Environment

City of Winnipeg

Phase III Environmental Site Assessment Former Dominion Bridge Operations Yard, 1460 Dublin Avenue – Winnipeg, Manitoba

Prepared by:

AECOM
99 Commerce Drive 204 477 5381 tel
Winnipeg, MB, Canada R3P 0Y7 204 284 2040 fax
www.aecom.com

Project Number:

60164142 (402.19.1.2)

Date:

February 2011

Statement of Qualifications and Limitations

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

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

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

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

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

The Report is to be treated as confidential and may not be used or relied upon by third parties, except:

- as agreed in writing by Consultant and Client
- as required by law
- for use by governmental reviewing agencies

Consultant accepts no responsibility, and denies any liability whatsoever, to parties other than Client who may obtain access to the Report or the Information for any injury, loss or damage suffered by such parties arising from their use of, reliance upon, or decisions or actions based on the Report or any of the Information ("improper use of the Report"), except to the extent those parties have obtained the prior written consent of Consultant to use and rely upon the Report and the Information. Any damages arising from improper use of the Report or parts thereof shall be borne by the party making such use.

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

AECOM
99 Commerce Drive
Winnipeg, MB, Canada R3P 0Y7
www.aecom.com

204 477 5381 tel
204 284 2040 fax

February 18, 2011

Ms. Joedi Pruden
Land Enhancement Coordinator. Real Estate Division
Planning, Property and Development Department
The City of Winnipeg
2nd Floor – 65 Garry Street
Winnipeg, Manitoba
R3C 4K4

Dear Ms. Pruden:

Project No: **60164142 (402.19.1.2)**

Regarding: **Phase III Environmental Site Assessment, Former Dominion Bridge Operations Yard, 1460 Dublin Avenue, Winnipeg, Manitoba**

Please find attached four (4) hard copies of the above mentioned report. If you have any questions or concerns, please feel free to contact Scott Chapman M.Sc., P.Eng. at (204) 928-8471.

Sincerely,
AECOM Canada Ltd.

for Ron Typliski, P.Eng.
Vice President, Manitoba District
Canada West Region

SC:dh
Encl.

Distribution List

# of Hard Copies	PDF Required	Association / Company Name
4	-	City of Winnipeg

Revision Log

Revision #	Revised By	Date	Issue / Revision Description
1	S.Chapman	December 23, 2010	Draft Report Issued for Client Review
2	S.Chapman	February 18, 2011	Final Report

AECOM Signatures

Report Prepared By:

for Ginger Rogers
Senior Geologist, Environment

Report Reviewed By:

Scott Chapman, M.Sc., P.Eng.
Environmental Engineer, Environment

PROVINCE OF MANITOBA
for S. D. CHAPMAN
Member
23198
Feb 18, 2011
REGISTERED PROFESSIONAL ENGINEER

Report Reviewed By:

Stephen Biswanger, P.Eng.
Manager, Remediation, Impact Analysis and Approvals, Environment

APEGM
Certificate of Authorization
AECOM Canada Ltd. (MB)
No. 4671 Date: 2011/02/18

Executive Summary

The City of Winnipeg retained AECOM Canada Ltd. (AECOM) to conduct a Phase III Environmental Site Assessment (ESA) at the former Dominion Bridge facility (the Site) located at 1460 Dublin Avenue in Winnipeg, Manitoba.

The objective of the Phase III ESA was to assess the areas of concern as identified by previous ESAs conducted at the Site. These areas of concern are associated with the former site operations and uses. Areas of Potential Concern (APEC) were to be delineated to determine the extent of impacted soil and groundwater, the potential for off-site migration (specifically towards Omand's Creek) and volume of contamination.

Formerly a bridge steel fabricating facility, the Site is currently owned by the City of Winnipeg and leased to several industrial manufacturing companies. The Site was constructed in the early 1910s and is approximately 11 ha in size. The Site consists of a Main Shop with attached Works Office, Galvanizing Shop and Stores Building; Transept Shop with Grit Blast Room and Paint Shop attached to the north side of the Main shop; Planning and Stock Office; Gate Shop; Shipping Office; PCB Storage Shed; and Security Building. Omands Creek lies along the west property line of the Site and flows south towards the Assiniboine River, located approximately 3 km to the south of the property.

Canadian Council of the Ministers for the Environment soil, groundwater, sediment and surface water quality guidelines protective of human health and the environment for industrial land use were used to compare the analytical results of samples collected from each area of concern.

Based on the investigation work completed at the Site to date, the following conclusions can be made:

1. The average depth to shallow groundwater at the Site was calculated as 1.58 mBGS. The inferred direction of shallow groundwater flow was to the west/northwest towards Omands Creek. The hydraulic conductivity at the Site ranged from 8.3×10^{-7} m/s to 2.4×10^{-6} m/s. Based on the calculated hydraulic conductivities for the Site, shallow on-site groundwater has an average flow velocity of 11.7 m/yr, a potential maximum flow velocity of 19.5 m/yr and a potential minimum flow velocity of 6.8 m/yr towards Omands Creek.
2. Based on the results of the investigation, there are no PCB or VOC impacts to soil and groundwater at the Site.
3. Contaminants of concern (COC) at the Site include PHC, metals, and PAH (both non-carcinogenic and carcinogenic). Impacts to one or more media (soil, groundwater, sediment and surface water) presenting a risk to human health and the environment were determined at multiple areas of the Site including:

Area	Impacted Media	Contaminant(s) of Concern (COC)
Paint Shop UST Area and West of Paint Shop	Soil	PHC, PAH
North Property Line UST Area	Soil Groundwater	Metals Metals
Waste Oil Drum Storage Area	Soil	PHC
Landfilling Area	Soil Groundwater	Metals Metals
Solvent AST Area	Soil	PHC, PAH
Diesel and Gasoline AST Area	Soil	PHC
Sulphuric Acid Drum Storage Area	Soil Groundwater	Metals Metals
Waste Paint Storage Area	Soil Groundwater	Metals Metals
Former Saskatchewan Avenue Landfill	Soil	Metals

	Groundwater	Metals
Polychlorinated Biphenyls Storage Area	Soil Groundwater	Metals, PAH Metals
Omands Creek	Sediment Surface Water	Metals, PAH Total Metals, Dissolved Metals
South Crane Runway	Soil	PAH
Galvanizing Pit	Soil	Metals

4. The total volume of soil impacted with these COC is conservatively estimated at 48,900 m^3 with depth of impacts ranging from surface to approximately 4 mBGS.
5. The total estimated area of groundwater impacts at the Site is conservatively estimated at 24,370 m^2. Groundwater impacts have not been delineated vertically but based on the soil stratigraphy present at the Site and the nature of site impacts water well records in the area (clay/clay till soil extends approximately 15 m below the overburden to bedrock); it is very unlikely that the bedrock aquifer has been impacted.
6. The total estimated volume of impacted sediments within Omands Creek is 2,160 m^3 extending the entire length of the Creek within the property limits.
7. PAH impacts to soil present at the Site, both carcinogenic and non-carcinogenic in nature, appear to be associated with the locations of rail lines on the property. PAH impacts were also identified in soil underneath the South Crane Runway. It is reasonable to assume that other crane runways on the property that use or have used treated lumber for the stacking of metal objects may also exhibit PAH impacts to soil. Based on the concentrations of PAHs present in the surface soil at the Site, the primary receptor at risk of exposure to the surficial non-carcinogenic PAH impacts is freshwater aquatic life associated with Omands Creek. Potential human exposure via surface soil contact is the governing exposure pathway associated with the exceedances of carcinogenic PAH criteria identified in the area.
8. With respect to Omands Creek, concentrations of metals and PAH exceeding the sediment and surface water quality guidelines protective of aquatic life were identified over the assessed length of Omands Creek, including 60 m upstream of the Site and up to 100 m downstream of the Site, suggesting that off-site sources (potentially unrelated to the Site) of impact exist, in addition to the on-site sources. Impacts to Omands Creek via COC loading, either through historical placement of contaminated fill or through groundwater impacts, are particularly evident in the areas of the Sulphuric Acid Drum Storage Area and the Landfilling Area. However, the overall environmental impact of metal loading on Omands Creek via groundwater transport is relatively low (metals loading via groundwater transport contributes less than 2% of the maximum concentration measured in surface water samples collected from the Creek during this investigation and less than 8% of the applicable CCME water quality guidelines). In addition, as the COC concentrations downstream of the Site were only marginally above guideline values and were similar to upstream concentrations in the Creek, and as the Creek supports a limited biological community due to other habitat limitations, the environmental impact of downstream transport of COCs via the surface water vector is considered relatively small. The environmental risk of downstream COC transport via the sediment transport vector has not been fully quantified. Also, based on the investigation results impacts to fish and fish habitat within Omands Creek are likely but the overall risk to Assiniboine River fish populations, in terms of impacts to the populations and to their suitability for consumption is low.
9. As field measurements were not possible for all COC at the Site, there are several areas at the Site where soil and groundwater impacts have not been fully delineated laterally or vertically with respect to metals and PAH.
10. The NCS score assigned to the Site given the results of the 2010 Phase III ESA is 78.0, which corresponds to a classification of “Class 1, High Priority for Action”.

AECOM has provided estimated areas and volumes of impacted soil, groundwater, and sediment at the Site that present a risk to human health and the environment. Based on the presence of multiple contaminant sources and several contaminated media (soil, groundwater, sediment, and surface water), AECOM recommends that a Remedial Action Plan (RAP) be developed for the Site to address the risks to human health and the environment.

However, prior to the development of a RAP for the Site, the following additional investigation is recommended for consideration to potentially increase the accuracy of the estimated areas and volumes of impacts and further refine remedial cost estimates:

1. Assessment of potential PAH impacts to shallow soil associated with all rail lines on the property and the other crane runways where treated lumber has been or is currently used for the stacking of metal objects.

2. Delineate the lateral and vertical extent of metals impacts in the Landfilling Area (delineation required to the southwest), the Waste Paint Storage Building (delineation required to the north, east and south), the Former Saskatchewan Avenue Landfill (delineation required in all directions), Polychlorinated Biphenyls Storage Area (delineation required to the north and northwest), and Galvanizing Pit (delineation required to the north, south and west).

3. Delineate the lateral extent of metals impacts to groundwater at the North Property Line UST Area, the Landfilling Area, the Sulphuric Acid Drum Storage Area, the Waste Paint Storage Area, the Former Saskatchewan Avenue Landfill Area, and the Polychlorinated Biphenyls Storage Area.

It is also recommended that if the industrial groundwater well located in the oil storage room in the Main Shop is no longer used for obtaining cooling water for site operations, the well should be properly decommissioned according to Provincial guidelines.

Table of Contents

List of Figures

List of Tables

Appendices

1. Introduction

The City of Winnipeg retained AECOM Canada Ltd. (AECOM) to conduct a Phase III Environmental Site Assessment (ESA) at the former Dominion Bridge facility (the Site) located at 1460 Dublin Avenue in Winnipeg, Manitoba.

The objective of the Phase III ESA was to assess the areas of concern as identified by previous ESAs conducted at the Site. These areas of concern are associated with the former site operations and uses. Areas of Potential Environmental Concern (APEC) were to be delineated to determine the extent of impacted soil and groundwater, the potential for off-site migration (specifically towards Omand's Creek) and volume of contamination.

1.1 Background

Formerly a bridge steel fabricating facility, the Site is currently owned by the City of Winnipeg and leased to several industrial manufacturing tenants. The Site was constructed in the early 1910s and is approximately 11 ha in size.

The Site consists of:

- a Main Shop with attached Works Office
- Galvanizing Shop and Stores Building
- Transept Shop with Grit Blast Room and Paint Shop attached to the north side of the Main shop
- Planning and Stock Office
- Gate Shop
- Shipping Office
- PCB Storage Shed
- Security Building

Omands Creek lies along the west property line of the Site and flows south towards the Assiniboine River, located approximately 3 km south. The location of the Site is shown in Figure 01 and a plan of the Site is shown in Figure 02. Photographs of the Site are provided in Appendix A.

1.2 Previous Environmental Assessments

Based on previous reports, it is believed that Omand's Creek was rerouted in the early 1900s. The original channel of Omands Creek reportedly traversed the property in the approximate location of the west wall of the Main Shop building.

Phase II and III ESAs previously completed in 1999 identified several Areas of Potential Environmental Concern (APECs) and multiple Contaminants of Concern (COCs) at the Site. Previous reports have also identified underground storage tanks (USTs) historically present at the Site. Two USTs, formerly located north of the Gate Shop, were removed in 1990 along with approximately 2,700 m^3 of impacted soil. Two USTs were identified beneath the existing Paint Shop and were reportedly removed in the 1980s. A UST was also reportedly located along the north property line. The removal of the USTs located beneath the Paint Shop and along the north property boundary was not recorded.

Several aboveground storage tanks (ASTs) were historically found at the Site. Two (2) ASTs, each 2,270L in size containing gasoline and diesel, were located approximately 150 m south of the Gate Shop. Previous reports noted surficial staining surrounding the ASTs. An AST containing solvents was historically located south of the Paint Shop, which was not believed to have secondary containment. An AST 27,000 L in size containing sulphuric acid was

located north of the Galvanizing Shop, and a sulphuric acid drum storage area was located on the west side of the Main Shop to the south of the Galvanizing Shop.

Additional APECs previously identified at the Site include:

- Drums of waste products including waste oil, cutting fluids and liquid paints were formerly stored in the area south of the Gate Shop
- Waste paint was stored in the area south of the stores building
- The banks of Omands Creek have been raised using solid waste materials, believed to contain considerable amounts of heavy metals, to prevent flooding of the property, especially along the southeast portion of the Creek
- A storage shed previously used to store polychlorinated biphenyls (PCB) is located at the south side of the property adjacent to Omands Creek
- The former Saskatchewan Avenue Landfill is located along the south side of the property near the security building

1.3 Objectives

The objectives of the AECOM Phase III ESA included:

- Delineate the extent (both vertical and lateral) and degree of impacts to both soil and groundwater on the Site and off-site (assuming access can be provided by the City of Winnipeg) in accordance with the requirements of Manitoba Conservation's Guidelines for Environmental Site Investigation in Manitoba.

- Complete an Aquatic Biota investigation, to determine the degree and extent of impacts to the adjacent Omand's Creek. The investigation will consider hydrology and hydrogeology to assess hydraulic connectivity between the Site and the creek.

- Confirm the presence or absence of underground storage tanks (USTs) on the subject site.

- Complete a designated substance survey on the existing facility and present as a separate report quantifying the hazardous materials, outline an abatement strategy and provide an estimated cost for the abatement program.

- Provide a report summarizing the findings of the existing soil and groundwater chemistry data and any data obtained from additional site assessment work in terms of the revised guidelines providing conclusion on the extent and degree of impacts, if any. The report is to provide a detailed discussion on regional and site-specific factors as established as the minimum data requirements within the 2008 CCME National Classification System for Contaminated Sites Guidance Document (NCS).

- Prepare a Remedial Action Plan (RAP) including analysis of alternative remediation and/or risk management strategies and cost estimation. The RAP should address both the off-site remediation as well as on-site remediation.

.

2. Methodology

Prior to the field investigation, AECOM personnel obtained utility clearances from representatives of applicable utility companies and also used a private utility locator, McCaine Electric Ltd., to locate all utilities in assessment areas on-site. AECOM also contacted Western Heritage Services Inc. to conduct a Ground Penetrating Radar (GPR) survey of selected areas of the Site to identify the potential location of the Paint Shop UST and the UST along the north property line.

2.1 Field Program

From October 18 to 22, 2010, AECOM conducted an intrusive subsurface assessment on-site. Paddock Drilling Ltd. provided two (2) truck-mounted drill rigs with continuous flight augers and support equipment, as well as operators to advance the boreholes at the Site. The investigation was completed using truck-mounted and track-mounted drill rigs with 125 mm continuous solid stem augers. The boreholes were advanced to a maximum depth of 7.62 m below ground surface (mBGS). In select areas where reinforced concrete was encountered at the surface, AECOM used concrete coring equipment to allow the advancement of augers.

The assessment of aquatic biota in Omands Creek, which covered the length of the creek adjacent to the former Dominion Bridge property, as well as approximately 60 m upstream and 100 m downstream, was performed between October 6th and 8th, 2010. Samples were collected from seven (7) locations to differentiate between the possible loading of contaminants of concern from the former sulphuric acid drum storage area, landfilling area and PCB storage area. At each of the seven locations, the following samples were collected: surface water, sediment, benthic invertebrates, and aquatic vegetation. Fish and amphibians were collected and/or observed opportunistically throughout the study reach of Omands Creek.

Considering the information collected from previous ESAs, an assessment program consisting of a total of eighty (80) boreholes was conducted. Boreholes not completed as monitoring wells were backfilled with auger cuttings with the top 0.30 m backfilled with hydrated bentonite. Additional drill cuttings, if any, were placed in soil bags and stored on-site. The final treatment and/or disposal method for the drill cuttings will be addressed in the RAP developed for the Site and will be dependent on soil analytical data.

Thirty-one (31) of the eighty (80) boreholes advanced on the Site were completed as monitoring wells. The borehole and monitoring well placement in relation to the on-site structures and features are presented on Figures 03 through Figure 18. Borehole and monitoring well logs along with ground water levels and hydrocarbon headspace measurements are provided in Appendix B.

The monitoring wells were constructed of 50 mm diameter, Schedule 40 flush joint polyvinyl chloride (PVC) casing with 0.10 mm machine slot screens installed to span the water table. Silica sand was used to fill the annular space around the screen to approximately 0.3 m above the top of the screened section of each monitoring well. Bentonite chips were placed above the silica sand to fill the annulus surrounding the solid riser pipe in all monitoring wells. Each of the monitoring wells was completed with either a protective steel cover placed flush with the ground surface or with a stick-up protective steel casing. All well materials were either screw connected or friction fit parts and no glues or solvents were used in their construction. Monitoring well construction details are included with each corresponding borehole log, as shown in Appendix B.

A GPS survey of the Site was completed to establish the horizontal and vertical positioning of all test holes and monitoring wells. The survey included determining the elevations of the top of the PVC casing (TOC) and ground surface at the Site.

2.1.1 Soil Sampling Program

All boreholes were visually logged in the field for soil type, colour, moisture content, consistency and plasticity, if relevant. In addition, any evidence of petroleum hydrocarbon product, staining, and/or odour was noted. Disturbed soil samples were recovered directly from the solid stem auger flights at approximately 0.8 m intervals, pared, and placed inside plastic sample bags for field screening using the headspace vapour method. A hand held auger was used for obtaining samples at both the South Crane Runway Area and Galvanizing Pit Area. Samples in these areas were obtained at approximately 0.6 mBGS and 1.5 mBGS.

An organic vapour survey was completed on collected soil samples as a guide to identifying any areas of PHC contamination, and in selecting appropriate soil samples for laboratory testing. The headspace vapour procedure was used to determine the presence of Volatile Organic Compounds (VOCs) in each collected soil sample. Soil samples were placed in a plastic bag with an equal amount of air and allowed to reach equilibrium at approximately 15°C prior to field testing. A hexane-calibrated a RKI Eagle Portable Multi Gas Detector set to methane elimination was used to measure the headspace vapour. After agitating the soil within the bag, the probe of the gas detector was inserted through the side of the bag to measure the headspace over the soil and provide a relative indication of the volatile hydrocarbons in the soil sample. Organic vapour concentrations were reported for each collected sample and are summarized on the borehole logs in Appendix B.

Based on the historical use of the areas being investigated and headspace readings, select samples were submitted for analysis of benzene, toluene, ethylbenzene, xylenes (BTEX), petroleum hydrocarbons (PHC) Fractions F1 to F4, polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), PCBs and total metals. Tables 2.1 to 2.16 indicate which parameters were analyzed for in each sample.

Portions of the collected soil samples were packed into laboratory supplied sampling jars, tightly sealed with a Teflon-lined lid, and labelled with appropriate sample identification (sample date, sampler, sample time, location). All samples were placed in a cooler with an ice pack to reduce temperature fluctuations prior to delivery to Maxxam Analytics Inc. (Maxxam) in Winnipeg, Manitoba within the recommended sample hold times. Chain of custody forms were completed and signed to track sample submissions.

Nineteen (19) blind field duplicate soil samples (a ratio of approximately 10%) were collected from the Site and submitted for analysis for laboratory quality assurance purposes. Blind field duplicates were created by apportioning the soil between two (2) sets of laboratory supplied sampling jars.

Maxxam routinely applies QA/QC protocols including: using Standard Operating Procedures, adhering to principles of Good Laboratory Practice and using standardized approved scientific methodologies. Their internal QA/QC program includes laboratory duplicates, method blanks and matrix spikes. Maxxam has been evaluated and accredited by Canadian Association for Laboratory Accreditation (CALA).

Disposable nitrile gloves were used during the sample handling.

2.1.2 Groundwater Sampling Program

The monitoring wells were monitored on October 29, 2010 and November 1, 2010 for headspace vapour concentrations, depth to free petroleum hydrocarbon product (if present), depth to the bottom of the well and depth to water. The vapour monitoring was carried out using a RKI Eagle Portable Multi Gas Detector set to methane elimination mode. The depth to free petroleum hydrocarbon product and depth to water were measured using a Heron Model H.01L interface probe (accuracy +/- 1 mm).

All purging and sampling activities were completed using dedicated bailers. Generally, three (3) well volumes were purged to ensure adequate development and to obtain a sample that was representative of the formation water. Purge water was released onto the ground surface in non-paved areas. Following purging, the water levels in the monitoring wells were allowed to recover prior to sampling to determine the groundwater quality.

Samples for laboratory analysis were placed in the appropriate laboratory supplied containers and stored on ice in a cooler. All samples were collected, transported, and stored under conditions that maintained sample integrity using the general protocols presented in Guidance Manual on Sampling, Analysis, and Data Management for Contaminated Sites (CCME, 1993). The groundwater samples were submitted to Maxxam within the required holding times using appropriate Chain of Custody forms.

Based on the historical use of the areas being investigated, select samples were submitted for analysis of BTEX, PHC Fractions F1-F4, PAHs, VOCs, PCBs and total metals. Tables 2.1 to 2.16 indicate which parameters each groundwater sample was analyzed for.

Ten (10) blind field duplicate groundwater samples (a ratio of approximately 10%) and one (1) trip blank were collected from the Site and submitted for analysis for laboratory quality assurance purposes. Blind field duplicates were created by apportioning the groundwater between two (2) sets of laboratory supplied sampling bottles.

In order to estimate hydraulic conductivity at the Site, single well bail tests were conducted on monitoring wells MW10-01, MW10-33, MW10-40, MW10-49, MW10-62 and MW10-70 as part of the ESA. A bail test typically involves withdrawing a measured volume of water and recording the groundwater level. Water level measurements are recorded with time until the water level is approximately equal to the level measured prior to bailing the well. Water levels were measured using an interface probe.

The data collected from the bail tests was analysed using AQTESOLV™ for Windows, Version 2.12 Professional (Hydrosolve Inc., 1996). AQTESOLV™ is a program that uses analytical solutions to determine aquifer properties. The water level displacement measured during the bail tests was plotted against time and matched to the Bouwer-Rice solution for an unconfined (overburden) aquifer.

2.1.3 Sediment Sampling Program

Three (3) grab samples of the upper 0.05 m of surficial sediments were collected in transects across Omands Creek at each of the seven (7) sampling sites using a Ponar or Ekman dredge. An additional sample, sectioned from a 0.3-m core collected with a 0.05 m diameter WildCo hand corer was also analyzed to characterize the deeper sediments within the creek bed fitted with clean cellulose acetate butyrate liners from the midstream portion of each transect. Each sediment sample was submitted for laboratory analysis of the following parameters:

- Metals;
- Organic carbon;
- Particle size (two size classes (> 0.075 mm or < 0.075 mm);
- PCBs (28 samples only); and,
- Polycyclic aromatic hydrocarbons (PAH).

Three (3) blind field duplicate sediment samples (a ratio of approximately 10%) were collected from the Site and submitted for analysis for laboratory quality assurance purposes. Blind field duplicates were created by apportioning the sediment between two (2) sets of laboratory supplied sampling jars.

2.1.4 Surface Water Sampling Program

In situ water quality parameters such as pH, temperature (°C), specific conductance (µS/cm), turbidity (NTU), and dissolved oxygen (mg/L) were measured at each sample location within Omands Creek using a Horiba U-53 Multi-Parameter Unit. Weather, qualitative descriptions and UTM coordinates were recorded at each sampling site.

Surface water samples were collected by directly submerging the water bottles. Preservatives, if required, were added immediately to the sample. Samples for analysis of dissolved mercury and metals were field-filtered by filling a syringe underwater and using a syringe-mounted 45 µm filter. Samples were kept cool and out of direct sun. Samples were submitted to Maxxam Analytics in Winnipeg within the specified 48-hr holding time for analysis of the following parameters:

- Metals (total extractable & dissolved);
- Organic carbon (total & dissolved);
- Hardness; and,
- Polychlorinated biphenyls [PCBs, seven (7) samples only]
- Polycyclic aromatic hydrocarbons [PAHs, seven (7) samples]

All laboratory analyses were conducted at an accredited analytical laboratory, which employs standard laboratory QA/QC measures. In addition, one (1) blind field duplicate surface water sample (a ratio of approximately 10%) was collected from the Site and submitted for analysis for laboratory quality assurance purposes. One (1) trip blank was prepared by the laboratory to determine whether or not any surface water samples collected at the Site were contaminated during shipping.

2.1.5 Aquatic Biota Sampling Program

2.1.5.1 Benthic Invertebrate Community

A single benthic invertebrate sample was collected at each of the seven (7) sampling sites within Omands Creek using a Ponar or Ekman dredge. Samples were sieved through a 500 µm mesh bucket to remove fines, mineral soils and particles. Sample jars were labelled and preserved with a 10% formalin solution. Samples were archived and held for potential future analysis as the turnaround time for taxonomic and enumeration exceeds the available project timeframe.

2.1.5.2 Fish Community

Fish were collected by backpack electrofishing to augment existing information on the Omands Creek fish community and evaluate the merit of studying fish further as a biological receptor. Sampling was conducted opportunistically at locations upstream and downstream of the property that permitted safe operation of electrofishing equipment, moving from downstream to upstream. Location and time were recorded at the start of each of the two (2) electrofishing runs. The backpack electrofisher was set to output 200 V at 60 Hz, pulsed DC range and duty cycle was set to 12%. Captured fish were identified to species level and returned live to the stream.

2.1.5.3 Aquatic Vegetation

An identification and characterization of the community assemblage of aquatic macrophyte communities along Omands Creek was completed. Tissue samples were collected from two (2) submergent aquatic macrophyte species at each of the seven (7) sampling sites and archived for chemical analysis pending the results of other study components and development of remediation options. The top 0.15 m of the macrophyte was removed with clean nitrile gloves and placed in individual labelled Ziploc bags. Care was taken to remove excess ambient water from the tissues collected.

2.1.5.4 Amphibians

No amphibians were detected in the study area.

2.2 Laboratory Analytical Program

Prior to, and throughout the field program, communication with the laboratory was maintained to ensure that all Quality Assurance (QA) and Quality Control (QC) objectives, such as detection limits, proper sample containers and sample holding times, were met.

In order to acquire high quality data and to reduce the potential for cross-contamination between samples, all samples were also collected, transported, and stored under conditions that maintained sample integrity using the general protocols presented in Sections 2.1.1 and 2.1.2.

Maxxam also routinely applies QA/QC protocols including: using standard operating procedures, adhering to principles of good laboratory practice and using standardized, approved scientific methodologies. Maxxam's internal QA/QC program includes laboratory duplicates, method blanks, and matrix spikes. Details of the internal QA/QC procedures and methodologies employed by Maxxam are presented in the laboratory reports provided in Appendix C. Maxxam has been evaluated and accredited by the Canadian Association for Laboratory Accreditation (CALA). Blind field duplicates of soil and groundwater samples were submitted to Maxxam as a QA measure.

2.3 Quality Assurance/Quality Control Program

As outlined in Sections 2.1.2 and 2.1.3, AECOM field personnel followed pre-defined field procedures for quality control. These procedures ensured that representative samples were collected and that the risk of cross contamination was minimized.

Further, blind field duplicate samples were also submitted for laboratory analysis for quality assurance. The soil and sediment samples were evenly partitioned into two (2) separate sets of sampling jars. For groundwater and surface water, blind field duplicate samples were submitted for analysis by evenly partitioning the water into sampling bottles from the dedicated Poly tubing or disposable bailer. The field duplicates ensure that the data is reproducible within certain limits and provide a means to evaluate precision of the field quality control program. Reproducibility is quantified by calculating the relative percent difference (RPD) defined by the following equation:

$$\text{Field Duplicate RPD}(\%) = \frac{(C1 - C2)}{(C1 + C2)/2} \text{x}100$$

Where: RPD = relative percent difference
C1 = larger of the two observed values from the field duplicate analysis
C2 = smaller of the two observed values from the field duplicate analysis

In order for a valid Field Duplicate RPD to be calculated, both results must be greater than five (5) times the Method Detection Limit (MDL). If one or both of the analytical results for the matrix duplicate samples are less than five (5) times the MDL for an analyzed parameter, then it is not possible to calculate a valid Field Duplicate RPD.

Chain of Custody forms were also completed for tracking purposes. These forms were completed prior to delivering the samples to the laboratory and included the following information: project address, sample identification, type of analysis required, sampling date, sampler's name and project contact information.

3. Selection of Applicable Environmental Quality Guidelines

The following sections discuss the rationale and selection for site-specific soil, sediment, surface water and groundwater quality guidelines to be used to compare the collected analytical results. Soil and groundwater quality guidelines established by the Canadian Council of the Ministers for the Environment (CCME) were selected based on the potential at risk receptors and potential exposure pathways.

In order to determine the most appropriate guidelines for the Site, information such as land-use, soil types, the presence of groundwater as a potable source, the presence of surface water, potential receptors (human and environmental), potential pathways and potential contaminants of concern were considered.

3.1 Potential Contaminants of Concern

Section 1.2 discussed the previous ESAs conducted at the Site that summarized historical site operations and APECs. Potential contaminants of concern (PCOCs) reported for the Site consist of petroleum hydrocarbons (PHC) Fractions F1 - F4, benzene, toluene, ethylbenzene, xylenes (BTEX), metals, polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs).

3.2 Land-use

According to the City of Winnipeg, the Site and surrounding area is zoned heavy manufacturing industrial (M3) with additional land uses consisting of PDO airport vicinity and urban infill area (west end) (City of Winnipeg, 2008). This district is intended for light or heavy industrial development, including heavy manufacturing, storage, major freight terminals, waste and salvage, resource extraction, processing, transportation, major utilities, and other related uses, particularly those that require very large buildings, frequent heavy truck traffic for supplies and shipments, or that may require substantial mitigation to avoid sound, noise, and odour impacts to neighbouring properties (City of Winnipeg, 2008). Considering this information, guidelines for industrial land use were used.

The Site is currently leased to several manufacturing business tenants. In addition to various environmental receptors, the Site's land use suggests that company workers and visitors are potential receptors with respect to the PCOCs identified at the Site via exposure by dermal contact, inhalation and accidental ingestion. The most stringent CCME guidelines for human health and the environment for each of the pathways discussed were selected for the Site.

3.3 Groundwater Use

The Site and the City of Winnipeg rely on surface water drawn from Shoal Lake (a large isolated lake in south-east Manitoba on the border near Ontario) for drinking water. Water from Shoal Lake is transported 137 km to the City via a 135 km-long concrete pipe and an aqueduct. Water from the aqueduct is stored in the Deacon Reservoir before being treated in the treatment facility.

Groundwater is currently not being used by the Site or the City of Winnipeg as a potable source. However, there is one (1) water well located on-site which, according to provincial water well records, formerly drew groundwater from a bedrock aquifer approximately 122 mBGS. The groundwater was used as cooling water for site operations and is located in the oil storage room in the Main Shop.

A shallow groundwater flow system with groundwater depths ranging from 0.356 mBGS to 5.05 mBGS exists primarily within the silt unit beneath the Site. Previous on-site groundwater monitoring conducted as part of the historical ESA work suggests that shallow groundwater is flowing west – northwest towards Omands Creek.

Considering the depth of on-site shallow groundwater, historical reported shallow groundwater flow directions and the depth of Omand's Creek located on the south and west side of the property, it is possible that a hydraulic connection exists (i.e. – shallow groundwater at the Site discharges into the Creek).

According to well logs in the vicinity of the Site, approximately 10 to 15 m of fine-grained firm to stiff clay/clay till exists between the shallow water bearing silt and bedrock aquifers beneath the Site (approximate depth of bedrock is 15 mBGS). The fine-grained clay/clay till provides sufficient stratigraphic separation from the shallow groundwater bearing silt to protect underlying bedrock aquifers containing groundwater beneath the Site.

Considering the known depth of 122 m for a groundwater industrial supply (cooling water) well, the depth of shallow groundwater on-site, and the fact that potable water is supplied through a municipal distribution system, guidelines for the protection of groundwater as a potable source can be excluded and therefore do not apply to the Site.

It is important to note that the shallow groundwater identified on-site is a potential pathway for on-site PCOCs to migrate to the creek.

3.4 Surface Water

As indicated in Section 2.4.2, Omands Creek is located along the south and west property boundaries. Section 1.2 discussed the diversion and western re-routing of Omand's Creek in the early 1900's from possibly the middle of the Site to its present location. Freshwater aquatic life (FWAL) such as fish species and invertebrates were identified in the creek and are potentially at risk with respect to the PCOCs identified on-site. Omands Creek is a tributary of the Assiniboine River which is located 3.0 km south of the Site.

Considering that the on-site shallow groundwater is a potential pathway to the Creek and FWAL exists within the creek, CCME guidelines for the protection of FWAL are appropriate for the Site.

3.5 Soil

Soil profiles previously identified on-site consist of gavel and/or sandy fill, underlain by a lacustrine clay unit. The clay is underlain by silt followed by clay/clay till. Fill material was documented from 0.0 mBGS to 1.7 mBGS and the silt unit ranged from 0.5 mBGS to 3.0 mBGS. Clay/clay till extends until bedrock at an approximate depth of 15 mBGS. Particle size analyses conducted on soil samples collected from the Site suggest that the silt and underlying clay/clay till are fine-grained. PCOCs were identified in the fill material and in the silt unit.

CCME guidelines for fine-grained surface soil (depths <1.5 mBGS) and subsoil (depths > 1.5 mBGS) are considered appropriate for the Site. In addition, considering the depths of PCOCs, CCME guidelines for soil contact (dermal and eco-contact) and soil ingestion are also considered appropriate for the Site.

3.6 Applicable Site Selected Guidelines

The CCME guidelines utilize a risk-based approach allowing limited modification of the generic soil and groundwater quality guidelines in light of prescribed site-specific factors affecting contaminant mobility and receptor characterization. In other words, in cases where soil and groundwater concentrations exceed the generic Tier I guidelines, an analysis of risk factors specific to the site in question is acceptable in order to allow for a realistic assessment of the actual risks at the site. Using this approach, Soil Quality Guidelines (SQGs) and Water Quality Guidelines (WQG) are selected based on a step-through procedure eliminating the exposure pathways that do not apply to receptors in the vicinity of the site and finally selecting the appropriate and most conservative guideline remaining. The guidelines are protective of both human and environmental receptors.

This approach was undertaken for the Site in order to provide a more realistic assessment of environmental and human health risks at the Site. The applicable site-specific factors at the Site and the rationale for the use of Tier I/II soil and groundwater quality objectives are summarized in Tables 3.1 and 3.2.

3.6.1 Soil Quality Guidelines

Considering the information discussed Sub-sections 3.1 to 3.5, CCME Tier II SQGs and the CWS Tier I SQGs are used as comparison guidelines for soil samples discussed in this report. The 2007 CCME SQG for the Protection of Human Health (SQG_{HH}) for benzene contains guidelines for both 10^{-6} and 10^{-5} incremental risk. As Manitoba has adopted the 10^{-6} incremental risk value, the results obtained during this assessment will be compared to the 10^{-6} incremental risk guideline.

3.6.2 Groundwater Quality Guidelines

As stated in Sub-section 3.3, the CCME WQGs for potable groundwater do not apply to the Site. However, based on the information discussed in Sub-section 3.3 and 3.4, CCME WQGs for the protection of FWAL do apply and are used for the comparison of groundwater samples discussed in this report.

3.6.3 Sediment Quality Guidelines

The CCME *Canadian Sediment Quality Guidelines* (*CSQG*) (CCME 2006) were applied to the sediment quality data collected during the aquatic survey.

3.6.4 Surface Water Quality Guidelines

The CCME *Canadian Water Quality Guidelines* (*CWQG*) for the protection of aquatic life (CCME 2006) were applied to the water quality data collected during the aquatic survey.

4. Field Observations and Laboratory Analytical Results

Field measurements and observations as well as laboratory results are summarized for each APEC in the following subsections. A detailed description of the soil stratigraphy encountered during the borehole drilling is included in each of the sub-sections and on the borehole logs in Appendix B. Groundwater monitoring data including groundwater elevations, headspace vapour concentrations and apparent thickness of light non-aqueous phase liquids (LNAPL) if present are summarized in the following sub-sections and documented in Table 4.1.

The results of the laboratory analyses for the soil, groundwater, sediment and surface water samples are summarized in the following sub-sections and on Tables 4.2 to 4.20. Copies of the analytical results for the submitted samples are included in Appendix C.

4.1 Groundwater Flow Regime

The silt unit which has been identified throughout the entire site at depths from 0.3 mBGS to 3.4 mBGS is the shallow groundwater bearing unit beneath the Site. As previously stated, Omands Creek originally ran across the centre of the Site but was diverted west to its current location in the early 1900s. It is possible that the shallow groundwater identified in the silt unit below the Site is hydraulically connected to Omands Creek and its historical location which may have an impact on the lateral groundwater flow direction.

In addition, site development that required the use of backfilling areas will also have an influence on groundwater depth in certain areas as well as groundwater flow direction. The subsurface stratigraphy of the Site is complex in that there are several areas that have fill to a depth of approximately 2 m below grade overlying the silt unit. Figure 19 presents the interpreted shallow groundwater flow direction beneath the Site which shows at least three (3) different flow directions, west-southwest, west, and northwest towards Omands Creek.

Thirty-one (31) monitoring wells were installed as part of the AECOM investigation to assess groundwater quality, groundwater hydraulic conductivity and depth to groundwater.

At the Site, the measured depth to groundwater ranged between 0.356 mBGS in monitoring well MW10-49 and 5.05 mBGS in monitoring well MW10-40. Groundwater elevation ranged from 233.02 meters above sea level (masl) (MW10-67) to 228.98 masl (MW10-40).

Single well response tests were conducted on monitoring wells MW10-01, MW10-33, MW10-40, MW10-49, MW10-62 and MW10-70. Tests ranged between 8.3×10^{-7} m/s and 2.4×10^{-6} m/s with a geometric mean of 1.6×10^{-6} m/s. The hydraulic conductivity values and the average thickness of the silt unit (approximately 2.5 m) indicate the groundwater-bearing unit beneath the Site would not be considered a domestic use aquifer (DUA). The data does support the potential for a hydraulic connection with Omands creek. Single well response test results are presented in Appendix D.

The lateral groundwater flow velocity was calculated using the following equation:

$$V = \{K\ i\}/n_e$$

Where “V” is the linear groundwater flow velocity, K is the hydraulic conductivity of the water-bearing unit, “i” is the lateral hydraulic gradient, and n_e is the effective porosity. The calculation table for determining velocity is presented in Appendix D.

Based on the calculated hydraulic conductivities for the Site, shallow on-site groundwater has an average flow velocity of 11.7 m/yr, a potential maximum flow velocity of 19.5 m/yr and a potential minimum flow velocity of 6.8 m/yr towards Omands Creek.

4.2 Site Specific Areas Assessed

The following sections discuss field observations and analytical results for each area assessed.

4.2.1 Gate Shop UST Area

Three (3) boreholes (BH10-02, BH10-04 and BH10-05) and two (2) monitoring wells (MW10-01 and MW10-03) were drilled to assess the Gate Shop UST Area (Figure 03). The soil encountered during the drilling program generally consisted of asphalt from 0.0 mBGS to 0.1 mBGS underlain by brown sand and gravel fill material from 0.1 mBGS to 0.9 mBGS. The sand and gravel fill material was underlain by dark grey clay fill from 0.5 mBGS to 2.1 mBGS, followed by a brown soft wet silt unit (1.8 mBGS to 3.8 mBGS). Underlying the wet silt was dark grey firm to stiff clay till from 2.5 mBGS to the maximum depth of assessment at 6.1 mBGS.

4.2.1.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from less than 10 parts per million (ppm) from borehole BH10-05 at 6.0 mbgs to 95 ppm in MW10-03 at 2.2 mbgs. The hydrocarbon vapour headspace measurements identified in monitoring wells MW10-01 and MW10-03 were 280 ppm and 70 ppm, respectively.

The depth to groundwater in monitoring well MW10-03 was measured at 1.45 mBGS. No liquid-phase petroleum hydrocarbons were detected.

4.2.1.2 Soil and Groundwater Laboratory Analytical Results

Up to three (3) soil samples collected from each borehole and monitoring well location were submitted for laboratory analyses of PHC Fractions F1-F4 and BTEX. All soil samples submitted for laboratory analyses were below the applicable soil quality guidelines. However, concentrations of ethylbenzene, xylenes, and PHC Fractions F1-F4 were slightly elevated in Monitoring Well MW10-03 at 2.29 mBGS and 4.57 mBGS.

Groundwater samples were collected from monitoring wells MW10-01 and MW10-03 as well as previously installed monitoring wells BH-2, MW-8, BH-61, BH-62, and BH-63 and submitted for laboratory analyses of PHC F1-F4 and BTEX. A single field duplicate sample (MW10-13) was also collected from monitoring well MW10-03. Concentrations of BTEX and PHC F1-F4 were below the site-specific groundwater quality guidelines for the collected groundwater samples. However, concentrations of ethylbenzene, xylenes, and PHC Fractions F2-F3 were detected in the groundwater sample collected from monitoring well MW10-03.

The laboratory soil results are presented in Table 4.2 and the groundwater results in Table 4.8.

4.2.2 Paint Shop UST Area

Three (3) boreholes (BH10-07, BH10-09 and BH10-09A) and two (2) monitoring wells (MW10-06 and MW10-08) were drilled to assess the Paint Shop UST Area (Figure 04). The soil encountered during the drilling program generally consisted of asphalt from 0.0 mBGS to 0.08 mBGS underlain by brown sand and gravel fill material from 0.08 mBGS to 0.6 mBGS. The fill material was underlain by brown silty clay from 0.2 mBGS to 1.8 mBGS, followed by a brown soft wet silt unit (1.4 mBGS to 3.0 mBGS). Underlying the wet silt was a dark grey firm to stiff clay till from 2.4 mBGS to the maximum depth of assessment at 7.6 mBGS. Black staining was identified at 0.8 mBGS in

BH10-09. The wet silt unit was not identified in BH10-09. Wood debris was only encountered in BH10-09 from 0.2 mBGS to 0.4 mBGS.

4.2.2.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from 0 ppm to 45 ppm in BH10-09 (2.29 mBGS). Hydrocarbon vapour headspace measurements in the monitoring wells ranged from 10 ppm (MW10-08) to 65 ppm (MW10-06).

The depth to groundwater ranged from 0.58 mBGS in MW10-08 to 1.02 mBGS in MW10-06. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.2.2 Soil and Groundwater Laboratory Analytical Results

A minimum of two (2) soil samples were collected from each borehole and monitoring well location and submitted for laboratory analyses of PHC F1-F4, BTEX, total metals, VOCs and PAHs.

Table 4.2.2.1 summarizes the analytical parameters exceeding the CCME Soil Quality Guidelines.

Table 4.2.2.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
BH10-09	2.29	PHC F3 = 1,600 mg/kg	1,000 mg/kg
BH10-08	0.76	Naphthalene = 0.11 mg/kg Phenanthrene = 0.21 mg/kg	0.013 mg/kg 0.046 mg/kg

The remaining soil samples submitted for laboratory analyses were below the applicable soil quality guidelines for PHC Fractions F1-F4, BTEX, total metals and PAH concentrations. There are no current guidelines for VOCs. The VOC concentrations of soil samples submitted for laboratory analyses were reported below the laboratory's analytical method of detection.

Figure 20 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are also presented in Tables 4.2, 4.3A, 4.5A, 4.6A and 4.7A.

Groundwater samples collected from monitoring wells MW10-06, MW10-08 and MW-15 (BH-15) were submitted for laboratory analyses of PHC Fractions F1-F4, BTEX, VOCs and total lead. Concentrations of BTEX, PHC Fractions F1-F4 and VOC were below the applicable groundwater quality guidelines for the collected groundwater samples. However, lead concentrations in groundwater samples collected from each of the three (3) monitoring wells installed in the area exceeded the applicable groundwater quality guideline for lead by up to one (1) order of magnitude.

The laboratory groundwater results are presented in Tables 4.8, 4.9A, and 4.11A.

4.2.3 North Property Line UST Area

Two (2) boreholes (BH10-11 and BH10-13) and one (1) monitoring well (MW10-10) were drilled to assess the North Property Line UST Area (Figure 05). The soil encountered during the drilling program generally consisted of a brown silty clay fill from 0.0 mbgs to 1.5 mbgs, followed by a brown soft wet silt unit (1.2 mbgs to 2.6 mbgs). Underlying the wet silt is a brown firm to stiff clay till from 2.6 mbgs to the maximum depth of assessment at 6.1 mBGS. Black staining was identified at 0.2 mBGS (BH10-11) and 0.6 mBGS (BH10-10). Sand and gravel fill was identified in BH10-10 from 0.0 mBGS to 0.2 mBGS.

4.2.3.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples were all below 15 ppm. The hydrocarbon vapour headspace measurement in monitoring well MW10-10 was 65 ppm.

The depth to groundwater in monitoring well MW10-10 was measured at 1.53 mBGS. No liquid-phase petroleum hydrocarbons were detected.

4.2.3.2 Soil and Groundwater Laboratory Analytical Results

At least one (1) soil sample collected from boreholes BH10-11 and BH10-12 and monitoring well MW10-10 was submitted for laboratory analyses of PHC F1-F4, BTEX, and total metals. All soil samples submitted for laboratory analysis were below the applicable soil quality guidelines for PHC Fractions F1-F4, BTEX and total metals.

A soil sample collected in 1999 from BH-17 at 0.6 mBGS had a reported nickel concentration of <200 mg/kg which was considered below the laboratory's analytical method of detection at the time. Since 1999, laboratory analytical detection methods have improved and the guidelines have changed. Borehole BH-17 is located in between MW10-10 and BH10-12 proximate to the north property line and as such the nickel concentrations may be similar to that reported in each location (41 mg/kg in MW10-10 at 0.76 mBGS and 35 mg/kg in BH10-12 at 0.76 mBGS).

Grain size analyses were conducted on soil samples collected from monitoring well MW10-10. The soil samples were collected from the silt unit at 2.28 mBGS and the underlying clay till at 5.33 mBGS. The silt and clay till were determined to be fine-grained with 89.8%, and 99.6% of the soil passing through a 0.075 mm sieve, respectively. Grain size distribution results are presented in Appendix E.

Figure 21 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are presented in Table 4.2 and Table 4.3B.

A groundwater sample collected from monitoring well MW10-10 was submitted for laboratory analyses of PHC F1-F4, BTEX, and total metals. Concentrations of BTEX and PHC Fractions F1-F4 were below the applicable groundwater quality guidelines for the collected groundwater samples.

Table 4.2.3.1 summarizes the analytical parameters exceeding the CCME Groundwater Quality Guidelines.

Table 4.2.3.1 Analytical Groundwater Parameters above CCME Guidelines

Monitoring Well ID.:	Parameter Above Guideline	CCME Guideline
MW10-10	Aluminum = 14.6 mg/L	0.005 mg/L
	Arsenic = 0.0072 mg/L	0.005 mg/L
	Cadmium = 0.00031 mg/L	0.000017 mg/L
	Chromium = 0.03 mg/L	0.0089 mg/L
	Copper = 0.0307 mg/L	0.002 mg/L
	Iron = 18.8 mg/L	0.300 mg/L
	Lead = 0.0524 mg/L	0.001 mg/L
	Nickel = 0.029 mg/L	0.025 mg/L
	Silver = 0.00014 mg/L	0.0001 mg/L
	Zinc = 0.103 mg/L	0.03 mg/L

Figure 22 summarizes groundwater parameters above the applicable quality guidelines established for the Site. The laboratory groundwater results are also presented in Table 4.8, and Table 4.9B.

4.2.4 Waste Oil Drum Storage Area

Seven (7) boreholes (BH10-16 to BH10-20, BH10-22 and BH10-24) and six (6) monitoring wells (MW10-14, MW10-15, MW10-21, MW10-22A, MW10-23 and MW10-25) were drilled to assess the Waste Oil Drum Area (Figure 06). The soil encountered during the drilling program generally consisted of asphalt from 0.0 mbgs to 0.1 mbgs underlain by sandy gravel fill, clay fill or sandy fill. Grey clay fill was identified from 0.1 mBGS to 2.5 mBGS, the sandy fill was identified from 0.1 mBGS to 0.9 mBGS, and the sandy gravel fill was identified from 0.1 mBGS to 0.6 mBGS. These units were generally underlain by dark grey clay from 0.6 mBGS to 2.0 mBGS. A brown soft wet silt unit from 1.2 mbgs to 3.4 mbgs was documented underlying the clay unit and was followed by a dark grey firm to stiff clay till from 2.9 mbgs to the maximum depth of assessment at 6.1 mBGS. Black staining was identified near 0.5 mbgs and grey staining was identified at 1.2 mBGS in BH10-16. Waste debris was indentified in MW10-15 and BH10-16 at 0.4 mBGS.

4.2.4.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from less than 5 ppm to 65 ppm in MW10-14 (4.57 mBGS) and MW10-15 (0.76 mBGS), respectively. Hydrocarbon vapour headspace measurements in the monitoring wells ranged from 0 ppm (MW10-21, MW10-23 and MW10-25) to 160 ppm (MW10-22A).

The depth to groundwater ranged from 1.00 mBGS in MW10-15 to 2.10 mBGS in MW10-21. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.4.2 Soil and Groundwater Laboratory Analytical Results

At least two (2) soil samples collected from each borehole and monitoring well location were submitted for laboratory analyses of PHC F1-F4 and BTEX. Two (2) single field duplicate samples (BH10-22 and MW10-22A) were also collected. All soil samples submitted for laboratory analysis contained parameter concentrations below the applicable soil quality guidelines for PHC F1-F4 and BTEX.

Figure 23 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site (all from previous ESA work). The laboratory soil results are also presented in Table 4.2.

Groundwater samples collected from monitoring wells MW10-14, MW10-15, MW10-21, MW10-22A, MW10-23 and MW10-25 were submitted for laboratory analyses of PHC Fractions F1-F4 and BTEX. Nearly all concentrations of BTEX and PHC Fractions F1-F4 were reported below the laboratory's analytical method of detection with the exception of the groundwater sample collected from MW10-14 (xylenes concentration of 0.0006 mg/L). However, all concentrations were still below the applicable groundwater quality guidelines for the collected groundwater samples.

The laboratory groundwater results are presented in Table 4.8.

4.2.5 Landfilling Area

Ten (10) boreholes (BH10-26, BH10-27, BH10-29, BH10-31, BH10-32, BH10-34 to BH10-36, BH10-39, and BH10-41) and seven (7) monitoring wells (MW10-28, MW10-30, MW10-33, MW10-37, MW10-40, MW10-42 and MW10-43) were drilled to assess the Landfilling area (Figure 07). The soil encountered during the drilling program generally consisted of topsoil (0.0 mBGS to 0.2 mBGS) and/or gravel fill (0.0 mBGS to 1.9 mBGS). Underlying these units was either silt or clay fill from 0.2 mBGS to 1.9 mBGS, followed by a wet silt unit (0.3 mBGS to 3.0 mBGS). Underlying the wet silt was a firm to stiff clay till identified from 2.1 mbgs to the maximum depth of assessment at 7.6 mBGS. Black staining was identified at 0.8 mBGS in BH10-32. Red staining was identified at 0.3 mBGS in BH10-26.

4.2.5.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from less than 5 ppm in boreholes BH10-29 (0.5 mBGS, 1.4 mBGS, 2.1 mBGS, 3.7 mBGS, 4.4 mBGS and 6.1 mBGS), BH10-40 (from 0.5 mBGS to 2.8 mBGS, 5.1 mBGS and 6.1 mBGS), MW10-42 (from 0.5 mBGS to 2.8 mBGS) and MW10-43 (from 2.8 mBGS to 6.1 mBGS) to 90 ppm in BH10-26 (0.6 mBGS), BH10-27 (2.1 mBGS), BH10-34 (0.6 mBGS), BH10-37 (0.6 mBGS) and BH10-41 (0.6 mBGS). Hydrocarbon vapour headspace measurements in the monitoring wells ranged from 0 ppm (MW10-30, MW10-42 and MW10-43) to 85 ppm (MW10-33).

The depth to groundwater ranged from 1.83 mBGS in MW10-33 to 5.05 mBGS in MW10-40. Monitoring well MW10-37 was dry during monitoring. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.5.2 Soil and Groundwater Laboratory Analytical Results

At least two (2) soil samples collected from each borehole and monitoring well location were submitted for laboratory analyses of VOCs, PCBs and total metals. A single field duplicate sample was also collected from BH10-33. Several metal concentrations were detected above the CCME Soil Quality Guidelines and are summarized in the table below.

Table 4.2.5.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
BH10-27	2.29	Nickel = 50.5 mg/kg	50 mg/kg
BH10-28	0.76	Copper 114 mg/kg Zinc = 1,140 mg/kg	91 mg/kg 360 mg/kg
BH10-32	2.29	Arsenic = 23.7 Chromium = 142 mg/kg Copper = 277 mg/kg Lead 3,150 mg/kg Nickel 97.2 mg/kg Zinc = 1,340 mg/kg	12 mg/kg 87 mg/kg 91 mg/kg 600 mg/kg 50 mg/kg 360 mg/kg
BH10-33	1.52	Arsenic = 18.3 mg/kg Chromium = 105 mg/kg Copper = 100 mg/kg Zinc = 486 mg/kg	12 mg/kg 87 mg/kg 91 mg/kg 360 mg/kg
BH10-41	0.76	Arsenic = 73.3 mg/kg Chromium = 437 mg/kg Copper = 515 mg/kg Nickel = 309 mg/kg	12 mg/kg 87 mg/kg 91 mg/kg 50 mg/kg

Soil samples submitted for laboratory analyses of Total PCBs were below the applicable soil quality guidelines. However, PCB concentrations were detected in boreholes BH10-28 at 0.76 mBGS, MW10-33 at 1.52 mBGS and BH10-37 at 0.76 mBGS.

VOC concentrations were below the laboratory's analytical method of detection.

Figure 24 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are also presented in Tables 4.3C, 4.4A and 4.5B. Historical metal concentrations (determined in boreholes BH-16, BH-19, BH-31, BH32, BH-33, BH-34, BH-35, BH-37, BH-38, BH39 and BH-40 during previous investigations) above the currently applicable CCME soil quality guidelines are also summarized in Table 4.3A.

Groundwater samples were collected from monitoring wells MW10-28, MW10-30, MW10-33, MW10-38, MW10-40, MW10-42 and MW10-43 and submitted for laboratory analyses of total metals and PCBs. All groundwater samples submitted for PCB analysis were below the applicable groundwater quality guidelines. Several metal concentrations were detected above the applicable CCME Groundwater Quality Guidelines and are summarized in the table below.

Table 4.2.5.2 Analytical Groundwater Parameters above CCME Guidelines

Monitoring Well ID.:	Parameter Above Guideline	CCME Guideline
MW10-28	Aluminum = 14.6 mg/L Arsenic = 0.0106 mg/L Cadmium = 0.00051 mg/L Chromium = 0.036 mg/L Copper = 0.0382 mg/L Iron = 25.7 mg/L Lead = 0.0377 mg/L Nickel = 0.04 mg/L Selenium = 0.0025 mg/L Silver = 0.00011 mg/L Zinc = 0.303 mg/L	0.005 mg/L 0.005 mg/L 0.000017 mg/L 0.0089 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.025 mg/L 0.001 mg/L 0.0001 mg/L 0.03 mg/L
MW10-30	Aluminum = 15.8 mg/L Arsenic = 0.007mg/L Cadmium = 0.00037 mg/L Chromium = 0.028 mg/L Copper = 0.0261 mg/L Iron = 19.7 mg/L Lead = 0.0194 mg/L Nickel = 0.026 mg/L Selenium = 0.0224 mg/L Zinc = 0.063 mg/L	0.005 mg/L 0.005 mg/L 0.000017 mg/L 0.0089 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.025 mg/L 0.001 mg/L 0.03 mg/L
MW10-33	Aluminum = 23.8 mg/L Arsenic = 0.0112 mg/L Cadmium = 0.00067 mg/L Chromium = 0.06 mg/L Copper = 0.0551 mg/L Iron = 36.9 mg/L Lead = 0.0292 mg/L Nickel = 0.055 mg/L Selenium = 0.0027 mg/L Silver = 0.00014 mg/L Zinc = 0.746 mg/L	0.005 mg/L 0.005 mg/L 0.000017 mg/L 0.0089 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.025 mg/L 0.001 mg/L 0.0001 mg/L 0.03 mg/L
MW10-40	Aluminum = 3.74 mg/L Cadmium = 0.00012 mg/L Copper = 0.0103 mg/L Iron = 5.41 mg/L Lead = 0.0034 mg/L Selenium = 0.0027 mg/L	0.005 mg/L 0.000017 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.001 mg/L
MW10-42	Aluminum = 3.44 mg/L Cadmium = 0.00009 mg/L Copper = 0.0086 mg/L Iron = 4.17 mg/L Lead = 0.0076mg/L Selenium = 0.0027 mg/L	0.005 mg/L 0.000017 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.001 mg/L
MW10-43	Aluminum = 2.06 mg/L Cadmium = 0.00008 mg/L Copper = 0.0088 mg/L Iron = 2.75 mg/L Lead = 0.0021mg/L Selenium = 0.0017 mg/L	0.005 mg/L 0.000017 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.001 mg/L

Figure 25 summarizes groundwater parameters above the applicable groundwater quality guidelines for the Site. The laboratory groundwater results are also presented in Tables 4.9C and 4.10A.

4.2.6 Solvent AST Area

Two (2) boreholes (BH10-46 and BH10-47) and two (2) monitoring wells (MW10-44 and MW10-45) were advanced to assess the Solvent AST Area (Figure 08). The soil encountered during the drilling program generally consisted of asphalt from 0.0 mBGS to 0.1 mBGS underlain by brown sand and gravel fill material to 0.4 mBGS. The fill material was underlain by dark grey clay fill from 0.4 mBGS to 2.0 mBGS, followed by a brown soft wet silt unit (1.2 mBGS to 3.1 mBGS). Underlying the wet silt was a dark grey firm to stiff clay till from 2.5 mBGS to the maximum depth of assessment at 6.1 mBGS.

4.2.6.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from less than 5 ppm in boreholes BH10-45 (1.52 mBGS) and MW10-46 (1.52 mBGS) to 100 ppm in BH10-44 (1.52 mBGS). Hydrocarbon vapour headspace measurements in the monitoring wells ranged from 5 ppm (MW10-45) to 30 ppm (MW10-44).

The depth to groundwater ranged from 1.05 mBGS in MW10-45 to 1.96 mBGS in MW10-44. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.6.2 Soil and Groundwater Laboratory Analytical Results

At least two (2) soil samples collected from each borehole and monitoring well location were submitted for laboratory analyses of BTEX, PHC Fractions F1-F4, PAHs, and VOCs. A single field duplicate sample was also collected from BH10-45. Table 4.2.6.1 summarizes the analytical parameters exceeding the CCME Soil Quality Guidelines.

Table 4.2.6.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
MW10-44	1.52	PHC F2 = 3,700 mg/kg PHC F3 = 5,000 mg/kg Acenapthene = 2.6 mg/kg Fluorene = 6.4 mg/kg Naphthalene = <3 mg/kg Phenanthrene = 15 mg/kg	1,000 mg/kg 5,000 mg/kg 0.28 mg/kg 0.25 mg/kg 0.013 mg/kg 0.046 mg/kg
MW10-45	0.76	Acenapthene = 0.76 mg/kg Fluorene = 0.73 mg/kg Naphthalene = 0.62 mg/kg Phenanthrene = 6.8 mg/kg	0.28 mg/kg 0.25 mg/kg 0.013 mg/kg 0.046 mg/kg

Historical PAH analyses from 1999 on borehole BH-56 detected several PAH parameters above the current CCME Soil guidelines. VOC concentrations in the submitted soil samples were below the laboratory's analytical method of detection.

Figure 26 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are also presented in Tables 4.2, 4.5C, 4.6B and 4.7B.

Groundwater samples collected from monitoring wells MW10-44, MW10-45 and BH8 (MW-8) were submitted for laboratory analyses of PHC Fractions F1-F4, BTEX and VOCs. The analytical parameters detected for all the groundwater samples collected were below the CCME Groundwater Guidelines selected for the Site.

The laboratory groundwater results are presented in Tables 4.8 and 4.11B.

4.2.7 Sulphuric Acid Drum Storage Area

Nine (9) boreholes (BH10-48, BH10-50 to BH10-52, BH10-54 to BH10-57 and BH10-57A) and two (2) monitoring wells (MW10-49, and MW10-53) were advanced to assess the Sulphuric Acid Drum Area (Figure 09). The soil encountered during the drilling program generally consisted of a sandy gravel fill from 0.0 mBGS to 0.8 mBGS or a clay fill from 0.0 mBGS to 1.5 mBGS. These soil profiles were generally underlain by dark grey clay fill from 0.2 mBGS to 1.8 mBGS, followed by a brown soft wet silt unit (0.5 mBGS to 3.4 mBGS). Underlying the wet silt was dark grey firm to stiff clay till from 2.0 mBGS to the maximum depth of assessment at 6.1 mBGS.

4.2.7.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from 5 ppm in borehole BH10-55 (4.57 mBGS) to 60 ppm in BH10-57 (0.76 mBGS). Hydrocarbon vapour headspace measurements in monitoring wells MW10-49 and MW10-53 were both 60 ppm.

The depth to groundwater ranged from 0.36 mBGS in MW10-49 to 0.37 mBGS in MW10-53. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.7.2 Soil and Groundwater Laboratory Analytical Results

Two (2) soil samples were collected from each borehole in the area. Soil samples were submitted for laboratory analyses of BTEX, PHC Fractions F1-F4, and total metals. One (1) single field duplicate sample (DUP8 – BH) was also collected.

Grain size analysis was conducted on two (2) soil samples collected from boreholes BH10-50 and BH10-53. One sample was collected from the silt unit at 1.52 mBGS (5.0 feet) and the underlying clay till at 2.29 mBGS (7.5 feet). The silt and clay till were determined to be fine-grained with 99.0%, and 89.2% of the soil passing through a 0.075mm sieve respectively. Grain size distribution results are presented in Appendix E.

All soil samples submitted for laboratory analyses contained parameter concentrations below the applicable soil quality guidelines for PHC Fractions F1-F4 and BTEX.

The laboratory soil analysis results for PHC Fractions F1-F4 and BTEX are presented in Table 4.2.

The pH concentrations of the collected soil samples ranged from 8.18 in Borehole BH10-57 (0.67 mBGS) and MW10-57A (0.76 mBGS) to 9.21 in borehole BH10-53 (1.52 mBGS).

Table 4.2.7.1 summarizes the analytical parameters exceeding the CCME Soil Quality Guidelines.

Table 4.2.7.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
BH10-56	0.76	Zinc = 482 mg/kg	360 mg/kg
BH10-57	0.76	Arsenic = 12.6 mg/kg	12 mg/kg
BH10-57A	0.76	Zinc = 1,080 mg/kg	360 mg/kg

The laboratory soil results for metals are presented in Table 4.3D and summarized on Figure 27. Historical metal parameters (indentified in boreholes BH-22, BH-44, BH-45, BH-46, BH-47, BH-48, BH-49, BH-50, and BH-51) with concentrations exceeding the CCME soil quality guidelines are summarized in Table 6D.

Groundwater samples collected from monitoring wells MW10-49 and MW10-53 were submitted for laboratory analyses of PHC Fractions F1-F4, BTEX, and total metals. In addition, all previously installed monitoring wells in the area were sampled for total metals. The PHC Fractions F1-F4 and BTEX concentrations detected for all the groundwater samples collected were below the CCME Groundwater Quality Guidelines selected for the Site.

Table 4.2.7.2 summarizes the analytical parameters exceeding the applicable CCME Groundwater Quality Guidelines.

Table 4.2.7.2 Analytical Groundwater Parameters above CCME Guidelines

Borehole ID.:	Parameter Above Guideline	CCME Guideline
MW10-49	Aluminum = 14.9 mg/L Arsenic = 0.0067 mg/L Cadmium = 0.00026 mg/L Chromium = 0.033 Copper = 0.0255 mg/L Iron = 19.9 mg/L Lead = 0.0172 mg/L Nickel = 0.026 mg/L Selenium = 0.0054 mg/L Zinc = 0.172 mg/L	0.005 mg/L 0.005 mg/L 0.000017 mg/L 0.0089 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.025 mg/L 0.001 mg/L 0.03 mg/L
MW10-53	Aluminum = 0.078 mg/L Cadmium = 0.00004 mg/L Copper = 0.0049mg/L Selenium = 0.0021 mg/L Zinc = 1.63 mg/L	0.005 mg/L 0.000017 mg/L 0.002 mg/L 0.001 mg/L 0.03 mg/L

Figure 27 summarizes groundwater parameters above the applicable groundwater quality guidelines for the Site. The laboratory groundwater results are presented in Tables 4.8 and 4.9 D.

4.2.8 Sulphuric Acid AST Area

One (1) borehole (BH10-58) was drilled to assess the Sulphuric Acid AST Area (Figure 10). The soil encountered during the drilling program consisted of asphalt to 0.1 mBGS underlain by brown clay to 1.2 mBGS, followed by a brown soft wet silt unit (1.2 mBGS to 2.7 mBHS). Underlying the wet silt was a brown firm to stiff clay till to the maximum depth of assessment at 6.0 mBGS.

4.2.8.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from 5 ppm in soil samples collected from 1.4 mBGS – 6.0 mBGS to 10 ppm at 0.76 mBGS. No monitoring wells were installed in this area.

4.2.8.2 Soil and Groundwater Laboratory Analytical Results

Two (2) soil samples were collected from borehole BH10-58 and submitted for laboratory analysis of metals. The soil samples submitted for laboratory analyses contained metals concentrations below the applicable soil quality guidelines. The pH concentrations of the collected soil samples ranged from 8.20 to 8.27.

The laboratory results for soil analyses are presented in Table 4.3E.

No groundwater samples were collected given that no monitoring wells were installed in this area.

4.2.9 Diesel and Gasoline AST Area

Three (3) boreholes (BH10-60 and BH10-63 to BH10-64) and three (3) monitoring wells (MW10-59, MW10-61, and MW10-62) were advanced to assess the Diesel and Gasoline AST Area (Figure 11). The soil encountered during the drilling program generally consisted of a sandy gravel fill from 0.0 mBGS to 1.2 mBGS underlain by dark grey clay from 0.2 mBGS to 1.8 mBGS, followed by a brown soft wet silt unit (1.5 mBGS to 2.8 mBGS). Underlying the wet silt was a dark grey firm to stiff clay till from 2.8 mBGS to the maximum depth of assessment at 6.1 mBGS. Wood debris was identified from 0.9 mBGS to 1.5 mBGS in borehole BH10-63.

4.2.9.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from less than 5 ppm in borehole BH10-61 (5.33 mBGS) and BH10-63 (4.57 mBGS) to 85 ppm in BH10-60 (3.05 mBGS). Hydrocarbon vapour headspace measurements in the monitoring wells ranged from 0 ppm (MW10-59) to 10 ppm (MW10-61 and MW10-62).

The depth to groundwater ranged from 1.60 mBGS in MW10-62 to 2.73 mBGS in MW10-61. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.9.2 Soil and Groundwater Laboratory Analytical Results

At least two (2) soil samples collected from each borehole and monitoring well location were submitted for laboratory analyses of BTEX and PHC Fractions F1-F4. One (1) single field duplicate sample from BH10-59 was also collected and submitted for laboratory analysis. All soil samples submitted for analysis contained concentrations of BTEX and PHC Fractions F1-F4 below the applicable soil quality guidelines.

Figure 29 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are also presented in Table 4.2.

Groundwater samples collected from monitoring wells MW10-59, MW10-61 and MW10-62 were submitted for laboratory analyses of PHC Fractions F1-F4 and BTEX. The PHC F1-F4 and BTEX concentrations detected for all the groundwater samples collected were below the laboratory's analytical method of detection and below the CCME Groundwater Quality Guidelines selected for the Site.

The laboratory soil and groundwater results are presented in Table 4.8.

4.2.10 Waste Paint Storage Area

Three (3) boreholes (BH10-65, BH10-66 and BH10-68) and two (2) monitoring wells (MW10-67 and MW10-69) were advanced to assess the Waste Paint Storage Area (Figure 12). The soil encountered during the drilling program generally consisted of a sandy gravel fill from 0.0 mBGS to 0.2 mBGS underlain by dark grey clay fill to 1.3 mBGS, followed by a brown soft wet silt unit (1.1 mBGS to 2.7 mBGS). Underlying the wet silt was a dark grey firm to stiff clay till from 2.6 mBGS to the maximum depth of assessment at 6.1 mBGS. Top soil was indentified from 0.0 mBGS to 0.2 mBGS in borehole MW10-67.

4.2.10.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from 5 ppm in borehole BH10-65 (1.52 mBGS) to 25 ppm in BH10-65 (0.76 mBGS). Hydrocarbon vapour headspace measurements in the monitoring wells ranged from 75 ppm (MW10-69) to 110 ppm (MW10-67).

The depth to groundwater ranged from 0.78 mBGS in MW10-69 to 1.26 mBGS in MW10-67. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.10.2 Soil and Groundwater Laboratory Analytical Results

Up to two (2) soil samples were collected from each borehole and submitted for laboratory analyses of BTEX, PHC F1-F4 and metals. Two (2) field duplicate samples were also collected from BH10-65 (1.52 mBGS) and MW10-67 (1.52 mBGS). All soil samples submitted for laboratory analyses were below the applicable soil quality guidelines for PHC Fractions F1-F4 and BTEX.

Table 4.2.10.1 summarizes the analytical parameters exceeding the applicable CCME Soil Quality Guidelines.

Table 4.2.10.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
BH10-65	0.76	Nickel = 78.2 mg/kg	50 mg/kg
BH10-68	0.76	Nickel = 51.7 mg/kg	50 mg/kg

The laboratory soil results are presented in Table 4.2 and Table 4.3F and summarized on Figure 30.

Results from previous investigations performed at the Site indicated metal parameters (indentified in boreholes BH-24, BH-24, BH-70, BH-71 and BH-72) greater than the current CCME soil quality guidelines as summarized in Table 4.3F.

Groundwater samples collected from monitoring wells MW10-67 and MW10-69 were submitted for laboratory analyses of PHC Fractions F1-F4, BTEX and total metals. The concentrations of PHC Fractions F1-F4 and BTEX detected for all the groundwater samples collected were below the laboratory's analytical method of detection and below the CCME Groundwater Quality Guidelines selected for the Site.

Table 4.2.10.2 summarizes the groundwater analytical parameters exceeding the CCME Groundwater Quality Guidelines.

Table 4.2.10.2 Analytical Groundwater Parameters above CCME Guidelines

Borehole ID.:	Parameter Above Guideline	CCME Guideline
MW10-67	Aluminum = 3.62 mg/L Arsenic = 0.0022 mg/L Cadmium = 0.00007 mg/L Copper = 0.01 mg/L Iron = 4.17 mg/L Lead = 0.0044mg/L Zinc = 0.07 mg/L	0.005 mg/L 0.005 mg/L 0.000017 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.03 mg/L
MW10-69	Aluminum = 0.369 mg/L Cadmium = 0.00003 mg/L Copper = 0.0034 mg/L Iron = 0.621 mg/L Lead = 0.0023mg/L Zinc = 0.069 mg/L	0.005 mg/L 0.000017 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.03 mg/L

The laboratory groundwater results are presented in Tables 4.8 and 4.9E and summarized on Figure 31.

4.2.11 Former Saskatchewan Avenue Landfill

Two (2) boreholes (BH10-72 and BH10-73) and two (2) monitoring wells (MW10-70 and MW10-71) were advanced to assess the Former Saskatchewan Landfill Area (Figure 13). The soil encountered during the drilling program generally consisted of a sandy gravel fill from 0.0 mBGS to 0.8 mBGS underlain by dark grey clay fill from 2.4 mBGS, followed by a brown soft wet silt unit (1.8 mBGS to 3.7 mBGS). Underlying the wet silt was a dark grey firm to stiff clay till from 3.0 mBGS to the maximum depth of assessment at 6.1 mBGS. Top soil was indentified from 0.0 mBGS to 0.3 mBGS in borehole MW10-71 and BH10-72.

4.2.11.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from less than 5 ppm in borehole BH10-73 (1.26 mBGS) to 65 ppm in MW10-70 (0.76 mBGS). Hydrocarbon vapour headspace measurements in the monitoring wells ranged from 0 ppm (MW10-71) to 5 ppm (MW10-70).

The depth to groundwater ranged from 0.64 mBGS in MW10-70 to 2.21 mBGS in MW10-71. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.11.2 Soil and Groundwater Laboratory Analytical Results

At least two (2) soil samples collected from each of the borehole and monitoring well locations were submitted for total metals and PAH analyses. A single field duplicate sample was also collected from MW10-71 (G-71-13 at 2.31 mBGS). Table 4.2.11.1 summarizes the analytical parameters exceeding the CCME Quality Guidelines.

Table 4.2.11.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
MW10-65	3.81	Arsenic = 13.6 mg/kg	12 mg/kg
BH10-72	0.76 3.81	Arsenic = 16.9 mg/kg Nickel = 53.5 mg/kg	12 mg/kg 50 mg/kg
BH10-73	0.76	Zinc = 523 mg/kg Naphthalene = 0.057 mg/kg Phenanthrene = 0.29 mg/kg Benzo(a)pyrene TPE = 1.0041 mg/kg	360 mg/kg 0.013 mg/kg 0.046 mg/kg 0.6 mg/kg

Figure 32 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are also presented in Tables 4.3G, 4.6C and 4.7C.

A groundwater sample collected from monitoring well MW10-72 was submitted for laboratory analyses of PHC Fractions F1-F4, BTEX and metals. The PHC Fractions F1-F4 and BTEX concentrations in the groundwater sample collected were below the laboratory's analytical method of detection and below the applicable CCME Groundwater Quality Guidelines selected for the Site.

Table 4.2.11.2 summarizes the analytical parameters exceeding the CCME Quality Guidelines.

Table 4.2.11.2 Analytical Groundwater Parameters above CCME Guidelines

Borehole ID.:	Parameter Above Guideline	CCME Guideline
MW10-70	Aluminum = 2.38 mg/L Cadmium = 0.00006 mg/L Copper = 0.0057 mg/L Iron = 3.21 mg/L Lead = 0.0051mg/L Selenium = 0.0017 mg/L Zinc = 0.034 mg/L	0.005 mg/L 0.000017 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.001 mg/L 0.03 mg/L
MW10-71	Aluminum = 0.137 mg/L Cadmium = 0.00002 mg/L Copper = 0.0022 mg/L	0.005 mg/L 0.000017 mg/L 0.002 mg/L

Figure 33 summarizes groundwater parameters above the applicable groundwater quality guidelines for the Site. The laboratory groundwater results are also presented in Tables 4.8 and 4.9F.

4.2.12 Polychlorinated Biphenyls Storage Area

Four (4) boreholes (BH10-74 to BH10-76 and BH10-78) and two (2) monitoring wells (MW10-77 and MW10-79) were advanced to assess the Polychlorinated Biphenyls Storage Area (Figure 14). The soil encountered during the drilling program generally consisted of a sandy gravel fill (from 0.0 mBGS to 1.5 mBGS) and/or clay fill (from 0.0 mBGS to 1.1 mBGS) underlain by dark grey clay to 1.8 mBGS. The clay unit was underlain by a brown soft wet silt unit (1.6 mBGS to 2.7 mBGS). Underlying the wet silt was a dark grey firm to stiff clay till to the maximum depth of assessment at 6.1 mBGS.

4.2.12.1 Field Observations of Soil and Groundwater

Headspace vapour concentrations of the collected soil samples ranged from less than 5 ppm in borehole BH10-75 (from 0.76 mBGS to 3.05 mBGS) and BH10-76 (4.57 mBGS) to 65 ppm in BH10-74 (0.76 mBGS), MW10-77 (0.76 mBGS and 2.69 mBGS) and BH10-78 (0.76 mBGS and 2.89 mBGS). Hydrocarbon vapour headspace measurements in the monitoring wells ranged from 20 ppm (MW10-77) to 55 ppm (MW10-79).

The depth to groundwater ranged from 1.44 mBGS in MW10-79 to 1.53 mBGS in MW10-77. No liquid-phase petroleum hydrocarbons were detected in any of the monitoring wells.

4.2.12.2 Soil and Groundwater Laboratory Analytical Results

Up to two (2) soil samples were collected from each borehole and monitoring well and submitted for analysis of PHC Fractions F1-F4 and BTEX, metals, PCBs, VOC and PAH analyses. The soil samples submitted for laboratory analyses of PHC Fractions F1-F4 and BTEX were below the applicable soil quality guidelines. Similarly, the soil

samples submitted for laboratory analyses of VOCs were below the applicable soil quality guidelines. Table 4.2.12.1 summarizes the analytical parameters exceeding the CCME Quality Guidelines.

Table 4.2.12.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
MW10-77	3.05	Nickel = 54.0 mg/kg	50 mg/kg
BH10-78	2.29	Naphthalene = 0.020 mg/kg Phenanthrene = 0.25 mg/kg	0.013 mg/kg 0.046 mg/kg

Figure 34 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are presented in Tables 4.2, 4.3H, 4.4B, 4.5D, 4.6D and 4.7D.

Groundwater samples collected from monitoring wells MW10-77 and MW10-79 were submitted for metals and PCB analyses. Although there are currently no guidelines for PCBs in groundwater, the samples submitted for laboratory analyses of PCBs were below the laboratory's analytical method of detection with the exception of groundwater collected from MW10-77 which contained a detectable concentration of Aroclor 1254 (0.00044 mg/L).

Table 4.2.12.2 summarizes the analytical parameters exceeding the CCME Quality Guidelines.

Table 4.2.12.2 Analytical Groundwater Parameters above CCME Guidelines

Borehole ID.:	Parameter Above Guideline	CCME Guideline
MW10-77	Aluminum = 39.2 mg/L Arsenic = 0.0225 Cadmium = 0.00128 mg/L Chromium = 0.121 mg/L Copper = 0.129 mg/L Iron = 69 mg/L Lead = 0.173mg/L Nickel = 0.109 mg/L Selenium = 0.0089 mg/L Silver = 0.00042 mg/L Thallium = 0.00083 Zinc = 1.14 mg/L	0.005 mg/L 0.005 mg/L 0.000017 mg/L 0.0089 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.025 mg/L 0.001 mg/L 0.0001 mg/L 0.0008 mg/L 0.03 mg/L
MW10-79	Aluminum = 2.54 mg/L Cadmium = 0.00037 mg/L Chromium = 0.037mg/L Copper = 0.032 mg/L Iron = 19.8 mg/L Lead = 0.3mg/L Nickel = 0.028mg/L Selenium = 0.0056 mg/L Zinc = 3.54 mg/L	0.005 mg/L 0.000017 mg/L 0.0089 mg/L 0.002 mg/L 0.3 mg/L 0.001 mg/L 0.025 mg/L 0.001 mg/L 0.03 mg/L

Figure 35 summarizes groundwater parameters above the applicable groundwater quality guidelines for the Site. The laboratory groundwater results are presented in Tables 4.9G and 4.10B.

4.2.13 Omands Creek

4.2.13.1 Field Observations of Physical Habitat

Omands Creek, as it passes through the Site is characterized by mid-channel depths ranging from 0.25 m to 1.5 m with steep, confined banks. Upstream and downstream of Site, the creek is narrower, shallower, with more complex

substrates (e.g., gravel and sand) and greater water velocities than in the Site proper, demonstrating a more erosional-type watercourse. This erosional-type watercourse more closely appears natural than on the site, with respect to channel sinuosity. The reach of the creek on the Site is generally a depositional type of watercourse, with low velocities, greater mid-channel depths (>1.0 m), and a greater abundance of aquatic macrophytes. Due to the rerouting and channelization of Omands Creek around the property, the channel does not demonstrate natural sinuosity.

As indicated in Figure 15, seven (7) sample locations were used to assess potential environmental impacts to Omands Creek. Limnological parameters were generally consistent throughout the Site. Dissolved oxygen ranged from 8 mg/L to 14 mg/L in water temperatures ranging from 12 ºC to 15 ºC. Turbidity and total dissolved solids ranged from 41 NTU to 98 NTU and 0.66 g/L to 0.73 g/L, respectively. Specific conductance and pH ranged from 1030 µS/cm to 1140 µS/cm and 8.0 to 8.8, respectively.

4.2.13.2 Sediment Laboratory Analytical Results

Twenty-eight (28) sediment samples were collected from 21 different locations in Omands Creek. The sample locations are shown in Figure 16. Sediment samples were collected at 0.0 mBGS to 0.05 mBGS and 0.30 mBGS to 0.35 mBGS intervals. Sediment samples were submitted for laboratory analyses of total organic matter, dissolved organic carbon, particle size, total metals, PCBs, and PAHs. Three (3) field duplicate samples were also collected from sample location OC10-1 (OC10-10A, OC10-10B, and OC10-10C).

The PCB and concentrations were below the laboratory's analytical method of detection and subsequently met the applicable sediment quality guidelines for PCBs.

Table 4.2.15.1 summarizes the sediment parameters that were above the applicable sediment quality guidelines.

Table 4.2.15.1 Analytical Sediment Parameters above CCME Guidelines

Sample ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
OC10-1A	0.0 – 0.05	Arsenic= 6.7 mg/kg	5.9 mg/kg
		Cadmium = 0.73 mg/kg	0.6 mg/kg
		Chromium = 38 mg/kg	37.3 mg/kg
		Copper = 42.9 mg/kg	35.7 mg/kg
		Lead = 94.3 mg/kg	35.0 mg/kg
		Zinc = 266 mg/kg	123 mg/kg
		Acenapthene = 0.02 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.05 mg/kg	0.00587 mg/kg
		Anthracene = 0.05 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.20 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.19 mg/kg	0.0319 mg/kg
		Chrysene = 0.27 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.03 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.46 mg/kg	0.111 mg/kg
		Fluorene = 0.03 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.03 mg/kg	0.0202 mg/kg
		Naphthalene = 0.04 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.20 mg/kg	0.0419 mg/kg
		Pyrene = 0.36 mg/kg	0.053 mg/kg
OC10-1B	0.0 – 0.05	Copper = 49 mg/kg	35.7mg/kg
		Lead = 76.6 mg/kg	35.0 mg/kg
		Zinc = 152 mg/kg	123 mg/kg
		Acenapthene = 0.08 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.02 mg/kg	0.00587 mg/kg
		Anthracene = 0.24 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.60 mg/kg	0.0317 mg/kg

Sample ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
		Benzo(1)pyrene = 0.56 mg/kg	0.0319 mg/kg
		Chrysene = 0.65 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.09mg/kg	0.00622 mg/kg
		Fluoranthene = 1.4 mg/kg	0.111 mg/kg
		Fluorene = 0.1 mg/kg	0.0212 mg/kg
		Naphthalene = 0.04 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.88 mg/kg	0.0419 mg/kg
		Pyrene = 1.2 mg/kg	0.053 mg/kg
OC10-1B	0.30 – 0.35	Copper = 43.3 mg/kg	35.7mg/kg
		Lead = 74.0 mg/kg	35.0 mg/kg
		Zinc = 143 mg/kg	123 mg/kg
		Acenapthene = 1.2 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.32 mg/kg	0.00587 mg/kg
		Anthracene = 3.2 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 4.1 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 2.9 mg/kg	0.0319 mg/kg
		Chrysene = 3.7 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.43 mg/kg	0.00622 mg/kg
		Fluoranthene = 9.40 mg/kg	0.111 mg/kg
		Fluorene = 2 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.27 mg/kg	0.0202 mg/kg
		Naphthalene = 0.80 mg/kg	0.0346 mg/kg
		Phenanthrene = 10 mg/kg	0.0419 mg/kg
		Pyrene = 7.4mg/kg	0.053 mg/kg
OC10-1C	0.0 – 0.05	Arsenic= 7.5 mg/kg	5.9 mg/kg
		Copper = 45 mg/kg	35.7 mg/kg
		Lead = 137 mg/kg	35.0 mg/kg
		Zinc = 145 mg/kg	123 mg/kg
		Acenapthene = 0.04 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.02 mg/kg	0.00587 mg/kg
		Anthracene = 0.09 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.26 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.24 mg/kg	0.0319 mg/kg
		Chrysene = 0.28 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.06 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.58 mg/kg	0.111 mg/kg
		Fluorene = 0.05 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.13 mg/kg	0.0202 mg/kg
		Naphthalene = 0.09 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.47 mg/kg	0.0419 mg/kg
		Pyrene = 0.49mg/kg	0.053 mg/kg
OC10-2A	0.0 – 0.05	Arsenic= 7 mg/kg	5.9 mg/kg
		Cadmium = 1.3 mg/kg	0.6 mg/kg
		Copper = 45.1 mg/kg	35.7 mg/kg
		Lead = 86.2 mg/kg	35.0 mg/kg
		Zinc = 288 mg/kg	123 mg/kg
		Acenapthene = 0.04 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.03 mg/kg	0.00587 mg/kg
		Anthracene = 0.11 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.22 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.19 mg/kg	0.0319 mg/kg
		Chrysene = 0.38 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.05 mg/kg	0.00622 mg/kg
		Fluoranthene = <0.08 mg/kg	0.111 mg/kg
		Fluorene = 0.08 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.03 mg/kg	0.0202 mg/kg
		Naphthalene = 0.04 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.54 mg/kg	0.0419 mg/kg
		Pyrene = 0.61mg/kg	0.053 mg/kg
OC10-2B	0.0 – 0.05	Arsenic= 5.9 mg/kg	5.9 mg/kg
		Copper = 48.3 mg/kg	35.7 mg/kg
		Lead = 90.8 mg/kg	35.0 mg/kg

Sample ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
		Zinc = 223 mg/kg	123 mg/kg
		Acenapthene = 0.03 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.05mg/kg	0.00587 mg/kg
		Anthracene = 0.09 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.19 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.15 mg/kg	0.0319 mg/kg
		Chrysene = 0.29 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.03 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.57 mg/kg	0.111 mg/kg
		Fluorene = 0.07 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.04 mg/kg	0.0202 mg/kg
		Naphthalene = 0.05 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.27 mg/kg	0.0419 mg/kg
		Pyrene = 0.48mg/kg	0.053 mg/kg
OC10-2B	0.30 – 0.35	Arsenic= 6.7 mg/kg	5.9 mg/kg
		Chromium = 41 mg/kg	37.3 mg/kg
		Lead = 40.7 mg/kg	35.0 mg/kg
		Zinc = 147 mg/kg	123 mg/kg
		Acenapthene = 0.03 mg/kg	0.00671 mg/kg
		Benzo(a)Anthracene = 0.042 mg/kg	0.0317 mg/kg
		Fluoranthene = 0.15 mg/kg	0.111 mg/kg
		Fluorene = 0.057 mg/kg	0.0212 mg/kg
		Naphthalene = 0.036 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.068 mg/kg	0.0419 mg/kg
		Pyrene = 0.14mg/kg	0.053 mg/kg
OC10-2C	0.0 – 0.05	Arsenic= 7.2 mg/kg	5.9 mg/kg
		Cadmium = 0.66 mg/kg	0.6 mg/kg
		Copper = 41.3 mg/kg	35.7 mg/kg
		Lead = 61.7 mg/kg	35.0 mg/kg
		Zinc = 271 mg/kg	123 mg/kg
		Acenapthene = <0.04 mg/kg	0.00671 mg/kg
		Acenaphthylene = <0.04mg/kg	0.00587 mg/kg
		Anthracene = 0.09 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.15 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.15 mg/kg	0.0319 mg/kg
		Chrysene = 0.22 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = <0.08 mg/kg	0.00622 mg/kg
		Fluoranthene = <0.5 mg/kg	0.111 mg/kg
		Fluorene = 0.04 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = <0.04 mg/kg	0.0202 mg/kg
		Naphthalene = <0.04 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.24 mg/kg	0.0419 mg/kg
OC10-3A	0. 0 – 0.05	Cadmium = 0.65 mg/kg	0.6 mg/kg
		Copper = 40.4 mg/kg	35.7 mg/kg
		Lead = 70.4mg/kg	35.0 mg/kg
		Zinc = 347 mg/kg	123 mg/kg
		Acenapthene = 0.03 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.04 mg/kg	0.00587 mg/kg
		Anthracene = 0.07 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.16mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.15 mg/kg	0.0319 mg/kg
		Chrysene = 0.23 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.03 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.45 mg/kg	0.111 mg/kg
		Fluorene = 0.03 mg/kg	0.0212 mg/kg
		Phenanthrene = 0.27 mg/kg	0.0419 mg/kg
		Pyrene = 0.37mg/kg	0.053 mg/kg
OC10-3B	0. 0 – 0.05	Chromium = 38 mg/kg	37.3 mg/kg
		Copper = 36.9 mg/kg	35.7 mg/kg
		Lead = 113mg/kg	35.0 mg/kg
		Zinc = 5,320 mg/kg	123 mg/kg
		Acenapthene = 0.02 mg/kg	0.00671 mg/kg

Sample ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
		Acenaphthylene = 0.01mg/kg	0.00587 mg/kg
		Anthracene = 0.05 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.12 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.12 mg/kg	0.0319 mg/kg
		Chrysene = 0.14 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.03 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.33 mg/kg	0.111 mg/kg
		Fluorene = 0.03 mg/kg	0.0212 mg/kg
		Phenanthrene = 0.16 mg/kg	0.0419 mg/kg
		Pyrene = 0.37mg/kg	0.053 mg/kg
OC10-3B	0. 30 – 0.35	Arsenic = 7.9 mg/kg	5.9 mg/kg
		Chromium = 51 mg/kg	37.3 mg/kg
		Copper = 41.3 mg/kg	35.7 mg/kg
		Lead = 79.8mg/kg	35.0 mg/kg
		Zinc = 1,170 mg/kg	123 mg/kg
		Acenapthene = 0.041 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.025 mg/kg	0.00587 mg/kg
		Anthracene = 0.14 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.52 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.51 mg/kg	0.0319 mg/kg
		Chrysene = 0.66 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.10 mg/kg	0.00622 mg/kg
		Fluoranthene = 1.5 mg/kg	0.111 mg/kg
		Fluorene = 0.055 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.017 mg/kg	0.0202 mg/kg
		Phenanthrene = 0.61 mg/kg	0.0419 mg/kg
		Pyrene = 1.2mg/kg	0.053 mg/kg
OC10-3C	0. 0 – 0.05	Chromium = 39 mg/kg	37.3 mg/kg
		Lead = 107mg/kg	35.0 mg/kg
		Zinc = 3,310 mg/kg	123 mg/kg
		Acenapthene = 1.1 mg/kg	0.00671 mg/kg
		Acenaphthylene = 1.5 mg/kg	0.00587 mg/kg
		Anthracene = 2.2 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 4.8 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 4.3 mg/kg	0.0319 mg/kg
		Chrysene = 6.0 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.73 mg/kg	0.00622 mg/kg
		Fluoranthene = 18 mg/kg	0.111 mg/kg
		Fluorene = 1.9 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 1.2 mg/kg	0.0202 mg/kg
		Naphthalene = 4.3 mg/kg	0.0346 mg/kg
		Phenanthrene = 20 mg/kg	0.0419 mg/kg
		Pyrene = 12 mg/kg	0.053 mg/kg
OC10-4A	0.0 – 0.05	Arsenic= 6.2 mg/kg	5.9 mg/kg
		Chromium = 38 mg/kg	37.3 mg/kg
		Lead = 74.8 mg/kg	35.0 mg/kg
		Zinc = 201 mg/kg	123 mg/kg
		Acenapthene = 0.016 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.017 mg/kg	0.00587 mg/kg
		Benzo(a)Anthracene = 0.13 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.11 mg/kg	0.0319 mg/kg
		Chrysene = 0.14 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.019 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.29 mg/kg	0.111 mg/kg
		Fluorene = 0.022 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.030 mg/kg	0.0202 mg/kg
		Phenanthrene = 0.16 mg/kg	0.0419 mg/kg
		Pyrene = 0.23 mg/kg	0.053 mg/kg
OC10-4B	0.0 – 0.05	Arsenic= 8.2 mg/kg	5.9 mg/kg
		Cadmium = 0.62 mg/kg	0.6 mg/kg
		Chromium = 39 mg/kg	37.3 mg/kg
		Copper = 41.9 mg/kg	35.7 mg/kg

Sample ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
		Lead = 97 mg/kg	35.0 mg/kg
		Zinc = 498 mg/kg	123 mg/kg
		Acenapthene = 0.03 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.02 mg/kg	0.00587 mg/kg
		Anthracene = 0.11 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.23 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.273 mg/kg	0.0319 mg/kg
		Chrysene = 0.29 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.06 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.58 mg/kg	0.111 mg/kg
		Fluorene = 0.04 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.03 mg/kg	0.0202 mg/kg
		Phenanthrene = 0.31 mg/kg	0.0419 mg/kg
		Pyrene = 0.48 mg/kg	0.053 mg/kg
OC10-4B	0.30 – 0.35	Arsenic= 11.1 mg/kg	5.9 mg/kg
		Chromium = 42 mg/kg	37.3 mg/kg
		Copper = 36.2 mg/kg	35.7 mg/kg
OC10-4C	0.0 – 0.05	Arsenic= 7.3 mg/kg	5.9 mg/kg
		Cadmium = 0.68 mg/kg	0.6 mg/kg
		Chromium = 39 mg/kg	37.3 mg/kg
		Copper = 41.8 mg/kg	35.7 mg/kg
		Lead = 78 mg/kg	35.0 mg/kg
		Zinc = 725 mg/kg	123 mg/kg
		Acenapthene = 0.042 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.028 mg/kg	0.00587 mg/kg
		Anthracene = 0.088 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.25 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.24 mg/kg	0.0319 mg/kg
		Chrysene = 0.33 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.045 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.70 mg/kg	0.111 mg/kg
		Fluorene = 0.055 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.028 mg/kg	0.0202 mg/kg
		Phenanthrene = 0.43 mg/kg	0.0419 mg/kg
		Pyrene = 0.55 mg/kg	0.053 mg/kg
OC10-5A	0.0 – 0.05	Arsenic= 6.2 mg/kg	5.9 mg/kg
		Cadmium = 0.7 mg/kg	0.6 mg/kg
		Chromium = 38 mg/kg	37.3 mg/kg
		Copper = 41.9 mg/kg	35.7 mg/kg
		Lead = 85.2 mg/kg	35.0 mg/kg
		Zinc = 395 mg/kg	123 mg/kg
		Acenapthene = 0.22 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.05 mg/kg	0.00587 mg/kg
		Anthracene = 0.42 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.71mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.61 mg/kg	0.0319 mg/kg
		Chrysene = 0.77 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.09 mg/kg	0.00622 mg/kg
		Fluoranthene = 1.9 mg/kg	0.111 mg/kg
		Fluorene = 0.20 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.06 mg/kg	0.0202 mg/kg
		Naphthalene = 0.07 mg/kg	0.0346 mg/kg
		Phenanthrene = 1.7 mg/kg	0.0419 mg/kg
		Pyrene = 1.6 mg/kg	0.053 mg/kg
OC10-5B	0.0 – 0.05	Arsenic= 6.2 mg/kg	5.9 mg/kg
		Lead = 83.3 mg/kg	35.0 mg/kg
		Zinc = 287 mg/kg	123 mg/kg
		Acenapthene = 0.02 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.02 mg/kg	0.00587 mg/kg
		Anthracene = 0.06 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.12mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.09 mg/kg	0.0319 mg/kg

Sample ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
		Chrysene = 0.16 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = <0.02 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.35 mg/kg	0.111 mg/kg
		Fluorene = 0.04 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.03 mg/kg	0.0202 mg/kg
		Naphthalene = 0.05 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.15 mg/kg	0.0419 mg/kg
		Pyrene = 0.3 mg/kg	0.053 mg/kg
OC10-5B	0.30 – 0.35	Arsenic= 6.5 mg/kg	5.9 mg/kg
		Chromium = 44 mg/kg	37.3 mg/kg
		Zinc = 128 mg/kg	123 mg/kg
OC10-5C	0.0 – 0.05	Arsenic= 6.3 mg/kg	5.9 mg/kg
		Cadmium = 0.7 mg/kg	0.6 mg/kg
		Copper = 43 mg/kg	35.7 mg/kg
		Lead = 165 mg/kg	35.0 mg/kg
		Zinc = 376 mg/kg	123 mg/kg
		Acenapthene = 0.05 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.04 mg/kg	0.00587 mg/kg
		Anthracene = 0.12 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.25mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.21 mg/kg	0.0319 mg/kg
		Chrysene = 0.32 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = <0.04 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.64 mg/kg	0.111 mg/kg
		Fluorene = 0.07 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.07 mg/kg	0.0202 mg/kg
		Naphthalene = 0.07 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.45 mg/kg	0.0419 mg/kg
		Pyrene = 0.52 mg/kg	0.053 mg/kg
OC10-6A	0.0 – 0.05	Arsenic= 7.8 mg/kg	5.9 mg/kg
		Cadmium = 0.6 mg/kg	0.6 mg/kg
		Copper = 42 mg/kg	35.7 mg/kg
		Lead = 85.7 mg/kg	35.0 mg/kg
		Zinc = 387 mg/kg	123 mg/kg
		Acenapthene = 0.1 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.1 mg/kg	0.00587 mg/kg
		Anthracene = 0.39 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.92mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.57 mg/kg	0.0319 mg/kg
		Chrysene = 2 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.13 mg/kg	0.00622 mg/kg
		Fluoranthene = 3.8 mg/kg	0.111 mg/kg
		Fluorene = 0.2 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.13 mg/kg	0.0202 mg/kg
		Naphthalene = 0.14 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.99 mg/kg	0.0419 mg/kg
		Pyrene = 2.7 mg/kg	0.053 mg/kg
OC10-6B	0.0 – 0.05	Copper = 36 mg/kg	35.7 mg/kg
		Lead = 125 mg/kg	35.0 mg/kg
		Zinc = 273 mg/kg	123 mg/kg
		Acenapthene = 0.19 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.32 mg/kg	0.00587 mg/kg
		Anthracene = 1.0 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 2.0 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 1.3 mg/kg	0.0319 mg/kg
		Chrysene = 2.7 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.30 mg/kg	0.00622 mg/kg
		Fluoranthene = 6.3 mg/kg	0.111 mg/kg
		Fluorene = 0.27 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.07mg/kg	0.0202 mg/kg
		Naphthalene = 0.13 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.88 mg/kg	0.0419 mg/kg

Sample ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
		Pyrene = 5.3 mg/kg	0.053 mg/kg
OC10-6B	0.30 – 0.35	Arsenic= 6.4 mg/kg Lead = 84.2 mg/kg Zinc = 536 mg/kg Acenapthene = 0.03mg/kg Acenaphthylene = 0.018 mg/kg Anthracene = 0.1 mg/kg Benzo(a)Anthracene = 0.17 mg/kg Benzo(1)pyrene = 0.13 mg/kg Chrysene = 0.21 mg/kg Dibenz(1,h)Anthracene = 0.027 mg/kg Fluoranthene = 0.56 mg/kg Fluorene = 0.045 mg/kg 2-Methylnaphthalene = 0.069 mg/kg Naphthalene = 0.052 mg/kg Phenanthrene = 0.21 mg/kg Pyrene = 0.45 mg/kg	5.9 mg/kg 35.0 mg/kg 123 mg/kg 0.00671 mg/kg 0.00587 mg/kg 0.0469 mg/kg 0.0317 mg/kg 0.0319 mg/kg 0.0571 mg/kg 0.00622 mg/kg 0.111 mg/kg 0.0212 mg/kg 0.0202 mg/kg 0.0346 mg/kg 0.0419 mg/kg 0.053 mg/kg
OC10-6C	0.0 – 0.05	Arsenic= 7.0 mg/kg Copper = 43 mg/kg Lead = 100 mg/kg Zinc = 335mg/kg Acenapthene = 0.18mg/kg Acenaphthylene = 0.017 mg/kg Anthracene = 0.69 mg/kg Benzo(a)Anthracene = 1.5 mg/kg Benzo(1)pyrene = 1.2 mg/kg Chrysene = 3.9 mg/kg Dibenz(1,h)Anthracene = 0.23 mg/kg Fluoranthene = 6.7 mg/kg Fluorene = 0.28 mg/kg 2-Methylnaphthalene = 0.25 mg/kg Naphthalene = 0.29 mg/kg Phenanthrene = 2.4 mg/kg Pyrene = 5.1 mg/kg	5.9 mg/kg 35.7 mg/kg 35.0 mg/kg 123 mg/kg 0.00671 mg/kg 0.00587 mg/kg 0.0469 mg/kg 0.0317 mg/kg 0.0319 mg/kg 0.0571 mg/kg 0.00622 mg/kg 0.111 mg/kg 0.0212 mg/kg 0.0202 mg/kg 0.0346 mg/kg 0.0419 mg/kg 0.053 mg/kg
OC10-7A	0.0 – 0.05	Arsenic= 6.9 mg/kg Chromium = 42 mg/kg Copper = 43.4 mg/kg Lead = 128 mg/kg Zinc = 380 mg/kg Acenapthene = 0.05mg/kg Acenaphthylene = 0.05 mg/kg Anthracene = 0.15 mg/kg Benzo(a)Anthracene = 0.28 mg/kg Benzo(1)pyrene = 0.32 mg/kg Chrysene = 0.7 mg/kg Dibenz(1,h)Anthracene = 0.07 mg/kg Fluoranthene = 0.77 mg/kg Fluorene = 0.08 mg/kg 2-Methylnaphthalene = 0.17 mg/kg Naphthalene = 0.13 mg/kg Phenanthrene = 0.38 mg/kg Pyrene = 0.62 mg/kg	5.9 mg/kg 37.3 mg/kg 35.7 mg/kg 35.0 mg/kg 123 mg/kg 0.00671 mg/kg 0.00587 mg/kg 0.0469 mg/kg 0.0317 mg/kg 0.0319 mg/kg 0.0571 mg/kg 0.00622 mg/kg 0.111 mg/kg 0.0212 mg/kg 0.0202 mg/kg 0.0346 mg/kg 0.0419 mg/kg 0.053 mg/kg
OC10-7B	0.0 – 0.05	Arsenic= 6.42 mg/kg Lead = 93.5 mg/kg Zinc = 268 mg/kg Acenapthene = 0.14mg/kg Acenaphthylene = 0.03 mg/kg Anthracene = 0.16 mg/kg Benzo(a)Anthracene = 0.33 mg/kg Benzo(1)pyrene = 0.31 mg/kg Chrysene = 0.6 mg/kg Dibenz(1,h)Anthracene = 0.06 mg/kg	5.9 mg/kg 35.0 mg/kg 123 mg/kg 0.00671 mg/kg 0.00587 mg/kg 0.0469 mg/kg 0.0317 mg/kg 0.0319 mg/kg 0.0571 mg/kg 0.00622 mg/kg

Sample ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
		Fluoranthene = 1.2 mg/kg	0.111 mg/kg
		Fluorene = 0.17 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.1 mg/kg	0.0202 mg/kg
		Naphthalene = 0.07 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.48 mg/kg	0.0419 mg/kg
		Pyrene = 0.89 mg/kg	0.053 mg/kg
OC10-7B	0.30 – 0.35	Arsenic= 7.6 mg/kg	5.9 mg/kg
		Cadmium = 0.8 mg/kg	0.6 mg/kg
		Chromium = 43 mg/kg	37.3 mg/kg
		Copper = 48 mg/kg	35.7 mg/kg
		Lead = 219 mg/kg	35.0 mg/kg
		Zinc = 283 mg/kg	123 mg/kg
		Acenapthene = 0.18 mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.007 mg/kg	0.00587 mg/kg
		Benzo(a)Anthracene = 0.12 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.082 mg/kg	0.0319 mg/kg
		Chrysene = 0.20 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.013 mg/kg	0.00622 mg/kg
		Fluoranthene = 0.36 mg/kg	0.111 mg/kg
		Fluorene = 0.024 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.018 mg/kg	0.0202 mg/kg
		Phenanthrene = 0.052 mg/kg	0.0419 mg/kg
		Pyrene = 0.31 mg/kg	0.053 mg/kg
OC10-7C	0.0 – 0.05	Zinc = 258 mg/kg	123 mg/kg
		Acenapthene = 0.09mg/kg	0.00671 mg/kg
		Acenaphthylene = 0.04 mg/kg	0.00587 mg/kg
		Anthracene = 0.23 mg/kg	0.0469 mg/kg
		Benzo(a)Anthracene = 0.27 mg/kg	0.0317 mg/kg
		Benzo(1)pyrene = 0.25 mg/kg	0.0319 mg/kg
		Chrysene = 0.96 mg/kg	0.0571 mg/kg
		Dibenz(1,h)Anthracene = 0.05 mg/kg	0.00622 mg/kg
		Fluoranthene = 1.8 mg/kg	0.111 mg/kg
		Fluorene = 0.11 mg/kg	0.0212 mg/kg
		2-Methylnaphthalene = 0.17 mg/kg	0.0202 mg/kg
		Naphthalene = 0.19 mg/kg	0.0346 mg/kg
		Phenanthrene = 0.42 mg/kg	0.0419 mg/kg
		Pyrene = 1.2 mg/kg	0.053 mg/kg

The laboratory sediment results are presented in Tables 4.13, 4.14, 4.15, and 4.16.

4.2.13.3 Surface Water Laboratory Analytical Results

Seven (7) surface water samples, one (1) from each sample station, were also collected from Omands Creek and submitted for total metals, dissolved metals, PAH, and PCB analyses. One (1) field duplicate sample was also collected from sample location OC10-1 (OC10-10). Concentrations of PAHs and PCBs were below the laboratory's analytical method of detection and subsequently meet the site-selected guidelines for surface water.

Table 4.2.15.2 summarizes the analytical parameters exceeding the applicable CCME Quality Guidelines.

Table 4.2.15.2 Analytical Surface Water Parameters above CCME Guidelines

Sample ID.:	Parameter Above Guideline	CCME Guideline
OC10-1	Dissolved Cadmium = 0.00003 mg/L Dissolved Selenium = 0.0016 mg/L Total Arsenic = 0.649 mg/L Total Cadmium = 0.00004 mg/L Total Iron = 0.766 mg/L Selenium = 0.0017 mg/L	0.000015 mg/L 0.001 mg/L 0.005 mg/L 0.000017 mg/L 0.3 mg/L 0.0010 mg/L
OC10-2	Dissolved Cadmium = 0.00002 mg/L Selenium = 0.0016 mg/L Total Arsenic = 0.476 mg/L Total Cadmium = 0.00032 mg/L Total Iron = 0.555 mg/L Total Selenium = 0.0017 mg/L	0.000015 mg/L 0.001 mg/L 0.005 mg/L 0.000017 mg/L 0.3 mg/L 0.0010 mg/L
OC10-3	Dissolved Cadmium = 0.00002 mg/L Dissolved Selenium = 0.0016 mg/L Total Arsenic = 0.839 mg/L Total Cadmium = 0.00005 mg/L Total Iron = 1.07 mg/L Total Selenium = 0.0015mg/L Total Zinc = 0.069 mg/L	0.000015 mg/L 0.001 mg/L 0.005 mg/L 0.000017 mg/L 0.3 mg/L 0.0010 mg/L 0.030 mg/L
OC10-4	Dissolved Selenium = 0.0015 mg/L Total Arsenic = 0.665 mg/L Total Cadmium = 0.00002 mg/L Total Iron = 0.808 mg/L Total Selenium = 0.0014 mg/L	0.001 mg/L 0.005 mg/L 0.000017 mg/L 0.3 mg/L 0.0010 mg/L
OC10-5	Dissolved Cadmium = 0.00003 mg/L Dissolved Selenium = 0.0014 mg/L Total Arsenic = 0.502 mg/L Total Cadmium = 0.00002 mg/L Total Iron = 0.598 mg/L Total Selenium = 0.0015 mg/L	0.000015 mg/L 0.001 mg/L 0.005 mg/L 0.000017 mg/L 0.3 mg/L 0.0010 mg/L
OC10-6	Dissolved Selenium = 0.0015 mg/L Total Iron = 0.430 mg/L Total Selenium = 0.0014 mg/L	0.001 mg/L 0.3 mg/L 0.0010 mg/
OC10-7	Dissolved Cadmium = 0.00003 mg/L Dissolved Selenium = 0.0013 mg/L Dissolved Zinc = 0.035 mg/L Total Iron = 0.498 mg/L Total Selenium = 0.0013 mg/L	0.000015 mg/L 0.001 mg/L 0.030 mg/L 0.3 mg/L 0.0010 mg/

The laboratory surface water results are presented in Tables 4.17, 4.18, 4.19, 4.20, and 4.21.

4.2.13.4 Biological Sampling Results

The aquatic macrophyte community observed during the site assessment in October 2010 in the creek at, and in the vicinity of, the Site included cattails (*Typha latifolia*) along the wetted margins and common waterweed (*Elodea canadensis*), milfoil (*Myriophyllum* sp.) and pondweed (*Potamogeton* sp.) as submergent vegetation.

Fish captured as part of the biota assessment were black bullhead (*Ameiurus melas*), brook stickleback (*Culaea inconstans*), northern pike (*Esox lucius*), and brassy minnow (*Hybognathus hankinsoni*). A total creek length of 468 m was fished in 1664 seconds, using a backpack electrofisher upstream and downstream of the Site. Soft, deep substrate made fishing within the Site unsafe.

Other wildlife (e.g., amphibians, birds, mammals) in Omands Creek were not directly observed during the October 2010 survey. However, raccoon (*Procyon lotor*) tracks were observed on Site along the wetted margins of Omands Creek. Bird nests and a duck tunnel were also observed on the Site. Additionally, a small garter snake

(*Thamnophis sirtalis parietalis*) was captured during the fishing effort downstream of the Site. No amphibians were heard or observed during the survey.

4.2.14 South Crane Runway Area

Three (3) boreholes were advanced by hand auger (TP10-01 to TP10-03) in selected locations to assess the South Crane Runway (Figure 17). The soil encountered during the drilling program generally consisted of a sandy gravel fill (from 0.0 mBGS to 0.2 mBGS) underlain by dark grey clay to the maximum depth of assessment of 0.6 mBGS.

4.2.14.1 Soil Laboratory Analytical Results

Two (2) soil samples from each hand auger location were submitted for PAH analysis. Table 4.12.13.1 summarizes the analytical parameters exceeding the CCME Quality Guidelines.

Table 4.2.13.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
TP10-01	0.15	Naphthalene = 0.84 mg/kg Phenanthrene = 1.3 mg/kg	0.013 mg/kg 0.046 mg/kg
	0.6	Naphthalene = 0.27 mg/kg Phenanthrene = 0.21 mg/kg	0.013 mg/kg 0.046 mg/kg
TP10-02	0.15	Acenapthene = 16 mg/kg Anthracene = 33 mg/kg Fluorene = 15 mg/kg Naphthalene = 8.7 mg/kg Phenanthrene = 140 mg/kg Pyrene = 140 mg/kg	0.28 mg/kg 32 mg/kg 0.25 mg/kg 0.013 mg/kg 0.046 mg/kg 100 mg/kg
	0.60	Acenapthene = 6.6 mg/kg Fluorene = 4.3 mg/kg Naphthalene = 3.1 mg/kg Phenanthrene = 48 mg/kg	0.28 mg/kg 0.25 mg/kg 0.013 mg/kg 0.046 mg/kg
TP10-03	0.15	Naphthalene = 0.84 mg/kg Phenanthrene = 1.3 mg/kg	0.013 mg/kg 0.046 mg/kg
	0.60	Naphthalene = 0.84 mg/kg Phenanthrene = 1.3 mg/kg	0.013 mg/kg 0.046 mg/kg

Figure 36 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are also presented in Tables 4.6E and 4.7E.

4.2.15 Galvanizing Pit Area

Two (2) hand auger locations (GP10-01 and GP10-02) were advanced to a maximum depth of 1.5 mBGS to assess the Galvanizing Pit Area (Figure 18). The soil encountered during the drilling program generally consisted of concrete at thicknesses of 0.2 m (GP10-01) and 0.5 m (GP10-02) followed by a sandy gravel fill (from approximately 0.2 mBGS to 1.0 mBGS). In borehole GP10-01, the sandy fill was underlain by a brown soft wet silt unit to 1.5 mBGS followed by dark grey clay to the maximum depth of assessment at 1.5 mBGS. For borehole GP10-02, the sandy fill was underlain by dark grey clay to the maximum depth of assessment at 1.5 mBGS with silt content decreasing with depth.

4.2.15.1 Soil Laboratory Analytical Results

Two (2) soil samples from each hand auger location were submitted for total metals analyses. The soil sample collected from GP10-01 at 0.3 mBGS detected a nickel concentration of 10,300 mg/kg which is above the applicable soil quality guideline of 360 mg/kg (as summarized in Table 4.2.14.1). The analytical results of all remaining soil samples were less than the applicable soil quality guidelines.

Table 4.2.13.1 Analytical Soil Parameters above CCME Guidelines

Borehole ID.:	Depth (mBGS)	Parameter Above Guideline	CCME Guideline
GP10-01 30CM	0.30	Nickel = 10,300 mg/kg	360 mg/kg

Figure 37 summarizes soil parameters above the applicable CCME Soil Quality Guidelines for the Site. The laboratory soil results are presented in Table 4.3I.

5. Quality Assurance/Quality Control

Field Quality Assurance/Quality Control (QA/QC) procedures employed during the soil and groundwater monitoring program included:

- Using experienced and trained staff in the field to conduct the sampling.
- Preparing and filing of detailed notes of the soil stratigraphy and well construction.
- Using sampling containers supplied by the analytical laboratory.
- Using a CALA accredited laboratory for the analyses.
- Purging the wells to dry or removal of three well volumes.
- Using newly supplied dedicated bailers for purging and sampling.
- Labelling, storing and shipping samples in coolers supplied by the laboratory.
- Submitting samples with chain of custody forms within 24 hours of sample collection.
- Submitting field duplicate soil, groundwater, sediment and surface water samples.
- Submitting one trip blank water sample.

Field duplicate samples were submitted for analysis to assess the overall sampling and analytical precision (reliability) of the laboratory results for the soil, groundwater, surface and sediment sampling programs. Reliability was assessed by calculating the relative percent difference (RPD) between the duplicate samples. Generally the acceptable RPD, for constituent concentrations that are greater than five (5) times the detection limit, between the concentration of a constituent in the original and duplicate sample is as follows:

- 100% or less for metals and general chemistry in soil
- 100% or less for VOCs, PHCs, PAHs and other organics in soil
- 50% or less for metals and general chemistry in water
- 80% or less for VOCs, PHCs, PAHs and other organics in water.

Thirteen (13) blind field duplicate soil samples were collected from the Site and submitted for laboratory analysis of BTEX, PHC Fractions F1 to F4, PCB, and/or metals as part of the project's QA/QC program:

Table 5.1 Blind Field Duplicate Soil Samples Submitted for Laboratory Analysis

Blind Field Duplicate Sample ID.	Corresponding Sample ID.	Sample Depth (mBGS)	Parameter(s) Analyzed
G-03-33	G-03-05	2.29	BTEX, PHC Fractions F1-F4
DUP1	G-22-02	1.52	BTEX, PHC Fractions F1-F4
DUP2	G-22A-05	4.57	BTEX, PHC Fractions F1-F4
DUP3	G-45-01	0.76	PHC BTEX, PHC Fractions F1-F4
G-63-13	G-63-03	2.29	BTEX, PHC Fractions F1-F4
DUP5	G-67-02	1.52	BTEX, PHC Fractions F1-F4, Metals
DUP7-BH	G-12-02	1.52	Metals
G-33-12	G-33-02	1.52	Metals, PCB
DUP8-BH	G-54-01	0.76	Metals
DUP6	G-58-02	1.52	Metals
DUP4-BH	G-65-02	1.52	Metals
G-71-13	G-71-03	2.31	Metals
G-79-12	G-79-12	1.52	Metals, PCB

Ten (10) blind field duplicate groundwater samples were collected from the Site and submitted for laboratory analysis of BTEX, PHC Fractions F1 to F4, PCB, VOC, and/or metals as part of the project's QA/QC program:

Table 5.2 Blind Field Duplicate Groundwater Samples Submitted for Laboratory Analysis

Blind Field Duplicate Sample ID.	Corresponding Sample ID.	Parameter(s) Analyzed
MW10-13	MW10-03	BTEX, PHC Fractions F1-F4
MW10-26	MW10-06	BTEX, PHC Fractions F1-F4, Metals
MW10-20	MW10-10	BTEX, PHC Fractions F1-F4, Metals
MW10-54	MW10-44	BTEX, PHC Fractions F1-F4, VOC
MW10-72	MW10-62	BTEX, PHC Fractions F1-F4
MW10-99	MW10-69	BTEX, PHC Fractions F1-F4, Metals
MW10-38	MW10-28	Metals
MW10-59	MW10-49	Metals
MW10-81	MW10-71	Metals
MW10-87	MW10-77	Metals, PCB

Three (3) blind field duplicate sediment samples were collected from the Site and submitted for laboratory analysis of metals, PCB, and PAH as part of the project's QA/QC program:

Table 5.3 Blind Field Duplicate Sediment Samples Submitted for Laboratory Analysis

Blind Field Duplicate Sample ID.	Corresponding Sample ID.	Parameter(s) Analyzed
OC10-10A	OC10-01A	Metals, PCB, PAH
OC10-10B (0-5)	OC10-10B (0-5)	Metals, PCB, PAH
OC10-10C	OC10-01C	Metals, PCB, PAH

One (1) blind field duplicate surface water sample was collected from the Site and submitted for laboratory analysis of dissolved organic Carbon (DOC), total organic carbon (TOC), total metals, PCB, and PAH as part of the project's QA/QC program:

Table 5.3 Blind Field Duplicate Surface Water Samples Submitted for Laboratory Analysis

Blind Field Duplicate Sample ID.	Corresponding Sample ID.	Parameter(s) Analyzed
OC10-10	OC10-1	DOC, TOC, Dissolved Metals, Total Metals, PCB, PAH

A water trip blank was also used at the site and analyzed for BTEX and PHC Fractions F1 to F4.

RPDs were calculated for each of the analytical parameters of the sample pairs and are included in Tables 4.22 to 4.36 for the soil, groundwater, sediment and surface water samples.

With respect to soil analyses, only two (2) samples exceeded the acceptable RPD range of 100%. The RPD calculated for sample DUP3 (a blind field duplicate of G-45-01) collected from the Solvent AST Area was 137% for the PHC Fraction F3 which is likely attributable to sample heterogeneity. Also, the RPD calculated for sample

DUP8-BH (a blind field duplicate of G-54-01) collected from the Sulphuric Acid Drum Storage Area was 102.5% for arsenic which is also likely attributable to sample heterogeneity. The concentrations of these two (2) sample sets were well below the applicable soil quality guidelines and are not significant.

The calculated RPDs for the groundwater samples were all below the applicable criteria.

With respect to sediment analyses, three (3) samples exceeded the acceptable RPD range of 100%. The RPD calculated for sample OC10-10B (a blind field duplicate of OC10-1B) collected from Omands Creek Sample Station 1 was 122% for antimony which is also likely attributable to sample heterogeneity. The concentrations of antimony in these samples were below the applicable sediment quality guideline. The RPD calculated for sample OC10-10A (a blind field duplicate of OC10-1A) collected from Omands Creek Sample Station 1 ranged from 106% to 150% for several PAH parameters (acenaphthene, anthracene, benzo(k)fluoranthene, fluoranthene, fluorene, and phenanthrene) which is also likely attributable to sample heterogeneity. The RPD calculated for sample OC10-10A (a blind field duplicate of OC10-1A) collected from Omands Creek Sample Station 1 ranged from 106% to 150% for several PAH parameters (acenaphthene, anthracene, benzo(k)fluoranthene, fluoranthene, fluorine, and phenanthrene) which is likely attributable to sample heterogeneity. Also, the RPD calculated for sample OC10-10C (a blind field duplicate of OC10-1C) collected from Omands Creek Sample Station 1 ranged from 111% to 131% for several PAH parameters (benxo(a)anthracene, benzo(a)pyrene, benzo(b,j)fluoranthene, chrysene, phenanthrene, and pyrene) which is also likely attributable to sample heterogeneity. However, the concentrations of these PAH parameters exhibiting RPDs higher than the acceptable limit all exceeded the applicable sediment quality guidelines regardless and the effects of this are therefore not significant.

The calculated RPDs for the surface water samples were all below the applicable alert criteria.

One water trip blank was submitted to Maxxam to monitor for possible cross-contamination between samples during transportation. The analyzed parameters of the trip blank (BTEX and PHC Fractions F1 to F4) were below the laboratory's analytical method of detection.

Once the completed laboratory certificates were received, the pertinent QA/QC data was reviewed. All QA/QC data for the laboratory analyses are included on the certificates attached in Appendix C.

Based on the QA/QC procedures utilized, the soil, groundwater, sediment and surface water results are considered to be sufficiently reliable.

6. Assessment of Contamination Distribution

6.1 Site Overview and Summary

Formerly a bridge steel fabricating facility, the Site is currently owned by the City of Winnipeg and leased to several industrial manufacturing company tenants. The Site was constructed in the early 1910s and is approximately 11 ha in size.

Site lithology consists of approximately 0.5 m to 2.0 m of fill material (sand, gravel and clay) underlain by an unconsolidated wet silt (1.0 m to 2.5 m) which is followed by a firm to stiff clay/clay till. Based on water well records in the area, the clay/clay till extends approximately 15 m below the wet silt to bedrock. The Site is level however the natural slope of the area is to the south approaching the Assiniboine River and to the west to Omands Creek.

Thirteen (13) areas of environmental concern (AEC) were identified on-site and are summarized in Table 6.1-1 below.

Table 6.1-1 Summary of Areas of Environmental Concern (AEC)

AEC	Name	Impacted Media	Contaminant(s) of Concern (COC)
AEC 1	Paint Shop UST Area and West of Paint Shop	Soil	PHC, PAH
AEC 2	North Property Line UST Area	Soil Groundwater	Metals Metals
AEC 3	Waste Oil Drum Storage Area	Soil	PHC
AEC 4	Landfilling Area	Soil Groundwater	Metals Metals
AEC 5	Solvent AST Area	Soil	PHC, PAH
AEC 6	Diesel and Gasoline AST Area	Soil	PHC
AEC 7	Sulphuric Acid Drum Storage Area	Soil Groundwater	Metals Metals
AEC 8	Waste Paint Storage Area	Soil Groundwater	Metals Metals
AEC 9	Former Saskatchewan Avenue Landfill	Soil Groundwater	Metals Metals
AEC 10	Polychlorinated Biphenyls Storage Area	Soil Groundwater	Metals, PAH Metals
AEC 11	Omands Creek	Sediment Surface Water	Metals, PAH Total Metals, Dissolved Metals
AEC 12	South Crane Runway	Soil	PAH
AEC 13	Galvanizing Pit	Soil	Metals

6.2 Soil Contamination

PHC, metals and PAH impacts have been identified at various AECs throughout the Site based on soil quality guidelines protective of both human and environmental receptors.

Areas of impacted soil at the Site that may require treatment and/or disposal to meet the applicable guidelines (prior to site redevelopment and/or purchase) have been estimated on the basis of the assessment work completed to date (including data from 1999 and 2010). Figures 20 through 37 present the estimated aerial extents of impacted areas at the Site. Table 6.2-1 summarizes the aerial extent (m^2), the depth (m) and volume (m^3) of on-site impacts.

The estimated areas and depths of impacted soil are conservative in nature, and generally assume that soil impacts extend to the next borehole or soil sample in which laboratory analysis has confirmed contaminant concentrations below the applicable soil quality guideline.

Table 6.2-1 Estimated Extents of Impacted Soil

Location	Name	COC	Estimated Area (m^2)	Estimated Depth of Impacts (m)	Total Estimated Volume (m^3)	Comments
AEC 1	Paint Shop UST Area and West of Paint Shop	PHC PAH	735 550	2.5 1.5	2,328	Not delineated to the west and north
AEC 2	North Property Line UST Area	Metals	210	1.0	210	Delineated
AEC 3	Waste Oil Drum Storage Area	PHC	1,358	1.0	1,358	Delineated
AEC 4	Landfilling Area	Metals	10,100	2.5	25,250	Not delineated southwest
AEC 5	Solvent AST Area	PHC PAH	935 1,930	2.0 2.5	4,825	Not delineated south, west and southeast
AEC 6	Diesel and Gasoline AST Area	PHC	80	2.0	160	Delineated
AEC 7	Sulphuric Acid Drum Storage Area	Metals	2,796	1.5	4,194	Delineated
AEC 8	Waste Paint Storage Area	Metals	752	0.8	602	Not delineated to the north, east and south
AEC 9	Former Saskatchewan Avenue Landfill	PAH Metals	235 436	1.5 4.0	1,854	Not delineated
AEC 10	Polychlorinated Biphenyls Storage Area	PAH Metals	375 475	3.0 3.5	2,461	Not delineated north and northeast
AEC 12	South Crane Runway	PAH	4,840	1.0	4,840	Not delineated but assumed directly beneath crane runway.
AEC 13	Galvanizing Pit	Metals	436	2.0	800	Not delineated to north, south and west.
				Total Approximate Volume:	**48,900**	

An estimated total soil volume of 48,900 m^3 is impacted with PHC, metals and/or PAH.

6.3 Groundwater Contamination

The areas of impacted groundwater at the Site that exceed the applicable groundwater quality guidelines have been estimated on the basis of the assessment work completed to date (including data from 1999 and 2010). Estimated aerial extents of the impacted areas are shown on Figures 20 through 37. Table 6.3-1 summarizes the aerial extents (m^2) of impacts. As was the case for impacted soil, the estimated areas of impacted groundwater are conservative in nature, and generally assume that groundwater impacts extend to the next monitoring well in which laboratory analysis has confirmed contaminant concentrations below the applicable groundwater quality guideline.

Table 6.3-1 Estimated Extents of Impacted Groundwater

Location	Name	COC	Estimated Area (m^2)	Comments
AEC 2	North Property Line UST Area	Metals	460	Not delineated
AEC 4	Landfilling Area	Metals	18,360	Not delineated
AEC 7	Sulphuric Acid Drum Storage Area	Metals	3,750	Not delineated
AEC 8	Waste Paint Storage Area	Metals	380	Not delineated
AEC 9	Former Saskatchewan Avenue Landfill	Metals	500	Not delineated
AEC 10	Polychlorinated Biphenyls Storage Area	Metals	920	Not delineated
		Total Approximate Area:	**24,370**	

As no nested monitoring wells were installed at the Site, the vertical extent of groundwater impacts at the Site is unknown. However, based on the soil stratigraphy present at the Site and the nature of site impacts, it is very unlikely that the bedrock aquifer has been impacted.

6.4 Sediment Contamination

Impacts appear to extend further upstream and downstream of the Site. However, based on the results of the investigation, impacted sediments are present over the entire length of the Site. Although the vertical extent of sediments impacts has not been confirmed, based on the observed decrease in contaminant concentrations with sediment depth, it is conservatively estimated that the sediments are impacted to a depth of 1 m below the bed of the Creek. Based on this assumption, Table 6.4-1 summarizes sediment impacts in Omands Creek (AEC 11).

Table 6.4-1 Estimated Extent of Impacted Sediment

Location	COC	Estimated Area (m^2)	Estimated Volume (m^3)	Comments
AEC 11	Metals and PAHs	4,775	4,775	Not delineated vertically or upstream/downstream of Site.

6.5 Surface Water Contamination

Surface water impacts appear to extend upstream and downstream of the Site. Table 6.4-1 summarizes surface water impacts in Omands Creek (AEC 11).

Table 6.5-1 Estimated Extent of Impacted Surface Water

Location	COC	Estimated Area (m^2)	Comments
AEC 11	Dissolved Metals and Total Metals	-	Unknown area and volume

7. Discussion and Conclusions

Based on the work completed at the Site by AECOM at least 11 AECs were identified on-site. Contaminants of concern consist of PHCs F2 and F3, PAHs and metals. Concentrations of PCBs were detected but met the selected-site guidelines.

The estimated direction of shallow groundwater at the Site was interpreted to the west/northwest towards Omands Creek with an average velocity of 11.7 m/yr, a potential maximum velocity of 19.5 m/yr and a potential minimum velocity of 6.8 m/yr. The average depth to groundwater at the Site is approximately 1.6 mBGS.

The following sections summarize the investigation results.

7.1 Gate Shop UST Area

Based on the results of the investigation, there was no evidence of any PHC impacts remaining in this area.

7.2 Paint Shop UST Area and West of Paint Shop Area

Based on the results of the investigation, no impacts to groundwater are present in this area.

With respect to soil, no metals or VOC impacts were discovered. However, PHC impacts (PHC Fraction F2) were noted under the Paint Shop Building at a depth of 2.3 mBGS. The PHC Fraction F2 concentration in this location does not present an exposure risk to building occupants via the inhalation of indoor air exposure pathway. The concentration does however, exceed the soil quality guideline for the Management Limit exposure pathway, meaning that should this soil be exposed in the future during building demolition or construction works, there is a risk of exposure to those who may come in contact with the soil. In addition, PAH impacts surficial and non-carcinogenic in nature, were noted in areas around the various rail spur lines running through the area. The surficial PAH impacts primarily present a risk to the environment via the soil contact pathway.

7.3 North Property Line UST Area

Based on the results of the 2010 and 1999 investigations, a small area of potentially metals impacted soil (nickel) was identified in surface soil in this area of the Site. As the laboratory detection limit for nickel was greater than the current applicable soil quality guideline in a soil sample collected from this location as part of the 1999 investigation, there exists the potential that metal impacted soil exists in this area. With respect to the metal impacted soil, the main pathway of exposure to human and environmental receptors is via soil contact (ingestion, dermal contact or inhalation).

As concentrations of aluminum, arsenic, cadmium, chromium, copper, iron, lead, nickel, silver and zinc in groundwater samples collected from this area exceeded the groundwater quality criteria protective of freshwater aquatic life, it is likely that soil in this particular area is impacted as well. It should be noted that elevated concentrations of aluminum, cadmium, copper, iron, lead, and zinc in groundwater are common across the Site and may be resultant of off-site sources not identified in this investigation.

7.4 Waste Oil Drum Storage Area

Based on the results of the investigation, no impacts to groundwater are present in this area.

The soil investigation completed during the 1999 assessment identified high concentrations of total semi-volatile hydrocarbons (TSVH) in this area. However, the sample analyses did not include PHC Fractions F1 to F4. Based on the conservative assumption that the TSVH concentrations potentially correlate to some degree of PHC Fraction F2 or F3 impacts, the extent of the soil impacts has been delineated by the soil investigation completed during the 2010 assessment. The suspected impacts to soil in this area appear to be shallow in nature (<1.0 mBGS). The shallow soil impacts primarily present a risk to human health and the environment via the soil contact pathway.

7.5 Landfilling Area

Based on the results of the investigation, no PCB or VOC impacts to soil are present in this area. However, a significant volume of metals-impacted soil has been identified up to, and including, the eastern edge of Omands Creek. The depth of the metals impacts extends to approximately 2.5 mBGS and includes concentrations of cadmium, chromium, copper, nickel, lead, and particularly zinc in excess of the applicable soil quality guidelines. The shallow soil impacts primarily present a risk to human health and the environment via the soil contact pathway.

Similar to the soil quality results for this area, no PCB impacts to groundwater are present in this area. However, many of the metal parameters that exceeded the soil quality guidelines are also present in groundwater at concentrations that exceed the water quality guidelines protective of freshwater aquatic life (aluminum, arsenic, cadmium, chromium, copper, iron, lead, nickel, selenium, silver and zinc). The area of metals-impacted groundwater has not been delineated in this area and extends further north of the investigated area, further west of the investigated area (in the estimated direction of shallow groundwater flow at the Site), further south beyond the property limit and further to the west on the west side of Omands Creek. Metals concentrations on the west side of Omands Creek are lower than concentrations noted in the Landfilling Area as it appears that shallow groundwater from the Site is moving to the west and at least partially underneath Omands Creek.

Based on current understanding of the horizontal extent of the landfill (confirmed visually during the 2010 soil investigation), it appears that some metals impacts to groundwater are attributable to other sources upgradient of the Landfilling Area (with respect to the estimated direction of shallow groundwater flow at the Site).

7.6 Solvent AST Area

Areas of PHC and PAH impacts to soil appear to overlap to a large extent in the Solvent AST Area (Figure 26). PHC impacts to soil (PHC Fractions F2 and F3) appear to extend underneath both the south portion of the Paint Shop Building and the Stores Building (at a depth of 2.0 mBGS). As was the case with PHC impacts noted near the Paint Shop UST Area and the West of Paint Shop Area (Section 7.2), the PHC Fraction F2 and F3 concentrations in this location do not present an exposure risk to building occupants via the inhalation of indoor air exposure pathway. The concentration does however, exceed the soil quality guideline for the Management Limit exposure pathway, meaning that should this soil be exposed in the future during building demolition or construction works, there is a risk of exposure to those who may come in contact with the soil. In addition, surficial PAH impacts to soil (both non-carcinogenic and carcinogenic in nature) were noted in areas around the various rail spur lines running through the area and extend to a depth of approximately 2.5 mBGS. The primary receptor at risk of exposure to the surficial non-carcinogenic PAH impacts is freshwater aquatic life associated with Omands Creek. Human exposure via soil contact is the governing exposure pathway associated with the carcinogenic PAHs identified in the area. Delineation of the PAH impacts in this area was not obtained during the investigation and potentially extend throughout this area where rail lines are present.

Based on the results of the investigation, there was no evidence of any VOC impact to soil or groundwater in this area.

7.7 Sulphuric Acid Drum Storage Area

Based on the results of the investigation, there was no evidence of any PHC impacts to soil or groundwater in this area.

However, metals impacts to soil were identified in this area including arsenic, copper, lead, nickel and zinc to a depth of approximately 1.5 mBGS. The area of metals impacted soil is fully delineated and extends to the east edge of Omands Creek. The shallow soil impacts primarily present a risk to human health and the environment via the soil contact pathway.

Metals impacts to groundwater (aluminum, arsenic, cadmium, chromium, copper, iron, lead, nickel, selenium and particularly zinc) also extend to the east edge of Omands Creek. As metals-impacted groundwater has not been delineated to the east, some of the metals impacts may be attributable to the galvanizing Shop to the east of this area. Further details of the investigation completed on the galvanizing pits within the Galvanizing Shop are included in Section 7.14.

7.8 Sulphuric Acid AST Area

Based on the results of the investigation, there was no evidence of any metals impacts in this area. No other contaminants of potential concern were suspected in this area.

7.9 Diesel and Gasoline AST Area

Based on the results of the investigation, no PHC impacts to groundwater are present in this area.

The soil investigation completed during the 1999 assessment identified a high concentration of total semi-volatile hydrocarbons (TSVH) for one (1) borehole advanced in this area. However, sample analyses did not include PHC Fractions F1 to F4. Based on the assumption that the TSVH concentrations potentially correlate to some degree of PHC Fraction F2 or F3 impacts, the extent of the soil impacts has been fully delineated by the soil investigation completed during the 2010 assessment. The suspected impacts to soil in this area appear to be shallow in nature (<2.0 mBGS). The impacts to shallow soil primarily present a risk to human health and the environment via the soil contact pathway. Furthermore, given its close proximity to the PHC impacts determined in the area, the underground electrical line running through the area (as depicted in Figure 29), may have been subjected to PHC impacts depending upon the date it was installed and provide a potential migratory conduit.

7.10 Waste Paint Storage Area

Based on the results of the investigation, there was no evidence of any PHC impacts to soil or groundwater in this area.

However, metals impacts to soil were determined in this area including copper, lead, nickel and zinc to a depth of approximately 0.8 mBGS. The area of metals impacted soil is partially delineated and extends to the Main Shop Building. The shallow soil impacts primarily present a risk to human health and the environment via the soil contact pathway.

Metals impacts to groundwater (aluminum, arsenic, cadmium, copper, iron, lead, and zinc) are also present in this area. As metals-impacted groundwater has not been delineated to the west, some of the metals impacts may be attributable to the galvanizing Shop to the east of this area. Further details of the investigation completed on the galvanizing pits within the Galvanizing Shop are included in Section 7.14.

7.11 Former Saskatchewan Avenue Landfill

Metals impacts to soil were identified in this area including arsenic, nickel and zinc to a depth of approximately 4.0 mBGS. The area of metals impacted soil is not delineated and overlaps with PAH impacted soil (non-carcinogenic and carcinogenic) extending to a depth of approximately 2.0 mBGS. Although solid waste was not encountered during the advancement of boreholes in this area, metals impacts to soil are likely attributable to the former landfill based on proximity and the depth of impacts noted. The shallow soil impacts primarily present a risk to human health and the environment via the soil contact pathway. However, the metals impacts to subsurface soil do not present an exposure risk. The surficial non-carcinogenic PAH impacts primarily present a risk to the environment via the soil contact pathway. Human exposure via soil contact is the governing exposure pathway associated with the carcinogenic PAHs identified in the area. PAH impacts to shallow soil may be attributable to proximity to rail lines in the area.

Metals impacts to groundwater (aluminum, arsenic, cadmium, copper, iron, lead, selenium and zinc) are present in the area and are not delineated in any direction, including off-site to the south. As noted for metals impacts to soil, the metals impacts to groundwater are likely attributable to the former landfill.

Based on the results of the investigation, there was no evidence of any PHC impacts to groundwater in this area.

7.12 Polychlorinated Biphenyls Storage Area

Based on the results of the investigation, there was no evidence of any PHC, PCB or VOC impacts to soil in this area. There was also no evidence of any PCB impacts to groundwater in this area.

A single soil sample (collected from a depth of 3.5 mBGS) only slightly exceeded the applicable soil quality guideline for nickel. The metals impacts in this area have not been delineated to the northeast but extend into the Landfilling Area discussed in Section 7.5. The metals impacts to subsurface soil do not present an exposure risk. PAH impacts to soil (non-carcinogenic), partially overlapping metals impacts to soil, are also present in this area to an estimated depth of 3.0 mBGS and are also not delineated as soil samples from only one (1) borehole were analysed for PAH parameters. The primary receptor at risk of exposure to the surficial non-carcinogenic PAH impacts is freshwater aquatic life associated with Omands Creek. It is likely that the PAH impacts are related to several rail spur lines entering the Site from the southwest in this location.

7.13 South Crane Runway

PAH impacts to soil were identified in this area at locations directly underneath the South Crane Runway to an approximate depth of 1.0 mBGS. The PAH impacts, both non-carcinogenic and carcinogenic in nature, are likely attributable to the presence of treated timbers used to support metal objects placed in the crane runway. The horizontal extent of the PAH impacts was not delineated but is not likely to extend much beyond the immediate crane runway area. The surficial non-carcinogenic PAH impacts primarily present a risk to the environment via the soil contact pathway. Human exposure via surface soil contact is the governing exposure pathway associated with the carcinogenic PAHs identified in the area.

It is reasonable to assume that other crane runways on the property that use or have used treated lumber for the stacking of metal objects may exhibit similar concentrations of PAHs. Further investigation is required to assess potential PAH impacts at the other crane runways and the associated risk to human health and the environment.

7.14 Galvanizing Pit

Of the two (2) boreholes advanced in the two (2) galvanizing pits within the Galvanizing Shop Building, one (1) soil sample collected from immediately below the concrete lining of the eastern pit contained a high concentration of zinc. Zinc impacts appear to extend to an inferred depth of approximately 2.0 m from the pit bottom. Zinc impacts to soil appear to be delineated to the west as the soil samples collected from the borehole advanced in the other pit did not exhibit concentrations of zinc that exceeded the applicable soil quality guideline. As the zinc impacted soil lies beneath the concrete floor of the Galvanizing Pit, there is no risk of exposure to human health or the environment.

As this area was not accessible by drill rig, the maximum depth of investigation was 1.5 m and no monitoring wells were installed to assess groundwater quality in this location.

7.15 Omands Creek

Omands Creek flows south towards the Assiniboine River in the vicinity of the Site. Analytical results of the collected creek sediment and surface water samples suggest that metal and PAH impacts to both sediments and surface water exist upstream of the Site. The PAH and metal concentrations appear to be at the greatest concentrations directly adjacent to the Site and then decrease slightly downstream. Considering the PAH and metal concentrations in excess of the site-selected guidelines upstream of the Site, it is possible that off-site sources (unrelated to the Site) of impacts exist, in addition to the on-site sources.

7.15.1 Biophysical Habitat

Omands Creek flows south towards the Assiniboine River, located approximately 3 km south of the Site. Approximately two thirds of the creek's watershed is well-drained, cultivated crop lands, with the remaining one third being urban runoff within the City of Winnipeg. Most or all of the creek's length has been channelized, and the overall length of mainstem creek channel is approximately 12.6 km upstream and 3.3 km downstream of the Site, respectively. No reservoirs exist in the system, although one or more low drop structures may exist within the City. Assessment of potential barriers to fish passage along the creek was not conducted as part of this assessment.

Based on previous reports, Omands Creek was rerouted along the perimeter of the current Dominion Bridge property in the early 1900s. The banks of the creek have since been raised to prevent flooding of the property, and least a portion of the fill used to raise the banks reportedly included process waste with high metals content, forming one of the AECs on the property. The original channel of Omands Creek reportedly traversed the property in the approximate location of the west wall of the Main Shop building.

Flow in the creek is negligible for much of the year. Its low gradient and channel restrictions, however, prevent the channel from drying except, possibly, during very dry conditions. As one of three tributaries to the Assiniboine River in the Winnipeg area, Omands Creek provides habitat that is otherwise fairly rare in the system, although the Assiniboine River mainstem habitats meet the complete life cycle requirements for local fish species.

Fish use of Omands Creek likely includes spawning and foraging activities for fish resident to the Assiniboine River, including forage species and large-bodied species such as northern pike. The creek at, and in the vicinity of, the Site provides simple, channelized fish habitat that has matured through the establishment of vegetation that includes sedges and shrubs along the banks and cattails along the wetted margins. The aquatic macrophyte assemblage

present in Omands Creek is common in this region and provides abundant cover for fish. Omands Creek likely does not support a resident fish population particularly considering that there is no overwintering habitat available.

The fish habitat at the Site would be classified as ***Important*** according to the Department of Fisheries and Oceans Canada (DFO) Habitat Conservation and Protection Guidelines (1998), as it provides habitat used by the local fish stocks but does not contain limiting habitat. The creek in the vicinity of the Site would be classified as Type B habitat (simple habitat, indicator fish present) according to DFO's Manitoba Drain Classification System for Agricultural Watersheds.

According to a local resident, the creek historically (*i.e*., prior to 30 years ago) provided opportunities for recreational fishing. Fish captured during this period were not generally kept for human consumption and it is unlikely that recreational fishing continues in Omands Creek. An onlooker shared his perception with the field crew that the quality of Omands Creek itself and the fish populations (in terms of size, quality and abundance) inhabiting the creek had degraded over the last 30 years.

7.15.2 On-Site Contaminant Concentrations and Bioavailability

Analytical results of the creek sediment and surface water samples collected over the length of the Site show elevated COC levels, with the highest concentration of metals and PAHs in sediments adjacent to the historical Sulphuric Acid Drum Storage Area. However, metals and PAH impacts to both sediments and surface water exist upstream of the Site as well. Considering the PAH and metal concentrations in excess of the site-selected guidelines upstream of the Site, it is likely that off-site sources of impacts exist (unrelated to the Site), in addition to the on-site sources. As the potential pathway of the historic Omands Creek channel has not been fully delineated, it is also possible that PAH and metals impacts (60 m upstream of the property) may be associated with loading from the Site.

Bioavailability of the contaminants to the aquatic biota in Omands Creek is affected by the physicochemical properties of the compound (particularly for PAHs), geochemical factors (*e.g*., organic content and particle size), biological factors (*e.g.,* feeding behaviours and lifestage), and the presence and concentration of co-occurring contaminants. The high DOC content in the Omands Creek water has considerable potential to attenuate toxicity of the metals COC, and additional study could likely identify site-specific, risk-based water and sediment quality targets that would be somewhat higher than the guidelines selected in this study. However, as more than one COC is well above the PEL in the creek sediments, benthic invertebrate diversity and abundance is likely negatively impacted by the current contaminant levels in the creek, and fish populations may be affected as well. Given necessary remediation efforts on the property including the banks of the creek (particularly along the landfilling area), the potential value of further risk assessment may be small relative to remediation costs.

In Omands Creek, concentrations of COCs in the surficial (upper 5 cm) sediments are generally an order of magnitude or more greater than in the deeper sediments (30-35 cm below the streambed) with the exception of the upstream reference (OC10-1) and OC10-3. This pattern of sediment contamination supports a characterization of contaminant loading from direct deposition of contaminated sediments, overland runoff and/or near-surface groundwater discharge. Therefore, remediation of the surficial sediments and sources from the Site would be expected to remediate impacts to the Creek, pending loading from upstream sources and existing sediment loads. Increased detail in sediment sampling, either with deeper and/or additional cores, would aid in quantifying the attenuation and extent of contaminants in the sediment in Omands Creek.

Impacts to Omands Creek due to COC loading, either through historical placement of contaminated fill or through groundwater impacts, are particularly evident in the areas of the Sulphuric Acid Drum Storage Area and the Landfilling Area. In these areas, particularly high COCs levels are present in the soils and groundwater immediately

adjacent to the Creek. The calculated creek water concentration of each metal COC from groundwater loading was calculated and compared to the current CCME water quality guideline to determine the extent to which metals loading via groundwater transport theoretically contributes to guidelines exceedances. The values were also compared to measured metals concentrations from creek water samples collected in October 2010. The calculated results indicated that the metals loading via groundwater transport contributes less than 2% of the maximum concentration measured in surface water samples collected from the Creek during this investigation. In addition, the loading via groundwater transport contributes less than 8% of the applicable CCME water quality guidelines. Based on these calculations, the overall environmental impact of metal loading on Omands Creek via groundwater transport is relatively low. The method of calculating these contributions is detailed as follows:

1. To determine the metals loading to Omands Creek via groundwater transport from the Site, three (3) separate areas adjacent to Omands Creek were identified. These areas are the Sulphuric Drum Storage Area, the Landfilling Area and the PCB Storage Area. The loading was calculated using measured concentrations of metals in groundwater and groundwater flow data.

2. The width of each loading area was calculated by estimating the length of the contaminated groundwater plume perpendicular to the direction of groundwater flow at the Creek-groundwater interface, as determined by the October 2010 investigation. The height of the loading interface was assumed to be equal to the depth of the water in Omands Creek as measured during the October 2010 investigation. The height of the loading interface approximates a mean value as it would be greater during spring and summer when higher flow conditions are present and lower during winter months when low to no-flow conditions are present. The product of the interface width and height represents the area over which groundwater is transported into the Creek. The volume of groundwater transported into Omands Creek was calculated by multiplying the groundwater velocity by the loading interface for each area.

3. The loading of metal contaminants into the Creek via groundwater transport was calculated using measured concentrations of metals in groundwater from selected monitoring wells installed during the October 2010 investigation and Darcy's equation for groundwater flow (Domenico and Schwartz, 1998). The mean hydraulic conductivity calculated for the Site was applied to each of the three (3) separate areas considered in the metals loading calculations. The concentration of metals in the groundwater was multiplied by the groundwater flow across each interface. This value is representative of the mass of metals that are transported to Omands Creek via groundwater transport.

4. To assess the impact of groundwater loading to metals concentrations in Omands Creek, the calculated loadings were compared to current CCME water quality guidelines. The loading of each contaminant was divided by the mean annual flow (MAF) of the Creek, which was calculated from the 1978-1993 dataset from Water Survey of Canada Gauging Station 05MJ007 near Route 90. The MAF was calculated based on an assumed flow of less than 0.01 m^3/s during the winter (November-February). The MAF condition, rather than low-flow conditions, was deemed appropriate for assessing potential effects of groundwater loading because flux from the shallow and localized impacted groundwater source likely varies considerably between dry and wet conditions, resulting in reduced loading to the creek during periods of low flow.

The comparisons described above provide a coarse evaluation of the potential magnitude of effect of current groundwater loading on surface-water metals COC concentrations in Omands Creek, relative to effects of other loadings including adsorption/desorption from creekbed sediments. It is recognized that, particularly for some metals such as aluminum and iron, the majority of the groundwater loads likely adsorb to creek bed sediments rather than contribute directly to surface-water concentrations. The metals loading to Omands Creek data is presented in Appendix D (Tables D2 through D5).

In addition to the metals loading to the Creek via groundwater transport, PAH and metals impacts in the creek sediments are evident through the entire reach of the creek in the vicinity of the Site. As discussed earlier, the extent of contamination and environmental risks in the creek on the Site could be further delineated. In terms of potential for impacts to fish and fish habitat that could result from remediation activities, the creek channel would be fairly insensitive to disruption, due to its previous channelization and existing habitat limitations.

7.15.3 Potential Exposure Beyond Site Boundaries

As discussed above, small communities of FWAL in Omands Creek are exposed to COCs in the sediments and surface water on the Site. The biologically or hydraulically-mediated transport of contaminants from the Site also creates theoretical exposure pathways to receptors away from the Site.

Contaminants in the surface water in Omands Creek represent a combination of ongoing loading from upstream, from contaminated groundwater and surface runoff, and from mobilization of contaminants from the creek sediments. Whereas several COCs exceeded guideline values on the Site during sampling in October 2010, concentrations at the downstream end of the Site were lower and similar to upstream reference site concentrations, indicating substantive assimilation of COCs within the creek on the Site (particularly of arsenic). As the COC concentrations downstream of the Site were only marginally above guideline values and were assumed as background concentrations in the creek, and as the Creek supports a limited biological community due to other habitat limitations, the environmental risk of downstream COC transport via the surface water vector is small. Any reduction in ongoing loading achieved through remediation activities on the Site will further reduce this risk.

Due to high COC levels in the streambed and bank sediments, downstream transport through scouring of sediments could result in a higher downstream COC loading than occurs through water transport. Neither the total COC load in the sediments nor the scouring dynamics, which likely vary seasonally, have been quantified. However, as described earlier, the reach of the creek channel on the Site appears to be primarily depositional in nature, suggesting that it may act more as a sink than a source for sediments and related COCs in terms of downstream transport.

Fish and other transient inhabitants of Omands Creek (such as migratory waterfowl) represent a theoretical vector of COC transport from the Site by accumulating COC while on the Site and transporting them to other areas. However, as these animals spend only a short time on the Site (maximum one open-water season), the potential for accumulation of sufficient COC concentrations within their tissues to represent a health risk to predators (or humans) is low. This would be particularly true for game fish, which are expected to inhabit the creek only in early life stages, prior to achieving harvestable size.

The forage fish base supported by the creek is a very small portion of that within the Assiniboine River system. Therefore, the potential loading of contaminants from the Site to the Assiniboine River fish community is very small. This loading would be limited to bioaccumulating metals, as PCBs were not detected in the creek sediments and significant bioaccumulation of PAHs does not occur in vertebrates. Overall, the risk to Assiniboine River fish populations, in terms of impacts to the populations and to their suitability for consumption, is low.

7.16 National Contaminated Sites Classification System Scoring

Based on the available site information, the Site was assigned a score as per the National Classification System for Contaminated Sites (NCSCS). The primary objectives of the NCSCS are to assess risks to human health and the natural environment under the current and future land use scenarios and to implement risk management solutions to mitigate those risks. The NCS score assigned to the Site given the results of the 2010 Phase III ESA is 78.0, which corresponds to a classification of “Class 1, High Priority for Action”.

7.17 Conclusions

Based on the investigation work completed at the Site to date, the following conclusions can be made:

1. The average depth to shallow groundwater at the Site was calculated as 1.58 mBGS. The inferred direction of shallow groundwater flow was to the west/northwest towards Omands Creek. The hydraulic conductivity at the Site ranged from 8.3×10^{-7} m/s to 2.4×10^{-6} m/s. Based on the calculated hydraulic conductivities for the Site, shallow on-site groundwater has an average flow velocity of 11.7 m/yr, a potential maximum flow velocity of 19.5 m/yr and a potential minimum flow velocity of 6.8 m/yr towards Omands Creek.
2. Based on the results of the investigation, there are no PCB or VOC impacts to soil and groundwater at the Site.
3. Contaminants of concern (COC) at the Site include PHC, metals, and PAH (both non-carcinogenic and carcinogenic). Impacts to one or more media (soil, groundwater, sediment and surface water) presenting a risk to human health and the environment were determined at multiple areas of the Site including:

Area	Impacted Media	Contaminant(s) of Concern (COC)
Paint Shop UST Area and West of Paint Shop	Soil	PHC, PAH
North Property Line UST Area	Soil Groundwater	Metals Metals
Waste Oil Drum Storage Area	Soil	PHC
Landfilling Area	Soil Groundwater	Metals Metals
Solvent AST Area	Soil	PHC, PAH
Diesel and Gasoline AST Area	Soil	PHC
Sulphuric Acid Drum Storage Area	Soil Groundwater	Metals Metals
Waste Paint Storage Area	Soil Groundwater	Metals Metals
Former Saskatchewan Avenue Landfill	Soil Groundwater	Metals Metals
Polychlorinated Biphenyls Storage Area	Soil Groundwater	Metals, PAH Metals
Omands Creek	Sediment Surface Water	Metals, PAH Total Metals, Dissolved Metals
South Crane Runway	Soil	PAH
Galvanizing Pit	Soil	Metals

4. The total volume of soil impacted with these COC is conservatively estimated at 48,900 m^3 with depth of impacts ranging from surface to approximately 4 mBGS.
5. The total estimated area of groundwater impacts at the Site is conservatively estimated at 24,370 m^2. Groundwater impacts have not been delineated vertically but based on the soil stratigraphy present at the Site and the nature of site impacts water well records in the area (clay/clay till soil extends approximately 15 m below the overburden to bedrock); it is very unlikely that the bedrock aquifer has been impacted.
6. The total estimated volume of impacted sediments within Omands Creek is 4,775 m^3 extending the entire length of the Creek within the property limits.

7. PAH impacts to soil present at the Site, both carcinogenic and non-carcinogenic in nature, appear to be associated with the locations of rail lines on the property. PAH impacts were also identified in soil underneath the South Crane Runway. It is reasonable to assume that other crane runways on the property that use or have used treated lumber for the stacking of metal objects may also exhibit PAH impacts to soil. Based on the concentrations of PAHs present in the surface soil at the Site, the primary receptor at risk of exposure to the surficial non-carcinogenic PAH impacts is freshwater aquatic life associated with Omands Creek. Human exposure via surface soil contact is the governing exposure pathway associated with the carcinogenic PAHs identified in the area.
8. With respect to Omands Creek, concentrations of metals and PAHs exceeding the sediment and surface water quality guidelines protective of aquatic life were identified over the assessed length of Omands Creek, including 60 m upstream of the Site and up to 100 m downstream of the Site, suggesting that off-site sources (potentially unrelated to the Site) of impact exist, in addition to the on-site sources. Impacts to Omands Creek via COC loading, either through historical placement of contaminated fill or through groundwater impacts, are particularly evident in the areas of the Sulphuric Acid Drum Storage Area and the Landfilling Area. However, the overall environmental impact of metal loading on Omands Creek via groundwater transport is relatively low (metals loading via groundwater transport contributes less than 2% of the maximum concentration measured in surface water samples collected from the Creek during this investigation and less than 8% of the applicable CCME water quality guidelines). In addition, as the COC concentrations downstream of the Site were only marginally above guideline values and were similar to upstream concentrations in the Creek, and as the Creek supports a limited biological community due to other habitat limitations, the environmental risk of downstream transport of COCs via the surface water vector is small. The environmental risk of downstream COC transport via the sediment transport vector has not been fully quantified. Also, based on the investigation results impacts to fish and fish habitat within Omands Creek are likely but the overall risk to Assiniboine River fish populations, in terms of impacts to the populations and to their suitability for consumption is low.
9. As field measurements were not possible for all COC at the Site, there are several areas at the Site where soil and groundwater impacts have not been fully delineated laterally or vertically with respect to metals and PAHs.
10. The NCS score assigned to the Site given the results of the 2010 Phase III ESA is 78.0, which corresponds to a classification of “Class 1, High Priority for Action”.

8. Recommendations

AECOM has provided estimated areas and volumes of impacted soil, groundwater, and sediment at the Site which present a risk to human health and the environment. Based on the presence of multiple contaminant sources and several contaminated media (soil, groundwater, sediment, and surface water), AECOM recommends that a Remedial Action Plan (RAP) be developed for the Site to address the risks to human health and the environment.

However, prior to the development of a RAP for the Site, the following additional investigation is recommended for consideration to potentially increase the accuracy of the estimated areas and volumes of impacts and further refine remedial cost estimates:

1. Assessment of potential PAH impacts to shallow soil associated with all rail lines on the property and the other crane runways where treated lumber has been or is currently used for the stacking of metal objects.
2. Delineate the lateral and vertical extent of metals impacts to soil in the Landfilling Area (delineation required to the southwest), the Waste Paint Storage Building (delineation required to the north, east and south), the Former Saskatchewan Avenue Landfill (delineation required in all directions), Polychlorinated Biphenyls Storage Area (delineation required to the north and northwest), and Galvanizing Pit (delineation required to the north, south and west).
3. Delineate the lateral extent of metals impacts to groundwater at the North Property Line UST Area, the Landfilling Area, the Sulphuric Acid Drum Storage Area, the Waste Paint Storage Area, the Former Saskatchewan Avenue Landfill Area, and the Polychlorinated Biphenyls Storage Area.

It is also recommended that if the industrial groundwater well located in the oil storage room in the Main Shop is no longer used for obtaining cooling water for site operations, the well should be properly decommissioned according to Provincial guidelines.

Figures

SCALE: NTS

ISS/REV: 0A
AECOM FILE NAME: 60164142-02-H-F01-R0X.dwg Saved By: cloustonc PLOT: 10/12/02 12:38:15 PM A SIZE 8.5" x 11" (215.9mm x 279.4mm)

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Location Plan

AECOM

Figure - 01

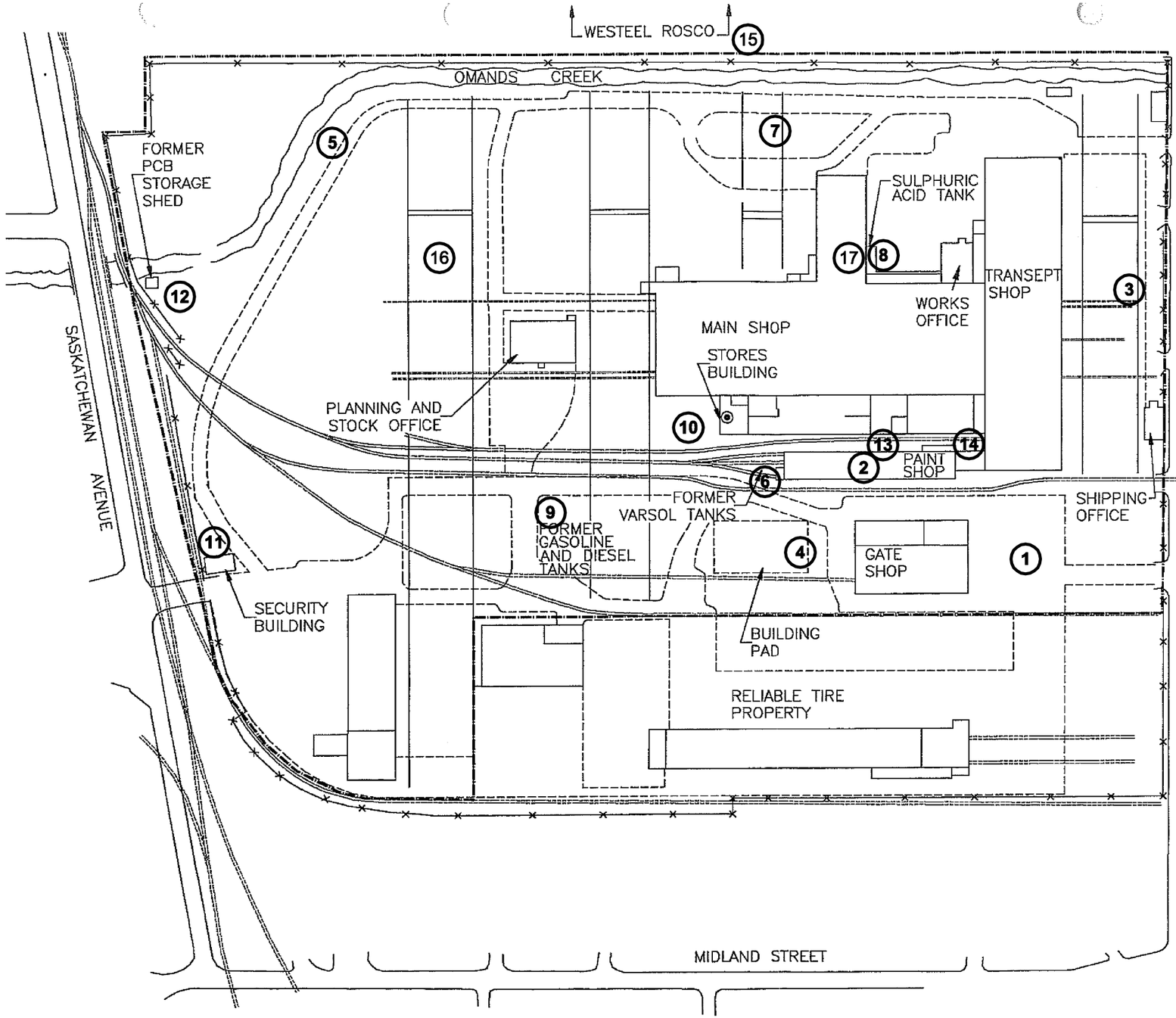


IMAGE SOURCE: PHASE I & II ENVIRONMENTAL SITE ASSESSMENT, FORMER DOMINION BRIDGE FACILITY, WINNIPEG, MANITOBA (WARDROP, SEPTEMBER 1999)

LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

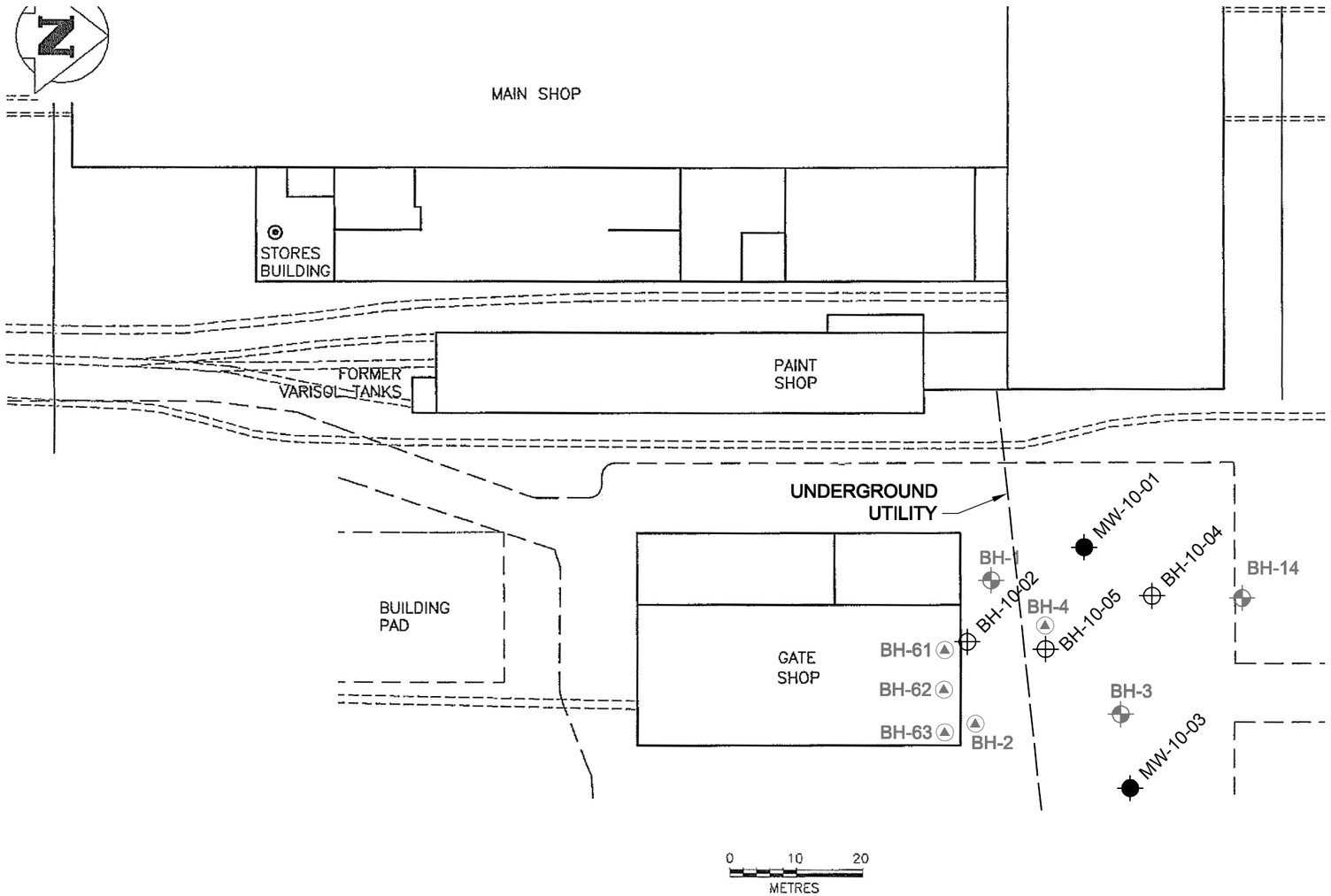
1. GATE SHOP UST AREA
2. PAINT SHOP UST AREA
3. NORTH PROPERTY LINE UST AREA
4. WASTE OIL DRUM STORAGE AREA
5. LANDFILLING AREA
6. SOLVENT AST AREA
7. SULFURIC ACID DRUM STORAGE AREA
8. SULFURIC ACID AST AREA
9. DIESEL AND GASOLINE AST AREA
10. WASTE PAINT STORAGE AREA
11. FORMER SASKATCHEWAN AVENUE LANDFILL
12. POLYCHLORINATED BIPHENYLS STORAGE AREA
13. WEST OF PAINT SHOP AREA
14. WHEELABRATOR DUST
15. **OMANDS CREEK**
16. **SOUTH CRANE RUNWAY**
17. **GALVANIZING PIT**

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Site Plan

Figure - 02

ISS/REV: 0A
AECOM FILE NAME: 60164142-03-H-F10-R0X.dwg



LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

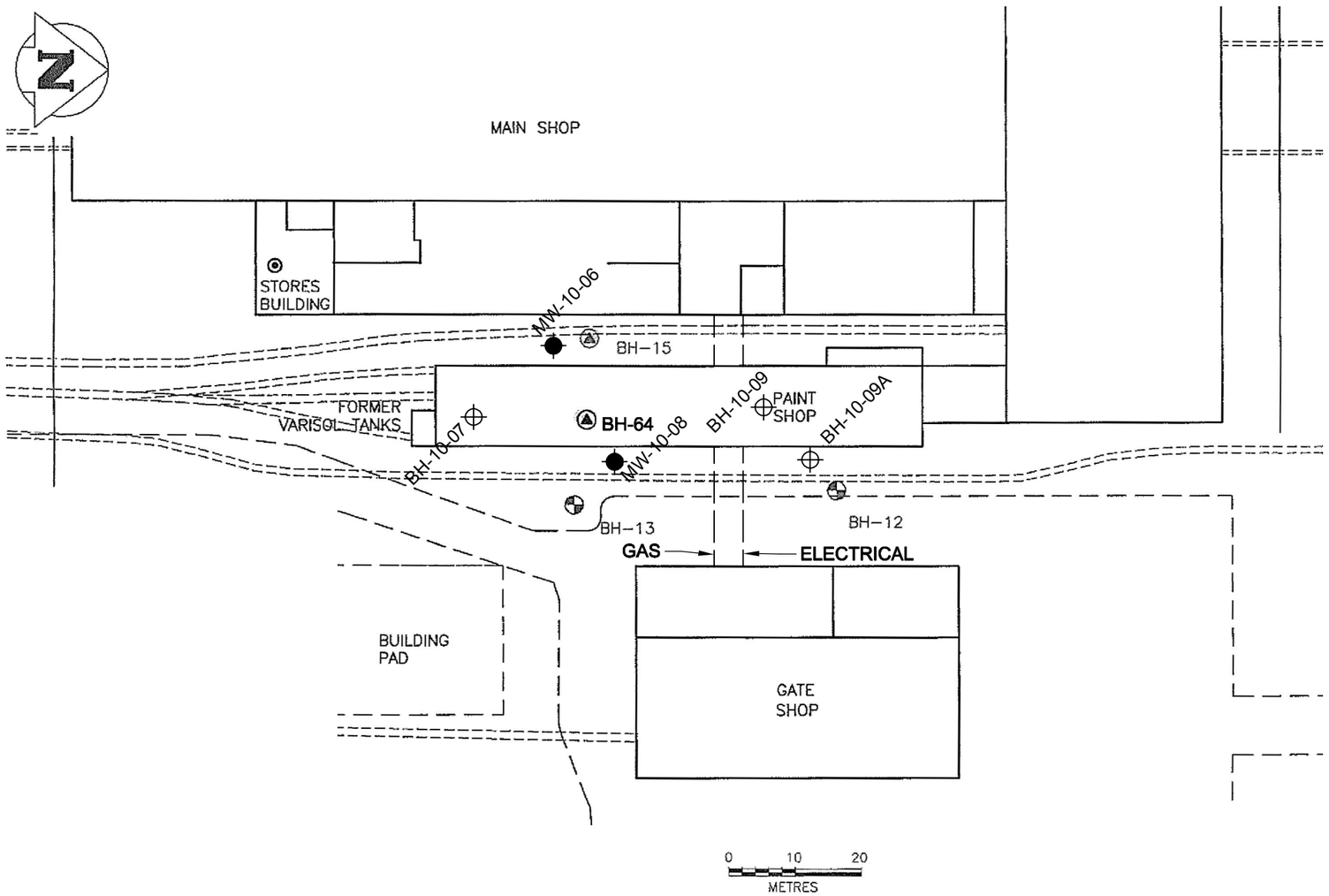
PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Gate Shop UST Area
Borehole and Monitoring Well Locations
Figure - 03



LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

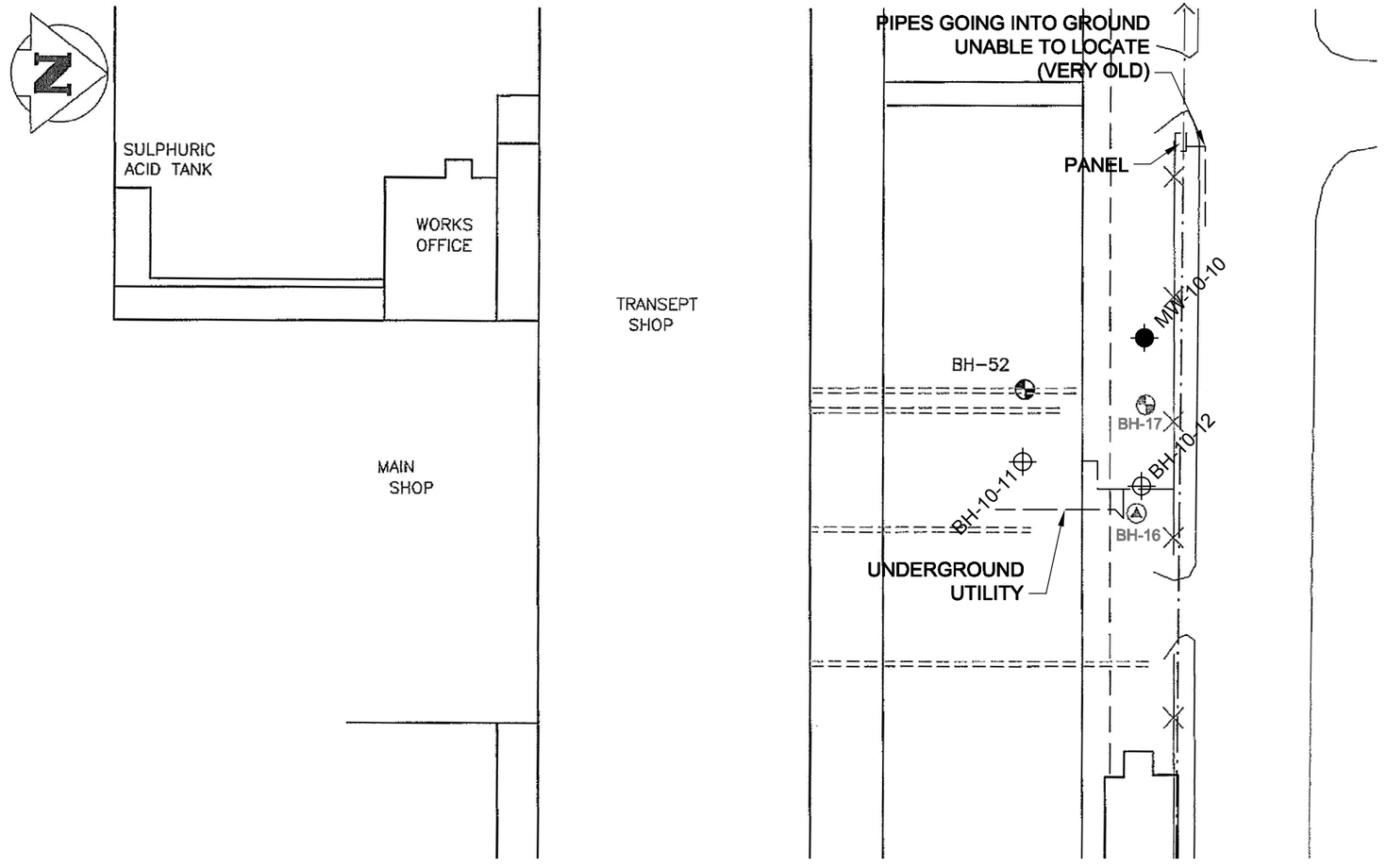
- **BOREHOLE**
- **MONITORING WELL**

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Paint Shop UST Area & West of Paint Shop Area Borehole and Monitoring Well Locations

Figure - 04

AECOM



LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION

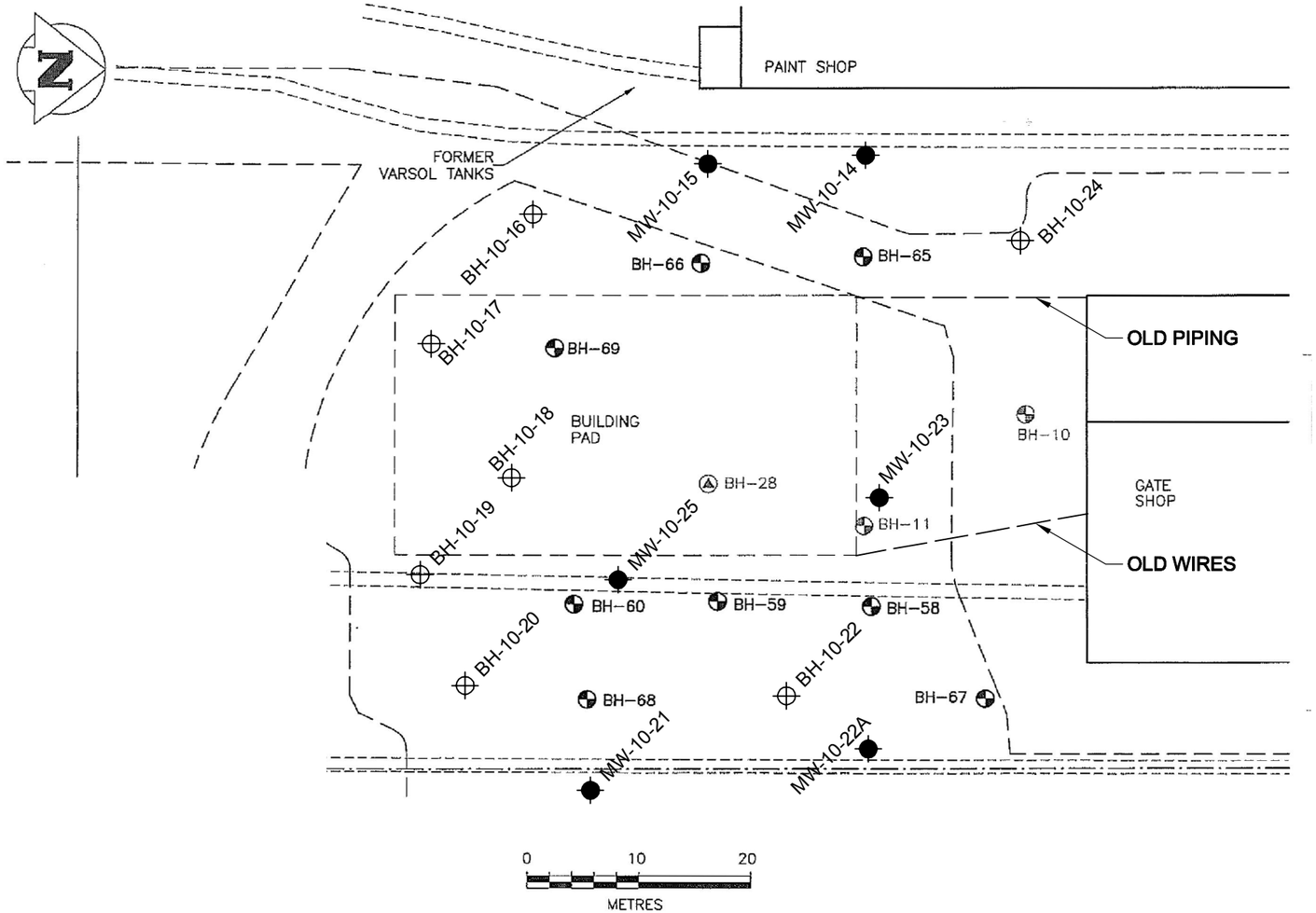
PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

North Property Line UST Area
Borehole and Monitoring Well Locations
Figure - 05



LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION

PHASE III (AECOM, 2010)

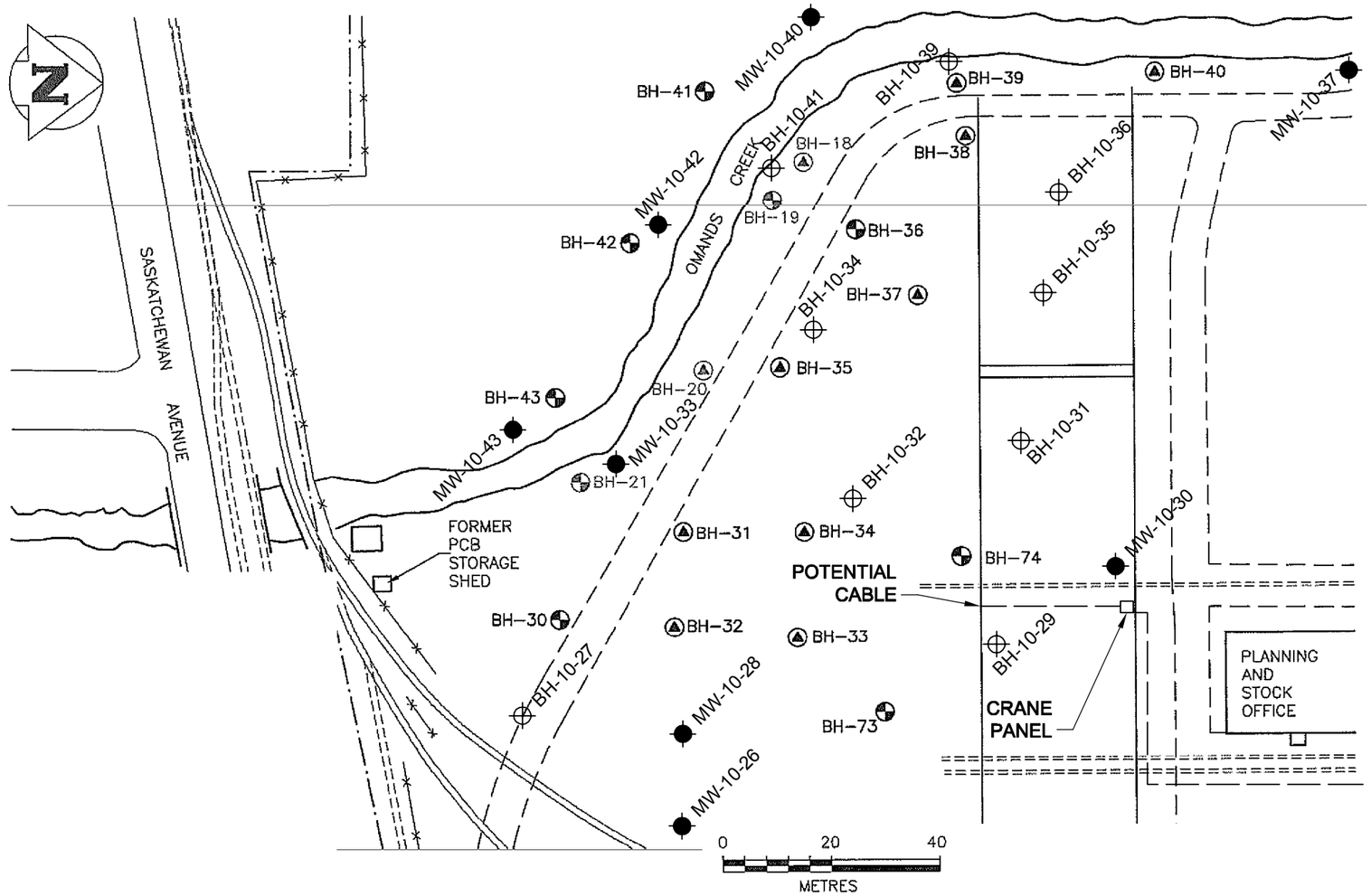
- **BOREHOLE**
- **MONITORING WELL**

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Waste Oil Drum Storage Area
Borehole and Monitoring Well Locations
Figure - 06

ISS/REV: 0A
AECOM FILE NAME: 60164142-03-H-F50-R0X.dwg Saved By: cloustonc



LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

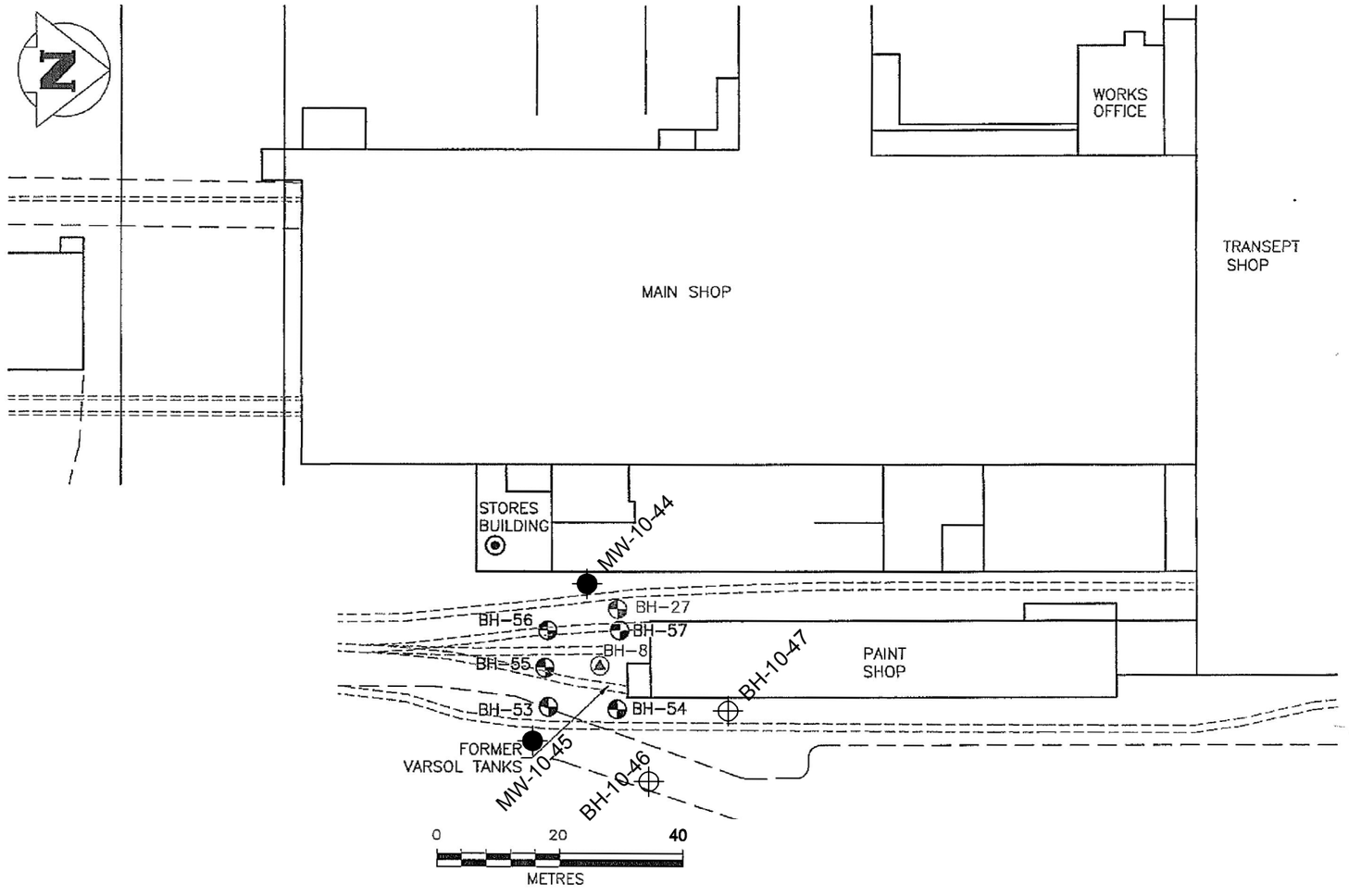
AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Landfilling Area

Borehole and Monitoring Well Locations

Figure - 07



LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION

PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

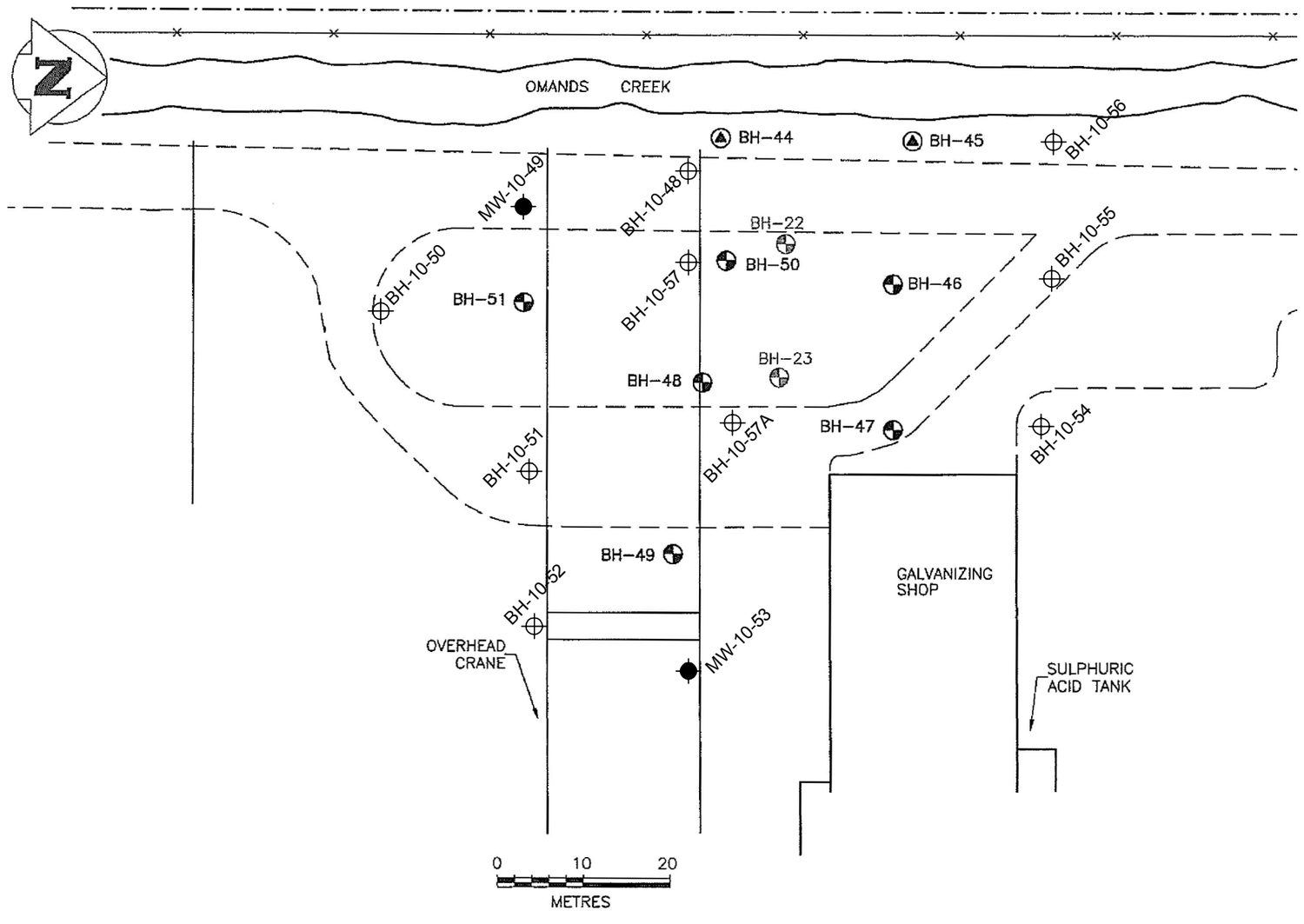
AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Solvent AST Area

Borehole and Monitoring Well Locations

Figure - 08



LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

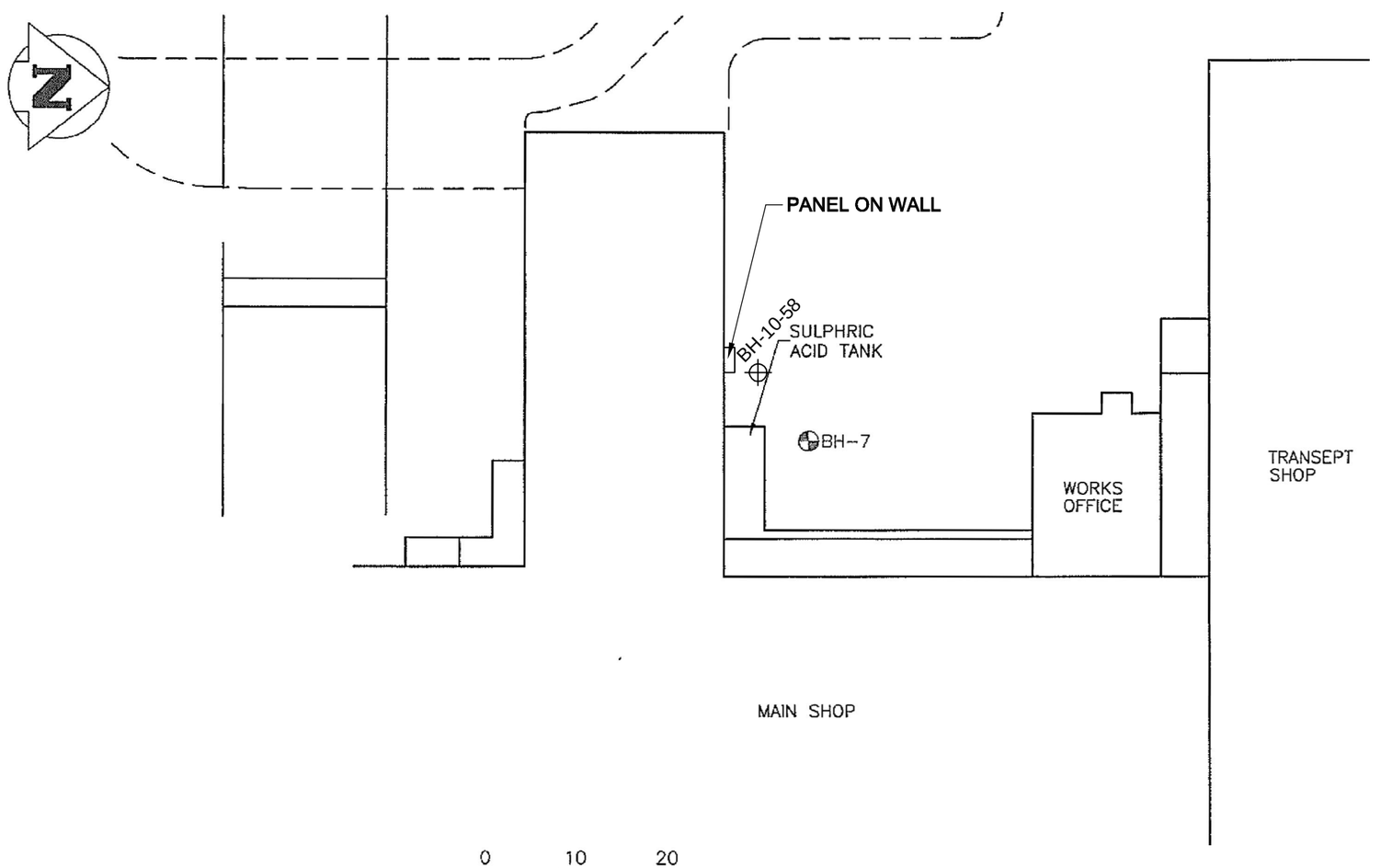
PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Sulphuric Acid Drum Storage Area
Borehole and Monitoring Well Locations
Figure - 09



LEGEND

— — SITE ROADWAYS AND PARKING LOTS

PHASE II (FEB,1999)

BOREHOLE LOCATION

PHASE III (AECOM, 2010)

BOREHOLE

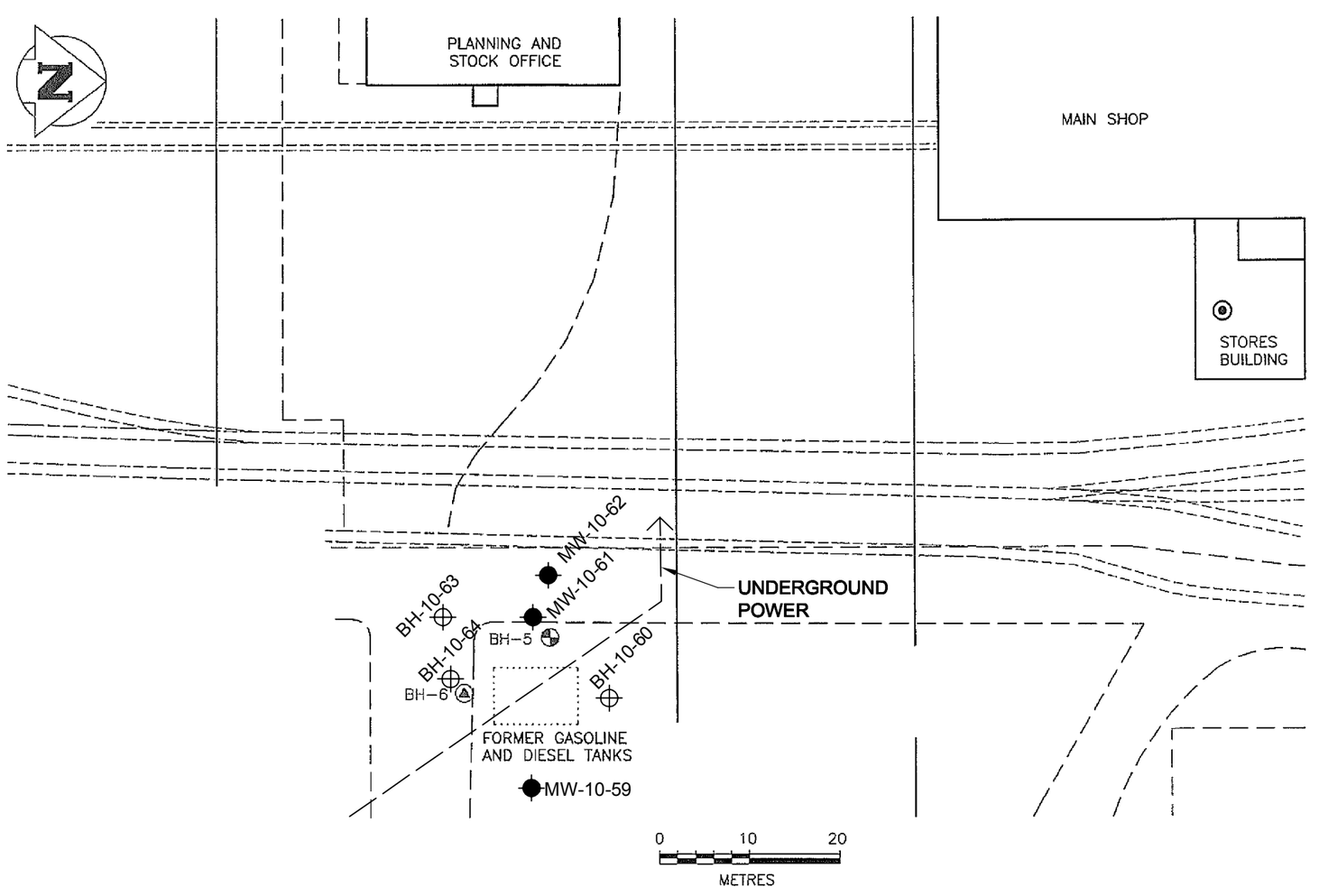
MONITORING WELL

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Sulphuric Acid AST Area Borehole Locations

Figure - 10



LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

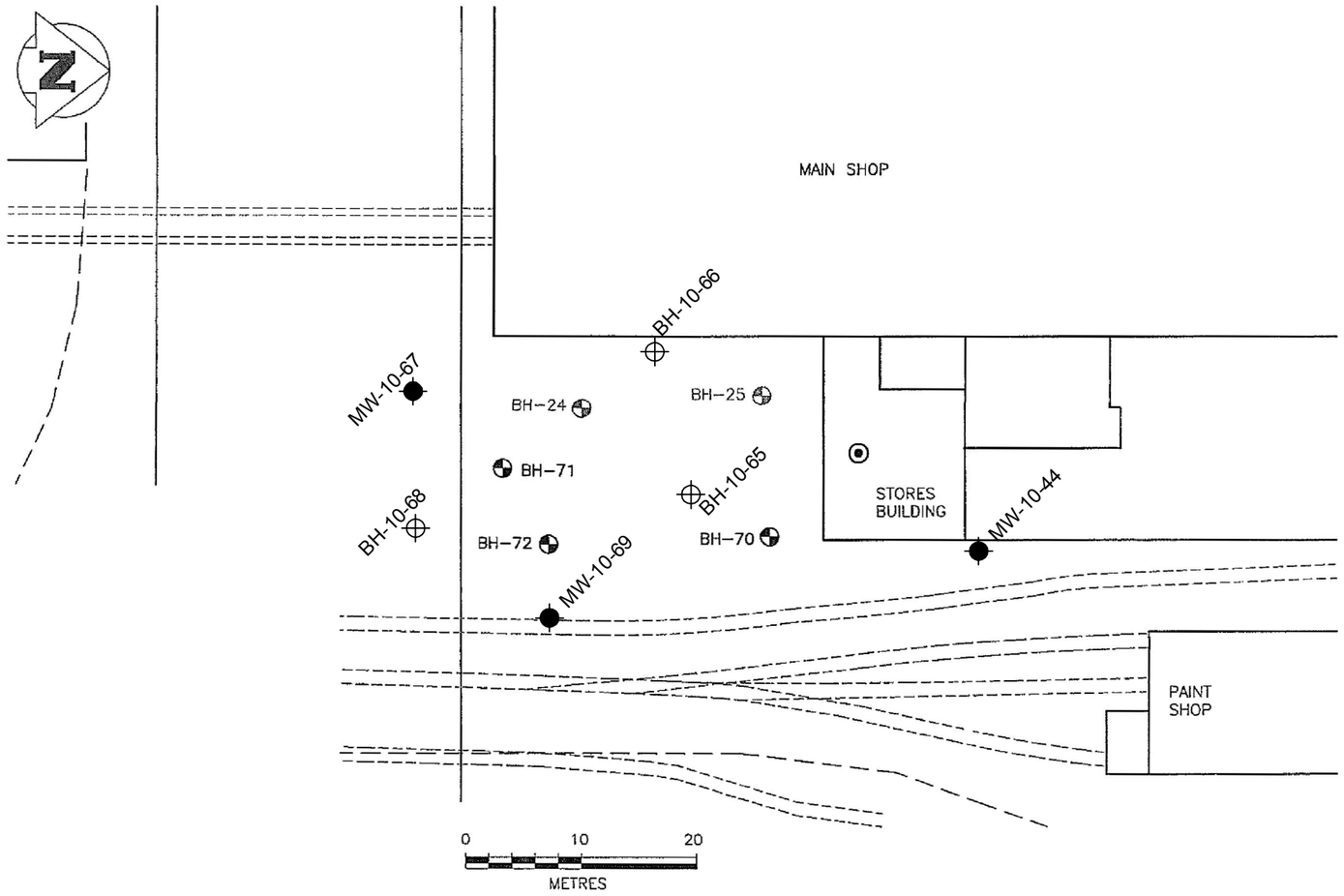
ISS/REV: 0A
AECOM FILE NAME: 60164142-03-H-F90-R0X.dwg

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Diesel and Gasoline AST Area Borehole and Monitoring Well Locations

Figure - 11



LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE LOCATION

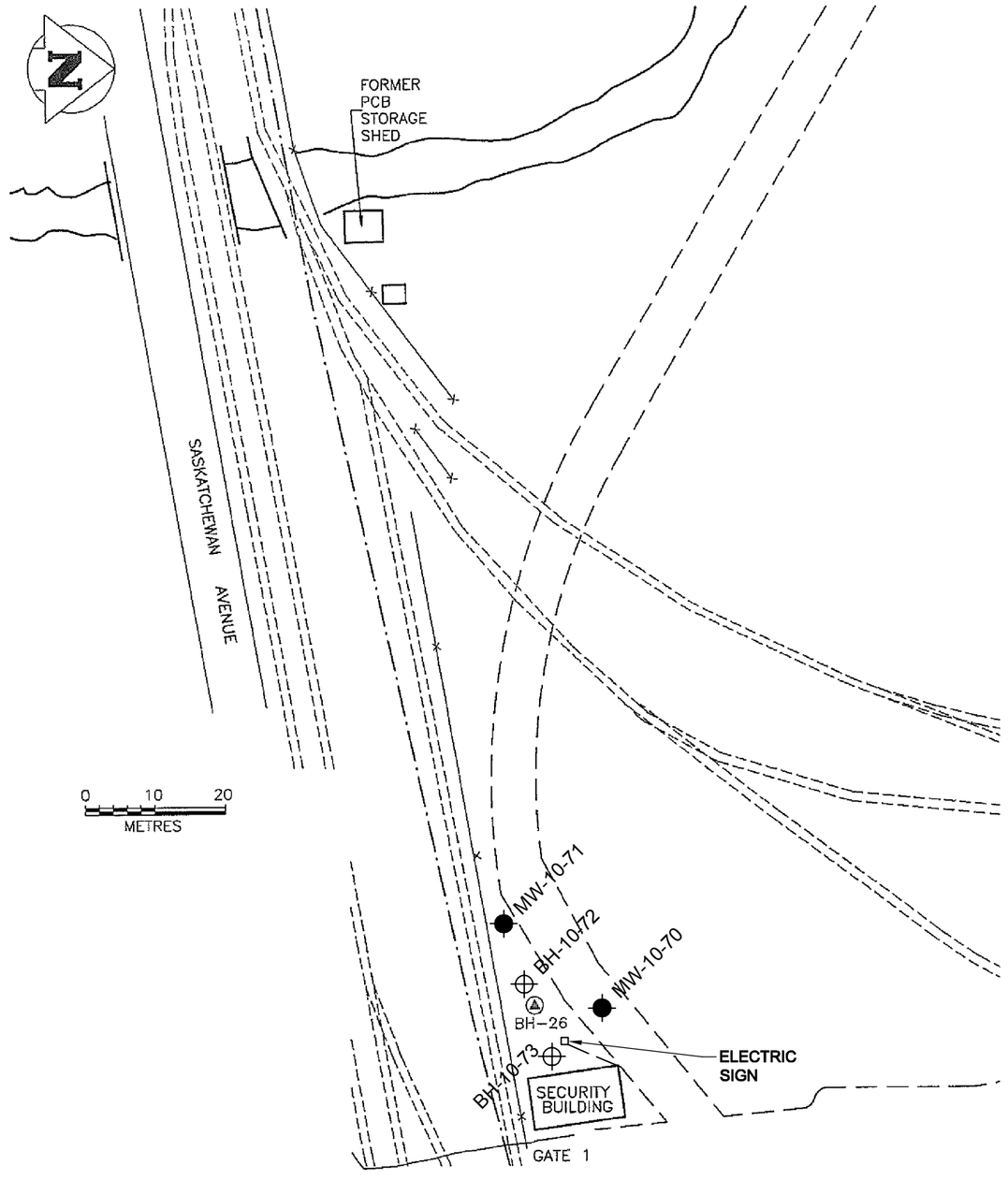
PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Waste Paint Storage Area
Borehole and Monitoring Well Locations
Figure - 12



LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

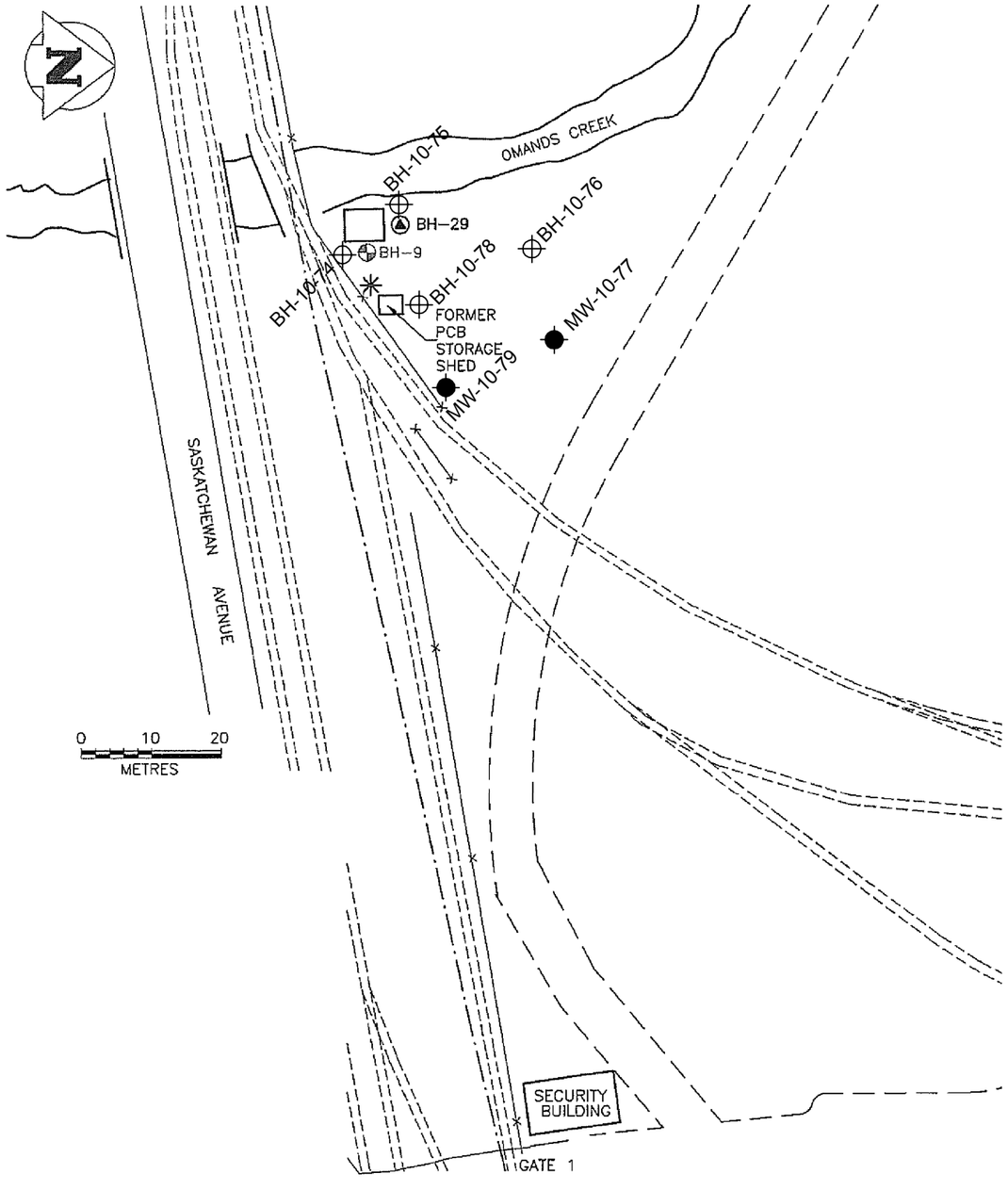
PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Former Saskatchewan Landfill Area
Borehole and Monitoring Well Locations
Figure - 13



LEGEND

- ✳ SURFICIAL SOIL SAMPLE
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Polychlorinated Biphenyls Storage Area Borehole and Monitoring Well Locations

Figure - 14

B SIZE 11" x 17" (279.4mm x 431.8mm)

PLOT: 10/12/17 5:01:15 PM

Saved By: cloustonc

ISS/REV: 0A
AECOM FILE NAME: 60164142-02-H-F50-ROX.dwg

0 40 80 m

SCALE 1:4000

LEGEND

SAMPLE LOCATIONS

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Omands Creek

Sediment & Surface Water Sampling Locations

Figure - 15

B SIZE 11" x 17" (279.4mm x 431.8mm)

PLOT: 10/12/17 5:05:01 PM

Saved By: cloustonc

ISS/REV: 0A

AECOM FILE NAME: 60164142-02-H-F51-R0X.dwg

N

OC10-1 ABC

DUBLIN AVE

OC10-32 ABC

OC10-3 ABC

OMANDS CREEK

OC10-4 ABC

OC10-5 ABC

SASKATCHEWAN AVE

OC10-6 ABC

OC10-7 ABC

0 20 40 m

SCALE 1:2000

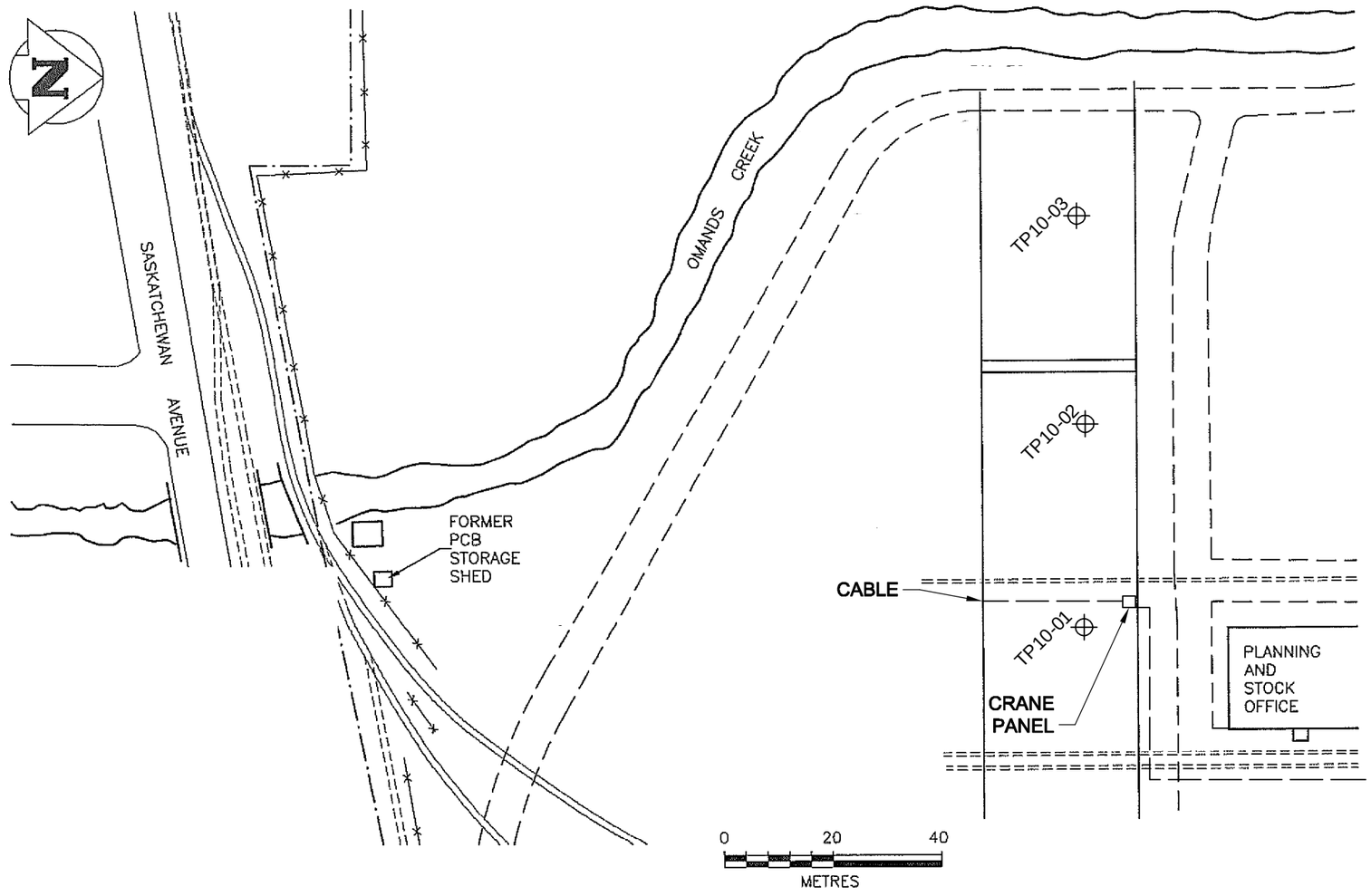
SAMPLING TYPE

- SAMPLE LOCATION - SURFICIAL SEDIMENT
- SAMPLE LOCATION - SURFICIAL SEDIMENT, DEEP SEDIMENTS, WATER QUALITY, AQUATIC VEGETATION & BENTHIC INVERTEBRATE COMMUNITY

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Omands Creek
Sediment Sampling Locations
Figure - 16



LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE III (AECOM, 2010)

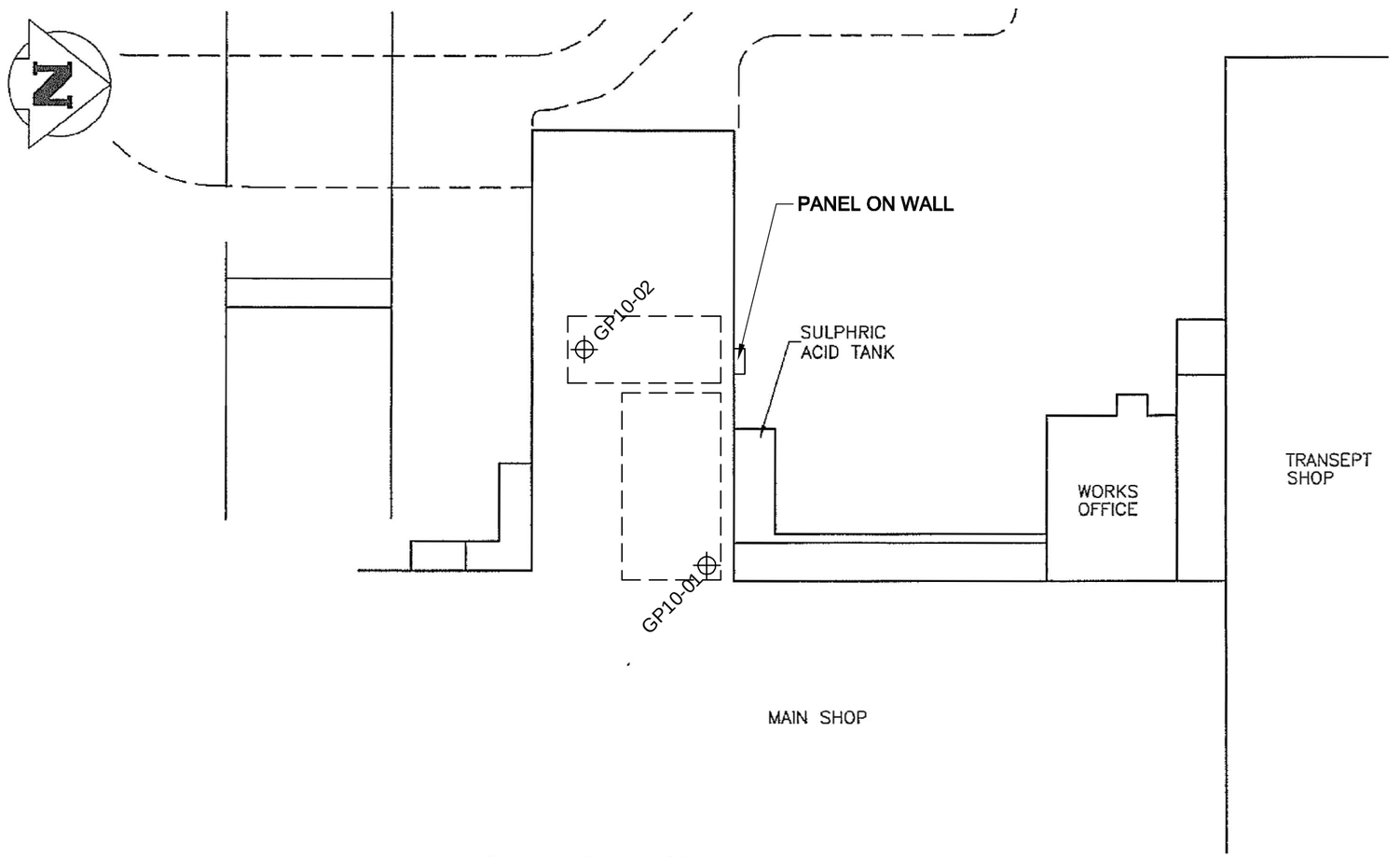
- BOREHOLE

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

South Crane Runway Borehole Locations

Figure - 17



LEGEND

SITE ROADWAYS AND PARKING LOTS

PHASE III (AECOM, 2010)

BOREHOLE

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Galvanizing Pit
Hand Auger Locations
Figure - 18

AECOM

B SIZE 11" x 17" (279.4mm x 431.8mm)

PLOT: 11/02/15 3:39:02 PM

Saved By: cloustonc

ISS/REV: 0A

AECOM FILE NAME: 60164142-02-H-F04-R0X.dwg

0 25 50 m SCALE 1:2500

LEGEND

MONITORING WELL

FLOW DIRECTION OF SHALLOW GROUNDWATER

AECOM

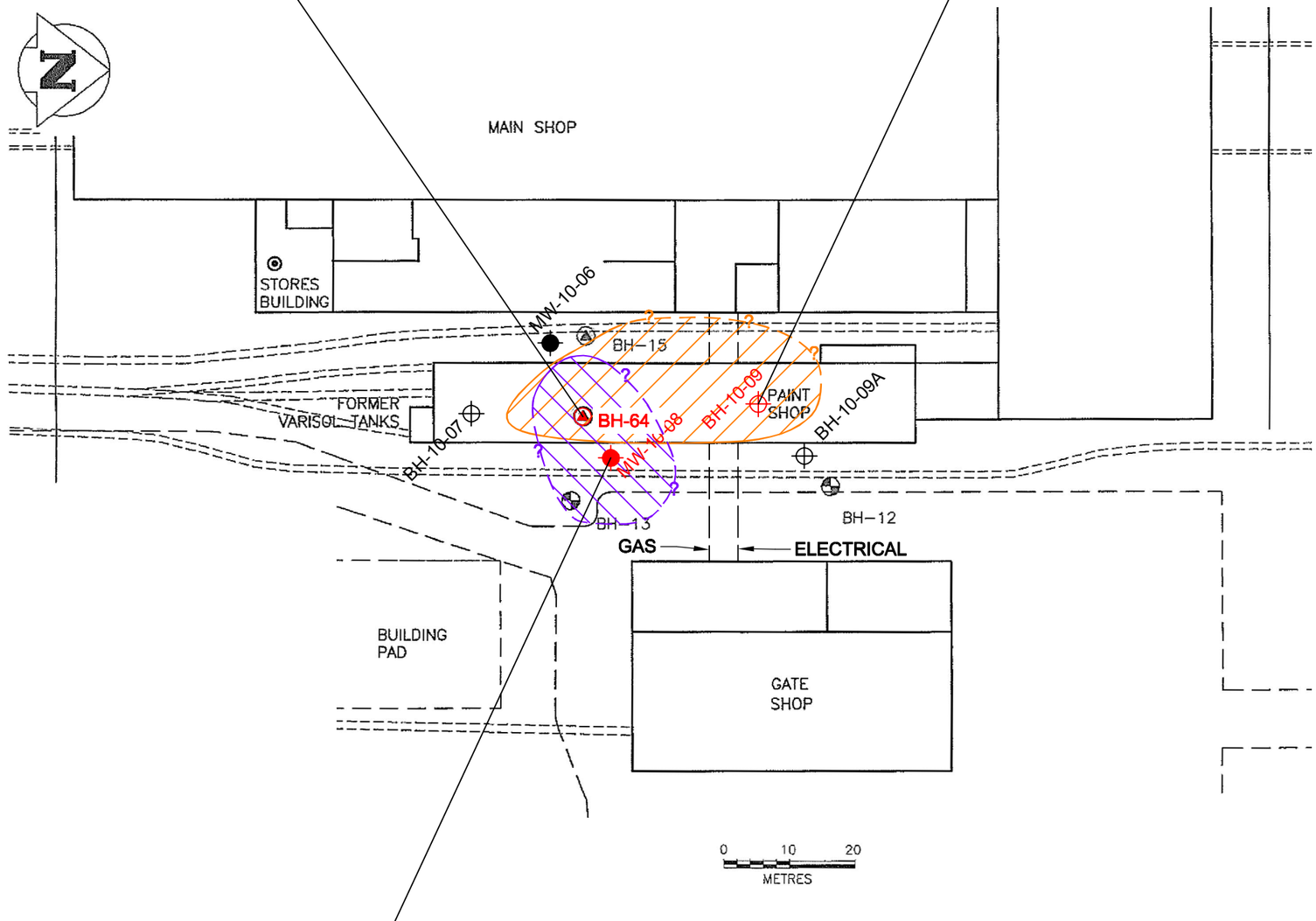
City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Interpreted Lateral Flow of Shallow Groundwater Bearing Unit

Figure - 19

Sample ID	MW10-08									
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	F1	F2	F3	F4	B	T	E	X
RESULT	2.29	45	51	**1,600**	2,300	480	<0.005	<0.03	0.02	<0.1
	6.10	15	<10	41	100	<10	<0.005	<0.03	<0.01	<0.1
CCME SQG		Surface Soil	320	260	2,500	6,600	0.28	330	430	210
		Subsoil	800	1,000	5,000	10,000	0.29	660	860	460

Sample ID	BH10-09		CCME SQG
PAH PARAMETER	DEPTH (m)	RESULT	
Naphthalene	0.76	**0.11**	**0.013**
Phenanthrene		**0.21**	**0.046**



LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- BOREHOLE
- MONITORING WELL
- ESTIMATED EXTENT OF PHC IMPACTED SOIL
- ESTIMATED EXTENT OF PAH IMPACTED SOIL
- **BOLD** RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE

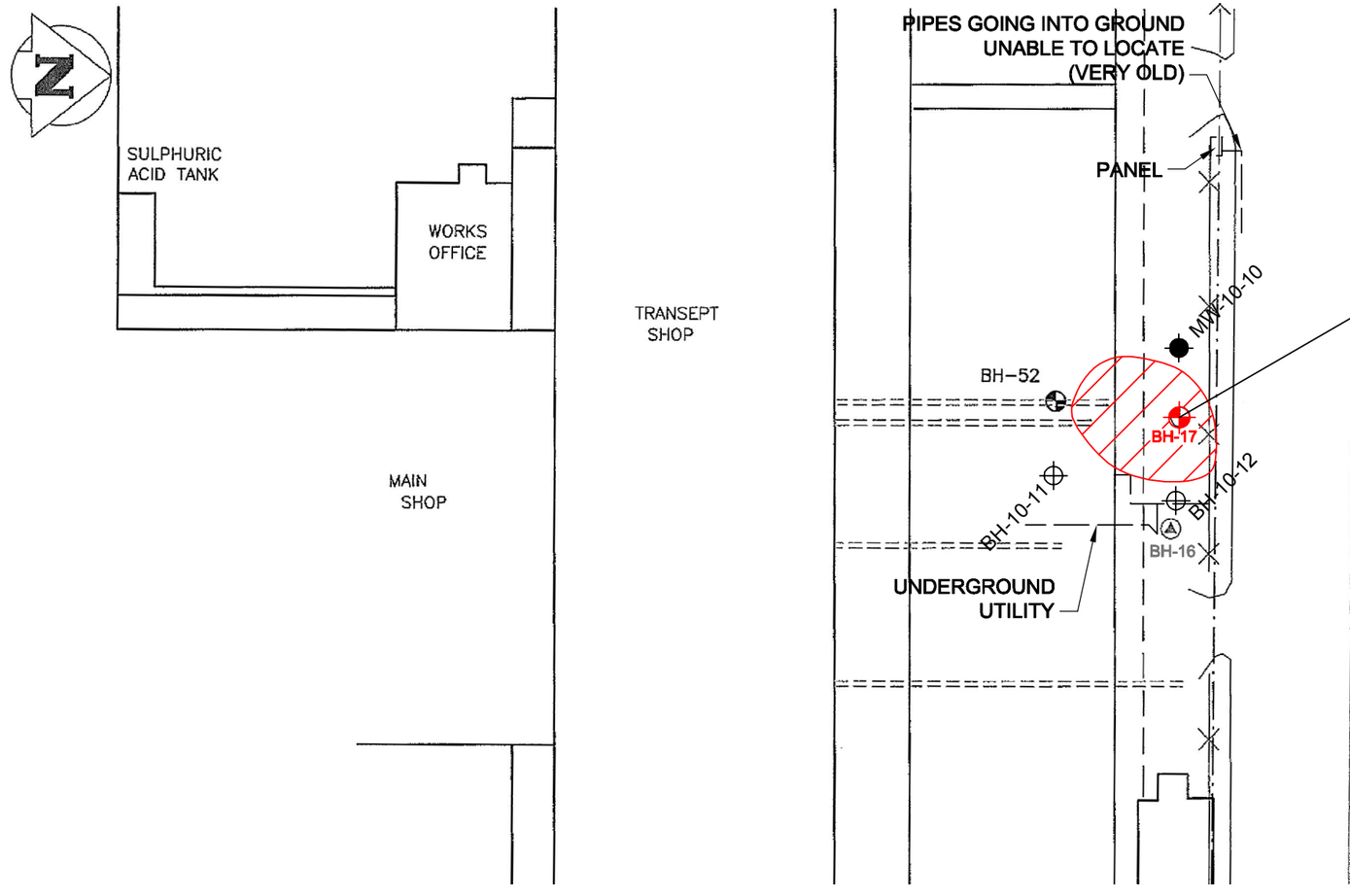
Sample ID	BH-64										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.6	-	**970**	-	-	-	-	<0.02	<0.02	0.03	0.1
CCME SQG		Surface Soil	-	320	260	2,500	6,600	0.28	330	430	210
		Subsoil	-	800	1,000	5,000	10,000	0.29	660	860	460

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Paint Shop UST Area & West of Paint Shop Area
Estimated Extent of Impacts to Soil
Figure - 20



Sample ID	BH-17		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Nickel (Ni)	0.6	<200	50

LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION

PHASE III (AECOM, 2010)

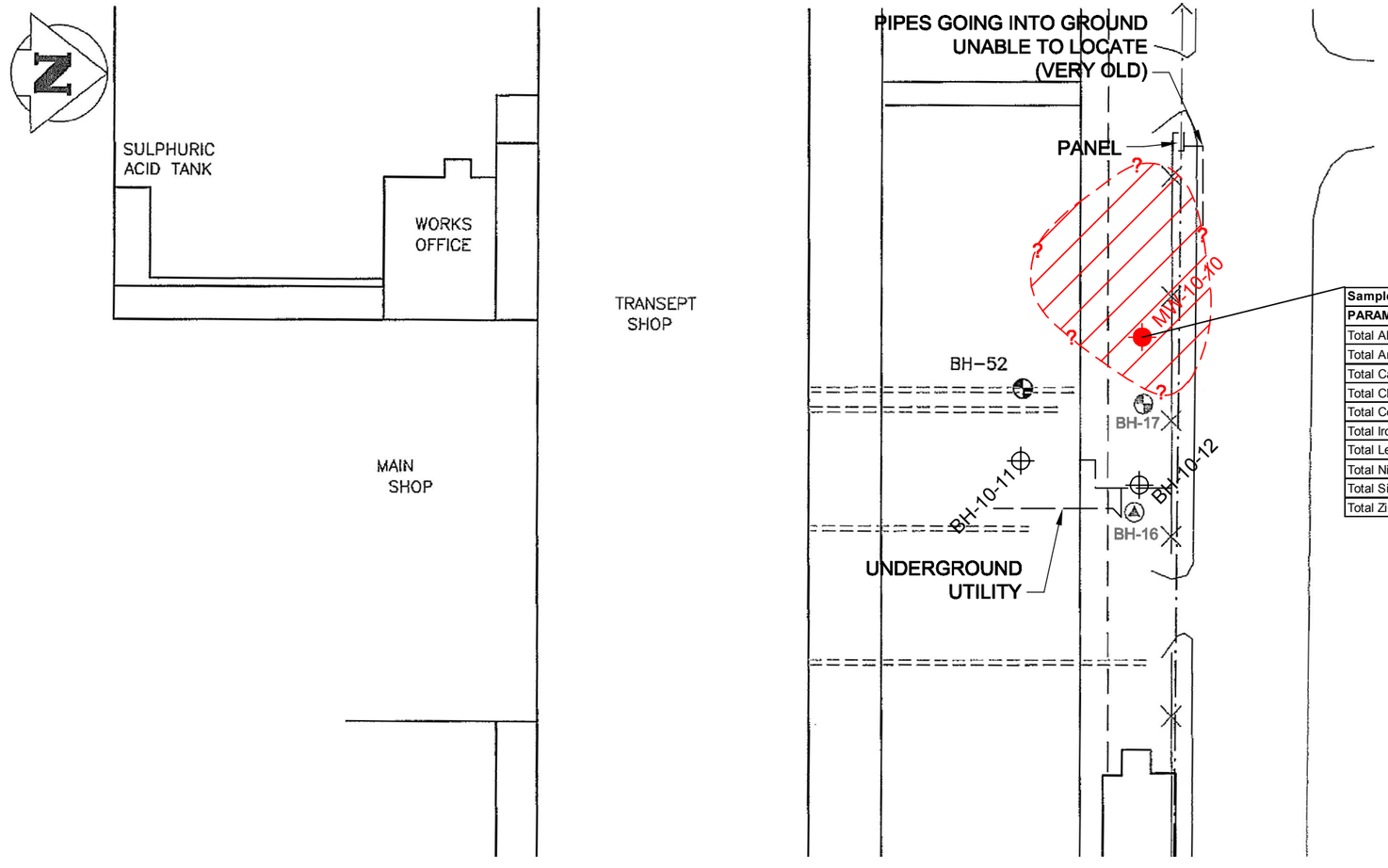
- **BOREHOLE**
- **MONITORING WELL**
- **ESTIMATED EXTENT OF METAL IMPACTED SOIL**
- **BOLD** **RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE**

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

North Property Line UST Area
Estimated Extent of Impacts to Soil
Figure - 21



Sample ID	MW10-10		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**14.6**	**0.005**
Total Arsenic (As)	11/01/10	**0.0072**	**0.005**
Total Cadmium (Cd)	11/01/10	**0.00031**	**0.000017**
Total Chromium (Cr)	11/01/10	**0.03**	**0.0089**
Total Copper (Cu)	11/01/10	**0.0307**	**0.002**
Total Iron (Fe)	11/01/10	**18.8**	**0.300**
Total Lead (Pb)	11/01/10	**0.0524**	**0.001**
Total Nickel (Ni)	11/01/10	**0.029**	**0.025**
Total Silver (Ag)	11/01/10	**0.00014**	**0.0001**
Total Zinc (Zn)	11/01/10	**0.103**	**0.03**

LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION

PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**
- **ESTIMATED EXTENT OF METAL IMPACTED GROUNDWATER**
- **BOLD** **RESULT EXCEEDS APPLICABLE GROUNDWATER QUALITY GUIDELINE**

NOTES
1. ALL RESULTS AND GROUNDWATER QUALITY GUIDELINES IN mg/L.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

North Property Line UST Area
Estimated Extent of Impacts to Groundwater
Figure - 22

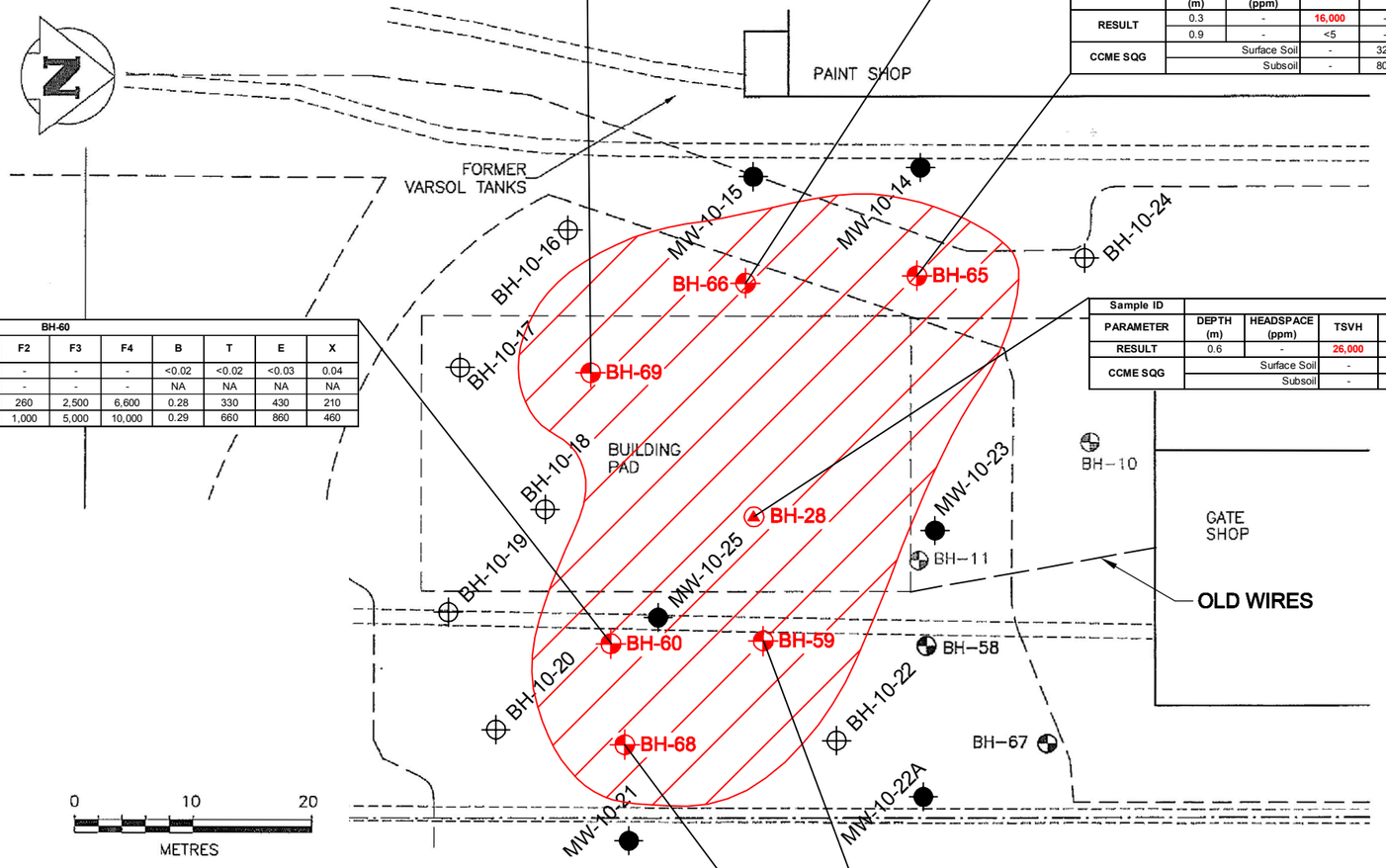
Sample ID	BH-69										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.3	-	**1,300**	-	-	-	-	NA	NA	NA	NA
	0.6	-	310	-	-	-	-	NA	NA	NA	NA
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460

Sample ID	BH-66										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.6	-	**430,000**	-	-	-	-	NA	NA	NA	NA
	0.9	-	130	-	-	-	-	NA	NA	NA	NA
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460

Sample ID	BH-65										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.3	-	**16,000**	-	-	-	-	NA	NA	NA	NA
	0.9	-	<5	-	-	-	-	NA	NA	NA	NA
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460

Sample ID	BH-60										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.6	-	**26,000**	-	-	-	-	<0.02	<0.02	<0.03	0.04
	0.9	-	64	-	-	-	-	NA	NA	NA	NA
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460

Sample ID	BH-28										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.6	-	**26,000**	-	-	-	-	<0.02	0.1	0.1	1.05
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460



Sample ID	BH-68										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.6	-	**1,000**	-	-	-	-	NA	NA	NA	NA
	0.9	-	<5	-	-	-	-	NA	NA	NA	NA
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460

Sample ID	BH-59										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.3	-	NA	-	-	-	-	NA	NA	NA	NA
	0.9	-	19	-	-	-	-	<0.02	<0.02	<0.03	<0.01
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460

LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION

PHASE III (AECOM, 2010)

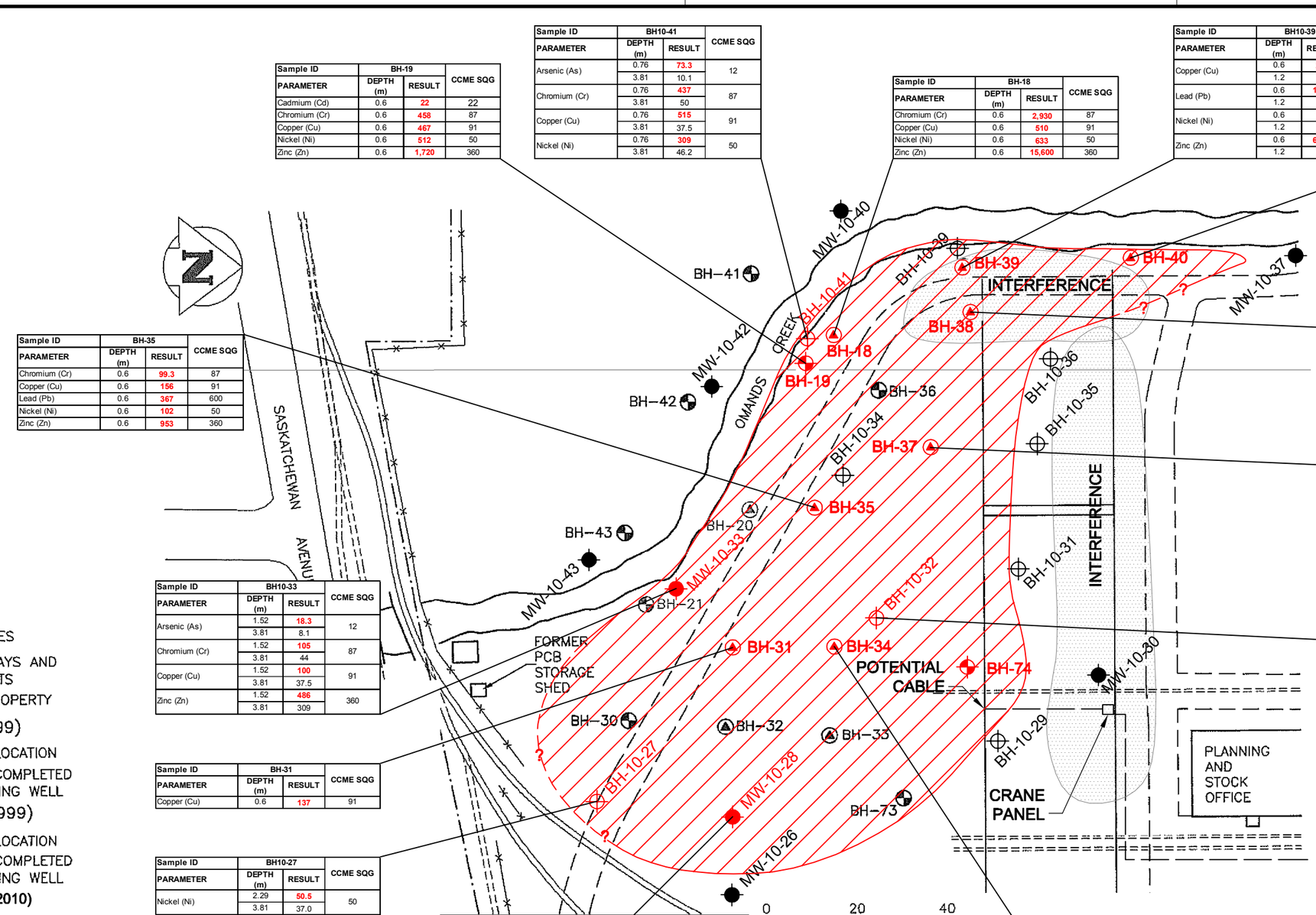
- **BOREHOLE**
- **MONITORING WELL**
- **ESTIMATED EXTENT OF METAL IMPACTED SOIL**
- **BOLD** **RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE**

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Waste Oil Drum Storage Area
Estimated Extent of Impacts to Soil
Figure - 23



Sample ID	BH-19		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Cadmium (Cd)	0.6	22	22
Chromium (Cr)	0.6	458	87
Copper (Cu)	0.6	467	91
Nickel (Ni)	0.6	512	50
Zinc (Zn)	0.6	1,720	360

Sample ID	BH10-41		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Arsenic (As)	0.76	73.3	12
	3.81	10.1	
Chromium (Cr)	0.76	437	87
	3.81	50	
Copper (Cu)	0.76	515	91
	3.81	37.5	
Nickel (Ni)	0.76	309	50
	3.81	46.2	

Sample ID	BH-18		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Chromium (Cr)	0.6	2,930	87
Copper (Cu)	0.6	510	91
Nickel (Ni)	0.6	633	50
Zinc (Zn)	0.6	15,600	360

Sample ID	BH10-39		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.6	260	91
	1.2	28	
Lead (Pb)	0.6	1,170	600
	1.2	20	
Nickel (Ni)	0.6	127	50
	1.2	NA	
Zinc (Zn)	0.6	6,620	360
	1.2	103	

Sample ID	BH-40		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Chromium (Cr)	0.6	331	87
Copper (Cu)	0.6	287	91
Lead (Pb)	0.6	537	600
Nickel (Ni)	0.6	123	50
Zinc (Zn)	0.6	2,430	360

Sample ID	BH-38		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.6	885	360

Sample ID	BH-35		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Chromium (Cr)	0.6	99.3	87
Copper (Cu)	0.6	156	91
Lead (Pb)	0.6	367	600
Nickel (Ni)	0.6	102	50
Zinc (Zn)	0.6	953	360

Sample ID	BH-37		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Chromium (Cr)	0.6	714.0	87
	1.2	78.6	
Copper (Cu)	0.6	591	91
	1.2	35	
Lead (Pb)	0.6	5,620	600
	1.2	48	
Nickel (Ni)	0.6	252	50
	1.2	49	
Zinc (Zn)	0.6	14,300	360
	1.2	183	

Sample ID	BH10-33		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Arsenic (As)	1.52	18.3	12
	3.81	8.1	
Chromium (Cr)	1.52	105	87
	3.81	44	
Copper (Cu)	1.52	100	91
	3.81	37.5	
Zinc (Zn)	1.52	486	360
	3.81	309	

Sample ID	BH10-32		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Arsenic (As)	2.29	23.7	12
	4.57	6.4	
Chromium (Cr)	2.29	142	87
	4.57	39	
Copper (Cu)	2.29	277	91
	4.57	32.7	
Lead (Pb)	2.29	3,150	600
	4.57	27.6	
Nickel (Ni)	2.29	97.2	50
	4.57	40.4	
Zinc (Zn)	2.29	1,340	360
	4.57	98	

Sample ID	BH-31		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.6	137	91

Sample ID	BH10-27		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Nickel (Ni)	2.29	50.5	50
	3.81	37.0	

Sample ID	BH10-28		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.76	114	91
	2.29	16.3	
Zinc (Zn)	0.76	1,140	360
	2.29	123	

Sample ID	BH-34		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.6	866	360

LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- BOREHOLE
- MONITORING WELL

ESTIMATED EXTENT OF METAL IMPACTED SOIL

BOLD RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Landfilling Area
Estimated Extent of Impacts to Soil
Figure - 24

Sample ID	MW10-33		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	23.8	0.005
Total Arsenic (As)	11/01/10	0.0112	0.005
Total Cadmium (Cd)	11/01/10	0.00067	0.000017
Total Chromium (Cr)	11/01/10	0.06	0.0089
Total Copper (Cu)	11/01/10	0.0551	0.002
Total Iron (Fe)	11/01/10	36.9	0.300
Total Lead (Pb)	11/01/10	0.0292	0.001
Total Nickel (Ni)	11/01/10	0.055	0.025
Total Selenium (Se)	11/01/10	0.0027	0.001
Total Silver (Ag)	11/01/10	0.00014	0.0001
Total Zinc (Zn)	11/01/10	0.746	0.03

Sample ID	MW10-43		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	2.06	0.005
Total Cadmium (Cd)	11/01/10	0.00008	0.000017
Total Copper (Cu)	11/01/10	0.0088	0.002
Total Iron (Fe)	11/01/10	2.75	0.300
Total Lead (Pb)	11/01/10	0.0021	0.001
Total Selenium (Se)	11/01/10	0.0017	0.001

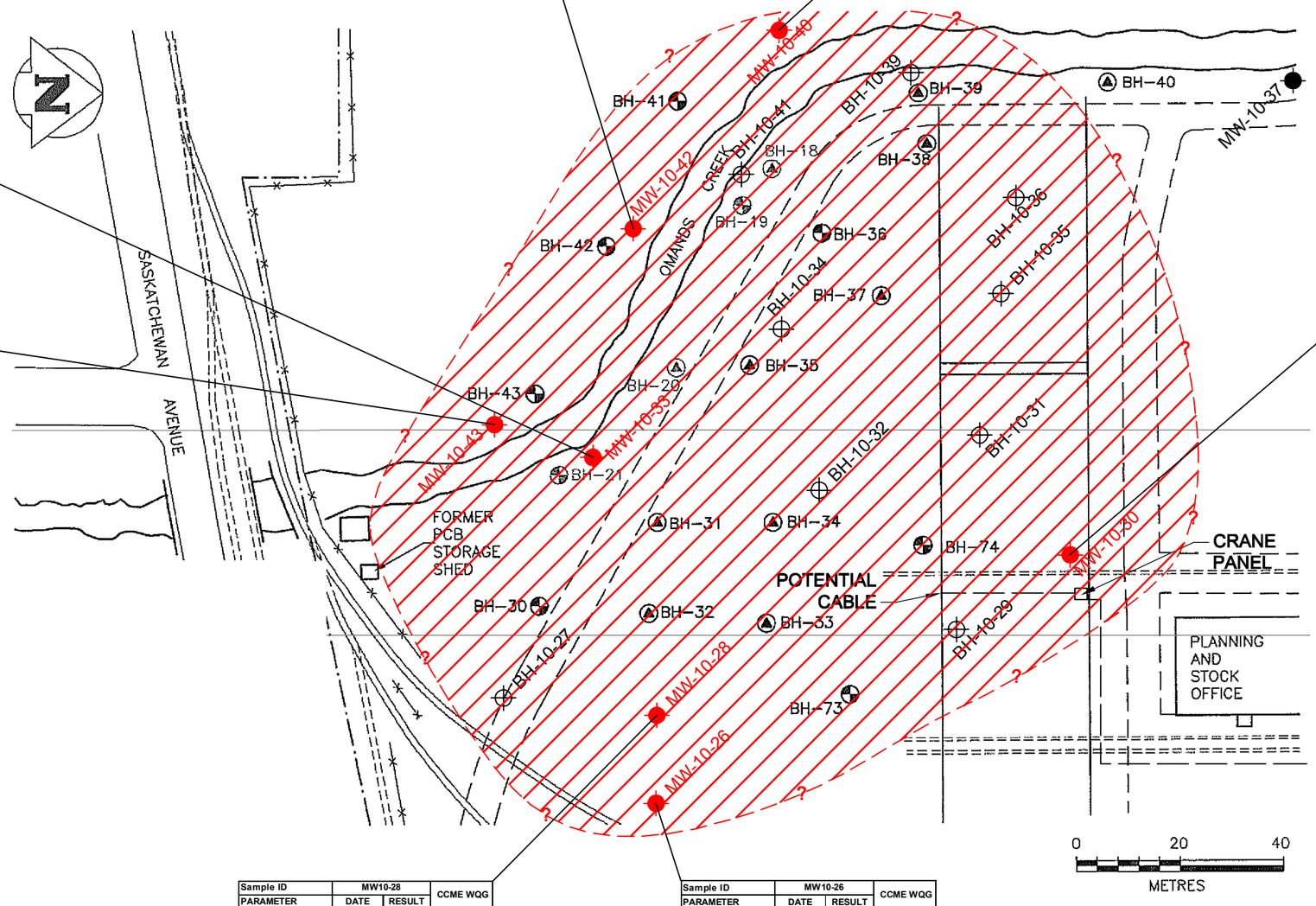
Sample ID	MW10-42		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	3.44	0.005
Total Cadmium (Cd)	11/01/10	0.00009	0.000017
Total Copper (Cu)	11/01/10	0.0086	0.002
Total Iron (Fe)	11/01/10	4.17	0.300
Total Lead (Pb)	11/01/10	0.0076	0.001
Total Selenium (Se)	11/01/10	0.0027	0.001

Sample ID	MW10-40		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	3.74	0.005
Total Cadmium (Cd)	11/01/10	0.00012	0.000017
Total Copper (Cu)	11/01/10	0.0103	0.002
Total Iron (Fe)	11/01/10	5.41	0.300
Total Lead (Pb)	11/01/10	0.0034	0.001
Total Selenium (Se)	11/01/10	0.0027	0.001

Sample ID	MW10-30		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	15	0.005
Total Arsenic (As)	11/01/10	0.007	0.005
Total Cadmium (Cd)	11/01/10	0.00037	0.000017
Total Chromium (Cr)	11/01/10	0.028	0.0089
Total Copper (Cu)	11/01/10	0.0261	0.002
Total Iron (Fe)	11/01/10	19.7	0.300
Total Lead (Pb)	11/01/10	0.0194	0.001
Total Nickel (Ni)	11/01/10	0.026	0.025
Total Selenium (Se)	11/01/10	0.0224	0.001
Total Zinc (Zn)	11/01/10	0.063	0.03

Sample ID	MW10-28		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	14.6	0.005
Total Arsenic (As)	11/01/10	0.0106	0.005
Total Cadmium (Cd)	11/01/10	0.00051	0.000017
Total Chromium (Cr)	11/01/10	0.036	0.0089
Total Copper (Cu)	11/01/10	0.0382	0.002
Total Iron (Fe)	11/01/10	25.7	0.300
Total Lead (Pb)	11/01/10	0.0377	0.001
Total Nickel (Ni)	11/01/10	0.04	0.025
Total Selenium (Se)	11/01/10	0.0025	0.001
Total Silver (Ag)	11/01/10	0.00011	0.0001
Total Zinc (Zn)	11/01/10	0.303	0.03

Sample ID	MW10-26		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	NA	0.005
Total Arsenic (As)	11/01/10	NA	0.005
Total Cadmium (Cd)	11/01/10	NA	0.000017
Total Chromium (Cr)	11/01/10	NA	0.0089
Total Copper (Cu)	11/01/10	NA	0.002
Total Iron (Fe)	11/01/10	NA	0.300
Total Lead (Pb)	11/01/10	0.0168	0.001
Total Nickel (Ni)	11/01/10	NA	0.025
Total Selenium (Se)	11/01/10	NA	0.001
Total Silver (Ag)	11/01/10	NA	0.0001
Total Zinc (Zn)	11/01/10	NA	0.03



LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**
- **ESTIMATED EXTENT OF METAL IMPACTED GROUNDWATER**
- **BOLD** RESULT EXCEEDS APPLICABLE GROUNDWATER QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND GROUNDWATER QUALITY GUIDELINES IN mg/L.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Landfilling Area

Estimated Extent of Impacts to Groundwater

Figure - 25

LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

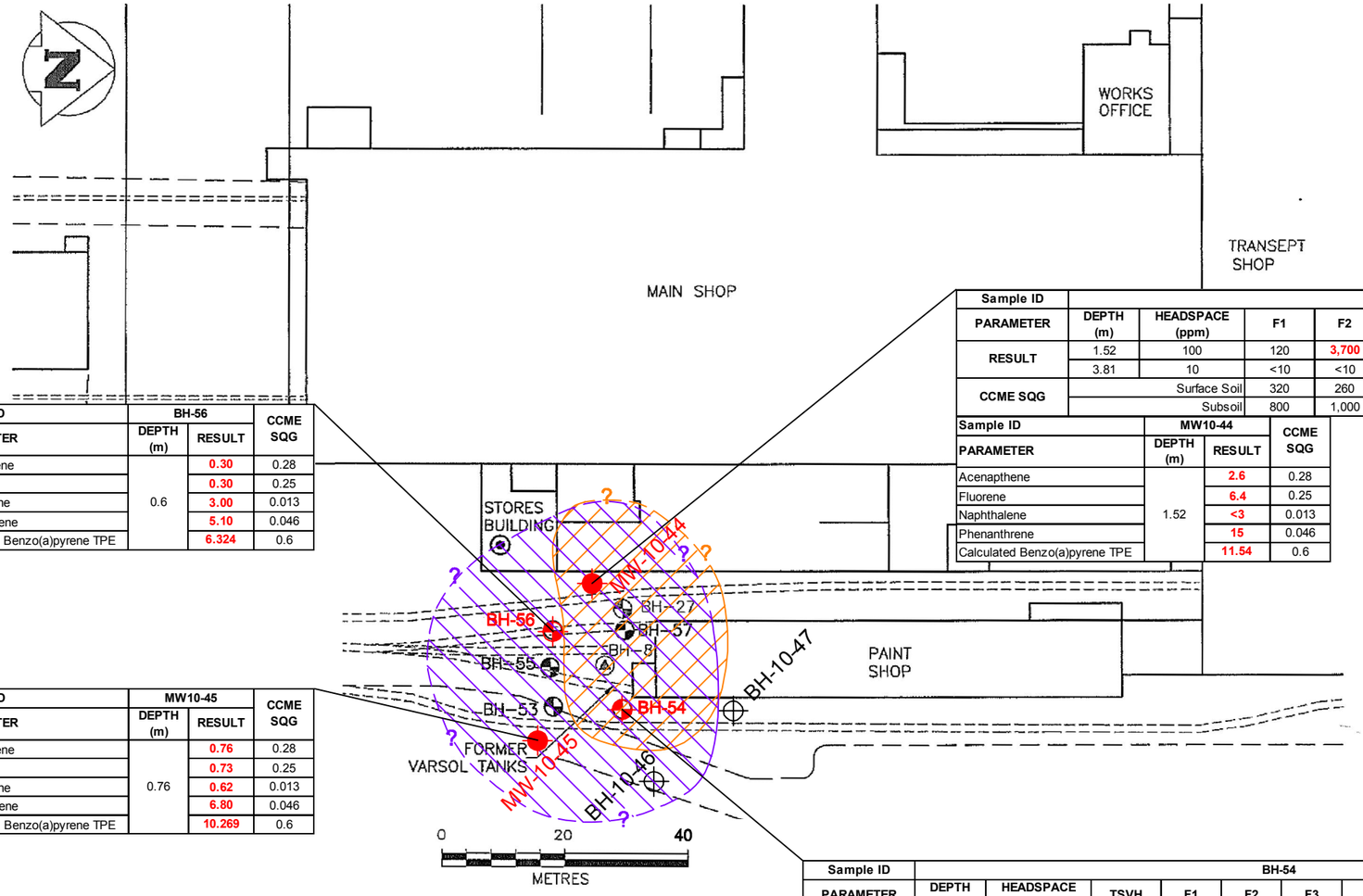
- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (JULY,1999)

- BOREHOLE LOCATION

PHASE III (AECOM, 2010)

- BOREHOLE
- MONITORING WELL
- ESTIMATED EXTENT OF PHC IMPACTED SOIL
- ESTIMATED EXTENT OF PAH IMPACTED SOIL
- **BOLD** RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE



Sample ID	BH-56		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Acenapthene	0.6	**0.30**	0.28
Fluorene		**0.30**	0.25
Naphthalene		**3.00**	0.013
Phenanthrene		**5.10**	0.046
Calculated Benzo(a)pyrene TPE		**6.324**	0.6

Sample ID	MW10-45		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Acenapthene	0.76	**0.76**	0.28
Fluorene		**0.73**	0.25
Naphthalene		**0.62**	0.013
Phenanthrene		**6.80**	0.046
Calculated Benzo(a)pyrene TPE		**10.269**	0.6

Sample ID	MW10-44									
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	F1	F2	F3	F4	B	T	E	X
RESULT	1.52	100	120	**3,700**	**6,000**	210	<0.01	<0.04	0.05	0.4
	3.81	10	<10	<10	34	<10	<0.005	<0.02	<0.01	<0.04
CCME SQG	Surface Soil		320	260	2,500	6,600	0.28	330	430	210
	Subsoil		800	1,000	5,000	10,000	0.29	660	860	460

Sample ID	MW10-44		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Acenapthene	1.52	**2.6**	0.28
Fluorene		**6.4**	0.25
Naphthalene		**<3**	0.013
Phenanthrene		**15**	0.046
Calculated Benzo(a)pyrene TPE		**11.54**	0.6

Sample ID	BH-54										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	0.3	-	**900**	-	-	-	-	<0.02	0.2	87	**334**
	1.2	-	NA	-	-	-	-	<0.02	<0.02	<0.03	0.05
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Solvent AST Area
Estimated Extent of Impacts to Soil
Figure - 26

Sample ID	BH10-57		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Arsenic (As)	0.76	**12.6**	12
	3.81	7.3	

Sample ID	BH-44		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Chromium (Cr)	0.6	**181**	91
	1.2	45.3	
Lead (Pb)	0.6	**970**	600
	1.2	55	
Nickel (Ni)	0.6	**72**	50
	1.2	NA	
Zinc (Zn)	0.6	**9,030**	360
	1.2	**840**	

Sample ID	BH-45		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.3	**124**	91
Zinc (Zn)	0.3	**23,000**	360

Sample ID	BH10-56		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.76	**482**	360
	3.05	37	

Sample ID	BH-22		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.3	**23,000**	360

Sample ID	BH-46		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.6	**128**	91

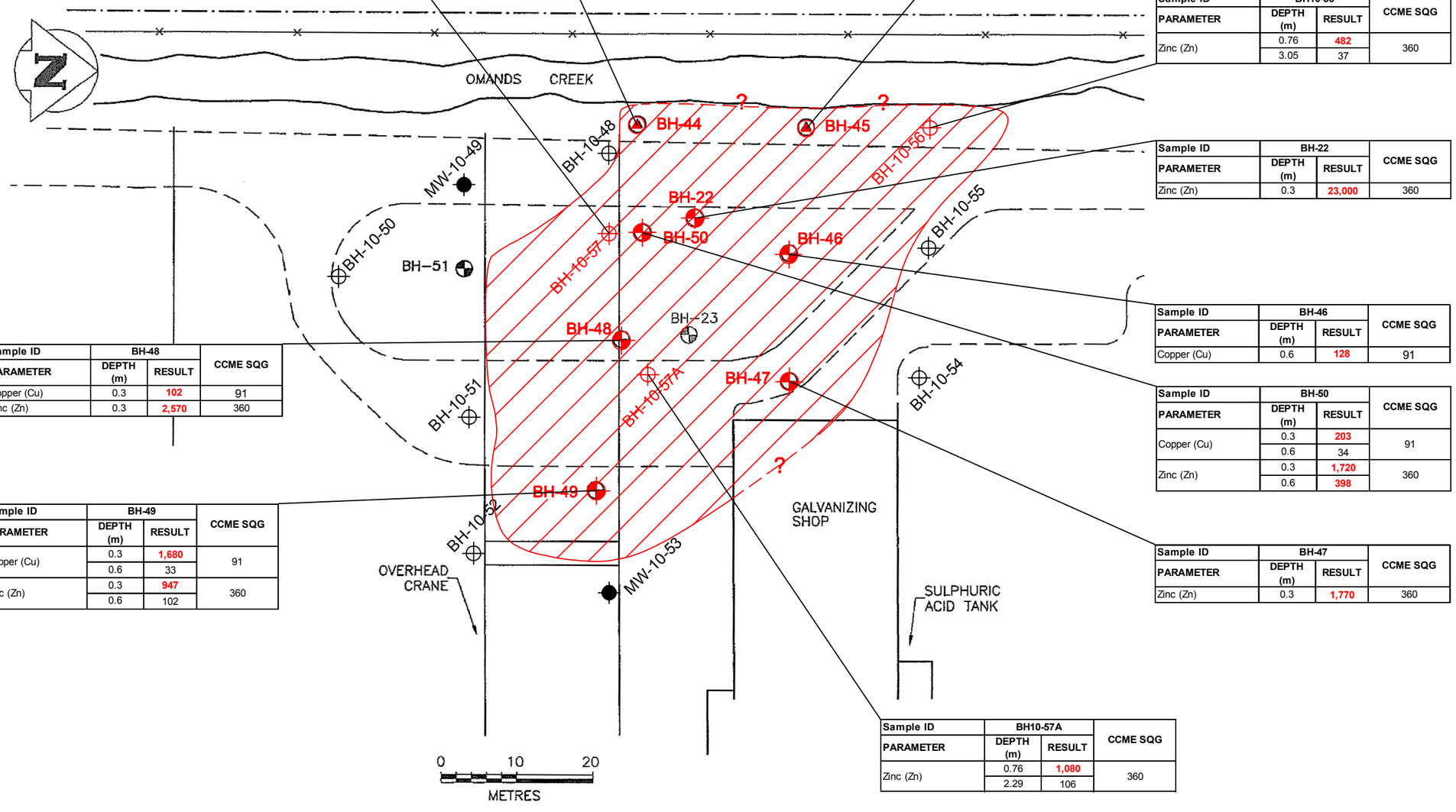
Sample ID	BH-50		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.3	**203**	91
	0.6	34	
Zinc (Zn)	0.3	**1,720**	360
	0.6	**398**	

Sample ID	BH-47		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.3	**1,770**	360

Sample ID	BH-48		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.3	**102**	91
Zinc (Zn)	0.3	**2,570**	360

Sample ID	BH-49		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.3	**1,680**	91
	0.6	33	
Zinc (Zn)	0.3	**947**	360
	0.6	102	

Sample ID	BH10-57A		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.76	**1,080**	360
	2.29	106	



LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- BOREHOLE
- MONITORING WELL

ESTIMATED EXTENT OF METAL IMPACTED SOIL

BOLD RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

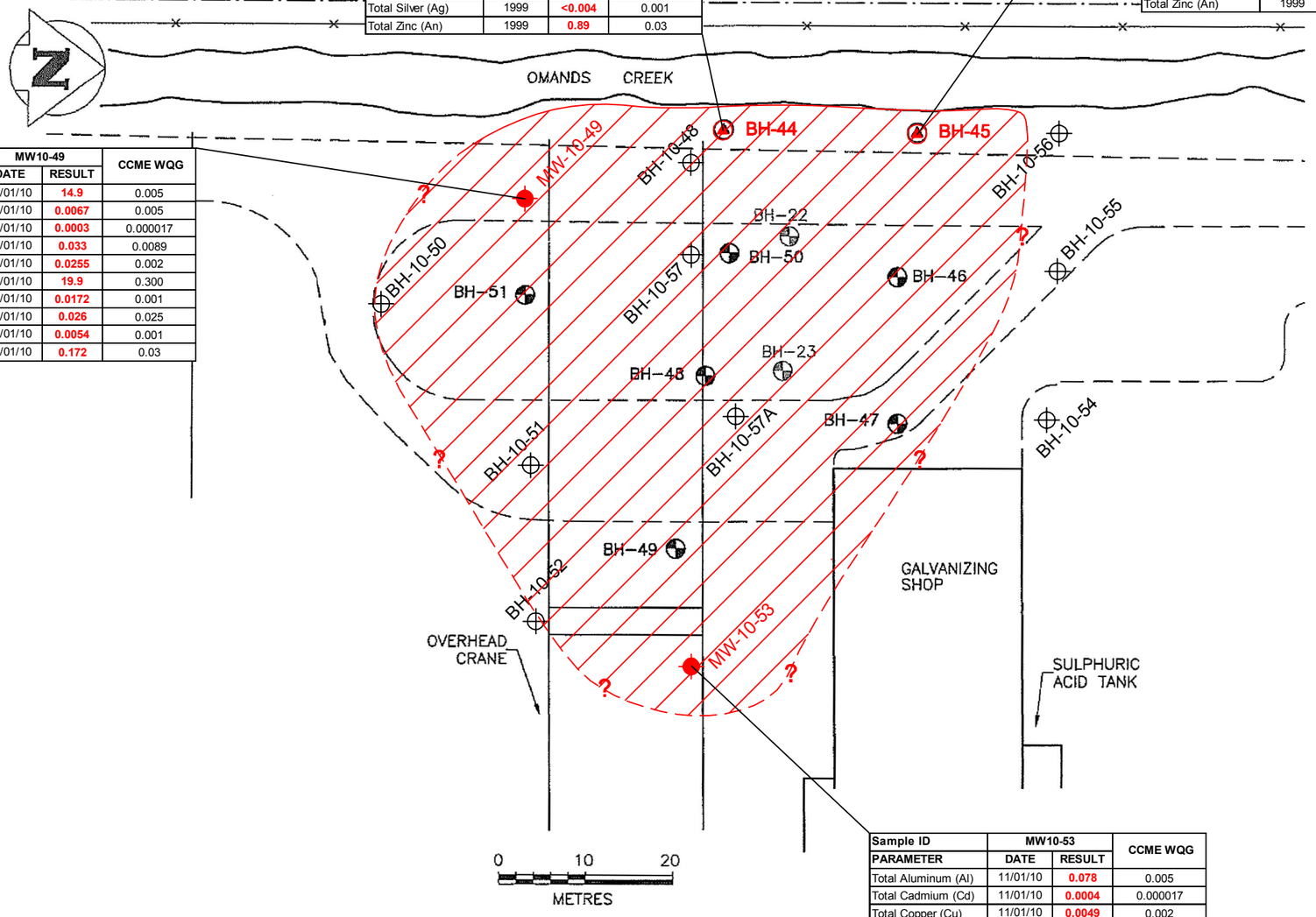
Sulphuric Acid Drum Storage Area
Estimated Extent of Impacts to Soil
Figure - 27

ISS/REV: 0A
AECOM FILE NAME: 60164142-03-H-F72-R0X.dwg Saved By: cloustonc

Sample ID	BH-44		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	1999	**20.1**	0.005
Total Arsenic (As)	1999	**0.0054**	0.005
Total Cadmium (Cd)	1999	**0.0006**	0.000017
Total Chromium (Cr)	1999	**7.15**	0.0089
Total Copper (Cu)	1999	**0.032**	0.002
Total Iron (Fe)	1999	**17.6**	0.300
Total Lead (Pb)	1999	**0.093**	0.001
Total Nickel (Ni)	1999	**0.026**	0.025
Total Selenium (Se)	1999	**0.004**	0.001
Total Silver (Ag)	1999	**<0.004**	0.001
Total Zinc (An)	1999	**0.89**	0.03

Sample ID	BH-45		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	1999	**1.94**	0.005
Total Cadmium (Cd)	1999	**<0.0002**	0.000017
Total Chromium (Cr)	1999	**0.011**	0.0089
Total Copper (Cu)	1999	**0.009**	0.002
Total Iron (Fe)	1999	**1.79**	0.300
Total Lead (Pb)	1999	**0.0052**	0.001
Total Selenium (Se)	1999	**0.003**	0.001
Total Silver (Ag)	1999	**<0.004**	0.001
Total Zinc (An)	1999	**0.42**	0.03

Sample ID	MW10-49		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**14.9**	0.005
Total Arsenic (As)	11/01/10	**0.0067**	0.005
Total Cadmium (Cd)	11/01/10	**0.0003**	0.000017
Total Chromium (Cr)	11/01/10	**0.033**	0.0089
Total Copper (Cu)	11/01/10	**0.0255**	0.002
Total Iron (Fe)	11/01/10	**19.9**	0.300
Total Lead (Pb)	11/01/10	**0.0172**	0.001
Total Nickel (Ni)	11/01/10	**0.026**	0.025
Total Selenium (Se)	11/01/10	**0.0054**	0.001
Total Zinc (An)	11/01/10	**0.172**	0.03



Sample ID	MW10-53		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**0.078**	0.005
Total Cadmium (Cd)	11/01/10	**0.0004**	0.000017
Total Copper (Cu)	11/01/10	**0.0049**	0.002
Total Selenium (Se)	11/01/10	**0.0021**	0.001
Total Zinc (An)	11/01/10	**1.63**	0.03

LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- BOREHOLE
- MONITORING WELL

ESTIMATED EXTENT OF METAL IMPACTED GROUNDWATER

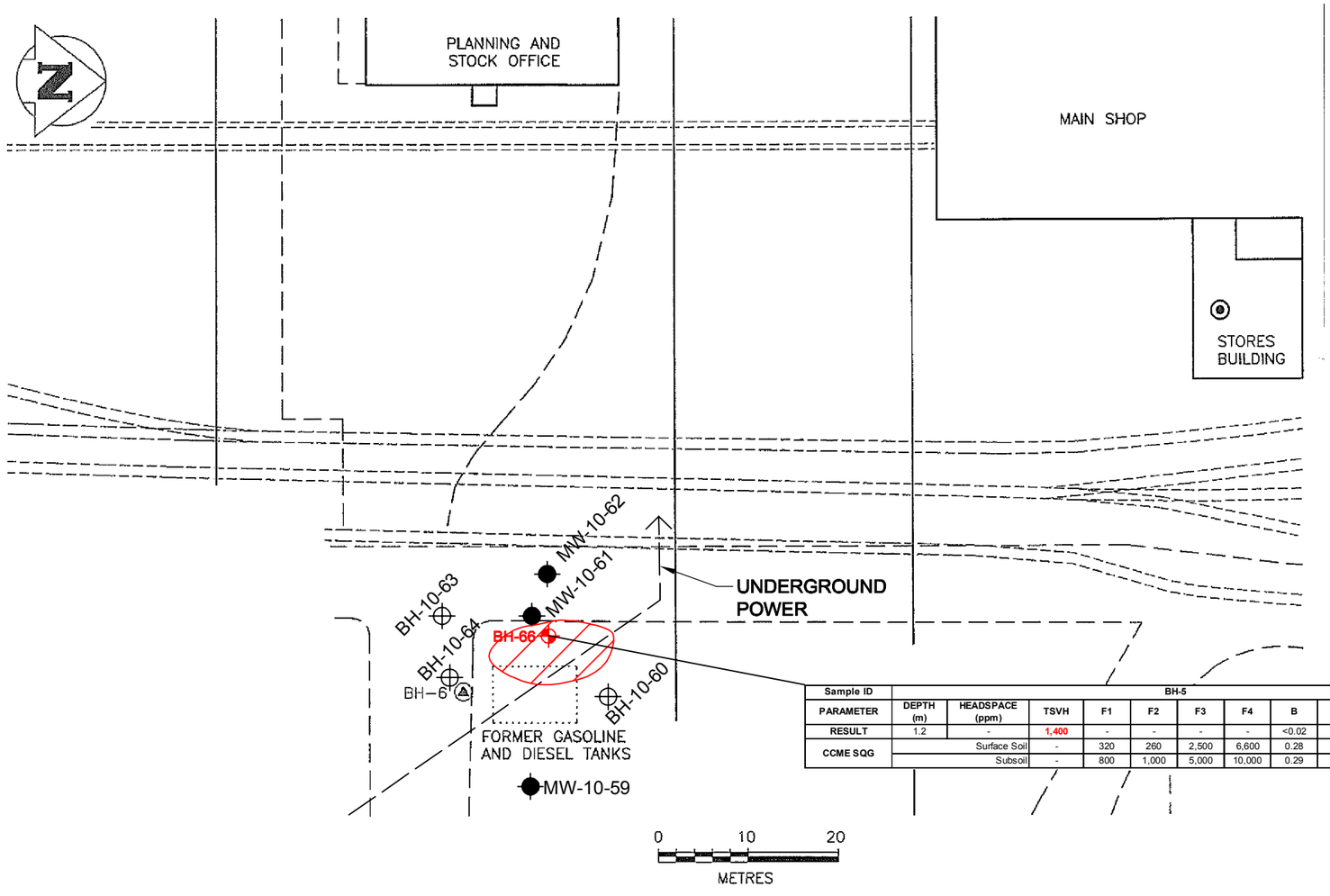
BOLD RESULT EXCEEDS APPLICABLE GROUNDWATER QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND GROUNDWATER QUALITY GUIDELINES IN mg/L.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Sulphuric Acid Drum Storage Area
Estimated Extent of Impacts to Groundwater
Figure - 28



Sample ID	BH-5										
PARAMETER	DEPTH (m)	HEADSPACE (ppm)	TSVH	F1	F2	F3	F4	B	T	E	X
RESULT	1.2	-	**1,400**	-	-	-	-	<0.02	0.08	0.06	0.18
CCME SQG	Surface Soil		-	320	260	2,500	6,600	0.28	330	430	210
	Subsoil		-	800	1,000	5,000	10,000	0.29	660	860	460

LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION
- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

- BOREHOLE
- MONITORING WELL
- ESTIMATED EXTENT OF PHC IMPACTED SOIL
- **BOLD** RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Diesel and Gasoline AST Area
Estimated Extent of Impacts to Soil
Figure - 29

Sample ID	BH-24		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.3	98	91
Lead (Pb)		687	600
Nickel (Ni)		57	50
Zinc (Zn)		673	360

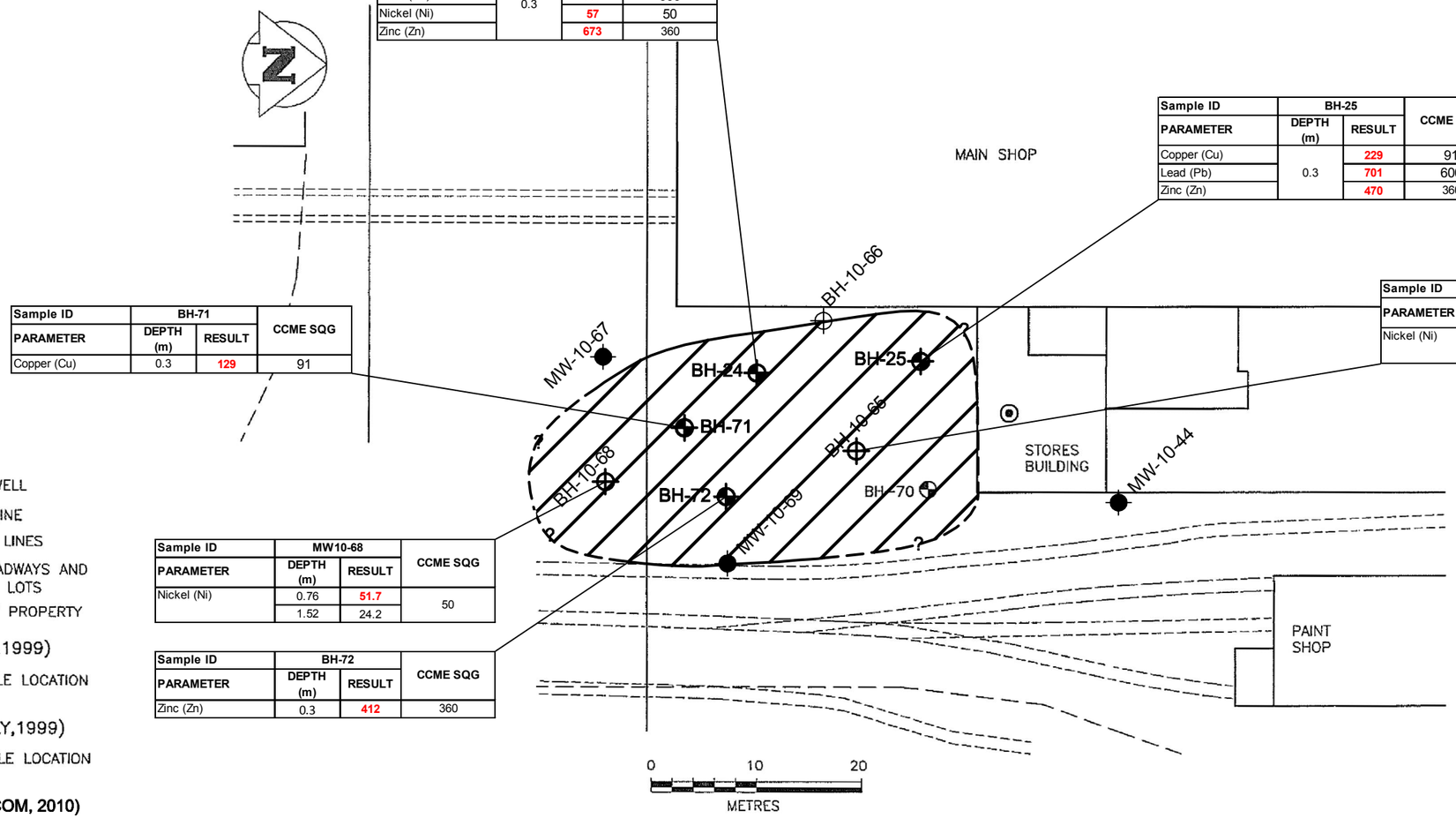
Sample ID	BH-25		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.3	229	91
Lead (Pb)		701	600
Zinc (Zn)		470	360

Sample ID	BH-71		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Copper (Cu)	0.3	129	91

Sample ID	MW10-65		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Nickel (Ni)	0.76	78.2	50
	1.52	30.3	

Sample ID	MW10-68		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Nickel (Ni)	0.76	51.7	50
	1.52	24.2	

Sample ID	BH-72		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.3	412	360



LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE LOCATION

PHASE III (AECOM, 2010)

- **BOREHOLE**
- **MONITORING WELL**
- **ESTIMATED EXTENT OF METAL IMPACTED SOIL**

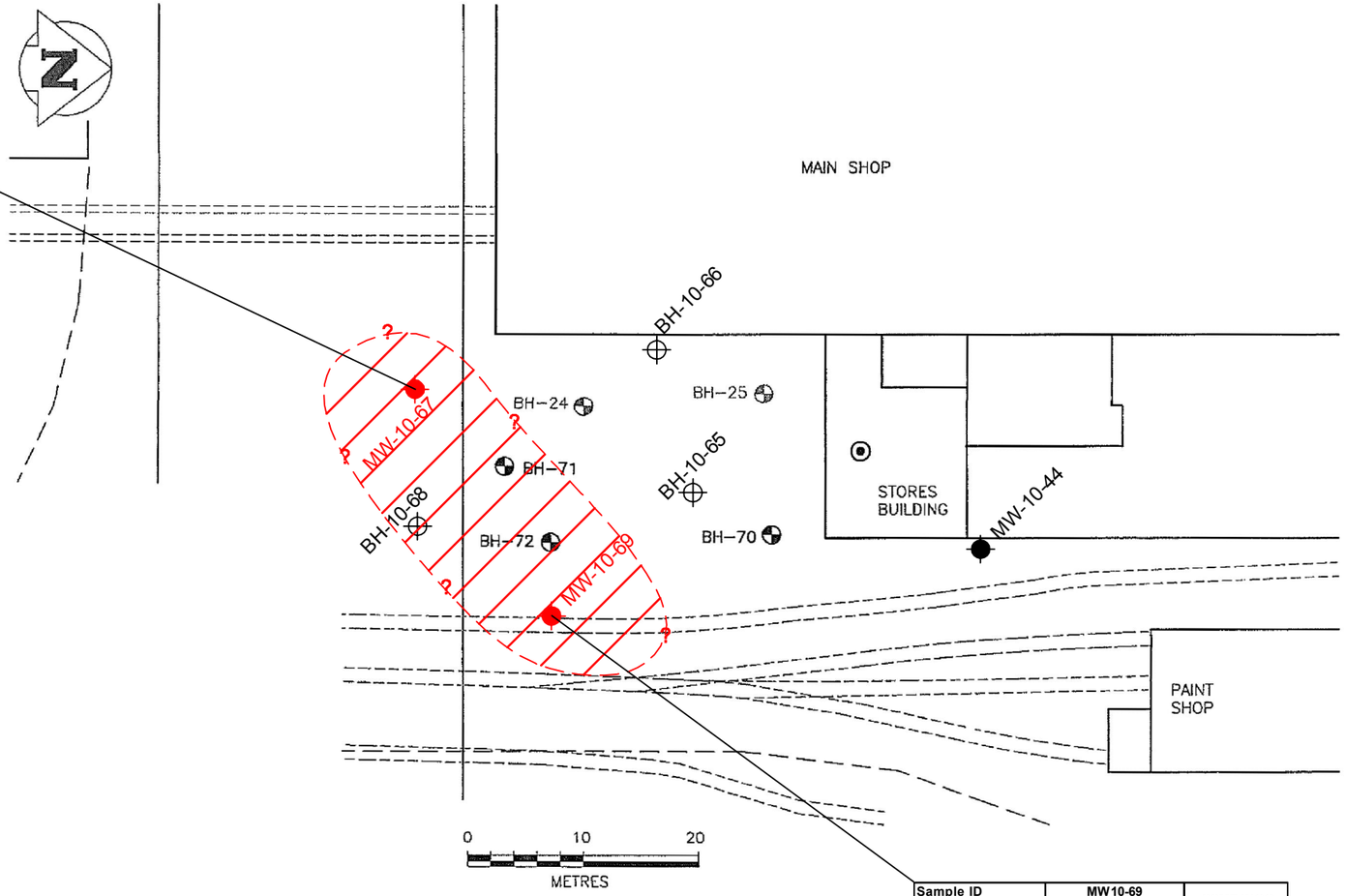
BOLD **RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE**

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Waste Paint Storage Area
Estimated Extent of Impacts to Soil
Figure - 30



Sample ID	MW10-67		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**3.62**	0.005
Total Arsenic (As)	11/01/10	**0.0022**	0.005
Total Cadmium (Cd)	11/01/10	**0.00007**	0.000017
Total Copper (Cu)	11/01/10	**0.01**	0.002
Total Iron (Fe)	11/01/10	**4.17**	0.300
Total Lead (Pb)	11/01/10	**0.0044**	0.001
Total Zinc (An)	11/01/10	**0.07**	0.03

Sample ID	MW10-69		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**0.369**	0.005
Total Cadmium (Cd)	11/01/10	**0.00003**	0.000017
Total Copper (Cu)	11/01/10	**0.0034**	0.002
Total Iron (Fe)	11/01/10	**0.621**	0.300
Total Lead (Pb)	11/01/10	**0.0023**	0.001
Total Zinc (An)	11/01/10	**0.069**	0.03

LEGEND

- WATER WELL
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE LOCATION

PHASE III (AECOM, 2010)

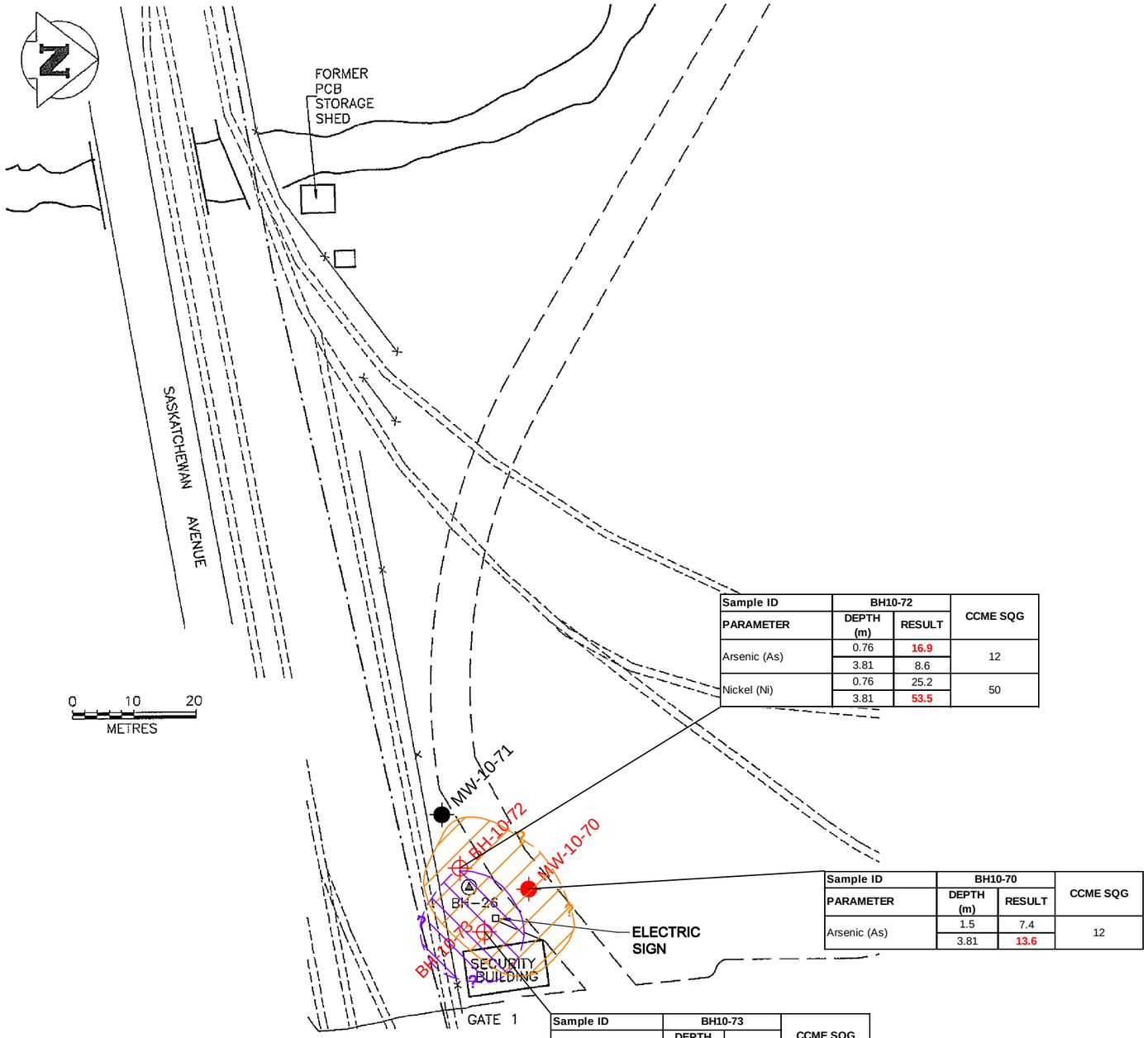
- **BOREHOLE**
- **MONITORING WELL**
- **ESTIMATED EXTENT OF METAL IMPACTED GROUNDWATER**
- **BOLD** **RESULT EXCEEDS APPLICABLE GROUNDWATER QUALITY GUIDELINE**

NOTES
1. ALL RESULTS AND GROUNDWATER QUALITY GUIDELINES IN mg/L.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Waste Paint Storage Area
Estimated Extent of Impacts to Groundwater
Figure - 31



Sample ID	BH10-72		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Arsenic (As)	0.76	16.9	12
	3.81	8.6	
Nickel (Ni)	0.76	25.2	50
	3.81	53.5	

Sample ID	BH10-70		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Arsenic (As)	1.5	7.4	12
	3.81	13.6	

Sample ID	BH10-73		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.76	523	360
	3.81	93	

Sample ID	BH10-73		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Naphthalene	0.76	0.057	0.013
Phenanthrene		0.29	0.046
Calculated Benzo(a)pyrene TPE		1.0041	0.6

LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

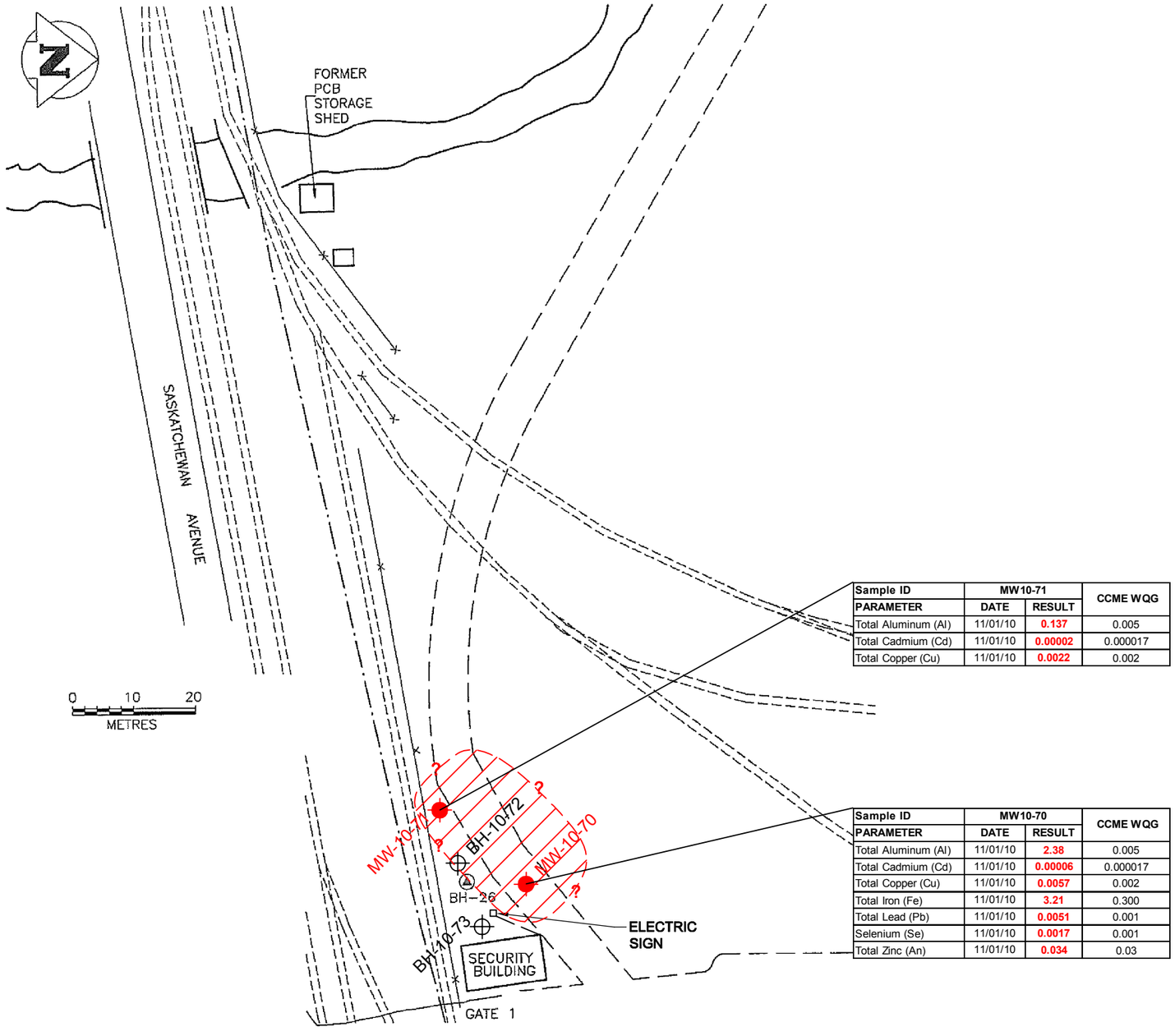
- BOREHOLE
- MONITORING WELL
- ESTIMATED EXTENT OF METAL IMPACTED SOIL
- ESTIMATED EXTENT OF PAH IMPACTED SOIL
- **BOLD** RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Former Saskatchewan Avenue Landfill Area
Estimated Extent of Impacts to Soil
Figure - 32



Sample ID	MW10-71		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**0.137**	0.005
Total Cadmium (Cd)	11/01/10	**0.00002**	0.000017
Total Copper (Cu)	11/01/10	**0.0022**	0.002

Sample ID	MW10-70		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**2.38**	0.005
Total Cadmium (Cd)	11/01/10	**0.00006**	0.000017
Total Copper (Cu)	11/01/10	**0.0057**	0.002
Total Iron (Fe)	11/01/10	**3.21**	0.300
Total Lead (Pb)	11/01/10	**0.0051**	0.001
Selenium (Se)	11/01/10	**0.0017**	0.001
Total Zinc (An)	11/01/10	**0.034**	0.03

LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

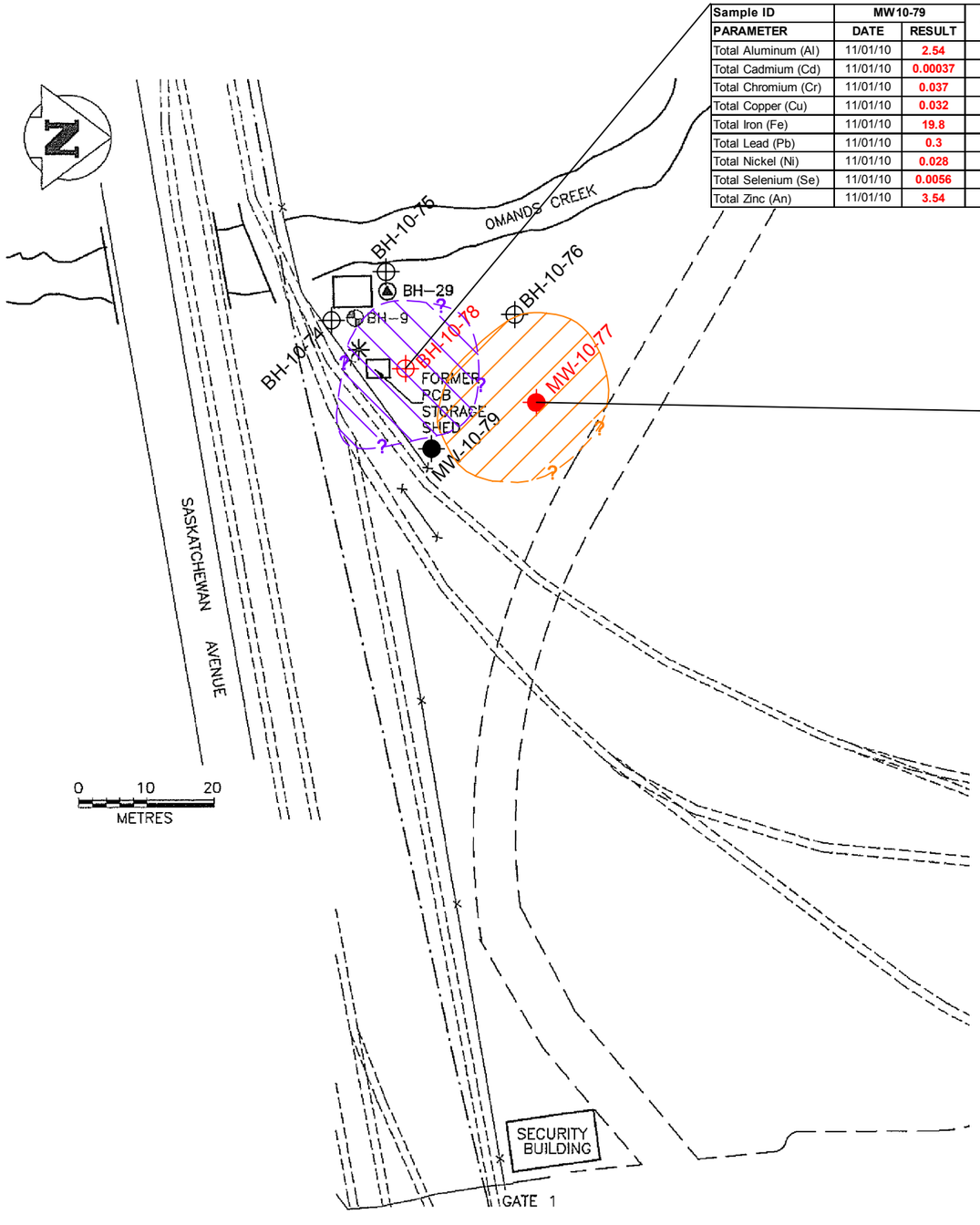
- BOREHOLE
- MONITORING WELL
- ESTIMATED EXTENT OF METAL IMPACTED GROUNDWATER
- **BOLD** RESULT EXCEEDS APPLICABLE GROUNDWATER QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND GROUNDWATER QUALITY GUIDELINES IN mg/L.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Former Saskatchewan Landfill Area
Estimated Extent of Impacts to Groundwater
Figure - 33



Sample ID	MW10-79		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**2.54**	0.005
Total Cadmium (Cd)	11/01/10	**0.00037**	0.000017
Total Chromium (Cr)	11/01/10	**0.037**	0.0089
Total Copper (Cu)	11/01/10	**0.032**	0.002
Total Iron (Fe)	11/01/10	**19.8**	0.300
Total Lead (Pb)	11/01/10	**0.3**	0.001
Total Nickel (Ni)	11/01/10	**0.028**	0.025
Total Selenium (Se)	11/01/10	**0.0056**	0.001
Total Zinc (An)	11/01/10	**3.54**	0.03

Sample ID	MW10-77		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**39.2**	0.005
Total Arsenic (As)	11/01/10	**0.0225**	0.005
Total Cadmium (Cd)	11/01/10	**0.00128**	0.000017
Total Chromium (Cr)	11/01/10	**0.121**	0.0089
Total Copper (Cu)	11/01/10	**0.129**	0.002
Total Iron (Fe)	11/01/10	**69**	0.300
Total Lead (Pb)	11/01/10	**0.173**	0.001
Total Nickel (Ni)	11/01/10	**0.109**	0.025
Total Selenium (Se)	11/01/10	**0.0089**	0.001
Total Silver (Ag)	11/01/10	**0.00042**	0.0001
Total Thallium (Tl)	11/01/10	**0.00083**	0.0008
Total Zinc (An)	11/01/10	**1.14**	0.03

LEGEND

- SURFICIAL SOIL SAMPLE
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

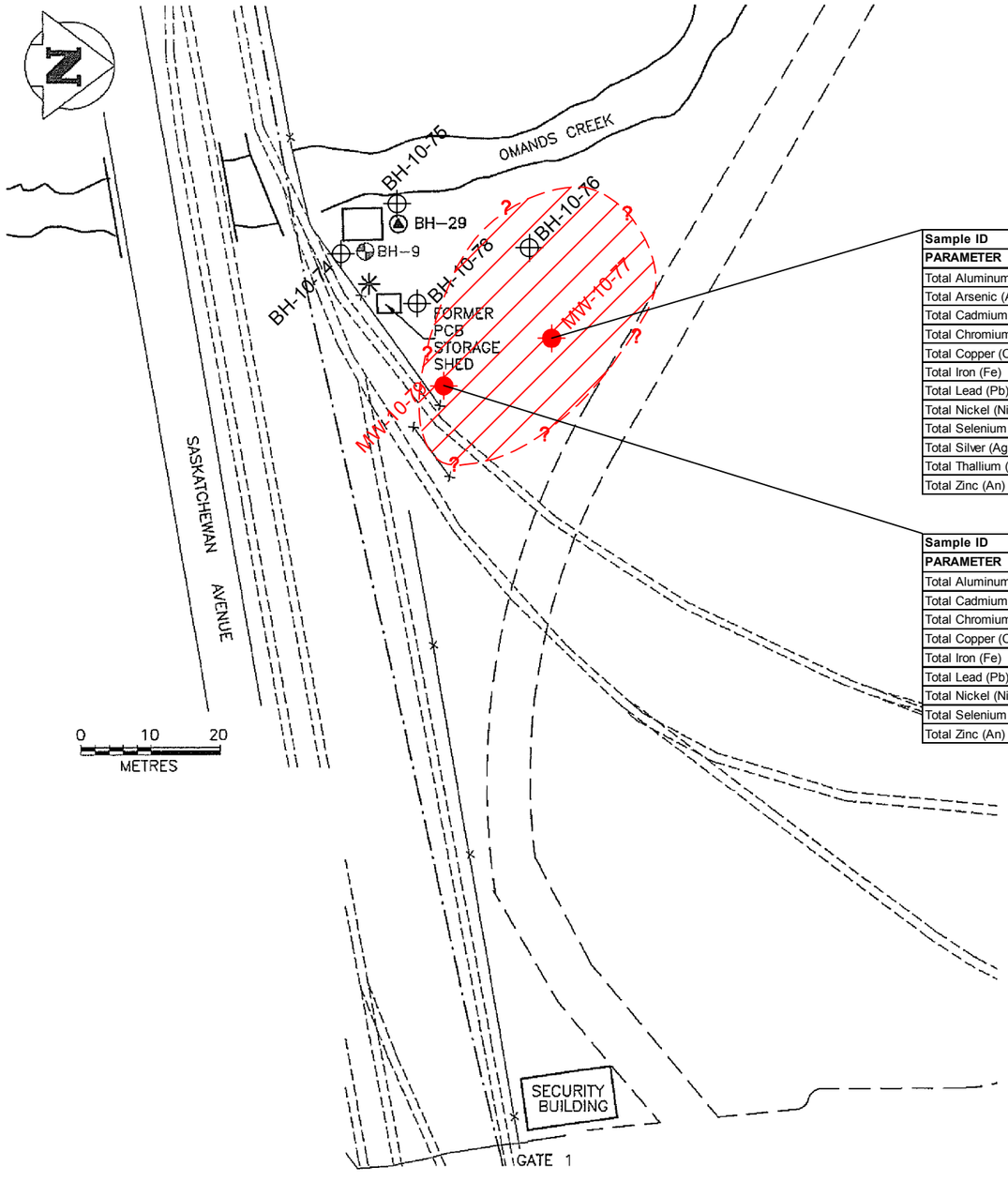
- BOREHOLE
- MONITORING WELL
- ESTIMATED EXTENT OF METAL IMPACTED SOIL
- ESTIMATED EXTENT OF PAH IMPACTED SOIL
- **BOLD** RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Polychlorinated Biphenyls Storage Area
Estimated Extent of Impacts to Soil
Figure - 34



Sample ID	MW10-77		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**39.2**	0.005
Total Arsenic (As)	11/01/10	**0.0225**	0.005
Total Cadmium (Cd)	11/01/10	**0.00128**	0.000017
Total Chromium (Cr)	11/01/10	**0.121**	0.0089
Total Copper (Cu)	11/01/10	**0.129**	0.002
Total Iron (Fe)	11/01/10	**69**	0.300
Total Lead (Pb)	11/01/10	**0.173**	0.001
Total Nickel (Ni)	11/01/10	**0.109**	0.025
Total Selenium (Se)	11/01/10	**0.0089**	0.001
Total Silver (Ag)	11/01/10	**0.00042**	0.0001
Total Thallium (Tl)	11/01/10	**0.00083**	0.0008
Total Zinc (An)	11/01/10	**1.14**	0.03

Sample ID	MW10-79		CCME WQG
PARAMETER	DATE	RESULT	
Total Aluminum (Al)	11/01/10	**2.54**	0.005
Total Cadmium (Cd)	11/01/10	**0.00037**	0.000017
Total Chromium (Cr)	11/01/10	**0.037**	0.0089
Total Copper (Cu)	11/01/10	**0.032**	0.002
Total Iron (Fe)	11/01/10	**19.8**	0.300
Total Lead (Pb)	11/01/10	**0.3**	0.001
Total Nickel (Ni)	11/01/10	**0.028**	0.025
Total Selenium (Se)	11/01/10	**0.0056**	0.001
Total Zinc (An)	11/01/10	**3.54**	0.03

LEGEND

- SURFICIAL SOIL SAMPLE
- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE II (FEB,1999)

- BOREHOLE LOCATION

PHASE III (JULY,1999)

- BOREHOLE COMPLETED AS MONITORING WELL

PHASE III (AECOM, 2010)

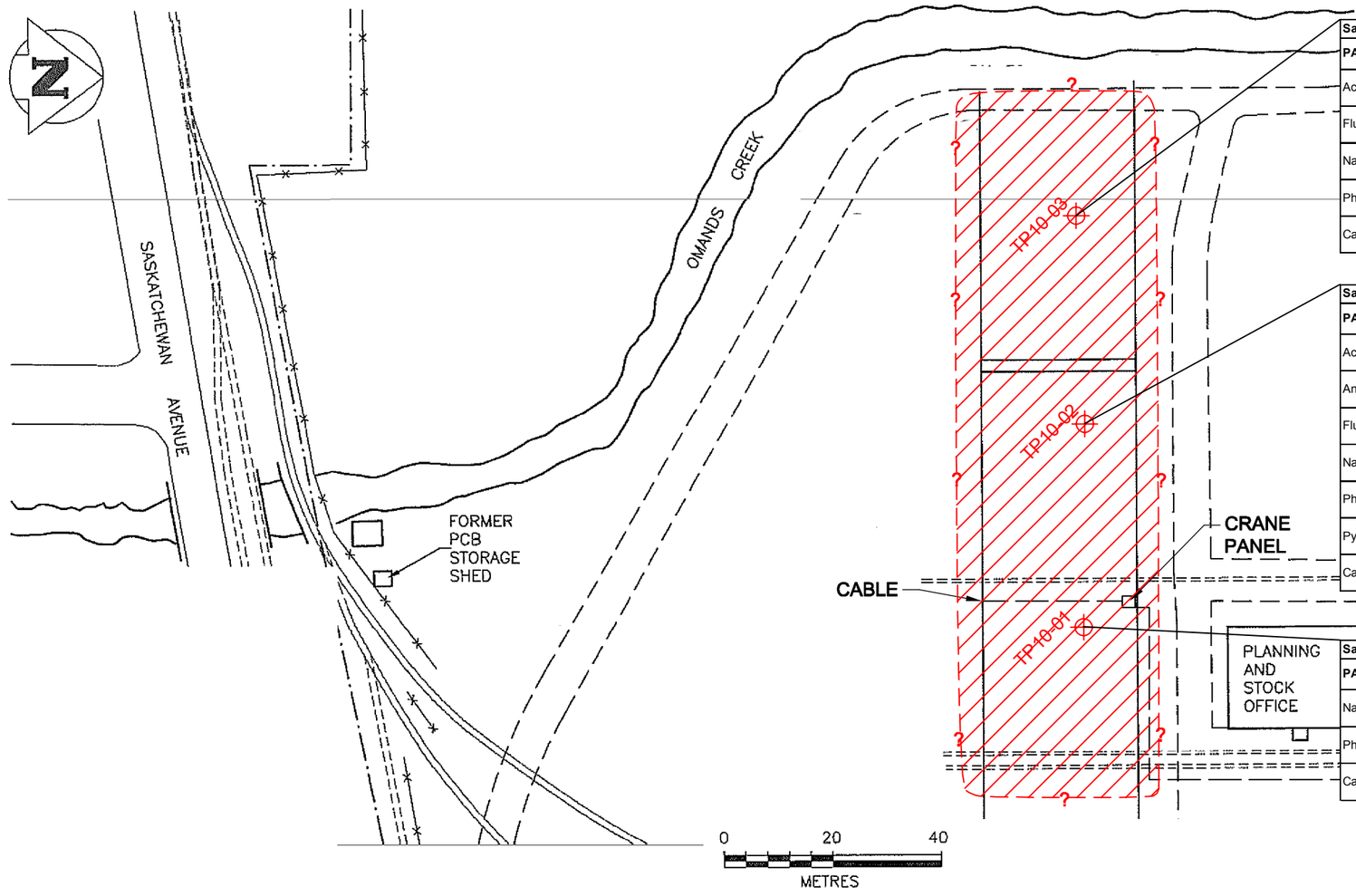
- **BOREHOLE**
- **MONITORING WELL**
- **ESTIMATED EXTENT OF METAL IMPACTED GROUNDWATER**
- **BOLD** **RESULT EXCEEDS APPLICABLE GROUNDWATER QUALITY GUIDELINE**

NOTES
1. ALL RESULTS AND GROUNDWATER QUALITY GUIDELINES IN mg/L.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Polychlorinated Biphenyls Storage Area
Estimated Extent of Impacts to Groundwater
Figure - 35



Sample ID	TP10-03		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Acenapthene	0.15	**0.64**	0.28
	0.6	0.084	
Fluorene	0.15	**0.60**	0.25
	0.6	0.081	
Naphthalene	0.15	**0.61**	0.013
	0.6	**0.013**	
Phenanthrene	0.15	**4.8**	0.046
	0.6	**0.27**	
Calculated Benzo(a)pyrene TPE	0.15	**27.6**	0.6
	0.6	0.373	

Sample ID	TP10-02		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Acenapthene	0.15	**16**	0.28
	0.6	**6.6**	
Anthracene	0.15	**33**	32
	0.6	10	
Fluorene	0.15	**15**	0.25
	0.6	**4.3**	
Naphthalene	0.15	**0.84**	0.013
	0.6	**0.27**	
Phenanthrene	0.15	**1.3**	0.046
	0.6	**0.21**	
Pyrene	0.15	**140**	100
	0.6	48	
Calculated Benzo(a)pyrene TPE	0.15	**234.4**	0.6
	0.6	**68.0**	

Sample ID	TP10-01		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Naphthalene	0.15	**0.84**	0.013
	0.6	**0.27**	
Phenanthrene	0.15	**1.3**	0.046
	0.6	**0.21**	
Calculated Benzo(a)pyrene TPE	0.15	0.25	0.6
	0.6	**2.25**	

LEGEND

- FENCE LINE
- RAILWAY LINES
- SITE ROADWAYS AND PARKING LOTS
- SUBJECT PROPERTY

PHASE III (AECOM, 2010)

- BOREHOLE
- ESTIMATED EXTENT OF METAL IMPACTED SOIL
- **BOLD** RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE

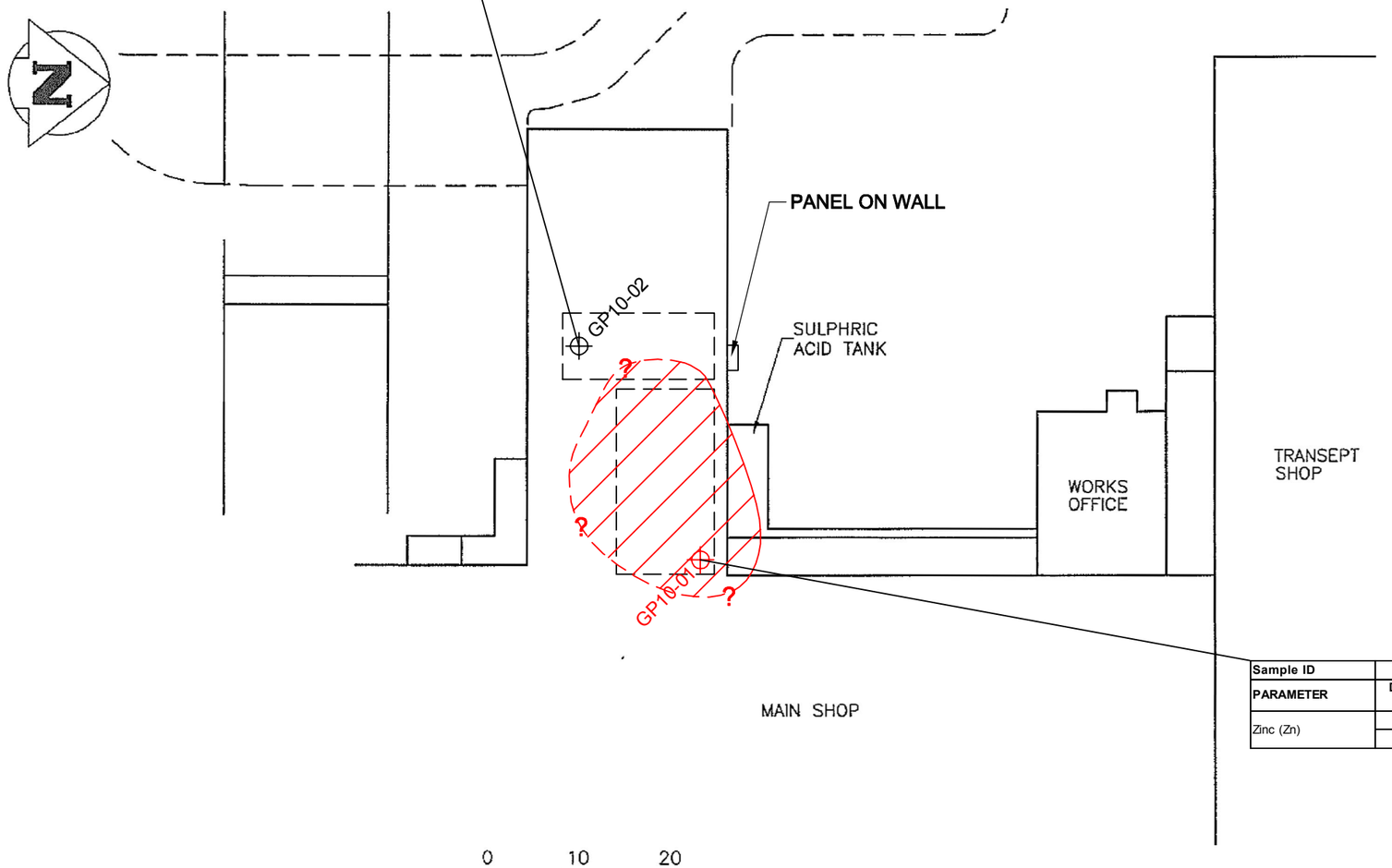
NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

South Crane Runway
Estimated Extent of Impacts to Soil
Figure - 36

Sample ID	GP10-02		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.30	29	360
	1.50	52	



Sample ID	GP10-01		CCME SQG
PARAMETER	DEPTH (m)	RESULT	
Zinc (Zn)	0.30	**10,300**	360
	1.50	387	

LEGEND

— — SITE ROADWAYS AND PARKING LOTS

PHASE III (AECOM, 2010)

⊕ BOREHOLE

ESTIMATED EXTENT OF METAL IMPACTED SOIL

BOLD RESULT EXCEEDS APPLICABLE SOIL QUALITY GUIDELINE

NOTES
1. ALL RESULTS AND SOIL QUALITY GUIDELINES IN mg/kg.

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Galvanizing Pit
Estimated Extent of Impacts to Soil
Figure - 37

B SIZE 11" x 17" (279.4mm x 431.8mm)

PLOT: 11/02/18 8:19:41 AM Saved By: cloustonc

ISS/REV: 0A
AECOM FILE NAME: 60164142-02-H-F06-R0X.dwg

PROPERTY LINE

DUBLIN AVE

OMANDS CREEK

SASKATCHEWAN AVE

OC10-1
OC10-2
OC10-3
OC10-4
OC10-5
OC10-6
OC10-7

SITE LEGEND

1. GATE SHOP UST AREA
2. PAINT SHOP UST AREA
3. NORTH PROPERTY LINE UST AREA
4. WASTE OIL DRUM STORAGE AREA
5. LANDFILLING AREA
6. SOLVENT AST AREA
7. SULFURIC ACID DRUM STORAGE AREA
8. SULFURIC ACID AST AREA
9. DIESEL AND GASOLINE AST AREA
10. WASTE PAINT STORAGE AREA
11. FORMER SASKATCHEWAN AVENUE LANDFILL
12. POLYCHLORINATED BIPHENYLS STORAGE AREA
13. WEST OF PAINT SHOP AREA
14. WHEELABRATOR DUST
15. OMANDS CREEK
16. SOUTH CRANE RUNWAY
17. GALVANIZING PIT

0 20 40 m

SCALE 1:2000

IMAGE DATE : 2005

LEGEND

- BOREHOLE (AECOM)
- MONITORING WELL (AECOM)
- OMANDS CREEK SAMPLE LOCATION (AECOM)
- BOREHOLE (PRIOR TO 2010)

ESTIMATED EXTENT OF:

- PHC IMPACTED SOIL
- PAH IMPACTED SOIL
- METAL IMPACTED SOIL

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Estimated Extent of Impacts to Soil

Figure - 38

B SIZE 11" x 17" (279.4mm x 431.8mm)

PLOT: 11/02/18 8:22:12 AM

Saved By: cloustonc

ISS/REV: 0A

AECOM FILE NAME: 60164142-02-H-F07-R0X.dwg

PROPERTY LINE

DUBLIN AVE

OMANDS CREEK

SASKATCHEWAN AVE

OC10-1

OC10-2

OC10-3

OC10-4

OC10-5

OC10-6

OC10-7

SITE LEGEND

1. GATE SHOP UST AREA
2. PAINT SHOP UST AREA
3. NORTH PROPERTY LINE UST AREA
4. WASTE OIL DRUM STORAGE AREA
5. LANDFILLING AREA
6. SOLVENT AST AREA
7. SULFURIC ACID DRUM STORAGE AREA
8. SULFURIC ACID AST AREA
9. DIESEL AND GASOLINE AST AREA
10. WASTE PAINT STORAGE AREA
11. FORMER SASKATCHEWAN AVENUE LANDFILL
12. POLYCHLORINATED BIPHENYLS STORAGE AREA
13. WEST OF PAINT SHOP AREA
14. WHEELABRATOR DUST
15. OMANDS CREEK
16. SOUTH CRANE RUNWAY
17. GALVANIZING PIT

0 20 40 m

SCALE 1:2000

IMAGE DATE : 2005

LEGEND

- BOREHOLE (AECOM)
- MONITORING WELL (AECOM)
- OMANDS CREEK SAMPLE LOCATION (AECOM)
- BOREHOLE (PRIOR TO 2010)

ESTIMATED EXTENT OF:

- METAL IMPACTED GROUNDWATER

AECOM

City of Winnipeg
Dominion Bridge Phase III ESA
1460 Dublin Avenue

Estimated Extent of Impacts to Groundwater

Figure - 39

Tables

Table 2.1: Borehole/Monitoring Well Placement – Gate Shop UST Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
MW10-01	West of BH-4	To delineate the potential extent of PHC impacts to soil & groundwater.	Soil : • BTEX, PHC F1-F4 Ground Water: • BTEX, PHC F1-F4
BH10-02	North of Gate Shop building, south of former UST location.	To delineate the potential extent of PHC impacts to soil.	
MW10-03	Northeast of former UST location.	To delineate the potential extent of PHC impacts to soil & groundwater. Given expected direction of shallow groundwater, determine background groundwater quality.	
BH10-04	North of presumed UST are and BH-4, south of BH-14.	To delineate the potential extent of PHC impacts to soil between BH-4 and BH-14.	
BH10-05	Proximate to BH-4.	To delineate the potential vertical extent of PHC impacts to soil.	

Table 2.2: Borehole/Monitoring Well Placement – Paint Shop UST Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
MW10-06	West of the Paint Shop building, proximate to BH-15.	To delineate the potential vertical extent of PHC, VOC, lead and PAH (soil only - associated with the rail spur line) impacts to soil & groundwater.	Soil : • BTEX, PHC F1-F4 • VOC • Lead • PAH (MW10-06 & MW10-08) Ground Water: • BTEX, PHC F1-F4 • VOC • Lead
BH10-07	Inside the Paint Shop building, south of BH-64.	To delineate the potential extent of PHC, VOC and lead impacts to soil.	
MW10-08	Immediately east of the Paint Shop building.	To delineate the potential extent of PHC, VOC, lead and PAH (soil only - associated with the rail spur line) impacts to soil & groundwater.	
BH10-09	Inside the Paint Shop building, north of BH-64.	To delineate the potential extent of PHC, VOC and lead impacts to soil.	

.

Table 2.3: Borehole/Monitoring Well Placement – North Property Line UST Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
MW10-10	West of BH-17.	To delineate the potential extent of potential PHC impacts to soil & groundwater.	Soil : • BTEX, PHC F1-F4 • Metals Ground Water: • BTEX, PHC F1-F4 • Metals
BH10-11	South of BH-17.	To delineate the potential extent of potential PHC impacts to soil.	
BH10-12	East of BH-17.	To delineate the potential extent of potential PHC impacts to soil.	
BH10-13	North of BH-17 on Dublin Road.	To delineate the potential extent of potential PHC impacts to soil.	

Table 2.4: Proposed Borehole/Monitoring Well Placement – Waste Oil Drum Storage Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
MW10-14	West of BH-65.	To delineate the extent of probable PHC impacts to soil & groundwater west of BH-65.	Soil : • BTEX, PHC F1-F4 • PAH (BH10-19 & BH10-25) Ground Water: • BTEX, PHC F1-F4
MW10-15	West of BH-66.	To delineate the extent of probable PHC impacts to soil west of BH-66.	
BH10-16	South of BH-66.	To delineate the extent of probable PHC impacts to soil west of BH-66.	
BH10-17	South of BH-69 on building pad.	To delineate the extent of potential PHC impacts to soil to the south.	
MW10-18	South of BH-28 on building pad.	To delineate the extent of probable PHC impacts to soil & groundwater south of BH-28 and southwest of BH-60.	
BH10-19	South of BH-60, proximate to the building pad.	To delineate the extent of probable PHC impacts to soil south of BH-60.	
BH10-20	Southeast of BH-60 and south of BH-68.	To delineate the extent of probable PHC impacts to soil & groundwater southeast of BH-60.	
MW10-21	East of BH-68.	To delineate the extent of probable PHC impacts to soil east of BH-68.	
BH10-22	North of BH-68.	To delineate the extent of probable PHC impacts to soil north of BH-68.	
MW10-23	North of BH-28, proximate to the building pad.	To delineate the extent of probable PHC impacts to soil and groundwater north of BH-28.	
BH10-24	North of BH-65.	To delineate the extent of probable PHC impacts to soil north of BH-65.	
BH10-25	Proximate to BH-60.	To delineate the vertical extent of probable PHC impacts to soil in the vicinity of BH-60.	

Table 2.5: Borehole/Monitoring Well Placement – Landfilling Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
BH10-26	South of BH-30.	To delineate the southern extent of metals and potential PCB impacts to soil.	Soil : • PCB (20 samples only) • Metals • VOC (10 samples only) Ground Water: • PCB • Metals
BH10-27	East of BH-30.	To delineate the eastern extent of metals and potential PCB impacts to soil.	
MW10-28	East of BH-32.	To delineate the eastern extent of metals and potential PCB impacts to soil & groundwater.	
BH10-29	East of BH-74.	To delineate the northern extent of metals and potential PCB impacts to soil.	
MW10-30	North of BH-74.	To delineate the northern extent of metals and potential PCB impacts to soil & groundwater.	
BH10-31	West of BH-74.	To delineate the northern extent of metals and potential PCB impacts to soil.	
BH10-32	Proximate to BH-34.	To delineate the extent of metals and PCB impacts to soil from BH-34 and BH-31, respectively.	
MW10-33	East of Omands Creek,	To delineate the extent of metals and PCB	

	proximate to BH-21.	impacts to soil & groundwater.	
BH10-34	Proximate to BH-35.	To delineate the vertical extent of metals and potential PCB impacts to soil.	
BH10-35	North of BH-37.	To delineate the northern extent of metals and potential PCB impacts to soil.	
BH10-36	Northeast of BH-38.	To delineate the northern extent of metals and potential PCB impacts to soil.	
MW10-37	North of BH-40.	To delineate the extent of metals and PCB impacts to soil & groundwater.	
MW10-38	West of Omands Creek.	To investigate the potential for metals and PCB impacts to soil & groundwater.	
BH10-39	East of Omands Creek, proximate to BH-39.	To delineate the extent of metals and potential PCB impacts to soil.	
MW10-40	West of Omands Creek.	To investigate the potential for metals and PCB impacts to soil & groundwater.	
BH10-41	East of Omands Creek, proximate to BH-18 and BH-19.	To delineate the vertical extent of metals and potential PCB impacts to soil.	
MW10-42	West of Omands Creek, proximate to BH-42.	To investigate the potential for metals and PCB impacts to soil & groundwater.	
MW10-43	West of Omands Creek, proximate to BH-43.	To investigate the potential for metals and PCB impacts to soil & groundwater.	

Table 2.6: Borehole/Monitoring Well Placement – Solvent AST Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
MW10-44	West of Former Varsol Tanks.	To delineate the western extent of metals impacts to soil and investigate potential PAH impacts to soil.	Soil : • BTEX, PHC F1-F4 • PAH (MW10-44 & MW10-45) • VOC Ground Water: • BTEX, PHC F1-F4 • VOC
MW10-45	Southeast of BH-54.	To delineate the south-eastern extent of metals impacts to soil & groundwater.	
BH10-46	East of BH-54.	To delineate the eastern extent of metals impacts to soil.	
BH10-47	North of BH-54.	To delineate the northern extent of metals impacts to soil.	

Table 2.7: Borehole/Monitoring Well Placement – Sulphuric Acid Drum Storage Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
BH10-48	Proximate to BH-44.	To delineate the vertical extent of metals and potential PHC impacts to soil.	Soil : • BTEX, PHC F1-F4 • Metals Ground Water: • BTEX, PHC F1-F4 • Metals
MW10-49	South of BH-44 and west of BH-51.	To delineate the extent of metals impacts and potential PHC impacts to soil & groundwater.	
BH10-50	South of BH-51.	To delineate the southern extent of metals impacts and potential PHC impacts to soil.	
BH10-51	East of BH-51.	To delineate the southern extent of metals impacts and potential PHC impacts to soil.	
BH10-52	Southeast of BH-49.	To delineate the eastern extent of metals impacts and potential PHC impacts to soil.	
MW10-53	Northeast of BH-49.	To delineate the eastern extent of metals impacts and potential PHC impacts to soil & groundwater.	
BH10-54	North of BH-47.	To delineate the northern extent of metals impacts and potential PHC impacts to soil.	
BH10-55	North of BH-46.	To delineate the northern extent of metals impacts and potential PHC impacts to soil.	
BH10-56	North of BH-45.	To delineate the northern extent of metals impacts and potential PHC impacts to soil.	
BH10-57	Proximate to BH-50.	To delineate the vertical extent of metals and probable PHC impacts to soil.	

Table 2.8: Borehole Placement – Sulphuric Acid AST Area

BH No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
BH10-58	West of the Sulphuric Acid Tank.	To investigate the presence/absence of PHC impacts to soil west of the Sulphuric Acid Tank.	Soil : • Metals

Table 2.9: Borehole/Monitoring Well Placement – Diesel and Gasoline AST Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
MW10-59	East of the Former Gasoline and Diesel Tanks.	To delineate the extent of potential PHC impacts to soil.	Soil : • BTEX, PHC F1-F4 Ground Water: • BTEX, PHC F1-F4
BH10-60	North of the Former Gasoline and Diesel Tanks.	To delineate the extent of potential PHC impacts to soil.	
MW10-61	West of the Former Gasoline and Diesel Tanks, proximate to BH-5.	To confirm probable PHC impacts to soil and groundwater proximate to an elevated TSVH concentration detected in BH-5.	
MW10-62	West of the Former Gasoline and Diesel Tanks.	To delineate the extent of potential PHC impacts to soil and groundwater.	
BH10-63	Southwest of the Former Gasoline and Diesel Tanks.	To delineate the extent of potential PHC impacts to soil.	
BH10-64	South of the Former Gasoline and Diesel Tanks, proximate to BH-6.	To delineate the extent of potential PHC impacts to soil.	

Table 2.10: Borehole/Monitoring Well Placement – Waste Paint Storage Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
BH10-65	East of BH-25.	To delineate the extent of metals impacts to soil.	Soil : • BTEX, PHC F1-F4 (MW10-67, BH10-68 & MW-10-69) • Metals Ground Water: • BTEX, PHC F1-F4 • Metals
BH10-66	West of BH-25 and BH-24.	To delineate the extent of metals impacts to soil.	
MW10-67	South of BH-24.	To delineate the extent of metals impacts and potential PHC impacts to soil & groundwater.	
BH10-68	South of BH-72.	To delineate the extent of metals impacts and potential PHC impacts to soil.	
MW10-69	East of BH-72.	To delineate the extent of metals impacts and potential PHC impacts to soil & groundwater.	

Table 2.11: Borehole/Monitoring Well Placement – Former Saskatchewan Avenue Landfill

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
MW10-70	North of BH-26.	To delineate the extent of metals impacts to soil & groundwater.	Soil : • Metals • PAH (MW10-71 & BH10-72) Ground Water: • Metals
MW10-71	West of BH-26.	To delineate the extent of metals impacts and investigate potential PAH impacts to soil and groundwater.	
BH10-72	West of BH-26.	To delineate the extent of metals impacts and investigate potential PAH impacts to soil.	
BH10-73	East of BH-26.	To delineate the extent of metals impacts to	

		soil.	

Table 2.12: Borehole/Monitoring Well Placement – Polychlorinated Biphenyls Storage Area

BH/MW No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
BH10-74	Southwest of Former PCB Storage Shed and south of BH-9.	To delineate the extent of PCB impacts and investigate potential PAH and metals impacts to soil.	Soil : • Metals • PCB • PAH (BH10-74 & MW10-79) Ground Water: • Metals • PCB
BH10-75	West of BH-29.	To delineate the vertical extent of PCB impacts and potential metals impacts to soil.	
BH10-76	Northeast of BH-29.	To delineate the extent of PCB impacts and investigate potential metals impacts to soil.	
MW10-77	North of Former PCB Storage Shed.	To delineate the extent of PCB impacts and investigate potential metals impacts to soil.	
BH10-78	North of Former PCB Storage Shed.	To delineate the extent of PCB impacts and investigate potential metals impacts to soil.	
MW10-79	East of Former PCB Storage Shed.	To delineate the extent of PCB impacts and investigate potential PAH and metals impacts to soil & groundwater.	

Table 2.13: Borehole Placement – Wheelabrator Dust

BH No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
None advanced.	-	The Wheelabrator dust pile, located west of the Paint Shop was previously sampled and was found to contain concentrations of heavy metals (copper, nickel and zinc) significantly exceeding applicable soil quality guidelines. As the dust is visually identifiable and surficial in this location, further delineation and sampling was not completed.	• None

Table 2.14: Aquatic Sampling Location Placement – Omands Creek

OC No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
OC10-01	50 m north of the Site.	To establish background sediment & surface water conditions.	Sediments: • Metals

OC10-02	Adjacent to northwest corner of property.	To investigate potential impacts to surface water and sediment at the northern limit of the Site.	
OC10-03	Adjacent to Sulphuric Acid Drum Storage Area.	To investigate potential impacts to surface water and sediment (and possibly benthic invertebrates and aquatic vegetation) due to historic sulphuric acid drum storage.	
OC10-04	Adjacent to Landfilled Area.	To investigate potential impacts to surface water and sediment (and possibly benthic invertebrates and aquatic vegetation) due to historic landfilling on the southwest portion of the site adjacent to Omands Creek.	
OC10-05	Adjacent to the former PCB storage shed.	To investigate potential impacts to surface water and sediment (and possibly benthic invertebrates and aquatic vegetation) due to historic PCB storage.	
OC10-06	50 m south of the Site.	To investigate potential downstream extent of impacts to surface water and sediment (and possibly benthic invertebrates and aquatic vegetation) due to historic operations at the Site.	
OC10-07	100 m south of the Site.	To investigate potential downstream extent of impacts to surface water and sediment (and possibly benthic invertebrates and aquatic vegetation) due to historic operations at the Site.	

Table 2.15: Borehole Placement – Crane Runway Area

BH No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
TP-10-01	Western edge of crane runway	To investigate potential PAH impacts to soil	Soil : • PAH
TP-10-02	East of TP-10-01, centre of crane runway		
TP-10-03	Eastern edge of crane runway		

Table 2.16: Borehole Placement – Galvanizing Pit Area

BH No.	Approximate Location	Rationale	Contaminants of Concern Analyzed
GP-10-01	Northeast corner of the eastern galvanizing pit (low area)	To investigate potential metals impacts to soil	Soil : • Metals
GP-10-02	South end of the western galvanizing pit (low area)	To investigate potential metals impacts to soil	

Table 3.1. Applicability of Receptors and Exposure Pathways, CCME Tier II Assessment for BTEX

Potential Exposure Pathway	Applicability (Yes/No)	Rationale
Human Health Guideline		
Soil Ingestion	Yes	Site is paved in select locations only.
Soil Dermal Contact	Yes	Site is paved in select locations only.
Soil Inhalation	Yes	Site is paved in select locations only.
Inhalation of Indoor Air (Basement)	No	No nearby buildings with basement construction.
Inhalation of Indoor Air (Slab on grade)	Yes	On-site buildings are slab on grade construction.
Off-Site Migration	Yes	Site is paved in select locations only.
Groundwater (Drinking water)	No	The City of Winnipeg is serviced by a piped water supply system. There are no potable wells within the area.
Produce, Meat, and Milk	No	No agricultural land use adjacent to site.
Environmental Health Guideline		
Soil Contact	Yes	Site is paved in select locations only.
Soil and Food Ingestion	Yes	Site is paved in select locations only.
Nutrient and Energy Cycling	Yes	Site is paved in select locations only.
Off-Site Migration	Yes	Site is paved in select locations only.
Groundwater (livestock)	No	No agricultural land use adjacent to site.
Groundwater (aquatic life)	Yes	Site includes Omands Creek which connects to the Assiniboine River.

Table 3.2. Applicability of Receptors and Exposure Pathways, CWS Tier I Assessment for PHC Fractions F1 – F4

Potential Exposure Pathway	Applicability (Yes/No)	Rationale
Direct Soil Contact (Human)	Yes	Site is paved in select locations only.
Vapour Inhalation[1]	Yes	On-site buildings are slab on grade construction.
Ecological Soil Contact	Yes	Site is paved in select locations only.
Protection of Potable Groundwater	No	The City of Winnipeg is serviced by a piped water supply system. There are no potable wells within the area.
Protection of Groundwater for FAL	Yes	Site includes Omands Creek which connects to the Assiniboine River.
Protection of Groundwater for Livestock	No	No agricultural land use adjacent to site.
Offsite Migration	Yes	Site is paved in select locations only.
Management Level	Yes	Applicable at site.

[1] For soil under or adjacent to building.

Table 4.1. Groundwater Monitoring Results

Monitoring Well	Top of MW Elevation (m)	Depth to Groundwater [1] (m)	Groundwater Elevation [2] (m)	Monitoring Well Vapour Concentration[3] (ppm)	Comments
MW10-01	NM	0.954	-	280	
MW10-03	233.438	1.445	231.993	70	
MW10-06	NM	1.022	-	65	
MW10-08	233.375	0.575	232.800	10	
MW10-10	233.416	1.528	231.888	65	
MW10-14	233.518	1.065	232.453	0	
MW10-15	233.483	1.000	232.483	120	
MW10-21	234.575	2.101	232.474	0	
MW10-22A	234.403	1.950	232.453	160	
MW10-23	233.738	1.283	232.455	0	
MW10-25	233.573	1.078	232.495	0	
MW10-28	234.869	1.994	232.875	45	
MW10-30	234.625	1.986	232.639	0	
MW10-33	NM	1.830	-	85	
MW10-37	233.528	NM	-	40	Monitoring well was dry.
MW10-40	234.028	5.045	228.983	NM	
MW10-42	234.114	2.176	231.938	0	
MW10-43	234.097	2.115	231.982	0	
MW10-44	233.890	1.960	231.930	30	
MW10-45	NM	1.050	-	5	
MW10-49	233.285	0.356	232.929	60	
MW10-53	233.053	0.370	232.683	60	
MW10-59	233.459	2.239	231.220	0	
MW10-61	234.347	2.725	231.622	10	
MW10-62	233.345	1.598	231.747	10	
MW10-67	234.282	1.263	233.019	110	
MW10-69	233.425	0.784	232.641	75	
MW10-70	233.549	0.641	232.908	5	
MW10-71	234.607	2.205	232.402	0	
MW10-77	233.822	1.526	232.296	20	
MW10-79	NM	1.436	-	25	

Notes:

[1] Measured from top of monitoring well.

[2] Corrected groundwater elevation if phase-separated liquids are present at the water table. Assumed liquid hydrocarbon specific gravity is 0.75.

[3] Measured using a RKI Eagle hydrocarbon vapour analyser set to "methane elimination" mode.

Notes:

1. Temporary survey benchmark southeast corner of cement sidewalk leading to men's washroom west of the Site was assigned an elevation of 100.000 m.

2. NM - Not measured.

Table 4.2. Soil Laboratory Analysis Results - Hydrocarbons

				Petroleum Hydrocarbon Fractions				BTEX			
Sample ID	Date Sampled	Depth (m)	Headspace (ppm)	F1	F2	F3	F4	Benzene	Toluene	Ethylbenzene	Xylenes
1. Gate Shop UST Area											
G-01-11	10/18/2010	3.81	55	<10	<10	34	<10	<0.005	<0.02	<0.01	<0.04
G-01-12	10/18/2010	5.34	30	<10	<10	89	<10	<0.005	<0.02	<0.01	<0.04
G-02-01	10/18/2010	4.57	45	<10	<10	52	<10	<0.005	<0.02	<0.01	<0.04
G-02-02	10/18/2010	6.10	10	<10	<10	68	<10	<0.005	<0.02	<0.01	<0.04
G-03-05	10/18/2010	2.29	80	56	400	250	47	<0.005	<0.02	0.09	<0.04
G-03-33 (duplicate of G-03-05)	10/18/2010	2.29	80	100	490	280	47	<0.005	<0.02	0.14	0.06
G-03-06	10/18/2010	4.57	55	<10	16	73	23	<0.005	<0.02	<0.01	<0.04
G-03-07	10/18/2010	6.10	35	<10	<10	28	<10	<0.005	<0.02	<0.01	<0.04
G-04-08	10/18/2010	1.52	60	<10	<10	14	<10	<0.005	<0.02	<0.01	<0.04
G-04-09	10/18/2010	4.57	60	<10	<10	90	<10	<0.005	<0.02	<0.01	<0.04
G-04-10	10/18/2010	6.10	35	<10	<10	94	<10	<0.005	<0.02	<0.01	<0.04
G-05-03	10/18/2010	3.05	40	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-05-04	10/18/2010	5.33	25	<10	<10	110	<10	<0.005	<0.02	<0.01	<0.04
2. Paint Shop UST Area											
G-06-03	10/20/2010	2.29	5	<10	<10	<10	<10	<0.005	<0.03	<0.01	<0.1
G-06-05	10/20/2010	3.81	20	<10	<10	31	<10	<0.005	<0.02	<0.01	<0.04
G-07-02	10/22/2010	1.52	20	<10	<10	<10	<10	<0.005	<0.03	<0.01	<0.1
G-07-07	10/22/2010	5.33	25	<10	23	220	160	<0.005	<0.03	<0.01	<0.1
G-08-01	10/20/2010	0.76	10	<10	45	280	47	<0.005	<0.03	<0.01	<0.1
G-08-07	10/20/2010	5.33	15	<10	<10	65	<10	<0.005	<0.02	<0.01	<0.04
G-08-10	10/20/2010	7.62	5	<10	<10	51	<10	<0.005 [e]	<0.02 [e]	<0.01 [e]	<0.04 [e]
G-09-03	10/21/2010	2.29	45	51	**1,600**	2,300	480	<0.005	<0.03	0.02	<0.1
G-09-08	10/21/2010	6.1	15	<10	41	100	<10	<0.005	<0.03	<0.01	<0.1
G-09A-03	10/22/2010	2.90	15	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-09A-06	10/22/2010	4.57	20	<10	21	170	47	<0.005	<0.02	<0.01	<0.04
3. North Property Line UST Area											
G-10-02	10/21/2010	1.52	5	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-11-02	10/21/2010	1.52	10	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-12-02	10/21/2010	1.52	5	<10	<10	14	<10	<0.005	<0.02	<0.01	<0.04
4. Waste Oil Drum Storage Area											
G-14-06	10/18/2010	4.57	65	<10	<10	38	<10	<0.005	<0.02	<0.01	<0.04
G-14-07	10/18/2010	5.33	5	<10	<10	40	<10	<0.005	<0.02	<0.01	<0.04
G-15-01	10/18/2010	0.76	65	<10	<10	160	15	0.16	0.30	<0.01	0.2
G-15-03	10/18/2010	2.29	15	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-16-01	10/18/2010	0.76	60	17	90	510	250	0.089	0.41	<0.01	1.3
G-16-02	10/18/2010	1.52	<5	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-16-03	10/18/2010	2.29	<5	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-17-04	10/18/2010	3.05	15	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-17-08	10/18/2010	6.10	20	<10	<10	65	<10	<0.005	<0.02	<0.001	<0.04
G-18-01	10/19/2010	0.76	20	<10	<10	13	<10	<0.005	<0.02	<0.001	<0.04
G-18-03	10/19/2010	2.29	<5	<10	<10	<10	<10	<0.005	<0.02	<0.001	<0.04
G-18-05	10/19/2010	3.81	10	<10	<10	34	<10	<0.005	<0.02	<0.001	<0.04
G-19-04	10/19/2010	3.05	15	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-19-05	10/19/2010	3.81	5	<10	<10	41	<10	<0.005	<0.02	<0.01	<0.04
G-20-02	10/19/2010	1.52	20	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-20-04	10/19/2010	3.05	15	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-21-01	10/19/2010	0.76	25	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-21-05	10/19/2010	3.81	30	<10	<10	53	<10	<0.005	<0.02	<0.01	<0.04
G-22-02	10/19/2010	1.52	10	19	230	93	<10	<0.005	<0.02	<0.01	<0.04
DUP 1 (duplicate of G-22-02)	10/19/2010	1.52	10	17	290	160	13	<0.005	<0.02	<0.01	<0.04
G-22-04	10/19/2010	3.05	5	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-22A-03	10/19/2010	2.29	20	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-22A-05	10/19/2010	4.57	40	<10	<10	85	16	<0.005	<0.02	<0.01	<0.04
DUP 2 (duplicate of G-22A-05)	10/19/2010	4.57	40	<10	<10	63	<10	<0.005	<0.02	<0.01	<0.04
G-22A-06	10/19/2010	6.10	25	<10	23	190	81	<0.005	<0.02	<0.01	<0.04
G-23-03	10/19/2010	1.52	5	<10	<10	<10	11	<0.005	<0.02	<0.01	<0.04
G-24-03	10/18/2010	2.29	<5	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-25-01	10/19/2010	0.76	5	<10	<10	27	20	<0.005	<0.02	<0.01	<0.04
6. Solvent AST Area											
G-44-02	10/20/2010	1.52	100	120	**3,700**	**5,000**	210	<0.01	<0.04	0.05	0.4
G-44-05	10/20/2010	3.81	10	<10	<10	34	<10	<0.005	<0.02	<0.01	<0.04
G-45-01	10/20/2010	0.76	70	<10	23	230	100	0.008	0.04	<0.01	<0.1
DUP 3 (duplicate of G-45-01)	10/20/2010	0.76	70	<10	<10	43	<10	<0.005	<0.02	<0.01	<0.04
G-45-02	10/20/2010	1.52	<5	<20	<10	20	31	<0.005	<0.02	<0.01	<0.04
G-46-02	10/19/2010	0.76	20	<10	<10	79	<10	0.008	<0.03	<0.01	<0.1
G-46-03	10/19/2010	1.52	<5	<10	<10	25	<10	<0.005	<0.02	<0.01	<0.04
G-47-02	10/20/2010	0.52	28	<10	<10	19	15	<0.005	<0.03	<0.01	<0.1
G-47-05	10/20/2010	3.81	5	<10	<10	17	<10	<0.005	<0.02	<0.01	<0.04
7. Sulphuric Acid Drum Storage Area											
G-48-01	10/22/2010	0.76	45	<10	21	470	530	<0.005	<0.02	<0.01	<0.04
G-49-01	10/22/2010	0.76	15	<10	<10	19	17	<0.005	<0.02	<0.01	<0.04
G-51-02	10/21/2010	1.52	15	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-51-08	10/21/2010	6.10	15	<10	27	170	52	<0.005	<0.02	<0.01	<0.04
G-55-02	10/22/2010	1.52	20	<10	<10	10	<10	<0.005	<0.02	<0.01	<0.04
G-55-06	10/22/2010	4.57	5	<10	23	170	58	<0.005	<0.02	<0.01	<0.04
G-57-01	10/22/2010	0.76	60	<10	29	1,100	840	<0.005	<0.02	<0.01	<0.04
G-57-05	10/22/2010	3.81	30	<10	14	81	96	<0.005	<0.02	<0.01	<0.04
9. Diesel and Gasoline AST Area											
G-59-01	10/19/2010	0.76	10	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-59-03	10/19/2010	2.29	15	<10	<10	12	<10	0.006	0.03	<0.01	<0.04
G-60-15	10/18/2010	3.05	85	<10	<10	16	<10	<0.005	<0.02	<0.01	<0.04
G-60-16	10/18/2010	5.33	15	<10	<10	55	<10	<0.005	<0.02	<0.01	<0.04
G-61-04	10/19/2010	3.05	15	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-61-07	10/19/2010	5.33	0	<10	<10	95	<10	<0.005	<0.02	<0.01	<0.04
G-62-03	10/19/2010	2.29	35	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-62-05	10/19/2010	3.81	15	<10	<10	46	<10	<0.005	<0.02	<0.01	<0.04
G-63-03	10/19/2010	2.29	20	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-63-13 (duplicate of G-63-03)	10/19/2010	2.29	20	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
G-63-06	10/19/2010	4.57	0	<10	<10	110	<10	<0.005	<0.02	<0.01	<0.04
G-64-13	10/18/2010	2.29	15	<10	<10	10	<10	<0.005	<0.02	<0.01	<0.04
G-64-14	10/18/2010	5.33	5	<10	<10	52	<10	<0.005	<0.02	<0.01	<0.04
10. Waste Paint Storage Area											
G-65-01	10/20/2010	0.76	25	<10	<10	17	<10	<0.005	<0.02	<0.01	<0.04
G-65-02	10/20/2010	1.52	5	<10	<10	12	<10	<0.005	<0.02	<0.01	<0.04
G-67-02	10/21/2010	1.52	10	<10	<10	12	26	<0.005	<0.02	<0.01	<0.04
DUP 5 (duplicate of G-67-02)	10/21/2010	1.52	10	<10	<10	19	<10	<0.005	<0.02	<0.01	<0.04
G-68-02	10/21/2010	1.52	<5	<10	<10	<10	<10	<0.005	<0.02	<0.01	<0.04
12. Polychlorinated Biphenyls Storage Area											
G-77-01	10/19/2010	2.50	30	17 [e]	82	600	230	0.017 [e]	0.10 [e]	0.05 [e]	0.37 [e]
CCME Canadian Soil Quality Guidelines for Surface Soil [a]											
Soil Ingestion[b]				-	-	-	-	11	NC	620,000	NA
Soil Dermal Contact[b]				-	-	-	-	25	NC	560,000	NA
Inhalation of Indoor Air (slab-on-grade)[b]				-	-	-	-	**0.28**	13,000	6,500	1,600
Off-Site Migration[b]				-	-	-	-	NC	NC	NC	NC
Soil Contact[c]				-	-	-	-	310	**330**	**430**	**210**
Groundwater check (aquatic)[c]				-	-	-	-	NC	NC	NC	NC
CCME Canadian Soil Quality Guidelines for Subsoil [a]											
Soil Ingestion[b]				-	-	-	-	NC	NC	NC	NC
Soil Dermal Contact[b]				-	-	-	-	NC	NC	NC	NC
Inhalation of Indoor Air (slab-on-grade)[b]				-	-	-	-	**0.29**	13,000	6,700	1,600
Off-Site Migration[b]				-	-	-	-	NC	NC	NC	NC
Soil Contact[c]				-	-	-	-	620	**660**	**860**	**460**
Groundwater check (aquatic)[c]				-	-	-	-	NC	NC	NC	NC
Canada Wide Standard for Petroleum Hydrocarbons (PHC) in Surface Soil [b]											
Direct Contact				RES	RES	RES	RES	-	-	-	-
Vapour Inhalation (indoor)				4,600	23,000	NA	NA				
Protection of Groundwater for Aquatic Life				RES	RES	NA	NA	-	-	-	-
Eco Soil Contact				**320**	**260**	**2,500**	**6,600**	-	-	-	-
Management Limit				800	1,000	5,000	10,000	-	-	-	-
Canada Wide Standard for Petroleum Hydrocarbons (PHC) in Subsoil [b]											
Direct Contact				NA	NA	NA	NA	-	-	-	-
Vapour Inhalation (indoor)				4,600	23,000	NA	NA				
Protection of Groundwater for Aquatic Life				RES	RES	NA	NA	-	-	-	-
Eco Soil Contact				NA	NA	NA	NA	-	-	-	-
Management Limit				**800**	**1,000**	**5,000**	**10,000**	-	-	-	-

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (updated 2009) - Industrial Land Use, Fine Grained Soil.
[b] Human Health SQG_{hh} guidelines.
[c] Environmental Health SQG_E guidelines.
[d] Surface soil SQG (<1.5 m) /Subsoil SQG (≥ 1.5 m).
[e] Sample received past recommended hold time (7 days) - Potential low bias

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NA - Not applicable.
3. RES - Residual PHC formation. Calculated value exceeds 30,000 mg/kg and solubility limit for PHC fraction.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.3 A. Soil Laboratory Analysis Results - Metals - Paint Shop UST Area

Sample ID	G-06-03	G-07-02	G-07-07	G-08-01	G-08-07	G-09-03	G-09-08	CCME SQG [a]
Date Sampled	10/20/2010	10/21/2010	10/21/2010	2010/1020	10/20/2010	10/21/2010	10/21/2010	
Sample Depth (m)	2.29	1.52	5.33	0.76	5.33	2.29	6.10	
pH	8.85	8.64	8.39	8.05	8.38	8.64	8.51	
Aluminum (Al)	9,140	NA	NA	20,100	17,800	NA	NA	**NC**
Antimony (Sb)	0.2	NA	NA	1.6	0.5	NA	NA	**NC**
Arsenic (As)	3.0	NA	NA	7.6	9.4	NA	NA	**12**
Barium (Ba)	100	NA	NA	327	123	NA	NA	**2,000**
Beryllium (Be)	0.4	NA	NA	1.2	1.0	NA	NA	**NC**
Bismuth (Bi)	<0.1	NA	NA	0.2	0.3	NA	NA	**NC**
Cadmium (Cd)	0.12	NA	NA	0.31	0.30	NA	NA	**22**
Calcium (Ca)	119,000	NA	NA	17,800	24,200	NA	NA	**NC**
Chromium (Cr), Total	22	NA	NA	37	34	NA	NA	**87**
Cobalt (Co)	6.0	NA	NA	12.9	14.4	NA	NA	**NC**
Copper (Cu)	13.6	NA	NA	38.4	35.9	NA	NA	**91**
Iron (Fe)	13,000	NA	NA	28,000	27,800	NA	NA	**NC**
Lead (Pb)	6.4	6.3	14.4	106.0	17.7	118.0	14.7	**600**
Lithium (Li)	15	NA	NA	17	25	NA	NA	**NC**
Magnesium (Mg)	55,500	NA	NA	9,360	13,300	NA	NA	**NC**
Manganese (Mn)	284	NA	NA	655	546	NA	NA	**NC**
Mercury (Hg)	<0.05	NA	NA	0.06	<0.05	NA	NA	**50**
Molybdenum (Mo)	0.2	NA	NA	2.8	1.1	NA	NA	**NC**
Nickel (Ni)	19.3	NA	NA	31.9	41.8	NA	NA	**50**
Phosphorus (P)	370	NA	NA	697	543	NA	NA	**NC**
Potasium (K)	1,910	NA	NA	3,410	3,200	NA	NA	**NC**
Selenium (Se)	<0.5	NA	NA	0.6	0.8	NA	NA	**2.9**
Silver (Ag)	0.07	NA	NA	0.11	0.12	NA	NA	**NC**
Sodium (Na)	216	NA	NA	754	655	NA	NA	**NC**
Strontium (Sr)	68.1	NA	NA	133	70.8	NA	NA	**NC**
Thallium (Tl)	0.15	NA	NA	0.31	0.23	NA	NA	**1**
Tin (Sn)	0.4	NA	NA	2.9	0.9	NA	NA	**NC**
Titanium (Ti)	378	NA	NA	155	103	NA	NA	**NC**
Uranium (U)	0.80	NA	NA	1.89	2.82	NA	NA	**300**
Vanadium (V)	30	NA	NA	54	52	NA	NA	**130**
Zinc (Zn)	29	NA	NA	124	88	NA	NA	**360**
Zirconium (Zr)	7.2	NA	NA	8.6	8.6	NA	NA	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.
3. NA - Not applicable.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 B. Soil Laboratory Analysis Results - Metals - North Property Line UST Area

Sample ID	G-10-01	G-10-02	G-11-01	G-11-02	G-12-01	G-12-02	DUP 7-BH (duplicate of G-12-02)	BH-17	CCME SQG [a]
Date Sampled	10/21/2010	10/21/2010	10/21/2010	10/21/2010	10/21/2010	10/21/2010	10/21/2010	1999	
Sample Depth (m)	0.76	1.52	0.76	1.52	0.76	1.52	1.52	0.60	
pH	8.55	8.85	8.43	8.26	8.72	8.72	8.72	-	
Aluminum (Al)	26,100	12,100	25,400	7,050	21,800	19,800	23,100	3,430	**NC**
Antimony (Sb)	0.3	0.2	0.2	0.1	0.2	0.2	0.2	-	**NC**
Arsenic (As)	7.7	3.4	5.2	2.6	4.6	4.5	4.5	-	**12**
Barium (Ba)	186	145	185	62.2	163	168	165	73	**2,000**
Beryllium (Be)	1.1	0.6	1.2	0.3	1.2	1.0	1.1	<1	**NC**
Bismuth (Bi)	0.2	0.1	0.2	<0.1	0.2	0.2	0.2	-	**NC**
Cadmium (Cd)	0.17	0.16	0.20	0.10	0.18	0.21	0.17	6	**22**
Calcium (Ca)	48,200	127,000	22,600	92,600	26,300	21,000	24,100	55,100	**NC**
Chromium (Cr)	46	26	44	17	39	36	40	36.4	**87**
Cobalt (Co)	13.2	7.1	11.0	4.9	11.5	16.3	11.8	22	**NC**
Copper (Cu)	27.9	16.5	27.4	11.1	25.4	25.2	25.2	86	**91**
Iron (Fe)	29,700	15,600	29,000	11,000	27,000	25,900	27,200	225,000	**NC**
Lead (Pb)	13.7	7.4	15.1	5.5	14.3	13.8	13.9	149	**600**
Lithium (Li)	31	20	26	12	23	21	24	-	**NC**
Magnesium (Mg)	25,900	51,900	14,300	51,600	13,600	13,200	13,600	27,300	**NC**
Manganese (Mn)	453	316	375	241	455	718	480	1,300	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NC	**50**
Molybdenum (Mo)	0.3	0.2	0.3	0.2	0.4	0.3	0.3	6	**NC**
Nickel (Ni)	41.0	23.8	35.0	15.6	35.0	38.6	36.4	**<200**	**50**
Phosphorus (P)	555	386	549	388	409	478	422	910	**NC**
Potasium (K)	4,280	2,280	4,460	1,350	3,560	3,700	3,800	780	**NC**
Selenium (Se)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	-	**2.9**
Silver (Ag)	0.10	0.08	0.12	<0.05	0.08	0.08	0.08	<1	**NC**
Sodium (Na)	707	437	205	160	598	626	602	100	**NC**
Strontium (Sr)	82.3	102	57.2	40.1	58.9	50.0	57.2	45	**NC**
Thallium (Tl)	0.34	0.19	0.32	0.12	0.31	0.29	0.33	<1	**1**
Tin (Sn)	0.9	0.5	0.9	0.3	0.8	0.7	0.8	<5	**NC**
Titanium (Ti)	249	385	130	248	103	89	129	93	**NC**
Uranium (U)	1.67	1.12	1.46	0.64	0.99	0.85	1.01	-	**300**
Vanadium (V)	79	36	69	24	57	55	61	7	**130**
Zinc (Zn)	75	35	87	25	86	73	82	85	**360**
Zirconium (Zr)	6.8	7.0	7.3	5.1	5.2	4.7	5.7	-	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 C. Soil Laboratory Analysis Results - Metals - Landfilling Area

Sample ID	G-26-02	G-26-05	G-27-03	G-27-05	G-28-01	G-28-03	G-28-06	G-29-01	G-29-03	G-30-01	G-30-05	CCME SQG [a]
Date Sampled	10/21/2010	10/21/2010	10/21/2010	10/21/2010	10/20/2010	10/20/2010	10/20/2010	10/21/2010	10/21/2010	10/20/2010	10/20/2010	
Sample Depth (m)	1.52	3.81	2.29	3.81	0.76	2.29	6.10	0.76	2.29	0.76	3.81	
pH	8.89	7.91	8.37	8.13	8.60	8.45	8.37	8.78	8.25	8.77	7.96	
Aluminum (Al)	4,230	19,100	24,000	19,100	15,700	8,150	19,400	10,200	22,100	5,950	17,400	**NC**
Antimony (Sb)	0.1	0.4	0.3	0.4	2.0	0.3	0.4	0.2	0.3	0.2	0.4	**NC**
Arsenic (As)	2.8	8.0	4.8	5.4	7.4	4.5	9.9	3.3	4.8	2.4	9.4	**12**
Barium (Ba)	32	180.0	262	159	251	77.4	127	87.4	234	51	168	**2,000**
Beryllium (Be)	0.1	0.9	0.7	0.8	0.7	0.4	1.0	0.5	0.8	0.2	1.0	**NC**
Bismuth (Bi)	<0.1	0.3	0.1	0.2	0.1	<0.1	0.2	<0.1	0.2	<0.1	0.2	**NC**
Cadmium (Cd)	0.09	0.34	0.15	0.39	0.49	0.26	0.23	0.19	0.20	0.09	0.39	**22**
Calcium (Ca)	107,000	24,700	33,200	23,800	62,800	80,900	20,100	74,900	31,500	89,900	21,900	**NC**
Chromium (Cr)	13	40	67	39	62	23	39	23	50	13	35	**87**
Cobalt (Co)	3.0	19.6	16.0	10.9	9.7	6.6	14.5	6.5	14.4	3.4	18.4	**NC**
Copper (Cu)	8.3	34.9	44.5	30.6	**114**	16.3	35.0	16.2	34.4	8.2	32.0	**91**
Iron (Fe)	8,090	31,900	35,100	26,800	32,500	14,200	30,800	14,700	28,600	8,950	27,800	**NC**
Lead (Pb)	16.5	18.0	47.8	15.6	305	36.3	16.9	7.3	15.7	6.5	14.6	**600**
Lithium (Li)	9	27	47	27	25	17	27	18	45	11	24	**NC**
Magnesium (Mg)	57,800	16,000	26,500	17,900	26,400	41,600	14,000	47,700	24,700	56,600	14,900	**NC**
Manganese (Mn)	174	700	587	337	584	355	408	301	503	239	674	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	0.19	<0.05	<0.05	<0.05	<0.05	<0.05	0.06	**50**
Molybdenum (Mo)	0.4	2.0	1.3	1.0	2.5	0.8	1.2	0.4	0.6	0.4	1.2	**NC**
Nickel (Ni)	11.7	44.3	**50.5**	37.0	36.3	21.2	42.0	20.0	44.7	11.0	39.5	**50**
Phosphorus (P)	355	516	571	497	501	458	522	472	577	419	480	**NC**
Potasium (K)	742	3,690	5,520	3,630	3,160	1,500	3,610	1,980	4,960	1,250	3,100	**NC**
Selenium (Se)	<0.5	1.1	<0.5	0.9	0.60	<0.5	1.6	0.6	<0.5	<0.5	0.7	**2.9**
Silver (Ag)	<0.05	0.14	0.12	0.13	0.13	0.07	0.10	0.05	0.11	<0.05	0.11	**NC**
Sodium (Na)	294	1,680	1,010	1,260	1,040	759	1,860	307	1,190	168	1,520	**NC**
Strontium (Sr)	41.7	65.3	61.4	59.1	136	66.9	60.5	48.9	65.0	65.5	57.5	**NC**
Thallium (Tl)	0.08	0.32	0.37	0.25	0.18	0.18	0.29	0.15	0.33	0.09	0.24	**1**
Tin (Sn)	0.3	1.0	1.3	0.9	5.9	0.5	0.9	0.4	0.9	0.7	1.0	**NC**
Titanium (Ti)	216	101	1040	141	167	255	55	347	687	192	91	**NC**
Uranium (U)	0.76	2.58	1.87	2.11	1.21	3.58	2.25	1.37	1.96	0.88	2.35	**300**
Vanadium (V)	18	58	62	56	45	33	54	32	61	20	56	**130**
Zinc (Zn)	56	98	326	100	**1,140**	123	94	34	82	21	84	**360**
Zirconium (Zr)	3.6	11.9	12.5	8.1	3.8	8	8.7	6.0	10.7	1.3	7.3	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 C (cont'd). Soil Laboratory Analysis Results - Metals - Landfilling Area

Sample ID	G-31-02	G-31-04	G-32-03	G-32-06	G-33-02	G-33-12 (duplicate of G-33-02)	G-33-05	G-34-04	G-34-07	G-35-01	G-35-05	CCME SQG [a]
Date Sampled	10/21/2010	10/21/2010	10/20/2010	10/20/2010	10/22/2010	10/22/2010	10/22/2010	10/20/2010	10/20/2010	10/21/2010	10/21/2010	
Sample Depth (m)	1.52	3.05	2.29	4.57	1.52	1.52	3.81	3.05	5.33	0.76	3.81	
pH	8.76	8.81	8.34	8.28	8.30	8.18	8.39	8.64	8.54	8.22	8.32	
Aluminum (Al)	11,700	21,300	11,900	20,200	15,700	16,800	18,100	8,140	1,990	18,000	18,700	**NC**
Antimony (Sb)	0.2	0.3	4.1	0.4	1.3	0.6	0.4	0.2	0.5	1.4	0.3	**NC**
Arsenic (As)	3.4	6.1	**23.7**	6.4	**18.3**	9.2	8.1	2.6	7.9	6.1	7.6	**12**
Barium (Ba)	95.4	200	602	133	140	179	170	74.0	261	184	195	**2,000**
Beryllium (Be)	0.5	1.0	0.5	1.1	0.7	0.7	1.0	0.3	1.1	0.7	1.0	**NC**
Bismuth (Bi)	<0.1	0.2	0.2	0.2	0.1	0.1	0.2	<0.1	0.2	0.2	0.2	**NC**
Cadmium (Cd)	0.10	0.20	1.29	0.19	0.57	0.36	0.32	0.09	0.26	0.40	0.31	**22**
Calcium (Ca)	87,200	24,600	45,600	23,000	34,700	34,100	25,800	104,000	21,300	30,900	20,400	**NC**
Chromium (Cr)	23	43	**142**	39	**105**	58	44	19	34	33	38	**87**
Cobalt (Co)	6.1	14.0	29.9	12.4	11.9	9.3	14.3	4.8	13.1	9.9	13.9	**NC**
Copper (Cu)	14.0	30.5	**277**	32.7	**100**	55.5	37.5	12.0	33.2	30.9	31.5	**91**
Iron (Fe)	14,000	27,800	121,000	27,600	86,100	47,500	32,200	11,700	26,800	26000	27200	**NC**
Lead (Pb)	6.9	17.5	**3,150**	27.6	62.1	43.2	17.4	9.0	15.8	55.8	14.8	**600**
Lithium (Li)	16	30	16	26	16	18	25	15	26	18	27	**NC**
Magnesium (Mg)	46,700	19,400	18,400	14,200	17,100	17,400	17,700	58,700	13,000	18,300	15,100	**NC**
Manganese (Mn)	270	506	1110	378	875	495	459	239	490	588	444	**NC**
Mercury (Hg)	<0.05	<0.05	0.27	<0.05	0.06	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	**50**
Molybdenum (Mo)	0.2	1.0	18.9	1.2	13.6	5.2	2.2	0.3	1.0	0.6	1.1	**NC**
Nickel (Ni)	19.9	39.5	**97.2**	40.4	75.2	44.0	41.5	15.8	39.1	27.7	38.6	**50**
Phosphorus (P)	369	524	469	513	426	462	506	344	528	673	499	**NC**
Potasium (K)	1,950	4,330	2,090	3,740	2,910	3,180	3,550	14,400	3,210	3,700	3,420	**NC**
Selenium (Se)	<0.5	0.6	1.1	1.5	<0.5	<0.5	0.5	<0.5	1.0	0.8	1.0	**2.9**
Silver (Ag)	0.06	0.12	0.57	0.11	0.12	0.09	0.09	0.09	0.12	0.16	0.12	**NC**
Sodium (Na)	320	753	549	1310	173	217	540	345	583	184	1060	**NC**
Strontium (Sr)	61.6	56.9	97.8	63.5	59.3	90.9	59.7	60.5	69.0	93.8	61.6	**NC**
Thallium (Tl)	0.16	0.29	0.17	0.25	0.18	0.21	0.24	0.12	0.20	0.24	0.25	**1**
Tin (Sn)	0.5	1.0	120	1.0	5.0	2.7	1.2	0.4	0.8	4.1	0.9	**NC**
Titanium (Ti)	262	270	272	100	183	205	137	358	93	181	115	**NC**
Uranium (U)	0.75	1.85	1.70	2.13	1.33	1.39	1.46	0.81	2.46	1.56	1.92	**300**
Vanadium (V)	35	59	47	61	51	47	58	27	51	46	56	**130**
Zinc (Zn)	33	84	**1,340**	98	**486**	219	309	35	83	123	83	**360**
Zirconium (Zr)	3.9	8.3	5.5	7.6	3.3	4	6.3	5.5	8.0	4.1	6.7	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 C (cont'd). Soil Laboratory Analysis Results - Metals - Landfilling Area

Sample ID	G-36-01	G-36-04	G-37-01	G-37-04	G-39-02	G-39-06	G-40-01	G-40-08	G-41-01	G-41-05	CCME SQG [a]
Date Sampled	10/20/2010	10/20/2010	10/22/2010	10/22/2010	10/20/2010	10/20/2010	10/22/2010	10/22/2010	10/20/2010	10/20/2010	
Sample Depth (m)	0.76	3.05	0.76	3.05	1.52	4.57	0.76	6.10	0.76	3.81	
pH	8.24	8.10	8.56	7.80	8.68	8.26	8.97	8.49	8.10	8.24	
Aluminum (Al)	14,900	20,900	14,600	20,000	27,000	20,900	12,800	15,900	378	25,200	**NC**
Antimony (Sb)	0.5	0.3	0.7	0.3	0.3	0.4	0.2	0.4	8.9	0.4	**NC**
Arsenic (As)	7.2	8.0	4.7	7.5	5.2	8.2	3.8	8.0	**73.3**	10.1	**12**
Barium (Ba)	150	222	179	179	214	203	100	377	18.3	249	**2,000**
Beryllium (Be)	0.7	1.0	0.6	1.1	1.2	1.1	0.5	0.9	<0.1	1.1	**NC**
Bismuth (Bi)	0.2	0.2	0.1	0.3	0.2	0.3	<0.1	0.2	<0.1	0.3	**NC**
Cadmium (Cd)	0.36	0.26	0.33	0.26	0.18	0.24	0.10	0.24	0.39	0.23	**22**
Calcium (Ca)	43,800	21,100	63,600	17,900	14,400	20,800	78,700	36,400	3,820	15,600	**NC**
Chromium (Cr)	30	44	31	46	56	45	26	30	**437**	50	**87**
Cobalt (Co)	10.7	14.6	8.1	16.9	13.7	15.6	6.7	11.8	36.5	18.3	**NC**
Copper (Cu)	26.5	34.4	30.9	37.9	35.2	35.8	16.9	29.0	**515**	37.5	**91**
Iron (Fe)	22,900	28,500	20,800	32,300	35,400	30,700	15,200	23,300	525,000	31,900	**NC**
Lead (Pb)	27.4	14.4	89.9	18.9	28.3	18.3	6.6	12.8	47.5	16.2	**600**
Lithium (Li)	20	28	20	32	31	30	25	23	<5	32	**NC**
Magnesium (Mg)	21,500	15,100	31,700	16,300	13,400	15,400	44,400	18,200	1,640	15,800	**NC**
Manganese (Mn)	448	493	322	592	554	445	315	486	4380	566	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.06	<0.05	**50**
Molybdenum (Mo)	1.3	1.7	0.9	1.2	1.0	1.3	0.3	1.0	99.4	1.7	**NC**
Nickel (Ni)	31.3	47.1	26.6	48.8	40.9	44.1	23.4	34.6	**309**	46.2	**50**
Phosphorus (P)	456	504	422	528	363	531	449	488	105	580	**NC**
Potasium (K)	2,840	4,130	2,580	4,460	4,200	4,180	1,970	2,920	<100	4,950	**NC**
Selenium (Se)	0.60	0.5	0.6	0.8	<0.5	0.9	<0.5	1.0	0.6	0.60	**2.9**
Silver (Ag)	0.13	0.13	0.08	0.12	0.11	0.12	0.08	0.13	0.38	0.17	**NC**
Sodium (Na)	219	858	563	927	230	898	227	775	<100	1050	**NC**
Strontium (Sr)	7034.0	64.3	82.9	60.8	68.6	65.4	64.8	78.3	5.4	64.2	**NC**
Thallium (Tl)	0.20	0.27	0.17	0.38	0.36	0.33	0.18	0.19	<0.05	0.30	**1**
Tin (Sn)	2.3	1.2	2.3	1.0	1.5	0.9	0.4	0.7	30.4	3.1	**NC**
Titanium (Ti)	102	143	204	144	161	122	439	128	47	246	**NC**
Uranium (U)	1.61	1.78	1.19	2.55	1.15	2.06	1.58	1.93	0.08	1.97	**300**
Vanadium (V)	48	68	44	60	71	64	40	47	43	75	**130**
Zinc (Zn)	101	82	111	95	161	103	37	75	155	91	**360**
Zirconium (Zr)	6.6	7.4	5.5	9.8	5.7	9.7	3.9	7.2	1.8	8.8	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 C (cont'd). Soil Laboratory Analysis Results - Metals - Landfilling Area

Sample ID	G-42-01	G-42-04	G-43-02	G-43-05	CCME SQG [a]
Date Sampled	201/10/21	10/21/2010	10/21/2010	10/21/2010	
Sample Depth (m)	0.76	3.05	1.52	3.81	
pH	8.30	8.24	8.52	8.25	
Aluminum (Al)	23,400	16,000	8,730	20,200	**NC**
Antimony (Sb)	1.1	0.4	0.2	0.3	**NC**
Arsenic (As)	5.1	7.3	2.6	5.2	**12**
Barium (Ba)	178	278	84.9	194	**2,000**
Beryllium (Be)	0.9	0.8	0.3	0.9	**NC**
Bismuth (Bi)	0.1	0.2	<0.1	0.2	**NC**
Cadmium (Cd)	0.16	0.28	0.11	0.24	**22**
Calcium (Ca)	6,320	21,600	112,000	31,200	**NC**
Chromium (Cr)	40	33	18	38	**87**
Cobalt (Co)	12.1	10.2	4.4	12.3	**NC**
Copper (Cu)	22.0	31.5	11.0	27.4	**91**
Iron (Fe)	26,200	25,300	10,800	25,400	**NC**
Lead (Pb)	31.0	14.6	5.4	12.7	**600**
Lithium (Li)	23	25	14	26	**NC**
Magnesium (Mg)	9,860	15,000	62,700	19,400	**NC**
Manganese (Mn)	539	301	217	371	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	**50**
Molybdenum (Mo)	0.3	1.0	0.1	0.8	**NC**
Nickel (Ni)	32.6	33.7	14.9	35.3	**50**
Phosphorus (P)	349	541	348	523	**NC**
Potasium (K)	3,920	3,050	1,440	3,660	**NC**
Selenium (Se)	<0.5	1.8	<0.5	1.1	**2.9**
Silver (Ag)	0.11	0.12	0.07	0.11	**NC**
Sodium (Na)	158	802	368	445	**NC**
Strontium (Sr)	43.0	65.4	73.1	66.8	**NC**
Thallium (Tl)	0.28	0.24	0.12	0.23	**1**
Tin (Sn)	1.2	0.7	0.5	0.9	**NC**
Titanium (Ti)	126	129	308	153	**NC**
Uranium (U)	1.01	1.85	0.81	1.70	**300**
Vanadium (V)	65	47	25	58	**130**
Zinc (Zn)	70	77	24	75	**360**
Zirconium (Zr)	4.4	5.9	4.9	7.0	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 C (cont'd). Soil Laboratory Analysis Results - Metals - Landfilling Area

Sample ID	BH-18	BH-19	BH-31	BH-31	BH-32	BH-33	BH-34	CCME SQG [a]
Date Sampled	1999	1999	1999	1999	1999	1999	1999	
Sample Depth (m)	0.60	0.60	0.60	2.40	0.60	0.60	0.60	
pH	-	-	-	-	-	-	-	
Aluminum (Al)	5,930	1,490	23,200	24,200	20,400	22,100	19,700	**NC**
Antimony (Sb)	-	-	-	-	-	-	-	**NC**
Arsenic (As)	-	-	-	-	-	-	-	**12**
Barium (Ba)	78	58	327	172	424	159	344	**2,000**
Beryllium (Be)	<1	<1	<1	<1	<1	<1	<1	**NC**
Bismuth (Bi)	-	-	-	-	-	-	-	**NC**
Cadmium (Cd)	14	**22**	0.6	<0.5	0.5	<0.5	<0.5	**22**
Calcium (Ca)	48,700	14,400	60,300	74,800	35,700	57,200	62,200	**NC**
Chromium (Cr)	**2,930**	**458**	63.2	41.3	44.7	38.3	78.9	**87**
Cobalt (Co)	36	55	11	8	10	8	13	**NC**
Copper (Cu)	**510**	**467**	**137**	22	45	26	70	**91**
Iron (Fe)	386,000	553,000	41,100	20,000	25,500	24,200	53,200	**NC**
Lead (Pb)	280	353	355	16	134	29	**469**	**600**
Lithium (Li)	-	-	-	-	-	-	-	**NC**
Magnesium (Mg)	14,000	4,650	27,700	43,700	18,200	28,100	31,100	**NC**
Manganese (Mn)	6,130	7,370	558	388	345	540	645	**NC**
Mercury (Hg)	NC	NC	NC	NC	-	-	-	**50**
Molybdenum (Mo)	61	81	3	<1	1	<1	5	**NC**
Nickel (Ni)	**633**	**512**	40	27	26	25	48	**50**
Phosphorus (P)	1,580	250	780	420	650	720	450	**NC**
Potasium (K)	1,070	300	5,310	4,860	4,670	5,310	3,970	**NC**
Selenium (Se)	-	-	-	-	-	-	-	**2.9**
Silver (Ag)	<1	<1	<1	<1	<1	<1	<1	**NC**
Sodium (Na)	300	200	500	600	600	300	400	**NC**
Strontium (Sr)	32	12	114	78	133	97	102	**NC**
Thallium (Tl)	<1	<1	<1	<1	<1	<1	<1	**1**
Tin (Sn)	<5	7	<5	<5	<5	<5	<5	**NC**
Titanium (Ti)	438	353	231	533	218	403	251	**NC**
Uranium (U)	-	-	-	-	-	-	-	**300**
Vanadium (V)	<1	<1	51	60	42	46	47	**130**
Zinc (Zn)	**15,600**	**1,720**	300	61.1	199	172	**866**	**360**
Zirconium (Zr)	-	-	-	-	-	-	-	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 C (cont'd). Soil Laboratory Analysis Results - Metals - Landfilling Area

Sample ID	BH-35	BH-37	BH-37	BH-38	BH-39	BH-39	BH-40	CCME SQG [a]
Date Sampled	1999	1999	1999	1999	1999	1999	1999	
Sample Depth (m)	0.60	0.60	1.20	0.60	0.60	1.20	0.60	
pH	-	-	-	-	-	-	-	
Aluminum (Al)	19,200	3,310	53,300	20,000	14,000	NA	5,950	**NC**
Antimony (Sb)	-	-	-	-	-	-	-	**NC**
Arsenic (As)	-	-	-	-	-	-	-	**12**
Barium (Ba)	292	883	299	198	336	NA	102	**2,000**
Beryllium (Be)	<1	<1	<1	<1	<1	NA	<1	**NC**
Bismuth (Bi)	-	-	-	-	-	-	-	**NC**
Cadmium (Cd)	0.5	4.9	<0.5	<0.5	1.3	NA	3.4	**22**
Calcium (Ca)	50,200	15,300	11,500	69,500	47,300	NA	64,100	**NC**
Chromium (Cr)	**99.3**	**714.0**	78.6	37.4	21.8	NA	**331**	**87**
Cobalt (Co)	20	36	15	8	22	NA	22	**NC**
Copper (Cu)	**156**	**591**	35	36	**260**	28	**287**	**91**
Iron (Fe)	79,600	507,000	39,600	26,400	199,000	NA	292,000	**NC**
Lead (Pb)	**367**	**5,620**	48	114	**1,170**	20	**537**	**600**
Lithium (Li)					-	-	-	**NC**
Magnesium (Mg)	25,000	5,700	15,100	36,600	23,800	NA	25,100	**NC**
Manganese (Mn)	1,060	6,310	577	409	1,880	NA	2,210	**NC**
Mercury (Hg)		0.21			NA	NA	0.09	**50**
Molybdenum (Mo)	5	65	<1	<1	**29**	NA	38	**NC**
Nickel (Ni)	**102**	**252**	49	26	**127**	NA	**123**	**50**
Phosphorus (P)	490	160	510	480	710	NA	260	**NC**
Potasium (K)	3,630	500	9,930	4,040	2,730	NA	1,270	**NC**
Selenium (Se)	-	-	-	-	-	-	-	**2.9**
Silver (Ag)	<1	<1	<1	<1	<1	NA	<1	**NC**
Sodium (Na)	600	300	500	400	400	NA	500	**NC**
Strontium (Sr)	96	24	72	77	53	NA	44	**NC**
Thallium (Tl)	<1	<1	<1	<1	<1	NA	<1	**1**
Tin (Sn)	<5	18	<5	<5	<5	NA	<5	**NC**
Titanium (Ti)	269	933	514	268	176	NA	217	**NC**
Uranium (U)	-	-	-	-	-	-	-	**300**
Vanadium (V)	51	51	117	44	40	NA	24	**130**
Zinc (Zn)	**953**	**14,300**	183	**885**	**6,620**	103	**2,430**	**360**
Zirconium (Zr)	-	-	-	-	-	-	-	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.
3. NA - Not applicable.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 D. Soil Laboratory Analysis Results - Metals - Sulfuric Acid Drum Storage Area

Sample ID	G-48-01	G-48-04	G-49-01	G-49-02	G-50-01	G-50-02	G-51-1	G-51-2	G-52-01	G-52-02	G-53-01	G-53-02	CCME SQG [a]
Date Sampled	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/21/2010	10/21/2010	10/21/2010	10/21/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	
Sample Depth (m)	0.76	3.05	0.76	1.52	0.76	1.52	0.76	1.52	0.76	1.52	0.76	1.52	
pH	8.43	8.26	8.47	8.64	8.77	8.77	8.52	8.93	8.93	9.09	8.91	9.21	
Aluminum (Al)	8,870	25,900	21,900	13,200	20,300	10,600	26,800	4,560	4,960	6,790	15,600	4,550	**NC**
Antimony (Sb)	3.4	0.2	0.3	0.2	0.2	0.1	0.2	<0.1	<0.1	0.1	0.2	<0.1	**NC**
Arsenic (As)	3.7	4.4	8.1	3.5	4.2	3.2	5.3	2.6	2.6	3.3	3.1	1.8	**12**
Barium (Ba)	297	271	151	147	158	116	180	35.9	53.5	60	169	41.4	**2,000**
Beryllium (Be)	0.5	0.8	1.0	0.6	0.9	0.5	1.4	0.2	0.3	0.3	0.8	0.2	**NC**
Bismuth (Bi)	<0.1	0.1	0.2	0.1	0.2	0.1	0.2	<0.1	<0.1	<0.1	0.1	<0.1	**NC**
Cadmium (Cd)	0.65	0.09	0.14	0.15	0.16	0.14	0.09	0.07	0.08	0.13	0.17	0.06	**22**
Calcium (Ca)	74,900	19,500	46,200	107,000	26,300	103,000	5,400	114,000	114,000	88,200	113,000	104,000	**NC**
Chromium (Cr)	20	57	41	29	38	25	49	12	13	16	34	13	**87**
Cobalt (Co)	5.1	16.5	11.9	8.4	10.2	6.4	13.2	3.1	3.2	4.7	8.0	3.2	**NC**
Copper (Cu)	54.5	40.2	27.2	18.4	21.8	15.1	28.1	6.7	7.6	11.4	18.7	7.2	**91**
Iron (Fe)	13,800	32,200	26,800	17,500	25,400	15,000	33,100	7,500	7,770	11,100	19,000	7,710	**NC**
Lead (Pb)	286	13.8	13.0	7.8	11.4	6.8	13.9	3.6	3.9	5	10	3.6	**600**
Lithium (Li)	12	51	27	22	22	18	29	9	10	12	25	10	**NC**
Magnesium (Mg)	33,100	20,100	21,600	43,400	15,100	45,500	11,000	60,300	59,200	51,600	38,100	58,400	**NC**
Manganese (Mn)	282	513	407	310	369	263	456	171	176	251	283	184	**NC**
Mercury (Hg)	0.11	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**50**
Molybdenum (Mo)	0.9	0.4	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.3	0.3	0.2	**NC**
Nickel (Ni)	18.2	48.4	39.9	26.5	32.7	21.2	41.6	11.6	12.0	15.7	26.1	11.4	**50**
Phosphorus (P)	657	587	513	410	423	383	391	361	343	423	389	313	**NC**
Potasium (K)	1,470	5,930	3,910	2,380	3,640	2,020	4,860	844	837	1,250	2,350	763	**NC**
Selenium (Se)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**2.9**
Silver (Ag)	0.08	0.11	0.08	0.07	0.08	0.06	0.11	<0.05	<0.05	<0.05	0.07	<0.05	**NC**
Sodium (Na)	416	834	197	272	307	269	529	220	204	294	376	249	**NC**
Strontium (Sr)	149	64.5	61.1	96.4	52.7	77.1	47.8	43.9	60.4	39.8	121	42.1	**NC**
Thallium (Tl)	0.10	0.41	0.32	0.20	0.29	0.17	0.37	0.08	0.09	0.14	0.23	0.08	**1**
Tin (Sn)	6.6	1.0	0.8	0.5	0.7	0.5	0.9	0.2	0.2	0.3	0.6	0.2	**NC**
Titanium (Ti)	189	1040	155	380	122	352	157	219	232	278	375	253	**NC**
Uranium (U)	0.90	1.33	1.18	0.94	0.76	0.84	0.92	0.69	0.76	0.76	1.54	0.65	**300**
Vanadium (V)	26	66	63	39	51	33	63	19	20	25	46	17	**130**
Zinc (Zn)	163	98	66	40	73	35	87	15	18	25	102	20	**360**
Zirconium (Zr)	3.0	12.3	5.9	7.7	4.6	6.8	6.9	3.0	3.6	6.2	7.3	4.5	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 D (cont'd). Soil Laboratory Analysis Results - Metals - Sulfuric Acid Drum Storage Area

Sample ID	G-54-01	DUP 8-BH (dup of G-54-	G-54-02	G-55-01	G-55-02	G-56-01	G-56-04	G-57-01	G-57-05	G-57A-01	G-57A-03	CCME SQG [a]
Date Sampled	10/20/2010	10/20/2010	10/20/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	10/22/2010	
Sample Depth (m)	0.76	0.76	1.52	0.76	1.52	0.76	3.05	0.76	3.81	0.76	2.29	
pH	8.64	8.43	8.77	8.62	8.52	8.34	8.79	8.18	8.25	8.18	8.95	
Aluminum (Al)	8,470	21,200	4,990	21,300	21,700	18,900	5,790	19,000	20,000	23,800	5,010	**NC**
Antimony (Sb)	0.2	0.3	0.1	0.2	0.3	1.0	<0.1	0.4	0.3	0.3	0.2	**NC**
Arsenic (As)	2.9	9.0	1.9	5.6	7.0	4.5	1.9	**12.6**	7.3	8.0	2.3	**12**
Barium (Ba)	102	159	44	166	201	137	45.8	130	210	128	40.5	**2,000**
Beryllium (Be)	0.4	0.9	0.2	1.1	1.0	0.8	0.3	0.8	1.0	1.0	0.2	**NC**
Bismuth (Bi)	<0.1	0.2	<0.1	0.2	0.2	<0.1	<0.1	0.1	0.2	0.1	<0.1	**NC**
Cadmium (Cd)	0.14	0.16	0.08	0.14	0.16	0.42	0.07	0.22	0.17	0.19	0.12	**22**
Calcium (Ca)	121,000	48,800	113,000	44,000	57,700	37,700	91,900	47,800	21,000	22,000	79,600	**NC**
Chromium (Cr)	20	40	14	38	41	35	14	34	44	39	13	**87**
Cobalt (Co)	5.0	13.1	3.6	11.2	11.1	8.8	3.6	9.4	13.0	10.0	3.9	**NC**
Copper (Cu)	12.6	27.3	8.2	23.7	24.7	24.4	8.3	25.4	31.9	25.7	9.3	**91**
Iron (Fe)	12,000	25,900	8,360	25,600	26,800	22,700	8,730	22,400	29,800	27,200	8,800	**NC**
Lead (Pb)	5.6	13.7	3.9	11.7	11.6	103.0	5.9	17.6	14.5	29.6	8.0	**600**
Lithium (Li)	17	26	10	24	28	20	10	21	29	20	9	**NC**
Magnesium (Mg)	58,800	22,000	61,300	18,900	26,000	19,600	53,800	21,200	15,900	15,700	47,000	**NC**
Manganese (Mn)	240	453	193	422	333	306	198	363	357	350	238	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**50**
Molybdenum (Mo)	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.4	1.1	0.5	0.3	**NC**
Nickel (Ni)	17.4	39.8	12.5	36.5	34.3	27.3	11.9	29.5	40.0	25.8	13.4	**50**
Phosphorus (P)	356	497	349	467	500	421	365	517	539	456	361	**NC**
Potasium (K)	1,460	3,720	953	3,450	3,550	3,290	1,090	3,250	4,360	3,870	905	**NC**
Selenium (Se)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	0.5	<0.5	**2.9**
Silver (Ag)	0.06	0.09	<0.05	0.09	0.09	0.09	<0.05	0.06	0.12	0.09	<0.05	**NC**
Sodium (Na)	308	187	233	281	375	258	207	174	518	376	231	**NC**
Strontium (Sr)	91.6	63.6	45.4	63.9	67.7	60.4	41.5	63.8	64.2	45.8	36.2	**NC**
Thallium (Tl)	0.14	0.30	0.10	0.30	0.32	0.22	0.09	0.22	0.32	0.28	0.08	**1**
Tin (Sn)	0.3	0.8	0.2	0.7	0.8	1.6	0.2	0.9	0.9	0.9	0.4	**NC**
Titanium (Ti)	325	182	260	142	224	132	276	159	231	117	212	**NC**
Uranium (U)	1.07	1.22	0.63	1.31	1.43	2.10	0.62	1.32	1.73	3.23	0.54	**300**
Vanadium (V)	28	63	19	61	65	49	20	56	60	62	19	**130**
Zinc (Zn)	26	67	17	66	66	**482**	37	167	95	**1,080**	106	**360**
Zirconium (Zr)	5.2	5.6	5.0	5.4	8.0	4.9	4.4	4.7	8.1	7.0	3.6	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 D (cont'd). Soil Laboratory Analysis Results - Metals - Sulfuric Acid Drum Storage Area

Sample ID	BH-22	BH-44	BH-44	BH-45	BH-46	BH-47	BH-48	BH-49	BH-49	BH-50	BH-50	BH-51	CCME SQG [a]
Date Sampled	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	
Sample Depth (m)	0.30	0.60	1.20	0.30	0.60	0.30	0.30	0.30	0.60	0.30	0.60	0.30	
pH	-	-	-	-	-	-	-	-	-	-	-	-	
Aluminum (Al)	9,510	16,600	NC	NC	NC	NC	NC	NC	NC	NC	36,700	NC	**NG**
Antimony (Sb)	-	-	-	-	-	-	-	-	-	-	-	-	**NG**
Arsenic (As)	-	-	-	-	-	-	-	-	-	-	-	-	**12**
Barium (Ba)	112	249	NA	NA	NA	NA	NA	NA	NA	NA	233	NA	**2,000**
Beryllium (Be)	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	<1	NA	**NG**
Bismuth (Bi)	-	-	-	-	-	-	-	-	-	-	-	-	**NG**
Cadmium (Cd)	<0.5	1.0	NA	NA	NA	NA	NA	NA	NA	NA	<0.5	NA	**22**
Calcium (Ca)	84,300	71,700	NA	NA	NA	NA	NA	NA	NA	NA	25,100	NA	**NG**
Chromium (Cr)	50.7	**181**	45.3	NA	NA	NA	NA	NA	NA	NA	58	NA	**87**
Cobalt (Co)	2	10	NC	NA	NA	NA	NA	NA	NA	NA	10	NA	**NG**
Copper (Cu)	24	87	NA	**124**	**128**	26	**102**	**1,680**	33	**203**	34	53	**91**
Iron (Fe)	17,400	38,900	NA	NA	NA	NA	NA	NA	NA	NA	28,100	NA	**NG**
Lead (Pb)	555	**970**	55	133	39	79	157	65	NA	186	40	401	**600**
Lithium (Li)	-	-	-	-	-	-	-	-	-	-	-	-	**NG**
Magnesium (Mg)	43,400	34,700	NA	NA	NA	NA	NA	NA	NA	NA	17,100	NA	**NG**
Manganese (Mn)	331	855	NA	NA	NA	NA	NA	NA	NA	NA	306	NA	**NG**
Mercury (Hg)	NC	0.85	NA	NA	NA	NA	NA	NA	NA	NA	NC	NA	**50**
Molybdenum (Mo)	<1	2	NA	NA	NA	NA	NA	NA	NA	NA	<1	NA	**NG**
Nickel (Ni)	28	**72**	NA	NA	NA	NA	NA	NA	NA	NA	34	NA	**50**
Phosphorus (P)	370	400	NA	NA	NA	NA	NA	NA	NA	NA	560	NA	**NG**
Potasium (K)	3,030	3,490	NA	NA	NA	NA	NA	NA	NA	NA	7,100	NA	**NG**
Selenium (Se)	-	-	-	-	-	-	-	-	-	-	-	-	**2.9**
Silver (Ag)	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	<1	NA	**NG**
Sodium (Na)	1,200	400	NA	NA	NA	NA	NA	NA	NA	NA	600	NA	**NG**
Strontium (Sr)	73	83	NA	NA	NA	NA	NA	NA	NA	NA	67	NA	**NG**
Thallium (Tl)	<1	<1	NA	NA	NA	NA	NA	NA	NA	NA	<1	NA	**1**
Tin (Sn)	<5	<5	NA	NA	NA	NA	NA	NA	NA	NA	<5	NA	**NG**
Titanium (Ti)	251	333	NA	NA	NA	NA	NA	NA	NA	NA	487	NA	**NG**
Uranium (U)	-	-	-	-	-	-	-	-	-	-	-	-	**300**
Vanadium (V)	23	46	NA	NA	NA	NA	NA	NA	NA	NA	92	NA	**130**
Zinc (Zn)	**23,000**	**9,030**	**840**	**1,680**	36	**1,770**	**2,570**	**947**	102	**1,720**	**398**	209	**360**
Zirconium (Zr)	-	-	-	-	-	-	-	-	-	-	-	-	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.
3. NA - Not applicable.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 E. Soil Laboratory Analysis Results - Metals - Sulfuric Acid AST Area

Sample ID	G-58-01	G-58-02	DUP 6 (duplicate of G-58-	BH-7	CCME SQG [a]
Date Sampled	10/21/2010	10/21/2010	10/21/2010	1999	
Sample Depth (m)	0.76	1.52	1.52	0.60	
pH	8.25	8.20	8.27	-	
Aluminum (Al)	23,700	8,530	8,910	17,700	**NC**
Antimony (Sb)	0.3	0.1	0.1	-	**NC**
Arsenic (As)	7.1	2.0	1.9	-	**12**
Barium (Ba)	193	121	112	147	**2,000**
Beryllium (Be)	1.1	0.4	0.4	<1	**NC**
Bismuth (Bi)	0.2	<0.1	<0.1	-	**NC**
Cadmium (Cd)	0.10	0.14	0.14	<0.5	**22**
Calcium (Ca)	42,200	132,000	128,000	34,200	**NC**
Chromium (Cr)	44	25	25	36.4	**87**
Cobalt (Co)	13.9	5.6	5.5	8	**NC**
Copper (Cu)	27.5	13.0	12.7	27	**91**
Iron (Fe)	29,500	12,400	12,900	25,200	**NC**
Lead (Pb)	15.7	6.3	6.1	32	**600**
Lithium (Li)	31	16	17	-	**NC**
Magnesium (Mg)	18,900	55,200	56,600	19,300	**NC**
Manganese (Mn)	525	276	244	327	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	NA	**50**
Molybdenum (Mo)	0.3	0.2	0.2	4	**NC**
Nickel (Ni)	41.2	20.2	18.9	38	**50**
Phosphorus (P)	449	350	351	510	**NC**
Potasium (K)	4,040	1,660	1,730	4,520	**NC**
Selenium (Se)	<0.5	<0.5	<0.5	-	**2.9**
Silver (Ag)	0.09	0.05	0.06	<1	**NC**
Sodium (Na)	4,140	3,070	3,180	400	**NC**
Strontium (Sr)	72.1	91	88.5	58	**NC**
Thallium (Tl)	0.35	0.14	0.15	<1	**1**
Tin (Sn)	0.9	0.4	0.4	<5	**NC**
Titanium (Ti)	190	345	344	51	**NC**
Uranium (U)	2.20	1.32	1.36	-	**300**
Vanadium (V)	68	26	28	37	**130**
Zinc (Zn)	104	36	33	123	**360**
Zirconium (Zr)	6.4	6.3	6.5	-	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 F. Soil Laboratory Analysis Results - Metals - Waste Paint Storage Area

Sample ID	G-65-01	G-65-02	DUP 4-BH (duplicate of G-65-	G-66-01	G-66-02	G-67-01	G-67-02	DUP 5-BH (duplicate of G-67-	G-68-01	G-68-02	G-69-01	G-69-02	CCME SQG [a]
Date Sampled	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/21/2010	1/21/2010	
Sample Depth (m)	0.76	1.52	1.52	0.76	1.52	0.76	1.52	1.52	0.76	1.52	0.76	1.52	
pH	8.43	8.99	8.58	8.41	8.95	8.17	8.67	8.57	8.01	8.52	8.60	8.38	
Aluminum (Al)	28,900	17,600	8,820	27,300	18,600	23,900	13,000	11,200	29,500	11,200	28,800	23,900	**NC**
Antimony (Sb)	0.3	0.2	0.6	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	**NC**
Arsenic (As)	7.8	4.2	4.4	6.3	4.7	4.2	4.5	3.9	8.2	2.9	6.4	5.0	**12**
Barium (Ba)	173	184	108	162	189	171	174	125	158	135	258	201	**2,000**
Beryllium (Be)	1.2	0.8	0.4	1.2	0.8	1.0	0.5	0.5	1.1	0.4	1.2	1.1	**NC**
Bismuth (Bi)	0.2	0.1	<0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	**NC**
Cadmium (Cd)	0.11	0.16	0.18	0.11	0.15	0.16	0.19	0.18	0.10	0.14	0.10	0.14	**22**
Calcium (Ca)	15,900	91,100	105,000	22,300	107,000	9,110	104,000	123,000	7,490	135,000	20,900	10,200	**NC**
Chromium (Cr)	50	35	22	47	38	43	26	24	50	25	50	44	**87**
Cobalt (Co)	17.2	9.3	6.1	12.4	10.1	12.7	10.7	6.9	16.8	7.1	14.3	15.2	**NC**
Copper (Cu)	30.7	20.6	18.7	24.7	23.1	26.7	16.1	15.9	28.1	15.3	26.5	23.9	**91**
Iron (Fe)	32,900	21,700	16,300	30,000	22,500	29,700	16,200	15,700	33,300	15,500	32,400	29,100	**NC**
Lead (Pb)	17.8	10.3	27.2	15.2	11	17.0	9.7	10.2	15.2	7.5	14.3	15.5	**600**
Lithium (Li)	32	27	15	29	28	24	19	18	31	18	33	27	**NC**
Magnesium (Mg)	13,900	40,400	53,100	15,200	40,100	11,200	43,300	55,100	10,300	53,600	13,000	11,300	**NC**
Manganese (Mn)	787	348	268	430	359	465	659	306	674	335	559	629	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	**50**
Molybdenum (Mo)	0.2	0.3	0.6	0.2	0.3	0.2	0.4	0.3	0.3	0.3	0.3	0.7	**NC**
Nickel (Ni)	**78.2**	30.3	22.5	38.0	32.4	35.5	27.7	22.5	**51.7**	24.2	42.0	38.6	**50**
Phosphorus (P)	456	405	382	441	430	319	356	403	434	388	361	325	**NC**
Potasium (K)	5,480	3,260	1,560	4,820	3,190	4,620	2,120	1,910	5,240	2,090	5,090	4,540	**NC**
Selenium (Se)	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	<0.5	<0.5	<0.5	<0.5	**2.9**
Silver (Ag)	0.11	0.09	0.06	0.08	0.10	0.09	<0.05	0.06	0.10	0.05	0.12	0.12	**NC**
Sodium (Na)	143	230	193	124	226	121	189	178	137	197	191	180	**NC**
Strontium (Sr)	53.7	111.0	73	55.2	124	46	102	93.5	42.6	102	75.5	58.2	**NC**
Thallium (Tl)	0.39	0.26	0.15	0.34	0.27	0.35	0.22	0.19	0.41	0.19	0.39	0.33	**1**
Tin (Sn)	1.0	0.7	0.9	0.9	0.7	0.9	0.6	0.6	1.0	0.5	1.0	0.9	**NC**
Titanium (Ti)	151	340	256	175	418	117	312	339	137	354	153	165	**NC**
Uranium (U)	1.11	1.44	0.92	1.23	1.05	0.92	0.96	0.94	2.02	1.26	1.64	1.41	**300**
Vanadium (V)	82	50	29	75	56	60	42	36	75	34	77	62	**130**
Zinc (Zn)	87	56	73	77	70	92	46	55	83	33	83	84	**360**
Zirconium (Zr)	8.6	8.5	4.3	6.0	9.1	5.6	5.6	5.2	8.2	5.4	6.6	6.5	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 F (cont'd). Soil Laboratory Analysis Results - Metals - Waste Paint Storage Area

Sample ID	BH-24	BH-25	BH-70	BH-70	BH-71	BH-72	CCME SQG [a]
Date Sampled	1999	1999	1999	1999	1999	1999	
Sample Depth (m)	0.60	0.30	0.30	0.90	0.60	0.30	
pH	-	-	-	-	-	-	
Aluminum (Al)	5,530	9,140	7,520	39,200	8,500	7,370	**NC**
Antimony (Sb)	-	-	-	-	-	-	**NC**
Arsenic (As)	-	-	-	-	-	-	**12**
Barium (Ba)	262	471	311	237	254	363	**2,000**
Beryllium (Be)	<1	<1	<1	<1	<1	<1	**NC**
Bismuth (Bi)	-	-	-	-	-	-	**NC**
Cadmium (Cd)	**3**	2	0.7	<0.5	<0.5	0.7	**22**
Calcium (Ca)	89,000	66,800	97,100	32,200	44,400	42,700	**NC**
Chromium (Cr)	62.9	68.5	18.9	54.4	41.1	32.6	**87**
Cobalt (Co)	7	11	4	14	11	8	**NC**
Copper (Cu)	**98**	**229**	61	29	**129**	88	**91**
Iron (Fe)	72,300	43,200	17,900	31,200	108,000	48,200	**NC**
Lead (Pb)	**687**	**701**	201	23	377	383	**600**
Lithium (Li)	-	-	-	-	-	-	**NC**
Magnesium (Mg)	48,100	19,900	52,100	17,800	18,000	18,300	**NC**
Manganese (Mn)	528	411	224	485	721	384	**NC**
Mercury (Hg)	NA	NA	NA	NA	NA	NA	**50**
Molybdenum (Mo)	10	8	2	<1	3	3	**NC**
Nickel (Ni)	**57**	47	15	41	39	26	**50**
Phosphorus (P)	410	810	350	450	500	480	**NC**
Potasium (K)	1,420	1,560	1,520	7,240	1,540	1,170	**NC**
Selenium (Se)	-	-	-	-	-	-	**2.9**
Silver (Ag)	<1	<1	<1	<1	<1	<1	**NC**
Sodium (Na)	200	800	400	400	500	400	**NC**
Strontium (Sr)	67	278	100	89	140	131	**NC**
Thallium (Tl)	<1	<1	<1	<1	<1	<1	**1**
Tin (Sn)	<5	<5	<5	<5	<5	<5	**NC**
Titanium (Ti)	132	380	141	220	310	265	**NC**
Uranium (U)	-	-	-	-	-	-	**300**
Vanadium (V)	10	24	16	77	27	24	**130**
Zinc (Zn)	**673**	**470**	**460**	83	268	**412**	**360**
Zirconium (Zr)	-	-	-	-	-	-	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.
3. NA - Not applicable.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 G. Soil Laboratory Analysis Results - Metals - Former Saskatchewan Avenue Landfill

Sample ID	G-70-02	G-70-05	G-71-03	G-71-13 (duplicate of G-71-	G-71-06	G-72-01	G-72-05	G-73-01	G-73-05	CCME SQG [a]
Date Sampled	10/19/2010	10/19/2010	10/19/2010	10/19/2010	10/19/2010	10/19/2010	10/19/2010	10/19/2010	10/19/2010	
Sample Depth (m)	1.50	3.81	2.31	2.31	4.57	0.76	3.81	0.76	3.81	
pH	8.49	8.12	8.82	8.71	8.17	8.81	8.21	8.74	8.27	
Aluminum (Al)	24,900	22,400	6,050	6,080	19,900	13,900	22,700	14,000	23,000	**NC**
Antimony (Sb)	0.6	0.5	0.2	0.2	0.6	70.5	0.9	5.1	0.4	**NC**
Arsenic (As)	7.4	**13.6**	2.4	1.9	10.1	**16.9**	8.6	7.2	6.0	**12**
Barium (Ba)	157	261	61	57	1.0	356	216	245	208	**2,000**
Beryllium (Be)	1.1	1.0	0.2	0.3	1.0	0.6	1.2	0.7	1.2	**NC**
Bismuth (Bi)	0.2	0.2	<0.1	<0.1	0.3	0.3	0.3	0.2	0.2	**NC**
Cadmium (Cd)	0.14	0.44	0.08	0.08	0.28	0.48	0.30	0.44	0.19	**22**
Calcium (Ca)	45,600	21,200	120,000	122,000	26,100	94,700	25,400	68,600	29,800	**NC**
Chromium (Cr)	44	48	15	15	39	29	46	44	53	**87**
Cobalt (Co)	13.7	19.9	4.1	4.2	15.5	8.0	14.9	10.7	15.9	**NC**
Copper (Cu)	29.0	40.5	9.4	8.9	31.7	61.8	36.1	42.7	35.1	**91**
Iron (Fe)	29,800	33,700	9,300	9,100	30,400	20,700	31,100	34,400	31,600	**NC**
Lead (Pb)	15.1	16.6	4.6	4.4	16.6	875	24.6	375	17	**600**
Lithium (Li)	28	30	11	11	27	20	30	21	36	**NC**
Magnesium (Mg)	25,300	16,300	61,800	64,000	17,100	38,900	15,800	30,000	20,300	**NC**
Manganese (Mn)	504	516	228	235	480	408	743	556	423	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	<0.05	0.75	<0.05	0.09	<0.05	**50**
Molybdenum (Mo)	0.2	1.6	0.2	0.2	1.3	0.7	2.0	1.5	0.9	**NC**
Nickel (Ni)	42.2	47.6	15.0	14.3	40.8	25.2	**53.5**	34.6	43.6	**50**
Phosphorus (P)	521	615	351	348	541	766	555	451	530	**NC**
Potasium (K)	4,370	4,630	1,060	1,040	3,700	3,190	4,450	2,890	5,120	**NC**
Selenium (Se)	<0.5	1.9	<0.5	<0.5	0.6	<0.5	0.6	<0.5	<0.5	**2.9**
Silver (Ag)	0.10	0.12	<0.05	<0.05	0.13	0.21	0.16	0.14	0.13	**NC**
Sodium (Na)	526	779	220	234	1040	492	740	1150	768	**NC**
Strontium (Sr)	56.5	71.2	52.0	50.6	67.4	148	72.9	92.1	68.3	**NC**
Thallium (Tl)	0.33	0.33	0.09	0.09	0.30	0.19	0.33	0.22	0.37	**1**
Tin (Sn)	1.0	0.9	0.3	0.3	0.9	61.2	1.4	8.5	1.2	**NC**
Titanium (Ti)	171	132	298	295	112	309	147	188	306	**NC**
Uranium (U)	0.99	2.03	0.80	0.80	2.02	0.91	1.91	1.25	1.57	**300**
Vanadium (V)	68	68	22	21	59	41	69	45	72	**130**
Zinc (Zn)	69	100	19	18	92	247	95	**523**	93	**360**
Zirconium (Zr)	6.7	10.3	5.8	5.7	13.6	5.0	10.6	6.3	14.5	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:

1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.
4. NA - not applicable.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 H. Soil Laboratory Analysis Results - Metals - Polychlorinated Biphenyls Storage Area

Sample ID	G-74-02	G-74-05	G-75-01	G-75-03	G-76-02	G-76-05	G-77-04	G-78-03	G-78-06	G-79-02	G-79-12 (duplicate of G-79-	G-79-05	BH-29	CCME SQG [a]
Date Sampled	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	1999	
Sample Depth (m)	1.52	3.81	0.76	2.29	1.52	3.81	3.05	2.29	6.10	1.52	1.52	3.81	1.20	
pH	8.55	8.51	8.42	8.87	8.20	8.52	8.74	9.03	8.24	8.78	9.12	8.14	-	
Aluminum (Al)	22,900	22,100	18,000	8,310	25,300	20,500	27,300	4,690	21,300	9,310	9,580	17,000	32,100	**NC**
Antimony (Sb)	0.5	0.3	2.2	0.2	0.3	0.3	0.2	0.1	0.4	0.3	0.3	0.3	-	**NC**
Arsenic (As)	5.4	7.2	6.5	3.5	4.6	7.6	5.1	2.1	9.6	3.1	3.0	6.4	-	**12**
Barium (Ba)	147	189	261	131	161	237	315	34.0	175	109	119	172	181	**2,000**
Beryllium (Be)	0.9	1.2	0.7	0.3	1.1	1.1	0.8	0.2	1.0	0.3	0.4	1.0	<1	**NC**
Bismuth (Bi)	0.2	0.3	0.2	<0.1	0.2	0.3	0.2	<0.1	0.2	<0.1	<0.1	0.1	-	**NC**
Cadmium (Cd)	0.17	0.24	0.45	0.14	0.20	0.31	0.18	0.07	0.24	0.17	0.17	0.24	<0.5	**22**
Calcium (Ca)	11,800	15,300	41,600	109,000	6,940	26,300	16,400	102,000	20,800	123,000	121,000	22,600	9,360	**NC**
Chromium (Cr)	44	52	42	18	50	46	65	13	37	21	24	37	52.5	**87**
Cobalt (Co)	12.3	14.7	9.5	5.4	14.2	13.7	18.1	3.1	13.3	5.1	5.1	10.7	12	**NC**
Copper (Cu)	29.3	37.6	39.6	13.4	29.4	35.3	47.4	7.7	30.1	11.3	12.1	32.8	23	**91**
Iron (Fe)	30,100	31,200	31,400	11,600	31,000	30,500	38,200	7,900	29,100	13,000	12,800	27,400	29,300	**NC**
Lead (Pb)	27.2	17.5	203	13.4	22.0	15.3	17.6	52.0	16.1	96.3	64.0	25.1	17	**600**
Lithium (Li)	20	34	21	14	23	30	57	9	27	14	15	25	-	**NC**
Magnesium (Mg)	9,960	14,200	21,100	43,600	9,960	18,200	18,900	56,000	14,800	46,000	42,700	15,400	9,620	**NC**
Manganese (Mn)	374	547	428	272	668	521	629	157	398	242	245	318	333	**NC**
Mercury (Hg)	<0.05	<0.05	0.10	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NA	**50**
Molybdenum (Mo)	1.2	1.1	1.6	0.2	1.8	1.0	0.8	0.2	1.2	0.2	0.3	1.1	<1	**NC**
Nickel (Ni)	32.1	49.0	33.2	18.0	43.6	44.1	**54.0**	11.2	38.1	18.3	20.4	37.6	32	**50**
Phosphorus (P)	400	540	463	406	426	552	615	353	497	379	409	474	510	**NC**
Potasium (K)	4,680	4,960	3,550	1,400	4,710	4,570	6,120	791	3,500	1,760	1,790	3,340	6,350	**NC**
Selenium (Se)	<0.5	<0.5	<0.5	<0.5	<0.5	1.3	<0.5	<0.5	1.0	<0.5	<0.5	0.9	-	**2.9**
Silver (Ag)	0.10	0.13	0.14	0.05	0.10	0.13	0.12	<0.05	0.12	0.05	<0.05	0.09	<1	**NC**
Sodium (Na)	223	562	248	293	228	620	1180	237	646	289	298	813	200	**NC**
Strontium (Sr)	57.2	66.2	86.1	84.4	44.8	66.8	64.1	36.5	64	132.0	133	57.2	58	**NC**
Thallium (Tl)	0.32	0.36	0.24	0.14	0.34	0.34	0.54	0.09	0.25	0.14	0.13	0.26	<1	**1**
Tin (Sn)	1.4	1.0	4.7	0.4	1.1	0.9	1.2	0.3	1.6	0.6	0.6	1.4	<5	**NC**
Titanium (Ti)	112	206	292	244	91	170	1,130	232	115	210	221	44	340	**NC**
Uranium (U)	1.19	2.02	1.24	0.95	1.39	2.13	1.70	0.66	1.85	1.57	1.54	1.90	-	**300**
Vanadium (V)	61	66	53	28	64	63	70	18	57	31	32	48	71	**130**
Zinc (Zn)	171	97	273	36	120	91	136	22	85	163	247	117	84	**360**
Zirconium (Zr)	5.7	11.2	6.5	5.0	5.8	10.8	16.0	3.8	7.1	2.1	1.8	7.8	-	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.
3. NA - Not applicable.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.3 I. Soil Laboratory Analysis Results - Metals - Galvanizing Pit

Sample ID	GP10-01 30CM	GP10-01 1.5M	GP10-02 30CM	GP10-02 1.5M	CCME SQG [a]
Date Sampled	11/4/2010	11/4/2010	11/4/2010	11/4/2010	
Sample Depth (m)	0.30	1.50	0.30	1.50	
pH	8.17	8.82	8.81	8.71	
Aluminum (Al)	4,440	13,600	8,630	10,400	**NC**
Antimony (Sb)	1.3	0.2	0.1	0.1	**NC**
Arsenic (As)	3.3	3.7	1.5	1.2	**12**
Barium (Ba)	137	134	45.5	67.3	**2,000**
Beryllium (Be)	0.2	0.5	0.3	0.4	**NC**
Bismuth (Bi)	<0.1	0.2	<0.1	<0.1	**NC**
Cadmium (Cd)	0.23	0.22	0.08	0.14	**22**
Calcium (Ca)	137,000	65,600	127,000	90,200	**NC**
Chromium (Cr)	17	37	42	43	**87**
Chromium (Cr 6^+)	<1	<1	<1	1	**1.4**
Cobalt (Co)	3.4	9.8	3.6	6.2	**NC**
Copper (Cu)	15.0	39.7	10.0	16.4	**91**
Iron (Fe)	17,700	21,100	8,560	13,800	**NC**
Lead (Pb)	90.2	11.5	4.8	6.6	**600**
Lithium (Li)	<5	22	11	16	**NC**
Magnesium (Mg)	46,100	37,300	79,800	58,800	**NC**
Manganese (Mn)	255	442	189	338	**NC**
Mercury (Hg)	<0.05	<0.05	<0.05	<0.05	**50**
Molybdenum (Mo)	1.8	0.5	0.2	0.2	**NC**
Nickel (Ni)	17.7	28.2	11.0	19.9	**50**
Phosphorus (P)	176	485	299	413	**NC**
Potasium (K)	662	2,750	1,020	1,660	**NC**
Selenium (Se)	<0.5	<0.5	<0.5	<0.5	**2.9**
Silver (Ag)	0.05	0.10	<0.05	0.07	**NC**
Sodium (Na)	234	432	189	205	**NC**
Strontium (Sr)	122	68.2	51.8	39.1	**NC**
Thallium (Tl)	0.07	0.26	0.08	0.16	**1**
Tin (Sn)	1.0	0.6	0.2	0.4	**NC**
Titanium (Ti)	192	374	240	356	**NC**
Uranium (U)	0.51	1.29	1.96	1.57	**300**
Vanadium (V)	12	46	20	28	**130**
Zinc (Zn)	**10,300**	**387**	29	52	**360**
Zirconium (Zr)	4.4	8.8	3.6	6.8	**NC**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2007) for the Protection of Environmental and Human Health, Industrial Land Use, Fine Grain Soil.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.4 A. Soil Laboratory Analysis Results - PCB - Landfilling Area

Sample ID	G-26-02	G-26-05	G-28-01	G-28-03	G-28-06	G-29-01	G-29-03	G-31-02	G-31-04	G-33-02	G-33-12 (dup of G-33-02)	G-33-05	CCME Guideline[A]
Date Sampled	2010/10/21	2010/10/21	2010/10/20	2010/10/20	2010/10/20	2010/10/21	2010/10/21	2010/10/21	2010/10/21	10/22/2010	10/22/2010	10/22/2010	
Depth (m)	1.52	3.81	0.76	2.29	2.29	0.76	2.29	1.52	3.05	1.52	1.52	3.81	
Polychlorinated Biphenyls (Total)	<0.03	<0.03	0.8	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.09	0.05	<0.03	33

[a] Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health (updated 2009)

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NA - Not applicable.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.4 A (cont'd). Soil Laboratory Analysis Results - PCB - Landfilling Area

Sample ID	G-35-01	G-35-05	G-37-01	G-37-04	G-39-02	G-39-06	G-40-01	G-40-08	CCME Guideline [a]
Date Sampled	10/21/2010	10/21/2010	10/22/2010	10/22/2010	10/20/2010	10/20/2010	10/22/2010	10/22/2010	
Depth (m)	0.76	3.81	0.76	3.05	1.52	4.57	0.76	6.10	33
Polychlorinated Biphenyls (Total)	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	

[a] Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health (updated 2009)

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NA - Not applicable.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.4 B. Soil Laboratory Analysis Results - PCB - Polychlorinated Biphenyls Storage Area

Sample ID	G-74-02	G-74-05	G-75-01	G-75-03	G-76-02	G-76-05	G-77-04	G-78-03	G-78-06	G-79-02	G-79-12 (dup of G-79-02)	G-79-05	CCME Guideline [a]
Date Sampled	2010/10/20	2010/10/20	10/20/2010	10/20/2010	10/20/2010	10/20/2010	10/20/2010	2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/20	
Depth (m)	1.52	3.81	0.76	2.29	1.52	3.81	3.05	2.29	4.57	1.52	1.52	3.81	33
Polychlorinated Biphenyls (Total)	0.13	<0.03	0.8	<0.03	0.04	<0.03	0.05	<0.03	<0.03	0.05	<0.03	<0.03	

[a] Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health (updated 2009)

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NA - Not applicable.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.5A. Soil Laboratory Analysis Results - VOC - Paint Shop UST Area

Sample ID	G-06-03	G-07-02	G-07-07	G-08-01	G-09-03	G-09-08
Date Sampled	10/20/2010	10/21/2010	10/21/2010	10/20/2010	10/21/2010	10/21/2010
Sample Depth (m)	2.29	1.52	5.33	0.76	2.29	6.10
Chloromethane	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl Chloride	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Bromomethane	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chloroethane	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dichloromethane	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
cis-1,2-dichloroethane	<0.03	<0.05	<0.03	<0.03	<0.03	<0.03
Chloroform	<0.05	<0.03	<0.05	<0.05	<0.05	<0.05
1,1,1-trichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,2-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbon tetrachloride	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Benzene	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Methyl-tert-butylether (MTBE)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethane	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromodichloromethane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
cis-1,3-dichloropropane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
trans-1,3-dichloropropene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2-trichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Toluene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlorodibromomethane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromoethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Tetrachloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlorobenzene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1,2-tetrachloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Ethylbenzene	<0.01	<0.01	<0.01	<0.01	0.02	<0.01
Bromoform	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Styrene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylenes	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,2-dichlorobenzene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,3-dichlorobenzene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,4-dichlorobenzene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Notes:
1. All results in mg/kg.

Table 4.5 B. Soil Laboratory Analysis Results - VOC - Landfilling Area

Sample ID	G-26-02	G-26-05	G-28-01	G-28-03	G-28-06	G-29-01	G-29-03	G-37-01	G-37-04	G-39-02	G-39-06
Date Sampled	10/21/2010	10/21/2010	10/21/2010	10/20/2010	10/20/2010	10/21/2010	10/21/2010	10/22/2010	10/22/2010	10/20/2010	10/20/2010
Sample Depth (m)	1.52	3.81	0.76	2.29	6.10	0.76	2.29	0.76	3.05	1.52	6.1
Chloromethane	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl Chloride	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Bromomethane	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chloroethane	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
1,1-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dichloromethane	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,2-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
cis-1,2-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chloroform	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,1-trichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,2-dichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Carbon tetrachloride	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Benzene	<0.005	<0.005	0.008	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Methyl-tert-butylether (MTBE)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Trichloroethane	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromodichloromethane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
cis-1,3-dichloropropane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
trans-1,3-dichloropropene	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
1,1,2-trichloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Toluene	<0.03	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlorodibromomethane	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dibromoethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Tetrachloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chlorobenzene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,1,1,2-tetrachloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Ethylbenzene	<0.01	<0.01	0.02	<0.01	<0.01	<0.01	<0.01	<0.03	<0.01	<0.01	<0.01
Bromoform	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Styrene	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Xylenes	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.1	<0.03
1,2-dichlorobenzene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,3-dichlorobenzene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
1,4-dichlorobenzene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Notes:
1. All results in mg/kg.

Table 4.5 C. Soil Laboratory Analysis Results - VOC - Solvent AST Area

Sample ID	G-44-02	G-45-01	G-46-02	G-47-02
Date Sampled	10/20/2010	10/20/2010	10/20/2010	10/20/2010
Sample Depth (m)	1.52	0.76	1.52	1.52
Chloromethane	<0.1	<0.1	<0.1	<0.1
Vinyl Chloride	<0.06	<0.06	<0.06	<0.06
Bromomethane	<0.3	<0.3	<0.3	<0.3
Chloroethane	<0.1	<0.1	<0.1	<0.1
Trichlorofluoromethane	<0.2	<0.2	<0.2	<0.2
1,1-dichloroethane	<0.03	<0.03	<0.03	<0.03
Dichloromethane	<0.1	<0.1	<0.1	<0.1
trans-1,2-dichloroethane	<0.03	<0.03	<0.03	<0.03
1,1-dichloroethane	<0.03	<0.03	<0.03	<0.03
cis-1,2-dichloroethane	<0.03	<0.03	<0.03	<0.03
Chloroform	<0.05	<0.05	<0.05	<0.05
1,1,1-trichloroethane	<0.03	<0.03	<0.03	<0.03
1,2-dichloroethane	<0.03	<0.03	<0.03	<0.03
Carbon tetrachloride	<0.03	<0.03	<0.03	<0.03
Benzene	<0.01	0.008	0.008	<0.005
Methyl-tert-butylether (MTBE)	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	<0.03	<0.03	<0.03	<0.03
Trichloroethane	0.16	<0.01	<0.01	<0.01
Bromodichloromethane	<0.05	<0.05	<0.05	<0.05
cis-1,3-dichloropropane	<0.05	<0.05	<0.05	<0.05
trans-1,3-dichloropropene	<0.05	<0.05	<0.05	<0.05
1,1,2-trichloroethane	<0.03	<0.03	<0.03	<0.03
Toluene	<0.04	0.04	<0.03	<0.03
Chlorodibromomethane	<0.05	<0.05	<0.05	<0.05
Dibromoethane	<0.03	<0.03	<0.03	<0.03
Tetrachloroethane	<0.03	<0.03	<0.03	<0.03
Chlorobenzene	<0.03	<0.03	<0.03	<0.03
1,1,1,2-tetrachloroethane	<0.03	<0.03	<0.03	<0.03
Ethylbenzene	<0.01	<0.01	<0.01	<0.01
Bromoform	<0.05	<0.05	<0.05	<0.05
Styrene	<0.1	<0.1	<0.1	<0.1
Xylenes	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	<0.03	<0.03	<0.03	<0.03
1,2-dichlorobenzene	<0.03	<0.03	<0.03	<0.03
1,3-dichlorobenzene	<0.03	<0.03	<0.03	<0.03
1,4-dichlorobenzene	<0.03	<0.03	<0.03	<0.03

Notes:
1. All results in mg/kg.

Table 4.5 D. Soil Laboratory Analysis Results - VOC - Polychlorinated Biphenyls Storage Area

Sample ID	G-78-03	G-79-02
Date Sampled	10/20/2010	10/20/2010
Sample Depth (m)	2.29	1.52
Chloromethane	<0.1	<0.1
Vinyl Chloride	<0.06	<0.06
Bromomethane	<0.3	<0.3
Chloroethane	<0.1	<0.1
Trichlorofluoromethane	<0.2	<0.2
1,1-dichloroethane	<0.03	<0.03
Dichloromethane	<0.1	<0.1
trans-1,2-dichloroethane	<0.03	<0.03
1,1-dichloroethane	<0.03	<0.03
cis-1,2-dichloroethane	<0.03	<0.03
Chloroform	<0.05	<0.05
1,1,1-trichloroethane	<0.03	<0.03
1,2-dichloroethane	<0.03	<0.03
Carbon tetrachloride	<0.03	<0.03
Benzene	<0.005	<0.005
Methyl-tert-butylether (MTBE)	<0.1	<0.1
1,2-dichloropropane	<0.03	<0.03
Trichloroethane	<0.01	<0.01
Bromodichloromethane	<0.05	<0.05
cis-1,3-dichloropropane	<0.05	<0.05
trans-1,3-dichloropropene	<0.05	<0.05
1,1,2-trichloroethane	<0.03	<0.03
Toluene	<0.03	<0.03
Chlorodibromomethane	<0.05	<0.05
Dibromoethane	<0.03	<0.03
Tetrachloroethane	<0.03	<0.03
Chlorobenzene	<0.03	<0.03
1,1,1,2-tetrachloroethane	<0.03	<0.03
Ethylbenzene	<0.01	<0.01
Bromoform	<0.05	<0.05
Styrene	<0.1	<0.1
Xylenes	<0.1	<0.1
1,1,2,2-tetrachloroethane	<0.03	<0.03
1,2-dichlorobenzene	<0.03	<0.03
1,3-dichlorobenzene	<0.03	<0.03
1,4-dichlorobenzene	<0.03	<0.03

Notes:
1. All results in mg/kg.

Table 4.6 A. Soil Laboratory Analysis Results - Non-Carcinogenic PAH - Paint Shop UST Area

Sample ID	G-06-03	G-08-01	CCME SQG
Date Sampled	10/20/2010	10/20/2010	
Sample Depth (m)	2.29	0.76	
Acenapthene	<0.001	0.013	**0.28**[a]
Acenaphthylene	0.002	0.041	**320**[a]
Anthracene	0.002	0.055	**32**[b]
Fluoranthene	0.005	0.20	**180**[b]
Fluorene	0.001	0.019	**0.25**[a]
2-Methylnaphthalene	0.004	0.18	**NG**
Naphthalene	0.003	**0.11**	**0.013**[a]
Phenanthrene	0.006	**0.21**	**0.046**[a]
Pyrene	0.006	0.20	**100**[c]

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Protection of Freshwater Life.
[b] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Soil Contact.
[c] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Interim Soil Quality Guideline (CCME 1991).

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.6 B. Soil Laboratory Analysis Results - Non-Carcinogenic PAH - Solvent AST Area

Sample ID	G-44-02	G-45-01	G-47-02	BH-56	CCME SQG
Date Sampled	10/20/2010	10/20/2010	10/20/2010	1999	
Sample Depth (m)	1.52	0.76	1.52	0.6	
Acenapthene	**2.6**	**0.76**	0.003	**0.30**	**0.28**[a]
Acenaphthylene	<1	0.07	0.002	0.200	**320**[a]
Anthracene	3.4	1.3	0.008	5.100	**32**[b]
Fluoranthene	3.1	8.3	0.025	3.700	**180**[b]
Fluorene	**6.4**	**0.73**	0.006	**0.30**	**0.25**[a]
2-Methylnaphthalene	25	0.82	0.011	-	**NG**
Naphthalene	**<3** [1]	**0.62**	0.006	**3.00**	**0.013**[a]
Phenanthrene	**15**	**6.80**	0.025	**5.10**	**0.046**[a]
Pyrene	13	6.4	0.024	3.300	**100**[c]

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Protection of Freshwater Life.
[b] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Soil Contact.
[c] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Interim Soil Quality Guideline (CCME 1991).
[1] RDL raised due to sample matrix interference.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.6 C. Soil Laboratory Analysis Results - Non-Carcinogenic PAH - Former Saskatchewan Avenue Landfill

Sample ID	G-70-02	G-73-01	CCME SQG
Date Sampled	10/19/2010	10/19/2010	
Sample Depth (m)	1.52	0.76	
Acenapthene	<0.001	0.029	**0.28[a]**
Acenaphthylene	<0.001	0.028	**320[a]**
Anthracene	<0.001	0.076	**32[b]**
Fluoranthene	<0.001	0.49	**180[b]**
Fluorene	<0.001	0.034	**0.25[a]**
2-Methylnaphthalene	<0.001	0.075	**NG**
Naphthalene	<0.001	**0.057**	**0.013[a]**
Phenanthrene	0.001	**0.29**	**0.046[a]**
Pyrene	<0.001	0.47	**100[c]**

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Protection of Freshwater Life.
[b] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Soil Contact.
[c] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Interim Soil Quality Guideline (CCME 1991).

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NG - No guideline.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.6 D. Soil Laboratory Analysis Results - Non-Carcinogenic PAH - Polychlorinated Biphenyls Storage Area

Sample ID	G-78-03	G-78-06	CCME SQG
Date Sampled	10/20/2010	10/20/2010	
Sample Depth (m)	2.29	4.57	
Acenapthene	0.022	<0.001	**0.28**[a]
Acenaphthylene	0.010	<0.001	**320**[a]
Anthracene	0.058	0.002	**32**[b]
Fluoranthene	0.35	0.013	**180**[b]
Fluorene	0.023	<0.001	**0.25**[a]
2-Methylnaphthalene	0.019	0.002	**NG**
Naphthalene	**0.020**	0.002	**0.013**[a]
Phenanthrene	**0.25**	0.009	**0.046**[a]
Pyrene	0.30	0.014	**100**[c]

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Protection of Freshwater Life.
[b] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Soil Contact.
[c] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Interim Soil Quality Guideline (CCME 1991).

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NA - Not applicable.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.6 E. Soil Laboratory Analysis Results - Non-Carcinogenic PAH - South Crane Runway

Sample ID	TP10-01-01	TP10-01-02	TP10-02-01	TP10-02-02	TP10-03-01	TP10-03-02	CCME SQG
Date Sampled	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	
Sample Depth (m)	0.15	0.6	0.15	0.6	0.15	0.6	
Acenapthene	0.10	0.007	**16**	**6.6**	**0.64**	0.084	**0.28**[a]
Acenaphthylene	0.074	<0.01 [1]	2.0	0.5	0.52	0.015	**320**[a]
Anthracene	0.23	0.016	**33**	10	2.3	0.096	**32**[b]
Fluoranthene	1.0	0.070	170	54	14	0.28	**180**[b]
Fluorene	0.13	0.012	**15**	**4.3**	**0.60**	0.081	**0.25**[a]
2-Methylnaphthalene	1.3	0.49	5.5	1.9	0.29	0.014	**NG**
Naphthalene	**0.84**	**0.27**	**8.7**	**3.1**	**0.61**	**0.013**	**0.013**[a]
Phenanthrene	**1.3**	**0.21**	**140**	**48**	**4.8**	**0.27**	**0.046**[a]
Pyrene	0.89	0.069	**140**	48	13	0.21	**100**[c]

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Protection of Freshwater Life.
[b] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Soil Contact.
[c] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use, Interim Soil Quality Guideline (CCME 1991).
[1] RDL raised due to sample matrix interference.

Notes:
1. All results and soil quality guidelines in mg/kg.
2. NA - Not applicable.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.7 A. Soil Laboratory Analysis Results - Carcinogenic PAH - Paint Shop UST Area

Sample ID	G-06-03	G-08-01	**Benzo(a)pyrene PEF[c]**	**CCME SQG [a]**
Date Sampled	10/20/2010	10/20/2010		
Sample Depth (m)	2.29	0.76		
Benzo(a)anthracene	0.004	0.088	0.1	
Benzo(a)pyrene	0.004	0.098	1	
Benzo(b/j)fluoranthene	0.005	0.17	0.1	
Benzo(g,h,i)perylene	0.003	0.13	0.01	
Benzo(k)fluoranthene	0.003	0.057	0.1	**0.6[b]**
Chrysene	0.005	0.096	0.01	
Dibenz(a,h)anthracene	<0.002	0.027	1	
Indeno(1,2,3-cd)pyrene	0.003	0.20	0.1	
Calculated Benzo(a)pyrene TPE[c]	0.02274	0.53628		

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use.
[b] Value based on inhalation for an Incremental Lifetime Cancer Risk (ILCR) of 10^{-6}.
[c] Total Potency Equivalent (TPE) is equal to the summation of the concentration of each parameter, multiplied by the respective PEF (Potency Equivalance Factor).
[d] The TPE was multiplied an Uncertainty Factor (UF) of 3 to account for carcinogenic potential of alkylated and other PAHs present as a result of the suspected creosote treated timbers at the site.

Notes:
1. All results and soil quality guidelines in mg/kg.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.7 B. Soil Laboratory Analysis Results - Carcinogenic PAH - Solvent AST Area

Sample ID	G-44-02	G-45-01	G-47-02	BH-56	Benzo(a)pyrene PEF[c]	CCME SQG [a]
Date Sampled	10/20/2010	10/20/2010	10/20/2010	6/21/1905		
Sample Depth (m)	1.52	0.76	1.52	0.6		
Benzo(a)anthracene	5.5	2.5	0.011	3.3	0.1	
Benzo(a)pyrene	2.6	2.2	0.011	1.2	1	
Benzo(b/j)fluoranthene	1.6	2.5	0.015	-	0.1	
Benzo(g,h,i)perylene	0.9	1.6	0.016	1.5	0.01	
Benzo(k)fluoranthene	0.65	1.6	0.007	2.2	0.1	**0.6[b]**
Chrysene	6.1	2.7	0.019	3.3	0.01	
Dibenz(a,h)anthracene	0.33	0.34	0.003	0.2	1	
Indeno(1,2,3-cd)pyrene	0.72	1.8	0.009	1.1	0.1	
Calculated Benzo(a)pyrene TPE[c,d]	**11.540**	**10.269**	0.056	**6.324**		

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use.

[b] Value based on inhalation for an Incremental Lifetime Cancer Risk (ILCR) of 10^{-6}.

[c] Total Potency Equivalent (TPE) is equal to the summation of the concentration of each parameter, multiplied by the respective PEF (Potency Equivalance Factor).

[d] The TPE was multiplied an Uncertainty Factor (UF) of 3 to account for carcinogenic potential of alkylated and other PAHs present as a result of the suspected creosote treated timbers at the site.

Notes:

1. All results and soil quality guidelines in mg/kg.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.7 C. Soil Laboratory Analysis Results - Carcinogenic PAH - Former Saskatchewan Avenue Landfill

Sample ID	G-70-02	G-73-01	**Benzo(a)pyrene PEF[c]**	**CCME SQG [a]**
Date Sampled	10/19/2010	10/19/2010		
Sample Depth (m)	1.52	0.76		
Benzo(a)anthracene	<0.001	0.24	0.1	
Benzo(a)pyrene	<0.001	0.21	1	
Benzo(b/j)fluoranthene	<0.001	0.26	0.1	
Benzo(g,h,i)perylene	<0.002	0.13	0.01	
Benzo(k)fluoranthene	<0.001	0.14	0.1	**0.6[b]**
Chrysene	<0.001	0.24	0.01	
Dibenz(a,h)anthracene	<0.002	0.039	1	
Indeno(1,2,3-cd)pyrene	<0.002	0.18	0.1	
Calculated Benzo(a)pyrene TPE[c]	<0.01059	**1.0041**		

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use.
[b] Value based on inhalation for an Incremental Lifetime Cancer Risk (ILCR) of 10^{-6}.
[c] Total Potency Equivalent (TPE) is equal to the summation of the concentration of each parameter, multiplied by the respective PEF (Potency Equivalance Factor).
[d] The TPE was multiplied an Uncertainty Factor (UF) of 3 to account for carcinogenic potential of alkylated and other PAHs present as a result of the suspected creosote treated timbers at the site.

Notes:
1. All results and soil quality guidelines in mg/kg.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.7 D. Soil Laboratory Analysis Results - Carcinogenic PAH - Polychlorinated Biphenyls Storage Area

Sample ID	G-78-03	G-78-06	**Benzo(a)pyrene PEF[c]**	**CCME SQG [a]**
Date Sampled	10/20/2010	10/20/2010		
Sample Depth (m)	2.29	4.57		
Benzo(a)anthracene	0.13	0.006	0.1	
Benzo(a)pyrene	0.13	0.005	1	
Benzo(b/j)fluoranthene	0.16	0.019	0.1	
Benzo(g,h,i)perylene	0.092	0.008	0.01	
Benzo(k)fluoranthene	0.091	0.004	0.1	**0.6[b]**
Chrysene	0.15	0.015	0.01	
Dibenz(a,h)anthracene	0.021	<0.002	1	
Indeno(1,2,3-cd)pyrene	0.089	0.005	0.1	
Calculated Benzo(a)pyrene TPE[c]	0.5443	0.03189		

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use.

[b] Value based on inhalation for an Incremental Lifetime Cancer Risk (ILCR) of 10^{-6}.

[c] Total Potency Equivalent (TPE) is equal to the summation of the concentration of each parameter, multiplied by the respective PEF (Potency Equivalance Factor).

[d] The TPE was multiplied an Uncertainty Factor (UF) of 3 to account for carcinogenic potential of alkylated and other PAHs present as a result of the suspected creosote treated timbers at the site.

Notes:

1. All results and soil quality guidelines in mg/kg.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.7 E. Soil Laboratory Analysis Results - Carcinogenic PAH - South Crane Runway

Sample ID	TP10-01-01	TP10-01-02	TP10-02-01	TP10-02-02	TP10-03-01	TP10-03-02	**Benzo(a)pyrene PEF[c]**	**CCME SQG [a]**
Date Sampled	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010	11/4/2010		
Sample Depth (m)	0.15	0.60	0.15	0.60	0.15	0.60		
Benzo(a)anthracene	0.045	0.46	56	15	4.2	0.062	0.1	
Benzo(a)pyrene	0.065	0.56	56	16	6.8	0.10	1	
Benzo(b/j)fluoranthene	0.051	0.66	71	23	12	0.094	0.1	
Benzo(g,h,i)perylene	0.011	0.19	24	6.1	2.5	0.030	0.01	
Benzo(k)fluoranthene	0.035	0.4	52	16	4.1	0.038	0.1	**0.6[b]**
Chrysene	0.025	0.31	39	12	3.6	0.029	0.01	
Dibenz(a,h)anthracene	0.008	0.08	8	2	0.77	0.006	1	
Indeno(1,2,3-cd)pyrene	0.029	0.3	36	11	3	0.025	0.1	
Calculated Benzo(a)pyrene TPE[c]	0.250	**2.25**	**234.4**	**68.0**	**27.6**	0.373		

[a] Canadian Council of Ministers of Environment (CCME) Soil Quality Guidelines (2010) - Industrial Land Use.

[b] Value based on inhalation for an Incremental Lifetime Cancer Risk (ILCR) of 10^{-6}.

[c] Total Potency Equivalent (TPE) is equal to the summation of the concentration of each parameter, multiplied by the respective PEF (Potency Equivalance Factor).

[d] The TPE was multiplied an Uncertainty Factor (UF) of 3 to account for carcinogenic potential of alkylated and other PAHs present as a result of the suspected creosote treated timbers at the site.

Notes:

1. All results and soil quality guidelines in mg/kg.

XX	Applicable Soil Quality Guideline.
XX	Exceeds Applicable Soil Quality Guideline.

Table 4.8. Groundwater Laboratory Analysis Results - Hydrocarbons

		Petroleum Hydrocarbon Fractions				BTEX			
Sample ID	Date Sampled	F1	F2	F3	F4	Benzene	Toluene	Ethylbenzene	Xylenes
1. Gate Shop UST Area									
MW10-01	10/29/2010	<0.300	<0.08	<0.08	<3	0.0004	<0.0004	<0.0004	<0.0004
MW10-03	10/29/2010	<0.300	4.2	1.8	<3	<0.0004	<0.0006 [1]	0.0078	0.0027
MW10-13 (duplicate of MW10-03)	10/29/2010	<0.300	3.6	1.4	<3	<0.0005 [1]	<0.0004	0.0083	0.0019
BH-2	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0005 [2]	<0.0004	<0.0004
MW-8 (BH-4)	1999	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0004	<0.0004	<0.0004
BH-61	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0004	<0.0004	<0.0004
BH-62	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0004	<0.0004	<0.0004
BH-63	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0004	<0.0004	<0.0004
2. Paint Shop UST Area									
MW10-06	11/1/2010	-	<0.08	<0.08	<3	<0.0005	<0.0005	<0.0005	<0.001
MW10-26 (duplicate of MW10-06)	11/1/2010	-	<0.08	<0.08	<3	<0.0005	<0.0005	<0.0005	<0.001
MW10-08	11/1/2010	-	<0.08	<0.08	<3	<0.0005	<0.0005	<0.0005	<0.001
MW10-15 (BH-15)	1999	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
	11/1/2010	<0.300	<0.08	<0.08	<3	<0.0005	<0.0005	<0.0005	<0.001
3. North Property Line UST Area									
MW10-10	11/1/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0004	<0.0004	0.0004
MW10-20 (duplicate of MW10-10)	11/1/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0004	<0.0004	<0.0004
MW-16 (BH-16)	1999	-	-	-	-	<0.0005	<0.0005	<0.0005	<0.0005
4. Waste Oil Drum Storage Area									
MW10-14	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0004	<0.0004	0.0006
MW10-15	11/4/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0004	<0.0004	<0.0004
MW10-21	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
MW10-21A (duplicate of MW10-21)	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
MW10-22A	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
MW10-23	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
MW10-25	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
6. Solvent AST Area									
MW10-44	11/1/2010	-	6.4	6.7	<3	<0.0005	<0.0005	0.0005	0.003
MW10-54 (duplicate of MW10-44)	11/1/2010	-	5.7	5.9	<3	<0.0005	<0.0005	0.0005	0.003
MW10-45	11/1/2010	-	<0.08	<0.08	<3	<0.0005	<0.0005	<0.0005	<0.001
MW-8 (BH-8)	1999	-	-	-	-	<0.0005	**0.0074**	<0.0005	<0.0005
	11/1/2010	-	<0.08	<0.08	<3	<0.0005	<0.0005	<0.0005	<0.001
7. Sulphuric Acid Drum Storage Area									
MW10-49	11/1/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
MW10-53	11/1/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
9. Diesel and Gasoline AST Area									
MW10-59	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	0.0005
MW10-61	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
MW10-62	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
MW10-72 (duplicate of MW10-62)	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
10. Waste Paint Storage Area									
MW10-67	11/1/2010	<0.300	<0.08	<0.08	<3	0.0006	<0.0008 [2]	<0.0004	<0.0004
MW10-69	11/1/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
MW10-99 (dup of MW10-69)	11/1/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
11. Former Saskatchewan Avenue Landfill Area									
MW10-72	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
TRIP BLANK	10/29/2010	<0.300	<0.08	<0.08	<3	<0.0004	<0.0008 [2]	<0.0004	<0.0004
Environmental Quality Guidelines									
CCME Protection of Aquatic Life[a]		**NG**	**NG**	**NG**	**NG**	**0.370**	**0.0020**	**0.090**	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

[1] RDL raised due to sample matrix interference.

[2] RDL raised due to background artifacts detected in analysis.

Notes:

1. All results and groundwater quality guidelines in mg/L.
2. NG - No guideline.

XX	Applicable water quality guideline.
XX	Exceeds applicable water quality guideline.

Table 4.9 A. Groundwater Laboratory Analysis Results - Metals - Paint Shop UST Area

Monitoring Well	MW10-06	MW10-26 (dup of MW10-06)	MW10-08	BH-15	CCME WQG [a]
Date Sampled:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	
Total Lead (Pb)	**0.0169**	**0.0168**	**0.0029**	**0.005**	**0.001**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:
1. All results and groundwater quality guidelines in mg/L.

Table 4.9 B. Groundwater Laboratory Analysis Results - Metals - North Propery Line UST Area

Monitoring Well	MW10-10	MW10-20 (dup of MW10-10)	
Date Sampled:	11/1/2010	11/1/2010	**CCME WQG [a]**
Total Aluminum (Al)	**14.6**	**14.4**	**0.005**
Total Antimony (Sb)	0.0006	0.0006	**NG**
Total Arsenic (As)	**0.0072**	**0.0068**	**0.005**
Total Barium (Ba)	0.308	0.297	**NG**
Total Beryllium (Be)	0.0007	0.0006	**NG**
Total Bismuth (Bi)	<0.001	<0.001	**NG**
Total Boron (B)	2.64	2.71	**NG**
Total Cadmium (Cd)	**0.00031**	**0.00032**	**0.000017**
Total Calcium (Ca)	364	432	**NG**
Total Chromium (Cr)	**0.03**	**0.029**	**0.0089**
Total Cobalt (Co)	0.0085	0.0088	**NG**
Total Copper (Cu)	**0.0307**	**0.0300**	**0.002**
Total Iron (Fe)	**18.8**	**18.0**	**0.300**
Total Lead (Pb)	**0.0524**	**0.0499**	**0.001**
Total Lithium (Li)	0.317	0.322	**NG**
Total Magnesium (Mg)	426	432	**NG**
Total Manganese (Mn)	0.574	0.556	**NG**
Total Mercury (Hg)	<0.00002	NA	**0.000026**
Total Molybdenum (Mo)	0.005	0.004	**0.073**
Total Nickel (Ni)	**0.029**	**0.029**	**0.025**
Total Potassium (K)	7.59	7.64	**NG**
Total Selenium (Se)	0.0004	0.0004	**0.001**
Total Silicon (Si)	41.6	40.4	**NG**
Total Silver (Ag)	**0.00014**	**0.00015**	**0.0001**
Total Sodium (Na)	291	298	**NG**
Total Strontium (Sr)	1.80	1.78	**NG**
Total Sulphur (S)	175	176	**NG**
Total Thallium (Tl)	0.00027	0.00026	**0.0008**
Total Tin (Sn)	<0.005	<0.005	**NG**
Total Titanium (Ti)	0.713	0.691	**NG**
Total Uranium (U)	0.0442	0.0432	**NG**
Total Vanadium (V)	0.046	0.045	**NG**
Total Zinc (Zn)	**0.103**	**0.102**	**0.03**
Total Zirconium (Zr)	0.0154	0.0127	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:

1. All results and groundwater quality guidelines in mg/L.

Table 4.9 C. Groundwater Laboratory Analysis Results - Metals - Landfilling Area

Monitoring Well	MW10-28	MW10-38 (dup of MW10-28)	MW10-30	MW10-33	MW10-40	MW10-42	MW10-43	CCME WQG [a]
Date Sampled:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	
Total Aluminum (Al)	**14.6**	**15.8**	**15**	**23.8**	**3.74**	**3.44**	**2.06**	**0.005**
Total Antimony (Sb)	0.0012	0.0012	0.0006	0.0006	<0.0005	0.0009	<0.0005	**NG**
Total Arsenic (As)	**0.0106**	0.0	**0.007**	**0.0112**	0.0027	0.0027	0.0019	**0.005**
Total Barium (Ba)	0.17	0.187	0.206	0.256	0.074	0.079	0.038	**NG**
Total Beryllium (Be)	0.0008	0.0008	0.0007	0.0011	0.0002	0.0002	0.0001	**NG**
Total Bismuth (Bi)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Total Boron (B)	1.13	1.11	0.397	0.36	0.097	0.247	0.166	**NG**
Total Cadmium (Cd)	**0.00051**	**0.0004**	**0.00037**	**0.00067**	**0.00012**	**0.00009**	**0.00008**	**0.000017**
Total Calcium (Ca)	584	478	297	453	116	132	236	**NG**
Total Chromium (Cr)	**0.036**	**0.037**	**0.028**	**0.06**	0.007	0.008	0.005	**0.0089**
Total Cobalt (Co)	0.0127	0.0122	0.0087	0.012	0.0023	0.0018	0.0017	**NG**
Total Copper (Cu)	**0.0382**	**0.039**	**0.0261**	**0.0551**	**0.0103**	**0.0086**	**0.0088**	**0.002**
Total Iron (Fe)	**25.7**	**26.2**	**19.7**	**36.9**	**5.41**	**4.17**	**2.75**	**0.300**
Total Lead (Pb)	**0.0377**	**0.0307**	**0.0194**	**0.0292**	**0.0034**	**0.0076**	**0.0021**	**0.001**
Total Lithium (Li)	0.564	0.544	0.434	0.296	0.524	0.236	0.177	**NG**
Total Magnesium (Mg)	844	744	422	471	291	261	335	**NG**
Total Manganese (Mn)	1.45	1.18	0.528	0.649	0.102	0.104	0.225	**NG**
Total Mercury (Hg)	<0.00002	<0.00002	<0.00002	<0.00002	0.00002	<0.00002	<0.00002	**0.000026**
Total Molybdenum (Mo)	0.036	0.036	0.02	0.006	0.012	0.008	0.006	**0.073**
Total Nickel (Ni)	**0.04**	**0.04**	**0.026**	**0.055**	0.008	0.007	0.01	**0.025**
Total Potassium (K)	39.2	36.2	6.98	8.03	3.75	2.23	4.33	**NG**
Total Selenium (Se)	**0.0025**	**0.0022**	**0.0224**	**0.0027**	**0.0027**	**0.0027**	**0.0017**	**0.001**
Total Silicon (Si)	37.4	40.3	39.8	53.9	14.8	11.1	11.3	**NG**
Total Silver (Ag)	**0.00011**	**0.00011**	0.00007	**0.00014**	0.00003	0.00002	<0.00002	**0.0001**
Total Sodium (Na)	841	771	464	207	335	201	338	**NG**
Total Strontium (Sr)	1.96	1.81	1.17	1.62	1.03	1.04	1.46	**NG**
Total Sulphur (S)	904	817	479	377	434	300	548	**NG**
Total Thallium (Tl)	0.00029	0.0003	0.00029	0.00042	0.00008	0.00008	<0.00005	**0.0008**
Total Tin (Sn)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**NG**
Total Titanium (Ti)	0.702	0.832	0.641	0.883	0.151	0.147	0.107	**NG**
Total Uranium (U)	0.0332	0.0312	0.137	0.0	0.1	0.0507	0.0441	**NG**
Total Vanadium (V)	0.073	0.071	0.045	0.07	0.013	0.02	0.009	**NG**
Total Zinc (Zn)	**0.303**	**0.25**	**0.063**	**0.746**	0.022	0.019	0.011	**0.03**
Total Zirconium (Zr)	0.0	0.0263	0.0135	0.0	0.0048	0.0035	0.0042	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:

1. All results and groundwater quality guidelines in mg/L.
2. NA - Not analyzed.
3. NG - No guideline.

Table 4.9 D. Groundwater Laboratory Analysis Results - Metals - Sulphuric Acid Drum Storage Area

Monitoring Well	MW10-49	MW10-59 (dup of MW10-49)	MW10-53	MW-44	MW-45	CCME WQG [a]
Date Sampled:	11/1/2010	11/1/2010	11/1/2010	1999	1999	
Total Aluminum (Al)	**14.9**	**9.95**	**0.078**	**20.1**	**1.94**	**0.005**
Total Antimony (Sb)	<0.0005	<0.0005	0.0009	0.001	0.001	**NG**
Total Arsenic (As)	**0.0067**	**0.0051**	0.0004	**0.0054**	0.0017	**0.005**
Total Barium (Ba)	0.252	0.199	0.023	0.21	0.0868	**NG**
Total Beryllium (Be)	0.0009	0.0006	<0.0001	<0.001	<0.001	**NG**
Total Bismuth (Bi)	<0.001	<0.001	<0.001	NA	NA	**NG**
Total Boron (B)	0.184	0.174	0.078	0.23	0.33	**NG**
Total Cadmium (Cd)	**0.00026**	**0.00024**	**0.00004**	**0.0006**	**<0.0002**	**0.000017**
Total Calcium (Ca)	349	342	42.2	226	124	**NG**
Total Chromium (Cr)	**0.033**	**0.023**	0.006	**7.15**	**0.011**	**0.0089**
Total Cobalt (Co)	0.0079	0.0058	<0.0005	0.0074	0.0027	**NG**
Total Copper (Cu)	**0.0255**	**0.0203**	**0.0049**	**0.032**	**0.009**	**0.002**
Total Iron (Fe)	**19.9**	**14.1**	0.192	**17.6**	**1.79**	**0.300**
Total Lead (Pb)	**0.0172**	**0.015**	0.0006	**0.093**	**0.0052**	**0.001**
Total Lithium (Li)	0.141	0.132	0.032	NA	NA	**NG**
Total Magnesium (Mg)	283	263	22.9	259	225	**NG**
Total Manganese (Mn)	0.385	0.318	0.094	0.303	0.41	**NG**
Total Mercury (Hg)	<0.00002	<0.00002	<0.00002	NA	NA	**0.000026**
Total Molybdenum (Mo)	0.004	0.004	0.007	0.006	0.0036	**0.073**
Total Nickel (Ni)	**0.026**	0.02	0.003	**0.026**	0.013	**0.025**
Total Potassium (K)	5.40	4.09	3.95	8.65	1.96	**NG**
Total Selenium (Se)	**0.0054**	**0.0054**	**0.0021**	**0.004**	**0.003**	**0.001**
Total Silicon (Si)	38.2	27.5	4.41	NA	NA	**NG**
Total Silver (Ag)	0.00009	0.00006	<0.00002	**<0.0004**	**<0.0004**	**0.0001**
Total Sodium (Na)	199	188	53.8	189	96.7	**NG**
Total Strontium (Sr)	1.1	1.06	0.23	1.45	0.942	**NG**
Total Sulphur (S)	217	0.208	42	NA	NA	**NG**
Total Thallium (Tl)	0.00031	0.00019	0.00008	0.0003	<0.0001	**0.0008**
Total Tin (Sn)	<0.005	<0.005	<0.005	0.0035	0.0007	**NG**
Total Titanium (Ti)	0.692	0.437	<0.005	NA	NA	**NG**
Total Uranium (U)	0.0244	0.0232	0.0024	NA	NA	**NG**
Total Vanadium (V)	0.048	0.035	<0.005	<0.001	0.01	**NG**
Total Zinc (Zn)	**0.172**	**0.153**	**1.63**	**0.89**	**0.42**	**0.03**
Total Zirconium (Zr)	0.01	0.0069	<0.005	NA	NA	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:

1. All results and groundwater quality guidelines in mg/L.
2. NA - Not analyzed.
3. NG - No guideline.

Table 4.9 E. Groundwater Laboratory Analysis Results - Metals - Waste Paint Storage Area

Monitoring Well	MW10-67	MW10-69	MW10-99 (dup of MW10-69)	
Date Sampled:	11/1/2010	11/1/2010	11/1/2010	CCME WQG [a]
Total Aluminum (Al)	**3.62**	**0.369**	**0.367**	**0.005**
Total Antimony (Sb)	<0.0005	<0.0006	<0.0005	**NG**
Total Arsenic (As)	**0.0022**	0.0007	0.0007	**0.005**
Total Barium (Ba)	0.098	0.083	0.078	**NG**
Total Beryllium (Be)	0.0002	<0.0001	<0.0001	**NG**
Total Bismuth (Bi)	<0.001	<0.001	<0.001	**NG**
Total Boron (B)	0.215	1.25	1.24	**NG**
Total Cadmium (Cd)	**0.00007**	**0.00003**	**0.00002**	**0.000017**
Total Calcium (Ca)	77.4	102	99.5	**NG**
Total Chromium (Cr)	0.007	0.002	0.002	**0.0089**
Total Cobalt (Co)	0.0016	<0.0005	<0.0005	**NG**
Total Copper (Cu)	**0.01**	**0.0034**	**0.0029**	**0.002**
Total Iron (Fe)	**4.17**	**0.621**	**0.588**	**0.300**
Total Lead (Pb)	**0.0044**	**0.0023**	**0.0023**	**0.001**
Total Lithium (Li)	0.046	0.254	0.25	**NG**
Total Magnesium (Mg)	52.4	172	170	**NG**
Total Manganese (Mn)	0.08	0.126	0.124	**NG**
Total Mercury (Hg)	<0.00002	<0.00002	<0.00002	**0.000026**
Total Molybdenum (Mo)	0.004	0.013	0.013	**0.073**
Total Nickel (Ni)	0.006	0.009	0.008	**0.025**
Total Potassium (K)	2.42	1.91	1.85	**NG**
Total Selenium (Se)	0.0009	0.0001	0.0001	**0.001**
Total Silicon (Si)	11.6	11.3	11.1	**NG**
Total Silver (Ag)	0.00003	<0.00002	<0.00002	**0.0001**
Total Sodium (Na)	29.0	68.0	66.7	**NG**
Total Strontium (Sr)	0.31	0.888	0.841	**NG**
Total Sulphur (S)	15	46	40	**NG**
Total Thallium (Tl)	0.00006	<0.00005	<0.00005	**0.0008**
Total Tin (Sn)	<0.005	<0.005	<0.005	**NG**
Total Titanium (Ti)	0.177	0.012	0.013	**NG**
Total Uranium (U)	0.0035	0.0	0.0345	**NG**
Total Vanadium (V)	0.012	<0.005	<0.005	**NG**
Total Zinc (Zn)	**0.07**	**0.069**	**0.075**	**0.03**
Total Zirconium (Zr)	0.0029	0.0013	0.0012	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:

1. All results and groundwater quality guidelines in mg/L.
2. NA - Not analyzed.
3. NG - No guideline.

Table 4.9 F. Groundwater Laboratory Analysis Results - Metals - Former Saskatchewan Avenue Landfill

Monitoring Well	MW10-70	MW10-71	MW10-81 (duplicate of MW10-71)	
Date Sampled:	11/1/2010	10/29/2010	10/29/2010	CCME WQG [a]
Total Aluminum (Al)	**2.38**	**0.137**	**0.091**	**0.005**
Total Antimony (Sb)	0.0005	<0.0005	<0.0005	**NG**
Total Arsenic (As)	0.0016	0.0008	0.0009	**0.005**
Total Barium (Ba)	0.056	0.05	0.048	**NG**
Total Beryllium (Be)	0.0001	<0.0001	<0.0001	**NG**
Total Bismuth (Bi)	<0.001	<0.001	<0.001	**NG**
Total Boron (B)	0.416	1.05	1.04	**NG**
Total Cadmium (Cd)	**0.00006**	**0.00002**	**0.00002**	**0.000017**
Total Calcium (Ca)	181	116	112	**NG**
Total Chromium (Cr)	0.005	0.001	<0.001	**0.0089**
Total Cobalt (Co)	0.0014	<0.0005	<0.0005	**NG**
Total Copper (Cu)	**0.0057**	**0.0022**	**0.0021**	**0.002**
Total Iron (Fe)	**3.21**	0.185	0.12	**0.300**
Total Lead (Pb)	**0.0051**	0.0007	0.0003	**0.001**
Total Lithium (Li)	0.245	0.386	0.379	**NG**
Total Magnesium (Mg)	294	267	257	**NG**
Total Manganese (Mn)	0.122	0.016	0.013	**NG**
Total Mercury (Hg)	<0.00002	<0.00002	<0.00002	**0.000026**
Total Molybdenum (Mo)	0.005	0.003	0.003	**0.073**
Total Nickel (Ni)	0.007	0.003	0.002	**0.025**
Total Potassium (K)	3.13	1.12	1.08	**NG**
Total Selenium (Se)	**0.0017**	0.0008	0.0007	**0.001**
Total Silicon (Si)	15.2	5.27	5.14	**NG**
Total Silver (Ag)	0.00002	<0.00002	<0.00002	**0.0001**
Total Sodium (Na)	325	218	211	**NG**
Total Strontium (Sr)	1.13	1.02	0.994	**NG**
Total Sulphur (S)	257	125	123	**NG**
Total Thallium (Tl)	0.00006	<0.00005	<0.00005	**0.0008**
Total Tin (Sn)	<0.005	<0.005	<0.005	**NG**
Total Titanium (Ti)	0.119	0.006	0.005	**NG**
Total Uranium (U)	0.0263	0.0485	0.0476	**NG**
Total Vanadium (V)	0.01	0.008	0.007	**NG**
Total Zinc (Zn)	**0.034**	0.006	<0.005	**0.03**
Total Zirconium (Zr)	0.0036	0.0014	0.0015	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:

1. All results and groundwater quality guidelines in mg/L.
2. NA - Not analyzed.
3. NG - No guideline.

Table 4.9 G. Groundwater Laboratory Analysis Results - Metals - Polychlorinated Biphenyls Storage Area

Monitoring Well	MW10-77	MW10-87 (duplicate of MW10-77)	MW10-79	
Date Sampled:	10/29/2010	10/29/2010	10/29/2010	CCME WQG [a]
Total Aluminum (Al)	**39.2**	**41.5**	**2.54**	**0.005**
Total Antimony (Sb)	0.0009	0.0009	0.0016	**NG**
Total Arsenic (As)	**0.0225**	**0.0191**	0.0025	**0.005**
Total Barium (Ba)	0.405	0.391	0.104	**NG**
Total Beryllium (Be)	0.0022	0.0018	<0.0001	**NG**
Total Bismuth (Bi)	<0.001	<0.001	<0.001	**NG**
Total Boron (B)	1.06	1.03	1.11	**NG**
Total Cadmium (Cd)	**0.00128**	**0.00113**	**0.00037**	**0.000017**
Total Calcium (Ca)	671	588	164	**NG**
Total Chromium (Cr)	**0.121**	**0.102**	**0.037**	**0.0089**
Total Cobalt (Co)	0.0285	0.0229	0.0045	**NG**
Total Copper (Cu)	**0.129**	**0.103**	**0.032**	**0.002**
Total Iron (Fe)	**69**	**68.1**	**19.8**	**0.300**
Total Lead (Pb)	**0.173**	**0.125**	**0.3**	**0.001**
Total Lithium (Li)	0.343	0.338	0.405	**NG**
Total Magnesium (Mg)	546	455	326	**NG**
Total Manganese (Mn)	1.98	1.57	0.246	**NG**
Total Mercury (Hg)	<0.00002	**0.00013**	0.00003	**0.000026**
Total Molybdenum (Mo)	0.014	0.014	0.008	**0.073**
Total Nickel (Ni)	**0.109**	**0.091**	**0.028**	**0.025**
Total Potassium (K)	14.0	13.0	17.8	**NG**
Total Selenium (Se)	**0.0089**	**0.0091**	**0.0056**	**0.001**
Total Silicon (Si)	74	82.2	10.2	**NG**
Total Silver (Ag)	**0.00042**	**0.00048**	0.00005	**0.0001**
Total Sodium (Na)	241	223	302	**NG**
Total Strontium (Sr)	1.52	1.54	1.26	**NG**
Total Sulphur (S)	304	281	269	**NG**
Total Thallium (Tl)	**0.00083**	**0.00081**	0.00017	**0.0008**
Total Tin (Sn)	<0.005	<0.005	<0.005	**NG**
Total Titanium (Ti)	1.39	1.29	0.074	**NG**
Total Uranium (U)	0.0625	0.0648	0.0559	**NG**
Total Vanadium (V)	0.126	0.115	0.013	**NG**
Total Zinc (Zn)	**1.14**	**0.663**	**3.54**	**0.03**
Total Zirconium (Zr)	0.0189	0.0135	0.0068	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:

1. All results and groundwater quality guidelines in mg/L.
2. NA - Not analyzed.
3. NG - No guideline.

Table 4.10 A. Groundwater Laboratory Analysis Results - PCB - Landfilling Area

Monitoring Well	MW10-28	MW10-30	MW10-33	MW10-38	MW10-40	MW10-42	MW10-43
Date Sampled	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010
Aroclor 1242	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Aroclor 1248	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Aroclor 1254	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Aroclor 1260	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010

Notes:
1. All results in mg/L.

Table 4.10 B. Groundwater Laboratory Analysis Results - PCB - Polychlorinated Biphenyls Storage Area

Monitoring Well	**MW10-77**	**MW10-87** (dup of MW10-77)	**MW10-79**
Date Sampled	10/29/2010	10/29/2010	10/29/2010
Aroclor 1242	<0.00010	<0.00010	<0.00010
Aroclor 1248	<0.00010	<0.00010	<0.00010
Aroclor 1254	0.00044	0.00037	<0.00010
Aroclor 1260	<0.00010	<0.00010	<0.00010

Notes:
1. All results in mg/L.

Table 4.11 A. Groundwater Laboratory Analysis Results - VOC - Paint Shop UST Area

Monitoring Well	MW10-06	MW10-26	MW10-08	BH-15	MW10-26	MW10-44	MW10-45	BH-8	MW10-54	CCME
Date Sampled:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	11/1/2010	WQG [a]
Chloromethane	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Vinyl chloride	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
Chloroethane	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Trichlorofluoromethane	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**NG**
1,1,2Trichloro-1,2,2Trifluoroethane	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	**NG**
Dichlorodifluoromethane	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	**NG**
1,1-dichloroethene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
Dichloromethane	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	**0.0981**
trans-1,2-dichloroethene	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
1,1-dichloroethane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
cis-1,2-dichloroethene	<0.001	<0.001	<0.001	<0.001	<0.001	0.004	<0.001	<0.001	0.004	**NG**
Chloroform (trichloromethane)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.0018**
1,1,1-trichloroethane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
1,2-dichloroethane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.100**
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**0.0133**
Benzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.370**
Methyl-tert-butylether (MTBE)	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	**10.000**
1,2-dichloropropane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
cis-1,3-dichloropropene	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
trans-1,3-dichloropropene	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Bromomethane	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
1,1,2-trichloroethene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.021**
Trichloroethene	0.0021	0.0013	<0.0005	<0.0005	0.0013	0.0039	<0.0005	<0.0005	0.0046	**NG**
Chlorodibromomethane	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Dibromoethane	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	**NG**
Tetrachloroethene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.0133**
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Toluene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.002**
Ethylbenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	**0.090**
m & p-Xylene	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.001	<0.001	0.002	**NG**
Bromoform	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Styrene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.072**
o-Xylene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0013	<0.0005	<0.0005	0.0013	**NG**
Xylenes (Total)	<0.001	<0.001	<0.001	<0.001	<0.001	0.003	<0.001	<0.001	0.003	**NG**
1,1,1,2-tetrachloroethane	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
1,1,2,2-tetrachloroethene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.111**
1,2-dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.00070**
1,3-dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.150**
1,4-dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.026**
Chlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**0.0013**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:
1. All results and groundwater quality guidelines in mg/L.
2. NG - No guideline.

Table 4.11 B. Groundwater Laboratory Analysis Results - VOC - Solvent AST Area

Monitoring Well	MW10-44	MW10-54B (dup of MW10-44)	MW10-45	BH-8	CCME WQG [a]
Date Sampled:	11/1/2010	11/1/2010	11/1/2010	11/1/2010	
Chloromethane	<0.001	<0.001	<0.001	<0.001	**NG**
Vinyl chloride	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
Chloroethane	<0.001	<0.001	<0.001	<0.001	**NG**
Trichlorofluoromethane	<0.004	<0.004	<0.004	<0.004	**NG**
1,1,2Trichloro-1,2,2Trifluoroethane	<0.002	<0.002	<0.002	<0.002	**NG**
Dichlorodifluoromethane	<0.002	<0.002	<0.002	<0.002	**NG**
1,1-dichloroethene	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
Dichloromethane	<0.002	<0.002	<0.002	<0.002	**0.0981**
trans-1,2-dichloroethene	<0.001	<0.001	<0.001	<0.001	**NG**
1,1-dichloroethane	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
cis-1,2-dichloroethene	0.004	0.004	<0.001	<0.001	**NG**
Chloroform	<0.001	<0.001	<0.001	<0.001	**0.0018**
1,1,1-trichloroethane	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
1,2-dichloroethane	<0.0005	<0.0005	<0.0005	<0.0005	**0.100**
Carbon tetrachloride	<0.001	<0.001	<0.001	<0.001	**0.0133**
Benzene	<0.0005	<0.0005	<0.0005	<0.0005	**0.370**
Methyl-tert-butylether (MTBE)	<0.004	<0.004	<0.004	<0.004	**10.000**
1,2-dichloropropane	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
cis-1,3-dichloropropene	<0.001	<0.001	<0.001	<0.001	**NG**
trans-1,3-dichloropropene	<0.001	<0.001	<0.001	<0.001	**NG**
Bromomethane	<0.001	<0.001	<0.001	<0.001	**NG**
1,1,2-trichloroethane	<0.0005	<0.0005	<0.0005	<0.0005	**0.021**
Trichloroethene	0.0039	0.0046	<0.0005	<0.0005	**NG**
Chlorodibromomethane	<0.001	<0.001	<0.001	<0.001	**NG**
Dibromoethane	<0.0002	<0.0002	<0.0002	<0.0002	**NG**
Tetrachloroethene	<0.0005	<0.0005	<0.0005	<0.0005	**0.0133**
Bromodichloromethane	<0.001	<0.001	<0.001	<0.001	**NG**
Toluene	<0.0005	<0.0005	<0.0005	<0.0005	**0.002**
Ethylbenzene	0.0005	0.0005	<0.0005	<0.0005	**0.090**
m & p-Xylene	0.002	0.002	<0.001	<0.001	**NG**
Bromoform	<0.001	<0.001	<0.001	<0.001	**NG**
Styrene	<0.0005	<0.0005	<0.0005	<0.0005	**0.072**
o-Xylene	0.0013	0.0013	<0.0005	<0.0005	**NG**
Xylenes (Total)	0.003	0.003	<0.001	<0.001	**NG**
1,1,1,2-tetrachloroethane	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
1,1,2,2-tetrachloroethane	<0.0005	<0.0005	<0.0005	<0.0005	**0.111**
1,2-dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	**0.00070**
1,3-dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	**0.150**
1,4-dichlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	**0.026**
Chlorobenzene	<0.0005	<0.0005	<0.0005	<0.0005	**0.0013**

[a] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Notes:
1. All results and groundwater quality guidelines in mg/L.
2. NG - No guideline.

Table 4.12. Supporting Environmental Variables for Stations on Omand's Creek

Station ID	Replicate	Date	Time	UTM (NAD83, 14U) Easting	UTM (NAD83, 14U) Northing	Samples Collected	Max Depth (m)	Water Temperature (°C)	pH	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)	DO mg/L	DO %	TDS (g/L)	Sediment Characterization	Habitat
OC10-1	A	8-Oct-10	12:29	629579	5530394	SS*	---	---	---	---	---	---	---	---	---	Clay/silt/organic; dark grey.	On flooded bank; cattail bed.
	B	8-Oct-10	12:31	629581	5530392	SS*, DS, WQ*, AV, BIC	1.00	13.26	8.41	101	1140	41.1	8.00	79.2	0.728	Clay/organic.	Gravel nearer to bank; manicured lawn on left downstream side; overhanging vegetation (grass/shrub); small beds of aquatic vegetation; flat; 3 metres wide.
	C	8-Oct-10	14:13	629554	5530389	SS*	---	---	---	---	---	---	---	---	---	Clay/silt/organic; light grey.	On flooded bank; cattail bed.
OC10-2	A	7-Oct-10	16:05	629568	5530304	SS	---	---	---	---	---	---	---	---	---	Clay/organic.	On flooded bank; cattail bed.
	B	7-Oct-10	16:36	629571	5530309	SS, DS, WQ, AV, BIC	1.00	15.22	8.86	54	1140	98.0	14.17	146.3	0.733	Organic/clay/gravel.	Large mats of aquatic vegetation throughout the channel and at least 50 metres in either direction; flat; deep; overhanging vegetation (shrub/grass/cattails); rip-rap on banks and in creek; man-made debris in creek (e.g., shopping cart and cement blocks); 1-3 metres wide.
	C	7-Oct-10	15:54	629570	5530305	SS	---	---	---	---	---	---	---	---	---	Clay/organic.	On flooded bank; cattail bed.
OC10-3	A	7-Oct-10	15:01	629564	5530166	SS	---	---	---	---	---	---	---	---	---	Clay/organic.	On flooded bank; cattail bed.
	B	7-Oct-10	15:33	629569	5530166	SS, DS, WQ, AV, BIC	1.00	13.78	8.84	142	1100	41.9	12.37	123.8	0.705	Organic/clay/gravel.	Large mats of aquatic vegetation throughout the channel and at least 50 metres in either direction; flat; deep; overhanging vegetation (shrub/grass/cattails); rip-rap on banks and in creek; 2 metres wide.
	C	7-Oct-10	14:58	629570	5530171	SS	---	---	---	---	---	---	---	---	---	Clay/organic.	On flooded bank; cattail bed.
OC10-4	A	6-Oct-10	16:07	629628	5529907	SS	---	---	---	---	---	---	---	---	---	Clay/silt/organic.	On flooded bank; cattail bed.
	B	7-Oct-10	14:13	629631	5529910	SS, DS, WQ, AV, BIC	1.25	12.95	8.85	127	1050	44.1	13.38	131.4	0.669	Organic/clay/silt/gravel.	Large mats of aquatic vegetation throughout the channel and at least 50 metres in either direction; flat; deep; overhanging vegetation (shrub/grass/cattails); 6 metres wide.
	C	6-Oct-10	15:51	629634	5529912	SS	---	---	---	---	---	---	---	---	---	Clay/silt/organic.	On flooded bank; cattail bed.
OC10-5	A	7-Oct-10	12:13	629642	5529860	SS	---	---	---	---	---	---	---	---	---	Clay/silt; dark colour.	On flooded bank; cattail bed.
	B	7-Oct-10	12:32	629647	5529862	SS, DS, WQ, AV, BIC	1.25	12.35	8.02	143	1050	62.3	11.27	109.3	0.675	Clay/organic.	Large areas of prominent aquatic vegetation beds; deep; flat; overhanging vegetation (shrub/grass/cattails); 6 metres wide.
	C	7-Oct-10	11:56	629649	5529862	SS	---	---	---	---	---	---	---	---	---	Clay/silt; dark colour.	On flooded bank; cattail bed.
OC10-6	A	6-Oct-10	14:43	629648	5529811	SS	---	---	---	---	---	---	---	---	---	Clay/organic.	On flooded bank; overhanging vegetation (grass/shrub).
	B	7-Oct-10	11:36	629650	5529816	SS, DS, WQ, AV, BIC	0.75	12.29	8.24	174	1060	49.3	11.54	111.7	0.675	Organic/clay/silt/gravel.	Mid-channel; downstream of riffle section; run; deeper with soft sediments; overhanging vegetation (grass/shrub); limited aquatic vegetation near banks and upstream of the riffle; 1-3 metres wide.
	C	6-Oct-10	14:35	629658	5529815	SS	---	---	---	---	---	---	---	---	---	Clay/silt/organic.	On flooded bank; overhanging vegetation (grass/shrub).
OC10-7	A	6-Oct-10	12:13	629641	5529742	SS	---	---	---	---	---	---	---	---	---	Dark grey; organic/silt/clay.	On flooded bank; cattail bed.
	B	6-Oct-10	12:58	629643	5529745	SS, DS, WQ, AV, BIC	0.50	11.93	8.07	143	1030	55.3	10.32	99.1	0.661	Clay/silt/gravel.	Mid-channel; 3 metres downstream of small riffle; run; some aquatic vegetation (more abundant immediately upstream of riffle); 0.5-1 metres wide.
	C	6-Oct-10	12:29	629644	5529741	SS	---	---	---	---	---	---	---	---	---	Dark grey; organic/silt/clay.	On flooded bank; cattail bed.

Notes:
1. SS = Surficial sediment.
2. DS = Deep sediments.
3. WQ = Water quality.
4. AV = Aquatic vegetation.
5. BIC = Benthic invertebrate community.
6. * = Field duplicate collected.
7. ORP = Oxidation reduction potential.
8. NTU = Nephelometric Turbidity Units.
9. DO = Dissolved oxygen.
10. TDS = total dissolved solids.

Table 4.13. Sediment Laboratory Analysis Results - Organic Matter, Organic Carbon, Particle Size Analysis - Omands Creek

Sample ID	OC10-1A	OC10-1B (0-5)	OC10-1B (30-35)	OC10-1C	OC10-2A	OC10-2B (0-5)	OC10-2B (30-35)	OC10-2C	OC10-3A	OC10-3B (0-5)	OC10-3B (30-35)	OC10-3C
Date Sampled	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/8/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010
Depth (m)	0 - 0.05	0 - 0.05	0.3 - 0.35	0 - 0.05	0 - 0.05	0-0.05	0.3 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05
Organic Matter (%)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (%)	NA	NA	NA	NA	6.4	3.2	NA	11.1	6.8	2.7	0.8	2.6
Particle Size >0.075 mm (%)	NA	NA	NA	NA	18.1	22.3	NA	15.0	21.4	37.6	17.9	47.6
Particle Size <0.075 mm (%)	NA	NA	NA	NA	81.9	77.7	NA	85.0	78.6	62.4	82.1	52.4

Notes:
1. NA - Not analyzed.

Table 4.13 (cont'd). Sediment Laboratory Analysis Results - Organic Matter, Organic Carbon, Particle Size Analysis - Omands Creek

Sample ID	OC10-4A	OC10-4B (0-5)	OC10-4B (30-35)	OC10-4C	OC10-5A	OC10-5B (0-5)	OC10-5B (30-35)	OC10-5C	OC10-6A	OC10-6B (0-5)	OC10-6B (30-35)	OC10-6C	OC10-7A	OC10-7B (0-5)	OC10-7B (30-35)	OC10-7C
Date Sampled	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010
Depth (m)	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05
Organic Matter (%)	3.7	NA	NA	10.9	NA	NA	NA	NA	10.3	NA	NA	4.6	7.2	3.7	NA	5.9
Total Organic Carbon (%)	2.1	4.2	0.5	6.3	7.2	2.2	0.6	4.1	6.0	2.5	1.1	2.7	4.2	2.2	2.4	3.4
Particle Size >0.075 mm (%)	7.3	6.8	<0.1	19.2	9.8	18.0	5.4	13.8	16.8	47.2	21.1	18.1	12.4	39.7	15.2	34.7
Particle Size <0.075 mm (%)	92.7	93.2	100	80.8	90.2	82.0	94.6	86.2	83.2	52.8	78.9	81.9	87.7	60.3	84.8	65.3

Notes:

1. NA - Not analyzed.

Table 4.14. Sediment Laboratory Analysis Results - Metals - Omands Creek

Sample ID	OC10-1A	OC10-10A (dup of OC10-1A)	OC10-1B (0-5)	OC10-10B (0-5) (dup of OC10-1B (0-5))	OC10-1B (30-35)	OC10-1C	OC10-10C (dup or OC10-1C)	OC10-2A	OC10-2B (0-5)	OC10-2B (30-35)	OC10-2C	OC10-3A	OC10-3B (0-5)	OC10-3B (30-35)	OC10-3C	CCME Guideline ISQG [a]	CCME Guideline PEL [a]
Date Sampled	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/8/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010		
Sample Depth (m)	0 - 0.05	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	(0 - 0.05)	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05		
pH	7.83	8.31	8.10	8.04	8.24	8.43	8.26	8.1	8.64	8.43	8.36	8.24	8.27	8.45	8.18		
Aluminum (Al)	18,600	18,600	13,700	12,200	14,200	13,000	11,800	17,200	15,200	18,900	17,600	18,500	13,700	22,400	8,870	**NG**	**NG**
Antimony (Sb)	1.1	1.3	2.9	0.7	0.7	1.9	2.3	1.1	1.2	0.6	1	0.9	0.7	1	1	**NG**	**NG**
Arsenic (As)	**6.7**	**6.9**	4.8	4.4	4.9	**7.5**	**13.7**	**7**	**5.9**	**6.7**	**7.2**	5.3	5.5	**7.9**	5.4	**5.9**	**17.0**
Barium (Ba)	134	148	118	105	152	129	130	130	119	191	119	119	114	216	103	**NG**	**NG**
Beryllium (Be)	0.8	0.9	0.6	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.6	0.9	0.4	**NG**	**NG**
Bismuth (Bi)	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.2	<0.1	**NG**	**NG**
Cadmium (Cd)	**0.73**	**0.7**	0.57	0.48	0.39	0.35	0.38	**1.3**	0.52	0.31	**0.66**	**0.65**	0.35	0.43	0.43	**0.6**	**3.5**
Calcium (Ca)	33,400	34,300	59,000	61,900	57,800	60,600	60,100	38,700	42,700	62,200	35,600	42,400	67,500	36,700	93,400	**NG**	**NG**
Chromium (Cr), Total	**38**	**41.0**	29	29	30	34	**74.0**	37	33	**41**	36	37	**38**	**51**	**39**	**37.3**	**90.0**
Cobalt (Co)	11.4	11.3	10.0	8.9	11.1	10.2	16.1	10.1	10.1	13.1	9.4	8.7	10.5	16.7	6.7	**NG**	**NG**
Copper (Cu)	**42.9**	**42.9**	**49.0**	31.7	**43.3**	**45.0**	**80.2**	**45.1**	**48.3**	31.3	**41.3**	**40.4**	**36.9**	**41.3**	34	**35.7**	**197**
Iron (Fe)	25,700	25,300	20,500	18,400	25,500	40,000	75,400	23,900	22,400	27,500	23,500	22,700	23,500	34,500	23,000	**NG**	**NG**
Lead (Pb)	**94.3**	**102**	**76.6**	**69.8**	**74.0**	**137**	**156**	**86.2**	**90.8**	**40.7**	**61.7**	**70.4**	**113**	**79.8**	**107**	**35.0**	**91.3**
Lithium (Li)	21	23	16	15	19	17	15	21	19	29	19	20	17	31	11	**NG**	**NG**
Magnesium (Mg)	23,300	23,200	28,000	29,100	27,200	32,800	32,400	25,000	23,600	39,400	23,100	27,600	30,300	23,000	46,100	**NG**	**NG**
Manganese (Mn)	247	230	269	254	385	451	638	357	280	433	324	267	362	803	256	**NG**	**NG**
Mercury (Hg)	0.07	0.08	<0.05	<0.05	0.05	0.10	0.10	0.06	0.06	<0.05	0.05	0.07	<0.05	<0.05	<0.05	**0.17**	**0.486**
Molybdenum (Mo)	1.2	1.3	1.3	0.8	0.8	2.0	5.1	1.4	0.9	0.9	1.9	0.9	1.6	1.2	3.2	**NG**	**NG**
Nickel (Ni)	32.8	33.6	26.1	24.6	30.3	34.4	48.6	30.4	28.4	38.5	30.1	29.5	34.2	46.1	28.9	**NG**	**NG**
Phosphorus (P)	866	862	549	514	562	586	636	877	628	632	921	931	545	653	598	**NG**	**NG**
Potasium (K)	3,790	3,900	3,010	2,670	3,120	2,660	2,420	4,030	3,520	4,120	4,000	3,940	2,930	4,870	2,030	**NG**	**NG**
Selenium (Se)	1.0	1.0	<0.5	0.7	<0.5	<0.5	0.5	1.6	0.9	<0.5	1.3	1.2	<0.5	<0.5	0.8	**NG**	**NG**
Silver (Ag)	0.16	0.12	0.09	0.09	0.08	0.10	0.11	0.09	0.73	0.11	0.07	0.1	0.09	0.12	0.06	**NG**	**NG**
Sodium (Na)	620	642	399	338	525	307	298	408	370	613	608	390	424	702	324	**NG**	**NG**
Strontium (Sr)	53.6	54.5	67.5	62.5	64.8	58.6	60.1	53.3	52	69.8	55.4	56.8	65.2	76.2	62.4	**NG**	**NG**
Thallium (Tl)	0.24	0.25	0.20	0.17	0.21	0.17	0.17	0.24	0.22	0.28	0.25	0.26	0.19	0.32	0.14	**NG**	**NG**
Tin (Sn)	2.8	4.2	5.1	3.2	4.9	3.9	7.4	3	6.8	1.5	1.9	1.9	2.2	7.1	2	**NG**	**NG**
Titanium (Ti)	168	174	200	186	226	194	177	132	206	345	118	129	202	373	134	**NG**	**NG**
Uranium (U)	3.66	3.83	2.07	1.88	1.39	1.35	1.56	3.5	2.4	1.97	4.91	2.97	1.54	1.72	1.55	**NG**	**NG**
Vanadium (V)	59	60	42	38	44	43	42	58	49	58	58	56	42	65	33	**NG**	**NG**
Zinc (Zn)	**266.0**	**274**	**152.0**	**148**	**143.0**	**145.0**	**205**	**288.0**	**223.0**	**147.0**	**271.0**	**347**	**5,320**	**1,170**	**3,310**	**123**	**315**
Zirconium (Zr)	7.4	8.0	6.5	5.1	7.5	6.2	4.9	3.6	5.8	11.8	3.9	4.9	5.2	11.5	1	**NG**	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Sediment Quality Guidelines (2002) for the Protection of Aquatic Life.

Notes:
1. All results and sediment quality guidelines in mg/kg.
2. ISQG - Interim freshwater sediment quality guidelines.
3. PEL - Probable effect levels.
4. NG - No guideline

XX	Applicable guideline.
XX	Exceeds CCME ISQG guideline.
XX	Exceeds CCME ISQG and PEL guidelines.

Table 4.14 (cont'd). Sediment Laboratory Analysis Results - Metals - Omands Creek

Sample ID	OC10-4A	OC10-4B (0-5)	OC10-4B (30-35)	OC10-4C	OC10-5A	OC10-5B (0-5)	OC10-5B (30-35)	OC10-5C	OC10-6A	OC10-6B (0-5)	OC10-6B (30-35)	OC10-6C	OC10-7A	OC10-7B (0-5)	OC10-7B (30-35)	OC10-7C	CCME Guideline ISQG [a]	CCME Guideline PEL [a]
Date Sampled	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010		
Sample Depth (m)	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05		
pH	7.94	8.65	8.3	7.49	8.15	8.25	8.81	8.35	7.77	8.02	8.34	7.75	7.74	7.88	8.66	7.58		
Aluminum (Al)	20,100	17,200	20,200	17,100	17,100	15,400	21,600	16,300	15,100	12,700	16,200	15,100	18,600	13,000	18,700	14,800	**NG**	**NG**
Antimony (Sb)	1.0	1.3	0.5	1.0	1	1.2	0.4	1.7	1.2	1.8	2.1	1.4	1.1	1.1	3.2	0.9	**NG**	**NG**
Arsenic (As)	**6.2**	**8.2**	**11.1**	**7.3**	**6.2**	**6.2**	**6.5**	**6.3**	**7.8**	5.8	**6.4**	**7.0**	**5.9**	**6.4**	**7.6**	6.3	**5.9**	**17.0**
Barium (Ba)	142	139	251	116	134	116	217	135	123	120	169	131	132	113	193	150	**NG**	**NG**
Beryllium (Be)	0.8	0.8	1.2	0.8	0.8	0.8	1	0.8	0.7	0.6	0.6	0.7	0.7	0.6	0.9	0.7	**NG**	**NG**
Bismuth (Bi)	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.1	**NG**	**NG**
Cadmium (Cd)	0.36	**0.62**	0.3	**0.68**	**0.7**	0.42	0.36	**0.7**	**0.6**	0.45	0.38	0.50	0.59	0.39	**0.8**	0.39	**0.6**	**3.5**
Calcium (Ca)	33,100	44,100	31,600	37,000	43,400	70,000	69,000	47,600	38,700	61,500	76,900	44,400	34,100	65,300	39,200	45,400	**NG**	**NG**
Chromium (Cr), Total	**38**	**39**	**42**	**39**	**38.0**	38	**44.0**	37	35	31	35	36	**42.0**	32	**43.0**	32	**37.3**	**90.0**
Cobalt (Co)	10.4	11.1	17.9	9.6	9.9	10.5	14.7	9.1	9.6	8.1	10.1	9.4	9.5	9.3	12.5	8.8	**NG**	**NG**
Copper (Cu)	30.8	**41.9**	**36.2**	**41.8**	**41.9**	35	33.3	**43.0**	**42.0**	**36.0**	35.5	**43.0**	**43.4**	31.4	**48.0**	31.0	**35.7**	**197**
Iron (Fe)	25,100	24,400	32,300	23,200	26,100	31,100	29,700	26,500	24,400	22,300	27,100	25,400	25,500	21,100	26,800	22,200	**NG**	**NG**
Lead (Pb)	**74.8**	**97**	16.6	**78**	**85.2**	**83.3**	16.8	**165.0**	**85.7**	**125.0**	**84.2**	**100.0**	**128.0**	**93.5**	**219.0**	80.8	**35.0**	**91.3**
Lithium (Li)	21	23	27	19	22	21	31	20	18	16	23	18	21	16	25	18	**NG**	**NG**
Magnesium (Mg)	21,200	26,600	20,400	24,400	28,800	30,600	22,600	29,100	23,900	29,200	36,200	27,900	24,100	33,900	23,900	22,700	**NG**	**NG**
Manganese (Mn)	395	308	568	301	322	384	674	347	272	368	458	361	229	423	428	591	**NG**	**NG**
Mercury (Hg)	<0.05	0.07	<0.05	0.07	0.09	<0.05	<0.05	0.08	0.07	0.05	0.06	0.06	0.08	<0.05	0.09	<0.05	**0.17**	**0.486**
Molybdenum (Mo)	0.4	1.5	1.8	1.2	0.9	1.3	0.6	0.8	1.5	0.9	0.9	1.3	0.8	1.0	1.2	0.7	**NG**	**NG**
Nickel (Ni)	31.2	33.7	45.2	29.5	30.7	32.3	44.2	31.1	29.2	24.5	31.8	28.6	29.1	25.5	38.2	25.7	**NG**	**NG**
Phosphorus (P)	725	722	632	904	1040	598	569	1070	828	642	584	819	960	507	579	953	**NG**	**NG**
Potasium (K)	4,170	3,870	4,020	3,820	3,690	3,380	4,950	3,590	3,220	2,580	3,290	3,040	3,720	2,620	3,670	3,950	**NG**	**NG**
Selenium (Se)	<0.5	1.3	<0.5	0.6	0.7	<0.5	<0.5	1.2	1.1	0.6	<0.5	0.7	0.7	<0.5	0.7	0.8	**NG**	**NG**
Silver (Ag)	0.07	0.11	0.12	0.08	0.11	0.1	0.13	0.1	0.08	0.1	0.12	0.09	0.09	0.07	0.15	0.06	**NG**	**NG**
Sodium (Na)	354	431	581	394	498	341	546	928	1030	375	872	819	414	317	494	328	**NG**	**NG**
Strontium (Sr)	60.3	60.6	70.5	49.2	57.9	63.4	97.8	68.4	62.8	65.5	92.4	64.5	55.6	57.1	59	62.3	**NG**	**NG**
Thallium (Tl)	0.25	0.26	0.31	0.26	0.26	0.22	0.30	0.22	0.22	0.17	0.21	0.21	0.23	0.17	0.25	0.21	**NG**	**NG**
Tin (Sn)	2.9	2.8	0.9	2.2	2.4	2.9	1.1	4.6	3.8	4.2	6	3.2	5.7	4.0	7.4	4.8	**NG**	**NG**
Titanium (Ti)	163	187	130	166	154	233	237	162	134	187	318	163	180	245	217	167	**NG**	**NG**
Uranium (U)	1.18	3.8	1.77	3.41	2.56	2.32	1.99	2.61	3.37	1.47	1.85	2.85	2.62	2.41	2.47	1.75	**NG**	**NG**
Vanadium (V)	58	57	63	59	57	48	67	49	54	39	48	49	59	44	56	47	**NG**	**NG**
Zinc (Zn)	**201**	**498**	96	**725**	**395**	**287**	**128**	**376**	**387.0**	**273**	**536**	**335.0**	**380.0**	**268.0**	**283**	**258.0**	**123**	**315**
Zirconium (Zr)	1.4	6.9	10.1	4.4	4.9	5.8	11.9	2.4	3.4	3.4	6.6	3.4	4.2	6.5	9.9	2.4	**NG**	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Sediment Quality Guidelines (2002) for the Protection of Aquatic Life.

Notes:
1. All results and sediment quality guidelines in mg/kg.
2. ISQG - Interim freshwater sediment quality guidelines.
3. PEL - Probable effect levels.
4. NG - No guideline

XX	Applicable guideline.
XX	Exceeds CCME ISQG guideline.
XX	Exceeds CCME ISQG and PEL guidelines.

Table 4.15. Sediment Laboratory Analysis Results - PCB - Omands Creek

Sample ID	OC10-1A	OC10-10A (dup of OC10-1A)	OC10-1B (0-5)	OC10-10B (0-5) (dup of OC10-1B (0-5))	OC10-1B (30-35)	OC10-1C	OC10-10C (dup or OC10-1C)	OC10-2A	OC10-2B (0-5)	OC10-2B (30-35)	OC10-2C	OC10-3A OC10-3A	OC10-3B (0-5)	OC10-3B (30-35)	OC10-3C	**CCME Guideline ISQG [a]**	**CCME Guideline PEL [a]**
Date Sampled	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/8/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010		
Depth (m)	0 - 0.05	0 - 0.05	0 - 0.05	0-0.05	0.3 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0-0.05	0.3 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05		
Aroclor 1242	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.06 [b]	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	<0.03	**NG**	**NG**
Aroclor 1248	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.06 [b]	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	<0.03	**NG**	**NG**
Aroclor 1254	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.06 [b]	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	0.14	**60**	**340**
Aroclor 1260	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.06 [b]	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	<0.03	**NG**	**NG**
Polychlorinated Biphenyls (Total)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.06 [b]	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	0.14	**34.1**	**277**

[a] Canadian Council of Ministers of Environment (CCME) Sediment Quality Guidelines (2002) for the Protection of Aquatic Life.
[b] RDL raised due to high sample moisture content.

Notes:
1. All results and sediment quality guidelines in mg/kg.
2. ISQG - Interim freshwater sediment quality guidelines.
3. PEL - Probable effect levels.
4. NG - No guideline

XX	Applicable guideline.
XX	Exceeds CCME ISQG guideline.
XX	Exceeds CCME ISQG and PEL guidelines.

Table 4.15 (cont'd). Sediment Laboratory Analysis Results - PCB - Omands Creek

Sample ID	OC10-4A	OC10-4B (0-5)	OC10-4B (30-35)	OC10-4C	OC10-5A	OC10-5B (0-5)	OC10-5B (30-35)	OC10-5C	OC10-6A	OC10-6B (0-5)	OC10-6B (30-35)	OC10-6C	OC10-7A	OC10-7B (0-5)	OC10-7B (30-35)	OC10-7C	CCME Guideline ISQG [a]	CCME Guideline PEL [a]
Date Sampled	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010		
Depth (m)	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05		
Aroclor 1242	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**NG**	**NG**
Aroclor 1248	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**NG**	**NG**
Aroclor 1254	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**60**	**340**
Aroclor 1260	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**NG**	**NG**
Polychlorinated Biphenyls (Total)	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.06 [b]	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	**34.1**	**277**

[a] Canadian Council of Ministers of Environment (CCME) Sediment Quality Guidelines (2002) for the Protection of Aquatic Life.
[b] RDL raised due to high sample moisture content.

Notes:
1. All results and sediment quality guidelines in mg/kg.
2. ISQG - Interim freshwater sediment quality guidelines.
3. PEL - Probable effect levels.
4. NG - No guideline

XX	Applicable guideline.
XX	Exceeds CCME ISQG guideline.
XX	Exceeds CCME ISQG and PEL guidelines.

Table 4.16. Sediment Laboratory Analysis Results - PAH - Omands Creek

Sample ID	OC10-1A	OC10-10A (dup of OC10-1A)	OC10-1B (0-5)	OC10-10B (0-5) (dup of OC10-1B (0-5))	OC10-1B (30-35)	OC10-1C	OC10-10C (dup of OC10-1C)	OC10-2A	OC10-2B (0-5)	OC10-2B (30-35)	OC10-2C	OC10-3A	OC10-3B (0-5)	OC10-3B (30-35)	OC10-3C	CCME Sediment Quality Guideline ISQG [a]	CCME Sediment Quality Guideline PEL [a]
Date Sampled	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/8/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010		
Sample Depth (m)	0 - 0.05	0 - 0.05	0 - 0.05	0-0.05	0.3 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0-0.05	0.3 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05		
Acenapthene	**0.02**	**0.12**	**0.08**	**0.07**	**1.2**	**0.04**	**0.01**	**0.04**	**0.03**	**0.03**	**<0.04** [2]	**0.03**	**0.02**	**0.041**	**1.1**	**0.00671**	**0.0889**
Acenaphthylene	**0.05**	**0.05**	**0.02**	**0.05**	**0.32**	**0.02**	**<0.01** [1]	**<0.03** [3]	**0.05**	0.005	**<0.04** [2]	**0.04**	**0.01**	**0.025**	**1.5**	**0.00587**	**0.128**
Anthracene	**0.05**	**0.18**	**0.24**	**0.17**	**3.2**	**0.09**	0.02	**0.11**	**0.09**	0.039	**0.09**	**0.07**	**0.05**	**0.14**	**2.2**	**0.0469**	**0.245**
Benzo(a)anthracene	**0.20**	**0.49**	**0.60**	**0.32**	**4.1**	**0.26**	**0.06**	**0.22**	**0.19**	**0.042**	**0.15**	**0.16**	**0.12**	**0.52**	**4.8**	**0.0317**	**0.385**
Benzo(a)pyrene	**0.19**	**0.44**	**0.56**	**0.25**	**2.9**	**0.24**	**0.05**	**0.19**	**0.15**	0.03	**0.15**	**0.15**	**0.12**	**0.51**	**4.3**	**0.0319**	**0.782**
Benzo(b/j)fluoranthene	0.29	0.52	0.58	0.25	2.6	0.33	0.07	0.35	0.20	0.042	0.24	0.19	0.18	0.79	6.4	**NG**	**NG**
Benzo(g,h,i)perylene	0.15	0.28	0.36	0.15	1.4	0.2	0.05	<0.2 [3]	0.12	0.021	0.14	0.12	0.11	0.35	2.8	**NG**	**NG**
Benzo(k)fluoranthene	0.12	0.42	0.42	0.22	2.7	0.13	0.04	0.10	0.15	0.027	0.10	0.14	0.07	0.30	3.6	**NG**	**NG**
Chrysene	**0.27**	**0.65**	**0.65**	**0.33**	**3.7**	**0.28**	**0.08**	**0.38**	**0.29**	0.053	**0.22**	**0.23**	**0.14**	**0.66**	**6.0**	**0.0571**	**0.862**
Dibenz(a,h)anthracene	**0.03**	**0.08**	**0.09**	**0.04**	**0.43**	**0.06**	**<0.02** [1]	**0.05**	**0.03**	0.005	**<0.08** [2]	**0.03**	**0.03**	**0.10**	**0.73**	**0.00622**	**0.135**
Fluoranthene	**0.46**	**1.5**	**1.4**	**0.81**	**9.40**	**0.58**	**0.12**	**<0.8** [3]	**0.57**	**0.15**	**<0.5** [3]	**0.45**	**0.33**	**1.50**	**18**	**0.111**	**2.355**
Fluorene	**0.03**	**0.16**	**0.1**	**0.11**	**2**	**0.05**	0.02	**0.08**	**0.07**	**0.057**	**0.04**	**0.03**	**0.03**	**0.055**	**1.9**	**0.0212**	**0.144**
Indeno(1,2,3-cd)pyrene	0.17	0.32	0.38	0.18	1.7	0.18	0.05	0.16	0.12	0.024	0.13	0.13	0.10	0.39	3.8	**NG**	**NG**
2-Methylnaphthalene	**0.03**	**0.05**	0.02	**0.03**	**0.27**	**0.13**	**0.08**	**0.03**	**0.04**	0.011	**<0.04** [2]	0.02	0.02	**0.017**	**1.2**	**0.0202**	**0.201**
Naphthalene	**0.04**	**0.06**	**0.04**	**0.05**	**0.80**	**0.09**	**0.05**	**0.04**	**0.05**	**0.036**	**<0.04** [2]	0.02	0.02	0.026	**4.3**	**0.0346**	**0.391**
Phenanthrene	**0.20**	**1.4**	**0.88**	**0.55**	**10**	**0.47**	**0.11**	**0.54**	**0.27**	**0.068**	**0.24**	**0.27**	**0.16**	**0.61**	**20**	**0.0419**	**0.515**
Pyrene	**0.38**	**1.1**	**1.2**	**0.64**	**7.4**	**0.49**	**0.11**	**0.61**	**0.48**	**0.14**	<0.04 [2]	**0.37**	**0.27**	**1.2**	**12**	**0.053**	**0.875**

[a] Canadian Council of Ministers of Environment (CCME) Sediment Quality Guidelines (2002) for the Protection of Aquatic Life.
[1] RDL raised due to sample dilution.
[2] RDL raised due to high sample moisture content and dilution.
[3] RDL raised due to sample matrix interference.

Notes:
1. All results and sediment quality guidelines in mg/kg.
2. ISQG - Interim freshwater sediment quality guidelines.
3. PEL - Probable effect levels.
4. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds CCME ISQG guideline.
XX	Exceeds CCME ISQG and PEL guidelines.

Table 4.16 (cont'd). Sediment Laboratory Analysis Results - PAH - Omands Creek

Sample ID	OC10-4A	OC10-4B (0-5)	OC10-4B (30-35)	OC10-4C	OC10-5A	OC10-5B (0-5)	OC10-5B (30-35)	OC10-5C	OC10-6A	OC10-6B (0-5)	OC10-6B (30-35)	OC10-6C	OC10-7A	OC10-7B (0-5)	OC10-7B (30-35)	OC10-7C	CCME Sediment Quality Guideline ISQG [a]	CCME Sediment Quality Guideline PEL [a]
Date Sampled	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010	10/7/2010		
Sample Depth (m)	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	0 - 0.05	0.30 - 0.35	0 - 0.05	0 - 0.05	**0 - 0.05**	0.30 - 0.35	0 - 0.05		
Acenapthene	**0.016**	**0.03**	<0.001	**0.042**	**0.22**	**0.02**	<0.002 [1]	**0.05**	**0.1**	**0.19**	**0.03**	**0.18**	**0.05**	**0.14**	**0.018**	**0.09**	**0.00671**	**0.0889**
Acenaphthylene	**0.017**	**0.02**	<0.001	**0.028**	**0.05**	**0.02**	<0.002 [1]	**0.04**	**0.1**	**0.32**	**0.018**	**0.17**	**0.05**	**0.03**	**0.007**	**0.04**	**0.00587**	**0.128**
Anthracene	0.044	**0.11**	<0.001	**0.088**	**0.42**	**0.05**	<0.002 [1]	**0.12**	**0.39**	**1.0**	**0.1**	**0.69**	**0.15**	**0.16**	0.027	**0.23**	**0.0469**	**0.245**
Benzo(a)anthracene	**0.13**	**0.23**	<0.001	**0.25**	**0.71**	**0.12**	0.002	**0.25**	**0.92**	**2.0**	**0.17**	**1.5**	**0.28**	**0.33**	**0.12** [2]	**0.27**	**0.0317**	**0.385**
Benzo(a)pyrene	**0.11**	**0.27**	<0.001	**0.24**	**0.61**	**0.09**	<0.002 [1]	**0.21**	**0.67**	**1.3**	**0.13**	**1.2**	**0.32**	**0.31**	**0.082**	**0.25**	**0.0319**	**0.782**
Benzo(b/j)fluoranthene	0.12	0.35	0.006	0.36	0.64	0.16	0.007	0.27	2	4	0.2	3.3	0.78	0.63	0.18	0.79	**NG**	**NG**
Benzo(g,h,i)perylene	0.069	0.25	<0.002	0.19	0.39	0.08	0.004	0.15	0.53	0.99	0.1	0.88	0.32	0.27	0.048	0.20	**NG**	**NG**
Benzo(k)fluoranthene	0.084	0.13	<0.002 [3]	0.14	0.47	0.07	0.003	0.19	0.57	0.95	0.12	1	0.22	0.18	0.058	0.23	**NG**	**NG**
Chrysene	**0.14**	**0.29**	0.002	**0.33**	**0.77**	**0.16**	0.005	**0.32**	**2**	**2.7**	**0.21**	**3.9**	**0.7**	**0.6**	**0.20** [2]	**0.96**	**0.0571**	**0.862**
Dibenz(a,h)anthracene	**0.019**	**0.06**	<0.002	**0.045**	**0.09**	**<0.02** [1]	<0.004 [1]	**0.04**	**0.13**	**0.30**	**0.027**	**0.23**	**0.07**	**0.06**	**0.013**	**0.05**	**0.00622**	**0.135**
Fluoranthene	**0.29**	**0.58**	<0.001	**0.70**	**1.9**	**0.35**	0.01	**0.64**	**3.80**	**6.30**	**0.56**	**6.7**	**0.77**	**1.2**	**0.36** [2]	**1.8**	**0.111**	**2.355**
Fluorene	**0.022**	**0.04**	<0.001	**0.055**	**0.20**	**0.04**	<0.002 [1]	**0.07**	**0.2**	**0.27**	**0.045**	**0.28**	**0.08**	**0.17**	**0.024**	**0.11**	**0.0212**	**0.144**
Indeno(1,2,3-cd)pyrene	0.078	0.24	<0.002	0.21	0.48	0.08	<0.004 [1]	0.16	0.46	1.0	0.1	0.76	0.25	0.22	0.039	0.17	**NG**	**NG**
2-Methylnaphthalene	**0.030**	**0.03**	<0.001	**0.028**	**0.06**	**0.03**	<0.002 [1]	**0.07**	**0.13**	**0.07**	**0.069**	**0.25**	**0.17**	**0.1**	**0.018**	**0.17**	**0.0202**	**0.201**
Naphthalene	0.029	0.03	0.001	0.032	**0.07**	**0.05**	<0.002 [1]	**0.07**	**0.14**	**0.13**	**0.052**	**0.29**	**0.13**	**0.07**	0.015	**0.19**	**0.0346**	**0.391**
Phenanthrene	**0.18**	**0.31**	0.001	**0.43**	**1.7**	**0.15**	0.004	**0.45**	**0.99**	**0.88**	**0.21**	**2.4**	**0.38**	**0.48**	**0.052**	**0.42**	**0.0419**	**0.515**
Pyrene	**0.23**	**0.48**	<0.001	**0.55**	**1.6**	**0.3**	0.007	**0.52**	**2.7**	**5.3**	**0.45**	**5.1**	**0.62**	**0.89**	**0.31** [2]	**1.2**	**0.053**	**0.875**

[a] Canadian Council of Ministers of Environment (CCME) Sediment Quality Guidelines (2002) for the Protection of Aquatic Life.
[1] RDL raised due to sample dilution.
[2] Duplicate RPD above control limit - non-homogenous sample - increased variability of results.
[3] RDL raised due to sample matrix interference.

Notes:

1. All results and sediment quality guidelines in mg/kg.
2. ISQG - Interim freshwater sediment quality guidelines.
3. PEL - Probable effect levels.
4. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds CCME ISQG guideline.
XX	Exceeds CCME ISQG and PEL guidelines.

Table 4.17. Surface Water Laboratory Analysis Results - Dissolved Organic Carbon, Total Organic Carbon - Omands Creek

Sample ID	OC10-1	OC10-10 (dup of OC10-1)	OC10-2	OC10-3	OC10-4	OC10-5	OC10-6	OC10-7
Date Sampled	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/6/2010	10/7/2010	10/6/2010	10/6/2010
Dissolved Organic Carbon (DOC)	14.0	14.2	13.0	13.2	13.4	13.4	12.7	13.3
Total Organic Carbon (TOC)	14.7	14.8	12.7	14.7	13.5	14.1	12.6	13.1

Notes:
1. All results in mg/L.
2. NA - Not analyzed.

Table 4.18. Surface Water Laboratory Analysis Results - Dissolved Metals - Omands Creek

Sample ID	OC10-1	OC10-10 (dup of OC10-1)	OC10-2	OC10-3	OC10-4	OC10-5	OC10-6	OC10-7	CCME Freshwater Aquatic Water Quality Guideline [a]
Date Sampled	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/6/2010	10/7/2010	10/6/2010	10/6/2010	
Dissolved Hardness ($CaCO_3$)	464	454	453	456	440	457	442	403	
Dissolved Aluminum (Al)	0.022	0.033	0.038	0.044	0.052	0.060	0.054	0.074	**0.005-0.100** [b]
Dissolved Antimony (Sb)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
Dissolved Arsenic (As)	0.0030	0.0030	0.0030	0.0030	0.0033	0.0032	0.0034	0.0030	**0.0050**
Dissolved Barium (Ba)	0.065	0.066	0.064	0.064	0.062	0.062	0.063	0.059	**NG**
Dissolved Beryllium (Be)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**NG**
Dissolved Bismuth (Bi)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Dissolved Boron (B)	0.091	0.09	0.088	0.087	0.085	0.089	0.097	0.116	**NG**
Dissolved Cadmium (Cd)	**0.00003**	**0.00002**	**0.00002**	**0.00019**	<0.00001	**0.00003**	<0.00001	**0.00003**	**0.000017**
Dissolved Calcium (Ca)	77.4	76.6	76.9	75.9	68.4	75	67.4	60.0	**NG**
Dissolved Chromium (Cr)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	**0.0089**
Dissolved Cobalt (Co)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
Dissolved Copper (Cu)	0.0013	0.0014	0.0014	0.0015	0.0014	0.0015	0.0015	0.0018	**0.002-0.004** [c]
Dissolved Iron (Fe)	0.058	0.074	0.066	0.087	0.078	0.0119	0.085	0.143	**0.300**
Dissolved Lead (Pb)	0.0002	0.0003	0.0003	0.0004	0.0003	0.0005	0.0003	0.0004	**0.001-0.007** [d]
Dissolved Lithium (Li)	0.074	0.074	0.072	0.072	0.074	0.073	0.079	0.07	**NG**
Dissolved Magnesium (Mg)	21	21	23	23	65.4	24	66.4	61.6	**NG**
Dissolved Manganese (Mn)	0.0657	0.0639	0.0634	0.0646	0.020	0.0655	0.016	0.019	**NG**
Dissolved Mercury (Hg)	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	**0.000026**
Dissolved Molybdenum (Mo)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.002	**0.073**
Dissolved Nickel (Ni)	0.003	0.004	0.003	0.004	0.004	0.004	0.004	0.004	**0.025-0.150** [e]
Dissolved Potassium (K)	12.2	12.1	12	12.3	12.4	12	12.6	12.2	**NG**
Dissolved Selenium (Se)	**0.0016**	**0.0016**	**0.0016**	**0.0015**	**0.0015**	**0.0014**	**0.0015**	**0.0013**	**0.0010**
Dissolved Silicon (Si)	2.34	2.31	2.65	2.71	2.62	2.52	2.8	2.47	**NG**
Dissolved Silver (Ag)	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	**0.0001**
Dissolved Sodium (Na)	66.8	64.9	67	65.3	73.1	65.6	74.7	67.1	**NG**
Dissolved Strontium (Sr)	0.436	0.441	0.429	0.431	0.394	0.423	0.403	0.380	**NG**
Dissolved Sulphur (S)	70	70	67	68	68	69	68	54	**NG**
Dissolved Thallium (Tl)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.0008**
Dissolved Tin (Sn)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**NG**
Dissolved Titanium (Ti)	<0.005	<0.005	<0.005	<0.005	<0.005	0.009	0.006	<0.005	**NG**
Dissolved Uranium (U)	0.0087	0.0089	0.0082	0.0082	0.0075	0.0082	0.0076	0.0073	**NG**
Dissolved Vanadium (V)	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	**NG**
Dissolved Zinc (Zn)	<0.005	<0.005	<0.005	0.009	<0.005	0.006	0.005	**0.035**	**0.030**
Dissolved Zirconium (Zr)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0006	0.0005	<0.0005	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Water Quality Guidelines (2007) for the Protection of Freshwater Aquatic Life.

[b] 0.005 mg/L at ph < 6.5; 0.1 mg/L at pH ≥ 6.5

[c] 0.002 mg/L at a water hardness of 0-120 mg/L as $CaCO_3$; 0.003 mg/L at a water hardness of 120-180 mg/L as $CaCO_3$; 0.004 mg/L at a water hardness of >180 mg/L as $CaCO_3$

[d] 0.001 mg/L at a water hardness of 0-60 mg/L as $CaCO_3$; 0.002 mg/L at a water hardness of 60-120 mg/L as $CaCO_3$; 0.04 mg/L at a water hardness of 120-180 mg/L as $CaCO_3$; 0.007 mg/L at a water hardness of >180 mg/L as $CaCO_3$

[e] 0.025 mg/L at a water hardness of 0-60 mg/L as $CaCO_3$; 0.065 mg/L at a water hardness of 60-120 mg/L as $CaCO_3$; 0.110 mg/L at a water hardness of 120-180 mg/L as $CaCO_3$; 0.150 mg/L at a water hardness of >180 mg/L as $CaCO_3$

Notes:
1. All results and water quality guidelines in mg/L.
2. NG - No guideline.

XX	Applicable Water Quality Guideline.
XX	Exceeds Applicable Water Quality Guideline.

Table 4.19. Surface Water Laboratory Analysis Results - Total Metals - Omands Creek

Sample ID	OC10-1	OC10-10 (dup of OC10-1)	OC10-2	OC10-3	OC10-4	OC10-5	OC10-6	OC10-7	CCME Freshwater Aquatic Water Quality Guideline [a]
Date Sampled	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/6/2010	10/7/2010	10/6/2010	10/6/2010	
Dissolved Hardness ($CaCO_3$)	486	478	486	450	445	472	422	429	
Total Aluminum (Al)	**0.694**	**0.605**	**0.476**	**0.839**	**0.665**	**0.502**	**0.445**	**0.447**	**0.005-0.100** [b]
Total Antimony (Sb)	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
Total Arsenic (As)	0.0030	0.0029	0.0032	0.0030	0.0034	0.0033	0.0031	0.0033	**0.0050**
Total Barium (Ba)	0.078	0.075	0.079	0.076	0.069	0.071	0.062	0.065	**NG**
Total Beryllium (Be)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	**NG**
Total Bismuth (Bi)	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	**NG**
Total Boron (B)	0.101	0.095	0.104	0.095	0.085	0.095	0.081	0.082	**NG**
Total Cadmium (Cd)	**0.00004**	**0.00012**	**0.00032**	**0.00005**	**0.00002**	**0.00002**	<0.00001	<0.00001	**0.000017**
Total Calcium (Ca)	77.2	76.2	78.1	73.4	72.0	74.5	68.3	69.3	**NG**
Total Chromium (Cr)	0.001	0.001	0.001	0.002	0.001	<0.001	<0.001	0.001	**0.0089**
Total Cobalt (Co)	0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	**NG**
Total Copper (Cu)	0.0027	0.0028	0.0023	0.0035	0.0031	0.0023	0.0019	0.0020	**0.002-0.004** [c]
Total Iron (Fe)	**0.766**	**0.695**	**0.555**	**1.070**	**0.808**	**0.598**	**0.430**	**0.498**	**0.300**
Total Lead (Pb)	0.0028	.002\6	0.0016	0.0038	0.0021	0.0019	0.0009	0.0012	**0.001-0.007** [d]
Total Lithium (Li)	0.08	0.076	0.081	0.075	0.073	0.076	0.068	0.069	**NG**
Total Manganese (Mn)	35	35	30	31	29	22	18	19	**NG**
Total Magnesium (Mg)	0.0712	0.0698	0.0706	0.0649	0.0644	0.0693	0.061	0.0621	**NG**
Total Mercury (Hg)	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	**0.000026**
Total Molybdenum (Mo)	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	**0.073**
Total Nickel (Ni)	0.005	0.005	0.005	0.005	0.004	0.005	0.004	0.004	**0.025-0.150** [e]
Total Potassium (K)	13.3	12.9	13.6	12.5	13.0	13.2	12.3	12.5	**NG**
Total Selenium (Se)	**0.0017**	**0.0017**	**0.0017**	**0.0015**	**0.0014**	**0.0015**	**0.0014**	**0.0013**	**0.0010**
Total Silicon (Si)	3.650	3.530	3.610	4.33	4.300	3.540	3.840	3.990	**NG**
Total Silver (Ag)	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	**0.0001**
Total Sodium (Na)	73.7	72.7	75.6	66.8	68.0	71.4	64.8	66.2	**NG**
Total Strontium (Sr)	0.48	0.452	0.481	0.447	0.406	0.444	0.381	0.392	**NG**
Total Sulphur (S)	77	70	72	66	66	75	62	62	**NG**
Total Thallium (Tl)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	**0.0008**
Total Tin (Sn)	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	**NG**
Total Titanium (Ti)	0.021	0.020	0.011	0.032	0.026	0.015	0.032	0.017	**NG**
Total Uranium (U)	0.0091	0.0088	0.0092	0.0086	0.0080	0.0085	0.0072	0.0074	**NG**
Total Vanadium (V)	0.008	0.007	0.007	0.007	0.008	0.008	0.006	0.007	**NG**
Total Zinc (Zn)	0.016	0.015	0.017	**0.069**	0.014	0.012	0.006	0.008	**0.030**
Total Zirconium (Zr)	0.0008	0.0009	0.0008	0.0009	0.0006	0.0006	0.0006	0.0018	**NG**

[a] Canadian Council of Ministers of Environment (CCME) Water Quality Guidelines (2007) for the Protection of Freshwater Aquatic Life.

[b] 0.005 mg/L at ph < 6.5; 0.1 mg/L at pH ≥ 6.5

[c] 0.002 mg/L at a water hardness of 0-120 mg/L as $CaCO_3$; 0.003 mg/L at a water hardness of 120-180 mg/L as $CaCO_3$; 0.004 mg/L at a water hardness of >180 mg/L as $CaCO_3$

[d] 0.001 mg/L at a water hardness of 0-60 mg/L as $CaCO_3$; 0.002 mg/L at a water hardness of 60-120 mg/L as $CaCO_3$; 0.04 mg/L at a water hardness of 120-180 mg/L as $CaCO_3$; 0.007 mg/L at a water hardness of >180 mg/L as $CaCO_3$

[e] 0.025 mg/L at a water hardness of 0-60 mg/L as $CaCO_3$; 0.065 mg/L at a water hardness of 60-120 mg/L as $CaCO_3$; 0.110 mg/L at a water hardness of 120-180 mg/L as $CaCO_3$; 0.150 mg/L at a water hardness of >180 mg/L as $CaCO_3$

Notes:
1. All results and water quality guidelines in mg/L.
2. NG - No guideline.

XX	Applicable Water Quality Guideline.
XX	Exceeds Applicable Water Quality Guideline.

Table 4.20. Surface Water Laboratory Analysis Results - PCB - Omands Creek

Sample ID	OC10-1	OC10-10 (dup of OC10-1)	OC10-2	OC10-3	OC10-4	OC10-5	OC10-6	OC10-7	**CCME Freshwater Aquatic Water Quality Guideline [a]**
Date Sampled	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/6/2010	10/7/2010	10/6/2010	10/6/2010	
Aroclor 1242	<0.00010	<0.00010	NA	NA	<0.00010	NA	NA	<0.00010	**NG**
Aroclor 1248	<0.00010	<0.00010	NA	NA	<0.00010	NA	NA	<0.00010	**NG**
Aroclor 1254	<0.00010	<0.00010	NA	NA	<0.00010	NA	NA	<0.00010	**NG**
Aroclor 1260	<0.00010	<0.00010	NA	NA	<0.00010	NA	NA	<0.00010	**NG**

[a] As per the Canadian Council of Ministers of Environment (CCME) Water Quality Guidelines (2007) for the Protection of Freshwater Aquatic Life, a water quality guideline is not recommended. Environmental exposure is predominantly via sediment, soil, and/or tissue.

Notes:

1. All results and water quality guidelines in mg/L.
2. NG - No guideline.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.21. Surface Water Laboratory Analysis Results - PAH - Omands Creek

Sample ID	OC10-1	OC10-10 (dup of OC10-1)	OC10-2	OC10-3	OC10-4	OC10-5	OC10-6	OC10-7	**CCME Freshwater Aquatic Water Quality Guideline [a]**
Date Sampled	10/8/2010	10/8/2010	10/7/2010	10/7/2010	10/6/2010	10/7/2010	10/6/2010	10/6/2010	
Acenaphthene	<0.00001	<0.00001	NA	NA	<0.00001	0.00002	<0.00001	0.00001	**0.0058**
Acenaphthylene	<0.00001	<0.00001	NA	NA	<0.00001	<0.00001	<0.00001	<0.00001	**NG**
Acridine	<0.00005	<0.00005	NA	NA	<0.00005	<0.00005	<0.00005	<0.00005	**0.0044**
Anthracene	<0.00001	<0.00001	NA	NA	<0.00001	<0.00001	<0.00001	<0.00001	**0.000012**
Benzo(a)anthracene	<0.00001	<0.00001	NA	NA	<0.00001	<0.00001	<0.00001	<0.00001	**0.000018**
Benzo(a)pyrene	<0.00001	<0.00001	NA	NA	<0.00001	<0.00001	<0.00001	<0.00001	**0.000015**
Benzo(b&j)fluoranthene	<0.00001	<0.00001	NA	NA	<0.00001	<0.00001	<0.00001	<0.00001	**NG**
Benzo(g,h,i)perylene	<0.00002	<0.00002	NA	NA	<0.00002	<0.00002	<0.00002	<0.00002	**NG**
Benzo(k)fluoranthene	<0.00001	<0.00001	NA	NA	<0.00001	<0.00001	<0.00001	<0.00001	**NG**
Chrysene	<0.00001	<0.00001	NA	NA	<0.00001	<0.00001	<0.00001	<0.00001	**NG**
Dibenz(a,h)anthracene	<0.00002	<0.00002	NA	NA	<0.00002	<0.00002	<0.00002	<0.00002	**NG**
Fluoranthene	<0.00001	<0.00001	NA	NA	<0.00001	0.00002	0.00001	0.00001	**0.00004**
Fluorene	<0.00001	<0.00001	NA	NA	<0.00001	0.00002	0.00001	0.00001	**0.0030**
Indeno(1,2,3-cd)pyrene	<0.00002	<0.00002	NA	NA	<0.00002	<0.00002	<0.00002	<0.00002	**NG**
2-Methylnaphthalene	<0.00005	<0.00005	NA	NA	<0.00005	<0.00005	<0.00005	<0.00005	**NG**
Naphthalene	<0.00005	<0.00005	NA	NA	<0.00005	0.00006	<0.00005	0.00008	**0.0011**
Phenanthrene	<0.00001	<0.00001	NA	NA	<0.00001	0.00004	0.00001	0.00001	**0.0004**
Pyrene	<0.00001	<0.00001	NA	NA	<0.00001	<0.00001	<0.00001	<0.00001	**0.000025**
Quinoline	<0.00005	<0.00005	NA	NA	<0.00005	<0.00005	<0.00005	<0.00005	**0.0034**

[a] Canadian Council of Ministers of Environment (CCME) Water Quality Guidelines (2007) for the Protection of Freshwater Aquatic Life.

Notes:
1. All results and sediment quality guidelines in mg/L.
2. NG - No guideline.
2. NA - Not analyzed.

XX	Applicable guideline.
XX	Exceeds applicable guideline.

Table 4.22. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Hydrocarbons

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-03-05	F1	10	56	G-03-33	F1	10	100	56.4%
	F2	10	400		F2	10	490	20.2%
	F3	10	250		F3	10	280	11.3%
	F4	10	47		F4	10	47	NC
	Benzene	0.005	<0.005		Benzene	0.005	<0.005	NC
	Toluene	0.02	<0.02		Toluene	0.02	<0.02	NC
	Ethylbenzene	0.01	0.09		Ethylbenzene	0.01	0.14	43.5%
	Xylene	0.04	<0.04		Xylene	0.04	<0.04	NC
G-22-02	F1	10	19	DUP 1	F1	10	17	11.1%
	F2	10	230		F2	10	290	23.1%
	F3	10	93		F3	10	160	53.0%
	F4	10	<10		F4	10	13	NC
	Benzene	0.005	<0.005		Benzene	0.005	<0.005	NC
	Toluene	0.02	<0.02		Toluene	0.02	<0.02	NC
	Ethylbenzene	0.01	<0.01		Ethylbenzene	0.01	<0.01	NC
	Xylene	0.04	<0.04		Xylene	0.04	<0.04	NC
G-22A-05	F1	10	<10	DUP 2	F1	10	<10	NC
	F2	10	<10		F2	10	<10	NC
	F3	10	85		F3	10	63	29.7%
	F4	10	16		F4	10	<10	NC
	Benzene	0.005	<0.005		Benzene	0.005	<0.005	NC
	Toluene	0.02	<0.02		Toluene	0.02	<0.02	NC
	Ethylbenzene	0.01	<0.01		Ethylbenzene	0.01	<0.01	NC
	Xylene	0.04	<0.04		Xylene	0.04	<0.04	NC
G-45-01	F1	10	<10	DUP 3	F1	10	<10	NC
	F2	10	23		F2	10	<10	NC
	F3	10	230		F3	10	43	**137.0%**
	F4	10	100		F4	10	<10	NC
	Benzene	0.005	0.008		Benzene	0.005	<0.005	NC
	Toluene	0.02	0.04		Toluene	0.02	<0.02	NC
	Ethylbenzene	0.01	<0.01		Ethylbenzene	0.01	<0.01	NC
	Xylene	0.04	<0.1		Xylene	0.04	<0.04	NC
G-63-03	F1	10	<10	G-63-13	F1	10	<10	NC
	F2	10	<10		F2	10	<10	NC
	F3	10	<10		F3	10	<10	NC
	F4	10	<10		F4	10	<10	NC
	Benzene	0.005	<0.005		Benzene	0.005	<0.005	NC
	Toluene	0.02	<0.02		Toluene	0.02	<0.02	NC
	Ethylbenzene	0.01	<0.01		Ethylbenzene	0.01	<0.01	NC
	Xylene	0.04	<0.04		Xylene	0.04	<0.04	NC
G-67-02	F1	10	<10	G-67-02	F1	10	<10	NC
	F2	10	<10		F2	10	<10	NC
	F3	10	12		F3	10	19	45.2%
	F4	10	26		F4	10	<10	NC
	Benzene	0.005	<0.005		Benzene	0.005	<0.005	NC
	Toluene	0.02	<0.02		Toluene	0.02	<0.02	NC
	Ethylbenzene	0.01	<0.01		Ethylbenzene	0.01	<0.01	NC
	Xylene	0.04	<0.04		Xylene	0.04	<0.04	NC

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.23 A. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-12-02	Aluminum (Al)	100	19,800	DUP 7-BH	Total Aluminum (Al)	100	23,100	15.4%
	Antimony (Sb)	0.1	0.2		Total Antimony (Sb)	0.1	0.2	0.0%
	Arsenic (As)	0.2	4.5		Total Arsenic (As)	0.2	4.5	0.0%
	Barium (Ba)	0.1	168		Total Barium (Ba)	0.1	165	1.8%
	Beryllium (Be)	0.1	1.0		Total Beryllium (Be)	0.1	1.1	9.5%
	Bismuth (Bi)	0.1	0.2		Total Bismuth (Bi)	0.1	0.2	0.0%
	Cadmium (Cd)	0.05	0.21		Total Boron (B)	0.05	0.17	21.1%
	Calcium (Ca)	100	21,000		Total Cadmium (Cd)	100	24,100	13.7%
	Chromium (Cr)	1	36		Total Calcium (Ca)	1	40	10.5%
	Cobalt (Co)	0.3	16.3		Total Cobalt (Co)	0.3	11.8	32.0%
	Copper (Cu)	0.5	25.2		Total Copper (Cu)	0.5	25.2	0.0%
	Iron (Fe)	100	25,900		Total Iron (Fe)	100	27,200	4.9%
	Lead (Pb)	0.1	13.8		Total Lead (Pb)	0.1	13.9	0.7%
	Lithium (Li)	5	21		Total Lithium (Li)	5	24	13.3%
	Magnesium (Mg)	100	13,200		Total Magnesium (Mg)	100	13,600	3.0%
	Manganese (Mn)	0.2	718		Total Manganese (Mn)	0.2	480	39.7%
	Mercury (Hg)	0.05	<0.05		Total Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	0.3		Total Molybdenum (Mo)	0.1	0.3	0.0%
	Nickel (Ni)	0.8	38.6		Total Nickel (Ni)	0.8	36.4	5.9%
	Phosphorus (P)	10	478		Total Potassium (K)	10	422	12.4%
	Potasium (K)	100	3,700		Total Selenium (Se)	100	3,800	2.7%
	Selenium (Se)	0.5	<0.5		Total Silicon (Si)	0.5	<0.5	NC
	Silver (Ag)	0.05	0.08		Total Silver (Ag)	0.05	0.08	0.0%
	Sodium (Na)	100	626		Total Sodium (Na)	100	602	3.9%
	Strontium (Sr)	0.1	50.0		Total Strontium (Sr)	0.1	57.2	13.4%
	Thallium (Tl)	0.05	0.29		Total Sulphur (S)	0.05	0.33	12.9%
	Tin (Sn)	0.1	0.7		Total Thallium (Tl)	0.1	0.8	13.3%
	Titanium (Ti)	1	89		Total Tin (Sn)	1	129	36.7%
	Uranium (U)	0.05	0.85		Total Titanium (Ti)	0.05	1.01	17.2%
	Vanadium (V)	2	55		Total Uranium (U)	2	61	10.3%
	Zinc (Zn)	1	73		Total Vanadium (V)	1	82	11.6%
	Zirconium (Zr)	0.5	4.7		Total Zinc (Zn)	0.5	5.7	19.2%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.23 B. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-33-02	Aluminum (Al)	100	15,700	G-33-12	Total Aluminum (Al)	100	16,800	6.8%
	Antimony (Sb)	0.1	1.3		Total Antimony (Sb)	0.1	0.6	73.7%
	Arsenic (As)	0.2	18.3		Total Arsenic (As)	0.2	9.2	66.2%
	Barium (Ba)	0.1	140		Total Barium (Ba)	0.1	179	24.5%
	Beryllium (Be)	0.1	0.7		Total Beryllium (Be)	0.1	0.7	0.0%
	Bismuth (Bi)	0.1	0.1		Total Bismuth (Bi)	0.1	0.1	0.0%
	Cadmium (Cd)	0.05	0.57		Total Boron (B)	0.05	0.36	45.2%
	Calcium (Ca)	100	34,700		Total Cadmium (Cd)	100	34,100	1.7%
	Chromium (Cr)	1	105		Total Calcium (Ca)	1	58	57.7%
	Cobalt (Co)	0.3	11.9		Total Cobalt (Co)	0.3	9.3	24.5%
	Copper (Cu)	0.5	100		Total Copper (Cu)	0.5	55.5	57.2%
	Iron (Fe)	100	86,100		Total Iron (Fe)	100	47,500	57.8%
	Lead (Pb)	0.1	62.1		Total Lead (Pb)	0.1	43.2	35.9%
	Lithium (Li)	5	16		Total Lithium (Li)	5	18	11.8%
	Magnesium (Mg)	100	17,100		Total Magnesium (Mg)	100	17,400	1.7%
	Manganese (Mn)	0.2	875		Total Manganese (Mn)	0.2	495	55.5%
	Mercury (Hg)	0.05	0.06		Total Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	13.6		Total Molybdenum (Mo)	0.1	5.2	89.4%
	Nickel (Ni)	0.8	75.2		Total Nickel (Ni)	0.8	44.0	52.3%
	Phosphorus (P)	10	426		Total Potassium (K)	10	462	8.1%
	Potasium (K)	100	2,910		Total Selenium (Se)	100	3,180	8.9%
	Selenium (Se)	0.5	<0.5		Total Silicon (Si)	0.5	<0.5	NC
	Silver (Ag)	0.05	0.12		Total Silver (Ag)	0.05	0.09	28.6%
	Sodium (Na)	100	173		Total Sodium (Na)	100	217	22.6%
	Strontium (Sr)	0.1	59.3		Total Strontium (Sr)	0.1	90.9	42.1%
	Thallium (Tl)	0.05	0.18		Total Sulphur (S)	0.05	0.21	15.4%
	Tin (Sn)	0.1	5.0		Total Thallium (Tl)	0.1	2.7	59.7%
	Titanium (Ti)	1	183		Total Tin (Sn)	1	205	11.3%
	Uranium (U)	0.05	1.33		Total Titanium (Ti)	0.05	1.39	4.4%
	Vanadium (V)	2	51		Total Uranium (U)	2	47	8.2%
	Zinc (Zn)	1	486		Total Vanadium (V)	1	219	75.7%
	Zirconium (Zr)	0.5	3.3		Total Zinc (Zn)	0.5	4	19.2%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.23 C. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-54-01	Aluminum (Al)	100	8,470	DUP 8-BH	Total Aluminum (Al)	100	21,200	85.8%
	Antimony (Sb)	0.1	0.2		Total Antimony (Sb)	0.1	0.3	40.0%
	Arsenic (As)	0.2	2.9		Total Arsenic (As)	0.2	9.0	**102.5%**
	Barium (Ba)	0.1	102		Total Barium (Ba)	0.1	159	43.7%
	Beryllium (Be)	0.1	0.4		Total Beryllium (Be)	0.1	0.9	76.9%
	Bismuth (Bi)	0.1	<0.1		Total Bismuth (Bi)	0.1	0.2	NC
	Cadmium (Cd)	0.05	0.14		Total Boron (B)	0.05	0.16	13.3%
	Calcium (Ca)	100	121,000		Total Cadmium (Cd)	100	48,800	85.0%
	Chromium (Cr)	1	20		Total Calcium (Ca)	1	40	66.7%
	Cobalt (Co)	0.3	5.0		Total Cobalt (Co)	0.3	13.1	89.5%
	Copper (Cu)	0.5	12.6		Total Copper (Cu)	0.5	27.3	73.7%
	Iron (Fe)	100	12,000		Total Iron (Fe)	100	25,900	73.4%
	Lead (Pb)	0.1	5.6		Total Lead (Pb)	0.1	13.7	83.9%
	Lithium (Li)	5	17		Total Lithium (Li)	5	26	41.9%
	Magnesium (Mg)	100	58,800		Total Magnesium (Mg)	100	22,000	91.1%
	Manganese (Mn)	0.2	240		Total Manganese (Mn)	0.2	453	61.5%
	Mercury (Hg)	0.05	<0.05		Total Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	0.2		Total Molybdenum (Mo)	0.1	0.3	40.0%
	Nickel (Ni)	0.8	17.4		Total Nickel (Ni)	0.8	39.8	78.3%
	Phosphorus (P)	10	356		Total Potassium (K)	10	497	33.1%
	Potasium (K)	100	1,460		Total Selenium (Se)	100	3,720	87.3%
	Selenium (Se)	0.5	<0.5		Total Silicon (Si)	0.5	<0.5	NC
	Silver (Ag)	0.05	0.06		Total Silver (Ag)	0.05	0.09	40.0%
	Sodium (Na)	100	308		Total Sodium (Na)	100	187	48.9%
	Strontium (Sr)	0.1	91.6		Total Strontium (Sr)	0.1	63.6	36.1%
	Thallium (Tl)	0.05	0.14		Total Sulphur (S)	0.05	0.30	72.7%
	Tin (Sn)	0.1	0.3		Total Thallium (Tl)	0.1	0.8	90.9%
	Titanium (Ti)	1	325		Total Tin (Sn)	1	182	56.4%
	Uranium (U)	0.05	1.07		Total Titanium (Ti)	0.05	1.22	13.1%
	Vanadium (V)	2	28		Total Uranium (U)	2	63	76.9%
	Zinc (Zn)	1	26		Total Vanadium (V)	1	67	88.2%
	Zirconium (Zr)	0.5	5.2		Total Zinc (Zn)	0.5	5.6	7.4%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.23 D. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-58-02	Aluminum (Al)	100	8,530	DUP 6	Total Aluminum (Al)	100	8,910	4.4%
	Antimony (Sb)	0.1	0.1		Total Antimony (Sb)	0.1	0.1	NC
	Arsenic (As)	0.2	2.0		Total Arsenic (As)	0.2	1.9	5.1%
	Barium (Ba)	0.1	121		Total Barium (Ba)	0.1	112	7.7%
	Beryllium (Be)	0.1	0.4		Total Beryllium (Be)	0.1	0.4	0.0%
	Bismuth (Bi)	0.1	<0.1		Total Bismuth (Bi)	0.1	<0.1	NC
	Cadmium (Cd)	0.05	0.14		Total Boron (B)	0.05	0.14	0.0%
	Calcium (Ca)	100	132,000		Total Cadmium (Cd)	100	128,000	3.1%
	Chromium (Cr)	1	25		Total Calcium (Ca)	1	25	0.0%
	Cobalt (Co)	0.3	5.6		Total Cobalt (Co)	0.3	5.5	1.8%
	Copper (Cu)	0.5	13.0		Total Copper (Cu)	0.5	12.7	2.3%
	Iron (Fe)	100	12,400		Total Iron (Fe)	100	12,900	4.0%
	Lead (Pb)	0.1	6.3		Total Lead (Pb)	0.1	6.1	3.2%
	Lithium (Li)	5	16		Total Lithium (Li)	5	17	6.1%
	Magnesium (Mg)	100	55,200		Total Magnesium (Mg)	100	56,600	2.5%
	Manganese (Mn)	0.2	276		Total Manganese (Mn)	0.2	244	12.3%
	Mercury (Hg)	0.05	<0.05		Total Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	0.2		Total Molybdenum (Mo)	0.1	0.2	NC
	Nickel (Ni)	0.8	20.2		Total Nickel (Ni)	0.8	18.9	6.6%
	Phosphorus (P)	10	350		Total Potassium (K)	10	351	0.3%
	Potasium (K)	100	1,660		Total Selenium (Se)	100	1,730	4.1%
	Selenium (Se)	0.5	<0.5		Total Silicon (Si)	0.5	<0.5	NC
	Silver (Ag)	0.05	0.05		Total Silver (Ag)	0.05	0.06	NC
	Sodium (Na)	100	3,070		Total Sodium (Na)	100	3,180	3.5%
	Strontium (Sr)	0.1	91		Total Strontium (Sr)	0.1	88.5	2.9%
	Thallium (Tl)	0.05	0.14		Total Sulphur (S)	0.05	0.15	NC
	Tin (Sn)	0.1	0.4		Total Thallium (Tl)	0.1	0.4	NC
	Titanium (Ti)	1	345		Total Tin (Sn)	1	344	0.3%
	Uranium (U)	0.05	1.32		Total Titanium (Ti)	0.05	1.36	3.0%
	Vanadium (V)	2	26		Total Uranium (U)	2	28	7.4%
	Zinc (Zn)	1	36		Total Vanadium (V)	1	33	8.7%
	Zirconium (Zr)	0.5	6.3		Total Zinc (Zn)	0.5	6.5	3.1%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.23 E. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-65-02	Aluminum (Al)	100	17,600	DUP 4-BH	Total Aluminum (Al)	100	8,820	66.5%
	Antimony (Sb)	0.1	0.2		Total Antimony (Sb)	0.1	0.6	100.0%
	Arsenic (As)	0.2	4.2		Total Arsenic (As)	0.2	4.4	4.7%
	Barium (Ba)	0.1	184		Total Barium (Ba)	0.1	108	52.1%
	Beryllium (Be)	0.1	0.8		Total Beryllium (Be)	0.1	0.4	NC
	Bismuth (Bi)	0.1	0.1		Total Bismuth (Bi)	0.1	<0.1	NC
	Cadmium (Cd)	0.05	0.16		Total Boron (B)	0.05	0.18	11.8%
	Calcium (Ca)	100	91,100		Total Cadmium (Cd)	100	105,000	14.2%
	Chromium (Cr)	1	35		Total Calcium (Ca)	1	22	45.6%
	Cobalt (Co)	0.3	9.3		Total Cobalt (Co)	0.3	6.1	41.6%
	Copper (Cu)	0.5	20.6		Total Copper (Cu)	0.5	18.7	9.7%
	Iron (Fe)	100	21,700		Total Iron (Fe)	100	16,300	28.4%
	Lead (Pb)	0.1	10.3		Total Lead (Pb)	0.1	27.2	90.1%
	Lithium (Li)	5	27		Total Lithium (Li)	5	15	57.1%
	Magnesium (Mg)	100	40,400		Total Magnesium (Mg)	100	53,100	27.2%
	Manganese (Mn)	0.2	348		Total Manganese (Mn)	0.2	268	26.0%
	Mercury (Hg)	0.05	<0.05		Total Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	0.3		Total Molybdenum (Mo)	0.1	0.6	66.7%
	Nickel (Ni)	0.8	30.3		Total Nickel (Ni)	0.8	22.5	29.5%
	Phosphorus (P)	10	405		Total Potassium (K)	10	382	5.8%
	Potasium (K)	100	3,260		Total Selenium (Se)	100	1,560	70.5%
	Selenium (Se)	0.5	<0.5		Total Silicon (Si)	0.5	<0.5	NC
	Silver (Ag)	0.05	0.09		Total Silver (Ag)	0.05	0.06	NC
	Sodium (Na)	100	230		Total Sodium (Na)	100	193	17.5%
	Strontium (Sr)	0.1	111.0		Total Strontium (Sr)	0.1	73	40.9%
	Thallium (Tl)	0.05	0.26		Total Sulphur (S)	0.05	0.15	53.7%
	Tin (Sn)	0.1	0.7		Total Thallium (Tl)	0.1	0.9	25.0%
	Titanium (Ti)	1	340		Total Tin (Sn)	1	256	28.2%
	Uranium (U)	0.05	1.44		Total Titanium (Ti)	0.05	0.92	44.1%
	Vanadium (V)	2	50		Total Uranium (U)	2	29	53.2%
	Zinc (Zn)	1	56		Total Vanadium (V)	1	73	26.4%
	Zirconium (Zr)	0.5	8.5		Total Zinc (Zn)	0.5	4.3	65.6%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.23 F. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-67-02	Aluminum (Al)	100	13,000	DUP 5-BH	Total Aluminum (Al)	100	11,200	14.9%
	Antimony (Sb)	0.1	0.2		Total Antimony (Sb)	0.1	0.2	NC
	Arsenic (As)	0.2	4.5		Total Arsenic (As)	0.2	3.9	14.3%
	Barium (Ba)	0.1	174		Total Barium (Ba)	0.1	125	32.8%
	Beryllium (Be)	0.1	0.5		Total Beryllium (Be)	0.1	0.5	0.0%
	Bismuth (Bi)	0.1	0.1		Total Bismuth (Bi)	0.1	0.1	NC
	Cadmium (Cd)	0.05	0.19		Total Boron (B)	0.05	0.18	5.4%
	Calcium (Ca)	100	104,000		Total Cadmium (Cd)	100	123,000	16.7%
	Chromium (Cr)	1	26		Total Calcium (Ca)	1	24	8.0%
	Cobalt (Co)	0.3	10.7		Total Cobalt (Co)	0.3	6.9	43.2%
	Copper (Cu)	0.5	16.1		Total Copper (Cu)	0.5	15.9	1.3%
	Iron (Fe)	100	16,200		Total Iron (Fe)	100	15,700	3.1%
	Lead (Pb)	0.1	9.7		Total Lead (Pb)	0.1	10.2	5.0%
	Lithium (Li)	5	19		Total Lithium (Li)	5	18	5.4%
	Magnesium (Mg)	100	43,300		Total Magnesium (Mg)	100	55,100	24.0%
	Manganese (Mn)	0.2	659		Total Manganese (Mn)	0.2	306	73.2%
	Mercury (Hg)	0.05	<0.05		Total Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	0.4		Total Molybdenum (Mo)	0.1	0.3	NC
	Nickel (Ni)	0.8	27.7		Total Nickel (Ni)	0.8	22.5	20.7%
	Phosphorus (P)	10	356		Total Potassium (K)	10	403	12.4%
	Potasium (K)	100	2,120		Total Selenium (Se)	100	1,910	10.4%
	Selenium (Se)	0.5	<0.5		Total Silicon (Si)	0.5	0.6	NC
	Silver (Ag)	0.05	<0.05		Total Silver (Ag)	0.05	0.06	NC
	Sodium (Na)	100	189		Total Sodium (Na)	100	178	6.0%
	Strontium (Sr)	0.1	102		Total Strontium (Sr)	0.1	93.5	8.7%
	Thallium (Tl)	0.05	0.22		Total Sulphur (S)	0.05	0.19	14.6%
	Tin (Sn)	0.1	0.6		Total Thallium (Tl)	0.1	0.6	0.0%
	Titanium (Ti)	1	312		Total Tin (Sn)	1	339	8.3%
	Uranium (U)	0.05	0.96		Total Titanium (Ti)	0.05	0.94	2.1%
	Vanadium (V)	2	42		Total Uranium (U)	2	36	15.4%
	Zinc (Zn)	1	46		Total Vanadium (V)	1	55	17.8%
	Zirconium (Zr)	0.5	5.6		Total Zinc (Zn)	0.5	5.2	7.4%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.23 G. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-71-03	Aluminum (Al)	100	6,050	G-71-13	Total Aluminum (Al)	100	6,080	0.5%
	Antimony (Sb)	0.1	0.2		Total Antimony (Sb)	0.1	0.2	NC
	Arsenic (As)	0.2	2.4		Total Arsenic (As)	0.2	1.9	23.3%
	Barium (Ba)	0.1	61		Total Barium (Ba)	0.1	57	8.0%
	Beryllium (Be)	0.1	0.2		Total Beryllium (Be)	0.1	0.3	NC
	Bismuth (Bi)	0.1	<0.1		Total Bismuth (Bi)	0.1	<0.1	NC
	Cadmium (Cd)	0.05	0.08		Total Boron (B)	0.05	0.08	NC
	Calcium (Ca)	100	120,000		Total Cadmium (Cd)	100	122,000	1.7%
	Chromium (Cr)	1	15		Total Calcium (Ca)	1	15	0.0%
	Cobalt (Co)	0.3	4.1		Total Cobalt (Co)	0.3	4.2	2.4%
	Copper (Cu)	0.5	9.4		Total Copper (Cu)	0.5	8.9	5.5%
	Iron (Fe)	100	9,300		Total Iron (Fe)	100	9,100	2.2%
	Lead (Pb)	0.1	4.6		Total Lead (Pb)	0.1	4.4	4.4%
	Lithium (Li)	5	11		Total Lithium (Li)	5	11	0.0%
	Magnesium (Mg)	100	61,800		Total Magnesium (Mg)	100	64,000	3.5%
	Manganese (Mn)	0.2	228		Total Manganese (Mn)	0.2	235	3.0%
	Mercury (Hg)	0.05	<0.05		Total Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	0.2		Total Molybdenum (Mo)	0.1	0.2	NC
	Nickel (Ni)	0.8	15.0		Total Nickel (Ni)	0.8	14.3	4.8%
	Phosphorus (P)	10	351		Total Potassium (K)	10	348	0.9%
	Potasium (K)	100	1,060		Total Selenium (Se)	100	1,040	1.9%
	Selenium (Se)	0.5	<0.5		Total Silicon (Si)	0.5	<0.5	NC
	Silver (Ag)	0.05	<0.05		Total Silver (Ag)	0.05	<0.05	NC
	Sodium (Na)	100	220		Total Sodium (Na)	100	234	6.2%
	Strontium (Sr)	0.1	52.0		Total Strontium (Sr)	0.1	50.6	2.7%
	Thallium (Tl)	0.05	0.09		Total Sulphur (S)	0.05	0.09	NC
	Tin (Sn)	0.1	0.3		Total Thallium (Tl)	0.1	0.3	NC
	Titanium (Ti)	1	298		Total Tin (Sn)	1	295	1.0%
	Uranium (U)	0.05	0.80		Total Titanium (Ti)	0.05	0.80	0.0%
	Vanadium (V)	2	22		Total Uranium (U)	2	21	4.7%
	Zinc (Zn)	1	19		Total Vanadium (V)	1	18	5.4%
	Zirconium (Zr)	0.5	5.8		Total Zinc (Zn)	0.5	5.7	1.7%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.23 H. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-79-02	Aluminum (Al)	100	9,310	G-79-12	Total Aluminum (Al)	100	9,580	2.9%
	Antimony (Sb)	0.1	0.3		Total Antimony (Sb)	0.1	0.3	NC
	Arsenic (As)	0.2	3.1		Total Arsenic (As)	0.2	3.0	3.3%
	Barium (Ba)	0.1	109		Total Barium (Ba)	0.1	119	8.8%
	Beryllium (Be)	0.1	0.3		Total Beryllium (Be)	0.1	0.4	28.6%
	Bismuth (Bi)	0.1	<0.1		Total Bismuth (Bi)	0.1	<0.1	NC
	Cadmium (Cd)	0.05	0.17		Total Boron (B)	0.05	0.17	NC
	Calcium (Ca)	100	123,000		Total Cadmium (Cd)	100	121,000	1.6%
	Chromium (Cr)	1	21		Total Calcium (Ca)	1	24	13.3%
	Cobalt (Co)	0.3	5.1		Total Cobalt (Co)	0.3	5.1	0.0%
	Copper (Cu)	0.5	11.3		Total Copper (Cu)	0.5	12.1	6.8%
	Iron (Fe)	100	13,000		Total Iron (Fe)	100	12,800	1.6%
	Lead (Pb)	0.1	96.3		Total Lead (Pb)	0.1	64.0	40.3%
	Lithium (Li)	5	14		Total Lithium (Li)	5	15	6.9%
	Magnesium (Mg)	100	46,000		Total Magnesium (Mg)	100	42,700	7.4%
	Manganese (Mn)	0.2	242		Total Manganese (Mn)	0.2	245	1.2%
	Mercury (Hg)	0.05	<0.05		Total Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	0.2		Total Molybdenum (Mo)	0.1	0.3	40.0%
	Nickel (Ni)	0.8	18.3		Total Nickel (Ni)	0.8	20.4	10.9%
	Phosphorus (P)	10	379		Total Potassium (K)	10	409	7.6%
	Potasium (K)	100	1,760		Total Selenium (Se)	100	1,790	1.7%
	Selenium (Se)	0.5	<0.5		Total Silicon (Si)	0.5	<0.5	NC
	Silver (Ag)	0.05	0.05		Total Silver (Ag)	0.05	<0.05	NC
	Sodium (Na)	100	289		Total Sodium (Na)	100	298	3.1%
	Strontium (Sr)	0.1	132.0		Total Strontium (Sr)	0.1	133	0.8%
	Thallium (Tl)	0.05	0.14		Total Sulphur (S)	0.05	0.13	7.4%
	Tin (Sn)	0.1	0.6		Total Thallium (Tl)	0.1	0.6	NC
	Titanium (Ti)	1	210		Total Tin (Sn)	1	221	5.1%
	Uranium (U)	0.05	1.57		Total Titanium (Ti)	0.05	1.54	1.9%
	Vanadium (V)	2	31		Total Uranium (U)	2	32	3.2%
	Zinc (Zn)	1	163		Total Vanadium (V)	1	247	41.0%
	Zirconium (Zr)	0.5	2.1		Total Zinc (Zn)	0.5	1.8	15.4%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.24. Soil Field Duplicate Relative Percent Difference (RPD) Calculations - PCB

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
G-33-02	Polychlorinated Biphenyls (Total)	0.03	0.09	G-33-12	Polychlorinated Biphenyls (Total)	0.03	0.05	NC
G-79-02	Polychlorinated Biphenyls (Total)	0.03	0.05	G-79-12	Polychlorinated Biphenyls (Total)	0.03	<0.03	NC

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.25. Groundwater Field Duplicate Relative Percent Difference (RPD) Calculations - Hydrocarbons

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-03	F1	0.003	<0.003	MW10-13	F1	0.003	<0.003	NC
	F2	0.08	4.2		F2	0.08	3.6	15.4%
	F3	0.08	1.8		F3	0.08	1.4	25.0%
	F4	3	<3		F4	3	<3	NC
	Benzene	0.0004	<0.0004		Benzene	0.0004	<0.0005	NC
	Toluene	0.0005	<0.0006		Toluene	0.0004	<0.0004	NC
	Ethylbenzene	0.0004	0.0078		Ethylbenzene	0.0004	0.0083	6.2%
	Xylene	0.0004	0.0027		Xylene	0.0004	0.0019	34.8%
MW10-06	F1	0.003	<0.003	MW10-26	F1	0.003	<0.003	NC
	F2	0.08	<0.08		F2	0.08	<0.08	NC
	F3	0.08	<0.08		F3	0.08	<0.08	NC
	F4	3	<3		F4	3	<3	NC
	Benzene	0.0005	<0.0005		Benzene	0.0005	<0.0005	NC
	Toluene	0.0005	<0.0005		Toluene	0.0005	<0.0005	NC
	Ethylbenzene	0.0005	<0.0005		Ethylbenzene	0.0005	<0.0005	NC
	Xylene	0.001	<0.001		Xylene	0.001	<0.001	NC
MW10-10	F1	0.003	<0.003	MW10-20	F1	0.003	<0.003	NC
	F2	0.08	<0.08		F2	0.08	<0.08	NC
	F3	0.08	<0.08		F3	0.08	<0.08	NC
	F4	3	<3		F4	3	<3	NC
	Benzene	0.0004	<0.0004		Benzene	0.0004	<0.0004	NC
	Toluene	0.0004	<0.0004		Toluene	0.0004	<0.0004	NC
	Ethylbenzene	0.0004	<0.0004		Ethylbenzene	0.0004	<0.0004	NC
	Xylene	0.0004	0.0004		Xylene	0.0004	<0.0004	NC
MW10-21	F1	0.003	<0.003	MW10-21A	F1	0.003	<0.003	NC
	F2	0.08	<0.08		F2	0.08	<0.08	NC
	F3	0.08	<0.08		F3	0.08	<0.08	NC
	F4	3	<3		F4	3	<3	NC
	Benzene	0.0004	<0.0004		Benzene	0.0004	<0.0004	NC
	Toluene	0.0008	<0.0008		Toluene	0.0008	<0.0008	NC
	Ethylbenzene	0.0004	<0.0004		Ethylbenzene	0.0004	<0.0004	NC
	Xylene	0.0004	<0.0004		Xylene	0.0004	<0.0004	NC
MW10-44	F1	0.003	<0.003	MW10-54	F1	0.003	<0.003	NC
	F2	0.08	6.4		F2	0.08	5.7	11.6%
	F3	0.08	6.7		F3	0.08	5.9	12.7%
	F4	3	<3		F4	3	<3	NC
	Benzene	0.0005	<0.0005		Benzene	0.0005	<0.0005	NC
	Toluene	0.0005	<0.0005		Toluene	0.0005	<0.0005	NC
	Ethylbenzene	0.0004	<0.0004		Ethylbenzene	0.0004	<0.0004	NC
	Xylene	0.001	<0.001		Xylene	0.001	<0.001	NC
MW10-49	F1	0.003	<0.003	MW10-59	F1	0.003	<0.003	NC
	F2	0.08	<0.08		F2	0.08	<0.08	NC
	F3	0.08	<0.08		F3	0.08	<0.08	NC
	F4	3	<3		F4	3	<3	NC
	Benzene	0.0004	<0.0004		Benzene	0.0004	<0.0004	NC
	Toluene	0.0008	<0.0008		Toluene	0.0008	<0.0008	NC
	Ethylbenzene	0.0004	<0.0004		Ethylbenzene	0.0004	<0.0004	NC
	Xylene	0.0004	<0.0004		Xylene	0.0004	<0.0004	NC
MW10-69	F1	0.003	<0.003	MW10-99	F1	0.003	<0.003	NC
	F2	0.08	<0.08		F2	0.08	<0.08	NC
	F3	0.08	<0.08		F3	0.08	<0.08	NC
	F4	3	<3		F4	3	<3	NC
	Benzene	0.0004	<0.0004		Benzene	0.0004	<0.0004	NC
	Toluene	0.0008	<0.0008		Toluene	0.0008	<0.0008	NC
	Ethylbenzene	0.0004	<0.0004		Ethylbenzene	0.0004	<0.0004	NC
	Xylene	0.0004	<0.0004		Xylene	0.0004	<0.0004	NC

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.26 A. Groundwater Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-10	Total Aluminum (Al)	0.003	14.6	MW10-20	Total Aluminum (Al)	0.003	14.4	1.4%
	Total Antimony (Sb)	0.0005	0.0006		Total Antimony (Sb)	0.0005	0.0006	NC
	Total Arsenic (As)	0.0001	0.0072		Total Arsenic (As)	0.0001	0.0068	5.7%
	Total Barium (Ba)	0.001	0.308		Total Barium (Ba)	0.001	0.297	3.6%
	Total Beryllium (Be)	0.0001	0.0007		Total Beryllium (Be)	0.0001	0.0006	15.4%
	Total Bismuth (Bi)	0.001	<0.001		Total Bismuth (Bi)	0.001	<0.001	NC
	Total Boron (B)	0.05	2.64		Total Boron (B)	0.05	2.71	2.6%
	Total Cadmium (Cd)	0.00001	0.00031		Total Cadmium (Cd)	0.00001	0.00032	3.2%
	Total Calcium (Ca)	0.0001	364		Total Calcium (Ca)	0.0001	432	17.1%
	Total Chromium (Cr)	0.001	0.03		Total Chromium (Cr)	0.001	0.029	3.4%
	Total Cobalt (Co)	0.0005	0.0085		Total Cobalt (Co)	0.0005	0.0088	3.5%
	Total Copper (Cu)	0.0002	0.0307		Total Copper (Cu)	0.0002	0.0300	2.3%
	Total Iron (Fe)	0.005	18.8		Total Iron (Fe)	0.005	18.0	4.3%
	Total Lead (Pb)	0.0002	0.0524		Total Lead (Pb)	0.0002	0.0499	4.9%
	Total Lithium (Li)	0.005	0.317		Total Lithium (Li)	0.005	0.322	1.6%
	Total Magnesium (Mg)	0.0001	426		Total Magnesium (Mg)	0.0001	432	1.4%
	Total Manganese (Mn)	0.001	0.574		Total Manganese (Mn)	0.001	0.556	3.2%
	Total Mercury (Hg)	0.00002	<0.00002		Total Mercury (Hg)	0.0000	NA	NC
	Total Molybdenum (Mo)	0.001	0.005		Total Molybdenum (Mo)	0.001	0.004	22.2%
	Total Nickel (Ni)	0.001	0.029		Total Nickel (Ni)	0.001	0.029	0.0%
	Total Potassium (K)	0.0001	7.59		Total Potassium (K)	0.0001	7.64	0.7%
	Total Selenium (Se)	0.0001	0.0004		Total Selenium (Se)	0.0001	0.0004	NC
	Total Silicon (Si)	0.1	41.6		Total Silicon (Si)	0.1	40.4	2.9%
	Total Silver (Ag)	0.00002	0.00014		Total Silver (Ag)	0.00002	0.00015	6.9%
	Total Sodium (Na)	0.00005	291		Total Sodium (Na)	0.00005	298	2.4%
	Total Strontium (Sr)	0.001	1.80		Total Strontium (Sr)	0.001	1.78	1.1%
	Total Sulphur (S)	0.003	175		Total Sulphur (S)	0.003	176	0.6%
	Total Thallium (Tl)	0.0001	0.00027		Total Thallium (Tl)	0.0001	0.00026	3.8%
	Total Tin (Sn)	0.005	<0.005		Total Tin (Sn)	0.005	<0.005	NC
	Total Titanium (Ti)	0.005	0.713		Total Titanium (Ti)	0.005	0.691	3.1%
	Total Uranium (U)	0.0001	0.0442		Total Uranium (U)	0.0001	0.0432	2.3%
	Total Vanadium (V)	0.005	0.046		Total Vanadium (V)	0.005	0.045	2.2%
	Total Zinc (Zn)	0.005	0.103		Total Zinc (Zn)	0.005	0.102	1.0%
	Total Zirconium (Zr)	0.0005	0.0154		Total Zirconium (Zr)	0.0005	0.0127	19.2%

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.26 B. Groundwater Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-28	Total Aluminum (Al)	0.003	14.6	MW10-38	Total Aluminum (Al)	0.003	15.8	7.9%
	Total Antimony (Sb)	0.0005	0.0012		Total Antimony (Sb)	0.0005	0.0012	0.0%
	Total Arsenic (As)	0.0001	0.0106		Total Arsenic (As)	0.0001	0.011	3.7%
	Total Barium (Ba)	0.001	0.17		Total Barium (Ba)	0.001	0.187	9.5%
	Total Beryllium (Be)	0.0001	0.0008		Total Beryllium (Be)	0.0001	0.0008	0.0%
	Total Bismuth (Bi)	0.001	<0.001		Total Bismuth (Bi)	0.001	<0.001	NC
	Total Boron (B)	0.05	1.13		Total Boron (B)	0.05	1.11	1.8%
	Total Cadmium (Cd)	0.00001	0.00051		Total Cadmium (Cd)	0.00001	0.0004	24.2%
	Total Calcium (Ca)	0.0001	584		Total Calcium (Ca)	0.0001	478	20.0%
	Total Chromium (Cr)	0.001	0.036		Total Chromium (Cr)	0.001	0.037	2.7%
	Total Cobalt (Co)	0.0005	0.0127		Total Cobalt (Co)	0.0005	0.0122	4.0%
	Total Copper (Cu)	0.0002	0.0382		Total Copper (Cu)	0.0002	0.039	2.1%
	Total Iron (Fe)	0.005	25.7		Total Iron (Fe)	0.005	26.2	1.9%
	Total Lead (Pb)	0.0002	0.0377		Total Lead (Pb)	0.0002	0.0307	20.5%
	Total Lithium (Li)	0.005	0.564		Total Lithium (Li)	0.005	0.544	3.6%
	Total Magnesium (Mg)	0.0001	844		Total Magnesium (Mg)	0.0001	744	12.6%
	Total Manganese (Mn)	0.001	1.45		Total Manganese (Mn)	0.001	1.18	20.5%
	Total Mercury (Hg)	0.00002	<0.00002		Total Mercury (Hg)	0.00002	<0.00002	NC
	Total Molybdenum (Mo)	0.001	0.036		Total Molybdenum (Mo)	0.001	0.036	0.0%
	Total Nickel (Ni)	0.001	0.04		Total Nickel (Ni)	0.001	0.04	NC
	Total Potassium (K)	0.0001	39.2		Total Potassium (K)	0.0001	36.2	8.0%
	Total Selenium (Se)	0.0001	0.0025		Total Selenium (Se)	0.0001	0.0022	12.8%
	Total Silicon (Si)	0.1	37.4		Total Silicon (Si)	0.1	40.3	7.5%
	Total Silver (Ag)	0.00002	0.00011		Total Silver (Ag)	0.00002	0.00011	0.0%
	Total Sodium (Na)	0.00005	841		Total Sodium (Na)	0.00005	771	8.7%
	Total Strontium (Sr)	0.001	1.96		Total Strontium (Sr)	0.001	1.81	8.0%
	Total Sulphur (S)	0.003	904		Total Sulphur (S)	0.003	817	10.1%
	Total Thallium (Tl)	0.0001	0.00029		Total Thallium (Tl)	0.0001	0.0003	NC
	Total Tin (Sn)	0.005	<0.005		Total Tin (Sn)	0.005	<0.005	NC
	Total Titanium (Ti)	0.005	0.702		Total Titanium (Ti)	0.005	0.832	16.9%
	Total Uranium (U)	0.0001	0.0332		Total Uranium (U)	0.0001	0.0312	6.2%
	Total Vanadium (V)	0.005	0.073		Total Vanadium (V)	0.005	0.071	2.8%
	Total Zinc (Zn)	0.005	0.303		Total Zinc (Zn)	0.005	0.25	19.2%
	Total Zirconium (Zr)	0.0005	0.0		Total Zirconium (Zr)	0.0005	0.0263	2.6%

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.26 C. Groundwater Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-49	Total Aluminum (Al)	0.003	14.9	MW10-59	Total Aluminum (Al)	0.003	9.95	39.8%
	Total Antimony (Sb)	0.0005	<0.0005		Total Antimony (Sb)	0.0005	<0.0005	NC
	Total Arsenic (As)	0.0001	0.0067		Total Arsenic (As)	0.0001	0.0051	27.1%
	Total Barium (Ba)	0.001	0.252		Total Barium (Ba)	0.001	0.199	23.5%
	Total Beryllium (Be)	0.0001	0.0009		Total Beryllium (Be)	0.0001	0.0006	40.0%
	Total Bismuth (Bi)	0.001	<0.001		Total Bismuth (Bi)	0.001	<0.001	NC
	Total Boron (B)	0.05	0.184		Total Boron (B)	0.05	0.174	5.6%
	Total Cadmium (Cd)	0.00001	0.00026		Total Cadmium (Cd)	0.00001	0.00024	8.0%
	Total Calcium (Ca)	0.0001	349		Total Calcium (Ca)	0.0001	342	2.0%
	Total Chromium (Cr)	0.001	0.033		Total Chromium (Cr)	0.001	0.023	35.7%
	Total Cobalt (Co)	0.0005	0.0079		Total Cobalt (Co)	0.0005	0.0058	30.7%
	Total Copper (Cu)	0.0002	0.0255		Total Copper (Cu)	0.0002	0.0203	22.7%
	Total Iron (Fe)	0.005	19.9		Total Iron (Fe)	0.005	14.1	34.1%
	Total Lead (Pb)	0.0002	0.0172		Total Lead (Pb)	0.0002	0.015	13.7%
	Total Lithium (Li)	0.005	0.141		Total Lithium (Li)	0.005	0.132	6.6%
	Total Magnesium (Mg)	0.0001	283		Total Magnesium (Mg)	0.0001	263	7.3%
	Total Manganese (Mn)	0.001	0.385		Total Manganese (Mn)	0.001	0.318	19.1%
	Total Mercury (Hg)	0.00002	<0.00002		Total Mercury (Hg)	0.00002	<0.00002	NC
	Total Molybdenum (Mo)	0.001	0.004		Total Molybdenum (Mo)	0.001	0.004	NC
	Total Nickel (Ni)	0.001	0.026		Total Nickel (Ni)	0.001	0.02	NC
	Total Potassium (K)	0.0001	5.40		Total Potassium (K)	0.0001	4.09	27.6%
	Total Selenium (Se)	0.0001	0.0054		Total Selenium (Se)	0.0001	0.0054	0.0%
	Total Silicon (Si)	0.1	38.2		Total Silicon (Si)	0.1	27.5	32.6%
	Total Silver (Ag)	0.00002	0.00009		Total Silver (Ag)	0.00002	0.00006	NC
	Total Sodium (Na)	0.00005	199		Total Sodium (Na)	0.00005	188	5.7%
	Total Strontium (Sr)	0.001	1.1		Total Strontium (Sr)	0.001	1.06	3.7%
	Total Sulphur (S)	0.003	217		Total Sulphur (S)	0.003	208	4.2%
	Total Thallium (Tl)	0.0001	0.00031		Total Thallium (Tl)	0.0001	0.00019	48.0%
	Total Tin (Sn)	0.005	<0.005		Total Tin (Sn)	0.005	<0.005	NC
	Total Titanium (Ti)	0.005	0.692		Total Titanium (Ti)	0.005	0.437	45.2%
	Total Uranium (U)	0.0001	0.0244		Total Uranium (U)	0.0001	0.0232	5.0%
	Total Vanadium (V)	0.005	0.048		Total Vanadium (V)	0.005	0.035	31.3%
	Total Zinc (Zn)	0.005	0.172		Total Zinc (Zn)	0.005	0.153	11.7%
	Total Zirconium (Zr)	0.0005	0.0		Total Zirconium (Zr)	0.0005	0.0069	36.7%

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.26 D. Groundwater Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-69	Total Aluminum (Al)	0.003	0.369	MW10-99	Total Aluminum (Al)	0.003	0.367	0.5%
	Total Antimony (Sb)	0.0005	<0.0006		Total Antimony (Sb)	0.0005	<0.0005	NC
	Total Arsenic (As)	0.0001	0.0007		Total Arsenic (As)	0.0001	0.0007	0.0%
	Total Barium (Ba)	0.001	0.083		Total Barium (Ba)	0.001	0.078	6.2%
	Total Beryllium (Be)	0.0001	<0.0001		Total Beryllium (Be)	0.0001	<0.0001	NC
	Total Bismuth (Bi)	0.001	<0.001		Total Bismuth (Bi)	0.001	<0.001	NC
	Total Boron (B)	0.05	1.25		Total Boron (B)	0.05	1.24	0.8%
	Total Cadmium (Cd)	0.00001	0.00003		Total Cadmium (Cd)	0.00001	0.00002	40.0%
	Total Calcium (Ca)	0.0001	102		Total Calcium (Ca)	0.0001	99.5	2.5%
	Total Chromium (Cr)	0.001	0.002		Total Chromium (Cr)	0.001	0.002	NC
	Total Cobalt (Co)	0.0005	<0.0005		Total Cobalt (Co)	0.0005	<0.0005	NC
	Total Copper (Cu)	0.0002	0.0034		Total Copper (Cu)	0.0002	0.0029	15.9%
	Total Iron (Fe)	0.005	0.621		Total Iron (Fe)	0.005	0.588	5.5%
	Total Lead (Pb)	0.0002	0.0023		Total Lead (Pb)	0.0002	0.0023	0.0%
	Total Lithium (Li)	0.005	0.254		Total Lithium (Li)	0.005	0.25	1.6%
	Total Magnesium (Mg)	0.0001	172		Total Magnesium (Mg)	0.0001	170	1.2%
	Total Manganese (Mn)	0.001	0.126		Total Manganese (Mn)	0.001	0.124	1.6%
	Total Mercury (Hg)	0.00002	<0.00002		Total Mercury (Hg)	0.00002	<0.00002	NC
	Total Molybdenum (Mo)	0.001	0.013		Total Molybdenum (Mo)	0.001	0.013	0.0%
	Total Nickel (Ni)	0.001	0.009		Total Nickel (Ni)	0.001	0.008	11.8%
	Total Potassium (K)	0.0001	1.91		Total Potassium (K)	0.0001	1.85	3.2%
	Total Selenium (Se)	0.0001	0.0001		Total Selenium (Se)	0.0001	0.0001	NC
	Total Silicon (Si)	0.1	11.3		Total Silicon (Si)	0.1	11.1	1.8%
	Total Silver (Ag)	0.00002	<0.00002		Total Silver (Ag)	0.00002	<0.00002	NC
	Total Sodium (Na)	0.00005	68.0		Total Sodium (Na)	0.00005	66.7	1.9%
	Total Strontium (Sr)	0.001	0.888		Total Strontium (Sr)	0.001	0.841	5.4%
	Total Sulphur (S)	0.003	46		Total Sulphur (S)	0.003	40	14.0%
	Total Thallium (Tl)	0.0001	<0.00005		Total Thallium (Tl)	0.0001	<0.00005	NC
	Total Tin (Sn)	0.005	<0.005		Total Tin (Sn)	0.005	<0.005	NC
	Total Titanium (Ti)	0.005	0.012		Total Titanium (Ti)	0.005	0.013	NC
	Total Uranium (U)	0.0001	0.0		Total Uranium (U)	0.0001	0.0345	4.3%
	Total Vanadium (V)	0.005	<0.005		Total Vanadium (V)	0.005	<0.005	NC
	Total Zinc (Zn)	0.005	0.069		Total Zinc (Zn)	0.005	0.075	8.3%
	Total Zirconium (Zr)	0.0005	0.0013		Total Zirconium (Zr)	0.0005	0.0012	8.0%

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.27. Groundwater Field Duplicate Relative Percent Difference (RPD) Calculations - PCB

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-28	Aroclor 1242	0.10	<0.10	MW10-38	Aroclor 1242	0.10	<0.10	NC
	Aroclor 1248	0.10	<0.10		Aroclor 1248	0.10	<0.10	NC
	Aroclor 1254	0.10	<0.10		Aroclor 1254	0.10	<0.10	NC
	Aroclor 1260	0.10	<0.10		Aroclor 1260	0.10	<0.10	NC
MW10-77	Aroclor 1242	0.10	<0.10	MW10-87	Aroclor 1242	0.10	<0.10	NC
	Aroclor 1248	0.10	<0.10		Aroclor 1248	0.10	<0.10	NC
	Aroclor 1254	0.10	0.44		Aroclor 1254	0.10	0.37	NC
	Aroclor 1260	0.10	<0.10		Aroclor 1260	0.10	<0.10	NC

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.28 A. Groundwater Field Duplicate Relative Percent Difference (RPD) Calculations - VOC

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-06	Chloromethane	0.003	<0.001	MW10-26	Chloromethane	0.003	<0.001	NC
	Vinyl chloride	0.001	<0.0005		Vinyl chloride	0.001	<0.0005	NC
	Chloroethane	0.001	<0.001		Chloroethane	0.001	<0.001	NC
	Trichlorofluoromethane	0.004	<0.004		Trichlorofluoromethane	0.004	<0.004	NC
	1,1,2Trichloro-1,2,2Trifluoroethane	0.002	<0.002		1,1,2Trichloro-1,2,2Trifluoroethane	0.002	<0.002	NC
	Dichlorodifluoromethane	0.002	<0.002		Dichlorodifluoromethane	0.002	<0.002	NC
	1,1-dichloroethene	0.001	<0.0005		1,1-dichloroethene	0.001	<0.0005	NC
	Dichloromethane	0.002	<0.002		Dichloromethane	0.002	<0.002	NC
	trans-1,2-dichloroethene	0.001	<0.001		trans-1,2-dichloroethene	0.001	<0.001	NC
	1,1-dichloroethane	0.001	<0.0005		1,1-dichloroethane	0.001	<0.0005	NC
	cis-1,2-dichloroethene	0.001	<0.001		cis-1,2-dichloroethene	0.001	<0.001	NC
	Chloroform (trichloromethane)	0.0010	<0.001		Chloroform (trichloromethane)	0.0010	<0.001	NC
	1,1,1-trichloroethane	0.0005	<0.0005		1,1,1-trichloroethane	0.0005	<0.0005	NC
	1,2-dichloroethane	0.0005	<0.0005		1,2-dichloroethane	0.0005	<0.0005	NC
	Carbon tetrachloride	0.001	<0.001		Carbon tetrachloride	0.001	<0.001	NC
	Benzene	0.0005	<0.0005		Benzene	0.0005	<0.0005	NC
	Methyl-tert-butylether (MTBE)	0.004	<0.004		Methyl-tert-butylether (MTBE)	0.004	<0.004	NC
	1,2-dichloropropane	0.0005	<0.0005		1,2-dichloropropane	0.0005	<0.0005	NC
	cis-1,3-dichloropropene	0.001	<0.001		cis-1,3-dichloropropene	0.001	<0.001	NC
	trans-1,3-dichloropropene	0.001	<0.001		trans-1,3-dichloropropene	0.001	<0.001	NC
	Bromomethane	0.001	<0.001		Bromomethane	0.001	<0.001	NC
	1,1,2-trichloroethene	0.0005	<0.0005		1,1,2-trichloroethene	0.0005	<0.0005	NC
	Trichloroethene	0.0005	0.0021		Trichloroethene	0.0005	0.0013	NC
	Chlorodibromomethane	0.001	<0.001		Chlorodibromomethane	0.001	<0.001	NC
	Dibromoethane	0.0002	<0.0002		Dibromoethane	0.0002	<0.0002	NC
	Tetrachloroethene	0.0005	<0.0005		Tetrachloroethene	0.0005	<0.0005	NC
	Bromodichloromethane	0.001	<0.001		Bromodichloromethane	0.001	<0.001	NC
	Toluene	0.0005	<0.0005		Toluene	0.0005	<0.0005	NC
	Ethylbenzene	0.0005	<0.0005		Ethylbenzene	0.0005	<0.0005	NC
	m & p-Xylene	0.001	<0.001		m & p-Xylene	0.001	<0.001	NC
	Bromoform	0.001	<0.001		Bromoform	0.001	<0.001	NC
	Styrene	0.0005	<0.0005		Styrene	0.0005	<0.0005	NC
	o-Xylene	0.0005	<0.0005		o-Xylene	0.0005	<0.0005	NC
	Xylenes (Total)	0.001	<0.001		Xylenes (Total)	0.001	<0.001	NC
	1,1,1,2-tetrachloroethane	0.0005	<0.0005		1,1,1,2-tetrachloroethane	0.0005	<0.0005	NC
	1,1,2,2-tetrachloroethene	0.0005	<0.0005		1,1,2,2-tetrachloroethene	0.0005	<0.0005	NC
	1,2-dichlorobenzene	0.0005	<0.0005		1,2-dichlorobenzene	0.0005	<0.0005	NC
	1,3-dichlorobenzene	0.0005	<0.0005		1,3-dichlorobenzene	0.0005	<0.0005	NC
	1,4-dichlorobenzene	0.0005	<0.0005		1,4-dichlorobenzene	0.0005	<0.0005	NC
	Chlorobenzene	0.0005	<0.0005		Chlorobenzene	0.0005	<0.0005	NC

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.28 B. Groundwater Field Duplicate Relative Percent Difference (RPD) Calculations - VOC

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-44	Chloromethane	0.003	<0.001	MW10-54	Chloromethane	0.003	<0.001	NC
	Vinyl chloride	0.001	<0.0005		Vinyl chloride	0.001	<0.0005	NC
	Chloroethane	0.001	<0.001		Chloroethane	0.001	<0.001	NC
	Trichlorofluoromethane	0.004	<0.004		Trichlorofluoromethane	0.004	<0.004	NC
	1,1,2Trichloro-1,2,2Trifluoroethane	0.002	<0.002		1,1,2Trichloro-1,2,2Trifluoroethane	0.002	<0.002	NC
	Dichlorodifluoromethane	0.002	<0.002		Dichlorodifluoromethane	0.002	<0.002	NC
	1,1-dichloroethene	0.001	<0.0005		1,1-dichloroethene	0.001	<0.0005	NC
	Dichloromethane	0.002	<0.002		Dichloromethane	0.002	<0.002	NC
	trans-1,2-dichloroethene	0.001	<0.001		trans-1,2-dichloroethene	0.001	<0.001	NC
	1,1-dichloroethane	0.001	<0.0005		1,1-dichloroethane	0.001	<0.0005	NC
	cis-1,2-dichloroethene	0.001	0.004		cis-1,2-dichloroethene	0.001	0.004	NC
	Chloroform (trichloromethane)	0.0010	<0.001		Chloroform (trichloromethane)	0.0010	<0.001	NC
	1,1,1-trichloroethane	0.0005	<0.0005		1,1,1-trichloroethane	0.0005	<0.0005	NC
	1,2-dichloroethane	0.0005	<0.0005		1,2-dichloroethane	0.0005	<0.0005	NC
	Carbon tetrachloride	0.001	<0.001		Carbon tetrachloride	0.001	<0.001	NC
	Benzene	0.0005	<0.0005		Benzene	0.0005	<0.0005	NC
	Methyl-tert-butylether (MTBE)	0.004	<0.004		Methyl-tert-butylether (MTBE)	0.004	<0.004	NC
	1,2-dichloropropane	0.0005	<0.0005		1,2-dichloropropane	0.0005	<0.0005	NC
	cis-1,3-dichloropropene	0.001	<0.001		cis-1,3-dichloropropene	0.001	<0.001	NC
	trans-1,3-dichloropropene	0.001	<0.001		trans-1,3-dichloropropene	0.001	<0.001	NC
	Bromomethane	0.001	<0.001		Bromomethane	0.001	<0.001	NC
	1,1,2-trichloroethene	0.0005	<0.0005		1,1,2-trichloroethene	0.0005	<0.0005	NC
	Trichloroethene	0.0005	0.0039		Trichloroethene	0.0005	0.0046	NC
	Chlorodibromomethane	0.001	<0.001		Chlorodibromomethane	0.001	<0.001	NC
	Dibromoethane	0.0002	<0.0002		Dibromoethane	0.0002	<0.0002	NC
	Tetrachloroethene	0.0005	<0.0005		Tetrachloroethene	0.0005	<0.0005	NC
	Bromodichloromethane	0.001	<0.001		Bromodichloromethane	0.001	<0.001	NC
	Toluene	0.0005	<0.0005		Toluene	0.0005	<0.0005	NC
	Ethylbenzene	0.0005	0.0005		Ethylbenzene	0.0005	<0.0005	NC
	m & p-Xylene	0.001	0.002		m & p-Xylene	0.001	0.002	NC
	Bromoform	0.001	<0.001		Bromoform	0.001	<0.001	NC
	Styrene	0.0005	<0.0005		Styrene	0.0005	<0.0005	NC
	o-Xylene	0.0005	0.0013		o-Xylene	0.0005	0.0013	NC
	Xylenes (Total)	0.001	0.003		Xylenes (Total)	0.001	0.003	NC
	1,1,1,2-tetrachloroethane	0.0005	<0.0005		1,1,1,2-tetrachloroethane	0.0005	<0.0005	NC
	1,1,2,2-tetrachloroethene	0.0005	<0.0005		1,1,2,2-tetrachloroethene	0.0005	<0.0005	NC
	1,2-dichlorobenzene	0.0005	<0.0005		1,2-dichlorobenzene	0.0005	<0.0005	NC
	1,3-dichlorobenzene	0.0005	<0.0005		1,3-dichlorobenzene	0.0005	<0.0005	NC
	1,4-dichlorobenzene	0.0005	<0.0005		1,4-dichlorobenzene	0.0005	<0.0005	NC
	Chlorobenzene	0.0005	<0.0005		Chlorobenzene	0.0005	<0.0005	NC

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.29 A. Sediment Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
OC10-1A	Aluminum (Al)	100	18,600	OC10-10A	Aluminum (Al)	100	18,600	0.0%
	Antimony (Sb)	0.1	1.1		Antimony (Sb)	0.1	1.3	16.7%
	Arsenic (As)	0.2	6.7		Arsenic (As)	0.2	6.9	2.9%
	Barium (Ba)	0.1	134		Barium (Ba)	0.1	148	9.9%
	Beryllium (Be)	0.1	0.8		Beryllium (Be)	0.1	0.9	11.8%
	Bismuth (Bi)	0.1	0.2		Bismuth (Bi)	0.1	0.2	NC
	Cadmium (Cd)	0.05	0.73		Cadmium (Cd)	0.05	0.7	NC
	Calcium (Ca)	100	33,400		Calcium (Ca)	100	34,300	2.7%
	Chromium (Cr)	1	38		Chromium (Cr)	1	41.0	7.6%
	Cobalt (Co)	0.3	11.4		Cobalt (Co)	0.3	11.3	0.9%
	Copper (Cu)	0.5	42.9		Copper (Cu)	0.5	42.9	0.0%
	Iron (Fe)	100	25,700		Iron (Fe)	100	25,300	1.6%
	Lead (Pb)	0.1	94.3		Lead (Pb)	0.1	102	7.8%
	Lithium (Li)	5	21		Lithium (Li)	5	23	9.1%
	Magnesium (Mg)	100	23,300		Magnesium (Mg)	100	23,200	0.4%
	Manganese (Mn)	0.2	247		Manganese (Mn)	0.2	230	7.1%
	Mercury (Hg)	0.05	0.07		Mercury (Hg)	0.05	0.08	NC
	Molybdenum (Mo)	0.1	1.2		Molybdenum (Mo)	0.1	1.3	8.0%
	Nickel (Ni)	0.8	32.8		Nickel (Ni)	0.8	33.6	2.4%
	Phosphorus (P)	10	866		Phosphorus (P)	10	862	0.5%
	Potasium (K)	100	3,790		Potasium (K)	100	3,900	2.9%
	Selenium (Se)	0.5	1.0		Selenium (Se)	0.5	1.0	0.0%
	Silver (Ag)	0.05	0.16		Silver (Ag)	0.05	0.12	NC
	Sodium (Na)	100	620		Sodium (Na)	100	642	3.5%
	Strontium (Sr)	0.1	53.6		Strontium (Sr)	0.1	54.5	1.7%
	Thallium (Tl)	0.05	0.24		Thallium (Tl)	0.05	0.25	4.1%
	Tin (Sn)	0.1	2.8		Tin (Sn)	0.1	4.2	40.0%
	Titanium (Ti)	1	168		Titanium (Ti)	1	174	3.5%
	Uranium (U)	0.05	3.66		Uranium (U)	0.05	3.83	4.5%
	Vanadium (V)	2	59		Vanadium (V)	2	60	1.7%
	Zinc (Zn)	1	266.0		Zinc (Zn)	1	274	3.0%
	Zirconium (Zr)	0.5	7.4		Zirconium (Zr)	0.5	8.0	7.8%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.29 B. Sediment Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
OC10-1B	Aluminum (Al)	100	13,700	OC10-10B	Aluminum (Al)	100	12,200	11.6%
	Antimony (Sb)	0.1	2.9		Antimony (Sb)	0.1	0.7	**122.2%**
	Arsenic (As)	0.2	4.8		Arsenic (As)	0.2	4.4	8.7%
	Barium (Ba)	0.1	118		Barium (Ba)	0.1	105	11.7%
	Beryllium (Be)	0.1	0.6		Beryllium (Be)	0.1	0.6	0.0%
	Bismuth (Bi)	0.1	0.1		Bismuth (Bi)	0.1	0.1	NC
	Cadmium (Cd)	0.05	0.57		Cadmium (Cd)	0.05	0.48	17.1%
	Calcium (Ca)	100	59,000		Calcium (Ca)	100	61,900	4.8%
	Chromium (Cr)	1	29		Chromium (Cr), Tota	1	29	0.0%
	Cobalt (Co)	0.3	10.0		Cobalt (Co)	0.3	8.9	11.6%
	Copper (Cu)	0.5	49.0		Copper (Cu)	0.5	31.7	42.9%
	Iron (Fe)	100	20,500		Iron (Fe)	100	18,400	10.8%
	Lead (Pb)	0.1	76.6		Lead (Pb)	0.1	69.8	9.3%
	Lithium (Li)	5	16		Lithium (Li)	5	15	6.5%
	Magnesium (Mg)	100	28,000		Magnesium (Mg)	100	29,100	3.9%
	Manganese (Mn)	0.2	269		Manganese (Mn)	0.2	254	5.7%
	Mercury (Hg)	0.05	<0.05		Mercury (Hg)	0.05	<0.05	NC
	Molybdenum (Mo)	0.1	1.3		Molybdenum (Mo)	0.1	0.8	47.6%
	Nickel (Ni)	0.8	26.1		Nickel (Ni)	0.8	24.6	5.9%
	Phosphorus (P)	10	549		Phosphorus (P)	10	514	6.6%
	Potasium (K)	100	3,010		Potasium (K)	100	2,670	12.0%
	Selenium (Se)	0.5	<0.5		Selenium (Se)	0.5	0.7	NC
	Silver (Ag)	0.05	0.09		Silver (Ag)	0.05	0.09	NC
	Sodium (Na)	100	399		Sodium (Na)	100	338	16.6%
	Strontium (Sr)	0.1	67.5		Strontium (Sr)	0.1	62.5	7.7%
	Thallium (Tl)	0.05	0.20		Thallium (Tl)	0.05	0.17	NC
	Tin (Sn)	0.1	5.1		Tin (Sn)	0.1	3.2	45.8%
	Titanium (Ti)	1	200		Titanium (Ti)	1	186	7.3%
	Uranium (U)	0.05	2.07		Uranium (U)	0.05	1.88	9.6%
	Vanadium (V)	2	42		Vanadium (V)	2	38	10.0%
	Zinc (Zn)	1	152.0		Zinc (Zn)	1	148	2.7%
	Zirconium (Zr)	0.5	6.5		Zirconium (Zr)	0.5	5.1	24.1%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.29 C. Sediment Field Duplicate Relative Percent Difference (RPD) Calculations - Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
OC10-1C	Aluminum (Al)	100	13,000	OC10-10C	Aluminum (Al)	100	11,800	9.7%
	Antimony (Sb)	0.1	1.9		Antimony (Sb)	0.1	2.3	19.0%
	Arsenic (As)	0.2	7.5		Arsenic (As)	0.2	13.7	58.5%
	Barium (Ba)	0.1	129		Barium (Ba)	0.1	130	0.8%
	Beryllium (Be)	0.1	0.6		Beryllium (Be)	0.1	0.6	0.0%
	Bismuth (Bi)	0.1	0.1		Bismuth (Bi)	0.1	0.1	NC
	Cadmium (Cd)	0.05	0.35		Cadmium (Cd)	0.05	0.38	8.2%
	Calcium (Ca)	100	60,600		Calcium (Ca)	100	60,100	0.8%
	Chromium (Cr)	1	34		Chromium (Cr), Tota	1	74.0	74.1%
	Cobalt (Co)	0.3	10.2		Cobalt (Co)	0.3	16.1	44.9%
	Copper (Cu)	0.5	45.0		Copper (Cu)	0.5	80.2	56.2%
	Iron (Fe)	100	40,000		Iron (Fe)	100	75,400	61.4%
	Lead (Pb)	0.1	137		Lead (Pb)	0.1	156	13.0%
	Lithium (Li)	5	17		Lithium (Li)	5	15	12.5%
	Magnesium (Mg)	100	32,800		Magnesium (Mg)	100	32,400	1.2%
	Manganese (Mn)	0.2	451		Manganese (Mn)	0.2	638	34.3%
	Mercury (Hg)	0.05	0.10		Mercury (Hg)	0.05	0.10	NC
	Molybdenum (Mo)	0.1	2.0		Molybdenum (Mo)	0.1	5.1	87.3%
	Nickel (Ni)	0.8	34.4		Nickel (Ni)	0.8	48.6	34.2%
	Phosphorus (P)	10	586		Phosphorus (P)	10	636	8.2%
	Potasium (K)	100	2,660		Potasium (K)	100	2,420	9.4%
	Selenium (Se)	0.5	<0.5		Selenium (Se)	0.5	0.5	NC
	Silver (Ag)	0.05	0.10		Silver (Ag)	0.05	0.11	NC
	Sodium (Na)	100	307		Sodium (Na)	100	298	3.0%
	Strontium (Sr)	0.1	58.6		Strontium (Sr)	0.1	60.1	2.5%
	Thallium (Tl)	0.05	0.17		Thallium (Tl)	0.05	0.17	NC
	Tin (Sn)	0.1	3.9		Tin (Sn)	0.1	7.4	61.9%
	Titanium (Ti)	1	194		Titanium (Ti)	1	177	9.2%
	Uranium (U)	0.05	1.35		Uranium (U)	0.05	1.56	14.4%
	Vanadium (V)	2	43		Vanadium (V)	2	42	2.4%
	Zinc (Zn)	1	145.0		Zinc (Zn)	1	205	34.3%
	Zirconium (Zr)	0.5	6.2		Zirconium (Zr)	0.5	4.9	23.4%

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.30. Sediment Field Duplicate Relative Percent Difference (RPD) Calculations - PCB

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
OC10-1A	Aroclor 1242	0.03	<0.03	OC10-10A	Aroclor 1242	0.03	<0.03	NC
	Aroclor 1248	0.03	<0.03		Aroclor 1248	0.03	<0.03	NC
	Aroclor 1254	0.03	<0.03		Aroclor 1254	0.03	<0.03	NC
	Aroclor 1260	0.03	<0.03		Aroclor 1260	0.03	<0.03	NC
	Polychlorinated Biphenyls (Total)	0.03	<0.03		Polychlorinated Biphenyls (Total)	0.03	<0.03	NC
OC10-1B (0-5)	Aroclor 1242	0.03	<0.03	OC10-10B (0-5)	Aroclor 1242	0.03	<0.03	NC
	Aroclor 1248	0.03	<0.03		Aroclor 1248	0.03	<0.03	NC
	Aroclor 1254	0.03	<0.03		Aroclor 1254	0.03	<0.03	NC
	Aroclor 1260	0.03	<0.03		Aroclor 1260	0.03	<0.03	NC
	Polychlorinated Biphenyls (Total)	0.03	<0.03		Polychlorinated Biphenyls (Total)	0.03	<0.03	NC
OC10-1C	Aroclor 1242	0.03	<0.03	OC10-10C	Aroclor 1242	0.03	<0.03	NC
	Aroclor 1248	0.03	<0.03		Aroclor 1248	0.03	<0.03	NC
	Aroclor 1254	0.03	<0.03		Aroclor 1254	0.03	<0.03	NC
	Aroclor 1260	0.03	<0.03		Aroclor 1260	0.03	<0.03	NC
	Polychlorinated Biphenyls (Total)	0.03	<0.03		Polychlorinated Biphenyls (Total)	0.03	<0.03	NC

Notes:
1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.31 A. Sediment Field Duplicate Relative Percent Difference (RPD) Calculations - PAH

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
OC10-1A	Acenapthene	0.01	0.02	OC10-10A	Acenapthene	0.01	0.12	**142.9%**
	Acenaphthylene	0.01	0.05		Acenaphthylene	0.01	0.05	0.0%
	Anthracene	0.01	0.05		Anthracene	0.01	0.18	**113.0%**
	Benzo(a)anthracene	0.01	0.20		Benzo(a)anthracene	0.01	0.49	84.1%
	Benzo(a)pyrene	0.01	0.19		Benzo(a)pyrene	0.01	0.44	79.4%
	Benzo(b/j)fluoranthene	0.01	0.29		Benzo(b/j)fluoranthene	0.01	0.52	56.8%
	Benzo(g,h,i)perylene	0.02	0.15		Benzo(g,h,i)perylene	0.02	0.28	60.5%
	Benzo(k)fluoranthene	0.01	0.12		Benzo(k)fluoranthene	0.01	0.42	**111.1%**
	Chrysene	0.01	0.27		Chrysene	0.01	0.65	82.6%
	Dibenz(a,h)anthracene	0.02	0.03		Dibenz(a,h)anthracene	0.02	0.08	90.9%
	Fluoranthene	0.01	0.46		Fluoranthene	0.01	1.5	**106.1%**
	Fluorene	0.01	0.03		Fluorene	0.01	0.16	**136.8%**
	Indeno(1,2,3-cd)pyrene	0.02	0.17		Indeno(1,2,3-cd)pyrene	0.02	0.32	61.2%
	2-Methylnaphthalene	0.01	0.03		2-Methylnaphthalene	0.01	0.05	50.0%
	Naphthalene	0.01	0.04		Naphthalene	0.01	0.06	40.0%
	Phenanthrene	0.01	0.20		Phenanthrene	0.01	1.4	**150.0%**
	Pyrene	0.01	0.38		Pyrene	0.01	1.1	97.3%

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.31 B. Sediment Field Duplicate Relative Percent Difference (RPD) Calculations - PAH

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
OC10-1B	Acenapthene	0.01	0.08	OC10-10B	Acenapthene	0.01	0.07	13.3%
	Acenaphthylene	0.01	0.02		Acenaphthylene	0.01	0.05	85.7%
	Anthracene	0.01	0.24		Anthracene	0.01	0.17	34.1%
	Benzo(a)anthracene	0.01	0.60		Benzo(a)anthracene	0.01	0.32	60.9%
	Benzo(a)pyrene	0.01	0.56		Benzo(a)pyrene	0.01	0.25	76.5%
	Benzo(b/j)fluoranthene	0.01	0.58		Benzo(b/j)fluoranthene	0.01	0.25	79.5%
	Benzo(g,h,i)perylene	0.02	0.36		Benzo(g,h,i)perylene	0.02	0.15	82.4%
	Benzo(k)fluoranthene	0.01	0.42		Benzo(k)fluoranthene	0.01	0.22	62.5%
	Chrysene	0.01	0.65		Chrysene	0.01	0.33	65.3%
	Dibenz(a,h)anthracene	0.02	0.09		Dibenz(a,h)anthracene	0.02	0.04	NC
	Fluoranthene	0.01	1.4		Fluoranthene	0.01	0.81	53.4%
	Fluorene	0.01	0.1		Fluorene	0.01	0.11	9.5%
	Indeno(1,2,3-cd)pyrene	0.02	0.38		Indeno(1,2,3-cd)pyrene	0.02	0.18	71.4%
	2-Methylnaphthalene	0.01	0.02		2-Methylnaphthalene	0.01	0.03	NC
	Naphthalene	0.01	0.04		Naphthalene	0.01	0.05	22.2%
	Phenanthrene	0.01	0.88		Phenanthrene	0.01	0.55	46.2%
	Pyrene	0.01	1.2		Pyrene	0.01	0.64	60.9%

Notes:

1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.31 C. Sediment Field Duplicate Relative Percent Difference (RPD) Calculations - PAH

Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/kg)	RPD (%)
OC10-1C	Acenapthene	0.01	0.04	OC10-10C	Acenapthene	0.01	0.01	NC
	Acenaphthylene	0.01	0.02		Acenaphthylene	0.01	<0.01	NC
	Anthracene	0.01	0.09		Anthracene	0.01	0.02	NC
	Benzo(a)anthracene	0.01	0.26		Benzo(a)anthracene	0.01	0.06	**125.0%**
	Benzo(a)pyrene	0.01	0.24		Benzo(a)pyrene	0.01	0.05	**131.0%**
	Benzo(b/j)fluoranthene	0.01	0.33		Benzo(b/j)fluoranthene	0.01	0.07	**130.0%**
	Benzo(g,h,i)perylene	0.02	0.2		Benzo(g,h,i)perylene	0.02	0.05	NC
	Benzo(k)fluoranthene	0.01	0.13		Benzo(k)fluoranthene	0.01	0.04	NC
	Chrysene	0.01	0.28		Chrysene	0.01	0.08	**111.1%**
	Dibenz(a,h)anthracene	0.02	0.06		Dibenz(a,h)anthracene	0.02	<0.02	NC
	Fluoranthene	0.01	0.58		Fluoranthene	0.01	0.12	131.4%
	Fluorene	0.01	0.05		Fluorene	0.01	0.02	NC
	Indeno(1,2,3-cd)pyrene	0.02	0.18		Indeno(1,2,3-cd)pyrene	0.02	0.05	NC
	2-Methylnaphthalene	0.01	0.13		2-Methylnaphthalene	0.01	0.08	47.6%
	Naphthalene	0.01	0.09		Naphthalene	0.01	0.05	57.1%
	Phenanthrene	0.01	0.47		Phenanthrene	0.01	0.11	**124.1%**
	Pyrene	0.01	0.49		Pyrene	0.01	0.11	**126.7%**

Notes:

1. All results in mg/kg.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.32. Surface Water Field Duplicate Relative Percent Difference (RPD) Calculations - Organic Matter, Organic Carbon

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
MW10-28	Dissolved Organic Carbon (DOC)	0.5	14.0	MW10-38	Dissolved Organic Carbon (DOC)	0.5	14.2	1.4%
	Total Organic Carbon (TOC)	0.5	14.7		Total Organic Carbon (TOC)	0.5	14.8	0.7%

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.33. Surface Water Field Duplicate Relative Percent Difference (RPD) Calculations - Dissolved Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
OC10-1	Dissolved Aluminum (Al)	0.003	0.022	OC10-10	Dissolved Aluminum (Al)	0.003	0.033	40.0%
	Dissolved Antimony (Sb)	0.0005	<0.0005		Dissolved Antimony (Sb)	0.0005	<0.0005	NC
	Dissolved Arsenic (As)	0.0001	0.0030		Dissolved Arsenic (As)	0.0001	0.0030	0.0%
	Dissolved Barium (Ba)	0.001	0.065		Dissolved Barium (Ba)	0.001	0.066	1.5%
	Dissolved Beryllium (Be)	0.0001	<0.0001		Dissolved Beryllium (Be)	0.0001	<0.0001	NC
	Dissolved Bismuth (Bi)	0.001	<0.001		Dissolved Bismuth (Bi)	0.001	<0.001	NC
	Dissolved Boron (B)	0.5	0.091		Dissolved Boron (B)	0.5	0.09	NC
	Dissolved Cadmium (Cd)	0.00001	0.00003		Dissolved Cadmium (Cd)	0.00001	0.00002	NC
	Dissolved Calcium (Ca)	0.00005	77.4		Dissolved Calcium (Ca)	0.00005	76.6	1.0%
	Dissolved Chromium (Cr)	0.001	<0.001		Dissolved Chromium (Cr)	0.001	<0.001	NC
	Dissolved Cobalt (Co)	0.0005	<0.0005		Dissolved Cobalt (Co)	0.0005	<0.0005	NC
	Dissolved Copper (Cu)	0.0002	0.0013		Dissolved Copper (Cu)	0.0002	0.0014	7.4%
	Dissolved Iron (Fe)	0.005	0.058		Dissolved Iron (Fe)	0.005	0.074	24.2%
	Dissolved Lead (Pb)	0.0002	0.0002		Dissolved Lead (Pb)	0.0002	0.0003	NC
	Dissolved Lithium (Li)	0.005	0.074		Dissolved Lithium (Li)	0.005	0.074	0.0%
	Dissolved Magnesium (Mg)	0.05	21		Dissolved Magnesium (Mg)	0.05	21	0.0%
	Dissolved Manganese (Mn)	0.001	0.0657		Dissolved Manganese (Mn)	0.001	0.0639	2.8%
	Dissolved Mercury (Hg)	0.00002	<0.00002		Dissolved Mercury (Hg)	0.00002	<0.00002	NC
	Dissolved Molybdenum (Mo)	0.001	0.001		Dissolved Molybdenum (Mo)	0.001	0.001	NC
	Dissolved Nickel (Ni)	0.001	0.003		Dissolved Nickel (Ni)	0.001	0.004	NC
	Dissolved Potassium (K)	0.05	12.2		Dissolved Potassium (K)	0.05	12.1	0.8%
	Dissolved Selenium (Se)	0.0001	0.0016		Dissolved Selenium (Se)	0.0001	0.0016	0.0%
	Dissolved Silicon (Si)	0.1	2.34		Dissolved Silicon (Si)	0.1	2.31	1.3%
	Dissolved Silver (Ag)	0.00002	<0.00002		Dissolved Silver (Ag)	0.00002	<0.00002	NC
	Dissolved Sodium (Na)	0.05	66.8		Dissolved Sodium (Na)	0.05	64.9	2.9%
	Dissolved Strontium (Sr)	0.001	0.436		Dissolved Strontium (Sr)	0.001	0.441	1.1%
	Dissolved Sulphur (S)	3	70		Dissolved Sulphur (S)	3	70	0.0%
	Dissolved Thallium (Tl)	0.00005	<0.00005		Dissolved Thallium (Tl)	0.00005	<0.00005	NC
	Dissolved Tin (Sn)	0.005	<0.005		Dissolved Tin (Sn)	0.005	<0.005	NC
	Dissolved Titanium (Ti)	0.005	<0.005		Dissolved Titanium (Ti)	0.005	<0.005	NC
	Dissolved Uranium (U)	0.0001	0.0087		Dissolved Uranium (U)	0.0001	0.0089	2.3%
	Dissolved Vanadium (V)	0.005	0.006		Dissolved Vanadium (V)	0.005	0.006	NC
	Dissolved Zinc (Zn)	0.005	<0.005		Dissolved Zinc (Zn)	0.005	<0.005	NC
	Dissolved Zirconium (Zr)	0.0005	<0.0005		Dissolved Zirconium (Zr)	0.0005	<0.0005	NC

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.34. Surface Water Field Duplicate Relative Percent Difference (RPD) Calculations - Total Metals

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
OC10-1	Total Aluminum (Al)	0.003	0.694	OC10-10	Total Aluminum (Al)	0.003	0.605	13.7%
	Total Antimony (Sb)	0.0005	<0.0005		Total Antimony (Sb)	0.0005	<0.0005	NC
	Total Arsenic (As)	0.0001	0.0030		Total Arsenic (As)	0.0001	0.0029	3.4%
	Total Barium (Ba)	0.001	0.078		Total Barium (Ba)	0.001	0.075	3.9%
	Total Beryllium (Be)	0.0001	<0.0001		Total Beryllium (Be)	0.0001	<0.0001	NC
	Total Bismuth (Bi)	0.001	<0.001		Total Bismuth (Bi)	0.001	<0.001	NC
	Total Boron (B)	0.5	0.101		Total Boron (B)	0.5	0.095	NC
	Total Cadmium (Cd)	0.05	0.00004		Total Cadmium (Cd)	0.05	0.00012	NC
	Total Calcium (Ca)	0.00005	77.2		Total Calcium (Ca)	0.00005	76.2	1.3%
	Total Chromium (Cr)	0.001	0.001		Total Chromium (Cr)	0.001	0.001	NC
	Total Cobalt (Co)	0.0005	0.0005		Total Cobalt (Co)	0.0005	<0.0005	NC
	Total Copper (Cu)	0.0002	0.0027		Total Copper (Cu)	0.0002	0.0028	3.6%
	Total Iron (Fe)	0.005	0.766		Total Iron (Fe)	0.005	0.695	9.7%
	Total Lead (Pb)	0.0002	0.0028		Total Lead (Pb)	0.0002	0.0026	7.4%
	Total Lithium (Li)	0.005	0.08		Total Lithium (Li)	0.005	0.076	5.1%
	Total Manganese (Mn)	0.05	35		Total Manganese (Mn)	0.05	35	0.0%
	Total Magnesium (Mg)	0.001	0.0712		Total Magnesium (Mg)	0.001	0.0698	2.0%
	Total Mercury (Hg)	0.00002	<0.00002		Total Mercury (Hg)	0.00002	<0.00002	NC
	Total Molybdenum (Mo)	0.001	0.001		Total Molybdenum (Mo)	0.001	0.001	NC
	Total Nickel (Ni)	0.001	0.005		Total Nickel (Ni)	0.001	0.005	0.0%
	Total Potassium (K)	0.05	13.3		Total Potassium (K)	0.05	12.9	3.1%
	Total Selenium (Se)	0.0001	0.0017		Total Selenium (Se)	0.0001	0.0017	0.0%
	Total Silicon (Si)	0.1	3.650		Total Silicon (Si)	0.1	3.530	3.3%
	Total Silver (Ag)	0.00002	<0.00002		Total Silver (Ag)	0.00002	<0.00002	NC
	Total Sodium (Na)	0.05	73.7		Total Sodium (Na)	0.05	72.7	1.4%
	Total Strontium (Sr)	0.001	0.48		Total Strontium (Sr)	0.001	0.452	6.0%
	Total Sulphur (S)	3	77		Total Sulphur (S)	3	70	9.5%
	Total Thallium (Tl)	0.00005	<0.00005		Total Thallium (Tl)	0.00005	<0.00005	NC
	Total Tin (Sn)	0.005	<0.005		Total Tin (Sn)	0.005	<0.005	NC
	Total Titanium (Ti)	0.005	0.021		Total Titanium (Ti)	0.005	0.020	NC
	Total Uranium (U)	0.0001	0.0091		Total Uranium (U)	0.0001	0.0088	3.4%
	Total Vanadium (V)	0.005	0.008		Total Vanadium (V)	0.005	0.007	13.3%
	Total Zinc (Zn)	0.005	0.016		Total Zinc (Zn)	0.005	0.015	NC
	Total Zirconium (Zr)	0.0005	0.0008		Total Zirconium (Zr)	0.0005	0.0009	NC

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.35. Surface Water Field Duplicate Relative Percent Difference (RPD) Calculations - PCB

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
OC10-1	Aroclor 1242	0.00010	<0.00010	OC10-10	Aroclor 1242	0.00010	<0.00010	NC
	Aroclor 1248	0.00010	<0.00010		Aroclor 1248	0.00010	<0.00010	NC
	Aroclor 1254	0.00010	<0.00010		Aroclor 1254	0.00010	<0.00010	NC
	Aroclor 1260	0.00010	<0.00010		Aroclor 1260	0.00010	<0.00010	NC

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Table 4.36. Surface Water Field Duplicate Relative Percent Difference (RPD) Calculations - PAH

Sample ID	Parameter	Laboratory RDL	Result (mg/L)	Duplicate Sample ID	Parameter	Laboratory RDL	Result (mg/L)	RPD (%)
OC10-1	Acenaphthene	0.00001	<0.00001	OC10-10	Acenaphthene	0.00001	<0.00001	NC
	Acenaphthylene	0.00001	<0.00001		Acenaphthylene	0.00001	<0.00001	NC
	Acridine	0.00005	<0.00005		Acridine	0.00005	<0.00005	NC
	Anthracene	0.00001	<0.00001		Anthracene	0.00001	<0.00001	NC
	Benzo(a)anthracene	0.00001	<0.00001		Benzo(a)anthracene	0.00001	<0.00001	NC
	Benzo(a)pyrene	0.00001	<0.00001		Benzo(a)pyrene	0.00001	<0.00001	NC
	Benzo(b&j)fluoranthene	0.00001	<0.00001		Benzo(b&j)fluoranthene	0.00001	<0.00001	NC
	Benzo(g,h,i)perylene	0.00002	<0.00002		Benzo(g,h,i)perylene	0.00002	<0.00002	NC
	Benzo(k)fluoranthene	0.00001	<0.00001		Benzo(k)fluoranthene	0.00001	<0.00001	NC
	Chrysene	0.00001	<0.00001		Chrysene	0.00001	<0.00001	NC
	Dibenz(a,h)anthracene	0.00002	<0.00002		Dibenz(a,h)anthracene	0.00002	<0.00002	NC
	Fluoranthene	0.00001	<0.00001		Fluoranthene	0.00001	<0.00001	NC
	Fluorene	0.00001	<0.00001		Fluorene	0.00001	<0.00001	NC
	Indeno(1,2,3-cd)pyrene	0.00002	<0.00002		Indeno(1,2,3-cd)pyrene	0.00002	<0.00002	NC
	2-Methylnaphthalene	0.00005	<0.00005		2-Methylnaphthalene	0.00005	<0.00005	NC
	Naphthalene	0.00005	<0.00005		Naphthalene	0.00005	<0.00005	NC
	Phenanthrene	0.00001	<0.00001		Phenanthrene	0.00001	<0.00001	NC
	Pyrene	0.00001	<0.00001		Pyrene	0.00001	<0.00001	NC
	Quinoline	0.00005	<0.00005		Quinoline	0.00005	<0.00005	NC

Notes:
1. All results in mg/L.
2. RDL - Reportable Detection Limit.
3. NC - Not Calculated (result < 5x the method detection limit).

XX Exceeds acceptable RPD value.

Appendix A
Site Photographs

Gate Shop UST Area

Photograph 1 ↑
View of MW10-01 facing south

Photograph 2 ↑
View of BH10-04 facing south

Photograph 3 ↑
View of BH10-05 and BH-4

Photograph 4 ↑
View of Gate Shop Area facing north

Paint Shop UST Area

Photograph 5 ↑
View of MW10-06 facing south

North Property Line UST Area

Photograph 6 ↑
View of MW10-10 facing north

Photograph 7 ↑
View of BH10-11 facing south

Landfilling Area

Photograph 8 ↑
View of MW10-28 and BH10-26 facing north

Photograph 9 ↑
View of BH10-41 facing west

Photograph 10 ↑
View of MW10-42 facing southwest

Photograph 11 ↑
View of BH10-36 facing east

Landfilling Area

Photograph 12 ↑
View of BH10-32 facing north

Photograph 13 ↑
View of landfilling area facing east

Photograph 14 ↑
View of landfilling area facing north

Photograph 15 ↑
View of landfilling area facing east

Sulphuric Acid Drum Storage Area

Photograph 16 ↑
View of MW10-49 facing north

Photograph 17 ↑
View of BH10-57 facing east

Photograph 18 ↑
View of BH10-52 facing northeast

Photograph 19 ↑
View of BH10-48 facing northwest

Diesel and Gasoline Area

Photograph 20 ↑
View of BH10-64 facing north

Photograph 21 ↑
View of MW10-59 facing north

Photograph 22 ↑
View of MW10-62 facing north

Photograph 23 ↑
View of MW10-61 facing north

Waste Paint Storage Area

Photograph 24 ↑
View of BH10-68 facing south

Photograph 25 ↑
View of BH10-67 and BH10-68 facing west

Photograph 26 ↑
View of MW10-67 facing south

Former Saskatchewan Landfill Area

Photograph 27 ↑
View of BH10-73 facing southeast

Photograph 28 ↑
View of MW10-71 facing west

Photograph 29 ↑
View of BH10-72 facing southwest

Polychlorinated Biphenyls Storage Area

Photograph 30
View of BH10-76 and MW10-77 facing east

Photograph 31
View of BH10-75 facing south

Photograph 32
View of BH10-76 facing south

Photograph 33
View of PCB Storage Area facing east

Appendix B

Borehole Logs

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-01**
LOCATION: Gate Shop UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			ASPHALT SAND & GRAVEL (Fill) - brown - fine to coarse grained, poorly graded					0
1			CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity					1
2			SILT - trace fine sand, trace clay - brown - moist - soft, low plasticity					2
3			- some clay below 3.0 m					3
					6-01-11		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	
4			CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity					4
5					6-01-12		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	5
6			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					6
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

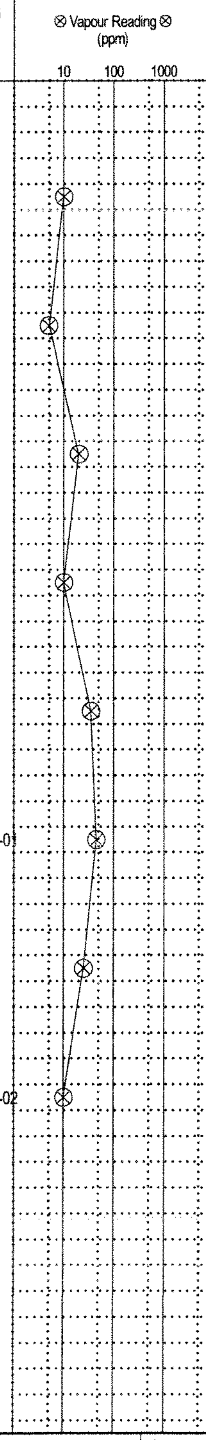
AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-02**
LOCATION: Gate Shop UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	COMMENTS
0	ASPHALT			
	SAND & GRAVEL (Fill) - brown - fine to coarse grained, poorly graded	GRAB		
1	CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity	GRAB		
2	SILT - trace fine sand, trace clay - brown - moist - soft, low plasticity	GRAB		
3	CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity	GRAB		
		GRAB		
4.5		GRAB	-02-01	- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.
		GRAB		
6		GRAB	-02-02	- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.
6.1	END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.			



AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-03**
LOCATION: Gate Shop UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			ASPHALT					0
			SAND & GRAVEL (Fill) - brown - fine to coarse grained, poorly graded					
1			CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity					1
2			SILT - trace fine sand, trace clay - brown - moist - soft, low plasticity		6-03-05		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	2
3								3
4			CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity					4
					6-03-07		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	
5								5
6			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					6
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-04**
LOCATION: Gate Shop UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT					0
		SAND & GRAVEL (Fill) - brown - fine to coarse grained, poorly graded					
1		CLAY - trace silte, trace fine sand - black - stiff, high plasticity					1
				G-04-08		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	
2							2
		SILT - trace fine sand, trace clay - brown - moist - soft, low plasticity					
3							3
		CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity					
4							4
				G-04-09		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	
5							5
6							6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-05**
LOCATION: Gate Shop UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS
0		ASPHALT				
		SAND & GRAVEL (Fill) - brown - fine to coarse grained, poorly graded				
1		CLAY - trace silte, trace fine sand - black - stiff, high plasticity				
2						
		SILT - trace fine sand, trace clay - brown - moist - soft, low plasticity				
3				6-05-03		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.
		CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity				
4						
5				6-05-04		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.
6						
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.				
7						
8						

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-06**
LOCATION: Paint Shop UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			ASPHALT (0 - 75 mm)					0
			SAND & GRAVEL (Fill) -brown -moist -fine to coarse grained, poorly graded					
			CLAY - Silty, trace fine sand, trace gravel -brown with black mottling -moist -stiff, high plasticity		06-01			
1								1
			-brown below 1.5 m		06-02			
			SILT - trace fine sand -brown -moist -soft, low plasticity -some clay below 2.3 m		06-03		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, PAH's and Metals	
2								2
			CLAY - silty, trace silt inclusions < 3 mm dia. -brown -moist -stiff, high plasticity		06-04			
3								3
					06-05		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4	
4								4
					06-06			
5								5
					06-07			
6					06-08			6
			END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) No seepage observed 3) Monitoring well MW-10-06 installed upon completion					
7								7
7.5								

AECOM

LOGGED BY: Brent Hay	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapmann	COMPLETION DATE: 10/20/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-07**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		CEMENT					0
		GRAVEL (Fill)					
1		CLAY -black -moist -stiff, high plasticity		6-07-01			1
				6-07-02			
2		SILT - major clay -light brown -moist -stiff, high plasticity		6-07-03			2
3		CLAY -light brown -moist -stiff, high plasticity		6-07-04			3
		CLAY -gleyed brown -wet -stiff, high plasticity		6-07-05			
4				6-07-06			4
5				6-07-07			5
6				6-07-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-08**
LOCATION: Paint Shop UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			ASPHALT (0 - 75 mm) SAND & GRAVEL (Fill) -brown -moist -poorly graded					0
			CLAY - Silty, trace fine sand, trace gravel -brown with black mottling -moist -stiff, high plasticity		08-01			
1								1
			SILT - trace fine sand -brown -moist -soft, low plasticity		08-02			
2			-some clay below 2.3 m		08-03			2
			CLAY - silty, -brown -moist -stiff, high plasticity -trace silt inclusions < 3 mm dia. below 1.5 m		08-04			
3					08-05			3
4			-trace oxidation below 4.0 m -dark grey below 4.3 m		08-06			4
5					08-07			5
6			END OF BOREHOLE @ 7.6 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) No seepage observed 3) Monitoring well MW-10-08 installed upon completion		08-08			6
7					08-09			7
7.6								

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 7.62 m
REVIEWED BY: Scott Chapmann	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 2

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-09**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		CEMENT					0
		GRAVEL (Fill)					
		WOOD					
		CLAY (Fill) - gravel -black -moist -stiff, high plasticity		BH10-09-01			
1				BH10-09-02			1
		CLAY -black -moist -stiff, high plasticity -odor		BH10-09-03			
2							2
				BH10-09-04			
3							3
		CLAY -gleyed brown -wet -stiff, high plasticity		BH10-09-05			
4							4
				BH10-09-06			
5				BH10-09-07			5
6				BH10-09-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-09A**
LOCATION: Paint Shop UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT (0 - 75 mm)					0
		GRAVEL & SAND (Fill) -black -moist -poorly graded (likely waste product as other BH's)		-09A-01			
1		CLAY -grey with black mottling -moist -stiff, high plasticity		-09A-02			1
2		SILT -brown -moist-wet -soft, low plasticity -some clay		-09A-03			2
3		-clayey		-09A-04			3
		CLAY - silty -brown -moist -stiff, high plasticity -trace silt inclusions < 3 mm dia. -trace oxidation below 3.7 m		-09A-05			
4		-dark grey below 4.3 m		-09A-06			4
		END OF BOREHOLE AT 4.6 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
5							5
6							6
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/22/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-10**
LOCATION: North Property Line UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	SOIL DESCRIPTION	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS
0	SAND & GRAVEL (Fill) -brown -moist -fine to coarse grained, poorly graded			
	CLAY - silty -brown with black mottling (organics) -moist -firm, high plasticity	10-01		-Soil sample submitted for analysis of metals
1				
	SILT - trace fine sand -brown -moist -soft, low plasticity	10-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4 and metals
2	-some clay below 1.8 m	10-03		
	CLAY - silty, trace silt inclusions < 3 mm dia. -brown -moist -very stiff, high plasticity -trace silt inclusions < 5 mm dia. below 2.7 m -trace silt inclusions < 10 mm dia. below 3.2 m	10-04		
3		10-05		
4		10-06		
5		10-07		
6		10-08		
	END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) No seepage observed 3) Monitoring well MW-10-10 installed upon completion			
7				
7.5				

AECOM

LOGGED BY: Brent Hay	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapmann	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-11**
LOCATION: North Property Line UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		CLAY (Fill) - trace sand, trace gravel, trace debris -dark grey with black mottling -moist -firm, high plasticity		11-01		-Soil sample submitted for metals analysis	0
1							1
		SILT - some clay, trace fine sand -brown -moist -soft, low plasticity		11-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4 and metals	
2				11-03			2
		CLAY - silty -brown -moist					
3		-stiff, high plasticity -trace silt inclusions < 10 mm dia. below 3.4 m		11-04			3
				11-05			
4		-firm below 4.0 m					4
				11-06			
5				11-07			5
6				11-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.4 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings and bentonite upon completion					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Brent Hay	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapmann	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-12**
LOCATION: North Property Line UST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		CLAY (Fill) - trace sand, trace gravel -dark grey -moist -stiff, high plasticity		12-01		-Soil sample submitted for metals analysis	0
1							1
		SILT -brown -moist -soft, low plasticity		12-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4 and metals	
2				12-03			2
		CLAY - silty -brown -moist -stiff, high plasticity -trace silt inclusions < 5 mm dia. below 2.9 m		12-04			
3				12-05			3
4		-trace oxidation below 4.0 m		12-06			4
5				12-07			5
6				12-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole backfilled with auger cuttings and bentonite upon completion					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-14**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			ASPHALT (0 - 100 mm) CLAY (Fill) some gravel, trace sand -grey with black mottling -moist -stiff, high plasticity		14-01			0
1			CLAY - Silty -grey -moist -firm, high plasticity		14-02			1
2			SILT -grey - brown -moist - wet -soft, low plasticity -light brown below 1.7 m		14-03			2
3			CLAY - silty -brown -moist -stiff, high plasticity -trace silt seams < 1 mm thick, trace silt inclusions < 5 mm dia. below ~ 2.9 m		14-04			3
4					14-05			4
5					14-06			5
6					14-07			6
7					14-08			7
7.5			END OF BOREHOLE @ 6.0 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) Seepage observed at 1.5 m 3) Monitoring well MW-10-14 installed upon completion					

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-15**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			ASPHALT (0 - 100 mm) SAND (Fill) - some gravel, -black -moist, likely coke or other waste product -loose, non-plastic		15-01			0
1			CLAY - silty -dark grey (likely stained) -moist -stiff, high plasticity grey below 1.1 m		15-02			1
2			SILT -light brown -moist to wet -soft, low plasticity		15-03			2
3			CLAY (Silty) -brown -moist -firm, high plasticity		15-04			3
4			-trace silt inclusions < 5 mm dia. below 3.7m		15-05			4
5			-trace oxidation below 4.3 m		15-06			5
6					15-07			6
7			END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.1 m below ground surface 2) Seepage observed at 1.5 m 3) Monitoring well MW-10-15 installed upon completion		15-08			7
7.5								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-16**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT (0-75mm)					0
		SAND (Fill) - trace gravel -black -moist, likely coke or other waste product -loose, non-plastic		16-01			
1		CLAY - silty -dark grey black (likely stained) -moist -stiff, high plasticity -soil looks slick & left black staining on gloves (oil)		16-02			1
2		SILT - trace fine sand, -brown -moist -soft, low plasticity		16-03			2
3		CLAY (Silty) - trace sand inclusions < 3mm dia. -brown -moist -stiff, high plasticity		16-04			3
4		-trace oxidation below 4.3 m		16-05			4
				16-06			
5				16-07			5
6				16-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) Seepage observed at 1.5 m 3) Monitoring well MW-10-15 installed upon completion					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-17**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT (0-75mm)					0
		GRAVEL & SAND (Fill) -brown -dry-moist					
		CLAY - Silty -grey -moist -stiff, high plasticity		17-01			
1		-black below 0.9 m -no odor -likely organics		17-02			1
2		SILT -brown -moist, wet -soft, low plasticity		17-03			2
3		CLAY - trace silt inclusions < 3mm dia. -brown -moist -stiff, high plasticity		17-04			3
				17-05			
4		-trace oxidation below 4.3 m		17-06			4
5				17-07			5
6				17-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.0 m below ground surface 2) Seepage observed at 1.8 m 3) Borehole backfilled with auger cuttings & bentonite upon completion					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-18**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT (0-75mm)					0
		CLAY (Fill) - trace sand, some gravel -dark grey with black mottling -moist -stiff, high plasticity -no gravel, sand below 0.6 m -silty		18-01			
1				18-02			1
		SILT - trace oxidation, -brown -moist -soft, high plasticity					
2				18-03			2
		CLAY -brown with dark grey mottling -moist -very stiff, high plasticity -trace silt inclusions < 5mm dia. below 3.1 m		18-04			
3							3
		-stiff below 3.8 m		18-05			
4		-trace oxidation below 4.3 m					4
		-dark grey below 4.6 m		18-06			
5				18-07			5
6				18-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) Seepage observed at 1.7 m 3) Backfilled with auger cuttings & bentonite surface					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-19**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill) -brown -moist					0
		CLAY (Fill) - silty, some gravel, some sand -grey -wet -soft, medium to low plasticity		19-01			
1		CLAY - silty, trace gravel, trace sand (Fill) -grey -moist -stiff, high plasticity -black (organics)		19-02			1
2		SILT -brown -moist -soft, low plasticity		19-03			2
		-some clay below 2.7 m					
3		CLAY - silty, -brown -moist -stiff, high plasticity -trace silt inclusions < 3 mm dia. -dark grey below 3.7 m		19-04			3
4		-trace oxidation below 4.1 m		19-05			4
				19-06			
5				19-07			5
6				19-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.0 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings & bentonite					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-20**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL - trace cobbles -grey -moist					0
		CLAY - silty, trace sand, trace gravel -grey -moist -stiff, high plasticity		20-01			
1		-black (organics) below 0.9 m -grey below 1.2 m					1
		SILT - some clay -brown -moist -soft, low plasticity		20-02			
2		-clayey		20-03			2
3		CLAY - silty -brown-grey -moist -stiff, high plasticity -trace silt inclusions < 3 mm dia. below 3.4 m		20-04			3
				20-05			
4		-trace oxidation below 4.0 m					4
		-dark grey below 4.3 m		20-06			
5				20-07			5
6				20-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) Seepage observed at 1.5 m 3) Borehole bacfilled with auger cuttings & bentonite					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-21**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			SAND & GRAVEL - trace cobbles -brown -moist -black granules fill, pockets ~ 0.15 m					0
			CLAY (Fill)- silty -grey with black mottling -moist -firm, high plasticity		21-01			
1								1
			SILT - some clay -brown -moist -soft, high plasticity		21-02			
2								2
			-clayey		21-03			
3					21-04			3
			CLAY - silty -brown -moist -firm, high plasticity -trace silt inclusions < 3 mm dia. below 3.7 m		21-05			
4			-trace oxidation below 4.0 m					4
					21-06			
5					21-07			5
6					21-08			6
			END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) Seepage observed at 1.4 m 3) Monitoring well MW-10-21 installed upon completion					
7								7
7.5								

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-22**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE ■ GRAB ▥ SHELBY TUBE ⊠ SPLIT SPOON ▤ BULK ▨ NO RECOVERY ◧ CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL -brown -moist					0
		CLAY (Fill)- silty -grey with black mottling -moist -firm, high plasticity		22-01			
1							1
		SILT - some clay, trace sand, hydrocarbon odor -grey-brown -moist -soft, low plasticity -silt seams/lenses ~ 5 mm thick		22-02			
2		-slight hydrocarbon odor in silt seams		22-03			2
		-clayey below 2.7 m -medium plasticity					
3		CLAY - silty -grey -moist -stiff, high plasticity -silt inclusions < 10 mm dia.		22-04			3
				22-05			
4		-trace oxidation below 4.1 m					4
				22-06			
5				22-07			5
6				22-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) Seepage observed at 1.5 m 3) Borehole backfilled with auger cuttings & bentonite upon completion					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-22A**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL - trace cobbles -orange-red (old crushed bricks) -moist					0
		CLAY (Fill)- silty, trace sand -grey -moist -stiff, high plasticity		22A-01			
1		-black (organics) below 0.6 m -grey (in-situ)					1
				22A-02			
2		SILT - some clay, -brown -moist -soft, low plasticity -clayey below 2.4		22A-03			2
3		CLAY - silty, trace silt inclusions < 3 mm dia. -brown-grey -moist -stiff, high plasticity		22A-04			3
4		-dark grey below 4.3 m -trace oxidation below 4.3 m		22A-05			4
5							5
6		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.1 m below ground surface 2) Seepage observed at 1.7 m 3) Borehole backfilled with auger cuttings & bentonite at surface with 0.9 m		22A-06			6
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-23**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			ASPHALT (0 - 75 mm)					0
			SAND & GRAVEL (Fill) -brown -moist -loose		23-01			
			CLAY (Fill) - trace silt inclusions -brown -moist -stiff, high plasticity		23-02			
1			SILT - trace gravel -brown -moist -soft, low plasticity		23-03			1
			CLAY -black (likely organics) with brown mottling -moist -firm, high plasticity -brown below 1.4 m					
2			SILT -brown -moist -soft, low plasticity		23-04			2
3			CLAY - trace silt inclusions < 5 mm dia. -grey -moist -stiff, high plasticity		23-05			3
					23-06			
4			-trace oxidation below 4.3 m					4
					23-07			
5					23-08			5
6					23-09			6
			END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.1 m below ground surface 2) Seepage observed at 1.8 m 3) Monitoring well MW-10-23 installed upon completion					
7								7
7.5								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-24**
LOCATION: Waste Oil Drum Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT (0 - 75 mm)					0
		FINE SAND (Fill) - silt, likely waste product -black -moist -loose, non-plastic -trace to some gravel below 0.6 m		24-01			
1		CLAY - silty -grey-dark grey -moist -stiff, high plasticity					1
		SILT - race fine sand -grey -soft, low plasticity -brown below 1.5 m		24-02			
2				24-03		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4	2
		CLAY -silty -grey with dark grey mottling -moist -firm, high plasticity		24-04			
3							3
		-trace silt inclusions ~ 1 mm dia. below 3.8 m		24-05			
4							4
		-soft below 4.6 m		24-06			
5							5
				24-07			
6				24-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings & bentonite upon completion					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 13-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-25**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			SAND & GRAVEL (Fill) -brown -moist					0
			CLAY (Fill)- trace gravel, trace sand -grey with black mottling -moist -stiff, high plasticity		25-01			
1			-grey ~ 1.2 m (natural)		25-02			1
2			SILT -brown -moist -soft, low plasticity		25-03			2
3			CLAY - silty -light brown-grey -moist -stiff, high plasticity -trace silt inclusions < 5 mm dia. below 3.1 m		25-04			3
					25-05			
4			- dark grey below 4.3 m		25-06			4
5					25-07			5
6					25-08			6
			END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.3 m below ground surface 2) Seepage observed at 2.1 m 3) Monitoring well MW-10-25 installed upon completion					
7								7
7.5								

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-26**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRASS					0
		CLAY -black red mottling -moist -loose					
		CLAY -grey black -moist -stiff, high plasticity		BH10-26-01			
1							1
		SILT -light brown -moist -soft, low plasticity		BH10-26-02			
2							2
		CLAY -brown -moist -stiff, high plasticity		BH10-26-03			
		CLAY -grey brown -moist -stiff, high plasticity		BH10-26-04			
3							3
				BH10-26-05			
4							4
				BH10-26-06			
5							5
				BH10-26-07			
6				BH10-26-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-27**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRASS					0
		SILT (Fill) - stones					
		CLAY -black -moist -stiff, high plasticity		BH10-27-01			
1				BH10-27-02			1
		SILT -light brown -moist -soft, low plasticity					
2				BH10-27-03			2
		CLAY -grey brown -moist -stiff, high plasticity					
3				BH10-27-04			3
				BH10-27-05			
4							4
				BH10-27-06			
5				BH10-27-07			5
6				BH10-27-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-28**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			TREES / GRASS					0
			CLAY -black with red and grey mottling -moist -stiff, high plasticity		G-28-01			
1								1
			CLAY -light grey -moist -stiff, high plasticity		G-28-02			
2			-odor SILT - odor 7.5 -light grey brown -moist -soft, low plasticity		G-28-03			2
			CLAY -light grey brown -moist -stiff, high plasticity		G-28-04			
3								3
					G-28-05			
4								4
					G-28-06			
5								5
					G-28-07			
6					G-28-08			6
			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-29**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill)					0
		CLAY -black -moist -stiff, high plasticity		BH10-29-01			
1		CLAY -light brown -moist -stiff, high plasticity		BH10-29-02			1
2		SILT -light brown -wet -soft, low plasticity		BH10-29-03			2
		CLAY -grey brown -moist -stiff, high plasticity		BH10-29-04			
3				BH10-29-05			3
4				BH10-29-06			4
5				BH10-29-07			5
6				BH10-29-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-30**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			GRASS					0
			GRAVEL (Fill)					
			SILT -black -moist -soft, low plasticity		G-30-01			
1			SILT -light brown		G-30-02			1
2					G-30-03			2
			CLAY -dark grey -moist -stiff, high plasticity		G-30-04			
3					G-30-05			3
4					G-30-06			4
5					G-30-07			5
6			END OF BOREHOLE AT 6.1 m IN CLAY		G-30-08			6
7								7
8								

Notes:
1) Monitoring well installed upon completion of borehole with flushmount metal casing.

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-31**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill)					0
1		SILT -light brown -moist -soft, low plasticity	G	BH10-30-01			1
			G	BH10-30-02			
2		CLAY -grey brown -moist -stiff, high plasticity	G	BH10-30-03			2
3			G	BH10-30-04			3
4			G	BH10-30-05			4
5			G	BH10-30-06			5
6			G	BH10-30-07			6
7		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.	G	BH10-30-08			7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-32**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill)					0
		GRAVEL (Fill) - minor clay -black -moist -loose		BH10-32-01			
1				BH10-32-02			1
2		SILT -minor clay, trace sand -black staining -odor -soft, low plasticity		BH10-32-03		- Sample submitted for analysis of Metals.	2
3		CLAY -dark grey -moist -stiff, high plasticity		BH10-32-04			3
4				BH10-32-05			4
				BH10-32-06		- Sample submitted for analysis of Metals.	
5				BH10-32-07			5
6				BH10-32-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-33**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			GRAVEL					0
			CLAY (Fill) - rocks, debris -black -moist -stiff, high plasticity					
1								1
			CLAY -dark grey -moist -stiff, high plasticity					
2			SILT -light brown -moist -soft, low plasticity					2
3			CLAY - minor silt, trace sand -grey brown -moist -stiff, high plasticity -wet					3
4								4
5								5
6			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					6
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-34**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill) -black with red mottling -stones					0
		SILT		G-34-01			
1				G-34-02			1
		CLAY -black -moist -stiff, high plasticity					
2		CLAY -light brown, some grey -moist -stiff, high plasticity		G-34-03			2
				G-34-04		- Sample submitted for analysis of Metals.	
3		CLAY -grey brown -moist -stiff, high plasticity		G-34-05			3
4				G-34-06			4
5				G-34-07		- Sample submitted for analysis of Metals.	5
6		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.		G-34-08			6
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-35**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill) -shurbs / weeds					0
		CLAY -black -moist -stiff, high plasticity		BH10-35-01			
1							1
		CLAY -grey brown -moist -stiff, high plasticity		BH10-35-02			
2		SILT -light brown -moist -soft, low plasticity		BH10-35-03			2
		CLAY -grey brown -moist -stiff, high plasticity		BH10-35-04			
3							3
				BH10-35-05			
4							4
				BH10-35-06			
5							5
				BH10-35-07			
6				BH10-35-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-36**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRASS, SHRUBS					0
		GRAVEL (Fill)					
		CLAY -black with grey mottling -moist -stiff, high plasticity		BH10-36-01			
1		SILT -light brown -moist -soft, low plasticity		BH10-36-02			1
2		CLAY -light grey -moist stiff, high plasticity		BH10-36-03			2
3				BH10-36-04			3
4				BH10-36-05			4
5				BH10-36-06			5
6				BH10-36-07			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.		BH10-36-08			
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-37**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			GRAVEL (Fill)					0
1			CLAY -black -moist -stiff, high plasticity					1
2			CLAY -moist -stiff, high plasticity					2
3								3
4								4
5								5
6			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					6
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-39**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill)					0
1		CLAY -black with grey mottling -moist -stiff, high plasticity		BH10-39-01			1
				BH10-39-02		- Sample submitted for analysis of PCB, VOC's and Metals.	
2		SILT -light brown -moist -soft, low plasticity		BH10-39-03			2
3				BH10-39-04			3
		CLAY -grey brown -moist -stiff, high plasticity		BH10-39-05			
4				BH10-39-06		- Sample submitted for analysis of PCB and VOC's.	4
5				BH10-39-07			5
6				BH10-39-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-40**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			GRASS					0
			CLAY -black -moist -siff, high plasticity		40-01			
1			SILT -light brown -moist -soft, low plasticity					1
			CLAY -grey brown -moist -soft, high plasticity		40-02			
2					40-03			2
					40-04			
3								3
					40-05			
4								4
					40-06			
5								5
					40-07			
6					40-08			6
			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					
7								7
8								

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-41**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0							0
				6-41-01		- Sample submitted for analysis of Metals.	
1							1
				6-41-02			
		CLAY -black grey -moist -stiff, high plasticity					
2							2
		SILT -light brown -moist -soft, low plasticity		6-41-03			
		CLAY -gleyed brown -moist -stiff, high plasticity -wet		6-41-04			
3							3
				6-41-05		- Sample submitted for analysis of Metals.	
4							4
				6-41-06			
5				6-41-07			5
6				6-41-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-42**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRASS					0
		CLAY -black -moist -stiff, high plasticity		G-42-01			
1							1
		SILT -light brown -moist -soft, low plasticity		G-42-02			
2							2
		CLAY -light brown -moist -stiff, high plasticity		G-42-03			
3				G-42-04			3
				G-42-05			
4							4
				G-42-06			
5				G-42-07			5
6				G-42-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					
7							7
8							

AECOM	LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
	REVIEWED BY: Scott Chapman	COMPLETION DATE:
	PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-43**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			GRASS					0
			CLAY -black -moist -stiff, high plasticity		43-01			
1					43-02			1
			SILT -light brown -moist -soft, low plasticity		43-03			
2								2
			CLAY -light grey -moist -stiff, high plasticity		43-04			
3								3
					43-05			
4								4
					43-06			
5					43-07			5
6					43-08			6
			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-44**
LOCATION: Solvent AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	SOIL DESCRIPTION	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS
0	SAND & GRAVEL (Fill) -brown -moist			
	CLAY - silty -grey with black mottling (organics) -moist -stiff, high plasticity	44-01		
1				
	SILT- hydrocarbon odor -grey -moist -firm, low plasticity -clayey	44-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, PAH's and VOC's
2		44-03		
	CLAY - silty, no hydrocarbon odor -brown -moist -firm-stiff, high plasticity -silt seam < 1mm thick, hydrocarbon odor -trace silt inclusions < 3mm dia.	44-04		
3				
		44-05		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4 and PAH's
4	-silt lense ~50 mm -no HC odor -trace oxidation below 4.0 m			
		44-06		
5				
		44-07		
6		44-08		
	END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.0 m below ground surface 2) No seepage observed 3) Monitoring well MW-10-44 installed upon completion			
7				
7.5				

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-45**
LOCATION: Solvent AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			ASPHALT (0 - 75 mm)					0
			SAND & GRAVEL (Fill) -brown -moist					
			CLAY (Fill) - trace sand, trace gravel -black (organics) -moist -firm, medium plasticity		45-01		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, PAH's, VOC's and metals	
1			-grey with black mottling					1
					45-02			
2			SILT - some clay -brown -moist -soft, low plasticity		45-03			2
			-clayey					
3			CLAY - silty, trace silt inclusions < 3 mm dia. -brown -moist -stiff, high plasticity		45-04			3
					45-05			
4			-trace oxidation below 4.1 m					4
					45-06			
5					45-07			5
6					45-08			6
			END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.1 m below ground surface 2) Seepage observed at 2.0 m 3) Monitoring well MW-10-45 installed upon completion					
7								7
7.5								

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-46**
LOCATION: Solvent AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT (0 - 50 mm)					0
		SAND & GRAVEL - hydrocarbon odor -brown -moist		46-01			
		CLAY (Fill) - trace sand, trace gravel, no hydrocarbon odor -black (organics) -moist -stiff, high plasticity -dark grey		46-02			
1		-grey		46-03			1
		SILT - some clay -brown -moist -soft, low plasticity -clayey					
2				46-04			2
		CLAY - silty, trace silt inclusions < 3 mm dia. -brown -moist -stiff, high plasticity		46-05			
3				46-06			3
4		-trace oxidation below 4.1 m		46-07			4
5				46-08			5
6				46-09			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 2.1 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings & bentonite upon completion					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-47**
LOCATION: Solvent AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT (0 - 75 mm)					0
		SAND & GRAVEL (Fill) -brown -moist					
		CLAY (Fill) - trace sand, trace gravel -dark grey -moist -stiff, high plasticity		47-01			
1							1
		SILT - some clay -brown -moist -soft, low plasticity -clayey		47-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, PAH's and VOC's	
2				47-03			2
		CLAY - silty -brown -moist -stiff, high plasticity trace silt inclusions below 3.2 m < 3 mm dia.		47-04			
3							3
				47-05		-Soil sample submitted for analysis of BTEX and PHC Fractions F1-F4	
4				47-06			4
5				47-07			5
6				47-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings & bentonite upon completion					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-48**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE ■ GRAB ▥ SHELBY TUBE ▨ SPLIT SPOON ▤ BULK ▨ NO RECOVERY ▮ CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill) - coarse, rocks		BH10-48-01			0
1		CLAY - loose, some stone -black -moist -firm, medium plasticity		BH10-48-02			1
2		SILT -light brown -wet -soft, low plasticity		BH10-48-03			2
3				BH10-48-04			3
		CLAY - minor silt -light brown -moist -stiff, high plasticity -gleyed		BH10-48-05			
4				BH10-48-06			4
5				BH10-48-07			5
6				BH10-48-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-49**
LOCATION: Sulfuric Acid Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			CLAY (Fill) - trace sand, trace gravel, trace debris -dark grey with black mottling (organics) -moist -firm, high plasticity					0
			-greybelow 0.8 m		49-01		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, and Metals	
1			-silty below 1.1 m					1
			SILT - trace fine sand -brown -moist-wet -soft, low plasticity		49-02			
2					49-03			2
			CLAY - silty -brown -moist -stiff, high plasticity -trace silt inclusions < 5 mm dia. below 2.6 m					
3					49-04			3
			-trace oxidation below 3.4 m					
					49-05		-Soil sample submitted for analysis of Metals	
4			-dark grey below 4.0 m					4
					49-06			
5					49-07			5
6					49-08			6
			END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) Seepage observed at 1.4 m 3) Monitoring well MW-10-49 installed upon completion					
7								7
7.5								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/22/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-50**
LOCATION: Sulfuric Acid Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill) -brown -dry					0
		CLAY -brown with black mottling (organics) -moist -stiff, high plasticity -firm		50-01		-Soil sample submitted for analysis of Metals	
1							1
		SILT - trace sand -brown -moist -soft, low plasticity -some clay		50-02		-Soil sample submitted for analysis of Metals	
2							2
		CLAY - silt -brown -moist -stiff, high plasticity -trace silt inclusions < 5 mm dia. below 2.4 m		50-03			
3				50-04			3
				50-05			
4		-trace oxidation below 4.3 m					4
				50-06			
5				50-07			5
6				50-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.7 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings and Bentonite					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-51**
LOCATION: Sulfuric Acid Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill) -grey -dry					0
		CLAY -dark grey -moist -very stiff, high plasticity		51-01		-Soil sample submitted for analysis of Metals	
1		SILT - some sand -brown -moist -soft, low plasticity - non plastic		51-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, and Metals	1
		-clayey					
2		CLAY - silty -brown -moist -stiff, high plasticity		51-03			2
3		-trace oxidation below 3.4 m		51-04			3
				51-05			
4		-dark grey below 4.0 m					4
				51-06			
5				51-07			5
6				51-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings and bentonite upon completion					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-52**
LOCATION: Sulfuric Acid Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE ■ GRAB ▥ SHELBY TUBE ▨ SPLIT SPOON ▤ BULK ▨ NO RECOVERY ▮ CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill) -brown -dry					0
		CLAY -dark grey with black mottling (organics) -moist -stiff, high plasticity		52-01		-Soil sample submitted for analysis of Metals	
1		SILT - some fine sand -brown -moist -soft, low plasticity - non plastic -some clay below 1.1 m		52-02		-Soil sample submitted for analysis of Metals	1
2		CLAY - silty, trace silt inclusions < 3 mm dia. -brown-grey -moist -stiff, high plasticity		52-03			2
3		-grey below 2.7 m		52-04			3
		-trace oxidation below 3.1 m		52-05			
4		-dark grey below 4.1 m		52-06			4
5				52-07			5
6				52-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 4.9 m below ground surface 2) Seepage observed at 0.9 m 3) Borehole backfilled with auger cuttings and bentonite upon completion					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/22/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-53**
LOCATION: Sulfuric Acid Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS
0	CLAY - gravelly, trace sand (Fill) -brown -moist -firm, medium plasticity -trace gravel, trace sand, high plasticity		53-01	⊗	-Soil sample submitted for analysis of Metals
1	SILT - trace sand -brown -moist-wet -soft, low plasticity		53-02	⊗	-Soil sample submitted for analysis of Metals
2	CLAY - silty -brown -moist -stiff, high plasticity -trace silt inclusions < 5 mm dia. below 2.3 m -grey below 2.7 m		53-03	⊗	
3			53-04	⊗	
4	-trace oxidation below 3.7 m -dark grey below 4.3 m		53-05	⊗	
5			53-06	⊗	
6			53-07	⊗	
7	END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) Seepage observed at 1.4 m 3) Monitoring well MW-10-53 installed upon completion		53-08	⊗	
7.5					

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/22/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-54**
LOCATION: Sulfuric Acid Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE ■ GRAB ▥ SHELBY TUBE ⊠ SPLIT SPOON ▤ BULK ⁄ NO RECOVERY ▮ CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		-Concrete					0
		CLAY -grey with black mottling -moist -stiff, high plasticity		54-01		-Soil sample submitted for analysis of Metals	
1		SILT - some fine sand -brown -moist -soft, low plasticity		54-02		-Soil sample submitted for analysis of Metals	1
2		CLAY - silty -brown -moist -stiff, high plasticity -trace silt inclusions < 5 mm dia. below 2.4 m		54-03			2
3		-trace oxidation below 3.4 m		54-04			3
4		-dark grey below 4.0 m -firm		54-05			4
5				54-06			5
6				54-07			6
7		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.2 m below ground surface 2) No seepage observed 3) Borehole bacfilled with auger cuttings & bentonite upon completion		54-08			7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/22/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-55**
LOCATION: Sulfuric Acid Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill) - some sand, some cobbles -white -dry -poorly graded					0
		CLAY -grey -moist -stiff, high plasticity		55-01		-Soil sample submitted for analysis of Metals	
1							1
		SILT - trace fine sand -brown -moist -soft, low plasticity		55-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, and Metals	
2							2
		CLAY - silty -brown -moist -stiff, high plasticity		55-03			
3				55-04			3
		-trace oxidation below 3.4 m					
		-dark grey below 3.7 m		55-05			
4							4
				55-06		-Soil sample submitted for analysis of BTEX and PHC Fractions F1-F4	
5				55-07			5
6				55-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings and bentonite upon completion					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/22/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-56**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill) -coarse, loose, stones					0
1		CLAY -black -moist -stiff, high plasticity		BH10-56-01			1
				BH10-56-02			
2		CLAY -gleyed brown -moist -stiff, high plasticity					2
3		SILT -light brown -moist -soft, low plasticity		BH10-56-03			3
				BH10-56-04			
4		CLAY -gleyed brown -moist -stiff, high plasticity		BH10-56-05			4
				BH10-56-06			
5				BH10-56-07			5
6				BH10-56-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-57**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRASS/SHRUBS/TREES					0
		CLAY -black -moist -loose, medium plasticity		BH10-57-01			
1		CLAY -black -moist -stiff, high plasticity		BH10-57-02			1
		CLAY -dark grey -moist -stiff, high plasticity					
2		SILT -light brown -moist -soft, low plasticity		BH10-57-03			2
3		CLAY -light grey brown -moist -stiff, high plasticity		BH10-57-04			3
				BH10-57-05			
4				BH10-57-06			4
5				BH10-57-07			5
6		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.		BH10-57-08			6
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-57A**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill)					0
		CLAY -black -moist -stiff, high plasticity		57A-01			
1				57A-02			1
		CLAY -gleyed black -moist -stiff, high plasticity					
2		SILT - minor clay -light brown -moist -soft, low plasticity		57A-03			2
		CLAY -light brown -moist -stiff, high plasticity		57A-04			
3				57A-05			3
4				57A-06			4
		END OF BOREHOLE AT 4.3 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
5							5
6							6
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-58**
LOCATION: Sulfuric Acid Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ASPHALT (0 - 75 mm)					0
		CLAY (Fill) trace gravel, trace sand -grey -moist -firm, medium plasticity		58-01		-Soil sample submitted for analysis of Metals	
1							1
		SILT - trace sand -brown -moist -soft, low plasticity		58-02		-Soil sample submitted for analysis of Metals	
2		-clayey		58-03			2
		CLAY - silty -brown -moist -stiff, high plasticity		58-04			
3		-trace silt inclusions < 5 mm dia. below 3.4 m		58-05			3
4		-trace oxidation below 4.1 m		58-06			4
5				58-07			5
6				58-08			6
		END OF BOREHOLE @ 6.0 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings and bentonite upon completion					
7							7
7.5							

AECOM

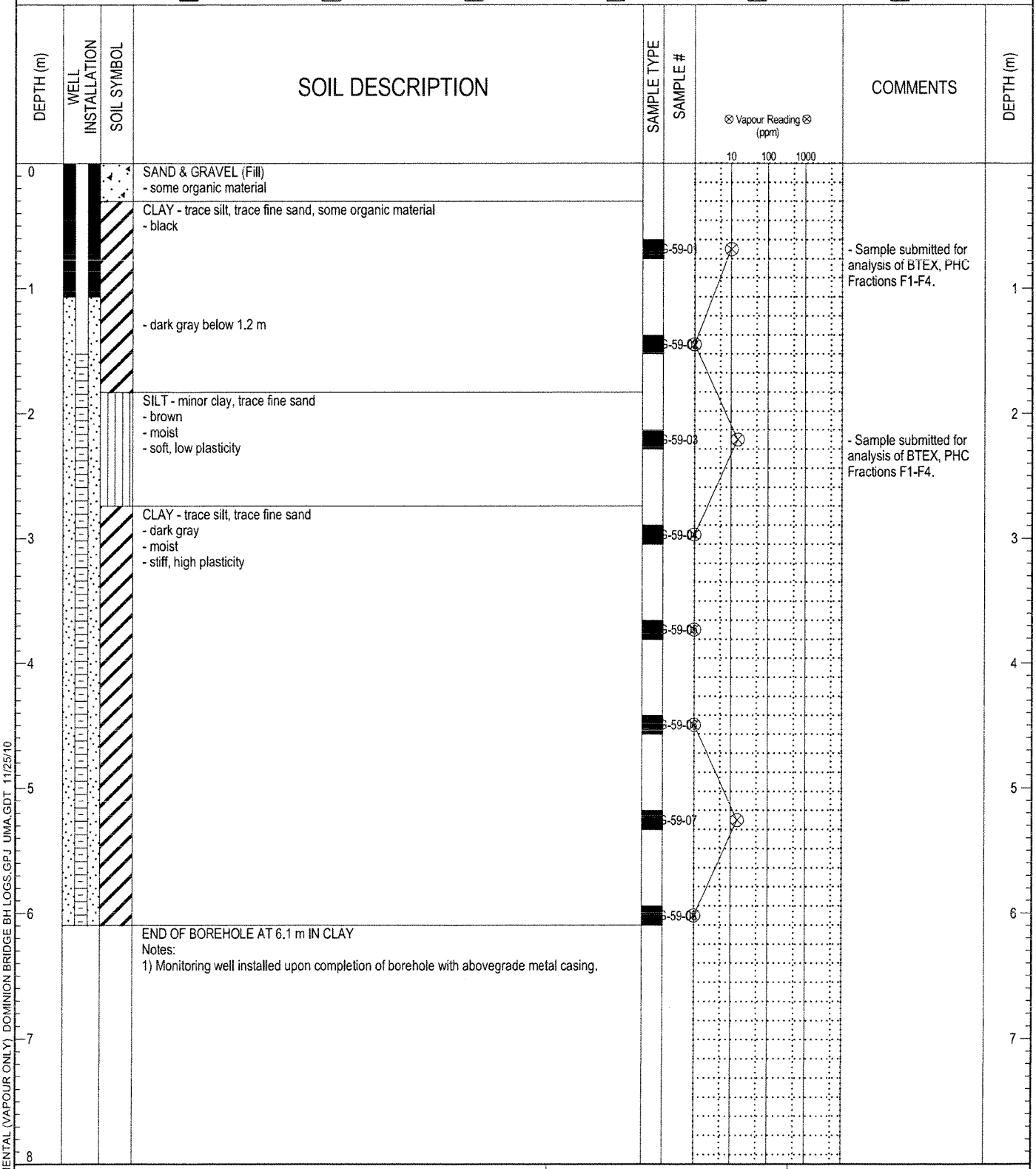
LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-59**
LOCATION: Diesel and Gasoline AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND



LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

AECOM

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-60**
LOCATION: Diesel and Gasoline AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS
0		SAND & GRAVEL (Fill) - some organic material				
		CLAY - trace silt, trace fine sand, some organic material - gray				
1		- black below 0.76 m				
		SILT - major clay, trace fine sand - brown - moist - firm, medium plasticity				
2		SILT - trace clay, trace fine sand - brown - wet - firm, low plasticity				
		CLAY - trace silte, trace fine sand - dark gray - moist - stiff, high plasticity		6-60-15		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.
3						
4						
5				6-60-16		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.
6		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.				
7						
8						

AECOM	LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
	REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
	PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-61**
LOCATION: Diesel and Gasoline AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION / SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill) - light gray					0
1		CLAY - trace silt, trace fine sand - black		S-61-01			1
		- dark gray below 1.5 m		S-61-02			
2		SILT - minor clay, trace fine sand - brown - wet - soft, low plasticity		S-61-03			2
3		CLAY - minor silt, trace fine sand - brown - moist - stiff, high plasticity		S-61-04		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	3
				S-61-05			
4		- dark gray below 4.0 m		S-61-06			4
5				S-61-07		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	5
6				S-61-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with abovegrade metal casing.					
7							7
8							

AECOM

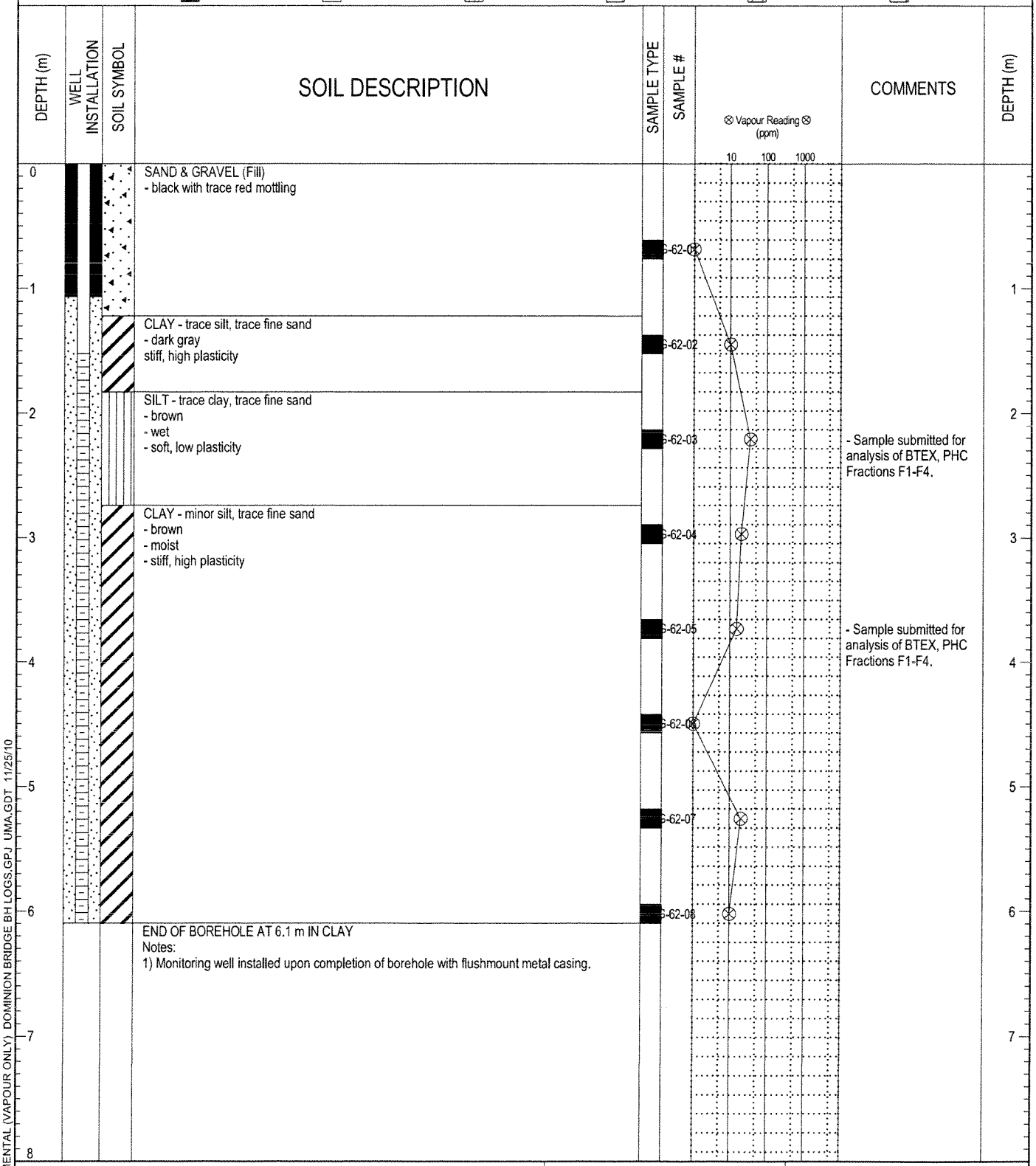
LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-62**
LOCATION: Diesel and Gasoline AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND



AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-63**
LOCATION: Diesel and Gasoline AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill)					0
1		CLAY - some gravel, trace silt, trace fine sand - dark gray - stiff, high plasticity wood between 0.9 and 1.5 m		63-01			1
				63-02			
2		SILT - minor clay, trace fine sand - brown - wet - soft, low plasticity		63-03		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	2
3		CLAY - minor silt, trace fine sand - brown - moist - stiff, high plasticity		63-04			3
				63-05			
4				63-06		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	4
5				63-07			5
6				63-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-64**
LOCATION: Diesel and Gasoline AST Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill)					0
		CLAY - some gravel, trace silt, trace fine sand - stiff, high plasticity					
1							1
2		SILT - minor clay, trace fine sand - brown - wet - soft, low plasticity		64-13		- Sample submitted for anlaysis of BTEX, PHC Fractions F1-F4.	2
3		CLAY - minor silt, trace fine sand - brown - moist - stiff, high plasticity					3
4		- dark gray below 4.0 m					4
5				64-14		- Sample submitted for analysis of BTEX, PHC Fractions F1-F4.	5
6		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					6
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/18/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-65**
LOCATION: Waste Paint Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill) -brown -moist					0
		CLAY (Fill)- trace sand, trace gravel, trace organics -black -moist -firm, medium plasticity		65-01		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, and Metals	
1		-grey, trace silt iclusions < 5 mm dia. -high plasticity					1
		SILT - some clay -brown -moist -soft, low plasticity		65-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, and Metals	
2				65-03			2
		CLAY - silty -brown -moist -stiff, high plasticity -silt seam < 1 mm thick		65-04			
3		-trace silt inclusions < 3 mm dia. below 3.4 m					3
				65-05			
4		-trace oxidation below 4.0 m					4
		-dark grey		65-06			
5				65-07			5
6				65-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) Seepage observed at 1.4 m 3) Borehole backfilled with auger cuttings & bentonite upon completion					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-66**
LOCATION: Waste Paint Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL					0
		CLAY - some sand, some gravel (Fill), trace oxidation -grey with black mottling (organics) -firm, medium plasticity					
		CLAY - silty -grey -moist -firm, high plasticity		66-01		-Soil sample submitted for analysis of Metals	
1							1
		SILT - some clay -brown -moist -soft, low plasticity		66-02		-Soil sample submitted for analysis of Metals	
2		-clayey		66-03			2
		CLAY - silty -brown -moist -firm, high plasticity		66-04			
3							3
		-trace silt inclusions < 5 mm dia. below 3.7 m -trace oxidation below 3.8 m		66-05			
4							4
				66-06			
5				66-07			5
				66-08			
6							6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.2 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings and bentonite upon completion					
7							7
7.5							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-67**
LOCATION: Waste Paint Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		ORGANIC CLAY - topsoil -black -moist -firm, medium plasticity					0
		CLAY -grey with black mottling -moist -firm, high plasticity		67-01		-Soil sample submitted for analysis of Metals	
1		SILT - trace sand -moist -soft, low plasticity					1
				67-02		-Soil sample submitted for analysis of BTEX, PHC Fractions F1-F4, and Metals	
		-some clay					
2				67-03			2
		-clayey					
		CLAY - silty -brown -moist -stiff, high plasticity -trace silt inclusions < 5 mm dia. below 3.1 m		67-04			
3							3
		-trace oxidation below 3.8 m		67-05			
4							4
				67-06			
5				67-07			5
6				67-08			6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) No seepage observed 3) Monitoring well MW-10-67 installed upon completion					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **BH-10-68**
LOCATION: Waste Paint Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE ■ GRAB ▥ SHELBY TUBE ⊠ SPLIT SPOON ▤ BULK ⁄ NO RECOVERY ◧ CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		SAND & GRAVEL (Fill) -brown -moist					0
		CLAY - trace sand, trace gravel -grey with black mottling (organics) -moist -firm, high plasticity	■	68-01	⊗	-Soil sample submitted for analysis of Metals	
1		SILT - trace sand -moist -soft, low plasticity -some clay	■	68-02	⊗	-Soil sample submitted for analysis of Metals	1
2		-clayey	■	68-03	⊗		2
3		CLAY - silty, trace silt pockets < 5 mm dia. -brown -moist -stiff, high plasticity	■	68-04	⊗		3
		-trace silt inclusions < 5 mm dia. below 3.7 m	■	68-05	⊗		
4		-dark grey, firm	■	68-06	⊗		4
5			■	68-07	⊗		5
6			■	68-08	⊗		6
		END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.8 m below ground surface 2) No seepage observed 3) Borehole backfilled with auger cuttings and bentonite upon completion					
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

PROJECT: Dominion Bridge ESA	CLIENT: City of Winnipeg	TESTHOLE NO: **MW-10-69**
LOCATION: Waste Paint Storage Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock Drilling Ltd.	METHOD: 125mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			SAND & GRAVEL (Fill) -brown -moist					0
			CLAY (Fill) - trace sand, trace gravel -grey with black mottling -moist -still, high plasticity -no sand, no gravel below 0.6 m		69-01	⊗	-Soil sample submitted for analysis of Metals	
1								1
			SILT - some clay, trace sand -brown -moist -soft, low plasticity		69-02	⊗	-Soil sample submitted for analysis of Metals	
2			-clayey		69-03	⊗		2
			CLAY - silty, -brown -moist -stiff, high plasticity		69-04	⊗		
3								3
			-trace silt inclusions < 3 mm dia. below 3.8 m		69-05	⊗		
4								4
			-dark grey below 4.6 m		69-06	⊗		
5					69-07	⊗		5
6					69-08	⊗		6
			END OF BOREHOLE @ 6.1 m IN CLAY Note: 1) Borehole sloughed at 1.5 m below ground surface 2) Seepage observed at 1.5 m 3) Monitoring well MW-10-69 installed upon completion					
7								7
7.5								

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/21/10
PROJECT ENGINEER: Scott Chapman	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS OCTOBER 18-22 2010.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-70**
LOCATION: Former Saskatchewan Landfill Area		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			SAND & GRAVEL (Fill) - some organic material					0
			CLAY - trace silt, trace fine sand - black stiff, high plasticity		S-70-01			
1					S-70-02		- Sample submited for analysis of Metals and PAH.	1
			- dark gray below 1.5 m					
2			SILT - minor clay, trace fine sand - brown - soft, low plasticity		S-70-03			2
3					S-70-04			3
			CLAY - minor silt, trace fine sand - brown - wet - stiff, high plasticity		S-70-05		- Sample submitted for analysis of Metals.	
4					S-70-06			4
5					S-70-07			5
6					S-70-08			6
			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-71**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			GRASS					0
			SILT (Fill) - minor sand -brown		G-71-01			
1			CLAY - trace silty -black -moist -stiff, high plasticity		G-71-02			1
2					G-71-03			2
			SILT - minor clay, trace sand -light brown					
3					G-71-04			3
			CLAY - minor silt, trace sand -brown -high plasticity		G-71-05			
4					G-71-06			4
5					G-71-07			5
6					G-71-08			6
			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-72**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRASS					0
		CLAY (Fill) - some gravel, minor silt, minor sand -grey -moist -stiff, high plasticity		BH10-72-01			
1				BH10-72-02			1
2				BH10-72-03			2
		SILT - minor clay, trace sand -light brown -moist -soft, low plasticity		BH10-72-04			
3		CLAY - trace silt, trace clay -grey - brown -moist -stiff, high plasticity		BH10-72-05			3
4				BH10-72-06			4
5				BH10-72-07			5
6				BH10-72-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-73**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill)					0
				G-73-01		- Sample submitted for analysis of PAH and Metals.	
1		CLAY - trace silt, trace sand -dark grey -moist -stiff, high plasticity		G-73-02			1
2				G-73-03			2
		SILT - minor clay, trace sand -light brown -moist -soft, low plasticity					
3				G-73-04			3
		CLAY - trace silt, trace sand -grey-brown -moist -stiff, high plasticity		G-73-05		- Sample submitted for analysis of Metals.	
4				G-73-06			4
5				G-73-07			5
6				G-73-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-74**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		CLAY - gravel (Fill) -black-light brown					0
				BH10-74-01			
1							1
		CLAY -black -moist stiff, high plasticity		BH10-74-02			
2		SILT -light brown -moist -soft, low plasticity		BH10-74-03			2
		CLAY -dark grey -moist -stiff, high plasticity		BH10-74-04			
3							3
				BH10-74-05			
4							4
				BH10-74-06			
5							5
				BH10-74-07			
6		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.		BH10-74-08			6
7							7
8							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-75**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill)					0
		GRAVELLY CLAY (Fill) -black		G-75-01			
1							1
		CLAY -dark grey -moist -stiff, high plasticity		G-75-02			
2		SILT -light brown -moist -soft, low plasticity		G-75-03			2
		CLAY -dark grey -moist -stiff, high plasticity		G-75-04			
3							3
				G-75-05			
4							4
				G-75-06			
5							5
				G-75-07			
6				G-75-08			6
		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/20/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-76**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill)					0
1		CLAY - gravel (Fill) -black with red mottling -moist -stiff, medium plasticity		BH10-76-01			1
				BH10-76-02			
2		SILT -light brown -moist -soft, low plasticity		BH10-76-03			2
3		CLAY -grey brown -moist -stiff, high plasticity		BH10-76-04			3
4				BH10-76-05			4
5				BH10-76-06			5
				BH10-76-07			
6				BH10-76-08			6
7		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.					7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-77**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			GRAVEL (Fill)					0
					MW10-77-01			
1								1
					MW10-77-02			
			CLAY - trace silt, trace sand -black -moist -stiff, high plasticity					
2			SILT - trace clay, minor sand -light brown -moist -soft, low plasiticity		MW10-77-03			2
			CLAY - trace silt, trace sand -light brown -moist -stiff, high plastic					
3					MW10-77-04			3
					MW10-77-05			
4								4
					MW10-77-06			
5					MW10-77-07			5
6					MW10-77-08			6
			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					
7								7
8								

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 10/19/10
PROJECT ENGINEER:	Page 1 of 2

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **BH10-78**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		CLAY (Fill) - silt, cobble -black -moist -stiff, high plasticity		BH10-78-01			0
1		-white mottling					1
		-dark grey clay		BH10-78-02			
2		SILT -light brown -moist -soft, low plasticity		BH10-78-03		- Sample submitted for analysis of PAH.	2
		CLAY -dark grey -moist -stiff, high plasticity		BH10-78-04			
3							3
				BH10-78-05			
4							4
				BH10-78-06		- Sample submitted for analysis of PAH.	
5				BH10-78-07			5
6		END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Borehole backfilled with auger cuttings and bentonite upon completion.		BH10-78-08			6
7							7
8							

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **MW10-79**
LOCATION:		PROJECT NO.: 60164142
CONTRACTOR: Paddock	METHOD: 125 mm SSA	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

BACKFILL TYPE: BENTONITE | GRAVEL | SLOUGH | GROUT | CUTTINGS | SAND

DEPTH (m)	WELL INSTALLATION	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading ⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0			GRAVEL (Fill), major clay, major silt					0
					MW10-79-01			
1								1
					MW10-79-02			
			SILT -grey browm -moist -soft, low plasticity					
2					MW10-79-03			2
			CLAY -dark grey -moist -stiff, high plasticity					
3					MW10-79-04			3
					MW10-79-05			
4								4
					MW10-79-06			
5								5
					MW10-79-07			
6					MW10-79-08			6
			END OF BOREHOLE AT 6.1 m IN CLAY Notes: 1) Monitoring well installed upon completion of borehole with flushmount metal casing.					
7								7
8								

AECOM

LOGGED BY: Siloni Goel	COMPLETION DEPTH: 6.10 m
REVIEWED BY: Scott Chapman	COMPLETION DATE:
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS.GPJ UMA.GDT 11/25/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **TP10-01**
LOCATION: Crane Runway		PROJECT NO.: 60164142
CONTRACTOR:	METHOD: dutch auger	ELEVATION (m):

SAMPLE TYPE ■ GRAB ▥ SHELBY TUBE ☒ SPLIT SPOON ▤ BULK ▨ NO RECOVERY ◧ CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill) - organic material	■			- sample submitted for laboratory analysis.	
		CLAY -black -moist -stiff, high plasticity	■			- sample submitted for laboratory anlaysis.	
		END OF TEST PIT AT 0.76 m IN CLAY Notes: 1) Test pit backfilled with auger cuttings upon completion.					
1							1
2							2
3							3
4							4
5							5
6							6
7							7
7.5							

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 0.61 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 11/4/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE TP LOGS (CRANE WAY).GPJ UMA.GDT 12/22/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **TP10-02**
LOCATION: Crane Runway		PROJECT NO.: 60164142
CONTRACTOR:	METHOD: dutch auger	ELEVATION (m):

SAMPLE TYPE ■ GRAB ▥ SHELBY TUBE ⊠ SPLIT SPOON ▤ BULK ▨ NO RECOVERY ◧ CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill) - organic material	■			- sample submitted for laboratory analysis.	
		CLAY -black -moist -stiff, high plasticity	■			- sample submitted for laboratory anlaysis.	
		END OF TEST PIT AT 0.76 m IN CLAY Notes: 1) Test pit backfilled with auger cuttings upon completion.					
1							1
2							2
3							3
4							4
5							5
6							6
7							7
7.5							

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 0.61 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 11/4/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE TP LOGS (CRANE WAY).GPJ UMA.GDT 12/22/10

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **TP10-03**
LOCATION: Crane Runway		PROJECT NO.: 60164142
CONTRACTOR:	METHOD: dutch auger	ELEVATION (m):

SAMPLE TYPE ■ GRAB ▥ SHELBY TUBE ☒ SPLIT SPOON ▤ BULK ⧄ NO RECOVERY ◧ CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		GRAVEL (Fill) - organic material	■			- sample submitted for laboratory analysis.	0
		CLAY -black -moist -stiff, high plasticity	■			- sample submitted for laboratory anlaysis.	
0.76		END OF TEST PIT AT 0.76 m IN CLAY Notes: 1) Test pit backfilled with auger cuttings upon completion.					
1							1
2							2
3							3
4							4
5							5
6							6
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE TP LOGS (CRANE WAY).GPJ UMA.GDT 12/22/10

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 0.61 m
REVIEWED BY: Scott Chapman	COMPLETION DATE: 11/4/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **GP10-01**
LOCATION: Galvanizing Pit		PROJECT NO.: 60164142
CONTRACTOR:	METHOD: hand auger	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		CONCRETE					0
		SAND AND GRAVEL (FILL) - brown - moist - well graded - oxidated from 0.9 m to 1.1 m				- sample submitted for laboratory analysis.	
1		SILT - major clay, trace fine sand - brown - moist - soft				- sample submitted for laboratory analysis.	1
		CLAY - major silt - grey - moist - stiff					
2		END OF TEST HOLE AT 1.5 m IN CLAY					2
3							3
4							4
5							5
6							6
7							7
7.5							

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS GALVANIZING PIT.GPJ UMA.GDT 12/22/10

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 1.83 m
REVIEWED BY: Scott Chapment	COMPLETION DATE: 11/4/10
PROJECT ENGINEER:	Page 1 of 1

PROJECT: Dominion Bridge	CLIENT: City of Winnipeg	TESTHOLE NO: **GP10-02**
LOCATION: Galvanizing Pit		PROJECT NO.: 60164142
CONTRACTOR:	METHOD: hand auger	ELEVATION (m):

SAMPLE TYPE: GRAB | SHELBY TUBE | SPLIT SPOON | BULK | NO RECOVERY | CORE

DEPTH (m)	SOIL SYMBOL	SOIL DESCRIPTION	SAMPLE TYPE	SAMPLE #	⊗ Vapour Reading⊗ (ppm) 10 100 1000	COMMENTS	DEPTH (m)
0		CONCRETE					0
						- sample submitted for laboratory analysis.	
		SAND AND GRAVEL (FILL) - wet					
1		CLAY - minor silt, trace fine sand - grey - wet					1
		CLAY - trace silt, trace fine sand - grey				- sample submitted for laboratory analysis.	
		END OF TEST HOLE AT 1.4 m IN CLAY					
2							2
3							3
4							4
5							5
6							6
7							7
7.5							

AECOM

LOGGED BY: Eryn Williamson	COMPLETION DEPTH: 1.83 m
REVIEWED BY: Scott Chapment	COMPLETION DATE: 11/4/10
PROJECT ENGINEER:	Page 1 of 1

ENVIRONMENTAL (VAPOUR ONLY) DOMINION BRIDGE BH LOGS GALVANIZING PIT.GPJ UMA.GDT 12/22/10

Appendix C
Laboratory Results

Your Project #: 60164142 DOMINION BRIDGE
Site: 1460 DUBLIN AVENUE
Your C.O.C. #: F111798, F111799, F111800

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/10/29

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0A1857
Received: 2010/10/21, 11:00

Sample Matrix: Soil
Samples Received: 36

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS (1)	26	2010/10/22	2010/10/24	BBY8-SOP-00010/R26	EPA SW846 8260B
BTEX/MTBE Soil LH, VH, F1 SIM/MS (1)	1	2010/10/27	2010/10/28	BBY8-SOP-00010/R26	EPA SW846 8260B
Volatile F1-BTEX (1)	26	N/A	2010/10/25		
Volatile F1-BTEX (1)	1	N/A	2010/10/28		
CCME Hydrocarbons (F2-F4 in soil) (1)	26	2010/10/22	2010/10/25	BRN SOP-00342 R9.0	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil) (1)	1	2010/10/27	2010/10/27	BRN SOP-00342 R9.0	CCME Soil Tier 1
Elements by ICPMS (total) (1)	9	2010/10/23	2010/10/25	BRN SOP-00203 R5.0	Based on EPA 200.8
Moisture (1)	28	N/A	2010/10/23	BRN SOP-00321 R5.0	Ont MOE -E 3139
Moisture (1)	1	N/A	2010/10/28	BRN SOP-00321 R5.0	Ont MOE -E 3139
PAH in Soil by GC/MS Lowlevel (Extended) (1)	2	2010/10/22	2010/10/27	BRN SOP-00332 R5.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc (1)	2	N/A	2010/10/29		PAHTOT-S
pH (2:1 DI Water Extract) (1)	1	2010/10/23	2010/10/24	BRN SOP-00266 R6.0	Carter, SSMA 16.2
pH (2:1 DI Water Extract) (1)	8	2010/10/23	2010/10/25	BRN SOP-00266 R6.0	Carter, SSMA 16.2

(1) This test was performed by Maxxam Vancouver

Encryption Key

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

Amanda Hart, Burnaby Customer Service
Email: AHart@maxxam.ca
Phone# (204) 772-2386

==========

Total cover pages: 1

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X85204	X85205	X85206	X85207		
Sampling Date		2010/10/18 08:00	2010/10/18 08:15	2010/10/18 08:30	2010/10/18 08:45		
COC Number		F111798	F111798	F111798	F111798		
	Units	**G-02-01**	**G-02-02**	**G-05-03**	**G-05-04**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	4366559
F3 (C16-C34 Hydrocarbons)	mg/kg	52	68	<10	110	10	4366559
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	4366559
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	N/A	4366559
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	78	78	98	86	N/A	4366559

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X85208	X85209		X85210		
Sampling Date		2010/10/18 09:00	2010/10/18 09:00		2010/10/18 09:15		
COC Number		F111798	F111798		F111798		
	Units	**G-03-05**	**G-03-33**	**QC Batch**	**G-03-06**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	400	490	4366559	16	10	4366568
F3 (C16-C34 Hydrocarbons)	mg/kg	250	280	4366559	73	10	4366568
F4 (C34-C50 Hydrocarbons)	mg/kg	47	47	4366559	23	10	4366568
Reached Baseline at C50	mg/kg	Yes	Yes	4366559	Yes	N/A	4366568
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	99	94	4366559	83	N/A	4366568

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X85211	X85212	X85213	X85214		
Sampling Date		2010/10/18 09:30	2010/10/18 09:45	2010/10/18 10:00	2010/10/18 10:15		
COC Number		F111798	F111798	F111798	F111798		
	Units	**G-03-07**	**G-04-08**	**G-04-09**	**G-04-10**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	4366559
F3 (C16-C34 Hydrocarbons)	mg/kg	28	14	90	94	10	4366559
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	4366559
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	N/A	4366559
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	83	94	83	84	N/A	4366559

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X85215	X85226	X85227	X85228		
Sampling Date		2010/10/18 10:30	2010/10/18 10:45	2010/10/18 11:00	2010/10/18 11:15		
COC Number		F111798	F111799	F111799	F111799		
	Units	**G-01-11**	**G-01-12**	**G-64-13**	**G-64-14**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	4366559
F3 (C16-C34 Hydrocarbons)	mg/kg	34	89	10	52	10	4366559
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	4366559
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	N/A	4366559
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	83	81	99	76	N/A	4366559

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X85229	X85230	X85231		X85232		
Sampling Date		2010/10/18 11:30	2010/10/18 11:45	2010/10/19 08:00		2010/10/19 08:00		
COC Number		F111799	F111799	F111799		F111799		
	Units	**G-60-15**	**G-60-16**	**G-63-03**	**QC Batch**	**G-63-13**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	4366559	<10	10	4366568
F3 (C16-C34 Hydrocarbons)	mg/kg	16	55	<10	4366559	<10	10	4366568
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	4366559	<10	10	4366568
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	4366559	Yes	N/A	4366568
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	85	85	95	4366559	96	N/A	4366568

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X85233	X85234	X85235	X85236		
Sampling Date		2010/10/19 08:15	2010/10/19 08:30	2010/10/19 08:45	2010/10/19 09:00		
COC Number		F111799	F111799	F111799	F111799		
	Units	**G-63-06**	**G-61-04**	**G-61-07**	**G-59-01**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon							
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	4366568
F3 (C16-C34 Hydrocarbons)	mg/kg	110	<10	95	<10	10	4366568
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	10	4366568
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	N/A	4366568
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	80	95	85	98	N/A	4366568

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X85238	X85271	X85272		X85282		
Sampling Date		2010/10/19 09:15	2010/10/19 09:30	2010/10/19 09:45				
COC Number		F111799	F111800	F111800		F111800		
	Units	**G-59-03**	**G-62-03**	**G-62-05**	**QC Batch**	**G-77-01**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	4366568	82	10	4375002
F3 (C16-C34 Hydrocarbons)	mg/kg	12	<10	46	4366568	600	10	4375002
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	4366568	230	10	4375002
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	4366568	Yes	N/A	4375002
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	99	98	86	4366568	119	N/A	4375002

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

PHYSICAL TESTING (SOIL)

Maxxam ID		X85204	X85205		X85206		X85207		
Sampling Date		2010/10/18 08:00	2010/10/18 08:15		2010/10/18 08:30		2010/10/18 08:45		
COC Number		F111798	F111798		F111798		F111798		
	Units	**G-02-01**	**G-02-02**	**QC Batch**	**G-05-03**	**QC Batch**	**G-05-04**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	36	38	4363526	17	4363685	35	0.3	4363774

RDL = Reportable Detection Limit

Maxxam ID		X85208		X85209		X85210	X85211		
Sampling Date		2010/10/18 09:00		2010/10/18 09:00		2010/10/18 09:15	2010/10/18 09:30		
COC Number		F111798		F111798		F111798	F111798		
	Units	**G-03-05**	**QC Batch**	**G-03-33**	**QC Batch**	**G-03-06**	**G-03-07**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	19	4363774	17	4363685	38	36	0.3	4363526

RDL = Reportable Detection Limit

Maxxam ID		X85212	X85213	X85214		X85215		
Sampling Date		2010/10/18 09:45	2010/10/18 10:00	2010/10/18 10:15		2010/10/18 10:30		
COC Number		F111798	F111798	F111798		F111798		
	Units	**G-04-08**	**G-04-09**	**G-04-10**	**QC Batch**	**G-01-11**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	23	34	37	4363774	36	0.3	4363526

RDL = Reportable Detection Limit

Maxxam ID		X85226	X85227	X85228	X85229	X85230		
Sampling Date		2010/10/18 10:45	2010/10/18 11:00	2010/10/18 11:15	2010/10/18 11:30	2010/10/18 11:45		
COC Number		F111799	F111799	F111799	F111799	F111799		
	Units	**G-01-12**	**G-64-13**	**G-64-14**	**G-60-15**	**G-60-16**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	37	17	39	29	28	0.3	4363526

RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

PHYSICAL TESTING (SOIL)

Maxxam ID		X85231	X85232		X85233		X85234		
Sampling Date		2010/10/19 08:00	2010/10/19 08:00		2010/10/19 08:15		2010/10/19 08:30		
COC Number		F111799	F111799		F111799		F111799		
	Units	**G-63-03**	**G-63-13**	**QC Batch**	**G-63-06**	**QC Batch**	**G-61-04**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	17	18	4363526	35	4363685	24	0.3	4363526

RDL = Reportable Detection Limit

Maxxam ID		X85235	X85236	X85238		X85271		
Sampling Date		2010/10/19 08:45	2010/10/19 09:00	2010/10/19 09:15		2010/10/19 09:30		
COC Number		F111799	F111799	F111799		F111800		
	Units	**G-61-07**	**G-59-01**	**G-59-03**	**QC Batch**	**G-62-03**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	37	17	21	4363526	17	0.3	4363685

RDL = Reportable Detection Limit

Maxxam ID		X85272		X85273		X85280		
Sampling Date		2010/10/19 09:45		2010/10/19 10:00		2010/10/19 11:30		
COC Number		F111800		F111800		F111800		
	Units	**G-62-05**	**QC Batch**	**G-73-01**	**QC Batch**	**G-70-02**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	36	4363526	22	4363774	24	0.3	4363526

RDL = Reportable Detection Limit

Maxxam ID		X85282		
Sampling Date				
COC Number		F111800		
	Units	**G-77-01**	**RDL**	**QC Batch**
Physical Properties				
Moisture	%	19	0.3	4373645

RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85204	X85205	X85206		
Sampling Date		2010/10/18 08:00	2010/10/18 08:15	2010/10/18 08:30		
COC Number		F111798	F111798	F111798		
	Units	**G-02-01**	**G-02-02**	**G-05-03**	**RDL**	**QC Batch**
Calculated Parameters						
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	10	4360676
Volatiles						
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	<0.1	0.1	4364863
Benzene	mg/kg	<0.005	<0.005	<0.005	0.005	4364863
Toluene	mg/kg	<0.02	<0.02	<0.02	0.02	4364863
Ethylbenzene	mg/kg	<0.01	<0.01	<0.01	0.01	4364863
m & p-Xylene	mg/kg	<0.04	<0.04	<0.04	0.04	4364863
o-Xylene	mg/kg	<0.04	<0.04	<0.04	0.04	4364863
Styrene	mg/kg	<0.03	<0.03	<0.03	0.03	4364863
Xylenes (Total)	mg/kg	<0.04	<0.04	<0.04	0.04	4364863
(C6-C10)	mg/kg	<10	<10	<10	10	4364863
Surrogate Recovery (%)						
4-BROMOFLUOROBENZENE (sur.)	%	89	95	95	N/A	4364863
D10-ETHYLBENZENE (sur.)	%	94	101	89	N/A	4364863
D4-1,2-DICHLOROETHANE (sur.)	%	101	92	92	N/A	4364863
D8-TOLUENE (sur.)	%	102	104	104	N/A	4364863

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85207		X85208	X85209		
Sampling Date		2010/10/18 08:45		2010/10/18 09:00	2010/10/18 09:00		
COC Number		F111798		F111798	F111798		
	Units	**G-05-04**	**QC Batch**	**G-03-05**	**G-03-33**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	4360676	56	100	10	4360676
Volatiles							
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4364871	<0.1	<0.1	0.1	4364863
Benzene	mg/kg	<0.005	4364871	<0.005	<0.005	0.005	4364863
Toluene	mg/kg	<0.02	4364871	<0.02	<0.02	0.02	4364863
Ethylbenzene	mg/kg	<0.01	4364871	0.09	0.14	0.01	4364863
m & p-Xylene	mg/kg	<0.04	4364871	<0.04	0.06	0.04	4364863
o-Xylene	mg/kg	<0.04	4364871	<0.04	<0.04	0.04	4364863
Styrene	mg/kg	<0.03	4364871	<0.03	<0.03	0.03	4364863
Xylenes (Total)	mg/kg	<0.04	4364871	<0.04	0.06	0.04	4364863
(C6-C10)	mg/kg	<10	4364871	56	110	10	4364863
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	94	4364871	99	102	N/A	4364863
D10-ETHYLBENZENE (sur.)	%	100	4364871	104	103	N/A	4364863
D4-1,2-DICHLOROETHANE (sur.)	%	89	4364871	88	92	N/A	4364863
D8-TOLUENE (sur.)	%	105	4364871	101	101	N/A	4364863

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85210	X85211		X85212		
Sampling Date		2010/10/18 09:15	2010/10/18 09:30		2010/10/18 09:45		
COC Number		F111798	F111798		F111798		
	Units	**G-03-06**	**G-03-07**	**QC Batch**	**G-04-08**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	<10	4360676	<10	10	4360676
Volatiles							
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	4364863	<0.1	0.1	4364873
Benzene	mg/kg	<0.005	<0.005	4364863	<0.005	0.005	4364873
Toluene	mg/kg	<0.02	<0.02	4364863	<0.02	0.02	4364873
Ethylbenzene	mg/kg	<0.01	<0.01	4364863	<0.01	0.01	4364873
m & p-Xylene	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364873
o-Xylene	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364873
Styrene	mg/kg	<0.03	<0.03	4364863	<0.03	0.03	4364873
Xylenes (Total)	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364873
(C6-C10)	mg/kg	<10	<10	4364863	<10	10	4364873
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	101	98	4364863	99	N/A	4364873
D10-ETHYLBENZENE (sur.)	%	115	115	4364863	101	N/A	4364873
D4-1,2-DICHLOROETHANE (sur.)	%	96	94	4364863	106	N/A	4364873
D8-TOLUENE (sur.)	%	102	103	4364863	102	N/A	4364873

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85213		X85214	X85215		
Sampling Date		2010/10/18 10:00		2010/10/18 10:15	2010/10/18 10:30		
COC Number		F111798		F111798	F111798		
	Units	**G-04-09**	**QC Batch**	**G-04-10**	**G-01-11**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	4360676	<10	<10	10	4360676
Volatiles							
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4364863	<0.1	<0.1	0.1	4364871
Benzene	mg/kg	<0.005	4364863	<0.005	<0.005	0.005	4364871
Toluene	mg/kg	<0.02	4364863	<0.02	<0.02	0.02	4364871
Ethylbenzene	mg/kg	<0.01	4364863	<0.01	<0.01	0.01	4364871
m & p-Xylene	mg/kg	<0.04	4364863	<0.04	<0.04	0.04	4364871
o-Xylene	mg/kg	<0.04	4364863	<0.04	<0.04	0.04	4364871
Styrene	mg/kg	<0.03	4364863	<0.03	<0.03	0.03	4364871
Xylenes (Total)	mg/kg	<0.04	4364863	<0.04	<0.04	0.04	4364871
(C6-C10)	mg/kg	<10	4364863	<10	<10	10	4364871
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	97	4364863	93	93	N/A	4364871
D10-ETHYLBENZENE (sur.)	%	102	4364863	99	100	N/A	4364871
D4-1,2-DICHLOROETHANE (sur.)	%	94	4364863	88	89	N/A	4364871
D8-TOLUENE (sur.)	%	103	4364863	104	105	N/A	4364871

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85226		X85227		X85228		
Sampling Date		2010/10/18 10:45		2010/10/18 11:00		2010/10/18 11:15		
COC Number		F111799		F111799		F111799		
	Units	**G-01-12**	**QC Batch**	**G-64-13**	**QC Batch**	**G-64-14**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	4360676	<10	4360676	<10	10	4360676
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4364863	<0.1	4364871	<0.1	0.1	4364863
Benzene	mg/kg	<0.005	4364863	<0.005	4364871	<0.005	0.005	4364863
Toluene	mg/kg	<0.02	4364863	<0.02	4364871	<0.02	0.02	4364863
Ethylbenzene	mg/kg	<0.01	4364863	<0.01	4364871	<0.01	0.01	4364863
m & p-Xylene	mg/kg	<0.04	4364863	<0.04	4364871	<0.04	0.04	4364863
o-Xylene	mg/kg	<0.04	4364863	<0.04	4364871	<0.04	0.04	4364863
Styrene	mg/kg	<0.03	4364863	<0.03	4364871	<0.03	0.03	4364863
Xylenes (Total)	mg/kg	<0.04	4364863	<0.04	4364871	<0.04	0.04	4364863
(C6-C10)	mg/kg	<10	4364863	<10	4364871	<10	10	4364863
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	96	4364863	93	4364871	96	N/A	4364863
D10-ETHYLBENZENE (sur.)	%	111	4364863	95	4364871	109	N/A	4364863
D4-1,2-DICHLOROETHANE (sur.)	%	97	4364863	88	4364871	96	N/A	4364863
D8-TOLUENE (sur.)	%	102	4364863	106	4364871	100	N/A	4364863

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85229	X85230	X85231	X85232		
Sampling Date		2010/10/18 11:30	2010/10/18 11:45	2010/10/19 08:00	2010/10/19 08:00		
COC Number		F111799	F111799	F111799	F111799		
	Units	**G-60-15**	**G-60-16**	**G-63-03**	**G-63-13**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	<10	10	4360676
Volatiles							
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1	4364863
Benzene	mg/kg	<0.005	<0.005	<0.005	<0.005	0.005	4364863
Toluene	mg/kg	<0.02	<0.02	<0.02	<0.02	0.02	4364863
Ethylbenzene	mg/kg	<0.01	<0.01	<0.01	<0.01	0.01	4364863
m & p-Xylene	mg/kg	<0.04	<0.04	<0.04	<0.04	0.04	4364863
o-Xylene	mg/kg	<0.04	<0.04	<0.04	<0.04	0.04	4364863
Styrene	mg/kg	<0.03	<0.03	<0.03	<0.03	0.03	4364863
Xylenes (Total)	mg/kg	<0.04	<0.04	<0.04	<0.04	0.04	4364863
(C6-C10)	mg/kg	<10	<10	<10	<10	10	4364863
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	96	97	97	97	N/A	4364863
D10-ETHYLBENZENE (sur.)	%	107	107	105	96	N/A	4364863
D4-1,2-DICHLOROETHANE (sur.)	%	95	100	98	99	N/A	4364863
D8-TOLUENE (sur.)	%	102	101	101	101	N/A	4364863

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85233	X85234		X85235		
Sampling Date		2010/10/19 08:15	2010/10/19 08:30		2010/10/19 08:45		
COC Number		F111799	F111799		F111799		
	Units	**G-63-06**	**G-61-04**	**QC Batch**	**G-61-07**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	<10	4360676	<10	10	4360676
Volatiles							
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	4364863	<0.1	0.1	4364871
Benzene	mg/kg	<0.005	<0.005	4364863	<0.005	0.005	4364871
Toluene	mg/kg	<0.02	<0.02	4364863	<0.02	0.02	4364871
Ethylbenzene	mg/kg	<0.01	<0.01	4364863	<0.01	0.01	4364871
m & p-Xylene	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364871
o-Xylene	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364871
Styrene	mg/kg	<0.03	<0.03	4364863	<0.03	0.03	4364871
Xylenes (Total)	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364871
(C6-C10)	mg/kg	<10	<10	4364863	<10	10	4364871
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	96	96	4364863	93	N/A	4364871
D10-ETHYLBENZENE (sur.)	%	102	109	4364863	100	N/A	4364871
D4-1,2-DICHLOROETHANE (sur.)	%	98	101	4364863	88	N/A	4364871
D8-TOLUENE (sur.)	%	101	99	4364863	105	N/A	4364871

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85236	X85238		X85271		
Sampling Date		2010/10/19 09:00	2010/10/19 09:15		2010/10/19 09:30		
COC Number		F111799	F111799		F111800		
	Units	**G-59-01**	**G-59-03**	**QC Batch**	**G-62-03**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	<10	4360676	<10	10	4360676
Volatiles							
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	4364863	<0.1	0.1	4364871
Benzene	mg/kg	<0.005	0.006	4364863	<0.005	0.005	4364871
Toluene	mg/kg	<0.02	0.03	4364863	<0.02	0.02	4364871
Ethylbenzene	mg/kg	<0.01	<0.01	4364863	<0.01	0.01	4364871
m & p-Xylene	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364871
o-Xylene	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364871
Styrene	mg/kg	<0.03	<0.03	4364863	<0.03	0.03	4364871
Xylenes (Total)	mg/kg	<0.04	<0.04	4364863	<0.04	0.04	4364871
(C6-C10)	mg/kg	<10	<10	4364863	<10	10	4364871
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	97	96	4364863	92	N/A	4364871
D10-ETHYLBENZENE (sur.)	%	106	106	4364863	87	N/A	4364871
D4-1,2-DICHLOROETHANE (sur.)	%	100	99	4364863	88	N/A	4364871
D8-TOLUENE (sur.)	%	100	100	4364863	105	N/A	4364871

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85272		X85282		
Sampling Date		2010/10/19 09:45				
COC Number		F111800		F111800		
	Units	**G-62-05**	**QC Batch**	**G-77-01**	**RDL**	**QC Batch**
Calculated Parameters						
F1 (C6-C10) - BTEX	mg/kg	<10	4360676	17	10	4373571
Volatiles						
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4364871	<0.1 (1)	0.1	4374949
Benzene	mg/kg	<0.005	4364871	0.017 (1)	0.005	4374949
Toluene	mg/kg	<0.02	4364871	0.10 (1)	0.02	4374949
Ethylbenzene	mg/kg	<0.01	4364871	0.05 (1)	0.01	4374949
m & p-Xylene	mg/kg	<0.04	4364871	0.22 (1)	0.04	4374949
o-Xylene	mg/kg	<0.04	4364871	0.15 (1)	0.04	4374949
Styrene	mg/kg	<0.03	4364871	<0.03 (1)	0.03	4374949
Xylenes (Total)	mg/kg	<0.04	4364871	0.37	0.04	4374949
(C6-C10)	mg/kg	<10	4364871	18 (1)	10	4374949
Surrogate Recovery (%)						
4-BROMOFLUOROBENZENE (sur.)	%	92	4364871	95	N/A	4374949
D10-ETHYLBENZENE (sur.)	%	103	4364871	87	N/A	4374949
D4-1,2-DICHLOROETHANE (sur.)	%	88	4364871	95	N/A	4374949
D8-TOLUENE (sur.)	%	106	4364871	98	N/A	4374949

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) Sample received past recommended hold time (7 days) - Pot. Low bias

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X85273	X85274	X85275	X85276		
Sampling Date		2010/10/19 10:00	2010/10/19 10:15	2010/10/19 10:30	2010/10/19 10:45		
COC Number		F111800	F111800	F111800	F111800		
	Units	**G-73-01**	**G-73-05**	**G-72-01**	**G-72-05**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	8.74	8.27	8.81	8.21	0.01	4365285
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	14000	23000	13900	22700	100	4365283
Total Antimony (Sb)	mg/kg	5.1	0.4	70.5	0.9	0.1	4365283
Total Arsenic (As)	mg/kg	7.2	6.0	16.9	8.6	0.2	4365283
Total Barium (Ba)	mg/kg	245	208	356	216	0.1	4365283
Total Beryllium (Be)	mg/kg	0.7	1.2	0.6	1.2	0.1	4365283
Total Bismuth (Bi)	mg/kg	0.2	0.2	0.3	0.3	0.1	4365283
Total Cadmium (Cd)	mg/kg	0.44	0.19	0.48	0.30	0.05	4365283
Total Calcium (Ca)	mg/kg	68600	29800	94700	25400	100	4365283
Total Chromium (Cr)	mg/kg	44	53	29	46	1	4365283
Total Cobalt (Co)	mg/kg	10.7	15.9	8.0	14.9	0.3	4365283
Total Copper (Cu)	mg/kg	42.7	35.1	61.8	36.1	0.5	4365283
Total Iron (Fe)	mg/kg	34400	31600	20700	31100	100	4365283
Total Lead (Pb)	mg/kg	375	16.5	875	24.6	0.1	4365283
Total Lithium (Li)	mg/kg	21	36	20	30	5	4365283
Total Magnesium (Mg)	mg/kg	30000	20300	38900	15800	100	4365283
Total Manganese (Mn)	mg/kg	556	423	408	743	0.2	4365283
Total Mercury (Hg)	mg/kg	0.09	<0.05	0.75	<0.05	0.05	4365283
Total Molybdenum (Mo)	mg/kg	1.5	0.9	0.7	2.0	0.1	4365283
Total Nickel (Ni)	mg/kg	34.6	43.6	25.2	53.5	0.8	4365283
Total Phosphorus (P)	mg/kg	451	530	766	555	10	4365283
Total Potassium (K)	mg/kg	2890	5120	3190	4450	100	4365283
Total Selenium (Se)	mg/kg	<0.5	<0.5	<0.5	0.6	0.5	4365283
Total Silver (Ag)	mg/kg	0.14	0.13	0.21	0.16	0.05	4365283
Total Sodium (Na)	mg/kg	1150	768	492	740	100	4365283
Total Strontium (Sr)	mg/kg	92.1	68.3	148	72.9	0.1	4365283
Total Thallium (Tl)	mg/kg	0.22	0.37	0.19	0.33	0.05	4365283
Total Tin (Sn)	mg/kg	8.5	1.2	61.2	1.4	0.1	4365283
Total Titanium (Ti)	mg/kg	188	306	309	147	1	4365283
Total Uranium (U)	mg/kg	1.25	1.57	0.91	1.91	0.05	4365283
Total Vanadium (V)	mg/kg	45	72	41	69	2	4365283

RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X85273	X85274	X85275	X85276		
Sampling Date		2010/10/19 10:00	2010/10/19 10:15	2010/10/19 10:30	2010/10/19 10:45		
COC Number		F111800	F111800	F111800	F111800		
	Units	**G-73-01**	**G-73-05**	**G-72-01**	**G-72-05**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	523	93	247	95	1	4365283
Total Zirconium (Zr)	mg/kg	6.3	14.5	5.0	10.6	0.5	4365283

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X85277	X85278	X85279	X85280		
Sampling Date		2010/10/19 11:00	2010/10/19 11:00	2010/10/19 11:15	2010/10/19 11:30		
COC Number		F111800	F111800	F111800	F111800		
	Units	**G-71-03**	**G-71-13**	**G-71-06**	**G-70-02**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	8.82	8.71	8.17	8.49	0.01	4365285
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	6050	6080	19900	24900	100	4365283
Total Antimony (Sb)	mg/kg	0.2	0.2	0.6	0.6	0.1	4365283
Total Arsenic (As)	mg/kg	2.4	1.9	10.1	7.4	0.2	4365283
Total Barium (Ba)	mg/kg	61.3	56.6	150	157	0.1	4365283
Total Beryllium (Be)	mg/kg	0.2	0.3	1.0	1.1	0.1	4365283
Total Bismuth (Bi)	mg/kg	<0.1	<0.1	0.3	0.2	0.1	4365283
Total Cadmium (Cd)	mg/kg	0.08	0.08	0.28	0.14	0.05	4365283
Total Calcium (Ca)	mg/kg	120000	122000	26100	45600	100	4365283
Total Chromium (Cr)	mg/kg	15	15	39	44	1	4365283
Total Cobalt (Co)	mg/kg	4.1	4.2	15.5	13.7	0.3	4365283
Total Copper (Cu)	mg/kg	9.4	8.9	31.7	29.0	0.5	4365283
Total Iron (Fe)	mg/kg	9300	9100	30400	29800	100	4365283
Total Lead (Pb)	mg/kg	4.6	4.4	16.6	15.1	0.1	4365283
Total Lithium (Li)	mg/kg	11	11	27	28	5	4365283
Total Magnesium (Mg)	mg/kg	61800	64000	17100	25300	100	4365283
Total Manganese (Mn)	mg/kg	228	235	480	504	0.2	4365283
Total Mercury (Hg)	mg/kg	<0.05	<0.05	<0.05	<0.05	0.05	4365283
Total Molybdenum (Mo)	mg/kg	0.2	0.2	1.3	0.2	0.1	4365283
Total Nickel (Ni)	mg/kg	15.0	14.3	40.8	42.2	0.8	4365283
Total Phosphorus (P)	mg/kg	351	348	541	521	10	4365283
Total Potassium (K)	mg/kg	1060	1040	3700	4370	100	4365283
Total Selenium (Se)	mg/kg	<0.5	<0.5	0.6	<0.5	0.5	4365283
Total Silver (Ag)	mg/kg	<0.05	<0.05	0.13	0.10	0.05	4365283
Total Sodium (Na)	mg/kg	220	234	1040	526	100	4365283
Total Strontium (Sr)	mg/kg	52.0	50.6	67.4	56.5	0.1	4365283
Total Thallium (Tl)	mg/kg	0.09	0.09	0.30	0.33	0.05	4365283
Total Tin (Sn)	mg/kg	0.3	0.3	0.9	1.0	0.1	4365283
Total Titanium (Ti)	mg/kg	298	295	112	171	1	4365283
Total Uranium (U)	mg/kg	0.80	0.80	2.02	0.99	0.05	4365283
Total Vanadium (V)	mg/kg	22	21	59	68	2	4365283

RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X85277	X85278	X85279	X85280		
Sampling Date		2010/10/19 11:00	2010/10/19 11:00	2010/10/19 11:15	2010/10/19 11:30		
COC Number		F111800	F111800	F111800	F111800		
	Units	**G-71-03**	**G-71-13**	**G-71-06**	**G-70-02**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	19	18	92	69	1	4365283
Total Zirconium (Zr)	mg/kg	5.8	5.7	13.6	6.7	0.5	4365283

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X85281		
Sampling Date		2010/10/19 11:45		
COC Number		F111800		
	Units	**G-70-05**	**RDL**	**QC Batch**
Physical Properties				
Soluble (2:1) pH	pH Units	8.12	0.01	4365277
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	22400	100	4365276
Total Antimony (Sb)	mg/kg	0.5	0.1	4365276
Total Arsenic (As)	mg/kg	13.6	0.2	4365276
Total Barium (Ba)	mg/kg	261	0.1	4365276
Total Beryllium (Be)	mg/kg	1.0	0.1	4365276
Total Bismuth (Bi)	mg/kg	0.2	0.1	4365276
Total Cadmium (Cd)	mg/kg	0.44	0.05	4365276
Total Calcium (Ca)	mg/kg	21200	100	4365276
Total Chromium (Cr)	mg/kg	48	1	4365276
Total Cobalt (Co)	mg/kg	19.9	0.3	4365276
Total Copper (Cu)	mg/kg	40.5	0.5	4365276
Total Iron (Fe)	mg/kg	33700	100	4365276
Total Lead (Pb)	mg/kg	16.6	0.1	4365276
Total Lithium (Li)	mg/kg	30	5	4365276
Total Magnesium (Mg)	mg/kg	16300	100	4365276
Total Manganese (Mn)	mg/kg	516	0.2	4365276
Total Mercury (Hg)	mg/kg	<0.05	0.05	4365276
Total Molybdenum (Mo)	mg/kg	1.6	0.1	4365276
Total Nickel (Ni)	mg/kg	47.6	0.8	4365276
Total Phosphorus (P)	mg/kg	615	10	4365276
Total Potassium (K)	mg/kg	4630	100	4365276
Total Selenium (Se)	mg/kg	1.9	0.5	4365276
Total Silver (Ag)	mg/kg	0.12	0.05	4365276
Total Sodium (Na)	mg/kg	779	100	4365276
Total Strontium (Sr)	mg/kg	71.2	0.1	4365276
Total Thallium (Tl)	mg/kg	0.33	0.05	4365276
Total Tin (Sn)	mg/kg	0.9	0.1	4365276
Total Titanium (Ti)	mg/kg	132	1	4365276
Total Uranium (U)	mg/kg	2.03	0.05	4365276
Total Vanadium (V)	mg/kg	68	2	4365276

RDL = Reportable Detection Limit

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X85281		
Sampling Date		2010/10/19 11:45		
COC Number		F111800		
	Units	**G-70-05**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	100	1	4365276
Total Zirconium (Zr)	mg/kg	10.3	0.5	4365276

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X85273	X85280		
Sampling Date		2010/10/19 10:00	2010/10/19 11:30		
COC Number		F111800	F111800		
	Units	**G-73-01**	**G-70-02**	**RDL**	**QC Batch**
Polycyclic Aromatics					
Naphthalene	mg/kg	0.057	<0.001	0.001	4371236
2-Methylnaphthalene	mg/kg	0.075	<0.001	0.001	4371236
Acenaphthylene	mg/kg	0.028	<0.001	0.001	4371236
Acenaphthene	mg/kg	0.029	<0.001	0.001	4371236
Fluorene	mg/kg	0.034	<0.001	0.001	4371236
Phenanthrene	mg/kg	0.29	0.001	0.001	4371236
Anthracene	mg/kg	0.076	<0.001	0.001	4371236
Fluoranthene	mg/kg	0.49	<0.001	0.001	4371236
Pyrene	mg/kg	0.47	<0.001	0.001	4371236
Benzo(a)anthracene	mg/kg	0.24	<0.001	0.001	4371236
Chrysene	mg/kg	0.24	<0.001	0.001	4371236
Benzo(b&j)fluoranthene	mg/kg	0.26	<0.001	0.001	4371236
Benzo(k)fluoranthene	mg/kg	0.14	<0.001	0.001	4371236
Benzo(a)pyrene	mg/kg	0.21	<0.001	0.001	4371236
Indeno(1,2,3-cd)pyrene	mg/kg	0.18	<0.002	0.002	4371236
Dibenz(a,h)anthracene	mg/kg	0.039	<0.002	0.002	4371236
Benzo(g,h,i)perylene	mg/kg	0.13	<0.002	0.002	4371236
Low Molecular Weight PAH`s	mg/kg	0.59	0.001	0.001	4358145
High Molecular Weight PAH`s	mg/kg	2.4	<0.002	0.002	4358145
Total PAH	mg/kg	3.0	<0.002	0.002	4358145
Surrogate Recovery (%)					
D10-ANTHRACENE (sur.)	%	80	88	N/A	4371236
D12-BENZO(A)PYRENE (sur.)	%	72	64	N/A	4371236
D8-ACENAPHTHYLENE (sur.)	%	91	96	N/A	4371236
D8-NAPHTHALENE (sur.)	%	82	90	N/A	4371236
TERPHENYL-D14 (sur.)	%	86	91	N/A	4371236

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1857
Report Date: 2010/10/29

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: SC

Package 1	16.3°C
Package 2	14.3°C

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

General Comments

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4363526	CG5	Method Blank	Moisture	2010/10/23	<0.3		%	
		RPD [X85236-01]	Moisture	2010/10/23	1.2		%	20
4363685	CG5	Method Blank	Moisture	2010/10/23	<0.3		%	
		RPD	Moisture	2010/10/23	3.8		%	20
4363774	CG5	Method Blank	Moisture	2010/10/23	<0.3		%	
		RPD	Moisture	2010/10/23	9.5		%	20
4364863	MM5	Matrix Spike						
		[X85232-01]	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		98	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		107	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		95	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		101	%	70 - 130
			Benzene	2010/10/24		106	%	60 - 140
			Toluene	2010/10/24		105	%	60 - 140
			Ethylbenzene	2010/10/24		119	%	60 - 140
			m & p-Xylene	2010/10/24		118	%	60 - 140
			o-Xylene	2010/10/24		119	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		85	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		85	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		103	%	70 - 130
			(C6-C10)	2010/10/24		101	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		98	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		90	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		90	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		105	%	70 - 130
			Benzene	2010/10/24		89	%	60 - 140
			Toluene	2010/10/24		91	%	60 - 140
			Ethylbenzene	2010/10/24		102	%	60 - 140
			m & p-Xylene	2010/10/24		102	%	60 - 140
			o-Xylene	2010/10/24		102	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		96	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		91	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		89	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		104	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/24	<0.1		mg/kg	
			Benzene	2010/10/24	<0.005		mg/kg	
			Toluene	2010/10/24	<0.02		mg/kg	
			Ethylbenzene	2010/10/24	<0.01		mg/kg	
			m & p-Xylene	2010/10/24	<0.04		mg/kg	
			o-Xylene	2010/10/24	<0.04		mg/kg	
			Styrene	2010/10/24	<0.03		mg/kg	
			Xylenes (Total)	2010/10/24	<0.04		mg/kg	
			(C6-C10)	2010/10/24	<10		mg/kg	
		RPD [X85232-01]	Methyl-tert-butylether (MTBE)	2010/10/24	NC		%	40
			Benzene	2010/10/24	NC		%	40
			Toluene	2010/10/24	NC		%	40
			Ethylbenzene	2010/10/24	NC		%	40
			m & p-Xylene	2010/10/24	NC		%	40
			o-Xylene	2010/10/24	NC		%	40
			Styrene	2010/10/24	NC		%	40
			Xylenes (Total)	2010/10/24	NC		%	40
			(C6-C10)	2010/10/24	NC		%	40
4364871	MM5	Matrix Spike						
		[X85271-01]	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		94	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		89	%	50 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4364871	MM5	Matrix Spike						
		[X85271-01]	D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		86	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		104	%	70 - 130
			Benzene	2010/10/24		94	%	60 - 140
			Toluene	2010/10/24		98	%	60 - 140
			Ethylbenzene	2010/10/24		110	%	60 - 140
			m & p-Xylene	2010/10/24		109	%	60 - 140
			o-Xylene	2010/10/24		110	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		95	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		85	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		86	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		105	%	70 - 130
			(C6-C10)	2010/10/24		131	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		95	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		83	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		87	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		105	%	70 - 130
			Benzene	2010/10/24		83	%	60 - 140
			Toluene	2010/10/24		86	%	60 - 140
			Ethylbenzene	2010/10/24		98	%	60 - 140
			m & p-Xylene	2010/10/24		97	%	60 - 140
			o-Xylene	2010/10/24		97	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		91	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		95	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		86	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		106	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/24	<0.1		mg/kg	
			Benzene	2010/10/24	<0.005		mg/kg	
			Toluene	2010/10/24	<0.02		mg/kg	
			Ethylbenzene	2010/10/24	<0.01		mg/kg	
			m & p-Xylene	2010/10/24	<0.04		mg/kg	
			o-Xylene	2010/10/24	<0.04		mg/kg	
			Styrene	2010/10/24	<0.03		mg/kg	
			Xylenes (Total)	2010/10/24	<0.04		mg/kg	
			(C6-C10)	2010/10/24	<10		mg/kg	
		RPD [X85271-01]	Methyl-tert-butylether (MTBE)	2010/10/24	NC		%	40
			Benzene	2010/10/24	NC		%	40
			Toluene	2010/10/24	NC		%	40
			Ethylbenzene	2010/10/24	NC		%	40
			m & p-Xylene	2010/10/24	NC		%	40
			o-Xylene	2010/10/24	NC		%	40
			Styrene	2010/10/24	NC		%	40
			Xylenes (Total)	2010/10/24	NC		%	40
			(C6-C10)	2010/10/24	NC		%	40
4364873	MM5	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		96	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		91	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		106	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		105	%	70 - 130
			Benzene	2010/10/24		87	%	60 - 140
			Toluene	2010/10/24		81	%	60 - 140
			Ethylbenzene	2010/10/24		85	%	60 - 140
			m & p-Xylene	2010/10/24		81	%	60 - 140
			o-Xylene	2010/10/24		81	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/23		98	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/23		88	%	50 - 130

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4364873	MM5	QC Standard	D4-1,2-DICHLOROETHANE (sur.)	2010/10/23		103	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/23		103	%	70 - 130
			(C6-C10)	2010/10/23		109	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/23		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/23		90	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/23		102	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/23		105	%	70 - 130
			Benzene	2010/10/23		90	%	60 - 140
			Toluene	2010/10/23		85	%	60 - 140
			Ethylbenzene	2010/10/23		88	%	60 - 140
			m & p-Xylene	2010/10/23		85	%	60 - 140
			o-Xylene	2010/10/23		86	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/23		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/23		93	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/23		100	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/23		105	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/23	<0.1		mg/kg	
			Benzene	2010/10/23	<0.005		mg/kg	
			Toluene	2010/10/23	<0.02		mg/kg	
			Ethylbenzene	2010/10/23	<0.01		mg/kg	
			m & p-Xylene	2010/10/23	<0.04		mg/kg	
			o-Xylene	2010/10/23	<0.04		mg/kg	
			Styrene	2010/10/23	<0.03		mg/kg	
			Xylenes (Total)	2010/10/23	<0.04		mg/kg	
			(C6-C10)	2010/10/23	<10		mg/kg	
		RPD	Benzene	2010/10/24	NC		%	40
			Toluene	2010/10/24	NC		%	40
			Ethylbenzene	2010/10/24	NC		%	40
			m & p-Xylene	2010/10/24	NC		%	40
			o-Xylene	2010/10/24	NC		%	40
			Styrene	2010/10/24	NC		%	40
			Xylenes (Total)	2010/10/24	NC		%	40
4365276	DJ	Matrix Spike	Total Arsenic (As)	2010/10/25		104	%	75 - 125
			Total Beryllium (Be)	2010/10/25		102	%	75 - 125
			Total Cadmium (Cd)	2010/10/25		109	%	75 - 125
			Total Chromium (Cr)	2010/10/25		NC	%	75 - 125
			Total Cobalt (Co)	2010/10/25		97	%	75 - 125
			Total Copper (Cu)	2010/10/25		99	%	75 - 125
			Total Lead (Pb)	2010/10/25		102	%	75 - 125
			Total Lithium (Li)	2010/10/25		99	%	75 - 125
			Total Mercury (Hg)	2010/10/25		99	%	75 - 125
			Total Nickel (Ni)	2010/10/25		NC	%	75 - 125
			Total Selenium (Se)	2010/10/25		107	%	75 - 125
			Total Uranium (U)	2010/10/25		102	%	75 - 125
			Total Vanadium (V)	2010/10/25		NC	%	75 - 125
			Total Zinc (Zn)	2010/10/25		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/25		104	%	70 - 130
			Total Antimony (Sb)	2010/10/25		110	%	70 - 130
			Total Arsenic (As)	2010/10/25		102	%	70 - 130
			Total Barium (Ba)	2010/10/25		114	%	70 - 130
			Total Cadmium (Cd)	2010/10/25		102	%	70 - 130
			Total Calcium (Ca)	2010/10/25		99	%	70 - 130
			Total Chromium (Cr)	2010/10/25		105	%	70 - 130
			Total Cobalt (Co)	2010/10/25		100	%	70 - 130
			Total Copper (Cu)	2010/10/25		92	%	70 - 130

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4365276	DJ	QC Standard	Total Iron (Fe)	2010/10/25		101	%	70 - 130
			Total Lead (Pb)	2010/10/25		107	%	70 - 130
			Total Magnesium (Mg)	2010/10/25		99	%	70 - 130
			Total Manganese (Mn)	2010/10/25		105	%	70 - 130
			Total Molybdenum (Mo)	2010/10/25		99	%	70 - 130
			Total Nickel (Ni)	2010/10/25		102	%	70 - 130
			Total Phosphorus (P)	2010/10/25		98	%	70 - 130
			Total Selenium (Se)	2010/10/25		1.1	%	N/A
			Total Strontium (Sr)	2010/10/25		103	%	70 - 130
			Total Thallium (Tl)	2010/10/25		92	%	70 - 130
			Total Titanium (Ti)	2010/10/25		105	%	70 - 130
			Total Uranium (U)	2010/10/25		102	%	70 - 130
			Total Vanadium (V)	2010/10/25		103	%	70 - 130
			Total Zinc (Zn)	2010/10/25		94	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/25		103	%	75 - 125
			Total Beryllium (Be)	2010/10/25		103	%	75 - 125
			Total Cadmium (Cd)	2010/10/25		105	%	75 - 125
			Total Chromium (Cr)	2010/10/25		99	%	75 - 125
			Total Cobalt (Co)	2010/10/25		99	%	75 - 125
			Total Copper (Cu)	2010/10/25		101	%	75 - 125
			Total Lead (Pb)	2010/10/25		106	%	75 - 125
			Total Lithium (Li)	2010/10/25		99	%	75 - 125
			Total Mercury (Hg)	2010/10/25		103	%	75 - 125
			Total Nickel (Ni)	2010/10/25		99	%	75 - 125
			Total Selenium (Se)	2010/10/25		114	%	75 - 125
			Total Uranium (U)	2010/10/25		102	%	75 - 125
			Total Vanadium (V)	2010/10/25		100	%	75 - 125
			Total Zinc (Zn)	2010/10/25		107	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/25	<100		mg/kg	
			Total Antimony (Sb)	2010/10/25	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/25	<0.2		mg/kg	
			Total Barium (Ba)	2010/10/25	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/25	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/25	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/25	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/25	<100		mg/kg	
			Total Chromium (Cr)	2010/10/25	<1		mg/kg	
			Total Cobalt (Co)	2010/10/25	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/25	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/25	<100		mg/kg	
			Total Lead (Pb)	2010/10/25	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/25	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/25	<100		mg/kg	
			Total Manganese (Mn)	2010/10/25	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/25	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/25	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/25	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/25	<10		mg/kg	
			Total Potassium (K)	2010/10/25	<100		mg/kg	
			Total Selenium (Se)	2010/10/25	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/25	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/25	<100		mg/kg	
			Total Strontium (Sr)	2010/10/25	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/25	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/25	<0.1		mg/kg	

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4365276	DJ	Method Blank	Total Titanium (Ti)	2010/10/25	<1		mg/kg	
			Total Uranium (U)	2010/10/25	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/25	<2		mg/kg	
			Total Zinc (Zn)	2010/10/25	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/25	<0.5		mg/kg	
		RPD	Total Arsenic (As)	2010/10/25	5.2		%	30
			Total Barium (Ba)	2010/10/25	1.9		%	35
			Total Chromium (Cr)	2010/10/25	0.9		%	30
			Total Copper (Cu)	2010/10/25	0.9		%	30
			Total Lead (Pb)	2010/10/25	0.7		%	35
			Total Zinc (Zn)	2010/10/25	0.7		%	30
4365277	KK3	Spiked Blank	Soluble (2:1) pH	2010/10/24		102	%	96 - 104
		RPD	Soluble (2:1) pH	2010/10/24	0.8		%	20
4365283	DJ	Matrix Spike						
		[X85277-01]	Total Arsenic (As)	2010/10/25		100	%	75 - 125
			Total Beryllium (Be)	2010/10/25		100	%	75 - 125
			Total Cadmium (Cd)	2010/10/25		105	%	75 - 125
			Total Chromium (Cr)	2010/10/25		99	%	75 - 125
			Total Cobalt (Co)	2010/10/25		96	%	75 - 125
			Total Copper (Cu)	2010/10/25		92	%	75 - 125
			Total Lead (Pb)	2010/10/25		99	%	75 - 125
			Total Lithium (Li)	2010/10/25		100	%	75 - 125
			Total Mercury (Hg)	2010/10/25		101	%	75 - 125
			Total Nickel (Ni)	2010/10/25		93	%	75 - 125
			Total Selenium (Se)	2010/10/25		106	%	75 - 125
			Total Uranium (U)	2010/10/25		100	%	75 - 125
			Total Vanadium (V)	2010/10/25		98	%	75 - 125
			Total Zinc (Zn)	2010/10/25		93	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/25		91	%	70 - 130
			Total Antimony (Sb)	2010/10/25		88	%	70 - 130
			Total Arsenic (As)	2010/10/25		87	%	70 - 130
			Total Barium (Ba)	2010/10/25		103	%	70 - 130
			Total Cadmium (Cd)	2010/10/25		90	%	70 - 130
			Total Calcium (Ca)	2010/10/25		92	%	70 - 130
			Total Chromium (Cr)	2010/10/25		99	%	70 - 130
			Total Cobalt (Co)	2010/10/25		92	%	70 - 130
			Total Copper (Cu)	2010/10/25		86	%	70 - 130
			Total Iron (Fe)	2010/10/25		94	%	70 - 130
			Total Lead (Pb)	2010/10/25		93	%	70 - 130
			Total Magnesium (Mg)	2010/10/25		90	%	70 - 130
			Total Manganese (Mn)	2010/10/25		97	%	70 - 130
			Total Molybdenum (Mo)	2010/10/25		87	%	70 - 130
			Total Nickel (Ni)	2010/10/25		89	%	70 - 130
			Total Phosphorus (P)	2010/10/25		88	%	70 - 130
			Total Strontium (Sr)	2010/10/25		90	%	70 - 130
			Total Thallium (Tl)	2010/10/25		86	%	70 - 130
			Total Titanium (Ti)	2010/10/25		101	%	70 - 130
			Total Uranium (U)	2010/10/25		86	%	70 - 130
			Total Vanadium (V)	2010/10/25		98	%	70 - 130
			Total Zinc (Zn)	2010/10/25		86	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/25		98	%	75 - 125
			Total Beryllium (Be)	2010/10/25		95	%	75 - 125
			Total Cadmium (Cd)	2010/10/25		93	%	75 - 125
			Total Chromium (Cr)	2010/10/25		94	%	75 - 125
			Total Cobalt (Co)	2010/10/25		93	%	75 - 125

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4365283	DJ	Spiked Blank	Total Copper (Cu)	2010/10/25		94	%	75 - 125
			Total Lead (Pb)	2010/10/25		96	%	75 - 125
			Total Lithium (Li)	2010/10/25		89	%	75 - 125
			Total Mercury (Hg)	2010/10/25		95	%	75 - 125
			Total Nickel (Ni)	2010/10/25		93	%	75 - 125
			Total Selenium (Se)	2010/10/25		98	%	75 - 125
			Total Uranium (U)	2010/10/25		90	%	75 - 125
			Total Vanadium (V)	2010/10/25		94	%	75 - 125
			Total Zinc (Zn)	2010/10/25		99	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/25	<100		mg/kg	
			Total Antimony (Sb)	2010/10/25	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/25	0.2, RDL=0.2		mg/kg	
			Total Barium (Ba)	2010/10/25	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/25	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/25	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/25	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/25	<100		mg/kg	
			Total Chromium (Cr)	2010/10/25	<1		mg/kg	
			Total Cobalt (Co)	2010/10/25	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/25	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/25	<100		mg/kg	
			Total Lead (Pb)	2010/10/25	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/25	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/25	<100		mg/kg	
			Total Manganese (Mn)	2010/10/25	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/25	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/25	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/25	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/25	<10		mg/kg	
			Total Potassium (K)	2010/10/25	<100		mg/kg	
			Total Selenium (Se)	2010/10/25	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/25	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/25	<100		mg/kg	
			Total Strontium (Sr)	2010/10/25	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/25	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/25	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/25	<1		mg/kg	
			Total Uranium (U)	2010/10/25	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/25	<2		mg/kg	
			Total Zinc (Zn)	2010/10/25	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/25	<0.5		mg/kg	
		RPD [X85277-01]	Total Aluminum (Al)	2010/10/25	2.3		%	35
			Total Antimony (Sb)	2010/10/25	NC		%	30
			Total Arsenic (As)	2010/10/25	0.2		%	30
			Total Barium (Ba)	2010/10/25	3.3		%	35
			Total Beryllium (Be)	2010/10/25	NC		%	30
			Total Bismuth (Bi)	2010/10/25	NC		%	30
			Total Cadmium (Cd)	2010/10/25	NC		%	30
			Total Calcium (Ca)	2010/10/25	0.2		%	30
			Total Chromium (Cr)	2010/10/25	0.5		%	30
			Total Cobalt (Co)	2010/10/25	2.2		%	30
			Total Copper (Cu)	2010/10/25	0.3		%	30
			Total Iron (Fe)	2010/10/25	1.2		%	30
			Total Lead (Pb)	2010/10/25	0.7		%	35
			Total Lithium (Li)	2010/10/25	NC		%	30

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4365283	DJ	RPD [X85277-01]	Total Magnesium (Mg)	2010/10/25	4.1		%	30
			Total Manganese (Mn)	2010/10/25	2.2		%	30
			Total Mercury (Hg)	2010/10/25	NC		%	35
			Total Molybdenum (Mo)	2010/10/25	NC		%	35
			Total Nickel (Ni)	2010/10/25	3.8		%	30
			Total Phosphorus (P)	2010/10/25	0.7		%	30
			Total Potassium (K)	2010/10/25	2.4		%	35
			Total Selenium (Se)	2010/10/25	NC		%	30
			Total Silver (Ag)	2010/10/25	NC		%	35
			Total Sodium (Na)	2010/10/25	NC		%	35
			Total Strontium (Sr)	2010/10/25	1.5		%	35
			Total Thallium (Tl)	2010/10/25	NC		%	30
			Total Tin (Sn)	2010/10/25	NC		%	35
			Total Titanium (Ti)	2010/10/25	2.9		%	35
			Total Uranium (U)	2010/10/25	0.5		%	30
			Total Vanadium (V)	2010/10/25	2.1		%	30
			Total Zinc (Zn)	2010/10/25	0.8		%	30
			Total Zirconium (Zr)	2010/10/25	4.7		%	30
4365285	DY	Spiked Blank	Soluble (2:1) pH	2010/10/25		102	%	96 - 104
		RPD [X85278-01]	Soluble (2:1) pH	2010/10/25	0.6		%	20
4366559	JC9	Matrix Spike [X85209-01]	O-TERPHENYL (sur.)	2010/10/25		97	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25		98	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/10/25		104	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/10/25		102	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/10/25		101	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25		102	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/10/25		107	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2010/10/25		104	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/10/25		125	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/10/25	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2010/10/25	<10		mg/kg	
		RPD [X85209-01]	F2 (C10-C16 Hydrocarbons)	2010/10/25	28.3		%	40
			F3 (C16-C34 Hydrocarbons)	2010/10/25	28.5		%	40
			F4 (C34-C50 Hydrocarbons)	2010/10/25	NC		%	40
			Reached Baseline at C50	2010/10/25	NC		%	50
4366568	JC9	Matrix Spike [X85210-01]	O-TERPHENYL (sur.)	2010/10/25		81	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25		96	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/10/25		103	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/10/25		94	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/10/25		93	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25		94	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/10/25		97	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2010/10/25		90	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/10/25		99	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/10/25	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2010/10/25	<10		mg/kg	
		RPD [X85210-01]	F2 (C10-C16 Hydrocarbons)	2010/10/25	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2010/10/25	33.4		%	40
			F4 (C34-C50 Hydrocarbons)	2010/10/25	NC		%	40
			Reached Baseline at C50	2010/10/25	NC		%	50
4371236	VB1	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/27		88	%	60 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4371236	VB1	Matrix Spike	D12-BENZO(A)PYRENE (sur.)	2010/10/27		82	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/27		93	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/27		82	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/27		88	%	60 - 130
			Naphthalene	2010/10/27		80	%	40 - 130
			2-Methylnaphthalene	2010/10/27		84	%	40 - 130
			Acenaphthylene	2010/10/27		87	%	40 - 130
			Acenaphthene	2010/10/27		87	%	40 - 130
			Fluorene	2010/10/27		92	%	40 - 130
			Phenanthrene	2010/10/27		87	%	40 - 130
			Anthracene	2010/10/27		87	%	40 - 130
			Fluoranthene	2010/10/27		91	%	40 - 130
			Pyrene	2010/10/27		90	%	40 - 130
			Benzo(a)anthracene	2010/10/27		85	%	40 - 130
			Chrysene	2010/10/27		80	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/27		84	%	40 - 130
			Benzo(k)fluoranthene	2010/10/27		87	%	40 - 130
			Benzo(a)pyrene	2010/10/27		82	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/27		94	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/27		89	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/27		86	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/27		81	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/27		83	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/27		85	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/27		79	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/27		89	%	60 - 130
			Naphthalene	2010/10/27		72	%	40 - 130
			2-Methylnaphthalene	2010/10/27		76	%	40 - 130
			Acenaphthylene	2010/10/27		77	%	40 - 130
			Acenaphthene	2010/10/27		77	%	40 - 130
			Fluorene	2010/10/27		78	%	40 - 130
			Phenanthrene	2010/10/27		77	%	40 - 130
			Anthracene	2010/10/27		77	%	40 - 130
			Fluoranthene	2010/10/27		82	%	40 - 130
			Pyrene	2010/10/27		84	%	40 - 130
			Benzo(a)anthracene	2010/10/27		82	%	40 - 130
			Chrysene	2010/10/27		80	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/27		78	%	40 - 130
			Benzo(k)fluoranthene	2010/10/27		86	%	40 - 130
			Benzo(a)pyrene	2010/10/27		80	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/27		82	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/27		81	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/27		78	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/27		90	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/27		76	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/27		90	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/27		88	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/27		92	%	60 - 130
			Naphthalene	2010/10/27	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/27	<0.001		mg/kg	
			Acenaphthylene	2010/10/27	<0.001		mg/kg	
			Acenaphthene	2010/10/27	<0.001		mg/kg	
			Fluorene	2010/10/27	<0.001		mg/kg	
			Phenanthrene	2010/10/27	<0.001		mg/kg	
			Anthracene	2010/10/27	<0.001		mg/kg	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4371236	VB1	Method Blank	Fluoranthene	2010/10/27	<0.001		mg/kg	
			Pyrene	2010/10/27	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/27	<0.001		mg/kg	
			Chrysene	2010/10/27	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/27	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/27	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/27	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/27	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/10/27	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/27	<0.002		mg/kg	
		RPD	Naphthalene	2010/10/27	NC		%	50
			2-Methylnaphthalene	2010/10/27	NC		%	50
			Acenaphthylene	2010/10/27	NC		%	50
			Acenaphthene	2010/10/27	NC		%	50
			Fluorene	2010/10/27	NC		%	50
			Phenanthrene	2010/10/27	NC		%	50
			Anthracene	2010/10/27	NC		%	50
			Fluoranthene	2010/10/27	NC		%	50
			Pyrene	2010/10/27	NC		%	50
			Benzo(a)anthracene	2010/10/27	NC		%	50
			Chrysene	2010/10/27	NC		%	50
			Benzo(b&j)fluoranthene	2010/10/27	NC (1)		%	50
			Benzo(k)fluoranthene	2010/10/27	NC (1)		%	50
			Benzo(a)pyrene	2010/10/27	NC		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/27	NC		%	50
			Dibenz(a,h)anthracene	2010/10/27	NC		%	50
			Benzo(g,h,i)perylene	2010/10/27	NC		%	50
4373645	AP8	Method Blank	Moisture	2010/10/28	<0.3		%	
		RPD	Moisture	2010/10/28	6.3		%	20
4374949	KPA	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/27		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/27		97	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/27		98	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/27		99	%	70 - 130
			Benzene	2010/10/27		90	%	60 - 140
			Toluene	2010/10/27		86	%	60 - 140
			Ethylbenzene	2010/10/27		92	%	60 - 140
			m & p-Xylene	2010/10/27		97	%	60 - 140
			o-Xylene	2010/10/27		93	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/27		103	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/27		96	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/27		96	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/27		104	%	70 - 130
			(C6-C10)	2010/10/27		113	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/27		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/27		93	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/27		101	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/27		97	%	70 - 130
			Benzene	2010/10/27		113	%	60 - 140
			Toluene	2010/10/27		108	%	60 - 140
			Ethylbenzene	2010/10/27		116	%	60 - 140
			m & p-Xylene	2010/10/27		111	%	60 - 140
			o-Xylene	2010/10/27		114	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/27		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/27		95	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/27		101	%	70 - 130

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1857

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4374949	KPA	Method Blank	D8-TOLUENE (sur.)	2010/10/27		98	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/27	<0.1		mg/kg	
			Benzene	2010/10/27	<0.005		mg/kg	
			Toluene	2010/10/27	<0.02		mg/kg	
			Ethylbenzene	2010/10/27	<0.01		mg/kg	
			m & p-Xylene	2010/10/27	<0.04		mg/kg	
			o-Xylene	2010/10/27	<0.04		mg/kg	
			Styrene	2010/10/27	<0.03		mg/kg	
			Xylenes (Total)	2010/10/27	<0.04		mg/kg	
			(C6-C10)	2010/10/27	<10		mg/kg	
		RPD	Benzene	2010/10/27	NC		%	40
			Toluene	2010/10/27	NC		%	40
			Ethylbenzene	2010/10/27	NC		%	40
			m & p-Xylene	2010/10/27	NC		%	40
			o-Xylene	2010/10/27	NC		%	40
			Styrene	2010/10/27	NC		%	40
			Xylenes (Total)	2010/10/27	NC		%	40
4375002	JC9	Matrix Spike	O-TERPHENYL (sur.)	2010/10/27		97	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/27		95	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/10/27		97	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/10/27		97	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/10/27		91	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/27		95	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/10/27		99	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2010/10/27		97	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/10/27		95	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/27	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/10/27	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2010/10/27	<10		mg/kg	
		RPD	F2 (C10-C16 Hydrocarbons)	2010/10/27	0.3		%	40
			F3 (C16-C34 Hydrocarbons)	2010/10/27	5.1		%	40
			F4 (C34-C50 Hydrocarbons)	2010/10/27	NC		%	40
			Reached Baseline at C50	2010/10/27	NC		%	50

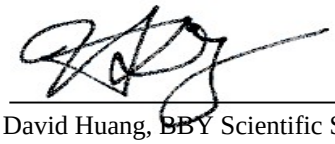
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
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.
(1) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

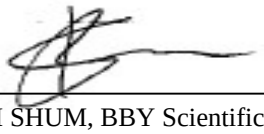
Validation Signature Page

Maxxam Job #: B0A1857

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



David Huang, BBY Scientific Specialist



TOM SHUM, BBY Scientific Specialist

==========

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 Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

JOB# B0A1857

ANALYSIS REQUEST F 111798

COMPANY NAME: AECOM	PH. #: (204) 928-8321 E-mail: eryn.williamson@aecom.com/ scott.chapman@aecom.com FAX #: (204) 284-2040
COMPANY ADDRESS: 99 Commerce Drive Winnipeg MB R3P 0Y7	CLIENT PROJECT ID: (#) 60164142 Dominion Bridge 1460 Dublin Avenue
SAMPLER NAME (PRINT): Eryn Williamson	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, PHC F1-F4	Metals	PAH	PCB	LAB USE ONLY
1	G02-01				X		2	18/10/10	8:00	45p	X				
2	G02-02				X		2	18/10/10	8:15	10p	X				
3	G05-03				X		2	18/10/10	8:30	40p	X				
4	G05-04				X		2	18/10/10	8:45	25p	X				
5	G03-05				X		2	18/10/10	9:00	80p	X				
6	G03-33				X		2	18/10/10	9:00	80p	X				
7	G03-06				X		2	18/10/10	9:15	35p	X				
8	G03-07				X		2	18/10/10	9:30	55p	X				
9	G04-08				X		2	18/10/10	9:45	65p	X				
10	G04-09				X		2	18/10/10	10:00	60p	X				
11	G04-10				X		2	18/10/10	10:15	35p	X				
12	G01-11				X		2	18/10/10	10:30	55p	X				

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☒
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

- ☒ CCME
- ☐ CSR
- ☐ ALBERTA TIER 1
- ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 9.7 9.8 9.7 16 15 18 15 15 13

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Eryn Williamson Eryn Williamson	DATE: DD/MM/YY 20/10/10	TIME: 9:00	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY 21/10/10	TIME: 11:00	RECEIVED BY: Claire Raymond
RELINQUISHED BY:	DATE: Oct 20/10	TIME: 11:00	RECEIVED BY LABORATORY:

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

JOB# BOA1857

ANALYSIS REQUEST F111799

COMPANY NAME: AECOM	PH. #: (204) 928-8321 E-mail: eryn.williamson@aecom.com FAX #: Scott.chapman@aecom.com (204) 284-2040
COMPANY ADDRESS: 99 Commerce Drive Winnipeg MB R3P 0Y7	CLIENT PROJECT ID: (#) 60164142 Dominion Bridge 1460 Dublin Avenue
SAMPLER NAME (PRINT): Eryn Williamson	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	MATRIX: SURFACE WATER	MATRIX: SOIL	MATRIX: OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	SAMPLING: TIME	SAMPLING: HEADSPACE VAPOUR	BTEX, PHC F1-F4	Metals	PAH	PCB	LAB USE ONLY
1	G01-12				X		2	18/10/10	10:45	30p	X				
2	G64-13				X		2	18/10/10	11:00	15p	X				
3	G64-14				X		2	18/10/10	11:15	5p	X				
4	G-60-15				X		2	18/10/10	11:30	25p	X				
5	G-60-16				X		2	18/10/10	11:45	15p	X				
6	G-63-03				X		2	19/10/10	8:00	20p	X				
7	G-63-13				X		2	19/10/10	8:00	20p	X				
8	G-63-06				X		2	19/10/10	8:15	0p	X				
9	G-61-04				X		2	19/10/10	8:30	15p	X				
10	G-61-07				X		2	19/10/10	8:45	0p	X				
11	G-59-01				X		2	19/10/10	9:00	10p	X				
12	G-59-03				X		2	19/10/10	9:15	15	X				

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	☐
RUSH	2 BUSINESS DAYS	☐
URGENT	1 BUSINESS DAY	☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

- X CCME
- ☐ CSR
- ☐ ALBERTA TIER 1
- ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 9.7 8.8 9.7 16,15,18 15/15/13

DUE DATE:

LOG IN CHECK:

	DATE DD/MM/YY	TIME	RECEIVED BY:
RELINQUISHED BY SAMPLER: Eryn Williamson ERYN WILLIAMSON	20/10/10	9:00	
RELINQUISHED BY:	20/10/10	11:00	Claire Laymont
RELINQUISHED BY:	Oct 20/10	11:00	RECEIVED BY LABORATORY:

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

JOB# BOA1857

ANALYSIS REQUEST F 111800

COMPANY NAME: AECOM	PH. #: (204) 925-2321 E-mail: eryn.williamson@aecom.com FAX #: Scott.chapman@aecom.com
COMPANY ADDRESS: 99 Commerce Drive, Winnipeg MB R3P 0Y7	CLIENT PROJECT ID: (#) (204) 284-2040 60164142 Dominion Bridge 1460 Dublin Avenue
SAMPLER NAME (PRINT): Eryn Williamson	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, PHC F1-F4	Metals	PAH	PCBs	LAB USE ONLY
1	G-62-03				X		2	19/10/10	9:30	35p	X				
2	G-62-05				X		2	19/10/10	9:45	15p	X				
3	G-73-01				X		2	19/10/10	10:00	20p		X	X		
4	G-73-05				X		1	19/10/10	10:15	20p		X			
5	G-72-01				X		1	19/10/10	10:30	20p		X			
6	G-72-05				X		1	19/10/10	10:45	20p		X			
7	G-71-03				X		1	19/10/10	11:00	25p		X			
8	G-71-13				X		1	19/10/10	11:00	25p		X			
9	G-71-06				X		1	19/10/10	11:15	25p		X			
10	G-70-02				X		2	19/10/10	11:30	25p		X	X		
11	G-70-05				X		1	19/10/10	11:45	25p		X			
12	G-72-04				X		2	19/10/10	12:00	20					

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☒
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS _____

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☒ CCME ☐ CSR ☐ ALBERTA TIER 1 ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 9.8 9.7 9.7 15, 15, 18

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Eryn Williamson Eryn Williamson DATE: DD/MM/YY 20/10/10 TIME: 9:00 RECEIVED BY: 15, 15, 13

RELINQUISHED BY: DATE: DD/MM/YY 21/10/10 TIME: 11:00 RECEIVED BY:

DD/MM/YY Oct 20/10 11:00

CUSTODY RECORD

Your Project #: DOMINION BRIDGE 60164142
Your C.O.C. #: F111691, F111693, F111692

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/10/29

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0A1871
Received: 2010/10/21, 11:00

Sample Matrix: Soil
Samples Received: 33

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS (1)	12	2010/10/23	2010/10/24	BBY8-SOP-00010/R26	EPA SW846 8260B
BTEX/MTBE Soil LH, VH, F1 SIM/MS (1)	19	2010/10/23	2010/10/25	BBY8-SOP-00010/R26	EPA SW846 8260B
Volatile F1-BTEX (1)	10	N/A	2010/10/25		
Volatile F1-BTEX (1)	23	N/A	2010/10/26		
CCME Hydrocarbons (F2-F4 in soil) (1)	2	2010/10/22	2010/10/26	BRN SOP-00342 R9.0	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil) (1)	11	2010/10/23	2010/10/25	BRN SOP-00342 R9.0	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil) (1)	17	2010/10/23	2010/10/26	BRN SOP-00342 R9.0	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil) (1)	3	2010/10/23	2010/10/27	BRN SOP-00342 R9.0	CCME Soil Tier 1
Moisture (1)	2	N/A	2010/10/23	BRN SOP-00321 R5.0	Ont MOE -E 3139
Moisture (1)	31	N/A	2010/10/24	BRN SOP-00321 R5.0	Ont MOE -E 3139
PAH in Soil by GC/MS Lowlevel (Extended) (1)	1	2010/10/22	2010/10/29	BRN SOP-00332 R5.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc (1)	1	N/A	2010/10/29		PAHTOT-S
CCME F1 C6-C10 in Soil by GC/FID (1)	2	2010/10/22	2010/10/24		Based on EPA SW8260B
VOCs in Soil by HS GC/MS (1)	2	2010/10/22	2010/10/24	BBY8-SOP-0009/R16	Based on EPA 8260B

(1) This test was performed by Maxxam Vancouver

Encryption Key

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

Amanda Hart, Burnaby Customer Service
Email: AHart@maxxam.ca
Phone# (204) 772-2386

==========

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 #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X85434	X85435	X85436	X85437	X85438	X85439		
Sampling Date		2010/10/18	2010/10/18	2010/10/18	2010/10/18	2010/10/18	2010/10/18		
COC Number		F111691	F111691	F111691	F111691	F111691	F111691		
	Units	**BH-10-16 G-16-01**	**G-16-02**	**G-16-03**	**G-15-01**	**G-15-03**	**G-14-06**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	90	<10	<10	<10	<10	<10	10	4366568
F3 (C16-C34 Hydrocarbons)	mg/kg	510	<10	<10	160	<10	38	10	4366568
F4 (C34-C50 Hydrocarbons)	mg/kg	250	<10	<10	15	<10	<10	10	4366568
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	4366568
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	97	94	100	97	98	84	N/A	4366568

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X85440	X85441	X85442	X85443	X85444		
Sampling Date		2010/10/18	2010/10/18	2010/10/18	2010/10/18	2010/10/19		
COC Number		F111691	F111691	F111691	F111691	F111691		
	Units	**G-14-07**	**G-24-03**	**G-17-04**	**G-17-08**	**G-23-03**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	<10	10	4366568
F3 (C16-C34 Hydrocarbons)	mg/kg	40	<10	<10	65	<10	10	4366568
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	11	10	4366568
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	N/A	4366568
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	91	98	91	77	96	N/A	4366568

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X85445	X85450	X85451	X85452	X85453	X85454		
Sampling Date		2010/10/19	2010/10/19	2010/10/19	2010/10/19	2010/10/19	2010/10/20		
COC Number		F111691	F111693	F111693	F111693	F111693	F111693		
	Units	**G-25-01**	**G-19-04**	**G-19-05**	**DUP 1-BH**	**DUP 2-BH**	**G-46-02**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	290	<10	<10	10	4370091
F3 (C16-C34 Hydrocarbons)	mg/kg	27	<10	41	160	63	79	10	4370091
F4 (C34-C50 Hydrocarbons)	mg/kg	20	<10	<10	13	<10	<10	10	4370091
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	4370091
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	96	98	80	97	82	95	N/A	4370091

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X85455	X85456	X85457	X85458	X85462	X85463		
Sampling Date		2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/19	2010/10/19		
COC Number		F111693	F111693	F111693	F111693	F111692	F111692		
	Units	**G-46-03**	**G-45-01**	**G-45-02**	**DUP 3-BH**	**G-18-01**	**G-18-03**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	21	<10	<10	<10	<10	10	4370091
F3 (C16-C34 Hydrocarbons)	mg/kg	25	230	20	43	13	<10	10	4370091
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	100	31	<10	<10	<10	10	4370091
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	4370091
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	96	103	94	96	95	96	N/A	4370091

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X85464	X85465	X85466	X85467	X85468	X85469		
Sampling Date		2010/10/19	2010/10/19	2010/10/19	2010/10/19	2010/10/19	2010/10/19		
COC Number		F111692	F111692	F111692	F111692	F111692	F111692		
	Units	**G-18-05**	**G-22-02**	**G-22-04**	**G-21-01**	**G-21-05**	**G-22A-03**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	230	<10	<10	<10	<10	10	4370091
F3 (C16-C34 Hydrocarbons)	mg/kg	34	93	<10	<10	53	<10	10	4370091
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	<10	<10	10	4370091
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	4370091
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	90	98	97	98	90	100	N/A	4370091

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X85470	X85471		X85472	X85473		
Sampling Date		2010/10/19	2010/10/19		2010/10/19	2010/10/19		
COC Number		F111692	F111692		F111692	F111692		
	Units	**G-22A-05**	**G-20-02**	**QC Batch**	**G-20-04**	**G-22A-06**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	4370091	<10	23	10	4375002
F3 (C16-C34 Hydrocarbons)	mg/kg	85	<10	4370091	<10	190	10	4375002
F4 (C34-C50 Hydrocarbons)	mg/kg	16	<10	4370091	<10	81	10	4375002
Reached Baseline at C50	mg/kg	Yes	Yes	4370091	Yes	Yes	N/A	4375002
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	90	99	4370091	95	78	N/A	4375002

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

PHYSICAL TESTING (SOIL)

Maxxam ID		X85434	X85435	X85436	X85437	X85438	X85439		
Sampling Date		2010/10/18	2010/10/18	2010/10/18	2010/10/18	2010/10/18	2010/10/18		
COC Number		F111691	F111691	F111691	F111691	F111691	F111691		
	Units	**BH-10-16 G-16-01**	**G-16-02**	**G-16-03**	**G-15-01**	**G-15-03**	**G-14-06**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	15	25	17	15	18	36	0.3	4364774

RDL = Reportable Detection Limit

Maxxam ID		X85440	X85441	X85442	X85443	X85444	X85445		
Sampling Date		2010/10/18	2010/10/18	2010/10/18	2010/10/18	2010/10/19	2010/10/19		
COC Number		F111691	F111691	F111691	F111691	F111691	F111691		
	Units	**G-14-07**	**G-24-03**	**G-17-04**	**G-17-08**	**G-23-03**	**G-25-01**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	38	19	29	38	25	28	0.3	4364774

RDL = Reportable Detection Limit

Maxxam ID		X85450	X85451	X85452	X85453		X85454		
Sampling Date		2010/10/19	2010/10/19	2010/10/19	2010/10/19		2010/10/20		
COC Number		F111693	F111693	F111693	F111693		F111693		
	Units	**G-19-04**	**G-19-05**	**DUP 1-BH**	**DUP 2-BH**	**QC Batch**	**G-46-02**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	17	36	19	38	4364774	18	0.3	4363685

RDL = Reportable Detection Limit

Maxxam ID		X85455		X85456		X85457	X85458	X85462		
Sampling Date		2010/10/20		2010/10/20		2010/10/20	2010/10/20	2010/10/19		
COC Number		F111693		F111693		F111693	F111693	F111692		
	Units	**G-46-03**	**QC Batch**	**G-45-01**	**QC Batch**	**G-45-02**	**DUP 3-BH**	**G-18-01**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	26	4364774	17	4363774	25	19	28	0.3	4364774

RDL = Reportable Detection Limit

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

PHYSICAL TESTING (SOIL)

Maxxam ID		X85463	X85464	X85465	X85466	X85467	X85468		
Sampling Date		2010/10/19	2010/10/19	2010/10/19	2010/10/19	2010/10/19	2010/10/19		
COC Number		F111692	F111692	F111692	F111692	F111692	F111692		
	Units	**G-18-03**	**G-18-05**	**G-22-02**	**G-22-04**	**G-21-01**	**G-21-05**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	21	38	19	19	28	39	0.3	4364771

RDL = Reportable Detection Limit

Maxxam ID		X85469	X85470	X85471	X85472	X85473		
Sampling Date		2010/10/19	2010/10/19	2010/10/19	2010/10/19	2010/10/19		
COC Number		F111692	F111692	F111692	F111692	F111692		
	Units	**G-22A-03**	**G-22A-05**	**G-20-02**	**G-20-04**	**G-22A-06**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	17	36	25	18	37	0.3	4364771

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85434		X85435	X85436	X85437		
Sampling Date		2010/10/18		2010/10/18	2010/10/18	2010/10/18		
COC Number		F111691		F111691	F111691	F111691		
	Units	**BH-10-16 G-16-01**	**QC Batch**	**G-16-02**	**G-16-03**	**G-15-01**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	17	4360676	<10	<10	<10	10	4360676
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4365783	<0.1	<0.1	<0.1	0.1	4365768
Benzene	mg/kg	0.089	4365783	<0.005	<0.005	0.16	0.005	4365768
Toluene	mg/kg	0.41	4365783	<0.02	<0.02	0.30	0.02	4365768
Ethylbenzene	mg/kg	<0.01	4365783	<0.01	<0.01	<0.01	0.01	4365768
m & p-Xylene	mg/kg	1.0	4365783	<0.04	<0.04	0.13	0.04	4365768
o-Xylene	mg/kg	0.24	4365783	<0.04	<0.04	0.09	0.04	4365768
Styrene	mg/kg	<0.03	4365783	<0.03	<0.03	<0.03	0.03	4365768
Xylenes (Total)	mg/kg	1.3	4365783	<0.04	<0.04	0.22	0.04	4365768
(C6-C10)	mg/kg	19	4365783	<10	<10	<10	10	4365768
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	99	4365783	95	96	96	N/A	4365768
D10-ETHYLBENZENE (sur.)	%	86	4365783	87	83	83	N/A	4365768
D4-1,2-DICHLOROETHANE (sur.)	%	96	4365783	89	95	90	N/A	4365768
D8-TOLUENE (sur.)	%	101	4365783	109	101	99	N/A	4365768

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85438		X85439		X85440		
Sampling Date		2010/10/18		2010/10/18		2010/10/18		
COC Number		F111691		F111691		F111691		
	Units	**G-15-03**	**QC Batch**	**G-14-06**	**QC Batch**	**G-14-07**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	4360676	<10	4360676	<10	10	4360676
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4365768	<0.1	4365720	<0.1	0.1	4365751
Benzene	mg/kg	<0.005	4365768	<0.005	4365720	<0.005	0.005	4365751
Toluene	mg/kg	<0.02	4365768	<0.02	4365720	<0.02	0.02	4365751
Ethylbenzene	mg/kg	<0.01	4365768	<0.01	4365720	<0.01	0.01	4365751
m & p-Xylene	mg/kg	<0.04	4365768	<0.04	4365720	<0.04	0.04	4365751
o-Xylene	mg/kg	<0.04	4365768	<0.04	4365720	<0.04	0.04	4365751
Styrene	mg/kg	<0.03	4365768	<0.03	4365720	<0.03	0.03	4365751
Xylenes (Total)	mg/kg	<0.04	4365768	<0.04	4365720	<0.04	0.04	4365751
(C6-C10)	mg/kg	<10	4365768	<10	4365720	<10	10	4365751
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	96	4365768	97	4365720	93	N/A	4365751
D10-ETHYLBENZENE (sur.)	%	84	4365768	92	4365720	97	N/A	4365751
D4-1,2-DICHLOROETHANE (sur.)	%	96	4365768	94	4365720	104	N/A	4365751
D8-TOLUENE (sur.)	%	100	4365768	109	4365720	102	N/A	4365751

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85441	X85442	X85443		X85444		
Sampling Date		2010/10/18	2010/10/18	2010/10/18		2010/10/19		
COC Number		F111691	F111691	F111691		F111691		
	Units	**G-24-03**	**G-17-04**	**G-17-08**	**QC Batch**	**G-23-03**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	4360676	<10	10	4360676
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	<0.1	4365768	<0.1	0.1	4365783
Benzene	mg/kg	<0.005	<0.005	<0.005	4365768	<0.005	0.005	4365783
Toluene	mg/kg	<0.02	<0.02	<0.02	4365768	<0.02	0.02	4365783
Ethylbenzene	mg/kg	<0.01	<0.01	<0.01	4365768	<0.01	0.01	4365783
m & p-Xylene	mg/kg	<0.04	<0.04	<0.04	4365768	<0.04	0.04	4365783
o-Xylene	mg/kg	<0.04	<0.04	<0.04	4365768	<0.04	0.04	4365783
Styrene	mg/kg	<0.03	<0.03	<0.03	4365768	<0.03	0.03	4365783
Xylenes (Total)	mg/kg	<0.04	<0.04	<0.04	4365768	<0.04	0.04	4365783
(C6-C10)	mg/kg	<10	<10	<10	4365768	<10	10	4365783
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	95	95	96	4365768	97	N/A	4365783
D10-ETHYLBENZENE (sur.)	%	87	90	92	4365768	90	N/A	4365783
D4-1,2-DICHLOROETHANE (sur.)	%	99	98	97	4365768	96	N/A	4365783
D8-TOLUENE (sur.)	%	100	98	107	4365768	98	N/A	4365783

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85445	X85450		X85451		X85452		
Sampling Date		2010/10/19	2010/10/19		2010/10/19		2010/10/19		
COC Number		F111691	F111693		F111693		F111693		
	Units	**G-25-01**	**G-19-04**	**QC Batch**	**G-19-05**	**QC Batch**	**DUP 1-BH**	**RDL**	**QC Batch**
Calculated Parameters									
F1 (C6-C10) - BTEX	mg/kg	<10	<10	4360676	<10	4360676	17	10	4360676
Volatiles									
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	4365720	<0.1	4365768	<0.1	0.1	4365783
Benzene	mg/kg	<0.005	<0.005	4365720	<0.005	4365768	<0.005	0.005	4365783
Toluene	mg/kg	<0.02	<0.02	4365720	<0.02	4365768	<0.02	0.02	4365783
Ethylbenzene	mg/kg	<0.01	<0.01	4365720	<0.01	4365768	<0.01	0.01	4365783
m & p-Xylene	mg/kg	<0.04	<0.04	4365720	<0.04	4365768	<0.04	0.04	4365783
o-Xylene	mg/kg	<0.04	<0.04	4365720	<0.04	4365768	<0.04	0.04	4365783
Styrene	mg/kg	<0.03	<0.03	4365720	<0.03	4365768	<0.03	0.03	4365783
Xylenes (Total)	mg/kg	<0.04	<0.04	4365720	<0.04	4365768	<0.04	0.04	4365783
(C6-C10)	mg/kg	<10	<10	4365720	<10	4365768	17	10	4365783
Surrogate Recovery (%)									
4-BROMOFLUOROBENZENE (sur.)	%	96	98	4365720	96	4365768	104	N/A	4365783
D10-ETHYLBENZENE (sur.)	%	90	88	4365720	90	4365768	89	N/A	4365783
D4-1,2-DICHLOROETHANE (sur.)	%	93	94	4365720	96	4365768	96	N/A	4365783
D8-TOLUENE (sur.)	%	100	102	4365720	101	4365768	98	N/A	4365783

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85453	X85455			X85457		
Sampling Date		2010/10/19	2010/10/20			2010/10/20		
COC Number		F111693	F111693			F111693		
	Units	**DUP 2-BH**	**G-46-03**	**RDL**	**QC Batch**	**G-45-02**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	4360676	<20	20	4360676
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	0.1	4365740	<0.1	0.1	4365783
Benzene	mg/kg	<0.005	<0.005	0.005	4365740	<0.005	0.005	4365783
Toluene	mg/kg	<0.02	<0.02	0.02	4365740	<0.02	0.02	4365783
Ethylbenzene	mg/kg	<0.01	<0.01	0.01	4365740	<0.01	0.01	4365783
m & p-Xylene	mg/kg	<0.04	<0.04	0.04	4365740	<0.04	0.04	4365783
o-Xylene	mg/kg	<0.04	<0.04	0.04	4365740	<0.04	0.04	4365783
Styrene	mg/kg	<0.03	<0.03	0.03	4365740	<0.03	0.03	4365783
Xylenes (Total)	mg/kg	<0.04	<0.04	0.04	4365740	<0.04	0.04	4365783
(C6-C10)	mg/kg	<10	<10	10	4365740	<20 (1)	20	4365783
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	95	95	N/A	4365740	96	N/A	4365783
D10-ETHYLBENZENE (sur.)	%	96	95	N/A	4365740	90	N/A	4365783
D4-1,2-DICHLOROETHANE (sur.)	%	101	101	N/A	4365740	90	N/A	4365783
D8-TOLUENE (sur.)	%	101	101	N/A	4365740	102	N/A	4365783

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to background artifacts detected in analysis

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85458	X85462		X85463	X85464		
Sampling Date		2010/10/20	2010/10/19		2010/10/19	2010/10/19		
COC Number		F111693	F111692		F111692	F111692		
	Units	**DUP 3-BH**	**G-18-01**	**QC Batch**	**G-18-03**	**G-18-05**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	<10	4360676	<10	<10	10	4360676
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	4365751	<0.1	<0.1	0.1	4365768
Benzene	mg/kg	<0.005	<0.005	4365751	<0.005	<0.005	0.005	4365768
Toluene	mg/kg	<0.02	<0.02	4365751	<0.02	<0.02	0.02	4365768
Ethylbenzene	mg/kg	<0.01	<0.01	4365751	<0.01	<0.01	0.01	4365768
m & p-Xylene	mg/kg	<0.04	<0.04	4365751	<0.04	<0.04	0.04	4365768
o-Xylene	mg/kg	<0.04	<0.04	4365751	<0.04	<0.04	0.04	4365768
Styrene	mg/kg	<0.03	<0.03	4365751	<0.03	<0.03	0.03	4365768
Xylenes (Total)	mg/kg	<0.04	<0.04	4365751	<0.04	<0.04	0.04	4365768
(C6-C10)	mg/kg	<10	<10	4365751	<10	<10	10	4365768
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	94	96	4365751	95	96	N/A	4365768
D10-ETHYLBENZENE (sur.)	%	95	99	4365751	85	88	N/A	4365768
D4-1,2-DICHLOROETHANE (sur.)	%	104	106	4365751	93	95	N/A	4365768
D8-TOLUENE (sur.)	%	102	103	4365751	100	109	N/A	4365768

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85465		X85466		X85467		
Sampling Date		2010/10/19		2010/10/19		2010/10/19		
COC Number		F111692		F111692		F111692		
	Units	**G-22-02**	**QC Batch**	**G-22-04**	**QC Batch**	**G-21-01**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	19	4360676	<10	4360676	<10	10	4360676
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4365783	<0.1	4365751	<0.1	0.1	4365768
Benzene	mg/kg	<0.005	4365783	<0.005	4365751	<0.005	0.005	4365768
Toluene	mg/kg	<0.02	4365783	<0.02	4365751	<0.02	0.02	4365768
Ethylbenzene	mg/kg	<0.01	4365783	<0.01	4365751	<0.01	0.01	4365768
m & p-Xylene	mg/kg	<0.04	4365783	<0.04	4365751	<0.04	0.04	4365768
o-Xylene	mg/kg	<0.04	4365783	<0.04	4365751	<0.04	0.04	4365768
Styrene	mg/kg	<0.03	4365783	<0.03	4365751	<0.03	0.03	4365768
Xylenes (Total)	mg/kg	<0.04	4365783	<0.04	4365751	<0.04	0.04	4365768
(C6-C10)	mg/kg	19	4365783	<10	4365751	<10	10	4365768
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	103	4365783	93	4365751	95	N/A	4365768
D10-ETHYLBENZENE (sur.)	%	90	4365783	95	4365751	91	N/A	4365768
D4-1,2-DICHLOROETHANE (sur.)	%	94	4365783	107	4365751	95	N/A	4365768
D8-TOLUENE (sur.)	%	100	4365783	100	4365751	99	N/A	4365768

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85468		X85469		X85470	X85471		
Sampling Date		2010/10/19		2010/10/19		2010/10/19	2010/10/19		
COC Number		F111692		F111692		F111692	F111692		
	Units	**G-21-05**	**QC Batch**	**G-22A-03**	**QC Batch**	**G-22A-05**	**G-20-02**	**RDL**	**QC Batch**
Calculated Parameters									
F1 (C6-C10) - BTEX	mg/kg	<10	4360676	<10	4360676	<10	<10	10	4360676
Volatiles									
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4365783	<0.1	4365768	<0.1	<0.1	0.1	4365751
Benzene	mg/kg	<0.005	4365783	<0.005	4365768	<0.005	<0.005	0.005	4365751
Toluene	mg/kg	<0.02	4365783	<0.02	4365768	<0.02	<0.02	0.02	4365751
Ethylbenzene	mg/kg	<0.01	4365783	<0.01	4365768	<0.01	<0.01	0.01	4365751
m & p-Xylene	mg/kg	<0.04	4365783	<0.04	4365768	<0.04	<0.04	0.04	4365751
o-Xylene	mg/kg	<0.04	4365783	<0.04	4365768	<0.04	<0.04	0.04	4365751
Styrene	mg/kg	<0.03	4365783	<0.03	4365768	<0.03	<0.03	0.03	4365751
Xylenes (Total)	mg/kg	<0.04	4365783	<0.04	4365768	<0.04	<0.04	0.04	4365751
(C6-C10)	mg/kg	<10 (1)	4365783	<10	4365768	<10	<10	10	4365751
Surrogate Recovery (%)									
4-BROMOFLUOROBENZENE (sur.)	%	97	4365783	95	4365768	98	93	N/A	4365751
D10-ETHYLBENZENE (sur.)	%	91	4365783	86	4365768	99	98	N/A	4365751
D4-1,2-DICHLOROETHANE (sur.)	%	95	4365783	93	4365768	93	112	N/A	4365751
D8-TOLUENE (sur.)	%	109	4365783	99	4365768	100	99	N/A	4365751

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to background artifacts detected in analysis

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X85472	X85473		
Sampling Date		2010/10/19	2010/10/19		
COC Number		F111692	F111692		
	Units	**G-20-04**	**G-22A-06**	**RDL**	**QC Batch**
Calculated Parameters					
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	4360676
Volatiles					
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	0.1	4365751
Benzene	mg/kg	<0.005	<0.005	0.005	4365751
Toluene	mg/kg	<0.02	<0.02	0.02	4365751
Ethylbenzene	mg/kg	<0.01	<0.01	0.01	4365751
m & p-Xylene	mg/kg	<0.04	<0.04	0.04	4365751
o-Xylene	mg/kg	<0.04	<0.04	0.04	4365751
Styrene	mg/kg	<0.03	<0.03	0.03	4365751
Xylenes (Total)	mg/kg	<0.04	<0.04	0.04	4365751
(C6-C10)	mg/kg	<10	<10	10	4365751
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	94	96	N/A	4365751
D10-ETHYLBENZENE (sur.)	%	96	98	N/A	4365751
D4-1,2-DICHLOROETHANE (sur.)	%	106	112	N/A	4365751
D8-TOLUENE (sur.)	%	101	101	N/A	4365751

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X85456		
Sampling Date		2010/10/20		
COC Number		F111693		
	Units	**G-45-01**	**RDL**	**QC Batch**
Polycyclic Aromatics				
Naphthalene	mg/kg	0.62 (1)	0.01	4371236
2-Methylnaphthalene	mg/kg	0.82 (1)	0.01	4371236
Acenaphthylene	mg/kg	0.07 (1)	0.01	4371236
Acenaphthene	mg/kg	0.76 (1)	0.01	4371236
Fluorene	mg/kg	0.73 (1)	0.01	4371236
Phenanthrene	mg/kg	6.8 (1)	0.01	4371236
Anthracene	mg/kg	1.3 (1)	0.01	4371236
Fluoranthene	mg/kg	8.3 (1)	0.01	4371236
Pyrene	mg/kg	6.4 (1)	0.01	4371236
Benzo(a)anthracene	mg/kg	2.5 (1)	0.01	4371236
Chrysene	mg/kg	2.7 (1)	0.01	4371236
Benzo(b&j)fluoranthene	mg/kg	2.5 (1)	0.01	4371236
Benzo(k)fluoranthene	mg/kg	1.6 (1)	0.01	4371236
Benzo(a)pyrene	mg/kg	2.2 (1)	0.01	4371236
Indeno(1,2,3-cd)pyrene	mg/kg	1.8 (1)	0.02	4371236
Dibenz(a,h)anthracene	mg/kg	0.34 (1)	0.02	4371236
Benzo(g,h,i)perylene	mg/kg	1.6 (1)	0.02	4371236
Low Molecular Weight PAH`s	mg/kg	11	0.01	4358145
High Molecular Weight PAH`s	mg/kg	30	0.02	4358145
Total PAH	mg/kg	41	0.02	4358145
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	104	N/A	4371236
D12-BENZO(A)PYRENE (sur.)	%	86	N/A	4371236
D8-ACENAPHTHYLENE (sur.)	%	97	N/A	4371236
D8-NAPHTHALENE (sur.)	%	94	N/A	4371236
TERPHENYL-D14 (sur.)	%	91	N/A	4371236

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X85454	X85456		
Sampling Date		2010/10/20	2010/10/20		
COC Number		F111693	F111693		
	Units	**G-46-02**	**G-45-01**	**RDL**	**QC Batch**
Calculated Parameters					
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	4360676
Volatile Hydrocarbons					
(C6-C10)	mg/kg	<10	<10	10	4365281
Volatiles					
Chloromethane	mg/kg	<0.1	<0.1	0.1	4364851
Vinyl chloride	mg/kg	<0.06	<0.06	0.06	4364851
Bromomethane	mg/kg	<0.3	<0.3	0.3	4364851
Chloroethane	mg/kg	<0.1	<0.1	0.1	4364851
Trichlorofluoromethane	mg/kg	<0.2	<0.2	0.2	4364851
1,1-dichloroethene	mg/kg	<0.03	<0.03	0.03	4364851
Dichloromethane	mg/kg	<0.1	<0.1	0.1	4364851
trans-1,2-dichloroethene	mg/kg	<0.03	<0.03	0.03	4364851
1,1-dichloroethane	mg/kg	<0.03	<0.03	0.03	4364851
cis-1,2-dichloroethene	mg/kg	<0.03	<0.03	0.03	4364851
Chloroform	mg/kg	<0.05	<0.05	0.05	4364851
1,1,1-trichloroethane	mg/kg	<0.03	<0.03	0.03	4364851
1,2-dichloroethane	mg/kg	<0.03	<0.03	0.03	4364851
Carbon tetrachloride	mg/kg	<0.03	<0.03	0.03	4364851
Benzene	mg/kg	0.008	0.008	0.005	4364851
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	0.1	4364851
1,2-dichloropropane	mg/kg	<0.03	<0.03	0.03	4364851
Trichloroethene	mg/kg	<0.01	<0.01	0.01	4364851
Bromodichloromethane	mg/kg	<0.05	<0.05	0.05	4364851
cis-1,3-dichloropropene	mg/kg	<0.05	<0.05	0.05	4364851
trans-1,3-dichloropropene	mg/kg	<0.05	<0.05	0.05	4364851
1,1,2-trichloroethane	mg/kg	<0.03	<0.03	0.03	4364851
Toluene	mg/kg	<0.03	0.04	0.03	4364851
Chlorodibromomethane	mg/kg	<0.05	<0.05	0.05	4364851
Dibromoethane	mg/kg	<0.03	<0.03	0.03	4364851
Tetrachloroethene	mg/kg	<0.03	<0.03	0.03	4364851
Chlorobenzene	mg/kg	<0.03	<0.03	0.03	4364851
1,1,1,2-tetrachloroethane	mg/kg	<0.03	<0.03	0.03	4364851
Ethylbenzene	mg/kg	<0.01	<0.01	0.01	4364851

RDL = Reportable Detection Limit

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X85454	X85456		
Sampling Date		2010/10/20	2010/10/20		
COC Number		F111693	F111693		
	Units	**G-46-02**	**G-45-01**	**RDL**	**QC Batch**
m & p-Xylene	mg/kg	<0.1	<0.1	0.1	4364851
Bromoform	mg/kg	<0.05	<0.05	0.05	4364851
Styrene	mg/kg	<0.1	<0.1	0.1	4364851
o-Xylene	mg/kg	<0.1	<0.1	0.1	4364851
Xylenes (Total)	mg/kg	<0.1	<0.1	0.1	4364851
1,1,2,2-tetrachloroethane	mg/kg	<0.03	<0.03	0.03	4364851
1,2-dichlorobenzene	mg/kg	<0.03	<0.03	0.03	4364851
1,3-dichlorobenzene	mg/kg	<0.03	<0.03	0.03	4364851
1,4-dichlorobenzene	mg/kg	<0.03	<0.03	0.03	4364851
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	79	87	N/A	4364851
D10-ETHYLBENZENE (sur.)	%	75	90	N/A	4364851
D4-1,2-DICHLOROETHANE (sur.)	%	90	98	N/A	4364851
D8-TOLUENE (sur.)	%	92	101	N/A	4364851

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A1871
Report Date: 2010/10/29

AECOM
Client Project #: DOMINION BRIDGE 60164142

Sampler Initials: BH

Package 1	16.3°C
Package 2	14.3°C

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

General Comments

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4363685	CG5	Method Blank	Moisture	2010/10/23	<0.3		%	
		RPD	Moisture	2010/10/23	3.8		%	20
4363774	CG5	Method Blank	Moisture	2010/10/23	<0.3		%	
		RPD	Moisture	2010/10/23	9.5		%	20
4364771	CG5	Method Blank	Moisture	2010/10/24	<0.3		%	
		RPD	Moisture	2010/10/24	12.8		%	20
4364774	CG5	Method Blank	Moisture	2010/10/24	<0.3		%	
		RPD [X85450-01]	Moisture	2010/10/24	2.9		%	20
4364851	AC2	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		89	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		84	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		102	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		99	%	70 - 130
			Chloromethane	2010/10/24		102	%	40 - 150
			Vinyl chloride	2010/10/24		90	%	40 - 150
			Bromomethane	2010/10/24		86	%	40 - 150
			Chloroethane	2010/10/24		102	%	40 - 150
			Trichlorofluoromethane	2010/10/24		101	%	40 - 150
			1,1-dichloroethene	2010/10/24		91	%	60 - 140
			Dichloromethane	2010/10/24		93	%	60 - 140
			trans-1,2-dichloroethene	2010/10/24		86	%	60 - 140
			1,1-dichloroethane	2010/10/24		95	%	60 - 140
			cis-1,2-dichloroethene	2010/10/24		90	%	60 - 140
			Chloroform	2010/10/24		96	%	60 - 140
			1,1,1-trichloroethane	2010/10/24		90	%	60 - 140
			1,2-dichloroethane	2010/10/24		83	%	60 - 140
			Carbon tetrachloride	2010/10/24		90	%	60 - 140
			Benzene	2010/10/24		87	%	60 - 140
			1,2-dichloropropane	2010/10/24		95	%	60 - 140
			Trichloroethene	2010/10/24		88	%	60 - 140
			Bromodichloromethane	2010/10/24		89	%	60 - 140
			cis-1,3-dichloropropene	2010/10/24		67	%	60 - 140
			trans-1,3-dichloropropene	2010/10/24		62	%	60 - 140
			1,1,2-trichloroethane	2010/10/24		89	%	60 - 140
			Toluene	2010/10/24		90	%	60 - 140
			Chlorodibromomethane	2010/10/24		89	%	60 - 140
			Dibromoethane	2010/10/24		94	%	60 - 140
			Tetrachloroethene	2010/10/24		76	%	60 - 140
			Chlorobenzene	2010/10/24		90	%	60 - 140
			1,1,1,2-tetrachloroethane	2010/10/24		91	%	60 - 140
			Ethylbenzene	2010/10/24		95	%	60 - 140
			m & p-Xylene	2010/10/24		96	%	60 - 140
			Bromoform	2010/10/24		88	%	60 - 140
			Styrene	2010/10/24		104	%	60 - 140
			o-Xylene	2010/10/24		95	%	60 - 140
			1,1,2,2-tetrachloroethane	2010/10/24		97	%	60 - 140
			1,2-dichlorobenzene	2010/10/24		98	%	60 - 140
			1,3-dichlorobenzene	2010/10/24		85	%	60 - 140
			1,4-dichlorobenzene	2010/10/24		92	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/23		96	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/23		79	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/23		98	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/23		95	%	70 - 130
			Chloromethane	2010/10/23		90	%	40 - 150
			Vinyl chloride	2010/10/23		83	%	40 - 150
			Bromomethane	2010/10/23		68	%	40 - 150

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4364851	AC2	Spiked Blank	Chloroethane	2010/10/23		88	%	40 - 150
			Trichlorofluoromethane	2010/10/23		86	%	40 - 150
			1,1-dichloroethene	2010/10/23		85	%	60 - 140
			Dichloromethane	2010/10/23		90	%	60 - 140
			trans-1,2-dichloroethene	2010/10/23		85	%	60 - 140
			1,1-dichloroethane	2010/10/23		90	%	60 - 140
			cis-1,2-dichloroethene	2010/10/23		87	%	60 - 140
			Chloroform	2010/10/23		94	%	60 - 140
			1,1,1-trichloroethane	2010/10/23		86	%	60 - 140
			1,2-dichloroethane	2010/10/23		93	%	60 - 140
			Carbon tetrachloride	2010/10/23		86	%	60 - 140
			Benzene	2010/10/23		93	%	60 - 140
			1,2-dichloropropane	2010/10/23		90	%	60 - 140
			Trichloroethene	2010/10/23		88	%	60 - 140
			Bromodichloromethane	2010/10/23		86	%	60 - 140
			cis-1,3-dichloropropene	2010/10/23		65	%	60 - 140
			trans-1,3-dichloropropene	2010/10/23		51 (1)	%	60 - 140
			1,1,2-trichloroethane	2010/10/23		85	%	60 - 140
			Toluene	2010/10/23		91	%	60 - 140
			Chlorodibromomethane	2010/10/23		87	%	60 - 140
			Dibromoethane	2010/10/23		90	%	60 - 140
			Tetrachloroethene	2010/10/23		75	%	60 - 140
			Chlorobenzene	2010/10/23		90	%	60 - 140
			1,1,1,2-tetrachloroethane	2010/10/23		87	%	60 - 140
			Ethylbenzene	2010/10/23		94	%	60 - 140
			m & p-Xylene	2010/10/23		97	%	60 - 140
			Bromoform	2010/10/23		86	%	60 - 140
			Styrene	2010/10/23		99	%	60 - 140
			o-Xylene	2010/10/23		95	%	60 - 140
			1,1,2,2-tetrachloroethane	2010/10/23		96	%	60 - 140
			1,2-dichlorobenzene	2010/10/23		96	%	60 - 140
			1,3-dichlorobenzene	2010/10/23		85	%	60 - 140
			1,4-dichlorobenzene	2010/10/23		94	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/23		80	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/23		84	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/23		95	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/23		96	%	70 - 130
			Chloromethane	2010/10/23	<0.1		mg/kg	
			Vinyl chloride	2010/10/23	<0.06		mg/kg	
			Bromomethane	2010/10/23	<0.3		mg/kg	
			Chloroethane	2010/10/23	<0.1		mg/kg	
			Trichlorofluoromethane	2010/10/23	<0.2		mg/kg	
			1,1-dichloroethene	2010/10/23	<0.03		mg/kg	
			Dichloromethane	2010/10/23	<0.1		mg/kg	
			trans-1,2-dichloroethene	2010/10/23	<0.03		mg/kg	
			1,1-dichloroethane	2010/10/23	<0.03		mg/kg	
			cis-1,2-dichloroethene	2010/10/23	<0.03		mg/kg	
			Chloroform	2010/10/23	<0.05		mg/kg	
			1,1,1-trichloroethane	2010/10/23	<0.03		mg/kg	
			1,2-dichloroethane	2010/10/23	<0.03		mg/kg	
			Carbon tetrachloride	2010/10/23	<0.03		mg/kg	
			Benzene	2010/10/23	<0.005		mg/kg	
			Methyl-tert-butylether (MTBE)	2010/10/23	<0.1		mg/kg	
			1,2-dichloropropane	2010/10/23	<0.03		mg/kg	
			Trichloroethene	2010/10/23	<0.01		mg/kg	

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4364851	AC2	Method Blank	Bromodichloromethane	2010/10/23	<0.05		mg/kg	
			cis-1,3-dichloropropene	2010/10/23	<0.05		mg/kg	
			trans-1,3-dichloropropene	2010/10/23	<0.05		mg/kg	
			1,1,2-trichloroethane	2010/10/23	<0.03		mg/kg	
			Toluene	2010/10/23	<0.03		mg/kg	
			Chlorodibromomethane	2010/10/23	<0.05		mg/kg	
			Dibromoethane	2010/10/23	<0.03		mg/kg	
			Tetrachloroethene	2010/10/23	<0.03		mg/kg	
			Chlorobenzene	2010/10/23	<0.03		mg/kg	
			1,1,1,2-tetrachloroethane	2010/10/23	<0.03		mg/kg	
			Ethylbenzene	2010/10/23	<0.01		mg/kg	
			m & p-Xylene	2010/10/23	<0.1		mg/kg	
			Bromoform	2010/10/23	<0.05		mg/kg	
			Styrene	2010/10/23	<0.1		mg/kg	
			o-Xylene	2010/10/23	<0.1		mg/kg	
			Xylenes (Total)	2010/10/23	<0.1		mg/kg	
			1,1,2,2-tetrachloroethane	2010/10/23	<0.03		mg/kg	
			1,2-dichlorobenzene	2010/10/23	<0.03		mg/kg	
			1,3-dichlorobenzene	2010/10/23	<0.03		mg/kg	
			1,4-dichlorobenzene	2010/10/23	<0.03		mg/kg	
		RPD	Vinyl chloride	2010/10/24	NC		%	40
			Chloroethane	2010/10/24	NC		%	40
			1,1-dichloroethene	2010/10/24	NC		%	40
			trans-1,2-dichloroethene	2010/10/24	NC		%	40
			cis-1,2-dichloroethene	2010/10/24	NC		%	40
			1,2-dichloroethane	2010/10/24	NC		%	40
			Methyl-tert-butylether (MTBE)	2010/10/24	NC		%	40
			Trichloroethene	2010/10/24	NC		%	40
			Dibromoethane	2010/10/24	NC		%	40
			Tetrachloroethene	2010/10/24	NC		%	40
4365281	AC2	QC Standard	(C6-C10)	2010/10/23		124	%	60 - 140
		Method Blank	(C6-C10)	2010/10/23	<10		mg/kg	
4365720	KPA	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		98	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		91	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		96	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		100	%	70 - 130
			Benzene	2010/10/24		88	%	60 - 140
			Toluene	2010/10/24		83	%	60 - 140
			Ethylbenzene	2010/10/24		96	%	60 - 140
			m & p-Xylene	2010/10/24		99	%	60 - 140
			o-Xylene	2010/10/24		96	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		101	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		81	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		91	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		110	%	70 - 130
			(C6-C10)	2010/10/24		107	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		78	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		97	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		99	%	70 - 130
			Benzene	2010/10/24		88	%	60 - 140
			Toluene	2010/10/24		85	%	60 - 140
			Ethylbenzene	2010/10/24		99	%	60 - 140
			m & p-Xylene	2010/10/24		99	%	60 - 140
			o-Xylene	2010/10/24		97	%	60 - 140

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4365720	KPA	Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		86	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		92	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		100	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/24	<0.1		mg/kg	
			Benzene	2010/10/24	<0.005		mg/kg	
			Toluene	2010/10/24	<0.02		mg/kg	
			Ethylbenzene	2010/10/24	<0.01		mg/kg	
			m & p-Xylene	2010/10/24	<0.04		mg/kg	
			o-Xylene	2010/10/24	<0.04		mg/kg	
			Styrene	2010/10/24	<0.03		mg/kg	
			Xylenes (Total)	2010/10/24	<0.04		mg/kg	
			(C6-C10)	2010/10/24	<10		mg/kg	
		RPD	Benzene	2010/10/24	NC		%	40
			Toluene	2010/10/24	NC		%	40
			Ethylbenzene	2010/10/24	NC		%	40
			m & p-Xylene	2010/10/24	NC		%	40
			o-Xylene	2010/10/24	NC		%	40
			Styrene	2010/10/24	NC		%	40
			Xylenes (Total)	2010/10/24	NC		%	40
4365740	KPA	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		99	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		90	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		95	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		102	%	70 - 130
			Benzene	2010/10/24		76	%	60 - 140
			Toluene	2010/10/24		75	%	60 - 140
			Ethylbenzene	2010/10/24		88	%	60 - 140
			m & p-Xylene	2010/10/24		82	%	60 - 140
			o-Xylene	2010/10/24		87	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		100	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		79	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		95	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		102	%	70 - 130
			(C6-C10)	2010/10/24		88	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		99	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		79	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		91	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		103	%	70 - 130
			Benzene	2010/10/24		81	%	60 - 140
			Toluene	2010/10/24		81	%	60 - 140
			Ethylbenzene	2010/10/24		96	%	60 - 140
			m & p-Xylene	2010/10/24		89	%	60 - 140
			o-Xylene	2010/10/24		95	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		96	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		85	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		90	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		106	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/24	<0.1		mg/kg	
			Benzene	2010/10/24	<0.005		mg/kg	
			Toluene	2010/10/24	<0.02		mg/kg	
			Ethylbenzene	2010/10/24	<0.01		mg/kg	
			m & p-Xylene	2010/10/24	<0.04		mg/kg	
			o-Xylene	2010/10/24	<0.04		mg/kg	
			Styrene	2010/10/24	<0.03		mg/kg	
			Xylenes (Total)	2010/10/24	<0.04		mg/kg	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4365740	KPA	Method Blank	(C6-C10)	2010/10/24	<10		mg/kg	
		RPD	Methyl-tert-butylether (MTBE)	2010/10/24	NC		%	40
			Benzene	2010/10/24	NC		%	40
			Toluene	2010/10/24	NC		%	40
			Ethylbenzene	2010/10/24	NC		%	40
			m & p-Xylene	2010/10/24	NC		%	40
			o-Xylene	2010/10/24	NC		%	40
			Styrene	2010/10/24	NC		%	40
			Xylenes (Total)	2010/10/24	NC		%	40
4365751	KPA	Matrix Spike						
		[X85440-01]	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		95	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		98	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		104	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/25		100	%	70 - 130
			Benzene	2010/10/25		101	%	60 - 140
			Toluene	2010/10/25		96	%	60 - 140
			Ethylbenzene	2010/10/25		113	%	60 - 140
			m & p-Xylene	2010/10/25		105	%	60 - 140
			o-Xylene	2010/10/25		112	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		85	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		105	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/25		101	%	70 - 130
			(C6-C10)	2010/10/25		90	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		83	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		107	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/25		100	%	70 - 130
			Benzene	2010/10/25		93	%	60 - 140
			Toluene	2010/10/25		89	%	60 - 140
			Ethylbenzene	2010/10/25		104	%	60 - 140
			m & p-Xylene	2010/10/25		97	%	60 - 140
			o-Xylene	2010/10/25		104	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		94	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		88	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		103	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/25		102	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/25	<0.1		mg/kg	
			Benzene	2010/10/25	<0.005		mg/kg	
			Toluene	2010/10/25	<0.02		mg/kg	
			Ethylbenzene	2010/10/25	<0.01		mg/kg	
			m & p-Xylene	2010/10/25	<0.04		mg/kg	
			o-Xylene	2010/10/25	<0.04		mg/kg	
			Styrene	2010/10/25	<0.03		mg/kg	
			Xylenes (Total)	2010/10/25	<0.04		mg/kg	
			(C6-C10)	2010/10/25	<10		mg/kg	
		RPD [X85440-01]	Methyl-tert-butylether (MTBE)	2010/10/25	NC		%	40
			Benzene	2010/10/25	NC		%	40
			Toluene	2010/10/25	NC		%	40
			Ethylbenzene	2010/10/25	NC		%	40
			m & p-Xylene	2010/10/25	NC		%	40
			o-Xylene	2010/10/25	NC		%	40
			Styrene	2010/10/25	NC		%	40
			Xylenes (Total)	2010/10/25	NC		%	40
			(C6-C10)	2010/10/25	NC		%	40

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4365768	KPA	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		106	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		89	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		91	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/25		102	%	70 - 130
			Benzene	2010/10/25		80	%	60 - 140
			Toluene	2010/10/25		76	%	60 - 140
			Ethylbenzene	2010/10/25		88	%	60 - 140
			m & p-Xylene	2010/10/25		90	%	60 - 140
			o-Xylene	2010/10/25		88	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		100	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		80	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		91	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		105	%	70 - 130
			(C6-C10)	2010/10/24		83	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		98	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		79	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		89	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		102	%	70 - 130
			Benzene	2010/10/24		86	%	60 - 140
			Toluene	2010/10/24		85	%	60 - 140
			Ethylbenzene	2010/10/24		97	%	60 - 140
			m & p-Xylene	2010/10/24		100	%	60 - 140
			o-Xylene	2010/10/24		95	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/24		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/24		86	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/24		95	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/24		103	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/24	<0.1		mg/kg	
			Benzene	2010/10/24	<0.005		mg/kg	
			Toluene	2010/10/24	<0.02		mg/kg	
			Ethylbenzene	2010/10/24	<0.01		mg/kg	
			m & p-Xylene	2010/10/24	<0.04		mg/kg	
			o-Xylene	2010/10/24	<0.04		mg/kg	
			Styrene	2010/10/24	<0.03		mg/kg	
			Xylenes (Total)	2010/10/24	<0.04		mg/kg	
			(C6-C10)	2010/10/24	<10		mg/kg	
		RPD	Benzene	2010/10/25	NC		%	40
			Toluene	2010/10/25	NC		%	40
			Ethylbenzene	2010/10/25	NC		%	40
			m & p-Xylene	2010/10/25	NC		%	40
			o-Xylene	2010/10/25	NC		%	40
			Styrene	2010/10/25	NC		%	40
			Xylenes (Total)	2010/10/25	NC		%	40
4365783	KPA	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		98	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		94	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		93	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/25		102	%	70 - 130
			Benzene	2010/10/25		87	%	60 - 140
			Toluene	2010/10/25		84	%	60 - 140
			Ethylbenzene	2010/10/25		97	%	60 - 140
			m & p-Xylene	2010/10/25		99	%	60 - 140
			o-Xylene	2010/10/25		96	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		100	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		80	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		90	%	70 - 130

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4365783	KPA	QC Standard	D8-TOLUENE (sur.)	2010/10/25		103	%	70 - 130
			(C6-C10)	2010/10/25		100	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		98	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		81	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		94	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/25		101	%	70 - 130
			Benzene	2010/10/25		88	%	60 - 140
			Toluene	2010/10/25		87	%	60 - 140
			Ethylbenzene	2010/10/25		101	%	60 - 140
			m & p-Xylene	2010/10/25		103	%	60 - 140
			o-Xylene	2010/10/25		99	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/25		96	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/25		83	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/25		91	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/25		101	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/25	<0.1		mg/kg	
			Benzene	2010/10/25	<0.005		mg/kg	
			Toluene	2010/10/25	<0.02		mg/kg	
			Ethylbenzene	2010/10/25	<0.01		mg/kg	
			m & p-Xylene	2010/10/25	<0.04		mg/kg	
			o-Xylene	2010/10/25	<0.04		mg/kg	
			Styrene	2010/10/25	<0.03		mg/kg	
			Xylenes (Total)	2010/10/25	<0.04		mg/kg	
			(C6-C10)	2010/10/25	<10		mg/kg	
		RPD	Benzene	2010/10/25	NC (2)		%	40
			Toluene	2010/10/25	NC (2)		%	40
			Ethylbenzene	2010/10/25	NC (2)		%	40
			m & p-Xylene	2010/10/25	NC (2)		%	40
			o-Xylene	2010/10/25	NC (2)		%	40
			Styrene	2010/10/25	NC (2)		%	40
			Xylenes (Total)	2010/10/25	NC		%	40
4366568	JC9	Matrix Spike	O-TERPHENYL (sur.)	2010/10/25		81	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25		96	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/10/25		103	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/10/25		94	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/10/25		93	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25		94	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/10/25		97	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2010/10/25		90	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/10/25		99	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/25	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/10/25	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2010/10/25	<10		mg/kg	
		RPD	F2 (C10-C16 Hydrocarbons)	2010/10/25	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2010/10/25	33.4		%	40
			F4 (C34-C50 Hydrocarbons)	2010/10/25	NC		%	40
			Reached Baseline at C50	2010/10/25	NC		%	50
4370091	JC9	Matrix Spike						
		[X85468-01]	O-TERPHENYL (sur.)	2010/10/27		92	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/27		99	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/10/27		103	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/10/27		92	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/10/26		102	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/26		101	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/10/26		106	%	80 - 120

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4370091	JC9	Spiked Blank	F4 (C34-C50 Hydrocarbons)	2010/10/26		100	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/10/26		104	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/26	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/10/26	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2010/10/26	<10		mg/kg	
		RPD [X85468-01]	F2 (C10-C16 Hydrocarbons)	2010/10/26	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2010/10/26	NC		%	40
			F4 (C34-C50 Hydrocarbons)	2010/10/26	NC		%	40
			Reached Baseline at C50	2010/10/26	NC		%	50
4371236	VB1	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/27		88	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/27		82	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/27		93	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/27		82	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/27		88	%	60 - 130
			Naphthalene	2010/10/27		80	%	40 - 130
			2-Methylnaphthalene	2010/10/27		84	%	40 - 130
			Acenaphthylene	2010/10/27		87	%	40 - 130
			Acenaphthene	2010/10/27		87	%	40 - 130
			Fluorene	2010/10/27		92	%	40 - 130
			Phenanthrene	2010/10/27		87	%	40 - 130
			Anthracene	2010/10/27		87	%	40 - 130
			Fluoranthene	2010/10/27		91	%	40 - 130
			Pyrene	2010/10/27		90	%	40 - 130
			Benzo(a)anthracene	2010/10/27		85	%	40 - 130
			Chrysene	2010/10/27		80	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/27		84	%	40 - 130
			Benzo(k)fluoranthene	2010/10/27		87	%	40 - 130
			Benzo(a)pyrene	2010/10/27		82	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/27		94	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/27		89	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/27		86	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/27		81	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/27		83	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/27		85	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/27		79	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/27		89	%	60 - 130
			Naphthalene	2010/10/27		72	%	40 - 130
			2-Methylnaphthalene	2010/10/27		76	%	40 - 130
			Acenaphthylene	2010/10/27		77	%	40 - 130
			Acenaphthene	2010/10/27		77	%	40 - 130
			Fluorene	2010/10/27		78	%	40 - 130
			Phenanthrene	2010/10/27		77	%	40 - 130
			Anthracene	2010/10/27		77	%	40 - 130
			Fluoranthene	2010/10/27		82	%	40 - 130
			Pyrene	2010/10/27		84	%	40 - 130
			Benzo(a)anthracene	2010/10/27		82	%	40 - 130
			Chrysene	2010/10/27		80	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/27		78	%	40 - 130
			Benzo(k)fluoranthene	2010/10/27		86	%	40 - 130
			Benzo(a)pyrene	2010/10/27		80	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/27		82	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/27		81	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/27		78	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/27		90	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/27		76	%	60 - 130

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4371236	VB1	Method Blank	D8-ACENAPHTHYLENE (sur.)	2010/10/27		90	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/27		88	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/27		92	%	60 - 130
			Naphthalene	2010/10/27	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/27	<0.001		mg/kg	
			Acenaphthylene	2010/10/27	<0.001		mg/kg	
			Acenaphthene	2010/10/27	<0.001		mg/kg	
			Fluorene	2010/10/27	<0.001		mg/kg	
			Phenanthrene	2010/10/27	<0.001		mg/kg	
			Anthracene	2010/10/27	<0.001		mg/kg	
			Fluoranthene	2010/10/27	<0.001		mg/kg	
			Pyrene	2010/10/27	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/27	<0.001		mg/kg	
			Chrysene	2010/10/27	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/27	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/27	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/27	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/27	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/10/27	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/27	<0.002		mg/kg	
		RPD	Naphthalene	2010/10/27	NC		%	50
			2-Methylnaphthalene	2010/10/27	NC		%	50
			Acenaphthylene	2010/10/27	NC		%	50
			Acenaphthene	2010/10/27	NC		%	50
			Fluorene	2010/10/27	NC		%	50
			Phenanthrene	2010/10/27	NC		%	50
			Anthracene	2010/10/27	NC		%	50
			Fluoranthene	2010/10/27	NC		%	50
			Pyrene	2010/10/27	NC		%	50
			Benzo(a)anthracene	2010/10/27	NC		%	50
			Chrysene	2010/10/27	NC		%	50
			Benzo(b&j)fluoranthene	2010/10/27	NC (3)		%	50
			Benzo(k)fluoranthene	2010/10/27	NC (3)		%	50
			Benzo(a)pyrene	2010/10/27	NC		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/27	NC		%	50
			Dibenz(a,h)anthracene	2010/10/27	NC		%	50
			Benzo(g,h,i)perylene	2010/10/27	NC		%	50
4375002	JC9	Matrix Spike	O-TERPHENYL (sur.)	2010/10/27		97	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/27		95	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/10/27		97	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/10/27		97	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/10/27		91	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/27		95	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/10/27		99	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2010/10/27		97	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/10/27		95	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/10/27	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/10/27	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2010/10/27	<10		mg/kg	
		RPD	F2 (C10-C16 Hydrocarbons)	2010/10/27	0.3		%	40
			F3 (C16-C34 Hydrocarbons)	2010/10/27	5.1		%	40
			F4 (C34-C50 Hydrocarbons)	2010/10/27	NC		%	40
			Reached Baseline at C50	2010/10/27	NC		%	50

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A1871

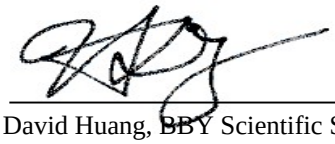
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the 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) LCS outside acceptance criteria (10% of analytes failure allowed)
(2) Sample extracted past recommended hold time (7 days) - Pot. Low bias
(3) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

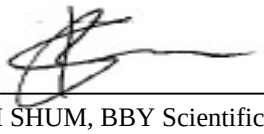
Validation Signature Page

Maxxam Job #: B0A1871

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



David Huang, BBY Scientific Specialist



TOM SHUM, BBY Scientific Specialist

==========

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 Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

JOB # BOA1871

ANALYSIS REQUEST F 111691

COMPANY NAME: AECOM	PH. #: 477-5381 E-mail: scott.chapman@aecom.com FAX #: 284-0580
COMPANY ADDRESS: 99 Commerce Drive Wpg, MB. R3B 0Y7	CLIENT PROJECT ID: (#) Dominion Bridge 60164142
SAMPLER NAME (PRINT): Brent Hay	PROJECT MANAGER: Scott Chapman

FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX	PHC F1-F4
1 BH-W #6 G-16-01				X		2	18/10/10	—			
2 G-16-02						2	"				
3 G-16-03						2					
4 G-15-01											
5 G-15-03											
6 G-14-06											
7 G-14-07											
8 G-24-03											
9 G-17-04											
10 G-17-08											
11 G-23-03							19/10/10				
12 G-25-01											

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☐
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS _____

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☐ CCME ☐ CSR ☐ ALBERTA TIER 1 ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 9.8 9.7 16, 9, 15, 18 15, 15, 13

DUE DATE:

LOG IN CHECK:

	DATE: DD/MM/YY	TIME:	
RELINQUISHED BY SAMPLER:			RECEIVED BY:
RELINQUISHED BY:	DATE: 21/10/10	TIME: 11:00	RECEIVED BY: Alan Drummond
	DD/MM/YY Oct 20/10	11:00	

CUSTODY RECORD

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

DOB# BOA1871

ANALYSIS REQUEST F 111693

COMPANY NAME: AECOM	PH. #: 477-5381 E-mail: scottchapman@aecom.com FAX #: 284-0584
COMPANY ADDRESS: 99 Commerce Drive Unit 1, MB. R3P 0Y7	CLIENT PROJECT ID: (#) Dominion Bridge 60164142
SAMPLER NAME (PRINT): Brent Hay	PROJECT MANAGER: Scott Chapman

FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX	PHC F1-F4	VOC's	PAH's
1 G-19-04				X		2	19/10/10	—		X	X		
2 G-19-05				↓		↓	↓	↓		X	X		
3 Dup 1-BH				↓		↓	↓	↓		X	X		
4 Dup 2-BH				↓		↓	↓	↓		X	X		
5 G-46-02				↓		↓	20/10/10	↓		X	X	X	
6 G-46-03				↓		↓	↓	↓		X	X		
7 G-45-01				↓		↓	↓	↓		X	X	X	X
8 G-45-02				↓		↓	↓	↓		X	X		
9 Dup 3-BH				X		X	X	↓		X	X		
10													
11													
12													

LAB USE ONLY

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☐
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS _____

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☐ CCME ☐ CSR ☐ ALBERTA TIER 1 ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 9.8 9.7 9.8

DUE DATE:

LOG IN CHECK:

16/15/18

RELINQUISHED BY SAMPLER:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE: 21/10/10	TIME: 11:00	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY Oct 20/10	TIME: 11:00	RECEIVED BY LABORATORY:

CUSTODY RECORD

Maxxam Analytics Inc

8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com

Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

JOB# B0A1871

ANALYSIS REQUEST F 111692

COMPANY NAME: AECOM

PH. #: 477-5381
E-mail: scott.chapman@aecom.com
FAX #:

COMPANY ADDRESS: 99 Commerce Drive
Wpg, MB
R3P 0Y7

CLIENT PROJECT ID: (#) Dominion Bridge 60164142 ~~02~~

SAMPLER NAME (PRINT): Brent Hay

PROJECT MANAGER: Scott Chapman

FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	MATRIX: SURFACE WATER	MATRIX: SOIL	MATRIX: OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	SAMPLING: TIME	HEADSPACE VAPOUR	BTEX	PHC F1-F4
1 G-18-01				X		2	19/10/10	—			
2 G-18-03											
3 G-18-05											
4 G-22-02											
5 G-22-04											
6 G-21-01											
7 G-21-05											
8 G-22A-03											
9 G-22A-05											
10 G-20-02											
11 G-20-04											
12 G-22A-06											

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☐
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS ____

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☐ CCME ☐ CSR ☐ ALBERTA TIER 1 ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 9.8 9.7 9.8 16, 15, 18 15, 15, 13

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: B Hay | DATE: DD/MM/YY | TIME: | RECEIVED BY:

RELINQUISHED BY: | DATE: DD/MM/YY 21/10/10 | TIME: 11:00 | RECEIVED BY: Raymond

RELINQUISHED BY: | DATE: DD/MM/YY | TIME: 11:00 | RECEIVED BY LABORATORY:

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

CUSTODY RECORD

COCFORM - BC - 06/06

ORIGINAL - MAXXAM YELLOW - MAXXAM PINK - CLIENT

Your Project #: 60164142 DOMINION BRIDGE
Site: 1460 DUBLIN AVENUE
Your C.O.C. #: F111801, F111802, F111803, F111804, F111805, F111806

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/11/05
This report supersedes all previous reports with the same Maxxam job number

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0A3598
Received: 2010/10/26, 08:45

Sample Matrix: Soil
Samples Received: 62

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	2	2010/10/26	2010/10/27	BBY8-SOP-00010/R26	EPA SW846 8260B
BTEX/MTBE Soil LH, VH, F1 SIM/MS	3	2010/10/26	2010/10/28	BBY8-SOP-00010/R26	EPA SW846 8260B
Volatile F1-BTEX	5	N/A	2010/10/28		
Volatile F1-BTEX	13	N/A	2010/10/29		
Volatile F1-BTEX	1	N/A	2010/11/02		
Volatile F1-BTEX	3	N/A	2010/11/03		
CCME Hydrocarbons (F2-F4 in soil)	6	2010/10/26	2010/10/27	BRN SOP-00342 R9.0	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil)	3	2010/10/27	2010/10/28	BRN SOP-00342 R9.0	CCME Soil Tier 1
Elements by ICPMS (total)	25	2010/10/27	2010/10/27	BRN SOP-00203 R5.0	Based on EPA 200.8
Elements by ICPMS (total)	16	2010/10/27	2010/10/28	BRN SOP-00203 R5.0	Based on EPA 200.8
Elements by ICPMS (total)	16	2010/10/28	2010/10/29	BRN SOP-00203 R5.0	Based on EPA 200.8
Elements by ICPMS (total)	3	2010/10/30	2010/11/01	BRN SOP-00203 R5.0	Based on EPA 200.8
Moisture	18	N/A	2010/10/27	BRN SOP-00321 R5.0	Ont MOE -E 3139
Moisture	23	N/A	2010/10/28	BRN SOP-00321 R5.0	Ont MOE -E 3139
PAH in Soil by GC/MS Lowlevel (Extended)	1	2010/10/26	2010/10/29	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	1	2010/10/27	2010/10/29	BRN SOP-00332 R5.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc	2	N/A	2010/11/02		PAHTOT-S
Polychlorinated Biphenyls in Soil	13	N/A	2010/11/02	60-C-025-09	EPA 608/8080
Polychlorinated Biphenyls in Soil	19	N/A	2010/11/04	60-C-025-09	EPA 608/8080
pH (2:1 DI Water Extract)	41	2010/10/27	2010/10/28	BRN SOP-00266 R6.0	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	16	2010/10/28	2010/10/29	BRN SOP-00266 R6.0	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	3	2010/10/30	2010/11/01	BRN SOP-00266 R6.0	Carter, SSMA 16.2
CCME F1 C6-C10 in Soil by GC/FID	1	2010/10/26	2010/10/28		Based on EPA SW8260B
CCME F1 C6-C10 in Soil by GC/FID	7	2010/10/26	2010/10/29		Based on EPA SW8260B
CCME F1 C6-C10 in Soil by GC/FID	2	2010/10/26	2010/11/01		Based on EPA SW8260B
CCME F1 C6-C10 in Soil by GC/FID	5	2010/10/27	2010/10/28		Based on EPA SW8260B
CCME F1 C6-C10 in Soil by GC/FID	1	2010/10/27	2010/10/29		Based on EPA SW8260B
CCME F1 C6-C10 in Soil by GC/FID	1	2010/10/29	2010/11/02		Based on EPA SW8260B
VOCs in Soil by HS GC/MS	1	2010/10/26	2010/10/28	BBY8-SOP-0009/R16	Based on EPA 8260B
VOCs in Soil by HS GC/MS	7	2010/10/26	2010/10/29	BBY8-SOP-0009/R16	Based on EPA 8260B
VOCs in Soil by HS GC/MS	2	2010/10/26	2010/11/02	BBY8-SOP-0009/R16	Based on EPA 8260B
VOCs in Soil by HS GC/MS	5	2010/10/27	2010/10/28	BBY8-SOP-0009/R16	Based on EPA 8260B
VOCs in Soil by HS GC/MS	1	2010/10/27	2010/10/30	BBY8-SOP-0009/R16	Based on EPA 8260B
VOCs in Soil by HS GC/MS	1	2010/10/29	2010/11/02	BBY8-SOP-0009/R16	Based on EPA 8260B

* Results relate only to the items tested.

../2

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

Encryption Key

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

Kelly Janda, B.Sc, Burnaby Customer Service
Email: KJanda@maxxam.ca
Phone# (604) 638-5019

==========

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 Analytics International Corporation o/a Maxxam Analytics Winnipeg: Unit D - 675 Berry Street R3H 1A7 Telephone(204) 772-7276 Fax(204) 772-2386

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X97107	X97108	X97114	X97115	X97116		
Sampling Date		2010/10/22 14:00	2010/10/22 14:15	2010/10/22 08:45	2010/10/22 09:00	2010/10/22 09:15		
COC#		F111801	F111801	F111801	F111801	F111801		
	Units	**G-09A-03**	**G-09A-06**	**G-57-01**	**G-57-05**	**G-48-01**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	21	29	14	21	10	4375002
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	170	1100	81	470	10	4375002
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	47	840	96	530	10	4375002
Reached Baseline at C50	mg/kg	YES	YES	YES	YES	NO	N/A	4375002
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	92	91	95	92	98		4375002

Maxxam ID		X97291		X97292		X97297	X97298		
Sampling Date		2010/10/21 15:00		2010/10/21 15:15		2010/10/21 16:30	2010/10/21 16:45		
COC#		F111805		F111805		F111805	F111805		
	Units	**G-07-02**	**QC Batch**	**G-07-07**	**QC Batch**	**G-09-03**	**G-09-08**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	4379389	23	4375002	1600	41	10	4379389
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	4379389	220	4375002	2300	100	10	4379389
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	4379389	160	4375002	480	<10	10	4379389
Reached Baseline at C50	mg/kg	YES	4379389	NO	4375002	YES	YES	N/A	4379389
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	95	4379389	88	4375002	104	87		4379389

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

POLYCHLORINATED BIPHENYLS BY GC-ECD (SOIL)

Maxxam ID		X97111	X97112	X97113	X97216	X97217	X97218	X97219	X97220	X97221	X97222		
Sampling Date		2010/10/22 08:00	2010/10/22 08:15	2010/10/22 08:30	2010/10/22 07:45	2010/10/22 07:45	2010/10/22 14:00	2010/10/22 13:45	2010/10/21 08:00	2010/10/21 08:15	2010/10/21 08:30		
COC#		F111801	F111801	F111801	F111802	F111802	F111802	F111802	F111802	F111802	F111802		
	Units	**G-33-05**	**G-37-01**	**G-37-04**	**G-33-12**	**G-33-02**	**G-40-08**	**G-40-01**	**G-35-05**	**G-35-01**	**G-31-04**	**RDL**	**QC Batch**
Polychlorinated Biphenyls													
Aroclor 1242	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4378445
Aroclor 1248	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4378445
Aroclor 1254	mg/kg	<0.03	0.05	<0.03	0.05	0.09	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4378445
Aroclor 1260	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4378445
Total PCB	mg/kg	<0.03	0.05	<0.03	0.05	0.09	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4378445
Surrogate Recovery (%)													
Hexabromobiphenyl (sur.)	%	70	106	104	107	105	66	105	67	78	73		4378445

Maxxam ID		X97223	X97224	X97225		X97251	X97252		X97253		X97256	X97257		
Sampling Date		2010/10/21 08:45	2010/10/21 09:00	2010/10/21 09:15		2010/10/20 08:30	2010/10/20 08:20		2010/10/20 08:17		2010/10/20 09:15	2010/10/20 09:30		
COC#		F111802	F111802	F111802		F111803	F111803		F111803		F111803	F111803		
	Units	**G-31-02**	**G-29-03**	**G-29-01**	**QC Batch**	**G-28-06**	**G-28-03**	**RDL**	**G-28-01**	**RDL**	**G-39-02**	**G-39-06**	**RDL**	**QC Batch**
Polychlorinated Biphenyls														
Aroclor 1242	mg/kg	<0.03	<0.03	<0.03	4378445	<0.03	<0.03	0.03	<0.03	0.03	<0.03	<0.03	0.03	4381626
Aroclor 1248	mg/kg	<0.03	<0.03	<0.03	4378445	<0.03	<0.03	0.03	<0.03	0.03	<0.03	<0.03	0.03	4381626
Aroclor 1254	mg/kg	<0.03	<0.03	<0.03	4378445	<0.03	<0.03	0.03	0.8(1)	0.2	<0.03	<0.03	0.03	4381626
Aroclor 1260	mg/kg	<0.03	<0.03	<0.03	4378445	<0.03	<0.03	0.03	<0.03	0.03	<0.03	<0.03	0.03	4381626
Total PCB	mg/kg	<0.03	<0.03	<0.03	4378445	<0.03	<0.03	0.03	0.8(1)	0.2	<0.03	<0.03	0.03	4381626
Surrogate Recovery (%)														
Hexabromobiphenyl (sur.)	%	106	71	77	4378445	95	96		96		100	104		4381626

RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

POLYCHLORINATED BIPHENYLS BY GC-ECD (SOIL)

Maxxam ID		X97260	X97261	X97272	X97273	X97274	X97275	X97277	X97278		
Sampling Date		2010/10/20 10:15	2010/10/20 10:25	2010/10/20 10:25	2010/10/20 10:30	2010/10/20 10:45	2010/10/20 11:00	2010/10/20 11:15	2010/10/20 11:30		
COC#		F111803	F111803	F111804	F111804	F111804	F111804	F111804	F111804		
	Units	**G-79-05**	**G-79-12**	**G-79-02**	**G-78-06**	**G-78-03**	**G-74-05**	**G-74-02**	**G-75-03**	**RDL**	**QC Batch**
Polychlorinated Biphenyls											
Aroclor 1242	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4381626
Aroclor 1248	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4381626
Aroclor 1254	mg/kg	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	0.13	<0.03	0.03	4381626
Aroclor 1260	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4381626
Total PCB	mg/kg	<0.03	<0.03	0.05	<0.03	<0.03	<0.03	0.13	<0.03	0.03	4381626
Surrogate Recovery (%)											
Hexabromobiphenyl (sur.)	%	104	114	103	108	97	96	92	91		4381626

Maxxam ID		X97279		X97280	X97281	X97282	X97293	X97294		
Sampling Date		2010/10/20 11:45		2010/10/20 14:00	2010/10/20 13:00	2010/10/20 13:15	2010/10/21 15:30	2010/10/21 15:45		
COC#		F111804		F111804	F111804	F111804	F111805	F111805		
	Units	**G-75-01**	**RDL**	**G-77-04**	**G-76-02**	**G-76-05**	**G-26-02**	**G-26-05**	**RDL**	**QC Batch**
Polychlorinated Biphenyls										
Aroclor 1242	mg/kg	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4381626
Aroclor 1248	mg/kg	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4381626
Aroclor 1254	mg/kg	0.8(1)	0.2	0.05	0.04	<0.03	<0.03	<0.03	0.03	4381626
Aroclor 1260	mg/kg	<0.03	0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4381626
Total PCB	mg/kg	0.8(1)	0.2	0.05	0.04	<0.03	<0.03	<0.03	0.03	4381626
Surrogate Recovery (%)										
Hexabromobiphenyl (sur.)	%	101		96	105	102	109	98		4381626

PHYSICAL TESTING (SOIL)

Maxxam ID		X97107	X97108	X97111	X97112	X97113	X97114	X97115	X97116	X97216	X97217		
Sampling Date		2010/10/22 14:00	2010/10/22 14:15	2010/10/22 08:00	2010/10/22 08:15	2010/10/22 08:30	2010/10/22 08:45	2010/10/22 09:00	2010/10/22 09:15	2010/10/22 07:45	2010/10/22 07:45		
COC#		F111801	F111801	F111801	F111801	F111801	F111801	F111801	F111801	F111802	F111802		
	Units	**G-09A-03**	**G-09A-06**	**G-33-05**	**G-37-01**	**G-37-04**	**G-57-01**	**G-57-05**	**G-48-01**	**G-33-12**	**G-33-02**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	19	37	32	27	35	22	30	15	24	21	0.3	4373568

RDL = Reportable Detection Limit
(1) - RDL raised due to sample dilution.

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

PHYSICAL TESTING (SOIL)

Maxxam ID		X97218	X97219	X97220	X97221	X97222	X97223	X97224	X97225		X97251		
Sampling Date		2010/10/22 14:00	2010/10/22 13:45	2010/10/21 08:00	2010/10/21 08:15	2010/10/21 08:30	2010/10/21 08:45	2010/10/21 09:00	2010/10/21 09:15		2010/10/20 08:30		
COC#		F111802	F111802	F111802	F111802	F111802	F111802	F111802	F111802		F111803		
	Units	**G-40-08**	**G-40-01**	**G-35-05**	**G-35-01**	**G-31-04**	**G-31-02**	**G-29-03**	**G-29-01**	**QC Batch**	**G-28-06**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	35	20	36	30	31	20	24	23	4373568	39	0.3	4373645

Maxxam ID		X97252	X97253	X97256	X97257	X97260	X97261		X97272	X97273	X97274		
Sampling Date		2010/10/20 08:20	2010/10/20 08:17	2010/10/20 09:15	2010/10/20 09:30	2010/10/20 10:15	2010/10/20 10:25		2010/10/20 10:25	2010/10/20 10:30	2010/10/20 10:45		
COC#		F111803	F111803	F111803	F111803	F111803	F111803		F111804	F111804	F111804		
	Units	**G-28-03**	**G-28-01**	**G-39-02**	**G-39-06**	**G-79-05**	**G-79-12**	**QC Batch**	**G-79-02**	**G-78-06**	**G-78-03**	**RDL**	**QC Batch**
Physical Properties													
Moisture	%	23	20	27	36	35	22	4373645	22	36	18	0.3	4373620

Maxxam ID		X97275	X97277	X97278	X97279	X97280	X97281	X97282		
Sampling Date		2010/10/20 11:00	2010/10/20 11:15	2010/10/20 11:30	2010/10/20 11:45	2010/10/20 14:00	2010/10/20 13:00	2010/10/20 13:15		
COC#		F111804	F111804	F111804	F111804	F111804	F111804	F111804		
	Units	**G-74-05**	**G-74-02**	**G-75-03**	**G-75-01**	**G-77-04**	**G-76-02**	**G-76-05**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	36	25	20	20	25	27	36	0.3	4373620

Maxxam ID		X97291	X97292	X97293	X97294	X97297	X97298		
Sampling Date		2010/10/21 15:00	2010/10/21 15:15	2010/10/21 15:30	2010/10/21 15:45	2010/10/21 16:30	2010/10/21 16:45		
COC#		F111805	F111805	F111805	F111805	F111805	F111805		
	Units	**G-07-02**	**G-07-07**	**G-26-02**	**G-26-05**	**G-09-03**	**G-09-08**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	21	36	17	36	22	37	0.3	4373620

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X97107	X97108		X97114	X97115		X97116		
Sampling Date		2010/10/22 14:00	2010/10/22 14:15		2010/10/22 08:45	2010/10/22 09:00		2010/10/22 09:15		
COC#		F111801	F111801		F111801	F111801		F111801		
	Units	**G-09A-03**	**G-09A-06**	**QC Batch**	**G-57-01**	**G-57-05**	**QC Batch**	**G-48-01**	**RDL**	**QC Batch**
Calculated Parameters										
F1 (C6-C10) - BTEX	mg/kg	<10	<10	4373571	<10	<10	4373571	<10	10	4373571
Volatiles										
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	4373977	<0.1	<0.1	4374949	<0.1	0.1	4373977
Benzene	mg/kg	<0.005	<0.005	4373977	<0.005	<0.005	4374949	<0.005	0.005	4373977
Toluene	mg/kg	<0.02	<0.02	4373977	<0.02	<0.02	4374949	<0.02	0.02	4373977
Ethylbenzene	mg/kg	<0.01	<0.01	4373977	<0.01	<0.01	4374949	<0.01	0.01	4373977
m & p-Xylene	mg/kg	<0.04	<0.04	4373977	<0.04	<0.04	4374949	<0.04	0.04	4373977
o-Xylene	mg/kg	<0.04	<0.04	4373977	<0.04	<0.04	4374949	<0.04	0.04	4373977
Styrene	mg/kg	<0.03	<0.03	4373977	<0.03	<0.03	4374949	<0.03	0.03	4373977
Xylenes (Total)	mg/kg	<0.04	<0.04	4373977	<0.04	<0.04	4374949	<0.04	0.04	4373977
(C6-C10)	mg/kg	<10	<10	4373977	<10	<10	4374949	<10	10	4373977
Surrogate Recovery (%)										
4-BROMOFLUOROBENZENE (sur.)	%	90	89	4373977	96	96	4374949	91		4373977
D10-ETHYLBENZENE (sur.)	%	109	114	4373977	100	98	4374949	101		4373977
D4-1,2-DICHLOROETHANE (sur.)	%	108	102	4373977	98	98	4374949	103		4373977
D8-TOLUENE (sur.)	%	93	95	4373977	98	99	4374949	97		4373977

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97106		X97109	X97110		X97111		X97112		X97113		
Sampling Date		2010/10/22 13:00		2010/10/22 13:15	2010/10/22 13:30		2010/10/22 08:00		2010/10/22 08:15		2010/10/22 08:30		
COC#		F111801		F111801	F111801		F111801		F111801		F111801		
	Units	**G-57A-03**	**QC Batch**	**G-56-01**	**G-56-04**	**QC Batch**	**G-33-05**	**QC Batch**	**G-37-01**	**QC Batch**	**G-37-04**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	8.95	4375725	8.34	8.79	4375567	8.39	4375725	8.56	4375567	7.80	0.01	4385891
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	5010	4375691	18900	5790	4375523	18100	4375691	14600	4375523	20000	100	4385879
Total Antimony (Sb)	mg/kg	0.2	4375691	1.0	<0.1	4375523	0.4	4375691	0.7	4375523	0.3	0.1	4385879
Total Arsenic (As)	mg/kg	2.3	4375691	4.5	1.9	4375523	8.1	4375691	4.7	4375523	7.5	0.2	4385879
Total Barium (Ba)	mg/kg	40.5	4375691	137	45.8	4375523	170	4375691	179	4375523	179	0.1	4385879
Total Beryllium (Be)	mg/kg	0.2	4375691	0.8	0.3	4375523	1.0	4375691	0.6	4375523	1.1	0.1	4385879
Total Bismuth (Bi)	mg/kg	<0.1	4375691	<0.1	<0.1	4375523	0.2	4375691	0.1	4375523	0.3	0.1	4385879
Total Cadmium (Cd)	mg/kg	0.12	4375691	0.42	0.07	4375523	0.32	4375691	0.33	4375523	0.26	0.05	4385879
Total Calcium (Ca)	mg/kg	79600	4375691	37700	91900	4375523	25800	4375691	63600	4375523	17900	100	4385879
Total Chromium (Cr)	mg/kg	13	4375691	35	14	4375523	44	4375691	31	4375523	46	1	4385879
Total Cobalt (Co)	mg/kg	3.9	4375691	8.8	3.6	4375523	14.3	4375691	8.1	4375523	16.9	0.3	4385879
Total Copper (Cu)	mg/kg	9.3	4375691	24.4	8.3	4375523	37.5	4375691	30.9	4375523	37.9	0.5	4385879
Total Iron (Fe)	mg/kg	8800	4375691	22700	8730	4375523	32200	4375691	20800	4375523	32300	100	4385879
Total Lead (Pb)	mg/kg	8.0	4375691	103	5.9	4375523	17.4	4375691	89.9	4375523	18.9	0.1	4385879
Total Lithium (Li)	mg/kg	9	4375691	20	10	4375523	25	4375691	20	4375523	32	5	4385879
Total Magnesium (Mg)	mg/kg	47000	4375691	19600	53800	4375523	17700	4375691	31700	4375523	16300	100	4385879
Total Manganese (Mn)	mg/kg	238	4375691	306	198	4375523	459	4375691	322	4375523	592	0.2	4385879
Total Mercury (Hg)	mg/kg	<0.05	4375691	<0.05	<0.05	4375523	<0.05	4375691	<0.05	4375523	0.05	0.05	4385879
Total Molybdenum (Mo)	mg/kg	0.3	4375691	0.3	0.2	4375523	2.2	4375691	0.9	4375523	1.2	0.1	4385879
Total Nickel (Ni)	mg/kg	13.4	4375691	27.3	11.9	4375523	41.5	4375691	26.6	4375523	48.8	0.8	4385879
Total Phosphorus (P)	mg/kg	361	4375691	421	365	4375523	506	4375691	422	4375523	528	10	4385879
Total Potassium (K)	mg/kg	905	4375691	3290	1090	4375523	3550	4375691	2580	4375523	4460	100	4385879
Total Selenium (Se)	mg/kg	<0.5	4375691	<0.5	<0.5	4375523	0.5	4375691	0.6	4375523	0.8	0.5	4385879
Total Silver (Ag)	mg/kg	<0.05	4375691	0.09	<0.05	4375523	0.09	4375691	0.08	4375523	0.12	0.05	4385879
Total Sodium (Na)	mg/kg	231	4375691	258	207	4375523	540	4375691	563	4375523	927	100	4385879
Total Strontium (Sr)	mg/kg	36.2	4375691	60.4	41.5	4375523	59.7	4375691	82.9	4375523	60.8	0.1	4385879
Total Thallium (Tl)	mg/kg	0.08	4375691	0.22	0.09	4375523	0.24	4375691	0.17	4375523	0.38	0.05	4385879
Total Tin (Sn)	mg/kg	0.4	4375691	1.6	0.2	4375523	1.2	4375691	2.3	4375523	1.0	0.1	4385879
Total Titanium (Ti)	mg/kg	212	4375691	132	276	4375523	137	4375691	204	4375523	144	1	4385879
Total Uranium (U)	mg/kg	0.54	4375691	2.10	0.62	4375523	1.46	4375691	1.19	4375523	2.55	0.05	4385879
Total Vanadium (V)	mg/kg	19	4375691	49	20	4375523	58	4375691	44	4375523	60	2	4385879
Total Zinc (Zn)	mg/kg	106	4375691	482	37	4375523	309	4375691	111	4375523	95	1	4385879
Total Zirconium (Zr)	mg/kg	3.6	4375691	4.9	4.4	4375523	6.3	4375691	5.5	4375523	9.8	0.5	4385879

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97114		X97115		X97116		X97117	X97215		X97216		
Sampling Date		2010/10/22 08:45		2010/10/22 09:00		2010/10/22 09:15		2010/10/22 09:30	2010/10/22 12:45		2010/10/22 07:45		
COC#		F111801		F111801		F111801		F111801	F111802		F111802		
	Units	**G-57-01**	**QC Batch**	**G-57-05**	**QC Batch**	**G-48-01**	**QC Batch**	**G-48-04**	**G-57A-01**	**QC Batch**	**G-33-12**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	8.18	4375833	8.25	4375725	8.43	4375833	8.26	8.18	4375567	8.18	0.01	4375725
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	19000	4375831	20000	4375691	8870	4375831	25900	23800	4375523	16800	100	4375691
Total Antimony (Sb)	mg/kg	0.4	4375831	0.3	4375691	3.4	4375831	0.2	0.3	4375523	0.6	0.1	4375691
Total Arsenic (As)	mg/kg	12.6	4375831	7.3	4375691	3.7	4375831	4.4	8.0	4375523	9.2	0.2	4375691
Total Barium (Ba)	mg/kg	130	4375831	210	4375691	297	4375831	271	128	4375523	179	0.1	4375691
Total Beryllium (Be)	mg/kg	0.8	4375831	1.0	4375691	0.5	4375831	0.8	1.0	4375523	0.7	0.1	4375691
Total Bismuth (Bi)	mg/kg	0.1	4375831	0.2	4375691	<0.1	4375831	0.1	0.1	4375523	0.1	0.1	4375691
Total Cadmium (Cd)	mg/kg	0.22	4375831	0.17	4375691	0.65	4375831	0.09	0.19	4375523	0.36	0.05	4375691
Total Calcium (Ca)	mg/kg	47800	4375831	21000	4375691	74900	4375831	19500	22000	4375523	34100	100	4375691
Total Chromium (Cr)	mg/kg	34	4375831	44	4375691	20	4375831	57	39	4375523	58	1	4375691
Total Cobalt (Co)	mg/kg	9.4	4375831	13.0	4375691	5.1	4375831	16.5	10.0	4375523	9.3	0.3	4375691
Total Copper (Cu)	mg/kg	25.4	4375831	31.9	4375691	54.5	4375831	40.2	25.7	4375523	55.5	0.5	4375691
Total Iron (Fe)	mg/kg	22400	4375831	29800	4375691	13800	4375831	32200	27200	4375523	47500	100	4375691
Total Lead (Pb)	mg/kg	17.6	4375831	14.5	4375691	286	4375831	13.8	29.6	4375523	43.2	0.1	4375691
Total Lithium (Li)	mg/kg	21	4375831	29	4375691	12	4375831	51	20	4375523	18	5	4375691
Total Magnesium (Mg)	mg/kg	21200	4375831	15900	4375691	33100	4375831	20100	15700	4375523	17400	100	4375691
Total Manganese (Mn)	mg/kg	363	4375831	357	4375691	282	4375831	513	350	4375523	495	0.2	4375691
Total Mercury (Hg)	mg/kg	<0.05	4375831	<0.05	4375691	0.11	4375831	<0.05	<0.05	4375523	<0.05	0.05	4375691
Total Molybdenum (Mo)	mg/kg	0.4	4375831	1.1	4375691	0.9	4375831	0.4	0.5	4375523	5.2	0.1	4375691
Total Nickel (Ni)	mg/kg	29.5	4375831	40.0	4375691	18.2	4375831	48.4	25.8	4375523	44.0	0.8	4375691
Total Phosphorus (P)	mg/kg	517	4375831	539	4375691	657	4375831	587	456	4375523	462	10	4375691
Total Potassium (K)	mg/kg	3250	4375831	4360	4375691	1470	4375831	5930	3870	4375523	3180	100	4375691
Total Selenium (Se)	mg/kg	<0.5	4375831	0.8	4375691	<0.5	4375831	<0.5	0.5	4375523	<0.5	0.5	4375691
Total Silver (Ag)	mg/kg	0.06	4375831	0.12	4375691	0.08	4375831	0.11	0.09	4375523	0.09	0.05	4375691
Total Sodium (Na)	mg/kg	174	4375831	518	4375691	416	4375831	834	376	4375523	217	100	4375691
Total Strontium (Sr)	mg/kg	63.8	4375831	64.2	4375691	149	4375831	64.5	45.8	4375523	90.9	0.1	4375691
Total Thallium (Tl)	mg/kg	0.22	4375831	0.32	4375691	0.10	4375831	0.41	0.28	4375523	0.21	0.05	4375691
Total Tin (Sn)	mg/kg	0.9	4375831	0.9	4375691	6.6	4375831	1.0	0.9	4375523	2.7	0.1	4375691
Total Titanium (Ti)	mg/kg	159	4375831	231	4375691	189	4375831	1040	117	4375523	205	1	4375691
Total Uranium (U)	mg/kg	1.32	4375831	1.73	4375691	0.90	4375831	1.33	3.23	4375523	1.39	0.05	4375691
Total Vanadium (V)	mg/kg	56	4375831	60	4375691	26	4375831	66	62	4375523	47	2	4375691
Total Zinc (Zn)	mg/kg	167	4375831	95	4375691	163	4375831	98	1080	4375523	219	1	4375691
Total Zirconium (Zr)	mg/kg	4.7	4375831	8.1	4375691	3.0	4375831	12.3	7.0	4375523	4.0	0.5	4375691

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97217	X97218	X97219	X97220	X97221	X97222	X97223	X97224	X97225		
Sampling Date		2010/10/22 07:45	2010/10/22 14:00	2010/10/22 13:45	2010/10/21 08:00	2010/10/21 08:15	2010/10/21 08:30	2010/10/21 08:45	2010/10/21 09:00	2010/10/21 09:15		
COC#		F111802	F111802	F111802	F111802	F111802	F111802	F111802	F111802	F111802		
	Units	**G-33-02**	**G-40-08**	**G-40-01**	**G-35-05**	**G-35-01**	**G-31-04**	**G-31-02**	**G-29-03**	**G-29-01**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	8.30	8.49	8.97	8.32	8.22	8.81	8.76	8.25	8.78	0.01	4375725
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	15700	15900	12800	18700	18000	21300	11700	22100	10200	100	4375691
Total Antimony (Sb)	mg/kg	1.3	0.4	0.2	0.3	1.4	0.3	0.2	0.3	0.2	0.1	4375691
Total Arsenic (As)	mg/kg	18.3	8.0	3.8	7.6	6.1	6.1	3.4	4.8	3.3	0.2	4375691
Total Barium (Ba)	mg/kg	140	377	100	195	184	200	95.4	234	87.4	0.1	4375691
Total Beryllium (Be)	mg/kg	0.7	0.9	0.5	1.0	0.7	1.0	0.5	0.8	0.5	0.1	4375691
Total Bismuth (Bi)	mg/kg	0.1	0.2	<0.1	0.2	0.2	0.2	<0.1	0.2	<0.1	0.1	4375691
Total Cadmium (Cd)	mg/kg	0.57	0.24	0.10	0.31	0.40	0.20	0.10	0.20	0.19	0.05	4375691
Total Calcium (Ca)	mg/kg	34700	36400	78700	20400	30900	24600	87200	31500	74900	100	4375691
Total Chromium (Cr)	mg/kg	105	30	26	38	33	43	23	50	23	1	4375691
Total Cobalt (Co)	mg/kg	11.9	11.8	6.7	13.9	9.9	14.0	6.1	14.4	6.5	0.3	4375691
Total Copper (Cu)	mg/kg	100	29.0	16.9	31.5	30.9	30.5	14.0	34.4	16.2	0.5	4375691
Total Iron (Fe)	mg/kg	86100	23300	15200	27200	26000	27800	14000	28600	14700	100	4375691
Total Lead (Pb)	mg/kg	62.1	12.8	6.6	14.8	55.8	17.5	6.9	15.7	7.3	0.1	4375691
Total Lithium (Li)	mg/kg	16	23	25	27	18	30	16	45	18	5	4375691
Total Magnesium (Mg)	mg/kg	17100	18200	44400	15100	18300	19400	46700	24700	47700	100	4375691
Total Manganese (Mn)	mg/kg	875	486	315	444	588	506	270	503	301	0.2	4375691
Total Mercury (Hg)	mg/kg	0.06	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	0.05	4375691
Total Molybdenum (Mo)	mg/kg	13.6	1.0	0.3	1.1	0.6	1.0	0.2	0.6	0.4	0.1	4375691
Total Nickel (Ni)	mg/kg	75.2	34.6	23.4	38.6	27.7	39.5	19.9	44.7	20.0	0.8	4375691
Total Phosphorus (P)	mg/kg	426	488	449	499	673	524	369	577	472	10	4375691
Total Potassium (K)	mg/kg	2910	2920	1970	3420	3700	4330	1950	4960	1980	100	4375691
Total Selenium (Se)	mg/kg	<0.5	1.0	<0.5	1.0	0.8	0.6	<0.5	<0.5	0.6	0.5	4375691
Total Silver (Ag)	mg/kg	0.12	0.13	0.08	0.12	0.16	0.12	0.06	0.11	0.05	0.05	4375691
Total Sodium (Na)	mg/kg	173	775	227	1060	184	753	320	1190	307	100	4375691
Total Strontium (Sr)	mg/kg	59.3	78.3	64.8	61.6	93.8	56.9	61.6	65.0	48.9	0.1	4375691
Total Thallium (Tl)	mg/kg	0.18	0.19	0.18	0.25	0.24	0.29	0.16	0.33	0.15	0.05	4375691
Total Tin (Sn)	mg/kg	5.0	0.7	0.4	0.9	4.1	1.0	0.5	0.9	0.4	0.1	4375691
Total Titanium (Ti)	mg/kg	183	128	439	115	181	270	262	687	347	1	4375691
Total Uranium (U)	mg/kg	1.33	1.93	1.58	1.92	1.56	1.85	0.75	1.96	1.37	0.05	4375691
Total Vanadium (V)	mg/kg	51	47	40	56	46	59	35	61	32	2	4375691
Total Zinc (Zn)	mg/kg	486	75	37	83	123	84	33	82	34	1	4375691
Total Zirconium (Zr)	mg/kg	3.3	7.2	3.9	6.7	4.1	8.3	3.9	10.7	6.0	0.5	4375691

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97226		X97250		X97251	X97252		X97253		X97254		
Sampling Date		2010/10/20 08:00		2010/10/20 08:15		2010/10/20 08:30	2010/10/20 08:20		2010/10/20 08:17		2010/10/20 08:45		
COC#		F111802		F111803		F111803	F111803		F111803		F111803		
	Units	**G-32-03**	**QC Batch**	**G-32-06**	**QC Batch**	**G-28-06**	**G-28-03**	**QC Batch**	**G-28-01**	**QC Batch**	**G-34-07**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	8.34	4375725	8.28	4375567	8.37	8.45	4379848	8.60	4379863	8.54	0.01	4375567
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	11900	4375691	20200	4375523	19400	8150	4379844	15700	4379855	19900	100	4375523
Total Antimony (Sb)	mg/kg	4.1	4375691	0.4	4375523	0.4	0.3	4379844	2.0	4379855	0.5	0.1	4375523
Total Arsenic (As)	mg/kg	23.7	4375691	6.4	4375523	9.9	4.5	4379844	7.4	4379855	7.9	0.2	4375523
Total Barium (Ba)	mg/kg	602	4375691	133	4375523	127	77.4	4379844	251	4379855	261	0.1	4375523
Total Beryllium (Be)	mg/kg	0.5	4375691	1.1	4375523	1.0	0.4	4379844	0.7	4379855	1.1	0.1	4375523
Total Bismuth (Bi)	mg/kg	0.2	4375691	0.2	4375523	0.2	<0.1	4379844	0.1	4379855	0.2	0.1	4375523
Total Cadmium (Cd)	mg/kg	1.29	4375691	0.19	4375523	0.23	0.26	4379844	0.49	4379855	0.26	0.05	4375523
Total Calcium (Ca)	mg/kg	45600	4375691	23000	4375523	20100	80900	4379844	62800	4379855	21300	100	4375523
Total Chromium (Cr)	mg/kg	142	4375691	39	4375523	39	23	4379844	62	4379855	34	1	4375523
Total Cobalt (Co)	mg/kg	29.9	4375691	12.4	4375523	14.5	6.6	4379844	9.7	4379855	13.1	0.3	4375523
Total Copper (Cu)	mg/kg	277	4375691	32.7	4375523	35.0	16.3	4379844	114	4379855	33.2	0.5	4375523
Total Iron (Fe)	mg/kg	121000	4375691	27600	4375523	30800	14200	4379844	32500	4379855	26800	100	4375523
Total Lead (Pb)	mg/kg	3150	4375691	27.6	4375523	16.9	36.3	4379844	305	4379855	15.8	0.1	4375523
Total Lithium (Li)	mg/kg	16	4375691	26	4375523	27	17	4379844	25	4379855	26	5	4375523
Total Magnesium (Mg)	mg/kg	18400	4375691	14200	4375523	14000	41600	4379844	26400	4379855	13000	100	4375523
Total Manganese (Mn)	mg/kg	1110	4375691	378	4375523	408	355	4379844	584	4379855	490	0.2	4375523
Total Mercury (Hg)	mg/kg	0.27	4375691	<0.05	4375523	<0.05	<0.05	4379844	0.19	4379855	<0.05	0.05	4375523
Total Molybdenum (Mo)	mg/kg	18.9	4375691	1.2	4375523	1.2	0.8	4379844	2.5	4379855	1.0	0.1	4375523
Total Nickel (Ni)	mg/kg	97.2	4375691	40.4	4375523	42.0	21.2	4379844	36.3	4379855	39.1	0.8	4375523
Total Phosphorus (P)	mg/kg	469	4375691	513	4375523	522	458	4379844	501	4379855	528	10	4375523
Total Potassium (K)	mg/kg	2090	4375691	3740	4375523	3610	1500	4379844	3160	4379855	3210	100	4375523
Total Selenium (Se)	mg/kg	1.1	4375691	1.5	4375523	1.6	<0.5	4379844	0.6	4379855	1.0	0.5	4375523
Total Silver (Ag)	mg/kg	0.57	4375691	0.11	4375523	0.10	0.07	4379844	0.13	4379855	0.12	0.05	4375523
Total Sodium (Na)	mg/kg	549	4375691	1310	4375523	1860	759	4379844	1040	4379855	583	100	4375523
Total Strontium (Sr)	mg/kg	97.8	4375691	63.5	4375523	60.5	66.9	4379844	136	4379855	69.0	0.1	4375523
Total Thallium (Tl)	mg/kg	0.17	4375691	0.25	4375523	0.29	0.18	4379844	0.18	4379855	0.20	0.05	4375523
Total Tin (Sn)	mg/kg	120	4375691	1.0	4375523	0.9	0.5	4379844	5.9	4379855	0.8	0.1	4375523
Total Titanium (Ti)	mg/kg	272	4375691	100	4375523	55	255	4379844	167	4379855	93	1	4375523
Total Uranium (U)	mg/kg	1.70	4375691	2.13	4375523	2.25	3.58	4379844	1.21	4379855	2.46	0.05	4375523
Total Vanadium (V)	mg/kg	47	4375691	61	4375523	54	33	4379844	45	4379855	51	2	4375523
Total Zinc (Zn)	mg/kg	1340	4375691	98	4375523	94	123	4379844	1140	4379855	83	1	4375523
Total Zirconium (Zr)	mg/kg	5.5	4375691	7.6	4375523	8.7	8.0	4379844	3.8	4379855	8.0	0.5	4375523

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97255		X97256	X97257		X97258		X97259		X97260		
Sampling Date		2010/10/20 09:00		2010/10/20 09:15	2010/10/20 09:30		2010/10/20 09:45		2010/10/20 10:00		2010/10/20 10:15		
COC#		F111803		F111803	F111803		F111803		F111803		F111803		
	Units	**G-34-04**	**QC Batch**	**G-39-02**	**G-39-06**	**QC Batch**	**G-41-01**	**QC Batch**	**G-41-05**	**QC Batch**	**G-79-05**	**RDL**	**QC Batch**
Physical Properties													
Soluble (2:1) pH	pH Units	8.64	4375567	8.68	8.26	4379848	8.10	4375567	8.24	4375725	8.14	0.01	4379863
Total Metals by ICPMS													
Total Aluminum (Al)	mg/kg	8140	4375523	27000	20900	4379844	378	4375523	25200	4375691	17000	100	4379855
Total Antimony (Sb)	mg/kg	0.2	4375523	0.3	0.4	4379844	8.9	4375523	0.4	4375691	0.3	0.1	4379855
Total Arsenic (As)	mg/kg	2.6	4375523	5.2	8.2	4379844	73.3	4375523	10.1	4375691	6.4	0.2	4379855
Total Barium (Ba)	mg/kg	74.0	4375523	214	203	4379844	18.3	4375523	249	4375691	172	0.1	4379855
Total Beryllium (Be)	mg/kg	0.3	4375523	1.2	1.1	4379844	<0.1	4375523	1.1	4375691	1.0	0.1	4379855
Total Bismuth (Bi)	mg/kg	<0.1	4375523	0.2	0.3	4379844	<0.1	4375523	0.3	4375691	0.1	0.1	4379855
Total Cadmium (Cd)	mg/kg	0.09	4375523	0.18	0.24	4379844	0.39	4375523	0.23	4375691	0.24	0.05	4379855
Total Calcium (Ca)	mg/kg	104000	4375523	14400	20800	4379844	3820	4375523	15600	4375691	22600	100	4379855
Total Chromium (Cr)	mg/kg	19	4375523	56	45	4379844	437	4375523	50	4375691	37	1	4379855
Total Cobalt (Co)	mg/kg	4.8	4375523	13.7	15.6	4379844	36.5	4375523	18.3	4375691	10.7	0.3	4379855
Total Copper (Cu)	mg/kg	12.0	4375523	35.2	35.8	4379844	515	4375523	37.5	4375691	32.8	0.5	4379855
Total Iron (Fe)	mg/kg	11700	4375523	35400	30700	4379844	525000	4375523	31900	4375691	27400	100	4379855
Total Lead (Pb)	mg/kg	9.0	4375523	28.3	18.3	4379844	47.5	4375523	16.2	4375691	25.1	0.1	4379855
Total Lithium (Li)	mg/kg	15	4375523	31	30	4379844	<5	4375523	32	4375691	25	5	4379855
Total Magnesium (Mg)	mg/kg	58700	4375523	13400	15400	4379844	1640	4375523	15800	4375691	15400	100	4379855
Total Manganese (Mn)	mg/kg	239	4375523	554	445	4379844	4380	4375523	566	4375691	318	0.2	4379855
Total Mercury (Hg)	mg/kg	<0.05	4375523	<0.05	<0.05	4379844	0.06	4375523	<0.05	4375691	<0.05	0.05	4379855
Total Molybdenum (Mo)	mg/kg	0.3	4375523	1.0	1.3	4379844	99.4	4375523	1.7	4375691	1.1	0.1	4379855
Total Nickel (Ni)	mg/kg	15.8	4375523	40.9	44.1	4379844	309	4375523	46.2	4375691	37.6	0.8	4379855
Total Phosphorus (P)	mg/kg	344	4375523	363	531	4379844	105	4375523	580	4375691	474	10	4379855
Total Potassium (K)	mg/kg	1440	4375523	4200	4180	4379844	<100	4375523	4950	4375691	3340	100	4379855
Total Selenium (Se)	mg/kg	<0.5	4375523	<0.5	0.9	4379844	0.6	4375523	0.6	4375691	0.9	0.5	4379855
Total Silver (Ag)	mg/kg	0.09	4375523	0.11	0.12	4379844	0.38	4375523	0.17	4375691	0.09	0.05	4379855
Total Sodium (Na)	mg/kg	345	4375523	230	898	4379844	<100	4375523	1050	4375691	813	100	4379855
Total Strontium (Sr)	mg/kg	60.5	4375523	68.6	65.4	4379844	5.4	4375523	64.2	4375691	57.2	0.1	4379855
Total Thallium (Tl)	mg/kg	0.12	4375523	0.36	0.33	4379844	<0.05	4375523	0.30	4375691	0.26	0.05	4379855
Total Tin (Sn)	mg/kg	0.4	4375523	1.5	0.9	4379844	30.4	4375523	3.1	4375691	1.4	0.1	4379855
Total Titanium (Ti)	mg/kg	358	4375523	161	122	4379844	47	4375523	246	4375691	44	1	4379855
Total Uranium (U)	mg/kg	0.81	4375523	1.15	2.06	4379844	0.08	4375523	1.97	4375691	1.90	0.05	4379855
Total Vanadium (V)	mg/kg	27	4375523	71	64	4379844	43	4375523	75	4375691	48	2	4379855
Total Zinc (Zn)	mg/kg	35	4375523	161	103	4379844	155	4375523	91	4375691	117	1	4379855
Total Zirconium (Zr)	mg/kg	5.5	4375523	5.7	9.7	4379844	1.8	4375523	8.8	4375691	7.8	0.5	4379855

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97261		X97272		X97273		X97274	X97275	X97277		
Sampling Date		2010/10/20 10:25		2010/10/20 10:25		2010/10/20 10:30		2010/10/20 10:45	2010/10/20 11:00	2010/10/20 11:15		
COC#		F111803		F111804		F111804		F111804	F111804	F111804		
	Units	**G-79-12**	**QC Batch**	**G-79-02**	**QC Batch**	**G-78-06**	**QC Batch**	**G-78-03**	**G-74-05**	**G-74-02**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	9.12	4379848	8.78	4385891	8.24	4375725	9.03	8.51	8.55	0.01	4379863
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	9580	4379844	9310	4385879	21300	4375691	4690	22100	22900	100	4379855
Total Antimony (Sb)	mg/kg	0.3	4379844	0.3	4385879	0.4	4375691	0.1	0.3	0.5	0.1	4379855
Total Arsenic (As)	mg/kg	3.0	4379844	3.1	4385879	9.6	4375691	2.1	7.2	5.4	0.2	4379855
Total Barium (Ba)	mg/kg	119	4379844	109	4385879	175	4375691	34.0	189	147	0.1	4379855
Total Beryllium (Be)	mg/kg	0.4	4379844	0.3	4385879	1.0	4375691	0.2	1.2	0.9	0.1	4379855
Total Bismuth (Bi)	mg/kg	<0.1	4379844	<0.1	4385879	0.2	4375691	<0.1	0.3	0.2	0.1	4379855
Total Cadmium (Cd)	mg/kg	0.17	4379844	0.17	4385879	0.24	4375691	0.07	0.24	0.17	0.05	4379855
Total Calcium (Ca)	mg/kg	121000	4379844	123000	4385879	20800	4375691	102000	15300	11800	100	4379855
Total Chromium (Cr)	mg/kg	24	4379844	21	4385879	37	4375691	13	52	44	1	4379855
Total Cobalt (Co)	mg/kg	5.1	4379844	5.1	4385879	13.3	4375691	3.1	14.7	12.3	0.3	4379855
Total Copper (Cu)	mg/kg	12.1	4379844	11.3	4385879	30.1	4375691	7.7	37.6	29.3	0.5	4379855
Total Iron (Fe)	mg/kg	12800	4379844	13000	4385879	29100	4375691	7900	31200	30100	100	4379855
Total Lead (Pb)	mg/kg	64.0	4379844	96.3	4385879	16.1	4375691	52.0	17.5	27.2	0.1	4379855
Total Lithium (Li)	mg/kg	15	4379844	14	4385879	27	4375691	9	34	20	5	4379855
Total Magnesium (Mg)	mg/kg	42700	4379844	46000	4385879	14800	4375691	56000	14200	9960	100	4379855
Total Manganese (Mn)	mg/kg	245	4379844	242	4385879	398	4375691	157	547	374	0.2	4379855
Total Mercury (Hg)	mg/kg	<0.05	4379844	<0.05	4385879	<0.05	4375691	<0.05	<0.05	<0.05	0.05	4379855
Total Molybdenum (Mo)	mg/kg	0.3	4379844	0.2	4385879	1.2	4375691	0.2	1.1	1.2	0.1	4379855
Total Nickel (Ni)	mg/kg	20.4	4379844	18.3	4385879	38.1	4375691	11.2	49.0	32.1	0.8	4379855
Total Phosphorus (P)	mg/kg	409	4379844	379	4385879	497	4375691	353	540	400	10	4379855
Total Potassium (K)	mg/kg	1790	4379844	1760	4385879	3500	4375691	791	4960	4680	100	4379855
Total Selenium (Se)	mg/kg	<0.5	4379844	<0.5	4385879	1.0	4375691	<0.5	<0.5	<0.5	0.5	4379855
Total Silver (Ag)	mg/kg	<0.05	4379844	0.05	4385879	0.12	4375691	<0.05	0.13	0.10	0.05	4379855
Total Sodium (Na)	mg/kg	298	4379844	289	4385879	646	4375691	237	562	223	100	4379855
Total Strontium (Sr)	mg/kg	133	4379844	132	4385879	64.0	4375691	36.5	66.2	57.2	0.1	4379855
Total Thallium (Tl)	mg/kg	0.13	4379844	0.14	4385879	0.25	4375691	0.09	0.36	0.32	0.05	4379855
Total Tin (Sn)	mg/kg	0.6	4379844	0.6	4385879	1.6	4375691	0.3	1.0	1.4	0.1	4379855
Total Titanium (Ti)	mg/kg	221	4379844	210	4385879	115	4375691	232	206	112	1	4379855
Total Uranium (U)	mg/kg	1.54	4379844	1.57	4385879	1.85	4375691	0.66	2.02	1.19	0.05	4379855
Total Vanadium (V)	mg/kg	32	4379844	31	4385879	57	4375691	18	66	61	2	4379855
Total Zinc (Zn)	mg/kg	247	4379844	163	4385879	85	4375691	22	97	171	1	4379855
Total Zirconium (Zr)	mg/kg	1.8	4379844	2.1	4385879	7.1	4375691	3.8	11.2	5.7	0.5	4379855

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97278		X97279	X97280	X97281	X97282		X97283	X97284		
Sampling Date		2010/10/20 11:30		2010/10/20 11:45	2010/10/20 14:00	2010/10/20 13:00	2010/10/20 13:15		2010/10/20 12:00	2010/10/20 12:15		
COC#		F111804		F111804	F111804	F111804	F111804		F111804	F111804		
	Units	**G-75-03**	**QC Batch**	**G-75-01**	**G-77-04**	**G-76-02**	**G-76-05**	**QC Batch**	**G-36-01**	**G-36-04**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	8.87	4379848	8.42	8.74	8.20	8.52	4379863	8.24	8.10	0.01	4375567
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	8310	4379844	18000	27300	25300	20500	4379855	14900	20900	100	4375523
Total Antimony (Sb)	mg/kg	0.2	4379844	2.2	0.2	0.3	0.3	4379855	0.5	0.3	0.1	4375523
Total Arsenic (As)	mg/kg	3.5	4379844	6.5	5.1	4.6	7.6	4379855	7.2	8.0	0.2	4375523
Total Barium (Ba)	mg/kg	131	4379844	261	315	161	237	4379855	150	222	0.1	4375523
Total Beryllium (Be)	mg/kg	0.3	4379844	0.7	0.8	1.1	1.1	4379855	0.7	1.0	0.1	4375523
Total Bismuth (Bi)	mg/kg	<0.1	4379844	0.2	0.2	0.2	0.3	4379855	0.2	0.2	0.1	4375523
Total Cadmium (Cd)	mg/kg	0.14	4379844	0.45	0.18	0.20	0.31	4379855	0.36	0.26	0.05	4375523
Total Calcium (Ca)	mg/kg	109000	4379844	41600	16400	6940	26300	4379855	43800	21100	100	4375523
Total Chromium (Cr)	mg/kg	18	4379844	42	65	50	46	4379855	30	44	1	4375523
Total Cobalt (Co)	mg/kg	5.4	4379844	9.5	18.1	14.2	13.7	4379855	10.7	14.6	0.3	4375523
Total Copper (Cu)	mg/kg	13.4	4379844	39.6	47.4	29.4	35.3	4379855	26.5	34.4	0.5	4375523
Total Iron (Fe)	mg/kg	11600	4379844	31400	38200	31000	30500	4379855	22900	28500	100	4375523
Total Lead (Pb)	mg/kg	13.4	4379844	203	17.6	22.0	15.3	4379855	27.4	14.4	0.1	4375523
Total Lithium (Li)	mg/kg	14	4379844	21	57	23	30	4379855	20	28	5	4375523
Total Magnesium (Mg)	mg/kg	43600	4379844	21100	18900	9960	18200	4379855	21500	15100	100	4375523
Total Manganese (Mn)	mg/kg	272	4379844	428	629	668	521	4379855	448	493	0.2	4375523
Total Mercury (Hg)	mg/kg	<0.05	4379844	0.10	<0.05	<0.05	<0.05	4379855	<0.05	<0.05	0.05	4375523
Total Molybdenum (Mo)	mg/kg	0.2	4379844	1.6	0.8	1.8	1.0	4379855	1.3	1.7	0.1	4375523
Total Nickel (Ni)	mg/kg	18.0	4379844	33.2	54.0	43.6	44.1	4379855	31.3	47.1	0.8	4375523
Total Phosphorus (P)	mg/kg	406	4379844	463	615	426	552	4379855	456	504	10	4375523
Total Potassium (K)	mg/kg	1400	4379844	3550	6120	4710	4570	4379855	2840	4130	100	4375523
Total Selenium (Se)	mg/kg	<0.5	4379844	<0.5	<0.5	<0.5	1.3	4379855	0.6	0.5	0.5	4375523
Total Silver (Ag)	mg/kg	0.05	4379844	0.14	0.12	0.10	0.13	4379855	0.13	0.13	0.05	4375523
Total Sodium (Na)	mg/kg	293	4379844	248	1180	228	620	4379855	219	858	100	4375523
Total Strontium (Sr)	mg/kg	84.4	4379844	86.1	64.1	44.8	66.8	4379855	70.4	64.3	0.1	4375523
Total Thallium (Tl)	mg/kg	0.14	4379844	0.24	0.54	0.34	0.34	4379855	0.20	0.27	0.05	4375523
Total Tin (Sn)	mg/kg	0.4	4379844	4.7	1.2	1.1	0.9	4379855	2.3	1.2	0.1	4375523
Total Titanium (Ti)	mg/kg	244	4379844	292	1130	91	170	4379855	102	143	1	4375523
Total Uranium (U)	mg/kg	0.95	4379844	1.24	1.70	1.39	2.13	4379855	1.61	1.78	0.05	4375523
Total Vanadium (V)	mg/kg	28	4379844	53	70	64	63	4379855	48	68	2	4375523
Total Zinc (Zn)	mg/kg	36	4379844	273	136	120	91	4379855	101	82	1	4375523
Total Zirconium (Zr)	mg/kg	5.0	4379844	6.5	16.0	5.8	10.8	4379855	6.6	7.4	0.5	4375523

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97289		X97290		X97291		X97292		X97293		
Sampling Date		2010/10/20 13:00		2010/10/20 13:15		2010/10/21 15:00		2010/10/21 15:15		2010/10/21 15:30		
COC#		F111805		F111805		F111805		F111805		F111805		
	Units	**G-30-01**	**QC Batch**	**G-30-05**	**QC Batch**	**G-07-02**	**QC Batch**	**G-07-07**	**QC Batch**	**G-26-02**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	8.77	4375725	7.96	4375567	8.64	4375725	8.39	4375567	8.89	0.01	4379863
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	5950	4375691	17400	4375523					4230	100	4379855
Total Antimony (Sb)	mg/kg	0.2	4375691	0.4	4375523					0.1	0.1	4379855
Total Arsenic (As)	mg/kg	2.4	4375691	9.4	4375523					2.8	0.2	4379855
Total Barium (Ba)	mg/kg	51.2	4375691	168	4375523					32.4	0.1	4379855
Total Beryllium (Be)	mg/kg	0.2	4375691	1.0	4375523					0.1	0.1	4379855
Total Bismuth (Bi)	mg/kg	<0.1	4375691	0.2	4375523					<0.1	0.1	4379855
Total Cadmium (Cd)	mg/kg	0.09	4375691	0.39	4375523					0.09	0.05	4379855
Total Calcium (Ca)	mg/kg	89900	4375691	21900	4375523					107000	100	4379855
Total Chromium (Cr)	mg/kg	13	4375691	35	4375523					13	1	4379855
Total Cobalt (Co)	mg/kg	3.4	4375691	18.4	4375523					3.0	0.3	4379855
Total Copper (Cu)	mg/kg	8.2	4375691	32.0	4375523					8.3	0.5	4379855
Total Iron (Fe)	mg/kg	8950	4375691	27800	4375523					8090	100	4379855
Total Lead (Pb)	mg/kg	6.5	4375691	14.6	4375523	6.3	4375691	14.4	4375523	16.5	0.1	4379855
Total Lithium (Li)	mg/kg	11	4375691	24	4375523					9	5	4379855
Total Magnesium (Mg)	mg/kg	56600	4375691	14900	4375523					57800	100	4379855
Total Manganese (Mn)	mg/kg	239	4375691	674	4375523					174	0.2	4379855
Total Mercury (Hg)	mg/kg	<0.05	4375691	0.06	4375523					<0.05	0.05	4379855
Total Molybdenum (Mo)	mg/kg	0.4	4375691	1.2	4375523					0.4	0.1	4379855
Total Nickel (Ni)	mg/kg	11.0	4375691	39.5	4375523					11.7	0.8	4379855
Total Phosphorus (P)	mg/kg	419	4375691	480	4375523					355	10	4379855
Total Potassium (K)	mg/kg	1250	4375691	3100	4375523					742	100	4379855
Total Selenium (Se)	mg/kg	<0.5	4375691	0.7	4375523					<0.5	0.5	4379855
Total Silver (Ag)	mg/kg	<0.05	4375691	0.11	4375523					<0.05	0.05	4379855
Total Sodium (Na)	mg/kg	168	4375691	1520	4375523					294	100	4379855
Total Strontium (Sr)	mg/kg	65.5	4375691	57.5	4375523					41.7	0.1	4379855
Total Thallium (Tl)	mg/kg	0.09	4375691	0.24	4375523					0.08	0.05	4379855
Total Tin (Sn)	mg/kg	0.7	4375691	1.0	4375523					0.3	0.1	4379855
Total Titanium (Ti)	mg/kg	192	4375691	91	4375523					216	1	4379855
Total Uranium (U)	mg/kg	0.88	4375691	2.35	4375523					0.76	0.05	4379855
Total Vanadium (V)	mg/kg	20	4375691	56	4375523					18	2	4379855
Total Zinc (Zn)	mg/kg	21	4375691	84	4375523					56	1	4379855
Total Zirconium (Zr)	mg/kg	1.3	4375691	7.3	4375523					3.6	0.5	4379855

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97294		X97295	X97296	X97297	X97298		X97299	X97300		
Sampling Date		2010/10/21 15:45		2010/10/21 16:00	2010/10/21 16:15	2010/10/21 16:30	2010/10/21 16:45		2010/10/21 17:00	2010/10/21 17:15		
COC#		F111805		F111805	F111805	F111805	F111805		F111805	F111805		
	Units	**G-26-05**	**QC Batch**	**G-27-03**	**G-27-05**	**G-09-03**	**G-09-08**	**QC Batch**	**G-43-02**	**G-43-05**	**RDL**	**QC Batch**
Physical Properties												
Soluble (2:1) pH	pH Units	7.91	4385891	8.37	8.13	8.64	8.51	4375567	8.52	8.25	0.01	4375725
Total Metals by ICPMS												
Total Aluminum (Al)	mg/kg	19100	4385879	24000	19100			4375523	8730	20200	100	4375691
Total Antimony (Sb)	mg/kg	0.4	4385879	0.3	0.4			4375523	0.2	0.3	0.1	4375691
Total Arsenic (As)	mg/kg	8.0	4385879	4.8	5.4			4375523	2.6	5.2	0.2	4375691
Total Barium (Ba)	mg/kg	180	4385879	262	159			4375523	84.9	194	0.1	4375691
Total Beryllium (Be)	mg/kg	0.9	4385879	0.7	0.8			4375523	0.3	0.9	0.1	4375691
Total Bismuth (Bi)	mg/kg	0.3	4385879	0.1	0.2			4375523	<0.1	0.2	0.1	4375691
Total Cadmium (Cd)	mg/kg	0.34	4385879	0.15	0.39			4375523	0.11	0.24	0.05	4375691
Total Calcium (Ca)	mg/kg	24700	4385879	33200	23800			4375523	112000	31200	100	4375691
Total Chromium (Cr)	mg/kg	40	4385879	67	39			4375523	18	38	1	4375691
Total Cobalt (Co)	mg/kg	19.6	4385879	16.0	10.9			4375523	4.4	12.3	0.3	4375691
Total Copper (Cu)	mg/kg	34.9	4385879	44.5	30.6			4375523	11.0	27.4	0.5	4375691
Total Iron (Fe)	mg/kg	31900	4385879	35100	26800			4375523	10800	25400	100	4375691
Total Lead (Pb)	mg/kg	18.0	4385879	47.8	15.6	118	14.7	4375523	5.4	12.7	0.1	4375691
Total Lithium (Li)	mg/kg	27	4385879	47	27			4375523	14	26	5	4375691
Total Magnesium (Mg)	mg/kg	16000	4385879	26500	17900			4375523	62700	19400	100	4375691
Total Manganese (Mn)	mg/kg	700	4385879	587	337			4375523	217	371	0.2	4375691
Total Mercury (Hg)	mg/kg	<0.05	4385879	<0.05	<0.05			4375523	<0.05	<0.05	0.05	4375691
Total Molybdenum (Mo)	mg/kg	2.0	4385879	1.3	1.0			4375523	0.1	0.8	0.1	4375691
Total Nickel (Ni)	mg/kg	44.3	4385879	50.5	37.0			4375523	14.9	35.3	0.8	4375691
Total Phosphorus (P)	mg/kg	516	4385879	571	497			4375523	348	523	10	4375691
Total Potassium (K)	mg/kg	3690	4385879	5520	3630			4375523	1440	3660	100	4375691
Total Selenium (Se)	mg/kg	1.1	4385879	<0.5	0.9			4375523	<0.5	1.1	0.5	4375691
Total Silver (Ag)	mg/kg	0.14	4385879	0.12	0.13			4375523	0.07	0.11	0.05	4375691
Total Sodium (Na)	mg/kg	1680	4385879	1010	1260			4375523	368	445	100	4375691
Total Strontium (Sr)	mg/kg	65.3	4385879	61.4	59.1			4375523	73.1	66.8	0.1	4375691
Total Thallium (Tl)	mg/kg	0.32	4385879	0.37	0.25			4375523	0.12	0.23	0.05	4375691
Total Tin (Sn)	mg/kg	1.0	4385879	1.3	0.9			4375523	0.5	0.9	0.1	4375691
Total Titanium (Ti)	mg/kg	101	4385879	1040	141			4375523	308	153	1	4375691
Total Uranium (U)	mg/kg	2.58	4385879	1.87	2.11			4375523	0.81	1.70	0.05	4375691
Total Vanadium (V)	mg/kg	58	4385879	62	56			4375523	25	58	2	4375691
Total Zinc (Zn)	mg/kg	98	4385879	326	100			4375523	24	75	1	4375691
Total Zirconium (Zr)	mg/kg	11.9	4385879	12.5	8.1			4375523	4.9	7.0	0.5	4375691

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97315	X97316		
Sampling Date		2010/10/21 17:30	2010/10/21 17:45		
COC#		F111806	F111806		
	Units	**G-42-01**	**G-42-04**	**RDL**	**QC Batch**
Physical Properties					
Soluble (2:1) pH	pH Units	8.30	8.24	0.01	4375567
Total Metals by ICPMS					
Total Aluminum (Al)	mg/kg	23400	16000	100	4375523
Total Antimony (Sb)	mg/kg	1.1	0.4	0.1	4375523
Total Arsenic (As)	mg/kg	5.1	7.3	0.2	4375523
Total Barium (Ba)	mg/kg	178	278	0.1	4375523
Total Beryllium (Be)	mg/kg	0.9	0.8	0.1	4375523
Total Bismuth (Bi)	mg/kg	0.1	0.2	0.1	4375523
Total Cadmium (Cd)	mg/kg	0.16	0.28	0.05	4375523
Total Calcium (Ca)	mg/kg	6320	21600	100	4375523
Total Chromium (Cr)	mg/kg	40	33	1	4375523
Total Cobalt (Co)	mg/kg	12.1	10.2	0.3	4375523
Total Copper (Cu)	mg/kg	22.0	31.5	0.5	4375523
Total Iron (Fe)	mg/kg	26200	25300	100	4375523
Total Lead (Pb)	mg/kg	31.0	14.6	0.1	4375523
Total Lithium (Li)	mg/kg	23	25	5	4375523
Total Magnesium (Mg)	mg/kg	9860	15000	100	4375523
Total Manganese (Mn)	mg/kg	539	301	0.2	4375523
Total Mercury (Hg)	mg/kg	<0.05	<0.05	0.05	4375523
Total Molybdenum (Mo)	mg/kg	0.3	1.0	0.1	4375523
Total Nickel (Ni)	mg/kg	32.6	33.7	0.8	4375523
Total Phosphorus (P)	mg/kg	349	541	10	4375523
Total Potassium (K)	mg/kg	3920	3050	100	4375523
Total Selenium (Se)	mg/kg	<0.5	1.8	0.5	4375523
Total Silver (Ag)	mg/kg	0.11	0.12	0.05	4375523
Total Sodium (Na)	mg/kg	158	802	100	4375523
Total Strontium (Sr)	mg/kg	43.0	65.4	0.1	4375523
Total Thallium (Tl)	mg/kg	0.28	0.24	0.05	4375523
Total Tin (Sn)	mg/kg	1.2	0.7	0.1	4375523
Total Titanium (Ti)	mg/kg	126	129	1	4375523
Total Uranium (U)	mg/kg	1.01	1.85	0.05	4375523
Total Vanadium (V)	mg/kg	65	47	2	4375523
Total Zinc (Zn)	mg/kg	70	77	1	4375523
Total Zirconium (Zr)	mg/kg	4.4	5.9	0.5	4375523

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X97273	X97274		
Sampling Date		2010/10/20 10:30	2010/10/20 10:45		
COC#		F111804	F111804		
	Units	**G-78-06**	**G-78-03**	**RDL**	**QC Batch**
Polycyclic Aromatics					
Naphthalene	mg/kg	0.002	0.020	0.001	4379716
2-Methylnaphthalene	mg/kg	0.002	0.019	0.001	4379716
Acenaphthylene	mg/kg	<0.001	0.010	0.001	4379716
Acenaphthene	mg/kg	<0.001	0.022	0.001	4379716
Fluorene	mg/kg	<0.001	0.023	0.001	4379716
Phenanthrene	mg/kg	0.009	0.25	0.001	4379716
Anthracene	mg/kg	0.002	0.058	0.001	4379716
Fluoranthene	mg/kg	0.013	0.35	0.001	4379716
Pyrene	mg/kg	0.014	0.30	0.001	4379716
Benzo(a)anthracene	mg/kg	0.006	0.13	0.001	4379716
Chrysene	mg/kg	0.015	0.15	0.001	4379716
Benzo(b&j)fluoranthene	mg/kg	0.019	0.16	0.001	4379716
Benzo(k)fluoranthene	mg/kg	0.004	0.091	0.001	4379716
Benzo(a)pyrene	mg/kg	0.005	0.13	0.001	4379716
Indeno(1,2,3-cd)pyrene	mg/kg	0.005	0.089	0.002	4379716
Dibenz(a,h)anthracene	mg/kg	<0.002	0.021	0.002	4379716
Benzo(g,h,i)perylene	mg/kg	0.008	0.092	0.002	4379716
Low Molecular Weight PAH`s	mg/kg	0.015	0.40	0.001	4370456
High Molecular Weight PAH`s	mg/kg	0.088	1.5	0.002	4370456
Total PAH	mg/kg	0.10	1.9	0.002	4370456
Surrogate Recovery (%)					
D10-ANTHRACENE (sur.)	%	118	120		4379716
D12-BENZO(A)PYRENE (sur.)	%	109	113		4379716
D8-ACENAPHTHYLENE (sur.)	%	115	119		4379716
D8-NAPHTHALENE (sur.)	%	111	112		4379716
TERPHENYL-D14 (sur.)	%	123	122		4379716

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X97112		X97113	X97224	X97225	X97251	X97252	X97253	X97256		
Sampling Date		2010/10/22 08:15		2010/10/22 08:30	2010/10/21 09:00	2010/10/21 09:15	2010/10/20 08:30	2010/10/20 08:20	2010/10/20 08:17	2010/10/20 09:15		
COC#		F111801		F111801	F111802	F111802	F111803	F111803	F111803	F111803		
	Units	**G-37-01**	**QC Batch**	**G-37-04**	**G-29-03**	**G-29-01**	**G-28-06**	**G-28-03**	**G-28-01**	**G-39-02**	**RDL**	**QC Batch**
Calculated Parameters												
F1 (C6-C10) - BTEX	mg/kg	<10	4373571	<10	<10	<10	<10	15	<10	<10	10	4373571
Volatile Hydrocarbons												
(C6-C10)	mg/kg	<10	4378342	<10	<10	<10	<10	15	<10	<10	10	4378490
Volatiles												
Chloromethane	mg/kg	<0.1	4377082	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4373970
Vinyl chloride	mg/kg	<0.06	4377082	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.06	4373970
Bromomethane	mg/kg	<0.3	4377082	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.3	4373970
Chloroethane	mg/kg	<0.1	4377082	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4373970
Trichlorofluoromethane	mg/kg	<0.2	4377082	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	4373970
1,1-dichloroethene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Dichloromethane	mg/kg	<0.1	4377082	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4373970
trans-1,2-dichloroethene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
1,1-dichloroethane	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
cis-1,2-dichloroethene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Chloroform	mg/kg	<0.05	4377082	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	4373970
1,1,1-trichloroethane	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
1,2-dichloroethane	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Carbon tetrachloride	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Benzene	mg/kg	<0.005	4377082	<0.005	<0.005	<0.005	<0.005	<0.005	0.008	<0.005	0.005	4373970
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4377082	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4373970
1,2-dichloropropane	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Trichloroethene	mg/kg	<0.01	4377082	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	0.01	4373970
Bromodichloromethane	mg/kg	<0.05	4377082	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	4373970
cis-1,3-dichloropropene	mg/kg	<0.05	4377082	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	4373970
trans-1,3-dichloropropene	mg/kg	<0.05	4377082	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	4373970
1,1,2-trichloroethane	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Toluene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	<0.03	0.03	4373970
Chlorodibromomethane	mg/kg	<0.05	4377082	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	4373970
Dibromoethane	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Tetrachloroethene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Chlorobenzene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
1,1,1,2-tetrachloroethane	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Ethylbenzene	mg/kg	<0.01 (1)	4377082	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	<0.01	0.01	4373970
m & p-Xylene	mg/kg	<0.1	4377082	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4373970

RDL = Reportable Detection Limit
(1) - Matrix Spike outside acceptance criteria (10% of analytes failure allowed)

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X97112		X97113	X97224	X97225	X97251	X97252	X97253	X97256		
Sampling Date		2010/10/22 08:15		2010/10/22 08:30	2010/10/21 09:00	2010/10/21 09:15	2010/10/20 08:30	2010/10/20 08:20	2010/10/20 08:17	2010/10/20 09:15		
COC#		F111801		F111801	F111802	F111802	F111803	F111803	F111803	F111803		
	Units	**G-37-01**	**QC Batch**	**G-37-04**	**G-29-03**	**G-29-01**	**G-28-06**	**G-28-03**	**G-28-01**	**G-39-02**	**RDL**	**QC Batch**
Bromoform	mg/kg	<0.05	4377082	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	4373970
Styrene	mg/kg	<0.1 (1)	4377082	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4373970
o-Xylene	mg/kg	<0.1 (1)	4377082	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4373970
Xylenes (Total)	mg/kg	<0.1	4377082	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4373970
1,1,2,2-tetrachloroethane	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
1,2-dichlorobenzene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
1,3-dichlorobenzene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
1,4-dichlorobenzene	mg/kg	<0.03	4377082	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4373970
Surrogate Recovery (%)												
4-BROMOFLUOROBENZENE (sur.)	%	78	4377082	84	104	83	101	77	101	78		4373970
D10-ETHYLBENZENE (sur.)	%	90	4377082	79	105	87	86	62	92	84		4373970
D4-1,2-DICHLOROETHANE (sur.)	%	96	4377082	96	108	97	97	98	96	87		4373970
D8-TOLUENE (sur.)	%	100	4377082	96	110	82	118	73	102	92		4373970

RDL = Reportable Detection Limit
(1) - Matrix Spike outside acceptance criteria (10% of analytes failure allowed)

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X97257		X97272		X97274		X97291		
Sampling Date		2010/10/20 09:30		2010/10/20 10:25		2010/10/20 10:45		2010/10/21 15:00		
COC#		F111803		F111804		F111804		F111805		
	Units	**G-39-06**	**QC Batch**	**G-79-02**	**QC Batch**	**G-78-03**	**QC Batch**	**G-07-02**	**RDL**	**QC Batch**
Calculated Parameters										
F1 (C6-C10) - BTEX	mg/kg	<10	4373571	<10	4373571	<10	4381613	<10	10	4373571
Volatile Hydrocarbons										
(C6-C10)	mg/kg	<10	4378490	<10	4378342	<10 (1)	4393191	<10	10	4381628
Volatiles										
Chloromethane	mg/kg	<0.1	4373970	<0.1	4377082	<0.1 (1)	4389803	<0.1	0.1	4378805
Vinyl chloride	mg/kg	<0.06	4373970	<0.06	4377082	<0.06 (1)	4389803	<0.06	0.06	4378805
Bromomethane	mg/kg	<0.3	4373970	<0.3	4377082	<0.3 (1)	4389803	<0.3	0.3	4378805
Chloroethane	mg/kg	<0.1	4373970	<0.1	4377082	<0.1 (1)	4389803	<0.1	0.1	4378805
Trichlorofluoromethane	mg/kg	<0.2	4373970	<0.2	4377082	<0.2 (1)	4389803	<0.2	0.2	4378805
1,1-dichloroethene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Dichloromethane	mg/kg	<0.1	4373970	<0.1	4377082	<0.1 (1)	4389803	<0.1	0.1	4378805
trans-1,2-dichloroethene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
1,1-dichloroethane	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
cis-1,2-dichloroethene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Chloroform	mg/kg	<0.05	4373970	<0.05	4377082	<0.05 (1)	4389803	<0.05	0.05	4378805
1,1,1-trichloroethane	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
1,2-dichloroethane	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Carbon tetrachloride	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Benzene	mg/kg	<0.005	4373970	<0.005	4377082	<0.005 (1)	4389803	<0.005	0.005	4378805
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4373970	<0.1	4377082	<0.1 (1)	4389803	<0.1	0.1	4378805
1,2-dichloropropane	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Trichloroethene	mg/kg	<0.01	4373970	<0.01	4377082	<0.01 (1)	4389803	<0.01	0.01	4378805
Bromodichloromethane	mg/kg	<0.05	4373970	<0.05	4377082	<0.05 (1)	4389803	<0.05	0.05	4378805
cis-1,3-dichloropropene	mg/kg	<0.05	4373970	<0.05	4377082	<0.05 (1)	4389803	<0.05	0.05	4378805
trans-1,3-dichloropropene	mg/kg	<0.05	4373970	<0.05	4377082	<0.05 (1)	4389803	<0.05	0.05	4378805
1,1,2-trichloroethane	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Toluene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Chlorodibromomethane	mg/kg	<0.05	4373970	<0.05	4377082	<0.05 (1)	4389803	<0.05	0.05	4378805
Dibromoethane	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Tetrachloroethene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Chlorobenzene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
1,1,1,2-tetrachloroethane	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Ethylbenzene	mg/kg	<0.01	4373970	<0.01	4377082	<0.01 (1)	4389803	<0.01	0.01	4378805
m & p-Xylene	mg/kg	<0.1	4373970	<0.1	4377082	<0.1 (1)	4389803	<0.1	0.1	4378805

RDL = Reportable Detection Limit
(1) - Sample extracted past recommended hold time (7 days) - Pot. Low bias

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X97257		X97272		X97274		X97291		
Sampling Date		2010/10/20 09:30		2010/10/20 10:25		2010/10/20 10:45		2010/10/21 15:00		
COC#		F111803		F111804		F111804		F111805		
	Units	**G-39-06**	**QC Batch**	**G-79-02**	**QC Batch**	**G-78-03**	**QC Batch**	**G-07-02**	**RDL**	**QC Batch**
Bromoform	mg/kg	<0.05	4373970	<0.05	4377082	<0.05 (1)	4389803	<0.05	0.05	4378805
Styrene	mg/kg	<0.1	4373970	<0.1	4377082	<0.1 (1)	4389803	<0.1	0.1	4378805
o-Xylene	mg/kg	<0.1	4373970	<0.1	4377082	<0.1 (1)	4389803	<0.1	0.1	4378805
Xylenes (Total)	mg/kg	<0.1	4373970	<0.1	4377082	<0.1	4389803	<0.1	0.1	4378805
1,1,2,2-tetrachloroethane	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
1,2-dichlorobenzene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
1,3-dichlorobenzene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
1,4-dichlorobenzene	mg/kg	<0.03	4373970	<0.03	4377082	<0.03 (1)	4389803	<0.03	0.03	4378805
Surrogate Recovery (%)										
4-BROMOFLUOROBENZENE (sur.)	%	94	4373970	91	4377082	97	4389803	91		4378805
D10-ETHYLBENZENE (sur.)	%	102	4373970	103	4377082	98	4389803	105		4378805
D4-1,2-DICHLOROETHANE (sur.)	%	102	4373970	108	4377082	106	4389803	111		4378805
D8-TOLUENE (sur.)	%	100	4373970	123	4377082	101	4389803	94		4378805

RDL = Reportable Detection Limit
(1) - Sample extracted past recommended hold time (7 days) - Pot. Low bias

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X97292		X97293	X97294	X97297	X97298		
Sampling Date		2010/10/21 15:15		2010/10/21 15:30	2010/10/21 15:45	2010/10/21 16:30	2010/10/21 16:45		
COC#		F111805		F111805	F111805	F111805	F111805		
	Units	**G-07-07**	**QC Batch**	**G-26-02**	**G-26-05**	**G-09-03**	**G-09-08**	**RDL**	**QC Batch**
Calculated Parameters									
F1 (C6-C10) - BTEX	mg/kg	<10	4373571	<10	<10	51	<10	10	4373571
Volatile Hydrocarbons									
(C6-C10)	mg/kg	<10	4378490	<10	<10	51	<10	10	4378342
Volatiles									
Chloromethane	mg/kg	<0.1	4373970	<0.1	<0.1	<0.1	<0.1	0.1	4377082
Vinyl chloride	mg/kg	<0.06	4373970	<0.06	<0.06	<0.06	<0.06	0.06	4377082
Bromomethane	mg/kg	<0.3	4373970	<0.3	<0.3	<0.3	<0.3	0.3	4377082
Chloroethane	mg/kg	<0.1	4373970	<0.1	<0.1	<0.1	<0.1	0.1	4377082
Trichlorofluoromethane	mg/kg	<0.2	4373970	<0.2	<0.2	<0.2	<0.2	0.2	4377082
1,1-dichloroethene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Dichloromethane	mg/kg	<0.1	4373970	<0.1	<0.1	<0.1	<0.1	0.1	4377082
trans-1,2-dichloroethene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
1,1-dichloroethane	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
cis-1,2-dichloroethene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Chloroform	mg/kg	<0.05	4373970	<0.05	<0.05	<0.05	<0.05	0.05	4377082
1,1,1-trichloroethane	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
1,2-dichloroethane	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Carbon tetrachloride	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Benzene	mg/kg	<0.005	4373970	<0.005	<0.005	<0.005	<0.005	0.005	4377082
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4373970	<0.1	<0.1	<0.1	<0.1	0.1	4377082
1,2-dichloropropane	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Trichloroethene	mg/kg	<0.01	4373970	<0.01	<0.01	<0.01	<0.01	0.01	4377082
Bromodichloromethane	mg/kg	<0.05	4373970	<0.05	<0.05	<0.05	<0.05	0.05	4377082
cis-1,3-dichloropropene	mg/kg	<0.05	4373970	<0.05	<0.05	<0.05	<0.05	0.05	4377082
trans-1,3-dichloropropene	mg/kg	<0.05	4373970	<0.05	<0.05	<0.05	<0.05	0.05	4377082
1,1,2-trichloroethane	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Toluene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Chlorodibromomethane	mg/kg	<0.05	4373970	<0.05	<0.05	<0.05	<0.05	0.05	4377082
Dibromoethane	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Tetrachloroethene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Chlorobenzene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
1,1,1,2-tetrachloroethane	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Ethylbenzene	mg/kg	<0.01	4373970	<0.01	<0.01	0.02	<0.01	0.01	4377082
m & p-Xylene	mg/kg	<0.1	4373970	<0.1	<0.1	<0.1	<0.1	0.1	4377082
Bromoform	mg/kg	<0.05	4373970	<0.05	<0.05	<0.05	<0.05	0.05	4377082

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X97292		X97293	X97294	X97297	X97298		
Sampling Date		2010/10/21 15:15		2010/10/21 15:30	2010/10/21 15:45	2010/10/21 16:30	2010/10/21 16:45		
COC#		F111805		F111805	F111805	F111805	F111805		
	Units	**G-07-07**	**QC Batch**	**G-26-02**	**G-26-05**	**G-09-03**	**G-09-08**	**RDL**	**QC Batch**
Styrene	mg/kg	<0.1	4373970	<0.1	<0.1	<0.1	<0.1	0.1	4377082
o-Xylene	mg/kg	<0.1	4373970	<0.1	<0.1	<0.1	<0.1	0.1	4377082
Xylenes (Total)	mg/kg	<0.1	4373970	<0.1	<0.1	<0.1	<0.1	0.1	4377082
1,1,2,2-tetrachloroethane	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
1,2-dichlorobenzene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
1,3-dichlorobenzene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
1,4-dichlorobenzene	mg/kg	<0.03	4373970	<0.03	<0.03	<0.03	<0.03	0.03	4377082
Surrogate Recovery (%)									
4-BROMOFLUOROBENZENE (sur.)	%	98	4373970	94	94	87	98		4377082
D10-ETHYLBENZENE (sur.)	%	93	4373970	80	72	93	69		4377082
D4-1,2-DICHLOROETHANE (sur.)	%	92	4373970	85	91	70	87		4377082
D8-TOLUENE (sur.)	%	102	4373970	84	101	88	78		4377082

RDL = Reportable Detection Limit

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4373568	Moisture	2010/10/27					<0.3	%	5.9	20		
4373620	Moisture	2010/10/28					<0.3	%	4.1	20		
4373645	Moisture	2010/10/28					<0.3	%	6.3	20		
4373970	4-BROMOFLUOROBENZENE (sur.)	2010/10/28	110	70 - 130	104	70 - 130	92	%				
4373970	D10-ETHYLBENZENE (sur.)	2010/10/28	92	50 - 130	95	50 - 130	80	%				
4373970	D4-1,2-DICHLOROETHANE (sur.)	2010/10/28	100	70 - 130	95	70 - 130	90	%				
4373970	D8-TOLUENE (sur.)	2010/10/28	101	70 - 130	118	70 - 130	100	%				
4373970	Chloromethane	2010/10/28	73	40 - 150	82	40 - 150	<0.1	mg/kg	NC	40		
4373970	Vinyl chloride	2010/10/28	87	40 - 150	104	40 - 150	<0.06	mg/kg	NC	40		
4373970	Bromomethane	2010/10/28	116	40 - 150	104	40 - 150	<0.3	mg/kg	NC	40		
4373970	Chloroethane	2010/10/28	96	40 - 150	107	40 - 150	<0.1	mg/kg	NC	40		
4373970	Trichlorofluoromethane	2010/10/28	95	40 - 150	105	40 - 150	<0.2	mg/kg	NC	40		
4373970	1,1-dichloroethene	2010/10/28	84	60 - 140	97	60 - 140	<0.03	mg/kg	NC	40		
4373970	Dichloromethane	2010/10/28	92	60 - 140	116	60 - 140	<0.1	mg/kg	NC	40		
4373970	trans-1,2-dichloroethene	2010/10/28	84	60 - 140	95	60 - 140	<0.03	mg/kg	NC	40		
4373970	1,1-dichloroethane	2010/10/28	91	60 - 140	105	60 - 140	<0.03	mg/kg	NC	40		
4373970	cis-1,2-dichloroethene	2010/10/28	88	60 - 140	105	60 - 140	<0.03	mg/kg	NC	40		
4373970	Chloroform	2010/10/28	101	60 - 140	99	60 - 140	<0.05	mg/kg	NC	40		
4373970	1,1,1-trichloroethane	2010/10/28	94	60 - 140	105	60 - 140	<0.03	mg/kg	NC	40		
4373970	1,2-dichloroethane	2010/10/28	88	60 - 140	79	60 - 140	<0.03	mg/kg	NC	40		
4373970	Carbon tetrachloride	2010/10/28	96	60 - 140	91	60 - 140	<0.03	mg/kg	NC	40		
4373970	Benzene	2010/10/28	90	60 - 140	94	60 - 140	<0.005	mg/kg	NC	40		
4373970	1,2-dichloropropane	2010/10/28	90	60 - 140	85	60 - 140	<0.03	mg/kg	NC	40		
4373970	Trichloroethene	2010/10/28	89	60 - 140	85	60 - 140	<0.01	mg/kg	NC	40		
4373970	Bromodichloromethane	2010/10/28	91	60 - 140	98	60 - 140	<0.05	mg/kg	NC	40		
4373970	cis-1,3-dichloropropene	2010/10/28	67	60 - 140	80	60 - 140	<0.05	mg/kg	NC	40		
4373970	trans-1,3-dichloropropene	2010/10/28	60	60 - 140	72	60 - 140	<0.05	mg/kg	NC	40		
4373970	1,1,2-trichloroethane	2010/10/28	95	60 - 140	109	60 - 140	<0.03	mg/kg	NC	40		
4373970	Toluene	2010/10/28	94	60 - 140	107	60 - 140	<0.03	mg/kg	NC	40		
4373970	Chlorodibromomethane	2010/10/28	87	60 - 140	99	60 - 140	<0.05	mg/kg	NC	40		
4373970	Dibromoethane	2010/10/28	92	60 - 140	104	60 - 140	<0.03	mg/kg	NC	40		
4373970	Tetrachloroethene	2010/10/28	68	60 - 140	94	60 - 140	<0.03	mg/kg	NC	40		
4373970	Chlorobenzene	2010/10/28	93	60 - 140	104	60 - 140	<0.03	mg/kg	NC	40		
4373970	1,1,1,2-tetrachloroethane	2010/10/28	96	60 - 140	108	60 - 140	<0.03	mg/kg	NC	40		
4373970	Ethylbenzene	2010/10/28	104	60 - 140	117	60 - 140	<0.01	mg/kg	NC	40		
4373970	m & p-Xylene	2010/10/28	108	60 - 140	122	60 - 140	<0.1	mg/kg	NC	40		
4373970	Bromoform	2010/10/28	96	60 - 140	90	60 - 140	<0.05	mg/kg	NC	40		
4373970	Styrene	2010/10/28	110	60 - 140	123	60 - 140	<0.1	mg/kg	NC	40		
4373970	o-Xylene	2010/10/28	100	60 - 140	113	60 - 140	<0.1	mg/kg	NC	40		
4373970	1,1,2,2-tetrachloroethane	2010/10/28	103	60 - 140	82	60 - 140	<0.03	mg/kg	NC	40		

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4373970	1,2-dichlorobenzene	2010/10/28	86	60 - 140	84	60 - 140	<0.03	mg/kg	NC	40		
4373970	1,3-dichlorobenzene	2010/10/28	79	60 - 140	81	60 - 140	<0.03	mg/kg	NC	40		
4373970	1,4-dichlorobenzene	2010/10/28	81	60 - 140	82	60 - 140	<0.03	mg/kg	NC	40		
4373970	Methyl-tert-butylether(MTBE)	2010/10/28					<0.1	mg/kg				
4373970	Xylenes (Total)	2010/10/28					<0.1	mg/kg	NC	40		
4373977	4-BROMOFLUOROBENZENE (sur.)	2010/10/28	97	70 - 130	89	70 - 130	85	%			98	70 - 130
4373977	D10-ETHYLBENZENE (sur.)	2010/10/28	106	50 - 130	91	50 - 130	95	%			95	50 - 130
4373977	D4-1,2-DICHLOROETHANE (sur.)	2010/10/28	100	70 - 130	98	70 - 130	96	%			101	70 - 130
4373977	D8-TOLUENE (sur.)	2010/10/28	96	70 - 130	95	70 - 130	98	%			100	70 - 130
4373977	Benzene	2010/10/28	109	60 - 140	104	60 - 140	<0.005	mg/kg	NC	40		
4373977	Toluene	2010/10/28	97	60 - 140	90	60 - 140	<0.02	mg/kg	NC	40		
4373977	Ethylbenzene	2010/10/28	119	60 - 140	111	60 - 140	<0.01	mg/kg	NC	40		
4373977	m & p-Xylene	2010/10/28	119	60 - 140	109	60 - 140	<0.04	mg/kg	NC	40		
4373977	o-Xylene	2010/10/28	125	60 - 140	115	60 - 140	<0.04	mg/kg	NC	40		
4373977	(C6-C10)	2010/10/28					<10	mg/kg			103	60 - 140
4373977	Methyl-tert-butylether(MTBE)	2010/10/28					<0.1	mg/kg				
4373977	Styrene	2010/10/28					<0.03	mg/kg	NC	40		
4373977	Xylenes (Total)	2010/10/28					<0.04	mg/kg	NC	40		
4374949	4-BROMOFLUOROBENZENE (sur.)	2010/10/27	97	70 - 130	97	70 - 130	97	%			103	70 - 130
4374949	D10-ETHYLBENZENE (sur.)	2010/10/27	97	50 - 130	93	50 - 130	95	%			96	50 - 130
4374949	D4-1,2-DICHLOROETHANE (sur.)	2010/10/27	98	70 - 130	101	70 - 130	101	%			96	70 - 130
4374949	D8-TOLUENE (sur.)	2010/10/27	99	70 - 130	97	70 - 130	98	%			104	70 - 130
4374949	Benzene	2010/10/27	90	60 - 140	113	60 - 140	<0.005	mg/kg	NC	40		
4374949	Toluene	2010/10/27	86	60 - 140	108	60 - 140	<0.02	mg/kg	NC	40		
4374949	Ethylbenzene	2010/10/27	92	60 - 140	116	60 - 140	<0.01	mg/kg	NC	40		
4374949	m & p-Xylene	2010/10/27	97	60 - 140	111	60 - 140	<0.04	mg/kg	NC	40		
4374949	o-Xylene	2010/10/27	93	60 - 140	114	60 - 140	<0.04	mg/kg	NC	40		
4374949	(C6-C10)	2010/10/27					<10	mg/kg			113	60 - 140
4374949	Methyl-tert-butylether(MTBE)	2010/10/27					<0.1	mg/kg				
4374949	Styrene	2010/10/27					<0.03	mg/kg	NC	40		
4374949	Xylenes (Total)	2010/10/27					<0.04	mg/kg	NC	40		
4375002	O-TERPHENYL (sur.)	2010/10/27	97	50 - 130	91	50 - 130	95	%				
4375002	F2 (C10-C16 Hydrocarbons)	2010/10/27	95	50 - 130	95	80 - 120	<10	mg/kg	0.3	40		
4375002	F3 (C16-C34 Hydrocarbons)	2010/10/27	97	50 - 130	99	80 - 120	<10	mg/kg	5.1	40		
4375002	F4 (C34-C50 Hydrocarbons)	2010/10/27	97	50 - 130	97	80 - 120	<10	mg/kg	NC	40		
4375002	Reached Baseline at C50	2010/10/27							NC	50		
4375523	Total Arsenic (As)	2010/10/27	97	75 - 125	92	75 - 125	<0.2	mg/kg	3.0	30	87	70 - 130
4375523	Total Beryllium (Be)	2010/10/27	103	75 - 125	91	75 - 125	<0.1	mg/kg	NC	30		
4375523	Total Cadmium (Cd)	2010/10/27	103	75 - 125	97	75 - 125	<0.05	mg/kg	NC	30	93	70 - 130
4375523	Total Chromium (Cr)	2010/10/27	100	75 - 125	90	75 - 125	<1	mg/kg	1.5	30	91	70 - 130

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4375523	Total Cobalt (Co)	2010/10/27	91	75 - 125	89	75 - 125	<0.3	mg/kg	2.0	30	85	70 - 130
4375523	Total Copper (Cu)	2010/10/27	92	75 - 125	93	75 - 125	<0.5	mg/kg	2.2	30	81	70 - 130
4375523	Total Lead (Pb)	2010/10/27	101	75 - 125	96	75 - 125	<0.1	mg/kg	8.9	35	96	70 - 130
4375523	Total Lithium (Li)	2010/10/27	106	75 - 125	93	75 - 125	<5	mg/kg	NC	30		
4375523	Total Mercury (Hg)	2010/10/27	100	75 - 125	96	75 - 125	<0.05	mg/kg	NC	35		
4375523	Total Nickel (Ni)	2010/10/27	93	75 - 125	90	75 - 125	<0.8	mg/kg	1.8	30	86	70 - 130
4375523	Total Selenium (Se)	2010/10/27	98	75 - 125	96	75 - 125	<0.5	mg/kg	NC	30		
4375523	Total Uranium (U)	2010/10/27	99	75 - 125	93	75 - 125	<0.05	mg/kg	1.2	30	84	70 - 130
4375523	Total Vanadium (V)	2010/10/27	105	75 - 125	93	75 - 125	<2	mg/kg	4.0	30	93	70 - 130
4375523	Total Zinc (Zn)	2010/10/27	NC	75 - 125	94	75 - 125	<1	mg/kg	13.4	30	80	70 - 130
4375523	Total Aluminum (Al)	2010/10/27					<100	mg/kg	5.4	35	90	70 - 130
4375523	Total Antimony (Sb)	2010/10/27					<0.1	mg/kg	NC	30	91	70 - 130
4375523	Total Barium (Ba)	2010/10/27					<0.1	mg/kg	0.9	35	100	70 - 130
4375523	Total Calcium (Ca)	2010/10/27					<100	mg/kg	0.1	30	85	70 - 130
4375523	Total Iron (Fe)	2010/10/27					<100	mg/kg	1.1	30	88	70 - 130
4375523	Total Magnesium (Mg)	2010/10/27					<100	mg/kg	1.3	30	87	70 - 130
4375523	Total Manganese (Mn)	2010/10/27					<0.2	mg/kg	0.7	30	89	70 - 130
4375523	Total Molybdenum (Mo)	2010/10/27					<0.1	mg/kg	NC	35	85	70 - 130
4375523	Total Phosphorus (P)	2010/10/27					<10	mg/kg	3.0	30	87	70 - 130
4375523	Total Strontium (Sr)	2010/10/27					<0.1	mg/kg	2.4	35	87	70 - 130
4375523	Total Thallium (Tl)	2010/10/27					<0.05	mg/kg	NC	30	74	70 - 130
4375523	Total Titanium (Ti)	2010/10/27					<1	mg/kg	2.0	35	93	70 - 130
4375523	Total Bismuth (Bi)	2010/10/27					<0.1	mg/kg	NC	30		
4375523	Total Potassium (K)	2010/10/27					<100	mg/kg	2.3	35		
4375523	Total Silver (Ag)	2010/10/27					<0.05	mg/kg	NC	35		
4375523	Total Sodium (Na)	2010/10/27					<100	mg/kg	NC	35		
4375523	Total Tin (Sn)	2010/10/27					<0.1	mg/kg	NC	35		
4375523	Total Zirconium (Zr)	2010/10/27					<0.5	mg/kg	13.9	30		
4375567	Soluble (2:1) pH	2010/10/28			102	96 - 104			0.1	20		
4375691	Total Arsenic (As)	2010/10/28	95	75 - 125	97	75 - 125	<0.2	mg/kg	13.9	30	91	70 - 130
4375691	Total Beryllium (Be)	2010/10/28	103	75 - 125	93	75 - 125	<0.1	mg/kg	NC	30		
4375691	Total Cadmium (Cd)	2010/10/28	100	75 - 125	98	75 - 125	<0.05	mg/kg	NC	30	91	70 - 130
4375691	Total Chromium (Cr)	2010/10/28	96	75 - 125	93	75 - 125	<1	mg/kg	1.1	30	91	70 - 130
4375691	Total Cobalt (Co)	2010/10/28	90	75 - 125	94	75 - 125	<0.3	mg/kg	1.4	30	89	70 - 130
4375691	Total Copper (Cu)	2010/10/28	89	75 - 125	96	75 - 125	<0.5	mg/kg	0.7	30	83	70 - 130
4375691	Total Lead (Pb)	2010/10/28	97	75 - 125	101	75 - 125	<0.1	mg/kg	2.5	35	99	70 - 130
4375691	Total Lithium (Li)	2010/10/28	103	75 - 125	96	75 - 125	<5	mg/kg	NC	30		
4375691	Total Mercury (Hg)	2010/10/28	96	75 - 125	96	75 - 125	<0.05	mg/kg	NC	35		
4375691	Total Nickel (Ni)	2010/10/28	89	75 - 125	93	75 - 125	<0.8	mg/kg	0.6	30	90	70 - 130
4375691	Total Selenium (Se)	2010/10/28	96	75 - 125	98	75 - 125	<0.5	mg/kg	NC	30		

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4375691	Total Uranium (U)	2010/10/28	96	75 - 125	96	75 - 125	<0.05	mg/kg	4.8	30	91	70 - 130
4375691	Total Vanadium (V)	2010/10/28	NC	75 - 125	97	75 - 125	<2	mg/kg	0.4	30	95	70 - 130
4375691	Total Zinc (Zn)	2010/10/28	NC	75 - 125	95	75 - 125	<1	mg/kg	1.4	30	82	70 - 130
4375691	Total Aluminum (Al)	2010/10/28					<100	mg/kg	1.0	35	94	70 - 130
4375691	Total Antimony (Sb)	2010/10/28					<0.1	mg/kg	NC	30	91	70 - 130
4375691	Total Barium (Ba)	2010/10/28					<0.1	mg/kg	1.9	35	101	70 - 130
4375691	Total Calcium (Ca)	2010/10/28					<100	mg/kg	2.4	30	90	70 - 130
4375691	Total Iron (Fe)	2010/10/28					<100	mg/kg	1.3	30	88	70 - 130
4375691	Total Magnesium (Mg)	2010/10/28					<100	mg/kg	0.9	30	90	70 - 130
4375691	Total Manganese (Mn)	2010/10/28					<0.2	mg/kg	0.2	30	92	70 - 130
4375691	Total Molybdenum (Mo)	2010/10/28					<0.1	mg/kg	NC	35	86	70 - 130
4375691	Total Phosphorus (P)	2010/10/28					<10	mg/kg	2.3	30	91	70 - 130
4375691	Total Strontium (Sr)	2010/10/28					<0.1	mg/kg	3.3	35	89	70 - 130
4375691	Total Thallium (Tl)	2010/10/28					<0.05	mg/kg	NC	30	81	70 - 130
4375691	Total Titanium (Ti)	2010/10/28					<1	mg/kg	1.1	35	96	70 - 130
4375691	Total Bismuth (Bi)	2010/10/28					<0.1	mg/kg	NC	30		
4375691	Total Potassium (K)	2010/10/28					<100	mg/kg	0.1	35		
4375691	Total Silver (Ag)	2010/10/28					<0.05	mg/kg	NC	35		
4375691	Total Sodium (Na)	2010/10/28					<100	mg/kg	NC	35		
4375691	Total Tin (Sn)	2010/10/28					<0.1	mg/kg	NC	35		
4375691	Total Zirconium (Zr)	2010/10/28					<0.5	mg/kg	5.1	30		
4375725	Soluble (2:1) pH	2010/10/28			102	96 - 104			0.7	20		
4375831	Total Arsenic (As)	2010/10/28	92	75 - 125	93	75 - 125	0.3, RDL=0.2	mg/kg			90	70 - 130
4375831	Total Beryllium (Be)	2010/10/28	100	75 - 125	97	75 - 125	<0.1	mg/kg				
4375831	Total Cadmium (Cd)	2010/10/28	100	75 - 125	98	75 - 125	<0.05	mg/kg			93	70 - 130
4375831	Total Chromium (Cr)	2010/10/28	NC	75 - 125	92	75 - 125	<1	mg/kg			91	70 - 130
4375831	Total Cobalt (Co)	2010/10/28	92	75 - 125	91	75 - 125	<0.3	mg/kg			87	70 - 130
4375831	Total Copper (Cu)	2010/10/28	89	75 - 125	94	75 - 125	<0.5	mg/kg			81	70 - 130
4375831	Total Lead (Pb)	2010/10/28	95	75 - 125	97	75 - 125	<0.1	mg/kg			96	70 - 130
4375831	Total Lithium (Li)	2010/10/28	NC	75 - 125	97	75 - 125	<5	mg/kg				
4375831	Total Mercury (Hg)	2010/10/28	97	75 - 125	92	75 - 125	<0.05	mg/kg				
4375831	Total Nickel (Ni)	2010/10/28	NC	75 - 125	91	75 - 125	<0.8	mg/kg			87	70 - 130
4375831	Total Selenium (Se)	2010/10/28	93	75 - 125	99	75 - 125	<0.5	mg/kg				
4375831	Total Uranium (U)	2010/10/28	98	75 - 125	95	75 - 125	<0.05	mg/kg			82	70 - 130
4375831	Total Vanadium (V)	2010/10/28	NC	75 - 125	94	75 - 125	<2	mg/kg			94	70 - 130
4375831	Total Zinc (Zn)	2010/10/28	NC	75 - 125	93	75 - 125	<1	mg/kg			81	70 - 130
4375831	Total Aluminum (Al)	2010/10/28					<100	mg/kg			97	70 - 130
4375831	Total Antimony (Sb)	2010/10/28					<0.1	mg/kg			85	70 - 130
4375831	Total Barium (Ba)	2010/10/28					<0.1	mg/kg			99	70 - 130
4375831	Total Calcium (Ca)	2010/10/28					<100	mg/kg			90	70 - 130

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4375831	Total Iron (Fe)	2010/10/28					<100	mg/kg			87	70 - 130
4375831	Total Magnesium (Mg)	2010/10/28					<100	mg/kg			95	70 - 130
4375831	Total Manganese (Mn)	2010/10/28					<0.2	mg/kg			90	70 - 130
4375831	Total Molybdenum (Mo)	2010/10/28					<0.1	mg/kg			85	70 - 130
4375831	Total Phosphorus (P)	2010/10/28					<10	mg/kg			92	70 - 130
4375831	Total Strontium (Sr)	2010/10/28					<0.1	mg/kg			89	70 - 130
4375831	Total Thallium (Tl)	2010/10/28					<0.05	mg/kg			74	70 - 130
4375831	Total Titanium (Ti)	2010/10/28					<1	mg/kg			94	70 - 130
4375831	Total Bismuth (Bi)	2010/10/28					<0.1	mg/kg				
4375831	Total Potassium (K)	2010/10/28					<100	mg/kg	0.4	35		
4375831	Total Silver (Ag)	2010/10/28					<0.05	mg/kg				
4375831	Total Sodium (Na)	2010/10/28					<100	mg/kg				
4375831	Total Tin (Sn)	2010/10/28					<0.1	mg/kg				
4375831	Total Zirconium (Zr)	2010/10/28					<0.5	mg/kg				
4375833	Soluble (2:1) pH	2010/10/28			102	96 - 104			0.5	20		
4377082	4-BROMOFLUOROBENZENE (sur.)	2010/10/28	119	70 - 130	85	70 - 130	77	%				
4377082	D10-ETHYLBENZENE (sur.)	2010/10/28	124	50 - 130	76	50 - 130	76	%				
4377082	D4-1,2-DICHLOROETHANE (sur.)	2010/10/28	92	70 - 130	96	70 - 130	94	%				
4377082	D8-TOLUENE (sur.)	2010/10/28	127	70 - 130	93	70 - 130	93	%				
4377082	Chloromethane	2010/10/28	101	40 - 150	76	40 - 150	<0.1	mg/kg	NC	40		
4377082	Vinyl chloride	2010/10/28	121	40 - 150	88	40 - 150	<0.06	mg/kg	NC	40		
4377082	Bromomethane	2010/10/28	140	40 - 150	91	40 - 150	<0.3	mg/kg	NC	40		
4377082	Chloroethane	2010/10/28	139	40 - 150	92	40 - 150	<0.1	mg/kg	NC	40		
4377082	Trichlorofluoromethane	2010/10/28	137	40 - 150	92	40 - 150	<0.2	mg/kg	NC	40		
4377082	1,1-dichloroethene	2010/10/28	124	60 - 140	88	60 - 140	<0.03	mg/kg	NC	40		
4377082	Dichloromethane	2010/10/28	130	60 - 140	95	60 - 140	<0.1	mg/kg	NC	40		
4377082	trans-1,2-dichloroethene	2010/10/28	121	60 - 140	87	60 - 140	<0.03	mg/kg	NC	40		
4377082	1,1-dichloroethane	2010/10/28	104	60 - 140	96	60 - 140	<0.03	mg/kg	NC	40		
4377082	cis-1,2-dichloroethene	2010/10/28	103	60 - 140	95	60 - 140	<0.03	mg/kg	NC	40		
4377082	Chloroform	2010/10/28	96	60 - 140	91	60 - 140	<0.05	mg/kg	NC	40		
4377082	1,1,1-trichloroethane	2010/10/28	108	60 - 140	95	60 - 140	<0.03	mg/kg	NC	40		
4377082	1,2-dichloroethane	2010/10/28	87	60 - 140	101	60 - 140	<0.03	mg/kg	NC	40		
4377082	Carbon tetrachloride	2010/10/28	106	60 - 140	98	60 - 140	<0.03	mg/kg	NC	40		
4377082	Benzene	2010/10/28	93	60 - 140	107	60 - 140	<0.005	mg/kg	NC	40		
4377082	1,2-dichloropropane	2010/10/28	120	60 - 140	96	60 - 140	<0.03	mg/kg	NC	40		
4377082	Trichloroethene	2010/10/28	123	60 - 140	94	60 - 140	<0.01	mg/kg	NC	40		
4377082	Bromodichloromethane	2010/10/28	122	60 - 140	93	60 - 140	<0.05	mg/kg	NC	40		
4377082	cis-1,3-dichloropropene	2010/10/28	107	60 - 140	81	60 - 140	<0.05	mg/kg	NC	40		
4377082	trans-1,3-dichloropropene	2010/10/28	97	60 - 140	68	60 - 140	<0.05	mg/kg	NC	40		
4377082	1,1,2-trichloroethane	2010/10/28	126	60 - 140	91	60 - 140	<0.03	mg/kg	NC	40		

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4377082	Toluene	2010/10/28	131	60 - 140	92	60 - 140	<0.03	mg/kg	NC	40		
4377082	Chlorodibromomethane	2010/10/28	119	60 - 140	84	60 - 140	<0.05	mg/kg	NC	40		
4377082	Dibromoethane	2010/10/28	123	60 - 140	88	60 - 140	<0.03	mg/kg	NC	40		
4377082	Tetrachloroethene	2010/10/28	116	60 - 140	81	60 - 140	<0.03	mg/kg	NC	40		
4377082	Chlorobenzene	2010/10/28	126	60 - 140	90	60 - 140	<0.03	mg/kg	NC	40		
4377082	1,1,1,2-tetrachloroethane	2010/10/28	130	60 - 140	92	60 - 140	<0.03	mg/kg	NC	40		
4377082	Ethylbenzene	2010/10/28	143 (1)	60 - 140	99	60 - 140	<0.01	mg/kg	NC	40		
4377082	m & p-Xylene	2010/10/28	140	60 - 140	104	60 - 140	<0.1	mg/kg	NC	40		
4377082	Bromoform	2010/10/28	127	60 - 140	92	60 - 140	<0.05	mg/kg	NC	40		
4377082	Styrene	2010/10/28	151 (1)	60 - 140	110	60 - 140	<0.1	mg/kg	NC	40		
4377082	o-Xylene	2010/10/28	142 (1)	60 - 140	100	60 - 140	<0.1	mg/kg	NC	40		
4377082	1,1,2,2-tetrachloroethane	2010/10/28	112	60 - 140	114	60 - 140	<0.03	mg/kg	NC	40		
4377082	1,2-dichlorobenzene	2010/10/28	117	60 - 140	114	60 - 140	<0.03	mg/kg	NC	40		
4377082	1,3-dichlorobenzene	2010/10/28	90	60 - 140	107	60 - 140	<0.03	mg/kg	NC	40		
4377082	1,4-dichlorobenzene	2010/10/28	92	60 - 140	112	60 - 140	<0.03	mg/kg	NC	40		
4377082	Methyl-tert-butylether(MTBE)	2010/10/28					<0.1	mg/kg	NC	40		
4377082	Xylenes (Total)	2010/10/28					<0.1	mg/kg	NC	40		
4378342	(C6-C10)	2010/10/28					<10	mg/kg	NC	50	112	60 - 140
4378445	Hexabromobiphenyl (sur.)	2010/10/29			102	60 - 130	113	%				
4378445	Aroclor 1254	2010/11/02			96	70 - 110	<0.03	mg/kg	NC	N/A		
4378445	Aroclor 1242	2010/11/02					<0.03	mg/kg	NC	N/A		
4378445	Aroclor 1248	2010/11/02					<0.03	mg/kg	NC	N/A		
4378445	Aroclor 1260	2010/11/02					<0.03	mg/kg	NC	N/A		
4378445	Total PCB	2010/11/02					<0.03	mg/kg	NC	N/A		
4378490	(C6-C10)	2010/10/28					<10	mg/kg			74	60 - 140
4378805	4-BROMOFLUOROBENZENE (sur.)	2010/10/30	108	70 - 130	88	70 - 130	104	%				
4378805	D10-ETHYLBENZENE (sur.)	2010/10/30	108	50 - 130	72	50 - 130	106	%				
4378805	D4-1,2-DICHLOROETHANE (sur.)	2010/10/30	111	70 - 130	98	70 - 130	112	%				
4378805	D8-TOLUENE (sur.)	2010/10/30	103	70 - 130	80	70 - 130	93	%				
4378805	Chloromethane	2010/10/29	127	40 - 150	72	40 - 150	<0.1	mg/kg	NC	40		
4378805	Vinyl chloride	2010/10/29	116	40 - 150	82	40 - 150	<0.06	mg/kg	NC	40		
4378805	Bromomethane	2010/10/29	102	40 - 150	82	40 - 150	<0.3	mg/kg	NC	40		
4378805	Chloroethane	2010/10/29	143	40 - 150	89	40 - 150	<0.1	mg/kg	NC	40		
4378805	Trichlorofluoromethane	2010/10/29	140	40 - 150	90	40 - 150	<0.2	mg/kg	NC	40		
4378805	1,1-dichloroethene	2010/10/29	128	60 - 140	98	60 - 140	<0.03	mg/kg	NC	40		
4378805	Dichloromethane	2010/10/29	114	60 - 140	101	60 - 140	<0.1	mg/kg	NC	40		
4378805	trans-1,2-dichloroethene	2010/10/29	123	60 - 140	90	60 - 140	<0.03	mg/kg	NC	40		
4378805	1,1-dichloroethane	2010/10/29	107	60 - 140	97	60 - 140	<0.03	mg/kg	NC	40		
4378805	cis-1,2-dichloroethene	2010/10/29	130	60 - 140	93	60 - 140	<0.03	mg/kg	NC	40		
4378805	Chloroform	2010/10/29	110	60 - 140	79	60 - 140	<0.05	mg/kg	NC	40		

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4378805	1,1,1-trichloroethane	2010/10/29	123	60 - 140	97	60 - 140	<0.03	mg/kg	NC	40		
4378805	1,2-dichloroethane	2010/10/29	104	60 - 140	76	60 - 140	<0.03	mg/kg	NC	40		
4378805	Carbon tetrachloride	2010/10/29	126	60 - 140	95	60 - 140	<0.03	mg/kg	NC	40		
4378805	Benzene	2010/10/29	111	60 - 140	100	60 - 140	<0.005	mg/kg	NC	40		
4378805	1,2-dichloropropane	2010/10/29	119	60 - 140	85	60 - 140	<0.03	mg/kg	NC	40		
4378805	Trichloroethene	2010/10/29	114	60 - 140	88	60 - 140	<0.01	mg/kg	NC	40		
4378805	Bromodichloromethane	2010/10/29	100	60 - 140	83	60 - 140	<0.05	mg/kg	NC	40		
4378805	cis-1,3-dichloropropene	2010/10/29	61	60 - 140	48(1, 2)	60 - 140	<0.05	mg/kg	NC	40		
4378805	trans-1,3-dichloropropene	2010/10/29	61	60 - 140	44(1, 2)	60 - 140	<0.05	mg/kg	NC	40		
4378805	1,1,2-trichloroethane	2010/10/29	131	60 - 140	93	60 - 140	<0.03	mg/kg	NC	40		
4378805	Toluene	2010/10/29	100	60 - 140	78	60 - 140	<0.03	mg/kg	NC	40		
4378805	Chlorodibromomethane	2010/10/29	124	60 - 140	86	60 - 140	<0.05	mg/kg	NC	40		
4378805	Dibromoethane	2010/10/29	111	60 - 140	89	60 - 140	<0.03	mg/kg	NC	40		
4378805	Tetrachloroethene	2010/10/29	120	60 - 140	99	60 - 140	<0.03	mg/kg	NC	40		
4378805	Chlorobenzene	2010/10/29	106	60 - 140	83	60 - 140	<0.03	mg/kg	NC	40		
4378805	1,1,1,2-tetrachloroethane	2010/10/29	110	60 - 140	84	60 - 140	<0.03	mg/kg	NC	40		
4378805	Ethylbenzene	2010/10/29	119	60 - 140	90	60 - 140	<0.01	mg/kg	NC	40		
4378805	m & p-Xylene	2010/10/29	130	60 - 140	85	60 - 140	<0.1	mg/kg	NC	40		
4378805	Bromoform	2010/10/29	112	60 - 140	87	60 - 140	<0.05	mg/kg	NC	40		
4378805	Styrene	2010/10/29	129	60 - 140	89	60 - 140	<0.1	mg/kg	NC	40		
4378805	o-Xylene	2010/10/29	123	60 - 140	82	60 - 140	<0.1	mg/kg	NC	40		
4378805	1,1,2,2-tetrachloroethane	2010/10/29	99	60 - 140	92	60 - 140	<0.03	mg/kg	NC	40		
4378805	1,2-dichlorobenzene	2010/10/29	94	60 - 140	100	60 - 140	<0.03	mg/kg	NC	40		
4378805	1,3-dichlorobenzene	2010/10/29	88	60 - 140	94	60 - 140	<0.03	mg/kg	NC	40		
4378805	1,4-dichlorobenzene	2010/10/29	100	60 - 140	95	60 - 140	<0.03	mg/kg	NC	40		
4378805	Methyl-tert-butylether(MTBE)	2010/10/29					<0.1	mg/kg	NC	40		
4378805	Xylenes (Total)	2010/10/29					<0.1	mg/kg	NC	40		
4379389	O-TERPHENYL (sur.)	2010/10/28	78	50 - 130	93	50 - 130	103	%				
4379389	F2 (C10-C16 Hydrocarbons)	2010/10/28	88	50 - 130	93	80 - 120	<10	mg/kg	NC	40		
4379389	F3 (C16-C34 Hydrocarbons)	2010/10/28	93	50 - 130	98	80 - 120	<10	mg/kg	15.1	40		
4379389	F4 (C34-C50 Hydrocarbons)	2010/10/28	92	50 - 130	90	80 - 120	<10	mg/kg	1	40		
4379389	Reached Baseline at C50	2010/10/28							NC	50		
4379716	D10-ANTHRACENE (sur.)	2010/10/29	111	60 - 130	119	60 - 130	101	%				
4379716	D12-BENZO(A)PYRENE (sur.)	2010/10/29	111	60 - 130	109	60 - 130	86	%				
4379716	D8-ACENAPHTHYLENE (sur.)	2010/10/29	118	50 - 130	118	50 - 130	102	%				
4379716	D8-NAPHTHALENE (sur.)	2010/10/29	106	50 - 130	112	50 - 130	100	%				
4379716	TERPHENYL-D14 (sur.)	2010/10/29	116	60 - 130	123	60 - 130	107	%				
4379716	Naphthalene	2010/10/29	92	40 - 130	94	40 - 130	<0.001	mg/kg	NC	50		
4379716	2-Methylnaphthalene	2010/10/29	95	40 - 130	92	40 - 130	<0.001	mg/kg	NC	50		
4379716	Acenaphthylene	2010/10/29	101	40 - 130	97	40 - 130	<0.001	mg/kg	NC(3)	50		

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4379716	Acenaphthene	2010/10/29	104	40 - 130	100	40 - 130	<0.001	mg/kg	NC(3)	50		
4379716	Fluorene	2010/10/29	104	40 - 130	97	40 - 130	<0.001	mg/kg	NC(3)	50		
4379716	Phenanthrene	2010/10/29	101	40 - 130	99	40 - 130	<0.001	mg/kg	NC(3)	50		
4379716	Anthracene	2010/10/29	98	40 - 130	102	40 - 130	<0.001	mg/kg	NC(3)	50		
4379716	Fluoranthene	2010/10/29	104	40 - 130	99	40 - 130	<0.001	mg/kg	NC	50		
4379716	Pyrene	2010/10/29	106	40 - 130	102	40 - 130	<0.001	mg/kg	20.0	50		
4379716	Benzo(a)anthracene	2010/10/29	99	40 - 130	92	40 - 130	<0.001	mg/kg	NC	50		
4379716	Chrysene	2010/10/29	94	40 - 130	98	40 - 130	<0.001	mg/kg	NC	50		
4379716	Benzo(b&j)fluoranthene	2010/10/29	115	40 - 130	96	40 - 130	<0.001	mg/kg	NC	50		
4379716	Benzo(k)fluoranthene	2010/10/29	93	40 - 130	89	40 - 130	<0.001	mg/kg	NC	50		
4379716	Benzo(a)pyrene	2010/10/29	98	40 - 130	95	40 - 130	<0.001	mg/kg	NC	50		
4379716	Indeno(1,2,3-cd)pyrene	2010/10/29	96	40 - 130	78	40 - 130	<0.002	mg/kg	NC	50		
4379716	Dibenz(a,h)anthracene	2010/10/29	96	40 - 130	80	40 - 130	<0.002	mg/kg	NC	50		
4379716	Benzo(g,h,i)perylene	2010/10/29	99	40 - 130	84	40 - 130	<0.002	mg/kg	NC	50		
4379844	Total Arsenic (As)	2010/10/29	101	75 - 125	101	75 - 125	<0.2	mg/kg			97	70 - 130
4379844	Total Beryllium (Be)	2010/10/29	100	75 - 125	99	75 - 125	<0.1	mg/kg				
4379844	Total Cadmium (Cd)	2010/10/29	103	75 - 125	100	75 - 125	<0.05	mg/kg			94	70 - 130
4379844	Total Chromium (Cr)	2010/10/29	98	75 - 125	97	75 - 125	<1	mg/kg			102	70 - 130
4379844	Total Cobalt (Co)	2010/10/29	NC	75 - 125	96	75 - 125	<0.3	mg/kg			93	70 - 130
4379844	Total Copper (Cu)	2010/10/29	103	75 - 125	101	75 - 125	<0.5	mg/kg	0.4	30	89	70 - 130
4379844	Total Lead (Pb)	2010/10/29	102	75 - 125	104	75 - 125	<0.1	mg/kg			109	70 - 130
4379844	Total Lithium (Li)	2010/10/29	97	75 - 125	98	75 - 125	<5	mg/kg				
4379844	Total Mercury (Hg)	2010/10/29	100	75 - 125	106	75 - 125	<0.05	mg/kg				
4379844	Total Nickel (Ni)	2010/10/29	NC	75 - 125	97	75 - 125	<0.8	mg/kg			92	70 - 130
4379844	Total Selenium (Se)	2010/10/29	105	75 - 125	108	75 - 125	<0.5	mg/kg				
4379844	Total Uranium (U)	2010/10/29	102	75 - 125	103	75 - 125	<0.05	mg/kg			96	70 - 130
4379844	Total Vanadium (V)	2010/10/29	NC	75 - 125	98	75 - 125	<2	mg/kg			102	70 - 130
4379844	Total Zinc (Zn)	2010/10/29	NC	75 - 125	100	75 - 125	<1	mg/kg			88	70 - 130
4379844	Total Aluminum (Al)	2010/10/29					<100	mg/kg			94	70 - 130
4379844	Total Antimony (Sb)	2010/10/29					<0.1	mg/kg			108	70 - 130
4379844	Total Barium (Ba)	2010/10/29					<0.1	mg/kg			109	70 - 130
4379844	Total Calcium (Ca)	2010/10/29					<100	mg/kg			95	70 - 130
4379844	Total Iron (Fe)	2010/10/29					<100	mg/kg			97	70 - 130
4379844	Total Magnesium (Mg)	2010/10/29					<100	mg/kg			90	70 - 130
4379844	Total Manganese (Mn)	2010/10/29					<0.2	mg/kg			97	70 - 130
4379844	Total Molybdenum (Mo)	2010/10/29					<0.1	mg/kg			89	70 - 130
4379844	Total Phosphorus (P)	2010/10/29					<10	mg/kg			97	70 - 130
4379844	Total Strontium (Sr)	2010/10/29					<0.1	mg/kg			92	70 - 130
4379844	Total Thallium (Tl)	2010/10/29					<0.05	mg/kg			90	70 - 130
4379844	Total Titanium (Ti)	2010/10/29					<1	mg/kg			103	70 - 130

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4379844	Total Bismuth (Bi)	2010/10/29					<0.1	mg/kg				
4379844	Total Potassium (K)	2010/10/29					<100	mg/kg				
4379844	Total Silver (Ag)	2010/10/29					<0.05	mg/kg				
4379844	Total Sodium (Na)	2010/10/29					<100	mg/kg				
4379844	Total Tin (Sn)	2010/10/29					<0.1	mg/kg				
4379844	Total Zirconium (Zr)	2010/10/29					<0.5	mg/kg				
4379848	Soluble (2:1) pH	2010/10/29			101	96 - 104			2.0	20		
4379855	Total Arsenic (As)	2010/10/29	99	75 - 125	99	75 - 125	0.3, RDL=0.2	mg/kg	6.2	30	92	70 - 130
4379855	Total Beryllium (Be)	2010/10/29	104	75 - 125	99	75 - 125	<0.1	mg/kg	NC	30		
4379855	Total Cadmium (Cd)	2010/10/29	102	75 - 125	100	75 - 125	<0.05	mg/kg	NC	30	93	70 - 130
4379855	Total Chromium (Cr)	2010/10/29	100	75 - 125	96	75 - 125	<1	mg/kg	1.0	30	95	70 - 130
4379855	Total Cobalt (Co)	2010/10/29	96	75 - 125	96	75 - 125	<0.3	mg/kg	3.0	30	90	70 - 130
4379855	Total Copper (Cu)	2010/10/29	95	75 - 125	100	75 - 125	<0.5	mg/kg	2.1	30	88	70 - 130
4379855	Total Lead (Pb)	2010/10/29	102	75 - 125	103	75 - 125	<0.1	mg/kg	3.6	35	102	70 - 130
4379855	Total Lithium (Li)	2010/10/29	101	75 - 125	97	75 - 125	<5	mg/kg	NC	30		
4379855	Total Mercury (Hg)	2010/10/29	103	75 - 125	99	75 - 125	<0.05	mg/kg	NC	35		
4379855	Total Nickel (Ni)	2010/10/29	100	75 - 125	97	75 - 125	<0.8	mg/kg	0.2	30	90	70 - 130
4379855	Total Selenium (Se)	2010/10/29	101	75 - 125	107	75 - 125	<0.5	mg/kg	NC	30		
4379855	Total Uranium (U)	2010/10/29	101	75 - 125	99	75 - 125	<0.05	mg/kg	0.3	30	93	70 - 130
4379855	Total Vanadium (V)	2010/10/29	104	75 - 125	96	75 - 125	<2	mg/kg	2.0	30	95	70 - 130
4379855	Total Zinc (Zn)	2010/10/29	NC	75 - 125	100	75 - 125	<1	mg/kg	0.6	30	85	70 - 130
4379855	Total Aluminum (Al)	2010/10/29					<100	mg/kg	3.9	35	90	70 - 130
4379855	Total Antimony (Sb)	2010/10/29					<0.1	mg/kg	NC	30	84	70 - 130
4379855	Total Barium (Ba)	2010/10/29					<0.1	mg/kg	0.6	35	106	70 - 130
4379855	Total Calcium (Ca)	2010/10/29					<100	mg/kg	1.6	30	93	70 - 130
4379855	Total Iron (Fe)	2010/10/29					<100	mg/kg	1.6	30	90	70 - 130
4379855	Total Magnesium (Mg)	2010/10/29					<100	mg/kg	1.3	30	90	70 - 130
4379855	Total Manganese (Mn)	2010/10/29					<0.2	mg/kg	1.9	30	94	70 - 130
4379855	Total Molybdenum (Mo)	2010/10/29					<0.1	mg/kg	NC	35	90	70 - 130
4379855	Total Phosphorus (P)	2010/10/29					<10	mg/kg	2.7	30	91	70 - 130
4379855	Total Strontium (Sr)	2010/10/29					<0.1	mg/kg	1	35	91	70 - 130
4379855	Total Thallium (Tl)	2010/10/29					<0.05	mg/kg	NC	30	87	70 - 130
4379855	Total Titanium (Ti)	2010/10/29					<1	mg/kg	3.2	35	90	70 - 130
4379855	Total Bismuth (Bi)	2010/10/29					<0.1	mg/kg	NC	30		
4379855	Total Potassium (K)	2010/10/29					<100	mg/kg	0.04	35		
4379855	Total Silver (Ag)	2010/10/29					<0.05	mg/kg	NC	35		
4379855	Total Sodium (Na)	2010/10/29					<100	mg/kg	NC	35		
4379855	Total Tin (Sn)	2010/10/29					<0.1	mg/kg	NC	35		
4379855	Total Zirconium (Zr)	2010/10/29					<0.5	mg/kg	1.2	30		
4379863	Soluble (2:1) pH	2010/10/29			102	96 - 104			1.8	20		

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4381626	Hexabromobiphenyl (sur.)	2010/11/04			95	60 - 130	102	%				
4381626	Aroclor 1254	2010/11/04			93	70 - 110	<0.03	mg/kg	NC	N/A		
4381626	Aroclor 1242	2010/11/04					<0.03	mg/kg	NC	N/A		
4381626	Aroclor 1248	2010/11/04					<0.03	mg/kg	NC	N/A		
4381626	Aroclor 1260	2010/11/04					<0.03	mg/kg	NC	N/A		
4381626	Total PCB	2010/11/04					<0.03	mg/kg	NC	N/A		
4381628	(C6-C10)	2010/10/29					<10	mg/kg	NC	50	121	60 - 140
4385879	Total Arsenic (As)	2010/11/01	110	75 - 125	103	75 - 125	<0.2	mg/kg	8.9	30	93	70 - 130
4385879	Total Beryllium (Be)	2010/11/01	106	75 - 125	103	75 - 125	<0.1	mg/kg	0.2	30		
4385879	Total Cadmium (Cd)	2010/11/01	111	75 - 125	104	75 - 125	<0.05	mg/kg	1.4	30	95	70 - 130
4385879	Total Chromium (Cr)	2010/11/01	NC	75 - 125	102	75 - 125	<1	mg/kg	4.7	30	102	70 - 130
4385879	Total Cobalt (Co)	2010/11/01	105	75 - 125	101	75 - 125	<0.3	mg/kg	2.6	30	96	70 - 130
4385879	Total Copper (Cu)	2010/11/01	NC	75 - 125	104	75 - 125	<0.5	mg/kg	5.0	30	91	70 - 130
4385879	Total Lead (Pb)	2010/11/01	113	75 - 125	104	75 - 125	<0.1	mg/kg	1.4	35	115	70 - 130
4385879	Total Lithium (Li)	2010/11/01	108	75 - 125	104	75 - 125	<5	mg/kg				
4385879	Total Mercury (Hg)	2010/11/01	96	75 - 125	102	75 - 125	<0.05	mg/kg	NC	35		
4385879	Total Nickel (Ni)	2010/11/01	NC	75 - 125	101	75 - 125	<0.8	mg/kg	3.7	30	94	70 - 130
4385879	Total Selenium (Se)	2010/11/01	108	75 - 125	105	75 - 125	<0.5	mg/kg	NC	30		
4385879	Total Uranium (U)	2010/11/01	116	75 - 125	111	75 - 125	<0.05	mg/kg			99	70 - 130
4385879	Total Vanadium (V)	2010/11/01	NC	75 - 125	104	75 - 125	<2	mg/kg	3.9	30	106	70 - 130
4385879	Total Zinc (Zn)	2010/11/01	NC	75 - 125	101	75 - 125	<1	mg/kg	5.1	30	92	70 - 130
4385879	Total Aluminum (Al)	2010/11/01					<100	mg/kg	5.5	35	101	70 - 130
4385879	Total Antimony (Sb)	2010/11/01					<0.1	mg/kg	7.0	30	93	70 - 130
4385879	Total Barium (Ba)	2010/11/01					<0.1	mg/kg	0.5	35	106	70 - 130
4385879	Total Calcium (Ca)	2010/11/01					<100	mg/kg	0.8	30	96	70 - 130
4385879	Total Iron (Fe)	2010/11/01					<100	mg/kg	2.0	30	102	70 - 130
4385879	Total Magnesium (Mg)	2010/11/01					<100	mg/kg	3.2	30	98	70 - 130
4385879	Total Manganese (Mn)	2010/11/01					<0.2	mg/kg	3.3	30	105	70 - 130
4385879	Total Molybdenum (Mo)	2010/11/01					<0.1	mg/kg	4.4	35	93	70 - 130
4385879	Total Phosphorus (P)	2010/11/01					<10	mg/kg	5.7	30	96	70 - 130
4385879	Total Strontium (Sr)	2010/11/01					<0.1	mg/kg	4.7	35	97	70 - 130
4385879	Total Thallium (Tl)	2010/11/01					<0.05	mg/kg	0.2	30	96	70 - 130
4385879	Total Titanium (Ti)	2010/11/01					<1	mg/kg	3.8	35	104	70 - 130
4385879	Total Bismuth (Bi)	2010/11/01					<0.1	mg/kg	NC	30		
4385879	Total Potassium (K)	2010/11/01					<100	mg/kg	3.7	35		
4385879	Total Silver (Ag)	2010/11/01					<0.05	mg/kg	NC	35		
4385879	Total Sodium (Na)	2010/11/01					<100	mg/kg	NC	35		
4385879	Total Tin (Sn)	2010/11/01					<0.1	mg/kg	11.3	35		
4385879	Total Zirconium (Zr)	2010/11/01					<0.5	mg/kg	6.1	30		
4385891	Soluble (2:1) pH	2010/11/01			101	96 - 104			0.3	20		

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4389803	4-BROMOFLUOROBENZENE (sur.)	2010/11/02	108	70 - 130	107	70 - 130	97	%				
4389803	D10-ETHYLBENZENE (sur.)	2010/11/02	99	50 - 130	90	50 - 130	95	%				
4389803	D4-1,2-DICHLOROETHANE (sur.)	2010/11/02	110	70 - 130	110	70 - 130	99	%				
4389803	D8-TOLUENE (sur.)	2010/11/02	98	70 - 130	99	70 - 130	100	%				
4389803	Chloromethane	2010/11/02	133	40 - 150	125	40 - 150	<0.1	mg/kg	NC(4)	40		
4389803	Vinyl chloride	2010/11/02	137	40 - 150	127	40 - 150	<0.06	mg/kg	NC(4)	40		
4389803	Bromomethane	2010/11/02	121	40 - 150	115	40 - 150	<0.3	mg/kg	NC(4)	40		
4389803	Chloroethane	2010/11/02	111	40 - 150	106	40 - 150	<0.1	mg/kg	NC(4)	40		
4389803	Trichlorofluoromethane	2010/11/02	124	40 - 150	111	40 - 150	<0.2	mg/kg	NC(4)	40		
4389803	1,1-dichloroethene	2010/11/02	96	60 - 140	92	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Dichloromethane	2010/11/02	98	60 - 140	93	60 - 140	<0.1	mg/kg	NC(4)	40		
4389803	trans-1,2-dichloroethene	2010/11/02	93	60 - 140	91	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	1,1-dichloroethane	2010/11/02	105	60 - 140	97	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	cis-1,2-dichloroethene	2010/11/02	99	60 - 140	95	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Chloroform	2010/11/02	104	60 - 140	97	60 - 140	<0.05	mg/kg	NC(4)	40		
4389803	1,1,1-trichloroethane	2010/11/02	107	60 - 140	97	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	1,2-dichloroethane	2010/11/02	106	60 - 140	98	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Carbon tetrachloride	2010/11/02	110	60 - 140	100	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Benzene	2010/11/02	102	60 - 140	97	60 - 140	<0.005	mg/kg	NC(4)	40		
4389803	1,2-dichloropropane	2010/11/02	96	60 - 140	91	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Trichloroethene	2010/11/02	98	60 - 140	95	60 - 140	<0.01	mg/kg	NC(4)	40		
4389803	Bromodichloromethane	2010/11/02	103	60 - 140	95	60 - 140	<0.05	mg/kg	NC(4)	40		
4389803	cis-1,3-dichloropropene	2010/11/02	113	60 - 140	119	60 - 140	<0.05	mg/kg	NC(4)	40		
4389803	trans-1,3-dichloropropene	2010/11/02	142(1)	60 - 140	168(1, 2)	60 - 140	<0.05	mg/kg	NC(4)	40		
4389803	1,1,2-trichloroethane	2010/11/02	95	60 - 140	93	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Toluene	2010/11/02	98	60 - 140	94	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Chlorodibromomethane	2010/11/02	106	60 - 140	102	60 - 140	<0.05	mg/kg	NC(4)	40		
4389803	Dibromoethane	2010/11/02	101	60 - 140	98	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Tetrachloroethene	2010/11/02	93	60 - 140	94	60 - 140	<0.03	mg/kg	4.5(4)	40		
4389803	Chlorobenzene	2010/11/02	105	60 - 140	103	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	1,1,1,2-tetrachloroethane	2010/11/02	105	60 - 140	100	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	Ethylbenzene	2010/11/02	114	60 - 140	109	60 - 140	<0.01	mg/kg	NC(4)	40		
4389803	m & p-Xylene	2010/11/02	109	60 - 140	104	60 - 140	<0.1	mg/kg				
4389803	Bromoform	2010/11/02	101	60 - 140	93	60 - 140	<0.05	mg/kg	NC(4)	40		
4389803	Styrene	2010/11/02	126	60 - 140	120	60 - 140	<0.1	mg/kg	NC(4)	40		
4389803	o-Xylene	2010/11/02	109	60 - 140	104	60 - 140	<0.1	mg/kg				
4389803	1,1,2,2-tetrachloroethane	2010/11/02	107	60 - 140	95	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	1,2-dichlorobenzene	2010/11/02	107	60 - 140	99	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	1,3-dichlorobenzene	2010/11/02	121	60 - 140	110	60 - 140	<0.03	mg/kg	NC(4)	40		
4389803	1,4-dichlorobenzene	2010/11/02	97	60 - 140	91	60 - 140	<0.03	mg/kg	NC(4)	40		

Maxxam Job #: B0A3598
Report Date: 2010/11/05

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE
Sampler Initials: EW

QUALITY ASSURANCE REPORT

			Matrix Spike		Spiked Blank		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	Units	Value (%)	QC Limits	% Recovery	QC Limits
4389803	Methyl-tert-butylether(MTBE)	2010/11/02					<0.1	mg/kg	NC(4)	40		
4389803	Xylenes (Total)	2010/11/02					<0.1	mg/kg	NC	40		
4393191	(C6-C10)	2010/11/02					<10	mg/kg			112	60 - 140

N/A = Not Applicable
RDL = Reportable Detection Limit
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.
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
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.
(1) - Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(2) - LCS outside acceptance criteria (10% of analytes failure allowed)
(3) - RDL raised due to sample matrix interference.
(4) - Sample extracted past recommended hold time (7 days) - Pot. Low bias

Validation Signature Page

Maxxam Job #: B0A3598

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

David Huang, BBY Scientific Specialist

==========

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 Analytics Inc

8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com

Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

PAGE 1 OF 6

BOA3598 — ANALYSIS REQUEST F111801

COMPANY NAME: AECOM	PH. #: (204) 926-9321 E-mail: Eryn.williamson@aecom.com / scott.chapman@aecom.com FAX #: (204) 284-2040
COMPANY ADDRESS: 99 Commerce Drive Winnipeg MB R3P 0Y7	CLIENT PROJECT ID: (#) 60164142 Dominion Bridge 1460 Dublin Avenue
SAMPLER NAME (PRINT): Eryn Williamson	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, PHC F1-F4	Metals	PCB	VOC
1	[illegible]G-57A-03				X		1	22/10/10	13:00	45p		X		
2	G-09A-03				X		2	22/10/10	14:00	15p	X			
3	G-09A-06				X		2	22/10/10	14:15	20p	X			
4	[illegible]G-56-01				X		1	22/10/10	13:15	30p		X		
5	G-56-04				X		1	22/10/10	13:30	20p		X		
6	G-33-05				X		2	22/10/10	8:00	30		X	X	
7	G-37-01				X		3	22/10/10	8:15	65		X	X	X
8	G-37-04				X		3	22/10/10	8:30	25		X	X	X
9	G-57-[illegible]01				X		3	22/10/10	8:45	60	X	X		
10	G-57-05				X		3	22/10/10	9:00	30	X	X		
11	G-48-01				X		3	22/10/10	9:15	45	X	X		
12	G-48-04				X		1	22/10/10	9:30	35		X		

LAB USE ONLY

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☒
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

- ☒ CCME
- ☐ CSR
- ☐ ALBERTA TIER 1
- ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.3, 11.3, 8.8 / 2.1, 3.5, 5.5, 5.4

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Eryn Williamson ERYN WILLIAMSON	DATE DD/MM/YY: 25/10/10	TIME: 11:00	RECEIVED BY:
RELINQUISHED BY:	DATE: 25/10/10	TIME: 12:00	RECEIVED BY: MRC
RELINQUISHED BY:	DATE DD/MM/YY: 26/10/10	TIME: 08:45	RECEIVED BY LABORATORY: MICHELLE CUN

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

BOA3598

ANALYSIS REQUEST F 111802

COMPANY NAME: AECOM	PH. #: (204) 908-8321 E-mail: erin.williamson@aecom.com / scott.chapman@aecom.com FAX #: (306) 284-240
COMPANY ADDRESS: 99 Commerce Drive Winnipeg MB R3P 0Y7	CLIENT PROJECT ID: (#) 60164142 Dominion Bridge 1460 Dublin Avenue
SAMPLER NAME (PRINT): Erin Williamson	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	MATRIX: SURFACE WATER	MATRIX: SOIL	MATRIX: OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	SAMPLING: TIME	SAMPLING: HEADSPACE VAPOUR	BTEX, F1-F4	metals	PCB	VOC	LAB USE ONLY
1	G-57A-01				X		1	22/10/10	12:45	25		X			
2	G-33-12				X		3	22/10/10	7:45	40		X	X		
3	G-33-02				X		3	22/10/10	7:45	40		X	X		
4	G-40-08				X		3	22/10/10	14:00	0		X	X		
5	G-40-01				X		3	22/10/10	8:45	0		X	X		
6	G-35-05				X		2	21/10/10	8:00	15		X	X		
7	G-35-01				X		2	21/10/10	8:15	30		X	X		
8	G-31-04				X		2	21/10/10	8:30	00		X	X		
9	G-31-02				X		2	21/10/10	8:45	15		X	X		
10	G-29-03				X		3	21/10/10	9:00	15		X	X	X	
11	G-29-01				X		3	21/10/10	9:15	20		X	X	X	
12	G-32-03				X		1	20/10/10	8:00	45		X			

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD	5 BUSINESS DAYS	☒
RUSH	3 BUSINESS DAYS	☐
RUSH	2 BUSINESS DAYS	☐
URGENT	1 BUSINESS DAY	☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☒ CCME
☐ CSR
☐ ALBERTA TIER 1
☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED: 2.1, 5.5, 5.4

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.3, 11.3, 8.3

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Erin Williamson Erin Williamson	DATE: DD/MM/YY 25/10/10	TIME: 11:00	RECEIVED BY:
RELINQUISHED BY:	DATE: 25/10/10	TIME: 12:00	RECEIVED BY: MR
RELINQUISHED BY:	DATE: DD/MM/YY 26/10/10	TIME: 0845	RECEIVED BY LABORATORY: MICHELLE LIN

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

B0A3598 — ANALYSIS REQUEST F111803

LAB USE ONLY

COMPANY NAME:	PH. #: (204) 928-8321
AECOM	E-mail: eryn.williamson@aecom.com / scott.chapman@aecom.com
COMPANY ADDRESS:	FAX #:
99 Commerce Drive Winnipeg MB R3P 0Y7	CLIENT PROJECT ID: (#) ~~(204) 284-1000~~ 2040 60164142 Dominion Bridge 1460 Dublin Avenue
SAMPLER NAME (PRINT):	PROJECT MANAGER:
Eryn Williamson	Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, F1-F4	Metals	PCB	VOC
1	G-32-06				X		1	20/10/10	8:15	50		X		
2	G-28-06				X		3	20/10/10	8:30	20		X	X	X
3	G-28-03				X		3	20/10/10	8:20	45		X	X	X
4	G-28-01				X		3	20/10/10	8:17	45		X	X	X
5	G-34-07				X		1	20/10/10	8:45	35		X		
6	G-34-04				X		1	20/10/10	9:00	35		X		
7	G-39-02				X		3	20/10/10	9:15	55		X	X	X
8	G-39-06				X		3	20/10/10	9:30	45		X	X	X
9	G-41-01				X		1	20/10/10	9:45	70		X		
10	G-41-05				X		1	20/10/10	10:00	30		X		
11	G-79-05				X		2	20/10/10	10:15	40		X	X	
12	G-79-12				X		2	20/10/10	10:25	45		X	X	

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☒
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS ____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

- ☑ CCME
- ☐ CSR
- ☐ ALBERTA TIER 1
- ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.3, 11.3, 8.8 / 2.1, 5.5, 5.4

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Eryn Williamson Eryn Williamson	DATE DD/MM/YY 25/10/10	TIME 11:00	RECEIVED BY:
RELINQUISHED BY:	DATE DD/MM/YY 25/10/10	TIME 12:00	RECEIVED BY: MR
RELINQUISHED BY:	DATE DD/MM/YY 26/10/10	TIME 08:45	RECEIVED BY LABORATORY: MICHELLE LIN.

COCFORM - BC - 06/06 ORIGINAL - MAXXAM

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Bo A3598 — ANALYSIS REQUEST F 111804

LAB USE ONLY

COMPANY NAME: AECOM

PH. #: (204) 928-9521
E-mail: Eryn.Williamson@aecom.com / Scott.Chapman@aecom.com
FAX #: (204) 284-2040

COMPANY ADDRESS: 99 Commerce Drive, Winnipeg MB, R3P 0Y7

CLIENT PROJECT ID: (#) 60164142 Dominion Bridge 1460 Dublin Ave

SAMPLER NAME (PRINT): Eryn Williamson

PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, F1 - F4	Metals	PCB	PAH	VOC
1	G-79-02				X		2	20/10/10	10:[illegible]8	45		X	X		X
2	G-78-06				X		3	28/10/10	10:30	20		X	X	X	X
3	G-78-03				X		3	28/10/10	10:45	25		X	X	X	
4	G-74-05				X		2	25/10/10	11:00	35		X	X		
5	G-74-02				X		2	25/10/10	11:15	10		X	X		
6	G-75-03				X		2	25/10/10	11:30	0		X	X		
7	G-75-01				X		2	25/10/10	11:45	0		X	X		
8	G-[illegible]77-04				X		2	[illegible]9/10/10	14:00	30		X	X		
9	G-76-02				X		2	19/10/10	13:00	5		X	X		
10	G-76-05				X		2	19/10/10	13:15	10		X	X		
11	G-36-01				X		1	26/10/10	12:00	50		X			
12	G-36-04				X		1	25/10/10	12:15	35		X			

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD	5 BUSINESS DAYS	☒
RUSH	3 BUSINESS DAYS	☐
RUSH	2 BUSINESS DAYS	☐
URGENT	1 BUSINESS DAY	☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☒ CCME ☐ CSR ☐ ALBERTA TIER 1 ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.3, 11.3, 8.8, 2.1, 5.5, 5.4

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Eryn Williamson Eryn Williamson	DATE: DD/MM/YY 25/10/10	TIME: 11:30	RECEIVED BY:
RELINQUISHED BY:	DATE: DD/MM/YY 25/10/10	TIME: 12:00	RECEIVED BY: MR
RELINQUISHED BY:	DATE: DD/MM/YY 26/10/10	TIME: 08:45	RECEIVED BY LABORATORY: MICHELLE LIN

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

BOA 3598 — ANALYSIS REQUEST F 111805

COMPANY NAME:	AECOM
COMPANY ADDRESS:	99 Commerce Drive Winnipeg MB R3P 0Y7
SAMPLER NAME (PRINT):	Eryn Williamson
PH. #: / E-mail: / FAX #:	(204) 928-8321 eryn.williamson@aecom.com / scott.chapman@aecom.com (204) 284-2040
CLIENT PROJECT ID: (#)	60164142 Dominion Bridge 1460 Dublin Ave
PROJECT MANAGER:	Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	MATRIX: SURFACE WATER	MATRIX: SOIL	MATRIX: OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	SAMPLING: TIME	SAMPLING: HEADSPACE VAPOUR	BTEX, F1-F4	Metals	PCB	VOC	lead	LAB USE ONLY
1	G-30-01				X		1	25/10/10	13:00	50		X				
2	G-30-05				X		1	25/10/10	13:15	40		X				
3	G-07-02				X		2	21/10/10	15:00	20	X			X	X	
4	G-07-07				X		2	21/10/10	15:15	25	X			X	X	
5	G-26-02				X		3	21/10/10	15:30	55		X	X	X		
6	G-26-05				X		3	21/10/10	15:45	60		X	X	X		
7	G-27-03				X		1	21/10/10	16:00	65		X				
8	G-27-05				X		1	21/10/10	16:15	60		X				
9	G-09-03				X		2	21/10/10	16:30	45	X			X	X	
10	G-09-08				X		2	21/10/10	16:45	15	X			X	X	
11	G-43-02				X		1	21/10/10	17:00	15		X				
12	G-43-05				X		1	21/10/10	17:15	6		X				

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD	5 BUSINESS DAYS	X
RUSH	3 BUSINESS DAYS	☐
RUSH	2 BUSINESS DAYS	☐
URGENT	1 BUSINESS DAY	☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☒ CCME
☐ CSR
☐ ALBERTA TIER 1
☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 13.2, 11.6 10.4 2.1, 5.5, 5.4 7.3, 11.3, 8.8

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Eryn Williamson ERYN WILLIAMSON	DATE: 25/10/10	TIME: 11:00	RECEIVED BY:
RELINQUISHED BY:	DATE: 25/10/10	TIME: 12:00 PM	RECEIVED BY: MR.
RELINQUISHED BY:	DATE: 26/10/10	TIME: 08:45	RECEIVED BY LABORATORY: MICHELLE LIN

MaxXam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

BOA3598 ANALYSIS REQUEST F 111806

LAB USE ONLY

COMPANY NAME: AECOM

PH. #: (204) 928-8321
E-mail: Eryn.williamson@aecom.com/
FAX #: Scott.chapman@aecom.com

COMPANY ADDRESS: 99 Commerce Drive Winnipeg MB R3P 0Y7

CLIENT PROJECT ID: (#) (204) 284-2040
60164442
Dominion Bridge
1460 Dublin Ave.

SAMPLER NAME (PRINT):

PROJECT MANAGER:

FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	MATRIX: SURFACE WATER	MATRIX: SOIL	MATRIX: OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	SAMPLING: TIME	HEADSPACE VAPOUR	metals													
1 G-42-01				X		1	21/10/10	17:30	0	X													
2 G-42-04				X		1	21/10/10	17:45	0	X													
3																							
4																							
5																							
6																							
7																							
8																							
9																							
10																							
11																							
12																							

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD 5 BUSINESS DAYS ☒
RUSH 3 BUSINESS DAYS ☐
RUSH 2 BUSINESS DAYS ☐
URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☒ CCME
☐ CSR
☐ ALBERTA TIER 1
☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.3, 11.3, 8.8
2.1, 5.5, 5.4

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER: Eryn Williamson Eryn Williams	DATE DD/MM/YY 25/10/10	TIME 11:00	RECEIVED BY:
RELINQUISHED BY:	DATE DD/MM/YY 25/10/10	TIME 12:00	RECEIVED BY: MR
RELINQUISHED BY:	DATE DD/MM/YY 26/10/10	TIME 08:45	RECEIVED BY LABORATORY: MICHELLE LIN

Your Project #: DOMINION BRIDGE 60164142
Your C.O.C. #: F111694, F111797, G018049, G018051

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/11/04

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0A3749
Received: 2010/10/26, 08:45

Sample Matrix: Soil
Samples Received: 48

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE Soil LH, VH, F1 SIM/MS	9	2010/10/27	2010/10/28	BBY8-SOP-00010/R26	EPA SW846 8260B
BTEX/MTBE Soil LH, VH, F1 SIM/MS	4	2010/10/27	2010/10/29	BBY8-SOP-00010/R26	EPA SW846 8260B
BTEX/MTBE Soil LH, VH, F1 SIM/MS	1	2010/10/31	2010/11/01	BBY8-SOP-00010/R26	EPA SW846 8260B
BTEX/MTBE Soil LH, VH, F1 SIM/MS	5	2010/11/01	2010/11/02	BBY8-SOP-00010/R26	EPA SW846 8260B
Volatile F1-BTEX	8	N/A	2010/10/28		
Volatile F1-BTEX	5	N/A	2010/10/29		
Volatile F1-BTEX	3	N/A	2010/11/02		
Volatile F1-BTEX	7	N/A	2010/11/03		
CCME Hydrocarbons (F2-F4 in soil)	15	2010/10/27	2010/10/28	BRN SOP-00342 R9.0	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil)	1	2010/10/31	2010/11/01	BRN SOP-00342 R9.0	CCME Soil Tier 1
CCME Hydrocarbons (F2-F4 in soil)	7	2010/11/01	2010/11/02	BRN SOP-00342 R9.0	CCME Soil Tier 1
Elements by ICPMS (total)	10	2010/10/28	2010/10/29	BRN SOP-00203 R5.0	Based on EPA 200.8
Elements by ICPMS (total)	22	2010/10/29	2010/10/29	BRN SOP-00203 R5.0	Based on EPA 200.8
Elements by ICPMS (total)	6	2010/11/01	2010/11/01	BRN SOP-00203 R5.0	Based on EPA 200.8
Elements by ICPMS (total)	2	2010/11/02	2010/11/02	BRN SOP-00203 R5.0	Based on EPA 200.8
Moisture	16	N/A	2010/10/28	BRN SOP-00321 R5.0	Ont MOE -E 3139
Moisture	1	N/A	2010/11/01	BRN SOP-00321 R5.0	Ont MOE -E 3139
Moisture	6	N/A	2010/11/02	BRN SOP-00321 R5.0	Ont MOE -E 3139
PAH in Soil by GC/MS Lowlevel (Extended)	3	2010/10/27	2010/10/29	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	1	2010/11/01	2010/11/04	BRN SOP-00332 R5.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc	3	N/A	2010/11/02		PAHTOT-S
Total LMW, HMW, Total PAH Calc	1	N/A	2010/11/04		PAHTOT-S
pH (2:1 DI Water Extract)	10	2010/10/28	2010/10/29	BRN SOP-00266 R6.0	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	22	2010/10/29	2010/10/30	BRN SOP-00266 R6.0	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	6	2010/11/01	2010/11/01	BRN SOP-00266 R6.0	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	2	2010/11/02	2010/11/02	BRN SOP-00266 R6.0	Carter, SSMA 16.2
CCME F1 C6-C10 in Soil by GC/FID	1	2010/10/27	2010/10/29		Based on EPA SW8260B
CCME F1 C6-C10 in Soil by GC/FID	2	2010/10/27	2010/10/30		Based on EPA SW8260B
CCME F1 C6-C10 in Soil by GC/FID	1	2010/11/01	2010/11/02		Based on EPA SW8260B
CSR VH C6-C10 in Soil by GC/FID	1	2010/10/27	2010/10/29		Based on EPA SW8260B
CSR VH C6-C10 in Soil by GC/FID	2	2010/10/27	2010/10/30		Based on EPA SW8260B
VOCs in Soil by HS GC/MS	1	2010/10/27	2010/10/29	BBY8-SOP-0009/R16	Based on EPA 8260B
VOCs in Soil by HS GC/MS	1	2010/10/27	2010/10/30	BBY8-SOP-0009/R16	Based on EPA 8260B
VOCs in Soil by HS GC/MS	1	2010/10/27	2010/10/31	BBY8-SOP-0009/R16	Based on EPA 8260B
VOCs in Soil by HS GC/MS	1	2010/11/01	2010/11/02	BBY8-SOP-0009/R16	Based on EPA 8260B
Volatile HC-BTEX	8	N/A	2010/10/28		
Volatile HC-BTEX	5	N/A	2010/10/29		
Volatile HC-BTEX	3	N/A	2010/11/02		

../2

Your Project #: DOMINION BRIDGE 60164142
Your C.O.C. #: F111694, F111797, G018049, G018051

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/11/04

CERTIFICATE OF ANALYSIS

(1) This test was performed by Maxxam Vancouver

Encryption Key

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

Kelly Janda, B.Sc, Burnaby Customer Service
Email: KJanda@maxxam.ca
Phone# (604) 638-5019

==========

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 #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X97934	X97935	X97936	X97937	X97938	X97939		
Sampling Date		2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/20		
COC Number		F111694	F111694	F111694	F111694	F111694	F111694		
	Units	**G-06-03**	**G-06-05**	**G-44-02**	**G-44-05**	**G-47-02**	**G-47-05**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	3700	<10	<10	<10	10	4379389
F3 (C16-C34 Hydrocarbons)	mg/kg	<10	31	5000	34	19	17	10	4379389
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	210	<10	15	<10	10	4379389
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	4379389
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	96	86	111	82	92	81	N/A	4379389

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X97940	X97941	X97953	X97955	X97957	X97960		
Sampling Date		2010/10/20	2010/10/20	2010/10/21	2010/10/21	2010/10/21	2010/10/21		
COC Number		F111694	F111694	F111797	F111797	F111797	F111797		
	Units	**G-65-01**	**G-65-02**	**G-10-02**	**G-11-02**	**G-12-02**	**G-51-2**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	<10	<10	<10	10	4379389
F3 (C16-C34 Hydrocarbons)	mg/kg	17	12	<10	<10	14	<10	10	4379389
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	<10	<10	<10	<10	<10	10	4379389
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	4379389
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	94	100	91	92	89	94	N/A	4379389

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X97961	X97985	X97986		X97989		
Sampling Date		2010/10/21	2010/10/22	2010/10/22		2010/10/22		
COC Number		F111797	G018049	G018049		G018049		
	Units	**G-51-8**	**G-55-02**	**G-55-06**	**QC Batch**	**G-49-01**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon								
F2 (C10-C16 Hydrocarbons)	mg/kg	27	<10	23	4379389	<10	10	4386519
F3 (C16-C34 Hydrocarbons)	mg/kg	170	10	170	4379389	19	10	4386519
F4 (C34-C50 Hydrocarbons)	mg/kg	52	<10	58	4379389	17	10	4386519
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	4379389	Yes	N/A	4386519
Surrogate Recovery (%)								
O-TERPHENYL (sur.)	%	81	93	91	4379389	86	N/A	4386519

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X98010	X98012	X98013	X98014	X98015	X98016		
Sampling Date		2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/20		
COC Number		G018051	G018051	G018051	G018051	G018051	G018051		
	Units	**G-67-02**	**G-68-02**	**DUP 5 -BH**	**DUP4 -BH**	**G-08-01**	**G-08-07**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon									
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	<10	<10	2900	45	<10	10	4389975
F3 (C16-C34 Hydrocarbons)	mg/kg	12	<10	19	3900	280	65	10	4389975
F4 (C34-C50 Hydrocarbons)	mg/kg	26	<10	<10	180	47	<10	10	4389975
Reached Baseline at C50	mg/kg	Yes	Yes	Yes	Yes	Yes	Yes	N/A	4389975
Surrogate Recovery (%)									
O-TERPHENYL (sur.)	%	86	78	94	105	86	74	N/A	4389975

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		X98017		
Sampling Date		2010/10/20		
COC Number		G018051		
	Units	**G-08-10**	**RDL**	**QC Batch**
Ext. Pet. Hydrocarbon				
F2 (C10-C16 Hydrocarbons)	mg/kg	<10	10	4386996
F3 (C16-C34 Hydrocarbons)	mg/kg	51	10	4386996
F4 (C34-C50 Hydrocarbons)	mg/kg	<10	10	4386996
Reached Baseline at C50	mg/kg	Yes	N/A	4386996
Surrogate Recovery (%)				
O-TERPHENYL (sur.)	%	78	N/A	4386996

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

PHYSICAL TESTING (SOIL)

Maxxam ID		X97934	X97935	X97936	X97937	X97938	X97939		
Sampling Date		2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/20		
COC Number		F111694	F111694	F111694	F111694	F111694	F111694		
	Units	**G-06-03**	**G-06-05**	**G-44-02**	**G-44-05**	**G-47-02**	**G-47-05**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	21	36	21	36	26	36	0.3	4376204

RDL = Reportable Detection Limit

Maxxam ID		X97940	X97941	X97953	X97955	X97957	X97960		
Sampling Date		2010/10/20	2010/10/20	2010/10/21	2010/10/21	2010/10/21	2010/10/21		
COC Number		F111694	F111694	F111797	F111797	F111797	F111797		
	Units	**G-65-01**	**G-65-02**	**G-10-02**	**G-11-02**	**G-12-02**	**G-51-2**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	30	20	21	20	26	14	0.3	4376204

RDL = Reportable Detection Limit

Maxxam ID		X97961	X97985	X97986	X97989		X98010	X98012		
Sampling Date		2010/10/21	2010/10/22	2010/10/22	2010/10/22		2010/10/20	2010/10/20		
COC Number		F111797	G018049	G018049	G018049		G018051	G018051		
	Units	**G-51-8**	**G-55-02**	**G-55-06**	**G-49-01**	**QC Batch**	**G-67-02**	**G-68-02**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	36	22	37	23	4376204	21	20	0.3	4387771

RDL = Reportable Detection Limit

Maxxam ID		X98013	X98014	X98015	X98016		X98017		
Sampling Date		2010/10/20	2010/10/20	2010/10/20	2010/10/20		2010/10/20		
COC Number		G018051	G018051	G018051	G018051		G018051		
	Units	**DUP 5 -BH**	**DUP4 -BH**	**G-08-01**	**G-08-07**	**QC Batch**	**G-08-10**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	22	19	31	39	4387771	40	0.3	4386289

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X98010	X98012	X98013	X98014	X98016		
Sampling Date		2010/10/20	2010/10/20	2010/10/20	2010/10/20	2010/10/20		
COC Number		G018051	G018051	G018051	G018051	G018051		
	Units	**G-67-02**	**G-68-02**	**DUP 5 -BH**	**DUP4 -BH**	**G-08-07**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	56	<10	10	4383320
Volatiles								
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	4389781
Benzene	mg/kg	<0.005	<0.005	<0.005	0.008	<0.005	0.005	4389781
Toluene	mg/kg	<0.02	<0.02	<0.02	0.03	<0.02	0.02	4389781
Ethylbenzene	mg/kg	<0.01	<0.01	<0.01	0.02	<0.01	0.01	4389781
m & p-Xylene	mg/kg	<0.04	<0.04	<0.04	0.11	<0.04	0.04	4389781
o-Xylene	mg/kg	<0.04	<0.04	<0.04	0.06	<0.04	0.04	4389781
Styrene	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4389781
Xylenes (Total)	mg/kg	<0.04	<0.04	<0.04	0.17	<0.04	0.04	4389781
(C6-C10)	mg/kg	<10	<10	<10	56	<10	10	4389781
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	94	96	105	105	96	N/A	4389781
D10-ETHYLBENZENE (sur.)	%	105	102	105	106	107	N/A	4389781
D4-1,2-DICHLOROETHANE (sur.)	%	105	106	105	106	106	N/A	4389781
D8-TOLUENE (sur.)	%	98	99	98	97	99	N/A	4389781

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME BTEX/F1 BY HS IN SOIL (SOIL)

Maxxam ID		X98017		
Sampling Date		2010/10/20		
COC Number		G018051		
	Units	**G-08-10**	**RDL**	**QC Batch**
Calculated Parameters				
F1 (C6-C10) - BTEX	mg/kg	<10	10	4383320
Volatiles				
Methyl-tert-butylether (MTBE)	mg/kg	<0.1 (1)	0.1	4387998
Benzene	mg/kg	<0.005 (1)	0.005	4387998
Toluene	mg/kg	<0.02 (1)	0.02	4387998
Ethylbenzene	mg/kg	<0.01 (1)	0.01	4387998
m & p-Xylene	mg/kg	<0.04 (1)	0.04	4387998
o-Xylene	mg/kg	<0.04 (1)	0.04	4387998
Styrene	mg/kg	<0.03 (1)	0.03	4387998
Xylenes (Total)	mg/kg	<0.04	0.04	4387998
(C6-C10)	mg/kg	<10 (1)	10	4387998
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	102	N/A	4387998
D10-ETHYLBENZENE (sur.)	%	89	N/A	4387998
D4-1,2-DICHLOROETHANE (sur.)	%	86	N/A	4387998
D8-TOLUENE (sur.)	%	106	N/A	4387998

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) Sample extracted past recommended hold time (7 days) - Pot. Low bias

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		X97935		X97937		X97939		
Sampling Date		2010/10/20		2010/10/20		2010/10/20		
COC Number		F111694		F111694		F111694		
	Units	**G-06-05**	**QC Batch**	**G-44-05**	**QC Batch**	**G-47-05**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	4373571	<10	4373571	<10	10	4373571
Volatiles								
VPH (VH6 to 10 - BTEX)	mg/kg	<10	4370458	<10	4370458	<10	10	4370458
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	4378825	<0.1	4378817	<0.1	0.1	4378810
Benzene	mg/kg	<0.005	4378825	<0.005	4378817	<0.005	0.005	4378810
Toluene	mg/kg	<0.02	4378825	<0.02	4378817	<0.02	0.02	4378810
Ethylbenzene	mg/kg	<0.01	4378825	<0.01	4378817	<0.01	0.01	4378810
m & p-Xylene	mg/kg	<0.04	4378825	<0.04	4378817	<0.04	0.04	4378810
o-Xylene	mg/kg	<0.04	4378825	<0.04	4378817	<0.04	0.04	4378810
Styrene	mg/kg	<0.03	4378825	<0.03	4378817	<0.03	0.03	4378810
Xylenes (Total)	mg/kg	<0.04	4378825	<0.04	4378817	<0.04	0.04	4378810
VH C6-C10	mg/kg	<10	4378825	<10	4378817	<10	10	4378810
(C6-C10)	mg/kg	<10	4378825	<10	4378817	<10	10	4378810
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	97	4378825	88	4378817	98	N/A	4378810
D10-ETHYLBENZENE (sur.)	%	93	4378825	102	4378817	125	N/A	4378810
D4-1,2-DICHLOROETHANE (sur.)	%	96	4378825	101	4378817	108	N/A	4378810
D8-TOLUENE (sur.)	%	99	4378825	97	4378817	95	N/A	4378810

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		X97940	X97941	X97953	X97955		
Sampling Date		2010/10/20	2010/10/20	2010/10/21	2010/10/21		
COC Number		F111694	F111694	F111797	F111797		
	Units	**G-65-01**	**G-65-02**	**G-10-02**	**G-11-02**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	<10	10	4373571
Volatiles							
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<10	<10	<10	10	4370458
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1	4378825
Benzene	mg/kg	<0.005	<0.005	<0.005	<0.005	0.005	4378825
Toluene	mg/kg	<0.02	<0.02	<0.02	<0.02	0.02	4378825
Ethylbenzene	mg/kg	<0.01	<0.01	<0.01	<0.01	0.01	4378825
m & p-Xylene	mg/kg	<0.04	<0.04	<0.04	<0.04	0.04	4378825
o-Xylene	mg/kg	<0.04	<0.04	<0.04	<0.04	0.04	4378825
Styrene	mg/kg	<0.03	<0.03	<0.03	<0.03	0.03	4378825
Xylenes (Total)	mg/kg	<0.04	<0.04	<0.04	<0.04	0.04	4378825
VH C6-C10	mg/kg	<10	<10	<10	<10	10	4378825
(C6-C10)	mg/kg	<10	<10	<10	<10	10	4378825
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	96	95	96	96	N/A	4378825
D10-ETHYLBENZENE (sur.)	%	96	91	94	93	N/A	4378825
D4-1,2-DICHLOROETHANE (sur.)	%	97	96	97	97	N/A	4378825
D8-TOLUENE (sur.)	%	98	98	99	98	N/A	4378825

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		X97957	X97960	X97961		X97985		
Sampling Date		2010/10/21	2010/10/21	2010/10/21		2010/10/22		
COC Number		F111797	F111797	F111797		G018049		
	Units	**G-12-02**	**G-51-2**	**G-51-8**	**QC Batch**	**G-55-02**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	<10	<10	4373571	<10	10	4373571
Volatiles								
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<10	<10	4370458	<10	10	4370458
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	<0.1	4378810	<0.1	0.1	4378825
Benzene	mg/kg	<0.005	<0.005	<0.005	4378810	<0.005	0.005	4378825
Toluene	mg/kg	<0.02	<0.02	<0.02	4378810	<0.02	0.02	4378825
Ethylbenzene	mg/kg	<0.01	<0.01	<0.01	4378810	<0.01	0.01	4378825
m & p-Xylene	mg/kg	<0.04	<0.04	<0.04	4378810	<0.04	0.04	4378825
o-Xylene	mg/kg	<0.04	<0.04	<0.04	4378810	<0.04	0.04	4378825
Styrene	mg/kg	<0.03	<0.03	<0.03	4378810	<0.03	0.03	4378825
Xylenes (Total)	mg/kg	<0.04	<0.04	<0.04	4378810	<0.04	0.04	4378825
VH C6-C10	mg/kg	<10	<10	<10	4378810	<10	10	4378825
(C6-C10)	mg/kg	<10	<10	<10	4378810	<10	10	4378825
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	98	96	98	4378810	96	N/A	4378825
D10-ETHYLBENZENE (sur.)	%	120	118	120	4378810	95	N/A	4378825
D4-1,2-DICHLOROETHANE (sur.)	%	109	109	109	4378810	107	N/A	4378825
D8-TOLUENE (sur.)	%	94	94	95	4378810	96	N/A	4378825

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME&CSR BTEX/F1/VPH IN SOIL (SOIL)

Maxxam ID		X97986	X97989		
Sampling Date		2010/10/22	2010/10/22		
COC Number		G018049	G018049		
	Units	**G-55-06**	**G-49-01**	**RDL**	**QC Batch**
Calculated Parameters					
F1 (C6-C10) - BTEX	mg/kg	<10	<10	10	4373571
Volatiles					
VPH (VH6 to 10 - BTEX)	mg/kg	<10	<10	10	4370458
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	<0.1	0.1	4378825
Benzene	mg/kg	<0.005	<0.005	0.005	4378825
Toluene	mg/kg	<0.02	<0.02	0.02	4378825
Ethylbenzene	mg/kg	<0.01	<0.01	0.01	4378825
m & p-Xylene	mg/kg	<0.04	<0.04	0.04	4378825
o-Xylene	mg/kg	<0.04	<0.04	0.04	4378825
Styrene	mg/kg	<0.03	<0.03	0.03	4378825
Xylenes (Total)	mg/kg	<0.04	<0.04	0.04	4378825
VH C6-C10	mg/kg	<10	<10	10	4378825
(C6-C10)	mg/kg	<10	<10	10	4378825
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	94	95	N/A	4378825
D10-ETHYLBENZENE (sur.)	%	98	96	N/A	4378825
D4-1,2-DICHLOROETHANE (sur.)	%	96	99	N/A	4378825
D8-TOLUENE (sur.)	%	98	98	N/A	4378825

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97934	X97940	X97941		X97942		
Sampling Date		2010/10/20	2010/10/20	2010/10/20		2010/10/20		
COC Number		F111694	F111694	F111694		F111694		
	Units	**G-06-03**	**G-65-01**	**G-65-02**	**QC Batch**	**G-66-01**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	8.85	8.43	8.99	4382791	8.41	0.01	4382804
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	9140	28900	17600	4382787	27300	100	4382799
Total Antimony (Sb)	mg/kg	0.2	0.3	0.2	4382787	0.2	0.1	4382799
Total Arsenic (As)	mg/kg	3.0	7.8	4.2	4382787	6.3	0.2	4382799
Total Barium (Ba)	mg/kg	100	173	184	4382787	162	0.1	4382799
Total Beryllium (Be)	mg/kg	0.4	1.2	0.8	4382787	1.2	0.1	4382799
Total Bismuth (Bi)	mg/kg	<0.1	0.2	0.1	4382787	0.2	0.1	4382799
Total Cadmium (Cd)	mg/kg	0.12	0.11	0.16	4382787	0.11	0.05	4382799
Total Calcium (Ca)	mg/kg	119000	15900	91100	4382787	22300	100	4382799
Total Chromium (Cr)	mg/kg	22	50	35	4382787	47	1	4382799
Total Cobalt (Co)	mg/kg	6.0	17.2	9.3	4382787	12.4	0.3	4382799
Total Copper (Cu)	mg/kg	13.6	30.7	20.6	4382787	24.7	0.5	4382799
Total Iron (Fe)	mg/kg	13000	32900	21700	4382787	30000	100	4382799
Total Lead (Pb)	mg/kg	6.4	17.8	10.3	4382787	15.2	0.1	4382799
Total Lithium (Li)	mg/kg	15	32	27	4382787	29	5	4382799
Total Magnesium (Mg)	mg/kg	55500	13900	40400	4382787	15200	100	4382799
Total Manganese (Mn)	mg/kg	284	787	348	4382787	430	0.2	4382799
Total Mercury (Hg)	mg/kg	<0.05	<0.05	<0.05	4382787	<0.05	0.05	4382799
Total Molybdenum (Mo)	mg/kg	0.2	0.2	0.3	4382787	0.2	0.1	4382799
Total Nickel (Ni)	mg/kg	19.3	48.2	30.3	4382787	38.0	0.8	4382799
Total Phosphorus (P)	mg/kg	370	456	405	4382787	441	10	4382799
Total Potassium (K)	mg/kg	1910	5480	3260	4382787	4820	100	4382799
Total Selenium (Se)	mg/kg	<0.5	<0.5	<0.5	4382787	<0.5	0.5	4382799
Total Silver (Ag)	mg/kg	0.07	0.11	0.09	4382787	0.08	0.05	4382799
Total Sodium (Na)	mg/kg	216	143	230	4382787	124	100	4382799
Total Strontium (Sr)	mg/kg	68.1	53.7	111	4382787	55.2	0.1	4382799
Total Thallium (Tl)	mg/kg	0.15	0.39	0.26	4382787	0.34	0.05	4382799
Total Tin (Sn)	mg/kg	0.4	1.0	0.7	4382787	0.9	0.1	4382799
Total Titanium (Ti)	mg/kg	378	151	340	4382787	175	1	4382799
Total Uranium (U)	mg/kg	0.80	1.11	1.44	4382787	1.23	0.05	4382799
Total Vanadium (V)	mg/kg	30	82	50	4382787	75	2	4382799
Total Zinc (Zn)	mg/kg	29	87	56	4382787	77	1	4382799

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97934	X97940	X97941		X97942		
Sampling Date		2010/10/20	2010/10/20	2010/10/20		2010/10/20		
COC Number		F111694	F111694	F111694		F111694		
	Units	**G-06-03**	**G-65-01**	**G-65-02**	**QC Batch**	**G-66-01**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	7.2	8.6	8.5	4382787	6.0	0.5	4382799

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97943	X97944		X97945		X97952		
Sampling Date		2010/10/20	2010/10/21		2010/10/21		2010/10/21		
COC Number		F111694	F111694		F111694		F111797		
	Units	**G-66-02**	**G-69-01**	**QC Batch**	**G-69-02**	**QC Batch**	**G-10-01**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.95	8.60	4382791	8.38	4379863	8.55	0.01	4382791
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18600	28800	4382787	23900	4379855	26100	100	4382787
Total Antimony (Sb)	mg/kg	0.2	0.2	4382787	0.2	4379855	0.3	0.1	4382787
Total Arsenic (As)	mg/kg	4.7	6.4	4382787	5.0	4379855	7.7	0.2	4382787
Total Barium (Ba)	mg/kg	189	258	4382787	201	4379855	186	0.1	4382787
Total Beryllium (Be)	mg/kg	0.8	1.2	4382787	1.1	4379855	1.1	0.1	4382787
Total Bismuth (Bi)	mg/kg	0.2	0.2	4382787	0.2	4379855	0.2	0.1	4382787
Total Cadmium (Cd)	mg/kg	0.15	0.10	4382787	0.14	4379855	0.17	0.05	4382787
Total Calcium (Ca)	mg/kg	107000	20900	4382787	10200	4379855	48200	100	4382787
Total Chromium (Cr)	mg/kg	38	50	4382787	44	4379855	46	1	4382787
Total Cobalt (Co)	mg/kg	10.1	14.3	4382787	15.2	4379855	13.2	0.3	4382787
Total Copper (Cu)	mg/kg	23.1	26.5	4382787	23.9	4379855	27.9	0.5	4382787
Total Iron (Fe)	mg/kg	22500	32400	4382787	29100	4379855	29700	100	4382787
Total Lead (Pb)	mg/kg	11.4	14.3	4382787	15.5	4379855	13.7	0.1	4382787
Total Lithium (Li)	mg/kg	28	33	4382787	27	4379855	31	5	4382787
Total Magnesium (Mg)	mg/kg	40100	13000	4382787	11300	4379855	25900	100	4382787
Total Manganese (Mn)	mg/kg	359	559	4382787	629	4379855	453	0.2	4382787
Total Mercury (Hg)	mg/kg	<0.05	<0.05	4382787	<0.05	4379855	<0.05	0.05	4382787
Total Molybdenum (Mo)	mg/kg	0.3	0.3	4382787	0.7	4379855	0.3	0.1	4382787
Total Nickel (Ni)	mg/kg	32.4	42.0	4382787	38.6	4379855	41.0	0.8	4382787
Total Phosphorus (P)	mg/kg	430	361	4382787	325	4379855	555	10	4382787
Total Potassium (K)	mg/kg	3190	5090	4382787	4540	4379855	4280	100	4382787
Total Selenium (Se)	mg/kg	<0.5	<0.5	4382787	<0.5	4379855	<0.5	0.5	4382787
Total Silver (Ag)	mg/kg	0.10	0.12	4382787	0.12	4379855	0.10	0.05	4382787
Total Sodium (Na)	mg/kg	226	191	4382787	180	4379855	707	100	4382787
Total Strontium (Sr)	mg/kg	124	75.5	4382787	58.2	4379855	82.3	0.1	4382787
Total Thallium (Tl)	mg/kg	0.27	0.39	4382787	0.33	4379855	0.34	0.05	4382787
Total Tin (Sn)	mg/kg	0.7	1.0	4382787	0.9	4379855	0.9	0.1	4382787
Total Titanium (Ti)	mg/kg	418	153	4382787	165	4379855	249	1	4382787
Total Uranium (U)	mg/kg	1.05	1.64	4382787	1.41	4379855	1.67	0.05	4382787
Total Vanadium (V)	mg/kg	56	77	4382787	62	4379855	79	2	4382787
Total Zinc (Zn)	mg/kg	70	83	4382787	84	4379855	75	1	4382787

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97943	X97944		X97945		X97952		
Sampling Date		2010/10/20	2010/10/21		2010/10/21		2010/10/21		
COC Number		F111694	F111694		F111694		F111797		
	Units	**G-66-02**	**G-69-01**	**QC Batch**	**G-69-02**	**QC Batch**	**G-10-01**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	9.1	6.6	4382787	6.5	4379855	6.8	0.5	4382787

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97953	X97954		X97955		X97956		
Sampling Date		2010/10/21	2010/10/21		2010/10/21		2010/10/21		
COC Number		F111797	F111797		F111797		F111797		
	Units	**G-10-02**	**G-11-01**	**QC Batch**	**G-11-02**	**QC Batch**	**G-12-01**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.85	8.43	4382791	8.26	4379863	8.72	0.01	4382791
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	12100	25400	4382787	7050	4379855	21800	100	4382787
Total Antimony (Sb)	mg/kg	0.2	0.2	4382787	0.1	4379855	0.2	0.1	4382787
Total Arsenic (As)	mg/kg	3.4	5.2	4382787	2.6	4379855	4.6	0.2	4382787
Total Barium (Ba)	mg/kg	145	185	4382787	62.2	4379855	163	0.1	4382787
Total Beryllium (Be)	mg/kg	0.6	1.2	4382787	0.3	4379855	1.2	0.1	4382787
Total Bismuth (Bi)	mg/kg	0.1	0.2	4382787	<0.1	4379855	0.2	0.1	4382787
Total Cadmium (Cd)	mg/kg	0.16	0.20	4382787	0.10	4379855	0.18	0.05	4382787
Total Calcium (Ca)	mg/kg	127000	22600	4382787	92600	4379855	26300	100	4382787
Total Chromium (Cr)	mg/kg	26	44	4382787	17	4379855	39	1	4382787
Total Cobalt (Co)	mg/kg	7.1	11.0	4382787	4.9	4379855	11.5	0.3	4382787
Total Copper (Cu)	mg/kg	16.5	27.4	4382787	11.1	4379855	25.4	0.5	4382787
Total Iron (Fe)	mg/kg	15600	29000	4382787	11000	4379855	27000	100	4382787
Total Lead (Pb)	mg/kg	7.4	15.1	4382787	5.5	4379855	14.3	0.1	4382787
Total Lithium (Li)	mg/kg	20	26	4382787	12	4379855	23	5	4382787
Total Magnesium (Mg)	mg/kg	51900	14300	4382787	51600	4379855	13600	100	4382787
Total Manganese (Mn)	mg/kg	316	375	4382787	241	4379855	455	0.2	4382787
Total Mercury (Hg)	mg/kg	<0.05	<0.05	4382787	<0.05	4379855	<0.05	0.05	4382787
Total Molybdenum (Mo)	mg/kg	0.2	0.3	4382787	0.2	4379855	0.4	0.1	4382787
Total Nickel (Ni)	mg/kg	23.8	35.0	4382787	15.6	4379855	35.0	0.8	4382787
Total Phosphorus (P)	mg/kg	386	549	4382787	388	4379855	409	10	4382787
Total Potassium (K)	mg/kg	2280	4460	4382787	1350	4379855	3560	100	4382787
Total Selenium (Se)	mg/kg	<0.5	<0.5	4382787	<0.5	4379855	<0.5	0.5	4382787
Total Silver (Ag)	mg/kg	0.08	0.12	4382787	<0.05	4379855	0.08	0.05	4382787
Total Sodium (Na)	mg/kg	437	205	4382787	160	4379855	598	100	4382787
Total Strontium (Sr)	mg/kg	102	57.2	4382787	40.1	4379855	58.9	0.1	4382787
Total Thallium (Tl)	mg/kg	0.19	0.32	4382787	0.12	4379855	0.31	0.05	4382787
Total Tin (Sn)	mg/kg	0.5	0.9	4382787	0.3	4379855	0.8	0.1	4382787
Total Titanium (Ti)	mg/kg	385	130	4382787	248	4379855	103	1	4382787
Total Uranium (U)	mg/kg	1.12	1.46	4382787	0.64	4379855	0.99	0.05	4382787
Total Vanadium (V)	mg/kg	36	67	4382787	24	4379855	57	2	4382787
Total Zinc (Zn)	mg/kg	35	87	4382787	25	4379855	86	1	4382787

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97953	X97954		X97955		X97956		
Sampling Date		2010/10/21	2010/10/21		2010/10/21		2010/10/21		
COC Number		F111797	F111797		F111797		F111797		
	Units	**G-10-02**	**G-11-01**	**QC Batch**	**G-11-02**	**QC Batch**	**G-12-01**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	7.0	7.3	4382787	5.1	4379855	5.2	0.5	4382787

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97957		X97958		X97959		X97960		
Sampling Date		2010/10/21		2010/10/21		2010/10/21		2010/10/21		
COC Number		F111797		F111797		F111797		F111797		
	Units	**G-12-02**	**QC Batch**	**DUP 7 -BH**	**QC Batch**	**G-51-1**	**QC Batch**	**G-51-2**	**RDL**	**QC Batch**
Physical Properties										
Soluble (2:1) pH	pH Units	8.72	4379863	8.72	4382791	8.52	4379863	8.93	0.01	4382791
Total Metals by ICPMS										
Total Aluminum (Al)	mg/kg	19800	4379855	23100	4382787	26800	4379855	4560	100	4382787
Total Antimony (Sb)	mg/kg	0.2	4379855	0.2	4382787	0.2	4379855	<0.1	0.1	4382787
Total Arsenic (As)	mg/kg	4.5	4379855	4.5	4382787	5.3	4379855	2.6	0.2	4382787
Total Barium (Ba)	mg/kg	168	4379855	165	4382787	180	4379855	35.9	0.1	4382787
Total Beryllium (Be)	mg/kg	1.0	4379855	1.1	4382787	1.4	4379855	0.2	0.1	4382787
Total Bismuth (Bi)	mg/kg	0.2	4379855	0.2	4382787	0.2	4379855	<0.1	0.1	4382787
Total Cadmium (Cd)	mg/kg	0.21	4379855	0.17	4382787	0.09	4379855	0.07	0.05	4382787
Total Calcium (Ca)	mg/kg	21000	4379855	24100	4382787	5400	4379855	114000	100	4382787
Total Chromium (Cr)	mg/kg	36	4379855	40	4382787	49	4379855	12	1	4382787
Total Cobalt (Co)	mg/kg	16.3	4379855	11.8	4382787	13.2	4379855	3.1	0.3	4382787
Total Copper (Cu)	mg/kg	25.2	4379855	25.2	4382787	28.1	4379855	6.7	0.5	4382787
Total Iron (Fe)	mg/kg	25900	4379855	27200	4382787	33100	4379855	7500	100	4382787
Total Lead (Pb)	mg/kg	13.8	4379855	13.9	4382787	13.9	4379855	3.6	0.1	4382787
Total Lithium (Li)	mg/kg	21	4379855	24	4382787	29	4379855	9	5	4382787
Total Magnesium (Mg)	mg/kg	13200	4379855	13600	4382787	11000	4379855	60300	100	4382787
Total Manganese (Mn)	mg/kg	718	4379855	480	4382787	456	4379855	171	0.2	4382787
Total Mercury (Hg)	mg/kg	<0.05	4379855	<0.05	4382787	<0.05	4379855	<0.05	0.05	4382787
Total Molybdenum (Mo)	mg/kg	0.3	4379855	0.3	4382787	0.2	4379855	0.1	0.1	4382787
Total Nickel (Ni)	mg/kg	38.6	4379855	36.4	4382787	41.6	4379855	11.6	0.8	4382787
Total Phosphorus (P)	mg/kg	478	4379855	422	4382787	391	4379855	361	10	4382787
Total Potassium (K)	mg/kg	3700	4379855	3800	4382787	4860	4379855	844	100	4382787
Total Selenium (Se)	mg/kg	<0.5	4379855	<0.5	4382787	<0.5	4379855	<0.5	0.5	4382787
Total Silver (Ag)	mg/kg	0.08	4379855	0.08	4382787	0.11	4379855	<0.05	0.05	4382787
Total Sodium (Na)	mg/kg	626	4379855	602	4382787	529	4379855	220	100	4382787
Total Strontium (Sr)	mg/kg	50.0	4379855	57.2	4382787	47.8	4379855	43.9	0.1	4382787
Total Thallium (Tl)	mg/kg	0.29	4379855	0.33	4382787	0.37	4379855	0.08	0.05	4382787
Total Tin (Sn)	mg/kg	0.7	4379855	0.8	4382787	0.9	4379855	0.2	0.1	4382787
Total Titanium (Ti)	mg/kg	89	4379855	129	4382787	157	4379855	219	1	4382787
Total Uranium (U)	mg/kg	0.85	4379855	1.01	4382787	0.92	4379855	0.69	0.05	4382787
Total Vanadium (V)	mg/kg	55	4379855	61	4382787	63	4379855	19	2	4382787
Total Zinc (Zn)	mg/kg	73	4379855	82	4382787	87	4379855	15	1	4382787

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97957		X97958		X97959		X97960		
Sampling Date		2010/10/21		2010/10/21		2010/10/21		2010/10/21		
COC Number		F111797		F111797		F111797		F111797		
	Units	**G-12-02**	**QC Batch**	**DUP 7 -BH**	**QC Batch**	**G-51-1**	**QC Batch**	**G-51-2**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	4.7	4379855	5.7	4382787	6.9	4379855	3.0	0.5	4382787

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97962		X97963	X97981		X97982		
Sampling Date		2010/10/21		2010/10/21	2010/10/21		2010/10/21		
COC Number		F111797		F111797	G018049		G018049		
	Units	**G-50-01**	**QC Batch**	**G-50-02**	**G-58-01**	**QC Batch**	**G-58-02**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.77	4379863	8.77	8.25	4382791	8.20	0.01	4379863
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	20300	4379855	10600	23700	4382787	8530	100	4379855
Total Antimony (Sb)	mg/kg	0.2	4379855	0.1	0.3	4382787	0.1	0.1	4379855
Total Arsenic (As)	mg/kg	4.2	4379855	3.2	7.1	4382787	2.0	0.2	4379855
Total Barium (Ba)	mg/kg	158	4379855	116	193	4382787	121	0.1	4379855
Total Beryllium (Be)	mg/kg	0.9	4379855	0.5	1.1	4382787	0.4	0.1	4379855
Total Bismuth (Bi)	mg/kg	0.2	4379855	0.1	0.2	4382787	<0.1	0.1	4379855
Total Cadmium (Cd)	mg/kg	0.16	4379855	0.14	0.10	4382787	0.14	0.05	4379855
Total Calcium (Ca)	mg/kg	26300	4379855	103000	42200	4382787	132000	100	4379855
Total Chromium (Cr)	mg/kg	38	4379855	25	44	4382787	25	1	4379855
Total Cobalt (Co)	mg/kg	10.2	4379855	6.4	13.9	4382787	5.6	0.3	4379855
Total Copper (Cu)	mg/kg	21.8	4379855	15.1	27.5	4382787	13.0	0.5	4379855
Total Iron (Fe)	mg/kg	25400	4379855	15000	29500	4382787	12400	100	4379855
Total Lead (Pb)	mg/kg	11.4	4379855	6.8	15.7	4382787	6.3	0.1	4379855
Total Lithium (Li)	mg/kg	22	4379855	18	31	4382787	16	5	4379855
Total Magnesium (Mg)	mg/kg	15100	4379855	45500	18900	4382787	55200	100	4379855
Total Manganese (Mn)	mg/kg	369	4379855	263	525	4382787	276	0.2	4379855
Total Mercury (Hg)	mg/kg	<0.05	4379855	<0.05	<0.05	4382787	<0.05	0.05	4379855
Total Molybdenum (Mo)	mg/kg	0.1	4379855	0.1	0.3	4382787	0.2	0.1	4379855
Total Nickel (Ni)	mg/kg	32.7	4379855	21.2	41.2	4382787	20.2	0.8	4379855
Total Phosphorus (P)	mg/kg	423	4379855	383	449	4382787	350	10	4379855
Total Potassium (K)	mg/kg	3640	4379855	2020	4040	4382787	1660	100	4379855
Total Selenium (Se)	mg/kg	<0.5	4379855	<0.5	<0.5	4382787	<0.5	0.5	4379855
Total Silver (Ag)	mg/kg	0.08	4379855	0.06	0.09	4382787	0.05	0.05	4379855
Total Sodium (Na)	mg/kg	307	4379855	269	4140	4382787	3070	100	4379855
Total Strontium (Sr)	mg/kg	52.7	4379855	77.1	72.1	4382787	91.1	0.1	4379855
Total Thallium (Tl)	mg/kg	0.29	4379855	0.17	0.35	4382787	0.14	0.05	4379855
Total Tin (Sn)	mg/kg	0.7	4379855	0.5	0.9	4382787	0.4	0.1	4379855
Total Titanium (Ti)	mg/kg	122	4379855	352	190	4382787	345	1	4379855
Total Uranium (U)	mg/kg	0.76	4379855	0.84	2.20	4382787	1.32	0.05	4379855
Total Vanadium (V)	mg/kg	51	4379855	33	68	4382787	26	2	4379855
Total Zinc (Zn)	mg/kg	73	4379855	35	104	4382787	36	1	4379855

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97962		X97963	X97981		X97982		
Sampling Date		2010/10/21		2010/10/21	2010/10/21		2010/10/21		
COC Number		F111797		F111797	G018049		G018049		
	Units	**G-50-01**	**QC Batch**	**G-50-02**	**G-58-01**	**QC Batch**	**G-58-02**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	4.6	4379855	6.8	6.4	4382787	6.3	0.5	4379855

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97983		X97984		X97985	X97987		
Sampling Date		2010/10/21		2010/10/22		2010/10/22	2010/10/22		
COC Number		G018049		G018049		G018049	G018049		
	Units	**DUP 6**	**QC Batch**	**G-55-01**	**QC Batch**	**G-55-02**	**G-53-01**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.27	4382791	8.62	4379863	8.52	8.91	0.01	4382791
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	8910	4382787	21300	4379855	21700	15600	100	4382787
Total Antimony (Sb)	mg/kg	0.1	4382787	0.2	4379855	0.3	0.2	0.1	4382787
Total Arsenic (As)	mg/kg	1.9	4382787	5.6	4379855	7.0	3.1	0.2	4382787
Total Barium (Ba)	mg/kg	112	4382787	166	4379855	201	169	0.1	4382787
Total Beryllium (Be)	mg/kg	0.4	4382787	1.1	4379855	1.0	0.8	0.1	4382787
Total Bismuth (Bi)	mg/kg	<0.1	4382787	0.2	4379855	0.2	0.1	0.1	4382787
Total Cadmium (Cd)	mg/kg	0.14	4382787	0.14	4379855	0.16	0.17	0.05	4382787
Total Calcium (Ca)	mg/kg	128000	4382787	44000	4379855	57700	113000	100	4382787
Total Chromium (Cr)	mg/kg	25	4382787	38	4379855	41	34	1	4382787
Total Cobalt (Co)	mg/kg	5.5	4382787	11.2	4379855	11.1	8.0	0.3	4382787
Total Copper (Cu)	mg/kg	12.7	4382787	23.7	4379855	24.7	18.7	0.5	4382787
Total Iron (Fe)	mg/kg	12900	4382787	25600	4379855	26800	19000	100	4382787
Total Lead (Pb)	mg/kg	6.1	4382787	11.7	4379855	11.6	10.0	0.1	4382787
Total Lithium (Li)	mg/kg	17	4382787	24	4379855	28	25	5	4382787
Total Magnesium (Mg)	mg/kg	56600	4382787	18900	4379855	26000	38100	100	4382787
Total Manganese (Mn)	mg/kg	244	4382787	422	4379855	333	283	0.2	4382787
Total Mercury (Hg)	mg/kg	<0.05	4382787	<0.05	4379855	<0.05	<0.05	0.05	4382787
Total Molybdenum (Mo)	mg/kg	0.2	4382787	0.2	4379855	0.2	0.3	0.1	4382787
Total Nickel (Ni)	mg/kg	18.9	4382787	36.5	4379855	34.3	26.1	0.8	4382787
Total Phosphorus (P)	mg/kg	351	4382787	467	4379855	500	389	10	4382787
Total Potassium (K)	mg/kg	1730	4382787	3450	4379855	3550	2350	100	4382787
Total Selenium (Se)	mg/kg	<0.5	4382787	<0.5	4379855	<0.5	<0.5	0.5	4382787
Total Silver (Ag)	mg/kg	0.06	4382787	0.09	4379855	0.09	0.07	0.05	4382787
Total Sodium (Na)	mg/kg	3180	4382787	281	4379855	375	376	100	4382787
Total Strontium (Sr)	mg/kg	88.5	4382787	63.9	4379855	67.7	121	0.1	4382787
Total Thallium (Tl)	mg/kg	0.15	4382787	0.30	4379855	0.32	0.23	0.05	4382787
Total Tin (Sn)	mg/kg	0.4	4382787	0.7	4379855	0.8	0.6	0.1	4382787
Total Titanium (Ti)	mg/kg	344	4382787	142	4379855	224	375	1	4382787
Total Uranium (U)	mg/kg	1.36	4382787	1.31	4379855	1.43	1.54	0.05	4382787
Total Vanadium (V)	mg/kg	28	4382787	61	4379855	65	46	2	4382787
Total Zinc (Zn)	mg/kg	33	4382787	66	4379855	66	102	1	4382787

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97983		X97984		X97985	X97987		
Sampling Date		2010/10/21		2010/10/22		2010/10/22	2010/10/22		
COC Number		G018049		G018049		G018049	G018049		
	Units	**DUP 6**	**QC Batch**	**G-55-01**	**QC Batch**	**G-55-02**	**G-53-01**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	6.5	4382787	5.4	4379855	8.0	7.3	0.5	4382787

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97988		X97989	X97990		X97991		
Sampling Date		2010/10/22		2010/10/22	2010/10/22		2010/10/22		
COC Number		G018049		G018049	G018049		G018049		
	Units	**G-53-02**	**QC Batch**	**G-49-01**	**G-49-02**	**QC Batch**	**G-52-01**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	9.21	4382791	8.47	8.64	4379863	8.93	0.01	4382804
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	4550	4382787	21900	13200	4379855	4960	100	4382799
Total Antimony (Sb)	mg/kg	<0.1	4382787	0.3	0.2	4379855	<0.1	0.1	4382799
Total Arsenic (As)	mg/kg	1.8	4382787	8.1	3.5	4379855	2.6	0.2	4382799
Total Barium (Ba)	mg/kg	41.4	4382787	151	147	4379855	53.5	0.1	4382799
Total Beryllium (Be)	mg/kg	0.2	4382787	1.0	0.6	4379855	0.3	0.1	4382799
Total Bismuth (Bi)	mg/kg	<0.1	4382787	0.2	0.1	4379855	<0.1	0.1	4382799
Total Cadmium (Cd)	mg/kg	0.06	4382787	0.14	0.15	4379855	0.08	0.05	4382799
Total Calcium (Ca)	mg/kg	104000	4382787	46200	107000	4379855	114000	100	4382799
Total Chromium (Cr)	mg/kg	13	4382787	41	29	4379855	13	1	4382799
Total Cobalt (Co)	mg/kg	3.2	4382787	11.9	8.4	4379855	3.2	0.3	4382799
Total Copper (Cu)	mg/kg	7.2	4382787	27.2	18.4	4379855	7.6	0.5	4382799
Total Iron (Fe)	mg/kg	7710	4382787	26800	17500	4379855	7770	100	4382799
Total Lead (Pb)	mg/kg	3.6	4382787	13.0	7.8	4379855	3.9	0.1	4382799
Total Lithium (Li)	mg/kg	10	4382787	27	22	4379855	10	5	4382799
Total Magnesium (Mg)	mg/kg	58400	4382787	21600	43400	4379855	59200	100	4382799
Total Manganese (Mn)	mg/kg	184	4382787	407	310	4379855	176	0.2	4382799
Total Mercury (Hg)	mg/kg	<0.05	4382787	<0.05	<0.05	4379855	<0.05	0.05	4382799
Total Molybdenum (Mo)	mg/kg	0.2	4382787	0.2	0.2	4379855	0.2	0.1	4382799
Total Nickel (Ni)	mg/kg	11.4	4382787	39.9	26.5	4379855	12.0	0.8	4382799
Total Phosphorus (P)	mg/kg	313	4382787	513	410	4379855	343	10	4382799
Total Potassium (K)	mg/kg	763	4382787	3910	2380	4379855	837	100	4382799
Total Selenium (Se)	mg/kg	<0.5	4382787	<0.5	<0.5	4379855	<0.5	0.5	4382799
Total Silver (Ag)	mg/kg	<0.05	4382787	0.08	0.07	4379855	<0.05	0.05	4382799
Total Sodium (Na)	mg/kg	249	4382787	197	272	4379855	204	100	4382799
Total Strontium (Sr)	mg/kg	42.1	4382787	61.1	96.4	4379855	60.4	0.1	4382799
Total Thallium (Tl)	mg/kg	0.08	4382787	0.32	0.20	4379855	0.09	0.05	4382799
Total Tin (Sn)	mg/kg	0.2	4382787	0.8	0.5	4379855	0.2	0.1	4382799
Total Titanium (Ti)	mg/kg	253	4382787	155	380	4379855	232	1	4382799
Total Uranium (U)	mg/kg	0.65	4382787	1.18	0.94	4379855	0.76	0.05	4382799
Total Vanadium (V)	mg/kg	17	4382787	63	39	4379855	20	2	4382799
Total Zinc (Zn)	mg/kg	20	4382787	66	40	4379855	18	1	4382799

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97988		X97989	X97990		X97991		
Sampling Date		2010/10/22		2010/10/22	2010/10/22		2010/10/22		
COC Number		G018049		G018049	G018049		G018049		
	Units	**G-53-02**	**QC Batch**	**G-49-01**	**G-49-02**	**QC Batch**	**G-52-01**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	4.5	4382787	5.9	7.7	4379855	3.6	0.5	4382799

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97992	X98006	X98007		X98008		
Sampling Date		2010/10/22	2010/10/20	2010/10/20		2010/10/20		
COC Number		G018049	G018051	G018051		G018051		
	Units	**G-52-02**	**G-54-01**	**G-54-02**	**QC Batch**	**DUP8-BH**	**RDL**	**QC Batch**
Physical Properties								
Soluble (2:1) pH	pH Units	9.09	8.64	8.77	4382791	8.43	0.01	4379863
Total Metals by ICPMS								
Total Aluminum (Al)	mg/kg	6790	8470	4990	4382787	21200	100	4379855
Total Antimony (Sb)	mg/kg	0.1	0.2	0.1	4382787	0.3	0.1	4379855
Total Arsenic (As)	mg/kg	3.3	2.9	1.9	4382787	9.0	0.2	4379855
Total Barium (Ba)	mg/kg	59.9	102	44.4	4382787	159	0.1	4379855
Total Beryllium (Be)	mg/kg	0.3	0.4	0.2	4382787	0.9	0.1	4379855
Total Bismuth (Bi)	mg/kg	<0.1	<0.1	<0.1	4382787	0.2	0.1	4379855
Total Cadmium (Cd)	mg/kg	0.13	0.14	0.08	4382787	0.16	0.05	4379855
Total Calcium (Ca)	mg/kg	88200	121000	113000	4382787	48800	100	4379855
Total Chromium (Cr)	mg/kg	16	20	14	4382787	40	1	4379855
Total Cobalt (Co)	mg/kg	4.7	5.0	3.6	4382787	13.1	0.3	4379855
Total Copper (Cu)	mg/kg	11.4	12.6	8.2	4382787	27.3	0.5	4379855
Total Iron (Fe)	mg/kg	11100	12000	8360	4382787	25900	100	4379855
Total Lead (Pb)	mg/kg	5.2	5.6	3.9	4382787	13.7	0.1	4379855
Total Lithium (Li)	mg/kg	12	17	10	4382787	26	5	4379855
Total Magnesium (Mg)	mg/kg	51600	58800	61300	4382787	22000	100	4379855
Total Manganese (Mn)	mg/kg	251	240	193	4382787	453	0.2	4379855
Total Mercury (Hg)	mg/kg	<0.05	<0.05	<0.05	4382787	<0.05	0.05	4379855
Total Molybdenum (Mo)	mg/kg	0.3	0.2	0.2	4382787	0.3	0.1	4379855
Total Nickel (Ni)	mg/kg	15.7	17.4	12.5	4382787	39.8	0.8	4379855
Total Phosphorus (P)	mg/kg	423	356	349	4382787	497	10	4379855
Total Potassium (K)	mg/kg	1250	1460	953	4382787	3720	100	4379855
Total Selenium (Se)	mg/kg	<0.5	<0.5	<0.5	4382787	<0.5	0.5	4379855
Total Silver (Ag)	mg/kg	<0.05	0.06	<0.05	4382787	0.09	0.05	4379855
Total Sodium (Na)	mg/kg	294	308	233	4382787	187	100	4379855
Total Strontium (Sr)	mg/kg	39.8	91.6	45.4	4382787	63.6	0.1	4379855
Total Thallium (Tl)	mg/kg	0.14	0.14	0.10	4382787	0.30	0.05	4379855
Total Tin (Sn)	mg/kg	0.3	0.3	0.2	4382787	0.8	0.1	4379855
Total Titanium (Ti)	mg/kg	278	325	260	4382787	182	1	4379855
Total Uranium (U)	mg/kg	0.76	1.07	0.63	4382787	1.22	0.05	4379855
Total Vanadium (V)	mg/kg	25	28	19	4382787	63	2	4379855
Total Zinc (Zn)	mg/kg	25	26	17	4382787	67	1	4379855

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X97992	X98006	X98007		X98008		
Sampling Date		2010/10/22	2010/10/20	2010/10/20		2010/10/20		
COC Number		G018049	G018051	G018051		G018051		
	Units	**G-52-02**	**G-54-01**	**G-54-02**	**QC Batch**	**DUP8-BH**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	6.2	5.2	5.0	4382787	5.6	0.5	4379855

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X98009		X98010	X98011		X98012		
Sampling Date		2010/10/20		2010/10/20	2010/10/20		2010/10/20		
COC Number		G018051		G018051	G018051		G018051		
	Units	**G-67-01**	**QC Batch**	**G-67-02**	**G-68-01**	**QC Batch**	**G-68-02**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.17	4387190	8.67	8.01	4390244	8.52	0.01	4387190
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	23900	4387176	13000	29500	4390176	11200	100	4387176
Total Antimony (Sb)	mg/kg	0.2	4387176	0.2	0.3	4390176	0.2	0.1	4387176
Total Arsenic (As)	mg/kg	4.2	4387176	4.5	8.2	4390176	2.9	0.2	4387176
Total Barium (Ba)	mg/kg	171	4387176	174	158	4390176	135	0.1	4387176
Total Beryllium (Be)	mg/kg	1.0	4387176	0.5	1.1	4390176	0.4	0.1	4387176
Total Bismuth (Bi)	mg/kg	0.2	4387176	0.1	0.2	4390176	0.1	0.1	4387176
Total Cadmium (Cd)	mg/kg	0.16	4387176	0.19	0.10	4390176	0.14	0.05	4387176
Total Calcium (Ca)	mg/kg	9110	4387176	104000	7490	4390176	135000	100	4387176
Total Chromium (Cr)	mg/kg	43	4387176	26	50	4390176	25	1	4387176
Total Cobalt (Co)	mg/kg	12.7	4387176	10.7	16.8	4390176	7.1	0.3	4387176
Total Copper (Cu)	mg/kg	26.7	4387176	16.1	28.1	4390176	15.3	0.5	4387176
Total Iron (Fe)	mg/kg	29700	4387176	16200	33300	4390176	15500	100	4387176
Total Lead (Pb)	mg/kg	17.0	4387176	9.7	15.2	4390176	7.5	0.1	4387176
Total Lithium (Li)	mg/kg	24	4387176	19	31	4390176	18	5	4387176
Total Magnesium (Mg)	mg/kg	11200	4387176	43300	10300	4390176	53600	100	4387176
Total Manganese (Mn)	mg/kg	465	4387176	659	674	4390176	335	0.2	4387176
Total Mercury (Hg)	mg/kg	<0.05	4387176	<0.05	<0.05	4390176	<0.05	0.05	4387176
Total Molybdenum (Mo)	mg/kg	0.2	4387176	0.4	0.3	4390176	0.3	0.1	4387176
Total Nickel (Ni)	mg/kg	35.5	4387176	27.7	51.7	4390176	24.2	0.8	4387176
Total Phosphorus (P)	mg/kg	319	4387176	356	434	4390176	388	10	4387176
Total Potassium (K)	mg/kg	4620	4387176	2120	5240	4390176	2090	100	4387176
Total Selenium (Se)	mg/kg	<0.5	4387176	<0.5	<0.5	4390176	<0.5	0.5	4387176
Total Silver (Ag)	mg/kg	0.09	4387176	<0.05	0.10	4390176	0.05	0.05	4387176
Total Sodium (Na)	mg/kg	121	4387176	189	137	4390176	197	100	4387176
Total Strontium (Sr)	mg/kg	46.2	4387176	102	42.6	4390176	102	0.1	4387176
Total Thallium (Tl)	mg/kg	0.35	4387176	0.22	0.41	4390176	0.19	0.05	4387176
Total Tin (Sn)	mg/kg	0.9	4387176	0.6	1.0	4390176	0.5	0.1	4387176
Total Titanium (Ti)	mg/kg	117	4387176	312	137	4390176	354	1	4387176
Total Uranium (U)	mg/kg	0.92	4387176	0.96	2.02	4390176	1.26	0.05	4387176
Total Vanadium (V)	mg/kg	60	4387176	42	75	4390176	34	2	4387176
Total Zinc (Zn)	mg/kg	92	4387176	46	83	4390176	33	1	4387176

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X98009		X98010	X98011		X98012		
Sampling Date		2010/10/20		2010/10/20	2010/10/20		2010/10/20		
COC Number		G018051		G018051	G018051		G018051		
	Units	**G-67-01**	**QC Batch**	**G-67-02**	**G-68-01**	**QC Batch**	**G-68-02**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	5.6	4387176	5.6	8.2	4390176	5.4	0.5	4387176

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X98013	X98014	X98015	X98016		
Sampling Date		2010/10/20	2010/10/20	2010/10/20	2010/10/20		
COC Number		G018051	G018051	G018051	G018051		
	Units	**DUP 5 -BH**	**DUP4 -BH**	**G-08-01**	**G-08-07**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	8.57	8.58	8.05	8.38	0.01	4387190
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	11200	8820	20100	17800	100	4387176
Total Antimony (Sb)	mg/kg	0.2	0.6	1.6	0.5	0.1	4387176
Total Arsenic (As)	mg/kg	3.9	4.4	7.6	9.4	0.2	4387176
Total Barium (Ba)	mg/kg	125	108	327	123	0.1	4387176
Total Beryllium (Be)	mg/kg	0.5	0.4	1.2	1.0	0.1	4387176
Total Bismuth (Bi)	mg/kg	0.1	<0.1	0.2	0.3	0.1	4387176
Total Cadmium (Cd)	mg/kg	0.18	0.18	0.31	0.30	0.05	4387176
Total Calcium (Ca)	mg/kg	123000	105000	17800	24200	100	4387176
Total Chromium (Cr)	mg/kg	24	22	37	34	1	4387176
Total Cobalt (Co)	mg/kg	6.9	6.1	12.9	14.4	0.3	4387176
Total Copper (Cu)	mg/kg	15.9	18.7	38.4	35.9	0.5	4387176
Total Iron (Fe)	mg/kg	15700	16300	28000	27800	100	4387176
Total Lead (Pb)	mg/kg	10.2	27.2	106	17.7	0.1	4387176
Total Lithium (Li)	mg/kg	18	15	17	25	5	4387176
Total Magnesium (Mg)	mg/kg	55100	53100	9360	13300	100	4387176
Total Manganese (Mn)	mg/kg	306	268	655	546	0.2	4387176
Total Mercury (Hg)	mg/kg	<0.05	<0.05	0.06	<0.05	0.05	4387176
Total Molybdenum (Mo)	mg/kg	0.3	0.6	2.8	1.1	0.1	4387176
Total Nickel (Ni)	mg/kg	22.5	22.5	31.9	41.8	0.8	4387176
Total Phosphorus (P)	mg/kg	403	382	697	543	10	4387176
Total Potassium (K)	mg/kg	1910	1560	3410	3200	100	4387176
Total Selenium (Se)	mg/kg	0.6	<0.5	0.6	0.8	0.5	4387176
Total Silver (Ag)	mg/kg	0.06	0.06	0.11	0.12	0.05	4387176
Total Sodium (Na)	mg/kg	178	193	754	655	100	4387176
Total Strontium (Sr)	mg/kg	93.5	73.3	133	70.8	0.1	4387176
Total Thallium (Tl)	mg/kg	0.19	0.15	0.31	0.23	0.05	4387176
Total Tin (Sn)	mg/kg	0.6	0.9	2.9	0.9	0.1	4387176
Total Titanium (Ti)	mg/kg	339	256	155	103	1	4387176
Total Uranium (U)	mg/kg	0.94	0.92	1.89	2.82	0.05	4387176
Total Vanadium (V)	mg/kg	36	29	54	52	2	4387176
Total Zinc (Zn)	mg/kg	55	76	124	88	1	4387176

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X98013	X98014	X98015	X98016		
Sampling Date		2010/10/20	2010/10/20	2010/10/20	2010/10/20		
COC Number		G018051	G018051	G018051	G018051		
	Units	**DUP 5 -BH**	**DUP4 -BH**	**G-08-01**	**G-08-07**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	5.2	4.3	8.6	8.6	0.5	4387176

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X97934		X97936		X97938		
Sampling Date		2010/10/20		2010/10/20		2010/10/20		
COC Number		F111694		F111694		F111694		
	Units	**G-06-03**	**RDL**	**G-44-02**	**RDL**	**G-47-02**	**RDL**	**QC Batch**
Polycyclic Aromatics								
Naphthalene	mg/kg	0.003	0.001	<3 (1)	3	0.006	0.001	4379716
2-Methylnaphthalene	mg/kg	0.004	0.001	25 (2)	0.02	0.011	0.001	4379716
Acenaphthylene	mg/kg	0.002	0.001	<1 (1)	1	0.002	0.001	4379716
Acenaphthene	mg/kg	<0.001	0.001	2.6 (2)	0.02	0.003	0.001	4379716
Fluorene	mg/kg	0.001	0.001	6.4 (2)	0.02	0.006	0.001	4379716
Phenanthrene	mg/kg	0.006	0.001	15 (2)	0.02	0.025	0.001	4379716
Anthracene	mg/kg	0.002	0.001	3.4 (2)	0.02	0.008	0.001	4379716
Fluoranthene	mg/kg	0.005	0.001	3.1 (2)	0.02	0.025	0.001	4379716
Pyrene	mg/kg	0.006	0.001	13 (2)	0.02	0.024	0.001	4379716
Benzo(a)anthracene	mg/kg	0.004	0.001	5.5 (2)	0.02	0.011	0.001	4379716
Chrysene	mg/kg	0.005	0.001	6.1 (2)	0.02	0.019	0.001	4379716
Benzo(b&j)fluoranthene	mg/kg	0.005	0.001	1.6 (2)	0.02	0.015	0.001	4379716
Benzo(k)fluoranthene	mg/kg	0.003	0.001	0.65 (2)	0.02	0.007	0.001	4379716
Benzo(a)pyrene	mg/kg	0.004	0.001	2.6 (2)	0.02	0.011	0.001	4379716
Indeno(1,2,3-cd)pyrene	mg/kg	0.003	0.002	0.72 (2)	0.04	0.009	0.002	4379716
Dibenz(a,h)anthracene	mg/kg	<0.002	0.002	0.33 (2)	0.04	0.003	0.002	4379716
Benzo(g,h,i)perylene	mg/kg	0.003	0.002	0.88 (2)	0.04	0.016	0.002	4379716
Low Molecular Weight PAH`s	mg/kg	0.017	0.001	52	3	0.061	0.001	4370456
High Molecular Weight PAH`s	mg/kg	0.038	0.002	34	0.04	0.14	0.002	4370456
Total PAH	mg/kg	0.055	0.002	87	3	0.20	0.002	4370456
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	110	N/A	114	N/A	118	N/A	4379716
D12-BENZO(A)PYRENE (sur.)	%	100	N/A	110	N/A	101	N/A	4379716
D8-ACENAPHTHYLENE (sur.)	%	110	N/A	122	N/A	116	N/A	4379716
D8-NAPHTHALENE (sur.)	%	105	N/A	96	N/A	109	N/A	4379716
TERPHENYL-D14 (sur.)	%	116	N/A	116	N/A	118	N/A	4379716

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample matrix interference.
(2) RDL raised due to sample dilution.

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X98015		
Sampling Date		2010/10/20		
COC Number		G018051		
	Units	**G-08-01**	**RDL**	**QC Batch**
Polycyclic Aromatics				
Naphthalene	mg/kg	0.11 (1)	0.002	4394998
2-Methylnaphthalene	mg/kg	0.18 (1)	0.002	4394998
Acenaphthylene	mg/kg	0.041 (1)	0.002	4394998
Acenaphthene	mg/kg	0.013 (1)	0.002	4394998
Fluorene	mg/kg	0.019 (1)	0.002	4394998
Phenanthrene	mg/kg	0.21 (1)	0.002	4394998
Anthracene	mg/kg	0.055 (1)	0.002	4394998
Fluoranthene	mg/kg	0.20 (1)	0.002	4394998
Pyrene	mg/kg	0.20 (1)	0.002	4394998
Benzo(a)anthracene	mg/kg	0.088 (1)	0.002	4394998
Chrysene	mg/kg	0.096 (1)	0.002	4394998
Benzo(b&j)fluoranthene	mg/kg	0.17 (1)	0.002	4394998
Benzo(k)fluoranthene	mg/kg	0.057 (1)	0.002	4394998
Benzo(a)pyrene	mg/kg	0.098 (1)	0.002	4394998
Indeno(1,2,3-cd)pyrene	mg/kg	0.11 (1)	0.004	4394998
Dibenz(a,h)anthracene	mg/kg	0.027 (1)	0.004	4394998
Benzo(g,h,i)perylene	mg/kg	0.13 (1)	0.004	4394998
Low Molecular Weight PAH`s	mg/kg	0.62	0.002	4383171
High Molecular Weight PAH`s	mg/kg	1.2	0.02	4383171
Total PAH	mg/kg	1.9	0.02	4383171
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	82	N/A	4394998
D12-BENZO(A)PYRENE (sur.)	%	60	N/A	4394998
D8-ACENAPHTHYLENE (sur.)	%	86	N/A	4394998
D8-NAPHTHALENE (sur.)	%	84	N/A	4394998
TERPHENYL-D14 (sur.)	%	80	N/A	4394998

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X98015		
Sampling Date		2010/10/20		
COC Number		G018051		
	Units	**G-08-01**	**RDL**	**QC Batch**
Calculated Parameters				
F1 (C6-C10) - BTEX	mg/kg	<10	10	4383320
Volatile Hydrocarbons				
(C6-C10)	mg/kg	<10	10	4393191
Volatiles				
Chloromethane	mg/kg	<0.1	0.1	4389803
Vinyl chloride	mg/kg	<0.06	0.06	4389803
Bromomethane	mg/kg	<0.3	0.3	4389803
Chloroethane	mg/kg	<0.1	0.1	4389803
Trichlorofluoromethane	mg/kg	<0.2	0.2	4389803
1,1-dichloroethene	mg/kg	<0.03	0.03	4389803
Dichloromethane	mg/kg	<0.1	0.1	4389803
trans-1,2-dichloroethene	mg/kg	<0.03	0.03	4389803
1,1-dichloroethane	mg/kg	<0.03	0.03	4389803
cis-1,2-dichloroethene	mg/kg	<0.03	0.03	4389803
Chloroform	mg/kg	<0.05	0.05	4389803
1,1,1-trichloroethane	mg/kg	<0.03	0.03	4389803
1,2-dichloroethane	mg/kg	<0.03	0.03	4389803
Carbon tetrachloride	mg/kg	<0.03	0.03	4389803
Benzene	mg/kg	<0.005	0.005	4389803
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	0.1	4389803
1,2-dichloropropane	mg/kg	<0.03	0.03	4389803
Trichloroethene	mg/kg	<0.01	0.01	4389803
Bromodichloromethane	mg/kg	<0.05	0.05	4389803
cis-1,3-dichloropropene	mg/kg	<0.05	0.05	4389803
trans-1,3-dichloropropene	mg/kg	<0.05	0.05	4389803
1,1,2-trichloroethane	mg/kg	<0.03	0.03	4389803
Toluene	mg/kg	<0.03	0.03	4389803
Chlorodibromomethane	mg/kg	<0.05	0.05	4389803
Dibromoethane	mg/kg	<0.03	0.03	4389803
Tetrachloroethene	mg/kg	<0.03	0.03	4389803
Chlorobenzene	mg/kg	<0.03	0.03	4389803
1,1,1,2-tetrachloroethane	mg/kg	<0.03	0.03	4389803
Ethylbenzene	mg/kg	<0.01	0.01	4389803

RDL = Reportable Detection Limit

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME VOC + F1 IN SOIL (SOIL)

Maxxam ID		X98015		
Sampling Date		2010/10/20		
COC Number		G018051		
	Units	**G-08-01**	**RDL**	**QC Batch**
m & p-Xylene	mg/kg	<0.1	0.1	4389803
Bromoform	mg/kg	<0.05	0.05	4389803
Styrene	mg/kg	<0.1	0.1	4389803
o-Xylene	mg/kg	<0.1	0.1	4389803
Xylenes (Total)	mg/kg	<0.1	0.1	4389803
1,1,2,2-tetrachloroethane	mg/kg	<0.03	0.03	4389803
1,2-dichlorobenzene	mg/kg	<0.03	0.03	4389803
1,3-dichlorobenzene	mg/kg	<0.03	0.03	4389803
1,4-dichlorobenzene	mg/kg	<0.03	0.03	4389803
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	95	N/A	4389803
D10-ETHYLBENZENE (sur.)	%	100	N/A	4389803
D4-1,2-DICHLOROETHANE (sur.)	%	106	N/A	4389803
D8-TOLUENE (sur.)	%	100	N/A	4389803

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME&CSR VOC/F1/VPH IN SOIL (SOIL)

Maxxam ID		X97934		X97936		X97938		
Sampling Date		2010/10/20		2010/10/20		2010/10/20		
COC Number		F111694		F111694		F111694		
	Units	**G-06-03**	**RDL**	**G-44-02**	**RDL**	**G-47-02**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	mg/kg	<10	10	120	10	<10	10	4373571
Volatiles								
VPH (VH6 to 10 - BTEX)	mg/kg	<10	10	110	10	<10	10	4370458
Volatile Hydrocarbons								
(C6-C10)	mg/kg	<10	10	120	10	<10	10	4381628
CSR VH C6-C10	mg/kg	<10	10	110	10	<10	10	4381625
Volatiles								
Chloromethane	mg/kg	<0.1	0.1	<0.1	0.1	<0.1	0.1	4378805
Vinyl chloride	mg/kg	<0.06	0.06	<0.06	0.06	<0.06	0.06	4378805
Bromomethane	mg/kg	<0.3	0.3	<0.3	0.3	<0.3	0.3	4378805
Chloroethane	mg/kg	<0.1	0.1	<0.1	0.1	<0.1	0.1	4378805
Trichlorofluoromethane	mg/kg	<0.2	0.2	<0.2	0.2	<0.2	0.2	4378805
1,1-dichloroethene	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Dichloromethane	mg/kg	<0.1	0.1	<0.1	0.1	<0.1	0.1	4378805
trans-1,2-dichloroethene	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
1,1-dichloroethane	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
cis-1,2-dichloroethene	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Chloroform	mg/kg	<0.05	0.05	<0.05	0.05	<0.05	0.05	4378805
1,1,1-trichloroethane	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
1,2-dichloroethane	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Carbon tetrachloride	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Benzene	mg/kg	<0.005	0.005	<0.01 (1)	0.01	<0.005	0.005	4378805
Methyl-tert-butylether (MTBE)	mg/kg	<0.1	0.1	<0.1	0.1	<0.1	0.1	4378805
1,2-dichloropropane	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Trichloroethene	mg/kg	<0.01	0.01	0.16	0.01	<0.01	0.01	4378805
Bromodichloromethane	mg/kg	<0.05	0.05	<0.05	0.05	<0.05	0.05	4378805
cis-1,3-dichloropropene	mg/kg	<0.05	0.05	<0.05	0.05	<0.05	0.05	4378805
trans-1,3-dichloropropene	mg/kg	<0.05	0.05	<0.05	0.05	<0.05	0.05	4378805
1,1,2-trichloroethane	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Toluene	mg/kg	<0.03	0.03	<0.04 (1)	0.04	<0.03	0.03	4378805
Chlorodibromomethane	mg/kg	<0.05	0.05	<0.05	0.05	<0.05	0.05	4378805
Dibromoethane	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805

RDL = Reportable Detection Limit
(1) RDL raised due to sample matrix interference.

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

CCME&CSR VOC/F1/VPH IN SOIL (SOIL)

Maxxam ID		X97934		X97936		X97938		
Sampling Date		2010/10/20		2010/10/20		2010/10/20		
COC Number		F111694		F111694		F111694		
	Units	**G-06-03**	**RDL**	**G-44-02**	**RDL**	**G-47-02**	**RDL**	**QC Batch**
Tetrachloroethene	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Chlorobenzene	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
1,1,1,2-tetrachloroethane	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Ethylbenzene	mg/kg	<0.01	0.01	0.05	0.01	<0.01	0.01	4378805
m & p-Xylene	mg/kg	<0.1	0.1	0.3	0.1	<0.1	0.1	4378805
Bromoform	mg/kg	<0.05	0.05	<0.05	0.05	<0.05	0.05	4378805
Styrene	mg/kg	<0.1	0.1	<0.1	0.1	<0.1	0.1	4378805
o-Xylene	mg/kg	<0.1	0.1	0.1	0.1	<0.1	0.1	4378805
Xylenes (Total)	mg/kg	<0.1	0.1	0.4	0.1	<0.1	0.1	4378805
1,1,2,2-tetrachloroethane	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
1,2-dichlorobenzene	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
1,3-dichlorobenzene	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
1,4-dichlorobenzene	mg/kg	<0.03	0.03	<0.03	0.03	<0.03	0.03	4378805
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	77	N/A	131 (1)	N/A	82	N/A	4378805
D10-ETHYLBENZENE (sur.)	%	82	N/A	125	N/A	88	N/A	4378805
D4-1,2-DICHLOROETHANE (sur.)	%	112	N/A	114	N/A	101	N/A	4378805
D8-TOLUENE (sur.)	%	82	N/A	114	N/A	90	N/A	4378805

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) Surrogate recovery above control limit - Matrix interference

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A3749
Report Date: 2010/11/04

AECOM
Client Project #: DOMINION BRIDGE 60164142

Package 1	10.7°C
Package 2	5.0°C

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

PETROLEUM HYDROCARBONS (CCME) Comments

CCME Hydrocarbons (F2-F4 in soil): sample contained > 50% moisture

CCME Hydrocarbons (F2-F4 in soil): sample contained > 50% moisture

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4376204	SZ4	Method Blank	Moisture	2010/10/28	<0.3		%	
		RPD	Moisture	2010/10/28	2.6		%	20
4378805	AC2	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/29		108	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/29		108	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/29		111	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/29		103	%	70 - 130
			Chloromethane	2010/10/29		127	%	40 - 150
			Vinyl chloride	2010/10/29		116	%	40 - 150
			Bromomethane	2010/10/29		102	%	40 - 150
			Chloroethane	2010/10/29		143	%	40 - 150
			Trichlorofluoromethane	2010/10/29		140	%	40 - 150
			1,1-dichloroethene	2010/10/29		128	%	60 - 140
			Dichloromethane	2010/10/29		114	%	60 - 140
			trans-1,2-dichloroethene	2010/10/29		123	%	60 - 140
			1,1-dichloroethane	2010/10/29		107	%	60 - 140
			cis-1,2-dichloroethene	2010/10/29		130	%	60 - 140
			Chloroform	2010/10/29		110	%	60 - 140
			1,1,1-trichloroethane	2010/10/29		123	%	60 - 140
			1,2-dichloroethane	2010/10/29		104	%	60 - 140
			Carbon tetrachloride	2010/10/29		126	%	60 - 140
			Benzene	2010/10/29		111	%	60 - 140
			1,2-dichloropropane	2010/10/29		119	%	60 - 140
			Trichloroethene	2010/10/29		114	%	60 - 140
			Bromodichloromethane	2010/10/29		100	%	60 - 140
			cis-1,3-dichloropropene	2010/10/29		61	%	60 - 140
			trans-1,3-dichloropropene	2010/10/29		61	%	60 - 140
			1,1,2-trichloroethane	2010/10/29		131	%	60 - 140
			Toluene	2010/10/29		100	%	60 - 140
			Chlorodibromomethane	2010/10/29		124	%	60 - 140
			Dibromoethane	2010/10/29		111	%	60 - 140
			Tetrachloroethene	2010/10/29		120	%	60 - 140
			Chlorobenzene	2010/10/29		106	%	60 - 140
			1,1,1,2-tetrachloroethane	2010/10/29		110	%	60 - 140
			Ethylbenzene	2010/10/29		119	%	60 - 140
			m & p-Xylene	2010/10/29		130	%	60 - 140
			Bromoform	2010/10/29		112	%	60 - 140
			Styrene	2010/10/29		129	%	60 - 140
			o-Xylene	2010/10/29		123	%	60 - 140
			1,1,2,2-tetrachloroethane	2010/10/29		99	%	60 - 140
			1,2-dichlorobenzene	2010/10/29		94	%	60 - 140
			1,3-dichlorobenzene	2010/10/29		88	%	60 - 140
			1,4-dichlorobenzene	2010/10/29		100	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/29		88	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/29		72	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/29		98	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/29		80	%	70 - 130
			Chloromethane	2010/10/29		72	%	40 - 150
			Vinyl chloride	2010/10/29		82	%	40 - 150
			Bromomethane	2010/10/29		82	%	40 - 150
			Chloroethane	2010/10/29		89	%	40 - 150
			Trichlorofluoromethane	2010/10/29		90	%	40 - 150
			1,1-dichloroethene	2010/10/29		98	%	60 - 140
			Dichloromethane	2010/10/29		101	%	60 - 140
			trans-1,2-dichloroethene	2010/10/29		90	%	60 - 140
			1,1-dichloroethane	2010/10/29		97	%	60 - 140

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4378805	AC2	Spiked Blank	cis-1,2-dichloroethene	2010/10/29		93	%	60 - 140
			Chloroform	2010/10/29		79	%	60 - 140
			1,1,1-trichloroethane	2010/10/29		97	%	60 - 140
			1,2-dichloroethane	2010/10/29		76	%	60 - 140
			Carbon tetrachloride	2010/10/29		95	%	60 - 140
			Benzene	2010/10/29		100	%	60 - 140
			1,2-dichloropropane	2010/10/29		85	%	60 - 140
			Trichloroethene	2010/10/29		88	%	60 - 140
			Bromodichloromethane	2010/10/29		83	%	60 - 140
			cis-1,3-dichloropropene	2010/10/29		48 (1)	%	60 - 140
			trans-1,3-dichloropropene	2010/10/29		44 (1)	%	60 - 140
			1,1,2-trichloroethane	2010/10/29		93	%	60 - 140
			Toluene	2010/10/29		78	%	60 - 140
			Chlorodibromomethane	2010/10/29		86	%	60 - 140
			Dibromoethane	2010/10/29		89	%	60 - 140
			Tetrachloroethene	2010/10/29		99	%	60 - 140
			Chlorobenzene	2010/10/29		83	%	60 - 140
			1,1,1,2-tetrachloroethane	2010/10/29		84	%	60 - 140
			Ethylbenzene	2010/10/29		90	%	60 - 140
			m & p-Xylene	2010/10/29		85	%	60 - 140
			Bromoform	2010/10/29		87	%	60 - 140
			Styrene	2010/10/29		89	%	60 - 140
			o-Xylene	2010/10/29		82	%	60 - 140
			1,1,2,2-tetrachloroethane	2010/10/29		92	%	60 - 140
			1,2-dichlorobenzene	2010/10/29		100	%	60 - 140
			1,3-dichlorobenzene	2010/10/29		94	%	60 - 140
			1,4-dichlorobenzene	2010/10/29		95	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/30		104	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/30		106	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/30		112	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/30		93	%	70 - 130
			Chloromethane	2010/10/30	<0.1		mg/kg	
			Vinyl chloride	2010/10/30	<0.06		mg/kg	
			Bromomethane	2010/10/30	<0.3		mg/kg	
			Chloroethane	2010/10/30	<0.1		mg/kg	
			Trichlorofluoromethane	2010/10/30	<0.2		mg/kg	
			1,1-dichloroethene	2010/10/30	<0.03		mg/kg	
			Dichloromethane	2010/10/30	<0.1		mg/kg	
			trans-1,2-dichloroethene	2010/10/30	<0.03		mg/kg	
			1,1-dichloroethane	2010/10/30	<0.03		mg/kg	
			cis-1,2-dichloroethene	2010/10/30	<0.03		mg/kg	
			Chloroform	2010/10/30	<0.05		mg/kg	
			1,1,1-trichloroethane	2010/10/30	<0.03		mg/kg	
			1,2-dichloroethane	2010/10/30	<0.03		mg/kg	
			Carbon tetrachloride	2010/10/30	<0.03		mg/kg	
			Benzene	2010/10/30	<0.005		mg/kg	
			Methyl-tert-butylether (MTBE)	2010/10/30	<0.1		mg/kg	
			1,2-dichloropropane	2010/10/30	<0.03		mg/kg	
			Trichloroethene	2010/10/30	<0.01		mg/kg	
			Bromodichloromethane	2010/10/30	<0.05		mg/kg	
			cis-1,3-dichloropropene	2010/10/30	<0.05		mg/kg	
			trans-1,3-dichloropropene	2010/10/30	<0.05		mg/kg	
			1,1,2-trichloroethane	2010/10/30	<0.03		mg/kg	
			Toluene	2010/10/30	<0.03		mg/kg	
			Chlorodibromomethane	2010/10/30	<0.05		mg/kg	

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4378805	AC2	Method Blank	Dibromoethane	2010/10/30	<0.03		mg/kg	
			Tetrachloroethene	2010/10/30	<0.03		mg/kg	
			Chlorobenzene	2010/10/30	<0.03		mg/kg	
			1,1,1,2-tetrachloroethane	2010/10/30	<0.03		mg/kg	
			Ethylbenzene	2010/10/30	<0.01		mg/kg	
			m & p-Xylene	2010/10/30	<0.1		mg/kg	
			Bromoform	2010/10/30	<0.05		mg/kg	
			Styrene	2010/10/30	<0.1		mg/kg	
			o-Xylene	2010/10/30	<0.1		mg/kg	
			Xylenes (Total)	2010/10/30	<0.1		mg/kg	
			1,1,2,2-tetrachloroethane	2010/10/30	<0.03		mg/kg	
			1,2-dichlorobenzene	2010/10/30	<0.03		mg/kg	
			1,3-dichlorobenzene	2010/10/30	<0.03		mg/kg	
			1,4-dichlorobenzene	2010/10/30	<0.03		mg/kg	
		RPD	Chloromethane	2010/10/29	NC		%	40
			Vinyl chloride	2010/10/29	NC		%	40
			Bromomethane	2010/10/29	NC		%	40
			Chloroethane	2010/10/29	NC		%	40
			Trichlorofluoromethane	2010/10/29	NC		%	40
			1,1-dichloroethene	2010/10/29	NC		%	40
			Dichloromethane	2010/10/29	NC		%	40
			trans-1,2-dichloroethene	2010/10/29	NC		%	40
			1,1-dichloroethane	2010/10/29	NC		%	40
			cis-1,2-dichloroethene	2010/10/29	NC		%	40
			Chloroform	2010/10/29	NC		%	40
			1,1,1-trichloroethane	2010/10/29	NC		%	40
			1,2-dichloroethane	2010/10/29	NC		%	40
			Carbon tetrachloride	2010/10/29	NC		%	40
			Benzene	2010/10/29	NC		%	40
			Methyl-tert-butylether (MTBE)	2010/10/29	NC		%	40
			1,2-dichloropropane	2010/10/29	NC		%	40
			Trichloroethene	2010/10/29	NC		%	40
			Bromodichloromethane	2010/10/29	NC		%	40
			cis-1,3-dichloropropene	2010/10/29	NC		%	40
			trans-1,3-dichloropropene	2010/10/29	NC		%	40
			1,1,2-trichloroethane	2010/10/29	NC		%	40
			Toluene	2010/10/29	NC		%	40
			Chlorodibromomethane	2010/10/29	NC		%	40
			Dibromoethane	2010/10/29	NC		%	40
			Tetrachloroethene	2010/10/29	NC		%	40
			Chlorobenzene	2010/10/29	NC		%	40
			1,1,1,2-tetrachloroethane	2010/10/29	NC		%	40
			Ethylbenzene	2010/10/29	NC		%	40
			m & p-Xylene	2010/10/29	NC		%	40
			Bromoform	2010/10/29	NC		%	40
			Styrene	2010/10/29	NC		%	40
			o-Xylene	2010/10/29	NC		%	40
			Xylenes (Total)	2010/10/29	NC		%	40
			1,1,2,2-tetrachloroethane	2010/10/29	NC		%	40
			1,2-dichlorobenzene	2010/10/29	NC		%	40
			1,3-dichlorobenzene	2010/10/29	NC		%	40
			1,4-dichlorobenzene	2010/10/29	NC		%	40
4378810	JL4	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/29		103	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/29		120	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/29		111	%	70 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4378810	JL4	Matrix Spike	D8-TOLUENE (sur.)	2010/10/29		96	%	70 - 130
			Benzene	2010/10/29		126	%	60 - 140
			Toluene	2010/10/29		113	%	60 - 140
			Ethylbenzene	2010/10/29		132	%	60 - 140
			m & p-Xylene	2010/10/29		133	%	60 - 140
			o-Xylene	2010/10/29		136	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/29		99	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/29		103	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/29		98	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/29		101	%	70 - 130
			VH C6-C10	2010/10/29		87	%	60 - 140
			(C6-C10)	2010/10/29		100	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/29		102	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/29		92	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/29		103	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/29		102	%	70 - 130
			Benzene	2010/10/29		96	%	60 - 140
			Toluene	2010/10/29		93	%	60 - 140
			Ethylbenzene	2010/10/29		108	%	60 - 140
			m & p-Xylene	2010/10/29		108	%	60 - 140
			o-Xylene	2010/10/29		108	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/29		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/29		101	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/29		103	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/29		96	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/29	<0.1		mg/kg	
			Benzene	2010/10/29	<0.005		mg/kg	
			Toluene	2010/10/29	<0.02		mg/kg	
			Ethylbenzene	2010/10/29	<0.01		mg/kg	
			m & p-Xylene	2010/10/29	<0.04		mg/kg	
			o-Xylene	2010/10/29	<0.04		mg/kg	
			Styrene	2010/10/29	<0.03		mg/kg	
			Xylenes (Total)	2010/10/29	<0.04		mg/kg	
			VH C6-C10	2010/10/29	<10		mg/kg	
			(C6-C10)	2010/10/29	<10		mg/kg	
		RPD	Methyl-tert-butylether (MTBE)	2010/10/29	NC		%	40
			Benzene	2010/10/29	NC		%	40
			Toluene	2010/10/29	NC		%	40
			Ethylbenzene	2010/10/29	NC		%	40
			m & p-Xylene	2010/10/29	NC		%	40
			o-Xylene	2010/10/29	NC		%	40
			Xylenes (Total)	2010/10/29	NC		%	40
			VH C6-C10	2010/10/29	NC		%	40
4378817	KL	Matrix Spike						
		[X97937-01]	4-BROMOFLUOROBENZENE (sur.)	2010/10/28		102	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/28		112	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/28		100	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/28		98	%	70 - 130
			Benzene	2010/10/28		115	%	60 - 140
			Toluene	2010/10/28		103	%	60 - 140
			Ethylbenzene	2010/10/28		124	%	60 - 140
			m & p-Xylene	2010/10/28		120	%	60 - 140
			o-Xylene	2010/10/28		131	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/28		99	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/28		95	%	50 - 130

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4378817	KL	QC Standard	D4-1,2-DICHLOROETHANE (sur.)	2010/10/28		97	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/28		97	%	70 - 130
			VH C6-C10	2010/10/28		111	%	60 - 140
			(C6-C10)	2010/10/28		108	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/28		100	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/28		96	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/28		99	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/28		97	%	70 - 130
			Benzene	2010/10/28		106	%	60 - 140
			Toluene	2010/10/28		94	%	60 - 140
			Ethylbenzene	2010/10/28		111	%	60 - 140
			m & p-Xylene	2010/10/28		108	%	60 - 140
			o-Xylene	2010/10/28		115	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/28		91	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/28		100	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/28		98	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/28		95	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/10/28	<0.1		mg/kg	
			Benzene	2010/10/28	<0.005		mg/kg	
			Toluene	2010/10/28	<0.02		mg/kg	
			Ethylbenzene	2010/10/28	<0.01		mg/kg	
			m & p-Xylene	2010/10/28	<0.04		mg/kg	
			o-Xylene	2010/10/28	<0.04		mg/kg	
			Styrene	2010/10/28	<0.03		mg/kg	
			Xylenes (Total)	2010/10/28	<0.04		mg/kg	
			VH C6-C10	2010/10/28	<10		mg/kg	
			(C6-C10)	2010/10/28	<10		mg/kg	
		RPD [X97937-01]	Methyl-tert-butylether (MTBE)	2010/10/28	NC		%	40
			Benzene	2010/10/28	NC		%	40
			Toluene	2010/10/28	NC		%	40
			Ethylbenzene	2010/10/28	NC		%	40
			m & p-Xylene	2010/10/28	NC		%	40
			o-Xylene	2010/10/28	NC		%	40
			Styrene	2010/10/28	NC		%	40
			Xylenes (Total)	2010/10/28	NC		%	40
			VH C6-C10	2010/10/28	NC		%	40
			(C6-C10)	2010/10/28	NC		%	40
4378825	KPA	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/10/29		108	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/29		108	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/29		107	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/29		98	%	70 - 130
			Benzene	2010/10/29		99	%	60 - 140
			Toluene	2010/10/29		93	%	60 - 140
			Ethylbenzene	2010/10/29		100	%	60 - 140
			m & p-Xylene	2010/10/29		100	%	60 - 140
			o-Xylene	2010/10/29		101	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/10/28		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/28		81	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/28		91	%	70 - 130
			D8-TOLUENE (sur.)	2010/10/28		101	%	70 - 130
			VH C6-C10	2010/10/28		122	%	60 - 140
			(C6-C10)	2010/10/28		128	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/28		96	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/10/28		80	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/10/28		91	%	70 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4378825 KPA	Spiked Blank	D8-TOLUENE (sur.)	2010/10/28		100	%	70 - 130
		Benzene	2010/10/28		85	%	60 - 140
		Toluene	2010/10/28		81	%	60 - 140
		Ethylbenzene	2010/10/28		85	%	60 - 140
		m & p-Xylene	2010/10/28		90	%	60 - 140
		o-Xylene	2010/10/28		86	%	60 - 140
	Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/10/28		94	%	70 - 130
		D10-ETHYLBENZENE (sur.)	2010/10/28		85	%	50 - 130
		D4-1,2-DICHLOROETHANE (sur.)	2010/10/28		91	%	70 - 130
		D8-TOLUENE (sur.)	2010/10/28		100	%	70 - 130
		Methyl-tert-butylether (MTBE)	2010/10/28	<0.1		mg/kg	
		Benzene	2010/10/28	<0.005		mg/kg	
		Toluene	2010/10/28	<0.02		mg/kg	
		Ethylbenzene	2010/10/28	<0.01		mg/kg	
		m & p-Xylene	2010/10/28	<0.04		mg/kg	
		o-Xylene	2010/10/28	<0.04		mg/kg	
		Styrene	2010/10/28	<0.03		mg/kg	
		Xylenes (Total)	2010/10/28	<0.04		mg/kg	
		VH C6-C10	2010/10/28	<10		mg/kg	
		(C6-C10)	2010/10/28	<10		mg/kg	
	RPD	Methyl-tert-butylether (MTBE)	2010/10/29	NC		%	40
		Benzene	2010/10/29	7.2		%	40
		Toluene	2010/10/29	35.6		%	40
		Ethylbenzene	2010/10/29	2.6		%	40
		m & p-Xylene	2010/10/29	10.7		%	40
		o-Xylene	2010/10/29	NC		%	40
		Styrene	2010/10/29	NC		%	40
		Xylenes (Total)	2010/10/29	10.7		%	40
		VH C6-C10	2010/10/29	NC		%	40
4379389 JC9	Matrix Spike						
	[X97986-01]	O-TERPHENYL (sur.)	2010/10/28		78	%	50 - 130
		F2 (C10-C16 Hydrocarbons)	2010/10/28		88	%	50 - 130
		F3 (C16-C34 Hydrocarbons)	2010/10/28		93	%	50 - 130
		F4 (C34-C50 Hydrocarbons)	2010/10/28		92	%	50 - 130
	Spiked Blank	O-TERPHENYL (sur.)	2010/10/28		93	%	50 - 130
		F2 (C10-C16 Hydrocarbons)	2010/10/28		93	%	80 - 120
		F3 (C16-C34 Hydrocarbons)	2010/10/28		98	%	80 - 120
		F4 (C34-C50 Hydrocarbons)	2010/10/28		90	%	80 - 120
	Method Blank	O-TERPHENYL (sur.)	2010/10/28		103	%	50 - 130
		F2 (C10-C16 Hydrocarbons)	2010/10/28	<10		mg/kg	
		F3 (C16-C34 Hydrocarbons)	2010/10/28	<10		mg/kg	
		F4 (C34-C50 Hydrocarbons)	2010/10/28	<10		mg/kg	
	RPD [X97986-01]	F2 (C10-C16 Hydrocarbons)	2010/10/28	NC		%	40
		F3 (C16-C34 Hydrocarbons)	2010/10/28	15.1		%	40
		F4 (C34-C50 Hydrocarbons)	2010/10/28	1		%	40
		Reached Baseline at C50	2010/10/28	NC		%	50
4379716 VB1	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/29		111	%	60 - 130
		D12-BENZO(A)PYRENE (sur.)	2010/10/29		111	%	60 - 130
		D8-ACENAPHTHYLENE (sur.)	2010/10/29		118	%	50 - 130
		D8-NAPHTHALENE (sur.)	2010/10/29		106	%	50 - 130
		TERPHENYL-D14 (sur.)	2010/10/29		116	%	60 - 130
		Naphthalene	2010/10/29		92	%	40 - 130
		2-Methylnaphthalene	2010/10/29		95	%	40 - 130
		Acenaphthylene	2010/10/29		101	%	40 - 130
		Acenaphthene	2010/10/29		104	%	40 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4379716	VB1	Matrix Spike	Fluorene	2010/10/29		104	%	40 - 130
			Phenanthrene	2010/10/29		101	%	40 - 130
			Anthracene	2010/10/29		98	%	40 - 130
			Fluoranthene	2010/10/29		104	%	40 - 130
			Pyrene	2010/10/29		106	%	40 - 130
			Benzo(a)anthracene	2010/10/29		99	%	40 - 130
			Chrysene	2010/10/29		94	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/29		115	%	40 - 130
			Benzo(k)fluoranthene	2010/10/29		93	%	40 - 130
			Benzo(a)pyrene	2010/10/29		98	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/29		96	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/29		96	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/29		99	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/29		119	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/29		109	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/29		118	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/29		112	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/29		123	%	60 - 130
			Naphthalene	2010/10/29		94	%	40 - 130
			2-Methylnaphthalene	2010/10/29		92	%	40 - 130
			Acenaphthylene	2010/10/29		97	%	40 - 130
			Acenaphthene	2010/10/29		100	%	40 - 130
			Fluorene	2010/10/29		97	%	40 - 130
			Phenanthrene	2010/10/29		99	%	40 - 130
			Anthracene	2010/10/29		102	%	40 - 130
			Fluoranthene	2010/10/29		99	%	40 - 130
			Pyrene	2010/10/29		102	%	40 - 130
			Benzo(a)anthracene	2010/10/29		92	%	40 - 130
			Chrysene	2010/10/29		98	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/29		96	%	40 - 130
			Benzo(k)fluoranthene	2010/10/29		89	%	40 - 130
			Benzo(a)pyrene	2010/10/29		95	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/29		78	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/29		80	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/29		84	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/29		101	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/29		86	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/29		102	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/29		100	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/29		107	%	60 - 130
			Naphthalene	2010/10/29	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/29	<0.001		mg/kg	
			Acenaphthylene	2010/10/29	<0.001		mg/kg	
			Acenaphthene	2010/10/29	<0.001		mg/kg	
			Fluorene	2010/10/29	<0.001		mg/kg	
			Phenanthrene	2010/10/29	<0.001		mg/kg	
			Anthracene	2010/10/29	<0.001		mg/kg	
			Fluoranthene	2010/10/29	<0.001		mg/kg	
			Pyrene	2010/10/29	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/29	<0.001		mg/kg	
			Chrysene	2010/10/29	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/29	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/29	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/29	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/29	<0.002		mg/kg	

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4379716	VB1	Method Blank	Dibenz(a,h)anthracene	2010/10/29	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/29	<0.002		mg/kg	
		RPD	Naphthalene	2010/10/29	NC		%	50
			2-Methylnaphthalene	2010/10/29	NC		%	50
			Acenaphthylene	2010/10/29	NC (2)		%	50
			Acenaphthene	2010/10/29	NC (2)		%	50
			Fluorene	2010/10/29	NC (2)		%	50
			Phenanthrene	2010/10/29	NC (2)		%	50
			Anthracene	2010/10/29	NC (2)		%	50
			Fluoranthene	2010/10/29	NC		%	50
			Pyrene	2010/10/29	20.0		%	50
			Benzo(a)anthracene	2010/10/29	NC		%	50
			Chrysene	2010/10/29	NC		%	50
			Benzo(b&j)fluoranthene	2010/10/29	NC		%	50
			Benzo(k)fluoranthene	2010/10/29	NC		%	50
			Benzo(a)pyrene	2010/10/29	NC		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/29	NC		%	50
			Dibenz(a,h)anthracene	2010/10/29	NC		%	50
			Benzo(g,h,i)perylene	2010/10/29	NC		%	50
4379855	DJ	Matrix Spike						
		[X97955-02]	Total Arsenic (As)	2010/10/29		99	%	75 - 125
			Total Beryllium (Be)	2010/10/29		104	%	75 - 125
			Total Cadmium (Cd)	2010/10/29		102	%	75 - 125
			Total Chromium (Cr)	2010/10/29		100	%	75 - 125
			Total Cobalt (Co)	2010/10/29		96	%	75 - 125
			Total Copper (Cu)	2010/10/29		95	%	75 - 125
			Total Lead (Pb)	2010/10/29		102	%	75 - 125
			Total Lithium (Li)	2010/10/29		101	%	75 - 125
			Total Mercury (Hg)	2010/10/29		103	%	75 - 125
			Total Nickel (Ni)	2010/10/29		100	%	75 - 125
			Total Selenium (Se)	2010/10/29		101	%	75 - 125
			Total Uranium (U)	2010/10/29		101	%	75 - 125
			Total Vanadium (V)	2010/10/29		104	%	75 - 125
			Total Zinc (Zn)	2010/10/29		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/29		90	%	70 - 130
			Total Antimony (Sb)	2010/10/29		84	%	70 - 130
			Total Arsenic (As)	2010/10/29		92	%	70 - 130
			Total Barium (Ba)	2010/10/29		106	%	70 - 130
			Total Cadmium (Cd)	2010/10/29		93	%	70 - 130
			Total Calcium (Ca)	2010/10/29		93	%	70 - 130
			Total Chromium (Cr)	2010/10/29		95	%	70 - 130
			Total Cobalt (Co)	2010/10/29		90	%	70 - 130
			Total Copper (Cu)	2010/10/29		88	%	70 - 130
			Total Iron (Fe)	2010/10/29		90	%	70 - 130
			Total Lead (Pb)	2010/10/29		102	%	70 - 130
			Total Magnesium (Mg)	2010/10/29		90	%	70 - 130
			Total Manganese (Mn)	2010/10/29		94	%	70 - 130
			Total Molybdenum (Mo)	2010/10/29		90	%	70 - 130
			Total Nickel (Ni)	2010/10/29		90	%	70 - 130
			Total Phosphorus (P)	2010/10/29		91	%	70 - 130
			Total Strontium (Sr)	2010/10/29		91	%	70 - 130
			Total Thallium (Tl)	2010/10/29		87	%	70 - 130
			Total Titanium (Ti)	2010/10/29		90	%	70 - 130
			Total Uranium (U)	2010/10/29		93	%	70 - 130
			Total Vanadium (V)	2010/10/29		95	%	70 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4379855	DJ	QC Standard	Total Zinc (Zn)	2010/10/29		85	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/29		99	%	75 - 125
			Total Beryllium (Be)	2010/10/29		99	%	75 - 125
			Total Cadmium (Cd)	2010/10/29		100	%	75 - 125
			Total Chromium (Cr)	2010/10/29		96	%	75 - 125
			Total Cobalt (Co)	2010/10/29		96	%	75 - 125
			Total Copper (Cu)	2010/10/29		100	%	75 - 125
			Total Lead (Pb)	2010/10/29		103	%	75 - 125
			Total Lithium (Li)	2010/10/29		97	%	75 - 125
			Total Mercury (Hg)	2010/10/29		99	%	75 - 125
			Total Nickel (Ni)	2010/10/29		97	%	75 - 125
			Total Selenium (Se)	2010/10/29		107	%	75 - 125
			Total Uranium (U)	2010/10/29		99	%	75 - 125
			Total Vanadium (V)	2010/10/29		96	%	75 - 125
			Total Zinc (Zn)	2010/10/29		100	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/29	<100		mg/kg	
			Total Antimony (Sb)	2010/10/29	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/29	0.3, RDL=0.2		mg/kg	
			Total Barium (Ba)	2010/10/29	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/29	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/29	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/29	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/29	<100		mg/kg	
			Total Chromium (Cr)	2010/10/29	<1		mg/kg	
			Total Cobalt (Co)	2010/10/29	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/29	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/29	<100		mg/kg	
			Total Lead (Pb)	2010/10/29	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/29	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/29	<100		mg/kg	
			Total Manganese (Mn)	2010/10/29	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/29	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/29	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/29	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/29	<10		mg/kg	
			Total Potassium (K)	2010/10/29	<100		mg/kg	
			Total Selenium (Se)	2010/10/29	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/29	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/29	<100		mg/kg	
			Total Strontium (Sr)	2010/10/29	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/29	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/29	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/29	<1		mg/kg	
			Total Uranium (U)	2010/10/29	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/29	<2		mg/kg	
			Total Zinc (Zn)	2010/10/29	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/29	<0.5		mg/kg	
		RPD [X97955-02]	Total Aluminum (Al)	2010/10/29	3.9		%	35
			Total Antimony (Sb)	2010/10/29	NC		%	30
			Total Arsenic (As)	2010/10/29	6.2		%	30
			Total Barium (Ba)	2010/10/29	0.6		%	35
			Total Beryllium (Be)	2010/10/29	NC		%	30
			Total Bismuth (Bi)	2010/10/29	NC		%	30
			Total Cadmium (Cd)	2010/10/29	NC		%	30
			Total Calcium (Ca)	2010/10/29	1.6		%	30

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4379855	DJ	RPD [X97955-02]	Total Chromium (Cr)	2010/10/29	1.0		%	30
			Total Cobalt (Co)	2010/10/29	3.0		%	30
			Total Copper (Cu)	2010/10/29	2.1		%	30
			Total Iron (Fe)	2010/10/29	1.6		%	30
			Total Lead (Pb)	2010/10/29	3.6		%	35
			Total Lithium (Li)	2010/10/29	NC		%	30
			Total Magnesium (Mg)	2010/10/29	1.3		%	30
			Total Manganese (Mn)	2010/10/29	1.9		%	30
			Total Mercury (Hg)	2010/10/29	NC		%	35
			Total Molybdenum (Mo)	2010/10/29	NC		%	35
			Total Nickel (Ni)	2010/10/29	0.2		%	30
			Total Phosphorus (P)	2010/10/29	2.7		%	30
			Total Potassium (K)	2010/10/29	0.04		%	35
			Total Selenium (Se)	2010/10/29	NC		%	30
			Total Silver (Ag)	2010/10/29	NC		%	35
			Total Sodium (Na)	2010/10/29	NC		%	35
			Total Strontium (Sr)	2010/10/29	1		%	35
			Total Thallium (Tl)	2010/10/29	NC		%	30
			Total Tin (Sn)	2010/10/29	NC		%	35
			Total Titanium (Ti)	2010/10/29	3.2		%	35
			Total Uranium (U)	2010/10/29	0.3		%	30
			Total Vanadium (V)	2010/10/29	2.0		%	30
			Total Zinc (Zn)	2010/10/29	0.6		%	30
			Total Zirconium (Zr)	2010/10/29	1.2		%	30
4379863	TW2	Spiked Blank	Soluble (2:1) pH	2010/10/29		102	%	96 - 104
		RPD [X97955-02]	Soluble (2:1) pH	2010/10/29	1.8		%	20
4381625	AC2	QC Standard	CSR VH C6-C10	2010/10/29		121	%	60 - 140
		Method Blank	CSR VH C6-C10	2010/10/29	<10		mg/kg	
4381628	AC2	QC Standard	(C6-C10)	2010/10/29		121	%	60 - 140
		Method Blank	(C6-C10)	2010/10/29	<10		mg/kg	
		RPD	(C6-C10)	2010/10/29	NC		%	50
4382787	DJ	Matrix Spike [X97934-02]	Total Arsenic (As)	2010/10/29		102	%	75 - 125
			Total Beryllium (Be)	2010/10/29		106	%	75 - 125
			Total Cadmium (Cd)	2010/10/29		106	%	75 - 125
			Total Chromium (Cr)	2010/10/29		103	%	75 - 125
			Total Cobalt (Co)	2010/10/29		96	%	75 - 125
			Total Copper (Cu)	2010/10/29		96	%	75 - 125
			Total Lead (Pb)	2010/10/29		106	%	75 - 125
			Total Lithium (Li)	2010/10/29		106	%	75 - 125
			Total Mercury (Hg)	2010/10/29		103	%	75 - 125
			Total Nickel (Ni)	2010/10/29		96	%	75 - 125
			Total Selenium (Se)	2010/10/29		101	%	75 - 125
			Total Uranium (U)	2010/10/29		105	%	75 - 125
			Total Vanadium (V)	2010/10/29		NC	%	75 - 125
			Total Zinc (Zn)	2010/10/29		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/29		105	%	70 - 130
			Total Antimony (Sb)	2010/10/29		92	%	70 - 130
			Total Arsenic (As)	2010/10/29		100	%	70 - 130
			Total Barium (Ba)	2010/10/29		110	%	70 - 130
			Total Cadmium (Cd)	2010/10/29		103	%	70 - 130
			Total Calcium (Ca)	2010/10/29		101	%	70 - 130
			Total Chromium (Cr)	2010/10/29		105	%	70 - 130
			Total Cobalt (Co)	2010/10/29		97	%	70 - 130
			Total Copper (Cu)	2010/10/29		91	%	70 - 130

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4382787	DJ	QC Standard	Total Iron (Fe)	2010/10/29		98	%	70 - 130
			Total Lead (Pb)	2010/10/29		107	%	70 - 130
			Total Magnesium (Mg)	2010/10/29		99	%	70 - 130
			Total Manganese (Mn)	2010/10/29		101	%	70 - 130
			Total Molybdenum (Mo)	2010/10/29		118	%	70 - 130
			Total Nickel (Ni)	2010/10/29		96	%	70 - 130
			Total Phosphorus (P)	2010/10/29		99	%	70 - 130
			Total Strontium (Sr)	2010/10/29		97	%	70 - 130
			Total Thallium (Tl)	2010/10/29		92	%	70 - 130
			Total Titanium (Ti)	2010/10/29		108	%	70 - 130
			Total Uranium (U)	2010/10/29		118	%	70 - 130
			Total Vanadium (V)	2010/10/29		106	%	70 - 130
			Total Zinc (Zn)	2010/10/29		92	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/29		102	%	75 - 125
			Total Beryllium (Be)	2010/10/29		105	%	75 - 125
			Total Cadmium (Cd)	2010/10/29		105	%	75 - 125
			Total Chromium (Cr)	2010/10/29		98	%	75 - 125
			Total Cobalt (Co)	2010/10/29		97	%	75 - 125
			Total Copper (Cu)	2010/10/29		102	%	75 - 125
			Total Lead (Pb)	2010/10/29		106	%	75 - 125
			Total Lithium (Li)	2010/10/29		101	%	75 - 125
			Total Mercury (Hg)	2010/10/29		98	%	75 - 125
			Total Nickel (Ni)	2010/10/29		98	%	75 - 125
			Total Selenium (Se)	2010/10/29		109	%	75 - 125
			Total Uranium (U)	2010/10/29		103	%	75 - 125
			Total Vanadium (V)	2010/10/29		99	%	75 - 125
			Total Zinc (Zn)	2010/10/29		107	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/29	<100		mg/kg	
			Total Antimony (Sb)	2010/10/29	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/29	<0.2		mg/kg	
			Total Barium (Ba)	2010/10/29	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/29	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/29	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/29	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/29	<100		mg/kg	
			Total Chromium (Cr)	2010/10/29	<1		mg/kg	
			Total Cobalt (Co)	2010/10/29	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/29	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/29	<100		mg/kg	
			Total Lead (Pb)	2010/10/29	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/29	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/29	<100		mg/kg	
			Total Manganese (Mn)	2010/10/29	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/29	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/29	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/29	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/29	<10		mg/kg	
			Total Potassium (K)	2010/10/29	<100		mg/kg	
			Total Selenium (Se)	2010/10/29	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/29	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/29	<100		mg/kg	
			Total Strontium (Sr)	2010/10/29	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/29	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/29	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/29	<1		mg/kg	

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4382787	DJ	Method Blank	Total Uranium (U)	2010/10/29	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/29	<2		mg/kg	
			Total Zinc (Zn)	2010/10/29	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/29	<0.5		mg/kg	
		RPD [X97934-02]	Total Aluminum (Al)	2010/10/29	1.8		%	35
			Total Antimony (Sb)	2010/10/29	NC		%	30
			Total Arsenic (As)	2010/10/29	2.5		%	30
			Total Barium (Ba)	2010/10/29	0.4		%	35
			Total Beryllium (Be)	2010/10/29	NC		%	30
			Total Bismuth (Bi)	2010/10/29	NC		%	30
			Total Cadmium (Cd)	2010/10/29	NC		%	30
			Total Calcium (Ca)	2010/10/29	0.3		%	30
			Total Chromium (Cr)	2010/10/29	0.2		%	30
			Total Cobalt (Co)	2010/10/29	1.0		%	30
			Total Copper (Cu)	2010/10/29	0.7		%	30
			Total Iron (Fe)	2010/10/29	0.1		%	30
			Total Lead (Pb)	2010/10/29	0.2		%	35
			Total Lithium (Li)	2010/10/29	NC		%	30
			Total Magnesium (Mg)	2010/10/29	2.6		%	30
			Total Manganese (Mn)	2010/10/29	0.5		%	30
			Total Mercury (Hg)	2010/10/29	NC		%	35
			Total Molybdenum (Mo)	2010/10/29	NC		%	35
			Total Nickel (Ni)	2010/10/29	1.7		%	30
			Total Phosphorus (P)	2010/10/29	4.4		%	30
			Total Potassium (K)	2010/10/29	0.7		%	35
			Total Selenium (Se)	2010/10/29	NC		%	30
			Total Silver (Ag)	2010/10/29	NC		%	35
			Total Sodium (Na)	2010/10/29	NC		%	35
			Total Strontium (Sr)	2010/10/29	0.6		%	35
			Total Thallium (Tl)	2010/10/29	NC		%	30
			Total Tin (Sn)	2010/10/29	NC		%	35
			Total Titanium (Ti)	2010/10/29	0.07		%	35
			Total Uranium (U)	2010/10/29	2.4		%	30
			Total Vanadium (V)	2010/10/29	0.6		%	30
			Total Zinc (Zn)	2010/10/29	0.2		%	30
			Total Zirconium (Zr)	2010/10/29	7.3		%	30
4382791	TW2	Spiked Blank	Soluble (2:1) pH	2010/10/30		101	%	96 - 104
		RPD [X98007-02]	Soluble (2:1) pH	2010/10/30	0		%	20
4382799	DJ	Matrix Spike	Total Arsenic (As)	2010/10/29		87	%	75 - 125
			Total Beryllium (Be)	2010/10/29		104	%	75 - 125
			Total Cadmium (Cd)	2010/10/29		104	%	75 - 125
			Total Chromium (Cr)	2010/10/29		NC	%	75 - 125
			Total Cobalt (Co)	2010/10/29		95	%	75 - 125
			Total Copper (Cu)	2010/10/29		NC	%	75 - 125
			Total Lead (Pb)	2010/10/29		102	%	75 - 125
			Total Lithium (Li)	2010/10/29		97	%	75 - 125
			Total Mercury (Hg)	2010/10/29		97	%	75 - 125
			Total Nickel (Ni)	2010/10/29		NC	%	75 - 125
			Total Selenium (Se)	2010/10/29		81	%	75 - 125
			Total Uranium (U)	2010/10/29		101	%	75 - 125
			Total Vanadium (V)	2010/10/29		NC	%	75 - 125
			Total Zinc (Zn)	2010/10/29		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/29		97	%	70 - 130
			Total Antimony (Sb)	2010/10/29		86	%	70 - 130
			Total Arsenic (As)	2010/10/29		90	%	70 - 130

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4382799	DJ	QC Standard	Total Barium (Ba)	2010/10/29		101	%	70 - 130
			Total Cadmium (Cd)	2010/10/29		88	%	70 - 130
			Total Calcium (Ca)	2010/10/29		92	%	70 - 130
			Total Chromium (Cr)	2010/10/29		95	%	70 - 130
			Total Cobalt (Co)	2010/10/29		88	%	70 - 130
			Total Copper (Cu)	2010/10/29		84	%	70 - 130
			Total Iron (Fe)	2010/10/29		91	%	70 - 130
			Total Lead (Pb)	2010/10/29		99	%	70 - 130
			Total Magnesium (Mg)	2010/10/29		92	%	70 - 130
			Total Manganese (Mn)	2010/10/29		94	%	70 - 130
			Total Molybdenum (Mo)	2010/10/29		89	%	70 - 130
			Total Nickel (Ni)	2010/10/29		88	%	70 - 130
			Total Phosphorus (P)	2010/10/29		92	%	70 - 130
			Total Strontium (Sr)	2010/10/29		88	%	70 - 130
			Total Thallium (Tl)	2010/10/29		92	%	70 - 130
			Total Titanium (Ti)	2010/10/29		99	%	70 - 130
			Total Uranium (U)	2010/10/29		88	%	70 - 130
			Total Vanadium (V)	2010/10/29		98	%	70 - 130
			Total Zinc (Zn)	2010/10/29		85	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/29		98	%	75 - 125
			Total Beryllium (Be)	2010/10/29		103	%	75 - 125
			Total Cadmium (Cd)	2010/10/29		99	%	75 - 125
			Total Chromium (Cr)	2010/10/29		94	%	75 - 125
			Total Cobalt (Co)	2010/10/29		94	%	75 - 125
			Total Copper (Cu)	2010/10/29		97	%	75 - 125
			Total Lead (Pb)	2010/10/29		103	%	75 - 125
			Total Lithium (Li)	2010/10/29		97	%	75 - 125
			Total Mercury (Hg)	2010/10/29		98	%	75 - 125
			Total Nickel (Ni)	2010/10/29		95	%	75 - 125
			Total Selenium (Se)	2010/10/29		104	%	75 - 125
			Total Uranium (U)	2010/10/29		99	%	75 - 125
			Total Vanadium (V)	2010/10/29		96	%	75 - 125
			Total Zinc (Zn)	2010/10/29		100	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/29	<100		mg/kg	
			Total Antimony (Sb)	2010/10/29	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/29	<0.2		mg/kg	
			Total Barium (Ba)	2010/10/29	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/29	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/29	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/29	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/29	<100		mg/kg	
			Total Chromium (Cr)	2010/10/29	<1		mg/kg	
			Total Cobalt (Co)	2010/10/29	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/29	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/29	<100		mg/kg	
			Total Lead (Pb)	2010/10/29	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/29	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/29	<100		mg/kg	
			Total Manganese (Mn)	2010/10/29	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/29	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/29	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/29	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/29	<10		mg/kg	
			Total Potassium (K)	2010/10/29	<100		mg/kg	
			Total Selenium (Se)	2010/10/29	<0.5		mg/kg	

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4382799	DJ	Method Blank	Total Silver (Ag)	2010/10/29	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/29	<100		mg/kg	
			Total Strontium (Sr)	2010/10/29	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/29	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/29	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/29	<1		mg/kg	
			Total Uranium (U)	2010/10/29	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/29	<2		mg/kg	
			Total Zinc (Zn)	2010/10/29	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/29	<0.5		mg/kg	
		RPD	Total Aluminum (Al)	2010/10/29	3.6		%	35
			Total Antimony (Sb)	2010/10/29	NC		%	30
			Total Arsenic (As)	2010/10/29	2.3		%	30
			Total Barium (Ba)	2010/10/29	0.7		%	35
			Total Beryllium (Be)	2010/10/29	NC		%	30
			Total Bismuth (Bi)	2010/10/29	NC		%	30
			Total Cadmium (Cd)	2010/10/29	NC		%	30
			Total Calcium (Ca)	2010/10/29	1.3		%	30
			Total Chromium (Cr)	2010/10/29	1.9		%	30
			Total Cobalt (Co)	2010/10/29	0.07		%	30
			Total Copper (Cu)	2010/10/29	0.9		%	30
			Total Iron (Fe)	2010/10/29	0.9		%	30
			Total Lead (Pb)	2010/10/29	0.7		%	35
			Total Magnesium (Mg)	2010/10/29	0.1		%	30
			Total Manganese (Mn)	2010/10/29	0.3		%	30
			Total Mercury (Hg)	2010/10/29	NC		%	35
			Total Molybdenum (Mo)	2010/10/29	NC		%	35
			Total Nickel (Ni)	2010/10/29	0.3		%	30
			Total Phosphorus (P)	2010/10/29	0.3		%	30
			Total Potassium (K)	2010/10/29	0.7		%	35
			Total Selenium (Se)	2010/10/29	NC		%	30
			Total Silver (Ag)	2010/10/29	NC		%	35
			Total Sodium (Na)	2010/10/29	NC		%	35
			Total Strontium (Sr)	2010/10/29	0.1		%	35
			Total Thallium (Tl)	2010/10/29	NC		%	30
			Total Tin (Sn)	2010/10/29	NC		%	35
			Total Titanium (Ti)	2010/10/29	0.7		%	35
			Total Vanadium (V)	2010/10/29	1.1		%	30
			Total Zinc (Zn)	2010/10/29	0.6		%	30
			Total Zirconium (Zr)	2010/10/29	7.0		%	30
4382804	TW2	Spiked Blank	Soluble (2:1) pH	2010/10/30		101	%	96 - 104
		RPD	Soluble (2:1) pH	2010/10/30	0.5		%	20
4386289	ASL	Method Blank	Moisture	2010/11/01	<0.3		%	
		RPD	Moisture	2010/11/01	2.6		%	20
4386519	JC9	Matrix Spike	O-TERPHENYL (sur.)	2010/11/02		90	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/11/02		95	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/11/02		98	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/11/02		93	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/11/01		91	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/11/01		92	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/11/01		97	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2010/11/01		93	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/11/01		93	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/11/01	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/11/01	<10		mg/kg	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4386519	JC9	Method Blank	F4 (C34-C50 Hydrocarbons)	2010/11/01	<10		mg/kg	
		RPD	F2 (C10-C16 Hydrocarbons)	2010/11/02	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2010/11/02	18.1		%	40
			F4 (C34-C50 Hydrocarbons)	2010/11/02	22.0		%	40
			Reached Baseline at C50	2010/11/02	NC		%	50
4386996	JC9	Matrix Spike	O-TERPHENYL (sur.)	2010/11/01		99	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/11/01		99	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/11/01		104	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/11/01		95	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/11/01		92	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/11/01		94	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/11/01		101	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2010/11/01		98	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/11/02		97	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/11/02	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/11/02	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2010/11/02	<10		mg/kg	
		RPD	F2 (C10-C16 Hydrocarbons)	2010/11/01	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2010/11/01	26.1		%	40
			F4 (C34-C50 Hydrocarbons)	2010/11/01	NC		%	40
			Reached Baseline at C50	2010/11/01	NC		%	50
4387176	DJ	Matrix Spike	Total Arsenic (As)	2010/11/01		102	%	75 - 125
			Total Beryllium (Be)	2010/11/01		99	%	75 - 125
			Total Cadmium (Cd)	2010/11/01		105	%	75 - 125
			Total Chromium (Cr)	2010/11/01		NC	%	75 - 125
			Total Cobalt (Co)	2010/11/01		104	%	75 - 125
			Total Copper (Cu)	2010/11/01		NC	%	75 - 125
			Total Lead (Pb)	2010/11/01		NC	%	75 - 125
			Total Lithium (Li)	2010/11/01		101	%	75 - 125
			Total Mercury (Hg)	2010/11/01		95	%	75 - 125
			Total Nickel (Ni)	2010/11/01		104	%	75 - 125
			Total Selenium (Se)	2010/11/01		105	%	75 - 125
			Total Uranium (U)	2010/11/01		110	%	75 - 125
			Total Vanadium (V)	2010/11/01		NC	%	75 - 125
			Total Zinc (Zn)	2010/11/01		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/11/01		97	%	70 - 130
			Total Antimony (Sb)	2010/11/01		86	%	70 - 130
			Total Arsenic (As)	2010/11/01		92	%	70 - 130
			Total Barium (Ba)	2010/11/01		102	%	70 - 130
			Total Cadmium (Cd)	2010/11/01		96	%	70 - 130
			Total Calcium (Ca)	2010/11/01		98	%	70 - 130
			Total Chromium (Cr)	2010/11/01		98	%	70 - 130
			Total Cobalt (Co)	2010/11/01		94	%	70 - 130
			Total Copper (Cu)	2010/11/01		89	%	70 - 130
			Total Iron (Fe)	2010/11/01		97	%	70 - 130
			Total Lead (Pb)	2010/11/01		111	%	70 - 130
			Total Magnesium (Mg)	2010/11/01		98	%	70 - 130
			Total Manganese (Mn)	2010/11/01		104	%	70 - 130
			Total Molybdenum (Mo)	2010/11/01		99	%	70 - 130
			Total Nickel (Ni)	2010/11/01		95	%	70 - 130
			Total Phosphorus (P)	2010/11/01		101	%	70 - 130
			Total Strontium (Sr)	2010/11/01		97	%	70 - 130
			Total Thallium (Tl)	2010/11/01		95	%	70 - 130
			Total Titanium (Ti)	2010/11/01		99	%	70 - 130
			Total Uranium (U)	2010/11/01		105	%	70 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4387176	DJ	QC Standard	Total Vanadium (V)	2010/11/01		103	%	70 - 130
			Total Zinc (Zn)	2010/11/01		90	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/11/01		97	%	75 - 125
			Total Beryllium (Be)	2010/11/01		93	%	75 - 125
			Total Cadmium (Cd)	2010/11/01		98	%	75 - 125
			Total Chromium (Cr)	2010/11/01		99	%	75 - 125
			Total Cobalt (Co)	2010/11/01		97	%	75 - 125
			Total Copper (Cu)	2010/11/01		98	%	75 - 125
			Total Lead (Pb)	2010/11/01		103	%	75 - 125
			Total Lithium (Li)	2010/11/01		93	%	75 - 125
			Total Mercury (Hg)	2010/11/01		93	%	75 - 125
			Total Nickel (Ni)	2010/11/01		97	%	75 - 125
			Total Selenium (Se)	2010/11/01		98	%	75 - 125
			Total Uranium (U)	2010/11/01		107	%	75 - 125
			Total Vanadium (V)	2010/11/01		101	%	75 - 125
			Total Zinc (Zn)	2010/11/01		100	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/11/01	<100		mg/kg	
			Total Antimony (Sb)	2010/11/01	<0.1		mg/kg	
			Total Arsenic (As)	2010/11/01	0.3, RDL=0.2		mg/kg	
			Total Barium (Ba)	2010/11/01	<0.1		mg/kg	
			Total Beryllium (Be)	2010/11/01	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/11/01	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/11/01	<0.05		mg/kg	
			Total Calcium (Ca)	2010/11/01	<100		mg/kg	
			Total Chromium (Cr)	2010/11/01	<1		mg/kg	
			Total Cobalt (Co)	2010/11/01	<0.3		mg/kg	
			Total Copper (Cu)	2010/11/01	<0.5		mg/kg	
			Total Iron (Fe)	2010/11/01	<100		mg/kg	
			Total Lead (Pb)	2010/11/01	<0.1		mg/kg	
			Total Lithium (Li)	2010/11/01	<5		mg/kg	
			Total Magnesium (Mg)	2010/11/01	<100		mg/kg	
			Total Manganese (Mn)	2010/11/01	<0.2		mg/kg	
			Total Mercury (Hg)	2010/11/01	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/11/01	<0.1		mg/kg	
			Total Nickel (Ni)	2010/11/01	<0.8		mg/kg	
			Total Phosphorus (P)	2010/11/01	<10		mg/kg	
			Total Potassium (K)	2010/11/01	<100		mg/kg	
			Total Selenium (Se)	2010/11/01	<0.5		mg/kg	
			Total Silver (Ag)	2010/11/01	<0.05		mg/kg	
			Total Sodium (Na)	2010/11/01	<100		mg/kg	
			Total Strontium (Sr)	2010/11/01	<0.1		mg/kg	
			Total Thallium (Tl)	2010/11/01	<0.05		mg/kg	
			Total Tin (Sn)	2010/11/01	<0.1		mg/kg	
			Total Titanium (Ti)	2010/11/01	<1		mg/kg	
			Total Uranium (U)	2010/11/01	<0.05		mg/kg	
			Total Vanadium (V)	2010/11/01	<2		mg/kg	
			Total Zinc (Zn)	2010/11/01	<1		mg/kg	
			Total Zirconium (Zr)	2010/11/01	<0.5		mg/kg	
		RPD	Total Aluminum (Al)	2010/11/01	4.6		%	35
			Total Antimony (Sb)	2010/11/01	5.4		%	30
			Total Arsenic (As)	2010/11/01	11.9		%	30
			Total Barium (Ba)	2010/11/01	4.9		%	35
			Total Beryllium (Be)	2010/11/01	NC		%	30
			Total Bismuth (Bi)	2010/11/01	NC		%	30
			Total Cadmium (Cd)	2010/11/01	NC		%	30

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4387176	DJ	RPD	Total Calcium (Ca)	2010/11/01	3.4		%	30
			Total Chromium (Cr)	2010/11/01	3.8		%	30
			Total Cobalt (Co)	2010/11/01	4.1		%	30
			Total Copper (Cu)	2010/11/01	3.3		%	30
			Total Iron (Fe)	2010/11/01	3.8		%	30
			Total Lead (Pb)	2010/11/01	3.0		%	35
			Total Magnesium (Mg)	2010/11/01	3.0		%	30
			Total Manganese (Mn)	2010/11/01	1.1		%	30
			Total Mercury (Hg)	2010/11/01	NC		%	35
			Total Molybdenum (Mo)	2010/11/01	5.6		%	35
			Total Nickel (Ni)	2010/11/01	0.3		%	30
			Total Phosphorus (P)	2010/11/01	4.5		%	30
			Total Potassium (K)	2010/11/01	3.5		%	35
			Total Selenium (Se)	2010/11/01	NC		%	30
			Total Silver (Ag)	2010/11/01	NC		%	35
			Total Sodium (Na)	2010/11/01	NC		%	35
			Total Strontium (Sr)	2010/11/01	2.0		%	35
			Total Thallium (Tl)	2010/11/01	NC		%	30
			Total Tin (Sn)	2010/11/01	10.7		%	35
			Total Titanium (Ti)	2010/11/01	4.1		%	35
			Total Vanadium (V)	2010/11/01	2.7		%	30
			Total Zinc (Zn)	2010/11/01	4.2		%	30
			Total Zirconium (Zr)	2010/11/01	NC		%	30
4387190	ALU	Spiked Blank	Soluble (2:1) pH	2010/11/01		102	%	96 - 104
		RPD	Soluble (2:1) pH	2010/11/01	0.8		%	20
4387771	SZ4	Method Blank	Moisture	2010/11/02	<0.3		%	
		RPD	Moisture	2010/11/02	5.9		%	20
4387998	JL4	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/11/01		92	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/01		88	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/01		84	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/01		106	%	70 - 130
			Benzene	2010/11/01		73	%	60 - 140
			Toluene	2010/11/01		74	%	60 - 140
			Ethylbenzene	2010/11/01		82	%	60 - 140
			m & p-Xylene	2010/11/01		80	%	60 - 140
			o-Xylene	2010/11/01		82	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/11/01		93	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/01		79	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/01		85	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/01		108	%	70 - 130
			(C6-C10)	2010/11/01		119	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/01		92	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/01		77	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/01		84	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/01		106	%	70 - 130
			Benzene	2010/11/01		81	%	60 - 140
			Toluene	2010/11/01		81	%	60 - 140
			Ethylbenzene	2010/11/01		90	%	60 - 140
			m & p-Xylene	2010/11/01		88	%	60 - 140
			o-Xylene	2010/11/01		90	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/01		92	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/01		83	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/01		83	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/01		107	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/01	<0.1		mg/kg	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4387998	JL4	Method Blank	Benzene	2010/11/01	<0.005		mg/kg	
			Toluene	2010/11/01	<0.02		mg/kg	
			Ethylbenzene	2010/11/01	<0.01		mg/kg	
			m & p-Xylene	2010/11/01	<0.04		mg/kg	
			o-Xylene	2010/11/01	<0.04		mg/kg	
			Styrene	2010/11/01	<0.03		mg/kg	
			Xylenes (Total)	2010/11/01	<0.04		mg/kg	
			(C6-C10)	2010/11/01	<10		mg/kg	
		RPD	Methyl-tert-butylether (MTBE)	2010/11/01	NC (3)		%	40
			Benzene	2010/11/01	NC (3)		%	40
			Toluene	2010/11/01	NC (3)		%	40
			Ethylbenzene	2010/11/01	NC (3)		%	40
			m & p-Xylene	2010/11/01	NC (3)		%	40
			o-Xylene	2010/11/01	NC (3)		%	40
			Styrene	2010/11/01	NC (3)		%	40
			Xylenes (Total)	2010/11/01	NC		%	40
4389781	MM5	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/11/03		109	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/03		111	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/03		105	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/03		100	%	70 - 130
			Benzene	2010/11/03		120	%	60 - 140
			Toluene	2010/11/03		115	%	60 - 140
			Ethylbenzene	2010/11/03		120	%	60 - 140
			m & p-Xylene	2010/11/03		116	%	60 - 140
			o-Xylene	2010/11/03		122	%	60 - 140
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/11/02		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/02		96	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/02		104	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/02		101	%	70 - 130
			(C6-C10)	2010/11/02		108	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/02		96	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/02		97	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/02		104	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/02		98	%	70 - 130
			Benzene	2010/11/02		107	%	60 - 140
			Toluene	2010/11/02		104	%	60 - 140
			Ethylbenzene	2010/11/02		108	%	60 - 140
			m & p-Xylene	2010/11/02		105	%	60 - 140
			o-Xylene	2010/11/02		108	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/02		94	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/02		99	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/02		104	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/02		99	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/02	<0.1		mg/kg	
			Benzene	2010/11/02	<0.005		mg/kg	
			Toluene	2010/11/02	<0.02		mg/kg	
			Ethylbenzene	2010/11/02	<0.01		mg/kg	
			m & p-Xylene	2010/11/02	<0.04		mg/kg	
			o-Xylene	2010/11/02	<0.04		mg/kg	
			Styrene	2010/11/02	<0.03		mg/kg	
			Xylenes (Total)	2010/11/02	<0.04		mg/kg	
			(C6-C10)	2010/11/02	<10		mg/kg	
		RPD	Methyl-tert-butylether (MTBE)	2010/11/03	NC		%	40
			Benzene	2010/11/03	NC		%	40
			Toluene	2010/11/03	NC		%	40

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4389781	MM5	RPD	Ethylbenzene	2010/11/03	NC		%	40
			m & p-Xylene	2010/11/03	NC		%	40
			o-Xylene	2010/11/03	NC		%	40
			Styrene	2010/11/03	NC		%	40
			Xylenes (Total)	2010/11/03	NC		%	40
			(C6-C10)	2010/11/03	NC		%	40
4389803	KL	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/11/02		108	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/02		99	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/02		110	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/02		98	%	70 - 130
			Chloromethane	2010/11/02		133	%	40 - 150
			Vinyl chloride	2010/11/02		137	%	40 - 150
			Bromomethane	2010/11/02		121	%	40 - 150
			Chloroethane	2010/11/02		111	%	40 - 150
			Trichlorofluoromethane	2010/11/02		124	%	40 - 150
			1,1-dichloroethene	2010/11/02		96	%	60 - 140
			Dichloromethane	2010/11/02		98	%	60 - 140
			trans-1,2-dichloroethene	2010/11/02		93	%	60 - 140
			1,1-dichloroethane	2010/11/02		105	%	60 - 140
			cis-1,2-dichloroethene	2010/11/02		99	%	60 - 140
			Chloroform	2010/11/02		104	%	60 - 140
			1,1,1-trichloroethane	2010/11/02		107	%	60 - 140
			1,2-dichloroethane	2010/11/02		106	%	60 - 140
			Carbon tetrachloride	2010/11/02		110	%	60 - 140
			Benzene	2010/11/02		102	%	60 - 140
			1,2-dichloropropane	2010/11/02		96	%	60 - 140
			Trichloroethene	2010/11/02		98	%	60 - 140
			Bromodichloromethane	2010/11/02		103	%	60 - 140
			cis-1,3-dichloropropene	2010/11/02		113	%	60 - 140
			trans-1,3-dichloropropene	2010/11/02		142 (4)	%	60 - 140
			1,1,2-trichloroethane	2010/11/02		95	%	60 - 140
			Toluene	2010/11/02		98	%	60 - 140
			Chlorodibromomethane	2010/11/02		106	%	60 - 140
			Dibromoethane	2010/11/02		101	%	60 - 140
			Tetrachloroethene	2010/11/02		93	%	60 - 140
			Chlorobenzene	2010/11/02		105	%	60 - 140
			1,1,1,2-tetrachloroethane	2010/11/02		105	%	60 - 140
			Ethylbenzene	2010/11/02		114	%	60 - 140
			m & p-Xylene	2010/11/02		109	%	60 - 140
			Bromoform	2010/11/02		101	%	60 - 140
			Styrene	2010/11/02		126	%	60 - 140
			o-Xylene	2010/11/02		109	%	60 - 140
			1,1,2,2-tetrachloroethane	2010/11/02		107	%	60 - 140
			1,2-dichlorobenzene	2010/11/02		107	%	60 - 140
			1,3-dichlorobenzene	2010/11/02		121	%	60 - 140
			1,4-dichlorobenzene	2010/11/02		97	%	60 - 140
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/02		107	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/02		90	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/02		110	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/02		99	%	70 - 130
			Chloromethane	2010/11/02		125	%	40 - 150
			Vinyl chloride	2010/11/02		127	%	40 - 150
			Bromomethane	2010/11/02		115	%	40 - 150
			Chloroethane	2010/11/02		106	%	40 - 150
			Trichlorofluoromethane	2010/11/02		111	%	40 - 150

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4389803	KL	Spiked Blank	1,1-dichloroethene	2010/11/02		92	%	60 - 140
			Dichloromethane	2010/11/02		93	%	60 - 140
			trans-1,2-dichloroethene	2010/11/02		91	%	60 - 140
			1,1-dichloroethane	2010/11/02		97	%	60 - 140
			cis-1,2-dichloroethene	2010/11/02		95	%	60 - 140
			Chloroform	2010/11/02		97	%	60 - 140
			1,1,1-trichloroethane	2010/11/02		97	%	60 - 140
			1,2-dichloroethane	2010/11/02		98	%	60 - 140
			Carbon tetrachloride	2010/11/02		100	%	60 - 140
			Benzene	2010/11/02		97	%	60 - 140
			1,2-dichloropropane	2010/11/02		91	%	60 - 140
			Trichloroethene	2010/11/02		95	%	60 - 140
			Bromodichloromethane	2010/11/02		95	%	60 - 140
			cis-1,3-dichloropropene	2010/11/02		119	%	60 - 140
			trans-1,3-dichloropropene	2010/11/02		168 (1)	%	60 - 140
			1,1,2-trichloroethane	2010/11/02		93	%	60 - 140
			Toluene	2010/11/02		94	%	60 - 140
			Chlorodibromomethane	2010/11/02		102	%	60 - 140
			Dibromoethane	2010/11/02		98	%	60 - 140
			Tetrachloroethene	2010/11/02		94	%	60 - 140
			Chlorobenzene	2010/11/02		103	%	60 - 140
			1,1,1,2-tetrachloroethane	2010/11/02		100	%	60 - 140
			Ethylbenzene	2010/11/02		109	%	60 - 140
			m & p-Xylene	2010/11/02		104	%	60 - 140
			Bromoform	2010/11/02		93	%	60 - 140
			Styrene	2010/11/02		120	%	60 - 140
			o-Xylene	2010/11/02		104	%	60 - 140
			1,1,2,2-tetrachloroethane	2010/11/02		95	%	60 - 140
			1,2-dichlorobenzene	2010/11/02		99	%	60 - 140
			1,3-dichlorobenzene	2010/11/02		110	%	60 - 140
			1,4-dichlorobenzene	2010/11/02		91	%	60 - 140
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/02		97	%	70 - 130
			D10-ETHYLBENZENE (sur.)	2010/11/02		95	%	50 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/02		99	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/02		100	%	70 - 130
			Chloromethane	2010/11/02	<0.1		mg/kg	
			Vinyl chloride	2010/11/02	<0.06		mg/kg	
			Bromomethane	2010/11/02	<0.3		mg/kg	
			Chloroethane	2010/11/02	<0.1		mg/kg	
			Trichlorofluoromethane	2010/11/02	<0.2		mg/kg	
			1,1-dichloroethene	2010/11/02	<0.03		mg/kg	
			Dichloromethane	2010/11/02	<0.1		mg/kg	
			trans-1,2-dichloroethene	2010/11/02	<0.03		mg/kg	
			1,1-dichloroethane	2010/11/02	<0.03		mg/kg	
			cis-1,2-dichloroethene	2010/11/02	<0.03		mg/kg	
			Chloroform	2010/11/02	<0.05		mg/kg	
			1,1,1-trichloroethane	2010/11/02	<0.03		mg/kg	
			1,2-dichloroethane	2010/11/02	<0.03		mg/kg	
			Carbon tetrachloride	2010/11/02	<0.03		mg/kg	
			Benzene	2010/11/02	<0.005		mg/kg	
			Methyl-tert-butylether (MTBE)	2010/11/02	<0.1		mg/kg	
			1,2-dichloropropane	2010/11/02	<0.03		mg/kg	
			Trichloroethene	2010/11/02	<0.01		mg/kg	
			Bromodichloromethane	2010/11/02	<0.05		mg/kg	
			cis-1,3-dichloropropene	2010/11/02	<0.05		mg/kg	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4389803	KL	Method Blank	trans-1,3-dichloropropene	2010/11/02	<0.05		mg/kg	
			1,1,2-trichloroethane	2010/11/02	<0.03		mg/kg	
			Toluene	2010/11/02	<0.03		mg/kg	
			Chlorodibromomethane	2010/11/02	<0.05		mg/kg	
			Dibromoethane	2010/11/02	<0.03		mg/kg	
			Tetrachloroethene	2010/11/02	<0.03		mg/kg	
			Chlorobenzene	2010/11/02	<0.03		mg/kg	
			1,1,1,2-tetrachloroethane	2010/11/02	<0.03		mg/kg	
			Ethylbenzene	2010/11/02	<0.01		mg/kg	
			m & p-Xylene	2010/11/02	<0.1		mg/kg	
			Bromoform	2010/11/02	<0.05		mg/kg	
			Styrene	2010/11/02	<0.1		mg/kg	
			o-Xylene	2010/11/02	<0.1		mg/kg	
			Xylenes (Total)	2010/11/02	<0.1		mg/kg	
			1,1,2,2-tetrachloroethane	2010/11/02	<0.03		mg/kg	
			1,2-dichlorobenzene	2010/11/02	<0.03		mg/kg	
			1,3-dichlorobenzene	2010/11/02	<0.03		mg/kg	
			1,4-dichlorobenzene	2010/11/02	<0.03		mg/kg	
		RPD	Chloromethane	2010/11/02	NC (5)		%	40
			Vinyl chloride	2010/11/02	NC (5)		%	40
			Bromomethane	2010/11/02	NC (5)		%	40
			Chloroethane	2010/11/02	NC (5)		%	40
			Trichlorofluoromethane	2010/11/02	NC (5)		%	40
			1,1-dichloroethene	2010/11/02	NC (5)		%	40
			Dichloromethane	2010/11/02	NC (5)		%	40
			trans-1,2-dichloroethene	2010/11/02	NC (5)		%	40
			1,1-dichloroethane	2010/11/02	NC (5)		%	40
			cis-1,2-dichloroethene	2010/11/02	NC (5)		%	40
			Chloroform	2010/11/02	NC (5)		%	40
			1,1,1-trichloroethane	2010/11/02	NC (5)		%	40
			1,2-dichloroethane	2010/11/02	NC (5)		%	40
			Carbon tetrachloride	2010/11/02	NC (5)		%	40
			Benzene	2010/11/02	NC (5)		%	40
			Methyl-tert-butylether (MTBE)	2010/11/02	NC (5)		%	40
			1,2-dichloropropane	2010/11/02	NC (5)		%	40
			Trichloroethene	2010/11/02	NC (5)		%	40
			Bromodichloromethane	2010/11/02	NC (5)		%	40
			cis-1,3-dichloropropene	2010/11/02	NC (5)		%	40
			trans-1,3-dichloropropene	2010/11/02	NC (5)		%	40
			1,1,2-trichloroethane	2010/11/02	NC (5)		%	40
			Toluene	2010/11/02	NC (5)		%	40
			Chlorodibromomethane	2010/11/02	NC (5)		%	40
			Dibromoethane	2010/11/02	NC (5)		%	40
			Tetrachloroethene	2010/11/02	4.5 (5)		%	40
			Chlorobenzene	2010/11/02	NC (5)		%	40
			1,1,1,2-tetrachloroethane	2010/11/02	NC (5)		%	40
			Ethylbenzene	2010/11/02	NC (5)		%	40
			Bromoform	2010/11/02	NC (5)		%	40
			Styrene	2010/11/02	NC (5)		%	40
			Xylenes (Total)	2010/11/02	NC		%	40
			1,1,2,2-tetrachloroethane	2010/11/02	NC (5)		%	40
			1,2-dichlorobenzene	2010/11/02	NC (5)		%	40
			1,3-dichlorobenzene	2010/11/02	NC (5)		%	40
			1,4-dichlorobenzene	2010/11/02	NC (5)		%	40
4389975	JC9	Matrix Spike	O-TERPHENYL (sur.)	2010/11/02		93	%	50 - 130

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4389975	JC9	Matrix Spike	F2 (C10-C16 Hydrocarbons)	2010/11/02		95	%	50 - 130
			F3 (C16-C34 Hydrocarbons)	2010/11/02		99	%	50 - 130
			F4 (C34-C50 Hydrocarbons)	2010/11/02		98	%	50 - 130
		Spiked Blank	O-TERPHENYL (sur.)	2010/11/02		92	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/11/02		90	%	80 - 120
			F3 (C16-C34 Hydrocarbons)	2010/11/02		95	%	80 - 120
			F4 (C34-C50 Hydrocarbons)	2010/11/02		88	%	80 - 120
		Method Blank	O-TERPHENYL (sur.)	2010/11/02		99	%	50 - 130
			F2 (C10-C16 Hydrocarbons)	2010/11/02	<10		mg/kg	
			F3 (C16-C34 Hydrocarbons)	2010/11/02	<10		mg/kg	
			F4 (C34-C50 Hydrocarbons)	2010/11/02	<10		mg/kg	
		RPD	F2 (C10-C16 Hydrocarbons)	2010/11/02	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2010/11/02	NC		%	40
			F4 (C34-C50 Hydrocarbons)	2010/11/02	NC		%	40
			Reached Baseline at C50	2010/11/02	NC		%	50
4390176	DJ	Matrix Spike	Total Arsenic (As)	2010/11/02		98	%	75 - 125
			Total Beryllium (Be)	2010/11/02		94	%	75 - 125
			Total Cadmium (Cd)	2010/11/02		100	%	75 - 125
			Total Chromium (Cr)	2010/11/02		NC	%	75 - 125
			Total Cobalt (Co)	2010/11/02		95	%	75 - 125
			Total Copper (Cu)	2010/11/02		NC	%	75 - 125
			Total Lead (Pb)	2010/11/02		108	%	75 - 125
			Total Lithium (Li)	2010/11/02		91	%	75 - 125
			Total Mercury (Hg)	2010/11/02		89	%	75 - 125
			Total Nickel (Ni)	2010/11/02		NC	%	75 - 125
			Total Selenium (Se)	2010/11/02		100	%	75 - 125
			Total Uranium (U)	2010/11/02		106	%	75 - 125
			Total Vanadium (V)	2010/11/02		NC	%	75 - 125
			Total Zinc (Zn)	2010/11/02		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/11/02		99	%	70 - 130
			Total Antimony (Sb)	2010/11/02		88	%	70 - 130
			Total Arsenic (As)	2010/11/02		97	%	70 - 130
			Total Barium (Ba)	2010/11/02		101	%	70 - 130
			Total Cadmium (Cd)	2010/11/02		92	%	70 - 130
			Total Calcium (Ca)	2010/11/02		95	%	70 - 130
			Total Chromium (Cr)	2010/11/02		99	%	70 - 130
			Total Cobalt (Co)	2010/11/02		93	%	70 - 130
			Total Copper (Cu)	2010/11/02		88	%	70 - 130
			Total Iron (Fe)	2010/11/02		96	%	70 - 130
			Total Lead (Pb)	2010/11/02		113	%	70 - 130
			Total Magnesium (Mg)	2010/11/02		95	%	70 - 130
			Total Manganese (Mn)	2010/11/02		102	%	70 - 130
			Total Molybdenum (Mo)	2010/11/02		92	%	70 - 130
			Total Nickel (Ni)	2010/11/02		92	%	70 - 130
			Total Phosphorus (P)	2010/11/02		97	%	70 - 130
			Total Strontium (Sr)	2010/11/02		98	%	70 - 130
			Total Thallium (Tl)	2010/11/02		94	%	70 - 130
			Total Titanium (Ti)	2010/11/02		99	%	70 - 130
			Total Uranium (U)	2010/11/02		101	%	70 - 130
			Total Vanadium (V)	2010/11/02		101	%	70 - 130
			Total Zinc (Zn)	2010/11/02		90	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/11/02		95	%	75 - 125
			Total Beryllium (Be)	2010/11/02		88	%	75 - 125
			Total Cadmium (Cd)	2010/11/02		99	%	75 - 125
			Total Chromium (Cr)	2010/11/02		93	%	75 - 125

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4390176	DJ	Spiked Blank	Total Cobalt (Co)	2010/11/02		94	%	75 - 125
			Total Copper (Cu)	2010/11/02		95	%	75 - 125
			Total Lead (Pb)	2010/11/02		103	%	75 - 125
			Total Lithium (Li)	2010/11/02		91	%	75 - 125
			Total Mercury (Hg)	2010/11/02		84	%	75 - 125
			Total Nickel (Ni)	2010/11/02		94	%	75 - 125
			Total Selenium (Se)	2010/11/02		96	%	75 - 125
			Total Uranium (U)	2010/11/02		103	%	75 - 125
			Total Vanadium (V)	2010/11/02		95	%	75 - 125
			Total Zinc (Zn)	2010/11/02		98	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/11/02	<100		mg/kg	
			Total Antimony (Sb)	2010/11/02	<0.1		mg/kg	
			Total Arsenic (As)	2010/11/02	<0.2		mg/kg	
			Total Barium (Ba)	2010/11/02	0.1, RDL=0.1		mg/kg	
			Total Beryllium (Be)	2010/11/02	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/11/02	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/11/02	<0.05		mg/kg	
			Total Calcium (Ca)	2010/11/02	<100		mg/kg	
			Total Chromium (Cr)	2010/11/02	<1		mg/kg	
			Total Cobalt (Co)	2010/11/02	<0.3		mg/kg	
			Total Copper (Cu)	2010/11/02	<0.5		mg/kg	
			Total Iron (Fe)	2010/11/02	<100		mg/kg	
			Total Lead (Pb)	2010/11/02	<0.1		mg/kg	
			Total Lithium (Li)	2010/11/02	<5		mg/kg	
			Total Magnesium (Mg)	2010/11/02	<100		mg/kg	
			Total Manganese (Mn)	2010/11/02	<0.2		mg/kg	
			Total Mercury (Hg)	2010/11/02	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/11/02	<0.1		mg/kg	
			Total Nickel (Ni)	2010/11/02	<0.8		mg/kg	
			Total Phosphorus (P)	2010/11/02	<10		mg/kg	
			Total Potassium (K)	2010/11/02	<100		mg/kg	
			Total Selenium (Se)	2010/11/02	<0.5		mg/kg	
			Total Silver (Ag)	2010/11/02	<0.05		mg/kg	
			Total Sodium (Na)	2010/11/02	<100		mg/kg	
			Total Strontium (Sr)	2010/11/02	<0.1		mg/kg	
			Total Thallium (Tl)	2010/11/02	<0.05		mg/kg	
			Total Tin (Sn)	2010/11/02	<0.1		mg/kg	
			Total Titanium (Ti)	2010/11/02	<1		mg/kg	
			Total Uranium (U)	2010/11/02	<0.05		mg/kg	
			Total Vanadium (V)	2010/11/02	<2		mg/kg	
			Total Zinc (Zn)	2010/11/02	<1		mg/kg	
			Total Zirconium (Zr)	2010/11/02	<0.5		mg/kg	
		RPD	Total Aluminum (Al)	2010/11/02	0.6		%	35
			Total Antimony (Sb)	2010/11/02	4.4		%	30
			Total Arsenic (As)	2010/11/02	1.0		%	30
			Total Barium (Ba)	2010/11/02	1.2		%	35
			Total Beryllium (Be)	2010/11/02	NC		%	30
			Total Cadmium (Cd)	2010/11/02	18.0		%	30
			Total Chromium (Cr)	2010/11/02	1.5		%	30
			Total Cobalt (Co)	2010/11/02	4.1		%	30
			Total Copper (Cu)	2010/11/02	4.3		%	30
			Total Lead (Pb)	2010/11/02	1		%	35
			Total Manganese (Mn)	2010/11/02	2.0		%	30
			Total Mercury (Hg)	2010/11/02	NC		%	35
			Total Molybdenum (Mo)	2010/11/02	6.0		%	35

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4390176	DJ	RPD	Total Nickel (Ni)	2010/11/02	3.6		%	30
			Total Selenium (Se)	2010/11/02	NC		%	30
			Total Silver (Ag)	2010/11/02	NC		%	35
			Total Strontium (Sr)	2010/11/02	2.2		%	35
			Total Tin (Sn)	2010/11/02	NC		%	35
			Total Titanium (Ti)	2010/11/02	2.9		%	35
			Total Vanadium (V)	2010/11/02	1.0		%	30
			Total Zinc (Zn)	2010/11/02	3.7		%	30
4390244	TW2	Spiked Blank	Soluble (2:1) pH	2010/11/02		102	%	96 - 104
		RPD	Soluble (2:1) pH	2010/11/02	0.1		%	20
4393191	KL	QC Standard	(C6-C10)	2010/11/02		112	%	60 - 140
		Method Blank	(C6-C10)	2010/11/02	<10		mg/kg	
4394998	SY	Spiked Blank	D10-ANTHRACENE (sur.)	2010/11/04		83	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/11/04		75	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/11/04		83	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/11/04		87	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/11/04		82	%	60 - 130
			Naphthalene	2010/11/04		92	%	40 - 130
			2-Methylnaphthalene	2010/11/04		87	%	40 - 130
			Acenaphthylene	2010/11/04		93	%	40 - 130
			Acenaphthene	2010/11/04		90	%	40 - 130
			Fluorene	2010/11/04		83	%	40 - 130
			Phenanthrene	2010/11/04		86	%	40 - 130
			Anthracene	2010/11/04		87	%	40 - 130
			Fluoranthene	2010/11/04		88	%	40 - 130
			Pyrene	2010/11/04		89	%	40 - 130
			Benzo(a)anthracene	2010/11/04		81	%	40 - 130
			Chrysene	2010/11/04		85	%	40 - 130
			Benzo(b&j)fluoranthene	2010/11/04		73	%	40 - 130
			Benzo(k)fluoranthene	2010/11/04		87	%	40 - 130
			Benzo(a)pyrene	2010/11/04		82	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/11/04		74	%	40 - 130
			Dibenz(a,h)anthracene	2010/11/04		68	%	40 - 130
			Benzo(g,h,i)perylene	2010/11/04		70	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/11/04		95	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/11/04		77	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/11/04		86	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/11/04		87	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/11/04		84	%	60 - 130
			Naphthalene	2010/11/04	<0.001		mg/kg	
			2-Methylnaphthalene	2010/11/04	<0.001		mg/kg	
			Acenaphthylene	2010/11/04	<0.001		mg/kg	
			Acenaphthene	2010/11/04	<0.001		mg/kg	
			Fluorene	2010/11/04	<0.001		mg/kg	
			Phenanthrene	2010/11/04	<0.001		mg/kg	
			Anthracene	2010/11/04	<0.001		mg/kg	
			Fluoranthene	2010/11/04	<0.001		mg/kg	
			Pyrene	2010/11/04	<0.001		mg/kg	
			Benzo(a)anthracene	2010/11/04	<0.001		mg/kg	
			Chrysene	2010/11/04	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/11/04	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/11/04	<0.001		mg/kg	
			Benzo(a)pyrene	2010/11/04	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/11/04	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/11/04	<0.002		mg/kg	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: DOMINION BRIDGE 60164142
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A3749

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4394998	SY	Method Blank	Benzo(g,h,i)perylene	2010/11/04	<0.002		mg/kg	

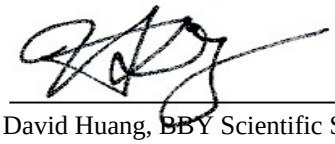
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
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.
(1) LCS outside acceptance criteria (10% of analytes failure allowed)
(2) RDL raised due to sample matrix interference.
(3) Sample extracted past 48 hours from receipt of sample but within the 7 day extraction holdtime
(4) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(5) Sample extracted past recommended hold time (7 days) - Pot. Low bias

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

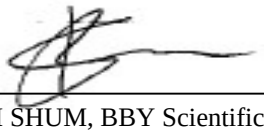
Validation Signature Page

Maxxam Job #: B0A3749

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



David Huang, BBY Scientific Specialist



TOM SHUM, BBY Scientific Specialist

==========

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 Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

PAGE 1 OF 4

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

BOA3603

ANALYSIS REQUEST F 111694

COMPANY NAME: AECOM	PH. #: 477-5381 E-mail: scott.chapman@aecom.com FAX #: 477-5381
COMPANY ADDRESS: 99 Commerce Drive Unit MB R3P0Y7	CLIENT PROJECT ID: (#) Dominion Bridge 60164142
SAMPLER NAME (PRINT): Brent Hay	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	METALS	BTEX	PHC F1-F4	PAH's	VOC's
1	G-06-03				X		2	20/10/10	✓		X	X	X	X	X
2	G-06-05							20/				X	X		
3	G-44-02							20/				X	X	X	X
4	G-44-05							20/				X	X		
5	G-47-03							20/				X	X	X	X
6	G-47-05							20/				X	X		
7	G-65-01							20/			X	X	X		
8	G-65-02							20/				X	X	X	
9	G-66-01							20/			X				
10	G-66-02							20/			X				
11	G-69-01							21/			X				
12	G-69-02				↓		↓	21/			X				

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD 5 BUSINESS DAYS ☒
RUSH 3 BUSINESS DAYS ☐
RUSH 2 BUSINESS DAYS ☐
URGENT 1 BUSINESS DAY ☐
OTHER BUSINESS DAYS ____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☐ CCME
☐ CSR
☐ ALBERTA TIER 1
☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 11.8, 11.1, 10.0, 5.3, 5.4, 5.6

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER:	DATE: DD/MM/YY 25/10/10	TIME: 11:45	RECEIVED BY: MR
RELINQUISHED BY:	DATE: DD/MM/YY 26/10/10	TIME: 08:45	RECEIVED BY: MICHELLE LIN
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY LABORATORY:

COCFORM - BC - 06/06

ORIGINAL - MAXXAM YELLOW - MAXXAM PINK - CLIENT

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

ANALYSIS REQUEST F 111797

COMPANY NAME: AECOM	PH. #: 4775381 E-mail: scott.chapman@aecom.com FAX #: 284-0580
COMPANY ADDRESS: 99 Commerce Dr. Wpg MB. R3P 0Y7	CLIENT PROJECT ID: (#) Dominion Bridge 60164142
SAMPLER NAME (PRINT): B Hay	PROJECT MANAGER: Scott Chapman

FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	MERCURY	BTEX	PHC F1-F4	PAH's
1 ~~G-69-01~~ G-W-01				S		2	21/10/10			X			
2 ~~G-69-02~~ G-W-02										X	X	X	
3 G-11-01										X			
4 G-11-02										X	X	X	
5 G-12-01										X			
6 G-12-02										X	X	X	
7 Dup 7-BH										X			
8 G-51-1										X			
9 G-51-2										X	X	X	
10 G-51-8											X	X	
11 G-50-01										X		X	NO
12 G-50-02										X	X	X	NO

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD	5 BUSINESS DAYS	☒
RUSH	3 BUSINESS DAYS	☐
RUSH	2 BUSINESS DAYS	☐
URGENT	1 BUSINESS DAY	☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☐ CCME ☐ CSR ☐ ALBERTA TIER 1 ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS: Extract G-51-8 please only analyze if G-51-2 has results > MDL for BTEX/PHC's. THX

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 11.8, 11.1 10.9 5.3, 5.4, 5.6

DUE DATE:

LOG IN CHECK:

RELINQUISHED BY SAMPLER:	DATE: DD/MM/YY 26/10/10	TIME: 08:45	RECEIVED BY: MICHELLE LIN
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY LABORATORY:

COCFORM - BC - 06/06

ORIGINAL - MAXXAM YELLOW - MAXXAM PINK - CLIENT

Maxxam

4606 Canada Way, Burnaby, BC Canada V5G 1K5 Ph: 604 734 7276 Toll Free: 1 800 665 8566 Fax: 604 731 2386

CHAIN OF CUSTODY RECORD

Page: 3 of 4

G 018049

Maxxam Job#:

Invoice To: Require Report? Yes ☐ No ☐

Company Name: AECOM
Contact Name: Scott Chapman
Address: 99 Commerce Dr. Wpg, MB
PC:
Phone / Fax#: Ph: 477-5381 Fax: 284-05B2
E-mail: Scott.Chapman@aecom.com

Report To:

Company Name:
Contact Name:
Address:
PC:
Ph: Fax:
Phone / Fax#:
E-mail

PO #:
Quotation #:
Project #: 60164142
Proj. Name: Dominion Bridge
Location:
Sampled By: B Hay

REGULATORY REQUIREMENTS SERVICE REQUESTED:

☐ CSR
☐ CCME
☐ BC Water Quality
☐ Other
☐ DRINKING WATER

☒ Regular Turn Around Time (TAT)
(5 days for most tests)
☐ RUSH (Please contact the lab)
☐ 1 Day ☐ 2 Day ☐ 3 Day
Date Required:

Special Instructions:
Return Cooler ☐ Ship Sample Bottles (please specify) ☐

ANALYSIS REQUESTED

	Sample Identification	Lab Identification	Sample Type	Date/Time Sampled	BTEX/VPH	VOC/VPH	EPH	PAH	CCME-PHC (Fractions 1-4 Plus BTEX)	CCME-PHC (Fractions 2-4)	CCME BTEX (Fraction 1 Plus BTEX)	PCB	Phenols by 4AAP	Phenols by GCMS	TOG	SWOG	MOG	Dissolved Metals (Field Filtered?)	Totals: Metals (Field Acidified?)	Nitrate	Nitrite	Ammonia	Chloride	Fluoride	Sulphate	Total Suspended Solids-TSS	TDS	pH	Conductivity	Alkalinity	BOD	COD	Coliform, Total & E.coli	Fecal	Asbestos	Metals	HOLD
					MTBE		TEH	LEPH/HEPH										N / Y	N / Y	N / Y																	
1	G-58-01		Soil	Oct.21/10																														X	X	
2	G-58-02																																	X	X	
3	Dup6																																	X	X	
4	G-55-01			Oct.22/10																														X	X	
5	G-55-02								X																									X	X	
6	G-55-06								X																									X	X	
7	G-53-01																																	X	X	
8	G-53-07																																	X	X	
9	G-49-01								X																									X	X	
10	G-49c02																																	X	X	
11	G-52-01																																	X	X	
12	G-52-02																																	X	X	

Samples are from a Drinking Water Source? YES ☐ NO ☐
Does source supply multiple households? YES ☐ NO ☐

Laboratory Use Only

*Relinquished by:	Date (YY/MM/DD):	Time:	Received by:	Date (YY/MM/DD):	Time:	Time Sensitive	Temperature on Receipt (°C)	Custody Seal Intact on Cooler?
B Hay	10/10/22		[illegible] MITCHELL LIN	26/10/10 10/10/26	08:45	☐	11.8, 11.1, 10.0	Yes ☐ 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.

White: Maxxam Yellow: Client

COC-1020 (05/10)

Maxxam International Corporation o/a Maxxam Analytics

5.2, 5.4, 5.6

Maxxam

4606 Canada Way, Burnaby, BC Canada V5G 1K5 Ph: 604 734 7276 Toll Free: 1 800 665 8566 Fax: 604 731 2386

CHAIN OF CUSTODY RECORD

Page: 4 of 4

G 018051

Maxxam Job#: _____

Invoice To: Require Report? Yes ☐ No ☐

Company Name: AECOM
Contact Name: Scott Chapman
Address: 99 Commerce Drive
PC:
Phone / Fax#: Ph: 477-5321 Fax: 2840580
E-mail scott.chapman@aecom.com

Report To:

Company Name:
Contact Name:
Address: & SAME
PC:
Phone / Fax#: Ph: Fax:
E-mail

PO #:
Quotation #:
Project #: 60164142
Proj. Name: Dominion Bridge
Location:
Sampled By: B May

REGULATORY REQUIREMENTS SERVICE REQUESTED:

☐ CSR
☐ CCME
☐ BC Water Quality
☐ Other
☐ DRINKING WATER

☒ Regular Turn Around Time (TAT) (5 days for most tests)
☐ RUSH (Please contact the lab)
☐ 1 Day ☐ 2 Day ☐ 3 Day
Date Required: _____

Special Instructions:
Return Cooler ☐ Ship Sample Bottles (please specify) ☐

ANALYSIS REQUESTED

	Sample Identification	Lab Identification	Sample Type	Date/Time Sampled	BTEX/VPH	VOC/VPH	EPH	PAH	LEPH/HEPH	CCME-PHC (Fractions 1-4 Plus BTEX)	CCME-PHC (Fractions 2-4)	CCME BTEX (Fraction 1 Plus BTEX)	PCB	Phenols by 4AAP	Phenols by GCMS	TOG	SWOG	MOG	Dissolved Metals	Field Filtered?	Totals Metals	Field Acidified?	Nitrate	Nitrite	Ammonia	Chloride	Fluoride	Sulphate	Total Suspended Solids-TSS	TDS	pH	Conductivity	Alkalinity	BOD	COD	Coliform, Total & E.coli	Fecal	Asbestos	Metals	HOLD
1	BH-54-01		SOIL	Oct 7/16																N		N																X	
2	BH-54-02																			N		N																X	
3	Dup 8-BH wet																			N		N																X	
4	G-67-01 (centre)																																						
5	~~BH~~ G-67-02																																						
6	G-68-01																																						
7	G-68-02																																						
8	Dup 5-BH																																						
9	Dup 4-BH																																						
10	G-08-01																																						
11	G-08-07																																						
12	G-08-16																																						

Samples are from a Drinking Water Source? YES NO
Does source supply multiple households? YES NO

Laboratory Use Only

*Relinquished by:	Date (YY/MM/DD):	Time:	Received by:	Date (YY/MM/DD):	Time:	Time Sensitive	Temperature on Receipt (°C)	Custody Seal Intact on Cooler?
[signature]	10/10/22		MICHELLE LIN	10/10/26	08:45	☐	11.8, 11.1, 10.0 C3, 5.4, 5.6	Yes ☐ 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.

White: Maxxam Yellow: Client

COC-1020 (05/10)

Maxxam International Corporation o/a Maxxam Analytics

Your Project #: 60164142 DOMINION BRIDGE
Your C.O.C. #: F111689

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/11/16

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0A8665
Received: 2010/11/06, 11:30

Sample Matrix: Soil
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Chromium, Hexavalent (soil) (1)	4	2010/11/08	2010/11/08	BRN SOP 00238 R4.0	3500 CR B
Elements by ICPMS (total) (1)	4	2010/11/08	2010/11/09	BRN SOP-00203 R5.0	Based on EPA 200.8
Moisture (1)	10	N/A	2010/11/07	BRN SOP-00321 R5.0	Ont MOE -E 3139
PAH in Soil by GC/MS Lowlevel (Extended) (1)	6	2010/11/06	2010/11/10	BRN SOP-00332 R5.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc (1)	6	N/A	2010/11/15		PAHTOT-S
pH (2:1 DI Water Extract) (1)	4	2010/11/08	2010/11/08	BRN SOP-00266 R6.0	Carter, SSMA 16.2

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE LH, VH, F1 SIM/MS (1)	2	2010/11/08	2010/11/08	BBY8-SOP-00010/R26	Based on EPA 8260B
CCME Hydrocarbons (F2-F4 in water) (1)	2	2010/11/10	2010/11/12	BRN SOP-00342 R9.0	CCME Soil Tier1
Volatile F1-BTEX (1)	2	N/A	2010/11/09		

(1) This test was performed by Maxxam Vancouver

Encryption Key

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

JANELLE KOCHAN, B.Sc,
Email: JKochan@maxxam.ca
Phone# (204) 772-7276 Ext:2209

==========

Your Project #: 60164142 DOMINION BRIDGE
Your C.O.C. #: F111689

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/11/16

CERTIFICATE OF ANALYSIS

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: 2

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		Y26244	Y26245	Y26246	Y26247		
Sampling Date		2010/11/04 10:30	2010/11/04 10:45	2010/11/04 11:00	2010/11/04 11:15		
COC Number		F111689	F111689	F111689	F111689		
	Units	**GP10-02 30CM**	**GP10-02 1.5M**	**GP10-01 30CM**	**GP10-01 1.5M**	**RDL**	**QC Batch**
Metals							
Hex. Chromium (Cr 6+)	mg/kg	<1	1	<1	<1	1	4410107

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

PHYSICAL TESTING (SOIL)

Maxxam ID		Y26238	Y26239	Y26240	Y26241	Y26242		
Sampling Date		2010/11/04 09:15	2010/11/04 09:00	2010/11/04 09:30	2010/11/04 09:45	2010/11/04 10:00		
COC Number		F111689	F111689	F111689	F111689	F111689		
	Units	**TP10-01-02**	**TP10-01-01**	**TP10-02-01**	**TP10-02-02**	**TP10-03-01**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	36	28	16	15	9.5	0.3	4405614

RDL = Reportable Detection Limit

Maxxam ID		Y26243	Y26244	Y26245	Y26246	Y26247		
Sampling Date		2010/11/04 10:15	2010/11/04 10:30	2010/11/04 10:45	2010/11/04 11:00	2010/11/04 11:15		
COC Number		F111689	F111689	F111689	F111689	F111689		
	Units	**TP10-03-02**	**GP10-02 30CM**	**GP10-02 1.5M**	**GP10-01 30CM**	**GP10-01 1.5M**	**RDL**	**QC Batch**
Physical Properties								
Moisture	%	24	21	21	11	25	0.3	4405614

RDL = Reportable Detection Limit

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		Y26237	Y26248		
Sampling Date		2010/11/04 12:00	2010/11/05 13:00		
COC Number		F111689	F111689		
	Units	**MW10-01**	**MW10-15**	**RDL**	**QC Batch**
Extractable Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	mg/L	<0.08	<0.08	0.08	4417363
F3 (C16-C34 Hydrocarbons)	mg/L	<0.08	<0.08	0.08	4417363
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	3	4417363
Surrogate Recovery (%)					
O-TERPHENYL (sur.)	%	95	93	N/A	4417363

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

CCME BTEX/F1 IN WATER (WATER)

Maxxam ID		Y26237	Y26248		
Sampling Date		2010/11/04 12:00	2010/11/05 13:00		
COC Number		F111689	F111689		
	Units	**MW10-01**	**MW10-15**	**RDL**	**QC Batch**
Calculated Parameters					
F1 (C6-C10) - BTEX	ug/L	<300	<300	300	4405585
Volatiles					
Methyl-tert-butylether (MTBE)	ug/L	<4	<4	4	4409845
Benzene	ug/L	0.4	<0.4	0.4	4409845
Toluene	ug/L	<0.4	<0.4	0.4	4409845
Ethylbenzene	ug/L	<0.4	<0.4	0.4	4409845
m & p-Xylene	ug/L	<0.4	<0.4	0.4	4409845
o-Xylene	ug/L	<0.4	<0.4	0.4	4409845
Styrene	ug/L	<0.4	<0.4	0.4	4409845
Xylenes (Total)	ug/L	<0.4	<0.4	0.4	4409845
(C6-C10)	ug/L	<300	<300	300	4409845
Surrogate Recovery (%)					
4-BROMOFLUOROBENZENE (sur.)	%	94	89	N/A	4409845
D4-1,2-DICHLOROETHANE (sur.)	%	106	104	N/A	4409845
D8-TOLUENE (sur.)	%	102	97	N/A	4409845

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		Y26244	Y26245	Y26246	Y26247		
Sampling Date		2010/11/04 10:30	2010/11/04 10:45	2010/11/04 11:00	2010/11/04 11:15		
COC Number		F111689	F111689	F111689	F111689		
	Units	**GP10-02 30CM**	**GP10-02 1.5M**	**GP10-01 30CM**	**GP10-01 1.5M**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	8.81	8.71	8.17	8.82	0.01	4407862
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	8630	10400	4440	13600	100	4407854
Total Antimony (Sb)	mg/kg	0.1	0.1	1.3	0.2	0.1	4407854
Total Arsenic (As)	mg/kg	1.5	1.2	3.3	3.7	0.2	4407854
Total Barium (Ba)	mg/kg	45.5	67.3	137	134	0.1	4407854
Total Beryllium (Be)	mg/kg	0.3	0.4	0.2	0.5	0.1	4407854
Total Bismuth (Bi)	mg/kg	<0.1	<0.1	<0.1	0.2	0.1	4407854
Total Cadmium (Cd)	mg/kg	0.08	0.14	0.23	0.22	0.05	4407854
Total Calcium (Ca)	mg/kg	127000	90200	137000	65600	100	4407854
Total Chromium (Cr)	mg/kg	42	43	17	37	1	4407854
Total Cobalt (Co)	mg/kg	3.6	6.2	3.4	9.8	0.3	4407854
Total Copper (Cu)	mg/kg	10.0	16.4	15.0	39.7	0.5	4407854
Total Iron (Fe)	mg/kg	8560	13800	17700	21100	100	4407854
Total Lead (Pb)	mg/kg	4.8	6.6	90.2	11.5	0.1	4407854
Total Lithium (Li)	mg/kg	11	16	<5	22	5	4407854
Total Magnesium (Mg)	mg/kg	79800	58800	46100	37300	100	4407854
Total Manganese (Mn)	mg/kg	189	338	255	442	0.2	4407854
Total Mercury (Hg)	mg/kg	<0.05	<0.05	<0.05	<0.05	0.05	4407854
Total Molybdenum (Mo)	mg/kg	0.2	0.2	1.8	0.5	0.1	4407854
Total Nickel (Ni)	mg/kg	11.0	19.9	17.7	28.2	0.8	4407854
Total Phosphorus (P)	mg/kg	299	413	176	485	10	4407854
Total Potassium (K)	mg/kg	1020	1660	662	2750	100	4407854
Total Selenium (Se)	mg/kg	<0.5	<0.5	<0.5	<0.5	0.5	4407854
Total Silver (Ag)	mg/kg	<0.05	0.07	0.05	0.10	0.05	4407854
Total Sodium (Na)	mg/kg	189	205	234	432	100	4407854
Total Strontium (Sr)	mg/kg	51.8	39.1	122	68.2	0.1	4407854
Total Thallium (Tl)	mg/kg	0.08	0.16	0.07	0.26	0.05	4407854
Total Tin (Sn)	mg/kg	0.2	0.4	1.0	0.6	0.1	4407854
Total Titanium (Ti)	mg/kg	240	356	192	374	1	4407854
Total Uranium (U)	mg/kg	1.96	1.57	0.51	1.29	0.05	4407854
Total Vanadium (V)	mg/kg	20	28	12	46	2	4407854

RDL = Reportable Detection Limit

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		Y26244	Y26245	Y26246	Y26247		
Sampling Date		2010/11/04 10:30	2010/11/04 10:45	2010/11/04 11:00	2010/11/04 11:15		
COC Number		F111689	F111689	F111689	F111689		
	Units	**GP10-02 30CM**	**GP10-02 1.5M**	**GP10-01 30CM**	**GP10-01 1.5M**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	29	52	10300	387	1	4407854
Total Zirconium (Zr)	mg/kg	3.6	6.8	4.4	8.8	0.5	4407854

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		Y26238		Y26239		Y26240		
Sampling Date		2010/11/04 09:15		2010/11/04 09:00		2010/11/04 09:30		
COC Number		F111689		F111689		F111689		
	Units	**TP10-01-02**	**RDL**	**TP10-01-01**	**RDL**	**TP10-02-01**	**RDL**	**QC Batch**
Polycyclic Aromatics								
Naphthalene	mg/kg	0.27	0.001	0.84 (1)	0.005	8.7 (1)	0.3	4411696
2-Methylnaphthalene	mg/kg	0.49	0.001	1.3 (1)	0.005	5.5 (1)	0.3	4411696
Acenaphthylene	mg/kg	<0.01 (2)	0.01	0.074 (1)	0.005	2.0 (1)	0.3	4411696
Acenaphthene	mg/kg	0.007	0.001	0.10 (1)	0.005	16 (1)	0.3	4411696
Fluorene	mg/kg	0.012	0.001	0.13 (1)	0.005	15 (1)	0.3	4411696
Phenanthrene	mg/kg	0.21	0.001	1.3 (1)	0.005	140 (1)	0.3	4411696
Anthracene	mg/kg	0.016	0.001	0.23 (1)	0.005	33 (1)	0.3	4411696
Fluoranthene	mg/kg	0.070	0.001	1.0 (1)	0.005	170 (1)	0.3	4411696
Pyrene	mg/kg	0.069	0.001	0.89 (1)	0.005	140 (1)	0.3	4411696
Benzo(a)anthracene	mg/kg	0.045	0.001	0.46 (1)	0.005	56 (1)	0.3	4411696
Chrysene	mg/kg	0.065	0.001	0.56 (1)	0.005	56 (1)	0.3	4411696
Benzo(b&j)fluoranthene	mg/kg	0.051	0.001	0.66 (1)	0.005	71 (1)	0.3	4411696
Benzo(k)fluoranthene	mg/kg	0.011	0.001	0.19 (1)	0.005	24 (1)	0.3	4411696
Benzo(a)pyrene	mg/kg	0.035	0.001	0.40 (1)	0.005	52 (1)	0.3	4411696
Indeno(1,2,3-cd)pyrene	mg/kg	0.025	0.002	0.31 (1)	0.01	39 (1)	0.5	4411696
Dibenz(a,h)anthracene	mg/kg	0.008	0.002	0.08 (1)	0.01	8.0 (1)	0.5	4411696
Benzo(g,h,i)perylene	mg/kg	0.029	0.002	0.30 (1)	0.01	36 (1)	0.5	4411696
Low Molecular Weight PAH`s	mg/kg	1.0	0.01	4.0	0.005	220	0.3	4405156
High Molecular Weight PAH`s	mg/kg	0.41	0.002	4.9	0.01	650	0.5	4405156
Total PAH	mg/kg	1.4	0.01	8.9	0.01	870	0.5	4405156
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	79	N/A	75	N/A	100	N/A	4411696
D12-BENZO(A)PYRENE (sur.)	%	59 (3)	N/A	60	N/A	100	N/A	4411696
D8-ACENAPHTHYLENE (sur.)	%	88	N/A	80	N/A	100	N/A	4411696
D8-NAPHTHALENE (sur.)	%	83	N/A	80	N/A	100	N/A	4411696
TERPHENYL-D14 (sur.)	%	86	N/A	80	N/A	100	N/A	4411696

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.
(2) RDL raised due to sample matrix interference.
(3) Surrogate recovery below control limit - 1 surrogate failure allowed - Pot. low bias

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		Y26241		Y26242		Y26243		
Sampling Date		2010/11/04 09:45		2010/11/04 10:00		2010/11/04 10:15		
COC Number		F111689		F111689		F111689		
	Units	**TP10-02-02**	**RDL**	**TP10-03-01**	**RDL**	**TP10-03-02**	**RDL**	**QC Batch**
Polycyclic Aromatics								
Naphthalene	mg/kg	3.1 (1)	0.1	0.61 (1)	0.005	0.013	0.001	4411696
2-Methylnaphthalene	mg/kg	1.9 (1)	0.1	0.29 (1)	0.005	0.014	0.001	4411696
Acenaphthylene	mg/kg	0.5 (1)	0.1	0.52 (1)	0.005	0.015	0.001	4411696
Acenaphthene	mg/kg	6.6 (1)	0.1	0.64 (1)	0.005	0.084	0.001	4411696
Fluorene	mg/kg	4.3 (1)	0.1	0.60 (1)	0.005	0.081	0.001	4411696
Phenanthrene	mg/kg	48 (1)	0.1	4.8 (1)	0.005	0.27	0.001	4411696
Anthracene	mg/kg	10 (1)	0.1	2.3 (1)	0.005	0.096	0.001	4411696
Fluoranthene	mg/kg	54 (1)	0.1	14 (1)	0.03	0.28	0.001	4411696
Pyrene	mg/kg	48 (1)	0.1	13 (1)	0.03	0.21	0.001	4411696
Benzo(a)anthracene	mg/kg	15 (1)	0.1	4.2 (1)	0.005	0.062	0.001	4411696
Chrysene	mg/kg	16 (1)	0.1	6.8 (1)	0.005	0.10	0.001	4411696
Benzo(b&j)fluoranthene	mg/kg	23 (1)	0.1	12 (1)	0.03	0.094	0.001	4411696
Benzo(k)fluoranthene	mg/kg	6.1 (1)	0.1	2.5 (1)	0.005	0.030	0.001	4411696
Benzo(a)pyrene	mg/kg	16 (1)	0.1	4.1 (1)	0.005	0.038	0.001	4411696
Indeno(1,2,3-cd)pyrene	mg/kg	12 (1)	0.2	3.6 (1)	0.01	0.029	0.002	4411696
Dibenz(a,h)anthracene	mg/kg	2.0 (1)	0.2	0.77 (1)	0.01	0.006	0.002	4411696
Benzo(g,h,i)perylene	mg/kg	11 (1)	0.2	3.0 (1)	0.01	0.025	0.002	4411696
Low Molecular Weight PAH`s	mg/kg	75	0.1	9.7	0.001	0.57	0.001	4405156
High Molecular Weight PAH`s	mg/kg	200	0.2	64	0.03	0.88	0.002	4405156
Total PAH	mg/kg	280	0.2	74	0.03	1.4	0.002	4405156
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	90	N/A	95	N/A	84	N/A	4411696
D12-BENZO(A)PYRENE (sur.)	%	80	N/A	100	N/A	62	N/A	4411696
D8-ACENAPHTHYLENE (sur.)	%	85	N/A	95	N/A	87	N/A	4411696
D8-NAPHTHALENE (sur.)	%	80	N/A	85	N/A	81	N/A	4411696
TERPHENYL-D14 (sur.)	%	100	N/A	95	N/A	88	N/A	4411696

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A8665
Report Date: 2010/11/16

AECOM
Client Project #: 60164142 DOMINION BRIDGE

Package 1	10.0°C

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

General Comments

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference:

Quality Assurance Report

Maxxam Job Number: NB0A8665

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4405614	CG5	Method Blank	Moisture	2010/11/07	<0.3		%	
		RPD [Y26243-01]	Moisture	2010/11/07	2.5		%	20
4407854	DJ	Matrix Spike	Total Arsenic (As)	2010/11/09		100	%	75 - 125
			Total Beryllium (Be)	2010/11/09		97	%	75 - 125
			Total Cadmium (Cd)	2010/11/09		101	%	75 - 125
			Total Chromium (Cr)	2010/11/09		100	%	75 - 125
			Total Cobalt (Co)	2010/11/09		97	%	75 - 125
			Total Copper (Cu)	2010/11/09		97	%	75 - 125
			Total Lead (Pb)	2010/11/09		104	%	75 - 125
			Total Lithium (Li)	2010/11/09		96	%	75 - 125
			Total Mercury (Hg)	2010/11/09		97	%	75 - 125
			Total Nickel (Ni)	2010/11/09		103	%	75 - 125
			Total Selenium (Se)	2010/11/09		96	%	75 - 125
			Total Uranium (U)	2010/11/09		103	%	75 - 125
			Total Vanadium (V)	2010/11/09		NC	%	75 - 125
			Total Zinc (Zn)	2010/11/09		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/11/09		103	%	70 - 130
			Total Antimony (Sb)	2010/11/09		85	%	70 - 130
			Total Arsenic (As)	2010/11/09		92	%	70 - 130
			Total Barium (Ba)	2010/11/09		104	%	70 - 130
			Total Cadmium (Cd)	2010/11/09		93	%	70 - 130
			Total Calcium (Ca)	2010/11/09		98	%	70 - 130
			Total Chromium (Cr)	2010/11/09		99	%	70 - 130
			Total Cobalt (Co)	2010/11/09		95	%	70 - 130
			Total Copper (Cu)	2010/11/09		92	%	70 - 130
			Total Iron (Fe)	2010/11/09		98	%	70 - 130
			Total Lead (Pb)	2010/11/09		105	%	70 - 130
			Total Magnesium (Mg)	2010/11/09		102	%	70 - 130
			Total Manganese (Mn)	2010/11/09		103	%	70 - 130
			Total Molybdenum (Mo)	2010/11/09		93	%	70 - 130
			Total Nickel (Ni)	2010/11/09		95	%	70 - 130
			Total Phosphorus (P)	2010/11/09		93	%	70 - 130
			Total Strontium (Sr)	2010/11/09		98	%	70 - 130
			Total Thallium (Tl)	2010/11/09		92	%	70 - 130
			Total Titanium (Ti)	2010/11/09		101	%	70 - 130
			Total Uranium (U)	2010/11/09		95	%	70 - 130
			Total Vanadium (V)	2010/11/09		103	%	70 - 130
			Total Zinc (Zn)	2010/11/09		88	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/11/09		96	%	75 - 125
			Total Beryllium (Be)	2010/11/09		94	%	75 - 125
			Total Cadmium (Cd)	2010/11/09		99	%	75 - 125
			Total Chromium (Cr)	2010/11/09		96	%	75 - 125
			Total Cobalt (Co)	2010/11/09		96	%	75 - 125
			Total Copper (Cu)	2010/11/09		99	%	75 - 125
			Total Lead (Pb)	2010/11/09		103	%	75 - 125
			Total Lithium (Li)	2010/11/09		98	%	75 - 125
			Total Mercury (Hg)	2010/11/09		102	%	75 - 125
			Total Nickel (Ni)	2010/11/09		98	%	75 - 125
			Total Selenium (Se)	2010/11/09		94	%	75 - 125
			Total Uranium (U)	2010/11/09		100	%	75 - 125
			Total Vanadium (V)	2010/11/09		100	%	75 - 125
			Total Zinc (Zn)	2010/11/09		95	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/11/09	<100		mg/kg	
			Total Antimony (Sb)	2010/11/09	<0.1		mg/kg	
			Total Arsenic (As)	2010/11/09	<0.2		mg/kg	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A8665

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4407854	DJ	Method Blank	Total Barium (Ba)	2010/11/09	<0.1		mg/kg	
			Total Beryllium (Be)	2010/11/09	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/11/09	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/11/09	<0.05		mg/kg	
			Total Calcium (Ca)	2010/11/09	<100		mg/kg	
			Total Chromium (Cr)	2010/11/09	<1		mg/kg	
			Total Cobalt (Co)	2010/11/09	<0.3		mg/kg	
			Total Copper (Cu)	2010/11/09	<0.5		mg/kg	
			Total Iron (Fe)	2010/11/09	<100		mg/kg	
			Total Lead (Pb)	2010/11/09	<0.1		mg/kg	
			Total Lithium (Li)	2010/11/09	<5		mg/kg	
			Total Magnesium (Mg)	2010/11/09	<100		mg/kg	
			Total Manganese (Mn)	2010/11/09	<0.2		mg/kg	
			Total Mercury (Hg)	2010/11/09	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/11/09	<0.1		mg/kg	
			Total Nickel (Ni)	2010/11/09	<0.8		mg/kg	
			Total Phosphorus (P)	2010/11/09	<10		mg/kg	
			Total Potassium (K)	2010/11/09	<100		mg/kg	
			Total Selenium (Se)	2010/11/09	<0.5		mg/kg	
			Total Silver (Ag)	2010/11/09	<0.05		mg/kg	
			Total Sodium (Na)	2010/11/09	<100		mg/kg	
			Total Strontium (Sr)	2010/11/09	<0.1		mg/kg	
			Total Thallium (Tl)	2010/11/09	<0.05		mg/kg	
			Total Tin (Sn)	2010/11/09	<0.1		mg/kg	
			Total Titanium (Ti)	2010/11/09	<1		mg/kg	
			Total Uranium (U)	2010/11/09	<0.05		mg/kg	
			Total Vanadium (V)	2010/11/09	<2		mg/kg	
			Total Zinc (Zn)	2010/11/09	<1		mg/kg	
			Total Zirconium (Zr)	2010/11/09	<0.5		mg/kg	
		RPD	Total Aluminum (Al)	2010/11/09	1.4		%	35
			Total Antimony (Sb)	2010/11/09	NC		%	30
			Total Arsenic (As)	2010/11/09	4.7		%	30
			Total Barium (Ba)	2010/11/09	6.9		%	35
			Total Beryllium (Be)	2010/11/09	NC		%	30
			Total Bismuth (Bi)	2010/11/09	NC		%	30
			Total Cadmium (Cd)	2010/11/09	3.0		%	30
			Total Calcium (Ca)	2010/11/09	4.2		%	30
			Total Chromium (Cr)	2010/11/09	1.9		%	30
			Total Cobalt (Co)	2010/11/09	3.1		%	30
			Total Copper (Cu)	2010/11/09	4.3		%	30
			Total Iron (Fe)	2010/11/09	7.1		%	30
			Total Lead (Pb)	2010/11/09	0.9		%	35
			Total Magnesium (Mg)	2010/11/09	1.9		%	30
			Total Manganese (Mn)	2010/11/09	6.7		%	30
			Total Mercury (Hg)	2010/11/09	NC		%	35
			Total Molybdenum (Mo)	2010/11/09	2.7		%	35
			Total Nickel (Ni)	2010/11/09	3.2		%	30
			Total Phosphorus (P)	2010/11/09	4.7		%	30
			Total Potassium (K)	2010/11/09	10.2		%	35
			Total Selenium (Se)	2010/11/09	NC		%	30
			Total Silver (Ag)	2010/11/09	NC		%	35
			Total Sodium (Na)	2010/11/09	NC		%	35
			Total Strontium (Sr)	2010/11/09	0.3		%	35
			Total Thallium (Tl)	2010/11/09	NC		%	30
			Total Tin (Sn)	2010/11/09	NC		%	35

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A8665

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4407854	DJ	RPD	Total Titanium (Ti)	2010/11/09	0.9		%	35
			Total Vanadium (V)	2010/11/09	1.9		%	30
			Total Zinc (Zn)	2010/11/09	0.4		%	30
			Total Zirconium (Zr)	2010/11/09	NC		%	30
4407862	AL8	Spiked Blank	Soluble (2:1) pH	2010/11/08		102	%	96 - 104
		RPD [Y26247-02]	Soluble (2:1) pH	2010/11/08	0.2		%	20
4409845	ALM	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		97	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		102	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		102	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08		100	%	70 - 130
			Benzene	2010/11/08		97	%	70 - 130
			Toluene	2010/11/08		99	%	70 - 130
			Ethylbenzene	2010/11/08		95	%	70 - 130
			m & p-Xylene	2010/11/08		89	%	70 - 130
			o-Xylene	2010/11/08		97	%	70 - 130
			Styrene	2010/11/08		78	%	70 - 130
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		98	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		99	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		103	%	70 - 130
			(C6-C10)	2010/11/08		108	%	70 - 130
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		97	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		106	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		100	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08		108	%	70 - 130
			Benzene	2010/11/08		106	%	70 - 130
			Toluene	2010/11/08		106	%	70 - 130
			Ethylbenzene	2010/11/08		102	%	70 - 130
			m & p-Xylene	2010/11/08		96	%	70 - 130
			o-Xylene	2010/11/08		103	%	70 - 130
			Styrene	2010/11/08		84	%	70 - 130
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		93	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		107	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		102	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08	<4		ug/L	
			Benzene	2010/11/08	<0.4		ug/L	
			Toluene	2010/11/08	<0.4		ug/L	
			Ethylbenzene	2010/11/08	<0.4		ug/L	
			m & p-Xylene	2010/11/08	<0.4		ug/L	
			o-Xylene	2010/11/08	<0.4		ug/L	
			Styrene	2010/11/08	<0.4		ug/L	
			Xylenes (Total)	2010/11/08	<0.4		ug/L	
			(C6-C10)	2010/11/08	<300		ug/L	
		RPD	Methyl-tert-butylether (MTBE)	2010/11/08	NC		%	30
			Benzene	2010/11/08	NC		%	30
			Toluene	2010/11/08	NC		%	30
			Ethylbenzene	2010/11/08	9.5		%	30
			m & p-Xylene	2010/11/08	15.2		%	30
			o-Xylene	2010/11/08	NC		%	30
			Styrene	2010/11/08	NC		%	30
			Xylenes (Total)	2010/11/08	14.9		%	30
4410107	AH5	Matrix Spike [Y26246-02]	Hex. Chromium (Cr 6+)	2010/11/08		96	%	75 - 125
		Spiked Blank	Hex. Chromium (Cr 6+)	2010/11/08		97	%	75 - 125
		Method Blank	Hex. Chromium (Cr 6+)	2010/11/08	<1		mg/kg	
		RPD [Y26246-02]	Hex. Chromium (Cr 6+)	2010/11/08	NC		%	30

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A8665

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4411696	MY4	Matrix Spike	D10-ANTHRACENE (sur.)	2010/11/10		100	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/11/10		110	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/11/10		110	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/11/10		100	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/11/10		110	%	60 - 130
			Naphthalene	2010/11/10		89	%	40 - 130
			2-Methylnaphthalene	2010/11/10		95	%	40 - 130
			Acenaphthylene	2010/11/10		86	%	40 - 130
			Acenaphthene	2010/11/10		94	%	40 - 130
			Fluorene	2010/11/10		NC	%	40 - 130
			Phenanthrene	2010/11/10		92	%	40 - 130
			Anthracene	2010/11/10		88	%	40 - 130
			Fluoranthene	2010/11/10		86	%	40 - 130
			Pyrene	2010/11/10		NC	%	40 - 130
			Benzo(a)anthracene	2010/11/10		88	%	40 - 130
			Chrysene	2010/11/10		92	%	40 - 130
			Benzo(b&j)fluoranthene	2010/11/10		96	%	40 - 130
			Benzo(k)fluoranthene	2010/11/10		96	%	40 - 130
			Benzo(a)pyrene	2010/11/10		92	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/11/10		101	%	40 - 130
			Dibenz(a,h)anthracene	2010/11/10		95	%	40 - 130
			Benzo(g,h,i)perylene	2010/11/10		95	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/11/09		85	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/11/09		85	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/11/09		85	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/11/09		85	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/11/09		88	%	60 - 130
			Naphthalene	2010/11/09		75	%	40 - 130
			2-Methylnaphthalene	2010/11/09		69	%	40 - 130
			Acenaphthylene	2010/11/09		73	%	40 - 130
			Acenaphthene	2010/11/09		74	%	40 - 130
			Fluorene	2010/11/09		75	%	40 - 130
			Phenanthrene	2010/11/09		74	%	40 - 130
			Anthracene	2010/11/09		74	%	40 - 130
			Fluoranthene	2010/11/09		74	%	40 - 130
			Pyrene	2010/11/09		77	%	40 - 130
			Benzo(a)anthracene	2010/11/09		68	%	40 - 130
			Chrysene	2010/11/09		70	%	40 - 130
			Benzo(b&j)fluoranthene	2010/11/09		75	%	40 - 130
			Benzo(k)fluoranthene	2010/11/09		71	%	40 - 130
			Benzo(a)pyrene	2010/11/09		72	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/11/09		70	%	40 - 130
			Dibenz(a,h)anthracene	2010/11/09		64	%	40 - 130
			Benzo(g,h,i)perylene	2010/11/09		66	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/11/10		99	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/11/10		95	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/11/10		99	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/11/10		100	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/11/10		102	%	60 - 130
			Naphthalene	2010/11/10	<0.001		mg/kg	
			2-Methylnaphthalene	2010/11/10	<0.001		mg/kg	
			Acenaphthylene	2010/11/10	<0.001		mg/kg	
			Acenaphthene	2010/11/10	<0.001		mg/kg	
			Fluorene	2010/11/10	<0.001		mg/kg	
			Phenanthrene	2010/11/10	<0.001		mg/kg	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference:

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A8665

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4411696	MY4	Method Blank	Anthracene	2010/11/10	<0.001		mg/kg	
			Fluoranthene	2010/11/10	<0.001		mg/kg	
			Pyrene	2010/11/10	<0.001		mg/kg	
			Benzo(a)anthracene	2010/11/10	<0.001		mg/kg	
			Chrysene	2010/11/10	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/11/10	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/11/10	<0.001		mg/kg	
			Benzo(a)pyrene	2010/11/10	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/11/10	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/11/10	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/11/10	<0.002		mg/kg	
		RPD	Naphthalene	2010/11/10	NC (1)		%	50
			2-Methylnaphthalene	2010/11/10	13.6 (2)		%	50
			Acenaphthylene	2010/11/10	NC (1)		%	50
			Acenaphthene	2010/11/10	0.3 (2)		%	50
			Fluorene	2010/11/10	NC (1)		%	50
			Phenanthrene	2010/11/10	6.2 (2)		%	50
			Anthracene	2010/11/10	NC (1)		%	50
			Fluoranthene	2010/11/10	8.4 (2)		%	50
			Pyrene	2010/11/10	1.0 (2)		%	50
			Benzo(a)anthracene	2010/11/10	NC (2)		%	50
			Chrysene	2010/11/10	4.1 (2)		%	50
			Benzo(b&j)fluoranthene	2010/11/10	NC (1)		%	50
			Benzo(k)fluoranthene	2010/11/10	NC (1)		%	50
			Benzo(a)pyrene	2010/11/10	NC (2)		%	50
			Indeno(1,2,3-cd)pyrene	2010/11/10	NC (2)		%	50
			Dibenz(a,h)anthracene	2010/11/10	NC (2)		%	50
			Benzo(g,h,i)perylene	2010/11/10	NC (1)		%	50
4417363	JC9	Spiked Blank	F2 (C10-C16 Hydrocarbons)	2010/11/12		87	%	80 - 120
			O-TERPHENYL (sur.)	2010/11/12		94	%	50 - 130
		Method Blank	F2 (C10-C16 Hydrocarbons)	2010/11/12	<0.08		mg/L	
			F3 (C16-C34 Hydrocarbons)	2010/11/12	<0.08		mg/L	
			F4 (C34-C50 Hydrocarbons)	2010/11/12	<3		mg/L	
			O-TERPHENYL (sur.)	2010/11/12		95	%	50 - 130
		RPD [Y26237-01]	F2 (C10-C16 Hydrocarbons)	2010/11/12	NC		%	40
			F3 (C16-C34 Hydrocarbons)	2010/11/12	NC		%	40
			F4 (C34-C50 Hydrocarbons)	2010/11/12	NC		%	40

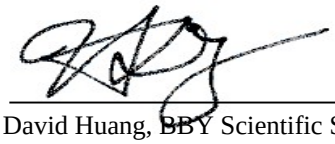
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
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.
(1) RDL raised due to sample matrix interference.
(2) RDL raised due to sample dilution.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

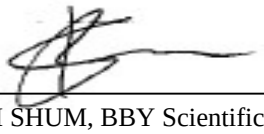
Validation Signature Page

Maxxam Job #: B0A8665

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



David Huang, BBY Scientific Specialist



TOM SHUM, BBY Scientific Specialist

==========

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 Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

BOA8665

ANALYSIS REQUEST F 111689

COMPANY NAME: AECOM	PH. #: (204) 928-6321 E-mail: eryn.williamson@aecom.com / scott.chapman@aecom.com FAX #:
COMPANY ADDRESS: 99 Commerce Drive Winnipeg MB R3P 0Y7	CLIENT PROJECT ID: (#) 60164142 Dominion Bridge
SAMPLER NAME (PRINT): Eryn Williamson	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, PHC, F1-F4	PAH	Metals	Chromium VI	LAB USE ONLY
1	MW10-01		X				5	04/11/10	12:00	280	X				
2	TP10-01-02				Y		2	04/11/10	9:15	-		Y			
3	TP10-01-01				X		2	04/11/10	9:00	-		X			
4	TP10-02-01				X		2	04/11/10	9:30	-		X			
5	TP10-02-02				X		2	04/11/10	9:45	-		X			
6	TP10-03-01				Y		2	04/11/10	10:00	-		X			
7	TP10-03-02				X		2	04/11/10	10:15	-		X			
8	GP10-02 30cm				X		3	04/11/10	10:30	-			X	X	
9	GP10-02 1.5m				X		3	04/11/10	10:45	-			X	X	
10	GP10-01 30cm				X		3	04/11/10	11:00	-			X	X	
11	GP10-01 1.5m				X		3	04/11/10	11:15	-			X	X	
12	MW10-15		X				5	05/11/10	13:00	-	X				

RECD IN WINNIPEG

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS [X]
- RUSH 3 BUSINESS DAYS [ ]
- RUSH 2 BUSINESS DAYS [ ]
- URGENT 1 BUSINESS DAY [ ]

OTHER BUSINESS DAYS _____

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

- [X] CCME
- [ ] CSR
- [ ] ALBERTA TIER 1
- [ ] OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C:	DUE DATE:	LOG IN CHECK:
10.2	NN5/10	4:15
10.2		
10.0		
BOY 5/6/10		

RELINQUISHED BY SAMPLER: Eryn Williamson	Eryn Williamson	DATE: DD/MM/YY 05/11/10	TIME: 15:00	RECEIVED BY: Victor Bel
RELINQUISHED BY:		DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY:		DATE: DD/MM/YY 04/11/10	TIME: 11:30	RECEIVED BY:

CUSTODY RECORD

Your Project #: 60164142 DOMINION BRIDGE
Site: 1460 DUBLIN AVENUE
Your C.O.C. #: F111808, F111786, F111783, F111787

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/11/17

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B0A7403
Received: 2010/11/03, 09:45

Sample Matrix: Water
Samples Received: 47

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
BTEX/MTBE LH, VH, F1 SIM/MS (1)	25	2010/11/07	2010/11/08	BBY8-SOP-00010/R26	Based on EPA 8260B
BTEX/MTBE LH, VH, F1 SIM/MS (1)	1	2010/11/07	2010/11/09	BBY8-SOP-00010/R26	Based on EPA 8260B
CCME Hydrocarbons (F2-F4 in water) (1)	14	2010/11/05	2010/11/07	BRN SOP-00342 R9.0	CCME Soil Tier1
CCME Hydrocarbons (F2-F4 in water) (1)	20	2010/11/05	2010/11/08	BRN SOP-00342 R9.0	CCME Soil Tier1
Hardness Total (calculated as CaCO3) (1)	23	N/A	2010/11/12		
Hardness Total (calculated as CaCO3) (1)	2	N/A	2010/11/15		
Mercury (Total) by CVAF (1)	8	2010/11/16	2010/11/16	65-A-002-10	EPA 245.7
Na, K, Ca, Mg, S by CRC ICPMS (total) (1)	19	2010/11/04	2010/11/12	BRN SOP-00206	Based on EPA 200.8
Na, K, Ca, Mg, S by CRC ICPMS (total) (1)	2	2010/11/04	2010/11/15	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (total) (1)	3	2010/11/10	2010/11/11	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (total) (1)	20	2010/11/10	2010/11/12	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (total) (1)	2	2010/11/10	2010/11/13	BRN SOP-00206	Based on EPA 200.8
Polychlorinated Biphenyls in Water (1)	9	2010/11/05	2010/11/08	60-C-044-05	EPA 608/8080
Polychlorinated Biphenyls in Water (1)	1	2010/11/10	2010/11/15	60-C-044-05	EPA 608/8080
CCME F1 C6-C10 in Water by HS GC/MS (1)	8	N/A	2010/11/07	BRN SOP 00305 R7.0	Based on EPA 8260B
VOCs in Water by HS GC/MS (1)	8	N/A	2010/11/07	BBY8-SOP-0009/R16	Based on EPA 8260B
Volatile F1-BTEX (1)	5	N/A	2010/11/08		
Volatile F1-BTEX (1)	5	N/A	2010/11/09		
Volatile F1-BTEX (1)	19	N/A	2010/11/10		
Volatile F1-BTEX (1)	5	N/A	2010/11/12		

(1) This test was performed by Maxxam Vancouver

../2

Your Project #: 60164142 DOMINION BRIDGE
Site: 1460 DUBLIN AVENUE
Your C.O.C. #: F111808, F111786, F111783, F111787

Attention: Scott Chapman
AECOM
99 Commerce Drive
WINNIPEG, MB
CANADA R3P 0Y7

Report Date: 2010/11/17

CERTIFICATE OF ANALYSIS

Encryption Key

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

Kelly Janda, B.Sc, Burnaby Customer Service
Email: KJanda@maxxam.ca
Phone# (604) 638-5019

==========

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: 2

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		Y18047	Y18048	Y18049	Y18050		
Sampling Date		2010/10/29 08:00	2010/10/29 08:00	2010/10/29 08:15	2010/10/29 08:30		
COC Number		F111808	F111808	F111808	F111808		
	Units	**MW10-03**	**MW10-13**	**BH-2**	**BH-4**	**RDL**	**QC Batch**
Extractable Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	4.2	3.6	<0.08	<0.08	0.08	4403261
F3 (C16-C34 Hydrocarbons)	mg/L	1.8	1.4	<0.08	<0.08	0.08	4403261
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	<3	<3	3	4403261
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	98	96	93	96	N/A	4403261

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		Y18051	Y18052	Y18053	Y18054		
Sampling Date		2010/10/29 08:45	2010/10/29 09:00	2010/10/29 09:15	2010/11/01 08:00		
COC Number		F111808	F111808	F111808	F111808		
	Units	**BH-61**	**BH-62**	**BH-63**	**MW10-06**	**RDL**	**QC Batch**
Extractable Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403261
F3 (C16-C34 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403261
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	<3	<3	3	4403261
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	95	95	95	98	N/A	4403261

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		Y18055	Y18056	Y18057	Y18058		
Sampling Date		2010/11/01 08:00	2010/11/01 08:15	2010/11/01 08:30	2010/11/01 08:45		
COC Number		F111808	F111808	F111808	F111808		
	Units	**MW10-26**	**MW10-08**	**BH-15**	**MW10-10**	**RDL**	**QC Batch**
Extractable Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403261
F3 (C16-C34 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403261
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	<3	<3	3	4403261
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	96	96	96	97	N/A	4403261

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		Y18059	Y18060	Y18062	Y18063		
Sampling Date		2010/11/01 08:45	2010/10/29 09:30	2010/10/29 10:00	2010/11/01 09:15		
COC Number		F111786	F111786	F111786	F111786		
	Units	**MW10-20**	**MW10-14**	**MW10-23**	**MW10-25**	**RDL**	**QC Batch**
Extractable Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403261
F3 (C16-C34 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403261
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	<3	<3	3	4403261
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	96	96	95	95	N/A	4403261

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		Y18070	Y18071	Y18072	Y18073		
Sampling Date		2010/10/29 10:30	2010/10/29 10:30	2010/10/29 10:45	2010/11/01 10:30		
COC Number		F111783	F111783	F111783	F111783		
	Units	**MW10-21**	**MW10-21A**	**MW10-22A**	**BH-8**	**RDL**	**QC Batch**
Extractable Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403261
F3 (C16-C34 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403261
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	<3	<3	3	4403261
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	94	94	94	95	N/A	4403261

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		Y18074	Y18075	Y18076	Y18077		
Sampling Date		2010/11/01 10:45	2010/11/01 10:45	2010/11/01 11:00	2010/11/01 11:15		
COC Number		F111783	F111783	F111783	F111783		
	Units	**MW10-44**	**MW10-54**	**MW10-45**	**MW10-49**	**RDL**	**QC Batch**
Extractable Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	6.4	5.7	<0.08	<0.08	0.08	4403263
F3 (C16-C34 Hydrocarbons)	mg/L	6.7	5.9	<0.08	<0.08	0.08	4403263
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	<3	<3	3	4403263
Reached Baseline at C50	mg/L	0	0	0	0	N/A	4403263
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	104	104	100	98	N/A	4403263

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		Y18078	Y18079	Y18080	Y18081		
Sampling Date		2010/11/01 11:15	2010/11/01 11:30	2010/10/29 11:00	2010/10/29 11:15		
COC Number		F111783	F111783	F111783	F111783		
	Units	**MW10-59**	**MW10-53**	**MW10-59**	**MW10-61**	**RDL**	**QC Batch**
Extractable Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403263
F3 (C16-C34 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403263
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	<3	<3	3	4403263
Reached Baseline at C50	mg/L	0	0	0	0	N/A	4403263
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	95	99	98	96	N/A	4403263

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		Y18082	Y18083	Y18084	Y18085		
Sampling Date		2010/10/29 11:30	2010/10/29 11:30	2010/11/01 11:45	2010/11/01 12:00		
COC Number		F111787	F111787	F111787	F111787		
	Units	**MW10-62**	**MW10-72**	**MW10-67**	**MW10-69**	**RDL**	**QC Batch**
Extractable Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403263
F3 (C16-C34 Hydrocarbons)	mg/L	<0.08	<0.08	<0.08	<0.08	0.08	4403263
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	<3	<3	3	4403263
Reached Baseline at C50	mg/L	0	0	0	0	N/A	4403263
Surrogate Recovery (%)							
O-TERPHENYL (sur.)	%	104	105	104	108	N/A	4403263

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

PETROLEUM HYDROCARBONS (CCME)

Maxxam ID		Y18086	Y18093		
Sampling Date		2010/11/01 12:00	2010/10/29		
COC Number		F111787	F111787		
	Units	**MW10-99**	**TRIP BLANK**	**RDL**	**QC Batch**
Extractable Hydrocarbons					
F2 (C10-C16 Hydrocarbons)	mg/L	<0.08	<0.08	0.08	4403263
F3 (C16-C34 Hydrocarbons)	mg/L	<0.08	<0.08	0.08	4403263
F4 (C34-C50 Hydrocarbons)	mg/L	<3	<3	3	4403263
Reached Baseline at C50	mg/L	0	0	N/A	4403263
Surrogate Recovery (%)					
O-TERPHENYL (sur.)	%	108	100	N/A	4403263

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

Maxxam ID		Y18061	Y18064	Y18065	Y18066		
Sampling Date		2010/11/01 09:00	2010/11/01 09:15	2010/11/01 09:30	2010/11/01 09:30		
COC Number		F111786	F111786	F111786	F111786		
	Units	**MW10-30**	**MW10-33**	**MW10-28**	**MW10-38**	**RDL**	**QC Batch**
Polychlorinated Biphenyls							
Aroclor 1242	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	4402925
Aroclor 1248	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	4402925
Aroclor 1254	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	4402925
Aroclor 1260	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	4402925
Surrogate Recovery (%)							
Hexabromobiphenyl (sur.)	%	84	96	82	86	N/A	4402925

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		Y18067	Y18068	Y18069	Y18090		
Sampling Date		2010/11/01 09:45	2010/11/01 10:00	2010/11/01 10:00	2010/10/29 12:00		
COC Number		F111786	F111786	F111786	F111787		
	Units	**MW10-40**	**MW10-42**	**MW10-43**	**MW10-77**	**RDL**	**QC Batch**
Polychlorinated Biphenyls							
Aroclor 1242	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	4402925
Aroclor 1248	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	4402925
Aroclor 1254	ug/L	<0.10	<0.10	<0.10	0.44	0.10	4402925
Aroclor 1260	ug/L	<0.10	<0.10	<0.10	<0.10	0.10	4402925
Surrogate Recovery (%)							
Hexabromobiphenyl (sur.)	%	90	91	86	72	N/A	4402925

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

Maxxam ID		Y18091		Y18092		
Sampling Date		2010/10/29 12:00		2010/10/29 12:15		
COC Number		F111787		F111787		
	Units	**MW10-87**	**QC Batch**	**MW10-79**	**RDL**	**QC Batch**
Polychlorinated Biphenyls						
Aroclor 1242	ug/L	<0.10	4418473	<0.10	0.10	4402925
Aroclor 1248	ug/L	<0.10	4418473	<0.10	0.10	4402925
Aroclor 1254	ug/L	0.37	4418473	<0.10	0.10	4402925
Aroclor 1260	ug/L	<0.10	4418473	<0.10	0.10	4402925
Surrogate Recovery (%)						
Hexabromobiphenyl (sur.)	%	70	4418473	76	N/A	4402925

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		Y18058	Y18059	Y18061	Y18064	Y18065		
Sampling Date		2010/11/01 08:45	2010/11/01 08:45	2010/11/01 09:00	2010/11/01 09:15	2010/11/01 09:30		
COC Number		F111808	F111786	F111786	F111786	F111786		
	Units	**MW10-10**	**MW10-20**	**MW10-30**	**MW10-33**	**MW10-28**	**RDL**	**QC Batch**
Elements								
Total Mercury (Hg)	ug/L	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	4431970

RDL = Reportable Detection Limit

Maxxam ID		Y18066	Y18077	Y18090		
Sampling Date		2010/11/01 09:30	2010/11/01 11:15	2010/10/29 12:00		
COC Number		F111786	F111783	F111787		
	Units	**MW10-38**	**MW10-49**	**MW10-77**	**RDL**	**QC Batch**
Elements						
Total Mercury (Hg)	ug/L	<0.02	<0.02	<0.02	0.02	4431970

RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME BTEX/F1 IN WATER (WATER)

Maxxam ID		Y18047		Y18048		Y18049		
Sampling Date		2010/10/29 08:00		2010/10/29 08:00		2010/10/29 08:15		
COC Number		F111808		F111808		F111808		
	Units	**MW10-03**	**RDL**	**MW10-13**	**RDL**	**BH-2**	**RDL**	**QC Batch**
Calculated Parameters								
F1 (C6-C10) - BTEX	ug/L	<300	300	<300	300	<300	300	4401148
Volatiles								
Methyl-tert-butylether (MTBE)	ug/L	<4	4	<4	4	<4	4	4405766
Benzene	ug/L	<0.4	0.4	<0.5 (1)	0.5	<0.4	0.4	4405766
Toluene	ug/L	<0.6 (1)	0.6	<0.4	0.4	<0.5 (2)	0.5	4405766
Ethylbenzene	ug/L	7.8	0.4	8.3	0.4	<0.4	0.4	4405766
m & p-Xylene	ug/L	2.7	0.4	1.9	0.4	<0.4	0.4	4405766
o-Xylene	ug/L	<0.4	0.4	<0.4	0.4	<0.4	0.4	4405766
Styrene	ug/L	<0.4	0.4	<0.4	0.4	<0.4	0.4	4405766
Xylenes (Total)	ug/L	2.7	0.4	1.9	0.4	<0.4	0.4	4405766
(C6-C10)	ug/L	<300	300	<300	300	<300	300	4405766
Surrogate Recovery (%)								
4-BROMOFLUOROBENZENE (sur.)	%	95	N/A	92	N/A	92	N/A	4405766
D4-1,2-DICHLOROETHANE (sur.)	%	124	N/A	121	N/A	122	N/A	4405766
D8-TOLUENE (sur.)	%	99	N/A	99	N/A	99	N/A	4405766

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample matrix interference.
(2) RDL raised due to background artifacts detected in analysis

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME BTEX/F1 IN WATER (WATER)

Maxxam ID		Y18050		Y18051			Y18052		
Sampling Date		2010/10/29 08:30		2010/10/29 08:45			2010/10/29 09:00		
COC Number		F111808		F111808			F111808		
	Units	**BH-4**	**RDL**	**BH-61**	**RDL**	**QC Batch**	**BH-62**	**RDL**	**QC Batch**
Calculated Parameters									
F1 (C6-C10) - BTEX	ug/L	<300	300	<300	300	4401148	<300	300	4401148
Volatiles									
Methyl-tert-butylether (MTBE)	ug/L	<4	4	<4	4	4405766	<4	4	4405801
Benzene	ug/L	<0.4	0.4	<0.4	0.4	4405766	<0.4	0.4	4405801
Toluene	ug/L	<0.4	0.4	<0.5 (1)	0.5	4405766	<0.4	0.4	4405801
Ethylbenzene	ug/L	<0.4	0.4	<0.4	0.4	4405766	<0.4	0.4	4405801
m & p-Xylene	ug/L	<0.4	0.4	<0.4	0.4	4405766	<0.4	0.4	4405801
o-Xylene	ug/L	<0.4	0.4	<0.4	0.4	4405766	<0.4	0.4	4405801
Styrene	ug/L	<0.4	0.4	<0.4	0.4	4405766	<0.4	0.4	4405801
Xylenes (Total)	ug/L	<0.4	0.4	<0.4	0.4	4405766	<0.4	0.4	4405801
(C6-C10)	ug/L	<300	300	<300	300	4405766	<300	300	4405801
Surrogate Recovery (%)									
4-BROMOFLUOROBENZENE (sur.)	%	93	N/A	93	N/A	4405766	113	N/A	4405801
D4-1,2-DICHLOROETHANE (sur.)	%	129	N/A	124	N/A	4405766	104	N/A	4405801
D8-TOLUENE (sur.)	%	99	N/A	99	N/A	4405766	104	N/A	4405801

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to background artifacts detected in analysis

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME BTEX/F1 IN WATER (WATER)

Maxxam ID		Y18053	Y18058	Y18059	Y18060		
Sampling Date		2010/10/29 09:15	2010/11/01 08:45	2010/11/01 08:45	2010/10/29 09:30		
COC Number		F111808	F111808	F111786	F111786		
	Units	**BH-63**	**MW10-10**	**MW10-20**	**MW10-14**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	ug/L	<300	<300	<300	<300	300	4401148
Volatiles							
Methyl-tert-butylether (MTBE)	ug/L	<4	<4	<4	<4	4	4405801
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405801
Toluene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405801
Ethylbenzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405801
m & p-Xylene	ug/L	<0.4	0.4	<0.4	0.6	0.4	4405801
o-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405801
Styrene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405801
Xylenes (Total)	ug/L	<0.4	0.4	<0.4	0.6	0.4	4405801
(C6-C10)	ug/L	<300	<300	<300	<300	300	4405801
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	91	93	100	122	N/A	4405801
D4-1,2-DICHLOROETHANE (sur.)	%	102	108	110	111	N/A	4405801
D8-TOLUENE (sur.)	%	104	96	105	103	N/A	4405801

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME BTEX/F1 IN WATER (WATER)

Maxxam ID		Y18062	Y18063	Y18070	Y18071		
Sampling Date		2010/10/29 10:00	2010/11/01 09:15	2010/10/29 10:30	2010/10/29 10:30		
COC Number		F111786	F111786	F111783	F111783		
	Units	**MW10-23**	**MW10-25**	**MW10-21**	**MW10-21A**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	ug/L	<300	<300	<300	<300	300	4401148
Volatiles							
Methyl-tert-butylether (MTBE)	ug/L	<4	<4	<4	<4	4	4405806
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Toluene	ug/L	<0.8 (1)	<0.8 (1)	<0.8 (1)	<0.8 (1)	0.8	4405806
Ethylbenzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
m & p-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
o-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Styrene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Xylenes (Total)	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
(C6-C10)	ug/L	<300	<300	<300	<300	300	4405806
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	95	92	95	95	N/A	4405806
D4-1,2-DICHLOROETHANE (sur.)	%	93	96	95	99	N/A	4405806
D8-TOLUENE (sur.)	%	102	109	106	105	N/A	4405806

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to background artifacts detected in analysis

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME BTEX/F1 IN WATER (WATER)

Maxxam ID		Y18072	Y18077	Y18078	Y18079		
Sampling Date		2010/10/29 10:45	2010/11/01 11:15	2010/11/01 11:15	2010/11/01 11:30		
COC Number		F111783	F111783	F111783	F111783		
	Units	**MW10-22A**	**MW10-49**	**MW10-59**	**MW10-53**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	ug/L	<300	<300	<300	<300	300	4401148
Volatiles							
Methyl-tert-butylether (MTBE)	ug/L	<4	<4	<4	<4	4	4405806
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Toluene	ug/L	<0.8 (1)	<0.8 (1)	<0.8 (1)	<0.8 (1)	0.8	4405806
Ethylbenzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
m & p-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
o-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Styrene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Xylenes (Total)	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
(C6-C10)	ug/L	<300	<300	<300	<300	300	4405806
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	102	94	94	95	N/A	4405806
D4-1,2-DICHLOROETHANE (sur.)	%	100	100	94	99	N/A	4405806
D8-TOLUENE (sur.)	%	99	98	100	104	N/A	4405806

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to background artifacts detected in analysis

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME BTEX/F1 IN WATER (WATER)

Maxxam ID		Y18080	Y18081	Y18082	Y18083		
Sampling Date		2010/10/29 11:00	2010/10/29 11:15	2010/10/29 11:30	2010/10/29 11:30		
COC Number		F111783	F111783	F111787	F111787		
	Units	**MW10-59**	**MW10-61**	**MW10-62**	**MW10-72**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	ug/L	<300	<300	<300	<300	300	4401148
Volatiles							
Methyl-tert-butylether (MTBE)	ug/L	<4	<4	<4	<4	4	4405806
Benzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Toluene	ug/L	<0.8 (1)	<0.8 (1)	<0.8 (1)	<0.8 (1)	0.8	4405806
Ethylbenzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
m & p-Xylene	ug/L	0.5	<0.4	<0.4	<0.4	0.4	4405806
o-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Styrene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Xylenes (Total)	ug/L	0.5	<0.4	<0.4	<0.4	0.4	4405806
(C6-C10)	ug/L	<300	<300	<300	<300	300	4405806
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	92	94	94	91	N/A	4405806
D4-1,2-DICHLOROETHANE (sur.)	%	78	100	101	85	N/A	4405806
D8-TOLUENE (sur.)	%	105	104	103	111	N/A	4405806

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to background artifacts detected in analysis

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME BTEX/F1 IN WATER (WATER)

Maxxam ID		Y18084	Y18085	Y18086	Y18093		
Sampling Date		2010/11/01 11:45	2010/11/01 12:00	2010/11/01 12:00	2010/10/29		
COC Number		F111787	F111787	F111787	F111787		
	Units	**MW10-67**	**MW10-69**	**MW10-99**	**TRIP BLANK**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	ug/L	<300	<300	<300	<300	300	4401148
Volatiles							
Methyl-tert-butylether (MTBE)	ug/L	<4	<4	<4	<4	4	4405806
Benzene	ug/L	0.6	<0.4	<0.4	<0.4	0.4	4405806
Toluene	ug/L	<0.8 (1)	<0.8 (1)	<0.8 (1)	<0.8 (1)	0.8	4405806
Ethylbenzene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
m & p-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
o-Xylene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Styrene	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
Xylenes (Total)	ug/L	<0.4	<0.4	<0.4	<0.4	0.4	4405806
(C6-C10)	ug/L	<300	<300	<300	<300	300	4405806
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	92	94	95	94	N/A	4405806
D4-1,2-DICHLOROETHANE (sur.)	%	100	99	100	101	N/A	4405806
D8-TOLUENE (sur.)	%	96	104	104	99	N/A	4405806

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to background artifacts detected in analysis

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18054	Y18055	Y18056		Y18057		
Sampling Date		2010/11/01 08:00	2010/11/01 08:00	2010/11/01 08:15		2010/11/01 08:30		
COC Number		F111808	F111808	F111808		F111808		
	Units	**MW10-06**	**MW10-26**	**MW10-08**	**QC Batch**	**BH-15**	**RDL**	**QC Batch**
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	768	741	602	4397019	387	0.5	4397019
Total Metals by ICPMS								
Total Lead (Pb)	ug/L	16.9	16.8	2.9	4417612	5.0	0.2	4417628

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18058	Y18059	Y18061	Y18064	Y18065		
Sampling Date		2010/11/01 08:45	2010/11/01 08:45	2010/11/01 09:00	2010/11/01 09:15	2010/11/01 09:30		
COC Number		F111808	F111786	F111786	F111786	F111786		
	Units	**MW10-10**	**MW10-20**	**MW10-30**	**MW10-33**	**MW10-28**	**RDL**	**QC Batch**
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	2660	2670	2480	3070	4930	0.5	4397019
Total Metals by ICPMS								
Total Aluminum (Al)	ug/L	14600	14400	15000	23800	14600	3	4417628
Total Antimony (Sb)	ug/L	0.6	0.6	0.6	0.6	1.2	0.5	4417628
Total Arsenic (As)	ug/L	7.2	6.8	7.0	11.2	10.6	0.1	4417628
Total Barium (Ba)	ug/L	308	297	206	256	170	1	4417628
Total Beryllium (Be)	ug/L	0.7	0.6	0.7	1.1	0.8	0.1	4417628
Total Bismuth (Bi)	ug/L	<1	<1	<1	<1	<1	1	4417628
Total Boron (B)	ug/L	2640	2710	397	360	1130	50	4417628
Total Cadmium (Cd)	ug/L	0.31	0.32	0.37	0.67	0.51	0.01	4417628
Total Chromium (Cr)	ug/L	30	29	28	60	36	1	4417628
Total Cobalt (Co)	ug/L	8.5	8.8	8.7	12.0	12.7	0.5	4417628
Total Copper (Cu)	ug/L	30.7	30.0	26.1	55.1	38.2	0.2	4417628
Total Iron (Fe)	ug/L	18800	18000	19700	36900	25700	5	4417628
Total Lead (Pb)	ug/L	52.4	49.9	19.4	29.2	37.7	0.2	4417628
Total Lithium (Li)	ug/L	317	322	434	296	564	5	4417628
Total Manganese (Mn)	ug/L	574	556	528	649	1450	1	4417628
Total Molybdenum (Mo)	ug/L	5	4	20	6	36	1	4417628
Total Nickel (Ni)	ug/L	29	29	26	55	40	1	4417628
Total Selenium (Se)	ug/L	0.4	0.4	22.4	2.7	2.5	0.1	4417628
Total Silicon (Si)	ug/L	41600	40400	39800	53900	37400	100	4417628
Total Silver (Ag)	ug/L	0.14	0.15	0.07	0.14	0.11	0.02	4417628
Total Strontium (Sr)	ug/L	1800	1780	1170	1620	1960	1	4417628
Total Thallium (Tl)	ug/L	0.27	0.26	0.29	0.42	0.29	0.05	4417628
Total Tin (Sn)	ug/L	<5	<5	<5	<5	<5	5	4417628
Total Titanium (Ti)	ug/L	713	691	641	883	702	5	4417628
Total Uranium (U)	ug/L	44.2	43.2	137	40.0	33.2	0.1	4417628
Total Vanadium (V)	ug/L	46	45	45	70	73	5	4417628
Total Zinc (Zn)	ug/L	103	102	63	746	303	5	4417628
Total Zirconium (Zr)	ug/L	15.4	12.7	13.5	11.0	27.0	0.5	4417628
Total Calcium (Ca)	mg/L	364	357	297	453	584	0.05	4397021
Total Magnesium (Mg)	mg/L	426	432	422	471	844	0.05	4397021

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18058	Y18059	Y18061	Y18064	Y18065		
Sampling Date		2010/11/01 08:45	2010/11/01 08:45	2010/11/01 09:00	2010/11/01 09:15	2010/11/01 09:30		
COC Number		F111808	F111786	F111786	F111786	F111786		
	Units	**MW10-10**	**MW10-20**	**MW10-30**	**MW10-33**	**MW10-28**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	7.59	7.64	6.98	8.03	39.2	0.05	4397021
Total Sodium (Na)	mg/L	291	298	464	207	841	0.05	4397021
Total Sulphur (S)	mg/L	175	176	479	377	904	3	4397021

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18066	Y18067	Y18068	Y18069	Y18077		
Sampling Date		2010/11/01 09:30	2010/11/01 09:45	2010/11/01 10:00	2010/11/01 10:00	2010/11/01 11:15		
COC Number		F111786	F111786	F111786	F111786	F111783		
	Units	**MW10-38**	**MW10-40**	**MW10-42**	**MW10-43**	**MW10-49**	**RDL**	**QC Batch**
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	4260	1490	1400	1970	2040	0.5	4397019
Total Metals by ICPMS								
Total Aluminum (Al)	ug/L	15800	3740	3440	2060	14900	3	4417628
Total Antimony (Sb)	ug/L	1.2	<0.5	0.9	<0.5	<0.5	0.5	4417628
Total Arsenic (As)	ug/L	11.0	2.7	2.7	1.9	6.7	0.1	4417628
Total Barium (Ba)	ug/L	187	74	79	38	252	1	4417628
Total Beryllium (Be)	ug/L	0.8	0.2	0.2	0.1	0.9	0.1	4417628
Total Bismuth (Bi)	ug/L	<1	<1	<1	<1	<1	1	4417628
Total Boron (B)	ug/L	1110	97	247	166	184	50	4417628
Total Cadmium (Cd)	ug/L	0.40	0.12	0.09	0.08	0.26	0.01	4417628
Total Chromium (Cr)	ug/L	37	7	8	5	33	1	4417628
Total Cobalt (Co)	ug/L	12.2	2.3	1.8	1.7	7.9	0.5	4417628
Total Copper (Cu)	ug/L	39.0	10.3	8.6	8.8	25.5	0.2	4417628
Total Iron (Fe)	ug/L	26200	5410	4170	2750	19900	5	4417628
Total Lead (Pb)	ug/L	30.7	3.4	7.6	2.1	17.2	0.2	4417628
Total Lithium (Li)	ug/L	544	524	236	177	141	5	4417628
Total Manganese (Mn)	ug/L	1180	102	104	225	385	1	4417628
Total Mercury (Hg)	ug/L	N/A	0.02	<0.02	<0.02	N/A	0.02	4417628
Total Molybdenum (Mo)	ug/L	36	12	8	6	4	1	4417628
Total Nickel (Ni)	ug/L	40	8	7	10	26	1	4417628
Total Selenium (Se)	ug/L	2.2	2.7	2.7	1.7	5.4	0.1	4417628
Total Silicon (Si)	ug/L	40300	14800	11100	11300	38200	100	4417628
Total Silver (Ag)	ug/L	0.11	0.03	0.02	<0.02	0.09	0.02	4417628
Total Strontium (Sr)	ug/L	1810	1030	1040	1460	1100	1	4417628
Total Thallium (Tl)	ug/L	0.30	0.08	0.08	<0.05	0.31	0.05	4417628
Total Tin (Sn)	ug/L	<5	<5	<5	<5	<5	5	4417628
Total Titanium (Ti)	ug/L	832	151	147	107	692	5	4417628
Total Uranium (U)	ug/L	31.2	77.0	50.7	44.1	24.4	0.1	4417628
Total Vanadium (V)	ug/L	71	13	20	9	48	5	4417628
Total Zinc (Zn)	ug/L	250	22	19	11	172	5	4417628
Total Zirconium (Zr)	ug/L	26.3	4.8	3.5	4.2	10.0	0.5	4417628
Total Calcium (Ca)	mg/L	478	116	132	236	349	0.05	4397021

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18066	Y18067	Y18068	Y18069	Y18077		
Sampling Date		2010/11/01 09:30	2010/11/01 09:45	2010/11/01 10:00	2010/11/01 10:00	2010/11/01 11:15		
COC Number		F111786	F111786	F111786	F111786	F111783		
	Units	**MW10-38**	**MW10-40**	**MW10-42**	**MW10-43**	**MW10-49**	**RDL**	**QC Batch**
Total Magnesium (Mg)	mg/L	744	291	261	335	283	0.05	4397021
Total Potassium (K)	mg/L	36.2	3.75	2.23	4.33	5.40	0.05	4397021
Total Sodium (Na)	mg/L	771	335	201	338	199	0.05	4397021
Total Sulphur (S)	mg/L	817	434	300	548	217	3	4397021

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18078	Y18079	Y18084	Y18085	Y18086		
Sampling Date		2010/11/01 11:15	2010/11/01 11:30	2010/11/01 11:45	2010/11/01 12:00	2010/11/01 12:00		
COC Number		F111783	F111783	F111787	F111787	F111787		
	Units	**MW10-59**	**MW10-53**	**MW10-67**	**MW10-69**	**MW10-99**	**RDL**	**QC Batch**
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	1940	200	409	963	948	0.5	4397019
Total Metals by ICPMS								
Total Aluminum (Al)	ug/L	9950	78	3620	369	367	3	4417628
Total Antimony (Sb)	ug/L	<0.5	0.9	<0.5	<0.5	<0.5	0.5	4417628
Total Arsenic (As)	ug/L	5.1	0.4	2.2	0.7	0.7	0.1	4417628
Total Barium (Ba)	ug/L	199	23	98	83	78	1	4417628
Total Beryllium (Be)	ug/L	0.6	<0.1	0.2	<0.1	<0.1	0.1	4417628
Total Bismuth (Bi)	ug/L	<1	<1	<1	<1	<1	1	4417628
Total Boron (B)	ug/L	174	78	215	1250	1240	50	4417628
Total Cadmium (Cd)	ug/L	0.24	0.04	0.07	0.03	0.02	0.01	4417628
Total Chromium (Cr)	ug/L	23	6	7	2	2	1	4417628
Total Cobalt (Co)	ug/L	5.8	<0.5	1.6	<0.5	<0.5	0.5	4417628
Total Copper (Cu)	ug/L	20.3	4.9	10.0	3.4	2.9	0.2	4417628
Total Iron (Fe)	ug/L	14100	192	4170	621	588	5	4417628
Total Lead (Pb)	ug/L	15.0	0.6	4.4	2.3	2.3	0.2	4417628
Total Lithium (Li)	ug/L	132	32	46	254	250	5	4417628
Total Manganese (Mn)	ug/L	318	94	80	126	124	1	4417628
Total Mercury (Hg)	ug/L	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	4417628
Total Molybdenum (Mo)	ug/L	4	7	4	13	13	1	4417628
Total Nickel (Ni)	ug/L	20	3	6	9	8	1	4417628
Total Selenium (Se)	ug/L	5.4	2.1	0.9	0.1	0.1	0.1	4417628
Total Silicon (Si)	ug/L	27500	4410	11600	11300	11100	100	4417628
Total Silver (Ag)	ug/L	0.06	<0.02	0.03	<0.02	<0.02	0.02	4417628
Total Strontium (Sr)	ug/L	1060	230	310	888	841	1	4417628
Total Thallium (Tl)	ug/L	0.19	0.08	0.06	<0.05	<0.05	0.05	4417628
Total Tin (Sn)	ug/L	<5	<5	<5	<5	<5	5	4417628
Total Titanium (Ti)	ug/L	437	<5	177	12	13	5	4417628
Total Uranium (U)	ug/L	23.2	2.4	3.5	36.0	34.5	0.1	4417628
Total Vanadium (V)	ug/L	35	<5	12	<5	<5	5	4417628
Total Zinc (Zn)	ug/L	153	1630	70	69	75	5	4417628
Total Zirconium (Zr)	ug/L	6.9	<0.5	2.9	1.3	1.2	0.5	4417628
Total Calcium (Ca)	mg/L	342	42.2	77.4	102	99.5	0.05	4397021

RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18078	Y18079	Y18084	Y18085	Y18086		
Sampling Date		2010/11/01 11:15	2010/11/01 11:30	2010/11/01 11:45	2010/11/01 12:00	2010/11/01 12:00		
COC Number		F111783	F111783	F111787	F111787	F111787		
	Units	**MW10-59**	**MW10-53**	**MW10-67**	**MW10-69**	**MW10-99**	**RDL**	**QC Batch**
Total Magnesium (Mg)	mg/L	263	22.9	52.4	172	170	0.05	4397021
Total Potassium (K)	mg/L	4.09	3.95	2.42	1.91	1.85	0.05	4397021
Total Sodium (Na)	mg/L	188	53.8	29.0	68.0	66.7	0.05	4397021
Total Sulphur (S)	mg/L	208	42	15	46	40	3	4397021

RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18087	Y18088	Y18089	Y18090		
Sampling Date		2010/11/01 12:15	2010/10/29 11:45	2010/10/29 11:45	2010/10/29 12:00		
COC Number		F111787	F111787	F111787	F111787		
	Units	**MW10-70**	**MW10-71**	**MW10-81**	**MW10-77**	**RDL**	**QC Batch**
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	1660	1390	1340	3930	0.5	4397019
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	2380	137	91	39200	3	4417628
Total Antimony (Sb)	ug/L	0.5	<0.5	<0.5	0.9	0.5	4417628
Total Arsenic (As)	ug/L	1.6	0.8	0.9	22.5	0.1	4417628
Total Barium (Ba)	ug/L	56	50	48	405	1	4417628
Total Beryllium (Be)	ug/L	0.1	<0.1	<0.1	2.2	0.1	4417628
Total Bismuth (Bi)	ug/L	<1	<1	<1	<1	1	4417628
Total Boron (B)	ug/L	416	1050	1040	1060	50	4417628
Total Cadmium (Cd)	ug/L	0.06	0.02	0.02	1.28	0.01	4417628
Total Chromium (Cr)	ug/L	5	1	<1	121	1	4417628
Total Cobalt (Co)	ug/L	1.4	<0.5	<0.5	28.5	0.5	4417628
Total Copper (Cu)	ug/L	5.7	2.2	2.1	129	0.2	4417628
Total Iron (Fe)	ug/L	3210	185	120	69000	5	4417628
Total Lead (Pb)	ug/L	5.1	0.7	0.3	173	0.2	4417628
Total Lithium (Li)	ug/L	245	386	379	343	5	4417628
Total Manganese (Mn)	ug/L	122	16	13	1980	1	4417628
Total Mercury (Hg)	ug/L	<0.02	<0.02	<0.02	N/A	0.02	4417628
Total Molybdenum (Mo)	ug/L	5	3	3	14	1	4417628
Total Nickel (Ni)	ug/L	7	3	2	109	1	4417628
Total Selenium (Se)	ug/L	1.7	0.8	0.7	8.9	0.1	4417628
Total Silicon (Si)	ug/L	15200	5270	5140	74000	100	4417628
Total Silver (Ag)	ug/L	0.02	<0.02	<0.02	0.42	0.02	4417628
Total Strontium (Sr)	ug/L	1130	1020	994	1520	1	4417628
Total Thallium (Tl)	ug/L	0.06	<0.05	<0.05	0.83	0.05	4417628
Total Tin (Sn)	ug/L	<5	<5	<5	<5	5	4417628
Total Titanium (Ti)	ug/L	119	6	5	1390	5	4417628
Total Uranium (U)	ug/L	26.3	48.5	47.6	62.5	0.1	4417628
Total Vanadium (V)	ug/L	10	8	7	126	5	4417628
Total Zinc (Zn)	ug/L	34	6	<5	1140	5	4417628
Total Zirconium (Zr)	ug/L	3.6	1.4	1.5	18.9	0.5	4417628
Total Calcium (Ca)	mg/L	181	116	112	671	0.05	4397021

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18087	Y18088	Y18089	Y18090		
Sampling Date		2010/11/01 12:15	2010/10/29 11:45	2010/10/29 11:45	2010/10/29 12:00		
COC Number		F111787	F111787	F111787	F111787		
	Units	**MW10-70**	**MW10-71**	**MW10-81**	**MW10-77**	**RDL**	**QC Batch**
Total Magnesium (Mg)	mg/L	294	267	257	546	0.05	4397021
Total Potassium (K)	mg/L	3.13	1.12	1.08	14.0	0.05	4397021
Total Sodium (Na)	mg/L	325	218	211	241	0.05	4397021
Total Sulphur (S)	mg/L	257	125	123	304	3	4397021

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18091	Y18092		
Sampling Date		2010/10/29 12:00	2010/10/29 12:15		
COC Number		F111787	F111787		
	Units	**MW10-87**	**MW10-79**	**RDL**	**QC Batch**
Calculated Parameters					
Total Hardness (CaCO3)	mg/L	3340	1750	0.5	4397019
Total Metals by ICPMS					
Total Aluminum (Al)	ug/L	41500	2540	3	4417688
Total Antimony (Sb)	ug/L	0.9	1.6	0.5	4417688
Total Arsenic (As)	ug/L	19.1	2.5	0.1	4417688
Total Barium (Ba)	ug/L	391	104	1	4417688
Total Beryllium (Be)	ug/L	1.8	<0.1	0.1	4417688
Total Bismuth (Bi)	ug/L	<1	<1	1	4417688
Total Boron (B)	ug/L	1030	1110	50	4417688
Total Cadmium (Cd)	ug/L	1.13	0.37	0.01	4417688
Total Chromium (Cr)	ug/L	102	37	1	4417688
Total Cobalt (Co)	ug/L	22.9	4.5	0.5	4417688
Total Copper (Cu)	ug/L	103	32.0	0.2	4417688
Total Iron (Fe)	ug/L	68100	19800	5	4417688
Total Lead (Pb)	ug/L	125	300	0.2	4417688
Total Lithium (Li)	ug/L	338	405	5	4417688
Total Manganese (Mn)	ug/L	1570	246	1	4417688
Total Mercury (Hg)	ug/L	0.13	0.03	0.02	4417688
Total Molybdenum (Mo)	ug/L	14	8	1	4417688
Total Nickel (Ni)	ug/L	91	28	1	4417688
Total Selenium (Se)	ug/L	9.1	5.6	0.1	4417688
Total Silicon (Si)	ug/L	82200	10200	100	4417688
Total Silver (Ag)	ug/L	0.48	0.05	0.02	4417688
Total Strontium (Sr)	ug/L	1540	1260	1	4417688
Total Thallium (Tl)	ug/L	0.81	0.17	0.05	4417688
Total Tin (Sn)	ug/L	<5	<5	5	4417688
Total Titanium (Ti)	ug/L	1290	74	5	4417688
Total Uranium (U)	ug/L	64.8	55.9	0.1	4417688
Total Vanadium (V)	ug/L	115	13	5	4417688
Total Zinc (Zn)	ug/L	663	3540	5	4417688
Total Zirconium (Zr)	ug/L	13.5	6.8	0.5	4417688
Total Calcium (Ca)	mg/L	588	164	0.05	4397021

RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME TOTAL METALS IN WATER (WATER)

Maxxam ID		Y18091	Y18092		
Sampling Date		2010/10/29 12:00	2010/10/29 12:15		
COC Number		F111787	F111787		
	Units	**MW10-87**	**MW10-79**	**RDL**	**QC Batch**
Total Magnesium (Mg)	mg/L	455	326	0.05	4397021
Total Potassium (K)	mg/L	13.0	17.8	0.05	4397021
Total Sodium (Na)	mg/L	223	302	0.05	4397021
Total Sulphur (S)	mg/L	281	269	3	4397021

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME VOC + F1 IN WATER (WATER)

Maxxam ID		Y18054	Y18055	Y18056	Y18057		
Sampling Date		2010/11/01 08:00	2010/11/01 08:00	2010/11/01 08:15	2010/11/01 08:30		
COC Number		F111808	F111808	F111808	F111808		
	Units	**MW10-06**	**MW10-26**	**MW10-08**	**BH-15**	**RDL**	**QC Batch**
Calculated Parameters							
F1 (C6-C10) - BTEX	ug/L	<300	<300	<300	<300	300	4401148
Volatile Hydrocarbons							
(C6-C10)	ug/L	<300	<300	<300	<300	300	4404782
Volatiles							
Chloromethane	ug/L	<1	<1	<1	<1	1	4403505
Vinyl chloride	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Chloroethane	ug/L	<1	<1	<1	<1	1	4403505
Trichlorofluoromethane	ug/L	<4	<4	<4	<4	4	4403505
1,1,2Trichloro-1,2,2Trifluoroethane	ug/L	<2	<2	<2	<2	2	4403505
Dichlorodifluoromethane	ug/L	<2	<2	<2	<2	2	4403505
1,1-dichloroethene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Dichloromethane	ug/L	<2	<2	<2	<2	2	4403505
trans-1,2-dichloroethene	ug/L	<1	<1	<1	<1	1	4403505
1,1-dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
cis-1,2-dichloroethene	ug/L	<1	<1	<1	<1	1	4403505
Chloroform	ug/L	<1	<1	<1	<1	1	4403505
1,1,1-trichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
1,2-dichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Carbon tetrachloride	ug/L	<1	<1	<1	<1	1	4403505
Benzene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Methyl-tert-butylether (MTBE)	ug/L	<4	<4	<4	<4	4	4403505
1,2-dichloropropane	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	1	4403505
trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	1	4403505
Bromomethane	ug/L	<1	<1	<1	<1	1	4403505
1,1,2-trichloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Trichloroethene	ug/L	2.1	1.3	<0.5	<0.5	0.5	4403505
Chlorodibromomethane	ug/L	<1	<1	<1	<1	1	4403505
Dibromoethane	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	4403505
Tetrachloroethene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Bromodichloromethane	ug/L	<1	<1	<1	<1	1	4403505
Toluene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505

RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME VOC + F1 IN WATER (WATER)

Maxxam ID		Y18054	Y18055	Y18056	Y18057		
Sampling Date		2010/11/01 08:00	2010/11/01 08:00	2010/11/01 08:15	2010/11/01 08:30		
COC Number		F111808	F111808	F111808	F111808		
	Units	**MW10-06**	**MW10-26**	**MW10-08**	**BH-15**	**RDL**	**QC Batch**
Ethylbenzene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
m & p-Xylene	ug/L	<1	<1	<1	<1	1	4403505
Bromoform	ug/L	<1	<1	<1	<1	1	4403505
Styrene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
o-Xylene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Xylenes (Total)	ug/L	<1	<1	<1	<1	1	4403505
1,1,1,2-tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
1,1,2,2-tetrachloroethane	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
1,2-dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
1,3-dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
1,4-dichlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	4403505
Surrogate Recovery (%)							
4-BROMOFLUOROBENZENE (sur.)	%	82	92	94	92	N/A	4403505
D4-1,2-DICHLOROETHANE (sur.)	%	86	98	98	96	N/A	4403505
D8-TOLUENE (sur.)	%	97	104	103	101	N/A	4403505

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME VOC + F1 IN WATER (WATER)

Maxxam ID		Y18073	Y18074	Y18075		
Sampling Date		2010/11/01 10:30	2010/11/01 10:45	2010/11/01 10:45		
COC Number		F111783	F111783	F111783		
	Units	**BH-8**	**MW10-44**	**MW10-54**	**RDL**	**QC Batch**
Calculated Parameters						
F1 (C6-C10) - BTEX	ug/L	<300	<300	<300	300	4401148
Volatile Hydrocarbons						
(C6-C10)	ug/L	<300	<300	<300	300	4418482
Volatiles						
Chloromethane	ug/L	<1	<1	<1	1	4405434
Vinyl chloride	ug/L	<0.5	<0.5	<0.5	0.5	4405434
Chloroethane	ug/L	<1	<1	<1	1	4405434
Trichlorofluoromethane	ug/L	<4	<4	<4	4	4405434
1,1,2Trichloro-1,2,2Trifluoroethane	ug/L	<2	<2	<2	2	4405434
Dichlorodifluoromethane	ug/L	<2	<2	<2	2	4405434
1,1-dichloroethene	ug/L	<0.5	<0.5	<0.5	0.5	4405434
Dichloromethane	ug/L	<2	<2	<2	2	4405434
trans-1,2-dichloroethene	ug/L	<1	<1	<1	1	4405434
1,1-dichloroethane	ug/L	<0.5	<0.5	<0.5	0.5	4405434
cis-1,2-dichloroethene	ug/L	<1	4	4	1	4405434
Chloroform	ug/L	<1	<1	<1	1	4405434
1,1,1-trichloroethane	ug/L	<0.5	<0.5	<0.5	0.5	4405434
1,2-dichloroethane	ug/L	<0.5	<0.5	<0.5	0.5	4405434
Carbon tetrachloride	ug/L	<1	<1	<1	1	4405434
Benzene	ug/L	<0.5	<0.5	<0.5	0.5	4405434
Methyl-tert-butylether (MTBE)	ug/L	<4	<4	<4	4	4405434
1,2-dichloropropane	ug/L	<0.5	<0.5	<0.5	0.5	4405434
cis-1,3-dichloropropene	ug/L	<1	<1	<1	1	4405434
trans-1,3-dichloropropene	ug/L	<1	<1	<1	1	4405434
Bromomethane	ug/L	<1	<1	<1	1	4405434
1,1,2-trichloroethane	ug/L	<0.5	<0.5	<0.5	0.5	4405434
Trichloroethene	ug/L	<0.5	3.9	4.6	0.5	4405434
Chlorodibromomethane	ug/L	<1	<1	<1	1	4405434
Dibromoethane	ug/L	<0.2	<0.2	<0.2	0.2	4405434
Tetrachloroethene	ug/L	<0.5	<0.5	<0.5	0.5	4405434
Bromodichloromethane	ug/L	<1	<1	<1	1	4405434
Toluene	ug/L	<0.5	<0.5	<0.5	0.5	4405434

RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME VOC + F1 IN WATER (WATER)

Maxxam ID		Y18073	Y18074	Y18075		
Sampling Date		2010/11/01 10:30	2010/11/01 10:45	2010/11/01 10:45		
COC Number		F111783	F111783	F111783		
	Units	**BH-8**	**MW10-44**	**MW10-54**	**RDL**	**QC Batch**
Ethylbenzene	ug/L	<0.5	0.5	0.5	0.5	4405434
m & p-Xylene	ug/L	<1	2	2	1	4405434
Bromoform	ug/L	<1	<1	<1	1	4405434
Styrene	ug/L	<0.5	<0.5	<0.5	0.5	4405434
o-Xylene	ug/L	<0.5	1.3	1.3	0.5	4405434
Xylenes (Total)	ug/L	<1	3	3	1	4405434
1,1,1,2-tetrachloroethane	ug/L	<0.5	<0.5	<0.5	0.5	4405434
1,1,2,2-tetrachloroethane	ug/L	<0.5	<0.5	<0.5	0.5	4405434
1,2-dichlorobenzene	ug/L	<0.5	<0.5	<0.5	0.5	4405434
1,3-dichlorobenzene	ug/L	<0.5	<0.5	<0.5	0.5	4405434
1,4-dichlorobenzene	ug/L	<0.5	<0.5	<0.5	0.5	4405434
Chlorobenzene	ug/L	<0.5	<0.5	<0.5	0.5	4405434
Surrogate Recovery (%)						
4-BROMOFLUOROBENZENE (sur.)	%	91	119	94	N/A	4405434
D4-1,2-DICHLOROETHANE (sur.)	%	87	163 (1)	89	N/A	4405434
D8-TOLUENE (sur.)	%	96	99	90	N/A	4405434

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) Surrogate recovery above control limit - Matrix interference

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME VOC + F1 IN WATER (WATER)

Maxxam ID		Y18076		
Sampling Date		2010/11/01 11:00		
COC Number		F111783		
	Units	**MW10-45**	**RDL**	**QC Batch**
Calculated Parameters				
F1 (C6-C10) - BTEX	ug/L	<300	300	4401148
Volatile Hydrocarbons				
(C6-C10)	ug/L	<300	300	4404782
Volatiles				
Chloromethane	ug/L	<1	1	4403505
Vinyl chloride	ug/L	<0.5	0.5	4403505
Chloroethane	ug/L	<1	1	4403505
Trichlorofluoromethane	ug/L	<4	4	4403505
1,1,2Trichloro-1,2,2Trifluoroethane	ug/L	<2	2	4403505
Dichlorodifluoromethane	ug/L	<2	2	4403505
1,1-dichloroethene	ug/L	<0.5	0.5	4403505
Dichloromethane	ug/L	<2	2	4403505
trans-1,2-dichloroethene	ug/L	<1	1	4403505
1,1-dichloroethane	ug/L	<0.5	0.5	4403505
cis-1,2-dichloroethene	ug/L	<1	1	4403505
Chloroform	ug/L	<1	1	4403505
1,1,1-trichloroethane	ug/L	<0.5	0.5	4403505
1,2-dichloroethane	ug/L	<0.5	0.5	4403505
Carbon tetrachloride	ug/L	<1	1	4403505
Benzene	ug/L	<0.5	0.5	4403505
Methyl-tert-butylether (MTBE)	ug/L	<4	4	4403505
1,2-dichloropropane	ug/L	<0.5	0.5	4403505
cis-1,3-dichloropropene	ug/L	<1	1	4403505
trans-1,3-dichloropropene	ug/L	<1	1	4403505
Bromomethane	ug/L	<1	1	4403505
1,1,2-trichloroethane	ug/L	<0.5	0.5	4403505
Trichloroethene	ug/L	<0.5	0.5	4403505
Chlorodibromomethane	ug/L	<1	1	4403505
Dibromoethane	ug/L	<0.2	0.2	4403505
Tetrachloroethene	ug/L	<0.5	0.5	4403505
Bromodichloromethane	ug/L	<1	1	4403505
Toluene	ug/L	<0.5	0.5	4403505

RDL = Reportable Detection Limit

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

CCME VOC + F1 IN WATER (WATER)

Maxxam ID		Y18076		
Sampling Date		2010/11/01 11:00		
COC Number		F111783		
	Units	**MW10-45**	**RDL**	**QC Batch**
Ethylbenzene	ug/L	<0.5	0.5	4403505
m & p-Xylene	ug/L	<1	1	4403505
Bromoform	ug/L	<1	1	4403505
Styrene	ug/L	<0.5	0.5	4403505
o-Xylene	ug/L	<0.5	0.5	4403505
Xylenes (Total)	ug/L	<1	1	4403505
1,1,1,2-tetrachloroethane	ug/L	<0.5	0.5	4403505
1,1,2,2-tetrachloroethane	ug/L	<0.5	0.5	4403505
1,2-dichlorobenzene	ug/L	<0.5	0.5	4403505
1,3-dichlorobenzene	ug/L	<0.5	0.5	4403505
1,4-dichlorobenzene	ug/L	<0.5	0.5	4403505
Chlorobenzene	ug/L	<0.5	0.5	4403505
Surrogate Recovery (%)				
4-BROMOFLUOROBENZENE (sur.)	%	92	N/A	4403505
D4-1,2-DICHLOROETHANE (sur.)	%	97	N/A	4403505
D8-TOLUENE (sur.)	%	99	N/A	4403505

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B0A7403
Report Date: 2010/11/17

AECOM
Client Project #: 60164142 DOMINION BRIDGE
Site Reference: 1460 DUBLIN AVENUE

Package 1	9.7°C
Package 2	9.7°C
Package 3	9.7°C
Package 4	9.7°C
Package 5	9.7°C

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

General Comments

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4402925	MY4	Spiked Blank	Hexabromobiphenyl (sur.)	2010/11/08		101	%	60 - 130
			Aroclor 1254	2010/11/08		90	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/11/08		97	%	60 - 130
			Aroclor 1242	2010/11/08	<0.10		ug/L	
			Aroclor 1248	2010/11/08	<0.10		ug/L	
			Aroclor 1254	2010/11/08	<0.10		ug/L	
			Aroclor 1260	2010/11/08	<0.10		ug/L	
4403261	JC9	Spiked Blank	F2 (C10-C16 Hydrocarbons)	2010/11/08		114	%	80 - 120
			O-TERPHENYL (sur.)	2010/11/08		97	%	50 - 130
		Method Blank	F2 (C10-C16 Hydrocarbons)	2010/11/08	<0.08		mg/L	
			F3 (C16-C34 Hydrocarbons)	2010/11/08	<0.08		mg/L	
			F4 (C34-C50 Hydrocarbons)	2010/11/08	<3		mg/L	
			O-TERPHENYL (sur.)	2010/11/08		97	%	50 - 130
4403263	RY	Spiked Blank	F2 (C10-C16 Hydrocarbons)	2010/11/07		94	%	80 - 120
			O-TERPHENYL (sur.)	2010/11/07		99	%	50 - 130
		Method Blank	F2 (C10-C16 Hydrocarbons)	2010/11/07	<0.08		mg/L	
			F3 (C16-C34 Hydrocarbons)	2010/11/07	<0.08		mg/L	
			F4 (C34-C50 Hydrocarbons)	2010/11/07	<3		mg/L	
			O-TERPHENYL (sur.)	2010/11/07		94	%	50 - 130
			Reached Baseline at C50	2010/11/07	0		mg/L	
4403505	KL	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/11/10		91	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/10		90	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/10		97	%	70 - 130
			Chloromethane	2010/11/10		75	%	60 - 140
			Vinyl chloride	2010/11/10		117	%	60 - 140
			Chloroethane	2010/11/10		100	%	60 - 140
			Trichlorofluoromethane	2010/11/10		108	%	60 - 140
			1,1-dichloroethene	2010/11/10		99	%	70 - 130
			Dichloromethane	2010/11/10		85	%	70 - 130
			trans-1,2-dichloroethene	2010/11/10		92	%	70 - 130
			1,1-dichloroethane	2010/11/10		87	%	70 - 130
			cis-1,2-dichloroethene	2010/11/10		92	%	70 - 130
			Chloroform	2010/11/10		83	%	70 - 130
			1,1,1-trichloroethane	2010/11/10		86	%	70 - 130
			1,2-dichloroethane	2010/11/10		86	%	70 - 130
			Carbon tetrachloride	2010/11/10		87	%	70 - 130
			Benzene	2010/11/10		85	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/10		84	%	70 - 130
			1,2-dichloropropane	2010/11/10		87	%	70 - 130
			cis-1,3-dichloropropene	2010/11/10		76	%	70 - 130
			trans-1,3-dichloropropene	2010/11/10		73	%	70 - 130
			Bromomethane	2010/11/10		105	%	60 - 140
			1,1,2-trichloroethane	2010/11/10		82	%	70 - 130
			Trichloroethene	2010/11/10		86	%	70 - 130
			Chlorodibromomethane	2010/11/10		85	%	70 - 130
			Dibromoethane	2010/11/10		83	%	70 - 130
			Tetrachloroethene	2010/11/10		85	%	70 - 130
			Bromodichloromethane	2010/11/10		85	%	70 - 130
			Toluene	2010/11/10		83	%	70 - 130
			Ethylbenzene	2010/11/10		88	%	70 - 130
			m & p-Xylene	2010/11/10		90	%	70 - 130
			Bromoform	2010/11/10		82	%	70 - 130
			Styrene	2010/11/10		71	%	70 - 130
			o-Xylene	2010/11/10		86	%	70 - 130
			1,1,1,2-tetrachloroethane	2010/11/10		85	%	70 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4403505	KL	Matrix Spike	1,1,2,2-tetrachloroethane	2010/11/10		108	%	70 - 130
			1,2-dichlorobenzene	2010/11/10		84	%	70 - 130
			1,3-dichlorobenzene	2010/11/10		97	%	70 - 130
			1,4-dichlorobenzene	2010/11/10		90	%	70 - 130
			Chlorobenzene	2010/11/10		75	%	70 - 130
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/06		84	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/06		105	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/06		98	%	70 - 130
			Chloromethane	2010/11/06		81	%	60 - 140
			Vinyl chloride	2010/11/06		189 (1)	%	60 - 140
			Chloroethane	2010/11/06		150 (1)	%	60 - 140
			Trichlorofluoromethane	2010/11/06		156 (1)	%	60 - 140
			1,1-dichloroethene	2010/11/06		127	%	70 - 130
			Dichloromethane	2010/11/06		106	%	70 - 130
			trans-1,2-dichloroethene	2010/11/06		119	%	70 - 130
			1,1-dichloroethane	2010/11/06		124	%	70 - 130
			cis-1,2-dichloroethene	2010/11/06		114	%	70 - 130
			Chloroform	2010/11/06		124	%	70 - 130
			1,1,1-trichloroethane	2010/11/06		125	%	70 - 130
			1,2-dichloroethane	2010/11/06		127	%	70 - 130
			Carbon tetrachloride	2010/11/06		119	%	70 - 130
			Benzene	2010/11/06		110	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/06		101	%	70 - 130
			1,2-dichloropropane	2010/11/06		112	%	70 - 130
			cis-1,3-dichloropropene	2010/11/06		84	%	70 - 130
			trans-1,3-dichloropropene	2010/11/06		86	%	70 - 130
			Bromomethane	2010/11/06		125	%	60 - 140
			1,1,2-trichloroethane	2010/11/06		115	%	70 - 130
			Trichloroethene	2010/11/06		113	%	70 - 130
			Chlorodibromomethane	2010/11/06		118	%	70 - 130
			Dibromoethane	2010/11/06		108	%	70 - 130
			Tetrachloroethene	2010/11/06		114	%	70 - 130
			Bromodichloromethane	2010/11/06		120	%	70 - 130
			Toluene	2010/11/06		96	%	70 - 130
			Ethylbenzene	2010/11/06		73	%	70 - 130
			m & p-Xylene	2010/11/06		75	%	70 - 130
			Bromoform	2010/11/06		115	%	70 - 130
			Styrene	2010/11/06		65 (1)	%	70 - 130
			o-Xylene	2010/11/06		79	%	70 - 130
			1,1,1,2-tetrachloroethane	2010/11/06		115	%	70 - 130
			1,1,2,2-tetrachloroethane	2010/11/06		123	%	70 - 130
			1,2-dichlorobenzene	2010/11/06		100	%	70 - 130
			1,3-dichlorobenzene	2010/11/06		104	%	70 - 130
			1,4-dichlorobenzene	2010/11/06		107	%	70 - 130
			Chlorobenzene	2010/11/06		100	%	70 - 130
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/06		76	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/06		101	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/06		95	%	70 - 130
			Chloromethane	2010/11/06	<1		ug/L	
			Vinyl chloride	2010/11/06	<0.5		ug/L	
			Chloroethane	2010/11/06	<1		ug/L	
			Trichlorofluoromethane	2010/11/06	<4		ug/L	
			1,1,2Trichloro-1,2,2Trifluoroethane	2010/11/06	<2		ug/L	
			1,1-dichloroethene	2010/11/06	<0.5		ug/L	
			Dichloromethane	2010/11/06	<2		ug/L	

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4403505	KL	Method Blank	trans-1,2-dichloroethene	2010/11/06	<1		ug/L	
			1,1-dichloroethane	2010/11/06	<0.5		ug/L	
			cis-1,2-dichloroethene	2010/11/06	<1		ug/L	
			Chloroform	2010/11/06	<1		ug/L	
			1,1,1-trichloroethane	2010/11/06	<0.5		ug/L	
			1,2-dichloroethane	2010/11/06	<0.5		ug/L	
			Carbon tetrachloride	2010/11/06	<1		ug/L	
			Benzene	2010/11/06	<0.5		ug/L	
			Methyl-tert-butylether (MTBE)	2010/11/06	<4		ug/L	
			1,2-dichloropropane	2010/11/06	<0.5		ug/L	
			cis-1,3-dichloropropene	2010/11/06	<1		ug/L	
			trans-1,3-dichloropropene	2010/11/06	<1		ug/L	
			Bromomethane	2010/11/06	<1		ug/L	
			1,1,2-trichloroethane	2010/11/06	<0.5		ug/L	
			Trichloroethene	2010/11/06	<0.5		ug/L	
			Chlorodibromomethane	2010/11/06	<1		ug/L	
			Dibromoethane	2010/11/06	<0.2		ug/L	
			Tetrachloroethene	2010/11/06	<0.5		ug/L	
			Bromodichloromethane	2010/11/06	<1		ug/L	
			Toluene	2010/11/06	<0.5		ug/L	
			Ethylbenzene	2010/11/06	<0.5		ug/L	
			m & p-Xylene	2010/11/06	<1		ug/L	
			Bromoform	2010/11/06	<1		ug/L	
			Styrene	2010/11/06	<0.5		ug/L	
			o-Xylene	2010/11/06	<0.5		ug/L	
			Xylenes (Total)	2010/11/06	<1		ug/L	
			1,1,1,2-tetrachloroethane	2010/11/06	<0.5		ug/L	
			1,1,2,2-tetrachloroethane	2010/11/06	<0.5		ug/L	
			1,2-dichlorobenzene	2010/11/06	<0.5		ug/L	
			1,3-dichlorobenzene	2010/11/06	<0.5		ug/L	
			1,4-dichlorobenzene	2010/11/06	<0.5		ug/L	
			Chlorobenzene	2010/11/06	<0.5		ug/L	
		RPD	Chloromethane	2010/11/06	NC		%	30
			Vinyl chloride	2010/11/06	NC		%	30
			Chloroethane	2010/11/06	NC		%	30
			Trichlorofluoromethane	2010/11/06	NC		%	30
			1,1-dichloroethene	2010/11/06	NC		%	30
			Dichloromethane	2010/11/06	NC		%	30
			trans-1,2-dichloroethene	2010/11/06	NC		%	30
			1,1-dichloroethane	2010/11/06	NC		%	30
			cis-1,2-dichloroethene	2010/11/06	NC		%	30
			Chloroform	2010/11/06	NC		%	30
			1,1,1-trichloroethane	2010/11/06	NC		%	30
			1,2-dichloroethane	2010/11/06	NC		%	30
			Carbon tetrachloride	2010/11/06	NC		%	30
			Benzene	2010/11/06	NC		%	30
			Methyl-tert-butylether (MTBE)	2010/11/06	NC		%	30
			1,2-dichloropropane	2010/11/06	NC		%	30
			cis-1,3-dichloropropene	2010/11/06	NC		%	30
			trans-1,3-dichloropropene	2010/11/06	NC		%	30
			Bromomethane	2010/11/06	NC		%	30
			1,1,2-trichloroethane	2010/11/06	NC		%	30
			Trichloroethene	2010/11/06	NC		%	30
			Chlorodibromomethane	2010/11/06	NC		%	30
			Dibromoethane	2010/11/06	NC		%	30

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4403505	KL	RPD	Tetrachloroethene	2010/11/06	NC		%	30
			Bromodichloromethane	2010/11/06	NC		%	30
			Toluene	2010/11/06	NC		%	30
			Ethylbenzene	2010/11/06	NC		%	30
			m & p-Xylene	2010/11/06	NC		%	30
			Bromoform	2010/11/06	NC		%	30
			Styrene	2010/11/06	NC		%	30
			o-Xylene	2010/11/06	NC		%	30
			Xylenes (Total)	2010/11/06	NC		%	30
			1,1,1,2-tetrachloroethane	2010/11/06	NC		%	30
			1,1,2,2-tetrachloroethane	2010/11/06	NC		%	30
			1,2-dichlorobenzene	2010/11/06	NC		%	30
			1,3-dichlorobenzene	2010/11/06	NC		%	30
			1,4-dichlorobenzene	2010/11/06	NC		%	30
			Chlorobenzene	2010/11/06	NC		%	30
4404782	KL	QC Standard	(C6-C10)	2010/11/06		122	%	N/A
		Method Blank	(C6-C10)	2010/11/06	<300		ug/L	
4405434	MM5	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/11/10		95	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/10		91	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/10		98	%	70 - 130
			Chloromethane	2010/11/10		82	%	60 - 140
			Vinyl chloride	2010/11/10		110	%	60 - 140
			Chloroethane	2010/11/10		109	%	60 - 140
			Trichlorofluoromethane	2010/11/10		120	%	60 - 140
			1,1-dichloroethene	2010/11/10		106	%	70 - 130
			Dichloromethane	2010/11/10		88	%	70 - 130
			trans-1,2-dichloroethene	2010/11/10		98	%	70 - 130
			1,1-dichloroethane	2010/11/10		94	%	70 - 130
			cis-1,2-dichloroethene	2010/11/10		98	%	70 - 130
			Chloroform	2010/11/10		90	%	70 - 130
			1,1,1-trichloroethane	2010/11/10		93	%	70 - 130
			1,2-dichloroethane	2010/11/10		91	%	70 - 130
			Carbon tetrachloride	2010/11/10		94	%	70 - 130
			Benzene	2010/11/10		92	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/10		87	%	70 - 130
			1,2-dichloropropane	2010/11/10		92	%	70 - 130
			cis-1,3-dichloropropene	2010/11/10		86	%	70 - 130
			trans-1,3-dichloropropene	2010/11/10		82	%	70 - 130
			Bromomethane	2010/11/10		110	%	60 - 140
			1,1,2-trichloroethane	2010/11/10		90	%	70 - 130
			Trichloroethene	2010/11/10		94	%	70 - 130
			Chlorodibromomethane	2010/11/10		92	%	70 - 130
			Dibromoethane	2010/11/10		89	%	70 - 130
			Tetrachloroethene	2010/11/10		95	%	70 - 130
			Bromodichloromethane	2010/11/10		92	%	70 - 130
			Toluene	2010/11/10		91	%	70 - 130
			Ethylbenzene	2010/11/10		91	%	70 - 130
			m & p-Xylene	2010/11/10		97	%	70 - 130
			Bromoform	2010/11/10		89	%	70 - 130
			Styrene	2010/11/10		83	%	70 - 130
			o-Xylene	2010/11/10		91	%	70 - 130
			1,1,1,2-tetrachloroethane	2010/11/10		93	%	70 - 130
			1,1,2,2-tetrachloroethane	2010/11/10		102	%	70 - 130
			1,2-dichlorobenzene	2010/11/10		99	%	70 - 130
			1,3-dichlorobenzene	2010/11/10		104	%	70 - 130

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4405434	MM5	Matrix Spike	1,4-dichlorobenzene	2010/11/10		105	%	70 - 130
			Chlorobenzene	2010/11/10		88	%	70 - 130
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/07		94	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/07		95	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/07		101	%	70 - 130
			Chloromethane	2010/11/07		115	%	60 - 140
			Vinyl chloride	2010/11/07		115	%	60 - 140
			Chloroethane	2010/11/07		118	%	60 - 140
			Trichlorofluoromethane	2010/11/07		114	%	60 - 140
			Dichlorodifluoromethane	2010/11/07		170 (1)	%	60 - 140
			1,1-dichloroethene	2010/11/07		97	%	70 - 130
			Dichloromethane	2010/11/07		95	%	70 - 130
			trans-1,2-dichloroethene	2010/11/07		86	%	70 - 130
			1,1-dichloroethane	2010/11/07		89	%	70 - 130
			cis-1,2-dichloroethene	2010/11/07		82	%	70 - 130
			Chloroform	2010/11/07		87	%	70 - 130
			1,1,1-trichloroethane	2010/11/07		90	%	70 - 130
			1,2-dichloroethane	2010/11/07		98	%	70 - 130
			Carbon tetrachloride	2010/11/07		93	%	70 - 130
			Benzene	2010/11/07		95	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/07		91	%	70 - 130
			1,2-dichloropropane	2010/11/07		85	%	70 - 130
			cis-1,3-dichloropropene	2010/11/07		72	%	70 - 130
			trans-1,3-dichloropropene	2010/11/07		70	%	70 - 130
			Bromomethane	2010/11/07		88	%	60 - 140
			1,1,2-trichloroethane	2010/11/07		91	%	70 - 130
			Trichloroethene	2010/11/07		92	%	70 - 130
			Chlorodibromomethane	2010/11/07		97	%	70 - 130
			Dibromoethane	2010/11/07		92	%	70 - 130
			Tetrachloroethene	2010/11/07		73	%	70 - 130
			Bromodichloromethane	2010/11/07		87	%	70 - 130
			Toluene	2010/11/07		90	%	70 - 130
			Ethylbenzene	2010/11/07		89	%	70 - 130
			m & p-Xylene	2010/11/07		90	%	70 - 130
			Bromoform	2010/11/07		90	%	70 - 130
			Styrene	2010/11/07		88	%	70 - 130
			o-Xylene	2010/11/07		90	%	70 - 130
			1,1,1,2-tetrachloroethane	2010/11/07		91	%	70 - 130
			1,1,2,2-tetrachloroethane	2010/11/07		96	%	70 - 130
			1,2-dichlorobenzene	2010/11/07		95	%	70 - 130
			1,3-dichlorobenzene	2010/11/07		99	%	70 - 130
			1,4-dichlorobenzene	2010/11/07		93	%	70 - 130
			Chlorobenzene	2010/11/07		91	%	70 - 130
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/07		89	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/07		88	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/07		102	%	70 - 130
			Chloromethane	2010/11/07	<1		ug/L	
			Vinyl chloride	2010/11/07	<0.5		ug/L	
			Chloroethane	2010/11/07	<1		ug/L	
			Trichlorofluoromethane	2010/11/07	<4		ug/L	
			1,1,2Trichloro-1,2,2Trifluoroethane	2010/11/07	<2		ug/L	
			Dichlorodifluoromethane	2010/11/07	<2		ug/L	
			1,1-dichloroethene	2010/11/07	<0.5		ug/L	
			Dichloromethane	2010/11/07	<2		ug/L	
			trans-1,2-dichloroethene	2010/11/07	<1		ug/L	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4405434	MM5	Method Blank	1,1-dichloroethane	2010/11/07	<0.5		ug/L	
			cis-1,2-dichloroethene	2010/11/07	<1		ug/L	
			Chloroform	2010/11/07	<1		ug/L	
			1,1,1-trichloroethane	2010/11/07	<0.5		ug/L	
			1,2-dichloroethane	2010/11/07	<0.5		ug/L	
			Carbon tetrachloride	2010/11/07	<1		ug/L	
			Benzene	2010/11/07	<0.5		ug/L	
			Methyl-tert-butylether (MTBE)	2010/11/07	<4		ug/L	
			1,2-dichloropropane	2010/11/07	<0.5		ug/L	
			cis-1,3-dichloropropene	2010/11/07	<1		ug/L	
			trans-1,3-dichloropropene	2010/11/07	<1		ug/L	
			Bromomethane	2010/11/07	<1		ug/L	
			1,1,2-trichloroethane	2010/11/07	<0.5		ug/L	
			Trichloroethene	2010/11/07	<0.5		ug/L	
			Chlorodibromomethane	2010/11/07	<1		ug/L	
			Dibromoethane	2010/11/07	<0.2		ug/L	
			Tetrachloroethene	2010/11/07	<0.5		ug/L	
			Bromodichloromethane	2010/11/07	<1		ug/L	
			Toluene	2010/11/07	<0.5		ug/L	
			Ethylbenzene	2010/11/07	<0.5		ug/L	
			m & p-Xylene	2010/11/07	<1		ug/L	
			Bromoform	2010/11/07	<1		ug/L	
			Styrene	2010/11/07	<0.5		ug/L	
			o-Xylene	2010/11/07	<0.5		ug/L	
			Xylenes (Total)	2010/11/07	<1		ug/L	
			1,1,1,2-tetrachloroethane	2010/11/07	<0.5		ug/L	
			1,1,2,2-tetrachloroethane	2010/11/07	<0.5		ug/L	
			1,2-dichlorobenzene	2010/11/07	<0.5		ug/L	
			1,3-dichlorobenzene	2010/11/07	<0.5		ug/L	
			1,4-dichlorobenzene	2010/11/07	<0.5		ug/L	
			Chlorobenzene	2010/11/07	<0.5		ug/L	
		RPD	Chloromethane	2010/11/07	NC		%	30
			Vinyl chloride	2010/11/07	NC		%	30
			Chloroethane	2010/11/07	NC		%	30
			Trichlorofluoromethane	2010/11/07	NC		%	30
			1,1-dichloroethene	2010/11/07	NC		%	30
			Dichloromethane	2010/11/07	NC		%	30
			trans-1,2-dichloroethene	2010/11/07	NC		%	30
			1,1-dichloroethane	2010/11/07	NC		%	30
			cis-1,2-dichloroethene	2010/11/07	NC		%	30
			Chloroform	2010/11/07	NC		%	30
			1,1,1-trichloroethane	2010/11/07	NC		%	30
			1,2-dichloroethane	2010/11/07	NC		%	30
			Carbon tetrachloride	2010/11/07	NC		%	30
			Benzene	2010/11/07	NC		%	30
			Methyl-tert-butylether (MTBE)	2010/11/07	NC		%	30
			1,2-dichloropropane	2010/11/07	NC		%	30
			cis-1,3-dichloropropene	2010/11/07	NC		%	30
			trans-1,3-dichloropropene	2010/11/07	NC		%	30
			Bromomethane	2010/11/07	NC		%	30
			1,1,2-trichloroethane	2010/11/07	NC		%	30
			Trichloroethene	2010/11/07	NC		%	30
			Chlorodibromomethane	2010/11/07	NC		%	30
			Dibromoethane	2010/11/07	NC		%	30
			Tetrachloroethene	2010/11/07	NC		%	30

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4405434	MM5	RPD	Bromodichloromethane	2010/11/07	NC		%	30
			Toluene	2010/11/07	NC		%	30
			Ethylbenzene	2010/11/07	NC		%	30
			m & p-Xylene	2010/11/07	NC		%	30
			Bromoform	2010/11/07	NC		%	30
			Styrene	2010/11/07	NC		%	30
			o-Xylene	2010/11/07	NC		%	30
			Xylenes (Total)	2010/11/07	NC		%	30
			1,1,1,2-tetrachloroethane	2010/11/07	NC		%	30
			1,1,2,2-tetrachloroethane	2010/11/07	NC		%	30
			1,2-dichlorobenzene	2010/11/07	NC		%	30
			1,3-dichlorobenzene	2010/11/07	NC		%	30
			1,4-dichlorobenzene	2010/11/07	NC		%	30
			Chlorobenzene	2010/11/07	NC		%	30
4405766	ALM	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		97	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		128	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		97	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08		116	%	70 - 130
			Benzene	2010/11/08		111	%	70 - 130
			Toluene	2010/11/08		92	%	70 - 130
			Ethylbenzene	2010/11/08		94	%	70 - 130
			m & p-Xylene	2010/11/08		82	%	70 - 130
			o-Xylene	2010/11/08		94	%	70 - 130
			Styrene	2010/11/08		72	%	70 - 130
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		98	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		111	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		105	%	70 - 130
			(C6-C10)	2010/11/08		115	%	70 - 130
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		106	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		123	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		112	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08		116	%	70 - 130
			Benzene	2010/11/08		108	%	70 - 130
			Toluene	2010/11/08		103	%	70 - 130
			Ethylbenzene	2010/11/08		103	%	70 - 130
			m & p-Xylene	2010/11/08		91	%	70 - 130
			o-Xylene	2010/11/08		103	%	70 - 130
			Styrene	2010/11/08		82	%	70 - 130
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		91	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		120	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		101	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08	<4		ug/L	
			Benzene	2010/11/08	<0.4		ug/L	
			Toluene	2010/11/08	<0.4		ug/L	
			Ethylbenzene	2010/11/08	<0.4		ug/L	
			m & p-Xylene	2010/11/08	<0.4		ug/L	
			o-Xylene	2010/11/08	<0.4		ug/L	
			Styrene	2010/11/08	<0.4		ug/L	
			Xylenes (Total)	2010/11/08	<0.4		ug/L	
			(C6-C10)	2010/11/08	<300		ug/L	
		RPD	Methyl-tert-butylether (MTBE)	2010/11/08	NC		%	30
			Benzene	2010/11/08	NC		%	30
			Toluene	2010/11/08	NC (2)		%	30
			Ethylbenzene	2010/11/08	NC		%	30
			m & p-Xylene	2010/11/08	NC		%	30

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4405766	ALM	RPD	o-Xylene	2010/11/08	NC		%	30
			Styrene	2010/11/08	NC		%	30
			Xylenes (Total)	2010/11/08	NC		%	30
4405801	ALM	Matrix Spike	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		102	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		114	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		106	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08		105	%	70 - 130
			Benzene	2010/11/08		109	%	70 - 130
			Toluene	2010/11/08		100	%	70 - 130
			Ethylbenzene	2010/11/08		100	%	70 - 130
			m & p-Xylene	2010/11/08		95	%	70 - 130
			o-Xylene	2010/11/08		105	%	70 - 130
			Styrene	2010/11/08		83	%	70 - 130
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		94	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		94	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		92	%	70 - 130
			(C6-C10)	2010/11/08		82	%	70 - 130
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		101	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		104	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		114	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08		109	%	70 - 130
			Benzene	2010/11/08		94	%	70 - 130
			Toluene	2010/11/08		110	%	70 - 130
			Ethylbenzene	2010/11/08		96	%	70 - 130
			m & p-Xylene	2010/11/08		90	%	70 - 130
			o-Xylene	2010/11/08		99	%	70 - 130
			Styrene	2010/11/08		82	%	70 - 130
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		96	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		105	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		97	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08	<4		ug/L	
			Benzene	2010/11/08	<0.4		ug/L	
			Toluene	2010/11/08	<0.4		ug/L	
			Ethylbenzene	2010/11/08	<0.4		ug/L	
			m & p-Xylene	2010/11/08	<0.4		ug/L	
			o-Xylene	2010/11/08	<0.4		ug/L	
			Styrene	2010/11/08	<0.4		ug/L	
			Xylenes (Total)	2010/11/08	<0.4		ug/L	
			(C6-C10)	2010/11/08	<300		ug/L	
		RPD	Benzene	2010/11/08	NC		%	30
			Toluene	2010/11/08	NC		%	30
			Ethylbenzene	2010/11/08	NC		%	30
			m & p-Xylene	2010/11/08	NC		%	30
			o-Xylene	2010/11/08	NC		%	30
			Xylenes (Total)	2010/11/08	NC		%	30
			(C6-C10)	2010/11/08	NC		%	30
4405806	AC2	Matrix Spike [Y18063-03]	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		98	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		91	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		105	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08		88	%	70 - 130
			Benzene	2010/11/08		91	%	70 - 130
			Toluene	2010/11/08		82	%	70 - 130
			Ethylbenzene	2010/11/08		86	%	70 - 130
			m & p-Xylene	2010/11/08		78	%	70 - 130

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4405806	AC2	Matrix Spike						
		[Y18063-03]	o-Xylene	2010/11/08		83	%	70 - 130
			Styrene	2010/11/08		92	%	70 - 130
		QC Standard	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		95	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		84	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		113	%	70 - 130
			(C6-C10)	2010/11/08		128	%	70 - 130
		Spiked Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		95	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		87	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		104	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08		85	%	70 - 130
			Benzene	2010/11/08		85	%	70 - 130
			Toluene	2010/11/08		86	%	70 - 130
			Ethylbenzene	2010/11/08		85	%	70 - 130
			m & p-Xylene	2010/11/08		83	%	70 - 130
			o-Xylene	2010/11/08		84	%	70 - 130
			Styrene	2010/11/08		92	%	70 - 130
		Method Blank	4-BROMOFLUOROBENZENE (sur.)	2010/11/08		93	%	70 - 130
			D4-1,2-DICHLOROETHANE (sur.)	2010/11/08		86	%	70 - 130
			D8-TOLUENE (sur.)	2010/11/08		103	%	70 - 130
			Methyl-tert-butylether (MTBE)	2010/11/08	<4		ug/L	
			Benzene	2010/11/08	<0.4		ug/L	
			Toluene	2010/11/08	<0.4		ug/L	
			Ethylbenzene	2010/11/08	<0.4		ug/L	
			m & p-Xylene	2010/11/08	<0.4		ug/L	
			o-Xylene	2010/11/08	<0.4		ug/L	
			Styrene	2010/11/08	<0.4		ug/L	
			Xylenes (Total)	2010/11/08	<0.4		ug/L	
			(C6-C10)	2010/11/08	<300		ug/L	
		RPD [Y18062-03]	Methyl-tert-butylether (MTBE)	2010/11/08	NC		%	30
			Benzene	2010/11/08	NC		%	30
			Toluene	2010/11/08	NC (2)		%	30
			Ethylbenzene	2010/11/08	NC		%	30
			m & p-Xylene	2010/11/08	NC		%	30
			o-Xylene	2010/11/08	NC		%	30
			Styrene	2010/11/08	NC		%	30
			Xylenes (Total)	2010/11/08	NC		%	30
			(C6-C10)	2010/11/08	NC		%	30
4417612	JC8	Matrix Spike	Total Lead (Pb)	2010/11/11		NC	%	80 - 120
		Spiked Blank	Total Lead (Pb)	2010/11/11		102	%	80 - 120
		Method Blank	Total Lead (Pb)	2010/11/11	<0.2		ug/L	
4417628	JC8	Matrix Spike						
		[Y18057-04]	Total Arsenic (As)	2010/11/12		104	%	80 - 120
			Total Beryllium (Be)	2010/11/12		108	%	80 - 120
			Total Cadmium (Cd)	2010/11/12		102	%	80 - 120
			Total Chromium (Cr)	2010/11/12		106	%	80 - 120
			Total Cobalt (Co)	2010/11/12		101	%	80 - 120
			Total Copper (Cu)	2010/11/12		NC	%	80 - 120
			Total Lead (Pb)	2010/11/12		NC	%	80 - 120
			Total Lithium (Li)	2010/11/12		NC	%	80 - 120
			Total Nickel (Ni)	2010/11/12		NC	%	80 - 120
			Total Selenium (Se)	2010/11/12		102	%	80 - 120
			Total Uranium (U)	2010/11/12		104	%	80 - 120
			Total Vanadium (V)	2010/11/12		104	%	80 - 120
			Total Zinc (Zn)	2010/11/12		NC	%	80 - 120

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4417628	JC8	Spiked Blank	Total Arsenic (As)	2010/11/12		105	%	80 - 120
			Total Beryllium (Be)	2010/11/12		106	%	80 - 120
			Total Cadmium (Cd)	2010/11/12		108	%	80 - 120
			Total Chromium (Cr)	2010/11/12		106	%	80 - 120
			Total Cobalt (Co)	2010/11/12		105	%	80 - 120
			Total Copper (Cu)	2010/11/12		105	%	80 - 120
			Total Lead (Pb)	2010/11/12		108	%	80 - 120
			Total Lithium (Li)	2010/11/12		106	%	80 - 120
			Total Nickel (Ni)	2010/11/12		109	%	80 - 120
			Total Selenium (Se)	2010/11/12		108	%	80 - 120
			Total Uranium (U)	2010/11/12		108	%	80 - 120
			Total Vanadium (V)	2010/11/12		106	%	80 - 120
			Total Zinc (Zn)	2010/11/12		108	%	80 - 120
		Method Blank	Total Aluminum (Al)	2010/11/12	<3		ug/L	
			Total Antimony (Sb)	2010/11/12	<0.5		ug/L	
			Total Arsenic (As)	2010/11/12	<0.1		ug/L	
			Total Barium (Ba)	2010/11/12	<1		ug/L	
			Total Beryllium (Be)	2010/11/12	<0.1		ug/L	
			Total Bismuth (Bi)	2010/11/12	<1		ug/L	
			Total Boron (B)	2010/11/12	<50		ug/L	
			Total Cadmium (Cd)	2010/11/12	<0.01		ug/L	
			Total Chromium (Cr)	2010/11/12	<1		ug/L	
			Total Cobalt (Co)	2010/11/12	<0.5		ug/L	
			Total Copper (Cu)	2010/11/12	<0.2		ug/L	
			Total Iron (Fe)	2010/11/12	<5		ug/L	
			Total Lead (Pb)	2010/11/12	<0.2		ug/L	
			Total Lithium (Li)	2010/11/12	<5		ug/L	
			Total Manganese (Mn)	2010/11/12	<1		ug/L	
			Total Mercury (Hg)	2010/11/12	0.02, RDL=0.02		ug/L	
			Total Molybdenum (Mo)	2010/11/12	<1		ug/L	
			Total Nickel (Ni)	2010/11/12	<1		ug/L	
			Total Selenium (Se)	2010/11/12	<0.1		ug/L	
			Total Silicon (Si)	2010/11/12	<100		ug/L	
			Total Silver (Ag)	2010/11/12	<0.02		ug/L	
			Total Strontium (Sr)	2010/11/12	<1		ug/L	
			Total Thallium (Tl)	2010/11/12	<0.05		ug/L	
			Total Tin (Sn)	2010/11/12	<5		ug/L	
			Total Titanium (Ti)	2010/11/12	<5		ug/L	
			Total Uranium (U)	2010/11/12	<0.1		ug/L	
			Total Vanadium (V)	2010/11/12	<5		ug/L	
			Total Zinc (Zn)	2010/11/12	<5		ug/L	
			Total Zirconium (Zr)	2010/11/12	<0.5		ug/L	
		RPD [Y18057-04]	Total Lead (Pb)	2010/11/12	2.7		%	20
4417688	JSW	Matrix Spike	Total Arsenic (As)	2010/11/13		107	%	80 - 120
			Total Beryllium (Be)	2010/11/13		107	%	80 - 120
			Total Cadmium (Cd)	2010/11/13		106	%	80 - 120
			Total Chromium (Cr)	2010/11/13		NC	%	80 - 120
			Total Cobalt (Co)	2010/11/13		105	%	80 - 120
			Total Copper (Cu)	2010/11/13		NC	%	80 - 120
			Total Lead (Pb)	2010/11/13		107	%	80 - 120
			Total Lithium (Li)	2010/11/13		101	%	80 - 120
			Total Nickel (Ni)	2010/11/13		102	%	80 - 120
			Total Selenium (Se)	2010/11/13		108	%	80 - 120
			Total Uranium (U)	2010/11/13		106	%	80 - 120
			Total Vanadium (V)	2010/11/13		100	%	80 - 120

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4417688	JSW	Matrix Spike	Total Zinc (Zn)	2010/11/13		139 (3)	%	80 - 120
		Spiked Blank	Total Arsenic (As)	2010/11/13		94	%	80 - 120
			Total Beryllium (Be)	2010/11/13		99	%	80 - 120
			Total Cadmium (Cd)	2010/11/13		99	%	80 - 120
			Total Chromium (Cr)	2010/11/13		100	%	80 - 120
			Total Cobalt (Co)	2010/11/13		99	%	80 - 120
			Total Copper (Cu)	2010/11/13		99	%	80 - 120
			Total Lead (Pb)	2010/11/13		99	%	80 - 120
			Total Lithium (Li)	2010/11/13		93	%	80 - 120
			Total Nickel (Ni)	2010/11/13		100	%	80 - 120
			Total Selenium (Se)	2010/11/13		102	%	80 - 120
			Total Uranium (U)	2010/11/13		98	%	80 - 120
			Total Vanadium (V)	2010/11/13		101	%	80 - 120
			Total Zinc (Zn)	2010/11/13		88	%	80 - 120
		Method Blank	Total Aluminum (Al)	2010/11/13	<3		ug/L	
			Total Antimony (Sb)	2010/11/13	<0.5		ug/L	
			Total Arsenic (As)	2010/11/13	<0.1		ug/L	
			Total Barium (Ba)	2010/11/13	<1		ug/L	
			Total Beryllium (Be)	2010/11/13	<0.1		ug/L	
			Total Bismuth (Bi)	2010/11/13	<1		ug/L	
			Total Boron (B)	2010/11/13	<50		ug/L	
			Total Cadmium (Cd)	2010/11/13	<0.01		ug/L	
			Total Chromium (Cr)	2010/11/13	<1		ug/L	
			Total Cobalt (Co)	2010/11/13	<0.5		ug/L	
			Total Copper (Cu)	2010/11/13	<0.2		ug/L	
			Total Iron (Fe)	2010/11/13	<5		ug/L	
			Total Lead (Pb)	2010/11/13	<0.2		ug/L	
			Total Lithium (Li)	2010/11/13	<5		ug/L	
			Total Manganese (Mn)	2010/11/13	<1		ug/L	
			Total Mercury (Hg)	2010/11/13	<0.02		ug/L	
			Total Molybdenum (Mo)	2010/11/13	<1		ug/L	
			Total Nickel (Ni)	2010/11/13	<1		ug/L	
			Total Selenium (Se)	2010/11/13	<0.1		ug/L	
			Total Silicon (Si)	2010/11/13	<100		ug/L	
			Total Silver (Ag)	2010/11/13	<0.02		ug/L	
			Total Strontium (Sr)	2010/11/13	<1		ug/L	
			Total Thallium (Tl)	2010/11/13	<0.05		ug/L	
			Total Tin (Sn)	2010/11/13	<5		ug/L	
			Total Titanium (Ti)	2010/11/13	<5		ug/L	
			Total Uranium (U)	2010/11/13	<0.1		ug/L	
			Total Vanadium (V)	2010/11/13	<5		ug/L	
			Total Zinc (Zn)	2010/11/13	<5		ug/L	
			Total Zirconium (Zr)	2010/11/13	<0.5		ug/L	
		RPD	Total Aluminum (Al)	2010/11/13	4.6		%	20
			Total Antimony (Sb)	2010/11/13	NC		%	20
			Total Arsenic (As)	2010/11/13	NC		%	20
			Total Barium (Ba)	2010/11/13	0.5		%	20
			Total Beryllium (Be)	2010/11/13	NC		%	20
			Total Bismuth (Bi)	2010/11/13	NC		%	20
			Total Boron (B)	2010/11/13	NC		%	20
			Total Cadmium (Cd)	2010/11/13	NC		%	20
			Total Chromium (Cr)	2010/11/13	8.0		%	20
			Total Cobalt (Co)	2010/11/13	NC		%	20
			Total Copper (Cu)	2010/11/13	7.1		%	20
			Total Iron (Fe)	2010/11/13	7.3		%	20

AECOM
Attention: Scott Chapman
Client Project #: 60164142 DOMINION BRIDGE
P.O. #:
Site Reference: 1460 DUBLIN AVENUE

Quality Assurance Report (Continued)

Maxxam Job Number: NB0A7403

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4417688	JSW	RPD	Total Lead (Pb)	2010/11/13	NC		%	20
			Total Lithium (Li)	2010/11/13	NC		%	20
			Total Manganese (Mn)	2010/11/13	6.9		%	20
			Total Mercury (Hg)	2010/11/13	NC		%	20
			Total Molybdenum (Mo)	2010/11/13	NC		%	20
			Total Nickel (Ni)	2010/11/13	NC		%	20
			Total Selenium (Se)	2010/11/13	NC		%	20
			Total Silicon (Si)	2010/11/13	NC		%	20
			Total Silver (Ag)	2010/11/13	NC		%	20
			Total Strontium (Sr)	2010/11/13	3.5		%	20
			Total Thallium (Tl)	2010/11/13	NC		%	20
			Total Tin (Sn)	2010/11/13	NC		%	20
			Total Titanium (Ti)	2010/11/13	NC		%	20
			Total Uranium (U)	2010/11/13	NC		%	20
			Total Vanadium (V)	2010/11/13	NC		%	20
			Total Zinc (Zn)	2010/11/13	NC		%	20
			Total Zirconium (Zr)	2010/11/13	NC		%	20
4418473	MY4	Spiked Blank	Hexabromobiphenyl (sur.)	2010/11/15		97	%	60 - 130
			Aroclor 1254	2010/11/15		93	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/11/15		90	%	60 - 130
			Aroclor 1242	2010/11/15	<0.10		ug/L	
			Aroclor 1248	2010/11/15	<0.10		ug/L	
			Aroclor 1254	2010/11/15	<0.10		ug/L	
			Aroclor 1260	2010/11/15	<0.10		ug/L	
4418482	AC2	Method Blank	(C6-C10)	2010/11/07	<300		ug/L	
4431970	RM3	Matrix Spike						
		[Y18058-04]	Total Mercury (Hg)	2010/11/16		85	%	80 - 120
		Spiked Blank	Total Mercury (Hg)	2010/11/16		104	%	80 - 120
		Method Blank	Total Mercury (Hg)	2010/11/16	<0.02		ug/L	
		RPD [Y18058-04]	Total Mercury (Hg)	2010/11/16	NC		%	20

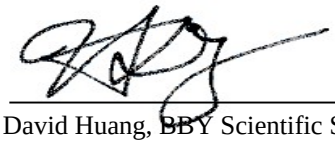
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
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.
(1) LCS outside acceptance criteria (10% of analytes failure allowed)
(2) RDL raised due to background artifacts detected in analysis
(3) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

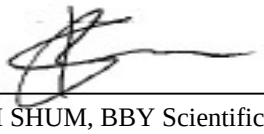
Validation Signature Page

Maxxam Job #: B0A7403

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



David Huang, BBY Scientific Specialist



TOM SHUM, BBY Scientific Specialist

==========

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 Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

B047403

ANALYSIS REQUEST F 111808

COMPANY NAME: AECOM

PH. #: (204) 928-8321
E-mail: eryn.williamson@aecom.com/scott.chapman@aecom.com
FAX #: (204) 284-2040

COMPANY ADDRESS: 99 Commerce Drive, Winnipeg MB, R3P 0Y7

CLIENT PROJECT ID: (#) 60164142, Dominion Bridge, 1460 Dublin Avenue

SAMPLER NAME (PRINT): Eryn Williamson

PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, PHC F1-F4	Metals	PCB	VOC	Lead
1	MW10-03		X				5	29/10/10	8:00	70	X				
2	MW10-13		X				5	29/10/10	8:00	70	X				
3	BH-2		X				5	29/10/10	8:15	0	X				
4	BH-4		X				5	29/10/10	8:30	0	X				
5	BH-61		X				5	29/10/10	8:45	35	X				
6	BH-62		X				5	29/10/10	9:00	15	X				
7	BH-63		X				5	29/10/10	9:15	45	X				
8	MW10-06		X				6	01/11/10	8:00	65	X			X	X
9	MW10-26		X				6	01/11/10	8:00	65	X			X	X
10	MW10-08		X				6	01/11/10	8:15	10	X			X	X
11	BH-15		X				6	01/11/10	8:30	10	X			X	X
12	MW10-10		X				6	01/11/10	8:45	65	X	X			

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☒
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS _____

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

- ☒ CCME
- ☐ CSR
- ☐ ALBERTA TIER 1
- ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.9, 8.1, 8.3

DUE DATE: 9 10 10 (x 4)

LOG IN CHECK:

RELINQUISHED BY SAMPLER: ERYN WILLIAMSON Eryn Williamson	DATE: DD/MM/YY 01/11/10	TIME: 12:00	RECEIVED BY: JB NOV 2/10 11:50
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:

CUSTODY RECORD

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

BOA7403

ANALYSIS REQUEST F 111786

COMPANY NAME: AECOM	PH. #: (204) 928-8321 E-mail: eryn.williamson@aecom.com/scott.chapman@aecom.com FAX #: (204) 284-2040
COMPANY ADDRESS: 99 Commerce Drive, Winnipeg MB, R3P 0Y7	CLIENT PROJECT ID: (#) 60164142, Dominion Bridge, 1460 Dublin Avenue
SAMPLER NAME (PRINT): ERYN WILLIAMSON	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, PHC F1-F4	Metals	PCB	VOC	Lead	LAB USE ONLY
1	MW10-20		X				6	01/11/10	8:45	65	X	X				
2	MW10-14		X				5	29/10/10	9:30	0	X					
3	MW10-15		X				5	29/10/10	9:45	120	X					
4	MW10-30		X				2	01/11/10	9:00	0		X	X			
5	MW10-23		X				5	29/10/10	10:00	0	X					
6	MW10-25		X				5	29/10/10	10:15	0	X					
7	MW10-33		X				2	01/11/10	9:15	85		X	X			
8	MW10-28		X				2	01/11/10	9:30	45		X	X			
9	MW10-38		X				2	01/11/10	9:30	45		X	X			
10	MW10-40		X				2	01/11/10	9:45	0		X	X			
11	MW10-42		X				2	01/11/10	10:00	0		X	X			
12	MW10-43		X				2	01/11/10	10:15	0		X	X			

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

STANDARD	5 BUSINESS DAYS	☒
RUSH	3 BUSINESS DAYS	☐
RUSH	2 BUSINESS DAYS	☐
URGENT	1 BUSINESS DAY	☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☒ CCME ☐ CSR ☐ ALBERTA TIER 1 ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.9, 8.1, 8.3

DUE DATE: (x4) 9 10 10

LOG IN CHECK:

RELINQUISHED BY SAMPLER: ERYN WILLIAMSON	DATE: DD/MM/YY 02/11/10	TIME: 12:00	RECEIVED BY: SB NA 2/10 11:50
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY LABORATORY:

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

B0A7403

ANALYSIS REQUEST F111783

COMPANY NAME: AECOM

COMPANY ADDRESS: 99 Commerce Drive Winnipeg MB R3P 0Y7

PH. #: (204) 928-8321
E-mail: eryn.williamson@aecom.com
FAX #: (204) 284-2040

CLIENT PROJECT ID: (#) 60164142 Dominion Bridge 1460 Dublin

SAMPLER NAME (PRINT): ERYN WILLIAMSON

PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, PHC F1-F4	Metals	PCB	VOC	Lead
1	MW10-21		X				5	29/10/10	10:30	0	X				
2	MW10-21A		X				5	29/10/10	10:30	0	X				
3	MW10-22A		X				5	29/10/10	10:45	160	X				
4	BH-8		X				5	01/11/10	10:30	0	X			X	
5	MW10-44		X				5	01/11/10	10:45	30	X			X	
6	MW10-54		X				5	01/11/10	10:45	30	X			X	
7	MW10-45		X				5	01/11/10	11:00	5	X			X	
8	MW10-49		X				6	01/11/10	11:15	60	X	X			
9	MW10-59		X				6	01/11/10	11:15	60	X	X			
10	MW10-53		X				6	01/11/10	11:30	60	X	X			
11	MW10-59		X					29/10/10	11:00	0	X				
12	MW10-61		X					29/10/10	11:15	10	X				

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

some exceptions apply please contact lab

STANDARD	5 BUSINESS DAYS	☒
RUSH	3 BUSINESS DAYS	☐
RUSH	2 BUSINESS DAYS	☐
URGENT	1 BUSINESS DAY	☐

OTHER BUSINESS DAYS ____

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☒ CCME
☐ CSR
☐ ALBERTA TIER 1
☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.9 8.1 8.3

DUE DATE: (x4) 9 10 10

LOG IN CHECK:

RELINQUISHED BY SAMPLER: ERYN WILLIAMSON Eryn Williamson — DATE: DD/MM/YY 02/11/10 — TIME: 12:00 — RECEIVED BY: SB NOV 2/10 11:50

RELINQUISHED BY: — DATE: DD/MM/YY — TIME: — RECEIVED BY:

RELINQUISHED BY: — DATE: DD/MM/YY — TIME: — RECEIVED BY LABORATORY:

CUSTODY RECORD

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

COCFORM - BC - 06/06

ORIGINAL - MAXXAM YELLOW - MAXXAM PINK - CLIENT

Maxxam Analytics Inc
8577 Commerce Court
Burnaby, BC V5A 4N5
www.maxxamanalytics.com
Phone: (604) 444-4808
Fax: (604) 444-4511
Toll Free: 1-800-440-4808

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

B047403

ANALYSIS REQUEST F111787

COMPANY NAME: AECOM	PH. #: (204) 928-8321 E-mail: eryn.williamson@aecom.com / scott.chapman@aecom.com FAX #: (204) 284-2045
COMPANY ADDRESS: 99 Commerce Drive, Winnipeg MB, R3P 0Y7	CLIENT PROJECT ID: (#) 60164142 Dominion Bridge 1460 Dublin
SAMPLER NAME (PRINT): ERYN WILLIAMSON	PROJECT MANAGER: Scott Chapman

	FIELD SAMPLE ID	MAXXAM LAB # (Lab Use Only)	MATRIX: GROUND WATER	SURFACE WATER	SOIL	OTHER	# CONTAINERS	SAMPLING: DATE DD/MM/YY	TIME	HEADSPACE VAPOUR	BTEX, PHC F1-F4	Metals	PCB	VOC	Lead	LAB USE ONLY
1	MW10-62		X				5	29/10/10	11:30	10	X					
2	MW10-72		X				5	29/10/10	11:30	10	X					
3	MW10-67		X				6	01/11/10	11:45	110	X	X				
4	MW10-69		X				6	01/11/10	12:00	75	X	X				
5	MW10-99		X				6	01/11/10	12:00	75	X	X				
6	MW10-70		X				1	01/11/10	12:15	5		X				
7	MW10-71		X				1	29/10/10	11:45	0		X				
8	MW10-81		X				1	29/10/10	11:45	0		X				
9	MW10-77		X					29/10/10	12:00	20		X	X			
10	MW10-87		X					29/10/10	12:00	20		X	X			
11	MW10-79		X					29/10/10	12:15	25		X	X			
12	TRIP BLANK					X	5	—	—	—	X					

TAT (Turnaround Time)

<5 DAY TAT MUST HAVE PRIOR APPROVAL

*some exceptions apply please contact lab

- STANDARD 5 BUSINESS DAYS ☒
- RUSH 3 BUSINESS DAYS ☐
- RUSH 2 BUSINESS DAYS ☐
- URGENT 1 BUSINESS DAY ☐

OTHER BUSINESS DAYS _____

CUSTODY RECORD

P.O. NUMBER / QUOTE NUMBER:

SPECIAL DETECTION LIMITS / CONTAMINANT TYPE:

☒ CCME ☐ CSR ☐ ALBERTA TIER 1 ☐ OTHER

ACCOUNTING CONTACT:

SPECIAL REPORTING OR BILLING INSTRUCTIONS:

JARS USED:

LAB USE ONLY

ARRIVAL TEMPERATURE °C: 7.9 F.1 F.3

DUE DATE: (+4) 9 10 10

LOG IN CHECK:

RELINQUISHED BY SAMPLER: ERYN WILLIAMSON Eryn Williamson	DATE: DD/MM/YY 02/11/10	TIME: 12:00	RECEIVED BY: 2/11 11:50
RELINQUISHED BY:	DATE: DD/MM/YY	TIME:	RECEIVED BY:

Your Project #: 60164142
Site: WINNIPEG
Your C.O.C. #: 08323667

Attention: Kris Plantz
AECOM
NEW Building
99 Commerce Drive
Winnipeg, MB
CANADA R3P 0Y7

Report Date: 2010/10/20

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B097221
Received: 2010/10/08, 11:55

Sample Matrix: Soil
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Elements by ICPMS (total) (1)	7	2010/10/13	2010/10/15	BRN SOP-00203 R5.0	Based on EPA 200.8
Particulate Mesh 200 (1)	7	N/A	2010/10/19	NA	NA
Moisture (1)	7	N/A	2010/10/14	BRN SOP-00321 R5.0	Ont MOE -E 3139
PAH in Soil by GC/MS Lowlevel (Extended) (1)	5	2010/10/13	2010/10/18	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended) (1)	2	2010/10/13	2010/10/19	BRN SOP-00332 R5.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc (1)	7	N/A	2010/10/19		PAHTOT-S
Polychlorinated Biphenyls in Soil (1)	7	N/A	2010/10/14	60-C-025-09	EPA 608/8080
pH (2:1 DI Water Extract) (1)	7	2010/10/13	2010/10/15	BRN SOP-00266 R6.0	Carter, SSMA 16.2
Organic Carbon and Organic Matter (2)	7	2010/10/18	2010/10/18	CAL SOP-00035	MMFSPA Ch6

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbon (DOC) (1)	3	N/A	2010/10/14	BRN SOP-00224 R4.0	Based on M 860-87T
Hardness Total (calculated as CaCO3) (1)	3	N/A	2010/10/18		
Hardness (calculated as CaCO3) (1)	3	N/A	2010/10/18		
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (1)	3	N/A	2010/10/18	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (dissolved) (1)	3	N/A	2010/10/18	BRN SOP-00206	Based on EPA 200.8
Na, K, Ca, Mg, S by CRC ICPMS (total) (1)	3	2010/10/08	2010/10/18	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (total) (1)	3	2010/10/14	2010/10/16	BRN SOP-00206	Based on EPA 200.8
PAH in Water by GC/MS (SIM) (1)	3	2010/10/13	2010/10/14	BRN SOP-00331 R11.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc (1)	3	N/A	2010/10/15		
Polychlorinated Biphenyls in Water (1)	1	2010/10/14	2010/10/19	60-C-044-05	EPA 608/8080
Filter and HNO3 Preserve for Metals (1)	3	N/A	2010/10/08	BRN WI-00006 R1.0	Based on EPA 200.2
Carbon (Total Organic) (1)	3	N/A	2010/10/14	BRN SOP-00224 R4.0	Based on SM-5310C

(1) This test was performed by Maxxam Vancouver
(2) This test was performed by Maxxam Calgary

../2

Your Project #: 60164142
Site: WINNIPEG
Your C.O.C. #: 08323667

Attention: Kris Plantz
AECOM
NEW Building
99 Commerce Drive
Winnipeg, MB
CANADA R3P 0Y7

Report Date: 2010/10/20

CERTIFICATE OF ANALYSIS

Encryption Key

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

JANELLE KOCHAN, B.Sc,
Email: janelle.kochan@maxxamanalytics.com
Phone# (204) 772-7276 Ext:2209

==========

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: 2

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		X56656	X56657	X56658	X56660	X56661	X56662		
Sampling Date		2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667	08323667	08323667	08323667		
	Units	**OC10-7A (0-5)**	**OC10-7B (0-5)**	**OC10-7C (0-5)**	**OC10-6A (0-5)**	**OC10-6C (0-5)**	**OC10-4A (0-5)**	**RDL**	**QC Batch**
Misc. Inorganics									
Organic Matter	%	7.2	3.7	5.9	10.3	4.6	3.7	0.2	4343710
Total Organic Carbon (C)	%	4.2	2.2	3.4	6.0	2.7	2.1	0.2	4343710
Physical Properties									
200 mesh (>.075 mm)	%	12.4	39.7	34.7	16.8	18.1	7.3	0.1	4342588
200 mesh (<.075 mm)	%	87.7	60.3	65.3	83.2	81.9	92.7	0.1	4342588
RDL = Reportable Detection Limit									

Maxxam ID		X56663		
Sampling Date		2010/10/06		
COC Number		08323667		
	Units	**OC10-4C (0-5)**	**RDL**	**QC Batch**
Misc. Inorganics				
Organic Matter	%	10.9	0.2	4343710
Total Organic Carbon (C)	%	6.3	0.2	4343710
Physical Properties				
200 mesh (>.075 mm)	%	19.2	0.1	4342588
200 mesh (<.075 mm)	%	80.8	0.1	4342588
RDL = Reportable Detection Limit				

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

POLYCHLORINATED BIPHENYLS BY GC-ECD (SOIL)

Maxxam ID		X56656	X56657	X56658		X56660		X56661		
Sampling Date		2010/10/06	2010/10/06	2010/10/06		2010/10/06		2010/10/06		
COC Number		08323667	08323667	08323667		08323667		08323667		
	Units	**OC10-7A (0-5)**	**OC10-7B (0-5)**	**OC10-7C (0-5)**	**RDL**	**OC10-6A (0-5)**	**RDL**	**OC10-6C (0-5)**	**RDL**	**QC Batch**
Polychlorinated Biphenyls										
Aroclor 1242	mg/kg	<0.03	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4333545
Aroclor 1248	mg/kg	<0.03	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4333545
Aroclor 1254	mg/kg	<0.03	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4333545
Aroclor 1260	mg/kg	<0.03	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4333545
Total PCB	mg/kg	<0.03	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4333545
Surrogate Recovery (%)										
Hexabromobiphenyl (sur.)	%	91	92	90	N/A	89	N/A	87	N/A	4333545

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to high sample moisture content.

Maxxam ID		X56662	X56663		
Sampling Date		2010/10/06	2010/10/06		
COC Number		08323667	08323667		
	Units	**OC10-4A (0-5)**	**OC10-4C (0-5)**	**RDL**	**QC Batch**
Polychlorinated Biphenyls					
Aroclor 1242	mg/kg	<0.03	<0.03	0.03	4333545
Aroclor 1248	mg/kg	<0.03	<0.03	0.03	4333545
Aroclor 1254	mg/kg	<0.03	<0.03	0.03	4333545
Aroclor 1260	mg/kg	<0.03	<0.03	0.03	4333545
Total PCB	mg/kg	<0.03	<0.03	0.03	4333545
Surrogate Recovery (%)					
Hexabromobiphenyl (sur.)	%	93	94	N/A	4333545

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

PHYSICAL TESTING (SOIL)

Maxxam ID		X56656	X56657	X56658	X56660	X56661	X56662		
Sampling Date		2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667	08323667	08323667	08323667		
	Units	**OC10-7A (0-5)**	**OC10-7B (0-5)**	**OC10-7C (0-5)**	**OC10-6A (0-5)**	**OC10-6C (0-5)**	**OC10-4A (0-5)**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	56	39	57	69	56	37	0.3	4333497

RDL = Reportable Detection Limit

Maxxam ID		X56663		
Sampling Date		2010/10/06		
COC Number		08323667		
	Units	**OC10-4C (0-5)**	**RDL**	**QC Batch**
Physical Properties				
Moisture	%	65	0.3	4333497

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		X56655	X56659	X56664		
Sampling Date		2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667		
	Units	**OC10-7**	**OC10-6**	**OC10-4**	**RDL**	**QC Batch**
Calculated Parameters						
Filter and HNO3 Preservation	N/A	FIELD	FIELD	FIELD	N/A	ONSITE
Misc. Inorganics						
Dissolved Organic Carbon (C)	mg/L	13.3	12.7	13.4	0.5	4337311
Total Organic Carbon (C)	mg/L	13.1	12.6	13.5	0.5	4337133

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

Maxxam ID		X56655		
Sampling Date		2010/10/06		
COC Number		08323667		
	Units	**OC10-7**	**RDL**	**QC Batch**
Polychlorinated Biphenyls				
Aroclor 1242	ug/L	<0.10	0.10	4336223
Aroclor 1248	ug/L	<0.10	0.10	4336223
Aroclor 1254	ug/L	<0.10	0.10	4336223
Aroclor 1260	ug/L	<0.10	0.10	4336223
Surrogate Recovery (%)				
Hexabromobiphenyl (sur.)	%	86	N/A	4336223

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X56656	X56657	X56658	X56660	X56661	X56662		
Sampling Date		2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667	08323667	08323667	08323667		
	Units	**OC10-7A (0-5)**	**OC10-7B (0-5)**	**OC10-7C (0-5)**	**OC10-6A (0-5)**	**OC10-6C (0-5)**	**OC10-4A (0-5)**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.74	7.88	7.58	7.77	7.75	7.94	0.01	4333644
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18600	13000	14800	15100	15100	20100	100	4333554
Total Antimony (Sb)	mg/kg	1.1	1.1	0.9	1.2	1.4	1.0	0.1	4333554
Total Arsenic (As)	mg/kg	5.9	6.4	6.3	7.8	7.0	6.2	0.2	4333554
Total Barium (Ba)	mg/kg	132	113	150	123	131	142	0.1	4333554
Total Beryllium (Be)	mg/kg	0.7	0.6	0.7	0.7	0.7	0.8	0.1	4333554
Total Bismuth (Bi)	mg/kg	0.2	0.1	0.1	0.2	0.2	0.2	0.1	4333554
Total Cadmium (Cd)	mg/kg	0.59	0.39	0.39	0.62	0.50	0.36	0.05	4333554
Total Calcium (Ca)	mg/kg	34100	65300	45400	38700	44400	33100	100	4333554
Total Chromium (Cr)	mg/kg	42	32	32	35	36	38	1	4333554
Total Cobalt (Co)	mg/kg	9.5	9.3	8.8	9.6	9.4	10.4	0.3	4333554
Total Copper (Cu)	mg/kg	43.4	31.4	31.0	42.0	43.0	30.8	0.5	4333554
Total Iron (Fe)	mg/kg	25500	21100	22200	24400	25400	25100	100	4333554
Total Lead (Pb)	mg/kg	128	93.5	80.8	85.7	100	74.8	0.1	4333554
Total Lithium (Li)	mg/kg	21	16	18	18	18	21	5	4333554
Total Magnesium (Mg)	mg/kg	24100	33900	22700	23900	27900	21200	100	4333554
Total Manganese (Mn)	mg/kg	229	423	591	272	361	395	0.2	4333554
Total Mercury (Hg)	mg/kg	0.08	<0.05	<0.05	0.07	0.06	<0.05	0.05	4333554
Total Molybdenum (Mo)	mg/kg	0.8	1.0	0.7	1.5	1.3	0.4	0.1	4333554
Total Nickel (Ni)	mg/kg	29.1	25.5	25.7	29.2	28.6	31.2	0.8	4333554
Total Phosphorus (P)	mg/kg	960	507	953	828	819	725	10	4333554
Total Potassium (K)	mg/kg	3720	2620	3950	3220	3040	4170	100	4333554
Total Selenium (Se)	mg/kg	0.7	<0.5	0.8	1.1	0.7	<0.5	0.5	4333554
Total Silver (Ag)	mg/kg	0.09	0.07	0.06	0.08	0.09	0.07	0.05	4333554
Total Sodium (Na)	mg/kg	414	317	328	1030	819	354	100	4333554
Total Strontium (Sr)	mg/kg	55.6	57.1	62.3	62.8	64.5	60.3	0.1	4333554
Total Thallium (Tl)	mg/kg	0.23	0.17	0.21	0.22	0.21	0.25	0.05	4333554
Total Tin (Sn)	mg/kg	5.7	4.0	4.8	3.8	3.2	2.9	0.1	4333554
Total Titanium (Ti)	mg/kg	180	245	167	134	163	163	1	4333554
Total Uranium (U)	mg/kg	2.62	2.41	1.75	3.37	2.85	1.18	0.05	4333554
Total Vanadium (V)	mg/kg	59	44	47	54	49	58	2	4333554

RDL = Reportable Detection Limit

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X56656	X56657	X56658	X56660	X56661	X56662		
Sampling Date		2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667	08323667	08323667	08323667		
	Units	**OC10-7A (0-5)**	**OC10-7B (0-5)**	**OC10-7C (0-5)**	**OC10-6A (0-5)**	**OC10-6C (0-5)**	**OC10-4A (0-5)**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	380	268	258	387	335	201	1	4333554
Total Zirconium (Zr)	mg/kg	4.2	6.5	2.4	3.4	3.4	1.4	0.5	4333554

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X56663		
Sampling Date		2010/10/06		
COC Number		08323667		
	Units	**OC10-4C (0-5)**	**RDL**	**QC Batch**
Physical Properties				
Soluble (2:1) pH	pH Units	7.49	0.01	4333644
Total Metals by ICPMS				
Total Aluminum (Al)	mg/kg	17100	100	4333554
Total Antimony (Sb)	mg/kg	1.0	0.1	4333554
Total Arsenic (As)	mg/kg	7.3	0.2	4333554
Total Barium (Ba)	mg/kg	116	0.1	4333554
Total Beryllium (Be)	mg/kg	0.8	0.1	4333554
Total Bismuth (Bi)	mg/kg	0.2	0.1	4333554
Total Cadmium (Cd)	mg/kg	0.68	0.05	4333554
Total Calcium (Ca)	mg/kg	37000	100	4333554
Total Chromium (Cr)	mg/kg	39	1	4333554
Total Cobalt (Co)	mg/kg	9.6	0.3	4333554
Total Copper (Cu)	mg/kg	41.8	0.5	4333554
Total Iron (Fe)	mg/kg	23200	100	4333554
Total Lead (Pb)	mg/kg	78.0	0.1	4333554
Total Lithium (Li)	mg/kg	19	5	4333554
Total Magnesium (Mg)	mg/kg	24400	100	4333554
Total Manganese (Mn)	mg/kg	301	0.2	4333554
Total Mercury (Hg)	mg/kg	0.07	0.05	4333554
Total Molybdenum (Mo)	mg/kg	1.2	0.1	4333554
Total Nickel (Ni)	mg/kg	29.5	0.8	4333554
Total Phosphorus (P)	mg/kg	904	10	4333554
Total Potassium (K)	mg/kg	3820	100	4333554
Total Selenium (Se)	mg/kg	0.6	0.5	4333554
Total Silver (Ag)	mg/kg	0.08	0.05	4333554
Total Sodium (Na)	mg/kg	394	100	4333554
Total Strontium (Sr)	mg/kg	49.2	0.1	4333554
Total Thallium (Tl)	mg/kg	0.26	0.05	4333554
Total Tin (Sn)	mg/kg	2.2	0.1	4333554
Total Titanium (Ti)	mg/kg	166	1	4333554
Total Uranium (U)	mg/kg	3.41	0.05	4333554
Total Vanadium (V)	mg/kg	59	2	4333554

RDL = Reportable Detection Limit

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X56663		
Sampling Date		2010/10/06		
COC Number		08323667		
	Units	**OC10-4C (0-5)**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	725	1	4333554
Total Zirconium (Zr)	mg/kg	4.4	0.5	4333554

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR DISSOLVED METALS IN WATER (WATER)

Maxxam ID		X56655	X56659	X56664		
Sampling Date		2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667		
	Units	**OC10-7**	**OC10-6**	**OC10-4**	**RDL**	**QC Batch**
Misc. Inorganics						
Dissolved Hardness (CaCO3)	mg/L	403	442	440	0.5	4326154
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	74	54	52	3	4343227
Dissolved Antimony (Sb)	ug/L	<0.5	<0.5	<0.5	0.5	4343227
Dissolved Arsenic (As)	ug/L	3.0	3.4	3.3	0.1	4343227
Dissolved Barium (Ba)	ug/L	59	63	62	1	4343227
Dissolved Beryllium (Be)	ug/L	<0.1	<0.1	<0.1	0.1	4343227
Dissolved Bismuth (Bi)	ug/L	<1	<1	<1	1	4343227
Dissolved Boron (B)	ug/L	116	97	85	50	4343227
Dissolved Cadmium (Cd)	ug/L	0.03	<0.01	<0.01	0.01	4343227
Dissolved Chromium (Cr)	ug/L	2	<1	<1	1	4343227
Dissolved Cobalt (Co)	ug/L	<0.5	<0.5	<0.5	0.5	4343227
Dissolved Copper (Cu)	ug/L	1.8	1.5	1.4	0.2	4343227
Dissolved Iron (Fe)	ug/L	143	85	78	5	4343227
Dissolved Lead (Pb)	ug/L	0.4	0.3	0.3	0.2	4343227
Dissolved Lithium (Li)	ug/L	70	79	74	5	4343227
Dissolved Manganese (Mn)	ug/L	19	16	20	1	4343227
Dissolved Mercury (Hg)	ug/L	<0.02	<0.02	0.02	0.02	4343227
Dissolved Molybdenum (Mo)	ug/L	2	1	1	1	4343227
Dissolved Nickel (Ni)	ug/L	4	4	4	1	4343227
Dissolved Selenium (Se)	ug/L	1.3	1.5	1.5	0.1	4343227
Dissolved Silicon (Si)	ug/L	2470	2800	2620	100	4343227
Dissolved Silver (Ag)	ug/L	<0.02	<0.02	<0.02	0.02	4343227
Dissolved Strontium (Sr)	ug/L	380	403	394	1	4343227
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	0.05	4343227
Dissolved Tin (Sn)	ug/L	<5	<5	<5	5	4343227
Dissolved Titanium (Ti)	ug/L	<5	6	<5	5	4343227
Dissolved Uranium (U)	ug/L	7.3	7.6	7.5	0.1	4343227
Dissolved Vanadium (V)	ug/L	6	6	6	5	4343227
Dissolved Zinc (Zn)	ug/L	35	5	<5	5	4343227
Dissolved Zirconium (Zr)	ug/L	<0.5	0.5	<0.5	0.5	4343227
Dissolved Calcium (Ca)	mg/L	60.0	67.4	68.4	0.05	4323617
Dissolved Magnesium (Mg)	mg/L	61.6	66.4	65.4	0.05	4323617

RDL = Reportable Detection Limit

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR DISSOLVED METALS IN WATER (WATER)

Maxxam ID		X56655	X56659	X56664		
Sampling Date		2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667		
	Units	**OC10-7**	**OC10-6**	**OC10-4**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	12.2	12.6	12.4	0.05	4323617
Dissolved Sodium (Na)	mg/L	67.1	74.7	73.1	0.05	4323617
Dissolved Sulphur (S)	mg/L	54	68	68	3	4323617

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR TOTAL METALS IN WATER (WATER)

Maxxam ID		X56655	X56659	X56664		
Sampling Date		2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667		
	Units	**OC10-7**	**OC10-6**	**OC10-4**	**RDL**	**QC Batch**
Calculated Parameters						
Total Hardness (CaCO3)	mg/L	429	422	445	0.5	4326594
Total Metals by ICPMS						
Total Aluminum (Al)	ug/L	447	445	665	3	4338586
Total Antimony (Sb)	ug/L	<0.5	<0.5	<0.5	0.5	4338586
Total Arsenic (As)	ug/L	3.3	3.1	3.4	0.1	4338586
Total Barium (Ba)	ug/L	65	62	69	1	4338586
Total Beryllium (Be)	ug/L	<0.1	<0.1	<0.1	0.1	4338586
Total Bismuth (Bi)	ug/L	<1	<1	<1	1	4338586
Total Boron (B)	ug/L	82	81	85	50	4338586
Total Cadmium (Cd)	ug/L	<0.01	<0.01	0.02	0.01	4338586
Total Chromium (Cr)	ug/L	1	<1	1	1	4338586
Total Cobalt (Co)	ug/L	<0.5	<0.5	<0.5	0.5	4338586
Total Copper (Cu)	ug/L	2.0	1.9	3.1	0.2	4338586
Total Iron (Fe)	ug/L	498	430	808	5	4338586
Total Lead (Pb)	ug/L	1.2	0.9	2.1	0.2	4338586
Total Lithium (Li)	ug/L	69	68	73	5	4338586
Total Manganese (Mn)	ug/L	19	18	29	1	4338586
Total Mercury (Hg)	ug/L	<0.02	<0.02	<0.02	0.02	4338586
Total Molybdenum (Mo)	ug/L	1	1	1	1	4338586
Total Nickel (Ni)	ug/L	4	4	4	1	4338586
Total Selenium (Se)	ug/L	1.3	1.4	1.4	0.1	4338586
Total Silicon (Si)	ug/L	3990	3840	4300	100	4338586
Total Silver (Ag)	ug/L	<0.02	<0.02	<0.02	0.02	4338586
Total Strontium (Sr)	ug/L	392	381	406	1	4338586
Total Thallium (Tl)	ug/L	<0.05	<0.05	<0.05	0.05	4338586
Total Tin (Sn)	ug/L	<5	<5	<5	5	4338586
Total Titanium (Ti)	ug/L	17	32	26	5	4338586
Total Uranium (U)	ug/L	7.4	7.2	8.0	0.1	4338586
Total Vanadium (V)	ug/L	7	6	8	5	4338586
Total Zinc (Zn)	ug/L	8	6	14	5	4338586
Total Zirconium (Zr)	ug/L	1.8	0.6	0.6	0.5	4338586
Total Calcium (Ca)	mg/L	69.3	68.3	72.0	0.05	4323618
Total Magnesium (Mg)	mg/L	62.1	61.0	64.4	0.05	4323618

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR TOTAL METALS IN WATER (WATER)

Maxxam ID		X56655	X56659	X56664		
Sampling Date		2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667		
	Units	**OC10-7**	**OC10-6**	**OC10-4**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	12.5	12.3	13.0	0.05	4323618
Total Sodium (Na)	mg/L	66.2	64.8	68.0	0.05	4323618
Total Sulphur (S)	mg/L	62	62	66	3	4323618

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

PAH IN WATER BY GC-MS (WATER)

Maxxam ID		X56655	X56659	X56664		
Sampling Date		2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667		
	Units	**OC10-7**	**OC10-6**	**OC10-4**	**RDL**	**QC Batch**
Polycyclic Aromatics						
Low Molecular Weight PAH`s	ug/L	0.11	<0.05	<0.05	0.05	4323620
High Molecular Weight PAH`s	ug/L	<0.02	<0.02	<0.02	0.02	4323620
Total PAH	ug/L	0.11	<0.05	<0.05	0.05	4323620
Naphthalene	ug/L	0.08	<0.05	<0.05	0.05	4334734
2-Methylnaphthalene	ug/L	<0.05	<0.05	<0.05	0.05	4334734
Quinoline	ug/L	<0.05	<0.05	<0.05	0.05	4334734
Acenaphthylene	ug/L	<0.01	<0.01	<0.01	0.01	4334734
Acenaphthene	ug/L	0.01	<0.01	<0.01	0.01	4334734
Fluorene	ug/L	0.01	0.01	<0.01	0.01	4334734
Phenanthrene	ug/L	0.01	0.01	<0.01	0.01	4334734
Anthracene	ug/L	<0.01	<0.01	<0.01	0.01	4334734
Acridine	ug/L	<0.05	<0.05	<0.05	0.05	4334734
Fluoranthene	ug/L	<0.01	0.01	<0.01	0.01	4334734
Pyrene	ug/L	<0.01	<0.01	<0.01	0.01	4334734
Benzo(a)anthracene	ug/L	<0.01	<0.01	<0.01	0.01	4334734
Chrysene	ug/L	<0.01	<0.01	<0.01	0.01	4334734
Benzo(b&j)fluoranthene	ug/L	<0.01	<0.01	<0.01	0.01	4334734
Benzo(k)fluoranthene	ug/L	<0.01	<0.01	<0.01	0.01	4334734
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	0.01	4334734
Indeno(1,2,3-cd)pyrene	ug/L	<0.02	<0.02	<0.02	0.02	4334734
Dibenz(a,h)anthracene	ug/L	<0.02	<0.02	<0.02	0.02	4334734
Benzo(g,h,i)perylene	ug/L	<0.02	<0.02	<0.02	0.02	4334734
Surrogate Recovery (%)						
D10-ANTHRACENE (sur.)	%	85	88	97	N/A	4334734
D12-BENZO(A)PYRENE (sur.)	%	77	81	88	N/A	4334734
D8-ACENAPHTHYLENE (sur.)	%	70	70	77	N/A	4334734
D8-NAPHTHALENE (sur.)	%	77	77	89	N/A	4334734
TERPHENYL-D14 (sur.)	%	81	87	92	N/A	4334734

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X56656	X56657	X56658	X56660	X56661		
Sampling Date		2010/10/06	2010/10/06	2010/10/06	2010/10/06	2010/10/06		
COC Number		08323667	08323667	08323667	08323667	08323667		
	Units	**OC10-7A (0-5)**	**OC10-7B (0-5)**	**OC10-7C (0-5)**	**OC10-6A (0-5)**	**OC10-6C (0-5)**	**RDL**	**QC Batch**
Polycyclic Aromatics								
Naphthalene	mg/kg	0.13 (1)	0.07 (1)	0.19 (1)	0.14 (1)	0.29 (1)	0.01	4340289
2-Methylnaphthalene	mg/kg	0.17 (1)	0.10 (1)	0.17 (1)	0.13 (1)	0.25 (1)	0.01	4340289
Acenaphthylene	mg/kg	0.05 (1)	0.03 (1)	0.04 (1)	0.10 (1)	0.17 (1)	0.01	4340289
Acenaphthene	mg/kg	0.05 (1)	0.14 (1)	0.09 (1)	0.10 (1)	0.18 (1)	0.01	4340289
Fluorene	mg/kg	0.08 (1)	0.17 (1)	0.11 (1)	0.20 (1)	0.28 (1)	0.01	4340289
Phenanthrene	mg/kg	0.38 (1)	0.48 (1)	0.42 (1)	0.99 (1)	2.4 (1)	0.01	4340289
Anthracene	mg/kg	0.15 (1)	0.16 (1)	0.23 (1)	0.39 (1)	0.69 (1)	0.01	4340289
Fluoranthene	mg/kg	0.77 (1)	1.2 (1)	1.8 (1)	3.8 (1)	6.7 (1)	0.01	4340289
Pyrene	mg/kg	0.62 (1)	0.89 (1)	1.2 (1)	2.7 (1)	5.1 (1)	0.01	4340289
Benzo(a)anthracene	mg/kg	0.28 (1)	0.33 (1)	0.27 (1)	0.92 (1)	1.5 (1)	0.01	4340289
Chrysene	mg/kg	0.70 (1)	0.60 (1)	0.96 (1)	2.0 (1)	3.9 (1)	0.01	4340289
Benzo(b&j)fluoranthene	mg/kg	0.78 (1)	0.63 (1)	0.79 (1)	2.0 (1)	3.3 (1)	0.01	4340289
Benzo(k)fluoranthene	mg/kg	0.22 (1)	0.18 (1)	0.23 (1)	0.57 (1)	1.0 (1)	0.01	4340289
Benzo(a)pyrene	mg/kg	0.32 (1)	0.31 (1)	0.25 (1)	0.67 (1)	1.2 (1)	0.01	4340289
Indeno(1,2,3-cd)pyrene	mg/kg	0.25 (1)	0.22 (1)	0.17 (1)	0.46 (1)	0.76 (1)	0.02	4340289
Dibenz(a,h)anthracene	mg/kg	0.07 (1)	0.06 (1)	0.05 (1)	0.13 (1)	0.23 (1)	0.02	4340289
Benzo(g,h,i)perylene	mg/kg	0.32 (1)	0.27 (1)	0.20 (1)	0.53 (1)	0.88 (1)	0.02	4340289
Low Molecular Weight PAH`s	mg/kg	1.0	1.2	1.3	2.1	4.2	0.01	4327535
High Molecular Weight PAH`s	mg/kg	4.3	4.6	6.0	14	25	0.02	4327535
Total PAH	mg/kg	5.3	5.8	7.2	16	29	0.02	4327535
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	100	130	130	130	120	N/A	4340289
D12-BENZO(A)PYRENE (sur.)	%	100	110	110	110	110	N/A	4340289
D8-ACENAPHTHYLENE (sur.)	%	100	100	110	100	100	N/A	4340289
D8-NAPHTHALENE (sur.)	%	110	100	110	110	110	N/A	4340289
TERPHENYL-D14 (sur.)	%	110	120	110	110	120	N/A	4340289

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X56662		X56663		
Sampling Date		2010/10/06		2010/10/06		
COC Number		08323667		08323667		
	Units	**OC10-4A (0-5)**	**RDL**	**OC10-4C (0-5)**	**RDL**	**QC Batch**
Polycyclic Aromatics						
Naphthalene	mg/kg	0.029	0.001	0.032 (1)	0.002	4343421
2-Methylnaphthalene	mg/kg	0.030	0.001	0.028 (1)	0.002	4343421
Acenaphthylene	mg/kg	0.017	0.001	0.028 (1)	0.002	4343421
Acenaphthene	mg/kg	0.016	0.001	0.042 (1)	0.002	4343421
Fluorene	mg/kg	0.022	0.001	0.055 (1)	0.002	4343421
Phenanthrene	mg/kg	0.18	0.001	0.43 (1)	0.002	4343421
Anthracene	mg/kg	0.044	0.001	0.088 (1)	0.002	4343421
Fluoranthene	mg/kg	0.29	0.001	0.70 (1)	0.002	4343421
Pyrene	mg/kg	0.23	0.001	0.55 (1)	0.002	4343421
Benzo(a)anthracene	mg/kg	0.13	0.001	0.25 (1)	0.002	4343421
Chrysene	mg/kg	0.14	0.001	0.33 (1)	0.002	4343421
Benzo(b&j)fluoranthene	mg/kg	0.12	0.001	0.36 (1)	0.002	4343421
Benzo(k)fluoranthene	mg/kg	0.084	0.001	0.14 (1)	0.002	4343421
Benzo(a)pyrene	mg/kg	0.11	0.001	0.24 (1)	0.002	4343421
Indeno(1,2,3-cd)pyrene	mg/kg	0.078	0.002	0.21 (1)	0.004	4343421
Dibenz(a,h)anthracene	mg/kg	0.019	0.002	0.045 (1)	0.004	4343421
Benzo(g,h,i)perylene	mg/kg	0.069	0.002	0.19 (1)	0.004	4343421
Low Molecular Weight PAH`s	mg/kg	0.34	0.001	0.70	0.002	4327535
High Molecular Weight PAH`s	mg/kg	1.3	0.002	3.0	0.004	4327535
Total PAH	mg/kg	1.6	0.002	3.7	0.004	4327535
Surrogate Recovery (%)						
D10-ANTHRACENE (sur.)	%	111	N/A	109	N/A	4343421
D12-BENZO(A)PYRENE (sur.)	%	99	N/A	110	N/A	4343421
D8-ACENAPHTHYLENE (sur.)	%	108	N/A	106	N/A	4343421
D8-NAPHTHALENE (sur.)	%	102	N/A	91	N/A	4343421
TERPHENYL-D14 (sur.)	%	116	N/A	114	N/A	4343421

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to high sample moisture content.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097221
Report Date: 2010/10/20

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

Package 1	9.3°C

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

General Comments

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4333497	CG5	Method Blank	Moisture	2010/10/14	<0.3		%	
		RPD	Moisture	2010/10/14	1.2		%	20
4333545	VB1	Spiked Blank	Hexabromobiphenyl (sur.)	2010/10/14		96	%	60 - 130
			Aroclor 1254	2010/10/14		106	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/10/14		103	%	60 - 130
			Aroclor 1242	2010/10/14	<0.03		mg/kg	
			Aroclor 1248	2010/10/14	<0.03		mg/kg	
			Aroclor 1254	2010/10/14	<0.03		mg/kg	
			Aroclor 1260	2010/10/14	<0.03		mg/kg	
			Total PCB	2010/10/14	<0.03		mg/kg	
		RPD	Aroclor 1242	2010/10/14	NC		%	N/A
			Aroclor 1248	2010/10/14	NC		%	N/A
			Aroclor 1254	2010/10/14	NC		%	N/A
			Aroclor 1260	2010/10/14	NC		%	N/A
			Total PCB	2010/10/14	NC		%	N/A
4333554	DJ	Matrix Spike	Total Arsenic (As)	2010/10/15		98	%	75 - 125
			Total Beryllium (Be)	2010/10/15		99	%	75 - 125
			Total Cadmium (Cd)	2010/10/15		105	%	75 - 125
			Total Chromium (Cr)	2010/10/15		NC	%	75 - 125
			Total Cobalt (Co)	2010/10/15		97	%	75 - 125
			Total Copper (Cu)	2010/10/15		NC	%	75 - 125
			Total Lead (Pb)	2010/10/15		99	%	75 - 125
			Total Lithium (Li)	2010/10/15		97	%	75 - 125
			Total Mercury (Hg)	2010/10/15		97	%	75 - 125
			Total Nickel (Ni)	2010/10/15		NC	%	75 - 125
			Total Selenium (Se)	2010/10/15		101	%	75 - 125
			Total Uranium (U)	2010/10/15		98	%	75 - 125
			Total Vanadium (V)	2010/10/15		NC	%	75 - 125
			Total Zinc (Zn)	2010/10/15		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/15		102	%	70 - 130
			Total Antimony (Sb)	2010/10/15		93	%	70 - 130
			Total Arsenic (As)	2010/10/15		93	%	70 - 130
			Total Barium (Ba)	2010/10/15		105	%	70 - 130
			Total Cadmium (Cd)	2010/10/15		93	%	70 - 130
			Total Calcium (Ca)	2010/10/15		94	%	70 - 130
			Total Chromium (Cr)	2010/10/15		100	%	70 - 130
			Total Cobalt (Co)	2010/10/15		94	%	70 - 130
			Total Copper (Cu)	2010/10/15		91	%	70 - 130
			Total Iron (Fe)	2010/10/15		98	%	70 - 130
			Total Lead (Pb)	2010/10/15		100	%	70 - 130
			Total Magnesium (Mg)	2010/10/15		94	%	70 - 130
			Total Manganese (Mn)	2010/10/15		98	%	70 - 130
			Total Molybdenum (Mo)	2010/10/15		82	%	70 - 130
			Total Nickel (Ni)	2010/10/15		93	%	70 - 130
			Total Phosphorus (P)	2010/10/15		95	%	70 - 130
			Total Strontium (Sr)	2010/10/15		95	%	70 - 130
			Total Thallium (Tl)	2010/10/15		90	%	70 - 130
			Total Titanium (Ti)	2010/10/15		99	%	70 - 130
			Total Uranium (U)	2010/10/15		88	%	70 - 130
			Total Vanadium (V)	2010/10/15		106	%	70 - 130
			Total Zinc (Zn)	2010/10/15		92	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/15		99	%	75 - 125
			Total Beryllium (Be)	2010/10/15		97	%	75 - 125
			Total Cadmium (Cd)	2010/10/15		101	%	75 - 125
			Total Chromium (Cr)	2010/10/15		96	%	75 - 125

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4333554	DJ	Spiked Blank	Total Cobalt (Co)	2010/10/15		96	%	75 - 125
			Total Copper (Cu)	2010/10/15		100	%	75 - 125
			Total Lead (Pb)	2010/10/15		99	%	75 - 125
			Total Lithium (Li)	2010/10/15		96	%	75 - 125
			Total Mercury (Hg)	2010/10/15		97	%	75 - 125
			Total Nickel (Ni)	2010/10/15		98	%	75 - 125
			Total Selenium (Se)	2010/10/15		103	%	75 - 125
			Total Uranium (U)	2010/10/15		97	%	75 - 125
			Total Vanadium (V)	2010/10/15		100	%	75 - 125
			Total Zinc (Zn)	2010/10/15		105	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/15	<100		mg/kg	
			Total Antimony (Sb)	2010/10/15	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/15	0.3, RDL=0.2		mg/kg	
			Total Barium (Ba)	2010/10/15	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/15	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/15	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/15	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/15	<100		mg/kg	
			Total Chromium (Cr)	2010/10/15	<1		mg/kg	
			Total Cobalt (Co)	2010/10/15	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/15	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/15	<100		mg/kg	
			Total Lead (Pb)	2010/10/15	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/15	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/15	<100		mg/kg	
			Total Manganese (Mn)	2010/10/15	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/15	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/15	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/15	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/15	<10		mg/kg	
			Total Potassium (K)	2010/10/15	<100		mg/kg	
			Total Selenium (Se)	2010/10/15	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/15	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/15	<100		mg/kg	
			Total Strontium (Sr)	2010/10/15	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/15	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/15	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/15	<1		mg/kg	
			Total Uranium (U)	2010/10/15	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/15	<2		mg/kg	
			Total Zinc (Zn)	2010/10/15	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/15	<0.5		mg/kg	
		RPD	Total Arsenic (As)	2010/10/15	7.9		%	30
			Total Barium (Ba)	2010/10/15	4.0		%	35
			Total Chromium (Cr)	2010/10/15	1.3		%	30
			Total Copper (Cu)	2010/10/15	4.9		%	30
			Total Lead (Pb)	2010/10/15	1.4		%	35
			Total Zinc (Zn)	2010/10/15	0.8		%	30
4333644	CB9	Spiked Blank	Soluble (2:1) pH	2010/10/15		102	%	96 - 104
		RPD [X56661-02]	Soluble (2:1) pH	2010/10/15	0.4		%	20
4334734	TG1	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/15		96	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/15		97	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/15		77	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/15		89	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/15		96	%	60 - 130

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4334734	TG1	Matrix Spike	Naphthalene	2010/10/15		87	%	50 - 130
			2-Methylnaphthalene	2010/10/15		96	%	50 - 130
			Quinoline	2010/10/15		113	%	50 - 130
			Acenaphthylene	2010/10/15		79	%	50 - 130
			Acenaphthene	2010/10/15		86	%	50 - 130
			Fluorene	2010/10/15		90	%	50 - 130
			Phenanthrene	2010/10/15		100	%	60 - 130
			Anthracene	2010/10/15		99	%	60 - 130
			Acridine	2010/10/15		99	%	50 - 130
			Fluoranthene	2010/10/15		97	%	60 - 130
			Pyrene	2010/10/15		100	%	60 - 130
			Benzo(a)anthracene	2010/10/15		94	%	60 - 130
			Chrysene	2010/10/15		100	%	60 - 130
			Benzo(b&j)fluoranthene	2010/10/15		91	%	60 - 130
			Benzo(k)fluoranthene	2010/10/15		105	%	60 - 130
			Benzo(a)pyrene	2010/10/15		100	%	60 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/15		90	%	60 - 130
			Dibenz(a,h)anthracene	2010/10/15		82	%	60 - 130
			Benzo(g,h,i)perylene	2010/10/15		92	%	60 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/14		102	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/14		108	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/14		85	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/14		81	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/14		107	%	60 - 130
			Naphthalene	2010/10/14		79	%	50 - 130
			2-Methylnaphthalene	2010/10/14		90	%	50 - 130
			Quinoline	2010/10/14		106	%	50 - 130
			Acenaphthylene	2010/10/14		81	%	50 - 130
			Acenaphthene	2010/10/14		87	%	50 - 130
			Fluorene	2010/10/14		92	%	50 - 130
			Phenanthrene	2010/10/14		98	%	60 - 130
			Anthracene	2010/10/14		99	%	60 - 130
			Acridine	2010/10/14		99	%	50 - 130
			Fluoranthene	2010/10/14		100	%	60 - 130
			Pyrene	2010/10/14		103	%	60 - 130
			Benzo(a)anthracene	2010/10/14		98	%	60 - 130
			Chrysene	2010/10/14		103	%	60 - 130
			Benzo(b&j)fluoranthene	2010/10/14		92	%	60 - 130
			Benzo(k)fluoranthene	2010/10/14		108	%	60 - 130
			Benzo(a)pyrene	2010/10/14		102	%	60 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/14		97	%	60 - 130
			Dibenz(a,h)anthracene	2010/10/14		91	%	60 - 130
			Benzo(g,h,i)perylene	2010/10/14		98	%	60 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/14		121	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/14		115	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/14		92	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/14		106	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/14		119	%	60 - 130
			Naphthalene	2010/10/14	<0.05		ug/L	
			2-Methylnaphthalene	2010/10/14	<0.05		ug/L	
			Quinoline	2010/10/14	<0.05		ug/L	
			Acenaphthylene	2010/10/14	<0.01		ug/L	
			Acenaphthene	2010/10/14	<0.01		ug/L	
			Fluorene	2010/10/14	<0.01		ug/L	
			Phenanthrene	2010/10/14	<0.01		ug/L	

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4334734	TG1	Method Blank	Anthracene	2010/10/14	<0.01		ug/L	
			Acridine	2010/10/14	<0.05		ug/L	
			Fluoranthene	2010/10/14	<0.01		ug/L	
			Pyrene	2010/10/14	<0.01		ug/L	
			Benzo(a)anthracene	2010/10/14	<0.01		ug/L	
			Chrysene	2010/10/14	<0.01		ug/L	
			Benzo(b&j)fluoranthene	2010/10/14	<0.01		ug/L	
			Benzo(k)fluoranthene	2010/10/14	<0.01		ug/L	
			Benzo(a)pyrene	2010/10/14	<0.01		ug/L	
			Indeno(1,2,3-cd)pyrene	2010/10/14	<0.02		ug/L	
			Dibenz(a,h)anthracene	2010/10/14	<0.02		ug/L	
			Benzo(g,h,i)perylene	2010/10/14	<0.02		ug/L	
		RPD	Naphthalene	2010/10/15	NC (1)		%	40
			2-Methylnaphthalene	2010/10/15	NC		%	40
			Quinoline	2010/10/15	NC (1)		%	40
			Acenaphthylene	2010/10/15	NC (1)		%	40
			Acenaphthene	2010/10/15	9.5		%	40
			Fluorene	2010/10/15	5.6		%	40
			Phenanthrene	2010/10/15	4.8		%	40
			Anthracene	2010/10/15	NC (1)		%	40
			Acridine	2010/10/15	NC		%	40
			Fluoranthene	2010/10/15	NC		%	40
			Pyrene	2010/10/15	NC		%	40
			Benzo(a)anthracene	2010/10/15	NC		%	40
			Chrysene	2010/10/15	NC		%	40
			Benzo(b&j)fluoranthene	2010/10/15	NC		%	40
			Benzo(k)fluoranthene	2010/10/15	NC		%	40
			Benzo(a)pyrene	2010/10/15	NC		%	40
			Indeno(1,2,3-cd)pyrene	2010/10/15	NC		%	40
			Dibenz(a,h)anthracene	2010/10/15	NC		%	40
			Benzo(g,h,i)perylene	2010/10/15	NC		%	40
4336223	MY4	Spiked Blank	Hexabromobiphenyl (sur.)	2010/10/19		89	%	60 - 130
			Aroclor 1254	2010/10/19		93	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/10/19		84	%	60 - 130
			Aroclor 1242	2010/10/19	<0.10		ug/L	
			Aroclor 1248	2010/10/19	<0.10		ug/L	
			Aroclor 1254	2010/10/19	<0.10		ug/L	
			Aroclor 1260	2010/10/19	<0.10		ug/L	
4337133	AD5	Matrix Spike	Total Organic Carbon (C)	2010/10/14		NC	%	80 - 120
		Spiked Blank	Total Organic Carbon (C)	2010/10/14		95	%	80 - 120
		Method Blank	Total Organic Carbon (C)	2010/10/14	<0.5		mg/L	
		RPD	Total Organic Carbon (C)	2010/10/14	4.3		%	20
4337311	AD5	Matrix Spike	Dissolved Organic Carbon (C)	2010/10/14		NC	%	80 - 120
		Spiked Blank	Dissolved Organic Carbon (C)	2010/10/07		94	%	80 - 120
		Method Blank	Dissolved Organic Carbon (C)	2010/10/14	<0.5		mg/L	
		RPD [X56655-06]	Dissolved Organic Carbon (C)	2010/10/14	8.5		%	20
4338586	GS9	Matrix Spike	Total Arsenic (As)	2010/10/16		99	%	80 - 120
			Total Beryllium (Be)	2010/10/16		105	%	80 - 120
			Total Cadmium (Cd)	2010/10/16		106	%	80 - 120
			Total Chromium (Cr)	2010/10/16		103	%	80 - 120
			Total Cobalt (Co)	2010/10/16		107	%	80 - 120
			Total Copper (Cu)	2010/10/16		99	%	80 - 120
			Total Lead (Pb)	2010/10/16		104	%	80 - 120
			Total Lithium (Li)	2010/10/16		100	%	80 - 120
			Total Nickel (Ni)	2010/10/16		103	%	80 - 120

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4338586	GS9	Matrix Spike	Total Selenium (Se)	2010/10/16		102	%	80 - 120
			Total Uranium (U)	2010/10/16		104	%	80 - 120
			Total Vanadium (V)	2010/10/16		106	%	80 - 120
			Total Zinc (Zn)	2010/10/16		NC	%	80 - 120
		Spiked Blank	Total Arsenic (As)	2010/10/16		102	%	80 - 120
			Total Beryllium (Be)	2010/10/16		103	%	80 - 120
			Total Cadmium (Cd)	2010/10/16		101	%	80 - 120
			Total Chromium (Cr)	2010/10/16		106	%	80 - 120
			Total Cobalt (Co)	2010/10/16		103	%	80 - 120
			Total Copper (Cu)	2010/10/16		105	%	80 - 120
			Total Lead (Pb)	2010/10/16		103	%	80 - 120
			Total Lithium (Li)	2010/10/16		102	%	80 - 120
			Total Nickel (Ni)	2010/10/16		105	%	80 - 120
			Total Selenium (Se)	2010/10/16		104	%	80 - 120
			Total Uranium (U)	2010/10/16		100	%	80 - 120
			Total Vanadium (V)	2010/10/16		104	%	80 - 120
			Total Zinc (Zn)	2010/10/16		107	%	80 - 120
		Method Blank	Total Aluminum (Al)	2010/10/16	<3		ug/L	
			Total Antimony (Sb)	2010/10/16	<0.5		ug/L	
			Total Arsenic (As)	2010/10/16	<0.1		ug/L	
			Total Barium (Ba)	2010/10/16	<1		ug/L	
			Total Beryllium (Be)	2010/10/16	<0.1		ug/L	
			Total Bismuth (Bi)	2010/10/16	<1		ug/L	
			Total Boron (B)	2010/10/16	<50		ug/L	
			Total Cadmium (Cd)	2010/10/16	<0.01		ug/L	
			Total Chromium (Cr)	2010/10/16	<1		ug/L	
			Total Cobalt (Co)	2010/10/16	<0.5		ug/L	
			Total Copper (Cu)	2010/10/16	<0.2		ug/L	
			Total Iron (Fe)	2010/10/16	<5		ug/L	
			Total Lead (Pb)	2010/10/16	<0.2		ug/L	
			Total Lithium (Li)	2010/10/16	<5		ug/L	
			Total Manganese (Mn)	2010/10/16	<1		ug/L	
			Total Mercury (Hg)	2010/10/16	<0.02		ug/L	
			Total Molybdenum (Mo)	2010/10/16	<1		ug/L	
			Total Nickel (Ni)	2010/10/16	<1		ug/L	
			Total Selenium (Se)	2010/10/16	<0.1		ug/L	
			Total Silicon (Si)	2010/10/16	<100		ug/L	
			Total Silver (Ag)	2010/10/16	<0.02		ug/L	
			Total Strontium (Sr)	2010/10/16	<1		ug/L	
			Total Thallium (Tl)	2010/10/16	<0.05		ug/L	
			Total Tin (Sn)	2010/10/16	<5		ug/L	
			Total Titanium (Ti)	2010/10/16	<5		ug/L	
			Total Uranium (U)	2010/10/16	<0.1		ug/L	
			Total Vanadium (V)	2010/10/16	<5		ug/L	
			Total Zinc (Zn)	2010/10/16	<5		ug/L	
			Total Zirconium (Zr)	2010/10/16	<0.5		ug/L	
		RPD	Total Aluminum (Al)	2010/10/18	NC		%	20
			Total Antimony (Sb)	2010/10/18	NC		%	20
			Total Arsenic (As)	2010/10/18	NC		%	20
			Total Barium (Ba)	2010/10/18	2.8		%	20
			Total Beryllium (Be)	2010/10/18	NC		%	20
			Total Bismuth (Bi)	2010/10/18	NC		%	20
			Total Boron (B)	2010/10/18	NC		%	20
			Total Cadmium (Cd)	2010/10/18	NC		%	20
			Total Chromium (Cr)	2010/10/18	NC		%	20

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4338586	GS9	RPD	Total Cobalt (Co)	2010/10/18	NC		%	20
			Total Copper (Cu)	2010/10/18	12.3		%	20
			Total Iron (Fe)	2010/10/18	2.4		%	20
			Total Lead (Pb)	2010/10/18	NC		%	20
			Total Lithium (Li)	2010/10/18	NC		%	20
			Total Manganese (Mn)	2010/10/18	NC		%	20
			Total Mercury (Hg)	2010/10/18	NC		%	20
			Total Molybdenum (Mo)	2010/10/18	NC		%	20
			Total Nickel (Ni)	2010/10/18	NC		%	20
			Total Selenium (Se)	2010/10/18	NC		%	20
			Total Silicon (Si)	2010/10/18	1.4		%	20
			Total Silver (Ag)	2010/10/18	NC		%	20
			Total Strontium (Sr)	2010/10/18	2.3		%	20
			Total Thallium (Tl)	2010/10/18	NC		%	20
			Total Tin (Sn)	2010/10/18	NC		%	20
			Total Titanium (Ti)	2010/10/18	NC		%	20
			Total Uranium (U)	2010/10/18	NC		%	20
			Total Vanadium (V)	2010/10/18	NC		%	20
			Total Zinc (Zn)	2010/10/18	NC		%	20
			Total Zirconium (Zr)	2010/10/18	NC		%	20
4340289	TG1	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/18		96	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		95	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		100	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		98	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		91	%	60 - 130
			Naphthalene	2010/10/18		91	%	40 - 130
			2-Methylnaphthalene	2010/10/18		104	%	40 - 130
			Acenaphthylene	2010/10/18		87	%	40 - 130
			Acenaphthene	2010/10/18		95	%	40 - 130
			Fluorene	2010/10/18		96	%	40 - 130
			Phenanthrene	2010/10/18		90	%	40 - 130
			Anthracene	2010/10/18		93	%	40 - 130
			Fluoranthene	2010/10/18		NC	%	40 - 130
			Pyrene	2010/10/18		NC	%	40 - 130
			Benzo(a)anthracene	2010/10/18		80	%	40 - 130
			Chrysene	2010/10/18		82	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/18		79	%	40 - 130
			Benzo(k)fluoranthene	2010/10/18		83	%	40 - 130
			Benzo(a)pyrene	2010/10/18		83	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/18		85	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/18		82	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/18		81	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/18		116	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		112	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		92	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		95	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		118	%	60 - 130
			Naphthalene	2010/10/18		106	%	40 - 130
			2-Methylnaphthalene	2010/10/18		110	%	40 - 130
			Acenaphthylene	2010/10/18		103	%	40 - 130
			Acenaphthene	2010/10/18		110	%	40 - 130
			Fluorene	2010/10/18		107	%	40 - 130
			Phenanthrene	2010/10/18		110	%	40 - 130
			Anthracene	2010/10/18		112	%	40 - 130
			Fluoranthene	2010/10/18		109	%	40 - 130

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4340289	TG1	Spiked Blank	Pyrene	2010/10/18		112	%	40 - 130
			Benzo(a)anthracene	2010/10/18		104	%	40 - 130
			Chrysene	2010/10/18		109	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/18		98	%	40 - 130
			Benzo(k)fluoranthene	2010/10/18		115	%	40 - 130
			Benzo(a)pyrene	2010/10/18		106	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/18		99	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/18		95	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/18		95	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/18		99	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		105	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		73	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		73	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		114	%	60 - 130
			Naphthalene	2010/10/18	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/18	<0.001		mg/kg	
			Acenaphthylene	2010/10/18	<0.001		mg/kg	
			Acenaphthene	2010/10/18	<0.001		mg/kg	
			Fluorene	2010/10/18	<0.001		mg/kg	
			Phenanthrene	2010/10/18	<0.001		mg/kg	
			Anthracene	2010/10/18	<0.001		mg/kg	
			Fluoranthene	2010/10/18	<0.001		mg/kg	
			Pyrene	2010/10/18	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/18	<0.001		mg/kg	
			Chrysene	2010/10/18	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/18	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/18	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/18	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/18	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/10/18	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/18	<0.002		mg/kg	
		RPD	Naphthalene	2010/10/18	3.9		%	50
			2-Methylnaphthalene	2010/10/18	25.2		%	50
			Acenaphthylene	2010/10/18	16.1		%	50
			Acenaphthene	2010/10/18	11.5		%	50
			Fluorene	2010/10/18	12.8		%	50
			Phenanthrene	2010/10/18	20.7		%	50
			Anthracene	2010/10/18	13.1		%	50
			Fluoranthene	2010/10/18	76.9 (2)		%	50
			Pyrene	2010/10/18	74.2 (2)		%	50
			Benzo(a)anthracene	2010/10/18	75.8 (2)		%	50
			Chrysene	2010/10/18	60.5 (2)		%	50
			Benzo(b&j)fluoranthene	2010/10/18	26.7		%	50
			Benzo(k)fluoranthene	2010/10/18	44.6		%	50
			Benzo(a)pyrene	2010/10/18	20.3		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/18	5.3		%	50
			Dibenz(a,h)anthracene	2010/10/18	11.4		%	50
			Benzo(g,h,i)perylene	2010/10/18	6.8		%	50
4342588	DY	RPD [X56662-04]	200 mesh (>.075 mm)	2010/10/19	10.7		%	30
			200 mesh (<.075 mm)	2010/10/19	0.8		%	30
4343227	GS9	Matrix Spike	Dissolved Arsenic (As)	2010/10/18		108	%	80 - 120
			Dissolved Beryllium (Be)	2010/10/18		106	%	80 - 120
			Dissolved Cadmium (Cd)	2010/10/18		105	%	80 - 120
			Dissolved Chromium (Cr)	2010/10/18		107	%	80 - 120
			Dissolved Cobalt (Co)	2010/10/18		103	%	80 - 120

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4343227	GS9	Matrix Spike	Dissolved Copper (Cu)	2010/10/18		99	%	80 - 120
			Dissolved Lead (Pb)	2010/10/18		103	%	80 - 120
			Dissolved Lithium (Li)	2010/10/18		102	%	80 - 120
			Dissolved Nickel (Ni)	2010/10/18		99	%	80 - 120
			Dissolved Selenium (Se)	2010/10/18		118	%	80 - 120
			Dissolved Uranium (U)	2010/10/18		108	%	80 - 120
			Dissolved Vanadium (V)	2010/10/18		114	%	80 - 120
			Dissolved Zinc (Zn)	2010/10/18		106	%	80 - 120
		Spiked Blank	Dissolved Arsenic (As)	2010/10/18		101	%	80 - 120
			Dissolved Beryllium (Be)	2010/10/18		103	%	80 - 120
			Dissolved Cadmium (Cd)	2010/10/18		106	%	80 - 120
			Dissolved Chromium (Cr)	2010/10/18		104	%	80 - 120
			Dissolved Cobalt (Co)	2010/10/18		105	%	80 - 120
			Dissolved Copper (Cu)	2010/10/18		104	%	80 - 120
			Dissolved Lead (Pb)	2010/10/18		108	%	80 - 120
			Dissolved Lithium (Li)	2010/10/18		100	%	80 - 120
			Dissolved Nickel (Ni)	2010/10/18		104	%	80 - 120
			Dissolved Selenium (Se)	2010/10/18		114	%	80 - 120
			Dissolved Uranium (U)	2010/10/18		107	%	80 - 120
			Dissolved Vanadium (V)	2010/10/18		103	%	80 - 120
			Dissolved Zinc (Zn)	2010/10/18		106	%	80 - 120
		Method Blank	Dissolved Aluminum (Al)	2010/10/18	<3		ug/L	
			Dissolved Antimony (Sb)	2010/10/18	<0.5		ug/L	
			Dissolved Arsenic (As)	2010/10/18	<0.1		ug/L	
			Dissolved Barium (Ba)	2010/10/18	<1		ug/L	
			Dissolved Beryllium (Be)	2010/10/18	<0.1		ug/L	
			Dissolved Bismuth (Bi)	2010/10/18	<1		ug/L	
			Dissolved Boron (B)	2010/10/18	<50		ug/L	
			Dissolved Cadmium (Cd)	2010/10/18	<0.01		ug/L	
			Dissolved Chromium (Cr)	2010/10/18	<1		ug/L	
			Dissolved Cobalt (Co)	2010/10/18	<0.5		ug/L	
			Dissolved Copper (Cu)	2010/10/18	<0.2		ug/L	
			Dissolved Iron (Fe)	2010/10/18	<5		ug/L	
			Dissolved Lead (Pb)	2010/10/18	<0.2		ug/L	
			Dissolved Lithium (Li)	2010/10/18	<5		ug/L	
			Dissolved Manganese (Mn)	2010/10/18	<1		ug/L	
			Dissolved Mercury (Hg)	2010/10/18	<0.02		ug/L	
			Dissolved Molybdenum (Mo)	2010/10/18	<1		ug/L	
			Dissolved Nickel (Ni)	2010/10/18	<1		ug/L	
			Dissolved Selenium (Se)	2010/10/18	<0.1		ug/L	
			Dissolved Silicon (Si)	2010/10/18	<100		ug/L	
			Dissolved Silver (Ag)	2010/10/18	<0.02		ug/L	
			Dissolved Strontium (Sr)	2010/10/18	<1		ug/L	
			Dissolved Thallium (Tl)	2010/10/18	<0.05		ug/L	
			Dissolved Tin (Sn)	2010/10/18	<5		ug/L	
			Dissolved Titanium (Ti)	2010/10/18	<5		ug/L	
			Dissolved Uranium (U)	2010/10/18	<0.1		ug/L	
			Dissolved Vanadium (V)	2010/10/18	<5		ug/L	
			Dissolved Zinc (Zn)	2010/10/18	<5		ug/L	
			Dissolved Zirconium (Zr)	2010/10/18	<0.5		ug/L	
		RPD	Dissolved Aluminum (Al)	2010/10/18	NC		%	20
			Dissolved Antimony (Sb)	2010/10/18	NC		%	20
			Dissolved Arsenic (As)	2010/10/18	1.0		%	20
			Dissolved Barium (Ba)	2010/10/18	0.6		%	20
			Dissolved Beryllium (Be)	2010/10/18	NC		%	20

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4343227	GS9	RPD	Dissolved Bismuth (Bi)	2010/10/18	NC		%	20
			Dissolved Boron (B)	2010/10/18	NC		%	20
			Dissolved Cadmium (Cd)	2010/10/18	NC		%	20
			Dissolved Chromium (Cr)	2010/10/18	NC		%	20
			Dissolved Cobalt (Co)	2010/10/18	NC		%	20
			Dissolved Copper (Cu)	2010/10/18	NC		%	20
			Dissolved Iron (Fe)	2010/10/18	0.9		%	20
			Dissolved Lead (Pb)	2010/10/18	NC		%	20
			Dissolved Lithium (Li)	2010/10/18	NC		%	20
			Dissolved Manganese (Mn)	2010/10/18	1.4		%	20
			Dissolved Molybdenum (Mo)	2010/10/18	NC		%	20
			Dissolved Nickel (Ni)	2010/10/18	NC		%	20
			Dissolved Selenium (Se)	2010/10/18	NC		%	20
			Dissolved Silicon (Si)	2010/10/18	0.7		%	20
			Dissolved Silver (Ag)	2010/10/18	NC		%	20
			Dissolved Strontium (Sr)	2010/10/18	0.09		%	20
			Dissolved Thallium (Tl)	2010/10/18	NC		%	20
			Dissolved Tin (Sn)	2010/10/18	NC		%	20
			Dissolved Titanium (Ti)	2010/10/18	NC		%	20
			Dissolved Uranium (U)	2010/10/18	NC		%	20
			Dissolved Vanadium (V)	2010/10/18	NC		%	20
			Dissolved Zinc (Zn)	2010/10/18	NC		%	20
			Dissolved Zirconium (Zr)	2010/10/18	NC		%	20
4343421	RW4	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/18		100	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		101	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		74	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		72	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		101	%	60 - 130
			Naphthalene	2010/10/18		91	%	40 - 130
			2-Methylnaphthalene	2010/10/18		95	%	40 - 130
			Acenaphthylene	2010/10/18		92	%	40 - 130
			Acenaphthene	2010/10/18		95	%	40 - 130
			Fluorene	2010/10/18		97	%	40 - 130
			Phenanthrene	2010/10/18		93	%	40 - 130
			Anthracene	2010/10/18		96	%	40 - 130
			Fluoranthene	2010/10/18		95	%	40 - 130
			Pyrene	2010/10/18		99	%	40 - 130
			Benzo(a)anthracene	2010/10/18		90	%	40 - 130
			Chrysene	2010/10/18		91	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/18		94	%	40 - 130
			Benzo(k)fluoranthene	2010/10/18		87	%	40 - 130
			Benzo(a)pyrene	2010/10/18		90	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/18		104	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/18		93	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/18		96	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/18		104	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		100	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		88	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		84	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		107	%	60 - 130
			Naphthalene	2010/10/18		81	%	40 - 130
			2-Methylnaphthalene	2010/10/18		82	%	40 - 130
			Acenaphthylene	2010/10/18		83	%	40 - 130
			Acenaphthene	2010/10/18		86	%	40 - 130
			Fluorene	2010/10/18		87	%	40 - 130

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4343421	RW4	Spiked Blank	Phenanthrene	2010/10/18		91	%	40 - 130
			Anthracene	2010/10/18		89	%	40 - 130
			Fluoranthene	2010/10/18		92	%	40 - 130
			Pyrene	2010/10/18		95	%	40 - 130
			Benzo(a)anthracene	2010/10/18		85	%	40 - 130
			Chrysene	2010/10/18		90	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/18		86	%	40 - 130
			Benzo(k)fluoranthene	2010/10/18		83	%	40 - 130
			Benzo(a)pyrene	2010/10/18		86	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/18		91	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/18		83	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/18		86	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/18		99	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		90	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		95	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		94	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		98	%	60 - 130
			Naphthalene	2010/10/18	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/18	<0.001		mg/kg	
			Acenaphthylene	2010/10/18	<0.001		mg/kg	
			Acenaphthene	2010/10/18	<0.001		mg/kg	
			Fluorene	2010/10/18	<0.001		mg/kg	
			Phenanthrene	2010/10/18	<0.001		mg/kg	
			Anthracene	2010/10/18	<0.001		mg/kg	
			Fluoranthene	2010/10/18	<0.001		mg/kg	
			Pyrene	2010/10/18	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/18	<0.001		mg/kg	
			Chrysene	2010/10/18	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/18	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/18	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/18	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/18	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/10/18	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/18	<0.002		mg/kg	
		RPD	Naphthalene	2010/10/18	NC		%	50
			2-Methylnaphthalene	2010/10/18	NC		%	50
			Acenaphthylene	2010/10/18	NC		%	50
			Acenaphthene	2010/10/18	NC		%	50
			Fluorene	2010/10/18	NC		%	50
			Phenanthrene	2010/10/18	NC		%	50
			Anthracene	2010/10/18	NC		%	50
			Fluoranthene	2010/10/18	NC		%	50
			Pyrene	2010/10/18	NC		%	50
			Benzo(a)anthracene	2010/10/18	NC		%	50
			Chrysene	2010/10/18	NC		%	50
			Benzo(b&j)fluoranthene	2010/10/18	NC		%	50
			Benzo(k)fluoranthene	2010/10/18	NC		%	50
			Benzo(a)pyrene	2010/10/18	NC		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/18	NC		%	50
			Dibenz(a,h)anthracene	2010/10/18	NC		%	50
			Benzo(g,h,i)perylene	2010/10/18	NC		%	50
4343710	SMB	QC Standard	Organic Matter	2010/10/18		104	%	83 - 118
			Total Organic Carbon (C)	2010/10/18		104	%	83 - 118
		RPD [X56656-03]	Organic Matter	2010/10/18	3.9		%	35
			Total Organic Carbon (C)	2010/10/18	4.0		%	35

AECOM
Attention: Kris Plantz
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097221

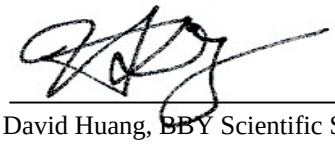
N/A = Not Applicable
Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
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.
(1) RDL raised due to sample matrix interference.
(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

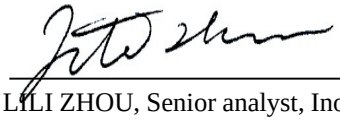
Validation Signature Page

Maxxam Job #: B097221

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



David Huang, BBY Scientific Specialist



LILI ZHOU, Senior analyst, Inorganic department.

==========

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 Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam

4606 Canada Way, Burnaby, BC Canada V5G 1K5 Ph: 604 734 7276 Toll Free: 1 800 665 8566 Fax: 604 731 2386

CHAIN OF CUSTODY RECORD

Page: 1 of 1

08323667

Maxxam Job#: B097221

Invoice To: Require Report? Yes [X] No [X]

Company Name: AECOM
Contact Name: Shawna Kjartanson
Address: 99 Commerce Drive
Winnipeg, MB PC: R2J 1S9
Phone / Fax#: Ph: 928-8456 Fax: 284-2040
E-mail: shawna.kjartanson@aecom.com

Report To:

Company Name:
Contact Name:
Address:
PC:
Phone / Fax#: Ph: Fax:
E-mail

PO #:
Quotation #:
Project #: 60164142
Proj. Name:
Location: WINNIPEG
Sampled By: SK, PA

REGULATORY REQUIREMENTS SERVICE REQUESTED:

- [ ] CSR
- [ ] CCME
- [ ] BC Water Quality
- [ ] Other
- [ ] DRINKING WATER

- [X] Regular Turn Around Time (TAT) (5 days for most tests)
- [ ] RUSH (Please contact the lab)
- [ ] 1 Day [ ] 2 Day [ ] 3 Day

Date Required:

Special Instructions:

Return Cooler [ ] Ship Sample Bottles (please specify) [ ]

Sediment in 1x125mL + 1x250mL

ANALYSIS REQUESTED

#	Sample Identification	Lab Identification	Sample Type	Date/Time Sampled	BTEX/VPH	VOC/VPH	EPH	PAH	CCME-PHC (Fractions 1-4 Plus BTEX)	CCME-PHC (Fractions 2-4)	CCME BTEX (Fraction 1 Plus BTEX)	PCB	Phenols by 4AAP	TOG	Dissolved Metals	Metals	Totals Metals Fluid Acidified?	Nitrate	Chloride	Total Suspended Solids-TSS	pH	BOD	COD	Coliform, Total & E coli	Asbestos	DOC	hardness	Particle Size	Organic Carbon	TOC		HOLD
1	OC10-7		water	6OCT10				X				X			X	X	X									X	X			X		
2	OC10-7A (0-5)		sediment	"				X				X					X											X	X			
3	OC10-7B (0-5)		"	"				X				X					X											X	X			
4	OC10-7C (0-5D)		"	"				X				X					X											X	X			
5	OC10-6		water	"				X				■			X	X	X									X	X			X		
6	OC10-6A (0-5)		sediment	"				X				X					X											X	X			
7	OC10-6C (0-5)		"	"				X				X					X											X	X			
8	OC10-4A (0-5)		"	"				X				X					X											X	X			
9	OC10-4C (0-5)		"	"				X				X					X											X	X			
10	OC10-4		water	"				X				■			X	X	X									X	X			X		
11																																
12																																

Samples are from a Drinking Water Source serving multiple households [ ] YES

Relinquished by:	Date (YY/MM/DD):	Time:	Received by:	Date (YY/MM/DD):	Time:
[signature]	6OCT10	1450	Victor Bel	Oct 6/10	4:50
			ANGI XIONG	10/10/08	11:55

Time Sensitive [ ]

Laboratory Use Only

Temperature on Receipt (°C): 15.6 13.8 15.8

Custody Seal Intact on Cooler? Yes [ ] 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.

White: Maxxam Yellow: Client

COC-1030 (03/10)

Maxxam International Corporation o/a Maxxam Analytics

Fresh from Field

8911 CS N/A

Your Project #: 601604142
Site: WINNIPEG
Your C.O.C. #: 08323689

AECOM
NEW Building
99 Commerce Drive
Winnipeg, MB
CANADA R3P 0Y7

Report Date: 2010/10/21

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B097863
Received: 2010/10/09, 10:30

Sample Matrix: Soil
Samples Received: 8

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Elements by ICPMS (total)	8	2010/10/14	2010/10/16	BRN SOP-00203 R5.0	Based on EPA 200.8
Particulate Mesh 200	8	N/A	2010/10/20	NA	NA
Moisture	8	N/A	2010/10/16	BRN SOP-00321 R5.0	Ont MOE -E 3139
PAH in Soil by GC/MS Lowlevel (Extended)	4	2010/10/15	2010/10/18	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	3	2010/10/15	2010/10/19	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	1	2010/10/18	2010/10/19	BRN SOP-00332 R5.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc	7	N/A	2010/10/19		PAHTOT-S
Total LMW, HMW, Total PAH Calc	1	N/A	2010/10/20		PAHTOT-S
Polychlorinated Biphenyls in Soil	4	N/A	2010/10/18	60-C-025-09	EPA 608/8080
Polychlorinated Biphenyls in Soil	4	N/A	2010/10/20	60-C-025-09	EPA 608/8080
pH (2:1 DI Water Extract)	2	2010/10/14	2010/10/14	BRN SOP-00266 R6.0	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	6	2010/10/14	2010/10/15	BRN SOP-00266 R6.0	Carter, SSMA 16.2
Organic Carbon and Organic Matter	8	2010/10/18	2010/10/18	CAL SOP-00035	MMFSPA Ch6

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbon (DOC)	2	N/A	2010/10/15	BRN SOP-00224 R4.0	Based on M 860-87T
Hardness Total (calculated as CaCO3)	2	N/A	2010/10/19		
Hardness (calculated as CaCO3)	2	N/A	2010/10/19		
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	2	N/A	2010/10/19	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (dissolved)	2	N/A	2010/10/19	BRN SOP-00206	Based on EPA 200.8
Na, K, Ca, Mg, S by CRC ICPMS (total)	2	2010/10/12	2010/10/19	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (total)	2	2010/10/15	2010/10/19	BRN SOP-00206	Based on EPA 200.8
PAH in Water by GC/MS (SIM)	2	2010/10/14	2010/10/17	BRN SOP-00331 R11.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc	2	N/A	2010/10/19		
Polychlorinated Biphenyls in Water	2	2010/10/14	2010/10/19	60-C-044-05	EPA 608/8080
Filter and HNO3 Preserve for Metals	2	N/A	2010/10/12	BRN WI-00006 R1.0	Based on EPA 200.2
Carbon (Total Organic)	2	N/A	2010/10/15	BRN SOP-00224 R4.0	Based on SM-5310C

(1) This test was performed by Maxxam Vancouver
(2) This test was performed by Maxxam Calgary

Encryption Key

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

CYNDY WILKINSON, B.Sc, Burnaby Customer Service
Email: CWilkinson@maxxam.ca
Phone# (604) 639-2605

==========

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 #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		X61038	X61040	X61041	X61042	X61043	X61044		
Sampling Date		2010/10/08	2010/10/08	2010/10/08	2010/10/08	2010/10/08	2010/10/08		
COC Number		08323689	08323689	08323689	08323689	08323689	08323689		
	Units	**OC10-1A**	**OC10-10A**	**OC10-1C**	**OC10-10C**	**OC10-1B (0-5)**	**OC10-10B (0-5)**	**RDL**	**QC Batch**
Misc. Inorganics									
Organic Matter	%	9.5	9.3	2.3	2.2	3.8	3.1	0.2	4343710
Total Organic Carbon (C)	%	5.5	5.4	1.3	1.3	2.2	1.8	0.2	4343710
Physical Properties									
200 mesh (>.075 mm)	%	17.8	14.8	27.9	22.2	42.8	44.9	0.1	4351353
200 mesh (<.075 mm)	%	82.2	85.2	72.1	77.8	57.2	55.1	0.1	4351353

RDL = Reportable Detection Limit

Maxxam ID		X61045	X61047		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-1B(30-35)**	**OC10-2B (30-35)**	**RDL**	**QC Batch**
Misc. Inorganics					
Organic Matter	%	2.4	1.5	0.2	4343710
Total Organic Carbon (C)	%	1.4	0.9	0.2	4343710
Physical Properties					
200 mesh (>.075 mm)	%	31.7	6.7	0.1	4351353
200 mesh (<.075 mm)	%	68.3	93.3	0.1	4351353

RDL = Reportable Detection Limit

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

POLYCHLORINATED BIPHENYLS BY GC-ECD (SOIL)

Maxxam ID		X61038	X61040	X61041	X61042		X61043		
Sampling Date		2010/10/08	2010/10/08	2010/10/08	2010/10/08		2010/10/08		
COC Number		08323689	08323689	08323689	08323689		08323689		
	Units	**OC10-1A**	**OC10-10A**	**OC10-1C**	**OC10-10C**	**QC Batch**	**OC10-1B (0-5)**	**RDL**	**QC Batch**
Polychlorinated Biphenyls									
Aroclor 1242	mg/kg	<0.03	<0.03	<0.03	<0.03	4336150	<0.03	0.03	4349386
Aroclor 1248	mg/kg	<0.03	<0.03	<0.03	<0.03	4336150	<0.03	0.03	4349386
Aroclor 1254	mg/kg	<0.03	<0.03	<0.03	<0.03	4336150	<0.03	0.03	4349386
Aroclor 1260	mg/kg	<0.03	<0.03	<0.03	<0.03	4336150	<0.03	0.03	4349386
Total PCB	mg/kg	<0.03	<0.03	<0.03	<0.03	4336150	<0.03	0.03	4349386
Surrogate Recovery (%)									
Hexabromobiphenyl (sur.)	%	64	84	68	79	4336150	92	N/A	4349386

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X61044	X61045	X61047		
Sampling Date		2010/10/08	2010/10/08	2010/10/08		
COC Number		08323689	08323689	08323689		
	Units	**OC10-10B (0-5)**	**OC10-1B(30-35)**	**OC10-2B (30-35)**	**RDL**	**QC Batch**
Polychlorinated Biphenyls						
Aroclor 1242	mg/kg	<0.03	<0.03	<0.03	0.03	4349386
Aroclor 1248	mg/kg	<0.03	<0.03	<0.03	0.03	4349386
Aroclor 1254	mg/kg	<0.03	<0.03	<0.03	0.03	4349386
Aroclor 1260	mg/kg	<0.03	<0.03	<0.03	0.03	4349386
Total PCB	mg/kg	<0.03	<0.03	<0.03	0.03	4349386
Surrogate Recovery (%)						
Hexabromobiphenyl (sur.)	%	68	78	74	N/A	4349386

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

PHYSICAL TESTING (SOIL)

Maxxam ID		X61038	X61040	X61041	X61042	X61043	X61044		
Sampling Date		2010/10/08	2010/10/08	2010/10/08	2010/10/08	2010/10/08	2010/10/08		
COC Number		08323689	08323689	08323689	08323689	08323689	08323689		
	Units	**OC10-1A**	**OC10-10A**	**OC10-1C**	**OC10-10C**	**OC10-1B (0-5)**	**OC10-10B (0-5)**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	63	66	66	30	53	43	0.3	4339783

RDL = Reportable Detection Limit

Maxxam ID		X61045	X61047		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-1B(30-35)**	**OC10-2B (30-35)**	**RDL**	**QC Batch**
Physical Properties					
Moisture	%	31	25	0.3	4339783

RDL = Reportable Detection Limit

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		X61037	X61039		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-10**	**OC10-1**	**RDL**	**QC Batch**
Calculated Parameters					
Filter and HNO3 Preservation	N/A	FIELD	FIELD	N/A	ONSITE
Misc. Inorganics					
Dissolved Organic Carbon (C)	mg/L	14.2	14.0	0.5	4339784
Total Organic Carbon (C)	mg/L	14.8	14.7	0.5	4339772

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

Maxxam ID		X61037	X61039		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-10**	**OC10-1**	**RDL**	**QC Batch**
Polychlorinated Biphenyls					
Aroclor 1242	ug/L	<0.10	<0.10	0.10	4336223
Aroclor 1248	ug/L	<0.10	<0.10	0.10	4336223
Aroclor 1254	ug/L	<0.10	<0.10	0.10	4336223
Aroclor 1260	ug/L	<0.10	<0.10	0.10	4336223
Surrogate Recovery (%)					
Hexabromobiphenyl (sur.)	%	90	87	N/A	4336223

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61038		X61040		X61041	X61042		
Sampling Date		2010/10/08		2010/10/08		2010/10/08	2010/10/08		
COC Number		08323689		08323689		08323689	08323689		
	Units	**OC10-1A**	**QC Batch**	**OC10-10A**	**QC Batch**	**OC10-1C**	**OC10-10C**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	7.83	4336265	8.31	4336278	8.43	8.26	0.01	4336265
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18600	4336252	18600	4336274	13000	11800	100	4336252
Total Antimony (Sb)	mg/kg	1.1	4336252	1.3	4336274	1.9	2.3	0.1	4336252
Total Arsenic (As)	mg/kg	6.7	4336252	6.9	4336274	7.5	13.7	0.2	4336252
Total Barium (Ba)	mg/kg	134	4336252	148	4336274	129	130	0.1	4336252
Total Beryllium (Be)	mg/kg	0.8	4336252	0.9	4336274	0.6	0.6	0.1	4336252
Total Bismuth (Bi)	mg/kg	0.2	4336252	0.2	4336274	0.1	0.1	0.1	4336252
Total Cadmium (Cd)	mg/kg	0.73	4336252	0.73	4336274	0.35	0.38	0.05	4336252
Total Calcium (Ca)	mg/kg	33400	4336252	34300	4336274	60600	60100	100	4336252
Total Chromium (Cr)	mg/kg	38	4336252	41	4336274	34	74	1	4336252
Total Cobalt (Co)	mg/kg	11.4	4336252	11.3	4336274	10.2	16.1	0.3	4336252
Total Copper (Cu)	mg/kg	42.9	4336252	42.9	4336274	45.0	80.2	0.5	4336252
Total Iron (Fe)	mg/kg	25700	4336252	25300	4336274	40000	75400	100	4336252
Total Lead (Pb)	mg/kg	94.3	4336252	102	4336274	137	156	0.1	4336252
Total Lithium (Li)	mg/kg	21	4336252	23	4336274	17	15	5	4336252
Total Magnesium (Mg)	mg/kg	23300	4336252	23200	4336274	32800	32400	100	4336252
Total Manganese (Mn)	mg/kg	247	4336252	230	4336274	451	638	0.2	4336252
Total Mercury (Hg)	mg/kg	0.07	4336252	0.08	4336274	0.10	0.10	0.05	4336252
Total Molybdenum (Mo)	mg/kg	1.2	4336252	1.3	4336274	2.0	5.1	0.1	4336252
Total Nickel (Ni)	mg/kg	32.8	4336252	33.6	4336274	34.4	48.6	0.8	4336252
Total Phosphorus (P)	mg/kg	866	4336252	862	4336274	586	636	10	4336252
Total Potassium (K)	mg/kg	3790	4336252	3900	4336274	2660	2420	100	4336252
Total Selenium (Se)	mg/kg	1.0	4336252	1.0	4336274	<0.5	0.5	0.5	4336252
Total Silver (Ag)	mg/kg	0.16	4336252	0.12	4336274	0.10	0.11	0.05	4336252
Total Sodium (Na)	mg/kg	620	4336252	642	4336274	307	298	100	4336252
Total Strontium (Sr)	mg/kg	53.6	4336252	54.5	4336274	58.6	60.1	0.1	4336252
Total Thallium (Tl)	mg/kg	0.24	4336252	0.25	4336274	0.17	0.17	0.05	4336252
Total Tin (Sn)	mg/kg	2.8	4336252	4.2	4336274	3.9	7.4	0.1	4336252
Total Titanium (Ti)	mg/kg	168	4336252	174	4336274	194	177	1	4336252
Total Uranium (U)	mg/kg	3.66	4336252	3.83	4336274	1.35	1.56	0.05	4336252
Total Vanadium (V)	mg/kg	59	4336252	60	4336274	43	42	2	4336252
Total Zinc (Zn)	mg/kg	266	4336252	274	4336274	145	205	1	4336252

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61038		X61040		X61041	X61042		
Sampling Date		2010/10/08		2010/10/08		2010/10/08	2010/10/08		
COC Number		08323689		08323689		08323689	08323689		
	Units	**OC10-1A**	**QC Batch**	**OC10-10A**	**QC Batch**	**OC10-1C**	**OC10-10C**	**RDL**	**QC Batch**
Total Zirconium (Zr)	mg/kg	7.4	4336252	8.0	4336274	6.2	4.9	0.5	4336252

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61043	X61044		X61045		X61047		
Sampling Date		2010/10/08	2010/10/08		2010/10/08		2010/10/08		
COC Number		08323689	08323689		08323689		08323689		
	Units	**OC10-1B (0-5)**	**OC10-10B (0-5)**	**QC Batch**	**OC10-1B(30-35)**	**QC Batch**	**OC10-2B (30-35)**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.10	8.04	4336265	8.24	4336278	8.43	0.01	4336265
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	13700	12200	4336252	14200	4336274	18900	100	4336252
Total Antimony (Sb)	mg/kg	2.9	0.7	4336252	0.7	4336274	0.6	0.1	4336252
Total Arsenic (As)	mg/kg	4.8	4.4	4336252	4.9	4336274	6.7	0.2	4336252
Total Barium (Ba)	mg/kg	118	105	4336252	152	4336274	191	0.1	4336252
Total Beryllium (Be)	mg/kg	0.6	0.6	4336252	0.6	4336274	0.8	0.1	4336252
Total Bismuth (Bi)	mg/kg	0.1	0.1	4336252	0.2	4336274	0.2	0.1	4336252
Total Cadmium (Cd)	mg/kg	0.57	0.48	4336252	0.39	4336274	0.31	0.05	4336252
Total Calcium (Ca)	mg/kg	59000	61900	4336252	57800	4336274	62200	100	4336252
Total Chromium (Cr)	mg/kg	29	29	4336252	30	4336274	41	1	4336252
Total Cobalt (Co)	mg/kg	10.0	8.9	4336252	11.1	4336274	13.1	0.3	4336252
Total Copper (Cu)	mg/kg	49.0	31.7	4336252	43.3	4336274	31.3	0.5	4336252
Total Iron (Fe)	mg/kg	20500	18400	4336252	25500	4336274	27500	100	4336252
Total Lead (Pb)	mg/kg	76.6	69.8	4336252	74.0	4336274	40.7	0.1	4336252
Total Lithium (Li)	mg/kg	16	15	4336252	19	4336274	29	5	4336252
Total Magnesium (Mg)	mg/kg	28000	29100	4336252	27200	4336274	39400	100	4336252
Total Manganese (Mn)	mg/kg	269	254	4336252	385	4336274	433	0.2	4336252
Total Mercury (Hg)	mg/kg	<0.05	<0.05	4336252	0.05	4336274	<0.05	0.05	4336252
Total Molybdenum (Mo)	mg/kg	1.3	0.8	4336252	0.8	4336274	0.9	0.1	4336252
Total Nickel (Ni)	mg/kg	26.1	24.6	4336252	30.3	4336274	38.5	0.8	4336252
Total Phosphorus (P)	mg/kg	549	514	4336252	562	4336274	632	10	4336252
Total Potassium (K)	mg/kg	3010	2670	4336252	3120	4336274	4120	100	4336252
Total Selenium (Se)	mg/kg	<0.5	0.7	4336252	<0.5	4336274	<0.5	0.5	4336252
Total Silver (Ag)	mg/kg	0.09	0.09	4336252	0.08	4336274	0.11	0.05	4336252
Total Sodium (Na)	mg/kg	399	338	4336252	525	4336274	613	100	4336252
Total Strontium (Sr)	mg/kg	67.5	62.5	4336252	64.8	4336274	69.8	0.1	4336252
Total Thallium (Tl)	mg/kg	0.20	0.17	4336252	0.21	4336274	0.28	0.05	4336252
Total Tin (Sn)	mg/kg	5.1	3.2	4336252	4.9	4336274	1.5	0.1	4336252
Total Titanium (Ti)	mg/kg	200	186	4336252	226	4336274	345	1	4336252
Total Uranium (U)	mg/kg	2.07	1.88	4336252	1.39	4336274	1.97	0.05	4336252
Total Vanadium (V)	mg/kg	42	38	4336252	44	4336274	58	2	4336252

RDL = Reportable Detection Limit

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61043	X61044		X61045		X61047		
Sampling Date		2010/10/08	2010/10/08		2010/10/08		2010/10/08		
COC Number		08323689	08323689		08323689		08323689		
	Units	**OC10-1B (0-5)**	**OC10-10B (0-5)**	**QC Batch**	**OC10-1B(30-35)**	**QC Batch**	**OC10-2B (30-35)**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	152	148	4336252	143	4336274	147	1	4336252
Total Zirconium (Zr)	mg/kg	6.5	5.1	4336252	7.5	4336274	11.8	0.5	4336252

RDL = Reportable Detection Limit

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CSR DISSOLVED METALS IN WATER (WATER)

Maxxam ID		X61037	X61039		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-10**	**OC10-1**	**RDL**	**QC Batch**
Misc. Inorganics					
Dissolved Hardness (CaCO3)	mg/L	454	464	0.5	4331896
Dissolved Metals by ICPMS					
Dissolved Aluminum (Al)	ug/L	33	22	3	4343279
Dissolved Antimony (Sb)	ug/L	<0.5	<0.5	0.5	4343279
Dissolved Arsenic (As)	ug/L	3.0	3.0	0.1	4343279
Dissolved Barium (Ba)	ug/L	66	65	1	4343279
Dissolved Beryllium (Be)	ug/L	<0.1	<0.1	0.1	4343279
Dissolved Bismuth (Bi)	ug/L	<1	<1	1	4343279
Dissolved Boron (B)	ug/L	90	91	50	4343279
Dissolved Cadmium (Cd)	ug/L	0.02	0.03	0.01	4343279
Dissolved Chromium (Cr)	ug/L	<1	<1	1	4343279
Dissolved Cobalt (Co)	ug/L	<0.5	<0.5	0.5	4343279
Dissolved Copper (Cu)	ug/L	1.4	1.3	0.2	4343279
Dissolved Iron (Fe)	ug/L	74	58	5	4343279
Dissolved Lead (Pb)	ug/L	0.3	0.2	0.2	4343279
Dissolved Lithium (Li)	ug/L	74	74	5	4343279
Dissolved Manganese (Mn)	ug/L	21	21	1	4343279
Dissolved Mercury (Hg)	ug/L	<0.02	<0.02	0.02	4343279
Dissolved Molybdenum (Mo)	ug/L	1	1	1	4343279
Dissolved Nickel (Ni)	ug/L	4	3	1	4343279
Dissolved Selenium (Se)	ug/L	1.6	1.6	0.1	4343279
Dissolved Silicon (Si)	ug/L	2310	2340	100	4343279
Dissolved Silver (Ag)	ug/L	<0.02	<0.02	0.02	4343279
Dissolved Strontium (Sr)	ug/L	441	436	1	4343279
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	0.05	4343279
Dissolved Tin (Sn)	ug/L	<5	<5	5	4343279
Dissolved Titanium (Ti)	ug/L	<5	<5	5	4343279
Dissolved Uranium (U)	ug/L	8.9	8.7	0.1	4343279
Dissolved Vanadium (V)	ug/L	6	6	5	4343279
Dissolved Zinc (Zn)	ug/L	5	<5	5	4343279
Dissolved Zirconium (Zr)	ug/L	<0.5	<0.5	0.5	4343279
Dissolved Calcium (Ca)	mg/L	76.6	77.4	0.05	4328633
Dissolved Magnesium (Mg)	mg/L	63.9	65.7	0.05	4328633

RDL = Reportable Detection Limit

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CSR DISSOLVED METALS IN WATER (WATER)

Maxxam ID		X61037	X61039		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-10**	**OC10-1**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	12.1	12.2	0.05	4328633
Dissolved Sodium (Na)	mg/L	64.9	66.8	0.05	4328633
Dissolved Sulphur (S)	mg/L	70	70	3	4328633

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CSR TOTAL METALS IN WATER (WATER)

Maxxam ID		X61037	X61039		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-10**	**OC10-1**	**RDL**	**QC Batch**
Calculated Parameters					
Total Hardness (CaCO3)	mg/L	478	486	0.5	4329303
Total Metals by ICPMS					
Total Aluminum (Al)	ug/L	605	694	3	4341927
Total Antimony (Sb)	ug/L	<0.5	<0.5	0.5	4341927
Total Arsenic (As)	ug/L	2.9	3.0	0.1	4341927
Total Barium (Ba)	ug/L	75	78	1	4341927
Total Beryllium (Be)	ug/L	<0.1	<0.1	0.1	4341927
Total Bismuth (Bi)	ug/L	<1	<1	1	4341927
Total Boron (B)	ug/L	95	101	50	4341927
Total Cadmium (Cd)	ug/L	0.12	0.04	0.01	4341927
Total Chromium (Cr)	ug/L	1	1	1	4341927
Total Cobalt (Co)	ug/L	<0.5	0.5	0.5	4341927
Total Copper (Cu)	ug/L	2.8	2.7	0.2	4341927
Total Iron (Fe)	ug/L	695	766	5	4341927
Total Lead (Pb)	ug/L	2.6	2.8	0.2	4341927
Total Lithium (Li)	ug/L	76	80	5	4341927
Total Manganese (Mn)	ug/L	35	35	1	4341927
Total Mercury (Hg)	ug/L	<0.02	<0.02	0.02	4341927
Total Molybdenum (Mo)	ug/L	1	1	1	4341927
Total Nickel (Ni)	ug/L	5	5	1	4341927
Total Selenium (Se)	ug/L	1.7	1.7	0.1	4341927
Total Silicon (Si)	ug/L	3530	3650	100	4341927
Total Silver (Ag)	ug/L	<0.02	<0.02	0.02	4341927
Total Strontium (Sr)	ug/L	452	480	1	4341927
Total Thallium (Tl)	ug/L	<0.05	<0.05	0.05	4341927
Total Tin (Sn)	ug/L	<5	<5	5	4341927
Total Titanium (Ti)	ug/L	20	21	5	4341927
Total Uranium (U)	ug/L	8.8	9.1	0.1	4341927
Total Vanadium (V)	ug/L	7	8	5	4341927
Total Zinc (Zn)	ug/L	15	16	5	4341927
Total Zirconium (Zr)	ug/L	0.9	0.8	0.5	4341927
Total Calcium (Ca)	mg/L	76.2	77.2	0.05	4329304
Total Magnesium (Mg)	mg/L	69.8	71.2	0.05	4329304

RDL = Reportable Detection Limit

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CSR TOTAL METALS IN WATER (WATER)

Maxxam ID		X61037	X61039		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-10**	**OC10-1**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	12.9	13.3	0.05	4329304
Total Sodium (Na)	mg/L	72.7	73.7	0.05	4329304
Total Sulphur (S)	mg/L	70	77	3	4329304

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

PAH IN WATER BY GC-MS (WATER)

Maxxam ID		X61037	X61039		
Sampling Date		2010/10/08	2010/10/08		
COC Number		08323689	08323689		
	Units	**OC10-10**	**OC10-1**	**RDL**	**QC Batch**
Polycyclic Aromatics					
Low Molecular Weight PAH`s	ug/L	<0.05	<0.05	0.05	4329305
High Molecular Weight PAH`s	ug/L	<0.02	<0.02	0.02	4329305
Total PAH	ug/L	<0.05	<0.05	0.05	4329305
Naphthalene	ug/L	<0.05	<0.05	0.05	4338116
2-Methylnaphthalene	ug/L	<0.05	<0.05	0.05	4338116
Quinoline	ug/L	<0.05	<0.05	0.05	4338116
Acenaphthylene	ug/L	<0.01	<0.01	0.01	4338116
Acenaphthene	ug/L	<0.01	<0.01	0.01	4338116
Fluorene	ug/L	<0.01	<0.01	0.01	4338116
Phenanthrene	ug/L	<0.01	<0.01	0.01	4338116
Anthracene	ug/L	<0.01	<0.01	0.01	4338116
Acridine	ug/L	<0.05	<0.05	0.05	4338116
Fluoranthene	ug/L	<0.01	<0.01	0.01	4338116
Pyrene	ug/L	<0.01	<0.01	0.01	4338116
Benzo(a)anthracene	ug/L	<0.01	<0.01	0.01	4338116
Chrysene	ug/L	<0.01	<0.01	0.01	4338116
Benzo(b&j)fluoranthene	ug/L	<0.01	<0.01	0.01	4338116
Benzo(k)fluoranthene	ug/L	<0.01	<0.01	0.01	4338116
Benzo(a)pyrene	ug/L	<0.01	<0.01	0.01	4338116
Indeno(1,2,3-cd)pyrene	ug/L	<0.02	<0.02	0.02	4338116
Dibenz(a,h)anthracene	ug/L	<0.02	<0.02	0.02	4338116
Benzo(g,h,i)perylene	ug/L	<0.02	<0.02	0.02	4338116
Surrogate Recovery (%)					
D10-ANTHRACENE (sur.)	%	100	90	N/A	4338116
D12-BENZO(A)PYRENE (sur.)	%	85	78	N/A	4338116
D8-ACENAPHTHYLENE (sur.)	%	96	86	N/A	4338116
D8-NAPHTHALENE (sur.)	%	86	75	N/A	4338116
TERPHENYL-D14 (sur.)	%	95	88	N/A	4338116

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X61038	X61040		X61041		X61042		
Sampling Date		2010/10/08	2010/10/08		2010/10/08		2010/10/08		
COC Number		08323689	08323689		08323689		08323689		
	Units	**OC10-1A**	**OC10-10A**	**QC Batch**	**OC10-1C**	**QC Batch**	**OC10-10C**	**RDL**	**QC Batch**
Polycyclic Aromatics									
Naphthalene	mg/kg	0.04 (1)	0.06 (1)	4344503	0.09 (1)	4348523	0.05 (1)	0.01	4344503
2-Methylnaphthalene	mg/kg	0.03 (1)	0.05 (1)	4344503	0.13 (1)	4348523	0.08 (1)	0.01	4344503
Acenaphthylene	mg/kg	0.05 (1)	0.05 (1)	4344503	0.02 (1)	4348523	<0.01 (1)	0.01	4344503
Acenaphthene	mg/kg	0.02 (1)	0.12 (1)	4344503	0.04 (1)	4348523	0.01 (1)	0.01	4344503
Fluorene	mg/kg	0.03 (1)	0.16 (1)	4344503	0.05 (1)	4348523	0.02 (1)	0.01	4344503
Phenanthrene	mg/kg	0.20 (1)	1.4 (1)	4344503	0.47 (1)	4348523	0.11 (1)	0.01	4344503
Anthracene	mg/kg	0.05 (1)	0.18 (1)	4344503	0.09 (1)	4348523	0.02 (1)	0.01	4344503
Fluoranthene	mg/kg	0.46 (1)	1.5 (1)	4344503	0.58 (1)	4348523	0.12 (1)	0.01	4344503
Pyrene	mg/kg	0.38 (1)	1.1 (1)	4344503	0.49 (1)	4348523	0.11 (1)	0.01	4344503
Benzo(a)anthracene	mg/kg	0.20 (1)	0.49 (1)	4344503	0.26 (1)	4348523	0.06 (1)	0.01	4344503
Chrysene	mg/kg	0.27 (1)	0.65 (1)	4344503	0.28 (1)	4348523	0.08 (1)	0.01	4344503
Benzo(b&j)fluoranthene	mg/kg	0.29 (1)	0.52 (1)	4344503	0.33 (1)	4348523	0.07 (1)	0.01	4344503
Benzo(k)fluoranthene	mg/kg	0.12 (1)	0.42 (1)	4344503	0.13 (1)	4348523	0.04 (1)	0.01	4344503
Benzo(a)pyrene	mg/kg	0.19 (1)	0.44 (1)	4344503	0.24 (1)	4348523	0.05 (1)	0.01	4344503
Indeno(1,2,3-cd)pyrene	mg/kg	0.17 (1)	0.32 (1)	4344503	0.18 (1)	4348523	0.05 (1)	0.02	4344503
Dibenz(a,h)anthracene	mg/kg	0.03 (1)	0.08 (1)	4344503	0.06 (1)	4348523	<0.02 (1)	0.02	4344503
Benzo(g,h,i)perylene	mg/kg	0.15 (1)	0.28 (1)	4344503	0.20 (1)	4348523	0.05 (1)	0.02	4344503
Low Molecular Weight PAH`s	mg/kg	0.41	2.1	4328971	0.90	4328971	0.30	0.01	4328971
High Molecular Weight PAH`s	mg/kg	2.3	5.8	4328971	2.7	4328971	0.62	0.02	4328971
Total PAH	mg/kg	2.7	7.9	4328971	3.6	4328971	0.92	0.02	4328971
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	120	110	4344503	110	4348523	120	N/A	4344503
D12-BENZO(A)PYRENE (sur.)	%	100	100	4344503	110	4348523	90	N/A	4344503
D8-ACENAPHTHYLENE (sur.)	%	110	90	4344503	110	4348523	100	N/A	4344503
D8-NAPHTHALENE (sur.)	%	120	100	4344503	110	4348523	110	N/A	4344503
TERPHENYL-D14 (sur.)	%	120	110	4344503	110	4348523	110	N/A	4344503

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X61043	X61044	X61045		X61047		
Sampling Date		2010/10/08	2010/10/08	2010/10/08		2010/10/08		
COC Number		08323689	08323689	08323689		08323689		
	Units	**OC10-1B (0-5)**	**OC10-10B (0-5)**	**OC10-1B(30-35)**	**RDL**	**OC10-2B (30-35)**	**RDL**	**QC Batch**
Polycyclic Aromatics								
Naphthalene	mg/kg	0.04 (1)	0.05 (1)	0.80 (1)	0.01	0.036	0.001	4344503
2-Methylnaphthalene	mg/kg	0.02 (1)	0.03 (1)	0.27 (1)	0.01	0.011	0.001	4344503
Acenaphthylene	mg/kg	0.02 (1)	0.05 (1)	0.32 (1)	0.01	0.005	0.001	4344503
Acenaphthene	mg/kg	0.08 (1)	0.07 (1)	1.2 (1)	0.01	0.030	0.001	4344503
Fluorene	mg/kg	0.10 (1)	0.11 (1)	2.0 (1)	0.01	0.057	0.001	4344503
Phenanthrene	mg/kg	0.88 (1)	0.55 (1)	10 (1)	0.01	0.068	0.001	4344503
Anthracene	mg/kg	0.24 (1)	0.17 (1)	3.2 (1)	0.01	0.039	0.001	4344503
Fluoranthene	mg/kg	1.4 (1)	0.81 (1)	9.4 (1)	0.01	0.15	0.001	4344503
Pyrene	mg/kg	1.2 (1)	0.64 (1)	7.4 (1)	0.01	0.14	0.001	4344503
Benzo(a)anthracene	mg/kg	0.60 (1)	0.32 (1)	4.1 (1)	0.01	0.042	0.001	4344503
Chrysene	mg/kg	0.65 (1)	0.33 (1)	3.7 (1)	0.01	0.053	0.001	4344503
Benzo(b&j)fluoranthene	mg/kg	0.58 (1)	0.25 (1)	2.6 (1)	0.01	0.042	0.001	4344503
Benzo(k)fluoranthene	mg/kg	0.42 (1)	0.22 (1)	2.7 (1)	0.01	0.027	0.001	4344503
Benzo(a)pyrene	mg/kg	0.56 (1)	0.25 (1)	2.9 (1)	0.01	0.030	0.001	4344503
Indeno(1,2,3-cd)pyrene	mg/kg	0.38 (1)	0.18 (1)	1.7 (1)	0.02	0.024	0.002	4344503
Dibenz(a,h)anthracene	mg/kg	0.09 (1)	0.04 (1)	0.43 (1)	0.02	0.005	0.002	4344503
Benzo(g,h,i)perylene	mg/kg	0.36 (1)	0.15 (1)	1.4 (1)	0.02	0.021	0.002	4344503
Low Molecular Weight PAH`s	mg/kg	1.4	1.0	18	0.01	0.25	0.001	4328971
High Molecular Weight PAH`s	mg/kg	6.2	3.2	36	0.02	0.54	0.002	4328971
Total PAH	mg/kg	7.6	4.2	54	0.02	0.79	0.002	4328971
Surrogate Recovery (%)								
D10-ANTHRACENE (sur.)	%	110	120	110	N/A	102	N/A	4344503
D12-BENZO(A)PYRENE (sur.)	%	100	100	90	N/A	88	N/A	4344503
D8-ACENAPHTHYLENE (sur.)	%	90	100	100	N/A	98	N/A	4344503
D8-NAPHTHALENE (sur.)	%	110	110	100	N/A	94	N/A	4344503
TERPHENYL-D14 (sur.)	%	110	110	110	N/A	112	N/A	4344503

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.

Maxxam Job #: B097863
Report Date: 2010/10/21

AECOM
Client Project #: 601604142
Site Reference: WINNIPEG

Package 1	11.0°C
Package 2	9.3°C
Package 3	2.0°C
Package 4	11.7°C
Package 5	6.3°C

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

General Comments

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336150	MY4	Spiked Blank	Hexabromobiphenyl (sur.)	2010/10/18		90	%	60 - 130
			Aroclor 1254	2010/10/18		109	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/10/18		97	%	60 - 130
			Aroclor 1242	2010/10/18	<0.03		mg/kg	
			Aroclor 1248	2010/10/18	<0.03		mg/kg	
			Aroclor 1254	2010/10/18	<0.03		mg/kg	
			Aroclor 1260	2010/10/18	<0.03		mg/kg	
			Total PCB	2010/10/18	<0.03		mg/kg	
		RPD	Aroclor 1242	2010/10/18	NC		%	N/A
			Aroclor 1248	2010/10/18	NC		%	N/A
			Aroclor 1254	2010/10/18	NC		%	N/A
			Aroclor 1260	2010/10/18	NC		%	N/A
			Total PCB	2010/10/18	NC		%	N/A
4336223	MY4	Spiked Blank	Hexabromobiphenyl (sur.)	2010/10/19		89	%	60 - 130
			Aroclor 1254	2010/10/19		93	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/10/19		84	%	60 - 130
			Aroclor 1242	2010/10/19	<0.10		ug/L	
			Aroclor 1248	2010/10/19	<0.10		ug/L	
			Aroclor 1254	2010/10/19	<0.10		ug/L	
			Aroclor 1260	2010/10/19	<0.10		ug/L	
4336252	DJ	Matrix Spike	Total Arsenic (As)	2010/10/16		101	%	75 - 125
			Total Beryllium (Be)	2010/10/16		103	%	75 - 125
			Total Cadmium (Cd)	2010/10/16		106	%	75 - 125
			Total Chromium (Cr)	2010/10/16		99	%	75 - 125
			Total Cobalt (Co)	2010/10/16		98	%	75 - 125
			Total Copper (Cu)	2010/10/16		103	%	75 - 125
			Total Lead (Pb)	2010/10/16		102	%	75 - 125
			Total Lithium (Li)	2010/10/16		NC	%	75 - 125
			Total Mercury (Hg)	2010/10/16		101	%	75 - 125
			Total Nickel (Ni)	2010/10/16		97	%	75 - 125
			Total Selenium (Se)	2010/10/16		103	%	75 - 125
			Total Uranium (U)	2010/10/16		105	%	75 - 125
			Total Vanadium (V)	2010/10/16		102	%	75 - 125
			Total Zinc (Zn)	2010/10/16		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/16		108	%	70 - 130
			Total Antimony (Sb)	2010/10/16		90	%	70 - 130
			Total Arsenic (As)	2010/10/16		96	%	70 - 130
			Total Barium (Ba)	2010/10/16		106	%	70 - 130
			Total Cadmium (Cd)	2010/10/16		88	%	70 - 130
			Total Calcium (Ca)	2010/10/16		99	%	70 - 130
			Total Chromium (Cr)	2010/10/16		107	%	70 - 130
			Total Cobalt (Co)	2010/10/16		98	%	70 - 130
			Total Copper (Cu)	2010/10/16		96	%	70 - 130
			Total Iron (Fe)	2010/10/16		103	%	70 - 130
			Total Lead (Pb)	2010/10/16		103	%	70 - 130
			Total Magnesium (Mg)	2010/10/16		107	%	70 - 130
			Total Manganese (Mn)	2010/10/16		105	%	70 - 130
			Total Molybdenum (Mo)	2010/10/16		85	%	70 - 130
			Total Nickel (Ni)	2010/10/16		97	%	70 - 130
			Total Phosphorus (P)	2010/10/16		104	%	70 - 130
			Total Strontium (Sr)	2010/10/16		99	%	70 - 130
			Total Thallium (Tl)	2010/10/16		93	%	70 - 130
			Total Titanium (Ti)	2010/10/16		108	%	70 - 130
			Total Uranium (U)	2010/10/16		93	%	70 - 130
			Total Vanadium (V)	2010/10/16		111	%	70 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336252	DJ	QC Standard	Total Zinc (Zn)	2010/10/16		92	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/16		104	%	75 - 125
			Total Beryllium (Be)	2010/10/16		104	%	75 - 125
			Total Cadmium (Cd)	2010/10/16		107	%	75 - 125
			Total Chromium (Cr)	2010/10/16		103	%	75 - 125
			Total Cobalt (Co)	2010/10/16		104	%	75 - 125
			Total Copper (Cu)	2010/10/16		103	%	75 - 125
			Total Lead (Pb)	2010/10/16		104	%	75 - 125
			Total Lithium (Li)	2010/10/16		105	%	75 - 125
			Total Mercury (Hg)	2010/10/16		106	%	75 - 125
			Total Nickel (Ni)	2010/10/16		103	%	75 - 125
			Total Selenium (Se)	2010/10/16		106	%	75 - 125
			Total Uranium (U)	2010/10/16		104	%	75 - 125
			Total Vanadium (V)	2010/10/16		107	%	75 - 125
			Total Zinc (Zn)	2010/10/16		108	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/16	<100		mg/kg	
			Total Antimony (Sb)	2010/10/16	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/16	<0.2		mg/kg	
			Total Barium (Ba)	2010/10/16	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/16	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/16	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/16	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/16	<100		mg/kg	
			Total Chromium (Cr)	2010/10/16	<1		mg/kg	
			Total Cobalt (Co)	2010/10/16	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/16	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/16	<100		mg/kg	
			Total Lead (Pb)	2010/10/16	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/16	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/16	<100		mg/kg	
			Total Manganese (Mn)	2010/10/16	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/16	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/16	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/16	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/16	<10		mg/kg	
			Total Potassium (K)	2010/10/16	<100		mg/kg	
			Total Selenium (Se)	2010/10/16	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/16	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/16	<100		mg/kg	
			Total Strontium (Sr)	2010/10/16	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/16	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/16	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/16	<1		mg/kg	
			Total Uranium (U)	2010/10/16	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/16	<2		mg/kg	
			Total Zinc (Zn)	2010/10/16	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/16	<0.5		mg/kg	
		RPD	Total Aluminum (Al)	2010/10/16	1.3		%	35
			Total Antimony (Sb)	2010/10/16	NC		%	30
			Total Arsenic (As)	2010/10/16	2.4		%	30
			Total Barium (Ba)	2010/10/16	0.1		%	35
			Total Beryllium (Be)	2010/10/16	NC		%	30
			Total Bismuth (Bi)	2010/10/16	NC		%	30
			Total Cadmium (Cd)	2010/10/16	NC		%	30
			Total Calcium (Ca)	2010/10/16	2.2		%	30

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336252	DJ	RPD	Total Chromium (Cr)	2010/10/16	1.6		%	30
			Total Cobalt (Co)	2010/10/16	0.9		%	30
			Total Copper (Cu)	2010/10/16	2.0		%	30
			Total Iron (Fe)	2010/10/16	1.5		%	30
			Total Lead (Pb)	2010/10/16	1.2		%	35
			Total Magnesium (Mg)	2010/10/16	2.2		%	30
			Total Manganese (Mn)	2010/10/16	0.1		%	30
			Total Mercury (Hg)	2010/10/16	NC		%	35
			Total Molybdenum (Mo)	2010/10/16	0.5		%	35
			Total Nickel (Ni)	2010/10/16	2.0		%	30
			Total Phosphorus (P)	2010/10/16	3.4		%	30
			Total Potassium (K)	2010/10/16	NC		%	35
			Total Selenium (Se)	2010/10/16	NC		%	30
			Total Silver (Ag)	2010/10/16	NC		%	35
			Total Sodium (Na)	2010/10/16	NC		%	35
			Total Strontium (Sr)	2010/10/16	0.7		%	35
			Total Thallium (Tl)	2010/10/16	NC		%	30
			Total Tin (Sn)	2010/10/16	NC		%	35
			Total Titanium (Ti)	2010/10/16	8.0		%	35
			Total Vanadium (V)	2010/10/16	1.3		%	30
			Total Zinc (Zn)	2010/10/16	0.4		%	30
			Total Zirconium (Zr)	2010/10/16	NC		%	30
4336265	CB9	Spiked Blank	Soluble (2:1) pH	2010/10/15		102	%	96 - 104
		RPD	Soluble (2:1) pH	2010/10/15	0.5		%	20
4336274	DJ	Matrix Spike [X61045-02]						
			Total Arsenic (As)	2010/10/16		105	%	75 - 125
			Total Beryllium (Be)	2010/10/16		109	%	75 - 125
			Total Cadmium (Cd)	2010/10/16		109	%	75 - 125
			Total Chromium (Cr)	2010/10/16		NC	%	75 - 125
			Total Cobalt (Co)	2010/10/16		100	%	75 - 125
			Total Copper (Cu)	2010/10/16		NC	%	75 - 125
			Total Lead (Pb)	2010/10/16		NC	%	75 - 125
			Total Lithium (Li)	2010/10/16		108	%	75 - 125
			Total Mercury (Hg)	2010/10/16		105	%	75 - 125
			Total Nickel (Ni)	2010/10/16		NC	%	75 - 125
			Total Selenium (Se)	2010/10/16		104	%	75 - 125
			Total Uranium (U)	2010/10/16		111	%	75 - 125
			Total Vanadium (V)	2010/10/16		NC	%	75 - 125
			Total Zinc (Zn)	2010/10/16		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/16		112	%	70 - 130
			Total Antimony (Sb)	2010/10/16		90	%	70 - 130
			Total Arsenic (As)	2010/10/16		95	%	70 - 130
			Total Barium (Ba)	2010/10/16		107	%	70 - 130
			Total Cadmium (Cd)	2010/10/16		102	%	70 - 130
			Total Calcium (Ca)	2010/10/16		107	%	70 - 130
			Total Chromium (Cr)	2010/10/16		107	%	70 - 130
			Total Cobalt (Co)	2010/10/16		103	%	70 - 130
			Total Copper (Cu)	2010/10/16		97	%	70 - 130
			Total Iron (Fe)	2010/10/16		106	%	70 - 130
			Total Lead (Pb)	2010/10/16		105	%	70 - 130
			Total Magnesium (Mg)	2010/10/16		112	%	70 - 130
			Total Manganese (Mn)	2010/10/16		109	%	70 - 130
			Total Molybdenum (Mo)	2010/10/16		86	%	70 - 130
			Total Nickel (Ni)	2010/10/16		101	%	70 - 130
			Total Phosphorus (P)	2010/10/16		112	%	70 - 130

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336274	DJ	QC Standard	Total Strontium (Sr)	2010/10/16		101	%	70 - 130
			Total Thallium (Tl)	2010/10/16		91	%	70 - 130
			Total Titanium (Ti)	2010/10/16		111	%	70 - 130
			Total Uranium (U)	2010/10/16		101	%	70 - 130
			Total Vanadium (V)	2010/10/16		112	%	70 - 130
			Total Zinc (Zn)	2010/10/16		99	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/16		102	%	75 - 125
			Total Beryllium (Be)	2010/10/16		103	%	75 - 125
			Total Cadmium (Cd)	2010/10/16		105	%	75 - 125
			Total Chromium (Cr)	2010/10/16		103	%	75 - 125
			Total Cobalt (Co)	2010/10/16		106	%	75 - 125
			Total Copper (Cu)	2010/10/16		108	%	75 - 125
			Total Lead (Pb)	2010/10/16		102	%	75 - 125
			Total Lithium (Li)	2010/10/16		104	%	75 - 125
			Total Mercury (Hg)	2010/10/16		103	%	75 - 125
			Total Nickel (Ni)	2010/10/16		106	%	75 - 125
			Total Selenium (Se)	2010/10/16		104	%	75 - 125
			Total Uranium (U)	2010/10/16		103	%	75 - 125
			Total Vanadium (V)	2010/10/16		107	%	75 - 125
			Total Zinc (Zn)	2010/10/16		110	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/16	<100		mg/kg	
			Total Antimony (Sb)	2010/10/16	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/16	0.3, RDL=0.2		mg/kg	
			Total Barium (Ba)	2010/10/16	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/16	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/16	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/16	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/16	<100		mg/kg	
			Total Chromium (Cr)	2010/10/16	<1		mg/kg	
			Total Cobalt (Co)	2010/10/16	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/16	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/16	<100		mg/kg	
			Total Lead (Pb)	2010/10/16	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/16	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/16	<100		mg/kg	
			Total Manganese (Mn)	2010/10/16	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/16	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/16	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/16	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/16	<10		mg/kg	
			Total Potassium (K)	2010/10/16	<100		mg/kg	
			Total Selenium (Se)	2010/10/16	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/16	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/16	<100		mg/kg	
			Total Strontium (Sr)	2010/10/16	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/16	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/16	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/16	<1		mg/kg	
			Total Uranium (U)	2010/10/16	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/16	<2		mg/kg	
			Total Zinc (Zn)	2010/10/16	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/16	<0.5		mg/kg	
		RPD [X61045-02]	Total Aluminum (Al)	2010/10/16	0.9		%	35
			Total Antimony (Sb)	2010/10/16	1.2		%	30
			Total Arsenic (As)	2010/10/16	8.5		%	30

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336274	DJ	RPD [X61045-02]	Total Barium (Ba)	2010/10/16	1.1		%	35
			Total Beryllium (Be)	2010/10/16	21.0		%	30
			Total Bismuth (Bi)	2010/10/16	NC		%	30
			Total Cadmium (Cd)	2010/10/16	1.5		%	30
			Total Calcium (Ca)	2010/10/16	0.07		%	30
			Total Chromium (Cr)	2010/10/16	0.3		%	30
			Total Cobalt (Co)	2010/10/16	0.9		%	30
			Total Copper (Cu)	2010/10/16	1.2		%	30
			Total Iron (Fe)	2010/10/16	0.7		%	30
			Total Lead (Pb)	2010/10/16	0.4		%	35
			Total Lithium (Li)	2010/10/16	NC		%	30
			Total Magnesium (Mg)	2010/10/16	0.6		%	30
			Total Manganese (Mn)	2010/10/16	1.4		%	30
			Total Mercury (Hg)	2010/10/16	NC		%	35
			Total Molybdenum (Mo)	2010/10/16	1.8		%	35
			Total Nickel (Ni)	2010/10/16	1.1		%	30
			Total Phosphorus (P)	2010/10/16	4.1		%	30
			Total Potassium (K)	2010/10/16	1.9		%	35
			Total Selenium (Se)	2010/10/16	NC		%	30
			Total Silver (Ag)	2010/10/16	NC		%	35
			Total Sodium (Na)	2010/10/16	3.6		%	35
			Total Strontium (Sr)	2010/10/16	1.5		%	35
			Total Thallium (Tl)	2010/10/16	NC		%	30
			Total Tin (Sn)	2010/10/16	0.3		%	35
			Total Titanium (Ti)	2010/10/16	0.3		%	35
			Total Uranium (U)	2010/10/16	0.9		%	30
			Total Vanadium (V)	2010/10/16	0.3		%	30
			Total Zinc (Zn)	2010/10/16	1.6		%	30
			Total Zirconium (Zr)	2010/10/16	1.4		%	30
4336278	CB9	Spiked Blank	Soluble (2:1) pH	2010/10/14		102	%	96 - 104
		RPD	Soluble (2:1) pH	2010/10/14	0.5		%	20
4338116	TG1	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/17		85	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/17		80	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/17		89	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/17		79	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/17		85	%	60 - 130
			Naphthalene	2010/10/17		83	%	50 - 130
			2-Methylnaphthalene	2010/10/17		91	%	50 - 130
			Quinoline	2010/10/17		113	%	50 - 130
			Acenaphthylene	2010/10/17		87	%	50 - 130
			Acenaphthene	2010/10/17		90	%	50 - 130
			Fluorene	2010/10/17		90	%	50 - 130
			Phenanthrene	2010/10/17		87	%	60 - 130
			Anthracene	2010/10/17		88	%	60 - 130
			Acridine	2010/10/17		89	%	50 - 130
			Fluoranthene	2010/10/17		87	%	60 - 130
			Pyrene	2010/10/17		94	%	60 - 130
			Benzo(a)anthracene	2010/10/17		88	%	60 - 130
			Chrysene	2010/10/17		92	%	60 - 130
			Benzo(b&j)fluoranthene	2010/10/17		82	%	60 - 130
			Benzo(k)fluoranthene	2010/10/17		96	%	60 - 130
			Benzo(a)pyrene	2010/10/17		91	%	60 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/17		92	%	60 - 130
			Dibenz(a,h)anthracene	2010/10/17		87	%	60 - 130
			Benzo(g,h,i)perylene	2010/10/17		89	%	60 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4338116	TG1	Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/15		101	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/15		99	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/15		85	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/15		81	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/15		97	%	60 - 130
			Naphthalene	2010/10/15		80	%	50 - 130
			2-Methylnaphthalene	2010/10/15		88	%	50 - 130
			Quinoline	2010/10/15		105	%	50 - 130
			Acenaphthylene	2010/10/15		85	%	50 - 130
			Acenaphthene	2010/10/15		87	%	50 - 130
			Fluorene	2010/10/15		89	%	50 - 130
			Phenanthrene	2010/10/15		94	%	60 - 130
			Anthracene	2010/10/15		101	%	60 - 130
			Acridine	2010/10/15		96	%	50 - 130
			Fluoranthene	2010/10/15		99	%	60 - 130
			Pyrene	2010/10/15		96	%	60 - 130
			Benzo(a)anthracene	2010/10/15		92	%	60 - 130
			Chrysene	2010/10/15		98	%	60 - 130
			Benzo(b&j)fluoranthene	2010/10/15		90	%	60 - 130
			Benzo(k)fluoranthene	2010/10/15		104	%	60 - 130
			Benzo(a)pyrene	2010/10/15		96	%	60 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/15		81	%	60 - 130
			Dibenz(a,h)anthracene	2010/10/15		76	%	60 - 130
			Benzo(g,h,i)perylene	2010/10/15		79	%	60 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/15		105	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/15		97	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/15		76	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/15		80	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/15		97	%	60 - 130
			Naphthalene	2010/10/15	<0.05		ug/L	
			2-Methylnaphthalene	2010/10/15	<0.05		ug/L	
			Quinoline	2010/10/15	<0.05		ug/L	
			Acenaphthylene	2010/10/15	<0.01		ug/L	
			Acenaphthene	2010/10/15	<0.01		ug/L	
			Fluorene	2010/10/15	<0.01		ug/L	
			Phenanthrene	2010/10/15	<0.01		ug/L	
			Anthracene	2010/10/15	<0.01		ug/L	
			Acridine	2010/10/15	<0.05		ug/L	
			Fluoranthene	2010/10/15	<0.01		ug/L	
			Pyrene	2010/10/15	<0.01		ug/L	
			Benzo(a)anthracene	2010/10/15	<0.01		ug/L	
			Chrysene	2010/10/15	<0.01		ug/L	
			Benzo(b&j)fluoranthene	2010/10/15	<0.01		ug/L	
			Benzo(k)fluoranthene	2010/10/15	<0.01		ug/L	
			Benzo(a)pyrene	2010/10/15	<0.01		ug/L	
			Indeno(1,2,3-cd)pyrene	2010/10/15	<0.02		ug/L	
			Dibenz(a,h)anthracene	2010/10/15	<0.02		ug/L	
			Benzo(g,h,i)perylene	2010/10/15	<0.02		ug/L	
		RPD	Pyrene	2010/10/17	NC		%	40
4339772	AD5	Matrix Spike	Total Organic Carbon (C)	2010/10/15		NC	%	80 - 120
		Spiked Blank	Total Organic Carbon (C)	2010/10/15		103	%	80 - 120
		Method Blank	Total Organic Carbon (C)	2010/10/15	<0.5		mg/L	
		RPD	Total Organic Carbon (C)	2010/10/15	0.9		%	20
4339783	CG5	Method Blank	Moisture	2010/10/16	<0.3		%	
		RPD	Moisture	2010/10/16	2.7		%	20

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4339784	AD5	Matrix Spike	Dissolved Organic Carbon (C)	2010/10/15		104	%	80 - 120
		Spiked Blank	Dissolved Organic Carbon (C)	2010/10/15		105	%	80 - 120
		Method Blank	Dissolved Organic Carbon (C)	2010/10/15	<0.5		mg/L	
		RPD	Dissolved Organic Carbon (C)	2010/10/15	NC		%	20
4341927	GS9	Matrix Spike	Total Arsenic (As)	2010/10/19		107	%	80 - 120
			Total Beryllium (Be)	2010/10/19		112	%	80 - 120
			Total Cadmium (Cd)	2010/10/19		116	%	80 - 120
			Total Chromium (Cr)	2010/10/19		110	%	80 - 120
			Total Cobalt (Co)	2010/10/19		110	%	80 - 120
			Total Copper (Cu)	2010/10/19		NC	%	80 - 120
			Total Lead (Pb)	2010/10/19		118	%	80 - 120
			Total Lithium (Li)	2010/10/19		112	%	80 - 120
			Total Nickel (Ni)	2010/10/19		106	%	80 - 120
			Total Selenium (Se)	2010/10/19		115	%	80 - 120
			Total Uranium (U)	2010/10/19		116	%	80 - 120
			Total Vanadium (V)	2010/10/19		110	%	80 - 120
			Total Zinc (Zn)	2010/10/19		NC	%	80 - 120
		Spiked Blank	Total Arsenic (As)	2010/10/19		101	%	80 - 120
			Total Beryllium (Be)	2010/10/19		105	%	80 - 120
			Total Cadmium (Cd)	2010/10/19		98	%	80 - 120
			Total Chromium (Cr)	2010/10/19		106	%	80 - 120
			Total Cobalt (Co)	2010/10/19		109	%	80 - 120
			Total Copper (Cu)	2010/10/19		106	%	80 - 120
			Total Lead (Pb)	2010/10/19		110	%	80 - 120
			Total Lithium (Li)	2010/10/19		108	%	80 - 120
			Total Nickel (Ni)	2010/10/19		107	%	80 - 120
			Total Selenium (Se)	2010/10/19		110	%	80 - 120
			Total Uranium (U)	2010/10/19		107	%	80 - 120
			Total Vanadium (V)	2010/10/19		101	%	80 - 120
			Total Zinc (Zn)	2010/10/19		102	%	80 - 120
		Method Blank	Total Aluminum (Al)	2010/10/19	4, RDL=3		ug/L	
			Total Antimony (Sb)	2010/10/19	<0.5		ug/L	
			Total Arsenic (As)	2010/10/19	<0.1		ug/L	
			Total Barium (Ba)	2010/10/19	<1		ug/L	
			Total Beryllium (Be)	2010/10/19	<0.1		ug/L	
			Total Bismuth (Bi)	2010/10/19	<1		ug/L	
			Total Boron (B)	2010/10/19	<50		ug/L	
			Total Cadmium (Cd)	2010/10/19	<0.01		ug/L	
			Total Chromium (Cr)	2010/10/19	<1		ug/L	
			Total Cobalt (Co)	2010/10/19	<0.5		ug/L	
			Total Copper (Cu)	2010/10/19	0.2, RDL=0.2		ug/L	
			Total Iron (Fe)	2010/10/19	<5		ug/L	
			Total Lead (Pb)	2010/10/19	<0.2		ug/L	
			Total Lithium (Li)	2010/10/19	<5		ug/L	
			Total Manganese (Mn)	2010/10/19	<1		ug/L	
			Total Mercury (Hg)	2010/10/19	0.03, RDL=0.02		ug/L	
			Total Molybdenum (Mo)	2010/10/19	<1		ug/L	
			Total Nickel (Ni)	2010/10/19	<1		ug/L	
			Total Selenium (Se)	2010/10/19	<0.1		ug/L	
			Total Silicon (Si)	2010/10/19	<100		ug/L	
			Total Silver (Ag)	2010/10/19	<0.02		ug/L	
			Total Strontium (Sr)	2010/10/19	<1		ug/L	
			Total Thallium (Tl)	2010/10/19	<0.05		ug/L	
			Total Tin (Sn)	2010/10/19	<5		ug/L	
			Total Titanium (Ti)	2010/10/19	<5		ug/L	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4341927	GS9	Method Blank	Total Uranium (U)	2010/10/19	<0.1		ug/L	
			Total Vanadium (V)	2010/10/19	<5		ug/L	
			Total Zinc (Zn)	2010/10/19	<5		ug/L	
			Total Zirconium (Zr)	2010/10/19	<0.5		ug/L	
		RPD	Total Aluminum (Al)	2010/10/19	NC		%	20
			Total Antimony (Sb)	2010/10/19	NC		%	20
			Total Arsenic (As)	2010/10/19	NC		%	20
			Total Barium (Ba)	2010/10/19	3.2		%	20
			Total Beryllium (Be)	2010/10/19	NC		%	20
			Total Bismuth (Bi)	2010/10/19	NC		%	20
			Total Boron (B)	2010/10/19	NC		%	20
			Total Cadmium (Cd)	2010/10/19	NC		%	20
			Total Chromium (Cr)	2010/10/19	NC		%	20
			Total Cobalt (Co)	2010/10/19	NC		%	20
			Total Copper (Cu)	2010/10/19	9.5		%	20
			Total Iron (Fe)	2010/10/19	15.3		%	20
			Total Lead (Pb)	2010/10/19	3.8		%	20
			Total Manganese (Mn)	2010/10/19	NC		%	20
			Total Mercury (Hg)	2010/10/19	NC		%	20
			Total Molybdenum (Mo)	2010/10/19	NC		%	20
			Total Nickel (Ni)	2010/10/19	NC		%	20
			Total Selenium (Se)	2010/10/19	NC		%	20
			Total Silicon (Si)	2010/10/19	4.2		%	20
			Total Silver (Ag)	2010/10/19	NC		%	20
			Total Strontium (Sr)	2010/10/19	0.02		%	20
			Total Thallium (Tl)	2010/10/19	NC		%	20
			Total Tin (Sn)	2010/10/19	NC		%	20
			Total Titanium (Ti)	2010/10/19	NC		%	20
			Total Uranium (U)	2010/10/19	NC		%	20
			Total Vanadium (V)	2010/10/19	NC		%	20
			Total Zinc (Zn)	2010/10/19	NC		%	20
			Total Zirconium (Zr)	2010/10/19	NC		%	20
4343279	JT3	Matrix Spike	Dissolved Arsenic (As)	2010/10/19		103	%	80 - 120
			Dissolved Beryllium (Be)	2010/10/19		113	%	80 - 120
			Dissolved Cadmium (Cd)	2010/10/19		115	%	80 - 120
			Dissolved Chromium (Cr)	2010/10/19		100	%	80 - 120
			Dissolved Cobalt (Co)	2010/10/19		100	%	80 - 120
			Dissolved Copper (Cu)	2010/10/19		100	%	80 - 120
			Dissolved Lead (Pb)	2010/10/19		114	%	80 - 120
			Dissolved Lithium (Li)	2010/10/19		114	%	80 - 120
			Dissolved Nickel (Ni)	2010/10/19		100	%	80 - 120
			Dissolved Selenium (Se)	2010/10/19		111	%	80 - 120
			Dissolved Uranium (U)	2010/10/19		110	%	80 - 120
			Dissolved Vanadium (V)	2010/10/19		100	%	80 - 120
			Dissolved Zinc (Zn)	2010/10/19		114	%	80 - 120
		Spiked Blank	Dissolved Arsenic (As)	2010/10/19		98	%	80 - 120
			Dissolved Beryllium (Be)	2010/10/19		103	%	80 - 120
			Dissolved Cadmium (Cd)	2010/10/19		100	%	80 - 120
			Dissolved Chromium (Cr)	2010/10/19		98	%	80 - 120
			Dissolved Cobalt (Co)	2010/10/19		98	%	80 - 120
			Dissolved Copper (Cu)	2010/10/19		105	%	80 - 120
			Dissolved Lead (Pb)	2010/10/19		103	%	80 - 120
			Dissolved Lithium (Li)	2010/10/19		107	%	80 - 120
			Dissolved Nickel (Ni)	2010/10/19		97	%	80 - 120
			Dissolved Selenium (Se)	2010/10/19		103	%	80 - 120

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4343279	JT3	Spiked Blank	Dissolved Uranium (U)	2010/10/19		103	%	80 - 120
			Dissolved Vanadium (V)	2010/10/19		95	%	80 - 120
			Dissolved Zinc (Zn)	2010/10/19		99	%	80 - 120
		Method Blank	Dissolved Aluminum (Al)	2010/10/19	<3		ug/L	
			Dissolved Antimony (Sb)	2010/10/19	<0.5		ug/L	
			Dissolved Arsenic (As)	2010/10/19	<0.1		ug/L	
			Dissolved Barium (Ba)	2010/10/19	<1		ug/L	
			Dissolved Beryllium (Be)	2010/10/19	<0.1		ug/L	
			Dissolved Bismuth (Bi)	2010/10/19	<1		ug/L	
			Dissolved Boron (B)	2010/10/19	<50		ug/L	
			Dissolved Cadmium (Cd)	2010/10/19	<0.01		ug/L	
			Dissolved Chromium (Cr)	2010/10/19	<1		ug/L	
			Dissolved Cobalt (Co)	2010/10/19	<0.5		ug/L	
			Dissolved Copper (Cu)	2010/10/19	<0.2		ug/L	
			Dissolved Iron (Fe)	2010/10/19	<5		ug/L	
			Dissolved Lead (Pb)	2010/10/19	<0.2		ug/L	
			Dissolved Lithium (Li)	2010/10/19	<5		ug/L	
			Dissolved Manganese (Mn)	2010/10/19	<1		ug/L	
			Dissolved Mercury (Hg)	2010/10/19	<0.02		ug/L	
			Dissolved Molybdenum (Mo)	2010/10/19	<1		ug/L	
			Dissolved Nickel (Ni)	2010/10/19	<1		ug/L	
			Dissolved Selenium (Se)	2010/10/19	<0.1		ug/L	
			Dissolved Silicon (Si)	2010/10/19	<100		ug/L	
			Dissolved Silver (Ag)	2010/10/19	<0.02		ug/L	
			Dissolved Strontium (Sr)	2010/10/19	<1		ug/L	
			Dissolved Thallium (Tl)	2010/10/19	<0.05		ug/L	
			Dissolved Tin (Sn)	2010/10/19	<5		ug/L	
			Dissolved Titanium (Ti)	2010/10/19	<5		ug/L	
			Dissolved Uranium (U)	2010/10/19	<0.1		ug/L	
			Dissolved Vanadium (V)	2010/10/19	<5		ug/L	
			Dissolved Zinc (Zn)	2010/10/19	<5		ug/L	
			Dissolved Zirconium (Zr)	2010/10/19	<0.5		ug/L	
4343710	SMB	QC Standard	Organic Matter	2010/10/18		104	%	83 - 118
			Total Organic Carbon (C)	2010/10/18		104	%	83 - 118
		RPD	Organic Matter	2010/10/18	3.9		%	35
			Total Organic Carbon (C)	2010/10/18	4.0		%	35
4344503	VB1	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/19		120	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		100	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/19		80	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		110	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		100	%	60 - 130
			Naphthalene	2010/10/19		96	%	40 - 130
			2-Methylnaphthalene	2010/10/19		100	%	40 - 130
			Acenaphthylene	2010/10/19		72	%	40 - 130
			Acenaphthene	2010/10/19		104	%	40 - 130
			Fluorene	2010/10/19		104	%	40 - 130
			Phenanthrene	2010/10/19		NC	%	40 - 130
			Anthracene	2010/10/19		101	%	40 - 130
			Fluoranthene	2010/10/19		NC	%	40 - 130
			Pyrene	2010/10/19		NC	%	40 - 130
			Benzo(a)anthracene	2010/10/19		96	%	40 - 130
			Chrysene	2010/10/19		NC	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/19		98	%	40 - 130
			Benzo(k)fluoranthene	2010/10/19		96	%	40 - 130
			Benzo(a)pyrene	2010/10/19		91	%	40 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4344503	VB1	Matrix Spike	Indeno(1,2,3-cd)pyrene	2010/10/19		95	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/19		84	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/19		87	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/19		111	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		98	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/19		104	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		104	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		113	%	60 - 130
			Naphthalene	2010/10/19		87	%	40 - 130
			2-Methylnaphthalene	2010/10/19		88	%	40 - 130
			Acenaphthylene	2010/10/19		85	%	40 - 130
			Acenaphthene	2010/10/19		90	%	40 - 130
			Fluorene	2010/10/19		89	%	40 - 130
			Phenanthrene	2010/10/19		90	%	40 - 130
			Anthracene	2010/10/19		94	%	40 - 130
			Fluoranthene	2010/10/19		85	%	40 - 130
			Pyrene	2010/10/19		92	%	40 - 130
			Benzo(a)anthracene	2010/10/19		81	%	40 - 130
			Chrysene	2010/10/19		88	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/19		71	%	40 - 130
			Benzo(k)fluoranthene	2010/10/19		88	%	40 - 130
			Benzo(a)pyrene	2010/10/19		79	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/19		67	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/19		65	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/19		65	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/19		105	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		88	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/19		95	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		99	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		115	%	60 - 130
			Naphthalene	2010/10/19	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/19	<0.001		mg/kg	
			Acenaphthylene	2010/10/19	<0.001		mg/kg	
			Acenaphthene	2010/10/19	<0.001		mg/kg	
			Fluorene	2010/10/19	<0.001		mg/kg	
			Phenanthrene	2010/10/19	<0.001		mg/kg	
			Anthracene	2010/10/19	<0.001		mg/kg	
			Fluoranthene	2010/10/19	<0.001		mg/kg	
			Pyrene	2010/10/19	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/19	<0.001		mg/kg	
			Chrysene	2010/10/19	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/19	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/19	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/19	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/19	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/10/19	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/19	<0.002		mg/kg	
		RPD	Naphthalene	2010/10/19	3.0 (1)		%	50
			2-Methylnaphthalene	2010/10/19	NC (1)		%	50
			Acenaphthylene	2010/10/19	NC (1)		%	50
			Acenaphthene	2010/10/19	NC (1)		%	50
			Fluorene	2010/10/19	4.6 (1)		%	50
			Phenanthrene	2010/10/19	28.6 (2)		%	50
			Anthracene	2010/10/19	31.9 (1)		%	50
			Fluoranthene	2010/10/19	21.5 (2)		%	50

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4344503	VB1	RPD	Pyrene	2010/10/19	24.7 (2)		%	50
			Benzo(a)anthracene	2010/10/19	27.8 (1)		%	50
			Chrysene	2010/10/19	24.9 (2)		%	50
			Benzo(b&j)fluoranthene	2010/10/19	22.8 (1)		%	50
			Benzo(k)fluoranthene	2010/10/19	11.7 (1)		%	50
			Benzo(a)pyrene	2010/10/19	24.3 (1)		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/19	23.3 (1)		%	50
			Dibenz(a,h)anthracene	2010/10/19	NC (1)		%	50
			Benzo(g,h,i)perylene	2010/10/19	14.5 (1)		%	50
4348523	SY	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/20		100	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/20		100	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/20		50	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/20		100	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/20		100	%	60 - 130
			Naphthalene	2010/10/20		NC	%	40 - 130
			2-Methylnaphthalene	2010/10/20		NC	%	40 - 130
			Acenaphthylene	2010/10/20		NC	%	40 - 130
			Acenaphthene	2010/10/20		NC	%	40 - 130
			Fluorene	2010/10/20		NC	%	40 - 130
			Phenanthrene	2010/10/20		NC	%	40 - 130
			Anthracene	2010/10/20		NC	%	40 - 130
			Fluoranthene	2010/10/20		NC	%	40 - 130
			Pyrene	2010/10/20		NC	%	40 - 130
			Benzo(a)anthracene	2010/10/20		NC	%	40 - 130
			Chrysene	2010/10/20		NC	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/20		NC	%	40 - 130
			Benzo(k)fluoranthene	2010/10/20		NC	%	40 - 130
			Benzo(a)pyrene	2010/10/20		NC	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/20		NC	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/20		NC	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/20		NC	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/19		109	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		107	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/19		96	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		96	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		111	%	60 - 130
			Naphthalene	2010/10/19		97	%	40 - 130
			2-Methylnaphthalene	2010/10/19		99	%	40 - 130
			Acenaphthylene	2010/10/19		96	%	40 - 130
			Acenaphthene	2010/10/19		102	%	40 - 130
			Fluorene	2010/10/19		101	%	40 - 130
			Phenanthrene	2010/10/19		105	%	40 - 130
			Anthracene	2010/10/19		106	%	40 - 130
			Fluoranthene	2010/10/19		104	%	40 - 130
			Pyrene	2010/10/19		106	%	40 - 130
			Benzo(a)anthracene	2010/10/19		96	%	40 - 130
			Chrysene	2010/10/19		104	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/19		96	%	40 - 130
			Benzo(k)fluoranthene	2010/10/19		100	%	40 - 130
			Benzo(a)pyrene	2010/10/19		100	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/19		95	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/19		88	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/19		89	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/19		108	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		100	%	60 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4348523	SY	Method Blank	D8-ACENAPHTHYLENE (sur.)	2010/10/19		96	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		96	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		107	%	60 - 130
			Naphthalene	2010/10/19	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/19	<0.001		mg/kg	
			Acenaphthylene	2010/10/19	<0.001		mg/kg	
			Acenaphthene	2010/10/19	<0.001		mg/kg	
			Fluorene	2010/10/19	<0.001		mg/kg	
			Phenanthrene	2010/10/19	<0.001		mg/kg	
			Anthracene	2010/10/19	<0.001		mg/kg	
			Fluoranthene	2010/10/19	<0.001		mg/kg	
			Pyrene	2010/10/19	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/19	<0.001		mg/kg	
			Chrysene	2010/10/19	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/19	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/19	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/19	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/19	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/10/19	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/19	<0.002		mg/kg	
		RPD	Naphthalene	2010/10/19	NC (3)		%	50
			2-Methylnaphthalene	2010/10/19	13.1 (1)		%	50
			Acenaphthylene	2010/10/19	NC (3)		%	50
			Acenaphthene	2010/10/19	2.8 (1)		%	50
			Fluorene	2010/10/19	1.7 (1)		%	50
			Phenanthrene	2010/10/19	21.0 (1)		%	50
			Anthracene	2010/10/19	NC (3)		%	50
			Fluoranthene	2010/10/19	6.1 (1)		%	50
			Pyrene	2010/10/19	5.1 (1)		%	50
			Benzo(a)anthracene	2010/10/19	7.4 (1)		%	50
			Chrysene	2010/10/19	2.0 (1)		%	50
			Benzo(b&j)fluoranthene	2010/10/19	8.6 (1)		%	50
			Benzo(k)fluoranthene	2010/10/19	12.0 (1)		%	50
			Benzo(a)pyrene	2010/10/19	8.9 (1)		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/19	NC (3)		%	50
			Dibenz(a,h)anthracene	2010/10/19	6.2 (1)		%	50
			Benzo(g,h,i)perylene	2010/10/19	8.1 (1)		%	50
4349386	MY4	Spiked Blank	Hexabromobiphenyl (sur.)	2010/10/20		86	%	60 - 130
			Aroclor 1254	2010/10/20		98	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/10/20		95	%	60 - 130
			Aroclor 1242	2010/10/20	<0.03		mg/kg	
			Aroclor 1248	2010/10/20	<0.03		mg/kg	
			Aroclor 1254	2010/10/20	<0.03		mg/kg	
			Aroclor 1260	2010/10/20	<0.03		mg/kg	
			Total PCB	2010/10/20	<0.03		mg/kg	
		RPD	Aroclor 1242	2010/10/20	NC		%	N/A
			Aroclor 1248	2010/10/20	NC		%	N/A
			Aroclor 1254	2010/10/20	NC		%	N/A
			Aroclor 1260	2010/10/20	NC		%	N/A
			Total PCB	2010/10/20	NC		%	N/A
4351353	DY	RPD [X61042-04]	200 mesh (>.075 mm)	2010/10/20	1.9		%	30
			200 mesh (<.075 mm)	2010/10/20	0.5		%	30

N/A = Not Applicable
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.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 601604142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097863

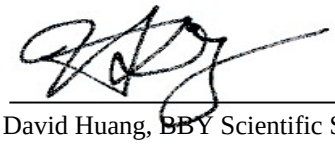
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the 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.
(1) RDL raised due to sample dilution.
(2) Matrix spike recovery above control limit - Matrix interference - Pot. high bias (No impact - ND)
RDL raised due to sample dilution.
(3) RDL raised due to sample matrix interference.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

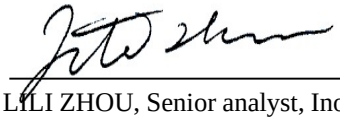
Validation Signature Page

Maxxam Job #: B097863

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



David Huang, BBY Scientific Specialist



LILI ZHOU, Senior analyst, Inorganic department.

==========

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 Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam

4606 Canada Way, Burnaby, BC Canada V5G 1K5 Ph: 604 734 7276 Toll Free: 1 800 665 8566 Fax: 604 731 2386

CHAIN OF CUSTODY RECORD

Page: 1 of 1

08323689

Maxxam Job#:

Invoice To: Require Report? Yes [X] No [X]

Company Name:	AECOM
Contact Name:	Shawna Kjartanson
Address:	99 Commerce Drive
	Winnipeg, MB PC: R2J 1S9
Phone / Fax#:	Ph: 928-8456 Fax: 284-2040
E-mail	shawna.kjartanson@aecom.com

Report To:

Company Name:	
Contact Name:	
Address:	
	PC:
Phone / Fax#:	Ph: Fax:
E-mail	

PO #:	
Quotation #:	
Project #:	60164142
Proj. Name:	
Location:	WINNIPEG
Sampled By:	SK

REGULATORY REQUIREMENTS SERVICE REQUESTED:

- [ ] CSR
- [ ] CCME
- [ ] BC Water Quality
- [ ] Other
- [ ] DRINKING WATER

- [X] Regular Turn Around Time (TAT) (5 days for most tests)
- [ ] RUSH (Please contact the lab) [ ] 1 Day [ ] 2 Day [ ] 3 Day
- Date Required:

Special Instructions:

Return Cooler [ ] Ship Sample Bottles (please specify) [ ]

ANALYSIS REQUESTED

#	Sample Identification	Lab Identification	Sample Type	Date/Time Sampled	BTEX/VPH	VOC/VPH	EPH	PAH	CCME-PHC (Fractions 1-4 Plus BTEX)	CCME-PHC (Fractions 2-4)	CCME BTEX (Fraction 1 Plus BTEX)	PCB	Phenols by 4AAP	TOG	Dissolved Metals (Field Filtered? Y [X]N)	Metals (Field Acidified? Y [X]N)	Total Metals (Field Acidified? Y [X]N)	Nitrate	Chloride	Total Suspended Solids-TSS	pH	BOD	COD	Coliform, Total & E.coli	Asbestos	DOC	hardness	Particle size	Organic Carbon.	TOC		HOLD
1	OC10-10		water	8OCT10				X				X			X	X	X									X	X			X		
2	OC10-1A		sediment	"				X				X					X											X	X			
3	OC10-1		water	"				X				X			X	X	X									X	X			X		
4	OC10-10A		sediment	"				X				X					X											X	X			
5	OC10-1C		"	"				X				X					X											X	X			
6	OC10-10C		"	"				X				X					X											X	X			
7	OC10-1B(0-5)		"	"				X				X					X											X	X			
8	OC10-10B(0-5)		"	"				X				X					X											X	X			
9	OC10-1B(30-35)		"	"				X				X					X											X	X			
10	OC10-10B(30-35)		"	"				X				X					X											X	X			
11	OC10-2B(30-35)		"	"				X				X					X											X	X			
12	[illegible]		"	"																												

Samples are from a Drinking Water Source serving multiple households [ ] YES

Missing 2 Day 2 jar — only 2 Day soil jar, missing 4 small jars

*Relinquished by:	Date (YY/MM/DD):	Time:	Received by:	Date (YY/MM/DD):	Time:
[signature]	10/10/08	16:00	[signature]	10/10/08	16:00
			MBregacain	10/10/09	10:30

Time Sensitive [ ]

Laboratory Use Only

Temperature on Receipt (°C)	Custody Seal Intact on Cooler?
11.4, 12.8, 15.0	Yes [ ] No [ ]

N/A

*Fresh off field

10/11/7 2/2/2 9/5/5

*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.

COC-1000 (03/15) Maxxam International Corporation o/a Maxxam Analytics White: Maxxam Yellow: Client

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Your Project #: 60164142
Site: WINNIPEG
Your C.O.C. #: 08323687, 08323688

AECOM
NEW Building
99 Commerce Drive
Winnipeg, MB
CANADA R3P 0Y7

Report Date: 2010/10/23

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B097883
Received: 2010/10/09, 10:30

Sample Matrix: Soil
Samples Received: 16

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Elements by ICPMS (total)	16	2010/10/14	2010/10/16	BRN SOP-00203 R5.0	Based on EPA 200.8
Particulate Mesh 200	8	N/A	2010/10/21	NA	NA
Particulate Mesh 200	8	N/A	2010/10/22	NA	NA
Moisture	11	N/A	2010/10/15	BRN SOP-00321 R5.0	Ont MOE -E 3139
Moisture	3	N/A	2010/10/16	BRN SOP-00321 R5.0	Ont MOE -E 3139
Moisture	2	N/A	2010/10/17	BRN SOP-00321 R5.0	Ont MOE -E 3139
PAH in Soil by GC/MS Lowlevel (Extended)	9	2010/10/14	2010/10/19	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	1	2010/10/15	2010/10/18	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	3	2010/10/15	2010/10/19	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	2	2010/10/16	2010/10/19	BRN SOP-00332 R5.0	Based on EPA 8270D
PAH in Soil by GC/MS Lowlevel (Extended)	1	2010/10/18	2010/10/19	BRN SOP-00332 R5.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc	10	N/A	2010/10/19		PAHTOT-S
Total LMW, HMW, Total PAH Calc	6	N/A	2010/10/20		PAHTOT-S
Polychlorinated Biphenyls in Soil	16	N/A	2010/10/18	60-C-025-09	EPA 608/8080
pH (2:1 DI Water Extract)	11	2010/10/14	2010/10/14	BRN SOP-00266 R6.0	Carter, SSMA 16.2
pH (2:1 DI Water Extract)	5	2010/10/14	2010/10/15	BRN SOP-00266 R6.0	Carter, SSMA 16.2
Organic Carbon and Organic Matter	14	2010/10/18	2010/10/18	CAL SOP-00035	MMFSPA Ch6
Organic Carbon and Organic Matter	2	2010/10/18	2010/10/20	CAL SOP-00035	MMFSPA Ch6

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Carbon (DOC)	2	N/A	2010/10/14	BRN SOP-00224 R4.0	Based on M 860-87T
Carbon (DOC)	1	N/A	2010/10/19	BRN SOP-00224 R4.0	Based on M 860-87T
Hardness Total (calculated as CaCO3)	3	N/A	2010/10/19		
Hardness (calculated as CaCO3)	3	N/A	2010/10/19		
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	3	N/A	2010/10/19	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (dissolved)	3	N/A	2010/10/19	BRN SOP-00206	Based on EPA 200.8
Na, K, Ca, Mg, S by CRC ICPMS (total)	2	2010/10/12	2010/10/19	BRN SOP-00206	Based on EPA 200.8
Na, K, Ca, Mg, S by CRC ICPMS (total)	1	2010/10/13	2010/10/19	BRN SOP-00206	Based on EPA 200.8
Elements by CRC ICPMS (total)	3	2010/10/15	2010/10/19	BRN SOP-00206	Based on EPA 200.8
PAH in Water by GC/MS (SIM)	1	2010/10/14	2010/10/18	BRN SOP-00331 R11.0	Based on EPA 8270D
Total LMW, HMW, Total PAH Calc	1	N/A	2010/10/19		
Polychlorinated Biphenyls in Water	1	2010/10/14	2010/10/19	60-C-044-05	EPA 608/8080

../2

Your Project #: 60164142
Site: WINNIPEG
Your C.O.C. #: 08323687, 08323688

AECOM
NEW Building
99 Commerce Drive
Winnipeg, MB
CANADA R3P 0Y7

Report Date: 2010/10/23

CERTIFICATE OF ANALYSIS

-2-

Sample Matrix: Water
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Filter and HNO3 Preserve for Metals (1)	2	N/A	2010/10/12	BRN WI-00006 R1.0	Based on EPA 200.2
Filter and HNO3 Preserve for Metals (1)	1	N/A	2010/10/18	BRN WI-00006 R1.0	Based on EPA 200.2
Carbon (Total Organic) (1)	2	N/A	2010/10/14	BRN SOP-00224 R4.0	Based on SM-5310C
Carbon (Total Organic) (1)	1	N/A	2010/10/19	BRN SOP-00224 R4.0	Based on SM-5310C

(1) This test was performed by Maxxam Vancouver
(2) This test was performed by Maxxam Calgary

Encryption Key

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

CYNDY WILKINSON, B.Sc, Burnaby Customer Service
Email: CWilkinson@maxxam.ca
Phone# (604) 639-2605

==========

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: 2

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		X61147	X61148	X61149		X61150		X61151		
Sampling Date		2010/10/07	2010/10/07	2010/10/07		2010/10/07		2010/10/07		
COC Number		08323687	08323687	08323687		08323687		08323687		
	Units	**OC10-7B (30-35)**	**OC10-6B (0-5)**	**OC10-6B (30-35)**	**QC Batch**	**OC10-5A**	**QC Batch**	**OC10-5C**	**RDL**	**QC Batch**
Misc. Inorganics										
Total Organic Carbon (C)	%	2.4	2.5	1.1	4343713	7.2	4352013	4.1	0.2	4343713
Physical Properties										
200 mesh (>.075 mm)	%	15.2	47.2	21.1	4357046	9.8	4357046	13.8	0.1	4357046
200 mesh (<.075 mm)	%	84.8	52.8	78.9	4357046	90.2	4357046	86.2	0.1	4357046

RDL = Reportable Detection Limit

Maxxam ID		X61152	X61153	X61154		X61155	X61156		
Sampling Date		2010/10/07	2010/10/07	2010/10/07		2010/10/07	2010/10/07		
COC Number		08323687	08323687	08323687		08323687	08323687		
	Units	**OC10-5B (0-5)**	**OC10-5B (30-35)**	**OC10-4B (30-35)**	**QC Batch**	**OC10-3A**	**OC10-3C**	**RDL**	**QC Batch**
Misc. Inorganics									
Total Organic Carbon (C)	%	2.2	0.6	0.5	4343713	6.8	2.6	0.2	4343713
Physical Properties									
200 mesh (>.075 mm)	%	18.0	5.4	<0.1	4357046	21.4	47.6	0.1	4361309
200 mesh (<.075 mm)	%	82.0	94.6	100	4357046	78.6	52.4	0.1	4361309

RDL = Reportable Detection Limit

Maxxam ID		X61157		X61214		X61216	X61217	X61218		
Sampling Date		2010/10/07		2010/10/07		2010/10/07	2010/10/07	2010/10/07		
COC Number		08323687		08323688		08323688	08323688	08323688		
	Units	**OC10-2A**	**QC Batch**	**OC10-2C**	**QC Batch**	**OC10-3B (0-5)**	**OC10-3B (30-35)**	**OC10-2B (0-5)**	**RDL**	**QC Batch**
Misc. Inorganics										
Total Organic Carbon (C)	%	6.4	4343713	11.1	4352013	2.7	0.8	3.2	0.2	4343713
Physical Properties										
200 mesh (>.075 mm)	%	18.1	4361309	15.0	4361309	37.6	17.9	22.3	0.1	4361309
200 mesh (<.075 mm)	%	81.9	4361309	85.0	4361309	62.4	82.1	77.7	0.1	4361309

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

RESULTS OF CHEMICAL ANALYSES OF SOIL

Maxxam ID		X61219		
Sampling Date		2010/10/07		
COC Number		08323688		
	Units	**OC10-4B (0-5)**	**RDL**	**QC Batch**
Misc. Inorganics				
Total Organic Carbon (C)	%	4.2	0.2	4343713
Physical Properties				
200 mesh (>.075 mm)	%	6.8	0.1	4361309
200 mesh (<.075 mm)	%	93.2	0.1	4361309

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

POLYCHLORINATED BIPHENYLS BY GC-ECD (SOIL)

Maxxam ID		X61147	X61148	X61149	X61150	X61151	X61152		
Sampling Date		2010/10/07	2010/10/07	2010/10/07	2010/10/07	2010/10/07	2010/10/07		
COC Number		08323687	08323687	08323687	08323687	08323687	08323687		
	Units	**OC10-7B (30-35)**	**OC10-6B (0-5)**	**OC10-6B (30-35)**	**OC10-5A**	**OC10-5C**	**OC10-5B (0-5)**	**RDL**	**QC Batch**
Polychlorinated Biphenyls									
Aroclor 1242	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4336150
Aroclor 1248	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4336150
Aroclor 1254	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4336150
Aroclor 1260	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4336150
Total PCB	mg/kg	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.03	4336150
Surrogate Recovery (%)									
Hexabromobiphenyl (sur.)	%	84	83	94	87	70	78	N/A	4336150

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam ID		X61153	X61154	X61155	X61156		X61157		
Sampling Date		2010/10/07	2010/10/07	2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323687	08323687	08323687		08323687		
	Units	**OC10-5B (30-35)**	**OC10-4B (30-35)**	**OC10-3A**	**OC10-3C**	**RDL**	**OC10-2A**	**RDL**	**QC Batch**
Polychlorinated Biphenyls									
Aroclor 1242	mg/kg	<0.03	<0.03	<0.03	<0.03	0.03	<0.06 (1)	0.06	4336150
Aroclor 1248	mg/kg	<0.03	<0.03	<0.03	<0.03	0.03	<0.06 (1)	0.06	4336150
Aroclor 1254	mg/kg	<0.03	<0.03	<0.03	0.14	0.03	<0.06 (1)	0.06	4336150
Aroclor 1260	mg/kg	<0.03	<0.03	<0.03	<0.03	0.03	<0.06 (1)	0.06	4336150
Total PCB	mg/kg	<0.03	<0.03	<0.03	0.14	0.03	<0.06 (1)	0.06	4336150
Surrogate Recovery (%)									
Hexabromobiphenyl (sur.)	%	80	77	66	93	N/A	72	N/A	4336150

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to high sample moisture content.

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

POLYCHLORINATED BIPHENYLS BY GC-ECD (SOIL)

Maxxam ID		X61214		X61216	X61217		X61218		X61219		
Sampling Date		2010/10/07		2010/10/07	2010/10/07		2010/10/07		2010/10/07		
COC Number		08323688		08323688	08323688		08323688		08323688		
	Units	**OC10-2C**	**RDL**	**OC10-3B (0-5)**	**OC10-3B (30-35)**	**RDL**	**OC10-2B (0-5)**	**RDL**	**OC10-4B (0-5)**	**RDL**	**QC Batch**
Polychlorinated Biphenyls											
Aroclor 1242	mg/kg	<0.06 (1)	0.06	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4336150
Aroclor 1248	mg/kg	<0.06 (1)	0.06	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4336150
Aroclor 1254	mg/kg	<0.06 (1)	0.06	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4336150
Aroclor 1260	mg/kg	<0.06 (1)	0.06	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4336150
Total PCB	mg/kg	<0.06 (1)	0.06	<0.03	<0.03	0.03	<0.06 (1)	0.06	<0.03	0.03	4336150
Surrogate Recovery (%)											
Hexabromobiphenyl (sur.)	%	64	N/A	66	73	N/A	62	N/A	96	N/A	4336150

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to high sample moisture content.

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

PHYSICAL TESTING (SOIL)

Maxxam ID		X61147	X61148	X61149	X61150	X61151	X61152		
Sampling Date		2010/10/07	2010/10/07	2010/10/07	2010/10/07	2010/10/07	2010/10/07		
COC Number		08323687	08323687	08323687	08323687	08323687	08323687		
	Units	**OC10-7B (30-35)**	**OC10-6B (0-5)**	**OC10-6B (30-35)**	**OC10-5A**	**OC10-5C**	**OC10-5B (0-5)**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	40	50	28	58	53	49	0.3	4336935

RDL = Reportable Detection Limit

Maxxam ID		X61153	X61154	X61155	X61156	X61157		X61214		
Sampling Date		2010/10/07	2010/10/07	2010/10/07	2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323687	08323687	08323687	08323687		08323688		
	Units	**OC10-5B (30-35)**	**OC10-4B (30-35)**	**OC10-3A**	**OC10-3C**	**OC10-2A**	**QC Batch**	**OC10-2C**	**RDL**	**QC Batch**
Physical Properties										
Moisture	%	38	37	60	37	71	4336935	78	0.3	4341369

RDL = Reportable Detection Limit

Maxxam ID		X61216		X61217		X61218	X61219		
Sampling Date		2010/10/07		2010/10/07		2010/10/07	2010/10/07		
COC Number		08323688		08323688		08323688	08323688		
	Units	**OC10-3B (0-5)**	**QC Batch**	**OC10-3B (30-35)**	**QC Batch**	**OC10-2B (0-5)**	**OC10-4B (0-5)**	**RDL**	**QC Batch**
Physical Properties									
Moisture	%	62	4341382	33	4341369	68	68	0.3	4341382

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		X61146	X61213		X61220		
Sampling Date		2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323688		08323688		
	Units	**OC10-3**	**OC10-2**	**QC Batch**	**OC10-5**	**RDL**	**QC Batch**
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	FIELD	ONSITE	FIELD	N/A	ONSITE
Misc. Inorganics							
Dissolved Organic Carbon (C)	mg/L	13.2	13.0	4337311	13.4	0.5	4347639
Total Organic Carbon (C)	mg/L	14.7	12.7	4337133	14.1	0.5	4347495

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

POLYCHLORINATED BIPHENYLS BY GC-ECD (WATER)

Maxxam ID		X61215		
Sampling Date		2010/10/07		
COC Number		08323688		
	Units	**OC10-4**	**RDL**	**QC Batch**
Polychlorinated Biphenyls				
Aroclor 1242	ug/L	<0.10	0.10	4336223
Aroclor 1248	ug/L	<0.10	0.10	4336223
Aroclor 1254	ug/L	<0.10	0.10	4336223
Aroclor 1260	ug/L	<0.10	0.10	4336223
Surrogate Recovery (%)				
Hexabromobiphenyl (sur.)	%	95	N/A	4336223

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61147		X61148	X61149		X61150		
Sampling Date		2010/10/07		2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687		08323687	08323687		08323687		
	Units	**OC10-7B (30-35)**	**QC Batch**	**OC10-6B (0-5)**	**OC10-6B (30-35)**	**QC Batch**	**OC10-5A**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.66	4336278	8.02	8.34	4336265	8.15	0.01	4336278
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18700	4336274	12700	16200	4336252	17100	100	4336274
Total Antimony (Sb)	mg/kg	3.2	4336274	1.8	2.1	4336252	1.0	0.1	4336274
Total Arsenic (As)	mg/kg	7.6	4336274	5.8	6.4	4336252	6.2	0.2	4336274
Total Barium (Ba)	mg/kg	193	4336274	120	169	4336252	134	0.1	4336274
Total Beryllium (Be)	mg/kg	0.9	4336274	0.6	0.6	4336252	0.8	0.1	4336274
Total Bismuth (Bi)	mg/kg	0.2	4336274	0.1	0.1	4336252	0.2	0.1	4336274
Total Cadmium (Cd)	mg/kg	0.81	4336274	0.45	0.38	4336252	0.70	0.05	4336274
Total Calcium (Ca)	mg/kg	39200	4336274	61500	76900	4336252	43400	100	4336274
Total Chromium (Cr)	mg/kg	43	4336274	31	35	4336252	38	1	4336274
Total Cobalt (Co)	mg/kg	12.5	4336274	8.1	10.1	4336252	9.9	0.3	4336274
Total Copper (Cu)	mg/kg	48.0	4336274	36.0	35.5	4336252	41.9	0.5	4336274
Total Iron (Fe)	mg/kg	26800	4336274	22300	27100	4336252	26100	100	4336274
Total Lead (Pb)	mg/kg	219	4336274	125	84.2	4336252	85.2	0.1	4336274
Total Lithium (Li)	mg/kg	25	4336274	16	23	4336252	22	5	4336274
Total Magnesium (Mg)	mg/kg	23900	4336274	29200	36200	4336252	28800	100	4336274
Total Manganese (Mn)	mg/kg	428	4336274	368	458	4336252	322	0.2	4336274
Total Mercury (Hg)	mg/kg	0.09	4336274	0.05	0.06	4336252	0.09	0.05	4336274
Total Molybdenum (Mo)	mg/kg	1.2	4336274	0.9	0.9	4336252	0.9	0.1	4336274
Total Nickel (Ni)	mg/kg	38.2	4336274	24.5	31.8	4336252	30.7	0.8	4336274
Total Phosphorus (P)	mg/kg	579	4336274	642	584	4336252	1040	10	4336274
Total Potassium (K)	mg/kg	3670	4336274	2580	3290	4336252	3690	100	4336274
Total Selenium (Se)	mg/kg	0.7	4336274	0.6	<0.5	4336252	0.7	0.5	4336274
Total Silver (Ag)	mg/kg	0.15	4336274	0.10	0.12	4336252	0.11	0.05	4336274
Total Sodium (Na)	mg/kg	494	4336274	375	872	4336252	498	100	4336274
Total Strontium (Sr)	mg/kg	59.0	4336274	65.5	92.4	4336252	57.9	0.1	4336274
Total Thallium (Tl)	mg/kg	0.25	4336274	0.17	0.21	4336252	0.26	0.05	4336274
Total Tin (Sn)	mg/kg	7.4	4336274	4.2	6.0	4336252	2.4	0.1	4336274
Total Titanium (Ti)	mg/kg	217	4336274	187	318	4336252	154	1	4336274
Total Uranium (U)	mg/kg	2.47	4336274	1.47	1.85	4336252	2.56	0.05	4336274
Total Vanadium (V)	mg/kg	56	4336274	39	48	4336252	57	2	4336274

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61147		X61148	X61149		X61150		
Sampling Date		2010/10/07		2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687		08323687	08323687		08323687		
	Units	**OC10-7B (30-35)**	**QC Batch**	**OC10-6B (0-5)**	**OC10-6B (30-35)**	**QC Batch**	**OC10-5A**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	283	4336274	273	536	4336252	395	1	4336274
Total Zirconium (Zr)	mg/kg	9.9	4336274	3.4	6.6	4336252	4.9	0.5	4336274

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61151		X61152		X61153	X61154		
Sampling Date		2010/10/07		2010/10/07		2010/10/07	2010/10/07		
COC Number		08323687		08323687		08323687	08323687		
	Units	**OC10-5C**	**QC Batch**	**OC10-5B (0-5)**	**QC Batch**	**OC10-5B (30-35)**	**OC10-4B (30-35)**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.35	4336278	8.25	4336265	8.81	8.30	0.01	4336278
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	16300	4336274	15400	4336252	21600	20200	100	4336274
Total Antimony (Sb)	mg/kg	1.7	4336274	1.2	4336252	0.4	0.5	0.1	4336274
Total Arsenic (As)	mg/kg	6.3	4336274	6.2	4336252	6.5	11.1	0.2	4336274
Total Barium (Ba)	mg/kg	135	4336274	116	4336252	217	251	0.1	4336274
Total Beryllium (Be)	mg/kg	0.8	4336274	0.8	4336252	1.0	1.2	0.1	4336274
Total Bismuth (Bi)	mg/kg	0.2	4336274	0.1	4336252	0.2	0.2	0.1	4336274
Total Cadmium (Cd)	mg/kg	0.66	4336274	0.42	4336252	0.36	0.30	0.05	4336274
Total Calcium (Ca)	mg/kg	47600	4336274	70000	4336252	69000	31600	100	4336274
Total Chromium (Cr)	mg/kg	37	4336274	38	4336252	44	42	1	4336274
Total Cobalt (Co)	mg/kg	9.1	4336274	10.5	4336252	14.7	17.9	0.3	4336274
Total Copper (Cu)	mg/kg	43.0	4336274	35.0	4336252	33.3	36.2	0.5	4336274
Total Iron (Fe)	mg/kg	26500	4336274	31100	4336252	29700	32300	100	4336274
Total Lead (Pb)	mg/kg	165	4336274	83.3	4336252	16.8	16.6	0.1	4336274
Total Lithium (Li)	mg/kg	20	4336274	21	4336252	31	27	5	4336274
Total Magnesium (Mg)	mg/kg	29100	4336274	30600	4336252	22600	20400	100	4336274
Total Manganese (Mn)	mg/kg	347	4336274	384	4336252	674	568	0.2	4336274
Total Mercury (Hg)	mg/kg	0.08	4336274	<0.05	4336252	<0.05	<0.05	0.05	4336274
Total Molybdenum (Mo)	mg/kg	0.8	4336274	1.3	4336252	0.6	1.8	0.1	4336274
Total Nickel (Ni)	mg/kg	31.1	4336274	32.3	4336252	44.2	45.2	0.8	4336274
Total Phosphorus (P)	mg/kg	1070	4336274	598	4336252	569	632	10	4336274
Total Potassium (K)	mg/kg	3590	4336274	3380	4336252	4950	4020	100	4336274
Total Selenium (Se)	mg/kg	1.2	4336274	<0.5	4336252	<0.5	<0.5	0.5	4336274
Total Silver (Ag)	mg/kg	0.10	4336274	0.10	4336252	0.13	0.12	0.05	4336274
Total Sodium (Na)	mg/kg	928	4336274	341	4336252	546	581	100	4336274
Total Strontium (Sr)	mg/kg	68.4	4336274	63.4	4336252	97.8	70.5	0.1	4336274
Total Thallium (Tl)	mg/kg	0.22	4336274	0.22	4336252	0.30	0.31	0.05	4336274
Total Tin (Sn)	mg/kg	4.6	4336274	2.9	4336252	1.1	0.9	0.1	4336274
Total Titanium (Ti)	mg/kg	162	4336274	233	4336252	237	130	1	4336274
Total Uranium (U)	mg/kg	2.61	4336274	2.32	4336252	1.99	1.77	0.05	4336274
Total Vanadium (V)	mg/kg	49	4336274	48	4336252	67	63	2	4336274

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61151		X61152		X61153	X61154		
Sampling Date		2010/10/07		2010/10/07		2010/10/07	2010/10/07		
COC Number		08323687		08323687		08323687	08323687		
	Units	**OC10-5C**	**QC Batch**	**OC10-5B (0-5)**	**QC Batch**	**OC10-5B (30-35)**	**OC10-4B (30-35)**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	376	4336274	287	4336252	128	96	1	4336274
Total Zirconium (Zr)	mg/kg	2.4	4336274	5.8	4336252	11.9	10.1	0.5	4336274

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61155	X61156	X61157	X61214		X61216		
Sampling Date		2010/10/07	2010/10/07	2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323687	08323687	08323688		08323688		
	Units	**OC10-3A**	**OC10-3C**	**OC10-2A**	**OC10-2C**	**QC Batch**	**OC10-3B (0-5)**	**RDL**	**QC Batch**
Physical Properties									
Soluble (2:1) pH	pH Units	8.24	8.18	8.10	8.36	4336278	8.27	0.01	4336265
Total Metals by ICPMS									
Total Aluminum (Al)	mg/kg	18500	8870	17200	17600	4336274	13700	100	4336252
Total Antimony (Sb)	mg/kg	0.9	1.0	1.1	1.0	4336274	0.7	0.1	4336252
Total Arsenic (As)	mg/kg	5.3	5.4	7.0	7.2	4336274	5.5	0.2	4336252
Total Barium (Ba)	mg/kg	119	103	130	119	4336274	114	0.1	4336252
Total Beryllium (Be)	mg/kg	0.8	0.4	0.8	0.8	4336274	0.6	0.1	4336252
Total Bismuth (Bi)	mg/kg	0.2	<0.1	0.2	0.2	4336274	0.1	0.1	4336252
Total Cadmium (Cd)	mg/kg	0.65	0.43	1.30	0.66	4336274	0.35	0.05	4336252
Total Calcium (Ca)	mg/kg	42400	93400	38700	35600	4336274	67500	100	4336252
Total Chromium (Cr)	mg/kg	37	39	37	36	4336274	38	1	4336252
Total Cobalt (Co)	mg/kg	8.7	6.7	10.1	9.4	4336274	10.5	0.3	4336252
Total Copper (Cu)	mg/kg	40.4	34.0	45.1	41.3	4336274	36.9	0.5	4336252
Total Iron (Fe)	mg/kg	22700	23000	23900	23500	4336274	23500	100	4336252
Total Lead (Pb)	mg/kg	70.4	107	86.2	61.7	4336274	113	0.1	4336252
Total Lithium (Li)	mg/kg	20	11	21	19	4336274	17	5	4336252
Total Magnesium (Mg)	mg/kg	27600	46100	25000	23100	4336274	30300	100	4336252
Total Manganese (Mn)	mg/kg	267	256	357	324	4336274	362	0.2	4336252
Total Mercury (Hg)	mg/kg	0.07	<0.05	0.06	0.05	4336274	<0.05	0.05	4336252
Total Molybdenum (Mo)	mg/kg	0.9	3.2	1.4	1.9	4336274	1.6	0.1	4336252
Total Nickel (Ni)	mg/kg	29.5	28.9	30.4	30.1	4336274	34.2	0.8	4336252
Total Phosphorus (P)	mg/kg	931	598	877	921	4336274	545	10	4336252
Total Potassium (K)	mg/kg	3940	2030	4030	4000	4336274	2930	100	4336252
Total Selenium (Se)	mg/kg	1.2	0.8	1.6	1.3	4336274	<0.5	0.5	4336252
Total Silver (Ag)	mg/kg	0.10	0.06	0.09	0.07	4336274	0.09	0.05	4336252
Total Sodium (Na)	mg/kg	390	324	408	608	4336274	424	100	4336252
Total Strontium (Sr)	mg/kg	56.8	62.4	53.3	55.4	4336274	65.2	0.1	4336252
Total Thallium (Tl)	mg/kg	0.26	0.14	0.24	0.25	4336274	0.19	0.05	4336252
Total Tin (Sn)	mg/kg	1.9	2.0	3.0	1.9	4336274	2.2	0.1	4336252
Total Titanium (Ti)	mg/kg	129	134	132	118	4336274	202	1	4336252
Total Uranium (U)	mg/kg	2.97	1.55	3.50	4.91	4336274	1.54	0.05	4336252
Total Vanadium (V)	mg/kg	56	33	58	58	4336274	42	2	4336252

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61155	X61156	X61157	X61214		X61216		
Sampling Date		2010/10/07	2010/10/07	2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323687	08323687	08323688		08323688		
	Units	**OC10-3A**	**OC10-3C**	**OC10-2A**	**OC10-2C**	**QC Batch**	**OC10-3B (0-5)**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	347	3310	288	271	4336274	5320	1	4336252
Total Zirconium (Zr)	mg/kg	4.9	1.0	3.6	3.9	4336274	5.2	0.5	4336252

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61217		X61218	X61219		
Sampling Date		2010/10/07		2010/10/07	2010/10/07		
COC Number		08323688		08323688	08323688		
	Units	**OC10-3B (30-35)**	**QC Batch**	**OC10-2B (0-5)**	**OC10-4B (0-5)**	**RDL**	**QC Batch**
Physical Properties							
Soluble (2:1) pH	pH Units	8.45	4336265	8.64	8.65	0.01	4336278
Total Metals by ICPMS							
Total Aluminum (Al)	mg/kg	22400	4336252	15200	17200	100	4336274
Total Antimony (Sb)	mg/kg	1.0	4336252	1.2	1.3	0.1	4336274
Total Arsenic (As)	mg/kg	7.9	4336252	5.9	8.2	0.2	4336274
Total Barium (Ba)	mg/kg	216	4336252	119	139	0.1	4336274
Total Beryllium (Be)	mg/kg	0.9	4336252	0.8	0.8	0.1	4336274
Total Bismuth (Bi)	mg/kg	0.2	4336252	0.2	0.2	0.1	4336274
Total Cadmium (Cd)	mg/kg	0.43	4336252	0.52	0.62	0.05	4336274
Total Calcium (Ca)	mg/kg	36700	4336252	42700	44100	100	4336274
Total Chromium (Cr)	mg/kg	51	4336252	33	39	1	4336274
Total Cobalt (Co)	mg/kg	16.7	4336252	10.1	11.1	0.3	4336274
Total Copper (Cu)	mg/kg	41.3	4336252	48.3	41.9	0.5	4336274
Total Iron (Fe)	mg/kg	34500	4336252	22400	24400	100	4336274
Total Lead (Pb)	mg/kg	79.8	4336252	90.8	97.0	0.1	4336274
Total Lithium (Li)	mg/kg	31	4336252	19	23	5	4336274
Total Magnesium (Mg)	mg/kg	23000	4336252	23600	26600	100	4336274
Total Manganese (Mn)	mg/kg	803	4336252	280	308	0.2	4336274
Total Mercury (Hg)	mg/kg	<0.05	4336252	0.06	0.07	0.05	4336274
Total Molybdenum (Mo)	mg/kg	1.2	4336252	0.9	1.5	0.1	4336274
Total Nickel (Ni)	mg/kg	46.1	4336252	28.4	33.7	0.8	4336274
Total Phosphorus (P)	mg/kg	653	4336252	628	722	10	4336274
Total Potassium (K)	mg/kg	4870	4336252	3520	3870	100	4336274
Total Selenium (Se)	mg/kg	<0.5	4336252	0.9	1.3	0.5	4336274
Total Silver (Ag)	mg/kg	0.12	4336252	0.73	0.11	0.05	4336274
Total Sodium (Na)	mg/kg	702	4336252	370	431	100	4336274
Total Strontium (Sr)	mg/kg	76.2	4336252	52.0	60.6	0.1	4336274
Total Thallium (Tl)	mg/kg	0.32	4336252	0.22	0.26	0.05	4336274
Total Tin (Sn)	mg/kg	7.1	4336252	6.8	2.8	0.1	4336274
Total Titanium (Ti)	mg/kg	373	4336252	206	187	1	4336274
Total Uranium (U)	mg/kg	1.72	4336252	2.40	3.80	0.05	4336274
Total Vanadium (V)	mg/kg	65	4336252	49	57	2	4336274

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR/CCME METALS IN SOIL (SOIL)

Maxxam ID		X61217		X61218	X61219		
Sampling Date		2010/10/07		2010/10/07	2010/10/07		
COC Number		08323688		08323688	08323688		
	Units	**OC10-3B (30-35)**	**QC Batch**	**OC10-2B (0-5)**	**OC10-4B (0-5)**	**RDL**	**QC Batch**
Total Zinc (Zn)	mg/kg	1170	4336252	223	498	1	4336274
Total Zirconium (Zr)	mg/kg	11.5	4336252	5.8	6.9	0.5	4336274

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR DISSOLVED METALS IN WATER (WATER)

Maxxam ID		X61146	X61213		X61220		
Sampling Date		2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323688		08323688		
	Units	**OC10-3**	**OC10-2**	**QC Batch**	**OC10-5**	**RDL**	**QC Batch**
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	456	453	4331896	457	0.5	4332022
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	44	38	4343279	60	3	4343279
Dissolved Antimony (Sb)	ug/L	<0.5	<0.5	4343279	<0.5	0.5	4343279
Dissolved Arsenic (As)	ug/L	3.0	3.0	4343279	3.2	0.1	4343279
Dissolved Barium (Ba)	ug/L	64	64	4343279	62	1	4343279
Dissolved Beryllium (Be)	ug/L	<0.1	<0.1	4343279	<0.1	0.1	4343279
Dissolved Bismuth (Bi)	ug/L	<1	<1	4343279	<1	1	4343279
Dissolved Boron (B)	ug/L	87	88	4343279	89	50	4343279
Dissolved Cadmium (Cd)	ug/L	0.19	0.02	4343279	0.03	0.01	4343279
Dissolved Chromium (Cr)	ug/L	<1	<1	4343279	<1	1	4343279
Dissolved Cobalt (Co)	ug/L	<0.5	<0.5	4343279	<0.5	0.5	4343279
Dissolved Copper (Cu)	ug/L	1.5	1.4	4343279	1.5	0.2	4343279
Dissolved Iron (Fe)	ug/L	87	66	4343279	119	5	4343279
Dissolved Lead (Pb)	ug/L	0.4	0.3	4343279	0.5	0.2	4343279
Dissolved Lithium (Li)	ug/L	72	72	4343279	73	5	4343279
Dissolved Manganese (Mn)	ug/L	23	23	4343279	24	1	4343279
Dissolved Mercury (Hg)	ug/L	<0.02	<0.02	4343279	<0.02	0.02	4343279
Dissolved Molybdenum (Mo)	ug/L	1	1	4343279	1	1	4343279
Dissolved Nickel (Ni)	ug/L	4	3	4343279	4	1	4343279
Dissolved Selenium (Se)	ug/L	1.5	1.6	4343279	1.4	0.1	4343279
Dissolved Silicon (Si)	ug/L	2710	2650	4343279	2520	100	4343279
Dissolved Silver (Ag)	ug/L	<0.02	<0.02	4343279	<0.02	0.02	4343279
Dissolved Strontium (Sr)	ug/L	431	429	4343279	423	1	4343279
Dissolved Thallium (Tl)	ug/L	<0.05	<0.05	4343279	<0.05	0.05	4343279
Dissolved Tin (Sn)	ug/L	<5	<5	4343279	<5	5	4343279
Dissolved Titanium (Ti)	ug/L	<5	<5	4343279	9	5	4343279
Dissolved Uranium (U)	ug/L	8.2	8.2	4343279	8.2	0.1	4343279
Dissolved Vanadium (V)	ug/L	6	6	4343279	6	5	4343279
Dissolved Zinc (Zn)	ug/L	9	<5	4343279	6	5	4343279
Dissolved Zirconium (Zr)	ug/L	<0.5	<0.5	4343279	0.6	0.5	4343279
Dissolved Calcium (Ca)	mg/L	75.9	76.9	4328633	75.0	0.05	4332023
Dissolved Magnesium (Mg)	mg/L	64.6	63.4	4328633	65.5	0.05	4332023

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR DISSOLVED METALS IN WATER (WATER)

Maxxam ID		X61146	X61213		X61220		
Sampling Date		2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323688		08323688		
	Units	**OC10-3**	**OC10-2**	**QC Batch**	**OC10-5**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	12.3	12.0	4328633	12.0	0.05	4332023
Dissolved Sodium (Na)	mg/L	65.3	67.0	4328633	65.6	0.05	4332023
Dissolved Sulphur (S)	mg/L	68	67	4328633	69	3	4332023

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR TOTAL METALS IN WATER (WATER)

Maxxam ID		X61146	X61213		X61220		
Sampling Date		2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323688		08323688		
	Units	**OC10-3**	**OC10-2**	**QC Batch**	**OC10-5**	**RDL**	**QC Batch**
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	450	486	4331895	472	0.5	4332884
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	839	476	4341927	502	3	4341927
Total Antimony (Sb)	ug/L	<0.5	<0.5	4341927	<0.5	0.5	4341927
Total Arsenic (As)	ug/L	3.0	3.2	4341927	3.3	0.1	4341927
Total Barium (Ba)	ug/L	76	79	4341927	71	1	4341927
Total Beryllium (Be)	ug/L	<0.1	<0.1	4341927	<0.1	0.1	4341927
Total Bismuth (Bi)	ug/L	<1	<1	4341927	<1	1	4341927
Total Boron (B)	ug/L	95	104	4341927	95	50	4341927
Total Cadmium (Cd)	ug/L	0.05	0.32	4341927	0.02	0.01	4341927
Total Chromium (Cr)	ug/L	2	1	4341927	<1	1	4341927
Total Cobalt (Co)	ug/L	0.5	<0.5	4341927	<0.5	0.5	4341927
Total Copper (Cu)	ug/L	3.5	2.3	4341927	2.3	0.2	4341927
Total Iron (Fe)	ug/L	1070	555	4341927	598	5	4341927
Total Lead (Pb)	ug/L	3.8	1.6	4341927	1.9	0.2	4341927
Total Lithium (Li)	ug/L	75	81	4341927	76	5	4341927
Total Manganese (Mn)	ug/L	31	30	4341927	22	1	4341927
Total Mercury (Hg)	ug/L	<0.02	<0.02	4341927	<0.02	0.02	4341927
Total Molybdenum (Mo)	ug/L	1	1	4341927	1	1	4341927
Total Nickel (Ni)	ug/L	5	5	4341927	5	1	4341927
Total Selenium (Se)	ug/L	1.5	1.7	4341927	1.5	0.1	4341927
Total Silicon (Si)	ug/L	4330	3610	4341927	3540	100	4341927
Total Silver (Ag)	ug/L	<0.02	<0.02	4341927	<0.02	0.02	4341927
Total Strontium (Sr)	ug/L	447	481	4341927	444	1	4341927
Total Thallium (Tl)	ug/L	<0.05	<0.05	4341927	<0.05	0.05	4341927
Total Tin (Sn)	ug/L	<5	<5	4341927	<5	5	4341927
Total Titanium (Ti)	ug/L	32	11	4341927	15	5	4341927
Total Uranium (U)	ug/L	8.6	9.2	4341927	8.5	0.1	4341927
Total Vanadium (V)	ug/L	7	7	4341927	8	5	4341927
Total Zinc (Zn)	ug/L	69	17	4341927	12	5	4341927
Total Zirconium (Zr)	ug/L	0.9	0.8	4341927	0.6	0.5	4341927
Total Calcium (Ca)	mg/L	73.4	78.1	4329304	74.5	0.05	4332886
Total Magnesium (Mg)	mg/L	64.9	70.6	4329304	69.3	0.05	4332886

RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CSR TOTAL METALS IN WATER (WATER)

Maxxam ID		X61146	X61213		X61220		
Sampling Date		2010/10/07	2010/10/07		2010/10/07		
COC Number		08323687	08323688		08323688		
	Units	**OC10-3**	**OC10-2**	**QC Batch**	**OC10-5**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	12.5	13.6	4329304	13.2	0.05	4332886
Total Sodium (Na)	mg/L	66.8	75.6	4329304	71.4	0.05	4332886
Total Sulphur (S)	mg/L	66	72	4329304	75	3	4332886

RDL = Reportable Detection Limit

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

PAH IN WATER BY GC-MS (WATER)

Maxxam ID		X61220		
Sampling Date		2010/10/07		
COC Number		08323688		
	Units	**OC10-5**	**RDL**	**QC Batch**
Polycyclic Aromatics				
Low Molecular Weight PAH`s	ug/L	0.13	0.05	4335202
High Molecular Weight PAH`s	ug/L	<0.02	0.02	4335202
Total PAH	ug/L	0.15	0.05	4335202
Naphthalene	ug/L	0.06	0.05	4341801
2-Methylnaphthalene	ug/L	<0.05	0.05	4341801
Quinoline	ug/L	<0.05	0.05	4341801
Acenaphthylene	ug/L	<0.01	0.01	4341801
Acenaphthene	ug/L	0.02	0.01	4341801
Fluorene	ug/L	0.02	0.01	4341801
Phenanthrene	ug/L	0.04	0.01	4341801
Anthracene	ug/L	<0.01	0.01	4341801
Acridine	ug/L	<0.05	0.05	4341801
Fluoranthene	ug/L	0.02	0.01	4341801
Pyrene	ug/L	<0.01	0.01	4341801
Benzo(a)anthracene	ug/L	<0.01	0.01	4341801
Chrysene	ug/L	<0.01	0.01	4341801
Benzo(b&j)fluoranthene	ug/L	<0.01	0.01	4341801
Benzo(k)fluoranthene	ug/L	<0.01	0.01	4341801
Benzo(a)pyrene	ug/L	<0.01	0.01	4341801
Indeno(1,2,3-cd)pyrene	ug/L	<0.02	0.02	4341801
Dibenz(a,h)anthracene	ug/L	<0.02	0.02	4341801
Benzo(g,h,i)perylene	ug/L	<0.02	0.02	4341801
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	112	N/A	4341801
D12-BENZO(A)PYRENE (sur.)	%	97	N/A	4341801
D8-ACENAPHTHYLENE (sur.)	%	101	N/A	4341801
D8-NAPHTHALENE (sur.)	%	105	N/A	4341801
TERPHENYL-D14 (sur.)	%	105	N/A	4341801

N/A = Not Applicable
RDL = Reportable Detection Limit

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X61147			X61148			X61149		
Sampling Date		2010/10/07			2010/10/07			2010/10/07		
COC Number		08323687			08323687			08323687		
	Units	**OC10-7B (30-35)**	**RDL**	**QC Batch**	**OC10-6B (0-5)**	**RDL**	**QC Batch**	**OC10-6B (30-35)**	**RDL**	**QC Batch**
Polycyclic Aromatics										
Naphthalene	mg/kg	0.015	0.001	4340289	0.13 (1)	0.01	4348523	0.052	0.001	4344503
2-Methylnaphthalene	mg/kg	0.018	0.001	4340289	0.07 (1)	0.01	4348523	0.069	0.001	4344503
Acenaphthylene	mg/kg	0.007	0.001	4340289	0.32 (1)	0.01	4348523	0.018	0.001	4344503
Acenaphthene	mg/kg	0.018	0.001	4340289	0.19 (1)	0.01	4348523	0.030	0.001	4344503
Fluorene	mg/kg	0.024	0.001	4340289	0.27 (1)	0.01	4348523	0.045	0.001	4344503
Phenanthrene	mg/kg	0.052	0.001	4340289	0.88 (1)	0.01	4348523	0.21	0.001	4344503
Anthracene	mg/kg	0.027	0.001	4340289	1.0 (1)	0.01	4348523	0.10	0.001	4344503
Fluoranthene	mg/kg	0.36 (2)	0.001	4340289	6.3 (1)	0.01	4348523	0.56	0.001	4344503
Pyrene	mg/kg	0.31 (2)	0.001	4340289	5.3 (1)	0.01	4348523	0.45	0.001	4344503
Benzo(a)anthracene	mg/kg	0.12 (3)	0.001	4340289	2.0 (1)	0.01	4348523	0.17	0.001	4344503
Chrysene	mg/kg	0.20 (3)	0.001	4340289	2.7 (1)	0.01	4348523	0.21	0.001	4344503
Benzo(b&j)fluoranthene	mg/kg	0.18	0.001	4340289	4.0 (1)	0.01	4348523	0.20	0.001	4344503
Benzo(k)fluoranthene	mg/kg	0.058	0.001	4340289	0.95 (1)	0.01	4348523	0.12	0.001	4344503
Benzo(a)pyrene	mg/kg	0.082	0.001	4340289	1.3 (1)	0.01	4348523	0.13	0.001	4344503
Indeno(1,2,3-cd)pyrene	mg/kg	0.039	0.002	4340289	1.0 (1)	0.02	4348523	0.10	0.002	4344503
Dibenz(a,h)anthracene	mg/kg	0.013	0.002	4340289	0.30 (1)	0.02	4348523	0.027	0.002	4344503
Benzo(g,h,i)perylene	mg/kg	0.048	0.002	4340289	0.99 (1)	0.02	4348523	0.10	0.002	4344503
Low Molecular Weight PAH`s	mg/kg	0.16	0.001	4328971	2.9	0.01	4328971	0.53	0.001	4328971
High Molecular Weight PAH`s	mg/kg	1.4	0.002	4328971	25	0.02	4328971	2.1	0.002	4328971
Total PAH	mg/kg	1.6	0.002	4328971	28	0.02	4328971	2.6	0.002	4328971
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	113	N/A	4340289	110	N/A	4348523	106	N/A	4344503
D12-BENZO(A)PYRENE (sur.)	%	95	N/A	4340289	110	N/A	4348523	90	N/A	4344503
D8-ACENAPHTHYLENE (sur.)	%	102	N/A	4340289	110	N/A	4348523	106	N/A	4344503
D8-NAPHTHALENE (sur.)	%	104	N/A	4340289	110	N/A	4348523	104	N/A	4344503
TERPHENYL-D14 (sur.)	%	109	N/A	4340289	120	N/A	4348523	118	N/A	4344503

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.
(2) Duplicate RPD above control limit - Non-homogenous sample - Increased variability of results
Matrix spike recovery outside control limit - High target compounds - No impact, spike Invalid
(3) Duplicate RPD above control limit - Non-homogenous sample - Increased variability of results

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X61150	X61151	X61152		X61153		X61154		
Sampling Date		2010/10/07	2010/10/07	2010/10/07		2010/10/07		2010/10/07		
COC Number		08323687	08323687	08323687		08323687		08323687		
	Units	**OC10-5A**	**OC10-5C**	**OC10-5B (0-5)**	**RDL**	**OC10-5B (30-35)**	**RDL**	**OC10-4B (30-35)**	**RDL**	**QC Batch**
Polycyclic Aromatics										
Naphthalene	mg/kg	0.07 (1)	0.07 (1)	0.05 (1)	0.01	<0.002 (1)	0.002	0.001	0.001	4344503
2-Methylnaphthalene	mg/kg	0.06 (1)	0.07 (1)	0.03 (1)	0.01	<0.002 (1)	0.002	<0.001	0.001	4344503
Acenaphthylene	mg/kg	0.05 (1)	0.04 (1)	0.02 (1)	0.01	<0.002 (1)	0.002	<0.001	0.001	4344503
Acenaphthene	mg/kg	0.22 (1)	0.05 (1)	0.02 (1)	0.01	<0.002 (1)	0.002	<0.001	0.001	4344503
Fluorene	mg/kg	0.20 (1)	0.07 (1)	0.04 (1)	0.01	<0.002 (1)	0.002	<0.001	0.001	4344503
Phenanthrene	mg/kg	1.7 (1)	0.45 (1)	0.15 (1)	0.01	0.004 (1)	0.002	0.001	0.001	4344503
Anthracene	mg/kg	0.42 (1)	0.12 (1)	0.05 (1)	0.01	<0.002 (1)	0.002	<0.001	0.001	4344503
Fluoranthene	mg/kg	1.9 (1)	0.64 (1)	0.35 (1)	0.01	0.006 (1)	0.002	<0.001	0.001	4344503
Pyrene	mg/kg	1.6 (1)	0.52 (1)	0.30 (1)	0.01	0.007 (1)	0.002	<0.001	0.001	4344503
Benzo(a)anthracene	mg/kg	0.71 (1)	0.25 (1)	0.12 (1)	0.01	0.002 (1)	0.002	<0.001	0.001	4344503
Chrysene	mg/kg	0.77 (1)	0.32 (1)	0.16 (1)	0.01	0.005 (1)	0.002	0.002	0.001	4344503
Benzo(b&j)fluoranthene	mg/kg	0.64 (1)	0.27 (1)	0.16 (1)	0.01	0.007 (1)	0.002	0.006	0.001	4344503
Benzo(k)fluoranthene	mg/kg	0.47 (1)	0.19 (1)	0.07 (1)	0.01	0.003 (1)	0.002	<0.002 (2)	0.002	4344503
Benzo(a)pyrene	mg/kg	0.61 (1)	0.21 (1)	0.09 (1)	0.01	<0.002 (1)	0.002	<0.001	0.001	4344503
Indeno(1,2,3-cd)pyrene	mg/kg	0.48 (1)	0.16 (1)	0.08 (1)	0.02	<0.004 (1)	0.004	<0.002	0.002	4344503
Dibenz(a,h)anthracene	mg/kg	0.09 (1)	0.04 (1)	<0.02 (1)	0.02	<0.004 (1)	0.004	<0.002	0.002	4344503
Benzo(g,h,i)perylene	mg/kg	0.39 (1)	0.15 (1)	0.08 (1)	0.02	0.004 (1)	0.004	<0.002	0.002	4344503
Low Molecular Weight PAH`s	mg/kg	2.7	0.87	0.36	0.01	0.004	0.002	0.003	0.001	4328971
High Molecular Weight PAH`s	mg/kg	7.7	2.8	1.4	0.02	0.035	0.004	0.007	0.002	4328971
Total PAH	mg/kg	10	3.6	1.8	0.02	0.039	0.004	0.010	0.002	4328971
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	120	110	110	N/A	110	N/A	109	N/A	4344503
D12-BENZO(A)PYRENE (sur.)	%	100	90	90	N/A	94	N/A	102	N/A	4344503
D8-ACENAPHTHYLENE (sur.)	%	110	110	90	N/A	104	N/A	103	N/A	4344503
D8-NAPHTHALENE (sur.)	%	110	110	110	N/A	104	N/A	103	N/A	4344503
TERPHENYL-D14 (sur.)	%	110	110	110	N/A	112	N/A	114	N/A	4344503

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.
(2) RDL raised due to sample matrix interference.

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X61155	X61156			X61157		X61214		
Sampling Date		2010/10/07	2010/10/07			2010/10/07		2010/10/07		
COC Number		08323687	08323687			08323687		08323688		
	Units	**OC10-3A**	**OC10-3C**	**RDL**	**QC Batch**	**OC10-2A**	**RDL**	**OC10-2C**	**RDL**	**QC Batch**
Polycyclic Aromatics										
Naphthalene	mg/kg	0.02 (1)	4.3 (1)	0.01	4344503	0.04 (1)	0.01	<0.04 (2)	0.04	4348523
2-Methylnaphthalene	mg/kg	0.02 (1)	1.2 (1)	0.01	4344503	0.03 (1)	0.01	<0.04 (2)	0.04	4348523
Acenaphthylene	mg/kg	0.04 (1)	1.5 (1)	0.01	4344503	<0.03 (3)	0.03	<0.04 (2)	0.04	4348523
Acenaphthene	mg/kg	0.03 (1)	1.1 (1)	0.01	4344503	0.04 (1)	0.01	<0.04 (2)	0.04	4348523
Fluorene	mg/kg	0.03 (1)	1.9 (1)	0.01	4344503	0.08 (1)	0.01	0.04 (2)	0.04	4348523
Phenanthrene	mg/kg	0.27 (1)	20 (1)	0.01	4344503	0.54 (1)	0.01	0.24 (2)	0.04	4348523
Anthracene	mg/kg	0.07 (1)	2.2 (1)	0.01	4344503	0.11 (1)	0.01	0.09 (2)	0.04	4348523
Fluoranthene	mg/kg	0.45 (1)	18 (1)	0.01	4344503	<0.8 (3)	0.8	<0.5 (3)	0.5	4348523
Pyrene	mg/kg	0.37 (1)	12 (1)	0.01	4344503	0.61 (1)	0.01	<0.4 (3)	0.4	4348523
Benzo(a)anthracene	mg/kg	0.16 (1)	4.8 (1)	0.01	4344503	0.22 (1)	0.01	0.15 (2)	0.04	4348523
Chrysene	mg/kg	0.23 (1)	6.0 (1)	0.01	4344503	0.38 (1)	0.01	0.22 (2)	0.04	4348523
Benzo(b&j)fluoranthene	mg/kg	0.19 (1)	6.4 (1)	0.01	4344503	0.35 (1)	0.01	0.24 (2)	0.04	4348523
Benzo(k)fluoranthene	mg/kg	0.14 (1)	3.6 (1)	0.01	4344503	0.10 (1)	0.01	0.10 (2)	0.04	4348523
Benzo(a)pyrene	mg/kg	0.15 (1)	4.3 (1)	0.01	4344503	0.19 (1)	0.01	0.15 (2)	0.04	4348523
Indeno(1,2,3-cd)pyrene	mg/kg	0.13 (1)	3.8 (1)	0.02	4344503	0.16 (1)	0.02	0.13 (2)	0.08	4348523
Dibenz(a,h)anthracene	mg/kg	0.03 (1)	0.73 (1)	0.02	4344503	0.05 (1)	0.02	<0.08 (2)	0.08	4348523
Benzo(g,h,i)perylene	mg/kg	0.12 (1)	2.8 (1)	0.02	4344503	<0.2 (3)	0.2	0.14 (2)	0.08	4348523
Low Molecular Weight PAH`s	mg/kg	0.47	32	0.01	4328971	0.84	0.03	0.36	0.04	4328971
High Molecular Weight PAH`s	mg/kg	2.0	62	0.02	4328971	2.1	0.8	1.1	0.5	4328971
Total PAH	mg/kg	2.4	94	0.02	4328971	2.9	0.8	1.5	0.5	4328971
Surrogate Recovery (%)										
D10-ANTHRACENE (sur.)	%	120	110	N/A	4344503	110	N/A	120	N/A	4348523
D12-BENZO(A)PYRENE (sur.)	%	100	100	N/A	4344503	110	N/A	120	N/A	4348523
D8-ACENAPHTHYLENE (sur.)	%	110	100	N/A	4344503	100	N/A	80	N/A	4348523
D8-NAPHTHALENE (sur.)	%	110	110	N/A	4344503	90	N/A	100	N/A	4348523
TERPHENYL-D14 (sur.)	%	110	110	N/A	4344503	110	N/A	120	N/A	4348523

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.
(2) RDL raised due to high sample moisture content and dilution.
(3) RDL raised due to sample matrix interference.

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X61216		X61217			X61218		
Sampling Date		2010/10/07		2010/10/07			2010/10/07		
COC Number		08323688		08323688			08323688		
	Units	**OC10-3B (0-5)**	**RDL**	**OC10-3B (30-35)**	**RDL**	**QC Batch**	**OC10-2B (0-5)**	**RDL**	**QC Batch**
Polycyclic Aromatics									
Naphthalene	mg/kg	0.02 (1)	0.01	0.026 (1)	0.005	4348523	0.05 (1)	0.01	4344503
2-Methylnaphthalene	mg/kg	0.02 (1)	0.01	0.017 (1)	0.005	4348523	0.04 (1)	0.01	4344503
Acenaphthylene	mg/kg	0.01 (1)	0.01	0.025 (1)	0.005	4348523	0.05 (1)	0.01	4344503
Acenaphthene	mg/kg	0.02 (1)	0.01	0.041 (1)	0.005	4348523	0.03 (1)	0.01	4344503
Fluorene	mg/kg	0.03 (1)	0.01	0.055 (1)	0.005	4348523	0.07 (1)	0.01	4344503
Phenanthrene	mg/kg	0.16 (1)	0.01	0.61 (1)	0.005	4348523	0.27 (1)	0.01	4344503
Anthracene	mg/kg	0.05 (1)	0.01	0.14 (1)	0.005	4348523	0.09 (1)	0.01	4344503
Fluoranthene	mg/kg	0.33 (1)	0.01	1.5 (1)	0.005	4348523	0.57 (1)	0.01	4344503
Pyrene	mg/kg	0.27 (1)	0.01	1.2 (1)	0.005	4348523	0.48 (1)	0.01	4344503
Benzo(a)anthracene	mg/kg	0.12 (1)	0.01	0.52 (1)	0.005	4348523	0.19 (1)	0.01	4344503
Chrysene	mg/kg	0.14 (1)	0.01	0.66 (1)	0.005	4348523	0.29 (1)	0.01	4344503
Benzo(b&j)fluoranthene	mg/kg	0.18 (1)	0.01	0.79 (1)	0.005	4348523	0.20 (1)	0.01	4344503
Benzo(k)fluoranthene	mg/kg	0.07 (1)	0.01	0.30 (1)	0.005	4348523	0.15 (1)	0.01	4344503
Benzo(a)pyrene	mg/kg	0.12 (1)	0.01	0.51 (1)	0.005	4348523	0.15 (1)	0.01	4344503
Indeno(1,2,3-cd)pyrene	mg/kg	0.10 (1)	0.02	0.39 (1)	0.01	4348523	0.12 (1)	0.02	4344503
Dibenz(a,h)anthracene	mg/kg	0.03 (1)	0.02	0.10 (1)	0.01	4348523	0.03 (1)	0.02	4344503
Benzo(g,h,i)perylene	mg/kg	0.11 (1)	0.02	0.35 (1)	0.01	4348523	0.12 (1)	0.02	4344503
Low Molecular Weight PAH`s	mg/kg	0.32	0.01	0.91	0.005	4328971	0.59	0.01	4328971
High Molecular Weight PAH`s	mg/kg	1.5	0.02	6.3	0.01	4328971	2.3	0.02	4328971
Total PAH	mg/kg	1.8	0.02	7.2	0.01	4328971	2.9	0.02	4328971
Surrogate Recovery (%)									
D10-ANTHRACENE (sur.)	%	110	N/A	115	N/A	4348523	120	N/A	4344503
D12-BENZO(A)PYRENE (sur.)	%	100	N/A	110	N/A	4348523	100	N/A	4344503
D8-ACENAPHTHYLENE (sur.)	%	90	N/A	105	N/A	4348523	80	N/A	4344503
D8-NAPHTHALENE (sur.)	%	90	N/A	105	N/A	4348523	120	N/A	4344503
TERPHENYL-D14 (sur.)	%	110	N/A	115	N/A	4348523	110	N/A	4344503

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

CCME PAH IN SOIL BY GC-MS (SOIL)

Maxxam ID		X61219		
Sampling Date		2010/10/07		
COC Number		08323688		
	Units	**OC10-4B (0-5)**	**RDL**	**QC Batch**
Polycyclic Aromatics				
Naphthalene	mg/kg	0.03 (1)	0.01	4348523
2-Methylnaphthalene	mg/kg	0.03 (1)	0.01	4348523
Acenaphthylene	mg/kg	0.02 (1)	0.01	4348523
Acenaphthene	mg/kg	0.03 (1)	0.01	4348523
Fluorene	mg/kg	0.04 (1)	0.01	4348523
Phenanthrene	mg/kg	0.31 (1)	0.01	4348523
Anthracene	mg/kg	0.11 (1)	0.01	4348523
Fluoranthene	mg/kg	0.58 (1)	0.01	4348523
Pyrene	mg/kg	0.48 (1)	0.01	4348523
Benzo(a)anthracene	mg/kg	0.23 (1)	0.01	4348523
Chrysene	mg/kg	0.29 (1)	0.01	4348523
Benzo(b&j)fluoranthene	mg/kg	0.35 (1)	0.01	4348523
Benzo(k)fluoranthene	mg/kg	0.13 (1)	0.01	4348523
Benzo(a)pyrene	mg/kg	0.27 (1)	0.01	4348523
Indeno(1,2,3-cd)pyrene	mg/kg	0.24 (1)	0.02	4348523
Dibenz(a,h)anthracene	mg/kg	0.06 (1)	0.02	4348523
Benzo(g,h,i)perylene	mg/kg	0.25 (1)	0.02	4348523
Low Molecular Weight PAH`s	mg/kg	0.57	0.01	4328971
High Molecular Weight PAH`s	mg/kg	2.9	0.02	4328971
Total PAH	mg/kg	3.5	0.02	4328971
Surrogate Recovery (%)				
D10-ANTHRACENE (sur.)	%	110	N/A	4348523
D12-BENZO(A)PYRENE (sur.)	%	90	N/A	4348523
D8-ACENAPHTHYLENE (sur.)	%	80	N/A	4348523
D8-NAPHTHALENE (sur.)	%	100	N/A	4348523
TERPHENYL-D14 (sur.)	%	90	N/A	4348523

N/A = Not Applicable
RDL = Reportable Detection Limit
(1) RDL raised due to sample dilution.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam Job #: B097883
Report Date: 2010/10/23

AECOM
Client Project #: 60164142
Site Reference: WINNIPEG

Package 1	11.0°C
Package 2	9.3°C
Package 3	2.0°C
Package 4	11.7°C
Package 5	6.3°C

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

General Comments

Results relate only to the items tested.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336150	MY4	Spiked Blank	Hexabromobiphenyl (sur.)	2010/10/18		90	%	60 - 130
			Aroclor 1254	2010/10/18		109	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/10/18		97	%	60 - 130
			Aroclor 1242	2010/10/18	<0.03		mg/kg	
			Aroclor 1248	2010/10/18	<0.03		mg/kg	
			Aroclor 1254	2010/10/18	<0.03		mg/kg	
			Aroclor 1260	2010/10/18	<0.03		mg/kg	
			Total PCB	2010/10/18	<0.03		mg/kg	
		RPD [X61150-02]	Aroclor 1242	2010/10/18	NC		%	N/A
			Aroclor 1248	2010/10/18	NC		%	N/A
			Aroclor 1254	2010/10/18	NC		%	N/A
			Aroclor 1260	2010/10/18	NC		%	N/A
			Total PCB	2010/10/18	NC		%	N/A
4336223	MY4	Spiked Blank	Hexabromobiphenyl (sur.)	2010/10/19		89	%	60 - 130
			Aroclor 1254	2010/10/19		93	%	70 - 110
		Method Blank	Hexabromobiphenyl (sur.)	2010/10/19		84	%	60 - 130
			Aroclor 1242	2010/10/19	<0.10		ug/L	
			Aroclor 1248	2010/10/19	<0.10		ug/L	
			Aroclor 1254	2010/10/19	<0.10		ug/L	
			Aroclor 1260	2010/10/19	<0.10		ug/L	
4336252	DJ	Matrix Spike	Total Arsenic (As)	2010/10/16		101	%	75 - 125
			Total Beryllium (Be)	2010/10/16		103	%	75 - 125
			Total Cadmium (Cd)	2010/10/16		106	%	75 - 125
			Total Chromium (Cr)	2010/10/16		99	%	75 - 125
			Total Cobalt (Co)	2010/10/16		98	%	75 - 125
			Total Copper (Cu)	2010/10/16		103	%	75 - 125
			Total Lead (Pb)	2010/10/16		102	%	75 - 125
			Total Lithium (Li)	2010/10/16		NC	%	75 - 125
			Total Mercury (Hg)	2010/10/16		101	%	75 - 125
			Total Nickel (Ni)	2010/10/16		97	%	75 - 125
			Total Selenium (Se)	2010/10/16		103	%	75 - 125
			Total Uranium (U)	2010/10/16		105	%	75 - 125
			Total Vanadium (V)	2010/10/16		102	%	75 - 125
			Total Zinc (Zn)	2010/10/16		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/16		108	%	70 - 130
			Total Antimony (Sb)	2010/10/16		90	%	70 - 130
			Total Arsenic (As)	2010/10/16		96	%	70 - 130
			Total Barium (Ba)	2010/10/16		106	%	70 - 130
			Total Cadmium (Cd)	2010/10/16		88	%	70 - 130
			Total Calcium (Ca)	2010/10/16		99	%	70 - 130
			Total Chromium (Cr)	2010/10/16		107	%	70 - 130
			Total Cobalt (Co)	2010/10/16		98	%	70 - 130
			Total Copper (Cu)	2010/10/16		96	%	70 - 130
			Total Iron (Fe)	2010/10/16		103	%	70 - 130
			Total Lead (Pb)	2010/10/16		103	%	70 - 130
			Total Magnesium (Mg)	2010/10/16		107	%	70 - 130
			Total Manganese (Mn)	2010/10/16		105	%	70 - 130
			Total Molybdenum (Mo)	2010/10/16		85	%	70 - 130
			Total Nickel (Ni)	2010/10/16		97	%	70 - 130
			Total Phosphorus (P)	2010/10/16		104	%	70 - 130
			Total Strontium (Sr)	2010/10/16		99	%	70 - 130
			Total Thallium (Tl)	2010/10/16		93	%	70 - 130
			Total Titanium (Ti)	2010/10/16		108	%	70 - 130
			Total Uranium (U)	2010/10/16		93	%	70 - 130
			Total Vanadium (V)	2010/10/16		111	%	70 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336252	DJ	QC Standard	Total Zinc (Zn)	2010/10/16		92	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/16		104	%	75 - 125
			Total Beryllium (Be)	2010/10/16		104	%	75 - 125
			Total Cadmium (Cd)	2010/10/16		107	%	75 - 125
			Total Chromium (Cr)	2010/10/16		103	%	75 - 125
			Total Cobalt (Co)	2010/10/16		104	%	75 - 125
			Total Copper (Cu)	2010/10/16		103	%	75 - 125
			Total Lead (Pb)	2010/10/16		104	%	75 - 125
			Total Lithium (Li)	2010/10/16		105	%	75 - 125
			Total Mercury (Hg)	2010/10/16		106	%	75 - 125
			Total Nickel (Ni)	2010/10/16		103	%	75 - 125
			Total Selenium (Se)	2010/10/16		106	%	75 - 125
			Total Uranium (U)	2010/10/16		104	%	75 - 125
			Total Vanadium (V)	2010/10/16		107	%	75 - 125
			Total Zinc (Zn)	2010/10/16		108	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/16	<100		mg/kg	
			Total Antimony (Sb)	2010/10/16	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/16	<0.2		mg/kg	
			Total Barium (Ba)	2010/10/16	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/16	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/16	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/16	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/16	<100		mg/kg	
			Total Chromium (Cr)	2010/10/16	<1		mg/kg	
			Total Cobalt (Co)	2010/10/16	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/16	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/16	<100		mg/kg	
			Total Lead (Pb)	2010/10/16	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/16	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/16	<100		mg/kg	
			Total Manganese (Mn)	2010/10/16	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/16	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/16	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/16	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/16	<10		mg/kg	
			Total Potassium (K)	2010/10/16	<100		mg/kg	
			Total Selenium (Se)	2010/10/16	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/16	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/16	<100		mg/kg	
			Total Strontium (Sr)	2010/10/16	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/16	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/16	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/16	<1		mg/kg	
			Total Uranium (U)	2010/10/16	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/16	<2		mg/kg	
			Total Zinc (Zn)	2010/10/16	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/16	<0.5		mg/kg	
		RPD	Total Aluminum (Al)	2010/10/16	1.3		%	35
			Total Antimony (Sb)	2010/10/16	NC		%	30
			Total Arsenic (As)	2010/10/16	2.4		%	30
			Total Barium (Ba)	2010/10/16	0.1		%	35
			Total Beryllium (Be)	2010/10/16	NC		%	30
			Total Bismuth (Bi)	2010/10/16	NC		%	30
			Total Cadmium (Cd)	2010/10/16	NC		%	30
			Total Calcium (Ca)	2010/10/16	2.2		%	30

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336252	DJ	RPD	Total Chromium (Cr)	2010/10/16	1.6		%	30
			Total Cobalt (Co)	2010/10/16	0.9		%	30
			Total Copper (Cu)	2010/10/16	2.0		%	30
			Total Iron (Fe)	2010/10/16	1.5		%	30
			Total Lead (Pb)	2010/10/16	1.2		%	35
			Total Magnesium (Mg)	2010/10/16	2.2		%	30
			Total Manganese (Mn)	2010/10/16	0.1		%	30
			Total Mercury (Hg)	2010/10/16	NC		%	35
			Total Molybdenum (Mo)	2010/10/16	0.5		%	35
			Total Nickel (Ni)	2010/10/16	2.0		%	30
			Total Phosphorus (P)	2010/10/16	3.4		%	30
			Total Potassium (K)	2010/10/16	NC		%	35
			Total Selenium (Se)	2010/10/16	NC		%	30
			Total Silver (Ag)	2010/10/16	NC		%	35
			Total Sodium (Na)	2010/10/16	NC		%	35
			Total Strontium (Sr)	2010/10/16	0.7		%	35
			Total Thallium (Tl)	2010/10/16	NC		%	30
			Total Tin (Sn)	2010/10/16	NC		%	35
			Total Titanium (Ti)	2010/10/16	8.0		%	35
			Total Vanadium (V)	2010/10/16	1.3		%	30
			Total Zinc (Zn)	2010/10/16	0.4		%	30
			Total Zirconium (Zr)	2010/10/16	NC		%	30
4336265	CB9	Spiked Blank	Soluble (2:1) pH	2010/10/15		102	%	96 - 104
		RPD	Soluble (2:1) pH	2010/10/15	0.5		%	20
4336274	DJ	Matrix Spike	Total Arsenic (As)	2010/10/16		105	%	75 - 125
			Total Beryllium (Be)	2010/10/16		109	%	75 - 125
			Total Cadmium (Cd)	2010/10/16		109	%	75 - 125
			Total Chromium (Cr)	2010/10/16		NC	%	75 - 125
			Total Cobalt (Co)	2010/10/16		100	%	75 - 125
			Total Copper (Cu)	2010/10/16		NC	%	75 - 125
			Total Lead (Pb)	2010/10/16		NC	%	75 - 125
			Total Lithium (Li)	2010/10/16		108	%	75 - 125
			Total Mercury (Hg)	2010/10/16		105	%	75 - 125
			Total Nickel (Ni)	2010/10/16		NC	%	75 - 125
			Total Selenium (Se)	2010/10/16		104	%	75 - 125
			Total Uranium (U)	2010/10/16		111	%	75 - 125
			Total Vanadium (V)	2010/10/16		NC	%	75 - 125
			Total Zinc (Zn)	2010/10/16		NC	%	75 - 125
		QC Standard	Total Aluminum (Al)	2010/10/16		112	%	70 - 130
			Total Antimony (Sb)	2010/10/16		90	%	70 - 130
			Total Arsenic (As)	2010/10/16		95	%	70 - 130
			Total Barium (Ba)	2010/10/16		107	%	70 - 130
			Total Cadmium (Cd)	2010/10/16		102	%	70 - 130
			Total Calcium (Ca)	2010/10/16		107	%	70 - 130
			Total Chromium (Cr)	2010/10/16		107	%	70 - 130
			Total Cobalt (Co)	2010/10/16		103	%	70 - 130
			Total Copper (Cu)	2010/10/16		97	%	70 - 130
			Total Iron (Fe)	2010/10/16		106	%	70 - 130
			Total Lead (Pb)	2010/10/16		105	%	70 - 130
			Total Magnesium (Mg)	2010/10/16		112	%	70 - 130
			Total Manganese (Mn)	2010/10/16		109	%	70 - 130
			Total Molybdenum (Mo)	2010/10/16		86	%	70 - 130
			Total Nickel (Ni)	2010/10/16		101	%	70 - 130
			Total Phosphorus (P)	2010/10/16		112	%	70 - 130
			Total Strontium (Sr)	2010/10/16		101	%	70 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336274	DJ	QC Standard	Total Thallium (Tl)	2010/10/16		91	%	70 - 130
			Total Titanium (Ti)	2010/10/16		111	%	70 - 130
			Total Uranium (U)	2010/10/16		101	%	70 - 130
			Total Vanadium (V)	2010/10/16		112	%	70 - 130
			Total Zinc (Zn)	2010/10/16		99	%	70 - 130
		Spiked Blank	Total Arsenic (As)	2010/10/16		102	%	75 - 125
			Total Beryllium (Be)	2010/10/16		103	%	75 - 125
			Total Cadmium (Cd)	2010/10/16		105	%	75 - 125
			Total Chromium (Cr)	2010/10/16		103	%	75 - 125
			Total Cobalt (Co)	2010/10/16		106	%	75 - 125
			Total Copper (Cu)	2010/10/16		108	%	75 - 125
			Total Lead (Pb)	2010/10/16		102	%	75 - 125
			Total Lithium (Li)	2010/10/16		104	%	75 - 125
			Total Mercury (Hg)	2010/10/16		103	%	75 - 125
			Total Nickel (Ni)	2010/10/16		106	%	75 - 125
			Total Selenium (Se)	2010/10/16		104	%	75 - 125
			Total Uranium (U)	2010/10/16		103	%	75 - 125
			Total Vanadium (V)	2010/10/16		107	%	75 - 125
			Total Zinc (Zn)	2010/10/16		110	%	75 - 125
		Method Blank	Total Aluminum (Al)	2010/10/16	<100		mg/kg	
			Total Antimony (Sb)	2010/10/16	<0.1		mg/kg	
			Total Arsenic (As)	2010/10/16	0.3, RDL=0.2		mg/kg	
			Total Barium (Ba)	2010/10/16	<0.1		mg/kg	
			Total Beryllium (Be)	2010/10/16	<0.1		mg/kg	
			Total Bismuth (Bi)	2010/10/16	<0.1		mg/kg	
			Total Cadmium (Cd)	2010/10/16	<0.05		mg/kg	
			Total Calcium (Ca)	2010/10/16	<100		mg/kg	
			Total Chromium (Cr)	2010/10/16	<1		mg/kg	
			Total Cobalt (Co)	2010/10/16	<0.3		mg/kg	
			Total Copper (Cu)	2010/10/16	<0.5		mg/kg	
			Total Iron (Fe)	2010/10/16	<100		mg/kg	
			Total Lead (Pb)	2010/10/16	<0.1		mg/kg	
			Total Lithium (Li)	2010/10/16	<5		mg/kg	
			Total Magnesium (Mg)	2010/10/16	<100		mg/kg	
			Total Manganese (Mn)	2010/10/16	<0.2		mg/kg	
			Total Mercury (Hg)	2010/10/16	<0.05		mg/kg	
			Total Molybdenum (Mo)	2010/10/16	<0.1		mg/kg	
			Total Nickel (Ni)	2010/10/16	<0.8		mg/kg	
			Total Phosphorus (P)	2010/10/16	<10		mg/kg	
			Total Potassium (K)	2010/10/16	<100		mg/kg	
			Total Selenium (Se)	2010/10/16	<0.5		mg/kg	
			Total Silver (Ag)	2010/10/16	<0.05		mg/kg	
			Total Sodium (Na)	2010/10/16	<100		mg/kg	
			Total Strontium (Sr)	2010/10/16	<0.1		mg/kg	
			Total Thallium (Tl)	2010/10/16	<0.05		mg/kg	
			Total Tin (Sn)	2010/10/16	<0.1		mg/kg	
			Total Titanium (Ti)	2010/10/16	<1		mg/kg	
			Total Uranium (U)	2010/10/16	<0.05		mg/kg	
			Total Vanadium (V)	2010/10/16	<2		mg/kg	
			Total Zinc (Zn)	2010/10/16	<1		mg/kg	
			Total Zirconium (Zr)	2010/10/16	<0.5		mg/kg	
		RPD	Total Aluminum (Al)	2010/10/16	0.9		%	35
			Total Antimony (Sb)	2010/10/16	1.2		%	30
			Total Arsenic (As)	2010/10/16	8.5		%	30
			Total Barium (Ba)	2010/10/16	1.1		%	35

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4336274	DJ	RPD	Total Beryllium (Be)	2010/10/16	21.0		%	30
			Total Bismuth (Bi)	2010/10/16	NC		%	30
			Total Cadmium (Cd)	2010/10/16	1.5		%	30
			Total Calcium (Ca)	2010/10/16	0.07		%	30
			Total Chromium (Cr)	2010/10/16	0.3		%	30
			Total Cobalt (Co)	2010/10/16	0.9		%	30
			Total Copper (Cu)	2010/10/16	1.2		%	30
			Total Iron (Fe)	2010/10/16	0.7		%	30
			Total Lead (Pb)	2010/10/16	0.4		%	35
			Total Lithium (Li)	2010/10/16	NC		%	30
			Total Magnesium (Mg)	2010/10/16	0.6		%	30
			Total Manganese (Mn)	2010/10/16	1.4		%	30
			Total Mercury (Hg)	2010/10/16	NC		%	35
			Total Molybdenum (Mo)	2010/10/16	1.8		%	35
			Total Nickel (Ni)	2010/10/16	1.1		%	30
			Total Phosphorus (P)	2010/10/16	4.1		%	30
			Total Potassium (K)	2010/10/16	1.9		%	35
			Total Selenium (Se)	2010/10/16	NC		%	30
			Total Silver (Ag)	2010/10/16	NC		%	35
			Total Sodium (Na)	2010/10/16	3.6		%	35
			Total Strontium (Sr)	2010/10/16	1.5		%	35
			Total Thallium (Tl)	2010/10/16	NC		%	30
			Total Tin (Sn)	2010/10/16	0.3		%	35
			Total Titanium (Ti)	2010/10/16	0.3		%	35
			Total Uranium (U)	2010/10/16	0.9		%	30
			Total Vanadium (V)	2010/10/16	0.3		%	30
			Total Zinc (Zn)	2010/10/16	1.6		%	30
			Total Zirconium (Zr)	2010/10/16	1.4		%	30
4336278	CB9	Spiked Blank	Soluble (2:1) pH	2010/10/14		102	%	96 - 104
		RPD	Soluble (2:1) pH	2010/10/14	0.5		%	20
4336935	EC5	Method Blank	Moisture	2010/10/15	<0.3		%	
		RPD	Moisture	2010/10/15	2.1		%	20
4337133	AD5	Matrix Spike	Total Organic Carbon (C)	2010/10/14		NC	%	80 - 120
		Spiked Blank	Total Organic Carbon (C)	2010/10/14		95	%	80 - 120
		Method Blank	Total Organic Carbon (C)	2010/10/14	<0.5		mg/L	
		RPD	Total Organic Carbon (C)	2010/10/14	4.3		%	20
4337311	AD5	Matrix Spike	Dissolved Organic Carbon (C)	2010/10/14		NC	%	80 - 120
		Spiked Blank	Dissolved Organic Carbon (C)	2010/10/07		94	%	80 - 120
		Method Blank	Dissolved Organic Carbon (C)	2010/10/14	<0.5		mg/L	
		RPD	Dissolved Organic Carbon (C)	2010/10/14	8.5		%	20
4340289	TG1	Matrix Spike [X61147-01]	D10-ANTHRACENE (sur.)	2010/10/18		96	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		95	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		100	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		98	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		91	%	60 - 130
			Naphthalene	2010/10/18		91	%	40 - 130
			2-Methylnaphthalene	2010/10/18		104	%	40 - 130
			Acenaphthylene	2010/10/18		87	%	40 - 130
			Acenaphthene	2010/10/18		95	%	40 - 130
			Fluorene	2010/10/18		96	%	40 - 130
			Phenanthrene	2010/10/18		90	%	40 - 130
			Anthracene	2010/10/18		93	%	40 - 130
			Fluoranthene	2010/10/18		NC	%	40 - 130
			Pyrene	2010/10/18		NC	%	40 - 130

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4340289 TG1	Matrix Spike						
	[X61147-01]	Benzo(a)anthracene	2010/10/18		80	%	40 - 130
		Chrysene	2010/10/18		82	%	40 - 130
		Benzo(b&j)fluoranthene	2010/10/18		79	%	40 - 130
		Benzo(k)fluoranthene	2010/10/18		83	%	40 - 130
		Benzo(a)pyrene	2010/10/18		83	%	40 - 130
		Indeno(1,2,3-cd)pyrene	2010/10/18		85	%	40 - 130
		Dibenz(a,h)anthracene	2010/10/18		82	%	40 - 130
		Benzo(g,h,i)perylene	2010/10/18		81	%	40 - 130
	Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/18		116	%	60 - 130
		D12-BENZO(A)PYRENE (sur.)	2010/10/18		112	%	60 - 130
		D8-ACENAPHTHYLENE (sur.)	2010/10/18		92	%	50 - 130
		D8-NAPHTHALENE (sur.)	2010/10/18		95	%	50 - 130
		TERPHENYL-D14 (sur.)	2010/10/18		118	%	60 - 130
		Naphthalene	2010/10/18		106	%	40 - 130
		2-Methylnaphthalene	2010/10/18		110	%	40 - 130
		Acenaphthylene	2010/10/18		103	%	40 - 130
		Acenaphthene	2010/10/18		110	%	40 - 130
		Fluorene	2010/10/18		107	%	40 - 130
		Phenanthrene	2010/10/18		110	%	40 - 130
		Anthracene	2010/10/18		112	%	40 - 130
		Fluoranthene	2010/10/18		109	%	40 - 130
		Pyrene	2010/10/18		112	%	40 - 130
		Benzo(a)anthracene	2010/10/18		104	%	40 - 130
		Chrysene	2010/10/18		109	%	40 - 130
		Benzo(b&j)fluoranthene	2010/10/18		98	%	40 - 130
		Benzo(k)fluoranthene	2010/10/18		115	%	40 - 130
		Benzo(a)pyrene	2010/10/18		106	%	40 - 130
		Indeno(1,2,3-cd)pyrene	2010/10/18		99	%	40 - 130
		Dibenz(a,h)anthracene	2010/10/18		95	%	40 - 130
		Benzo(g,h,i)perylene	2010/10/18		95	%	40 - 130
	Method Blank	D10-ANTHRACENE (sur.)	2010/10/18		99	%	60 - 130
		D12-BENZO(A)PYRENE (sur.)	2010/10/18		105	%	60 - 130
		D8-ACENAPHTHYLENE (sur.)	2010/10/18		73	%	50 - 130
		D8-NAPHTHALENE (sur.)	2010/10/18		73	%	50 - 130
		TERPHENYL-D14 (sur.)	2010/10/18		114	%	60 - 130
		Naphthalene	2010/10/18	<0.001		mg/kg	
		2-Methylnaphthalene	2010/10/18	<0.001		mg/kg	
		Acenaphthylene	2010/10/18	<0.001		mg/kg	
		Acenaphthene	2010/10/18	<0.001		mg/kg	
		Fluorene	2010/10/18	<0.001		mg/kg	
		Phenanthrene	2010/10/18	<0.001		mg/kg	
		Anthracene	2010/10/18	<0.001		mg/kg	
		Fluoranthene	2010/10/18	<0.001		mg/kg	
		Pyrene	2010/10/18	<0.001		mg/kg	
		Benzo(a)anthracene	2010/10/18	<0.001		mg/kg	
		Chrysene	2010/10/18	<0.001		mg/kg	
		Benzo(b&j)fluoranthene	2010/10/18	<0.001		mg/kg	
		Benzo(k)fluoranthene	2010/10/18	<0.001		mg/kg	
		Benzo(a)pyrene	2010/10/18	<0.001		mg/kg	
		Indeno(1,2,3-cd)pyrene	2010/10/18	<0.002		mg/kg	
		Dibenz(a,h)anthracene	2010/10/18	<0.002		mg/kg	
		Benzo(g,h,i)perylene	2010/10/18	<0.002		mg/kg	
	RPD [X61147-01]	Naphthalene	2010/10/18	3.9		%	50
		2-Methylnaphthalene	2010/10/18	25.2		%	50

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4340289	TG1	RPD [X61147-01]	Acenaphthylene	2010/10/18	16.1		%	50
			Acenaphthene	2010/10/18	11.5		%	50
			Fluorene	2010/10/18	12.8		%	50
			Phenanthrene	2010/10/18	20.7		%	50
			Anthracene	2010/10/18	13.1		%	50
			Fluoranthene	2010/10/18	76.9 (1)		%	50
			Pyrene	2010/10/18	74.2 (1)		%	50
			Benzo(a)anthracene	2010/10/18	75.8 (1)		%	50
			Chrysene	2010/10/18	60.5 (1)		%	50
			Benzo(b&j)fluoranthene	2010/10/18	26.7		%	50
			Benzo(k)fluoranthene	2010/10/18	44.6		%	50
			Benzo(a)pyrene	2010/10/18	20.3		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/18	5.3		%	50
			Dibenz(a,h)anthracene	2010/10/18	11.4		%	50
			Benzo(g,h,i)perylene	2010/10/18	6.8		%	50
4341369	ALA	Method Blank	Moisture	2010/10/17	<0.3		%	
		RPD	Moisture	2010/10/17	7.7		%	20
4341382	CG5	Method Blank	Moisture	2010/10/16	<0.3		%	
		RPD	Moisture	2010/10/16	19.3		%	20
4341801	TG1	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/18		104	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		102	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		123	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		107	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		100	%	60 - 130
			Naphthalene	2010/10/18		115	%	50 - 130
			2-Methylnaphthalene	2010/10/18		103	%	50 - 130
			Quinoline	2010/10/18		126	%	50 - 130
			Acenaphthylene	2010/10/18		113	%	50 - 130
			Acenaphthene	2010/10/18		109	%	50 - 130
			Fluorene	2010/10/18		106	%	50 - 130
			Phenanthrene	2010/10/18		110	%	60 - 130
			Anthracene	2010/10/18		117	%	60 - 130
			Acridine	2010/10/18		112	%	50 - 130
			Fluoranthene	2010/10/18		110	%	60 - 130
			Pyrene	2010/10/18		116	%	60 - 130
			Benzo(a)anthracene	2010/10/18		106	%	60 - 130
			Chrysene	2010/10/18		111	%	60 - 130
			Benzo(b&j)fluoranthene	2010/10/18		106	%	60 - 130
			Benzo(k)fluoranthene	2010/10/18		109	%	60 - 130
			Benzo(a)pyrene	2010/10/18		113	%	60 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/18		109	%	60 - 130
			Dibenz(a,h)anthracene	2010/10/18		102	%	60 - 130
			Benzo(g,h,i)perylene	2010/10/18		107	%	60 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/18		130	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		124	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		113	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		125	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		129	%	60 - 130
			Naphthalene	2010/10/18		123	%	50 - 130
			2-Methylnaphthalene	2010/10/18		110	%	50 - 130
			Quinoline	2010/10/18		119	%	50 - 130
			Acenaphthylene	2010/10/18		110	%	50 - 130
			Acenaphthene	2010/10/18		109	%	50 - 130
			Fluorene	2010/10/18		109	%	50 - 130
			Phenanthrene	2010/10/18		127	%	60 - 130

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4341801	TG1	Spiked Blank	Anthracene	2010/10/18		122	%	60 - 130
			Acridine	2010/10/18		126	%	50 - 130
			Fluoranthene	2010/10/18		122	%	60 - 130
			Pyrene	2010/10/18		128	%	60 - 130
			Benzo(a)anthracene	2010/10/18		119	%	60 - 130
			Chrysene	2010/10/18		125	%	60 - 130
			Benzo(b&j)fluoranthene	2010/10/18		110	%	60 - 130
			Benzo(k)fluoranthene	2010/10/18		118	%	60 - 130
			Benzo(a)pyrene	2010/10/18		118	%	60 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/18		118	%	60 - 130
			Dibenz(a,h)anthracene	2010/10/18		111	%	60 - 130
			Benzo(g,h,i)perylene	2010/10/18		116	%	60 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/18		101	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/18		98	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/18		86	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/18		92	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/18		99	%	60 - 130
			Naphthalene	2010/10/18	<0.05		ug/L	
			2-Methylnaphthalene	2010/10/18	<0.05		ug/L	
			Quinoline	2010/10/18	<0.05		ug/L	
			Acenaphthylene	2010/10/18	<0.01		ug/L	
			Acenaphthene	2010/10/18	<0.01		ug/L	
			Fluorene	2010/10/18	<0.01		ug/L	
			Phenanthrene	2010/10/18	<0.01		ug/L	
			Anthracene	2010/10/18	<0.01		ug/L	
			Acridine	2010/10/18	<0.05		ug/L	
			Fluoranthene	2010/10/18	<0.01		ug/L	
			Pyrene	2010/10/18	<0.01		ug/L	
			Benzo(a)anthracene	2010/10/18	<0.01		ug/L	
			Chrysene	2010/10/18	<0.01		ug/L	
			Benzo(b&j)fluoranthene	2010/10/18	<0.01		ug/L	
			Benzo(k)fluoranthene	2010/10/18	<0.01		ug/L	
			Benzo(a)pyrene	2010/10/18	<0.01		ug/L	
			Indeno(1,2,3-cd)pyrene	2010/10/18	<0.02		ug/L	
			Dibenz(a,h)anthracene	2010/10/18	<0.02		ug/L	
			Benzo(g,h,i)perylene	2010/10/18	<0.02		ug/L	
		RPD	Naphthalene	2010/10/18	NC		%	40
			2-Methylnaphthalene	2010/10/18	NC		%	40
			Quinoline	2010/10/18	NC		%	40
			Acenaphthylene	2010/10/18	NC		%	40
			Acenaphthene	2010/10/18	NC		%	40
			Fluorene	2010/10/18	NC		%	40
			Phenanthrene	2010/10/18	NC		%	40
			Anthracene	2010/10/18	NC (2)		%	40
			Acridine	2010/10/18	NC		%	40
			Fluoranthene	2010/10/18	NC		%	40
			Pyrene	2010/10/18	NC		%	40
			Benzo(a)anthracene	2010/10/18	NC		%	40
			Chrysene	2010/10/18	NC		%	40
			Benzo(b&j)fluoranthene	2010/10/18	NC		%	40
			Benzo(k)fluoranthene	2010/10/18	NC		%	40
			Benzo(a)pyrene	2010/10/18	NC		%	40
			Indeno(1,2,3-cd)pyrene	2010/10/18	NC		%	40
			Dibenz(a,h)anthracene	2010/10/18	NC		%	40
			Benzo(g,h,i)perylene	2010/10/18	NC		%	40

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4341927	GS9	Matrix Spike	Total Arsenic (As)	2010/10/19		107	%	80 - 120
			Total Beryllium (Be)	2010/10/19		112	%	80 - 120
			Total Cadmium (Cd)	2010/10/19		116	%	80 - 120
			Total Chromium (Cr)	2010/10/19		110	%	80 - 120
			Total Cobalt (Co)	2010/10/19		110	%	80 - 120
			Total Copper (Cu)	2010/10/19		NC	%	80 - 120
			Total Lead (Pb)	2010/10/19		118	%	80 - 120
			Total Lithium (Li)	2010/10/19		112	%	80 - 120
			Total Nickel (Ni)	2010/10/19		106	%	80 - 120
			Total Selenium (Se)	2010/10/19		115	%	80 - 120
			Total Uranium (U)	2010/10/19		116	%	80 - 120
			Total Vanadium (V)	2010/10/19		110	%	80 - 120
			Total Zinc (Zn)	2010/10/19		NC	%	80 - 120
		Spiked Blank	Total Arsenic (As)	2010/10/19		101	%	80 - 120
			Total Beryllium (Be)	2010/10/19		105	%	80 - 120
			Total Cadmium (Cd)	2010/10/19		98	%	80 - 120
			Total Chromium (Cr)	2010/10/19		106	%	80 - 120
			Total Cobalt (Co)	2010/10/19		109	%	80 - 120
			Total Copper (Cu)	2010/10/19		106	%	80 - 120
			Total Lead (Pb)	2010/10/19		110	%	80 - 120
			Total Lithium (Li)	2010/10/19		108	%	80 - 120
			Total Nickel (Ni)	2010/10/19		107	%	80 - 120
			Total Selenium (Se)	2010/10/19		110	%	80 - 120
			Total Uranium (U)	2010/10/19		107	%	80 - 120
			Total Vanadium (V)	2010/10/19		101	%	80 - 120
			Total Zinc (Zn)	2010/10/19		102	%	80 - 120
		Method Blank	Total Aluminum (Al)	2010/10/19	4, RDL=3		ug/L	
			Total Antimony (Sb)	2010/10/19	<0.5		ug/L	
			Total Arsenic (As)	2010/10/19	<0.1		ug/L	
			Total Barium (Ba)	2010/10/19	<1		ug/L	
			Total Beryllium (Be)	2010/10/19	<0.1		ug/L	
			Total Bismuth (Bi)	2010/10/19	<1		ug/L	
			Total Boron (B)	2010/10/19	<50		ug/L	
			Total Cadmium (Cd)	2010/10/19	<0.01		ug/L	
			Total Chromium (Cr)	2010/10/19	<1		ug/L	
			Total Cobalt (Co)	2010/10/19	<0.5		ug/L	
			Total Copper (Cu)	2010/10/19	0.2, RDL=0.2		ug/L	
			Total Iron (Fe)	2010/10/19	<5		ug/L	
			Total Lead (Pb)	2010/10/19	<0.2		ug/L	
			Total Lithium (Li)	2010/10/19	<5		ug/L	
			Total Manganese (Mn)	2010/10/19	<1		ug/L	
			Total Mercury (Hg)	2010/10/19	0.03, RDL=0.02		ug/L	
			Total Molybdenum (Mo)	2010/10/19	<1		ug/L	
			Total Nickel (Ni)	2010/10/19	<1		ug/L	
			Total Selenium (Se)	2010/10/19	<0.1		ug/L	
			Total Silicon (Si)	2010/10/19	<100		ug/L	
			Total Silver (Ag)	2010/10/19	<0.02		ug/L	
			Total Strontium (Sr)	2010/10/19	<1		ug/L	
			Total Thallium (Tl)	2010/10/19	<0.05		ug/L	
			Total Tin (Sn)	2010/10/19	<5		ug/L	
			Total Titanium (Ti)	2010/10/19	<5		ug/L	
			Total Uranium (U)	2010/10/19	<0.1		ug/L	
			Total Vanadium (V)	2010/10/19	<5		ug/L	
			Total Zinc (Zn)	2010/10/19	<5		ug/L	
			Total Zirconium (Zr)	2010/10/19	<0.5		ug/L	

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4341927	GS9	RPD	Total Aluminum (Al)	2010/10/19	NC		%	20
			Total Antimony (Sb)	2010/10/19	NC		%	20
			Total Arsenic (As)	2010/10/19	NC		%	20
			Total Barium (Ba)	2010/10/19	3.2		%	20
			Total Beryllium (Be)	2010/10/19	NC		%	20
			Total Bismuth (Bi)	2010/10/19	NC		%	20
			Total Boron (B)	2010/10/19	NC		%	20
			Total Cadmium (Cd)	2010/10/19	NC		%	20
			Total Chromium (Cr)	2010/10/19	NC		%	20
			Total Cobalt (Co)	2010/10/19	NC		%	20
			Total Copper (Cu)	2010/10/19	9.5		%	20
			Total Iron (Fe)	2010/10/19	15.3		%	20
			Total Lead (Pb)	2010/10/19	3.8		%	20
			Total Manganese (Mn)	2010/10/19	NC		%	20
			Total Mercury (Hg)	2010/10/19	NC		%	20
			Total Molybdenum (Mo)	2010/10/19	NC		%	20
			Total Nickel (Ni)	2010/10/19	NC		%	20
			Total Selenium (Se)	2010/10/19	NC		%	20
			Total Silicon (Si)	2010/10/19	4.2		%	20
			Total Silver (Ag)	2010/10/19	NC		%	20
			Total Strontium (Sr)	2010/10/19	0.02		%	20
			Total Thallium (Tl)	2010/10/19	NC		%	20
			Total Tin (Sn)	2010/10/19	NC		%	20
			Total Titanium (Ti)	2010/10/19	NC		%	20
			Total Uranium (U)	2010/10/19	NC		%	20
			Total Vanadium (V)	2010/10/19	NC		%	20
			Total Zinc (Zn)	2010/10/19	NC		%	20
			Total Zirconium (Zr)	2010/10/19	NC		%	20
4343279	JT3	Matrix Spike	Dissolved Arsenic (As)	2010/10/19		103	%	80 - 120
			Dissolved Beryllium (Be)	2010/10/19		113	%	80 - 120
			Dissolved Cadmium (Cd)	2010/10/19		115	%	80 - 120
			Dissolved Chromium (Cr)	2010/10/19		100	%	80 - 120
			Dissolved Cobalt (Co)	2010/10/19		100	%	80 - 120
			Dissolved Copper (Cu)	2010/10/19		100	%	80 - 120
			Dissolved Lead (Pb)	2010/10/19		114	%	80 - 120
			Dissolved Lithium (Li)	2010/10/19		114	%	80 - 120
			Dissolved Nickel (Ni)	2010/10/19		100	%	80 - 120
			Dissolved Selenium (Se)	2010/10/19		111	%	80 - 120
			Dissolved Uranium (U)	2010/10/19		110	%	80 - 120
			Dissolved Vanadium (V)	2010/10/19		100	%	80 - 120
			Dissolved Zinc (Zn)	2010/10/19		114	%	80 - 120
		Spiked Blank	Dissolved Arsenic (As)	2010/10/19		98	%	80 - 120
			Dissolved Beryllium (Be)	2010/10/19		103	%	80 - 120
			Dissolved Cadmium (Cd)	2010/10/19		100	%	80 - 120
			Dissolved Chromium (Cr)	2010/10/19		98	%	80 - 120
			Dissolved Cobalt (Co)	2010/10/19		98	%	80 - 120
			Dissolved Copper (Cu)	2010/10/19		105	%	80 - 120
			Dissolved Lead (Pb)	2010/10/19		103	%	80 - 120
			Dissolved Lithium (Li)	2010/10/19		107	%	80 - 120
			Dissolved Nickel (Ni)	2010/10/19		97	%	80 - 120
			Dissolved Selenium (Se)	2010/10/19		103	%	80 - 120
			Dissolved Uranium (U)	2010/10/19		103	%	80 - 120
			Dissolved Vanadium (V)	2010/10/19		95	%	80 - 120
			Dissolved Zinc (Zn)	2010/10/19		99	%	80 - 120
		Method Blank	Dissolved Aluminum (Al)	2010/10/19	<3		ug/L	

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4343279	JT3	Method Blank	Dissolved Antimony (Sb)	2010/10/19	<0.5		ug/L	
			Dissolved Arsenic (As)	2010/10/19	<0.1		ug/L	
			Dissolved Barium (Ba)	2010/10/19	<1		ug/L	
			Dissolved Beryllium (Be)	2010/10/19	<0.1		ug/L	
			Dissolved Bismuth (Bi)	2010/10/19	<1		ug/L	
			Dissolved Boron (B)	2010/10/19	<50		ug/L	
			Dissolved Cadmium (Cd)	2010/10/19	<0.01		ug/L	
			Dissolved Chromium (Cr)	2010/10/19	<1		ug/L	
			Dissolved Cobalt (Co)	2010/10/19	<0.5		ug/L	
			Dissolved Copper (Cu)	2010/10/19	<0.2		ug/L	
			Dissolved Iron (Fe)	2010/10/19	<5		ug/L	
			Dissolved Lead (Pb)	2010/10/19	<0.2		ug/L	
			Dissolved Lithium (Li)	2010/10/19	<5		ug/L	
			Dissolved Manganese (Mn)	2010/10/19	<1		ug/L	
			Dissolved Mercury (Hg)	2010/10/19	<0.02		ug/L	
			Dissolved Molybdenum (Mo)	2010/10/19	<1		ug/L	
			Dissolved Nickel (Ni)	2010/10/19	<1		ug/L	
			Dissolved Selenium (Se)	2010/10/19	<0.1		ug/L	
			Dissolved Silicon (Si)	2010/10/19	<100		ug/L	
			Dissolved Silver (Ag)	2010/10/19	<0.02		ug/L	
			Dissolved Strontium (Sr)	2010/10/19	<1		ug/L	
			Dissolved Thallium (Tl)	2010/10/19	<0.05		ug/L	
			Dissolved Tin (Sn)	2010/10/19	<5		ug/L	
			Dissolved Titanium (Ti)	2010/10/19	<5		ug/L	
			Dissolved Uranium (U)	2010/10/19	<0.1		ug/L	
			Dissolved Vanadium (V)	2010/10/19	<5		ug/L	
			Dissolved Zinc (Zn)	2010/10/19	<5		ug/L	
			Dissolved Zirconium (Zr)	2010/10/19	<0.5		ug/L	
4343713	SMB	QC Standard	Total Organic Carbon (C)	2010/10/18		101	%	83 - 118
		RPD [X61147-03]	Total Organic Carbon (C)	2010/10/18	3.3		%	35
4344503	VB1	Matrix Spike						
		[X61218-01]	D10-ANTHRACENE (sur.)	2010/10/19		120	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		100	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/19		80	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		110	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		100	%	60 - 130
			Naphthalene	2010/10/19		96	%	40 - 130
			2-Methylnaphthalene	2010/10/19		100	%	40 - 130
			Acenaphthylene	2010/10/19		72	%	40 - 130
			Acenaphthene	2010/10/19		104	%	40 - 130
			Fluorene	2010/10/19		104	%	40 - 130
			Phenanthrene	2010/10/19		NC	%	40 - 130
			Anthracene	2010/10/19		101	%	40 - 130
			Fluoranthene	2010/10/19		NC	%	40 - 130
			Pyrene	2010/10/19		NC	%	40 - 130
			Benzo(a)anthracene	2010/10/19		96	%	40 - 130
			Chrysene	2010/10/19		NC	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/19		98	%	40 - 130
			Benzo(k)fluoranthene	2010/10/19		96	%	40 - 130
			Benzo(a)pyrene	2010/10/19		91	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/19		95	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/19		84	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/19		87	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/19		111	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		98	%	60 - 130

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4344503	VB1	Spiked Blank	D8-ACENAPHTHYLENE (sur.)	2010/10/19		104	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		104	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		113	%	60 - 130
			Naphthalene	2010/10/19		87	%	40 - 130
			2-Methylnaphthalene	2010/10/19		88	%	40 - 130
			Acenaphthylene	2010/10/19		85	%	40 - 130
			Acenaphthene	2010/10/19		90	%	40 - 130
			Fluorene	2010/10/19		89	%	40 - 130
			Phenanthrene	2010/10/19		90	%	40 - 130
			Anthracene	2010/10/19		94	%	40 - 130
			Fluoranthene	2010/10/19		85	%	40 - 130
			Pyrene	2010/10/19		92	%	40 - 130
			Benzo(a)anthracene	2010/10/19		81	%	40 - 130
			Chrysene	2010/10/19		88	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/19		71	%	40 - 130
			Benzo(k)fluoranthene	2010/10/19		88	%	40 - 130
			Benzo(a)pyrene	2010/10/19		79	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/19		67	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/19		65	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/19		65	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/19		105	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		88	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/19		95	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		99	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		115	%	60 - 130
			Naphthalene	2010/10/19	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/19	<0.001		mg/kg	
			Acenaphthylene	2010/10/19	<0.001		mg/kg	
			Acenaphthene	2010/10/19	<0.001		mg/kg	
			Fluorene	2010/10/19	<0.001		mg/kg	
			Phenanthrene	2010/10/19	<0.001		mg/kg	
			Anthracene	2010/10/19	<0.001		mg/kg	
			Fluoranthene	2010/10/19	<0.001		mg/kg	
			Pyrene	2010/10/19	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/19	<0.001		mg/kg	
			Chrysene	2010/10/19	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/19	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/19	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/19	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/19	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/10/19	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/19	<0.002		mg/kg	
		RPD [X61218-01]	Naphthalene	2010/10/19	3.0 (3)		%	50
			2-Methylnaphthalene	2010/10/19	NC (3)		%	50
			Acenaphthylene	2010/10/19	NC (3)		%	50
			Acenaphthene	2010/10/19	NC (3)		%	50
			Fluorene	2010/10/19	4.6 (3)		%	50
			Phenanthrene	2010/10/19	28.6 (4)		%	50
			Anthracene	2010/10/19	31.9 (3)		%	50
			Fluoranthene	2010/10/19	21.5 (4)		%	50
			Pyrene	2010/10/19	24.7 (4)		%	50
			Benzo(a)anthracene	2010/10/19	27.8 (3)		%	50
			Chrysene	2010/10/19	24.9 (4)		%	50
			Benzo(b&j)fluoranthene	2010/10/19	22.8 (3)		%	50
			Benzo(k)fluoranthene	2010/10/19	11.7 (3)		%	50

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4344503	VB1	RPD [X61218-01]	Benzo(a)pyrene	2010/10/19	24.3 (3)		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/19	23.3 (3)		%	50
			Dibenz(a,h)anthracene	2010/10/19	NC (3)		%	50
			Benzo(g,h,i)perylene	2010/10/19	14.5 (3)		%	50
4347495	AD5	Matrix Spike	Total Organic Carbon (C)	2010/10/19		NC	%	80 - 120
		Spiked Blank	Total Organic Carbon (C)	2010/10/19		108	%	80 - 120
		Method Blank	Total Organic Carbon (C)	2010/10/19	<0.5		mg/L	
		RPD	Total Organic Carbon (C)	2010/10/19	NC		%	20
4347639	AD5	Matrix Spike	Dissolved Organic Carbon (C)	2010/10/19		NC	%	80 - 120
		Spiked Blank	Dissolved Organic Carbon (C)	2010/10/19		107	%	80 - 120
		Method Blank	Dissolved Organic Carbon (C)	2010/10/19	<0.5		mg/L	
		RPD	Dissolved Organic Carbon (C)	2010/10/19	NC		%	20
4348523	SY	Matrix Spike	D10-ANTHRACENE (sur.)	2010/10/20		100	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/20		100	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/20		50	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/20		100	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/20		100	%	60 - 130
			Naphthalene	2010/10/20		NC	%	40 - 130
			2-Methylnaphthalene	2010/10/20		NC	%	40 - 130
			Acenaphthylene	2010/10/20		NC	%	40 - 130
			Acenaphthene	2010/10/20		NC	%	40 - 130
			Fluorene	2010/10/20		NC	%	40 - 130
			Phenanthrene	2010/10/20		NC	%	40 - 130
			Anthracene	2010/10/20		NC	%	40 - 130
			Fluoranthene	2010/10/20		NC	%	40 - 130
			Pyrene	2010/10/20		NC	%	40 - 130
			Benzo(a)anthracene	2010/10/20		NC	%	40 - 130
			Chrysene	2010/10/20		NC	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/20		NC	%	40 - 130
			Benzo(k)fluoranthene	2010/10/20		NC	%	40 - 130
			Benzo(a)pyrene	2010/10/20		NC	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/20		NC	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/20		NC	%	40 - 130
			Benzo(g,h,i)perylene	2010/10/20		NC	%	40 - 130
		Spiked Blank	D10-ANTHRACENE (sur.)	2010/10/19		109	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		107	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/19		96	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		96	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		111	%	60 - 130
			Naphthalene	2010/10/19		97	%	40 - 130
			2-Methylnaphthalene	2010/10/19		99	%	40 - 130
			Acenaphthylene	2010/10/19		96	%	40 - 130
			Acenaphthene	2010/10/19		102	%	40 - 130
			Fluorene	2010/10/19		101	%	40 - 130
			Phenanthrene	2010/10/19		105	%	40 - 130
			Anthracene	2010/10/19		106	%	40 - 130
			Fluoranthene	2010/10/19		104	%	40 - 130
			Pyrene	2010/10/19		106	%	40 - 130
			Benzo(a)anthracene	2010/10/19		96	%	40 - 130
			Chrysene	2010/10/19		104	%	40 - 130
			Benzo(b&j)fluoranthene	2010/10/19		96	%	40 - 130
			Benzo(k)fluoranthene	2010/10/19		100	%	40 - 130
			Benzo(a)pyrene	2010/10/19		100	%	40 - 130
			Indeno(1,2,3-cd)pyrene	2010/10/19		95	%	40 - 130
			Dibenz(a,h)anthracene	2010/10/19		88	%	40 - 130

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
4348523	SY	Spiked Blank	Benzo(g,h,i)perylene	2010/10/19		89	%	40 - 130
		Method Blank	D10-ANTHRACENE (sur.)	2010/10/19		108	%	60 - 130
			D12-BENZO(A)PYRENE (sur.)	2010/10/19		100	%	60 - 130
			D8-ACENAPHTHYLENE (sur.)	2010/10/19		96	%	50 - 130
			D8-NAPHTHALENE (sur.)	2010/10/19		96	%	50 - 130
			TERPHENYL-D14 (sur.)	2010/10/19		107	%	60 - 130
			Naphthalene	2010/10/19	<0.001		mg/kg	
			2-Methylnaphthalene	2010/10/19	<0.001		mg/kg	
			Acenaphthylene	2010/10/19	<0.001		mg/kg	
			Acenaphthene	2010/10/19	<0.001		mg/kg	
			Fluorene	2010/10/19	<0.001		mg/kg	
			Phenanthrene	2010/10/19	<0.001		mg/kg	
			Anthracene	2010/10/19	<0.001		mg/kg	
			Fluoranthene	2010/10/19	<0.001		mg/kg	
			Pyrene	2010/10/19	<0.001		mg/kg	
			Benzo(a)anthracene	2010/10/19	<0.001		mg/kg	
			Chrysene	2010/10/19	<0.001		mg/kg	
			Benzo(b&j)fluoranthene	2010/10/19	<0.001		mg/kg	
			Benzo(k)fluoranthene	2010/10/19	<0.001		mg/kg	
			Benzo(a)pyrene	2010/10/19	<0.001		mg/kg	
			Indeno(1,2,3-cd)pyrene	2010/10/19	<0.002		mg/kg	
			Dibenz(a,h)anthracene	2010/10/19	<0.002		mg/kg	
			Benzo(g,h,i)perylene	2010/10/19	<0.002		mg/kg	
		RPD	Naphthalene	2010/10/19	NC (2)		%	50
			2-Methylnaphthalene	2010/10/19	13.1 (3)		%	50
			Acenaphthylene	2010/10/19	NC (2)		%	50
			Acenaphthene	2010/10/19	2.8 (3)		%	50
			Fluorene	2010/10/19	1.7 (3)		%	50
			Phenanthrene	2010/10/19	21.0 (3)		%	50
			Anthracene	2010/10/19	NC (2)		%	50
			Fluoranthene	2010/10/19	6.1 (3)		%	50
			Pyrene	2010/10/19	5.1 (3)		%	50
			Benzo(a)anthracene	2010/10/19	7.4 (3)		%	50
			Chrysene	2010/10/19	2.0 (3)		%	50
			Benzo(b&j)fluoranthene	2010/10/19	8.6 (3)		%	50
			Benzo(k)fluoranthene	2010/10/19	12.0 (3)		%	50
			Benzo(a)pyrene	2010/10/19	8.9 (3)		%	50
			Indeno(1,2,3-cd)pyrene	2010/10/19	NC (2)		%	50
			Dibenz(a,h)anthracene	2010/10/19	6.2 (3)		%	50
			Benzo(g,h,i)perylene	2010/10/19	8.1 (3)		%	50
4352013	SMB	QC Standard	Total Organic Carbon (C)	2010/10/20		107	%	83 - 118
		RPD	Total Organic Carbon (C)	2010/10/20	NC		%	35
4357046	DY	RPD [X61153-04]	200 mesh (>.075 mm)	2010/10/21	18.5		%	30
			200 mesh (<.075 mm)	2010/10/21	1.2		%	30
4361309	DY	RPD [X61216-04]	200 mesh (>.075 mm)	2010/10/22	6.9		%	30
			200 mesh (<.075 mm)	2010/10/22	4.4		%	30

N/A = Not Applicable
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.
QC Standard: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
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.

AECOM
Attention:
Client Project #: 60164142
P.O. #:
Site Reference: WINNIPEG

Quality Assurance Report (Continued)

Maxxam Job Number: NB097883

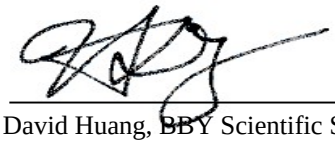
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.
(2) RDL raised due to sample matrix interference.
(3) RDL raised due to sample dilution.
(4) Matrix spike recovery above control limit - Matrix interference - Pot. high bias (No impact - ND)
RDL raised due to sample dilution.

Maxxam Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

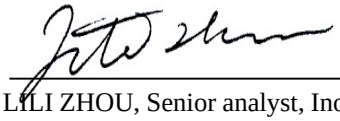
Validation Signature Page

Maxxam Job #: B097883

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



David Huang, BBY Scientific Specialist



LILI ZHOU, Senior analyst, Inorganic department.

==========

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 Analytics International Corporation o/a Maxxam Analytics, Unit D - 675 Berry Street, Winnipeg, MB, R3H 1A7, Tel: (204) 772-7276, Fax: (204) 772-2386 www.maxxam.ca

Maxxam

4606 Canada Way, Burnaby, BC Canada V5G 1K5 Ph: 604 734 7276 Toll Free: 1 800 665 8566 Fax: 604 731 2386

CHAIN OF CUSTODY RECORD

Page: 1 of 2

Maxxam Job#: B09T883

08323687

Invoice To: Require Report? Yes [X] No [X]

Company Name: AECOM
Contact Name: Shawna Kjartanson
Address: 99 Commerce Drive
Winnipeg, MB PC: R2J 1S9
Phone / Fax#: Ph: 928-8456 Fax: 284-2040
E-mail: shawna.kjartanson@aecom.com

Report To:

Company Name:
Contact Name:
Address:
PC:
Phone / Fax#: Ph: Fax:
E-mail

PO #:
Quotation #:
Project #: 60164142
Proj. Name:
Location: WINNIPEG
Sampled By: SK, PA, MH

REGULATORY REQUIREMENTS SERVICE REQUESTED:

- [ ] CSR
- [ ] CCME
- [ ] BC Water Quality
- [ ] Other
- [ ] DRINKING WATER

- [X] Regular Turn Around Time (TAT) (5 days for most tests)
- [ ] RUSH (Please contact the lab) [ ] 1 Day [ ] 2 Day [ ] 3 Day
- Date Required:

Special Instructions:
Return Cooler [ ] Ship Sample Bottles (please specify) [ ]

ANALYSIS REQUESTED

#	Sample Identification	Lab Identification	Sample Type	Date/Time Sampled	BTEX/VPH	VOC/VPH	EPH	PAH	CCME-PHC (Fractions 1-4 Plus BTEX)	CCME-PHC (Fractions 2-4)	CCME BTEX (Fraction 1 Plus BTEX)	PCB	Phenols by 4AAP	TOG	Dissolved Metals Field Filtered?	Field Acidified?	Total Metals Field Acidified?	Nitrate	Chloride	Total Suspended Solids-TSS	pH	BOD	COD	Coliform, Total & E coli	Asbestos	DOC	hardness	Particle Size	Organic Carbon	TOC		HOLD
1	OC10-3		water	10/10/10				X							X	X	X									X	X			X		
2	OC10-7B (30-35)		sediment	"				X				X					X											X	X			
3	OC10-6B (0-5)		"	"				X				X					X											X	X			
4	OC10-6B (30-35)		"	"				X				X					X											X	X			
5	OC10-5A		"	"				X				X					X											X	X			
6	OC10-5C		"	"				X				X					X											X	X			
7	OC10-5B (0-5)		"	"				X				X					X											X	X			
8	OC10-5B (30-35)		"	"				X				X					X											X	X			
9	OC10-4B (30-35)		"	"				X									X											X	X			
10	OC10-3A		"	"				X									X											X	X			
11	OC10-3C		"	"				X									X											X	X			
12	OC10-2A		"	"				X									X											X	X			

Samples are from a Drinking Water Source serving multiple households [ ] YES

Laboratory Use Only

*Relinquished by:	Date (YY/MM/DD):	Time:	Received by:	Date (YY/MM/DD):	Time:
[signature]	10/10/08	09:45	[signature]	10/10/08	9:45
			[signature]	10/10/09	10:30

Time Sensitive [ ]

Temperature on Receipt (°C): 10.6, 11, 4.8

Custody Seal Intact on Cooler? Yes 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.

White: Maxxam Yellow: Client

COC-1030 (03/10)

Maxxam International Corporation o/a Maxxam Analytics

MICHELLE RRY 13/10/10 15/10/10 N/A

Maxxam

4606 Canada Way, Burnaby, BC Canada V5G 1K5 Ph: 604 734 7276 Toll Free: 1 800 665 8566 Fax: 604 731 2386

CHAIN OF CUSTODY RECORD

Page: 2 of 2

Maxxam Job#: B09T883

08323688

Invoice To: Require Report? Yes ☒ No ☒

Company Name: AECOM
Contact Name: Shawna Kjartanson
Address: 99 Commerce Drive
Winnipeg, MB PC: R2J 1S9
Phone / Fax#: Ph: 928-8456 Fax: 284-2040
E-mail: shawna.kjartanson@aecom.com

Report To:

Company Name:
Contact Name:
Address:
PC:
Phone / Fax#: Ph: Fax:
E-mail

PO #:
Quotation #:
Project #: 60164142
Proj. Name:
Location: WINNIPEG
Sampled By: SK

REGULATORY REQUIREMENTS SERVICE REQUESTED:

- ☐ CSR
- ☐ CCME
- ☐ BC Water Quality
- ☐ Other
- ☐ DRINKING WATER

- ☒ Regular Turn Around Time (TAT) (5 days for most tests)
- ☐ RUSH (Please contact the lab)
- ☐ 1 Day ☐ 2 Day ☐ 3 Day
- Date Required:

Special Instructions:

Return Cooler ☐ Ship Sample Bottles (please specify) ☐

ANALYSIS REQUESTED

Analysis options: BTEX/VPH ☐ MTBE ☐; VOC/VPH; EPH ☐ TEH ☐; PAH ☒ LEPH/HEPH ☐; CCME-PHC (Fractions 1-4 Plus BTEX); CCME-PHC (Fractions 2-4); CCME BTEX (Fraction 1 Plus BTEX); PCB ☒; Phenols by 4AAP ☐ Phenols by GCMS ☐; TOG ☐ MOG ☐ SWOG ☐; Dissolved Metals Field Filtered? Y ☒ N ☐; Metals Field Acidified? Y ☒ N ☐; Total Metals Field Acidified? Y ☒ N ☐; Nitrate ☐ Nitrite ☐ Ammonia ☐; Chloride ☐ Fluoride ☐ Sulphate ☐; Total Suspended Solids-TSS ☐ TDS ☐; pH ☐ Conductivity ☐ Alkalinity ☐; BOD ☐; COD ☐; Coliform, Total & E.coli ☐ Fecal ☐; Asbestos ☐; DOC; hardness; Particle Size; Organic Carbon; TOC; HOLD ☐

Samples are from a Drinking Water Source serving multiple households ☐ YES

#	Sample Identification	Lab Identification	Sample Type	Date/Time Sampled	BTEX/VPH	VOC/VPH	EPH	PAH	CCME-PHC (F1-4 Plus BTEX)	CCME-PHC (F2-4)	CCME BTEX	PCB	Phenols by 4AAP	TOG	Dissolved Metals	Metals Field Acidified	Total Metals	Nitrate	Chloride	TSS	pH	BOD	COD	Coliform	Asbestos	DOC	hardness	Particle Size	Organic Carbon	TOC		HOLD
1	OC10-2		water	7OCT10				X							X	X	X									X	X			X		
2	OC10-2C		sediment	7OCT10				X							■		X											X	X			
3	OC10-4		water	7OCT10								X																				
4	OC10-3B(0-5)		sediment	"				X									X											X	X			
5	OC10-3B(30-35)		"	"				X									X											X	X			
6	OC10-2B(0-5)		"	"				X									X											X	X			
7	OC10-4B(0-5)		"	"				X									X											X	X			
8																																
9	OC10-5																															
10	Unlabelled																															
11																																
12																																

*Relinquished by:	Date (YY/MM/DD):	Time:	Received by:	Date (YY/MM/DD):	Time:	Time Sensitive	Temperature on Receipt (°C)	Custody Seal Intact on Cooler?
[signature]	10/10/08	09:45	[signature]	Oct 8/10	9:45	☐	10.6, 11.1, 4.8	Yes ☐ No ☐
			MBrezaw [signature]	10/10/09	10:30			

Laboratory Use Only

*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.

White: Maxxam Yellow: Client

COC-1020 (03/10)

Maxxam International Corporation o/a Maxxam Analytics

MICHELLE BRESCALIN RRV TO ... 13/10/10 15/10/10 N/A 2/2/12

Appendix D

Single Well Response Tests, Calculated Groundwater Velocity and Groundwater Flux Calculations

Table D1: Calculation of Lateral Groundwater Flow Velocity

Hydraulic Conductivity:

Well ID	K (m/s)	K (m/yr)
MW10-01	2.375E-06	74.898
MW10-33	2.100E-06	66.2256
MW10-40	8.281E-07	26.1149616
MW10-49	2.000E-06	63.072
MW10-62	8.304E-07	26.1874944
MW10-70	1.254E-06	39.546144

Geometric Mean 1.43141E-06 **K=** 45.14088 **m/yr**

Calculation of i:

Height of contour:	**Δh=**	3.64
Length of contour:	**Δl=**	70

i=Δh/Δl= 0.052

Selection of n_e:

Gravel (coarse)	0.2
Gravel (fine)	0.3
Sand	0.3
Silt	0.2
Clay	0.06

n= 0.2

Effective porosity values were taken from McWorter and Sunada (1977).

LATERAL GROUNDWATER FLOW VELOCITY:

Geometric Mean	**v=K(geo.)i/n=**	11.73662916	**(m/yr)**
Min. of Range	**v=K(min.)i/n=**	6.789890016	**(m/yr)**
Max. of Range	**v=K(max.)i/n=**	19.47348	**(m/yr)**

Table D2: Metals Loading to Omands Creek from Groundwater - Sulphuric Acid Drum Storage Area

Well Location	Parameters	Depth of Loading Interface (m) [1]	Width of Loading Interface(m) [2]	Area of Loading Interface (m^2)	Groundwater Velocity (m/s) [3]	Discharge (m^3/s) [4]	Discharge (L/s)	Concentration (mg/L) [5]	Loading (mg/s)	Loading (kg/yr)
MW-10-49	Al	0.5	70	35	3.72E-07	1.30E-05	1.30E-02	14.9	1.94E-01	6.12E+00
	As							0.0067	8.72E-05	2.75E-03
	Cd							0.00026	3.39E-06	1.07E-04
	Cr							0.033	4.30E-04	1.35E-02
	Cu							0.0255	3.32E-04	1.05E-02
	Fe							19.9	2.59E-01	8.17E+00
	Pb							0.0172	2.24E-04	7.06E-03
	Ni							0.026	3.39E-04	1.07E-02
	Se							0.0054	7.03E-05	2.22E-03
	Ag							0.00009	1.17E-06	3.70E-05
	Tl							0.00031	4.04E-06	1.27E-04
	Zn							0.172	2.24E-03	7.06E-02

Note:

[1] Equal to the height of the water level in Omands Creek as measured October 2010

[2] Equal to the length of the Creek normal to groundwater flow for the portion of the bank at MW-10-49

[3] Based on average lateral groundwater velocity for the Site. Calculated using Darcy's Law; $v = ki/n$

[4] Equal to the area of the loading interface multiplied by the ground water velocity

[5] Based on laboratory analytical results from October 2010 Phase III ESA

Table D3: Metals Loading to Omands Creek from Groundwater - Landfilling Area

Well Location	Parameters	Depth of Loading Interface (m) [1]	Width of Loading Interface(m) [2]	Area of Loading Interface (m^2)	Groundwater Velocity (m/s) [3]	Discharge (m^3/s) [4]	Discharge (L/s)	Concentration (mg/L) [5]	Loading (mg/s)	Loading (kg/yr)
MW-10-33	Al	0.5	70	35	3.72E-07	1.30E-05	1.30E-02	23.8	3.10E-01	9.77E+00
	As							0.112	1.46E-03	4.60E-02
	Cd							0.00067	8.72E-06	2.75E-04
	Cr							0.06	7.81E-04	2.46E-02
	Cu							0.0551	7.17E-04	2.26E-02
	Fe							36.9	4.80E-01	1.52E+01
	Pb							0.0292	3.80E-04	1.20E-02
	Ni							0.055	7.16E-04	2.26E-02
	Se							0.0027	3.52E-05	1.11E-03
	Ag							0.00014	1.82E-06	5.75E-05
	Tl							0.00042	5.47E-06	1.72E-04
	Zn							0.743	9.67E-03	3.05E-01

Note:

[1] Equal to the height of the water level in Omands Creek as measured October 2010

[2] Equal to the length of the Creek normal to groundwater flow for the portion of the bank at MW-10-33

[3] Based on average lateral groundwater velocity for the Site. Calculated using Darcy's Law; $v = ki/n$

[4] Equal to the area of the loading interface multiplied by the ground water velocity

[5] Based on laboratory analytical results from October 2010 Phase III ESA

Table D4: Metals Loading to Omands Creek from Groundwater - PCB Storage Area

Well Location	Parameters	Depth of Loading Interface (m) [1]	Width of Loading Interface(m) [2]	Area of Loading Interface (m^2)	Groundwater Velocity (m/s) [3]	Discharge (m^3/s) [4]	Discharge (L/s)	Concentration (mg/L) [5]	Loading (mg/s)	Loading (kg/yr)
MW-10-77	Al	0.5	70	35	3.72E-07	1.30E-05	1.30E-02	39.2	5.10E-01	1.61E+01
	As							0.0225	2.93E-04	9.24E-03
	Cd							0.00128	1.67E-05	5.26E-04
	Cr							0.121	1.58E-03	4.97E-02
	Cu							0.129	1.68E-03	5.30E-02
	Fe							69	8.98E-01	2.83E+01
	Pb							0.173	2.25E-03	7.10E-02
	Ni							0.109	1.42E-03	4.48E-02
	Se							0.0089	1.16E-04	3.65E-03
	Ag							0.00042	5.47E-06	1.72E-04
	Tl							0.00083	1.08E-05	3.41E-04
	Zn							1.14	1.48E-02	4.68E-01

Note:

[1] Equal to the height of the water level in Omands Creek as measured October 2010

[2] Equal to the length of the Creek normal to groundwater flow for the portion of the bank at MW-10-77

[3] Based on average lateral groundwater velocity for the Site. Calculated using Darcy's Law; $v = ki/n$

[4] Equal to the area of the loading interface multiplied by the ground water velocity

[5] Based on laboratory analytical results from October 2010 Phase III ESA

Table D5: Metals Loading to Omands Creek from Groundwater - Total

Parameter	Total Groundwater Loading (mg/s) [1]	Omands Creek Concentration @ 130 L/s (from groundwater loading) [2]	CCME GWQ Guideline [3]	% of Guideline from Groundwater Loading	Maximum Measured Concentration in Omands Creek - Oct 2010 (mg/L)	% of Actual Measured Concentration (Oct 2010) from Groundwater Loading
Al	1.01E+00	7.80E-03	0.1	7.80%	0.83900	0.93%
As	1.84E-03	1.41E-05	0.005	0.28%	0.00340	0.42%
Cd	2.88E-05	2.21E-07	0.000017	1.30%	0.00003	0.74%
Cr	2.79E-03	2.14E-05	0.0089	0.24%	0.00200	1.07%
Cu	2.73E-03	2.10E-05	0.004	0.52%	0.00350	0.60%
Fe	1.64E+00	1.26E-02	0.3	4.20%	1.07000	1.18%
Pb	2.86E-03	2.20E-05	0.007	0.31%	0.00380	0.58%
Ni	2.47E-03	1.90E-05	0.15	0.01%	0.00500	0.38%
Se	2.21E-04	1.70E-06	0.001	0.17%	0.00170	0.10%
Ag	8.46E-06	6.51E-08	0.0001	0.07%	0.00001	0.65%
Tl	2.03E-05	1.56E-07	0.0008	0.02%	0.00003	0.52%
Zn	2.68E-02	2.06E-04	0.03	0.69%	0.06900	0.30%

Note:

[1] Equal to the sum of loading from Sulphuric Acid Drum Storage Area, Landfilling Area and PCB Storage Area

[2] Calculated for mean annual flow conditions in Omands Creek (130 L/s)

[3] Canadian Council of Ministers of Environment (CCME) Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Appendix E

Grain Size Analytical Results

AECOM
99 Commerce Drive
Winnipeg, MB, Canada R3P 0Y7
www.aecom.com

204 477 5381 tel
204 284 2040 fax

Memorandum

To	Scott Chapman	Page	1
CC			
Subject	Dominion Bridge ESA & RAP		
From	Stephen Petsche		
Date	November 5, 2010	60164142	

Attached are testing results for the above noted project. The testing included four (4) Grain Size Distribution (Hydrometer method) tests on samples submitted to the lab and the recovery of two (2) 150 mm diameter cores from the Pit Slabs in the Galvanizing Building on November 4, 2010.

If you have any questions, please call.

Sincerely,

Stephen Petsche, C.E.T.
Coordinator, Lab and Technical Services

Attach.

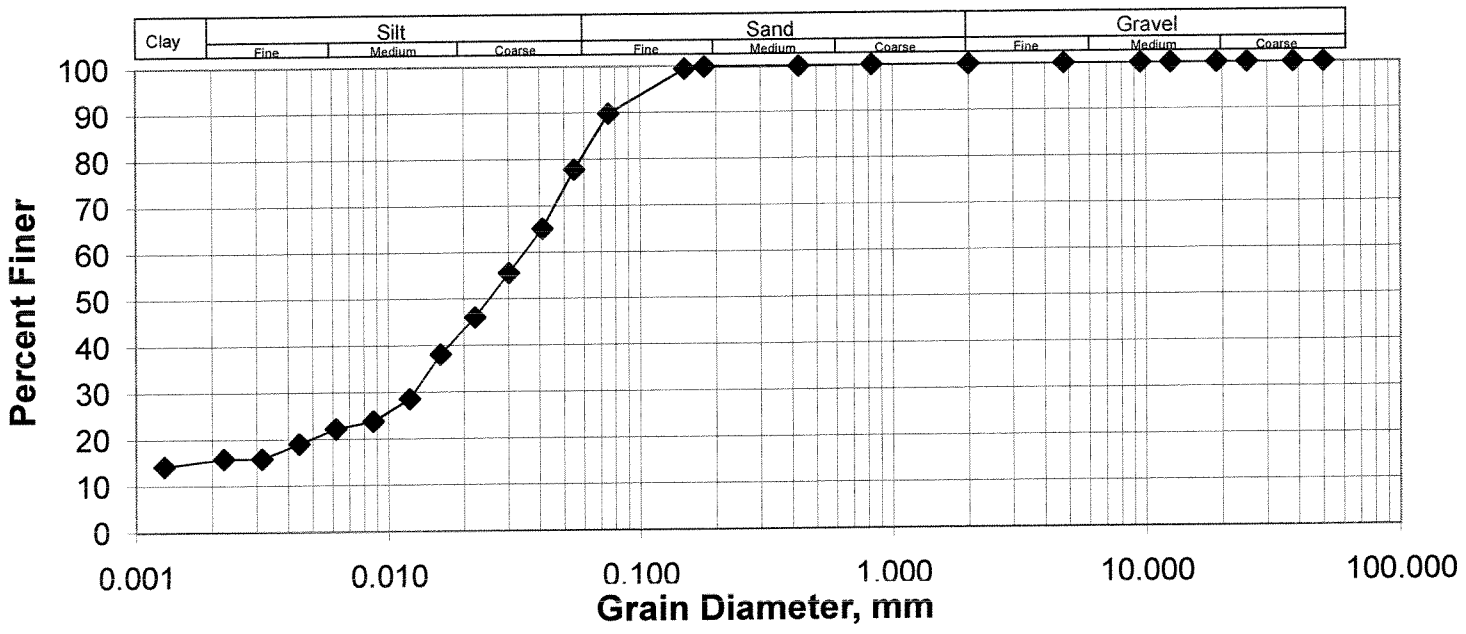
GRAIN SIZE DISTRIBUTION

AECOM
MATERIALS LABORATORY
AECOM
99 Commerce Dr., Winnipeg, MB R3P 0Y7 Canada
tel (204) 477-5381 fax (204) 284-2040

Job No.:	60164142	Sample No.	
Client:	City of Winnipeg	Hole No.	BH10-10
Project :	Dominion Bridge Phase II/III	Depth:	7.5'
Date Tested:	2-Nov-10	Date Sampled:	
Tested By:		Sampled By:	

GRAVEL SIZES		SAND SIZES		FINES	
Grain Size (mm.)	Total Percent Passing	Grain Size (mm.)	Total Percent Passing	Grain Size (mm.)	Total Percent Passing
50.0	100.0	2.00	100.0	0.0750	89.8
38.0	100.0	0.83	100.0	0.0548	77.8
25.0	100.0	0.43	99.8	0.0410	65.1
19.0	100.0	0.18	99.8	0.0301	55.5
12.5	100.0	0.15	99.4	0.0221	46.0
9.5	100.0	0.075	89.8	0.0161	38.1
4.75	100.0			0.0121	28.5
2.00	100.0			0.0087	23.8
				0.0062	22.2
				0.0044	19.0
				0.0031	15.8
				0.0022	15.8
				0.0013	14.2

GRAIN SIZE DISTRIBUTION CURVE



Gravel	**0.0%**	**Silt**	**65.4%**
Sand	**19.1%**	**Clay**	**15.4%**

** Note: Soil Classification based on Grain Size from Canadian Foundation Engineering Manual, 3rd edition (1992).

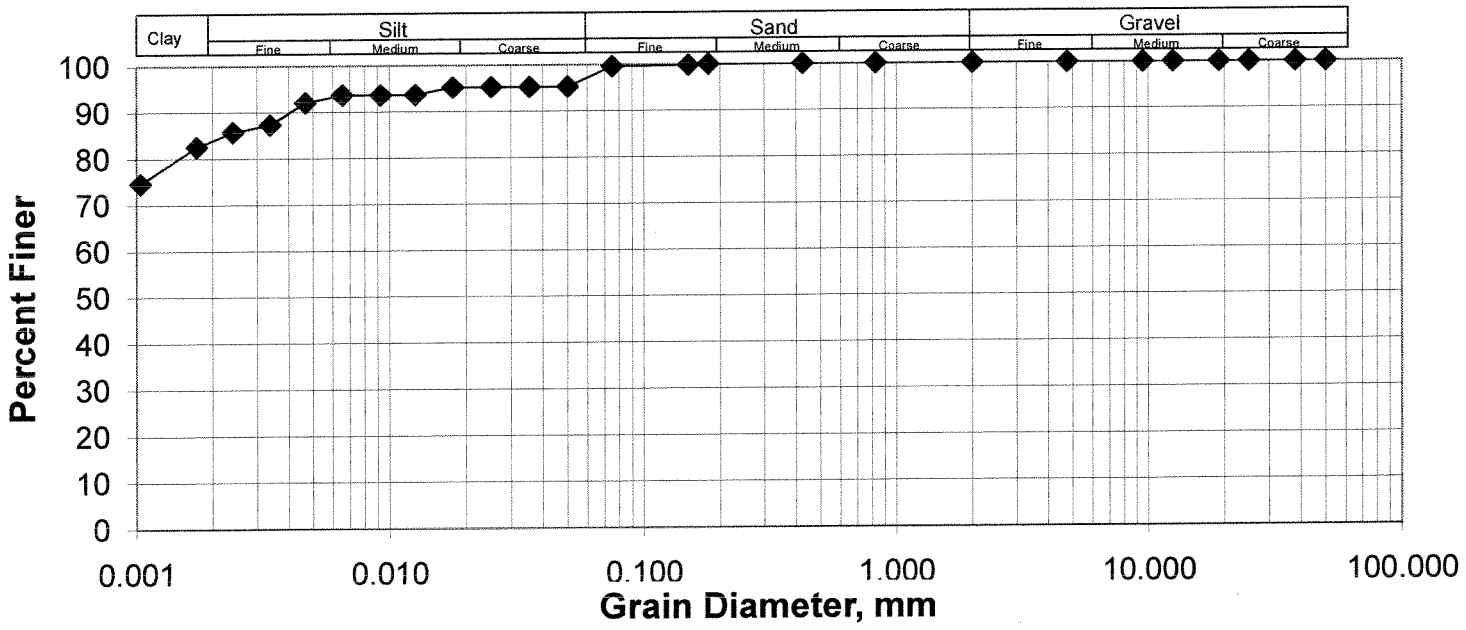
GRAIN SIZE DISTRIBUTION

MATERIALS LABORATORY
AECOM
99 Commerce Dr., Winnipeg, MB R3P 0Y7 Canada
tel (204) 477-5381 fax (204) 284-2040

Job No.:	60164142	Sample No.	
Client:	City of Winnipeg	Hole No.	BH10-10
Project :	Dominion Bridge Phase II/III	Depth:	17.5'
Date Tested:	29-Oct-10	Date Sampled:	
Tested By:		Sampled By:	

GRAVEL SIZES		SAND SIZES		FINES	
Grain Size (mm.)	Total Percent Passing	Grain Size (mm.)	Total Percent Passing	Grain Size (mm.)	Total Percent Passing
50.0	100.0	2.00	100.0	0.0750	99.6
38.0	100.0	0.83	100.0	0.0501	95.2
25.0	100.0	0.43	100.0	0.0354	95.2
19.0	100.0	0.18	100.0	0.0251	95.2
12.5	100.0	0.15	99.8	0.0177	95.2
9.5	100.0	0.075	99.6	0.0126	93.6
4.75	100.0			0.0092	93.6
2.00	100.0			0.0065	93.6
				0.0047	92.1
				0.0034	87.3
				0.0024	85.7
				0.0017	82.5
				0.0010	74.6

GRAIN SIZE DISTRIBUTION CURVE



Gravel	**0.0%**	**Silt**	**13.2%**
Sand	**3.0%**	**Clay**	**83.8%**

** Note: Soil Classification based on Grain Size from Canadian Foundation Engineering Manual, 3rd edition (1992).

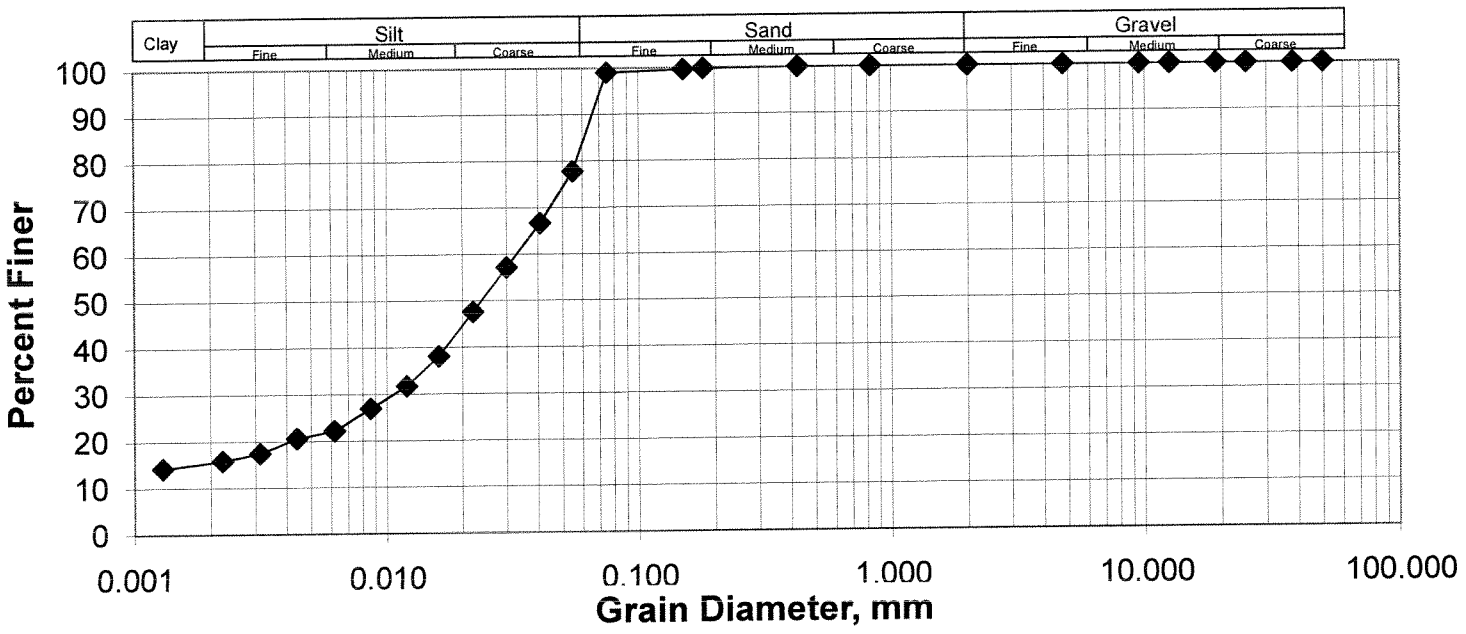
GRAIN SIZE DISTRIBUTION

MATERIALS LABORATORY
AECOM
99 Commerce Dr., Winnipeg, MB R3P 0Y7 Canada
tel (204) 477-5381 fax (204) 284-2040

Job No.:	60164142	Sample No.	
Client:	City of Winnipeg	Hole No.	BH10-50
Project :	Dominion Bridge Phase II/III	Depth:	5.0'
Date Tested:	2-Nov-10	Date Sampled:	
Tested By:		Sampled By:	

GRAVEL SIZES		SAND SIZES		FINES	
Grain Size (mm.)	Total Percent Passing	Grain Size (mm.)	Total Percent Passing	Grain Size (mm.)	Total Percent Passing
50.0	100.0	2.00	100.0	0.0750	99.0
38.0	100.0	0.83	100.0	0.0548	77.8
25.0	100.0	0.43	100.0	0.0407	66.6
19.0	100.0	0.18	99.8	0.0299	57.1
12.5	100.0	0.15	99.6	0.0220	47.6
9.5	100.0	0.075	99.0	0.0161	38.1
4.75	100.0			0.0120	31.7
2.00	100.0			0.0086	26.9
				0.0062	22.2
				0.0044	20.6
				0.0031	17.4
				0.0022	15.8
				0.0013	14.2

GRAIN SIZE DISTRIBUTION CURVE



Gravel	**0.0%**	**Silt**	**67.8%**
Sand	**16.8%**	**Clay**	**15.4%**

** Note: Soil Classification based on Grain Size from Canadian Foundation Engineering Manual, 3rd edition (1992).

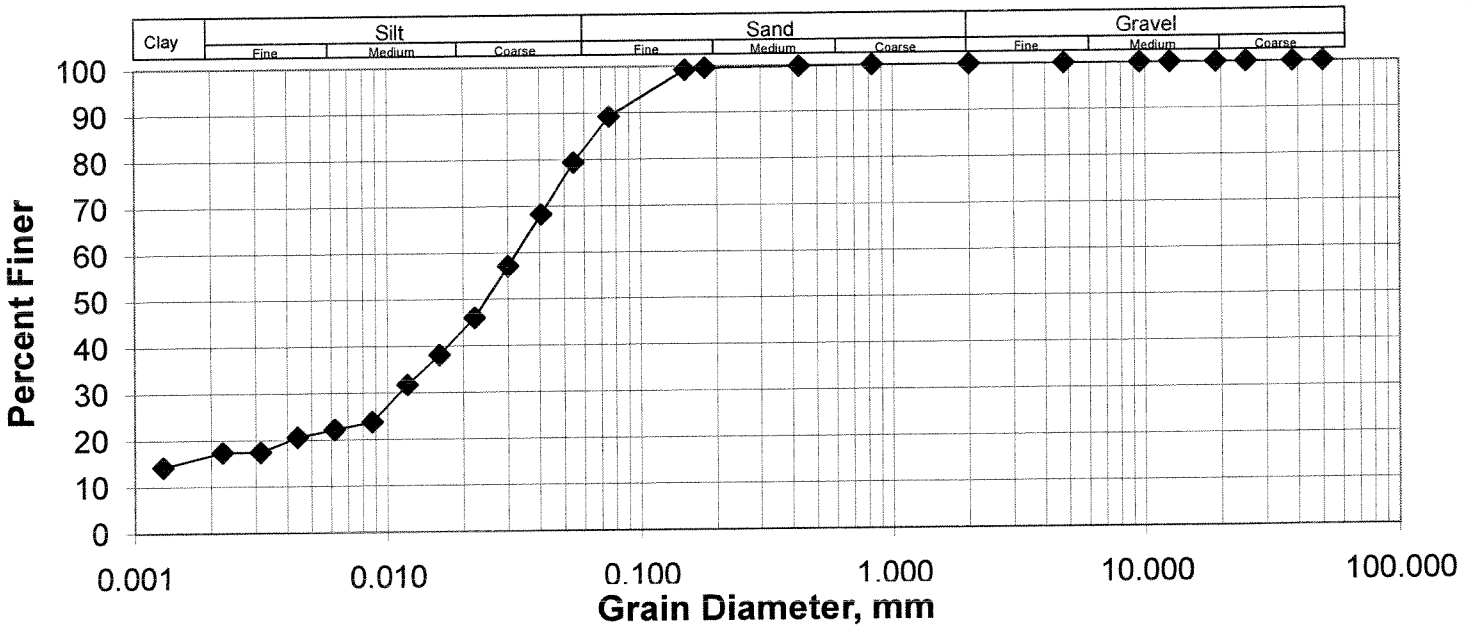
GRAIN SIZE DISTRIBUTION

AECOM
MATERIALS LABORATORY
AECOM
99 Commerce Dr., Winnipeg, MB R3P 0Y7 Canada
tel (204) 477-5381 fax (204) 284-2040

Job No.:	60164142	Sample No.	
Client:	City of Winnipeg	Hole No.	BH10-53
Project :	Dominion Bridge Phase II/III	Depth:	7.5'
Date Tested:	29-Oct-10	Date Sampled:	
Tested By:		Sampled By:	

GRAVEL SIZES		SAND SIZES		FINES	
Grain Size (mm.)	Total Percent Passing	Grain Size (mm.)	Total Percent Passing	Grain Size (mm.)	Total Percent Passing
50.0	100.0	2.00	100.0	0.0750	89.2
38.0	100.0	0.83	100.0	0.0544	79.3
25.0	100.0	0.43	99.8	0.0405	68.2
19.0	100.0	0.18	99.6	0.0299	57.1
12.5	100.0	0.15	99.2	0.0221	46.0
9.5	100.0	0.075	89.2	0.0161	38.1
4.75	100.0			0.0120	31.7
2.00	100.0			0.0087	23.8
				0.0062	22.2
				0.0044	20.6
				0.0031	17.4
				0.0022	17.4
				0.0013	14.2

GRAIN SIZE DISTRIBUTION CURVE



Gravel	**0.0%**	**Silt**	**65.4%**
Sand	**18.0%**	**Clay**	**16.7%**

** Note: Soil Classification based on Grain Size from Canadian Foundation Engineering Manual, 3rd edition (1992).

Coring Report

JOB No.: 60164142
CLIENT: City of Winnipeg
PROJECT: Dominion Bridge ESA & RAP

DATE CORED: November 4, 2010
CORED BY: Spetsche

GENERAL LOCATION: Galvanizing Building - Galvanizing Pit Slabs
CORE DIAMETER (mm): 150 mm

CORE NO.	LOCATION	THICKNESS (mm)
1	PP10-01; East Pit, NE Corner	185.0
2	PP10-02; West Pit, South End	610.0

Notes: All cores were retained on site by AECOM. Core No. 2 - Several layers of rebar discovered towards bottom of core.

AECOM
MATERIALS LABORATORY
AECOM
99 Commerce Drive, Winnipeg, MB R3P 0Y7 Canada
tel (204) 477-5381 **fax** (204) 284-2040

Appendix F

National Contaminated Sites Classification System Scoring

CCME National Classification System for Contaminated Sites (2008, 2010 v 1.2)
Pre-Screening Checklist

Question	Response (yes / no)	Comment
1. Are **Radioactive material**, **Bacterial contamination** or **Biological hazards** likely to be present at the site?	No	If yes, do not proceed through the NCSCS. Contact applicable regulatory agency immediately.
2. Are there **no contamination exceedances** (known or suspected)? Determination of exceedances may be based on: 1) CCME environmental quality guidelines; 2) equivalent provincial guidelines/standards if no CCME guideline exists for a specific chemical in a relevant medium; or 3) toxicity benchmarks derived from the literature for chemicals not covered by CCME or provincial guidelines/standards.	No	If yes (i.e., there are no exceedances), do not proceed through the NCSCS.
3. Have **partial/incompleted or no environmental site investigations** been conducted for the Site?	No	If yes, do not proceed through the NCSCS.
4. Is there direct and signficant evidence of **impacts to humans** at the site, or off-site due to migration of contaminants from the site?	No	If yes, automatically rate the site as Class 1, a priority for remediation or risk management, regardless of the total score obtained should one be calculated (e.g., for comparison with other Class 1 sites).
5. Is there direct and significant evidence of **impacts to ecological receptors** at the site, or off-site due to migration of contaminants from the site?	No	Some low levels of impact to ecological receptors are considered acceptable, particularly on commercial and industrial land uses. However, if ecological effects are considered to be severe, the site may be categorized as Class 1, regardless of the numerical total NCSCS score. For the purpose of application of the NCSCS, effects that would be considered severe include observed effects on survival, growth or reproduction which could threaten the viability of a population of ecological receptors at the site. Other evidence that qualifies as severe adverse effects may be determined based on professional judgement and in consultation with the relevant jurisdiction.
6. Are there indicators of significant **adverse effects in the exposure zone** (i.e., the zone in which receptors may come into contact with contaminants)? Some examples are as follows: -Hydrocarbon sheen or NAPL in the exposure zone -Severely stressed biota or devoid of biota; -Presence of material at ground surface or sediment with suspected high concentration of contaminants such as ore tailings, sandblasting grit, slag, and coal tar.	No	If yes, automatically rate the site as Class 1, a priority for remediation or risk management, regardless of the total score obtained should one be calculated (e.g., for comparison with other Class 1 sites).
7. Do measured concentrations of volatiles or unexploded ordnances represent an **explosion hazard**?	No	If yes, automatically rate the site as Class 1, a priority for remediation or risk management, and do not continue until the safety risks have been addressed. Consult your jurisdiction's occupational health and safety guidance or legislation on exposive hazards and measurement of lower explosive limits.

If none of the above applies, proceed with the NCSCS scoring.

CCME National Classification System for Contaminated Sites (2008, 2010 v 1.2)
Summary of Site Conditions

Subject Site:	**Dominion Bridge**	
Civic Address: *(or other description of location)*	1460 Dublin Avenue, Winnipeg, Manitoba	
Site Common Name : *(if applicable)*	Dominion Bridge	
Site Owner or Custodian: *(Organization and Contact Person)*	City of Winnipeg	
Legal description *or* metes and bounds:		
Approximate Site area:	27 acres (11 ha)	
PID(s) : *(or Parcel Identification Numbers [PIN] if untitled Crown land)*		
Centre of site: *(provide latitude/longitude or UTM coordinates)*	Latitude:	_____ degrees _____ min _____ secs
	Longitude:	_____ degrees _____ min _____ secs
	UTM Coordinate:	Northing _____ Easting _____
Site Land Use:	Current:	Industrial
	Proposed:	Industrial
Site Plan	**To delineate the bounds of the Site a site plan MUST be attached. The plan must be drawn to scale indicating the boundaries in relation to well-defined reference points and/or legal descriptions. Delineation of the contamination should also be indicated on the site plan.**	
Provide a brief description of the Site:	The Site is a former bridge steel fabricating facility currently owned by the City of Winnipeg and leased to several industrial manufacturing tenants. The Site was constructed in the early 1910s and is approximately 11 ha in size. The Site consists of a Main Shop with attached Works Office, Galvanizing Shop and Stores Building, Transept Shop with Grit Blast Room and Paint Shop attached to the north side of the Main shop, Planning and Stock Office, Gate Shop, Shipping Office, PCB Storage Shed, and Security Building. Two USTs, formerly located north of the Gate Shop, were removed in 1990. Two USTs were identified beneath the existing Paint Shop reportedly removed in the 1980s. A UST was also reportedly located along the north property line. Several aboveground storage tanks (ASTs) were historically found at the Site. Two (2) ASTs, each 2,270L in size containing gasoline and diesel, were located approximately 150 m south of the Gate Shop. An AST containing solvents was historically located south of the Paint Shop. An AST 27,000 L in size containing sulphuric acid was located north of the Galvanizing Shop, and a sulphuric acid drum storage area was located on the west side of the Main Shop to the south of the Galvanizing Shop. Additional APECs previously identified at the Site include drums of waste products were formerly stored in the area south of the Gate Shop, waste paint was stored in the area south of the stores building, the banks of Omands Creek have been raised using solid waste materials, a storage shed previously used to store polychlorinated biphenyls (PCB) is located at the south side of the property adjacent to Omands Creek, and the former Saskatchewan Avenue Landfill is located along the south side of the property near the security building	
Affected media and Contaminants of Potential Concern (COPC):	Soil, groundwater, sediment, and surface water are the affected media. COPC include petroleum hydrocarbons, metals, and PAHs (non-carcinogenic and carcinogenic).	

Please fill in the "letter" that best describes the level of information available for the site being assessed:

Site Letter Grade **C**

If letter grade is F, do not continue, you must have a minimum of a Phase I Environmental Site Assessment or equivalent.

Scoring Completed By:	Eryn Williamson
Date Scoring Completed:	17-Feb-11

CCME National Classification System (2008, 2010 v 1.2)

(I) Contaminant Characteristics

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method of Evaluation	Notes
1. Residency Media (replaces physical state)				
Which of the following residency media are known (or strongly suspected) to have one or more exceedances of the applicable CCME guidelines? **yes** = has an exceedance or strongly suspected to have an exceedance **no** = does not have an exceedance or strongly suspected not to have an exceedance		Refer to the 2011 report "Phase III Environmental Site Assessment Former Dominion Bridge Operations Yard, 1460 Dublin Avenue – Winnipeg, Manitoba" prepared by AECOM.	The overall score is calculated by adding the individual scores from each residency media (having one or more exceedance of the most conservative media specific and land-use appropriate CCME guideline). Summary tables of the Canadian Environmental Quality Guidelines for soil, water (aquatic life, non-potable groundwater environments, and agricultural water uses) and sediment are available on the CCME website at http://www.ccme.ca/publications/cegg_rcqe.html?category_id=124. For potable groundwater environments, guidelines for Canadian Drinking Water Quality (for comparison with groundwater monitoring data) are available on the Health Canada website at http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/doc_sup-appui/sum_guide-res_recom/index_e.html.	An increasing number of residency media containing chemical exceedances often equates to a greater potential risk due to an increase in the number of potential exposure pathways.
A. Soil	Yes			
Yes / No / Do Not Know				
B. Groundwater	Yes			
Yes / No / Do Not Know				
C. Surface water	Yes			
Yes / No / Do Not Know				
D. Sediment	Yes			
Yes / No / Do Not Know				
"Known" -score	8			
"Potential" - score	---			
2. Chemical Hazard				
What is the relative degree of chemical hazard of the contaminant in the list of hazard rankings proposed by the Federal Contaminated Sites Action Plan (FCSAP)?	High	carcinogenic PAHs present in soil and sediment	The relative degree of chemical hazard should be selected based on the most hazardous contaminant known or suspected to be present at the site. The degree of hazard has been defined by the Federal Contaminated Sites Action Plan (FCSAP) and a list of substances with their associated hazard (Low, Medium and High) has been provided as a separate sheet in this file. *See Attached Reference Material for Contaminant Hazard Rankings.*	Hazard as defined in the revised NCS pertains to the physical properties of a chemical which can cause harm. Properties can include toxic potency, propensity to biomagnify, persistence in the environment, etc. Although there is some overlap between hazard and contaminant exceedance factor below, it will not be possible to derive contaminant exceedance factors for many substances which have a designated chemical hazard designation, but don't have a CCME guideline. The purpose of this category is to avoid missing a measure of toxic potential.
High / Medium / Low / Do Not Know				
"Known" -score	8			
"Potential" - score	---			
3. Contaminant Exceedence Factor				
What is the ratio between the measured contaminant concentration and the applicable CCME guidelines (or other "standards")?	High (>100x)	Refer to tables in the 2011 report "Phase III Environmental Site Assessment Former Dominion Bridge Operations Yard, 1460 Dublin Avenue – Winnipeg, Manitoba" prepared by AECOM.	Ranking of contaminant "exceedance" is determined by comparing contaminant concentrations with the *most conservative media-specific and land-use appropriate CCME* environmental quality guidelines. **Ranking should be based on contaminant with greatest exceedance of CCME guidelines.** Ranking of contaminant hazard as high, medium and low is as follows: High = One or more measured contaminant concentration is greater than 100 X appropriate CCME guidelines Medium = One or more measured contaminant concentration is 10 - 99.99 X appropriate CCME guidelines Low = One or more measured contaminant concentration is 1 - 9.99 X appropriate CCME guidelines Mobile NAPL = Contaminant is a non-aqueous phase liquid (i.e., due to its low solubility, it does not dissolve in water, but remains as a separate liquid) and is present at a sufficiently high saturation (i.e., greater than residual NAPL saturation) such that there is significant potential for mobility either downwards or laterally. Other standards may include local background concentration or published toxicity benchmarks. Results of toxicity testing with site samples can be used as an alternative. This approach is only relevant for contaminants that do not biomagnify in the food web, since toxicity tests would not indicate potential effects at higher trophic levels. High = lethality observed. Medium = no lethality, but sub lethal effects observed. Low = neither lethal nor sub lethal effects observed.	In the event that elevated levels of a material with no associated CCME guidelines are present, check provincial and USEPA environmental criteria. Hazard Quotients (sometimes referred to as a screening quotient in risk assessments) refer to the ratio of measured concentration to the concentration believed to be the threshold for toxicity. A similar calculation is used here to determine the contaminant exceedance factor (CEF). Concentrations greater than one times the applicable CCME guideline (i.e., CEF=>1) indicate that risks are possible. Mobile NAPL has the highest associated score (8) because of its highly concentrated nature and potential for increase in the size of the impacted zone.
Mobile NAPL / High (>100x) / Medium (10x to 100x) / Low (1x to 10x) / Do Not Know				
"Known" -score	6			
"Potential" - score	---			

CCME National Classification System (2008, 2010 v 1.2)

(I) Contaminant Characteristics

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method of Evaluation	Notes
4. Contaminant Quantity (known or strongly suspected)				
What is the known or strongly suspected quantity of all contaminants? >10 hectare (ha) or 5000 m^3 2 to 10 ha or 1000 to 5000 m^3 <2 ha or 1000 m^3 Do Not Know	>10 hectare (ha) or 5000 m3	Total approximate volume of contaminated soil is 48,900 m3. Total approximate volume of contaminated sediment is 2,160 m3.	Measure or estimate the area or quantity of total contamination (i.e, all contaminants known or strongly suspected to be present on the site). The "Area of Contamination" is defined as the area or volume of contaminated media (soil, sediment, groundwater, surface water) exceeding appropriate environmental criteria.	A larger quantity of a potentially toxic substance can result in a larger frequency of exposure as well as a greater probability of migration, therefore, larger quantities of these substances earn a higher score.
"Known" -score	9			
"Potential" - score	---			
5. Modifying Factors				
Does the chemical fall in the class of persistent chemicals based on its behavior in the environment? Yes No Do Not Know	Yes	Benzo(a)pyrene is a COC.	Persistent chemicals, e.g., PCBs, chlorinated pesticides etc. either do not degrade or take longer to degrade, and therefore may be available to cause effects for a longer period of time. Canadian Environmental Protection Act (CEPA) classifies a chemical as persistent when it has at least one of the following characteristics: (a) in air, (i) its half-life is equal to or greater than 2 days, or (ii) it is subject to atmospheric transport from its source to a remote area; (b) in water, its half-life is equal to or greater than 182 days; (c) in sediments, its half-life is equal to or greater than 365 days; or (d) in soil, its half-life is equal to or greater than 182 days. This list does not include metals or metalloids, which in their elemental form do not degrade. However metals and metalloids form chemical species in the environment, many of which are not readily bioavailable.	*Examples of Persistent Substances are provided in attached Reference Materials*
Are there contaminants present that could cause damage to utilities and infrastructure, either now or in the future, given their location? Yes No Do Not Know	No			Some contaminants may react or absorb into underground utilities and infrastructure. For example, organic solvents may degrade some plastics, and salts could cause corrosion of metal.
How many different contaminant classes have representative CCME guideline exceedances? one two to four five or more Do Not Know	two to four	-inorganic substances, light extractable petroleum hydrocarbons, heavy extractable petroleum hydrocarbons, and PAHs are present at the site.	For the purposes of the revised NCS ranking system, the following chemicals represent distinct chemical "classes": inorganic substances (including metals), volatile petroleum hydrocarbons, light extractable petroleum hydrocarbons, heavy extractable petroleum hydrocarbons, PAHs, phenolic substances, chlorinated hydrocarbons, halogenated methanes, phthalate esters, pesticides.	*Refer to the Reference Material sheet for a list of example substances that fall under the various chemical classes.*
"Known" - Score	4			
"Potential" - Score	---			

Contaminant Characteristic Total

Raw Total Scores- "Known"	35
Raw Total Scores- "Potential"	0
Raw Combined Total Scores	35
Total Score (Raw Combined / 40 * 33)	**28.9**

(II) Migration Potential (Evaluation of contaminant migration pathways)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
1. Groundwater Movement				
A. Known COPC exceedances and an operable groundwater pathway within and/or beyond the property boundary.				
i) For **potable groundwater environments**, 1) groundwater concentrations exceed background concentrations and 1X the Guideline for Canadian Drinking Water Quality (GCDWQ) or 2) there is known contact of contaminants with groundwater, based on physical evidence of groundwater contamination. For **non-potable environments** (typically urban environments with municipal services), 1) groundwater concentrations exceed 1X the applicable non potable guidelines or modified generic guidelines (which exclude ingestion of drinking water pathway) or 2) there is known contact of contaminants with groundwater, based on physical evidence of groundwater impacts.	12	Non-potable environment. Groundwater impacts identified at the Site.	Review chemical data and evaluate groundwater quality. The evaluation method concentrates on 1) a potable or non-potable groundwater environment; 2) the groundwater flow system and its potential to be an exposure pathway to known or potential receptors An aquifer is defined as a geologic unit that yields groundwater in usable quantities and drinking water quality. The aquifer can currently be used as a potable water supply or could have the potential for use in the future. Non-potable groundwater environments are defined as areas that are serviced with a reliable alternative water supply (most commonly provided in urban areas). The evaluation of a non-potable environment will be based on a site specific basis. Physical evidence includes significant sheens, liquid phase contamination, or contaminant saturated soils. Seeps and springs are considered part of the groundwater pathway. In Arctic environments, the potability and evaluation of the seasonal active layer (above the permafrost) as a groundwater exposure pathway will be considered on a site-specific basis.	The 1992 NCS rationale evaluated the off-site migration as a regulatory issue. The exposure assessment and classification of hazards should be evaluated regardless of the property boundaries. Someone experienced must provide a thorough description of the sources researched to determine the presence/absence of a groundwater supply source in the vicinity of the contaminated site. This information must be documented in the NCS Site Classification Worksheet including contact names, phone numbers, e-mail correspondence and/or reference maps/reports and other resources such as internet links. Note that for potable groundwater that also daylights into a nearby surface water body, the more stringent guidelines for both drinking water and protection of aquatic life should be considered. **Selected References** Potable Environments Guidelines for Canadian Drinking Water Quality: www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/doc_sup-appui/sum_guide-res_recom/index_e.html Non-Potable Environments Canadian Water Quality Guidelines for Protection of Aquatic Life. CCME. 1999 www.ccme.ca Compilation and Review of Canadian Remediation Guidelines, Standards and Regulations. Science Applications International Corporation (SAIC Canada), report to Environment Canada, January 4, 2002.
ii) Same as (i) except the information is not known but strongly suspected based on indirect observations.	9			
iii) Meets GCDWQ for **potable environments**; meets non-potable criteria or modified generic criteria (excludes ingestion of drinking water pathway) for **non-potable environments** **or** Absence of groundwater exposure pathway (i.e., there is no aquifer (see definition at right) at the site or there is an adequate isolating layer between the aquifer and the contamination, and within 5 km of the site there are no aquatic receiving environments and the groundwater does not daylight).	0			
	12			
Score	12			
NOTE: If a score is assigned here for Known COPC Exceedances, then you can skip Part B (Potential for groundwater pathway) and go to Section 2 (Surface Water Pathway)				
B. Potential for groundwater pathway.				
a. Relative Mobility High Moderate Low Insignificant Do Not Know	High	-log Koc value of benzo(a)pyrene, a COC, is 6.01.	Organics Koc (L/kg) / Metals with higher mobility at acidic conditions / Metals with higher mobility at alkaline conditions Koc < 500 (i.e., log Koc < 2.7) — pH < 5 — pH > 8.5 Koc = 500 to 5000 (i.e., log Koc = 2.7 to 3.7) — pH = 5 to 6 — pH = 7.5 to 8.5 Koc = 5,000 to 100,000 (i.e., log Koc = 3.7 to 5) — pH > 6 — pH < 7.5 Koc > 100,000 (i.e., log Koc > 5)	Reference: US EPA Soil Screening Guidance (Part 5 - Table 39) If a score of zero is assigned for relative mobility, it is still recommended that the following sections on potential for groundwater pathway be evaluated and scored. Although the Koc of an individual contaminant may suggest that it will be relatively immobile, it is possible that, with complex mixtures, there could be enhanced mobility due to co-solvent effects. Therefore, the Koc cannot be relied on solely as a measure of mobility. An evaluation of other factors such as containment, thickness of confining layer, hydraulic conductivities and precipitation infiltration rate are still useful in predicting potential for groundwater migration, even if a contaminant is expected to have insignificant mobility based on its chemistry alone.
Score	4			
b. Presence of engineered sub-surface containment? No containment Partial containment Full containment Do Not Know	Do Not Know		Review the existing engineered systems or natural attenuation processes for the site and determine if full or partial containment is achieved. Full containment is defined as an engineered system or natural attenuation processes, monitored as being effective, which provide for full capture and/or treatment of contaminants. All chemicals of concern must be contained for "Full Containment" scoring. Natural attenuation must have sufficient data, and reports cited with monitoring data to support steady state conditions and the attenuation processes. If there is no containment or insufficient natural attenuation process, this category is evaluated as high. If there is less than full containment or if uncertain, then evaluate as medium. In Arctic environments, permafrost will be evaluated, as appropriate, based on detailed evaluations, effectiveness and reliability to contain/control contaminant migration.	Someone experienced must provide a thorough description of the sources researched to determine the containment of the source at the contaminated site. This information must be documented in the NCS Site Classification Worksheet including contact names, phone numbers, e-mail correspondence and/or reference maps, geotechnical reports or natural attenuation studies and other resources such as internet links. **Selected Resources:** United States Environmental Protection Agency (USEPA) 1998. Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater. EPA/600/R-98/128. Environment Canada – Ontario Region – Natural Attenuation Technical Assistance Bulletins (TABS) Number 19 –21.
Score	1.5			
c. Thickness of confining layer over aquifer of concern or groundwater exposure pathway 3 m or less including no confining layer or discontinuous confining layer 3 to 10 m > 10 m Do Not Know	> 10 m	Approximately 15m of clay/clay till.	The term "confining layer" refers to geologic material with little or no permeability or hydraulic conductivity (such as unfractured clay); water does not pass through this layer or the rate of movement is extremely slow. Measure the thickness and extent of materials that will impede the migration of contaminants to the groundwater exposure pathway. The evaluation of this category is based on: 1) The presence and thickness of saturated subsurface materials that impede the vertical migration of contaminants to lower aquifer units which can or are used as drinking water sources or 2) The presence and thickness of unsaturated subsurface materials that impede the vertical migration of contaminants from the source location to the saturated zone (e.g., water table aquifer, first hydrostratigraphic unit or other groundwater pathway).	
Score	0			

(II) Migration Potential (Evaluation of contaminant migration pathways)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
d. Hydraulic conductivity of confining layer $>10^{-4}$ cm/s or no confining layer 10^{-4} to 10^{-6} cm/s $<10^{-6}$ cm/s Do Not Know			Determine the nature of geologic materials and estimate hydraulic conductivity from published material (or use "Range of Values of Hydraulic Conductivity and Permeability" figure in the Reference Material sheet). Unfractured clays should be scored low. Silts should be scored medium. Sand, gravel should be scored high. The evaluation of this category is based on: 1) The presence and hydraulic conductivity ("K") of saturated subsurface materials that impede the vertical migration of contaminants to lower aquifer units which can or are used as a drinking water source, groundwater exposure pathway or 2) The presence and permeability ("k") of unsaturated subsurface materials that impede the vertical migration of contaminants from the source location to the saturated water table aquifer, first hydrostratigraphic unit or other groundwater pathway.	
	10-4 to 10-6 cm/s			
Score	0.5			
B. Potential for groundwater pathway.				
e. Precipitation infiltration rate (Annual precipitation factor x surface soil relative permeability factor) High Moderate Low Very Low None Do Not Know		Precipitation = 513.7 mm = 0.51 Permeability = 0.3 Precipitation Infiltration Rate = 0.153	Precipitation Refer to Environment Canada precipitation records for relevant areas. Divide annual precipitation by 1000 and round to nearest tenth (e.g., 667 mm = 0.7 score). Permeability For surface soil relative permeability (i.e., infiltration) assume: gravel (1), sand (0.6), loam (0.3) and pavement or clay (0). Multiply the surface soil relative permeability factor with precipitation factor to obtain the score for precipitation infiltration rate.	
	Low			
Score	0.4			
f. Hydraulic conductivity of aquifer $>10^{-2}$ cm/s 10^{-2} to 10^{-4} cm/s $<10^{-4}$ cm/s Do Not Know		-Soil profiles previously identified on-site consist of gavel and/or sandy fill, underlain by a lacustrine clay unit. The clay is underlain by silt followed by clay/clay till.	Determine the nature of geologic materials and estimate hydraulic conductivity of all aquifers of concern from published material (refer to "Range of Values of Hydraulic Conductivity and Permeability" in the Reference Material sheet).	
	10-2 to 10-4 cm/s			
Score	1			
Potential groundwater pathway total	7.4			
Allowed Potential score	---	Note: If a "known" score is provided, the "potential" score is disallowed.		
Groundwater pathway total	**12**			
2. Surface Water Movement				
A. Demonstrated migration of COPC in surface water above background conditions				
Known concentrations of surface water: i) Concentrations exceed background concentrations and exceed CCME CWQG for protection of aquatic life, irrigation, livestock water, and/or recreation (whichever uses are applicable at the site) by >1 X; or There is known contact of contaminants with surface water based on site observations. or In the absence of CWQG, chemicals have been proven to be toxic based on site specific testing (e.g. toxicity testing; or other indicator testing of exposure).	12	Total metals concentrations of aluminum, cadmium, iron and zinc exceed CCME CWQG for protection of FWAL. Concentrations also exceed background (upstream 50m) concentrations.	Collect all available information on quality of surface water near to site. Evaluate available data against Canadian Water Quality Guidelines (select appropriate guidelines based on local water use, e.g., recreation, irrigation, aquatic life, livestock watering, etc.). The evaluation method concentrates on the surface water flow system and its potential to be an exposure pathway. Contamination is present on the surface (above ground) and has the potential to impact surface water bodies. Surface water is defined as a water body that supports one of the following uses: recreation, irrigation, livestock watering, aquatic life.	General Notes: Someone experienced must provide a thorough description of the sources researched to classify the surface water body in the vicinity of the contaminated site. This information must be documented in the NCS Site Classification Worksheet including contact names, phone numbers, e-mail correspondence and/or reference maps/reports and other resource such as internet links. Selected References: CCME. 1999. Canadian Water Quality Guidelines for the Protection of Aquatic Life www.ccme.ca CCME. 1999. Canadian Water Quality Guidelines for the Protection of Agricultural Water Uses (Irrigation and Livestock Water) www.ccme.ca Health and Welfare Canada. 1992. Guidelines for Canadian Recreational Water Quality.
ii) Same as (i) except the information is not known but strongly suspected based on indirect observations.	8			
iii) Meets CWQG or absence of surface water exposure pathway (i.e., Distance to nearest surface water is > 5 km.)	0			
	12			
Score	12			
NOTE: If a score is assigned here for Demonstrated Migration in Surface Water, then you can skip Part B (Potential for migration of COPCs in surface water) and go to Section 3 (Surface Soils)				
B. Potential for migration of COPCs in surface water				
a. Presence of containment No containment Partial containment Full containment Do Not Know		-no barrier exist between impact soils and on-site Omands Creek.	Review the existing engineered systems and relate these structures to site conditions and proximity to surface water and determine if full containment is achieved: score low if there is full containment such as capping, berms, dikes; score medium if there is partial containment such as natural barriers, trees, ditches, sedimentation ponds; score high if there are no intervening barriers between the site and nearby surface water. Full containment must include containment of all chemicals.	
	No containment			
Score	5			
b. Distance to Surface Water 0 to <100 m 100 - 300 m >300 m Do Not Know		Omands Creek is located on-site.	Review available mapping and survey data to determine distance to nearest surface water bodies.	

(II) Migration Potential (Evaluation of contaminant migration pathways)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
	0 to <100 m			

(II) Migration Potential (Evaluation of contaminant migration pathways)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
Score	3			
c. Topography Contaminants above ground level and slope is steep Contaminants at or below ground level and slope is steep Contaminants above ground level and slope is intermediate Contaminants at or below ground level and slope is intermediate Contaminants above ground level and slope is flat Contaminants at or below ground level and slope is flat Do Not Know	At/below and flat	- estimated depth of impact is from surface to 4 m bgs, and the slope of the site is generally flat.	Review engineering documents on the topography of the site and the slope of surrounding terrain. Steep slope = >50% Intermediate slope = between 5 and 50% Flat slope = < 5% Note: Type of fill placement (e.g., trench, above ground, etc.).	
Score	0			
d. Run-off potential High (rainfall run-off score > 0.6) Moderate (0.4 < rainfall run-off score <0.6) Low (0.2 < rainfall run-off score <0.4) Very Low (0 < rainfall run-off score < 0.2) None (rainfall run-off score = 0) Do Not Know	Low	Precipitation = 513.7 mm = 0.51 Permeability = 0.6 Runoff-potential = 0.31	Rainfall Refer to Environment Canada precipitation records for relevant areas. Divide rainfall by 1000 and round to nearest tenth (e.g., 667 mm = 0.7 score). The former definition of "annual rainfall" did not include the precipitation as snow. This minor adjustment has been made. The second modification was the inclusion of permeability of surface materials as an evaluation factor. Permeability For infiltration assume: gravel (0), sand (0.3), loam (0.6) and pavement or clay (1). Multiply the infiltration factor with precipitation factor to obtain rainfall run off score.	Selected Sources: Environment Canada web page link: www.msc.ec.gc.ca Snow to rainfall conversion apply ratio of 15 (snow):1(water)
Score	0.4			
e. Flood potential 1 in 2 years 1 in 10 years 1 in 50 years Not in floodplain Do Not Know	Do Not Know		Review published data such as flood plain mapping or flood potential (e.g., spring or mountain run-off) and Conservation Authority records to evaluate flood potential of nearby water courses both up and down gradient. Rate zero if site not in flood plain.	
Score	0.5			
Potential surface water pathway total	8.9			
Allowed Potential score	---	Note: If a "known" score is provided, the "potential" score is disallowed.		
Surface water pathway total	**12**			
3. Surface Soils (potential for dust, dermal and ingestion exposure)				
A. Demonstrated concentrations of COPC in surface soils (top 1.5 m)				
COPCs measured in surface soils exceed the CCME soil quality guideline. Strongly suspected that soils exceed guidelines COPCs in surface soils does not exceed the CCME soil quality guideline or is not present (i.e., bedrock).	12 9 0		Collect all available information on quality of surface soils (i.e., top 1.5 metres) at the site. Evaluate available data against Canadian Soil Quality Guidelines. Select appropriate guidelines based on current (or proposed future) land use (i.e, agricultural, residential/parkland, commercial, or industrial), and soil texture if applicable (i.e., coarse or fine).	Selected References: CCME. 1999. Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health www.ccme.ca
	12			
Score	12			
NOTE: If a score is assigned here for Demonstrated Concentrations in Surface Soils, then you can skip Part B (Potential for a surface soils migration pathway) and go to Section 4 (Vapour)				
B. Potential for a surface soils (top 1.5 m) migration pathway				
a. Are the soils in question covered? Exposed Vegetated Landscaped Paved Do Not Know	Exposed	-impacted surficial soils throughout the site are generally unvegetated fill material.	Consult engineering or risk assessment reports for the site. Alternatively, review photographs or perform a site visit. Landscaped surface soils must include a minimum of 0.5 m of topsoil.	The possibility of contaminants in blowing snow have not been included in the revised NCS as it is difficult to assess what constitutes an unacceptable concentration and secondly, spills to snow or ice are most efficiently mitigated while freezing conditions remain.
Score	6			
b. For what proportion of the year does the site remain covered by snow? 0 to 10% of the year 10 to 30% of the year More than 30% of the year Do Not Know	>30% of year		Consult climatic information for the site. The increments represent the full span from soils which are always wet or covered with snow (and therefore less likely to generate dust) to those soils which are predominantly dry and not covered by snow (and therefore are more likely to generate dust).	
Score	0			
Potential surface soil pathway total	6			
Allowed Potential score	---	**Note: If a "known" score is provided, the "potential" score is disallowed.**		
Soil pathway total	**12**			

(II) Migration Potential (Evaluation of contaminant migration pathways)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
4. Vapour				
A. Demonstrated COPCs in vapour.				
Vapour has been measured (indoor or outdoor) in concentrations exceeding risk based concentrations.	12		Consult previous investigations, including human health risk assessments, for reports of vapours detected.	
Strongly suspected (based on observations and/or modelling)	9			
Vapour has not been measured and volatile hydrocarbons have not been found in site soils or groundwater.	0			
	Go to Potential			
Score	---			
NOTE: If a score is assigned here for Demonstrated COPCs in Vapour, then you can skip Part B (Potential for COPCs in vapour) and go to Section 5 (Sediment)				
B. Potential for COPCs in vapour				
a. Relative Volatility based on Henry's Law Constant, H' (dimensionless) High (H' > 1.0E-1) Moderate (H' = 1.0E-1 to 1.0E-3) Low (H' < 1.0E-3) Not Volatile Do Not Know		-Henry's Law Constant for the non-carcinogenic PAH napthalene, a COC, measures 1.98E-2.	Reference: US EPA Soil Screening Guidance (Part 5 - Table 36) *Provided in Attached Reference Materials*	If the Henry's Law Constant for a substance indicates that it is not volatile, and a score of zero is assigned here for relative volatility, then the other three questions in this section on Potential for COPCs will be automatically assigned scores of zero and you can skip to section 5.
	Moderate			
Score	2.5			
b. What is the soil grain size? Fine Coarse Do Not Know			Review soil permeability data in engineering reports. The greater the permeability of soils, the greater the possible movement of vapours. Fine-grained soils are defined as those which contain greater than 50% by mass particles less than 75 µm mean diameter (D50 < 75 µm). Coarse-grained soils are defined as those which contain greater than 50% by mass particles greater than 75 µm mean diameter (D50 > 75 µm).	
	Fine			
Score	2			
c. Is the depth to the source less than 10m? Yes No Do Not Know		- estimated depth of impact is from surface to 4 m bgs (refer to Phase III ESA report).	Review groundwater depths below grade for the site.	
	Yes			
Score	2			
d. Are there any preferential pathways? Yes No Do Not Know			Visit the site during dry summer conditions and/or review available photographs. Where bedrock is present, fractures would likely act as preferential pathyways.	Preferential pathways refer to areas where vapour migration is more likely to occur because there is lower resistance to flow than in the surrounding materials. For example, underground conduits such as sewer and utility lines, drains, or septic systems may serve as preferential pathways. Features of the building itself that may also be preferential pathways include earthen floors, expansion joints, wall cracks, or foundation perforations for subsurface features such as utility pipes, sumps, and drains.
	Do Not Know			
Score	1			
Potential vapour pathway total	7.5			
Allowed Potential score	7.5	Note: If a "known" score is provided, the "potential" score is disallowed.		
Vapour pathway total	**7.5**			
5. Sediment Movement				
A. Demonstrated migration of sediments containing COPCs				
There is evidence to suggest that sediments originally deposited to the site (exceeding the CCME sediment quality guidelines) have migrated.	12	Cannot determine exact source of downstream impacts given information available.	Review sediment assessment reports. Evidence of migration of contaminants in sediments must be reported by someone experienced in this area.	Usually not considered a significant concern in lakes/marine environments, but could be very important in rivers where transport downstream could be significant.
Strongly suspected (based on observations and/or modelling)	9			
Sediments have been contained and there is no indication that sediments will migrate in future. **or** Absence of sediment exposure pathway (i.e., within 5 km of the site there are no aquatic receiving environments, and therefore no sediments).	0			
	9			
Score	9			
NOTE: If a score is assigned here for Demonstrated Migration of Sediments, then you can skip Part B (Potential for Sediment Migration) and go to Section 6 (Modifying Factors)				

CCME National Classification System (2008, 2010 v 1.2)

(II) Migration Potential (Evaluation of contaminant migration pathways)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
B. Potential for sediment migration				
a. Are the sediments having COPC exceedances capped with sediments having no exceedances ("clean sediments")?	No		Review existing sediment assessments. If sediment coring has been completed, it may indicate that historically contaminated sediments have been covered over by newer "clean" sediments. This assessment will require that cores collected demonstrate a low concentration near the top and higher concentration with sediment depth.	
Yes				
No				
Do Not Know	4			
b. For lakes and marine habitats, are the contaminated sediments in shallow water and therefore likely to be affected by tidal action, wave action or propeller wash?	No		Review existing sediment assessments. If the sediments present at the site are in a river, select "no" for this question.	
Yes				
No				
Do Not Know	0			
c. For rivers, are the contaminated sediments in an area prone to sediment scouring?	Do Not Know		Review existing sediment assessments. It is important that the assessment is made under worst case flows (high yearly flows). Under high yearly flows, areas which are commonly depositional may	
Yes				
No				
Do Not Know	2			
Potential sediment pathway total	6			
Allowed Potential score	---	Note: If a "known" score is provided, the "potential" score is disallowed.		
Sediment pathway total	**9**			
6. Modifying Factors				
Are there subsurface utility conduits in the area affected by contamination?	Do Not Know		Consult existing engineering reports. Subsurface utilities can act as conduits for contaminant migration.	
Yes				
No				
Do Not Know				
Known	---			
Potential	2			

Migration Potential Total		
Raw "known" total	45	
Raw "potential" total	9.5	
Raw combined total	54.5	Note: If "Known" and "Potential" scores are provided, the checklist defaults to known. Therefore, the total "Potential" Score may not reflect the sum of the individual "Potential" scores.
Total (max 33)	**28.1**	

(III) Exposure (Demonstrates the presence of an exposure pathway and receptors)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
1. Human				
A. Known exposure				
Documented adverse impact or high quantified exposure which has or will result in an adverse effect, injury or harm or impairment of the safety to humans as a result of the contaminated site. (Class 1 Site*)	22		*Where adverse effects on humans are documented, the site should be automatically designated as a Class 1 site (i.e., action required). There is no need to proceed through the NCS in this case. However, a scoring guideline (22) is provided in case a numerical score for the site is still desired (e.g., for comparison with other Class 1 sites). This category can be based on the outcomes of risk assessments and applies to studies which have reported Hazard Quotients >1 for noncarcinogenic chemicals and incremental cancer risks that exceed acceptable levels defined by the jurisdiction for carcinogenic chemicals (for most jurisdictions this is typically either $>10^{-5}$ or $>10^{-6}$). Known impacts can also be evaluated based on blood testing (e.g. blood lead >10 ug/dL) or other health based testing. This category can be based on the outcomes of risk assessments and applies to studies which have reported Hazard Quotients of less than 0.2 for non-carcinogenic chemicals and incremental lifetime cancer risks for carcinogenic chemicals that are within acceptable levels as defined by the jurisdiction (for most jurisdictions this is less than either 10^{-6} or 10^{-5}).	Known adverse impact includes domestic and traditional food sources. Adverse effects based on food chain transfer to humans and/or animals can be scored in this category. However, the weight of evidence must show a direct link of a contaminated food source/supply and subsequent ingestion/transfer to humans. Any associated adverse effects to the environment are scored separately later in this worksheet. Someone experienced must provide a thorough description of the sources researched to evaluate and determine the quantified exposure/impact (adverse effect) in the vicinity of the contaminated site. **Selected References:** Health Canada – Federal Contaminated Site Risk Assessment in Canada Parts 1 and 2 Guidance on Human Heath Screening Level Risk Assessments (www.hc-sc.gc.ca/ewh-semt/pubs/contamsite/index_e.html) United States Environmental Protection Agency, Integrated Risk Information System (IRIS) – http://toxnet.nml.nih.gov
Same as above, but "Strongly Suspected" based on observations or indirect evidence.	10			
No quantified or suspected exposures/impacts in humans.	0			
	Go to Potential			
Score	---			
NOTE: If a score is assigned here for Known Exposure, then you can skip Part B (Potential for Human Exposure) and go to Section 2 (Human Exposure Modifying Factors)				
B. Potential for human exposure				
a) Land use (provides an indication of potential human exposure scenarios) Agricultural Residential / Parkland Commercial Industrial Do Not Know			Review zoning and land use maps over the distances indicated. If the proposed future land use is more "sensitive" than the current land use, evaluate this factor assuming the proposed future use is in place. Agricultural land use is defined as uses of land where the activities are related to the productive capability of the land or facility (e.g., greenhouse) and are agricultural in nature, or activities related to the feeding and housing of animals as livestock. Residential/Parkland land uses are defined as uses of land on which dwelling on a permanent, temporary, or seasonal basis is the activity (residential), as well as uses on which the activities are recreational in nature and require the natural or human designed capability of the land to sustain that activity (parkland). Commercial/Industrial land uses are defined as land on which the activities are related to the buying, selling, or trading of merchandise or services (commercial), as well as land uses which are related to the production, manufacture, or storage of materials (industrial).	This is the main "receptor" factor used in site scoring. A higher score implies a greater exposure and/or exposure of more sensitive human receptors (e.g., children).
	Industrial			
Score	0.5			
b. Indicate the level of accessibility to the contaminated portion of the site (e.g., the potential for coming in contact with contamination) Limited barriers to prevent site access; contamination not covered Moderate access or no intervening barriers, contaminants are covered. Remote locations in which contaminants not covered. Controlled access or remote location and contaminants are covered Do Not Know		- A fence is located around the perimeter of the site; however, several industrial manufacturing tenants operate on-site within the fenced area.	Review location and structures and contaminants at the site and determine if there are intervening barriers between the site and humans. A low rating should be assigned to a (covered) site surrounded by a fence or in a remote location, whereas a high score should be assigned to a site that has no cover, fence, natural barriers or buffer.	
	Access, not covered			
Score	2			
B. Potential for human exposure				
c) Potential for intake of contaminated soil, water, sediment or foods for operable or potentially operable pathways, as identified in Worksheet II (Migration Potential). i) direct contact Is dermal contact with contaminated surface water, groundwater, sediments or soils anticipated? Yes No Do Not Know		-Impacts to surficial soil have been identified on-site.	If soils or potable groundwater are present exceeding their respective CCME guidelines, dermal contact is assumed. Exposure to surface water, non-potable groundwater or sediments exceeding their respective CCME guidelines will depend on the site. Select "Yes" if dermal exposure to surface water, non-potable groundwater or sediments is expected. For instance, dermal contact with sediments would not be expected in an active port. Only soils in the top 1.5 m are defined by CCME (2003) as surface soils. If contaminated soils are only located deeper than 1.5 m, direct contact with soils is not anticipated to be an operable contaminant exposure pathway.	Exposure via the skin is generally believed to be a minor exposure route. However for some organic contaminants, skin exposure can play a very important component of overall exposure. Dermal exposure can occur while swimming in contaminated waters, bathing with contaminated surface water/groundwater and digging in contaminated dirt, etc.
	Yes			
Score	3			
ii) inhalation (i.e., inhalation of dust, vapour) Vapour - Are there inhabitable buildings on the site within 30 m of soils or groundwater with volatile contamination as determined in Worksheet II (Migration Potential)? Yes No Do Not Know		-Buildings located within 30 m of soil with volatile conatmination includes the Paint Shop and the Main Shop (please refer to Phase III ESA report).	If inhabitable buildings are on the site within 30 m of soils or groundwater exceeding their respective guidelines for volatile chemicals, there is a potential of risk to human health (Health Canada, 2004). Review site investigations for location of soil samples (having exceedances of volatile substances) relative to buildings. Refer to (II) Migration Potential worksheet, 4B.a), *Potential for COPCs in Vapour* for a definition of volatility.	Exposure via the lungs (inhalation) can be a very important exposure pathway. Inhalation can be via both particulates (dust) and gas (vapours). Vapours can be a problem where buildings have been built on former industrial sites or where volatile contaminants have migrated below buildings resulting in the potential for vapour intrusion. Assesses the potential for humans to be exposed to vapours originating from site soils. The closer the receptor is to a source of volatile chemicals in soil, the greater the potential of exposure. Also, coarser-grained soil will convey vapour much more efficiently in the soil than finer grained material such as clays and silts. General Notes; Someone experienced must provide a thorough description of the sources researched to determine the presence/absence of a vapour migration and/or dust generation in the vicinity of the contaminated site. This information must be documented in the NCS Site Classification Worksheet including contact names, phone numbers, e-mail correspondence and/or reference maps/reports and other resource such as internet links. Selected References; Canadian Council of Ministers of the Environment (CCME). 2006. Protocol for the Derivation of Environmental and Human Health Soil Quality Guidelines. PN 1332. www.ccme.ca Golder, 2004. Soil Vapour Intrusion Guidance for Health Canada Screening Level Risk Assessment (SLRA) Submitted to Health Canada, Burnaby, BC
	Yes			
Score	3			
Dust - If there is contaminated surface soil (e.g. top 1.5 m) , indicate whether the soil is fine or coarse textured. If it is known that surface soil is not contaminated, enter a score of zero. Fine Coarse Surface soil is not contaminated or absent (bedrock) Do Not Know Texture			Consult grain size data for the site. If soils (containing exceedances of the CCME soil quality guidelines) predominantly consist of fine material (having a median grain size of 75 microns; as defined by CCME (2006)) then these soils are more likely to generate dusts.	
	Fine			
Score	3			
inhalation total	6			

(III) Exposure (Demonstrates the presence of an exposure pathway and receptors)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
B. Potential for human exposure				
iii) Ingestion (i.e., ingestion of food items, water and soils [for children]), including traditional foods.		The City of Winnipeg obtains is serviced by a municipal water system, which obtains water from Shoal lake located approximately 137 km east of the City.	Review available site data to determine if drinking water (groundwater, surface water, private, commercial or municipal supply) is known or suspected to be contaminated above Guidelines for Canadian Drinking Water Quality. If drinking water supply is known to be contaminated, some immediate action (e.g., provision of alternate drinking water supply) should be initiated to reduce or eliminate exposure. The evaluation of significant potential for exceedances of the water supply in the future may be based on the capture zones of the drinking water wells; contaminant travel times; computer modelling of flow and contaminant transport.	**Selected References:** Guidelines for Canadian Drinking Water Quality: www.hc-sc.gc.ca/hecs-sesc/water/publications/drinking_water_quality_guidelines/toc.htm Drinking water can be an extremely important exposure pathway to humans. If site groundwater or surface water is not used for drinking, then this pathway is considered to be inoperable. Consider both wild foods such as salmon, venison, caribou, as well as agricultural sources of food items if the contaminated site is on or adjacent to agricultural land uses.
Drinking Water: Choose a score based on the proximity to a drinking water supply, to indicate the potential for contamination (present or future).				
0 to 100 m				
100 to 300 m				
300 m to 1 km				
1 to 5 km				
No drinking water present				
Do Not Know				
	No drinking water present			
Score	0			
Is an alternative water supply readily available?		The City of Winnipeg obtains is serviced by a municipal water system, which obtains water from Shoal lake located approximately 137 km east of the City.		
Yes				
No				
Do Not Know	Yes			
Score	0			
Is human ingestion of contaminated soils possible?			If contaminated soils are located within the top 1.5 m, it is assumed that ingestion of soils is an operable exposure pathway. Exposure to soils deeper than 1.5 m is possible, but less likely, and the duration is shorter. Refer to human health risk assessment reports for the site in question.	
Yes				
No				
Do Not Know	Yes			
Score	3			
Are food items consumed by people, such as plants, domestic animals or wildlife harvested from the contaminated land and its surroundings?			Use human health risk assessment reports (or others) to determine if there is significant reliance on traditional food sources associated with the site. Is the food item in question going to spend a large proportion of its time at the site (e.g., large mammals may spend a very small amount of time at a small contaminated site)? Human health risk assessment reports for the site in question will also provide information on potential bioaccumulation of the COPC in question.	
Yes				
No				
Do Not Know	No			
Score	0			
Ingestion total	3			
Human Health Total "Potential" Score	14.5	Note if a "Known" Human Health score is provided, the "Potential" score is disallowed.		
Allowed "Potential" Score	14.5			
2. Human Exposure Modifying Factors				
a) Strong reliance of local people on natural resources for survival (i.e., food, water, shelter, etc.)	No			
Yes				
No				
Do Not Know				
Known	0			
Potential	---			
Raw Human "known" total	0			
Raw Human "potential" total	14.5			
Raw Human Exposure Total Score	14.5			
Human Health Total (max 22)	**14.5**			
3. Ecological				
A. Known exposure				
Documented adverse impact or high quantified exposure which has or will result in an adverse effect, injury or harm or impairment of the safety to terrestrial or aquatic organisms as a result of the contaminated site.	18		Some low levels of impact to ecological receptors are considered acceptable, particularly on commercial and industrial land uses. However, if ecological effects are deemed to be severe, the site may be categorized as class one (i.e., a priority for remediation or risk management), regardless of the numerical total NCS score. For the purpose of application of the NCS, effects that would be considered severe include observed effects on survival, growth or reproduction which could threaten the viability of a population of ecological receptors at the site. Other evidence that qualifies as severe adverse effects may be determined based on professional judgement and in consultation with the relevant jurisdiction. If ecological effects are determined to be severe and an automatic Class 1 is assigned, there is no need to proceed through the NCS. However, a scoring guideline (18) is provided in case a numerical score for the site is still desired (e.g., for comparison with other Class 1 sites).	CCME, 1999: Canadian Water Quality Guidelines for the Protection of Aquatic Life. www.ccme.ca CCME, 1999: Canadian Water Quality Guidelines for the Protection of Agricultural Water Uses. www.ccme.ca Sensitive receptors- review: Canadian Council on Ecological Areas; www.ccea.org. Ecological effects should be evaluated at a population or community level, as opposed to at the level of individuals. For example, population-level effects could include reduced reproduction, growth or survival in a species. Community-level effects could include reduced species diversity or relative abundances. Further discussion of ecological assessment endpoints is provided in *A Framework for Ecological Risk Assessment: General Guidance* (CCME 1996). Notes: Someone experienced must provide a thorough description of the sources researched to classify the environmental receptors in the vicinity of the contaminated site. This information must be documented in the NCS Site Classification Worksheet including contact names, phone numbers, e-mail correspondence and/or reference maps/reports and other resource such as internet links.
Same as above, but "Strongly Suspected" based on observations or indirect evidence.	12		This category can be based on the outcomes of risk assessments and applies to studies which have reported Hazard Quotients >1. Alternatively, known impacts can also be evaluated based on a weight of evidence assessment involving a combination of site observations, tissue testing, toxicity testing and quantitative community assessments. Scoring of adverse effects on individual rare or endangered species will be completed on a case-by-case basis with full scientific justification.	
No quantified or suspected exposures/impacts in terrestrial or aquatic organisms	0		This category can be based on the outcomes of risk assessments and applies to studies which have reported Hazard Quotients of less than 1 and no other observable or measurable sign of impacts. Alternatively, it can be based on a combination of other lines of evidence showing no adverse effects, such as site observations, tissue testing, toxicity testing and quantitative community assessments.	
	Go to Potential			
Score	---			
NOTE: If a score is assigned here for Known Exposure, then you can skip Part B (Potential for Ecological Exposure) and go to Section 4 (Ecological Exposure Modifying Factors)				

(III) Exposure (Demonstrates the presence of an exposure pathway and receptors)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
B. Potential for ecological exposure (for the contaminated portion of the site)				
a) Terrestrial			Review zoning and land use maps. If the proposed future land use is more "sensitive" than the current land use, evaluate this factor assuming the proposed future use is in place (indicate in the worksheet that future land use is the consideration).	
i) Land use				
Agricultural (or Wild lands) Residential/Parkland Commercial Industrial Do Not Know	Industrial		Agricultural land use is defined as uses of land where the activities are related to the productive capability of the land or facility (e.g., greenhouse) and are agricultural in nature, or activities related to the feeding and housing of animals as livestock. Wild lands are grouped with agricultural land due to the similarities in receptors that would be expected to occur there (e.g., herbivorous mammals and birds) and the similar need for a high level of protection to ensure ecological functioning. Residential/Parkland land uses are defined as uses of land on which dwelling on a permanent, temporary, or seasonal basis is the activity (residential), as well as uses on which the activities are recreational in nature and require the natural or human designed capability of the land to sustain that activity (parkland). Commercial/Industrial land uses are defined as land on which the activities are related to the buying, selling, or trading of merchandise or services (commercial), as well as land uses which are related to the production, manufacture, or storage of materials (industrial).	
Score	0.5			
ii) Uptake potential		-estimated depth of impact is surface to 4 m bgs (refer to Phase III ESA report).	If contaminated soils are located within the top 1.5 m, it is assumed that direct contact of soils with plants and soil invertebrates is an operable exposure pathway. Exposure to soils deeper than 1.5 m is possible, but less likely.	
Direct Contact - Are plants and/or soil invertebrates likely exposed to contaminated soils at the site? Yes No Do Not Know	Yes			
Score	1			
iii) Ingestion (i.e., wildlife or domestic animals ingesting contaminated food items, soils or water)		-impacted surface water has been identified on-site (refer to 2010 Phase III ESA report completed by AECOM).		
Are terrestrial animals likely to be ingesting contaminated water at the site? Yes No Do Not Know	Yes		Refer to an Ecological Risk Assessment for the site. If there is contaminated surface water at the site, assume that terrestrial organisms will ingest it.	
Score	1			
Are terrestrial animals likely to be ingesting contaminated soils at the site? Yes No Do Not Know	Yes	-estimated depth of impact is surface to 4 m bgs (refer to 2010 Phase III ESA report completed by AECOM).	Refer to an Ecological Risk Assessment report. Most animals will co-ingest some soil while eating plant matter or soil invertebrates.	
Score	1			
Can the contamination identified bioaccumulate? Yes No Do Not Know	Yes	- Log(Kow) value of benzo(a)pyrene is 5.7.	Bioaccumulation of contaminants within food items is considered possible if: 1) The Log(Kow) of the contaminant is greater than 4 (as per the chemical characteristics work sheet) and concentrations in soils exceed the most conservative CCME soil quality guideline for the intended land use, or 2) The contaminant in collected tissue samples exceeds the Canadian Tissue Residue Guidelines.	
Score	1			
Distance to sensitive terrestrial ecological area 0 to 300 m 300 m to 1 km 1 to 5 km > 5 km Do Not Know	Do Not Know		It is considered that within 300 m of a site, there is a concern for contamination. Therefore an environmental receptor located within this area of the site will be subject to further evaluations. It is also considered that any environmental receptor located greater than 5 km will not be a concern for evaluation. Review Conservation Authority mapping and literature including Canadian Council on Ecological Areas link: www.ccea.org.	Environmental receptors include: local, regional or provincial species of interest or significance; arctic environments (on a site specific basis); nature preserves, habitats for species at risk, sensitive forests, natural parks or forests.
Score	1.5			
Raw Terrestrial Total Potential	6	Note if a "Known" Ecological Effects score is provided, the "Potential" score is disallowed.		
Allowed Terrestrial Total Potential	6			
B. Potential for ecological exposure (for the contaminated portion of the site)				
b) Aquatic			"Sensitive aquatic environments" include those in or adjacent to shellfish or fish harvesting areas, marine parks, ecological reserves and fish migration paths. Also includes those areas deemed to have ecological significance such as for fish food resources, spawning areas or having rare or endangered species. "Typical aquatic environments" include those in areas other than those listed above.	
i) Classification of aquatic environment Sensitive Typical Not Applicable (no aquatic environment present) Do Not Know	Typical			
Score	1			
ii) Uptake potential		-groundwater samples collected from monitoring wells located adjacent to Omands Creek (MW10-33, MW10-40 to MW10-43) and surface water samples exceeded CCME WQGs for the protection of aquatic life (refer to Phase III ESA report).	Groundwater concentrations of contaminants at the point of contact with an aquatic receiving environment can be estimated in three ways: 1) by comparing collected nearshore groundwater concentrations to the CCME water quality guidelines (this will be a conservative comparison, as contaminant concentrations in groundwater often decrease between nearshore wells and the point of discharge). 2) by conducting groundwater modeling to estimate the concentration of groundwater immediately before discharge. 3) by installing water samplers, "peepers", in the sediments in the area of daylighting groundwater.	
Does groundwater daylighting to an aquatic environment exceed the CCME water quality guidelines for the protection of aquatic life at the point of contact? Yes No (or Not Applicable) Do Not Know	Yes			
Score	1			
Distance from the contaminated site to an important surface water resource 0 to 300 m 300 m to 1 km 1 to 5 km > 5 km Do Not Know	0 to 300 m	Omands Creek is located on-site.	It is considered that within 300 m of a site, there is a concern for contamination. Therefore an environmental receptor or important water resource located within this area of the site will be subject to further evaluation. It is also considered that any environmental receptor located greater than 5 km away will not be a concern for evaluation. Review Conservation Authority mapping and literature including Canadian Council on Ecological Areas link: www.ccea.org.	Environmental receptors include: local, regional or provincial species of interest or significance, sensitive wetlands and fens and other aquatic environments.
Score	3			

(III) Exposure (Demonstrates the presence of an exposure pathway and receptors)

Dominion Bridge

Definition	Score	Rationale for Score (document any assumptions, reports, or site-specific information; provide references)	Method Of Evaluation	Notes
Are aquatic species (i.e., forage fish, invertebrates or plants) that are consumed by predatory fish or wildlife consumers, such as mammals and birds, likely to accumulate contaminants in their tissues?			Bioaccumulation of food items is possible if: 1) The Log(Kow) of the contaminant is greater than 4 (as per the chemical characteristics work sheet) and concentrations in sediments exceed the CCME ISQGs. 2) The contaminant in collected tissue samples exceeds the CCME tissue quality guidelines.	
Yes				
No				
Do Not Know	Yes			
Score	1			
Raw Aquatic Total Potential	6	Note if a "Known" Ecological Effects score is provided, the "Potential" score is disallowed.		
Allowed Aquatic Total Potential	6			
4. Ecological Exposure Modifying Factors				
a) Known occurrence of a species at risk.			Consult any ecological risk assessment reports. If information is not present, utilize on-line databases such as Eco Explorer. Regional, Provincial (Environment Ministries), or Federal staff (Fisheries and Oceans or Environment Canada) should be able to provide some guidance.	Species at risk include those that are extirpated, endangered, threatened, or of special concern. For a list of species at risk, consult Schedule 1 of the federal Species at Risk Act (http://www.sararegistry.gc.ca/species/schedules_e.cfm?id=1). Many provincial governments may also provide regionally applicable lists of species at risk. For example, in British Columbia, consult: BCMWLAP. 2005. Endangered Species and Ecosystems in British Columbia. Provincial red and blue lists. Ministry of Sustainable Resource Management and Water, Land and Air Protection. http://srmwww.gov.bc.ca/atrisk/red-blue.htm
Is there a potential for a species at risk to be present at the site?				
Yes				
No				
Do Not Know	Do Not Know			

Score	1			
b) Potential impact of aesthetics (e.g., enrichment of a lake or tainting of food flavor).				
Is there evidence of aesthetic impact to receiving water bodies?	No		Documentation may consist of environmental investigation reports, press articles, petitions or other records.	This Item will require some level of documentation by user, including contact names, addresses, phone numbers, e-mail addresses. Evidence of changes must be documented, please attach copy of report containing relevant information.
Yes				
No	0			
Do Not Know	---			
Is there evidence of olfactory impact (i.e., unpleasant smell)?	No		Examples of olfactory change can include the smell of a COPC or an increase in the rate of decay in an aquatic habitat.	
Yes				
No	0			
Do Not Know	---			
Is there evidence of increase in plant growth in the lake or water body?	No		A distinct increase of plant growth in an aquatic environment may suggest enrichment. Nutrients e.g., nitrogen or phosphorous releases to an aquatic body can act as a fertilizer.	
Yes				
No	0			
Do Not Know	---			
Is there evidence that fish or meat taken from or adjacent to the site smells or tastes different?	Do Not Know		Some contaminants can result in a distinctive change in the way food gathered from the site tastes or smells.	
Yes	---			
No	1			
Do Not Know				
Ecological Modifying Factors Total - Known	**0**			
Ecological Modifying Factors Total - Potential	**2**			
Raw Ecological Total - Known	0			
Raw Ecological Total - Potential	14			
Raw Ecological Total	14			
Ecological Total (Max 18)	**14.0**			
5. Other Potential Contaminant Receptors				
a) Exposure of permafrost (leading to erosion and structural concerns)				Plants and lichens provide a natural insulating layer which will help prevent thawing of the permafrost during the summer. Plants and lichens may also absorb less solar radiation. Solar radiation is turned into heat which can also cause underlying permafrost to melt.
Are there improvements (roads, buildings) at the site dependant upon the permafrost for structural integrity?	No		Consult engineering reports, site plans or air photos of the site. When permafrost melts, the stability of the soil decreases, leading to erosion. Human structures, such as roads and/or buildings are often dependent on the stability that the permafrost provides.	
Yes				
No	0			
Do Not Know	---			
Is there a physical pathway which can transport soils released by damaged permafrost to a nearby aquatic environment?	No		Melting permafrost leads to a decreased stability of underlying soils. Wind or surface run-off erosion can carry soils into nearby aquatic habitats. The increased soil loadings into a river can cause an increase in total dissolved solids and a resulting decrease in aquatic habitat quality. In addition, the erosion can bring contaminants from soils to aquatic environments.	
Yes				
No	0			
Do Not Know	---			
Other Potential Receptors Total - Known	**0**			
Other Potential Receptors Total - Potential	**0**			

Exposure Total		
Raw Human Health + Ecological Total - Known	0	
Raw Human Health + Ecological Total - Potential	28.5	Only includes "Allowed potential" - if a "Known" score was supplied under a given category then the "Potential" score was not included.
Raw Total	28.5	
Exposure Total (max 34)	**21.1**	

CCME National Classification System (2008, 2010 v 1.2)
Score Summary

Scores from individual worksheets are tallied in this worksheet.
Refer to this sheet after filling out the revised NCS completely.

I. Contaminant Characteristics	Known	Potential
1. Residency Media	8	---
2. Chemical Hazard	8	---
3. Contaminant Exceedance Factor	6	---
4. Contaminant Quantity	9	---
5. Modifying Factors	4	---
Raw Total Score	35	0
Raw Total Score (Known + Potential)	35	
Adjusted Total Score (Raw Total / 40 *33)	**28.9**	(max 33)

II. Migration Potential	Known	Potential
1. Groundwater Movement	12	---
2. Surface Water Movement	12	---
3. Soil	12	---
4. Vapour	---	7.5
5. Sediment Movement	9	---
6. Modifying Factors	---	2
Raw Total Score	45	9.5
Raw Total Score (Known + Potential)	54.5	
Adjusted Total Score (Raw Total / 64 * 33)	**28.1**	(max 33)

III. Exposure	Known	Potential
1. Human Receptors		
A. Known Impact	---	
B Potential		
a. Land Use		0.5
b. Accessibility		2
c. Exposure Route		
i. Direct Contact		3
ii. Inhalation		6
iii. Ingestion		3
2. Human Receptors Modifying Factors	0	---
Raw Total Human Score	0	14.5
Raw Total Human Score (Known + Potential)	14.5	
Adjusted Total Human Score	14.5	(maximum 22)
3. Ecological Receptors		
A. Known Impact	---	
B. Potential		
a. Terrestrial		6
b. Aquatic		6
4. Ecological Receptors Modifying Factors	0	2
Raw Total Ecological Score	0	14
Raw Total Ecological Score (Known + Potential)	14	
Adjusted Total Ecological Score	14.0	(maximum 18)
5. Other Receptors	0	0
Total Other Receptors Score (Known + Potential)	0	
Total Exposure Score (Human + Ecological + Other)	**28.5**	
Adjusted Total Exposure Score (Total Exposure / 46 * 34)	**21.1**	(max 34)

Site Score

Dominion Bridge

Site Letter Grade	**C**
Certainty Percentage	**75%**
% Responses that are "Do Not Know"	**-14%**
Total NCSCS Score for site	**78.0**
Site Classification Category	**1**

Site Classification Categories*:

Class 1 - High Priority for Action (Total NCS Score >70)
Class 2 - Medium Priority for Action (Total NCS Score 50 - 69.9)
Class 3 - Low Priority for Action (Total NCS Score 37 - 49.9)
Class N - Not a Priority for Action (Total NCS Score <37)
Class INS - Insufficient Information (>15% of responses are "Do Not Know")

* NOTE: The term "action" in the above categories does not necessarily refer to remediation, but could also include risk assessment, risk management or further site characterization and data collection.