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December 19, 2008

**PHASE II ENVIRONMENTAL SITE ASSESSMENT  
BAKER STREET REDEVELOPMENT SITE,  
GUELPH, ONTARIO**

Submitted to:

**CITY OF GUELPH, CITY HALL**  
59 Carden Street  
Guelph, Ontario  
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Attention: Mr. Colin Baker

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## **EXECUTIVE SUMMARY**

XCG Consultants Ltd. (XCG) was retained by the City of Guelph to conduct a Phase II Environmental Site Assessment (ESA) of the Baker Street Redevelopment Site property located at 55 Baker Street in Guelph, Ontario (subject property or site), including Chapel Lane, Park Lane, and Baker Street road allowances. It is XCG's understanding that the City of Guelph is considering redeveloping the subject property and that a Record of Site Condition (RSC) will be required prior to the site redevelopment.

The purpose of the Investigation was to further investigate the potential environmental issues identified in the previous Phase I ESA completed by XCG in October 2008 and to assess the soil and groundwater quality with respect to the applicable Ministry of Environment (MOE) soil and groundwater standards.

The tasks completed as part of the Investigation included:

- Completion of both public and private utility locates to verify the potential presence and location of underground utilities;
- Advancement of 20 boreholes including installation of seven monitoring wells at the site to a maximum depth of 10.7 metres below ground surface (bgs);
- Collection of soil and groundwater samples from each borehole and monitoring well for chemical analyses of metals, petroleum hydrocarbon compounds (PHCs) (Fractions F1 to F4), benzene, toluene, ethylbenzene, and xylenes (BTEX), volatile organic compounds (VOCs), polyaromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and/or pH; and
- Review and assessment of field and analytical data.

Based on the findings of the Phase II ESA it was concluded that:

1. Soil analytical results confirmed the presence of pH outside the 5 to 9 range. Therefore, the site is considered an environmentally sensitive site and the MOE Standard Table 1 criterion applies for this site. For reference purposes, for parameters with no MOE Standard Table 1 values, the MOE Standard Table 2 criterion was utilized.
2. Historical and ongoing on-site operations resulted in widespread soil and groundwater contamination with select metals, and localized VOC and PAH-related impacts. The concentrations of metals, VOCs, and PAHs in soil and/or groundwater exceed the applicable MOE Standard Table 1 criteria. In addition, the concentrations of select metals, PAHs, and PHCs in some soil and groundwater samples also exceeded the less stringent MOE Standard Table 2 criteria. The full extent or the significance of the identified soil and/or groundwater impacts have not been investigated and are currently unknown.
3. There is no evidence that historical operations of underground storage tanks (USTs) for storage of petroleum hydrocarbon and/or formaldehyde conducted on adjacent properties resulted in on-site impacts to soil and groundwater quality.

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## ***1. INTRODUCTION, PURPOSE, AND USE***

As requested by the City of Guelph, XCG Consultants Ltd. (XCG) has completed a Phase II Environmental Site Assessment (ESA) at the Baker Street Redevelopment Site property located at 55 Baker Street in Guelph, Ontario (herein referred to as the subject property or site), including Chapel Lane, Park Lane, and Baker Street road allowances. The site location and layout is shown on Figure 1.

It is XCG's understanding that the City of Guelph is considering redeveloping the subject property for use as a library and that a Record of Site Condition (RSC) will be sought from the Ministry of the Environment (MOE) prior to the site redevelopment.

XCG has recently completed a Phase I ESA which was documented in a draft report dated October 8, 2008. Based on the findings of the Phase I ESA, XCG developed a scope of work to further investigate the potential areas of environmental concern identified during the Phase I ESA.

XCG understands that the purpose of the Phase II ESA was to further investigate areas of environmental concern identified during the Phase I ESA and to assess the soil and groundwater quality with respect to the applicable MOE Standards.

The findings of the Phase I ESA included:

- Historical site use included industrial and manufacturing operations (a creamery, sawing machine, and spring manufacturing) conducted between 1897 and the 1960s and subsequent operation of the site as a municipal parking lot;
- Historical operations conducted on adjacent properties included operation of underground storage tanks (USTs) for storage of petroleum hydrocarbons (PHCs) and formaldehyde; and
- Historical investigations identified soil and groundwater quality impacts above currently applicable MOE Standards.

This report summarizes the scope of work, field activities, observations, and analytical data obtained during the Phase II ESA conducted at the site, and presents conclusions based on the information obtained. This Phase II ESA report has been prepared for the use of the City of Guelph and may not be relied upon by others without the written concurrence of XCG.

## **2. *BACKGROUND INFORMATION***

In August 2001, a Phase II ESA was completed on the subject property by Kewen Environmental Limited (Kewen). The work completed by Kewen included advancement of seven boreholes across the site, three of which were instrumented as monitoring wells (2, 4, and 6). Monitoring well 4 was dry at the time of drilling, and a groundwater sample was not collected from this well. Monitoring well 2 was reportedly paved over and could not be located by XCG personnel.

A total of 11 soil samples, (at least one from each borehole) and one groundwater sample (collected from monitoring well 6) were submitted for chemical analyses for pH, metals, inorganic parameters, conductivity, and/or volatile organic compounds (VOCs).

A review of the August 2001 results indicated that:

- Soil pH for shallow soil samples ranged between 8.87 and 9.36, and five of the 11 samples had pH values above nine;
- Soil sample concentrations of lead (169 µg/g), zinc (between 168 and 833 µg/g), benzene (0.003 µg/g), toluene (between 0.007 and 0.008 µg/g), and xylene (between 0.008 and 0.009 µg/g) were above the applicable MOE Standard Table 1 criteria of 2.5 µg/g, 120 µg/g, 160 µg/g, 0.002 µg/g (for benzene, toluene and xylene), respectively; and
- The groundwater sample collected from well 6 was reported to have concentrations of cobalt (2 µg/L), and antimony (7 µg/L), which were above the MOE Standard Table 1 criteria of 0.9 µg/L and 6 µg/L, respectively.

In 2007, an archaeological investigation was conducted in the southern portion of the site by D. R. Poulton & Associates Inc. (Poulton). The purpose of the investigation was to document the presence and remove any historic grave sites that could be impacted by the proposed site development. The archaeological excavation work was reportedly completed over an area of approximately 0.41 hectares, reportedly two-thirds of the former cemetery. The outer limits of the former cemetery are unknown.

During the investigation, Poulton encountered 11 intact grave sites and an additional 25 grave sites that had previously been exhumed. Furthermore, during the excavation activities bones, from previously disturbed or exhumed grave sites, were also found. The findings of the Poulton archaeological investigation was documented in a report entitled "The Stage 3-4 Archaeological Investigations of the Proposed Baker Street Parking Facility, Former Public Burying Ground (AjHb-71), City of Guelph, Ontario," dated August 2007.

In 2008, Jacques Whitford Environmental Ltd. (JWEL) completed a geotechnical investigation on the subject property. The purpose of this investigation was to determine the subsurface conditions at the site and to provide geotechnical data and recommendations related to the redevelopment of the site.

As part of the geotechnical investigation, a total of nine boreholes were advanced to depths ranging between 5.5 and 12.1 metres below ground surface (bgs). Six of the boreholes were terminated at the top of the inferred bedrock between 5.5 and 8.5 metres bgs and three boreholes were advanced between 3.0 and 4.0 metres further into the bedrock. Reportedly, the boreholes advanced into the bedrock were instrumented as monitoring wells; however, at the time of the geotechnical investigation, the wells remained dry.

The subsurface geology generally consisted of surficial asphalt pavement structure (asphalt and granular materials), fill materials at some locations, native sand/silty sand, sandy silt, weathered bedrock, and sound bedrock. The fill layer generally consisted of very loose dark brown to black organic silty sand, trace clay was encountered in BH1 and a fill layer of compact brown sandy clay was encountered in BH4. Bedrock coring was carried out in boreholes BH2, BH5, and BH9. According to JWEL, the rock that was encountered indicated that the bedrock was sound, hard to moderately hard, fresh to slightly weathered, white to pinkish white, amorphous, medium to think, smooth, and consisted of horizontal limestone.

Sieve analysis tests were carried out on select native soil samples. As reported by JWEL, BH1 to BH3 and BH6 to BH9 contained average of 13% gravel size particles, 78% sand size particles, and 9% silty/clay particles. The grain size analysis for BH4 and BH5 contained an average of 4% gravel size particles, 51% sand size particles, and 45% silt/clay particles.

During the drilling activities, brick debris was reportedly encountered in boreholes advanced within the footprint of the former factory (BH5 and BH7). The full extent of the brick debris has not been identified.

The findings of the geotechnical investigation were presented in a report entitled “Geotechnical Investigation, Baker Street Parking Garage, Guelph, Ontario”, dated July 14, 2008.

### **3. XCG SCOPE OF WORK**

In order to achieve the above-listed project objectives, the following tasks were completed as part of the Phase II ESA:

1. Mobilization and demobilization of all personnel and equipment required to complete the work. Prior to the subsurface investigation, both public and private utility locates were carried out in all of the areas where subsurface work was conducted.
2. Advancement of 20 boreholes at the site to a maximum depth of 10.7 metres bgs within the Baker Street Parking Lot and on Park Lane to investigate soil quality.
3. Collection and field screening of soil samples from all boreholes for evidence of impact including discolouration, odours, and the presence of total organic vapours (TOVs) as measured using a handheld gas meter [i.e. gastechtor or photo ionization detector (PID) meter].
4. Laboratory analyses of one ‘worst case’ soil sample from each borehole for metals, PHCs (Fractions F1 to F4), VOCs, polyaromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), and/or pH.
5. Instrumentation of seven boreholes as monitoring wells to facilitate collection of groundwater samples for chemical analyses and determination of groundwater flow direction.
6. Surveying ground surface elevations at the monitoring well locations relative to an on-site temporary benchmark.
7. Measuring groundwater levels in all on-site wells (including wells installed during previous investigations), purging and/or development of the wells and collection of groundwater samples for chemical analyses.
8. Submission of 10 groundwater samples [one sample per well, including the previously installed wells plus one quality assurance/quality control (QA/QC) for laboratory analyses of metals, PHCs (F1 to F4), benzene, toluene, ethylbenzene, xylenes (BTEX), VOCs, PAHs, and/or PCBs.
9. Review and assessment of field and analytical data.
10. Preparation of a summary report.

## **4. METHODOLOGY**

Prior to commencing on-site drilling activities, utility locates were performed by Ontario One Call and Down Under Pipe and Cable Locating (Down Under). A copy of the Down Under buried utility locates reports are included in Appendix A.

The Phase II ESA was designed in general accordance with the Canadian Standards Association (CSA) Standard Z769-00 for completing Phase II Environmental Site Assessments (ESAs). The Phase II ESA sampling program was conducted in general accordance with the MOE sampling protocols, including QA/QC methods, as described in the MOE document, “*Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario*,” dated December 1996. All chemical analyses were performed in accordance with Ontario Regulation (O. Reg.) 153/04, and specifically the related document “*Protocol for Analytical Methods Used in the Assessment of Properties under Part XV.1 of the Environmental Protection Act*,” dated March 2004.

### **4.1 Soil and Groundwater Sampling**

#### **4.1.1 Borehole Drilling/Monitoring Well Installations**

All drilling activities were completed under XCG supervision by Geo-Environmental Drilling Inc., of Milton, Ontario (Geo-Environmental), a MOE-licensed drilling contractor. Between November 25 and December 3, 2008, Geo-Environmental advanced 20 boreholes, BH-1 to BH-19, and BH-17-MW5D, using a truck-mounted CME-75 drill rig equipped with split spoon samplers and hollow stem augers and tri-cone drilling bit. The boreholes were advance to depths ranging from 0.76 to 10.7 metres bgs. Boreholes BH-8, BH-15, BH-16, and BH-17-MW5D were advanced into the limestone bedrock using an air tri-cone drilling bit. The approximate borehole locations are shown on Figure 2.

Soil samples collected from each borehole were logged for physical characteristics, as well as olfactory and visual evidence of contamination. Soil samples were collected in sealable plastic bags and those selected for laboratory analysis were split, with half of the sample being placed in laboratory-supplied sample jars with Teflon lined lids to prevent the loss of volatile compounds.

Soil samples from each borehole were screened in the field for visual and olfactory evidence of impacts and the presence of TOV using the headspace method using a Photovac 2020 PID. TOV measurements were taken from the headspace in the sample bags. The TOV readings are provided on the borehole logs included in Appendix B.

Based on field screening, one ‘worst-case’ soil sample was selected from each of the 20 boreholes and submitted to Maxxam Analytics Inc. of Mississauga, Ontario (Maxxam) for chemical analysis. Selected soil samples were submitted under chain-of-custody protocols, for chemical analysis of metals, PHCs (F1 to F4), VOCs, PAH, PCBs, and/or pH. The soil quality results are discussed in Section 4.4. The Maxxam laboratory analytical reports are provided in Appendix C.

Following completion of soil sampling activities, seven of the 20 boreholes (BH-8-MW4, BH-15-MW3, BH-16-MW2, BH-17-MW5S, MW5D, BH-18, MW1, and BH-19-MW6) were instrumented as monitoring wells. The new wells were constructed using 51-millimetre (2-inch) diameter PVC Schedule 40 pipe equipped with 10-slot 1.5-metre or 3-metre (5-foot or 10-foot) long screen. Clean silica sand (#3) filter pack was placed around each screen with a bentonite seal placed above the filter pack to backfill the remaining borehole annulus. The monitoring wells were completed with well caps and flush-mounted protective casings set into a concrete collar at grade. Each monitoring well was instrumented with dedicated sampling tubing. Well instrumentation details are presented in the borehole logs in Appendix B.

#### **4.1.2 *Hydraulic Monitoring and Groundwater Sampling***

XCG measured water levels from the newly installed monitoring wells (BH-8-MW4, BH-15-MW3, BH-16-MW2, BH-17-MW5S, BH-17-MW5D, BH-18-MW1, and BH-19-MW6) and the already existing monitoring wells (BH2, BH5, and 6) on December 4, 2008. The water levels were measured with respect to an on-site benchmark (the top of a fire hydrant located adjacent to the parking kiosk building), which was assigned an arbitrary elevation of 100.00 metres above arbitrary site datum (ASD).

The groundwater levels measured on December 4, 2008 were between 8.245 metres bgs (89.945 metres ASD) at BH-15-MW3 and 3.365 metres bgs (94.990 metres ASD) at BH-19-MW6. The groundwater levels measured on December 4, 2008 and the calculate groundwater elevations with respect to the ASD are summarized in Table 1.

The well development and groundwater sampling activities were conducted between December 2 and 4, 2008. The newly installed monitoring wells were developed to remove fine material from the sand pack and to ensure that groundwater samples collected from the wells are representative of the formation water. Following well development, all wells were purged prior to sampling.

Following completion of well development and purging activities, each well was generally sampled using WaTerra inertial lift pumps; however, pre-existing monitoring wells BH2 and BH5 were sampled using a low-flow peristaltic pump due to the diameter of the well. Between December 2 and 4, 2008, 11 groundwater samples, including one QA/QC sample, were collected from newly installed and previously existing monitoring and were submitted for chemical analyses of metals, PHCs (F1 to F4), BTEX, VOCs, PAHs, and/or PCBs. Previously existing monitoring wells 4 and BH9 were purged dry and did not recovered in time; therefore, samples were not collected from these monitoring wells. Previously existing monitoring well 2 could not be located and may have been possibly paved over. All samples were collected directly in the laboratory-supplied containers and submitted under chain-of-custody protocol to Maxxam. The groundwater analytical results are discussed in Section 4.5. The Maxxam laboratory analytical reports are provided in Appendix C.

## **5. RESULTS**

### **5.1 Geology**

The stratigraphy observed in boreholes advanced at the subject site consists of various layers of sand and gravel fill, silty sand, silt and gravel, cobbles, sand, silt, and limestone bedrock extending from the ground surface to approximately 10.7 metres bgs. The sand and gravel fill layers ranged from the ground surface to a maximum depth of approximately 3.05 metres bgs across the entire site. Red brick fragments were observed in BH-5, BH-14, BH-18, and BH-19 within the fill layer in localized areas.

The fill layers were underlain by silty sand, silt, sand, gravel, and cobbles to a maximum depth of 7.3 metres bgs. Limestone bedrock was encountered between 4.27 and 7.3 metres bgs to the maximum depth of the investigation of 10.7 metres bgs. The limestone bedrock was typically encountered between 4.27 and 5.33 metres bgs at the southern portion of the site and between 7.3 and 6.55 metres bgs at the northern portion of the site.

The sand and gravel layer directly beneath the fill layer in BH-8, BH-9, BH-15, and BH-16 was found to extend between 0.46 and 5.2 metres bgs, and was underlain by the limestone bedrock. The sand and gravel layer in BH-1, BH-2, BH-3, and BH-12 was found to extend between 2.44 and 4.57 metres bgs, and was underlain by silt, underlain by the limestone bedrock. A sand and gravel layer was not observed in the remaining boreholes.

Auger refusal occurred between 0.76 and 1.98 metres bgs at BH-5, BH-7, BH-10, and BH-10. Auger refusal may have occurred due to encountering a concrete structure or a large boulder; however, refusal typically occurred within the fill layer.

### **5.2 Hydrogeology**

Water was generally encountered within the bedrock in the southern portion of the site and water was generally encountered within the overburden/fill in the northern portion of the site. Based on the groundwater elevations measured on December 4, 2008 in wells installed at the site, the direction of shallow groundwater flow beneath the investigative portion of the site is to the east to southeast towards the Speed River. Speed River flows from the north to south and is located approximately 160 metres northeast of the subject site northern property boundary.

### **5.3 Applicable Standard**

Review of soil pH data generated during previous on-site investigations conducted by Kewen in 2001 indicated that five of eleven shallow (less than 1.5 metres bgs) soil samples collected, five samples had soil pH values above 9. Furthermore, two of the 12 shallow soil samples collected as part of this Phase II ESA were also reported to have pH values above 9. According to MOE document entitled "*Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act,*" dated March 9, 2004 (MOE Standard), a property with pH values in

shallow soil outside the normal range of 5 to 9 is considered an environmentally sensitive site. As such, the soil and groundwater quality data generated as part of this Phase II ESA was assessed with respect to the MOE Standard Table 1 criteria.

Due to the fact that the MOE Standard Table 1 does not provide criteria for some parameters of concern analyzed for during the Phase II ESA, for reference purposes, XCG also compared the analytical results to the MOE Standard Table 2 criteria developed for commercial, industrial and institutional land use in a potable groundwater situation.

#### **5.4     *Soil Quality***

Review of the soil analytical results indicates that all analyzed parameters were detected at concentrations either less than the laboratory method detection limit or below the MOE Standard Table 1 soil quality criteria for PAHs and PCBs.

Analytical results indicated that concentrations of metals were less than the applicable MOE Standard Table 1 soil quality criteria, with the exception of lead and zinc. Concentrations of lead in boreholes BH-6 (199 µg/g) and BH-19 (138 µg/g) exceeded the applicable MOE Standard Table 1 soil quality criteria of 120 µg/g. Concentrations of zinc in boreholes BH-2 (185 µg/g), BH-9 (172 µg/g), and BH-19 (176 µg/g) also exceeded the applicable MOE Standard Table 1 soil quality criteria of 160 µg/g.

Analytical results indicated that concentrations of VOCs were less than the applicable MOE Table 1 soil quality criteria, with the exception of toluene in the sample collected from borehole BH-3 (0.003 µg/g) which exceeded the applicable MOE Standard Table 1 soil quality criteria of 0.002 µg/g.

It is noted that the concentration of dichloromethane in the sample collected from BH-14 was reported to be less than the analytical method detection limit; however, the detection limit was above the MOE Standard Table 1 criterion for this parameter.

Review of the soil analytical results for PHCs (F1 and F2) indicated that all concentrations were less than the laboratory method detection limits. Detectable concentrations of PHCs (F3 and F4) were detected in BH-10 (1,300 µg/g and 7,900 µg/g), BH-13 (56 µg/g and 600 µg/g), BH-14 (56 µg/g), and BH-15 (107 µg/g and 900 µg/g). There are no MOE Table 1 Standards for PHCs (F1 to F4).

For reference purposes, the soil sample analytical results were also compared to the MOE Standard Table 2 criteria. The concentration of PHC (F4) in sample collected from borehole BH-10 (7,900 µg/g) was greater than the MOE Standard Table 2 criteria of 3,300 µg/g.

The soil sample analytical results are summarized in Tables 2, 3, and 4. Laboratory certificates of analysis are also included in Appendix C.

#### **5.5     *Groundwater Quality***

Review of the groundwater analytical results indicates that with the exception of toluene, all samples had concentrations of VOCs and PCBs either less than the

laboratory method detection limit or less than the MOE Standard Table 1 groundwater quality criteria. Groundwater samples collected from monitoring wells MW1 (1.0 µg/L), MW2 (1.9 µg/L), MW5S (2.2 µg/L), and MW5D (2.6 µg/L) were reported to have concentration of toluene greater than the applicable MOE Standard Table 1 groundwater criterion of 0.8 µg/L.

Analytical results for metals indicated that concentrations of cadmium, cobalt, copper, nickel, selenium, and zinc were greater than the applicable MOE Standard Table 1 groundwater quality criteria of 2.5 µg/L, 25 µg/L, 5 µg/L, and 20 µg/L, respectively. Concentrations of copper exceeded the applicable MOE Standard Table 1 groundwater quality criteria in every monitoring well sampled. Concentrations of cobalt exceeded the applicable MOE Standard Table 1 groundwater quality criteria in every monitoring well with the exception of the pre-existing monitoring wells BH5 and 6. Concentrations of sodium were detected in every monitoring well sampled; however, the MOE Standard Table 1 has no numerical criteria for sodium.

Review of the groundwater analytical results for PHC (F1 to F4) indicated that with the exception of sample collected from well MW1, all PHC concentrations were below the laboratory method detection limits. The sample collected from MW1 was reported to have concentrations of PHC (F3) and PHC (F4) at 340 µg/L and 840 µg/L, respectively. The MOE Standard Table 1 has no numerical criteria for PHCs. However, in order for a site to meet the MOE Standard Table 1 criteria for PHCs, there must be no evidence of free product, including but not limited to, visible petroleum hydrocarbon film or sheen present in groundwater samples. The groundwater must also be free of objectionable petroleum hydrocarbon odour and taste. It is noted that during purging, development, and sampling activities no evidence of petroleum hydrocarbon film, sheen, and/or odour was observed.

Analytical results for PAHs in monitoring wells MW4 and pre-existing BH5 indicated that all analyzed parameters were detected at concentrations either less than the laboratory method detection limit or less than the MOE Standard Table 1 groundwater quality criteria. Concentrations of PAHs in monitoring well MW1 exceeded the applicable MOE Standard Table 1 groundwater quality criteria for anthracene (0.10 µg/L), benzo(a)anthracene (0.48 µg/L), benzo(a)pyrene (0.522 µg/L), benzo(b)fluoranthene (0.72 µg/L), benzo(g,h,i)perylene (0.46 µg/L), benzo(k)fluoranthene (0.33 µg/L), chrysene (0.50 µg/L), indeno(1,2,3-cd)pyrene (0.48 µg/L), and pyrene (0.79 µg/L).

For reference purposes, the groundwater sample analytical results were also compared to the MOE Standard Table 2 criteria. The concentrations of PHC (F3 and F4) in the sample collected from well MW1, barium in sample collected from well MW5S (1,400 µg/L), and selenium in samples collected from wells MW5D (6 µg/L) and MW6 (6 µg/L) exceeded the MOE Standard Table 2 criteria for these parameters. In addition, concentration of sodium in samples collected from all on-site wells were above the MOE Standard Table 2 criteria of 200,000 µg/L.

The groundwater sample analytical results are summarized in Tables 5, 6, and 7. Laboratory certificates of analysis are also included in Appendix C.

**5.6 QA/QC Results**

XCG reviewed the laboratory sample results and QA/QC samples to evaluate whether data quality objectives were met. The analytical data are considered to be representative, reliable, and complete, and have a documented accuracy and precision. The laboratory sample spikes and QC standard samples analyzed by the laboratory did not reveal any anomalous results.

For the fieldwork program, XCG followed standard QA/QC field protocols, which included cleaning and decontamination of sampling equipment, dedicated sampling equipment, wearing clean gloves between each new sample was collected, minimizing aeration and air contact of samples, sample preservation, unique sample identification and completing chain of custody, recording observations in field notes, keeping samples cool (4°C) and in the dark as soon as they were collected, securing samples with ice packs to maintain internal temperatures in shipping containers for storage and transport, and shipping samples to the laboratory as soon as possible after collection, noting the recommended maximum holding times.

## **6. SUMMARY OF FINDINGS**

1. Based on the review of the water levels and survey data, groundwater is confirmed to flow in an east to southeast direction across the subject property.
2. Analytical results indicated that soil from BH-10 and BH-14 had pH levels of 10.5 and 9.63, respectively. Historical investigations also indicated several soil samples had a pH greater than 9. Therefore the subject site is considered to be environmentally sensitive and analytical data must be compared to the MOE Table 1 Standards criteria.
3. PAHs and PCBs parameter concentrations in soil samples were all found to be less than the MOE Standard Table 1 soil quality criteria.
4. Metals were below the applicable MOE Standard Table 1 soil quality criteria with the exception of lead and zinc. Concentrations of lead in boreholes BH-6 (199 µg/g) and BH-19 (138 µg/g) exceeded the applicable MOE Standard Table 1 soil quality criteria of 120 µg/g. Concentrations of zinc in boreholes BH-2 (185 µg/g), BH-9 (172 µg/g), and BH-19 (176 µg/g) also exceeded the applicable MOE Standard Table 1 soil quality criteria of 160 µg/g.
5. VOCs parameter concentrations were less than the applicable MOE Table 1 soil quality criteria with the exception of toluene. Concentration of toluene in BH-3 (0.003 µg/g) exceeded the applicable MOE Standard Table 1 soil quality criteria of 0.002 µg/g.
6. There are no MOE Table 1 Standards for PHCs (F1 to F4) in soil. Detectable concentrations of PHCs (F3 and F4) were detected in soil samples from BH-10, BH-13, BH-14, and BH-15. Analytical results indicated that the concentration of PHC (F4) in borehole BH-10 (7,900 µg/g) was greater than the MOE Standard Table 2 criteria of 3,300 µg/g.
7. VOCs and PCB parameter concentrations in groundwater samples were all found less than the MOE Standard Table 1 groundwater quality criteria.
8. Analytical results for metals indicated that concentrations of cadmium, cobalt, copper, nickel, selenium, and zinc were greater than the applicable MOE Standard Table 1 groundwater quality criteria of 2.5 µg/L, 25 µg/L, 5 µg/L, and 20 µg/L, respectively.
9. Concentrations of BTEX within the groundwater samples taken were all less than their respective MOE Table 1 Standards with the exception of toluene. Monitoring wells MW1 (1.0 µg/L), MW2 (1.9 µg/L), MW5S (2.2 µg/L), and MW5D (2.6 µg/L) were reported to have concentration of toluene greater than the applicable MOE Standard Table 1 groundwater criterion of 0.8 µg/L.
10. There are no MOE Table 1 Standards for PHCs in groundwater. Detectable concentrations of PHCs (F3 and F4) were found in the groundwater sample from monitoring well MW1 (340 µg/L and 840 µg/L, respectively). Analytical results indicated that the concentration of PHCs (F3 and F4) in MW1 was greater than the MOE Standard Table 2 groundwater quality criterion of 1,000 µg/L.

11. Analytical results for PAHs in monitoring wells MW4 and pre-existing BH5 indicated that all analyzed parameters were detected at concentrations either less than the laboratory method detection limit or less than the MOE Standard Table 1 groundwater quality criteria. Concentrations of PAHs in monitoring well MW1 exceeded the applicable MOE Standard Table 1 groundwater quality criteria for anthracene (0.10 µg/L), benzo(a)anthracene (0.48 µg/L), benzo(a)pyrene (0.522 µg/L), benzo(b)fluoranthene (0.72 µg/L), benzo(g,h,i)perylene (0.46 µg/L), benzo(k)fluoranthene (0.33 µg/L), chrysene (0.50 µg/L), indeno(1,2,3-cd)pyrene (0.48 µg/L), and pyrene (0.79 µg/L).

## **7. LIMITATIONS AND CONCLUSIONS**

### **7.1 Limitations**

The Phase II Environmental Site Assessment described herein was designed to further investigate the potential subsurface environmental impacts at the subject site known as the Baker Street Redevelopment Site property located at 55 Baker Street in Guelph, Ontario, Ontario.

The findings and conclusions regarding contamination of the subject property provided in this report are based solely on the extent of the data obtained during XCG's Phase II Environmental Site Assessment. As such, XCG cannot be held responsible for the accuracy of the results or findings previously identified by others.

The conclusions drawn from this Phase II Environmental Site Assessment were based on information at selected observation and sampling locations. Conditions between and beyond these locations may become apparent during future investigations or on-site work, which could not be detected or anticipated at the time of this investigation. The sampling locations were chosen based upon historical information, visual observations, and site accessibility. As such, XCG cannot be held responsible for environmental conditions at the site that were not apparent from the available information.

The scope of this report is limited to the matters expressly covered. This report was prepared for the benefit of the City of Guelph for the purpose of documenting environmental conditions at the subject property. This report may only be relied upon by the City of Guelph. Any use or reuse of this document (or the findings and conclusions represented herein), by parties other than those listed above, is at the sole risk of those parties.

This Investigation report may not be relied upon by others without the written concurrence of XCG.

### **7.2 Conclusions**

The overall conclusions of this Phase II Environmental Site Assessment include:

1. Historical and ongoing on-site operations resulted in widespread soil and groundwater contamination with select metals, and localized VOC and PAH-related impacts. The concentrations of metals, VOCs, and PAHs in soil and/or groundwater exceed the applicable MOE Standard Table 1 criteria. In addition, the concentrations of select metals, PAHs, and PHCs in some soil and groundwater samples also exceeded the less stringent MOE Standard Table 2 criteria. The full extent or the significance of the identified soil and/or groundwater impacts have not been investigated and are currently unknown.
2. There is no evidence that historical operations of USTs for storage of petroleum hydrocarbon and/or formaldehyde conducted on adjacent properties resulted in on-site impacts to soil and groundwater quality.

## ***TABLES***

**Table 1 Summary of Groundwater Levels**

Monitoring Well	Top of Pipe Elevation (m)	Ground Surface Elevation (m)	Depth to Water (mbgs) December 4, 2008	Groundwater Elevation (m) December 4, 2008
MW1	98.635	98.635	3.510	94.855
MW2	98.450	98.450	7.610	90.840
MW3	98.135	98.190	8.965	89.945
MW4	97.845	98.520	7.585	90.935
MW5S	98.610	98.755	4.195	94.560
MW5D	98.650	98.755	7.695	91.060
MW6	98.230	98.355	3.365	94.990
BH2	98.600	98.645	8.145	90.500
BH5	99.115	99.270	7.135	92.135
6	98.500	98.500	3.870	94.630

**Notes:**  
Groundwater elevations are calculated from top of pipe (TOP)  
mbgs - metres below ground surface

**Table 2 Summary of Analytical Results for Inorganics, Metals, Polychlorinated Biphenyls, and Petroleum Hydrocarbons in Soil**

Parameter ( $\mu\text{g/g}$ )	RDL	MOE Table 1 Standards	MOE Table 2 Standards	BH-1 (SS4)	BH-2 (SS2)	BH-3 (SS2)	BH-4 (SS2)	BH-5 (SS2)	BH-6 (SS5)	BH-7 (SS2)	BH-8 (SS4)
				2.3 - 2.9 mbgs	0.8 - 1.4 mbgs	3.1 - 3.7 mbgs	0.8 - 1.2 mbgs	2.3 - 2.9 mbgs			
		All Other Types	Industrial/Commercial	3-Dec-08	2-Dec-08	27-Nov-08	26-Nov-08	25-Nov-08	25-Nov-08	25-Nov-08	25-Nov-08
Antimony	1	1	40	<1	<1	<1	>1	<1	<1	<1	<1
Arsenic	1	17	40	2	2	1	2	2	1	2	1
Selenium	1	1.9	10.0	<1	<1	<1	<1	<1	<1	<1	<1
Boron	0.1	NV	2	0.1	0.2	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
Chromium (VI)	2	2.5	8	<2	<2	<2	<2	<2	<2	<0.2	<2
Mercury	0.05	0.23	10	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05	<0.05	<0.05
Barium	1	210	1,500	22	18	18	37	12	11	12	12
Beryllium	0.5	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium	0.5	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	1	71	750	8	8	7	12	5	4	6	5
Cobalt	1	21	80	4	3	3	6	2	2	2	2
Copper	1	85	225	10	8	8	11	5	4	8	6
Lead	1	120	1,000	9	9	14	12	15	199	18	8
Molybdenum	1	2.5	40	<1	<1	<1	<1	<1	<1	<1	<1
Nickel	1	43	150	7	5	5	11	4	3	4	3
Silver	0.2	0.42	40	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	1	2.5	32	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	1	91	200	10	15	8	14	6	4	5	4
Zinc	1	160	600	60	182	102	57	91	71	66	47
pH	0.01	NV	NV	7.86	7.74	7.97	8.19	8.16	8.15	8.31	8.47
PCBs	0.01	0.3	25	NA	NA	NA	<0.01	NA	NA	NA	<0.05
F1 (C6 - C10)	5	NV	230	<5	<5	<5	<5	NA	NA	NA	<5
F2 (C>10 - C16)	10	NV	150	<10	<10	<10	<10	NA	NA	NA	<10
F3 (C>16 - C34)	50	NV	1,700	<50	<50	<50	<50	NA	NA	NA	<50
F4 (C>34 - C50)	50	NV	3,300	<50	<50	<50	<50	NA	NA	NA	<50

**Notes:**

RDL Report Detection Limit  
mbgs metres below ground surface

NV No Value

NA Not Analyzed

< Below laboratory RDL

a For surface soil (soil above 1.5 metres) with a pH less than 5 or greater than 9, the property is an environmentally sensitive area

MOE Table 1 Standards Table 1 Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (March 9, 2004), Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition".

Exceeds MOE Table 1 Standard for All Other Types of Property Uses

**BOLD** Exceeds MOE Table 2 Standard for Industrial/Commercial/Community Property Use

**Table 2 Summary of Analytical Results for Inorganics, Metals, Polychlorinated Biphenyls, and Petroleum Hydrocarbons in Soil**

Parameter ( $\mu\text{g/g}$ )	RDL	MOE Table 1 Standards	MOE Table 2 Standards	BH-X-NOV25 - DUP of BH-8	BH-9 (SS3)	BH-10 (SS1)	BH-11 (SS2)	BH-12 (SS3)	BH-13 (SS3)	BH-14 (SS2)	BH-15 (SS1)	BH-16 (SS2)	BH-17 (SS3)	BH-18 (SS1)	BH-19 (SS2)
				2.3 - 2.9 mbgs	1.5 - 2.2 mbgs	0.0 - 0.6 mbgs	0.8 - 1.4 mbgs	1.5 - 2.2 mbgs	1.5 - 2.0 mbgs	0.8 - 1.4 mbgs	0.0 - 0.6 mbgs	0.8 - 1.4 mbgs	1.5 - 2.1 mbgs	0.0 - 0.6 mbgs	0.8 - 1.4 mbgs
		All Other Types	Industrial/Commercial	25-Nov-08	26-Nov-08	27-Nov-08	3-Dec-08	25-Nov-08	25-Nov-08	26-Nov-08	26-Nov-08	27-Nov-08	2-Dec-08	3-Dec-08	
Antimony	1	1	40	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Arsenic	1	17	40	1	2	2	1	2	1	2	4	3	<1	3	7
Selenium	1	1.9	10.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Boron	0.1	NV	2	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.2	0.2	<0.1	0.4	0.2	0.2
Chromium (VI)	2	2.5	8	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Mercury	0.05	0.23	10	<0.05	<0.05	<0.05	<0.05	<0.05	0.23	0.09	0.09	<0.05	<0.05	0.12	0.21
Barium	1	210	1,500	11	17	18	22	31	28	34	35	10	57	52	
Beryllium	0.5	1.2	1.2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Cadmium	0.5	1	12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	1	71	750	6	7	6	8	8	4	7	9	12	5	13	13
Cobalt	1	21	80	2	3	3	4	1	2	3	5	2	6	6	
Copper	1	85	225	6	8	11	8	9	7	16	22	11	6	23	35
Lead	1	120	1,000	14	13	17	11	10	35	29	52	16	6	105	138
Molybdenum	1	2.5	40	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Nickel	1	43	150	3	5	5	5	6	2	4	7	9	3	10	12
Silver	0.2	0.42	40	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	1	2.5	32	<1	<1	<1	<1	<1	<1	1	<1	<1	<1	<1	<1
Vanadium	1	91	200	4	7	8	9	11	3	10	13	17	12	21	19
Zinc	1	160	600	49	172	99	44	62	79	63	124	103	31	92	176
pH	0.01	NV	NV	8.27	8.02	10.5 <sup>a</sup>	8.08	7.85	8.39	9.63 <sup>a</sup>	8.03	7.73	8.1	7.51	NA
PCBs	0.01	0.3	25	<0.01	NA	NA	NA	NA	NA	NA	<0.01	NA	NA	NA	NA
F1 (C6 - C10)	5	NV	230	<5	NA	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
F2 (C>10 - C16)	10	NV	150	<10	NA	<100	<10	<10	<10	<10	<10	<10	<10	<10	<10
F3 (C>16 - C34)	50	NV	1,700	<50	NA	1,300	<50	<50	56	<50	107	<50	<50	55	<50
F4 (C>34 - C50)	50	NV	3,300	<50	NA	7,900	<50	<50	600	56	900	<50	<50	<50	<50

**Notes:**

RDL Report Detection Limit  
mbgs metres below ground surface  
NV No Value  
NA Not Analyzed  
< Below laboratory RDL  
<sup>a</sup> For surface soil (soil above 1.5 metres) with a pH less than 5 or greater than 9, the property is an environmentally sensitive area

MOE Table 1 Standards Table 1 Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (March 9, 2004), Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition".

Exceeds MOE Table 1 Standard for All Other Types of Property Uses

**BOLD** Exceeds MOE Table 2 Standard for Industrial/Commercial/Community Property Use

**Table 3 Summary of Analytical Results for Volatile Organic Compounds in Soil**

Parameter ( $\mu\text{g/g}$ )	RDL	MOE Table 1 Standards	MOE Table 2 Standards	BH-1 (SS4)	BH-2 (SS2)	BH-3 (SS2)	BH-8 (SS4)	BH-X-NOV25 - DUP of BH-8	BH-12 (SS3)	BH-14 (SS2)	BH-19 (SS2)
				2.3 - 2.9 mbgs	0.8 - 1.4 mbgs	0.8 - 1.4 mbgs	2.3 - 2.9 mbgs	2.3 - 2.9 mbgs	1.5 - 2.2 mbgs	0.8 - 1.4 mbgs	0.8 - 1.4 mbgs
		All Other Types	Industrial/Commercial	3-Dec-08	2-Dec-08	27-Nov-08	25-Nov-08	25-Nov-08	3-Dec-08	25-Nov-08	3-Dec-08
1,1,1,2-Tetrachloroethane	0.008	NV	0.019	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
1,1,2,2-Tetrachloroethane	0.004	0.004	0.01	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
1,1,1-Trichloroethane	0.008	0.009	26	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
1,1,2-Trichloroethane	0.002	0.002	0.28	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethane	0.002	0.002	3	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,1-Dichloroethylene	0.002	0.002	0.0024	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichlorobenzene	0.002	0.002	0.88	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dichloroethane	0.002	0.002	0.22	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,2-Dibromoethane	0.004	0.004	0.0056	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
1,2-Dichloropropane	0.002	0.002	0.019	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,3-Dichlorobenzene	0.002	0.002	30	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1,4-Dichlorobenzene	0.002	0.002	0.32	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
2-Hexanone	0.2	NV	NV	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Acetone	0.5	NV	3.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzene	0.002	0.002	0.24	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromodichloromethane	0.005	NV	0.12	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Bromoform	0.002	0.002	0.11	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Bromomethane	0.003	0.003	0.061	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Carbon Disulfide	0.02	NV	NV	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Carbon Tetrachloride	0.002	0.002	0.1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chlorobenzene	0.002	0.002	2.4	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Chloroethane	0.03	NV	NV	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Chloroform	0.006	0.006	0.13	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Chloromethane	0.03	NV	NV	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
cis-1,2-Dichloroethylene	0.02	NV	2.3	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
cis-1,3-Dichloropropene	0.003	0.003	0.0066	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Dibromomethane	0.01	NV	NV	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibromochloromethane	0.003	0.003	0.09	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Dichlorodifluoromethane	0.03	NV	NV	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Dichloromethane	0.003	0.003	1.1	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.004	<0.003
Ethylbenzene	0.002	0.002	0.28	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
MTBE	0.2	NV	5.7	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
m+p-Xylenes	0.002	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Methyl Ethyl Ketone	0.2	NV	0.27	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methyl Isobutyl Ketone	0.2	NV	0.48	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-Xylene	0.002	NV	NV	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Styrene	0.002	0.002	1.2	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Tetrachloroethylene	0.002	0.002	0.45	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Toluene	0.002	0.002	2.1	<0.002	0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,2-Dichloroethylene	0.002	0.003	4.1	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
trans-1,3-Dichloropropene	0.003	0.003	0.0066	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Trichloroethylene	0.004	0.004	1.1	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	0.004	<0.004
Trichlorofluoromethane	0.03	NV	NV	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Vinyl Chloride	0.003	0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Xylenes (Total)	0.002	0.002	25	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002

**Notes:**

RDL Report Detection Limit  
mbgs meters below ground surface  
NV No Value  
< Below Laboratory RDL

MOE Table 1 Standards

Table 1 Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (March 9, 2004), Full Depth Generic Site Condition Standards in a Non-Potable Ground Water Condition" for fine textured soils.

Exceeds MOE Table 1 Standard for All Other Types of Property Uses

**BOLD** Exceeds MOE Table 2 Standard for Industrial/Commercial/Community Property Use

**Table 4 Summary of Analytical Results for Polycyclic Aromatic Hydrocarbons in Soil**

Parameter ( $\mu\text{g/g}$ )	RDL	MOE Table 1 Standards	MOE Table 2 Standards	BH-3 (SS2)	BH-10 (SS1)	BH-11 (SS2)	BH-14 (SS2)
		All Other Types	Industrial/Commerical	0.8 - 1.4 mbgs	0.0 - 0.6 mbgs	0.8 - 1.4 mbgs	0.8 - 1.4 mbgs
				27-Nov-08	27-Nov-08	27-Nov-08	25-Nov-08
1-Methylnaphthalene	0.05	0.26	1.20	<0.05	<0.05	<0.05	<0.05
2-Methylnaphthalene	0.05			<0.05	<0.05	<0.05	<0.05
Acenaphthene	0.05			15	<0.05	<0.05	<0.05
Acenaphthylene	0.05			130.00	<0.05	<0.05	<0.05
Acridine	0.8			NV	<0.8	<0.8	<0.8
Anthracene	0.05			28.00	<0.05	<0.05	<0.05
Benzo(a)anthracene	0.05			6.6	<0.05	<0.05	0.14
Benzo(a)pyrene	0.02			1.9	<0.02	<0.02	0.24
Benzo(b)fluoranthene	0.05			18	<0.05	<0.05	0.18
Benzo(g,h,i)perylene	0.05			40	<0.05	<0.05	0.22
Benzo(k)fluoranthene	0.05			18	<0.05	<0.05	0.11
Chrysene	0.05			17	<0.05	<0.05	0.18
Dibenz(a,h)anthracene	0.05			1.9	<0.05	<0.05	0.13
Fluoranthene	0.05			40	<0.05	<0.05	0.19
Fluorene	0.05			340	<0.05	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	0.05			19	<0.05	<0.05	0.14
Naphthalene	0.05			4.6	<0.05	<0.05	<0.05
Phenanthrene	0.05			40	<0.05	<0.05	0.09
Pyrene	0.05			250	<0.05	<0.05	0.17
Quinoline	0.05			NV	<0.05	<0.05	<0.05

**Notes:**

RDL Report Detection Limit  
mbgs meters below ground surface

< Below Laboratory RDL  
NV No Value

MOE Table 1 Standards Table 1 Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (March 9, 2004), Full Depth Generic Site Condition Standards in a Potable Ground Water Condition".

Exceeds MOE Table 1 Standard for All Other Types of Property Uses

**BOLD** Exceeds MOE Table 2 Standard for Industrial/Commercial/Community Property Use

**Table 5 Summary of Analytical Results for Inorganics, Metals, Polychlorinated Biphenyls, and Petroleum Hydrocarbons in Groundwater**

Parameter ( $\mu\text{g/L}$ )	RDL	MOE Table 1 Standards	MOE Table 2 Standards	MW1	MW2	MW-X-99 - DUP of MW2	MW3	MW4	MW5S	MW5D	MW6	BH2	BH5	6
		All Other Types	Industrial/Commercial	3-Dec-08	2-Dec-08	2-Dec-08	2-Dec-08	2-Dec-08	3-Dec-08	3-Dec-08	4-Dec-08	4-Dec-08	3-Dec-08	4-Dec-08
Antimony	5	6	6	<5	5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Arsenic	1	25	25	<1	<1	<1	2	<1	<1	1	<1	<1	<1	<1
Barium	10	NV	1,000	270	600	590	590	90	<b>1,440</b>	480	260	990	140	310
Beryllium	1	4	4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Boron	50	200	5,000	80	120	110	60	60	100	150	60	<50	100	60
Cadmium	0.1	0.5	5	0.1	0.3	0.3	<0.1	1.3	0.8	<0.1	0.2	0.4	4.3	0.2
Chromium	1	8.9	50	4	2	2	6	8	5	4	1	3	5	3
Cobalt	0.5	0.9	100	2	2.3	2.2	1.2	1	4.4	1.8	2.7	1.4	<0.5	0.6
Copper	1	2.5	23	4	3	2	3	3	6	3	5	3	3	12
Lead	1	1	10	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	7
Molybdenum	1	40	7,300	5	2	2	20	4	4	19	5	<1	2	<1
Nickel	2	25	100	9	19	19	10	6	20	10	11	30	6	11
Selenium	5	5	10	<5	<5	<5	<5	<5	<5	<b>6</b>	<b>6</b>	<5	<5	<5
Silver	0.1	0.25	1.2	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
Sodium	50,000	NV	200,000	<b>290,000</b>	<b>1,160,000</b>	<b>1,140,000</b>	<b>2,340,000</b>	<b>4,600,000</b>	<b>3,600,000</b>	<b>2,600,000</b>	<b>390,000</b>	<b>1,760,000</b>	<b>1,100,000</b>	<b>3,900,000</b>
Thallium	0.3	0.5	2.0	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Vanadium	1	6	200	1	<1	<1	<1	1	<1	<1	<1	<1	<1	<1
Zinc	3	20	1,100	5	49	33	7	21	64	3	15	12	3	17
PCBs	0.02	0.1	0.2	0.03	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
F1 (C6 - C10)	100	NV	1000 <sup>a</sup>	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
F2 (C>10 - C16)	100	NV		<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100
F3 (C>16 - C34)	250	NV	1000 <sup>b</sup>	340	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250
F4 (C>34 - C50)	250	NV		840	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250

**Notes:**

RDL Report Detection Limit

NV No Value

NA Not Analyzed

< Below Laboratory RDL

<sup>a</sup> The sum of F1 and F2 must be less than 1,000

<sup>b</sup> The sum of F3 and F4 must be less than 1,000

MOE Table 1 Standards Table 1 Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (March 9, 2004), Full Depth Generic Site Condition Standards in a Potable Ground Water Condition".

Exceeds MOE Table 1 Standard for All Other Types of Property Uses

**BOLD** Exceeds MOE Table 2 Standard for Industrial/Commercial/Community Property Use

**Table 6 Summary of Analytical Results for Volatile Organic Compounds in Groundwater**

Parameter ( $\mu\text{g/L}$ )	RDL	MOE Table 1 Standards	MOE Table 2 Standards	MW1	MW2	MW-X-99 - DUP of MW2	MW3	MW4	MW5S	MW5D	MW6	BH2	BH5	6
		All Other Types	Industrial/Commercial	3-Dec-08	2-Dec-08	2-Dec-08	2-Dec-08	2-Dec-08	3-Dec-08	3-Dec-08	4-Dec-08	4-Dec-08	3-Dec-08	3-Dec-08
1,1,1,2-Tetrachloroethane	0.5	5	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.005	<0.05	NA
1,1,2,2-Tetrachloroethane	0.5	1	0.01	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,1,1-Trichloroethane	0.5	10	200	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,1,2-Trichloroethane	0.5	5	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,2-Dibromoethane	0.5	1	1	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,1-Dichloroethane	0.5	70	70	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,1-Dichloroethylene	0.5	0.66	0.66	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,2-Dichlorobenzene	0.5	2.5	3	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,2-Dichloroethane	0.5	5	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,2-Dichloropropane	0.5	0.7	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,3-Dichlorobenzene	0.5	2.5	630.0	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
1,4-Dichlorobenzene	0.5	1	1	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.05	<0.05	NA
2-Hexanone	20	NV	NV	NA	NA	NA	NA	<20	NA	NA	NA	<20	<20	NA
Acetone	20	NV	3,000	NA	NA	NA	NA	<20	NA	NA	NA	<20	<20	NA
Benzene	0.5	5	5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromodichloromethane	0.5	5	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Bromoform	0.5	5	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Bromomethane	0.5	0.9	3.7	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Carbon Disulfide	0.5	NV	N	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Carbon Tetrachloride	0.5	0.5	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Chlorobenzene	0.5	15	30	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Chloroethane	1	NV	NV	NA	NA	NA	NA	<1	NA	NA	NA	<1	<1	NA
Chloroform	0.5	1	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Chloromethane	1	NV	NV	NA	NA	NA	NA	<1	NA	NA	NA	<1	<1	NA
cis-1,2-Dichloroethylene	0.5	70	70	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
cis-1,3-Dichloropropene	0.5	1.4	1.4	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Dibromochloromethane	0.5	0.5	5.0	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Dichlorodifluoromethane	1	NV	NV	NA	NA	NA	NA	<1	NA	NA	NA	<1	<1	NA
Dichloromethane	0.5	50	50	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Ethylbenzene	0.5	2.4	2.4	<0.5	<0.5	<0.5	<0.5	<0.5	0.6	0.6	<0.5	<0.5	<0.5	<0.5
Methyl Ethyl Ketone	20	350	350	NA	NA	NA	NA	<20	NA	NA	NA	<20	<20	NA
Methyl Isobutyl Ketone	20	NV	350	NA	NA	NA	NA	<20	NA	NA	NA	<20	<20	NA
MTBE	0.5	200	700	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Styrene	0.5	4	100	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Tetrachloroethylene	0.5	5	5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Toluene	0.5	0.8	24	1.0	1.9	1.7	0.6	<0.5	2.2	2.6	0.8	<0.5	<0.5	<0.5
trans-1,2-Dichloroethylene	0.5	100	100	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
trans-1,3-Dichloropropene	0.5	1.4	1.4	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Trichloroethylene	0.5	20	50	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Trichlorofluoromethane	1	NV	NV	NA	NA	NA	NA	<1	NA	NA	NA	<1	<1	NA
Trihalomethanes	2	NV	NV	NA	NA	NA	NA	<2	NA	NA	NA	<2	<2	NA
Vinyl Chloride	0.5	0.5	0.5	NA	NA	NA	NA	<0.05	NA	NA	NA	<0.5	<0.05	NA
Xylenes	1.5	72	300	<1.5	1.6	<1.5	<1.5	<1.5	2.9	3.3	<1.5	<1.5	<1.5	<1.5

Notes:

RDL Report Detection Limit

NV No Value

< Below Laboratory RDL

MOE Table 1 Standards Table 1 Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (March 9, 2004), Full Depth Generic Site Condition Standards in a Potable Ground Water Condition".

Exceeds MOE Table 1 Standard for All Other Types of Property Uses

**BOLD** Exceeds MOE Table 2 Standard for Industrial/Commercial/Community Property Use

**Table 7 Summary of Analytical Results for Polycyclic Aromatic Hydrocarbons in Groundwater**

Parameter ( $\mu\text{g/L}$ )	RDL	MOE Table 1 Standards		MOE Table 2 Standards		MW1 3-Dec-08	MW4 2-Dec-08	BH-5 3-Dec-08
		All Other Types	Industrial/Commercial					
1-Methylnaphthalene	0.02	2.5	10.0	0.10	0.04	<0.02	<0.02	<0.02
2-Methylnaphthalene	0.02	2.5	10.0	0.12	0.04	<0.02	<0.02	<0.02
Acenaphthene	0.02	1	20	<0.02	<0.02	<0.02	<0.02	<0.02
Acenaphthylene	0.02	1	310	<0.06	<0.02	<0.02	<0.02	<0.02
Acridine	4	NV	NV	<4	<4	<4	<4	<4
Anthracene	0.02	0.05	12	0.10	<0.02	<0.02	<0.02	<0.02
Benzo(a)anthracene	0.02	0.1	0.2	<b>0.48</b>	<0.02	<0.02	<0.02	<0.02
Benzo(a)pyrene	0.005	0.005	0.01	<b>0.522</b>	<0.005	<0.005	<0.005	<0.005
Benzo(b)fluoranthene	0.02	0.05	0.2	<b>0.72</b>	<0.02	<0.02	<0.02	<0.02
Benzo(g,h,i)perylene	0.02	0.1	0.2	<b>0.46</b>	<0.02	<0.02	<0.02	<0.02
Benzo(k)fluoranthene	0.02	0.05	0.2	<b>0.33</b>	<0.02	<0.02	<0.02	<0.02
Chrysene	0.02	0.05	0.5	0.50	<0.02	<0.02	<0.02	<0.02
Dibenzo(a,h)anthracene	0.02	0.1	0.2	0.05	<0.02	<0.02	<0.02	<0.02
Fluoranthene	0.02	1	130	0.77	<0.02	<0.02	<0.02	<0.02
Fluorene	0.02	1	280	0.10	0.03	<0.02	<0.02	<0.02
Indeno(1,2,3-cd)pyrene	0.02	0.1	0.2	<b>0.48</b>	<0.02	<0.02	<0.02	<0.02
Naphthalene	0.02	7	21	0.12	0.02	<0.02	<0.02	<0.02
Phenanthrene	0.02	1	63	0.48	0.19	<0.02	<0.02	<0.02
Pyrene	0.02	0.05	40	<b>0.79</b>	<0.02	<0.02	<0.02	<0.02
Quinoline	0.02	NV	NV	<0.03	<0.02	<0.02	<0.02	<0.02

**Notes:**

RDL Report Detection Limit

NV No Value

< Below Laboratory RDL

MOE Table 1 Standards Table 1 Ontario Ministry of the Environment's (MOE) "Soil, Ground Water and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act" (March 9, 2004), Full Depth Generic Site Condition Standards in a Potable Ground Water Condition".

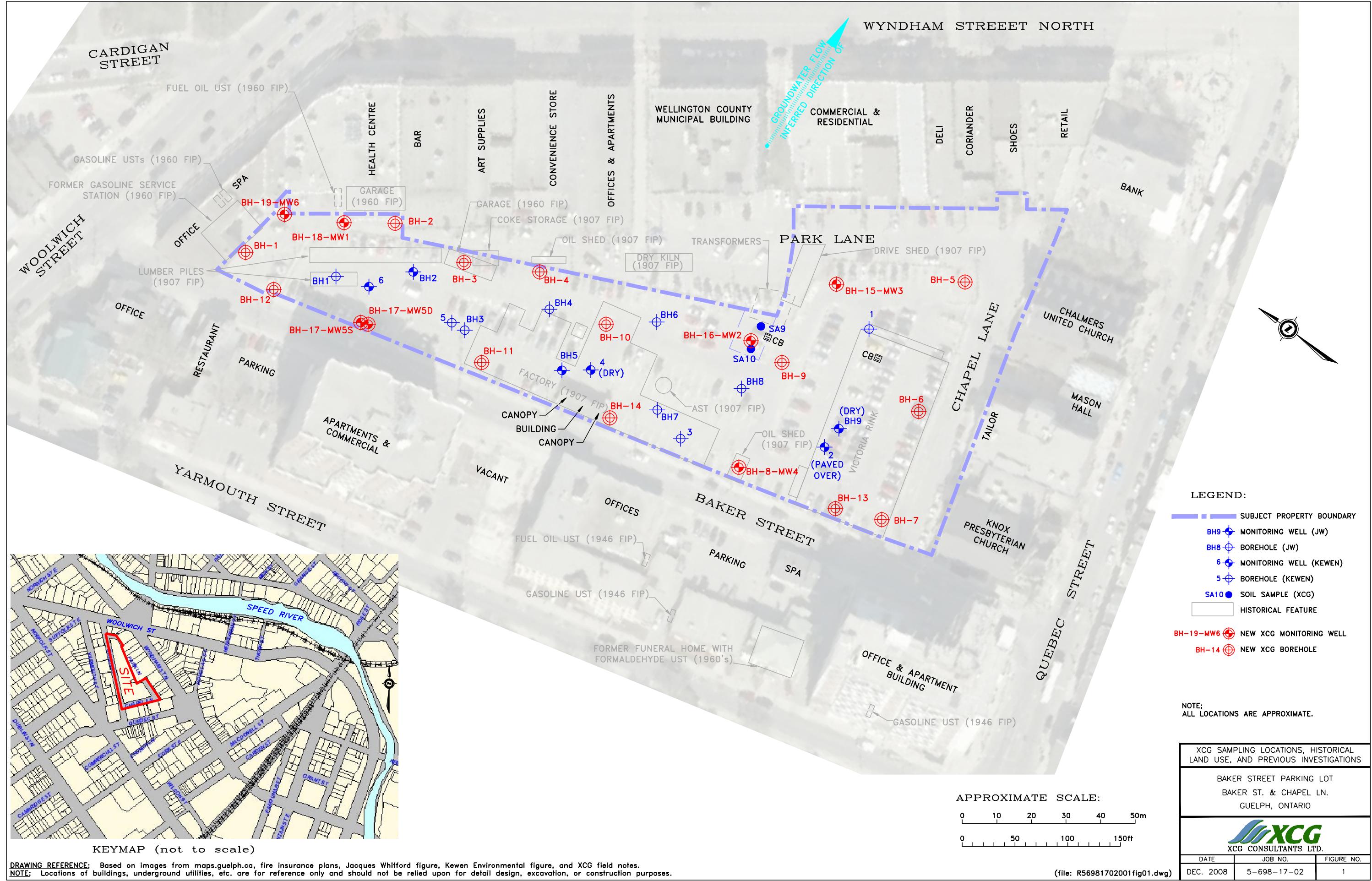
Exceeds MOE Table 1 Standard for All Other Types of Property Uses

**BOLD** Exceeds MOE Table 2 Standard for Industrial/Commercial/Community Property Use

**Table 8 Summary of Analytical Results for O. Reg. 558 in Soil**

Parameter ( $\mu\text{g/g}$ )	MOE Schedule 4 Leachate Quality	RDL	TCLP
	Industrial / Commercial		Composite Sample
			2-Dec-08
<b>Metals &amp; Conventionals</b>			
Fluoride	150	10	<10
Cyanide	20	0.002	<0.002
Mercury	0.1	0.0001	<0.0001
Nitrite	N/V	2	<2
Nitrate	N/V	2	<2
Nitrate + Nitrite	1,000	4	<4
<b>Leachable Metals</b>			
Silver	5	0.001	<0.001
Arsenic	2.5	0.01	<0.01
Boron	500	0.5	<0.5
Barium	100	0.1	0.8
Cadmium	0.5	0.001	0.003
Chromium	5	0.01	<0.01
Lead	5	0.01	0.04
Selenium	1	0.05	<0.05
Uranium	10	0.05	<0.05
<b>PCBs</b>			
Total PCBs	0.3	0.0002	<0.0002
<b>VOCs</b>			
1,1-Dichloroethylene	0.05	1.4	<0.05
1,2-Dichlorobenzene	0.05	20	<0.05
1,2-Dichloroethane	0.05	0.5	<0.05
1,4-Dichlorobenzene	0.05	0.5	<0.05
Benzene	0.05	0.5	<0.05
Carbon Tetrachloride	0.05	0.5	<0.05
Chlorobenzene	0.05	8	<0.05
Chloroform	0.05	10	<0.05
Dichloromethane	0.05	5	<0.05
Methyl Ethyl Ketone	2	200	<2
Tetrachloroethylene	0.05	3	<0.05
Trichloroethylene	0.05	5	<0.05
Vinyl Chloride	0.1	0.2	<0.1
<b>Notes:</b>			
RDL	Reportable Detection Limit		
<	Below laboratory RDL		
MOE Schedule 4 Leachate Quality	MOE O. Reg. 558/00 Schedule 4 Leachate Quality Criteria Standards		
mbgs	meters below ground surface		
<b>Bold</b>	Exceeds MOE Schedule 4 Leachate Quality		

***FIGURE 1***



**APPENDIX A**

***PRIVATE LOCATE SURVEY REPORT***

## LOCATE REQUEST FORM

Gas - yellow  
Hydro - red  
Communications - orange  
Water - blue  
Storm/sewer - green  
Construction - White



5274 County Road 27

R.R. # 1  
Rockwood, Ontario  
Canada  
N0B 2K0  
Tel. (519) 856-1409  
Fax. (519) 856-9182

LOCATION	BAKER ST P LOT GUELPH		PO#	REQUEST#			
AREA	PLOT	REQUESTED BY	XCH.	CONTACT NAME	ERIKA	DATE	NOV 20 108
NATURE OF WORK	B HOLES (14) (85)			PHONE#	741-5774		

### "CAUTION"

HAND DIG WITHIN 1 METRE EITHER SIDE OF LOCATE MARKINGS  
Depth of plant varies and must be clarified by hand digging. This locate is based on information given at the time. If site conditions change or past 30 days, a new locate must be obtained.

Method of Marking

Paint

Flags

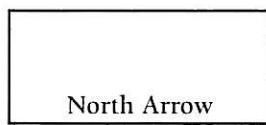
Stakes

Chalk

Measurements

LEGEND	
hydro cable	-H-
street light	-SL-
gas line	-G-
bell cable	-B-
TV cable	-TV-
fibre optics	-F-
water line	-W-
storm line	-STM-
sewer line	-SAN-
conduit	-C-
unknown	-?-
property line	PL
curb	C
sidewalk	SW
fence line	-FL-
work area	WA
driveway	DW
hydro pole	○
limit of locate	LOL
bldg line	-BL-
manhole	MH
pedestal	□
hydrant	-○-
transformer	■
road edge	RE
centre line	CL
catch basin	CB

sketch is not drawn  
to scale



North Arrow

a copy of this locate report must be on-site with the machine operators during work operations

Comments:	ONT 1 CALL ✓ LUKE RECALL 1 CALL AREA OUTSIDE PLOT.		
Signature received by:	JULY	Company:	XX6 LT
Located by:	Mike C Date: NOV 20/08		

**Disclaimer:** This locate is not a substitute for locates required by law such as Ontario One Call and various independent utility services. Each excavator making an excavation is required by law to contact all public utilities prior to digging.

## LOCATE REQUEST FORM

Gas - yellow

Hydro - red

Communications - orange

Water - blue

Storm/sewer - green

Construction - White



5274 County Road 27

R.R. # 1

Rockwood, Ontario

Canada

N0B 2K0

Tel. (519) 856-1409

Fax. (519) 856-9182

LOCATION	BAKER ST P LOT GUERON		PO#	REQUEST#
AREA	Prop	REQUESTED BY	XCM	CONTACT NAME LUKE
NATURE OF WORK	BL			DATE Nov 28/08
PHONE#				
<b>"CAUTION"</b> <b>HAND DIG WITHIN 1 METRE EITHER SIDE OF LOCATE MARKINGS</b> Depth of plant varies and must be clarified by hand digging. This locate is based on information given at the time. If site conditions change or past 30 days, a new locate must be obtained.				

Method of Marking

Paint

Flags

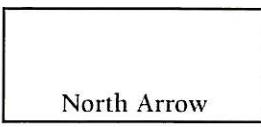
Stakes

Chalk

Measurements

<b>LEGEND</b>	
hydro cable	-H-
street light	-SL-
gas line	-G-
bell cable	-B-
TV cable	-TV-
fibre optics	-F-
water line	-W-
storm line	-STM-
sewer line	-SAN-
conduit	-C-
unknown	-?-
property line	PL
curb	C
sidewalk	SW
fence line	-FL-
work area	WA
driveway	DW
hydro pole	O
limit of locate	LOL
bldg line	-BL-
manhole	MH
pedestal	<input type="checkbox"/>
hydrant	O-
transformer	<input checked="" type="checkbox"/>
road edge	RE
centre line	L
catch basin	CB

sketch is not drawn  
to scale



a copy of this locate report must be on-site with the machine operators during work operations

Comments:

*(Handwritten signature)*

Signature received by:

Company: X XCG

Located by: MIKE C Date: NOV 28/08

**Disclaimer:** This locate is not a substitute for locates required by law such as Ontario One Call and various independent utility services. Each excavator making an excavation is required by law to contact all public utilities prior to digging.

## LOCATE REQUEST FORM

Gas - yellow  
Hydro - red  
Communications - orange  
Water - blue  
Storm/sewer - green  
Construction - White



5274 County Road 27

R.R. # 1  
Rockwood, Ontario  
Canada  
N0B 2K0  
Tel. (519) 856-1409  
Fax. (519) 856-9182

LOCATION	Baker St. Parking Lot.	PO#	REQUEST#
AREA	P.Lot.	REQUESTED BY	DATE
NATURE OF WORK	Boreholes	CONTACT NAME	PHONE#

### "CAUTION"

**HAND DIG WITHIN 1 METRE EITHER SIDE OF LOCATE MARKINGS**  
Depth of plant varies and must be clarified by hand digging. This locate is based on information given at the time. If site conditions change or past 30 days, a new locate must be obtained.

Method of Marking

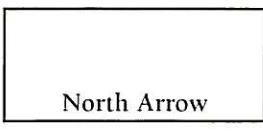
Paint  Flags  Stakes  Chalk  Measurements

**Nº 5142**

### LEGEND

hydro cable	-H-
street light	-SL-
gas line	-G-
bell cable	-B-
TV cable	-TV-
fibre optics	-F-
water line	-W-
storm line	-STM-
sewer line	-SAN-
conduit	-C-
unknown	-?-
property line	PL
curb	C
sidewalk	SW
fence line	-FL-
work area	WA
driveway	DW
hydro pole	○
limit of locate	LOL
bldg line	-BL-
manhole	MH
pedestal	□
hydrant	-○-
transformer	■
road edge	RE
centre line	CL
catch basin	CB

sketch is not drawn  
to scale



North Arrow

a copy of this locate report must be on-site with the machine operators during work operations

Comments: 2 hr locate

Signature received by:

Company: XC6

Located by:

Date:

12/03/08

**Disclaimer:** This locate is not a substitute for locates required by law such as Ontario One Call and various independent utility services. Each excavator making an excavation is required by law to contact all public utilities prior to digging.

***APPENDIX B***

***BOREHOLE LOGS***



XCG Consultants Ltd.

Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF BOREHOLE: BH-1

Driller: Geo-Environmental Drilling Inc.

Drill Method: Hollow Stem Auger

Sample Method: Split-Spoon Method

Borehole Diameter: 203 mm

Start Date: December 3, 2008

Checked By: EF

Completed: December 3, 2008

Logged By: LT

Depth	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
ft m						Ground Surface	0.00
0 0	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	-0.46
1	2	5	60	0.5		<b>SW - SAND (FILL)</b> Brown, moist, no odour or staining.	
2	3	9	60	0.3			-2.13
3	4	9	20	1.2		<b>SM - SILTY SAND</b> Brown, damp, no odour or staining.	
4	5	29	20	ND		<b>GW - ANGULAR GRAVEL AND SAND</b> Brown, dry, no odour or staining.	-3.20
5	6	31	40	ND		<b>ML - SILT</b> Brown, dry, no odour or staining.	-3.96
6	7	39	40	ND			
7	8	40	60	ND			
8	9	50+	10	ND			
9	10	50+	10	ND		Auger refusal at 7.01m, gravel, no odour or staining. <b>BEDROCK (LIMESTONE)</b>	-7.01
10						End of Borehole	
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



**Project #: 5-698-17-02**

**Privileged and Confidential**

## **LOG OF BOREHOLE: BH-10**

XCG Consultants Ltd.

## **Project: Phase II ESA**

**Client:** City of Guelph

## **Location:** Baker Street Redevelopment Site

**Driller:** Geo-Environmental Drilling Inc.

**Borehole Diameter:** 203 mm

#### **Drill Method: Hollow Stem Auger**

**Start Date:** November 27, 2008    **Checked By:** EF

#### **Sample Method:** Split-Spoon Method

**Completed:** November 27, 2008 **Logged By:** LT

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

### For Environmental Purposes Only

Sheet: 1 of 1



XCG Consultants Ltd.

Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF BOREHOLE: BH-11

Driller: Geo-Environmental Drilling Inc.

Drill Method: Hollow Stem Auger

Sample Method: Split-Spoon Method

Borehole Diameter: 203 mm

Start Date: November 27, 2008 Checked By: EF

Completed: November 27, 2008 Logged By: LT

Depth	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
ft m						Ground Surface	0.00
0 0						ASPHALT	
1	1	AS	AS	ND		SW - SAND (FILL) Brown, dry, no odour or staining.	
2							
3 1	2	14	40	0.7			
4							
5							-1.52
6 2	3	38	40	0.4		SW - SAND Light brown, moist, no odour or staining.	
7							
8							
9							
10 3	4	50+	70	ND			
11							
12							
13 4	5	50+	30	ND		Some small gravel, dry, no odour or staining.	-3.66
14							
15							
16 5	6	50+	20	ND		ML - SILT Light brown, dry, no odour or staining.	-4.57
17							
18							
19							
20 6	7	50+	5	ND		BEDROCK (LIMESTONE) Dry, auger refusal.	-4.72
15							
16						End of Borehole	
17							
18							
19							
20							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



XCG Consultants Ltd.

Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF BOREHOLE: BH-12

Driller: Geo-Environmental Drilling Inc.

Drill Method: Hollow Stem Auger

Sample Method: Split-Spoon Method

Borehole Diameter: 203 mm

Start Date: December 3, 2008

Checked By: EF

Completed: December 3, 2008

Logged By: LT

Depth ft m	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 0						Ground Surface	0.00
1 1	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour staining.	-0.61
2 1	2	2	50	0.4		<b>SW - SAND (FILL)</b> Brown, moist, no odour or staining.	
3 2	3	6	60	0.8			-2.13
4 3	4	11	60	ND		<b>SM - SILTY SAND</b> Brown, moist, no odour or staining.	-2.74
5 3	5	16	20	ND		<b>SW - SAND AND GRAVEL</b> Brown, dry, trace silt, no odour or staining. Grey at 3.35 m, no odour or staining.	-3.66
6 4	6	30	40	ND		<b>ML - SILT</b> Brown, dry, hard, no odour or staining.	
7 5	7	39	40	ND			
8 6	8	37	60	ND			
9 7	9	45	10	ND			
10 7	10	50+	10	ND		Auger refusal at 7.16m, possible bedrock (limestone).	-7.16
24						End of Borehole	

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



Project #: 5-698-17-02

Privileged and Confidential

Project: Phase II ESA

LOG OF BOREHOLE: BH-13

Client: City of Guelph

Location: Baker Street Redevelopment Site

Driller: Geo-Environmental Drilling Inc.

Borehole Diameter: 203 mm

Drill Method: Hollow Stem Auger

Start Date: November 25, 2008 Checked By: EF

Sample Method: Split-Spoon Method

Completed: November 25, 2008 Logged By: LT

Depth ft m	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 0						Ground Surface	0.00
1 1	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	
2 2						<b>SW - SAND AND GRAVEL (FILL)</b> Brown, very hard, dry, no odour or staining.	-0.61
3 1	2	50+	30	ND		<b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	-1.07
4 1							
5 1							
6 2	3	50+	20	0.6		Auger refusal at 2.0m, possible boulder or concrete, white powder on split spoon.	-1.98
7 2						End of Borehole	
8 2							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



XCG Consultants Ltd.

Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF BOREHOLE: BH-14

Driller: Geo-Environmental Drilling Inc.

Borehole Diameter: 203 mm

Drill Method: Hollow Stem Auger

Start Date: November 25, 2008 Checked By: EF

Sample Method: Split-Spoon Method

Completed: November 25, 2008 Logged By: LT

Depth ft m	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 0						Ground Surface	0.00
1	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	
2						<b>SW - SAND AND GRAVEL (FILL)</b> Brown, very hard, red brick fragments, dry, no odour or staining.	-0.61
3	2	25	30	0.6			
4							
5	3	50+	5	ND		<b>GW - GRAVEL (FILL)</b> Red brick fragements, dry, no odour or staining. Auger refusal at 1.83m, possible concrete or boulder.	-1.52
6							
7							
8						End of Borehole	

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF WELL: BH-15-MW3

Driller: Geo-Environmental Drilling Inc.

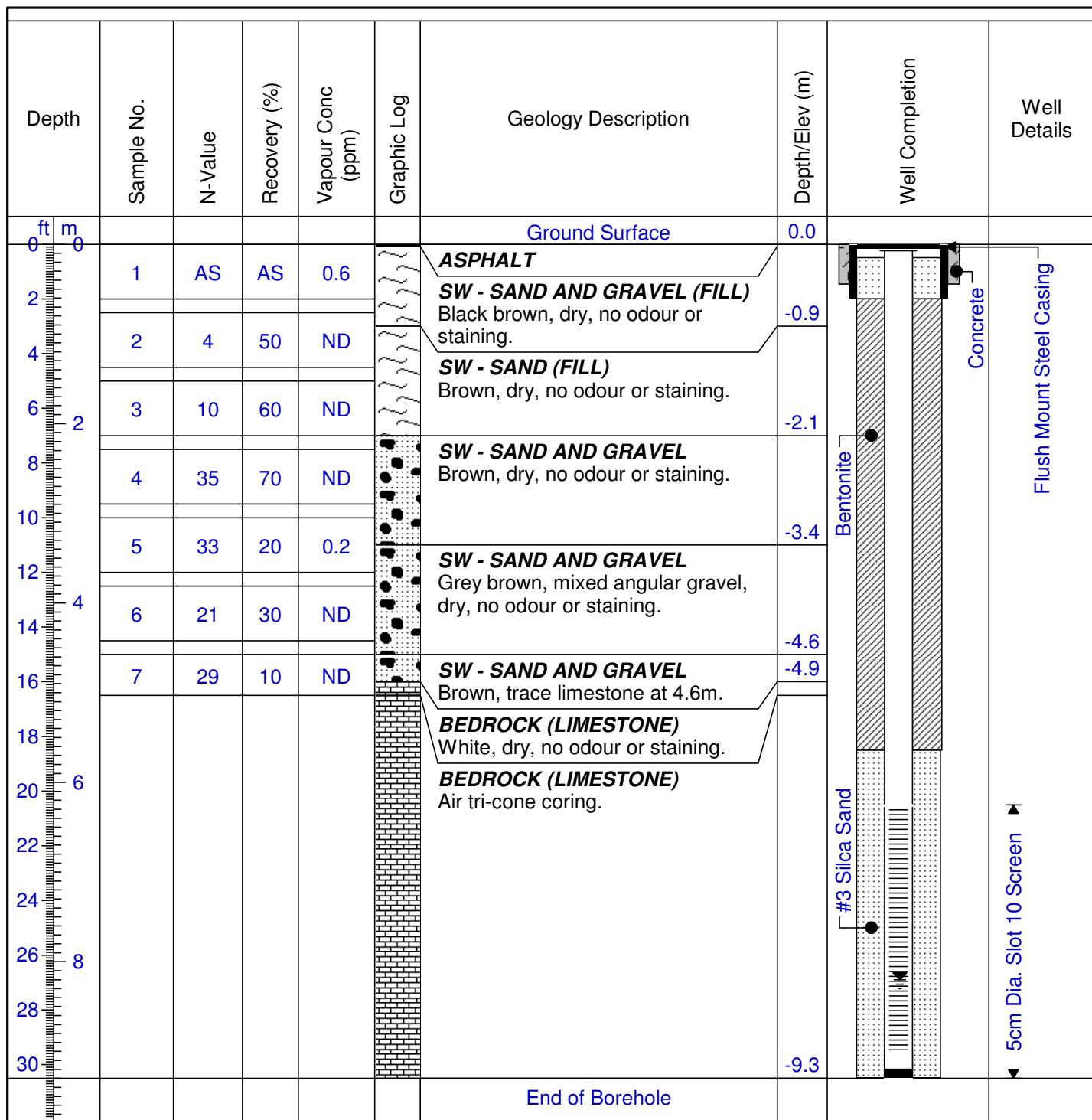
Drill Method: Hollow Stem Augers and Tri-Cone Coring

Sample Method: Split-Spoon Method

Borehole Diameter: 203 mm Auger /100 mm Coring

Start Date: November 28, 2008 Checked By: EF

Completed: December 1, 2008 Logged By: LT



Groundwater Elevation: 89.945m

Screening Tool: Photovac 2020 PID

T.O.P Elevation: 98.135m

Monitoring Well Log

Sheet: 1 of 1



Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF WELL: BH-16 - MW2

Driller: Geo-Environmental Drilling Inc.

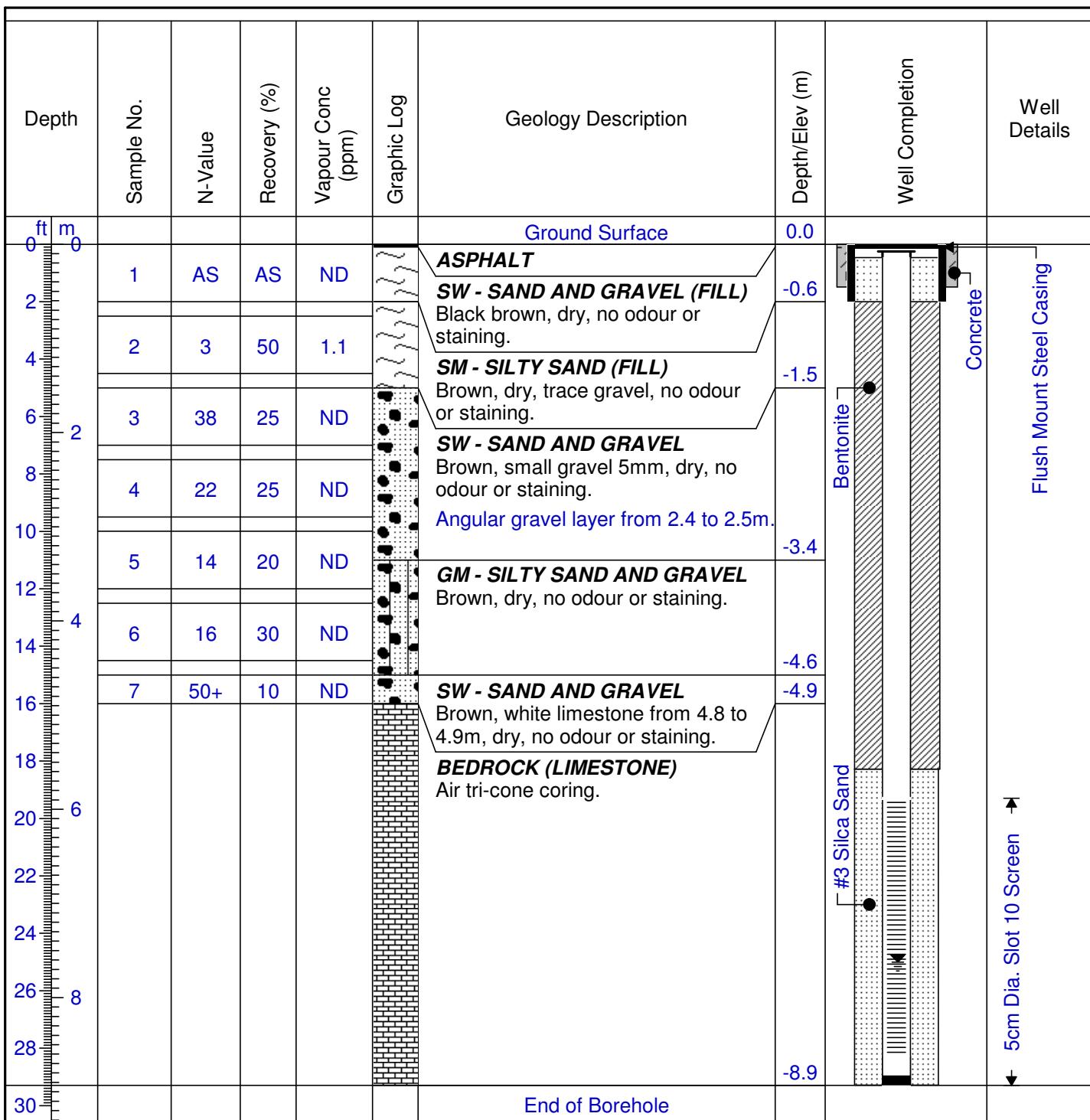
Drill Method: Hollow Stem Auger and Tri-Cone Coring

Sample Method: Split-Spoon Method

Borehole Diameter: 203 mm Auger/100 mm Coring

Start Date: November 26, 2008 Checked By: EF

Completed: November 28, 2008 Logged By: LT



Groundwater Elevation: 90.840m

Screening Tool: Photovac 2020 PID

T.O.P Elevation: 98.450m

Monitoring Well Log

Sheet: 1 of 1



Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF WELL: BH-17-MW5S

Driller: Geo-Environmental Drilling Inc.

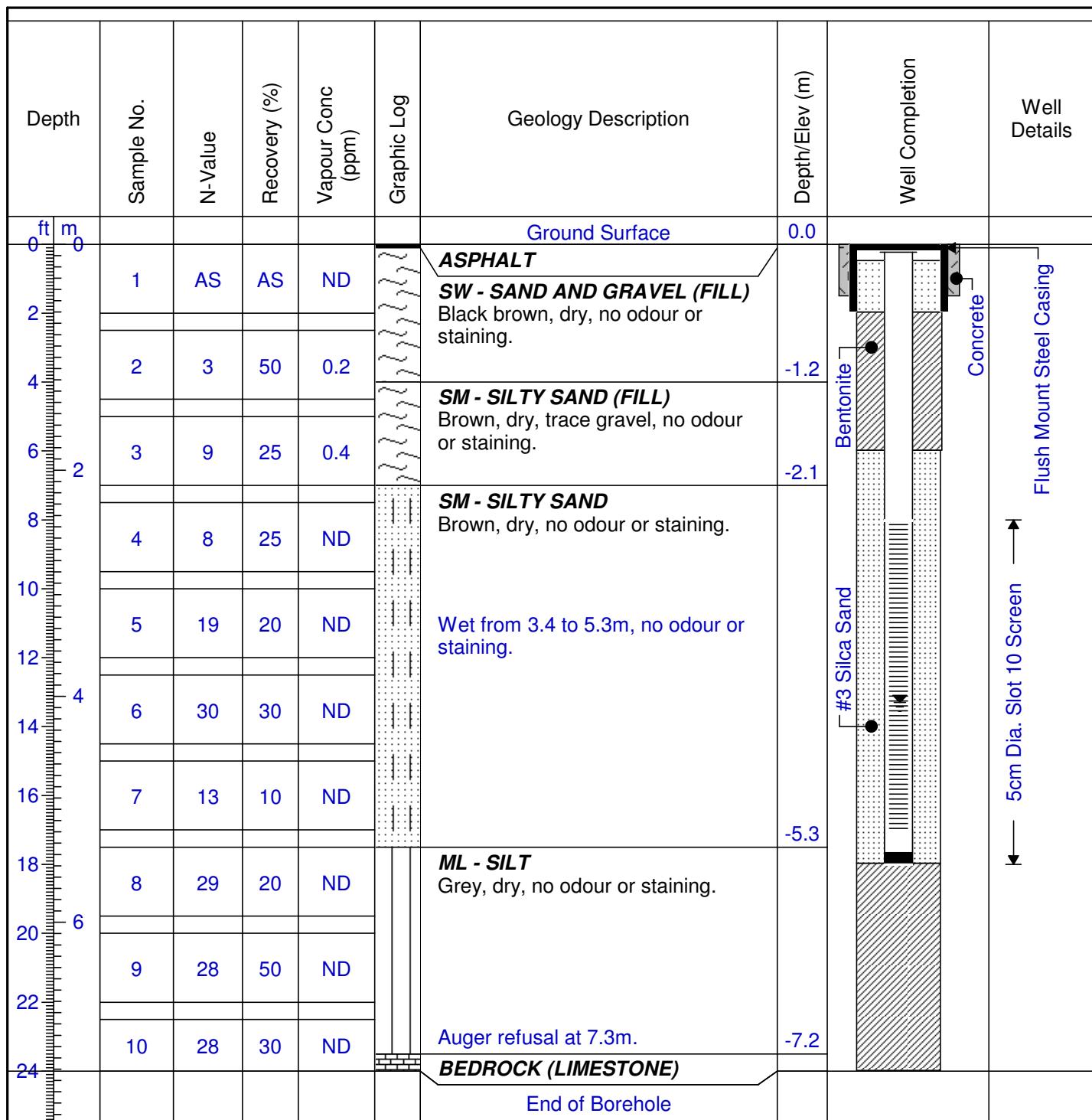
Drill Method: Hollow Stem Augeres

Sample Method: Hollow Stem Auger

Borehole Diameter: 203 mm

Start Date: November 27, 2008 Checked By: EF

Completed: November 27, 2008 Logged By: LT



Groundwater Elevation: 94.560m

T.O.P Elevation: 98.610m

Screening Tool: Photovac 2020 PID

Monitoring Well Log

Sheet: 1 of 1



Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF WELL: BH-18-MW1

Driller: Geo-Environmental Drilling Inc.

Drill Method: Hollow Stem Auger

Sample Method: Split Spoon Method

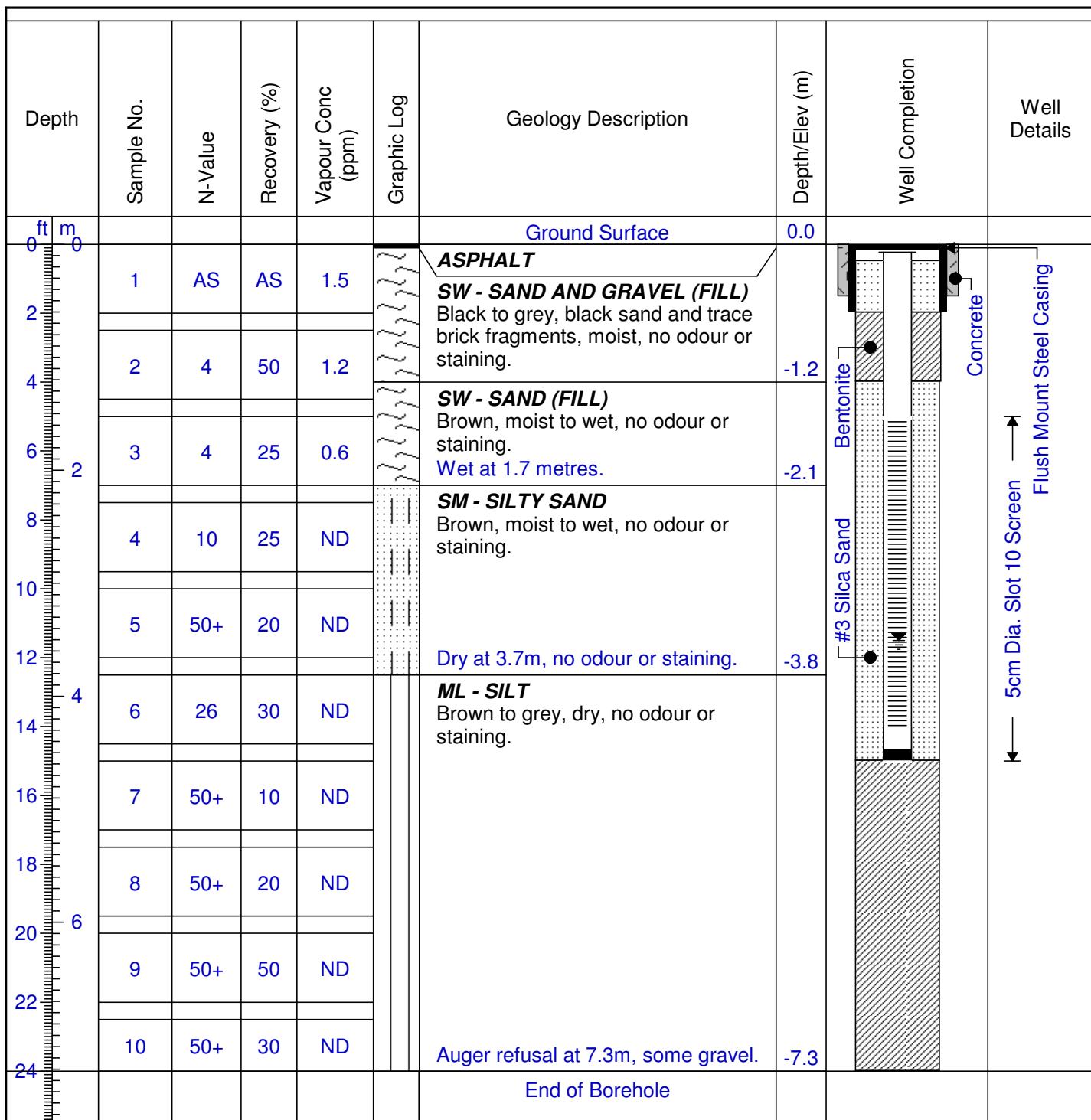
Borehole Diameter: 203 mm

Start Date: December 2, 2008

Checked By: EF

Completed: December 2, 2008

Logged By: LT



Groundwater Elevation: 94.855m

Screening Tool: Phtotovac 2020 PID

T.O.P Elevation: 98.365m

Monitoring Well Log

Sheet: 1 of 1



Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF WELL: BH-19-MW6

Driller: Geo-Environmental Drilling Inc.

Borehole Diameter: 203 mm

Drill Method: Hollow Stem Augers

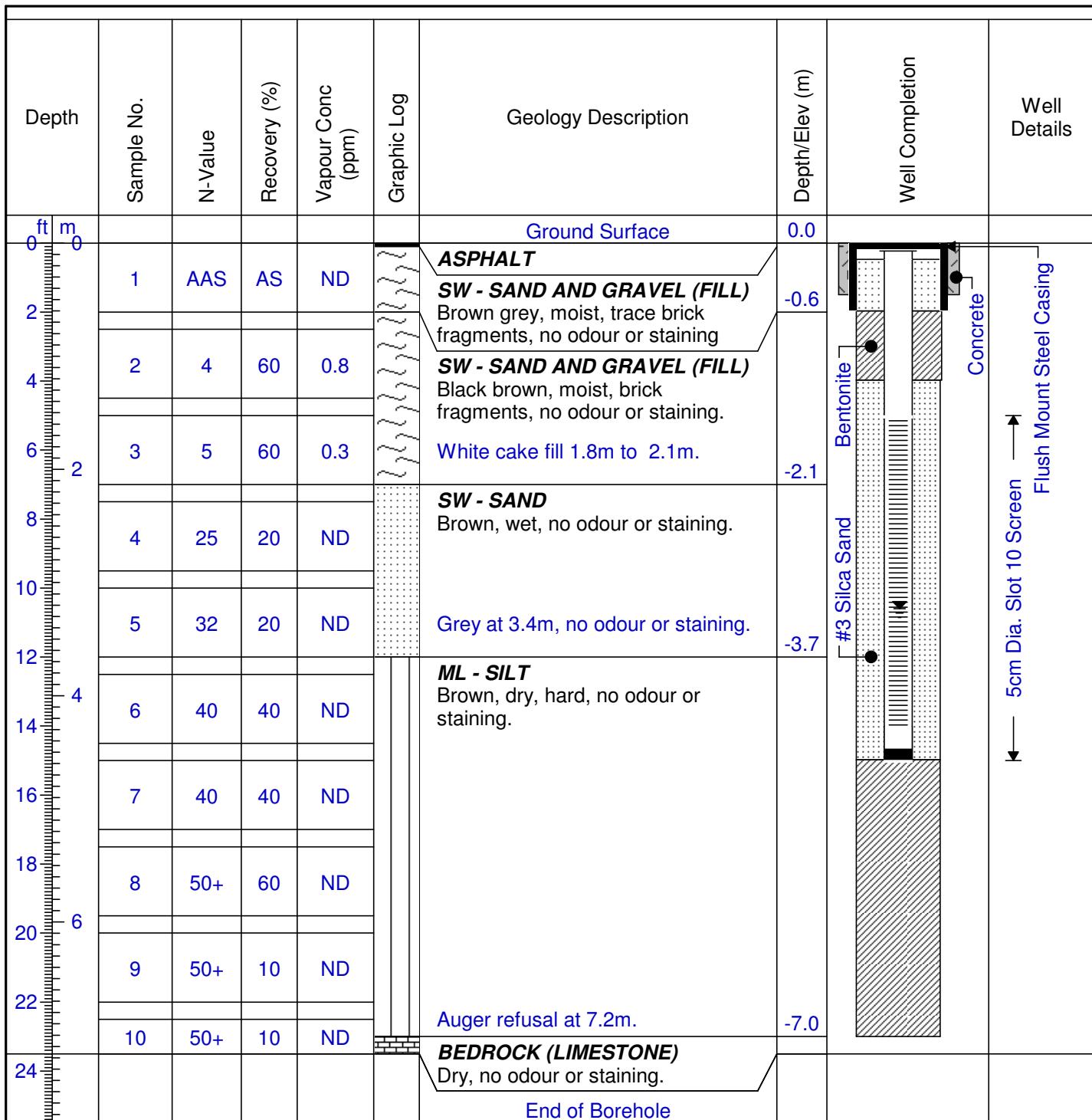
Start Date: December 3, 2008

Checked By: EF

Sample Method: Split Spoon Method

Completed: December 3, 2008

Logged By: LT



Groundwater Elevation: 94.990m

Screening Tool: Photovac 2020 PID

T.O.P Elevation: 98.230m

Monitoring Well Log

Sheet: 1 of 1



XCG Consultants Ltd.

Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF BOREHOLE: BH-2

Driller: Geo-Environmental Drilling Inc.

Borehole Diameter: 203 mm

Drill Method: Hollow Stem Auger

Start Date: December 2, 2008

Checked By: EF

Sample Method: Split-Spoon Method

Completed: December 2, 2008

Logged By: LT

Depth	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
ft m							
0 0						Ground Surface	0.00
1	1	AS	AS	ND	{}	<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, wet, no odour or staining.	-0.61
2	2	4	60	0.8	{}	<b>SW - SAND AND GRAVEL (FILL)</b> Brown, moist, no odour or staining.	-1.52
3	3	4	60	0.3	{}	<b>SW - SAND (FILL)</b> Brown, wet, no odour or staining.	-2.44
4	4	23	20	ND	{}	<b>GW - ANGULAR GRAVEL AND SAND</b> Grey, dry, no odour or staining.	-2.74
5	5	18	20	ND	{}	<b>SW - SAND AND GRAVEL</b> Brown, dry, 2cm of gravel, no odour or staining. Grey at 3.35m, no odour or staining.	-3.66
6	6	16	40	ND		<b>ML - SILT</b> Brown, dry, hard, no odour or staining.	
7	7	50+	40	ND			
8	8	50+	60	ND			
9	9	50+	10	ND			
10	10	50+	-	ND		Auger refusal at 7.16m.	-7.01
						<b>BEDROCK (LIMESTONE)</b>	
						End of Borehole	
24							
25							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



**Project #: 5-698-17-02**

**Privileged and Confidential**

## **LOG OF BOREHOLE: BH-3**

XCG Consultants Ltd.

## **Project: Phase II ESA**

**Client:** City of Guelph

## **Location:** Baker Street Redevelopment Site

**Driller:** Geo-Environmental Drilling Inc.

**Borehole Diameter:** 203 mm

#### **Drill Method: Hollow Stem Auger**

**Start Date:** November 27, 2008    **Checked By:** EF

#### **Sample Method:** Split-Spoon Method

**Completed:** November 27, 2008 **Logged By:** LT

Depth	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 ft 0 m						Ground Surface	0.00
1	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	
2	2	9	60	0.7			
3	3	6	60	0.2			
4	4	25	20	ND			-3.05
5	5	50+	50	ND		<b>SM - SILTY SAND</b> Brown, moist to dry, some small gravel, no odour or staining.	
6	6	50+	40	ND		<b>GM - SILTY GRAVEL</b> Brown, very hard, dry, no odour or staining.	-3.96
7	7	33	30	ND		<b>ML - SILT</b> Dark grey, dry, no odour or staining.	-4.57
8	8	38	20	ND		<b>ML - SILT</b> Brown, moist to wet, no odour or staining.	-5.33
9	9	50+	10	ND		Auger refusal at 6.55m.	-6.55
10						End of Borehole	
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

### For Environmental Purposes Only

Sheet: 1 of 1



Project #: 5-698-17-02

Privileged and Confidential

Project: Phase II ESA

LOG OF BOREHOLE: BH-4

Client: City of Guelph

Location: Baker Street Redevelopment Site

Driller: Geo-Environmental Drilling Inc.

Borehole Diameter: 203 mm

Drill Method: Hollow Stem Auger

Start Date: November 26, 2008 Checked By: EF

Sample Method: Split-Spoon Method

Completed: November 26, 2008 Logged By: LT

Depth ft m	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 0						Ground Surface	0.00
1	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	-0.46
2						<b>ML - SILT</b> Brown, dry, no odour or staining.	
3	2	11	60	0.5			
4							
5							
6	3	17	60	0.2			
7							
8							
9							
10							
11	4	50+	40	ND			
12							
13							
14	5	50+	50	ND		Grey brown at 3.35m, very dry, angular gravel, no odour or staining.	
15							
16	6	32	20	ND			
17							
18						<b>SW - SAND AND GRAVEL</b> Auger refusal at 5.33m.	-5.18
19						<b>BEDROCK (LIMESTONE)</b>	-5.33
20						End of Borehole	

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



Project #: 5-698-17-02

Privileged and Confidential

Project: Phase II ESA

LOG OF BOREHOLE: BH-5

Client: City of Guelph

Location: Baker Street Redevelopment Site

Driller: Geo-Environmental Drilling Inc.

Borehole Diameter: 203 mm

Drill Method: Hollow Stem Auger

Start Date: November 25, 2008 Checked By: EF

Sample Method: Split-Spoon Method

Completed: November 25, 2008 Logged By: LT

Depth ft m	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 0						Ground Surface	0.00
1	1	AS	AS	0.2	ASPHALT		
2					SW - SAND AND GRAVEL (FILL)	Brown, dry, no odour or staining.	-0.61
3	2	6	40	0.8	SW - SAND AND GRAVEL (FILL)	Brown, grey, dry, trace red brick fragments, no odour or staining.	
4							
5	3	50+	2	ND		Auger refusal at 1.68m, possible concrete.	-1.62
6						End of Borehole	
7							
8							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



XCG Consultants Ltd.

Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF BOREHOLE: BH-6

Driller: Geo-Environmental Drilling Inc.

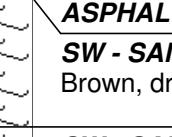
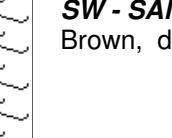
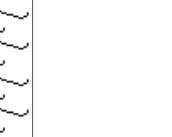
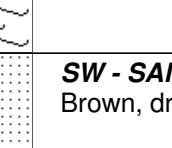
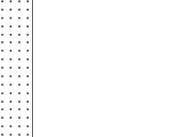
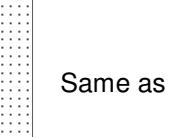
Drill Method: Hollow Stem Auger

Sample Method: Split-Spoon Method

Borehole Diameter: 203 mm

Start Date: November 25, 2008 Checked By: EF

Completed: November 25, 2008 Logged By: LT

Depth	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 ft m 0						Ground Surface	0.00
1	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	-0.61
2	2	5	70	ND		<b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	-2.13
3	3	8	60	0.7		<b>SW - SAND</b> Brown, dry, no odour or staining.	-4.27
4	4	13	50	ND		Same as above.	-4.42
5	5	33	30	0.5		<b>BEDROCK (LIMESTONE)</b> Dry, no odour or staining.	
6	6	45	20	ND		End of Borehole	
15							
16							
17							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



XCG Consultants Ltd.

Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF BOREHOLE: BH-7

Driller: Geo-Environmental Drilling Inc.

Borehole Diameter: 203 mm

Drill Method: Hollow Stem Auger

Start Date: November 25, 2008 Checked By: EF

Sample Method: Split-Spoon Method

Completed: November 25, 2008 Logged By: LT

Depth ft m	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
0 ft m						Ground Surface	0.00
1	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	
2						<b>SW - SAND AND GRAVEL (FILL)</b> Brown, angular gravel, very hard, some white powder at 0.91m, stone or bedrock, dry, no odour or staining.	-0.61
3	2	50+	20	ND		Auger refusal at 1.22m, possible boulder or concrete, white powder in split spoon.	-1.22
4						End of Borehole	
5							
6							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF WELL: BH-8-MW4

Driller: Geo-Environmental Drilling Inc.

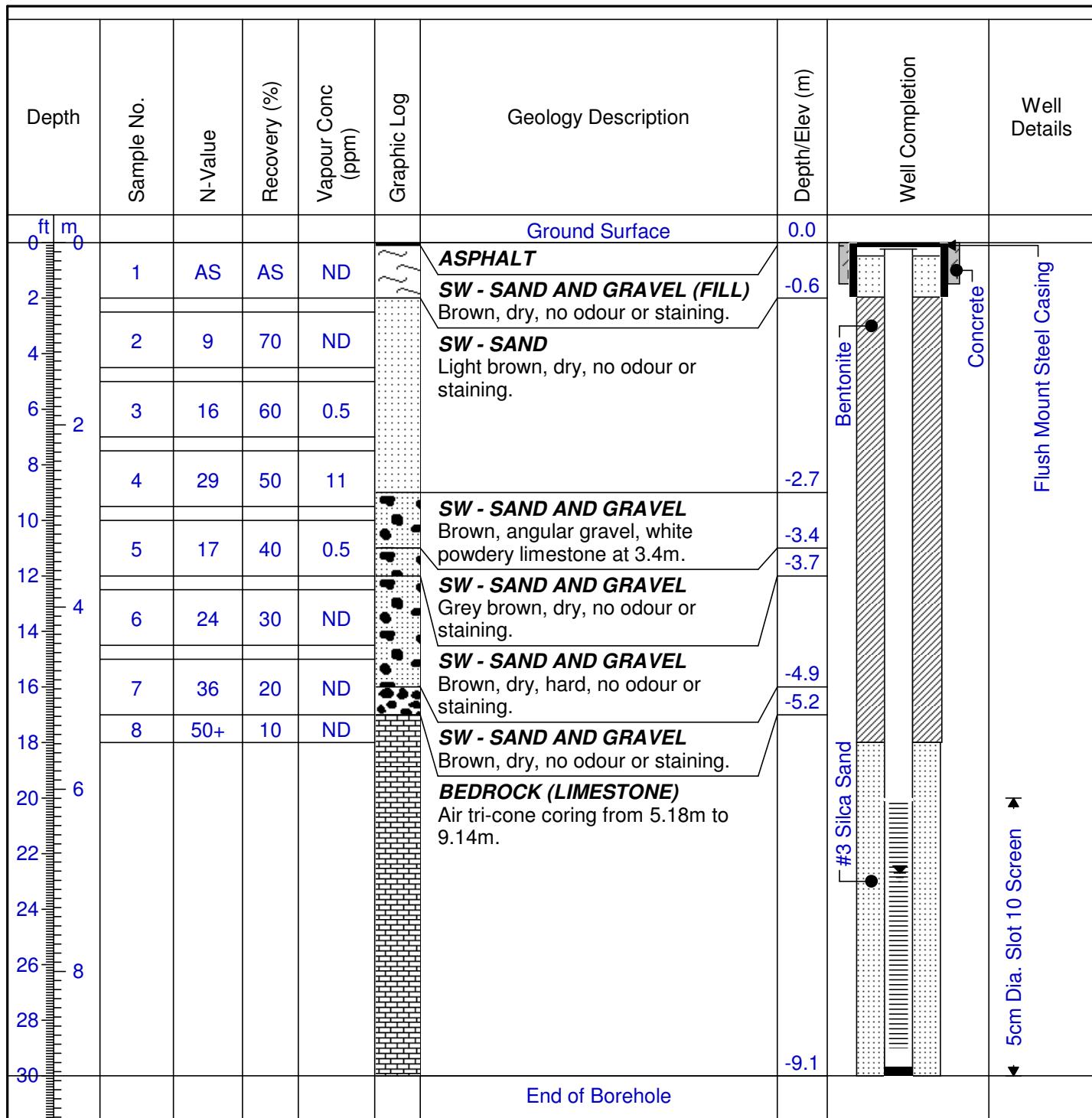
Drill Method: Hollow Stem Auger and Tri-Cone Coring

Sample Method: Split-Spoon Method

Borehole Diameter: 203 mm Auger / 100 mm Coring

Start Date: November 25, 2008 Checked By: EF

Completed: November 28, 2008 Logged By: LT



Groundwater Elevation: 90.935m

Screening Tool: Photovac 2020 PID

T.O.P Elevation: 97.845m

Monitoring Well Log

Sheet: 1 of 1



XCG Consultants Ltd.

Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

Privileged and Confidential

LOG OF BOREHOLE: BH-9

Driller: Geo-Environmental Drilling Inc.

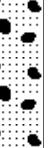
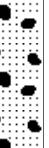
Drill Method: Hollow Stem Auger

Sample Method: Split-Spoon Method

Borehole Diameter: 203 mm

Start Date: November 26, 2008 Checked By: EF

Completed: November 26, 2008 Logged By: LT

Depth	Sample No.	N-Value	Recovery %	Vapour Conc (ppm)	Graphic Log	Geology Description	Depth/Elev (m)
ft m							
0 0						Ground Surface	0.00
1	1	AS	AS	ND		<b>ASPHALT</b> <b>SW - SAND AND GRAVEL (FILL)</b> Brown, dry, no odour or staining.	-0.46
2	2	6	30	ND		<b>SW - SAND AND GRAVEL</b> Brown, dry, no odour or staining.	
3	3	12	60	0.7		Angular gravel from 1.68 to 2.13m.	
4	4	30	20	0.2			
5	5	11	50	ND		<b>SW - SAND AND GRAVEL</b> Brown, dry, no odour or staining.	-3.35
6	6	15	20	ND			
7	7	19	40	ND		Limestone at 5.18m. Auger refusal.	-5.15
8						<b>BEDROCK (LIMESTONE)</b>	
9						End of Borehole	
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							

Ground Surface Elevation: NA

Screening Tool: Photovac 2020 PID

For Environmental Purposes Only

Sheet: 1 of 1



Project #: 5-698-17-02

Project: Phase II ESA

Client: City of Guelph

Location: Baker Street Redevelopment Site

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LOG OF WELL: BH-17-MW5D

Driller: Geo-Environmental Drilling Inc.

Drill Method: Hollow Stem Auger and Tri-Cone Coring

Sample Method: Split-Spoon Method

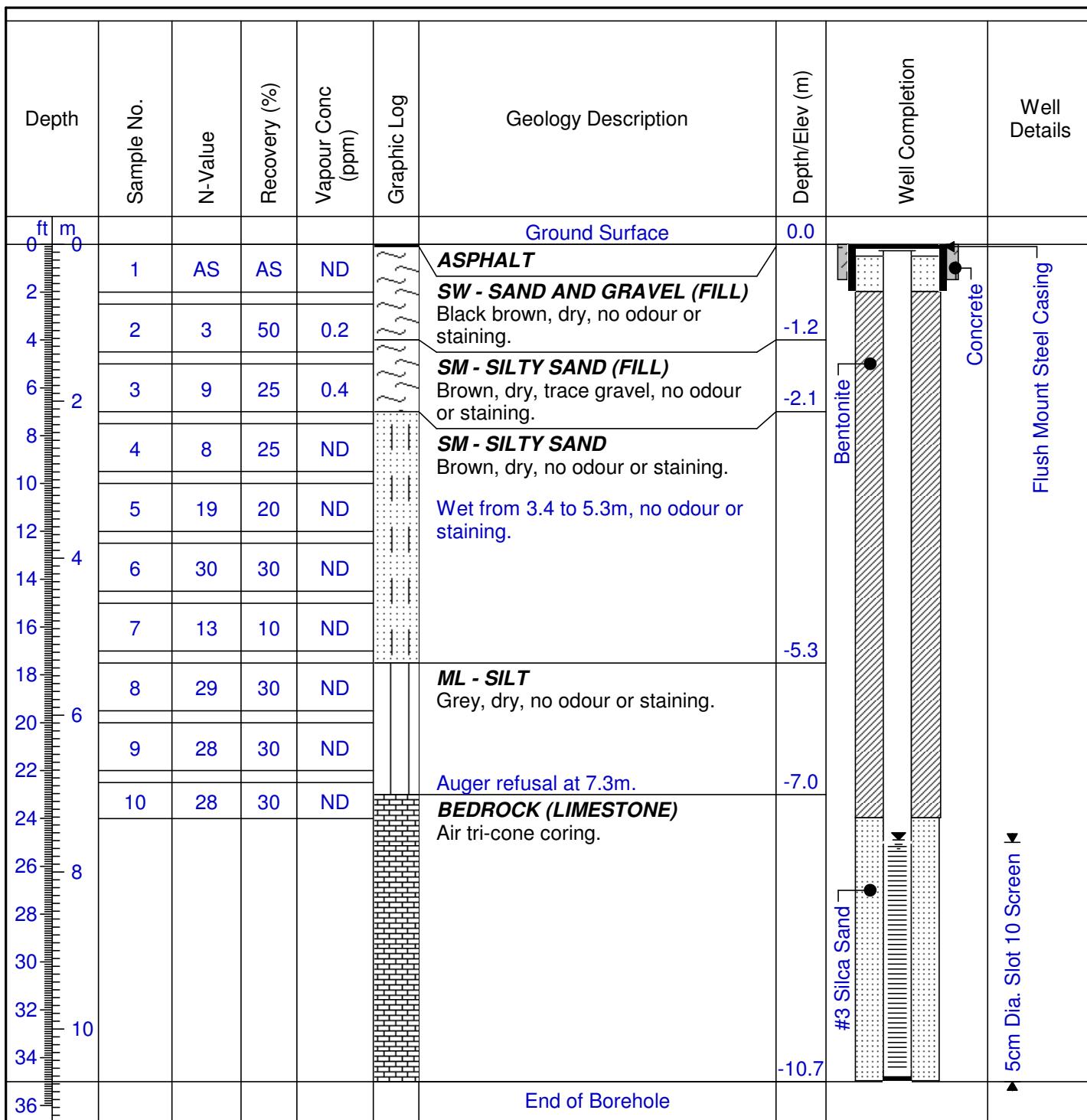
Borehole Diameter: 203 mm Auger/100 mm Coring

Start Date: December 1, 2008

Checked By: EF

Completed: December 1, 2008

Logged By: LT



Groundwater Elevation: 91.060m

Screening Tool: Photovac 2020 PID

T.O.P Elevation: 98.650m

Monitoring Well Log

Sheet: 1 of 1

## **APPENDIX C**

### ***ANALYTICAL RESULTS TABLES AND LABORATORY CERTIFICATES OF ANALYSIS***



**Environmental Division**

**Certificate of Analysis**

XCG CONSULTANTS LTD.

**ATTN:** THOMAS KOLODZIEJ  
820 TRILLIUM DRIVE  
KITCHENER ON N2R 1K4

**Reported On:** 01-DEC-08 03:23 PM  
**Revision:** 3

**Lab Work Order #:** L712303

**Date Received:** 26-NOV-08

**Project P.O. #:**

**Job Reference:** 5-698-17-02

**Legal Site Desc:**

**CofC Numbers:** 69263

**Other Information:**

**Comments:** 01-DEC-08 NG/WT  
REVISION 3: CORRECTED CALCULATION FOR F1-BTEX

MARY-LYNN PIKE  
Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.  
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU  
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

**ALS Canada Ltd. (formerly ETL Chemspect Analytical Ltd.)**  
Part of the **ALS Laboratory Group**

60 Northland Road, Unit 1, Waterloo, ON N2V 2B8  
Phone: +1 519 886 6910 Fax: +1 519 886 9047 [www.alsglobal.com](http://www.alsglobal.com)  
A Campbell Brothers Limited Company



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5-698-17-02

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-1 BH-14 (SS-2) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	01-DEC-08	R763631
Arsenic (As)	2		1	mg/kg	14	17	01-DEC-08	R763631
Selenium (Se)	<1		1	mg/kg	1.4	1.9	01-DEC-08	R763631
Boron (B), Available	0.2		0.1	ug/g			28-NOV-08	R762751
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	28-NOV-08	R762763
Mercury (Hg)	0.09		0.05	ug/g	0.16	0.23	27-NOV-08	R762794
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	28		1	mg/kg	190	210	28-NOV-08	R763507
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507
Chromium (Cr)	7		1	mg/kg	67	71	28-NOV-08	R763507
Cobalt (Co)	2		1	mg/kg	19	21	28-NOV-08	R763507
Copper (Cu)	16		1	mg/kg	56	85	28-NOV-08	R763507
Lead (Pb)	29		1	mg/kg	55	120	28-NOV-08	R763507
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Nickel (Ni)	4		1	mg/kg	43	43	28-NOV-08	R763507
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Vanadium (V)	10		1	mg/kg	91	91	28-NOV-08	R763507
Zinc (Zn)	63		1	mg/kg	150	160	28-NOV-08	R763507
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5	VC:RHS	5	mg/kg			01-DEC-08	
F1-BTEX	<5		5	mg/kg			01-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			01-DEC-08	
F2-Naphth	<10		10	mg/kg			01-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			01-DEC-08	
F3-PAH	<50		50	mg/kg			01-DEC-08	
F4 (C34-C50)	56		50	mg/kg			01-DEC-08	
Total Hydrocarbons (C6-C50)	56		50	mg/kg			01-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			01-DEC-08	
Prep/Analysis Dates				No Unit			28-NOV-08	R762621
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			28-NOV-08	R762542
Sur: Octacosane	75		60-120	%			28-NOV-08	R762542
<b>Volatile Organics (153/04) Table 1</b>								
1,1,1,2-Tetrachloroethane	<0.008	VC:RHS	0.008	mg/kg			28-NOV-08	R762774
1,1,2,2-Tetrachloroethane	<0.004	VC:RHS	0.004	mg/kg	0.004	0.004	28-NOV-08	R762774
1,1,1-Trichloroethane	<0.008	VC:RHS	0.008	mg/kg	0.009	0.009	28-NOV-08	R762774
1,1,2-Trichloroethane	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,1-Dichloroethane	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,1-Dichloroethylene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dichlorobenzene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dichloroethane	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dibromoethane	<0.004	VC:RHS	0.004	mg/kg	0.004	0.004	28-NOV-08	R762774

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-1 BH-14 (SS-2) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>Volatile Organics (153/04) Table 1</b>								
1,2-Dichloropropane	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,3-Dichlorobenzene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,4-Dichlorobenzene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
2-Hexanone	<0.2	VC:RHS	0.2	mg/kg			28-NOV-08	R762774
Acetone	<0.5	VC:RHS	0.5	mg/kg			28-NOV-08	R762774
Benzene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Bromodichloromethane	<0.005	VC:RHS	0.005	mg/kg			28-NOV-08	R762774
Bromoform	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Bromomethane	<0.003	VC:RHS	0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Carbon Disulfide	<0.02	VC:RHS	0.02	mg/kg			28-NOV-08	R762774
Carbon tetrachloride	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Chlorobenzene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Chloroethane	<0.03	VC:RHS	0.03	mg/kg			28-NOV-08	R762774
Chloroform	<0.006	VC:RHS	0.006	mg/kg	0.006	0.006	28-NOV-08	R762774
Chloromethane	<0.03	VC:RHS	0.03	mg/kg			28-NOV-08	R762774
cis-1,2-Dichloroethylene	<0.02	VC:RHS	0.02	mg/kg			28-NOV-08	R762774
cis-1,3-Dichloropropene	<0.003	VC:RHS	0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Dibromomethane	<0.01	VC:RHS	0.01	mg/kg			28-NOV-08	R762774
Dibromochloromethane	<0.003	VC:RHS	0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Dichlorodifluoromethane	<0.03	VC:RHS	0.03	mg/kg			28-NOV-08	R762774
Dichloromethane	<0.003	VC:RHS	0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Ethyl Benzene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
MTBE	<0.2	VC:RHS	0.2	mg/kg			28-NOV-08	R762774
m+p-Xylenes	<0.002	VC:RHS	0.002	mg/kg			28-NOV-08	R762774
Methyl Ethyl Ketone	<0.2	VC:RHS	0.2	mg/kg			28-NOV-08	R762774
Methyl Isobutyl Ketone	<0.2	VC:RHS	0.2	mg/kg			28-NOV-08	R762774
o-Xylene	<0.002	VC:RHS	0.002	mg/kg			28-NOV-08	R762774
Styrene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Tetrachloroethylene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Toluene	<0.002	VC:RHS	0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
trans-1,2-Dichloroethylene	<0.002	VC:RHS	0.002	mg/kg	0.003	0.003	28-NOV-08	R762774
trans-1,3-Dichloropropene	<0.003	VC:RHS	0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Trichloroethylene	<0.004	VC:RHS	0.004	mg/kg	0.004	0.004	28-NOV-08	R762774
Trichlorofluoromethane	<0.03	VC:RHS	0.03	mg/kg			28-NOV-08	R762774
Vinyl chloride	<0.003	VC:RHS	0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Xylenes (Total)	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Surr: 1,2-Dichloroethane d4	100		25-175	%			28-NOV-08	R762774
Surr: Toluene-d8	90		25-175	%			28-NOV-08	R762774
Surr: 4-Bromofluorobenzene	102		25-175	%			28-NOV-08	R762774
<b>Individual Analytes</b>								
% Moisture	10.7		0.5	%			27-NOV-08	R762204
<b>CCME PAHs</b>								
1-Methylnaphthalene	<0.05		0.05	mg/kg	0.05	0.26	01-DEC-08	R763496
2-Methylnaphthalene	<0.05		0.05	mg/kg			01-DEC-08	R763496
Acenaphthene	<0.05		0.05	mg/kg	0.05	0.07	01-DEC-08	R763496
Acenaphthylene	<0.05		0.05	mg/kg	0.08	0.08	01-DEC-08	R763496
Acridine	<0.8		0.8	mg/kg			01-DEC-08	R763496

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



**Environmental Division**

**ALS LABORATORY GROUP CRITERIA REPORT**

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-1 BH-14 (SS-2) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Individual Analytes</b>								
<b>CCME PAHs</b>								
Anthracene	<0.05		0.05	mg/kg	0.05	0.16	01-DEC-08	R763496
Benzo(a)anthracene	0.14		0.05	mg/kg	** 0.10	0.74	01-DEC-08	R763496
Benzo(a)pyrene	0.24		0.02	mg/kg	** 0.10	0.49	01-DEC-08	R763496
Benzo(b)fluoranthene	0.18		0.05	mg/kg	0.30	0.47	01-DEC-08	R763496
Benzo(g,h,i)perylene	0.22		0.05	mg/kg	** 0.20	0.68	01-DEC-08	R763496
Benzo(k)fluoranthene	0.11		0.05	mg/kg	** 0.05	0.48	01-DEC-08	R763496
Chrysene	0.18		0.05	mg/kg	** 0.18	0.69	01-DEC-08	R763496
Dibenzo(ah)anthracene	0.13		0.05	mg/kg	0.15	0.16	01-DEC-08	R763496
Fluoranthene	0.19		0.05	mg/kg	0.24	1.1	01-DEC-08	R763496
Fluorene	<0.05		0.05	mg/kg	0.05	0.12	01-DEC-08	R763496
Indeno(1,2,3-cd)pyrene	0.14		0.05	mg/kg	** 0.11	0.38	01-DEC-08	R763496
Naphthalene	<0.05		0.05	mg/kg	0.05	0.09	01-DEC-08	R763496
Phenanthrene	0.09		0.05	mg/kg	0.19	0.69	01-DEC-08	R763496
Pyrene	0.17		0.05	mg/kg	0.19	1.0	01-DEC-08	R763496
Quinoline	<0.05		0.05	mg/kg			01-DEC-08	R763496
Surr: 2-Fluorobiphenyl	107		50-150	%			01-DEC-08	R763496
Surr: p-Terphenyl d14	96		52-158	%			01-DEC-08	R763496
pH	9.63		0.01	pH units			27-NOV-08	R762512
L712303-2 BH-8 (SS-4) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	01-DEC-08	R763631
Arsenic (As)	1		1	mg/kg	14	17	01-DEC-08	R763631
Selenium (Se)	<1		1	mg/kg	1.4	1.9	01-DEC-08	R763631
Boron (B), Available	<0.1		0.1	ug/g			28-NOV-08	R762751
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	28-NOV-08	R762763
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	27-NOV-08	R762794
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	12		1	mg/kg	190	210	28-NOV-08	R763507
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507
Chromium (Cr)	5		1	mg/kg	67	71	28-NOV-08	R763507
Cobalt (Co)	2		1	mg/kg	19	21	28-NOV-08	R763507
Copper (Cu)	6		1	mg/kg	56	85	28-NOV-08	R763507
Lead (Pb)	8		1	mg/kg	55	120	28-NOV-08	R763507
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Nickel (Ni)	3		1	mg/kg	43	43	28-NOV-08	R763507
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Vanadium (V)	4		1	mg/kg	91	91	28-NOV-08	R763507
Zinc (Zn)	47		1	mg/kg	150	160	28-NOV-08	R763507
<b>VOC, F1-F4 (O.Reg.153/04)</b>								

\*\* analytical results for this parameter exceed criteria limits listed on this report



**Environmental Division**

**ALS LABORATORY GROUP CRITERIA REPORT**

L712303 CONTD....

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5-698-17-02

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-2 BH-8 (SS-4) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5	VC:RHS	5	mg/kg			01-DEC-08	
F1-BTEX	<5		5	mg/kg			01-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			01-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			01-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			01-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			01-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			01-DEC-08	
Prep/Analysis Dates				No Unit			28-NOV-08	R762621
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			28-NOV-08	R762542
Surr: Octacosane	82		60-120	%			28-NOV-08	R762542
<b>Volatile Organics (153/04) Table 1</b>								
1,1,1,2-Tetrachloroethane	<0.008		0.008	mg/kg			28-NOV-08	R762774
1,1,2,2-Tetrachloroethane	<0.004		0.004	mg/kg	0.004	0.004	28-NOV-08	R762774
1,1,1-Trichloroethane	<0.008		0.008	mg/kg	0.009	0.009	28-NOV-08	R762774
1,1,2-Trichloroethane	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,1-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,1-Dichloroethylene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dibromoethane	<0.004		0.004	mg/kg	0.004	0.004	28-NOV-08	R762774
1,2-Dichloropropane	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,3-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,4-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
2-Hexanone	<0.2		0.2	mg/kg			28-NOV-08	R762774
Acetone	<0.5		0.5	mg/kg			28-NOV-08	R762774
Benzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Bromodichloromethane	<0.005		0.005	mg/kg			28-NOV-08	R762774
Bromoform	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Bromomethane	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Carbon Disulfide	<0.02		0.02	mg/kg			28-NOV-08	R762774
Carbon tetrachloride	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Chlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Chloroethane	<0.03		0.03	mg/kg			28-NOV-08	R762774
Chloroform	<0.006		0.006	mg/kg	0.006	0.006	28-NOV-08	R762774
Chloromethane	<0.03		0.03	mg/kg			28-NOV-08	R762774
cis-1,2-Dichloroethylene	<0.02		0.02	mg/kg			28-NOV-08	R762774
cis-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Dibromomethane	<0.01		0.01	mg/kg			28-NOV-08	R762774
Dibromochloromethane	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Dichlorodifluoromethane	<0.03		0.03	mg/kg			28-NOV-08	R762774
Dichloromethane	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Ethyl Benzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
MTBE	<0.2		0.2	mg/kg			28-NOV-08	R762774
m+p-Xylenes	<0.002		0.002	mg/kg			28-NOV-08	R762774
Methyl Ethyl Ketone	<0.2		0.2	mg/kg			28-NOV-08	R762774

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-2 BH-8 (SS-4) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>Volatile Organics (153/04) Table 1</b>								
Methyl Isobutyl Ketone	<0.2		0.2	mg/kg			28-NOV-08	R762774
o-Xylene	<0.002		0.002	mg/kg			28-NOV-08	R762774
Styrene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Tetrachloroethylene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Toluene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
trans-1,2-Dichloroethylene	<0.002		0.002	mg/kg	0.003	0.003	28-NOV-08	R762774
trans-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Trichloroethylene	<0.004		0.004	mg/kg	0.004	0.004	28-NOV-08	R762774
Trichlorofluoromethane	<0.03		0.03	mg/kg			28-NOV-08	R762774
Vinyl chloride	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Xylenes (Total)	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Surr: 1,2-Dichloroethane d4	96		25-175	%			28-NOV-08	R762774
Surr: Toluene-d8	87		25-175	%			28-NOV-08	R762774
Surr: 4-Bromofluorobenzene	101		25-175	%			28-NOV-08	R762774
<b>Individual Analytes</b>								
% Moisture	8.0		0.5	%			27-NOV-08	R762204
<b>PCBs</b>								
Aroclor 1242	<0.05	DLA	0.05	mg/kg			29-NOV-08	R762567
Aroclor 1248	<0.05	DLA	0.05	mg/kg			29-NOV-08	R762567
Aroclor 1254	<0.05	DLA	0.05	mg/kg			29-NOV-08	R762567
Aroclor 1260	<0.05	DLA	0.05	mg/kg			29-NOV-08	R762567
Total PCBs	<0.05	DLA	0.05	mg/kg	0.3	0.3	29-NOV-08	R762567
Surr: d14-Terphenyl	86		63-153	%			29-NOV-08	R762567
pH	8.47		0.01	pH units			27-NOV-08	R762512
L712303-3 BH-13 (SS-3) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			28-NOV-08	
F2 (C10-C16)	<10		10	mg/kg			28-NOV-08	
F3 (C16-C34)	56		50	mg/kg			28-NOV-08	
F4 (C34-C50)	144		50	mg/kg			28-NOV-08	
F4G-SG (GHH-Silica)	600		100	mg/kg			28-NOV-08	
Total Hydrocarbons (C6-C50)	200		50	mg/kg			28-NOV-08	
Chromatogram to baseline at nC50	NO		No Unit				28-NOV-08	
Prep/Analysis Dates			No Unit				28-NOV-08	R762621
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates			No Unit				28-NOV-08	R762542
Surr: Octacosane	88		60-120	No Unit %			28-NOV-08	R762542
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	01-DEC-08	R763631

\*\* analytical results for this parameter exceed criteria limits listed on this report

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L712303-3 BH-13 (SS-3) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER			
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>									
<b>As, Sb and Se by ICP/MS</b>									
Arsenic (As)	1	1	mg/kg	14	17	01-DEC-08	R763631		
Selenium (Se)	<1	1	mg/kg	1.4	1.9	01-DEC-08	R763631		
Boron (B), Available	<0.1	0.1	ug/g			28-NOV-08	R762751		
Chromium, Hexavalent	<2	2	mg/kg	2.5	2.5	28-NOV-08	R762763		
Mercury (Hg)	0.23	0.05	ug/g	** 0.16	0.23	27-NOV-08	R762794		
<b>Standard Metal Scan (ICP)</b>									
Barium (Ba)	31	1	mg/kg	190	210	28-NOV-08	R763507		
Beryllium (Be)	<0.5	0.5	mg/kg	1.2	1.2	28-NOV-08	R763507		
Cadmium (Cd)	<0.5	0.5	mg/kg	1.0	1.0	28-NOV-08	R763507		
Chromium (Cr)	4	1	mg/kg	67	71	28-NOV-08	R763507		
Cobalt (Co)	1	1	mg/kg	19	21	28-NOV-08	R763507		
Copper (Cu)	7	1	mg/kg	56	85	28-NOV-08	R763507		
Lead (Pb)	35	1	mg/kg	55	120	28-NOV-08	R763507		
Molybdenum (Mo)	<1	1	mg/kg	2.5	2.5	28-NOV-08	R763507		
Nickel (Ni)	2	1	mg/kg	43	43	28-NOV-08	R763507		
Silver (Ag)	<0.2	0.2	mg/kg	0.35	0.42	28-NOV-08	R763507		
Thallium (Tl)	<1	1	mg/kg	2.5	2.5	28-NOV-08	R763507		
Vanadium (V)	3	1	mg/kg	91	91	28-NOV-08	R763507		
Zinc (Zn)	79	1	mg/kg	150	160	28-NOV-08	R763507		
<b>Individual Analytes</b>									
% Moisture	3.5	0.5	%			27-NOV-08	R762204		
Prep/Analysis Dates				No Unit			28-NOV-08	R762690	
pH	8.39	0.01	pH units				27-NOV-08	R762512	
L712303-4 BH-6 (SS-5) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER			
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>									
<b>As, Sb and Se by ICP/MS</b>									
Antimony (Sb)	<1	1	mg/kg	1	1	01-DEC-08	R763631		
Arsenic (As)	1	1	mg/kg	14	17	01-DEC-08	R763631		
Selenium (Se)	<1	1	mg/kg	1.4	1.9	01-DEC-08	R763631		
Boron (B), Available	<0.1	0.1	ug/g			28-NOV-08	R762751		
Chromium, Hexavalent	<2	2	mg/kg	2.5	2.5	28-NOV-08	R762763		
Mercury (Hg)	<0.05	0.05	ug/g	0.16	0.23	27-NOV-08	R762794		
<b>Standard Metal Scan (ICP)</b>									
Barium (Ba)	11	1	mg/kg	190	210	28-NOV-08	R763507		
Beryllium (Be)	<0.5	0.5	mg/kg	1.2	1.2	28-NOV-08	R763507		
Cadmium (Cd)	<0.5	0.5	mg/kg	1.0	1.0	28-NOV-08	R763507		
Chromium (Cr)	4	1	mg/kg	67	71	28-NOV-08	R763507		
Cobalt (Co)	2	1	mg/kg	19	21	28-NOV-08	R763507		
Copper (Cu)	4	1	mg/kg	56	85	28-NOV-08	R763507		
Lead (Pb)	199	1	mg/kg	** 55	** 120	28-NOV-08	R763507		
Molybdenum (Mo)	<1	1	mg/kg	2.5	2.5	28-NOV-08	R763507		

\*\* analytical results for this parameter exceed criteria limits listed on this report



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L712303-4 BH-6 (SS-5) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>Standard Metal Scan (ICP)</b>								
Nickel (Ni) 3		1	mg/kg	43	43	28-NOV-08	R763507	
Silver (Ag) <0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507	
Thallium (Tl) <1		1	mg/kg	2.5	2.5	28-NOV-08	R763507	
Vanadium (V) 4		1	mg/kg	91	91	28-NOV-08	R763507	
Zinc (Zn) 71		1	mg/kg	150	160	28-NOV-08	R763507	
<b>Individual Analytes</b>								
% Moisture 7.0		0.5	%			27-NOV-08	R762204	
pH 8.15		0.01	pH units			27-NOV-08	R762512	
L712303-5 BH-7 (SS-2) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb) <1		1	mg/kg	1	1	01-DEC-08	R763631	
Arsenic (As) 2		1	mg/kg	14	17	01-DEC-08	R763631	
Selenium (Se) <1		1	mg/kg	1.4	1.9	01-DEC-08	R763631	
Boron (B), Available 0.1		0.1	ug/g			28-NOV-08	R762751	
Chromium, Hexavalent <2		2	mg/kg	2.5	2.5	28-NOV-08	R762763	
Mercury (Hg) <0.05		0.05	ug/g	0.16	0.23	27-NOV-08	R762794	
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba) 12		1	mg/kg	190	210	28-NOV-08	R763507	
Beryllium (Be) <0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507	
Cadmium (Cd) <0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507	
Chromium (Cr) 6		1	mg/kg	67	71	28-NOV-08	R763507	
Cobalt (Co) 2		1	mg/kg	19	21	28-NOV-08	R763507	
Copper (Cu) 8		1	mg/kg	56	85	28-NOV-08	R763507	
Lead (Pb) 18		1	mg/kg	55	120	28-NOV-08	R763507	
Molybdenum (Mo) <1		1	mg/kg	2.5	2.5	28-NOV-08	R763507	
Nickel (Ni) 4		1	mg/kg	43	43	28-NOV-08	R763507	
Silver (Ag) <0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507	
Thallium (Tl) <1		1	mg/kg	2.5	2.5	28-NOV-08	R763507	
Vanadium (V) 5		1	mg/kg	91	91	28-NOV-08	R763507	
Zinc (Zn) 66		1	mg/kg	150	160	28-NOV-08	R763507	
<b>Individual Analytes</b>								
% Moisture 4.1		0.5	%			27-NOV-08	R762204	
pH 8.31		0.01	pH units			27-NOV-08	R762512	
L712303-6 BH-5 (SS-2) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								

\*\* analytical results for this parameter exceed criteria limits listed on this report



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L712303-6 BH-5 (SS-2) Sampled By: LUKE T on 25-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	01-DEC-08	R763631
Arsenic (As)	2		1	mg/kg	14	17	01-DEC-08	R763631
Selenium (Se)	<1		1	mg/kg	1.4	1.9	01-DEC-08	R763631
Boron (B), Available	<0.1		0.1	ug/g			28-NOV-08	R762751
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	28-NOV-08	R762763
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	27-NOV-08	R762794
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	12		1	mg/kg	190	210	28-NOV-08	R763507
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507
Chromium (Cr)	5		1	mg/kg	67	71	28-NOV-08	R763507
Cobalt (Co)	2		1	mg/kg	19	21	28-NOV-08	R763507
Copper (Cu)	5		1	mg/kg	56	85	28-NOV-08	R763507
Lead (Pb)	15		1	mg/kg	55	120	28-NOV-08	R763507
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Nickel (Ni)	4		1	mg/kg	43	43	28-NOV-08	R763507
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Vanadium (V)	6		1	mg/kg	91	91	28-NOV-08	R763507
Zinc (Zn)	91		1	mg/kg	150	160	28-NOV-08	R763507
<b>Individual Analytes</b>								
% Moisture	6.2		0.5	%			27-NOV-08	R762204
pH	8.16		0.01	pH units			27-NOV-08	R762512
L712303-7 BH-15 (SS-1) Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			28-NOV-08	
F2 (C10-C16)	<10		10	mg/kg			28-NOV-08	
F3 (C16-C34)	107		50	mg/kg			28-NOV-08	
F4 (C34-C50)	227		50	mg/kg			28-NOV-08	
F4G-SG (GHH-Silica)	900		100	mg/kg			28-NOV-08	
Total Hydrocarbons (C6-C50)	334		50	mg/kg			28-NOV-08	
Chromatogram to baseline at nC50	NO			No Unit			28-NOV-08	
Prep/Analysis Dates				No Unit			28-NOV-08	R762621
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			28-NOV-08	R762542
Surr: Octacosane	89		60-120	%			28-NOV-08	R762542
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	01-DEC-08	R763631

\*\* analytical results for this parameter exceed criteria limits listed on this report



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L712303-7 BH-15 (SS-1) Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Arsenic (As)	4		1	mg/kg	14	17	01-DEC-08	R763631
Selenium (Se)	<1		1	mg/kg	1.4	1.9	01-DEC-08	R763631
Boron (B), Available	0.2		0.1	ug/g			28-NOV-08	R762751
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	28-NOV-08	R762763
Mercury (Hg)	0.09		0.05	ug/g	0.16	0.23	27-NOV-08	R762794
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	34		1	mg/kg	190	210	28-NOV-08	R763507
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507
Chromium (Cr)	9		1	mg/kg	67	71	28-NOV-08	R763507
Cobalt (Co)	3		1	mg/kg	19	21	28-NOV-08	R763507
Copper (Cu)	22		1	mg/kg	56	85	28-NOV-08	R763507
Lead (Pb)	52		1	mg/kg	55	120	28-NOV-08	R763507
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Nickel (Ni)	7		1	mg/kg	43	43	28-NOV-08	R763507
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Vanadium (V)	13		1	mg/kg	91	91	28-NOV-08	R763507
Zinc (Zn)	124		1	mg/kg	150	160	28-NOV-08	R763507
<b>Individual Analytes</b>								
% Moisture	9.8		0.5	%			27-NOV-08	R762204
Prep/Analysis Dates				No Unit			28-NOV-08	R762690
pH	8.03		0.01	pH units			27-NOV-08	R762512
L712303-8 BH-9 (SS-3) Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	01-DEC-08	R763631
Arsenic (As)	2		1	mg/kg	14	17	01-DEC-08	R763631
Selenium (Se)	<1		1	mg/kg	1.4	1.9	01-DEC-08	R763631
Boron (B), Available	<0.1		0.1	ug/g			28-NOV-08	R762751
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	28-NOV-08	R762763
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	27-NOV-08	R762794
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	17		1	mg/kg	190	210	28-NOV-08	R763507
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507
Chromium (Cr)	7		1	mg/kg	67	71	28-NOV-08	R763507
Cobalt (Co)	3		1	mg/kg	19	21	28-NOV-08	R763507
Copper (Cu)	8		1	mg/kg	56	85	28-NOV-08	R763507
Lead (Pb)	13		1	mg/kg	55	120	28-NOV-08	R763507
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters		Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-8	BH-9 (SS-3)					AGRICULTURAL OR OTHER	ALL OTHER		
Sampled By:	LUKE T on 26-NOV-08								
Matrix:	SOIL								
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>									
<b>Standard Metal Scan (ICP)</b>									
Nickel (Ni)	5		1	mg/kg	43	43	28-NOV-08	R763507	
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507	
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507	
Vanadium (V)	7		1	mg/kg	91	91	28-NOV-08	R763507	
Zinc (Zn)	172		1	mg/kg	** 150	** 160	28-NOV-08	R763507	
<b>Individual Analytes</b>									
% Moisture	8.1		0.5	%			27-NOV-08	R762204	
pH	8.02		0.01	pH units			27-NOV-08	R762512	
L712303-9	BH-16 (SS-2)					AGRICULTURAL OR OTHER	ALL OTHER		
Sampled By:	LUKE T on 26-NOV-08								
Matrix:	SOIL								
<b>F1-F4 (O.Reg.153/04)</b>									
<b>CCME Total Hydrocarbons</b>									
F1 (C6-C10)	<5		5	mg/kg			28-NOV-08		
F2 (C10-C16)	<10		10	mg/kg			28-NOV-08		
F3 (C16-C34)	<50		50	mg/kg			28-NOV-08		
F4 (C34-C50)	<50		50	mg/kg			28-NOV-08		
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			28-NOV-08		
Chromatogram to baseline at nC50	YES			No Unit			28-NOV-08		
Prep/Analysis Dates				No Unit			28-NOV-08	R762621	
<b>F2-F4 (O.Reg.153/04)</b>									
Prep/Analysis Dates				No Unit			28-NOV-08	R762542	
Surr: Octacosane	88		60-120	%			28-NOV-08	R762542	
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>									
<b>As, Sb and Se by ICP/MS</b>									
Antimony (Sb)	<1		1	mg/kg	1	1	01-DEC-08	R763631	
Arsenic (As)	3		1	mg/kg	14	17	01-DEC-08	R763631	
Selenium (Se)	<1		1	mg/kg	1.4	1.9	01-DEC-08	R763631	
Boron (B), Available	0.7		0.1	ug/g			28-NOV-08	R762751	
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	28-NOV-08	R762763	
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	27-NOV-08	R762794	
<b>Standard Metal Scan (ICP)</b>									
Barium (Ba)	35		1	mg/kg	190	210	28-NOV-08	R763507	
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507	
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507	
Chromium (Cr)	12		1	mg/kg	67	71	28-NOV-08	R763507	
Cobalt (Co)	5		1	mg/kg	19	21	28-NOV-08	R763507	
Copper (Cu)	11		1	mg/kg	56	85	28-NOV-08	R763507	
Lead (Pb)	16		1	mg/kg	55	120	28-NOV-08	R763507	
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507	
Nickel (Ni)	9		1	mg/kg	43	43	28-NOV-08	R763507	
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507	

\*\* analytical results for this parameter exceed criteria limits listed on this report



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-9 BH-16 (SS-2) Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>Standard Metal Scan (ICP)</b>								
Thallium (Tl) <1		1	mg/kg	2.5	2.5	28-NOV-08	R763507	
Vanadium (V) 17		1	mg/kg	91	91	28-NOV-08	R763507	
Zinc (Zn) 103		1	mg/kg	150	160	28-NOV-08	R763507	
<b>Individual Analytes</b>								
% Moisture 15.3		0.5	%				27-NOV-08	R762204
<b>PCBs</b>								
Aroclor 1242 <0.01		0.01	mg/kg				29-NOV-08	R762567
Aroclor 1248 <0.01		0.01	mg/kg				29-NOV-08	R762567
Aroclor 1254 <0.01		0.01	mg/kg				29-NOV-08	R762567
Aroclor 1260 <0.01		0.01	mg/kg				29-NOV-08	R762567
Total PCBs <0.01		0.01	mg/kg	0.3	0.3	29-NOV-08	R762567	
Surr: d14-Terphenyl 119		63-153	%				29-NOV-08	R762567
pH 7.73		0.01	pH units				27-NOV-08	R762512
L712303-10 BH-4 (SS-2) Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10) <5		5	mg/kg				28-NOV-08	
F2 (C10-C16) <10		10	mg/kg				28-NOV-08	
F3 (C16-C34) <50		50	mg/kg				28-NOV-08	
F4 (C34-C50) <50		50	mg/kg				28-NOV-08	
Total Hydrocarbons (C6-C50) <50		50	mg/kg				28-NOV-08	
Chromatogram to baseline at nC50 YES			No Unit				28-NOV-08	
Prep/Analysis Dates			No Unit				28-NOV-08	R762621
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates							28-NOV-08	R762542
Surr: Octacosane 86		60-120	No Unit %				28-NOV-08	R762542
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb) <1		1	mg/kg	1	1	01-DEC-08	R763631	
Arsenic (As) 2		1	mg/kg	14	17	01-DEC-08	R763631	
Selenium (Se) <1		1	mg/kg	1.4	1.9	01-DEC-08	R763631	
Boron (B), Available <0.1		0.1	ug/g			28-NOV-08	R762751	
Chromium, Hexavalent <2		2	mg/kg	2.5	2.5	28-NOV-08	R762763	
Mercury (Hg) <0.05		0.05	ug/g	0.16	0.23	27-NOV-08	R762794	
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba) 37		1	mg/kg	190	210	28-NOV-08	R763507	
Beryllium (Be) <0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507	
Cadmium (Cd) <0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507	
Chromium (Cr) 12		1	mg/kg	67	71	28-NOV-08	R763507	
Cobalt (Co) 6		1	mg/kg	19	21	28-NOV-08	R763507	

\*\* analytical results for this parameter exceed criteria limits listed on this report



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-10 BH-4 (SS-2) Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>Standard Metal Scan (ICP)</b>								
Copper (Cu)	11		1	mg/kg	56	85	28-NOV-08	R763507
Lead (Pb)	12		1	mg/kg	55	120	28-NOV-08	R763507
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Nickel (Ni)	11		1	mg/kg	43	43	28-NOV-08	R763507
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Vanadium (V)	14		1	mg/kg	91	91	28-NOV-08	R763507
Zinc (Zn)	57		1	mg/kg	150	160	28-NOV-08	R763507
<b>Individual Analytes</b>								
% Moisture	12.2		0.5	%			27-NOV-08	R762204
<b>PCBs</b>								
Aroclor 1242	<0.01		0.01	mg/kg			29-NOV-08	R762567
Aroclor 1248	<0.01		0.01	mg/kg			29-NOV-08	R762567
Aroclor 1254	<0.01		0.01	mg/kg			29-NOV-08	R762567
Aroclor 1260	<0.01		0.01	mg/kg			29-NOV-08	R762567
Total PCBs	<0.01		0.01	mg/kg	0.3	0.3	29-NOV-08	R762567
Surr: d14-Terphenyl	112		63-153	%			29-NOV-08	R762567
pH	8.19		0.01	pH units			27-NOV-08	R762512
L712303-11 BH-X-NOV25 Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	01-DEC-08	R763631
Arsenic (As)	1		1	mg/kg	14	17	01-DEC-08	R763631
Selenium (Se)	<1		1	mg/kg	1.4	1.9	01-DEC-08	R763631
Boron (B), Available	<0.1		0.1	ug/g			28-NOV-08	R762751
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	28-NOV-08	R762763
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	27-NOV-08	R762794
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	11		1	mg/kg	190	210	28-NOV-08	R763507
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	28-NOV-08	R763507
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	28-NOV-08	R763507
Chromium (Cr)	6		1	mg/kg	67	71	28-NOV-08	R763507
Cobalt (Co)	2		1	mg/kg	19	21	28-NOV-08	R763507
Copper (Cu)	6		1	mg/kg	56	85	28-NOV-08	R763507
Lead (Pb)	14		1	mg/kg	55	120	28-NOV-08	R763507
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Nickel (Ni)	3		1	mg/kg	43	43	28-NOV-08	R763507
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	28-NOV-08	R763507
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	28-NOV-08	R763507
Vanadium (V)	4		1	mg/kg	91	91	28-NOV-08	R763507
Zinc (Zn)	49		1	mg/kg	150	160	28-NOV-08	R763507

\*\* analytical results for this parameter exceed criteria limits listed on this report



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-11 BH-X-NOV25 Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			01-DEC-08	
F1-BTEX	<5		5	mg/kg			01-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			01-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			01-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			01-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			01-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			01-DEC-08	
Prep/Analysis Dates				No Unit			28-NOV-08	R762621
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			28-NOV-08	R762542
Surr: Octacosane	83		60-120	%			28-NOV-08	R762542
<b>Volatile Organics (153/04) Table 1</b>								
1,1,1,2-Tetrachloroethane	<0.008		0.008	mg/kg			28-NOV-08	R762774
1,1,2,2-Tetrachloroethane	<0.004		0.004	mg/kg	0.004	0.004	28-NOV-08	R762774
1,1,1-Trichloroethane	<0.008		0.008	mg/kg	0.009	0.009	28-NOV-08	R762774
1,1,2-Trichloroethane	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,1-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,1-Dichloroethylene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,2-Dibromoethane	<0.004		0.004	mg/kg	0.004	0.004	28-NOV-08	R762774
1,2-Dichloropropane	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,3-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
1,4-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
2-Hexanone	<0.2		0.2	mg/kg			28-NOV-08	R762774
Acetone	<0.5		0.5	mg/kg			28-NOV-08	R762774
Benzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Bromodichloromethane	<0.005		0.005	mg/kg			28-NOV-08	R762774
Bromoform	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Bromomethane	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Carbon Disulfide	<0.02		0.02	mg/kg			28-NOV-08	R762774
Carbon tetrachloride	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Chlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
Chloroethane	<0.03		0.03	mg/kg			28-NOV-08	R762774
Chloroform	<0.006		0.006	mg/kg	0.006	0.006	28-NOV-08	R762774
Chloromethane	<0.03		0.03	mg/kg			28-NOV-08	R762774
cis-1,2-Dichloroethylene	<0.02		0.02	mg/kg			28-NOV-08	R762774
cis-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Dibromomethane	<0.01		0.01	mg/kg			28-NOV-08	R762774
Dibromochloromethane	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Dichlorodifluoromethane	<0.03		0.03	mg/kg			28-NOV-08	R762774
Dichloromethane	<0.003		0.003	mg/kg	0.003	0.003	28-NOV-08	R762774
Ethyl Benzene	<0.002		0.002	mg/kg	0.002	0.002	28-NOV-08	R762774
MTBE	<0.2		0.2	mg/kg			28-NOV-08	R762774
m+p-Xylenes	<0.002		0.002	mg/kg			28-NOV-08	R762774
Methyl Ethyl Ketone	<0.2		0.2	mg/kg			28-NOV-08	R762774

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L712303-11 BH-X-NOV25 Sampled By: LUKE T on 26-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>Volatile Organics (153/04) Table 1</b>								
Methyl Isobutyl Ketone	<0.2	0.2	mg/kg				28-NOV-08	R762774
o-Xylene	<0.002	0.002	mg/kg				28-NOV-08	R762774
Styrene	<0.002	0.002	mg/kg	0.002	0.002		28-NOV-08	R762774
Tetrachloroethylene	<0.002	0.002	mg/kg	0.002	0.002		28-NOV-08	R762774
Toluene	<0.002	0.002	mg/kg	0.002	0.002		28-NOV-08	R762774
trans-1,2-Dichloroethylene	<0.002	0.002	mg/kg	0.003	0.003		28-NOV-08	R762774
trans-1,3-Dichloropropene	<0.003	0.003	mg/kg	0.003	0.003		28-NOV-08	R762774
Trichloroethylene	<0.004	0.004	mg/kg	0.004	0.004		28-NOV-08	R762774
Trichlorofluoromethane	<0.03	0.03	mg/kg				28-NOV-08	R762774
Vinyl chloride	<0.003	0.003	mg/kg	0.003	0.003		28-NOV-08	R762774
Xylenes (Total)	<0.002	0.002	mg/kg	0.002	0.002		28-NOV-08	R762774
Surr: 1,2-Dichloroethane d4	102	25-175	%				28-NOV-08	R762774
Surr: Toluene-d8	90	25-175	%				28-NOV-08	R762774
Surr: 4-Bromofluorobenzene	110	25-175	%				28-NOV-08	R762774
<b>Individual Analytes</b>								
% Moisture	7.6	0.5	%				27-NOV-08	R762204
<b>PCBs</b>								
Aroclor 1242	<0.01	0.01	mg/kg				29-NOV-08	R762567
Aroclor 1248	<0.01	0.01	mg/kg				29-NOV-08	R762567
Aroclor 1254	<0.01	0.01	mg/kg				29-NOV-08	R762567
Aroclor 1260	<0.01	0.01	mg/kg				29-NOV-08	R762567
Total PCBs	<0.01	0.01	mg/kg	0.3	0.3		29-NOV-08	R762567
Surr: d14-Terphenyl	110	63-153	%				29-NOV-08	R762567
pH	8.27	0.01	pH units				27-NOV-08	R762512

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004

# Reference Information

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**Sample Parameter Qualifier key listed:**

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
VC:RHS	Volatile Analysis Compromised; Samples Received With Headspace

**Methods Listed (if applicable):**

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
AS,SB,SE-3050-MS-WT	Soil	As, Sb and Se by ICP/MS		SW846 3050B/6020A
B-AVAIL-WT	Soil	Boron (B), Available		HW EXTR, EPA 6010B
CR-CR6-WT	Soil	Hexavalent Chromium in Soil		EPA 7196
ETL-TVH,TEH-CCME-WT	Soil	CCME Total Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-WT	Soil	F1 (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
F2-F4-WT	Soil	F2-F4 (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
F4G-ADD-WT	Soil	F4G-SG (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
HG-WT	Soil	Mercury by CVAA	SW846 7470A
MET-R153-WT	Soil	Standard Metal Scan (ICP)	EPA 3050
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried
PAH-CCME-WT	Soil	CCME PAHs	SW846 8270
PCB-WT	Soil	PCBs	EPA 8082
PH-R153-WT	Soil	pH	MOEE E3137A
VOC-CCME-TABLE1-WT	Soil	Volatile Organics (153/04) Table 1	MOE-E3254

Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

69263

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS LABORATORY GROUP - WATERLOO, ONTARIO, CAN		

## Reference Information

5-698-17-02

### GLOSSARY OF REPORT TERMS

**Surr** - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

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

*UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.*

*UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.*

*Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.*

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS provides criteria information as a service to you, our customer. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. ALS recommends review of the most current version of the regulation, and assumes no responsibility for the accuracy of the criteria levels indicated.



**Environmental Division**

## **ALS Laboratory Group Quality Control Report**

Workorder: L712303

Report Date: 01-DEC-08

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Client: XCG CONSULTANTS LTD.  
820 TRILLIUM DRIVE  
KITCHENER ON N2R 1K4

Contact: THOMAS KOLODZIEJ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>AS,SB,SE-3050-MS-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R763631</b>							
<b>WG879232-2</b>	<b>CVS</b>							
Antimony (Sb)			112		%		63-138	01-DEC-08
Arsenic (As)			108		%		63-138	01-DEC-08
Selenium (Se)			103		%		63-138	01-DEC-08
<b>WG878174-3</b>	<b>DUP</b>	<b>L712303-8</b>						
Antimony (Sb)		<1	<1	RPD-NA	mg/kg	N/A	26	01-DEC-08
Arsenic (As)		2	<1	RPD-NA	mg/kg	N/A	26	01-DEC-08
Selenium (Se)		<1	<1	RPD-NA	mg/kg	N/A	26	01-DEC-08
<b>WG878174-2</b>	<b>LCS</b>							
Arsenic (As)			102		%		63-138	01-DEC-08
Selenium (Se)			94		%		63-138	01-DEC-08
<b>WG878174-1</b>	<b>MB</b>							
Antimony (Sb)			<1		mg/kg		1	01-DEC-08
Arsenic (As)			<1		mg/kg		1	01-DEC-08
Selenium (Se)			<1		mg/kg		1	01-DEC-08
<b>B-AVAIL-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R762751</b>							
<b>WG878190-3</b>	<b>DUP</b>	<b>L712274-1</b>						
Boron (B), Available		<0.1	<0.1	RPD-NA	ug/g	N/A	26	28-NOV-08
<b>WG878190-2</b>	<b>LCS</b>							
Boron (B), Available			100		%		60-140	28-NOV-08
<b>WG878190-1</b>	<b>MB</b>							
Boron (B), Available			<0.1		ug/g		0.1	28-NOV-08
<b>CR-CR6-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R762763</b>							
<b>WG878449-1</b>	<b>CVS</b>							
Chromium, Hexavalent			94		%		70-130	28-NOV-08
<b>WG878449-3</b>	<b>DUP</b>	<b>L712303-11</b>						
Chromium, Hexavalent		<2	<2	RPD-NA	mg/kg	N/A	20	28-NOV-08
<b>WG878449-4</b>	<b>DUP</b>	<b>L712531-3</b>						
Chromium, Hexavalent		<2	<2	RPD-NA	mg/kg	N/A	20	28-NOV-08
<b>WG878449-2</b>	<b>MB</b>							
Chromium, Hexavalent			<2		mg/kg		2	28-NOV-08
<b>F1-WT</b>	<b>Soil</b>							

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F1-WT	Soil							
Batch	R762621							
WG877488-1	CVS							
TVH: (C6-C10 / No BTEX Correction)			93		%		59-131	28-NOV-08
WG877524-3	DUP	WG877524-2						
TVH: (C6-C10 / No BTEX Correction)		<5	<5	RPD-NA	mg/kg	N/A	65	28-NOV-08
WG877524-1	MB							
TVH: (C6-C10 / No BTEX Correction)			<5		mg/kg		5	28-NOV-08
F2-F4-WT	Soil							
Batch	R762542							
WG878143-1	CVS							
F2 (C10-C16)			102		%		80-120	28-NOV-08
F3 (C16-C34)			106		%		80-120	28-NOV-08
F4 (C34-C50)			108		%		70-130	28-NOV-08
WG878143-2	CVS							
F2 (C10-C16)			104		%		80-120	28-NOV-08
F3 (C16-C34)			105		%		80-120	28-NOV-08
F4 (C34-C50)			107		%		70-130	28-NOV-08
WG878143-3	CVS							
F2 (C10-C16)			102		%		80-120	28-NOV-08
F3 (C16-C34)			105		%		80-120	28-NOV-08
F4 (C34-C50)			108		%		70-130	28-NOV-08
WG877572-4	DUP	L712303-3						
F2 (C10-C16)		<10	<10	RPD-NA	mg/kg	N/A	65	28-NOV-08
F3 (C16-C34)		56	60	J	mg/kg	4	20	28-NOV-08
F4 (C34-C50)		144	144	J	mg/kg	1	20	28-NOV-08
WG877572-2	LCS							
F2 (C10-C16)			94		%		54-120	28-NOV-08
F3 (C16-C34)			97		%		60-106	28-NOV-08
F4 (C34-C50)			88		%		52-122	28-NOV-08
WG877572-3	LCSD	WG877572-2						
F2 (C10-C16)		94	101		%	7.9	45	28-NOV-08
F3 (C16-C34)		97	100		%	3.8	45	28-NOV-08
F4 (C34-C50)		88	91		%	3.2	45	28-NOV-08
WG877572-1	MB							
F2 (C10-C16)			<10		mg/kg		10	28-NOV-08
F3 (C16-C34)			<50		mg/kg		50	28-NOV-08
F4 (C34-C50)			<50		mg/kg		50	28-NOV-08

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>HG-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R762794</b>							
<b>WG877665-3</b>	<b>DUP</b>	<b>L712303-1</b>						
Mercury (Hg)		0.09	0.11	J	ug/g	0.02	0.2	27-NOV-08
<b>WG877665-2</b>	<b>LCS</b>							
Mercury (Hg)			101		%		70-130	27-NOV-08
<b>WG877665-1</b>	<b>MB</b>							
Mercury (Hg)			<0.05		ug/g		0.05	27-NOV-08
<b>MET-R153-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R763507</b>							
<b>WG878335-2</b>	<b>CVS</b>							
Barium (Ba)			99		%		80-120	28-NOV-08
Beryllium (Be)			87		%		80-120	28-NOV-08
Cadmium (Cd)			88		%		80-120	28-NOV-08
Chromium (Cr)			95		%		80-120	28-NOV-08
Cobalt (Co)			94		%		80-120	28-NOV-08
Copper (Cu)			96		%		80-120	28-NOV-08
Molybdenum (Mo)			81		%		80-120	28-NOV-08
Nickel (Ni)			97		%		80-120	28-NOV-08
Silver (Ag)			80		%		80-120	28-NOV-08
Thallium (Tl)			95		%		80-120	28-NOV-08
Vanadium (V)			88		%		80-120	28-NOV-08
Zinc (Zn)			88		%		80-120	28-NOV-08
Lead (Pb)			84		%		80-120	28-NOV-08
<b>WG878174-3</b>	<b>DUP</b>	<b>L712303-8</b>						
Barium (Ba)		17	15		mg/kg	13	20	28-NOV-08
Beryllium (Be)		<0.5	<0.5	RPD-NA	mg/kg	N/A	20	28-NOV-08
Cadmium (Cd)		<0.5	<0.5	RPD-NA	mg/kg	N/A	20	28-NOV-08
Chromium (Cr)		7	6	J	mg/kg	1	4	28-NOV-08
Cobalt (Co)		3	2	J	mg/kg	0	4	28-NOV-08
Copper (Cu)		8	7	J	mg/kg	1	4	28-NOV-08
Lead (Pb)		13	11		mg/kg	17	120	28-NOV-08
Molybdenum (Mo)		<1	<1	RPD-NA	mg/kg	N/A	20	28-NOV-08
Nickel (Ni)		5	4	J	mg/kg	1	4	28-NOV-08
Silver (Ag)		<0.2	<0.2	RPD-NA	mg/kg	N/A	20	28-NOV-08
Thallium (Tl)		<1	<1	RPD-NA	mg/kg	N/A	20	28-NOV-08
Vanadium (V)		7	6					

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>MET-R153-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R763507</b>							
<b>WG878174-3</b>	<b>DUP</b>	<b>L712303-8</b>						
Vanadium (V)		7	6	J	mg/kg	1	4	28-NOV-08
Zinc (Zn)		172	155		mg/kg	11	20	28-NOV-08
<b>WG878174-2</b>	<b>LCS</b>							
Barium (Ba)			96		%		80-120	28-NOV-08
Beryllium (Be)			85		%		80-120	28-NOV-08
Cadmium (Cd)			89		%		80-120	28-NOV-08
Chromium (Cr)			95		%		80-120	28-NOV-08
Cobalt (Co)			94		%		80-120	28-NOV-08
Copper (Cu)			94		%		80-120	28-NOV-08
Lead (Pb)			90		%		80-120	28-NOV-08
Nickel (Ni)			93		%		80-120	28-NOV-08
Thallium (Tl)			87		%		80-120	28-NOV-08
Vanadium (V)			93		%		80-120	28-NOV-08
Zinc (Zn)			81		%		80-120	28-NOV-08
<b>WG878174-1</b>	<b>MB</b>							
Barium (Ba)			<1		mg/kg		1	28-NOV-08
Beryllium (Be)			<0.5		mg/kg		0.5	28-NOV-08
Cadmium (Cd)			<0.5		mg/kg		0.5	28-NOV-08
Chromium (Cr)			<1		mg/kg		1	28-NOV-08
Cobalt (Co)			<1		mg/kg		1	28-NOV-08
Copper (Cu)			<1		mg/kg		1	28-NOV-08
Lead (Pb)			<1		mg/kg		1	28-NOV-08
Molybdenum (Mo)			<1		mg/kg		1	28-NOV-08
Nickel (Ni)			<1		mg/kg		1	28-NOV-08
Silver (Ag)			<0.2		mg/kg		0.2	28-NOV-08
Thallium (Tl)			<1		mg/kg		1	28-NOV-08
Vanadium (V)			<1		mg/kg		1	28-NOV-08
Zinc (Zn)			<1		mg/kg		1	28-NOV-08
<b>MOISTURE-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R762204</b>							
<b>WG877654-3</b>	<b>DUP</b>	<b>L712303-10</b>						
% Moisture		12.2	11.3		%	7.0	26	27-NOV-08
<b>WG877654-2</b>	<b>LCS</b>							
% Moisture			100				79-120	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>MOISTURE-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R762204</b>							
WG877654-2	LCS							
% Moisture			100		%		79-120	27-NOV-08
WG877654-1	MB							
% Moisture			<0.5		%		0.5	27-NOV-08
<b>PAH-CCME-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R763496</b>							
WG878132-1	CVS							
1-Methylnaphthalene			94		%		71-127	01-DEC-08
2-Methylnaphthalene			83		%		68-115	01-DEC-08
Acenaphthene			96		%		66-128	01-DEC-08
Acenaphthylene			96		%		60-132	01-DEC-08
Acridine			111		%		69-145	01-DEC-08
Anthracene			93		%		64-123	01-DEC-08
Benzo(a)anthracene			91		%		75-134	01-DEC-08
Benzo(a)pyrene			90		%		60-135	01-DEC-08
Benzo(b)fluoranthene			80		%		67-131	01-DEC-08
Benzo(g,h,i)perylene			91		%		60-136	01-DEC-08
Benzo(k)fluoranthene			99		%		68-137	01-DEC-08
Chrysene			100		%		72-131	01-DEC-08
Dibenzo(ah)anthracene			94		%		64-133	01-DEC-08
Fluoranthene			89		%		75-124	01-DEC-08
Fluorene			100		%		75-127	01-DEC-08
Indeno(1,2,3-cd)pyrene			88		%		58-140	01-DEC-08
Naphthalene			94		%		69-122	01-DEC-08
Phenanthrene			87		%		77-126	01-DEC-08
Pyrene			90		%		76-127	01-DEC-08
Quinoline			109		%		70-120	01-DEC-08
<b>WG877577-4</b>	<b>DUP</b>	<b>L712303-1</b>						
1-Methylnaphthalene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	01-DEC-08
2-Methylnaphthalene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	01-DEC-08
Acenaphthene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	01-DEC-08
Acenaphthylene		<0.05	0.06	RPD-NA	mg/kg	N/A	65	01-DEC-08
Acridine		<0.8	<0.8	RPD-NA	mg/kg	N/A	39	01-DEC-08
Anthracene		<0.05	0.07	RPD-NA	mg/kg	N/A	65	01-DEC-08

COMMENTS: QC results are acceptable and within the method data quality objectives.

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-CCME-WT	Soil							
Batch	R763496							
WG877577-4	DUP	L712303-1						
Benzo(a)anthracene		0.14	0.21	J	mg/kg	0.07	0.2	01-DEC-08
Benzo(a)pyrene		0.24	0.25		mg/kg	2.2	65	01-DEC-08
Benzo(b)fluoranthene		0.18	0.18	J	mg/kg	0.00	0.2	01-DEC-08
Benzo(g,h,i)perylene		0.22	0.95	J,G	mg/kg	0.72	0.2	01-DEC-08
Benzo(k)fluoranthene		0.11	0.15	J	mg/kg	0.04	0.2	01-DEC-08
Chrysene		0.18	0.22	J	mg/kg	0.03	0.2	01-DEC-08
Dibenzo(ah)anthracene		0.13	0.19	J	mg/kg	0.06	0.2	01-DEC-08
Fluoranthene		0.19	0.31	J	mg/kg	0.13	0.2	01-DEC-08
Fluorene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	01-DEC-08
Indeno(1,2,3-cd)pyrene		0.14	0.36	J,G	mg/kg	0.23	0.2	01-DEC-08
Naphthalene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	01-DEC-08
Phenanthrene		0.09	0.17	J	mg/kg	0.08	0.2	01-DEC-08
Pyrene		0.17	0.29	J	mg/kg	0.12	0.2	01-DEC-08
Quinoline		<0.05	<0.05	RPD-NA	mg/kg	N/A	39	01-DEC-08
COMMENTS: QC results are acceptable and within the method data quality objectives.								
WG877577-2	LCS							
1-Methylnaphthalene		100		%		74-131	01-DEC-08	
2-Methylnaphthalene		90		%		70-127	01-DEC-08	
Acenaphthene		108		%		54-134	01-DEC-08	
Acenaphthylene		107		%		49-136	01-DEC-08	
Acridine		123		%		43-131	01-DEC-08	
Anthracene		103		%		49-134	01-DEC-08	
Benzo(a)anthracene		100		%		49-141	01-DEC-08	
Benzo(a)pyrene		97		%		42-131	01-DEC-08	
Benzo(b)fluoranthene		82		%		46-131	01-DEC-08	
Benzo(g,h,i)perylene		97		%		43-126	01-DEC-08	
Benzo(k)fluoranthene		117		%		48-143	01-DEC-08	
Chrysene		115		%		48-129	01-DEC-08	
Dibenzo(ah)anthracene		100		%		49-142	01-DEC-08	
Fluoranthene		101		%		50-133	01-DEC-08	
Fluorene		109		%		51-137	01-DEC-08	
Indeno(1,2,3-cd)pyrene		101		%		38-134	01-DEC-08	
Naphthalene		103		%		51-134	01-DEC-08	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-CCME-WT	Soil							
Batch	R763496							
WG877577-2	LCS							
Phenanthrene			97	%		57-137	01-DEC-08	
Pyrene			100	%		45-126	01-DEC-08	
Quinoline			106	%		25-175	01-DEC-08	
WG877577-3	LCSD	WG877577-2						
1-Methylnaphthalene		100	106	%	5.5	45	01-DEC-08	
2-Methylnaphthalene		90	96	%	6.5	45	01-DEC-08	
Acenaphthene		108	113	%	4.3	24	01-DEC-08	
Acenaphthylene		107	112	%	5.2	45	01-DEC-08	
Acridine		123	125	%	1.5	45	01-DEC-08	
Anthracene		103	104	%	0.58	45	01-DEC-08	
Benzo(a)anthracene		100	99	%	0.50	45	01-DEC-08	
Benzo(a)pyrene		97	100	%	2.8	45	01-DEC-08	
Benzo(b)fluoranthene		82	84	%	2.4	45	01-DEC-08	
Benzo(g,h,i)perylene		97	101	%	3.9	45	01-DEC-08	
Benzo(k)fluoranthene		117	121	%	3.4	45	01-DEC-08	
Chrysene		115	115	%	0.32	45	01-DEC-08	
Dibenzo(ah)anthracene		100	104	%	3.6	45	01-DEC-08	
Fluoranthene		101	102	%	1.9	45	01-DEC-08	
Fluorene		109	114	%	4.7	45	01-DEC-08	
Indeno(1,2,3-cd)pyrene		101	98	%	2.8	45	01-DEC-08	
Naphthalene		103	107	%	3.4	45	01-DEC-08	
Phenanthrene		97	101	%	4.0	45	01-DEC-08	
Pyrene		100	103	%	2.3	45	01-DEC-08	
Quinoline		106	110	%	3.5	45	01-DEC-08	
WG877577-1	MB							
1-Methylnaphthalene			<0.05	mg/kg		0.05	01-DEC-08	
2-Methylnaphthalene			<0.05	mg/kg		0.05	01-DEC-08	
Acenaphthene			<0.05	mg/kg		0.05	01-DEC-08	
Acenaphthylene			<0.05	mg/kg		0.05	01-DEC-08	
Acridine			<0.8	mg/kg		0.8	01-DEC-08	
Anthracene			<0.05	mg/kg		0.05	01-DEC-08	
Benzo(a)anthracene			<0.05	mg/kg		0.05	01-DEC-08	
Benzo(a)pyrene			<0.02	mg/kg		0.02	01-DEC-08	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed	
<b>PAH-CCME-WT</b>	<b>Soil</b>								
<b>Batch</b>	<b>R763496</b>								
<b>WG877577-1</b>	<b>MB</b>								
Benzo(b)fluoranthene			<0.05		mg/kg		0.05	01-DEC-08	
Benzo(g,h,i)perylene			<0.05		mg/kg		0.05	01-DEC-08	
Benzo(k)fluoranthene			<0.05		mg/kg		0.05	01-DEC-08	
Chrysene			<0.05		mg/kg		0.05	01-DEC-08	
Dibenzo(ah)anthracene			<0.05		mg/kg		0.05	01-DEC-08	
Fluoranthene			<0.05		mg/kg		0.05	01-DEC-08	
Fluorene			<0.05		mg/kg		0.05	01-DEC-08	
Indeno(1,2,3-cd)pyrene			<0.05		mg/kg		0.05	01-DEC-08	
Naphthalene			<0.05		mg/kg		0.05	01-DEC-08	
Phenanthrene			<0.05		mg/kg		0.05	01-DEC-08	
Pyrene			<0.05		mg/kg		0.05	01-DEC-08	
Quinoline			<0.05		mg/kg		0.05	01-DEC-08	
<b>PCB-WT</b>	<b>Soil</b>								
<b>Batch</b>	<b>R762567</b>								
<b>WG878144-1</b>	<b>CVS</b>								
Aroclor 1242			97		%		40-140	28-NOV-08	
Aroclor 1248			97		%		55-145	28-NOV-08	
Aroclor 1254			101		%		40-140	28-NOV-08	
Aroclor 1260			109		%		40-140	28-NOV-08	
Total PCBs			101		%		33-138	28-NOV-08	
<b>WG878144-2</b>	<b>CVS</b>								
Aroclor 1242			96		%		40-140	29-NOV-08	
Aroclor 1248			97		%		55-145	29-NOV-08	
Aroclor 1254			94		%		40-140	29-NOV-08	
Aroclor 1260			98		%		40-140	29-NOV-08	
Total PCBs			96		%		33-138	29-NOV-08	
<b>WG877577-5</b>	<b>DUP</b>	<b>L712303-9</b>							
Aroclor 1242			<0.01	<0.01	RPD-NA	mg/kg	N/A	50	29-NOV-08
Aroclor 1248			<0.01	<0.01	RPD-NA	mg/kg	N/A	39	29-NOV-08
Aroclor 1254			<0.01	<0.01	RPD-NA	mg/kg	N/A	50	29-NOV-08
Aroclor 1260			<0.01	<0.01	RPD-NA	mg/kg	N/A	50	29-NOV-08
Total PCBs			<0.01	<0.01	RPD-NA	mg/kg	N/A	50	29-NOV-08
<b>WG877577-2</b>	<b>LCS</b>								
Aroclor 1242				93				62-133	

# ALS Laboratory Group Quality Control Report

Workorder: L712303

Report Date: 01-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>PCB-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R762567</b>							
<b>WG877577-2</b>	<b>LCS</b>							
Aroclor 1242			93		%		62-133	28-NOV-08
Aroclor 1248			90		%		55-145	28-NOV-08
Aroclor 1254			91		%		58-130	28-NOV-08
Aroclor 1260			98		%		56-133	28-NOV-08
Total PCBs			93		%		25-175	28-NOV-08
<b>WG877577-3</b>	<b>LCSD</b>	<b>WG877577-2</b>						
Aroclor 1242			93	95	%	1.5	45	28-NOV-08
Aroclor 1248			90	90	%	0.0	45	28-NOV-08
Aroclor 1254			91	92	%	0.68	45	28-NOV-08
Aroclor 1260			98	103	%	4.9	45	28-NOV-08
Total PCBs			93	95	%	1.9	45	28-NOV-08
<b>WG877577-1</b>	<b>MB</b>							
Aroclor 1242			<0.01		mg/kg		0.01	28-NOV-08
Aroclor 1248			<0.01		mg/kg		0.01	28-NOV-08
Aroclor 1254			<0.01		mg/kg		0.01	28-NOV-08
Aroclor 1260			<0.01		mg/kg		0.01	28-NOV-08
Total PCBs			<0.01		mg/kg		0.01	28-NOV-08
<b>PH-R153-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R762512</b>							
<b>WG878105-1</b>	<b>CVS</b>							
pH			100		%		63-138	27-NOV-08
<b>WG878105-2</b>	<b>DUP</b>	<b>L712274-1</b>						
pH			7.20	7.13	pH units	0.98	26	27-NOV-08
<b>WG878105-3</b>	<b>DUP</b>	<b>L712303-1</b>						
pH			9.63	10.3	pH units	7.1	26	27-NOV-08
<b>VOC-CCME-TABLE1-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R762774</b>							
<b>WG877833-1</b>	<b>CVS</b>							
1,1,1,2-Tetrachloroethane			94		%		75-125	28-NOV-08
1,1,1-Trichloroethane			97		%		75-125	28-NOV-08
1,1,2,2-Tetrachloroethane			98		%		75-125	28-NOV-08
1,1,2-Trichloroethane			99		%		75-125	28-NOV-08
1,1-Dichloroethane			99		%		75-125	28-NOV-08
1,1-Dichloroethylene			97		%		75-125	28-NOV-08

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R762774							
WG877833-1	CVS							
1,2-Dichlorobenzene			94		%		75-125	28-NOV-08
1,2-Dichloroethane			104		%		75-125	28-NOV-08
1,2-Dichloropropane			99		%		75-125	28-NOV-08
1,3-Dichlorobenzene			96		%		75-125	28-NOV-08
1,4-Dichlorobenzene			94		%		75-125	28-NOV-08
2-Hexanone			102		%		75-125	28-NOV-08
Acetone			106		%		75-125	28-NOV-08
Benzene			102		%		75-125	28-NOV-08
Bromodichloromethane			101		%		75-125	28-NOV-08
Bromoform			97		%		75-125	28-NOV-08
Bromomethane			104		%		55-145	28-NOV-08
Carbon Disulfide			102		%		75-125	28-NOV-08
Carbon tetrachloride			99		%		75-125	28-NOV-08
Chlorobenzene			97		%		75-125	28-NOV-08
Dibromochloromethane			92		%		75-125	28-NOV-08
Chloroethane			104		%		75-125	28-NOV-08
Chloroform			100		%		75-125	28-NOV-08
Chloromethane			97		%		75-125	28-NOV-08
cis-1,2-Dichloroethylene			93		%		75-125	28-NOV-08
cis-1,3-Dichloropropene			93		%		75-125	28-NOV-08
Dibromomethane			99		%		55-145	28-NOV-08
Dichlorodifluoromethane			75		%		75-125	28-NOV-08
Ethyl Benzene			97		%		75-125	28-NOV-08
1,2-Dibromoethane			95		%		55-145	28-NOV-08
m+p-Xylenes			98		%		75-125	28-NOV-08
Methyl Ethyl Ketone			114		%		75-125	28-NOV-08
Methyl Isobutyl Ketone			107		%		55-145	28-NOV-08
MTBE			99		%		75-125	28-NOV-08
Dichloromethane			98		%		55-145	28-NOV-08
o-Xylene			93		%		75-125	28-NOV-08
Styrene			88		%		75-125	28-NOV-08
Tetrachloroethylene			95		%		75-125	28-NOV-08
Toluene			102		%		75-125	28-NOV-08

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R762774							
WG877833-1	CVS							
trans-1,2-Dichloroethylene			102		%		75-125	28-NOV-08
trans-1,3-Dichloropropene			92		%		75-125	28-NOV-08
Trichloroethylene			91		%		75-125	28-NOV-08
Trichlorofluoromethane			112		%		66-137	28-NOV-08
Vinyl chloride			105		%		75-125	28-NOV-08
WG877517-3	DUP	WG877517-2						
1,1,1,2-Tetrachloroethane		<0.008	<0.008	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,1,1-Trichloroethane		<0.008	<0.008	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,1,2,2-Tetrachloroethane		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,1,2-Trichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,1-Dichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,1-Dichloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,2-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,2-Dichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,2-Dichloropropane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,3-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,4-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
2-Hexanone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	28-NOV-08
Acetone		<0.5	<0.5	RPD-NA	mg/kg	N/A	39	28-NOV-08
Benzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
Bromodichloromethane		<0.005	<0.005	RPD-NA	mg/kg	N/A	39	28-NOV-08
Bromoform		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
Bromomethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	28-NOV-08
Carbon Disulfide		<0.02	<0.02	RPD-NA	mg/kg	N/A	39	28-NOV-08
Carbon tetrachloride		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
Chlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
Dibromochloromethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	28-NOV-08
Chloroethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	28-NOV-08
Chloroform		<0.006	<0.006	RPD-NA	mg/kg	N/A	39	28-NOV-08
Chloromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	28-NOV-08
cis-1,2-Dichloroethylene		<0.02	<0.02	RPD-NA	mg/kg	N/A	39	28-NOV-08
cis-1,3-Dichloropropene		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	28-NOV-08
Dibromomethane		<0.01	<0.01	RPD-NA	mg/kg	N/A	39	28-NOV-08

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R762774							
WG877517-3	DUP	WG877517-2						
Dichlorodifluoromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	28-NOV-08
Ethyl Benzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
1,2-Dibromoethane		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	28-NOV-08
m+p-Xylenes		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
Methyl Ethyl Ketone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	28-NOV-08
Methyl Isobutyl Ketone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	28-NOV-08
MTBE		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	28-NOV-08
Dichloromethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	28-NOV-08
o-Xylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
Styrene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
Tetrachloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
Toluene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
trans-1,2-Dichloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	28-NOV-08
trans-1,3-Dichloropropene		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	28-NOV-08
Trichloroethylene		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	28-NOV-08
Trichlorofluoromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	28-NOV-08
Vinyl chloride		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	28-NOV-08
WG877517-1	MB							
1,1,1,2-Tetrachloroethane			<0.008		mg/kg		0.008	28-NOV-08
1,1,1-Trichloroethane			<0.008		mg/kg		0.008	28-NOV-08
1,1,2,2-Tetrachloroethane			<0.004		mg/kg		0.004	28-NOV-08
1,1,2-Trichloroethane			<0.002		mg/kg		0.002	28-NOV-08
1,1-Dichloroethane			<0.002		mg/kg		0.002	28-NOV-08
1,1-Dichloroethylene			<0.002		mg/kg		0.002	28-NOV-08
1,2-Dichlorobenzene			<0.002		mg/kg		0.002	28-NOV-08
1,2-Dichloroethane			<0.002		mg/kg		0.002	28-NOV-08
1,2-Dichloropropane			<0.002		mg/kg		0.002	28-NOV-08
1,3-Dichlorobenzene			<0.002		mg/kg		0.002	28-NOV-08
1,4-Dichlorobenzene			<0.002		mg/kg		0.002	28-NOV-08
2-Hexanone			<0.2		mg/kg		0.2	28-NOV-08
Acetone			<0.5		mg/kg		0.5	28-NOV-08
Benzene			<0.002		mg/kg		0.002	28-NOV-08
Bromodichloromethane			<0.005		mg/kg		0.005	28-NOV-08

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R762774							
WG877517-1	MB							
Bromoform			<0.002		mg/kg		0.002	28-NOV-08
Bromomethane			<0.003		mg/kg		0.003	28-NOV-08
Carbon Disulfide			<0.02		mg/kg		0.02	28-NOV-08
Carbon tetrachloride			<0.002		mg/kg		0.002	28-NOV-08
Chlorobenzene			<0.002		mg/kg		0.002	28-NOV-08
Dibromochloromethane			<0.003		mg/kg		0.003	28-NOV-08
Chloroethane			<0.03		mg/kg		0.03	28-NOV-08
Chloroform			<0.006		mg/kg		0.006	28-NOV-08
Chloromethane			<0.03		mg/kg		0.03	28-NOV-08
cis-1,2-Dichloroethylene			<0.02		mg/kg		0.02	28-NOV-08
cis-1,3-Dichloropropene			<0.003		mg/kg		0.003	28-NOV-08
Dibromomethane			<0.01		mg/kg		0.01	28-NOV-08
Dichlorodifluoromethane			<0.03		mg/kg		0.03	28-NOV-08
Ethyl Benzene			<0.002		mg/kg		0.002	28-NOV-08
1,2-Dibromoethane			<0.004		mg/kg		0.004	28-NOV-08
m+p-Xylenes			<0.002		mg/kg		0.002	28-NOV-08
Methyl Ethyl Ketone			<0.2		mg/kg		0.2	28-NOV-08
Methyl Isobutyl Ketone			<0.2		mg/kg		0.2	28-NOV-08
MTBE			<0.2		mg/kg		0.2	28-NOV-08
Dichloromethane			<0.003		mg/kg		0.003	28-NOV-08
o-Xylene			<0.002		mg/kg		0.002	28-NOV-08
Styrene			<0.002		mg/kg		0.002	28-NOV-08
Tetrachloroethylene			<0.002		mg/kg		0.002	28-NOV-08
Toluene			<0.002		mg/kg		0.002	28-NOV-08
trans-1,2-Dichloroethylene			<0.002		mg/kg		0.002	28-NOV-08
trans-1,3-Dichloropropene			<0.003		mg/kg		0.003	28-NOV-08
Trichloroethylene			<0.004		mg/kg		0.004	28-NOV-08
Trichlorofluoromethane			<0.03		mg/kg		0.03	28-NOV-08
Vinyl chloride			<0.003		mg/kg		0.003	28-NOV-08

# ALS Laboratory Group Quality Control Report

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## Legend:

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Limit 99% Confidence Interval (Laboratory Control Limits)

DUP Duplicate

RPD Relative Percent Difference

N/A Not Available

LCS Laboratory Control Sample

SRM Standard Reference Material

MS Matrix Spike

MSD Matrix Spike Duplicate

ADE Average Desorption Efficiency

MB Method Blank

IRM Internal Reference Material

CRM Certified Reference Material

CCV Continuing Calibration Verification

CVS Calibration Verification Standard

LCSD Laboratory Control Sample Duplicate

## Sample Parameter Qualifier Definitions:

---

Qualifier	Description
G	QC result did not meet ALS DQO. Refer to narrative comments for further information.
J	Duplicate results and limits are expressed in terms of absolute difference.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.



**Environmental Division**

**Certificate of Analysis**

XCG CONSULTANTS LTD.

ATTN: THOMAS KOLODZIEJ

820 TRILLIUM DRIVE

KITCHENER ON N2R 1K4

Reported On: 05-DEC-08 01:29 PM

Lab Work Order #: **L713254**

Date Received: **01-DEC-08**

Project P.O. #:

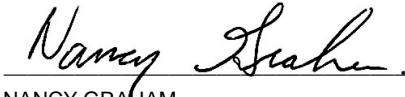
Job Reference: 5-698-17-02

Legal Site Desc:

CofC Numbers: 69264

Other Information:

Comments:

  
\_\_\_\_\_  
NANCY GRAHAM  
Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.  
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU  
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

**ALS Canada Ltd. (formerly ETL Chemspect Analytical Ltd.)**  
Part of the **ALS Laboratory Group**

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**Environmental Division**

**ALS LABORATORY GROUP CRITERIA REPORT**

L713254 CONTD....

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5-698-17-02

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L713254-1 BH3 (SS-2) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	02-DEC-08	R764211
Arsenic (As)	1		1	mg/kg	14	17	02-DEC-08	R764211
Selenium (Se)	<1		1	mg/kg	1.4	1.9	02-DEC-08	R764211
Boron (B), Available	<0.1		0.1	ug/g			02-DEC-08	R764169
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	04-DEC-08	R765163
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	02-DEC-08	R764296
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	18		1	mg/kg	190	210	02-DEC-08	R764231
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	02-DEC-08	R764231
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	02-DEC-08	R764231
Chromium (Cr)	7		1	mg/kg	67	71	02-DEC-08	R764231
Cobalt (Co)	3		1	mg/kg	19	21	02-DEC-08	R764231
Copper (Cu)	8		1	mg/kg	56	85	02-DEC-08	R764231
Lead (Pb)	14		1	mg/kg	55	120	02-DEC-08	R764231
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	02-DEC-08	R764231
Nickel (Ni)	5		1	mg/kg	43	43	02-DEC-08	R764231
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	02-DEC-08	R764231
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	02-DEC-08	R764231
Vanadium (V)	8		1	mg/kg	91	91	02-DEC-08	R764231
Zinc (Zn)	102		1	mg/kg	150	160	02-DEC-08	R764231
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			04-DEC-08	
F1-BTEX	<5		5	mg/kg			04-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			04-DEC-08	
F2-Naphth	<10		10	mg/kg			04-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			04-DEC-08	
F3-PAH	<50		50	mg/kg			04-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			04-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			04-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			04-DEC-08	
Prep/Analysis Dates				No Unit			02-DEC-08	R764516
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates							04-DEC-08	R765314
Sur: Octacosane	84		60-120	No Unit %			04-DEC-08	R765314
<b>Volatile Organics (153/04) Table 1</b>								
1,1,1,2-Tetrachloroethane	<0.008		0.008	mg/kg			02-DEC-08	R763892
1,1,2,2-Tetrachloroethane	<0.004		0.004	mg/kg	0.004	0.004	02-DEC-08	R763892
1,1,1-Trichloroethane	<0.008		0.008	mg/kg	0.009	0.009	02-DEC-08	R763892
1,1,2-Trichloroethane	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
1,1-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
1,1-Dichloroethylene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
1,2-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
1,2-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
1,2-Dibromoethane	<0.004		0.004	mg/kg	0.004	0.004	02-DEC-08	R763892

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L713254-1 BH3 (SS-2)					AGRICULTURAL OR OTHER	ALL OTHER		
Sampled By: CLIENT on 27-NOV-08								
Matrix: SOIL								
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>Volatile Organics (153/04) Table 1</b>								
1,2-Dichloropropane	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
1,3-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
1,4-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
2-Hexanone	<0.2		0.2	mg/kg			02-DEC-08	R763892
Acetone	<0.5		0.5	mg/kg			02-DEC-08	R763892
Benzene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
Bromodichloromethane	<0.005		0.005	mg/kg			02-DEC-08	R763892
Bromoform	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
Bromomethane	<0.003		0.003	mg/kg	0.003	0.003	02-DEC-08	R763892
Carbon Disulfide	<0.02		0.02	mg/kg			02-DEC-08	R763892
Carbon tetrachloride	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
Chlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
Chloroethane	<0.03		0.03	mg/kg			02-DEC-08	R763892
Chloroform	<0.006		0.006	mg/kg	0.006	0.006	02-DEC-08	R763892
Chloromethane	<0.03		0.03	mg/kg			02-DEC-08	R763892
cis-1,2-Dichloroethylene	<0.02		0.02	mg/kg			02-DEC-08	R763892
cis-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	02-DEC-08	R763892
Dibromomethane	<0.01		0.01	mg/kg			02-DEC-08	R763892
Dibromochloromethane	<0.003		0.003	mg/kg	0.003	0.003	02-DEC-08	R763892
Dichlorodifluoromethane	<0.03		0.03	mg/kg			02-DEC-08	R763892
Dichloromethane	<0.003		0.003	mg/kg	0.003	0.003	02-DEC-08	R763892
Ethyl Benzene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
MTBE	<0.2		0.2	mg/kg			02-DEC-08	R763892
m+p-Xylenes	<0.002		0.002	mg/kg			02-DEC-08	R763892
Methyl Ethyl Ketone	<0.2		0.2	mg/kg			02-DEC-08	R763892
Methyl Isobutyl Ketone	<0.2		0.2	mg/kg			02-DEC-08	R763892
o-Xylene	<0.002		0.002	mg/kg			02-DEC-08	R763892
Styrene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
Tetrachloroethylene	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
Toluene	0.003		0.002	mg/kg	**	0.002	02-DEC-08	R763892
trans-1,2-Dichloroethylene	<0.002		0.002	mg/kg	0.003	0.003	02-DEC-08	R763892
trans-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	02-DEC-08	R763892
Trichloroethylene	<0.004		0.004	mg/kg	0.004	0.004	02-DEC-08	R763892
Trichlorofluoromethane	<0.03		0.03	mg/kg			02-DEC-08	R763892
Vinyl chloride	<0.003		0.003	mg/kg	0.003	0.003	02-DEC-08	R763892
Xylenes (Total)	<0.002		0.002	mg/kg	0.002	0.002	02-DEC-08	R763892
Surr: 1,2-Dichloroethane d4	95		25-175	%			02-DEC-08	R763892
Surr: Toluene-d8	91		25-175	%			02-DEC-08	R763892
Surr: 4-Bromofluorobenzene	114		25-175	%			02-DEC-08	R763892
<b>Individual Analytes</b>								
% Moisture	8.0		0.5	%			01-DEC-08	R763998
<b>CCME PAHs</b>								
1-Methylnaphthalene	<0.05		0.05	mg/kg	0.05	0.26	03-DEC-08	R764751
2-Methylnaphthalene	<0.05		0.05	mg/kg			03-DEC-08	R764751
Acenaphthene	<0.05		0.05	mg/kg	0.05	0.07	03-DEC-08	R764751
Acenaphthylene	<0.05		0.05	mg/kg	0.08	0.08	03-DEC-08	R764751
Acridine	<0.8		0.8	mg/kg			03-DEC-08	R764751

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L713254-1 BH3 (SS-2) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Individual Analytes</b>								
<b>CCME PAHs</b>								
Anthracene	<0.05		0.05	mg/kg	0.05	0.16	03-DEC-08	R764751
Benzo(a)anthracene	<0.05		0.05	mg/kg	0.10	0.74	03-DEC-08	R764751
Benzo(a)pyrene	<0.02		0.02	mg/kg	0.10	0.49	03-DEC-08	R764751
Benzo(b)fluoranthene	<0.05		0.05	mg/kg	0.30	0.47	03-DEC-08	R764751
Benzo(g,h,i)perylene	<0.05		0.05	mg/kg	0.20	0.68	03-DEC-08	R764751
Benzo(k)fluoranthene	<0.05		0.05	mg/kg	0.05	0.48	03-DEC-08	R764751
Chrysene	<0.05		0.05	mg/kg	0.18	0.69	03-DEC-08	R764751
Dibenzo(ah)anthracene	<0.05		0.05	mg/kg	0.15	0.16	03-DEC-08	R764751
Fluoranthene	<0.05		0.05	mg/kg	0.24	1.1	03-DEC-08	R764751
Fluorene	<0.05		0.05	mg/kg	0.05	0.12	03-DEC-08	R764751
Indeno(1,2,3-cd)pyrene	<0.05		0.05	mg/kg	0.11	0.38	03-DEC-08	R764751
Naphthalene	<0.05		0.05	mg/kg	0.05	0.09	03-DEC-08	R764751
Phenanthrene	<0.05		0.05	mg/kg	0.19	0.69	03-DEC-08	R764751
Pyrene	<0.05		0.05	mg/kg	0.19	1.0	03-DEC-08	R764751
Quinoline	<0.05		0.05	mg/kg			03-DEC-08	R764751
Surr: 2-Fluorobiphenyl	87		50-150	%			03-DEC-08	R764751
Surr: p-Terphenyl d14	84		52-158	%			03-DEC-08	R764751
pH	7.97		0.01	pH units			01-DEC-08	R764008
L713254-2 BH10 (SS-1) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			05-DEC-08	
F2 (C10-C16)	<100	DLA	100	mg/kg			05-DEC-08	
F2-Naphth	<100		100	mg/kg			05-DEC-08	
F3 (C16-C34)	1300	DLA	500	mg/kg			05-DEC-08	
F3-PAH	1300		500	mg/kg			05-DEC-08	
F4 (C34-C50)	2600	DLA	500	mg/kg			05-DEC-08	
F4G-SG (GHH-Silica)	7900		100	mg/kg			05-DEC-08	
Total Hydrocarbons (C6-C50)	3900		500	mg/kg			05-DEC-08	
Chromatogram to baseline at nC50	NO			No Unit			05-DEC-08	
Prep/Analysis Dates				No Unit			02-DEC-08	R764516
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			04-DEC-08	R765314
Surr: Octacosane	0	SOL:MI	60-120	%			04-DEC-08	R765314
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	02-DEC-08	R764211
Arsenic (As)	2		1	mg/kg	14	17	02-DEC-08	R764211
Selenium (Se)	<1		1	mg/kg	1.4	1.9	02-DEC-08	R764211
Boron (B), Available	0.1		0.1	ug/g			02-DEC-08	R764169
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	04-DEC-08	R765163

\*\* analytical results for this parameter exceed criteria limits listed on this report

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L713254-2 BH10 (SS-1) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	02-DEC-08	R764296
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	17	1	mg/kg	190	210	02-DEC-08	R764231	
Beryllium (Be)	<0.5	0.5	mg/kg	1.2	1.2	02-DEC-08	R764231	
Cadmium (Cd)	<0.5	0.5	mg/kg	1.0	1.0	02-DEC-08	R764231	
Chromium (Cr)	6	1	mg/kg	67	71	02-DEC-08	R764231	
Cobalt (Co)	3	1	mg/kg	19	21	02-DEC-08	R764231	
Copper (Cu)	11	1	mg/kg	56	85	02-DEC-08	R764231	
Lead (Pb)	17	1	mg/kg	55	120	02-DEC-08	R764231	
Molybdenum (Mo)	<1	1	mg/kg	2.5	2.5	02-DEC-08	R764231	
Nickel (Ni)	5	1	mg/kg	43	43	02-DEC-08	R764231	
Silver (Ag)	<0.2	0.2	mg/kg	0.35	0.42	02-DEC-08	R764231	
Thallium (Tl)	<1	1	mg/kg	2.5	2.5	02-DEC-08	R764231	
Vanadium (V)	8	1	mg/kg	91	91	02-DEC-08	R764231	
Zinc (Zn)	99	1	mg/kg	150	160	02-DEC-08	R764231	
<b>Individual Analytes</b>								
% Moisture	4.5	0.5	%				01-DEC-08	R763998
<b>CCME PAHs</b>								
1-Methylnaphthalene	<0.05	0.05	mg/kg	0.05	0.26	03-DEC-08	R764751	
2-Methylnaphthalene	<0.05	0.05	mg/kg			03-DEC-08	R764751	
Acenaphthene	<0.05	0.05	mg/kg	0.05	0.07	03-DEC-08	R764751	
Acenaphthylene	<0.05	0.05	mg/kg	0.08	0.08	03-DEC-08	R764751	
Acridine	<0.8	0.8	mg/kg			03-DEC-08	R764751	
Anthracene	<0.05	0.05	mg/kg	0.05	0.16	03-DEC-08	R764751	
Benzo(a)anthracene	<0.05	0.05	mg/kg	0.10	0.74	03-DEC-08	R764751	
Benzo(a)pyrene	<0.02	0.02	mg/kg	0.10	0.49	03-DEC-08	R764751	
Benzo(b)fluoranthene	<0.05	0.05	mg/kg	0.30	0.47	03-DEC-08	R764751	
Benzo(g,h,i)perylene	0.06	0.05	mg/kg	0.20	0.68	03-DEC-08	R764751	
Benzo(k)fluoranthene	<0.05	0.05	mg/kg	0.05	0.48	03-DEC-08	R764751	
Chrysene	0.09	0.05	mg/kg	0.18	0.69	03-DEC-08	R764751	
Dibenz(a,h)anthracene	<0.05	0.05	mg/kg	0.15	0.16	03-DEC-08	R764751	
Fluoranthene	<0.05	0.05	mg/kg	0.24	1.1	03-DEC-08	R764751	
Fluorene	<0.05	0.05	mg/kg	0.05	0.12	03-DEC-08	R764751	
Indeno(1,2,3-cd)pyrene	<0.05	0.05	mg/kg	0.11	0.38	03-DEC-08	R764751	
Naphthalene	<0.05	0.05	mg/kg	0.05	0.09	03-DEC-08	R764751	
Phenanthrene	<0.05	0.05	mg/kg	0.19	0.69	03-DEC-08	R764751	
Pyrene	<0.05	0.05	mg/kg	0.19	1.0	03-DEC-08	R764751	
Quinoline	<0.05	0.05	mg/kg			03-DEC-08	R764751	
Surr: 2-Fluorobiphenyl	88	50-150	%			03-DEC-08	R764751	
Surr: p-Terphenyl d14	89	52-158	%			03-DEC-08	R764751	
Prep/Analysis Dates			No Unit				05-DEC-08	R765583
pH	10.5	0.01	pH units				01-DEC-08	R764008
L713254-3 BH11 (SS-2) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		

\*\* analytical results for this parameter exceed criteria limits listed on this report



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L713254-3 BH11 (SS-2) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			04-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			04-DEC-08	
F2-Naphth	<10		10	mg/kg			04-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			04-DEC-08	
F3-PAH	<50		50	mg/kg			04-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			04-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			04-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			04-DEC-08	
Prep/Analysis Dates				No Unit			02-DEC-08	R764516
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			04-DEC-08	R765314
Surr: Octacosane	78		60-120	%			04-DEC-08	R765314
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	02-DEC-08	R764211
Arsenic (As)	1		1	mg/kg	14	17	02-DEC-08	R764211
Selenium (Se)	<1		1	mg/kg	1.4	1.9	02-DEC-08	R764211
Boron (B), Available	<0.1		0.1	ug/g			02-DEC-08	R764169
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	04-DEC-08	R765163
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	02-DEC-08	R764296
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	18		1	mg/kg	190	210	02-DEC-08	R764231
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	02-DEC-08	R764231
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	02-DEC-08	R764231
Chromium (Cr)	8		1	mg/kg	67	71	02-DEC-08	R764231
Cobalt (Co)	3		1	mg/kg	19	21	02-DEC-08	R764231
Copper (Cu)	8		1	mg/kg	56	85	02-DEC-08	R764231
Lead (Pb)	11		1	mg/kg	55	120	02-DEC-08	R764231
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	02-DEC-08	R764231
Nickel (Ni)	5		1	mg/kg	43	43	02-DEC-08	R764231
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	02-DEC-08	R764231
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	02-DEC-08	R764231
Vanadium (V)	9		1	mg/kg	91	91	02-DEC-08	R764231
Zinc (Zn)	44		1	mg/kg	150	160	02-DEC-08	R764231
<b>Individual Analytes</b>								
% Moisture	10.7		0.5	%			01-DEC-08	R763998
<b>CCME PAHs</b>								
1-Methylnaphthalene	<0.05		0.05	mg/kg	0.05	0.26	03-DEC-08	R764751
2-Methylnaphthalene	<0.05		0.05	mg/kg			03-DEC-08	R764751
Acenaphthene	<0.05		0.05	mg/kg	0.05	0.07	03-DEC-08	R764751
Acenaphthylene	<0.05		0.05	mg/kg	0.08	0.08	03-DEC-08	R764751
Acridine	<0.8		0.8	mg/kg			03-DEC-08	R764751
Anthracene	<0.05		0.05	mg/kg	0.05	0.16	03-DEC-08	R764751
Benzo(a)anthracene	<0.05		0.05	mg/kg	0.10	0.74	03-DEC-08	R764751
Benzo(a)pyrene	<0.02		0.02	mg/kg	0.10	0.49	03-DEC-08	R764751

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L713254-3 BH11 (SS-2) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Individual Analytes</b>								
<b>CCME PAHs</b>								
Benzo(b)fluoranthene	<0.05		0.05	mg/kg	0.30	0.47	03-DEC-08	R764751
Benzo(g,h,i)perylene	<0.05		0.05	mg/kg	0.20	0.68	03-DEC-08	R764751
Benzo(k)fluoranthene	<0.05		0.05	mg/kg	0.05	0.48	03-DEC-08	R764751
Chrysene	<0.05		0.05	mg/kg	0.18	0.69	03-DEC-08	R764751
Dibenzo(ah)anthracene	<0.05		0.05	mg/kg	0.15	0.16	03-DEC-08	R764751
Fluoranthene	<0.05		0.05	mg/kg	0.24	1.1	03-DEC-08	R764751
Fluorene	<0.05		0.05	mg/kg	0.05	0.12	03-DEC-08	R764751
Indeno(1,2,3-cd)pyrene	<0.05		0.05	mg/kg	0.11	0.38	03-DEC-08	R764751
Naphthalene	<0.05		0.05	mg/kg	0.05	0.09	03-DEC-08	R764751
Phenanthrene	<0.05		0.05	mg/kg	0.19	0.69	03-DEC-08	R764751
Pyrene	<0.05		0.05	mg/kg	0.19	1.0	03-DEC-08	R764751
Quinoline	<0.05		0.05	mg/kg			03-DEC-08	R764751
Surr: 2-Fluorobiphenyl	91		50-150	%			03-DEC-08	R764751
Surr: p-Terphenyl d14	90		52-158	%			03-DEC-08	R764751
pH	8.08		0.01	pH units			01-DEC-08	R764008
L713254-4 BH17 (SS-3) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			04-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			04-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			04-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			04-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			04-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			04-DEC-08	
Prep/Analysis Dates				No Unit			02-DEC-08	R764516
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			04-DEC-08	R765314
Surr: Octacosane	69		60-120	%			04-DEC-08	R765314
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	02-DEC-08	R764211
Arsenic (As)	<1		1	mg/kg	14	17	02-DEC-08	R764211
Selenium (Se)	<1		1	mg/kg	1.4	1.9	02-DEC-08	R764211
Boron (B), Available	<0.1		0.1	ug/g			02-DEC-08	R764169
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	04-DEC-08	R765163
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	02-DEC-08	R764296
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	10		1	mg/kg	190	210	02-DEC-08	R764231
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	02-DEC-08	R764231
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	02-DEC-08	R764231

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



Environmental Division

# ALS LABORATORY GROUP CRITERIA REPORT

L713254 CONTD....

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5-698-17-02

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L713254-4      BH17 (SS-3) Sampled By: CLIENT on 27-NOV-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>Standard Metal Scan (ICP)</b>								
Chromium (Cr)	5		1	mg/kg	67	71	02-DEC-08	R764231
Cobalt (Co)	2		1	mg/kg	19	21	02-DEC-08	R764231
Copper (Cu)	6		1	mg/kg	56	85	02-DEC-08	R764231
Lead (Pb)	6		1	mg/kg	55	120	02-DEC-08	R764231
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	02-DEC-08	R764231
Nickel (Ni)	3		1	mg/kg	43	43	02-DEC-08	R764231
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	02-DEC-08	R764231
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	02-DEC-08	R764231
Vanadium (V)	12		1	mg/kg	91	91	02-DEC-08	R764231
Zinc (Zn)	31		1	mg/kg	150	160	02-DEC-08	R764231
<b>Individual Analytes</b>								
% Moisture	7.7		0.5	%			01-DEC-08	R763998
pH	8.10		0.01	pH units			01-DEC-08	R764008

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004

# Reference Information

L713254 CONTD....

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**Sample Parameter Qualifier key listed:**

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
SOL:MI	Surrogate recovery outside acceptable limits due to matrix interference

**Methods Listed (if applicable):**

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
AS,SB,SE-3050-MS-WT	Soil	As, Sb and Se by ICP/MS		SW846 3050B/6020A
B-AVAIL-WT	Soil	Boron (B), Available		HW EXTR, EPA 6010B
CR-CR6-WT	Soil	Hexavalent Chromium in Soil		EPA 7196
ETL-TVH,TEH-CCME-WT	Soil	CCME Total Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-WT	Soil	F1 (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
F2-F4-WT	Soil	F2-F4 (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
F4G-ADD-WT	Soil	F4G-SG (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
HG-WT	Soil	Mercury by CVAA	SW846 7470A
MET-R153-WT	Soil	Standard Metal Scan (ICP)	EPA 3050
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried
PAH-CCME-WT	Soil	CCME PAHs	SW846 8270
PH-R153-WT	Soil	pH	MOEE E3137A
VOC-CCME-TABLE1-WT	Soil	Volatile Organics (153/04) Table 1	MOE-E3254

Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

69264

*The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:*

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS LABORATORY GROUP - WATERLOO, ONTARIO, CAN		

## Reference Information

5-698-17-02

### GLOSSARY OF REPORT TERMS

**Surr** - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

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

*UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.*

*UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.*

*Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.*

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS provides criteria information as a service to you, our customer. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. ALS recommends review of the most current version of the regulation, and assumes no responsibility for the accuracy of the criteria levels indicated.



**Environmental Division**

## **ALS Laboratory Group Quality Control Report**

Workorder: L713254

Report Date: 05-DEC-08

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Client: XCG CONSULTANTS LTD.  
820 TRILLIUM DRIVE  
KITCHENER ON N2R 1K4

Contact: THOMAS KOLODZIEJ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>AS,SB,SE-3050-MS-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R764211</b>							
<b>WG879851-2</b>	<b>CVS</b>							
Antimony (Sb)			105		%		63-138	02-DEC-08
Arsenic (As)			119		%		63-138	02-DEC-08
Selenium (Se)			115		%		63-138	02-DEC-08
<b>WG879815-4</b>	<b>DUP</b>	<b>WG879815-3</b>						
Antimony (Sb)		<1	<1	RPD-NA	mg/kg	N/A	26	02-DEC-08
Arsenic (As)		1	1	J	mg/kg	0	4	02-DEC-08
Selenium (Se)		<1	<1	RPD-NA	mg/kg	N/A	26	02-DEC-08
<b>WG879815-2</b>	<b>LCS</b>							
Arsenic (As)			86		%		63-138	02-DEC-08
Selenium (Se)			78		%		63-138	02-DEC-08
<b>WG879815-1</b>	<b>MB</b>							
Antimony (Sb)			<1		mg/kg		1	02-DEC-08
Arsenic (As)			<1		mg/kg		1	02-DEC-08
Selenium (Se)			<1		mg/kg		1	02-DEC-08
<b>B-AVAIL-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R764169</b>							
<b>WG879825-3</b>	<b>DUP</b>	<b>L713553-3</b>						
Boron (B), Available		0.1	0.1	J	ug/g	0.0	0.4	02-DEC-08
<b>WG879825-2</b>	<b>LCS</b>							
Boron (B), Available			103		%		60-140	02-DEC-08
<b>WG879825-1</b>	<b>MB</b>							
Boron (B), Available			<0.1		ug/g		0.1	02-DEC-08
<b>CR-CR6-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765163</b>							
<b>WG881084-3</b>	<b>DUP</b>	<b>L713254-4</b>						
Chromium, Hexavalent		<2	<2	RPD-NA	mg/kg	N/A	20	04-DEC-08
<b>WG881084-4</b>	<b>DUP</b>	<b>L714136-1</b>						
Chromium, Hexavalent		<2	<2	RPD-NA	mg/kg	N/A	20	04-DEC-08
<b>WG881084-5</b>	<b>DUP</b>	<b>L714614-4</b>						
Chromium, Hexavalent		<2	<2	RPD-NA	mg/kg	N/A	20	04-DEC-08
<b>WG881084-1</b>	<b>MB</b>							
Chromium, Hexavalent			<2		mg/kg		2	04-DEC-08
<b>F1-WT</b>	<b>Soil</b>							

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>F1-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R764516</b>							
<b>WG879810-1</b>	<b>CVS</b>							
TVH: (C6-C10 / No BTEX Correction)			86		%		59-131	02-DEC-08
<b>WG879192-3</b>	<b>DUP</b>	<b>WG879192-2</b>						
TVH: (C6-C10 / No BTEX Correction)		<5	<5	RPD-NA	mg/kg	N/A	65	02-DEC-08
<b>WG879192-1</b>	<b>MB</b>							
TVH: (C6-C10 / No BTEX Correction)			<5		mg/kg		5	02-DEC-08
<b>F2-F4-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765314</b>							
<b>WG880559-1</b>	<b>CVS</b>							
F2 (C10-C16)			96		%		80-120	04-DEC-08
F3 (C16-C34)			103		%		80-120	04-DEC-08
F4 (C34-C50)			106		%		70-130	04-DEC-08
<b>WG879279-4</b>	<b>DUP</b>	<b>L713118-2</b>						
F2 (C10-C16)		<10	<10	RPD-NA	mg/kg	N/A	65	04-DEC-08
F3 (C16-C34)		<50	<50	RPD-NA	mg/kg	N/A	65	04-DEC-08
F4 (C34-C50)		<50	<50	RPD-NA	mg/kg	N/A	65	04-DEC-08
<b>WG879279-2</b>	<b>LCS</b>							
F2 (C10-C16)			95		%		54-120	04-DEC-08
F3 (C16-C34)			98		%		60-106	04-DEC-08
F4 (C34-C50)			98		%		52-122	04-DEC-08
<b>WG879279-3</b>	<b>LCSD</b>	<b>WG879279-2</b>						
F2 (C10-C16)		95	93		%	2.5	45	04-DEC-08
F3 (C16-C34)		98	94		%	3.5	45	04-DEC-08
F4 (C34-C50)		98	99		%	0.52	45	04-DEC-08
<b>WG879279-1</b>	<b>MB</b>							
F2 (C10-C16)			<10		mg/kg		10	04-DEC-08
F3 (C16-C34)			<50		mg/kg		50	04-DEC-08
F4 (C34-C50)			<50		mg/kg		50	04-DEC-08
<b>HG-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R764296</b>							
<b>WG879845-3</b>	<b>DUP</b>	<b>L713254-1</b>						
Mercury (Hg)		<0.05	<0.05	RPD-NA	ug/g	N/A	20	02-DEC-08
<b>WG879845-2</b>	<b>LCS</b>							
Mercury (Hg)			89		%		70-130	02-DEC-08
<b>WG879845-1</b>	<b>MB</b>							
Mercury (Hg)			<0.05		ug/g		0.05	02-DEC-08

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Soil							
Batch	R764231							
WG879914-2	CVS							
Barium (Ba)			104		%		80-120	02-DEC-08
Beryllium (Be)			98		%		80-120	02-DEC-08
Cadmium (Cd)			102		%		80-120	02-DEC-08
Chromium (Cr)			101		%		80-120	02-DEC-08
Cobalt (Co)			103		%		80-120	02-DEC-08
Copper (Cu)			102		%		80-120	02-DEC-08
Lead (Pb)			102		%		80-120	02-DEC-08
Molybdenum (Mo)			97		%		80-120	02-DEC-08
Nickel (Ni)			102		%		80-120	02-DEC-08
Silver (Ag)			95		%		80-120	02-DEC-08
Thallium (Tl)			102		%		80-120	02-DEC-08
Vanadium (V)			93		%		80-120	02-DEC-08
Zinc (Zn)			96		%		80-120	02-DEC-08
WG879815-4	DUP	WG879815-3						
Barium (Ba)		14	14		mg/kg	0.086	20	02-DEC-08
Beryllium (Be)		<0.5	<0.5	RPD-NA	mg/kg	N/A	20	02-DEC-08
Cadmium (Cd)		<0.5	<0.5	RPD-NA	mg/kg	N/A	20	02-DEC-08
Chromium (Cr)		7	7	J	mg/kg	0	4	02-DEC-08
Cobalt (Co)		3	3	J	mg/kg	0	4	02-DEC-08
Copper (Cu)		8	8	J	mg/kg	0	4	02-DEC-08
Lead (Pb)		13	10		mg/kg	25	120	02-DEC-08
Molybdenum (Mo)		<1	<1	RPD-NA	mg/kg	N/A	20	02-DEC-08
Nickel (Ni)		5	5	J	mg/kg	0	4	02-DEC-08
Silver (Ag)		<0.2	<0.2	RPD-NA	mg/kg	N/A	20	02-DEC-08
Thallium (Tl)		<1	<1	RPD-NA	mg/kg	N/A	20	02-DEC-08
Vanadium (V)		8	8	J	mg/kg	0	4	02-DEC-08
Zinc (Zn)		66	63		mg/kg	3.4	20	02-DEC-08
WG879815-2	LCS							
Barium (Ba)			102		%		80-120	02-DEC-08
Beryllium (Be)			96		%		80-120	02-DEC-08
Cadmium (Cd)			95		%		80-120	02-DEC-08
Chromium (Cr)			102		%		80-120	02-DEC-08
Cobalt (Co)			101		%		80-120	02-DEC-08

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed	
<b>MET-R153-WT</b>	<b>Soil</b>								
<b>Batch</b>	<b>R764231</b>								
<b>WG879815-2</b>	<b>LCS</b>								
Copper (Cu)			100		%		80-120	02-DEC-08	
Lead (Pb)			101		%		80-120	02-DEC-08	
Nickel (Ni)			99		%		80-120	02-DEC-08	
Thallium (Tl)			94		%		80-120	02-DEC-08	
Vanadium (V)			97		%		80-120	02-DEC-08	
Zinc (Zn)			89		%		80-120	02-DEC-08	
<b>WG879815-1</b>	<b>MB</b>								
Barium (Ba)			<1		mg/kg		1	02-DEC-08	
Beryllium (Be)			<0.5		mg/kg		0.5	02-DEC-08	
Cadmium (Cd)			<0.5		mg/kg		0.5	02-DEC-08	
Chromium (Cr)			<1		mg/kg		1	02-DEC-08	
Cobalt (Co)			<1		mg/kg		1	02-DEC-08	
Copper (Cu)			<1		mg/kg		1	02-DEC-08	
Lead (Pb)			<1		mg/kg		1	02-DEC-08	
Molybdenum (Mo)			<1		mg/kg		1	02-DEC-08	
Nickel (Ni)			<1		mg/kg		1	02-DEC-08	
Silver (Ag)			<0.2		mg/kg		0.2	02-DEC-08	
Thallium (Tl)			<1		mg/kg		1	02-DEC-08	
Vanadium (V)			<1		mg/kg		1	02-DEC-08	
Zinc (Zn)			<1		mg/kg		1	02-DEC-08	
<b>MOISTURE-WT</b>	<b>Soil</b>								
<b>Batch</b>	<b>R763998</b>								
<b>WG879396-3</b>	<b>DUP</b>	<b>L713351-6</b>							
% Moisture			11.1		%		0.71	26	01-DEC-08
<b>WG879396-2</b>	<b>LCS</b>								
% Moisture			104		%			79-120	01-DEC-08
<b>WG879396-1</b>	<b>MB</b>								
% Moisture			<0.5		%			0.5	01-DEC-08
<b>PAH-CCME-WT</b>	<b>Soil</b>								
<b>Batch</b>	<b>R764751</b>								
<b>WG879812-1</b>	<b>CVS</b>								
1-Methylnaphthalene			80		%		71-127	03-DEC-08	
2-Methylnaphthalene			72		%		68-115	03-DEC-08	
Acenaphthene			83		%		66-128	03-DEC-08	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-CCME-WT	Soil							
Batch	R764751							
WG879812-1	CVS							
Acenaphthylene			82		%		60-132	03-DEC-08
Acridine			113		%		69-145	03-DEC-08
Anthracene			91		%		64-123	03-DEC-08
Benzo(a)anthracene			97		%		75-134	03-DEC-08
Benzo(a)pyrene			85		%		60-135	03-DEC-08
Benzo(b)fluoranthene			79		%		67-131	03-DEC-08
Benzo(g,h,i)perylene			85		%		60-136	03-DEC-08
Benzo(k)fluoranthene			105		%		68-137	03-DEC-08
Chrysene			94		%		72-131	03-DEC-08
Dibenz(a,h)anthracene			83		%		64-133	03-DEC-08
Fluoranthene			87		%		75-124	03-DEC-08
Fluorene			84		%		75-127	03-DEC-08
Indeno(1,2,3-cd)pyrene			95		%		58-140	03-DEC-08
Naphthalene			82		%		69-122	03-DEC-08
Phenanthrene			91		%		77-126	03-DEC-08
Pyrene			87		%		76-127	03-DEC-08
Quinoline			100		%		70-120	03-DEC-08
WG879302-5	DUP	L713254-1						
1-Methylnaphthalene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
2-Methylnaphthalene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Acenaphthene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Acenaphthylene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Acridine		<0.8	<0.8	RPD-NA	mg/kg	N/A	39	03-DEC-08
Anthracene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Benzo(a)anthracene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Benzo(a)pyrene		<0.02	<0.02	RPD-NA	mg/kg	N/A	65	03-DEC-08
Benzo(b)fluoranthene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Benzo(g,h,i)perylene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Benzo(k)fluoranthene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Chrysene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Dibenz(a,h)anthracene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Fluoranthene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Fluorene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-CCME-WT	Soil							
Batch	R764751							
WG879302-5	DUP	L713254-1						
Indeno(1,2,3-cd)pyrene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Naphthalene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Phenanthrene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Pyrene		<0.05	<0.05	RPD-NA	mg/kg	N/A	65	03-DEC-08
Quinoline		<0.05	<0.05	RPD-NA	mg/kg	N/A	39	03-DEC-08
WG879302-2	LCS							
1-Methylnaphthalene		85		%		74-131		03-DEC-08
2-Methylnaphthalene		76		%		70-127		03-DEC-08
Acenaphthene		88		%		54-134		03-DEC-08
Acenaphthylene		87		%		49-136		03-DEC-08
Acridine		112		%		43-131		03-DEC-08
Anthracene		89		%		49-134		03-DEC-08
Benzo(a)anthracene		95		%		49-141		03-DEC-08
Benzo(a)pyrene		85		%		42-131		03-DEC-08
Benzo(b)fluoranthene		81		%		46-131		03-DEC-08
Benzo(g,h,i)perylene		85		%		43-126		03-DEC-08
Benzo(k)fluoranthene		100		%		48-143		03-DEC-08
Chrysene		93		%		48-129		03-DEC-08
Dibenzo(ah)anthracene		81		%		49-142		03-DEC-08
Fluoranthene		86		%		50-133		03-DEC-08
Fluorene		88		%		51-137		03-DEC-08
Indeno(1,2,3-cd)pyrene		93		%		38-134		03-DEC-08
Naphthalene		83		%		51-134		03-DEC-08
Phenanthrene		91		%		57-137		03-DEC-08
Pyrene		87		%		45-126		03-DEC-08
Quinoline		97		%		25-175		03-DEC-08
WG879302-3	LCSD	WG879302-2						
1-Methylnaphthalene		85	80	%	5.7	45		03-DEC-08
2-Methylnaphthalene		76	72	%	6.1	45		03-DEC-08
Acenaphthene		88	83	%	6.2	24		03-DEC-08
Acenaphthylene		87	82	%	5.1	45		03-DEC-08
Acridine		112	112	%	0.64	45		03-DEC-08
Anthracene		89	88	%	1.8	45		03-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>PAH-CCME-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R764751</b>							
<b>WG879302-3</b>	<b>LCSD</b>	<b>WG879302-2</b>						
Benzo(a)anthracene		95	92	%	3.6	45	03-DEC-08	
Benzo(a)pyrene		85	84	%	1.3	45	03-DEC-08	
Benzo(b)fluoranthene		81	81	%	0.47	45	03-DEC-08	
Benzo(g,h,i)perylene		85	83	%	2.6	45	03-DEC-08	
Benzo(k)fluoranthene		100	98	%	1.7	45	03-DEC-08	
Chrysene		93	93	%	0.83	45	03-DEC-08	
Dibenzo(ah)anthracene		81	79	%	2.9	45	03-DEC-08	
Fluoranthene		86	85	%	1.5	45	03-DEC-08	
Fluorene		88	82	%	6.2	45	03-DEC-08	
Indeno(1,2,3-cd)pyrene		93	84	%	9.8	45	03-DEC-08	
Naphthalene		83	82	%	0.55	45	03-DEC-08	
Phenanthrene		91	89	%	3.1	45	03-DEC-08	
Pyrene		87	85	%	1.5	45	03-DEC-08	
Quinoline		97	91	%	6.0	45	03-DEC-08	
<b>WG879302-1</b>	<b>MB</b>							
1-Methylnaphthalene		<0.05		mg/kg		0.05	03-DEC-08	
2-Methylnaphthalene		<0.05		mg/kg		0.05	03-DEC-08	
Acenaphthene		<0.05		mg/kg		0.05	03-DEC-08	
Acenaphthylene		<0.05		mg/kg		0.05	03-DEC-08	
Acridine		<0.8		mg/kg		0.8	03-DEC-08	
Anthracene		<0.05		mg/kg		0.05	03-DEC-08	
Benzo(a)anthracene		<0.05		mg/kg		0.05	03-DEC-08	
Benzo(a)pyrene		<0.02		mg/kg		0.02	03-DEC-08	
Benzo(b)fluoranthene		<0.05		mg/kg		0.05	03-DEC-08	
Benzo(g,h,i)perylene		<0.05		mg/kg		0.05	03-DEC-08	
Benzo(k)fluoranthene		<0.05		mg/kg		0.05	03-DEC-08	
Chrysene		<0.05		mg/kg		0.05	03-DEC-08	
Dibenzo(ah)anthracene		<0.05		mg/kg		0.05	03-DEC-08	
Fluoranthene		<0.05		mg/kg		0.05	03-DEC-08	
Fluorene		<0.05		mg/kg		0.05	03-DEC-08	
Indeno(1,2,3-cd)pyrene		<0.05		mg/kg		0.05	03-DEC-08	
Naphthalene		<0.05		mg/kg		0.05	03-DEC-08	
Phenanthrene		<0.05		mg/kg		0.05	03-DEC-08	

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<b>PAH-CCME-WT</b>	<b>Soil</b>							
Batch	R764751							
WG879302-1	MB							
Pyrene			<0.05		mg/kg		0.05	03-DEC-08
Quinoline			<0.05		mg/kg		0.05	03-DEC-08
<b>PH-R153-WT</b>	<b>Soil</b>							
Batch	R764008							
WG879793-1	CVS							
pH			100		%		63-138	01-DEC-08
WG879793-2	DUP	L713553-1						
pH		7.96	7.97		pH units	0.13	26	01-DEC-08
WG879793-3	DUP	L713574-2						
pH		7.70	7.66		pH units	0.52	26	01-DEC-08
<b>VOC-CCME-TABLE1-WT</b>	<b>Soil</b>							
Batch	R763892							
WG879388-1	CVS							
1,1,1,2-Tetrachloroethane			98		%		75-125	01-DEC-08
1,1,1-Trichloroethane			101		%		75-125	01-DEC-08
1,1,2,2-Tetrachloroethane			102		%		75-125	01-DEC-08
1,1,2-Trichloroethane			98		%		75-125	01-DEC-08
1,1-Dichloroethane			102		%		75-125	01-DEC-08
1,1-Dichloroethylene			102		%		75-125	01-DEC-08
1,2-Dichlorobenzene			100		%		75-125	01-DEC-08
1,2-Dichloroethane			107		%		75-125	01-DEC-08
1,2-Dichloropropane			103		%		75-125	01-DEC-08
1,3-Dichlorobenzene			102		%		75-125	01-DEC-08
1,4-Dichlorobenzene			102		%		75-125	01-DEC-08
2-Hexanone			104		%		75-125	01-DEC-08
Acetone			111		%		75-125	01-DEC-08
Benzene			105		%		75-125	01-DEC-08
Bromodichloromethane			105		%		75-125	01-DEC-08
Bromoform			102		%		75-125	01-DEC-08
Bromomethane			99		%		55-145	01-DEC-08
Carbon Disulfide			102		%		75-125	01-DEC-08
Carbon tetrachloride			105		%		75-125	01-DEC-08
Chlorobenzene			102		%		75-125	01-DEC-08
Dibromochloromethane			94				75-125	

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<b>VOC-CCME-TABLE1-WT</b> <b>Soil</b>								
<b>Batch R763892</b>								
<b>WG879388-1 CVS</b>								
Dibromochloromethane			94		%		75-125	01-DEC-08
Chloroethane			101		%		75-125	01-DEC-08
Chloroform			105		%		75-125	01-DEC-08
Chloromethane			87		%		75-125	01-DEC-08
cis-1,2-Dichloroethylene			99		%		75-125	01-DEC-08
cis-1,3-Dichloropropene			97		%		75-125	01-DEC-08
Dibromomethane			101		%		55-145	01-DEC-08
Ethyl Benzene			109		%		75-125	01-DEC-08
1,2-Dibromoethane			96		%		55-145	01-DEC-08
m+p-Xylenes			109		%		75-125	01-DEC-08
Methyl Ethyl Ketone			113		%		75-125	01-DEC-08
Methyl Isobutyl Ketone			106		%		55-145	01-DEC-08
MTBE			102		%		75-125	01-DEC-08
Dichloromethane			100		%		55-145	01-DEC-08
o-Xylene			108		%		75-125	01-DEC-08
Styrene			105		%		75-125	01-DEC-08
Tetrachloroethylene			102		%		75-125	01-DEC-08
Toluene			106		%		75-125	01-DEC-08
trans-1,2-Dichloroethylene			106		%		75-125	01-DEC-08
trans-1,3-Dichloropropene			97		%		75-125	01-DEC-08
Trichloroethylene			96		%		75-125	01-DEC-08
Trichlorofluoromethane			110		%		66-137	01-DEC-08
Vinyl chloride			97		%		75-125	01-DEC-08
Dichlorodifluoromethane			59	G	%		75-125	01-DEC-08

COMMENTS: 10% of analytes may exceed QC limits. Analyte not present in related samples.

WG879189-3 DUP	WG879189-2							
1,1,1,2-Tetrachloroethane	<0.008	<0.008	RPD-NA	mg/kg	N/A	39	02-DEC-08	
1,1,1-Trichloroethane	<0.008	<0.008	RPD-NA	mg/kg	N/A	39	02-DEC-08	
1,1,2,2-Tetrachloroethane	<0.004	<0.004	RPD-NA	mg/kg	N/A	39	02-DEC-08	
1,1,2-Trichloroethane	<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08	
1,1-Dichloroethane	<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08	
1,1-Dichloroethylene	<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08	
1,2-Dichlorobenzene	<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R763892							
WG879189-3	DUP	WG879189-2						
1,2-Dichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,2-Dichloropropane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,3-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,4-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
2-Hexanone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	02-DEC-08
Acetone		<0.5	<0.5	RPD-NA	mg/kg	N/A	39	02-DEC-08
Benzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Bromodichloromethane		<0.005	<0.005	RPD-NA	mg/kg	N/A	39	02-DEC-08
Bromoform		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Bromomethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
Carbon Disulfide		<0.02	<0.02	RPD-NA	mg/kg	N/A	39	02-DEC-08
Carbon tetrachloride		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Chlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Dibromochloromethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
Chloroethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	02-DEC-08
Chloroform		<0.006	<0.006	RPD-NA	mg/kg	N/A	39	02-DEC-08
Chloromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	02-DEC-08
cis-1,2-Dichloroethylene		<0.02	<0.02	RPD-NA	mg/kg	N/A	39	02-DEC-08
cis-1,3-Dichloropropene		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
Dibromomethane		<0.01	<0.01	RPD-NA	mg/kg	N/A	39	02-DEC-08
Dichlorodifluoromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	02-DEC-08
Ethyl Benzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,2-Dibromoethane		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	02-DEC-08
m+p-Xylenes		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Methyl Ethyl Ketone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	02-DEC-08
Methyl Isobutyl Ketone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	02-DEC-08
MTBE		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	02-DEC-08
Dichloromethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
o-Xylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Styrene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Tetrachloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Toluene		0.003	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
trans-1,2-Dichloroethylene		<0.002	<0.002					02-DEC-08

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VOC-CCME-TABLE1-WT	Soil							
Batch	R763892							
WG879189-3	DUP	WG879189-2						
trans-1,2-Dichloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
trans-1,3-Dichloropropene		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
Trichloroethylene		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	02-DEC-08
Trichlorofluoromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	02-DEC-08
Vinyl chloride		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
WG879189-4	DUP	WG879189-2						
1,1,1,2-Tetrachloroethane		<0.008	<0.008	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,1,1-Trichloroethane		<0.008	<0.008	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,1,2,2-Tetrachloroethane		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,1,2-Trichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,1-Dichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,1-Dichloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,2-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,2-Dichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,2-Dichloropropane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,3-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,4-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
2-Hexanone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	02-DEC-08
Acetone		<0.5	<0.5	RPD-NA	mg/kg	N/A	39	02-DEC-08
Benzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Bromodichloromethane		<0.005	<0.005	RPD-NA	mg/kg	N/A	39	02-DEC-08
Bromoform		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Bromomethane		<0.003	0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
Carbon Disulfide		<0.02	<0.02	RPD-NA	mg/kg	N/A	39	02-DEC-08
Carbon tetrachloride		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Chlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Dibromochloromethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
Chloroethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	02-DEC-08
Chloroform		<0.006	<0.006	RPD-NA	mg/kg	N/A	39	02-DEC-08
Chloromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	02-DEC-08
cis-1,2-Dichloroethylene		<0.02	<0.02	RPD-NA	mg/kg	N/A	39	02-DEC-08
cis-1,3-Dichloropropene		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
Dibromomethane		<0.01	<0.01	RPD-NA	mg/kg	N/A	39	02-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>VOC-CCME-TABLE1-WT      Soil</b>								
Batch	R763892							
WG879189-4	DUP	WG879189-2						
Dichlorodifluoromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	02-DEC-08
Ethyl Benzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
1,2-Dibromoethane		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	02-DEC-08
m+p-Xylenes		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Methyl Ethyl Ketone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	02-DEC-08
Methyl Isobutyl Ketone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	02-DEC-08
MTBE		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	02-DEC-08
Dichlormethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
o-Xylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Styrene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Tetrachloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
Toluene		0.003	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
trans-1,2-Dichloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	02-DEC-08
trans-1,3-Dichloropropene		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08
Trichloroethylene		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	02-DEC-08
Trichlorofluoromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	02-DEC-08
Vinyl chloride		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	02-DEC-08

# ALS Laboratory Group Quality Control Report

Workorder: L713254

Report Date: 05-DEC-08

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## Legend:

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Limit 99% Confidence Interval (Laboratory Control Limits)

DUP Duplicate

RPD Relative Percent Difference

N/A Not Available

LCS Laboratory Control Sample

SRM Standard Reference Material

MS Matrix Spike

MSD Matrix Spike Duplicate

ADE Average Desorption Efficiency

MB Method Blank

IRM Internal Reference Material

CRM Certified Reference Material

CCV Continuing Calibration Verification

CVS Calibration Verification Standard

LCSD Laboratory Control Sample Duplicate

## Sample Parameter Qualifier Definitions:

---

Qualifier	Description
G	QC result did not meet ALS DQO. Refer to narrative comments for further information.
J	Duplicate results and limits are expressed in terms of absolute difference.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.



**Environmental Division**

**Certificate of Analysis**

XCG CONSULTANTS LTD.

**ATTN:** THOMAS KOLODZIEJ

820 TRILLIUM DRIVE

KITCHENER ON N2R 1K4

**Reported On:** 09-DEC-08 03:29 PM

**Lab Work Order #:** **L714516**

**Date Received:** **02-DEC-08**

**Project P.O. #:**

**Job Reference:** 5-698-17-02

**Legal Site Desc:**

**CofC Numbers:** 62600

**Other Information:**

**Comments:**

MARY-LYNN PIKE  
Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.  
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU  
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

**ALS Canada Ltd. (formerly ETL Chemspect Analytical Ltd.)**  
Part of the **ALS Laboratory Group**

60 Northland Road, Unit 1, Waterloo, ON N2V 2B8  
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**Environmental Division**

**ALS LABORATORY GROUP CRITERIA REPORT**

L714516 CONTD....

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L714516-1 BH-2 (SS-2) Sampled By: LUKE T on 02-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	09-DEC-08	R767196
Arsenic (As)	2		1	mg/kg	14	17	09-DEC-08	R767196
Selenium (Se)	<1		1	mg/kg	1.4	1.9	09-DEC-08	R767196
Boron (B), Available	0.2		0.1	ug/g			05-DEC-08	R765821
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	04-DEC-08	R765163
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	05-DEC-08	R765905
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	18		1	mg/kg	190	210	05-DEC-08	R765820
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	05-DEC-08	R765820
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	05-DEC-08	R765820
Chromium (Cr)	8		1	mg/kg	67	71	05-DEC-08	R765820
Cobalt (Co)	3		1	mg/kg	19	21	05-DEC-08	R765820
Copper (Cu)	8		1	mg/kg	56	85	05-DEC-08	R765820
Lead (Pb)	9		1	mg/kg	55	120	05-DEC-08	R765820
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	05-DEC-08	R765820
Nickel (Ni)	5		1	mg/kg	43	43	05-DEC-08	R765820
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	05-DEC-08	R765820
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	05-DEC-08	R765820
Vanadium (V)	15		1	mg/kg	91	91	05-DEC-08	R765820
Zinc (Zn)	182		1	mg/kg	** 150	** 160	05-DEC-08	R765820
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			04-DEC-08	
F1-BTEX	<5		5	mg/kg			04-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			04-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			04-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			04-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			04-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			04-DEC-08	
Prep/Analysis Dates				No Unit			04-DEC-08	R765152
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			04-DEC-08	R765079
Sur: Octacosane	77		60-120	%			04-DEC-08	R765079
<b>Volatile Organics (153/04) Table 1</b>								
1,1,1,2-Tetrachloroethane	<0.008		0.008	mg/kg			04-DEC-08	R765367
1,1,2,2-Tetrachloroethane	<0.004		0.004	mg/kg	0.004	0.004	04-DEC-08	R765367
1,1,1-Trichloroethane	<0.008		0.008	mg/kg	0.009	0.009	04-DEC-08	R765367
1,1,2-Trichloroethane	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
1,1-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
1,1-Dichloroethylene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
1,2-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
1,2-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
1,2-Dibromoethane	<0.004		0.004	mg/kg	0.004	0.004	04-DEC-08	R765367
1,2-Dichloropropane	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
1,3-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L714516-1 BH-2 (SS-2) Sampled By: LUKE T on 02-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>Volatile Organics (153/04) Table 1</b>								
1,4-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
2-Hexanone	<0.2		0.2	mg/kg			04-DEC-08	R765367
Acetone	<0.5		0.5	mg/kg			04-DEC-08	R765367
Benzene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
Bromodichloromethane	<0.005		0.005	mg/kg			04-DEC-08	R765367
Bromoform	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
Bromomethane	<0.003		0.003	mg/kg	0.003	0.003	04-DEC-08	R765367
Carbon Disulfide	<0.02		0.02	mg/kg			04-DEC-08	R765367
Carbon tetrachloride	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
Chlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
Chloroethane	<0.03		0.03	mg/kg			04-DEC-08	R765367
Chloroform	<0.006		0.006	mg/kg	0.006	0.006	04-DEC-08	R765367
Chloromethane	<0.03		0.03	mg/kg			04-DEC-08	R765367
cis-1,2-Dichloroethylene	<0.02		0.02	mg/kg			04-DEC-08	R765367
cis-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	04-DEC-08	R765367
Dibromomethane	<0.01		0.01	mg/kg			04-DEC-08	R765367
Dibromochloromethane	<0.003		0.003	mg/kg	0.003	0.003	04-DEC-08	R765367
Dichlorodifluoromethane	<0.03		0.03	mg/kg			04-DEC-08	R765367
Dichloromethane	0.003		0.003	mg/kg	** 0.003	** 0.003	04-DEC-08	R765367
Ethyl Benzene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
MTBE	<0.2		0.2	mg/kg			04-DEC-08	R765367
m+p-Xylenes	<0.002		0.002	mg/kg			04-DEC-08	R765367
Methyl Ethyl Ketone	<0.2		0.2	mg/kg			04-DEC-08	R765367
Methyl Isobutyl Ketone	<0.2		0.2	mg/kg			04-DEC-08	R765367
o-Xylene	<0.002		0.002	mg/kg			04-DEC-08	R765367
Styrene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
Tetrachloroethylene	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
Toluene	0.002		0.002	mg/kg	** 0.002	** 0.002	04-DEC-08	R765367
trans-1,2-Dichloroethylene	<0.002		0.002	mg/kg	0.003	0.003	04-DEC-08	R765367
trans-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	04-DEC-08	R765367
Trichloroethylene	<0.004		0.004	mg/kg	0.004	0.004	04-DEC-08	R765367
Trichlorofluoromethane	<0.03		0.03	mg/kg			04-DEC-08	R765367
Vinyl chloride	<0.003		0.003	mg/kg	0.003	0.003	04-DEC-08	R765367
Xylenes (Total)	<0.002		0.002	mg/kg	0.002	0.002	04-DEC-08	R765367
Surr: 1,2-Dichloroethane d4	83		25-175	%			04-DEC-08	R765367
Surr: Toluene-d8	92		25-175	%			04-DEC-08	R765367
Surr: 4-Bromofluorobenzene	110		25-175	%			04-DEC-08	R765367
<b>Individual Analytes</b>								
% Moisture	10.2		0.5	%			03-DEC-08	R765029
pH	7.74		0.01	pH units			03-DEC-08	R765022
L714516-2 BH-18 (SS-1) Sampled By: LUKE T on 02-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch	
L714516-2 BH-18 (SS-1) Sampled By: LUKE T on 02-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER			
<b>F1-F4 (O.Reg.153/04)</b> <b>CCME Total Hydrocarbons</b>					ALL OTHER			
F1 (C6-C10) F2 (C10-C16) F3 (C16-C34) F4 (C34-C50) Total Hydrocarbons (C6-C50) Chromatogram to baseline at nC50 Prep/Analysis Dates	<5 <10 55 <50 55 YES		5 10 50 50 50 No Unit	mg/kg mg/kg mg/kg mg/kg mg/kg No Unit		04-DEC-08 04-DEC-08 04-DEC-08 04-DEC-08 04-DEC-08 04-DEC-08		
<b>F2-F4 (O.Reg.153/04)</b> Prep/Analysis Dates Surr: Octacosane	69		60-120	No Unit %		04-DEC-08 04-DEC-08	R765152 R765079 R765079	
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b> <b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb) Arsenic (As) Selenium (Se) Boron (B), Available Chromium, Hexavalent Mercury (Hg)	<1 3 <1 0.4 <2 0.12		1 1 1 0.1 2 0.05	mg/kg mg/kg mg/kg ug/g mg/kg ug/g	1 14 1.4 2.5 2.5 0.16	1 17 1.9 2.5 2.5 0.23	09-DEC-08 09-DEC-08 09-DEC-08 05-DEC-08 04-DEC-08 05-DEC-08	R767196 R767196 R767196 R765821 R765163 R765905
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba) Beryllium (Be) Cadmium (Cd) Chromium (Cr) Cobalt (Co) Copper (Cu) Lead (Pb) Molybdenum (Mo) Nickel (Ni) Silver (Ag) Thallium (Tl) Vanadium (V) Zinc (Zn)	57 <0.5 <0.5 13 6 23 105 <1 10 <0.2 <1 21 92		1 0.5 0.5 1 1 1 1 1 1 0.2 1 1 1	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	190 1.2 1.0 67 19 56 ** 2.5 43 0.35 2.5 91 150	210 1.2 1.0 71 21 85 55 2.5 43 0.42 2.5 91 160	05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08 05-DEC-08	R765820 R765820 R765820 R765820 R765820 R765820 R765820 R765820 R765820 R765820 R765820 R765820
<b>Individual Analytes</b>								
% Moisture pH	17.0 7.51		0.5 0.01	% pH units			03-DEC-08 03-DEC-08	R765029 R765022
L714516-5 MW2 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES			
<b>BTEX, F1-F4 (O.Reg.153/04)</b> <b>BTEX (O.Reg.153/04)</b>								
Benzene Ethyl Benzene m+p-Xylenes	<0.5 <0.5 1		0.5 0.5 1	ug/L ug/L ug/L	5 2.4	04-DEC-08 04-DEC-08 04-DEC-08	R765171 R765171 R765171	

\*\* analytical results for this parameter exceed criteria limits listed on this report



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714516-5 MW2 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>BTEX, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
o-Xylene	0.6		0.5	ug/L		04-DEC-08	R765171
Toluene	1.9		0.5	ug/L	** 0.8	04-DEC-08	R765171
Xylene, (total)	1.6		1.5	ug/L	72	04-DEC-08	R765171
Surr: 2,5-Dibromotoluene	119		25-175	%		04-DEC-08	R765171
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		05-DEC-08	
F1-BTEX	<100		100	ug/L		05-DEC-08	
F2 (C10-C16)	<100		100	ug/L		05-DEC-08	
F3 (C16-C34)	<250		250	ug/L		05-DEC-08	
F4 (C34-C50)	<250		250	ug/L		05-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		05-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765173
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates						05-DEC-08	R765052
Surr: Octacosane	79		49-120	%		05-DEC-08	R765052
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Antimony (Sb)	5		5	ug/L	6	08-DEC-08	R766845
Arsenic (As)	<1		1	ug/L	25	08-DEC-08	R766845
Barium (Ba)	600		10	ug/L		08-DEC-08	R766845
Beryllium (Be)	<1		1	ug/L	4	08-DEC-08	R766845
Boron (B)	120		50	ug/L	200	08-DEC-08	R766845
Cadmium (Cd)	0.3		0.1	ug/L	0.5	08-DEC-08	R766845
Chromium (Cr)	2		1	ug/L	8.9	08-DEC-08	R766845
Cobalt (Co)	2.3		0.5	ug/L	** 0.9	08-DEC-08	R766845
Copper (Cu)	3		1	ug/L	** 2.5	08-DEC-08	R766845
Lead (Pb)	<1		1	ug/L	1	08-DEC-08	R766845
Molybdenum (Mo)	2		1	ug/L	40	08-DEC-08	R766845
Nickel (Ni)	19		2	ug/L	25	08-DEC-08	R766845
Selenium (Se)	<5		5	ug/L	5	08-DEC-08	R766845
Silver (Ag)	0.1		0.1	ug/L	0.25	08-DEC-08	R766845
Sodium (Na)	1160000	DLM	50000	ug/L		09-DEC-08	R767392
Thallium (Tl)	<0.3		0.3	ug/L	0.5	08-DEC-08	R766845
Vanadium (V)	<1		1	ug/L	6	08-DEC-08	R766845
Zinc (Zn)	49		3	ug/L	** 20	08-DEC-08	R766845
L714516-6 MW3 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>BTEX, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	04-DEC-08	R765171
Ethyl Benzene	<0.5		0.5	ug/L	2.4	04-DEC-08	R765171
m+p-Xylenes	<1		1	ug/L		04-DEC-08	R765171

\*\* analytical results for this parameter exceed criteria limits listed on this report



Environmental Division

## ALS LABORATORY GROUP CRITERIA REPORT

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714516-6 MW3 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>BTEX, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
o-Xylene	<0.5		0.5	ug/L		04-DEC-08	R765171
Toluene	0.6		0.5	ug/L	0.8	04-DEC-08	R765171
Xylene, (total)	<1.5		1.5	ug/L	72	04-DEC-08	R765171
Surr: 2,5-Dibromotoluene	117		25-175	%		04-DEC-08	R765171
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		05-DEC-08	
F1-BTEX	<100		100	ug/L		05-DEC-08	
F2 (C10-C16)	<100		100	ug/L		05-DEC-08	
F3 (C16-C34)	<250		250	ug/L		05-DEC-08	
F4 (C34-C50)	<250		250	ug/L		05-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		05-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765173
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates						05-DEC-08	R765052
Surr: Octacosane	89		49-120	%		05-DEC-08	R765052
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	08-DEC-08	R766845
Arsenic (As)	2		1	ug/L	25	08-DEC-08	R766845
Barium (Ba)	590		10	ug/L		08-DEC-08	R766845
Beryllium (Be)	<1		1	ug/L	4	08-DEC-08	R766845
Boron (B)	60		50	ug/L	200	08-DEC-08	R766845
Cadmium (Cd)	<0.1		0.1	ug/L	0.5	08-DEC-08	R766845
Chromium (Cr)	6		1	ug/L	8.9	08-DEC-08	R766845
Cobalt (Co)	1.2		0.5	ug/L	** 0.9	08-DEC-08	R766845
Copper (Cu)	3		1	ug/L	** 2.5	08-DEC-08	R766845
Lead (Pb)	<1		1	ug/L	1	08-DEC-08	R766845
Molybdenum (Mo)	20		1	ug/L	40	08-DEC-08	R766845
Nickel (Ni)	10		2	ug/L	25	08-DEC-08	R766845
Selenium (Se)	<5		5	ug/L	5	08-DEC-08	R766845
Silver (Ag)	<0.1		0.1	ug/L	0.25	08-DEC-08	R766845
Sodium (Na)	2340000	DLM	50000	ug/L		09-DEC-08	R767392
Thallium (Tl)	<0.3		0.3	ug/L	0.5	08-DEC-08	R766845
Vanadium (V)	<1		1	ug/L	6	08-DEC-08	R766845
Zinc (Zn)	7		3	ug/L	20	08-DEC-08	R766845
L714516-7 MW4 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	08-DEC-08	R766845
Arsenic (As)	<1		1	ug/L	25	08-DEC-08	R766845
Barium (Ba)	90		10	ug/L		08-DEC-08	R766845

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714516-7 MW4 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Beryllium (Be)	<1		1	ug/L	4	08-DEC-08	R766845
Boron (B)	60		50	ug/L	200	08-DEC-08	R766845
Cadmium (Cd)	1.3		0.1	ug/L	** 0.5	08-DEC-08	R766845
Chromium (Cr)	8		1	ug/L	8.9	08-DEC-08	R766845
Cobalt (Co)	1.0		0.5	ug/L	** 0.9	08-DEC-08	R766845
Copper (Cu)	3		1	ug/L	** 2.5	08-DEC-08	R766845
Lead (Pb)	<1		1	ug/L	1	08-DEC-08	R766845
Molybdenum (Mo)	4		1	ug/L	40	08-DEC-08	R766845
Nickel (Ni)	6		2	ug/L	25	08-DEC-08	R766845
Selenium (Se)	<5		5	ug/L	5	08-DEC-08	R766845
Silver (Ag)	<0.1		0.1	ug/L	0.25	08-DEC-08	R766845
Sodium (Na)	460000	DLM	50000	ug/L		09-DEC-08	R767392
Thallium (Tl)	<0.3		0.3	ug/L	0.5	08-DEC-08	R766845
Vanadium (V)	1		1	ug/L	6	08-DEC-08	R766845
Zinc (Zn)	21		3	ug/L	** 20	08-DEC-08	R766845
<b>VOC, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	04-DEC-08	R765171
Ethyl Benzene	<0.5		0.5	ug/L	2.4	04-DEC-08	R765171
m+p-Xylenes	<1		1	ug/L		04-DEC-08	R765171
o-Xylene	<0.5		0.5	ug/L		04-DEC-08	R765171
Toluene	<0.5		0.5	ug/L	0.8	04-DEC-08	R765171
Xylene, (total)	<1.5		1.5	ug/L	72	04-DEC-08	R765171
Surr: 2,5-Dibromotoluene	115		25-175	%		04-DEC-08	R765171
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		05-DEC-08	
F1-BTEX	<100		100	ug/L		05-DEC-08	
F2 (C10-C16)	<100		100	ug/L		05-DEC-08	
F2-Naphth	<100		100	ug/L		05-DEC-08	
F3 (C16-C34)	<250		250	ug/L		05-DEC-08	
F3-PAH	<250		250	ug/L		05-DEC-08	
F4 (C34-C50)	<250		250	ug/L		05-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		05-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765173
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates				No Unit		05-DEC-08	R765052
Surr: Octacosane	83		49-120	%		05-DEC-08	R765052
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	<0.5		0.5	ug/L	5	04-DEC-08	R765146
1,1,2,2-Tetrachloroethane	<0.5		0.5	ug/L	1	04-DEC-08	R765146
1,1,1-Trichloroethane	<0.5		0.5	ug/L	10	04-DEC-08	R765146
1,1,2-Trichloroethane	<0.5		0.5	ug/L	5	04-DEC-08	R765146
1,2-Dibromoethane	<0.5		0.5	ug/L	1	04-DEC-08	R765146
1,1-Dichloroethane	<0.5		0.5	ug/L	70	04-DEC-08	R765146
1,1-Dichloroethylene	<0.5		0.5	ug/L	0.66	04-DEC-08	R765146

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714516-7 MW4 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>VOC, F1-F4 (O.Reg.153/04)</b>							
<b>Volatile Organic Compounds</b>							
1,2-Dichlorobenzene	<0.5		0.5	ug/L	2.5	04-DEC-08	R765146
1,2-Dichloroethane	<0.5		0.5	ug/L	5	04-DEC-08	R765146
1,2-Dichloropropane	<0.5		0.5	ug/L	0.7	04-DEC-08	R765146
1,3-Dichlorobenzene	<0.5		0.5	ug/L	2.5	04-DEC-08	R765146
1,4-Dichlorobenzene	<0.5		0.5	ug/L	1	04-DEC-08	R765146
2-Hexanone	<20		20	ug/L		04-DEC-08	R765146
Acetone	<20		20	ug/L		04-DEC-08	R765146
Bromodichloromethane	<0.5		0.5	ug/L	5	04-DEC-08	R765146
Bromoform	<0.5		0.5	ug/L	5	04-DEC-08	R765146
Bromomethane	<0.5	RAMB	0.5	ug/L	0.9	04-DEC-08	R765146
Carbon Disulfide	<0.5		0.5	ug/L		04-DEC-08	R765146
Carbon tetrachloride	<0.5		0.5	ug/L	0.5	04-DEC-08	R765146
Chlorobenzene	<0.5		0.5	ug/L	15	04-DEC-08	R765146
Chloroethane	<1		1	ug/L		04-DEC-08	R765146
Chloroform	<0.5		0.5	ug/L	0.5	04-DEC-08	R765146
Chloromethane	<1		1	ug/L		04-DEC-08	R765146
cis-1,2-Dichloroethylene	<0.5		0.5	ug/L	70	04-DEC-08	R765146
cis-1,3-Dichloropropene	<0.5		0.5	ug/L	1.4	04-DEC-08	R765146
Dibromochloromethane	<0.5		0.5	ug/L	0.5	04-DEC-08	R765146
Dichlorodifluoromethane	<1		1	ug/L		04-DEC-08	R765146
Dichloromethane	<0.5		0.5	ug/L	50	04-DEC-08	R765146
Methyl Ethyl Ketone	<20		20	ug/L	350	04-DEC-08	R765146
Methyl Isobutyl Ketone	<20		20	ug/L		04-DEC-08	R765146
MTBE	<0.5		0.5	ug/L	200	04-DEC-08	R765146
Styrene	<0.5		0.5	ug/L	4	04-DEC-08	R765146
Tetrachloroethylene	<0.5		0.5	ug/L	5	04-DEC-08	R765146
trans-1,2-Dichloroethylene	<0.5		0.5	ug/L	100	04-DEC-08	R765146
trans-1,3-Dichloropropene	<0.5		0.5	ug/L	1.4	04-DEC-08	R765146
Trichloroethylene	<0.5		0.5	ug/L	20	04-DEC-08	R765146
Trichlorofluoromethane	<1		1	ug/L		04-DEC-08	R765146
Trihalomethanes (total)	<2		2	ug/L		04-DEC-08	R765146
Vinyl chloride	<0.5		0.5	ug/L	0.5	04-DEC-08	R765146
Surr: 1,2-Dichloroethane d4	100		50-150	%		04-DEC-08	R765146
Surr: Toluene-d8	90		70-130	%		04-DEC-08	R765146
Surr: 4-Bromofluorobenzene	102		50-150	%		04-DEC-08	R765146
<b>Individual Analytes</b>							
<b>CCME PAHs</b>							
1-Methylnaphthalene	0.04		0.02	ug/L	2.5	04-DEC-08	R765093
2-Methylnaphthalene	0.04		0.02	ug/L	2.5	04-DEC-08	R765093
Acenaphthene	<0.02		0.02	ug/L	1	04-DEC-08	R765093
Acenaphthylene	<0.02		0.02	ug/L	1	04-DEC-08	R765093
Acridine	<4		4	ug/L		04-DEC-08	R765093
Anthracene	<0.02		0.02	ug/L	0.05	04-DEC-08	R765093
Benzo(a)anthracene	<0.02		0.02	ug/L	0.10	04-DEC-08	R765093
Benzo(a)pyrene	<0.005		0.005	ug/L	0.005	04-DEC-08	R765093
Benzo(b)fluoranthene	<0.02		0.02	ug/L	0.05	04-DEC-08	R765093
Benzo(g,h,i)perylene	<0.02		0.02	ug/L	0.1	04-DEC-08	R765093
Benzo(k)fluoranthene	<0.02		0.02	ug/L	0.05	04-DEC-08	R765093

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714516-7 MW4 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>Individual Analytes</b>							
<b>CCME PAHs</b>							
Chrysene	<0.02		0.02	ug/L	0.05	04-DEC-08	R765093
Dibenzo(ah)anthracene	<0.02		0.02	ug/L	0.1	04-DEC-08	R765093
Fluoranthene	<0.02		0.02	ug/L	1	04-DEC-08	R765093
Fluorene	0.03		0.02	ug/L	1	04-DEC-08	R765093
Indeno(1,2,3-cd)pyrene	<0.02		0.02	ug/L	0.1	04-DEC-08	R765093
Naphthalene	0.02		0.02	ug/L	7	04-DEC-08	R765093
Phenanthrene	0.19		0.02	ug/L	1	04-DEC-08	R765093
Pyrene	<0.02		0.02	ug/L	0.05	04-DEC-08	R765093
Quinoline	<0.02		0.02	ug/L		04-DEC-08	R765093
Surr: 2-Fluorobiphenyl	84		29-139	%		04-DEC-08	R765093
Surr: d14-Terphenyl	100		50-150	%		04-DEC-08	R765093
L714516-8 MW-X-99 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>BTEX, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	04-DEC-08	R765171
Ethyl Benzene	<0.5		0.5	ug/L	2.4	04-DEC-08	R765171
m+p-Xylenes	1		1	ug/L		04-DEC-08	R765171
o-Xylene	<0.5		0.5	ug/L		04-DEC-08	R765171
Toluene	1.7		0.5	ug/L	** 0.8	04-DEC-08	R765171
Xylene, (total)	<1.5		1.5	ug/L	72	04-DEC-08	R765171
Surr: 2,5-Dibromotoluene	119		25-175	%		04-DEC-08	R765171
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		05-DEC-08	
F1-BTEX	<100		100	ug/L		05-DEC-08	
F2 (C10-C16)	<100		100	ug/L		05-DEC-08	
F3 (C16-C34)	<250		250	ug/L		05-DEC-08	
F4 (C34-C50)	<250		250	ug/L		05-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		05-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765173
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates				No Unit		05-DEC-08	R765052
Surr: Octacosane	87		49-120	%		05-DEC-08	R765052
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	08-DEC-08	R766845
Arsenic (As)	<1		1	ug/L	25	08-DEC-08	R766845
Barium (Ba)	590		10	ug/L		08-DEC-08	R766845
Beryllium (Be)	<1		1	ug/L	4	08-DEC-08	R766845
Boron (B)	110		50	ug/L	200	08-DEC-08	R766845
Cadmium (Cd)	0.3		0.1	ug/L	0.5	08-DEC-08	R766845
Chromium (Cr)	2		1	ug/L	8.9	08-DEC-08	R766845

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714516-8 MW-X-99 Sampled By: LUKE T on 02-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Cobalt (Co)	2.2		0.5	ug/L	** 0.9	08-DEC-08	R766845
Copper (Cu)	2		1	ug/L	2.5	08-DEC-08	R766845
Lead (Pb)	<1		1	ug/L	1	08-DEC-08	R766845
Molybdenum (Mo)	2		1	ug/L	40	08-DEC-08	R766845
Nickel (Ni)	19		2	ug/L	25	08-DEC-08	R766845
Selenium (Se)	<5		5	ug/L	5	08-DEC-08	R766845
Silver (Ag)	<0.1		0.1	ug/L	0.25	08-DEC-08	R766845
Sodium (Na)	1140000	DLM	50000	ug/L		09-DEC-08	R767392
Thallium (Tl)	<0.3		0.3	ug/L	0.5	08-DEC-08	R766845
Vanadium (V)	<1		1	ug/L	6	08-DEC-08	R766845
Zinc (Zn)	33		3	ug/L	** 20	08-DEC-08	R766845

\*\* analytical results for this parameter exceed criteria limits listed on this report

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# Reference Information

L714516 CONTD....

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## Sample Parameter Qualifier key listed:

Qualifier	Description
DLM	Detection Limit Adjustment For Sample Matrix Effects
RAMB	Result Adjusted For Method Blank

## Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
AS,SB,SE-3050-MS-WT	Soil	As, Sb and Se by ICP/MS		SW846 3050B/6020A
B-AVAIL-WT	Soil	Boron (B), Available		HW EXTR, EPA 6010B
BTX-R153-WT	Water	BTEX (O.Reg.153/04)		MOE DECPH-E3421/CCME Tier 1
CR-CR6-WT	Soil	Hexavalent Chromium in Soil		EPA 7196
ETL-TVH,TEH-CCME-WT	Water	CCME Total Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

ETL-TVH,TEH-CCME-WT	Soil	CCME Total Hydrocarbons	CCME CWS-PHC Dec-2000 - Pub# 1310
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Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-WT	Water	F1 (O.Reg.153/04)	MOE DECPH-E3421/CCME Tier 1
F1-WT	Soil	F1 (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
F2-F4-WT	Water	F2-F4 (O.Reg.153/04)	MOE DECPH-E3421/CCME Tier 1
F2-F4-WT	Soil	F2-F4 (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
HG-WT	Soil	Mercury by CVAA	SW846 7470A
MET-R153-WT	Water	Standard Metal Scan	EPA 200.8
MET-R153-WT	Soil	Standard Metal Scan (ICP)	EPA 3050
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried
PAH-CCME-WT	Water	CCME PAHs	SW846 8270
PH-R153-WT	Soil	pH	MOEE E3137A

## Reference Information

5-698-17-02

VOC-CCME-TABLE1-WT	Soil	Volatile Organics (153/04) Table 1	MOE-E3254
VOC-ROU-NO-BTX-WT	Water	Volatile Organic Compounds	SW846 8260

Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

62600

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS LABORATORY GROUP - WATERLOO, ONTARIO, CAN		

### GLOSSARY OF REPORT TERMS

**Surr** - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

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

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS provides criteria information as a service to you, our customer. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. ALS recommends review of the most current version of the regulation, and assumes no responsibility for the accuracy of the criteria levels indicated.



**Environmental Division**

## **ALS Laboratory Group Quality Control Report**

Workorder: L714516

Report Date: 09-DEC-08

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Client: XCG CONSULTANTS LTD.  
820 TRILLIUM DRIVE  
KITCHENER ON N2R 1K4

Contact: THOMAS KOLODZIEJ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>BTX-R153-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R765171</b>							
<b>WG881029-1</b>	<b>CVS</b>							
Benzene			101		%		79-117	04-DEC-08
Ethyl Benzene			100		%		80-117	04-DEC-08
m+p-Xylenes			104		%		75-127	04-DEC-08
o-Xylene			103		%		81-118	04-DEC-08
Toluene			111		%		79-117	04-DEC-08
<b>WG881029-3</b>	<b>DUP</b>	<b>L714530-1</b>						
Benzene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	04-DEC-08
Ethyl Benzene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	04-DEC-08
m+p-Xylenes		<1	<1	RPD-NA	ug/L	N/A	39	04-DEC-08
o-Xylene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	04-DEC-08
Toluene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	04-DEC-08
<b>WG881029-2</b>	<b>MB</b>							
Benzene			<0.5		ug/L		0.5	04-DEC-08
Ethyl Benzene			<0.5		ug/L		0.5	04-DEC-08
m+p-Xylenes			<1		ug/L		1	04-DEC-08
o-Xylene			<0.5		ug/L		0.5	04-DEC-08
Toluene			<0.5		ug/L		0.5	04-DEC-08
<b>F1-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R765173</b>							
<b>WG881030-1</b>	<b>CVS</b>							
TVH: (C6-C10 / No BTEX Correction)			73		%		54-126	03-DEC-08
<b>WG881030-3</b>	<b>DUP</b>	<b>L714530-1</b>						
TVH: (C6-C10 / No BTEX Correction)		<100	<100	RPD-NA	ug/L	N/A	30	03-DEC-08
<b>WG881030-2</b>	<b>MB</b>							
TVH: (C6-C10 / No BTEX Correction)			<100		ug/L		100	03-DEC-08
<b>F2-F4-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R765052</b>							
<b>WG881073-1</b>	<b>CVS</b>							
F2 (C10-C16)			100		%		80-120	04-DEC-08
F3 (C16-C34)			100		%		80-120	04-DEC-08
F4 (C34-C50)			101		%		80-120	04-DEC-08
<b>WG881073-2</b>	<b>CVS</b>							
F2 (C10-C16)			98		%		80-120	05-DEC-08
F3 (C16-C34)			97		%		80-120	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F2-F4-WT	Water							
Batch	R765052							
WG881073-2	CVS							
F4 (C34-C50)			99		%		80-120	05-DEC-08
WG880848-2	LCS							
F2 (C10-C16)			72		%		40-120	04-DEC-08
F3 (C16-C34)			77		%		56-104	04-DEC-08
F4 (C34-C50)			77		%		50-110	04-DEC-08
WG880848-3	LCSD	WG880848-2						
F2 (C10-C16)			72	74	%	3.5	45	04-DEC-08
F3 (C16-C34)			77	78	%	2.0	45	04-DEC-08
F4 (C34-C50)			77	78	%	1.8	45	04-DEC-08
WG880848-1	MB							
F2 (C10-C16)			<100		ug/L		100	04-DEC-08
F3 (C16-C34)			<250		ug/L		250	04-DEC-08
F4 (C34-C50)			<250		ug/L		250	04-DEC-08
MET-R153-WT	Water							
Batch	R766845							
WG882923-1	CVS							
Antimony (Sb)			100		%		80-120	08-DEC-08
Arsenic (As)			109		%		80-120	08-DEC-08
Barium (Ba)			104		%		80-120	08-DEC-08
Beryllium (Be)			110		%		80-120	08-DEC-08
Boron (B)			112		%		70-130	08-DEC-08
Cadmium (Cd)			108		%		80-120	08-DEC-08
Chromium (Cr)			112		%		80-120	08-DEC-08
Cobalt (Co)			112		%		80-120	08-DEC-08
Copper (Cu)			114		%		80-120	08-DEC-08
Lead (Pb)			109		%		80-120	08-DEC-08
Molybdenum (Mo)			114		%		80-120	08-DEC-08
Nickel (Ni)			113		%		80-120	08-DEC-08
Selenium (Se)			104		%		80-120	08-DEC-08
Silver (Ag)			103		%		80-120	08-DEC-08
Thallium (Tl)			109		%		63-138	08-DEC-08
Vanadium (V)			110		%		63-138	08-DEC-08
Zinc (Zn)			114		%		80-120	08-DEC-08
WG882923-5	DUP	WG882923-4						

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Water							
Batch	R766845							
WG882923-5	DUP	WG882923-4						
Antimony (Sb)		<50	<50	DLM	ug/L	N/A	20	08-DEC-08
Arsenic (As)		20	20	DLM	ug/L	0	40	08-DEC-08
Barium (Ba)		400	400	DLM	ug/L	0	400	08-DEC-08
Beryllium (Be)		<10	<10	DLM	ug/L	N/A	26	08-DEC-08
Boron (B)		2400	2300	DLM	ug/L	2.4	20	08-DEC-08
Cadmium (Cd)		<1	<1	DLM	ug/L	N/A	26	08-DEC-08
Chromium (Cr)		40	50	DLM	ug/L	0	40	08-DEC-08
Cobalt (Co)		17	16	DLM	ug/L	0	20	08-DEC-08
Copper (Cu)		<10	<10	DLM	ug/L	N/A	26	08-DEC-08
Lead (Pb)		<10	<10	DLM	ug/L	N/A	20	08-DEC-08
Molybdenum (Mo)		<10	<10	DLM	ug/L	N/A	26	08-DEC-08
Nickel (Ni)		30	30	DLM	ug/L	0	80	08-DEC-08
Selenium (Se)		<50	<50	DLM	ug/L	N/A	26	08-DEC-08
Silver (Ag)		<1	<1	DLM	ug/L	N/A	26	08-DEC-08
Thallium (Tl)		<3	<3	DLM	ug/L	N/A	26	08-DEC-08
Vanadium (V)		10	10	DLM	ug/L	0	40	08-DEC-08
Zinc (Zn)		<30	<30	DLM	ug/L	N/A	20	08-DEC-08
WG882923-3	MB							
Antimony (Sb)		<5			ug/L		5	08-DEC-08
Arsenic (As)		<1			ug/L		1	08-DEC-08
Barium (Ba)		<10			ug/L		10	08-DEC-08
Beryllium (Be)		<1			ug/L		1	08-DEC-08
Boron (B)		<50			ug/L		50	08-DEC-08
Cadmium (Cd)		<0.1			ug/L		0.1	08-DEC-08
Chromium (Cr)		<1			ug/L		1	08-DEC-08
Cobalt (Co)		<0.5			ug/L		0.5	08-DEC-08
Copper (Cu)		<1			ug/L		1	08-DEC-08
Lead (Pb)		<1			ug/L		1	08-DEC-08
Molybdenum (Mo)		<1			ug/L		1	08-DEC-08
Nickel (Ni)		<2			ug/L		2	08-DEC-08
Selenium (Se)		<5			ug/L		5	08-DEC-08
Silver (Ag)		<0.1			ug/L		0.1	08-DEC-08
Thallium (Tl)		<0.3			ug/L		0.3	08-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Water							
Batch R766845								
WG882923-3 MB								
Vanadium (V)			<1		ug/L	1	08-DEC-08	
Zinc (Zn)			<3		ug/L	3	08-DEC-08	
Batch R767392								
WG883603-1 CVS								
Sodium (Na)			101		%	63-138	09-DEC-08	
WG883603-3 MB								
Sodium (Na)			<500		ug/L	500	09-DEC-08	
PAH-CCME-WT	Water							
Batch R765093								
WG881067-1 CVS								
1-Methylnaphthalene			84		%	71-125	04-DEC-08	
2-Methylnaphthalene			74		%	70-117	04-DEC-08	
Acenaphthene			86		%	77-128	04-DEC-08	
Acenaphthylene			84		%	70-125	04-DEC-08	
Acridine			109		%	55-145	04-DEC-08	
Anthracene			92		%	74-126	04-DEC-08	
Benzo(a)anthracene			93		%	77-131	04-DEC-08	
Benzo(a)pyrene			89		%	48-149	04-DEC-08	
Benzo(b)fluoranthene			86		%	62-135	04-DEC-08	
Benzo(g,h,i)perylene			89		%	73-128	04-DEC-08	
Benzo(k)fluoranthene			102		%	69-132	04-DEC-08	
Chrysene			97		%	75-130	04-DEC-08	
Dibenzo(ah)anthracene			89		%	66-136	04-DEC-08	
Fluoranthene			88		%	75-122	04-DEC-08	
Fluorene			85		%	76-127	04-DEC-08	
Indeno(1,2,3-cd)pyrene			87		%	62-139	04-DEC-08	
Naphthalene			99		%	79-126	04-DEC-08	
Phenanthrene			90		%	79-126	04-DEC-08	
Pyrene			89		%	76-126	04-DEC-08	
Quinoline			93		%	55-145	04-DEC-08	
WG880414-2 LCS								
1-Methylnaphthalene			71		%	25-131	04-DEC-08	
2-Methylnaphthalene			61		%	25-123	04-DEC-08	
Acenaphthene			77			38-143		

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-CCME-WT	Water							
Batch	R765093							
WG880414-2	LCS							
Acenaphthene			77		%		38-143	04-DEC-08
Acenaphthylene			76		%		43-145	04-DEC-08
Acridine			96		%		55-145	04-DEC-08
Anthracene			83		%		44-129	04-DEC-08
Benzo(a)anthracene			87		%		48-143	04-DEC-08
Benzo(a)pyrene			81		%		39-137	04-DEC-08
Benzo(b)fluoranthene			86		%		42-153	04-DEC-08
Benzo(g,h,i)perylene			79		%		42-157	04-DEC-08
Benzo(k)fluoranthene			90		%		37-158	04-DEC-08
Chrysene			92		%		48-149	04-DEC-08
Dibenzo(ah)anthracene			75		%		41-141	04-DEC-08
Fluoranthene			86		%		46-146	04-DEC-08
Fluorene			78		%		37-140	04-DEC-08
Indeno(1,2,3-cd)pyrene			74		%		42-139	04-DEC-08
Naphthalene			81		%		29-127	04-DEC-08
Phenanthrene			81		%		43-137	04-DEC-08
Pyrene			87		%		58-132	04-DEC-08
Quinoline			86		%		55-145	04-DEC-08
WG880414-3	LCSD	WG880414-2						
1-Methylnaphthalene		71	79		%	11	45	04-DEC-08
2-Methylnaphthalene		61	69		%	12	50	04-DEC-08
Acenaphthene		77	87		%	12	45	04-DEC-08
Acenaphthylene		76	86		%	12	45	04-DEC-08
Acridine		96	98		%	1.8	45	04-DEC-08
Anthracene		83	88		%	5.4	50	04-DEC-08
Benzo(a)anthracene		87	90		%	3.0	45	04-DEC-08
Benzo(a)pyrene		81	85		%	5.3	45	04-DEC-08
Benzo(b)fluoranthene		86	89		%	3.2	45	04-DEC-08
Benzo(g,h,i)perylene		79	82		%	3.7	45	04-DEC-08
Benzo(k)fluoranthene		90	96		%	7.0	45	04-DEC-08
Chrysene		92	95		%	3.5	45	04-DEC-08
Dibenzo(ah)anthracene		75	77		%	3.6	45	04-DEC-08
Fluoranthene		86	90		%	5.0	45	04-DEC-08

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<b>PAH-CCME-WT</b>	<b>Water</b>							
<b>Batch R765093</b>								
<b>WG880414-3 LCSD</b>	<b>WG880414-2</b>							
Fluorene	78	89		%	13	45	04-DEC-08	
Indeno(1,2,3-cd)pyrene	74	80		%	7.6	45	04-DEC-08	
Naphthalene	81	84		%	3.3	45	04-DEC-08	
Phenanthrene	81	86		%	5.9	45	04-DEC-08	
Pyrene	87	92		%	5.3	45	04-DEC-08	
Quinoline	86	103		%	18	45	04-DEC-08	
<b>WG880414-1 MB</b>								
1-Methylnaphthalene		<0.02		ug/L		0.02	04-DEC-08	
2-Methylnaphthalene		<0.02		ug/L		0.02	04-DEC-08	
Acenaphthene		<0.02		ug/L		0.02	04-DEC-08	
Acenaphthylene		<0.02		ug/L		0.02	04-DEC-08	
Acridine		<4		ug/L		4	04-DEC-08	
Anthracene		<0.02		ug/L		0.02	04-DEC-08	
Benzo(a)anthracene		<0.02		ug/L		0.02	04-DEC-08	
Benzo(a)pyrene		<0.005		ug/L		0.005	04-DEC-08	
Benzo(b)fluoranthene		<0.02		ug/L		0.02	04-DEC-08	
Benzo(g,h,i)perylene		<0.02		ug/L		0.02	04-DEC-08	
Benzo(k)fluoranthene		<0.02		ug/L		0.02	04-DEC-08	
Chrysene		<0.02		ug/L		0.02	04-DEC-08	
Dibenzo(ah)anthracene		<0.02		ug/L		0.02	04-DEC-08	
Fluoranthene		<0.02		ug/L		0.02	04-DEC-08	
Fluorene		<0.02		ug/L		0.02	04-DEC-08	
Indeno(1,2,3-cd)pyrene		<0.02		ug/L		0.02	04-DEC-08	
Naphthalene		<0.02		ug/L		0.02	04-DEC-08	
Phenanthrene		<0.02		ug/L		0.02	04-DEC-08	
Pyrene		<0.02		ug/L		0.02	04-DEC-08	
Quinoline		<0.02		ug/L		0.02	04-DEC-08	
<b>VOC-ROU-NO-BTX-WT</b>	<b>Water</b>							
<b>Batch R765146</b>								
<b>WG879842-1 CVS</b>								
1,1,1,2-Tetrachloroethane		82		%	75-120	03-DEC-08		
1,1,1-Trichloroethane		99		%	74-124	03-DEC-08		
1,1,2,2-Tetrachloroethane		88		%	62-130	03-DEC-08		

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch	R765146							
WG879842-1	CVS							
1,1,2-Trichloroethane			77		%		76-119	03-DEC-08
1,1-Dichloroethane			97		%		74-126	03-DEC-08
1,1-Dichloroethylene			93		%		67-127	03-DEC-08
1,2-Dichlorobenzene			89		%		77-119	03-DEC-08
1,2-Dichloroethane			101		%		70-132	03-DEC-08
1,2-Dichloropropane			86		%		75-126	03-DEC-08
1,3-Dichlorobenzene			91		%		74-120	03-DEC-08
1,4-Dichlorobenzene			91		%		74-122	03-DEC-08
2-Hexanone			89		%		47-149	03-DEC-08
Acetone			86		%		32-175	03-DEC-08
Bromodichloromethane			84		%		71-124	03-DEC-08
Bromoform			87		%		63-126	03-DEC-08
Bromomethane			115		%		45-138	03-DEC-08
Carbon Disulfide			97		%		47-133	03-DEC-08
Carbon tetrachloride			97		%		69-129	03-DEC-08
Chlorobenzene			84		%		78-120	03-DEC-08
Dibromochloromethane			83		%		69-120	03-DEC-08
Chloroethane			100		%		64-130	03-DEC-08
Chloroform			95		%		63-138	03-DEC-08
Chloromethane			116		%		43-142	03-DEC-08
cis-1,2-Dichloroethylene			87		%		77-121	03-DEC-08
cis-1,3-Dichloropropene			80		%		63-138	03-DEC-08
Dichlorodifluoromethane			105		%		60-125	03-DEC-08
1,2-Dibromoethane			81		%		75-125	03-DEC-08
Methyl Ethyl Ketone			78		%		47-155	03-DEC-08
Methyl Isobutyl Ketone			75		%		60-132	03-DEC-08
MTBE			92		%		62-128	03-DEC-08
Dichloromethane			90		%		78-121	03-DEC-08
Styrene			78		%		72-130	03-DEC-08
Tetrachloroethylene			86		%		78-130	03-DEC-08
trans-1,2-Dichloroethylene			93		%		63-138	03-DEC-08
trans-1,3-Dichloropropene			95		%		63-138	03-DEC-08
Trichloroethylene			79		%		74-124	03-DEC-08

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VOC-ROU-NO-BTX-WT	Water							
Batch	R765146							
WG879842-1	CVS							
Trichlorofluoromethane			108		%		67-133	03-DEC-08
Vinyl chloride			102		%		55-145	03-DEC-08
WG879842-4	DUP	WG879842-3						
1,1,1,2-Tetrachloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,1,1-Trichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,1,2,2-Tetrachloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,1,2-Trichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,1-Dichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,1-Dichloroethylene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,2-Dichlorobenzene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,2-Dichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,2-Dichloropropane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,3-Dichlorobenzene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
1,4-Dichlorobenzene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
2-Hexanone		<20	<20	RPD-NA	ug/L	N/A	20	04-DEC-08
Acetone		<20	<20	RPD-NA	ug/L	N/A	20	04-DEC-08
Bromodichloromethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Bromoform		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Bromomethane		1.9	1.8	PPMB	ug/L	0.2	0.2	04-DEC-08
Carbon Disulfide		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Carbon tetrachloride		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Chlorobenzene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Dibromochloromethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Chloroethane		<1	<1	RPD-NA	ug/L	N/A	20	04-DEC-08
Chloroform		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Chloromethane		<1	<1	RPD-NA	ug/L	N/A	20	04-DEC-08
cis-1,2-Dichloroethylene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
cis-1,3-Dichloropropene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Dichlorodifluoromethane		<1	<1	RPD-NA	ug/L	N/A	20	04-DEC-08
1,2-Dibromoethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08
Methyl Ethyl Ketone		<20	<20	RPD-NA	ug/L	N/A	20	04-DEC-08
Methyl Isobutyl Ketone		<20	<20	RPD-NA	ug/L	N/A	20	04-DEC-08
MTBE		<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch R765146								
WG879842-4 DUP	WG879842-3							
Dichloromethane	<0.5	<0.5	RPD-NA	ug/L	N/A	31	04-DEC-08	
Styrene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08	
Tetrachloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08	
trans-1,2-Dichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08	
trans-1,3-Dichloropropene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08	
Trichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08	
Trichlorofluoromethane	<1	<1	RPD-NA	ug/L	N/A	20	04-DEC-08	
Vinyl chloride	<0.5	<0.5	RPD-NA	ug/L	N/A	20	04-DEC-08	
WG879842-2 MB								
1,1,1,2-Tetrachloroethane		<0.5		ug/L		0.5	04-DEC-08	
1,1,1-Trichloroethane		<0.5		ug/L		0.5	04-DEC-08	
1,1,2,2-Tetrachloroethane		<0.5		ug/L		0.5	04-DEC-08	
1,1,2-Trichloroethane		<0.5		ug/L		0.5	04-DEC-08	
1,1-Dichloroethane		<0.5		ug/L		0.5	04-DEC-08	
1,1-Dichloroethylene		<0.5		ug/L		0.5	04-DEC-08	
1,2-Dichlorobenzene		<0.5		ug/L		0.5	04-DEC-08	
1,2-Dichloroethane		<0.5		ug/L		0.5	04-DEC-08	
1,2-Dichloropropane		<0.5		ug/L		0.5	04-DEC-08	
1,3-Dichlorobenzene		<0.5		ug/L		0.5	04-DEC-08	
1,4-Dichlorobenzene		<0.5		ug/L		0.5	04-DEC-08	
2-Hexanone	<20			ug/L		20	04-DEC-08	
Acetone	<20			ug/L		20	04-DEC-08	
Bromodichloromethane		<0.5		ug/L		0.5	04-DEC-08	
Bromoform		<0.5		ug/L		0.5	04-DEC-08	
Carbon Disulfide		<0.5		ug/L		0.5	04-DEC-08	
Carbon tetrachloride		<0.5		ug/L		0.5	04-DEC-08	
Chlorobenzene		<0.5		ug/L		0.5	04-DEC-08	
Dibromochloromethane		<0.5		ug/L		0.5	04-DEC-08	
Chloroethane	<1			ug/L		1	04-DEC-08	
Chloroform	<0.5			ug/L		0.5	04-DEC-08	
Chloromethane	<1			ug/L		1	04-DEC-08	
cis-1,2-Dichloroethylene	<0.5			ug/L		0.5	04-DEC-08	
cis-1,3-Dichloropropene	<0.5			ug/L		0.5	04-DEC-08	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch	R765146							
WG879842-2	MB							
Dichlorodifluoromethane			<1		ug/L		1	04-DEC-08
1,2-Dibromoethane			<0.5		ug/L		0.5	04-DEC-08
Methyl Ethyl Ketone			<20		ug/L		20	04-DEC-08
Methyl Isobutyl Ketone			<20		ug/L		20	04-DEC-08
MTBE			<0.5		ug/L		0.5	04-DEC-08
Dichloromethane			<0.5		ug/L		0.5	04-DEC-08
Styrene			<0.5		ug/L		0.5	04-DEC-08
Tetrachloroethylene			<0.5		ug/L		0.5	04-DEC-08
trans-1,2-Dichloroethylene			<0.5		ug/L		0.5	04-DEC-08
trans-1,3-Dichloropropene			<0.5		ug/L		0.5	04-DEC-08
Trichloroethylene			<0.5		ug/L		0.5	04-DEC-08
Trichlorofluoromethane			<1		ug/L		1	04-DEC-08
Vinyl chloride			<0.5		ug/L		0.5	04-DEC-08
Bromomethane			2.7	A	ug/L		0.5	04-DEC-08
COMMENTS: Method blank positive; related samples have been qualified accordingly and/or blank corrected.								
AS,SB,SE-3050-MS-WT	Soil							
Batch	R767196							
WG883491-2	CVS							
Antimony (Sb)			93		%		63-138	09-DEC-08
Arsenic (As)			104		%		63-138	09-DEC-08
Selenium (Se)			98		%		63-138	09-DEC-08
WG881744-4	DUP	WG881744-3						
Antimony (Sb)		<1	<1	RPD-NA	mg/kg	N/A	26	09-DEC-08
Arsenic (As)		1	1	J	mg/kg	0	4	09-DEC-08
Selenium (Se)		<1	<1	RPD-NA	mg/kg	N/A	26	09-DEC-08
WG881744-2	LCS							
Arsenic (As)			83		%		63-138	09-DEC-08
Selenium (Se)			75		%		63-138	09-DEC-08
WG881744-1	MB							
Antimony (Sb)			<1		mg/kg		1	09-DEC-08
Arsenic (As)			<1		mg/kg		1	09-DEC-08
Selenium (Se)			<1		mg/kg		1	09-DEC-08
B-AVAIL-WT	Soil							

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<b>B-AVAIL-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765821</b>							
<b>WG881766-3</b>	<b>DUP</b>	<b>L714725-3</b>						
Boron (B), Available		0.2	0.2	J	ug/g	0.0	0.4	05-DEC-08
<b>WG881766-2</b>	<b>LCS</b>				%			
Boron (B), Available			102				60-140	05-DEC-08
<b>WG881766-1</b>	<b>MB</b>							
Boron (B), Available			<0.1		ug/g		0.1	05-DEC-08
<b>CR-CR6-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765163</b>							
<b>WG881255-9</b>	<b>CVS</b>				%			
Chromium, Hexavalent			91				70-130	04-DEC-08
<b>WG881084-3</b>	<b>DUP</b>	<b>L713254-4</b>						
Chromium, Hexavalent		<2	<2	RPD-NA	mg/kg	N/A	20	04-DEC-08
<b>WG881084-4</b>	<b>DUP</b>	<b>L714136-1</b>						
Chromium, Hexavalent		<2	<2	RPD-NA	mg/kg	N/A	20	04-DEC-08
<b>WG881084-5</b>	<b>DUP</b>	<b>L714614-4</b>						
Chromium, Hexavalent		<2	<2	RPD-NA	mg/kg	N/A	20	04-DEC-08
<b>WG881084-1</b>	<b>MB</b>						2	04-DEC-08
Chromium, Hexavalent			<2		mg/kg			
<b>F1-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765152</b>							
<b>WG880384-1</b>	<b>CVS</b>				%			
TVH: (C6-C10 / No BTEX Correction)			89				59-131	04-DEC-08
<b>WG880426-2</b>	<b>DUP</b>	<b>L714136-1</b>						
TVH: (C6-C10 / No BTEX Correction)		<5	<5	RPD-NA	mg/kg	N/A	65	04-DEC-08
<b>WG880426-1</b>	<b>MB</b>							
TVH: (C6-C10 / No BTEX Correction)			<5		mg/kg		5	04-DEC-08
<b>F2-F4-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765079</b>							
<b>WG881070-1</b>	<b>CVS</b>							
F2 (C10-C16)			100		%		80-120	04-DEC-08
F3 (C16-C34)			101		%		80-120	04-DEC-08
F4 (C34-C50)			102		%		70-130	04-DEC-08
<b>WG881070-2</b>	<b>CVS</b>							
F2 (C10-C16)			95		%		80-120	04-DEC-08
F3 (C16-C34)			97		%		80-120	04-DEC-08
F4 (C34-C50)			100		%		70-130	04-DEC-08
<b>WG881070-3</b>	<b>CVS</b>							

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F2-F4-WT	Soil							
Batch	R765079							
WG881070-3	CVS							
F2 (C10-C16)			89		%		80-120	04-DEC-08
F3 (C16-C34)			95		%		80-120	04-DEC-08
F4 (C34-C50)			103		%		70-130	04-DEC-08
WG880415-4	DUP	L714104-8						
F2 (C10-C16)		2850	2830		mg/kg	0.61	65	04-DEC-08
F3 (C16-C34)		2830	2650		mg/kg	6.9	65	04-DEC-08
F4 (C34-C50)		116	119	J	mg/kg	2	20	04-DEC-08
WG880415-2	LCS							
F2 (C10-C16)			88		%		54-120	04-DEC-08
F3 (C16-C34)			87		%		60-106	04-DEC-08
F4 (C34-C50)			85		%		52-122	04-DEC-08
WG880415-3	LCSD	WG880415-2						
F2 (C10-C16)		88	87		%	0.90	45	04-DEC-08
F3 (C16-C34)		87	86		%	1.0	45	04-DEC-08
F4 (C34-C50)		85	85		%	0.39	45	04-DEC-08
WG880415-1	MB							
F2 (C10-C16)			<10		mg/kg		10	04-DEC-08
F3 (C16-C34)			<50		mg/kg		50	04-DEC-08
F4 (C34-C50)			<50		mg/kg		50	04-DEC-08
HG-WT	Soil							
Batch	R765905							
WG881773-3	DUP	L714516-1						
Mercury (Hg)		<0.05	<0.05		ug/g		N/A	20
WG881773-4	LCS							
Mercury (Hg)			111		%		70-130	05-DEC-08
WG881773-1	MB							
Mercury (Hg)			<0.05		ug/g		0.05	05-DEC-08
MET-R153-WT	Soil							
Batch	R765820							
WG881769-2	CVS							
Barium (Ba)			101		%		80-120	05-DEC-08
Beryllium (Be)			95		%		80-120	05-DEC-08
Cadmium (Cd)			99		%		80-120	05-DEC-08
Chromium (Cr)			98		%		80-120	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Soil							
Batch	R765820							
WG881769-2	CVS							
Cobalt (Co)			100		%		80-120	05-DEC-08
Copper (Cu)			99		%		80-120	05-DEC-08
Lead (Pb)			87		%		80-120	05-DEC-08
Molybdenum (Mo)			94		%		80-120	05-DEC-08
Nickel (Ni)			101		%		80-120	05-DEC-08
Silver (Ag)			89		%		80-120	05-DEC-08
Thallium (Tl)			99		%		80-120	05-DEC-08
Vanadium (V)			91		%		80-120	05-DEC-08
Zinc (Zn)			94		%		80-120	05-DEC-08
WG881744-4	DUP	WG881744-3						
Barium (Ba)		12	12		mg/kg	1.7	20	05-DEC-08
Beryllium (Be)		<0.5	<0.5	RPD-NA	mg/kg	N/A	20	05-DEC-08
Cadmium (Cd)		<0.5	<0.5	RPD-NA	mg/kg	N/A	20	05-DEC-08
Chromium (Cr)		6	7	J	mg/kg	0	4	05-DEC-08
Cobalt (Co)		3	3	J	mg/kg	0	4	05-DEC-08
Copper (Cu)		7	7	J	mg/kg	0	4	05-DEC-08
Lead (Pb)		8	8	J	mg/kg	0	4	05-DEC-08
Molybdenum (Mo)		<1	<1	RPD-NA	mg/kg	N/A	20	05-DEC-08
Nickel (Ni)		4	4	J	mg/kg	0	4	05-DEC-08
Silver (Ag)		<0.2	<0.2	RPD-NA	mg/kg	N/A	20	05-DEC-08
Thallium (Tl)		<1	<1	RPD-NA	mg/kg	N/A	20	05-DEC-08
Vanadium (V)		10	11		mg/kg	6.0	20	05-DEC-08
Zinc (Zn)		36	37		mg/kg	2.9	20	05-DEC-08
WG881744-2	LCS							
Barium (Ba)			101		%		80-120	05-DEC-08
Beryllium (Be)			95		%		80-120	05-DEC-08
Cadmium (Cd)			94		%		80-120	05-DEC-08
Chromium (Cr)			101		%		80-120	05-DEC-08
Cobalt (Co)			99		%		80-120	05-DEC-08
Copper (Cu)			100		%		80-120	05-DEC-08
Lead (Pb)			97		%		80-120	05-DEC-08
Nickel (Ni)			98		%		80-120	05-DEC-08
Thallium (Tl)			93		%		80-120	05-DEC-08

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<b>MET-R153-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765820</b>							
<b>WG881744-2</b>	<b>LCS</b>							
Vanadium (V)			96		%		80-120	05-DEC-08
Zinc (Zn)			96		%		80-120	05-DEC-08
<b>WG881744-1</b>	<b>MB</b>							
Barium (Ba)			<1		mg/kg		1	05-DEC-08
Beryllium (Be)			<0.5		mg/kg		0.5	05-DEC-08
Cadmium (Cd)			<0.5		mg/kg		0.5	05-DEC-08
Chromium (Cr)			<1		mg/kg		1	05-DEC-08
Cobalt (Co)			<1		mg/kg		1	05-DEC-08
Copper (Cu)			<1		mg/kg		1	05-DEC-08
Lead (Pb)			<1		mg/kg		1	05-DEC-08
Molybdenum (Mo)			<1		mg/kg		1	05-DEC-08
Nickel (Ni)			<1		mg/kg		1	05-DEC-08
Silver (Ag)			<0.2		mg/kg		0.2	05-DEC-08
Thallium (Tl)			<1		mg/kg		1	05-DEC-08
Vanadium (V)			<1		mg/kg		1	05-DEC-08
Zinc (Zn)			<1		mg/kg		1	05-DEC-08
<b>MOISTURE-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765029</b>							
<b>WG880505-3</b>	<b>DUP</b>	<b>L714136-1</b>						
% Moisture			11.2		%		2.7	26
<b>WG880505-2</b>	<b>LCS</b>							
% Moisture			100		%		79-120	03-DEC-08
<b>WG880505-1</b>	<b>MB</b>							
% Moisture			<0.5		%		0.5	03-DEC-08
<b>PH-R153-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765022</b>							
<b>WG881035-1</b>	<b>CVS</b>							
pH			100		%		63-138	03-DEC-08
<b>WG881035-2</b>	<b>DUP</b>	<b>L714136-1</b>						
pH			7.63		pH units		0.52	26
<b>VOC-CCME-TABLE1-WT</b>	<b>Soil</b>							

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VOC-CCME-TABLE1-WT	Soil							
Batch	R765367							
WG881027-1	CVS							
1,1,1,2-Tetrachloroethane			96		%		75-125	04-DEC-08
1,1,1-Trichloroethane			99		%		75-125	04-DEC-08
1,1,2,2-Tetrachloroethane			98		%		75-125	04-DEC-08
1,1,2-Trichloroethane			99		%		75-125	04-DEC-08
1,1-Dichloroethane			101		%		75-125	04-DEC-08
1,1-Dichloroethylene			99		%		75-125	04-DEC-08
1,2-Dichlorobenzene			97		%		75-125	04-DEC-08
1,2-Dichloroethane			96		%		75-125	04-DEC-08
1,2-Dichloropropane			101		%		75-125	04-DEC-08
1,3-Dichlorobenzene			99		%		75-125	04-DEC-08
1,4-Dichlorobenzene			99		%		75-125	04-DEC-08
2-Hexanone			102		%		75-125	04-DEC-08
Acetone			92		%		75-125	04-DEC-08
Benzene			96		%		75-125	04-DEC-08
Bromodichloromethane			103		%		75-125	04-DEC-08
Bromoform			88		%		75-125	04-DEC-08
Bromomethane			102		%		55-145	04-DEC-08
Carbon Disulfide			95		%		75-125	04-DEC-08
Carbon tetrachloride			98		%		75-125	04-DEC-08
Chlorobenzene			100		%		75-125	04-DEC-08
Dibromochloromethane			93		%		75-125	04-DEC-08
Chloroethane			99		%		75-125	04-DEC-08
Chloroform			103		%		75-125	04-DEC-08
Chloromethane			104		%		75-125	04-DEC-08
cis-1,2-Dichloroethylene			95		%		75-125	04-DEC-08
cis-1,3-Dichloropropene			92		%		75-125	04-DEC-08
Dibromomethane			102		%		55-145	04-DEC-08
Dichlorodifluoromethane			86		%		75-125	04-DEC-08
Ethyl Benzene			97		%		75-125	04-DEC-08
1,2-Dibromoethane			97		%		55-145	04-DEC-08
m+p-Xylenes			97		%		75-125	04-DEC-08
Methyl Ethyl Ketone			84		%		75-125	04-DEC-08
Methyl Isobutyl Ketone			104		%		55-145	04-DEC-08

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VOC-CCME-TABLE1-WT	Soil							
Batch	R765367							
WG881027-1	CVS							
MTBE			94		%		75-125	04-DEC-08
Dichloromethane			102		%		55-145	04-DEC-08
o-Xylene			96		%		75-125	04-DEC-08
Styrene			92		%		75-125	04-DEC-08
Tetrachloroethylene			96		%		75-125	04-DEC-08
Toluene			103		%		75-125	04-DEC-08
trans-1,2-Dichloroethylene			106		%		75-125	04-DEC-08
trans-1,3-Dichloropropene			92		%		75-125	04-DEC-08
Trichloroethylene			96		%		75-125	04-DEC-08
Trichlorofluoromethane			110		%		66-137	04-DEC-08
Vinyl chloride			109		%		75-125	04-DEC-08
WG880420-3	DUP	WG880420-2						
1,1,1,2-Tetrachloroethane		<0.008	<0.008	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,1,1-Trichloroethane		<0.008	<0.008	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,1,2,2-Tetrachloroethane		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,1,2-Trichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,1-Dichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,1-Dichloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,2-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,2-Dichloroethane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,2-Dichloropropane		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,3-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,4-Dichlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
2-Hexanone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	04-DEC-08
Acetone		<0.5	<0.5	RPD-NA	mg/kg	N/A	39	04-DEC-08
Benzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
Bromodichloromethane		<0.005	<0.005	RPD-NA	mg/kg	N/A	39	04-DEC-08
Bromoform		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
Bromomethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	04-DEC-08
Carbon Disulfide		<0.02	<0.02	RPD-NA	mg/kg	N/A	39	04-DEC-08
Carbon tetrachloride		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
Chlorobenzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
Dibromochloromethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	04-DEC-08

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<b>VOC-CCME-TABLE1-WT      Soil</b>								
<b>Batch</b>	<b>R765367</b>							
<b>WG880420-3      DUP</b>		<b>WG880420-2</b>						
Chloroethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	04-DEC-08
Chloroform		<0.006	<0.006	RPD-NA	mg/kg	N/A	39	04-DEC-08
Chloromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	04-DEC-08
cis-1,2-Dichloroethylene		<0.02	<0.02	RPD-NA	mg/kg	N/A	39	04-DEC-08
cis-1,3-Dichloropropene		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	04-DEC-08
Dibromomethane		<0.01	<0.01	RPD-NA	mg/kg	N/A	39	04-DEC-08
Dichlorodifluoromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	04-DEC-08
Ethyl Benzene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
1,2-Dibromoethane		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	04-DEC-08
m+p-Xylenes		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
Methyl Ethyl Ketone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	04-DEC-08
Methyl Isobutyl Ketone		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	04-DEC-08
MTBE		<0.2	<0.2	RPD-NA	mg/kg	N/A	39	04-DEC-08
Dichloromethane		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	04-DEC-08
o-Xylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
Styrene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
Tetrachloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
Toluene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
trans-1,2-Dichloroethylene		<0.002	<0.002	RPD-NA	mg/kg	N/A	39	04-DEC-08
trans-1,3-Dichloropropene		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	04-DEC-08
Trichloroethylene		<0.004	<0.004	RPD-NA	mg/kg	N/A	39	04-DEC-08
Trichlorofluoromethane		<0.03	<0.03	RPD-NA	mg/kg	N/A	39	04-DEC-08
Vinyl chloride		<0.003	<0.003	RPD-NA	mg/kg	N/A	39	04-DEC-08
<b>WG880420-1      MB</b>								
1,1,1,2-Tetrachloroethane		<0.008			mg/kg		0.008	04-DEC-08
1,1,1-Trichloroethane		<0.008			mg/kg		0.008	04-DEC-08
1,1,2,2-Tetrachloroethane		<0.004			mg/kg		0.004	04-DEC-08
1,1,2-Trichloroethane		<0.002			mg/kg		0.002	04-DEC-08
1,1-Dichloroethane		<0.002			mg/kg		0.002	04-DEC-08
1,1-Dichloroethylene		<0.002			mg/kg		0.002	04-DEC-08
1,2-Dichlorobenzene		<0.002			mg/kg		0.002	04-DEC-08
1,2-Dichloroethane		<0.002			mg/kg		0.002	04-DEC-08
1,2-Dichloropropane		<0.002			mg/kg		0.002	04-DEC-08

# ALS Laboratory Group Quality Control Report

Workorder: L714516

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R765367							
WG880420-1	MB							
1,3-Dichlorobenzene			<0.002		mg/kg	0.002	04-DEC-08	
1,4-Dichlorobenzene			<0.002		mg/kg	0.002	04-DEC-08	
2-Hexanone			<0.2		mg/kg	0.2	04-DEC-08	
Acetone			<0.5		mg/kg	0.5	04-DEC-08	
Benzene			<0.002		mg/kg	0.002	04-DEC-08	
Bromodichloromethane			<0.005		mg/kg	0.005	04-DEC-08	
Bromoform			<0.002		mg/kg	0.002	04-DEC-08	
Bromomethane			<0.003		mg/kg	0.003	04-DEC-08	
Carbon Disulfide			<0.02		mg/kg	0.02	04-DEC-08	
Carbon tetrachloride			<0.002		mg/kg	0.002	04-DEC-08	
Chlorobenzene			<0.002		mg/kg	0.002	04-DEC-08	
Dibromochloromethane			<0.003		mg/kg	0.003	04-DEC-08	
Chloroethane			<0.03		mg/kg	0.03	04-DEC-08	
Chloroform			<0.006		mg/kg	0.006	04-DEC-08	
Chloromethane			<0.03		mg/kg	0.03	04-DEC-08	
cis-1,2-Dichloroethylene			<0.02		mg/kg	0.02	04-DEC-08	
cis-1,3-Dichloropropene			<0.003		mg/kg	0.003	04-DEC-08	
Dibromomethane			<0.01		mg/kg	0.01	04-DEC-08	
Dichlorodifluoromethane			<0.03		mg/kg	0.03	04-DEC-08	
Ethyl Benzene			<0.002		mg/kg	0.002	04-DEC-08	
1,2-Dibromoethane			<0.004		mg/kg	0.004	04-DEC-08	
m+p-Xylenes			<0.002		mg/kg	0.002	04-DEC-08	
Methyl Ethyl Ketone			<0.2		mg/kg	0.2	04-DEC-08	
Methyl Isobutyl Ketone			<0.2		mg/kg	0.2	04-DEC-08	
MTBE			<0.2		mg/kg	0.2	04-DEC-08	
Dichloromethane			<0.003		mg/kg	0.003	04-DEC-08	
o-Xylene			<0.002		mg/kg	0.002	04-DEC-08	
Styrene			<0.002		mg/kg	0.002	04-DEC-08	
Tetrachloroethylene			<0.002		mg/kg	0.002	04-DEC-08	
Toluene			<0.002		mg/kg	0.002	04-DEC-08	
trans-1,2-Dichloroethylene			<0.002		mg/kg	0.002	04-DEC-08	
trans-1,3-Dichloropropene			<0.003		mg/kg	0.003	04-DEC-08	
Trichloroethylene			<0.004		mg/kg	0.004	04-DEC-08	

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R765367							
WG880420-1	MB							
Trichlorofluoromethane			<0.03		mg/kg		0.03	04-DEC-08
Vinyl chloride			<0.003		mg/kg		0.003	04-DEC-08

# ALS Laboratory Group Quality Control Report

Workorder: L714516

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## Legend:

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Limit 99% Confidence Interval (Laboratory Control Limits)

DUP Duplicate

RPD Relative Percent Difference

N/A Not Available

LCS Laboratory Control Sample

SRM Standard Reference Material

MS Matrix Spike

MSD Matrix Spike Duplicate

ADE Average Desorption Efficiency

MB Method Blank

IRM Internal Reference Material

CRM Certified Reference Material

CCV Continuing Calibration Verification

CVS Calibration Verification Standard

LCSD Laboratory Control Sample Duplicate

## Sample Parameter Qualifier Definitions:

---

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
J	Duplicate results and limits are expressed in terms of absolute difference.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.



**Environmental Division**

**Certificate of Analysis**

XCG CONSULTANTS LTD.

**ATTN:** THOMAS KOLODZIEJ

820 TRILLIUM DRIVE

KITCHENER ON N2R 1K4

**Reported On:** 09-DEC-08 12:59 PM

**Lab Work Order #:** **L714542**

**Date Received:** **02-DEC-08**

**Project P.O. #:**

**Job Reference:** 5-698-17-02

**Legal Site Desc:**

**CofC Numbers:** 62600

**Other Information:**

**Comments:**

MARY-LYNN PIKE  
Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.  
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU  
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

**ALS Canada Ltd. (formerly ETL Chemspect Analytical Ltd.)**  
Part of the **ALS Laboratory Group**

60 Northland Road, Unit 1, Waterloo, ON N2V 2B8  
**Phone: +1 519 886 6910 Fax: +1 519 886 9047 www.alsglobal.com**  
A Campbell Brothers Limited Company



**Environmental Division**

**ALS LABORATORY GROUP CRITERIA REPORT**

L714542 CONTD....

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5-698-17-02

Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714542-1 REG 558 Sampled By: LUKE T on 02-DEC-08 Matrix: SOIL					ON-558/00		
<b>O.Reg 558 TCLP Metals and Conventionals</b>							
Nitrate and Nitrite as N	<4		4	mg/L	1000	06-DEC-08	
Cyanide, Weak Acid Diss	<0.002		0.002	mg/L	20.0	05-DEC-08	R765839
Fluoride (F)	<10		10	mg/L	150	05-DEC-08	R766311
Mercury (Hg)	<0.0001		0.0001	mg/L	0.1	08-DEC-08	R766763
<b>Nitrate/Nitrite-N for O. Reg 347</b>							
Nitrate-N	<2		2	mg/L		05-DEC-08	R766311
Nitrite-N	<2		2	mg/L		05-DEC-08	R766311
<b>O.Reg 347 TCLP Leachable Metals</b>							
Silver (Ag)	<0.001		0.001	mg/L	5	08-DEC-08	R766655
Arsenic (As)	<0.01		0.01	mg/L	2.5	08-DEC-08	R766655
Boron (B)	<0.5		0.5	mg/L	500	08-DEC-08	R766655
Barium (Ba)	0.8		0.1	mg/L	100	08-DEC-08	R766655
Cadmium (Cd)	0.003		0.001	mg/L	0.5	08-DEC-08	R766655
Chromium (Cr)	<0.01		0.01	mg/L	5.0	08-DEC-08	R766655
Lead (Pb)	0.04		0.01	mg/L	5.0	08-DEC-08	R766655
Selenium (Se)	<0.05		0.05	mg/L	1.0	08-DEC-08	R766655
Uranium (U)	<0.05		0.05	mg/L	10.0	08-DEC-08	R766655
<b>Individual Analytes</b>							
% Moisture	17.1		0.5	%		03-DEC-08	R765029
<b>PCBs for O. Reg 347</b>							
Aroclor 1260	<0.0002		0.0002	mg/L		08-DEC-08	R767126
Aroclor 1254	<0.0002		0.0002	mg/L		08-DEC-08	R767126
Aroclor 1242	<0.0002		0.0002	mg/L		08-DEC-08	R767126
Aroclor 1248	<0.0002		0.0002	mg/L		08-DEC-08	R767126
Total PCBs	<0.0002		0.0002	mg/L	0.3	08-DEC-08	R767126
Surr: d14-Terphenyl	114		25-175	%		08-DEC-08	R767126
<b>VOC for O. Reg 347</b>							
1,1-Dichloroethylene	<0.05		0.05	mg/L	1.4	06-DEC-08	R766180
1,2-Dichlorobenzene	<0.05		0.05	mg/L	20.0	06-DEC-08	R766180
1,2-Dichloroethane	<0.05		0.05	mg/L	0.5	06-DEC-08	R766180
1,4-Dichlorobenzene	<0.05		0.05	mg/L	0.5	06-DEC-08	R766180
Benzene	<0.05		0.05	mg/L	0.5	06-DEC-08	R766180
Carbon tetrachloride	<0.05		0.05	mg/L	0.5	06-DEC-08	R766180
Chlorobenzene	<0.05		0.05	mg/L	8.0	06-DEC-08	R766180
Chloroform	<0.05		0.05	mg/L	10.0	06-DEC-08	R766180
Dichloromethane	<0.05		0.05	mg/L	5.0	06-DEC-08	R766180
Methyl Ethyl Ketone	<2		2	mg/L	200	06-DEC-08	R766180
Tetrachloroethylene	<0.05		0.05	mg/L	3.0	06-DEC-08	R766180
Trichloroethylene	<0.05		0.05	mg/L	5.0	06-DEC-08	R766180
Vinyl chloride	<0.1		0.1	mg/L	0.2	06-DEC-08	R766180
Surr: 1,2-Dichloroethane d4	106		70-130	%		06-DEC-08	R766180
Surr: Toluene-d8	107		70-130	%		06-DEC-08	R766180
Surr: 4-Bromofluorobenzene	104		70-130	%		06-DEC-08	R766180

\*\* analytical results for this parameter exceed criteria limits listed on this report

**O.REG 558/00 LEACHATE QUALITY CRITERIA**

# Reference Information

L714542 CONTD....

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**Methods Listed (if applicable):**

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
CN-TCLP-WT	Waste	Cyanide for O. Reg 347		APHA 4500CN C E
ETL-N2N3-WT	Water	Calculate from NO <sub>2</sub> + NO <sub>3</sub>		APHA 4110 B
F-TCLP-WT	Waste	Fluoride (F) for O. Reg 347		APHA 4110 B-Ion Chromatography
HG-TCLP-WT	Waste	Mercury (CVAA) for O.Reg 347		SW846 7470A
MET-TCLP-WT	Waste	O.Reg 347 TCLP Leachable Metals		EPA 200.8
MOISTURE-WT	Soil	% Moisture		Gravimetric: Oven Dried
N2N3-TCLP-WT	Waste	Nitrate/Nitrite-N for O. Reg 347		APHA 4110 B-Ion Chromatography
PCB-TCLP-WT	Waste	PCBs for O. Reg 347		SW846 8270
VOC-TCLP-WT	Waste	VOC for O. Reg 347		SW846 8260

Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

62600

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS LABORATORY GROUP - WATERLOO, ONTARIO, CAN		

**GLOSSARY OF REPORT TERMS**

**Surr** - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

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

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS provides criteria information as a service to you, our customer. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. ALS recommends review of the most current version of the regulation, and assumes no responsibility for the accuracy of the criteria levels indicated.



**Environmental Division**

**ALS Laboratory Group Quality Control Report**

Workorder: L714542

Report Date: 09-DEC-08

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Client: XCG CONSULTANTS LTD.  
820 TRILLIUM DRIVE  
KITCHENER ON N2R 1K4

Contact: THOMAS KOLODZIEJ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>MOISTURE-WT</b>								
	Soil							
Batch	R765029							
WG880505-3	DUP	L714136-1						
% Moisture		11.2	11.5		%	2.7	26	03-DEC-08
WG880505-2	LCS							
% Moisture			100		%		79-120	03-DEC-08
WG880505-1	MB							
% Moisture			<0.5		%		0.5	03-DEC-08
<b>CN-TCLP-WT</b>								
	Waste							
Batch	R765839							
WG881848-2	CVS							
Cyanide, Weak Acid Diss			104		%		85-115	05-DEC-08
WG881848-3	DUP	L714542-1						
Cyanide, Weak Acid Diss		<0.002	<0.002	RPD-NA	mg/L	N/A	26	05-DEC-08
WG881848-1	MB							
Cyanide, Weak Acid Diss			<0.002		mg/L		0.002	05-DEC-08
<b>F-TCLP-WT</b>								
	Waste							
Batch	R766311							
WG881966-5	DUP	WG881966-4						
Fluoride (F)		<10	<10	RPD-NA	mg/L	N/A	20	05-DEC-08
WG881966-8	DUP	L714542-1						
Fluoride (F)		<10	<10	RPD-NA	mg/L	N/A	20	05-DEC-08
WG881966-3	LCS							
Fluoride (F)			102		%		75-125	05-DEC-08
WG881966-1	MB							
Fluoride (F)			<10		mg/L		10	05-DEC-08
<b>HG-TCLP-WT</b>								
	Waste							
Batch	R766763							
WG882776-2	CVS							
Mercury (Hg)			96		%		67-119	08-DEC-08
WG882776-4	DUP	WG882776-3						
Mercury (Hg)		<0.0001	<0.0001	RPD-NA	mg/L	N/A	20	08-DEC-08
WG882776-1	MB							
Mercury (Hg)			<0.0001		mg/L		0.0001	08-DEC-08
<b>MET-TCLP-WT</b>								
	Waste							
Batch	R766655							
WG882785-1	CVS							
Arsenic (As)			112		%		91-121	08-DEC-08
Barium (Ba)			108		%		88-120	08-DEC-08

# ALS Laboratory Group Quality Control Report

Workorder: L714542

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>MET-TCLP-WT</b> <b>Waste</b>								
<b>Batch</b>	<b>R766655</b>							
<b>WG882785-1</b>	<b>CVS</b>							
Boron (B)			115		%		70-130	08-DEC-08
Cadmium (Cd)			112		%		86-120	08-DEC-08
Chromium (Cr)			109		%		88-120	08-DEC-08
Lead (Pb)			115		%		88-124	08-DEC-08
Selenium (Se)			106		%		86-128	08-DEC-08
Silver (Ag)			105		%		70-130	08-DEC-08
Uranium (U)			113		%		70-130	08-DEC-08
<b>WG882785-5</b>	<b>DUP</b>	<b>WG882785-4</b>						
Arsenic (As)		<0.01	<0.01	RPD-NA	mg/L	N/A	20	08-DEC-08
Barium (Ba)		0.9	0.9	J	mg/L	0.0	0.4	08-DEC-08
Boron (B)		<0.5	<0.5	RPD-NA	mg/L	N/A	20	08-DEC-08
Cadmium (Cd)		0.003	0.003	J	mg/L	0.000	0.004	08-DEC-08
Chromium (Cr)		<0.01	<0.01	RPD-NA	mg/L	N/A	20	08-DEC-08
Lead (Pb)		0.04	0.04	J	mg/L	0.00	0.04	08-DEC-08
Selenium (Se)		<0.05	<0.05	RPD-NA	mg/L	N/A	26	08-DEC-08
Silver (Ag)		<0.001	<0.001	RPD-NA	mg/L	N/A	20	08-DEC-08
Uranium (U)		<0.05	<0.05	RPD-NA	mg/L	N/A	26	08-DEC-08
<b>WG882785-3</b>	<b>MB</b>							
Arsenic (As)			<0.001		mg/L		0.001	08-DEC-08
Barium (Ba)			<0.01		mg/L		0.01	08-DEC-08
Boron (B)			<0.05		mg/L		0.05	08-DEC-08
Cadmium (Cd)			<0.0001		mg/L		0.0001	08-DEC-08
Chromium (Cr)			<0.001		mg/L		0.001	08-DEC-08
Lead (Pb)			<0.001		mg/L		0.001	08-DEC-08
Selenium (Se)			<0.005		mg/L		0.005	08-DEC-08
Silver (Ag)			<0.0001		mg/L		0.0001	08-DEC-08
Uranium (U)			<0.005		mg/L		0.005	08-DEC-08
<b>N2N3-TCLP-WT</b> <b>Waste</b>								
<b>Batch</b>	<b>R766311</b>							
<b>WG881966-5</b>	<b>DUP</b>	<b>WG881966-4</b>						
Nitrate-N		<2	<2	RPD-NA	mg/L	N/A	35	05-DEC-08
Nitrite-N		<2	<2	RPD-NA	mg/L	N/A	26	05-DEC-08
<b>WG881966-8</b>	<b>DUP</b>	<b>L714542-1</b>						
Nitrate-N		<2	<2					

# ALS Laboratory Group Quality Control Report

Workorder: L714542

Report Date: 09-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>N2N3-TCLP-WT</b>								
<b>Batch</b>	<b>R766311</b>							
<b>WG881966-8</b>	<b>DUP</b>	<b>L714542-1</b>						
Nitrate-N		<2	<2	RPD-NA	mg/L	N/A	35	05-DEC-08
Nitrite-N		<2	<2	RPD-NA	mg/L	N/A	26	05-DEC-08
<b>WG881966-3</b>	<b>LCS</b>							
Nitrate-N			93		%		87-110	05-DEC-08
Nitrite-N			100		%		75-125	05-DEC-08
<b>WG881966-1</b>	<b>MB</b>							
Nitrate-N			<2		mg/L		2	05-DEC-08
Nitrite-N			<2		mg/L		2	05-DEC-08
<b>PCB-TCLP-WT</b>								
<b>Batch</b>	<b>R767126</b>							
<b>WG883366-1</b>	<b>CVS</b>							
Aroclor 1242			97		%		62-116	08-DEC-08
Aroclor 1248			101		%		55-145	08-DEC-08
Aroclor 1254			98		%		63-121	08-DEC-08
Aroclor 1260			109		%		71-119	08-DEC-08
Total PCBs			101		%		55-145	08-DEC-08
<b>WG882809-4</b>	<b>DUP</b>	<b>L714542-1</b>						
Aroclor 1242		<0.0002	<0.0002	RPD-NA	mg/L	N/A	39	08-DEC-08
Aroclor 1248		<0.0002	<0.0002	RPD-NA	mg/L	N/A	39	08-DEC-08
Aroclor 1254		<0.0002	<0.0002	RPD-NA	mg/L	N/A	39	08-DEC-08
Aroclor 1260		<0.0002	<0.0002	RPD-NA	mg/L	N/A	39	08-DEC-08
Total PCBs		<0.0002	<0.0002	RPD-NA	mg/L	N/A	39	08-DEC-08
<b>WG882809-2</b>	<b>LCS</b>							
Aroclor 1242			92		%		42-117	08-DEC-08
Aroclor 1248			92		%		55-145	08-DEC-08
Aroclor 1254			103		%		50-130	08-DEC-08
Aroclor 1260			117		%		50-130	08-DEC-08
Total PCBs			101		%		55-145	08-DEC-08
<b>WG882809-3</b>	<b>LCSD</b>	<b>WG882809-2</b>						
Aroclor 1242		92	94		%	2.8	45	08-DEC-08
Aroclor 1248		92	92		%	0.0	45	08-DEC-08
Aroclor 1254		103	106		%	3.6	45	08-DEC-08
Aroclor 1260		117	122		%	4.0	45	08-DEC-08
Total PCBs		101	104		%	2.7	45	08-DEC-08

# ALS Laboratory Group Quality Control Report

Workorder: L714542

Report Date: 09-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>PCB-TCLP-WT</b>	<b>Waste</b>							
<b>Batch</b>	<b>R767126</b>							
<b>WG882809-1</b>	<b>MB</b>							
Aroclor 1242			<0.0002		mg/L		0.0002	08-DEC-08
Aroclor 1248			<0.0002		mg/L		0.0002	08-DEC-08
Aroclor 1254			<0.0002		mg/L		0.0002	08-DEC-08
Aroclor 1260			<0.0002		mg/L		0.0002	08-DEC-08
Total PCBs			<0.0002		mg/L		0.0002	08-DEC-08
<b>VOC-TCLP-WT</b>	<b>Waste</b>							
<b>Batch</b>	<b>R766180</b>							
<b>WG881951-1</b>	<b>CVS</b>							
1,1-Dichloroethylene			95		%		70-130	05-DEC-08
1,2-Dichlorobenzene			95		%		67-129	05-DEC-08
1,2-Dichloroethane			91		%		62-142	05-DEC-08
1,4-Dichlorobenzene			95		%		67-129	05-DEC-08
Benzene			100		%		81-120	05-DEC-08
Carbon tetrachloride			86		%		71-127	05-DEC-08
Chlorobenzene			100		%		85-116	05-DEC-08
Chloroform			93		%		77-121	05-DEC-08
Methyl Ethyl Ketone			96		%		25-175	05-DEC-08
Dichloromethane			94		%		71-126	05-DEC-08
Tetrachloroethylene			101		%		67-117	05-DEC-08
Trichloroethylene			99		%		70-130	05-DEC-08
Vinyl chloride			100		%		58-141	05-DEC-08
<b>WG881951-4</b>	<b>DUP</b>	<b>WG881951-3</b>						
1,1-Dichloroethylene		<0.05	<0.05	RPD-NA	mg/L	N/A	39	06-DEC-08
1,2-Dichlorobenzene		<0.05	<0.05	RPD-NA	mg/L	N/A	39	06-DEC-08
1,2-Dichloroethane		<0.05	<0.05	RPD-NA	mg/L	N/A	39	06-DEC-08
1,4-Dichlorobenzene		<0.05	<0.05	RPD-NA	mg/L	N/A	39	06-DEC-08
Benzene		<0.05	<0.05	RPD-NA	mg/L	N/A	65	06-DEC-08
Carbon tetrachloride		<0.05	<0.05	RPD-NA	mg/L	N/A	39	06-DEC-08
Chlorobenzene		<0.05	<0.05	RPD-NA	mg/L	N/A	39	06-DEC-08
Chloroform		<0.05	<0.05	RPD-NA	mg/L	N/A	39	06-DEC-08
Methyl Ethyl Ketone		<2	<2	RPD-NA	mg/L	N/A	39	06-DEC-08
Dichloromethane		<0.05	<0.05	RPD-NA	mg/L	N/A	65	06-DEC-08
Tetrachloroethylene		<0.05	<0.05	RPD-NA	mg/L	N/A	65	06-DEC-08

# ALS Laboratory Group Quality Control Report

Workorder: L714542

Report Date: 09-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-TCLP-WT	Waste							
Batch	R766180							
WG881951-4	DUP	WG881951-3						
Trichloroethylene		<0.05	<0.05	RPD-NA	mg/L	N/A	65	06-DEC-08
Vinyl chloride		<0.1	<0.1	RPD-NA	mg/L	N/A	39	06-DEC-08
WG881951-2	MB							
1,1-Dichloroethylene			<0.05		mg/L		0.05	06-DEC-08
1,2-Dichlorobenzene			<0.05		mg/L		0.05	06-DEC-08
1,2-Dichloroethane			<0.05		mg/L		0.05	06-DEC-08
1,4-Dichlorobenzene			<0.05		mg/L		0.05	06-DEC-08
Benzene			<0.05		mg/L		0.05	06-DEC-08
Carbon tetrachloride			<0.05		mg/L		0.05	06-DEC-08
Chlorobenzene			<0.05		mg/L		0.05	06-DEC-08
Chloroform			<0.05		mg/L		0.05	06-DEC-08
Methyl Ethyl Ketone			<2		mg/L		2	06-DEC-08
Tetrachloroethylene			<0.05		mg/L		0.05	06-DEC-08
Trichloroethylene			<0.05		mg/L		0.05	06-DEC-08
Vinyl chloride			<0.1		mg/L		0.1	06-DEC-08
Dichloromethane			0.06	A	mg/L		0.05	06-DEC-08

COMMENTS: Related samples were unaffected.

# ALS Laboratory Group Quality Control Report

Workorder: L714542

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## Legend:

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Limit 99% Confidence Interval (Laboratory Control Limits)

DUP Duplicate

RPD Relative Percent Difference

N/A Not Available

LCS Laboratory Control Sample

SRM Standard Reference Material

MS Matrix Spike

MSD Matrix Spike Duplicate

ADE Average Desorption Efficiency

MB Method Blank

IRM Internal Reference Material

CRM Certified Reference Material

CCV Continuing Calibration Verification

CVS Calibration Verification Standard

LCSD Laboratory Control Sample Duplicate

## Sample Parameter Qualifier Definitions:

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Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
J	Duplicate results and limits are expressed in terms of absolute difference.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.



**Environmental Division**

**Certificate of Analysis**

XCG CONSULTANTS LTD.

**ATTN:** THOMAS KOLODZIEJ

820 TRILLIUM DRIVE

KITCHENER ON N2R 1K4

**Reported On:** 15-DEC-08 01:57 PM

**Lab Work Order #:** L715317

**Date Received:** 05-DEC-08

**Project P.O. #:**

**Job Reference:** 5-698-17-02

**Legal Site Desc:**

**CofC Numbers:** 62599

**Other Information:**

**Comments:**

MARY-LYNN PIKE  
Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.  
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU  
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

**ALS Canada Ltd. (formerly ETL Chemspect Analytical Ltd.)**  
Part of the **ALS Laboratory Group**

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**Environmental Division**

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L715317-1 MW-1 Sampled By: LUKE on 04-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>Individual Analytes</b>							
<b>PCBs</b>							
Aroclor 1242	<0.02		0.02	ug/L		09-DEC-08	R767137
Aroclor 1248	<0.02		0.02	ug/L		09-DEC-08	R767137
Aroclor 1254	<0.02		0.02	ug/L		09-DEC-08	R767137
Aroclor 1260	<0.02		0.02	ug/L		09-DEC-08	R767137
Total PCBs	0.03		0.02	ug/L	0.1	09-DEC-08	R767137
Surrogate: d14-Terphenyl	56		25-175	%		09-DEC-08	R767137
L715317-2 BH-2 Sampled By: LUKE on 04-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>VOC, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	08-DEC-08	R766532
Ethyl Benzene	<0.5		0.5	ug/L	2.4	08-DEC-08	R766532
m+p-Xylenes	<1		1	ug/L		08-DEC-08	R766532
o-Xylene	<0.5		0.5	ug/L		08-DEC-08	R766532
Toluene	<0.5		0.5	ug/L	0.8	08-DEC-08	R766532
Xylene, (total)	<1.5		1.5	ug/L	72	08-DEC-08	R766532
Surrogate: 2,5-Dibromotoluene	103		25-175	%		08-DEC-08	R766532
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		08-DEC-08	
F1-BTEX	<100		100	ug/L		08-DEC-08	
F2 (C10-C16)	<100		100	ug/L		08-DEC-08	
F3 (C16-C34)	<250		250	ug/L		08-DEC-08	
F4 (C34-C50)	<250		250	ug/L		08-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		08-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		08-DEC-08	
Analysis Date				No Unit		08-DEC-08	R766539
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates						08-DEC-08	R766589
Surrogate: Octacosane	90		49-120	No Unit		08-DEC-08	R766589
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	<0.5		0.5	ug/L	5	08-DEC-08	R766722
1,1,2,2-Tetrachloroethane	<0.5		0.5	ug/L	1	08-DEC-08	R766722
1,1,1-Trichloroethane	<0.5		0.5	ug/L	10	08-DEC-08	R766722
1,1,2-Trichloroethane	<0.5		0.5	ug/L	5	08-DEC-08	R766722
1,2-Dibromoethane	<0.5		0.5	ug/L	1	08-DEC-08	R766722
1,1-Dichloroethane	<0.5		0.5	ug/L	70	08-DEC-08	R766722
1,1-Dichloroethylene	<0.5		0.5	ug/L	0.66	08-DEC-08	R766722
1,2-Dichlorobenzene	<0.5		0.5	ug/L	2.5	08-DEC-08	R766722
1,2-Dichloroethane	<0.5		0.5	ug/L	5	08-DEC-08	R766722
1,2-Dichloropropane	<0.5		0.5	ug/L	0.7	08-DEC-08	R766722
1,3-Dichlorobenzene	<0.5		0.5	ug/L	2.5	08-DEC-08	R766722
1,4-Dichlorobenzene	<0.5		0.5	ug/L	1	08-DEC-08	R766722
2-Hexanone	<20		20	ug/L		08-DEC-08	R766722

\*\* analytical results for this parameter exceed criteria limits listed on this report

**O.Reg.153, Table 1 MARCH 9, 2004**



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L715317-2 BH-2 Sampled By: LUKE on 04-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>VOC, F1-F4 (O.Reg.153/04)</b>							
<b>Volatile Organic Compounds</b>							
Acetone	<20		20	ug/L		08-DEC-08	R766722
Bromodichloromethane	<0.5		0.5	ug/L	5	08-DEC-08	R766722
Bromoform	<0.5		0.5	ug/L	5	08-DEC-08	R766722
Bromomethane	<0.5	RAMB	0.5	ug/L	0.9	08-DEC-08	R766722
Carbon Disulfide	<0.5		0.5	ug/L		08-DEC-08	R766722
Carbon tetrachloride	<0.5		0.5	ug/L	0.5	08-DEC-08	R766722
Chlorobenzene	<0.5		0.5	ug/L	15	08-DEC-08	R766722
Chloroethane	<1		1	ug/L		08-DEC-08	R766722
Chloroform	<0.5		0.5	ug/L	0.5	08-DEC-08	R766722
Chloromethane	<1		1	ug/L		08-DEC-08	R766722
cis-1,2-Dichloroethylene	<0.5		0.5	ug/L	70	08-DEC-08	R766722
cis-1,3-Dichloropropene	<0.5		0.5	ug/L	1.4	08-DEC-08	R766722
Dibromochloromethane	<0.5		0.5	ug/L	0.5	08-DEC-08	R766722
Dichlorodifluoromethane	<1		1	ug/L		08-DEC-08	R766722
Dichloromethane	<0.5		0.5	ug/L	50	08-DEC-08	R766722
Methyl Ethyl Ketone	<20		20	ug/L	350	08-DEC-08	R766722
Methyl Isobutyl Ketone	<20		20	ug/L		08-DEC-08	R766722
MTBE	<0.5		0.5	ug/L	200	08-DEC-08	R766722
Styrene	<0.5		0.5	ug/L	4	08-DEC-08	R766722
Tetrachloroethylene	<0.5		0.5	ug/L	5	08-DEC-08	R766722
trans-1,2-Dichloroethylene	<0.5		0.5	ug/L	100	08-DEC-08	R766722
trans-1,3-Dichloropropene	<0.5		0.5	ug/L	1.4	08-DEC-08	R766722
Trichloroethylene	<0.5		0.5	ug/L	20	08-DEC-08	R766722
Trichlorofluoromethane	<1		1	ug/L		08-DEC-08	R766722
Trihalomethanes (total)	<2		2	ug/L		08-DEC-08	R766722
Vinyl chloride	<0.5		0.5	ug/L	0.5	08-DEC-08	R766722
Surr: 1,2-Dichloroethane d4	117		50-150	%		08-DEC-08	R766722
Surr: Toluene-d8	99		70-130	%		08-DEC-08	R766722
Surr: 4-Bromofluorobenzene	102		50-150	%		08-DEC-08	R766722
<b>Individual Analytes</b>							
<b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	09-DEC-08	R767306
Arsenic (As)	<1		1	ug/L	25	09-DEC-08	R767306
Barium (Ba)	990		10	ug/L		09-DEC-08	R767306
Beryllium (Be)	<1		1	ug/L	4	10-DEC-08	R767755
Boron (B)	<50		50	ug/L	200	10-DEC-08	R767755
Cadmium (Cd)	0.4		0.1	ug/L	0.5	09-DEC-08	R767306
Chromium (Cr)	3		1	ug/L	8.9	09-DEC-08	R767306
Cobalt (Co)	1.4		0.5	ug/L	** 0.9	09-DEC-08	R767306
Copper (Cu)	3		1	ug/L	** 2.5	09-DEC-08	R767306
Lead (Pb)	<1		1	ug/L	1	09-DEC-08	R767306
Molybdenum (Mo)	<1		1	ug/L	40	09-DEC-08	R767306
Nickel (Ni)	30		2	ug/L	** 25	09-DEC-08	R767306
Selenium (Se)	<5		5	ug/L	5	09-DEC-08	R767306
Silver (Ag)	0.1		0.1	ug/L	0.25	09-DEC-08	R767306
Sodium (Na)	1760000	DLM	50000	ug/L		11-DEC-08	R768476
Thallium (Tl)	<0.3		0.3	ug/L	0.5	09-DEC-08	R767306
Vanadium (V)	<1		1	ug/L	6	09-DEC-08	R767306

\*\* analytical results for this parameter exceed criteria limits listed on this report



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L715317-2 BH-2 Sampled By: LUKE on 04-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>Individual Analytes</b> <b>Standard Metal Scan</b> Zinc (Zn)	12		3	ug/L	20	09-DEC-08	R767306
L715317-3 MW-6 Sampled By: LUKE on 04-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>BTEX, F1-F4 (O.Reg.153/04)</b> <b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	08-DEC-08	R766532
Ethyl Benzene	<0.5		0.5	ug/L	2.4	08-DEC-08	R766532
m+p-Xylenes	<1		1	ug/L		08-DEC-08	R766532
o-Xylene	<0.5		0.5	ug/L		08-DEC-08	R766532
Toluene	0.8		0.5	ug/L	** 0.8	08-DEC-08	R766532
Xylene, (total)	<1.5		1.5	ug/L	72	08-DEC-08	R766532
Surr: 2,5-Dibromotoluene	103		25-175	%		08-DEC-08	R766532
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		08-DEC-08	
F1-BTEX	<100		100	ug/L		08-DEC-08	
F2 (C10-C16)	<100		100	ug/L		08-DEC-08	
F3 (C16-C34)	<250		250	ug/L		08-DEC-08	
F4 (C34-C50)	<250		250	ug/L		08-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		08-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		08-DEC-08	
Analysis Date				No Unit		08-DEC-08	R766539
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates				No Unit		08-DEC-08	R766589
Surr: Octacosane	90		49-120	%		08-DEC-08	R766589
<b>Individual Analytes</b> <b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	09-DEC-08	R767306
Arsenic (As)	<1		1	ug/L	25	09-DEC-08	R767306
Barium (Ba)	260		10	ug/L		09-DEC-08	R767306
Beryllium (Be)	<1		1	ug/L	4	10-DEC-08	R767755
Boron (B)	60		50	ug/L	200	10-DEC-08	R767755
Cadmium (Cd)	0.2		0.1	ug/L	0.5	09-DEC-08	R767306
Chromium (Cr)	1		1	ug/L	8.9	09-DEC-08	R767306
Cobalt (Co)	2.7		0.5	ug/L	** 0.9	09-DEC-08	R767306
Copper (Cu)	5		1	ug/L	** 2.5	09-DEC-08	R767306
Lead (Pb)	<1		1	ug/L	1	09-DEC-08	R767306
Molybdenum (Mo)	5		1	ug/L	40	09-DEC-08	R767306
Nickel (Ni)	11		2	ug/L	25	09-DEC-08	R767306
Selenium (Se)	6		5	ug/L	** 5	09-DEC-08	R767306
Silver (Ag)	<0.1		0.1	ug/L	0.25	09-DEC-08	R767306
Sodium (Na)	390000	DLM	50000	ug/L		11-DEC-08	R768476
Thallium (Tl)	<0.3		0.3	ug/L	0.5	09-DEC-08	R767306
Vanadium (V)	<1		1	ug/L	6	09-DEC-08	R767306

\*\* analytical results for this parameter exceed criteria limits listed on this report



## **Environmental Division**

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Sample Details/Parameters		Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L715317-3	MW-6					GROUNDWATER, ALL PROPERTIES			
Sampled By:	LUKE on 04-DEC-08								
Matrix:	WATER								
<b>Individual Analytes</b>									
<b>Standard Metal Scan</b>									
Zinc (Zn)		15		3	ug/L	20		09-DEC-08	R767306
L715317-4	6					GROUNDWATER, ALL PROPERTIES			
Sampled By:	LUKE on 04-DEC-08								
Matrix:	WATER								
<b>Individual Analytes</b>									
<b>Standard Metal Scan</b>									
Antimony (Sb)	<5			5	ug/L	6		09-DEC-08	R767306
Arsenic (As)	<1			1	ug/L	25		09-DEC-08	R767306
Barium (Ba)	310			10	ug/L			09-DEC-08	R767306
Beryllium (Be)	<1			1	ug/L	4		10-DEC-08	R767755
Boron (B)	60			50	ug/L	200		10-DEC-08	R767755
Cadmium (Cd)	0.2			0.1	ug/L	0.5		09-DEC-08	R767306
Chromium (Cr)	3			1	ug/L	8.9		09-DEC-08	R767306
Cobalt (Co)	0.6			0.5	ug/L	0.9		09-DEC-08	R767306
Copper (Cu)	12			1	ug/L	** 2.5		09-DEC-08	R767306
Lead (Pb)	7			1	ug/L	** 1		09-DEC-08	R767306
Molybdenum (Mo)	<1			1	ug/L	40		09-DEC-08	R767306
Nickel (Ni)	11			2	ug/L	25		09-DEC-08	R767306
Selenium (Se)	<5			5	ug/L	5		09-DEC-08	R767306
Silver (Ag)	<0.1			0.1	ug/L	0.25		09-DEC-08	R767306
Sodium (Na)	3900000	DLM	500000		ug/L			12-DEC-08	R768800
Thallium (Tl)	<0.3			0.3	ug/L	0.5		09-DEC-08	R767306
Vanadium (V)	<1			1	ug/L	6		09-DEC-08	R767306
Zinc (Zn)	17			3	ug/L	20		09-DEC-08	R767306

\*\* analytical results for this parameter exceed criteria limits listed on this report

# Reference Information

L715317 CONTD....

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**Sample Parameter Qualifier key listed:**

Qualifier	Description
DLM	Detection Limit Adjustment For Sample Matrix Effects
RAMB	Result Adjusted For Method Blank

**Methods Listed (if applicable):**

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
BTX-R153-WT	Water	BTEX (O.Reg.153/04)		MOE DECPH-E3421/CCME Tier 1
ETL-TVH,TEH-CCME-WT	Water	CCME Total Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-WT	Water	F1 (O.Reg.153/04)	MOE DECPH-E3421/CCME Tier 1
F2-F4-WT	Water	F2-F4 (O.Reg.153/04)	MOE DECPH-E3421/CCME Tier 1
MET-R153-WT	Water	Standard Metal Scan	EPA 200.8
PCB-WT	Water	PCBs	EPA 8082
VOC-ROU-NO-BTX-WT	Water	Volatile Organic Compounds	SW846 8260

Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

**Chain of Custody numbers:**

62599

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS LABORATORY GROUP - WATERLOO, ONTARIO, CAN		

## Reference Information

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### GLOSSARY OF REPORT TERMS

**Surr** - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

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

*UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.*

*UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.*

*Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.*

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS provides criteria information as a service to you, our customer. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. ALS recommends review of the most current version of the regulation, and assumes no responsibility for the accuracy of the criteria levels indicated.



**Environmental Division**

## **ALS Laboratory Group Quality Control Report**

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Client: XCG CONSULTANTS LTD.  
820 TRILLIUM DRIVE  
KITCHENER ON N2R 1K4

Contact: THOMAS KOLODZIEJ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>BTX-R153-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R766532</b>							
<b>WG882823-1</b>	<b>CVS</b>							
Benzene			98		%		79-117	08-DEC-08
Ethyl Benzene			97		%		80-117	08-DEC-08
m+p-Xylenes			101		%		75-127	08-DEC-08
o-Xylene			96		%		81-118	08-DEC-08
Toluene			97		%		79-117	08-DEC-08
<b>WG882823-3</b>	<b>DUP</b>	<b>L714711-1</b>						
Benzene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	08-DEC-08
Ethyl Benzene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	08-DEC-08
m+p-Xylenes		<1	<1	RPD-NA	ug/L	N/A	39	08-DEC-08
o-Xylene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	08-DEC-08
Toluene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	08-DEC-08
<b>WG882823-2</b>	<b>MB</b>							
Benzene			<0.5		ug/L		0.5	08-DEC-08
Ethyl Benzene			<0.5		ug/L		0.5	08-DEC-08
m+p-Xylenes			<1		ug/L		1	08-DEC-08
o-Xylene			<0.5		ug/L		0.5	08-DEC-08
Toluene			<0.5		ug/L		0.5	08-DEC-08
<b>F1-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R766539</b>							
<b>WG882824-1</b>	<b>CVS</b>							
TVH: (C6-C10 / No BTEX Correction)			92		%		54-126	08-DEC-08
<b>WG882824-3</b>	<b>DUP</b>	<b>L714711-1</b>						
TVH: (C6-C10 / No BTEX Correction)		<100	<100	RPD-NA	ug/L	N/A	30	08-DEC-08
<b>WG882824-2</b>	<b>MB</b>							
TVH: (C6-C10 / No BTEX Correction)			<100		ug/L		100	08-DEC-08
<b>F2-F4-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R766589</b>							
<b>WG882934-1</b>	<b>CVS</b>							
F2 (C10-C16)			101		%		80-120	08-DEC-08
F3 (C16-C34)			104		%		80-120	08-DEC-08
F4 (C34-C50)			107		%		80-120	08-DEC-08
<b>WG882934-2</b>	<b>CVS</b>							
F2 (C10-C16)			100		%		80-120	09-DEC-08
F3 (C16-C34)			102		%		80-120	09-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed	
F2-F4-WT	Water								
Batch	R766589								
WG882934-2	CVS								
F4 (C34-C50)			108		%		80-120	09-DEC-08	
WG882537-2	LCS								
F2 (C10-C16)			84		%		40-120	08-DEC-08	
F3 (C16-C34)			92		%		56-104	08-DEC-08	
F4 (C34-C50)			94		%		50-110	08-DEC-08	
WG882537-3	LCSD	WG882537-2							
F2 (C10-C16)			84	86	%	3.0	45	08-DEC-08	
F3 (C16-C34)			92	94	%	2.1	45	08-DEC-08	
F4 (C34-C50)			94	97	%	2.7	45	08-DEC-08	
WG882537-1	MB								
F2 (C10-C16)			<100		ug/L		100	08-DEC-08	
F3 (C16-C34)			<250		ug/L		250	08-DEC-08	
F4 (C34-C50)			<250		ug/L		250	08-DEC-08	
MET-R153-WT	Water								
Batch	R767306								
WG883196-1	CVS								
Antimony (Sb)			101		%		80-120	09-DEC-08	
Arsenic (As)			110		%		80-120	09-DEC-08	
Barium (Ba)			106		%		80-120	09-DEC-08	
Cadmium (Cd)			109		%		80-120	09-DEC-08	
Chromium (Cr)			105		%		80-120	09-DEC-08	
Cobalt (Co)			110		%		80-120	09-DEC-08	
Copper (Cu)			103		%		80-120	09-DEC-08	
Lead (Pb)			113		%		80-120	09-DEC-08	
Molybdenum (Mo)			111		%		80-120	09-DEC-08	
Nickel (Ni)			108		%		80-120	09-DEC-08	
Selenium (Se)			104		%		80-120	09-DEC-08	
Silver (Ag)			104		%		80-120	09-DEC-08	
Thallium (Tl)			111		%		63-138	09-DEC-08	
Vanadium (V)			101		%		63-138	09-DEC-08	
Zinc (Zn)			108		%		80-120	09-DEC-08	
WG883196-5	DUP	WG883196-4							
Antimony (Sb)			<5	<5	RPD-NA	ug/L	N/A	20	09-DEC-08
Arsenic (As)			<1	<1	RPD-NA	ug/L	N/A	20	09-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Water							
Batch R767306								
WG883196-5 DUP	WG883196-4							
Barium (Ba)	<10	<10		RPD-NA	ug/L	N/A	20	09-DEC-08
Cadmium (Cd)	<0.1	<0.1		RPD-NA	ug/L	N/A	26	09-DEC-08
Chromium (Cr)	2	2	J	ug/L	0	4	09-DEC-08	
Cobalt (Co)	<0.5	<0.5		RPD-NA	ug/L	N/A	26	09-DEC-08
Copper (Cu)	8	8	J	ug/L	0	4	09-DEC-08	
Lead (Pb)	<1	<1		RPD-NA	ug/L	N/A	20	09-DEC-08
Molybdenum (Mo)	7	7	J	ug/L	0	4	09-DEC-08	
Nickel (Ni)	31	31			ug/L	0.83	26	09-DEC-08
Selenium (Se)	<5	<5		RPD-NA	ug/L	N/A	26	09-DEC-08
Silver (Ag)	<0.1	<0.1		RPD-NA	ug/L	N/A	26	09-DEC-08
Thallium (Tl)	<0.3	<0.3		RPD-NA	ug/L	N/A	26	09-DEC-08
Vanadium (V)	<1	<1		RPD-NA	ug/L	N/A	26	09-DEC-08
Zinc (Zn)	39	39			ug/L	0.015	20	09-DEC-08
WG883196-3 MB								
Antimony (Sb)		<5			ug/L	5	09-DEC-08	
Arsenic (As)		<1			ug/L	1	09-DEC-08	
Barium (Ba)		<10			ug/L	10	09-DEC-08	
Cadmium (Cd)		<0.1			ug/L	0.1	09-DEC-08	
Chromium (Cr)		<1			ug/L	1	09-DEC-08	
Cobalt (Co)		<0.5			ug/L	0.5	09-DEC-08	
Copper (Cu)		<1			ug/L	1	09-DEC-08	
Lead (Pb)		<1			ug/L	1	09-DEC-08	
Molybdenum (Mo)		<1			ug/L	1	09-DEC-08	
Nickel (Ni)		<2			ug/L	2	09-DEC-08	
Selenium (Se)		<5			ug/L	5	09-DEC-08	
Silver (Ag)		<0.1			ug/L	0.1	09-DEC-08	
Thallium (Tl)		<0.3			ug/L	0.3	09-DEC-08	
Vanadium (V)		<1			ug/L	1	09-DEC-08	
Zinc (Zn)		<3			ug/L	3	09-DEC-08	
Batch R767755								
WG884103-1 CVS								
Beryllium (Be)		112			%	80-120	10-DEC-08	
Boron (B)		108			%	70-130	10-DEC-08	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>MET-R153-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R767755</b>							
<b>WG884103-5</b>	<b>DUP</b>	<b>WG884103-4</b>						
Beryllium (Be)		<10	<10	RPD-NA	ug/L	N/A	26	10-DEC-08
Boron (B)		<500	<500	RPD-NA	ug/L	N/A	20	10-DEC-08
<b>WG884103-3</b>	<b>MB</b>							
Beryllium (Be)			<1		ug/L		1	10-DEC-08
Boron (B)			<50		ug/L		50	10-DEC-08
<b>Batch</b>	<b>R768476</b>							
<b>WG884650-1</b>	<b>CVS</b>							
Sodium (Na)			122		%		63-138	11-DEC-08
<b>WG884650-5</b>	<b>DUP</b>	<b>WG884650-4</b>						
Sodium (Na)		32000	31600		ug/L	1.1	26	11-DEC-08
<b>WG884650-3</b>	<b>MB</b>							
Sodium (Na)			<500		ug/L		500	11-DEC-08
<b>Batch</b>	<b>R768800</b>							
<b>WG885265-1</b>	<b>CVS</b>							
Sodium (Na)			104		%		63-138	12-DEC-08
<b>WG885265-5</b>	<b>DUP</b>	<b>WG885265-4</b>						
Sodium (Na)		<5000	<5000	RPD-NA	ug/L	N/A	26	12-DEC-08
<b>WG885265-3</b>	<b>MB</b>							
Sodium (Na)			<500		ug/L		500	12-DEC-08
<b>PCB-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R767137</b>							
<b>WG883367-1</b>	<b>CVS</b>							
Aroclor 1242			97		%		55-145	08-DEC-08
Aroclor 1248			101		%		55-145	08-DEC-08
Aroclor 1254			98		%		55-145	08-DEC-08
Aroclor 1260			109		%		55-145	08-DEC-08
Total PCBs			101		%		55-145	08-DEC-08
<b>WG883367-2</b>	<b>CVS</b>							
Aroclor 1242			96		%		55-145	09-DEC-08
Aroclor 1248			96		%		55-145	09-DEC-08
Aroclor 1254			98		%		55-145	09-DEC-08
Aroclor 1260			104		%		55-145	09-DEC-08
Total PCBs			99		%		55-145	09-DEC-08
<b>WG882809-2</b>	<b>LCS</b>							
Aroclor 1242			92		%		50-130	08-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>PCB-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R767137</b>							
<b>WG882809-2</b>	<b>LCS</b>							
Aroclor 1248			92		%		55-145	08-DEC-08
Aroclor 1254			103		%		50-130	08-DEC-08
Aroclor 1260			117		%		30-150	08-DEC-08
Total PCBs			101		%		55-145	08-DEC-08
<b>WG882809-3</b>	<b>LCSD</b>	<b>WG882809-2</b>						
Aroclor 1242		92	94		%	2.8	45	08-DEC-08
Aroclor 1248		92	92		%	0.0	45	08-DEC-08
Aroclor 1254		103	106		%	3.6	45	08-DEC-08
Aroclor 1260		117	122		%	4.0	45	08-DEC-08
Total PCBs		101	104		%	2.7	45	08-DEC-08
<b>WG882809-1</b>	<b>MB</b>							
Aroclor 1242			<0.02		ug/L		0.02	08-DEC-08
Aroclor 1248			<0.02		ug/L		0.02	08-DEC-08
Aroclor 1254			<0.02		ug/L		0.02	08-DEC-08
Aroclor 1260			<0.02		ug/L		0.02	08-DEC-08
Total PCBs			<0.02		ug/L		0.02	08-DEC-08
<b>VOC-ROU-NO-BTX-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R766722</b>							
<b>WG882446-1</b>	<b>CVS</b>							
1,1,1,2-Tetrachloroethane			82		%		75-120	08-DEC-08
1,1,1-Trichloroethane			97		%		74-124	08-DEC-08
1,1,2,2-Tetrachloroethane			93		%		62-130	08-DEC-08
1,1,2-Trichloroethane			91		%		76-119	08-DEC-08
1,1-Dichloroethane			100		%		74-126	08-DEC-08
1,1-Dichloroethylene			96		%		67-127	08-DEC-08
1,2-Dichlorobenzene			95		%		77-119	08-DEC-08
1,2-Dichloroethane			99		%		70-132	08-DEC-08
1,2-Dichloropropane			92		%		75-126	08-DEC-08
1,3-Dichlorobenzene			93		%		74-120	08-DEC-08
1,4-Dichlorobenzene			92		%		74-122	08-DEC-08
2-Hexanone			91		%		47-149	08-DEC-08
Acetone			88		%		32-175	08-DEC-08
Bromodichloromethane			89		%		71-124	08-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch R766722								
WG882446-1 CVS								
Bromoform			83		%		63-126	08-DEC-08
Bromomethane			91		%		45-138	08-DEC-08
Carbon Disulfide			88		%		47-133	08-DEC-08
Carbon tetrachloride			82		%		69-129	08-DEC-08
Chlorobenzene			94		%		78-120	08-DEC-08
Dibromochloromethane			89		%		69-120	08-DEC-08
Chloroethane			94		%		64-130	08-DEC-08
Chloroform			97		%		63-138	08-DEC-08
Chloromethane			101		%		43-142	08-DEC-08
cis-1,2-Dichloroethylene			89		%		77-121	08-DEC-08
cis-1,3-Dichloropropene			78		%		63-138	08-DEC-08
Dichlorodifluoromethane			84		%		60-125	08-DEC-08
1,2-Dibromoethane			99		%		75-125	08-DEC-08
Methyl Ethyl Ketone			78		%		47-155	08-DEC-08
Methyl Isobutyl Ketone			84		%		60-132	08-DEC-08
MTBE			107		%		62-128	08-DEC-08
Dichloromethane			96		%		78-121	08-DEC-08
Styrene			79		%		72-130	08-DEC-08
Tetrachloroethylene			91		%		78-130	08-DEC-08
trans-1,2-Dichloroethylene			94		%		63-138	08-DEC-08
trans-1,3-Dichloropropene			85		%		63-138	08-DEC-08
Trichloroethylene			90		%		74-124	08-DEC-08
Trichlorofluoromethane			105		%		67-133	08-DEC-08
Vinyl chloride			101		%		55-145	08-DEC-08
WG882446-4 DUP		WG882446-3						
1,1,1,2-Tetrachloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08
1,1,1-Trichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08
1,1,2,2-Tetrachloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08
1,1,2-Trichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08
1,1-Dichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08
1,1-Dichloroethylene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08
1,2-Dichlorobenzene		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08
1,2-Dichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch R766722								
WG882446-4 DUP	WG882446-3							
1,2-Dichloropropane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,3-Dichlorobenzene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,4-Dichlorobenzene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
2-Hexanone	<20	<20	RPD-NA	ug/L	N/A	20	08-DEC-08	
Acetone	<20	<20	RPD-NA	ug/L	N/A	20	08-DEC-08	
Bromodichloromethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Bromoform	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Bromomethane	0.6	0.5	J	ug/L	0.1	0.2	08-DEC-08	
Carbon Disulfide	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Carbon tetrachloride	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Chlorobenzene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Dibromochloromethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Chloroethane	<1	<1	RPD-NA	ug/L	N/A	20	08-DEC-08	
Chloroform	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Chloromethane	<1	<1	RPD-NA	ug/L	N/A	20	08-DEC-08	
cis-1,2-Dichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
cis-1,3-Dichloropropene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Dichlorodifluoromethane	<1	<1	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,2-Dibromoethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Methyl Ethyl Ketone	<20	<20	RPD-NA	ug/L	N/A	20	08-DEC-08	
Methyl Isobutyl Ketone	<20	<20	RPD-NA	ug/L	N/A	20	08-DEC-08	
MTBE	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Dichloromethane	<0.5	<0.5	RPD-NA	ug/L	N/A	31	08-DEC-08	
Styrene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Tetrachloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
trans-1,2-Dichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
trans-1,3-Dichloropropene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Trichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Trichlorofluoromethane	<1	<1	RPD-NA	ug/L	N/A	20	08-DEC-08	
Vinyl chloride	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
WG882446-2 MB								
1,1,1,2-Tetrachloroethane		<0.5		ug/L		0.5	08-DEC-08	
1,1,1-Trichloroethane		<0.5		ug/L		0.5	08-DEC-08	

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch	R766722							
WG882446-2	MB							
1,1,2,2-Tetrachloroethane			<0.5		ug/L		0.5	08-DEC-08
1,1,2-Trichloroethane			<0.5		ug/L		0.5	08-DEC-08
1,1-Dichloroethane			<0.5		ug/L		0.5	08-DEC-08
1,1-Dichloroethylene			<0.5		ug/L		0.5	08-DEC-08
1,2-Dichlorobenzene			<0.5		ug/L		0.5	08-DEC-08
1,2-Dichloroethane			<0.5		ug/L		0.5	08-DEC-08
1,2-Dichloropropane			<0.5		ug/L		0.5	08-DEC-08
1,3-Dichlorobenzene			<0.5		ug/L		0.5	08-DEC-08
1,4-Dichlorobenzene			<0.5		ug/L		0.5	08-DEC-08
2-Hexanone			<20		ug/L		20	08-DEC-08
Acetone			<20		ug/L		20	08-DEC-08
Bromodichloromethane			<0.5		ug/L		0.5	08-DEC-08
Bromoform			<0.5		ug/L		0.5	08-DEC-08
Carbon Disulfide			<0.5		ug/L		0.5	08-DEC-08
Carbon tetrachloride			<0.5		ug/L		0.5	08-DEC-08
Chlorobenzene			<0.5		ug/L		0.5	08-DEC-08
Dibromochloromethane			<0.5		ug/L		0.5	08-DEC-08
Chloroethane			<1		ug/L		1	08-DEC-08
Chloroform			<0.5		ug/L		0.5	08-DEC-08
Chloromethane			<1		ug/L		1	08-DEC-08
cis-1,2-Dichloroethylene			<0.5		ug/L		0.5	08-DEC-08
cis-1,3-Dichloropropene			<0.5		ug/L		0.5	08-DEC-08
Dichlorodifluoromethane			<1		ug/L		1	08-DEC-08
1,2-Dibromoethane			<0.5		ug/L		0.5	08-DEC-08
Methyl Ethyl Ketone			<20		ug/L		20	08-DEC-08
Methyl Isobutyl Ketone			<20		ug/L		20	08-DEC-08
MTBE			<0.5		ug/L		0.5	08-DEC-08
Dichloromethane			<0.5		ug/L		0.5	08-DEC-08
Styrene			<0.5		ug/L		0.5	08-DEC-08
Tetrachloroethylene			<0.5		ug/L		0.5	08-DEC-08
trans-1,2-Dichloroethylene			<0.5		ug/L		0.5	08-DEC-08
trans-1,3-Dichloropropene			<0.5		ug/L		0.5	08-DEC-08
Trichloroethylene			<0.5		ug/L		0.5	08-DEC-08

# ALS Laboratory Group Quality Control Report

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch	R766722							
WG882446-2	MB							
Trichlorofluoromethane			<1		ug/L		1	08-DEC-08
Vinyl chloride			<0.5		ug/L		0.5	08-DEC-08
Bromomethane			1.1	A	ug/L		0.5	08-DEC-08

COMMENTS: Method blank positive; related samples have been qualified accordingly.

# ALS Laboratory Group Quality Control Report

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## Legend:

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Limit 99% Confidence Interval (Laboratory Control Limits)

DUP Duplicate

RPD Relative Percent Difference

N/A Not Available

LCS Laboratory Control Sample

SRM Standard Reference Material

MS Matrix Spike

MSD Matrix Spike Duplicate

ADE Average Desorption Efficiency

MB Method Blank

IRM Internal Reference Material

CRM Certified Reference Material

CCV Continuing Calibration Verification

CVS Calibration Verification Standard

LCSD Laboratory Control Sample Duplicate

## Sample Parameter Qualifier Definitions:

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Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
J	Duplicate results and limits are expressed in terms of absolute difference.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.



**Environmental Division**

**Certificate of Analysis**

XCG CONSULTANTS LTD.

**ATTN:** THOMAS KOLODZIEJ

820 TRILLIUM DRIVE

KITCHENER ON N2R 1K4

**Reported On:** 12-DEC-08 02:30 PM

**Lab Work Order #:** L714725

**Date Received:** 04-DEC-08

**Project P.O. #:**

**Job Reference:** 5-698-17-02

**Legal Site Desc:**

**CofC Numbers:** 55492

**Other Information:**

**Comments:**

MARY-LYNN PIKE  
Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.  
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU  
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

**ALS Canada Ltd. (formerly ETL Chemspect Analytical Ltd.)**  
Part of the **ALS Laboratory Group**

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**Environmental Division**

**ALS LABORATORY GROUP CRITERIA REPORT**

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L714725-1 BH-1 (SS-4) Sampled By: LUKE T on 03-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	09-DEC-08	R767196
Arsenic (As)	2		1	mg/kg	14	17	09-DEC-08	R767196
Selenium (Se)	<1		1	mg/kg	1.4	1.9	09-DEC-08	R767196
Boron (B), Available	0.1		0.1	ug/g			05-DEC-08	R765821
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	08-DEC-08	R766645
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	05-DEC-08	R765905
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	22		1	mg/kg	190	210	05-DEC-08	R765820
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	05-DEC-08	R765820
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	05-DEC-08	R765820
Chromium (Cr)	8		1	mg/kg	67	71	05-DEC-08	R765820
Cobalt (Co)	4		1	mg/kg	19	21	05-DEC-08	R765820
Copper (Cu)	10		1	mg/kg	56	85	05-DEC-08	R765820
Lead (Pb)	9		1	mg/kg	55	120	05-DEC-08	R765820
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	05-DEC-08	R765820
Nickel (Ni)	7		1	mg/kg	43	43	05-DEC-08	R765820
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	05-DEC-08	R765820
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	05-DEC-08	R765820
Vanadium (V)	10		1	mg/kg	91	91	05-DEC-08	R765820
Zinc (Zn)	60		1	mg/kg	150	160	05-DEC-08	R765820
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			05-DEC-08	
F1-BTEX	<5		5	mg/kg			05-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			05-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			05-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			05-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			05-DEC-08	
Prep/Analysis Dates				No Unit			04-DEC-08	R765653
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			05-DEC-08	R765825
Sur: Octacosane	79		60-120	%			05-DEC-08	R765825
<b>Volatile Organics (153/04) Table 1</b>								
1,1,1,2-Tetrachloroethane	<0.008		0.008	mg/kg			05-DEC-08	R766147
1,1,2,2-Tetrachloroethane	<0.004		0.004	mg/kg	0.004	0.004	05-DEC-08	R766147
1,1,1-Trichloroethane	<0.008		0.008	mg/kg	0.009	0.009	05-DEC-08	R766147
1,1,2-Trichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,1-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,1-Dichloroethylene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dibromoethane	<0.004		0.004	mg/kg	0.004	0.004	05-DEC-08	R766147
1,2-Dichloropropane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,3-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



**Environmental Division**

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L714725-1 BH-1 (SS-4) Sampled By: LUKE T on 03-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>Volatile Organics (153/04) Table 1</b>								
1,4-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
2-Hexanone	<0.2		0.2	mg/kg			05-DEC-08	R766147
Acetone	<0.5		0.5	mg/kg			05-DEC-08	R766147
Benzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Bromodichloromethane	<0.005		0.005	mg/kg			05-DEC-08	R766147
Bromoform	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Bromomethane	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Carbon Disulfide	<0.02		0.02	mg/kg			05-DEC-08	R766147
Carbon tetrachloride	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Chlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Chloroethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Chloroform	<0.006		0.006	mg/kg	0.006	0.006	05-DEC-08	R766147
Chloromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
cis-1,2-Dichloroethylene	<0.02		0.02	mg/kg			05-DEC-08	R766147
cis-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Dibromomethane	<0.01		0.01	mg/kg			05-DEC-08	R766147
Dibromochloromethane	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Dichlorodifluoromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Dichloromethane	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Ethyl Benzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
MTBE	<0.2		0.2	mg/kg			05-DEC-08	R766147
m+p-Xylenes	<0.002		0.002	mg/kg			05-DEC-08	R766147
Methyl Ethyl Ketone	<0.2		0.2	mg/kg			05-DEC-08	R766147
Methyl Isobutyl Ketone	<0.2		0.2	mg/kg			05-DEC-08	R766147
o-Xylene	<0.002		0.002	mg/kg			05-DEC-08	R766147
Styrene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Tetrachloroethylene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Toluene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
trans-1,2-Dichloroethylene	<0.002		0.002	mg/kg	0.003	0.003	05-DEC-08	R766147
trans-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Trichloroethylene	<0.004		0.004	mg/kg	0.004	0.004	05-DEC-08	R766147
Trichlorofluoromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Vinyl chloride	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Xylenes (Total)	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Surr: 1,2-Dichloroethane d4	112		25-175	%			05-DEC-08	R766147
Surr: Toluene-d8	91		25-175	%			05-DEC-08	R766147
Surr: 4-Bromofluorobenzene	114		25-175	%			05-DEC-08	R766147
<b>Individual Analytes</b>								
% Moisture	11.9		0.5	%			04-DEC-08	R765335
pH	7.86		0.01	pH units			08-DEC-08	R766985
L714725-2 BH-12 (SS-3) Sampled By: LUKE T on 03-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B As, Sb and Se by ICP/MS</b>								

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



**Environmental Division**

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L714725 CONTD....

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L714725-2 BH-12 (SS-3)								
Sampled By:	LUKE T	on 03-DEC-08						
Matrix:	SOIL				AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	09-DEC-08	R767196
Arsenic (As)	2		1	mg/kg	14	17	09-DEC-08	R767196
Selenium (Se)	<1		1	mg/kg	1.4	1.9	09-DEC-08	R767196
Boron (B), Available	<0.1		0.1	ug/g			05-DEC-08	R765821
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	08-DEC-08	R766645
Mercury (Hg)	<0.05		0.05	ug/g	0.16	0.23	05-DEC-08	R765905
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	22		1	mg/kg	190	210	05-DEC-08	R765820
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	05-DEC-08	R765820
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	05-DEC-08	R765820
Chromium (Cr)	8		1	mg/kg	67	71	05-DEC-08	R765820
Cobalt (Co)	4		1	mg/kg	19	21	05-DEC-08	R765820
Copper (Cu)	9		1	mg/kg	56	85	05-DEC-08	R765820
Lead (Pb)	10		1	mg/kg	55	120	05-DEC-08	R765820
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	05-DEC-08	R765820
Nickel (Ni)	6		1	mg/kg	43	43	05-DEC-08	R765820
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	05-DEC-08	R765820
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	05-DEC-08	R765820
Vanadium (V)	11		1	mg/kg	91	91	05-DEC-08	R765820
Zinc (Zn)	62		1	mg/kg	150	160	05-DEC-08	R765820
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			05-DEC-08	
F1-BTEX	<5		5	mg/kg			05-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			05-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			05-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			05-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			05-DEC-08	
Prep/Analysis Dates				No Unit			04-DEC-08	R765653
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			05-DEC-08	R765825
Sur: Octacosane	68		60-120	%			05-DEC-08	R765825
<b>Volatile Organics (153/04) Table 1</b>								
1,1,1,2-Tetrachloroethane	<0.008		0.008	mg/kg			05-DEC-08	R766147
1,1,2,2-Tetrachloroethane	<0.004		0.004	mg/kg	0.004	0.004	05-DEC-08	R766147
1,1,1-Trichloroethane	<0.008		0.008	mg/kg	0.009	0.009	05-DEC-08	R766147
1,1,2-Trichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,1-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,1-Dichloroethylene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dibromoethane	<0.004		0.004	mg/kg	0.004	0.004	05-DEC-08	R766147
1,2-Dichloropropane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,3-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147

\*\* analytical results for this parameter exceed criteria limits listed on this report

O.Reg.153, Table 1 MARCH 9, 2004



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L714725-2 BH-12 (SS-3) Sampled By: LUKE T on 03-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>Volatile Organics (153/04) Table 1</b>								
1,4-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
2-Hexanone	<0.2		0.2	mg/kg			05-DEC-08	R766147
Acetone	<0.5		0.5	mg/kg			05-DEC-08	R766147
Benzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Bromodichloromethane	<0.005		0.005	mg/kg			05-DEC-08	R766147
Bromoform	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Bromomethane	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Carbon Disulfide	<0.02		0.02	mg/kg			05-DEC-08	R766147
Carbon tetrachloride	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Chlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Chloroethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Chloroform	<0.006		0.006	mg/kg	0.006	0.006	05-DEC-08	R766147
Chloromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
cis-1,2-Dichloroethylene	<0.02		0.02	mg/kg			05-DEC-08	R766147
cis-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Dibromomethane	<0.01		0.01	mg/kg			05-DEC-08	R766147
Dibromochloromethane	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Dichlorodifluoromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Dichloromethane	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Ethyl Benzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
MTBE	<0.2		0.2	mg/kg			05-DEC-08	R766147
m+p-Xylenes	<0.002		0.002	mg/kg			05-DEC-08	R766147
Methyl Ethyl Ketone	<0.2		0.2	mg/kg			05-DEC-08	R766147
Methyl Isobutyl Ketone	<0.2		0.2	mg/kg			05-DEC-08	R766147
o-Xylene	<0.002		0.002	mg/kg			05-DEC-08	R766147
Styrene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Tetrachloroethylene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Toluene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
trans-1,2-Dichloroethylene	<0.002		0.002	mg/kg	0.003	0.003	05-DEC-08	R766147
trans-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Trichloroethylene	<0.004		0.004	mg/kg	0.004	0.004	05-DEC-08	R766147
Trichlorofluoromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Vinyl chloride	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Xylenes (Total)	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Surr: 1,2-Dichloroethane d4	106		25-175	%			05-DEC-08	R766147
Surr: Toluene-d8	94		25-175	%			05-DEC-08	R766147
Surr: 4-Bromofluorobenzene	118		25-175	%			05-DEC-08	R766147
<b>Individual Analytes</b>								
% Moisture	10.1		0.5	%			04-DEC-08	R765335
pH	7.85		0.01	pH units			08-DEC-08	R766985
L714725-3 BH-19 (SS-2) Sampled By: LUKE T on 03-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B As, Sb and Se by ICP/MS</b>								

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L714725-3 BH-19 (SS-2) Sampled By: LUKE T on 03-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>Regulation 153 Metals, Hg, Cr6+, Avail B</b>								
<b>As, Sb and Se by ICP/MS</b>								
Antimony (Sb)	<1		1	mg/kg	1	1	09-DEC-08	R767196
Arsenic (As)	7		1	mg/kg	14	17	09-DEC-08	R767196
Selenium (Se)	<1		1	mg/kg	1.4	1.9	09-DEC-08	R767196
Boron (B), Available	0.2		0.1	ug/g			05-DEC-08	R765821
Chromium, Hexavalent	<2		2	mg/kg	2.5	2.5	08-DEC-08	R766645
Mercury (Hg)	0.21		0.05	ug/g	** 0.16	0.23	05-DEC-08	R765905
<b>Standard Metal Scan (ICP)</b>								
Barium (Ba)	52		1	mg/kg	190	210	05-DEC-08	R765820
Beryllium (Be)	<0.5		0.5	mg/kg	1.2	1.2	05-DEC-08	R765820
Cadmium (Cd)	<0.5		0.5	mg/kg	1.0	1.0	05-DEC-08	R765820
Chromium (Cr)	13		1	mg/kg	67	71	05-DEC-08	R765820
Cobalt (Co)	6		1	mg/kg	19	21	05-DEC-08	R765820
Copper (Cu)	35		1	mg/kg	56	85	05-DEC-08	R765820
Lead (Pb)	138		1	mg/kg	** 55	** 120	05-DEC-08	R765820
Molybdenum (Mo)	<1		1	mg/kg	2.5	2.5	05-DEC-08	R765820
Nickel (Ni)	12		1	mg/kg	43	43	05-DEC-08	R765820
Silver (Ag)	<0.2		0.2	mg/kg	0.35	0.42	05-DEC-08	R765820
Thallium (Tl)	<1		1	mg/kg	2.5	2.5	05-DEC-08	R765820
Vanadium (V)	19		1	mg/kg	91	91	05-DEC-08	R765820
Zinc (Zn)	176		1	mg/kg	** 150	** 160	05-DEC-08	R765820
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>CCME Total Hydrocarbons</b>								
F1 (C6-C10)	<5		5	mg/kg			05-DEC-08	
F1-BTEX	<5		5	mg/kg			05-DEC-08	
F2 (C10-C16)	<10		10	mg/kg			05-DEC-08	
F3 (C16-C34)	<50		50	mg/kg			05-DEC-08	
F4 (C34-C50)	<50		50	mg/kg			05-DEC-08	
Total Hydrocarbons (C6-C50)	<50		50	mg/kg			05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit			05-DEC-08	
Prep/Analysis Dates				No Unit			04-DEC-08	R765653
<b>F2-F4 (O.Reg.153/04)</b>								
Prep/Analysis Dates				No Unit			05-DEC-08	R765825
Sur: Octacosane	77		60-120	%			05-DEC-08	R765825
<b>Volatile Organics (153/04) Table 1</b>								
1,1,1,2-Tetrachloroethane	<0.008		0.008	mg/kg			05-DEC-08	R766147
1,1,2,2-Tetrachloroethane	<0.004		0.004	mg/kg	0.004	0.004	05-DEC-08	R766147
1,1,1-Trichloroethane	<0.008		0.008	mg/kg	0.009	0.009	05-DEC-08	R766147
1,1,2-Trichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,1-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,1-Dichloroethylene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dichloroethane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,2-Dibromoethane	<0.004		0.004	mg/kg	0.004	0.004	05-DEC-08	R766147
1,2-Dichloropropane	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
1,3-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits		Analyzed	Batch
L714725-3 BH-19 (SS-2) Sampled By: LUKE T on 03-DEC-08 Matrix: SOIL					AGRICULTURAL OR OTHER	ALL OTHER		
<b>VOC, F1-F4 (O.Reg.153/04)</b>								
<b>Volatile Organics (153/04) Table 1</b>								
1,4-Dichlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
2-Hexanone	<0.2		0.2	mg/kg			05-DEC-08	R766147
Acetone	<0.5		0.5	mg/kg			05-DEC-08	R766147
Benzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Bromodichloromethane	<0.005		0.005	mg/kg			05-DEC-08	R766147
Bromoform	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Bromomethane	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Carbon Disulfide	<0.02		0.02	mg/kg			05-DEC-08	R766147
Carbon tetrachloride	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Chlorobenzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Chloroethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Chloroform	<0.006		0.006	mg/kg	0.006	0.006	05-DEC-08	R766147
Chloromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
cis-1,2-Dichloroethylene	<0.02		0.02	mg/kg			05-DEC-08	R766147
cis-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Dibromomethane	<0.01		0.01	mg/kg			05-DEC-08	R766147
Dibromochloromethane	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Dichlorodifluoromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Dichloromethane	<0.004		0.004	mg/kg	** 0.003	** 0.003	05-DEC-08	R766147
Ethyl Benzene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
MTBE	<0.2		0.2	mg/kg			05-DEC-08	R766147
m+p-Xylenes	<0.002		0.002	mg/kg			05-DEC-08	R766147
Methyl Ethyl Ketone	<0.2		0.2	mg/kg			05-DEC-08	R766147
Methyl Isobutyl Ketone	<0.2		0.2	mg/kg			05-DEC-08	R766147
o-Xylene	<0.002		0.002	mg/kg			05-DEC-08	R766147
Styrene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Tetrachloroethylene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Toluene	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
trans-1,2-Dichloroethylene	<0.002		0.002	mg/kg	0.003	0.003	05-DEC-08	R766147
trans-1,3-Dichloropropene	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Trichloroethylene	0.004		0.004	mg/kg	** 0.004	** 0.004	05-DEC-08	R766147
Trichlorofluoromethane	<0.03		0.03	mg/kg			05-DEC-08	R766147
Vinyl chloride	<0.003		0.003	mg/kg	0.003	0.003	05-DEC-08	R766147
Xylenes (Total)	<0.002		0.002	mg/kg	0.002	0.002	05-DEC-08	R766147
Surr: 1,2-Dichloroethane d4	98		25-175	%			05-DEC-08	R766147
Surr: Toluene-d8	93		25-175	%			05-DEC-08	R766147
Surr: 4-Bromofluorobenzene	118		25-175	%			05-DEC-08	R766147
<b>Individual Analytes</b>								
% Moisture	15.4		0.5	%			04-DEC-08	R765335
L714725-6 MW-1 Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES			
<b>BTEX, F1-F4 (O.Reg.153/04)</b>								
<b>BTEX (O.Reg.153/04)</b>								
Benzene	<0.5		0.5	ug/L	5		05-DEC-08	R765687

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714725-6 MW-1 Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>BTEX, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
Ethyl Benzene	<0.5		0.5	ug/L	2.4	05-DEC-08	R765687
m+p-Xylenes	<1		1	ug/L		05-DEC-08	R765687
o-Xylene	<0.5		0.5	ug/L		05-DEC-08	R765687
Toluene	1.0		0.5	ug/L	** 0.8	05-DEC-08	R765687
Xylene, (total)	<1.5		1.5	ug/L	72	05-DEC-08	R765687
Surr: 2,5-Dibromotoluene	107		25-175	%		05-DEC-08	R765687
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		10-DEC-08	
F1-BTEX	<100		100	ug/L		10-DEC-08	
F2 (C10-C16)	<100		100	ug/L		10-DEC-08	
F2-Naphth	<100		100	ug/L		10-DEC-08	
F3 (C16-C34)	340		250	ug/L		10-DEC-08	
F3-PAH	340		250	ug/L		10-DEC-08	
F4 (C34-C50)	500		250	ug/L		10-DEC-08	
Total Hydrocarbons (C6-C50)	840		250	ug/L		10-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		10-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765719
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates				No Unit		05-DEC-08	R765850
Surr: Octacosane	75		49-120	%		05-DEC-08	R765850
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	11-DEC-08	R768311
Arsenic (As)	<1		1	ug/L	25	11-DEC-08	R768311
Barium (Ba)	270		10	ug/L		11-DEC-08	R768311
Beryllium (Be)	<1		1	ug/L	4	12-DEC-08	R768731
Boron (B)	80		50	ug/L	200	11-DEC-08	R768311
Cadmium (Cd)	0.1		0.1	ug/L	0.5	11-DEC-08	R768311
Chromium (Cr)	4		1	ug/L	8.9	11-DEC-08	R768311
Cobalt (Co)	2.0		0.5	ug/L	** 0.9	11-DEC-08	R768311
Copper (Cu)	4		1	ug/L	** 2.5	11-DEC-08	R768311
Lead (Pb)	<1		1	ug/L	1	11-DEC-08	R768311
Molybdenum (Mo)	5		1	ug/L	40	11-DEC-08	R768311
Nickel (Ni)	9		2	ug/L	25	11-DEC-08	R768311
Selenium (Se)	<5		5	ug/L	5	11-DEC-08	R768311
Silver (Ag)	<0.1		0.1	ug/L	0.25	11-DEC-08	R768311
Sodium (Na)	290000	DLM	50000	ug/L		12-DEC-08	R768731
Thallium (Tl)	<0.3		0.3	ug/L	0.5	11-DEC-08	R768311
Vanadium (V)	1		1	ug/L	6	11-DEC-08	R768311
Zinc (Zn)	5		3	ug/L	20	11-DEC-08	R768311
<b>Individual Analytes</b>							
<b>CCME PAHs</b>							
1-Methylnaphthalene	0.10		0.02	ug/L	2.5	10-DEC-08	R767652
2-Methylnaphthalene	0.12		0.02	ug/L	2.5	10-DEC-08	R767652
Acenaphthene	<0.02		0.02	ug/L	1	10-DEC-08	R767652
Acenaphthylene	<0.06	DLM	0.06	ug/L	1	10-DEC-08	R767652

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714725-6 MW-1 Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>Individual Analytes</b>							
<b>CCME PAHs</b>							
Acridine	<4		4	ug/L		10-DEC-08	R767652
Anthracene	0.10		0.02	ug/L	** 0.05	10-DEC-08	R767652
Benzo(a)anthracene	0.48		0.02	ug/L	** 0.10	10-DEC-08	R767652
Benzo(a)pyrene	0.522		0.005	ug/L	** 0.005	10-DEC-08	R767652
Benzo(b)fluoranthene	0.72		0.02	ug/L	** 0.05	10-DEC-08	R767652
Benzo(g,h,i)perylene	0.46		0.02	ug/L	** 0.1	10-DEC-08	R767652
Benzo(k)fluoranthene	0.33		0.02	ug/L	** 0.05	10-DEC-08	R767652
Chrysene	0.50		0.02	ug/L	** 0.05	10-DEC-08	R767652
Dibenzo(ah)anthracene	0.05		0.02	ug/L	0.1	10-DEC-08	R767652
Fluoranthene	0.77		0.02	ug/L	1	10-DEC-08	R767652
Fluorene	0.10		0.02	ug/L	1	10-DEC-08	R767652
Indeno(1,2,3-cd)pyrene	0.48		0.02	ug/L	** 0.1	10-DEC-08	R767652
Naphthalene	0.12		0.02	ug/L	7	10-DEC-08	R767652
Phenanthrene	0.48		0.02	ug/L	1	10-DEC-08	R767652
Pyrene	0.79		0.02	ug/L	** 0.05	10-DEC-08	R767652
Quinoline	<0.03		0.03	ug/L		10-DEC-08	R767652
Surr: 2-Fluorobiphenyl	67		29-139	%		10-DEC-08	R767652
Surr: d14-Terphenyl	92		50-150	%		10-DEC-08	R767652
L714725-7 6 Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>BTEX, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	05-DEC-08	R765687
Ethyl Benzene	<0.5		0.5	ug/L	2.4	05-DEC-08	R765687
m+p-Xylenes	<1		1	ug/L		05-DEC-08	R765687
o-Xylene	<0.5		0.5	ug/L		05-DEC-08	R765687
Toluene	<0.5		0.5	ug/L	0.8	05-DEC-08	R765687
Xylene, (total)	<1.5		1.5	ug/L	72	05-DEC-08	R765687
Surr: 2,5-Dibromotoluene	110		25-175	%		05-DEC-08	R765687
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		05-DEC-08	
F1-BTEX	<100		100	ug/L		05-DEC-08	
F2 (C10-C16)	<100		100	ug/L		05-DEC-08	
F3 (C16-C34)	<250		250	ug/L		05-DEC-08	
F4 (C34-C50)	<250		250	ug/L		05-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		05-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765719
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates				No Unit		05-DEC-08	R765850
Surr: Octacosane	84		49-120	%		05-DEC-08	R765850

\*\* analytical results for this parameter exceed criteria limits listed on this report



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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714725-8 BH-5 Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	08-DEC-08	R766845
Arsenic (As)	<1		1	ug/L	25	08-DEC-08	R766845
Barium (Ba)	140		10	ug/L		08-DEC-08	R766845
Beryllium (Be)	<1		1	ug/L	4	10-DEC-08	R767654
Boron (B)	100		50	ug/L	200	08-DEC-08	R766845
Cadmium (Cd)	4.3		0.1	ug/L	** 0.5	08-DEC-08	R766845
Chromium (Cr)	5		1	ug/L	8.9	08-DEC-08	R766845
Cobalt (Co)	<0.5		0.5	ug/L	0.9	08-DEC-08	R766845
Copper (Cu)	3		1	ug/L	** 2.5	08-DEC-08	R766845
Lead (Pb)	<1		1	ug/L	1	08-DEC-08	R766845
Molybdenum (Mo)	2		1	ug/L	40	08-DEC-08	R766845
Nickel (Ni)	6		2	ug/L	25	08-DEC-08	R766845
Selenium (Se)	<5		5	ug/L	5	08-DEC-08	R766845
Silver (Ag)	<0.1		0.1	ug/L	0.25	08-DEC-08	R766845
Sodium (Na)	1100000	DLM	50000	ug/L		10-DEC-08	R767654
Thallium (Tl)	<0.3		0.3	ug/L	0.5	08-DEC-08	R766845
Vanadium (V)	<1		1	ug/L	6	08-DEC-08	R766845
Zinc (Zn)	3		3	ug/L	20	08-DEC-08	R766845
<b>VOC, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	05-DEC-08	R765687
Ethyl Benzene	<0.5		0.5	ug/L	2.4	05-DEC-08	R765687
m+p-Xylenes	<1		1	ug/L		05-DEC-08	R765687
o-Xylene	<0.5		0.5	ug/L		05-DEC-08	R765687
Toluene	<0.5		0.5	ug/L	0.8	05-DEC-08	R765687
Xylene, (total)	<1.5		1.5	ug/L	72	05-DEC-08	R765687
Surr: 2,5-Dibromotoluene	109		25-175	%		05-DEC-08	R765687
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		05-DEC-08	
F1-BTEX	<100		100	ug/L		05-DEC-08	
F2 (C10-C16)	<100		100	ug/L		05-DEC-08	
F2-Naphth	<100		100	ug/L		05-DEC-08	
F3 (C16-C34)	<250		250	ug/L		05-DEC-08	
F3-PAH	<250		250	ug/L		05-DEC-08	
F4 (C34-C50)	<250		250	ug/L		05-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		05-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765719
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates				No Unit		05-DEC-08	R765850
Surr: Octacosane	80		49-120	%		05-DEC-08	R765850
<b>Volatile Organic Compounds</b>							
1,1,1,2-Tetrachloroethane	<0.5		0.5	ug/L	5	08-DEC-08	R766722
1,1,2,2-Tetrachloroethane	<0.5		0.5	ug/L	1	08-DEC-08	R766722
1,1,1-Trichloroethane	<0.5		0.5	ug/L	10	08-DEC-08	R766722
1,1,2-Trichloroethane	<0.5		0.5	ug/L	5	08-DEC-08	R766722

\*\* analytical results for this parameter exceed criteria limits listed on this report

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L714725-8 BH-5 Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>VOC, F1-F4 (O.Reg.153/04)</b>							
<b>Volatile Organic Compounds</b>							
1,2-Dibromoethane	<0.5		0.5	ug/L	1	08-DEC-08	R766722
1,1-Dichloroethane	<0.5		0.5	ug/L	70	08-DEC-08	R766722
1,1-Dichloroethylene	<0.5		0.5	ug/L	0.66	08-DEC-08	R766722
1,2-Dichlorobenzene	<0.5		0.5	ug/L	2.5	08-DEC-08	R766722
1,2-Dichloroethane	<0.5		0.5	ug/L	5	08-DEC-08	R766722
1,2-Dichloropropane	<0.5		0.5	ug/L	0.7	08-DEC-08	R766722
1,3-Dichlorobenzene	<0.5		0.5	ug/L	2.5	08-DEC-08	R766722
1,4-Dichlorobenzene	<0.5		0.5	ug/L	1	08-DEC-08	R766722
2-Hexanone	<20		20	ug/L		08-DEC-08	R766722
Acetone	<20		20	ug/L		08-DEC-08	R766722
Bromodichloromethane	<0.5		0.5	ug/L	5	08-DEC-08	R766722
Bromoform	<0.5		0.5	ug/L	5	08-DEC-08	R766722
Bromomethane	<0.5		0.5	ug/L	0.9	08-DEC-08	R766722
Carbon Disulfide	<0.5		0.5	ug/L		08-DEC-08	R766722
Carbon tetrachloride	<0.5		0.5	ug/L	0.5	08-DEC-08	R766722
Chlorobenzene	<0.5		0.5	ug/L	15	08-DEC-08	R766722
Chloroethane	<1		1	ug/L		08-DEC-08	R766722
Chloroform	<0.5		0.5	ug/L	0.5	08-DEC-08	R766722
Chloromethane	<1		1	ug/L		08-DEC-08	R766722
cis-1,2-Dichloroethylene	<0.5		0.5	ug/L	70	08-DEC-08	R766722
cis-1,3-Dichloropropene	<0.5		0.5	ug/L	1.4	08-DEC-08	R766722
Dibromochloromethane	<0.5		0.5	ug/L	0.5	08-DEC-08	R766722
Dichlorodifluoromethane	<1		1	ug/L		08-DEC-08	R766722
Dichlormethane	<0.5		0.5	ug/L	50	08-DEC-08	R766722
Methyl Ethyl Ketone	<20		20	ug/L	350	08-DEC-08	R766722
Methyl Isobutyl Ketone	<20		20	ug/L		08-DEC-08	R766722
MTBE	<0.5		0.5	ug/L	200	08-DEC-08	R766722
Styrene	<0.5		0.5	ug/L	4	08-DEC-08	R766722
Tetrachloroethylene	<0.5		0.5	ug/L	5	08-DEC-08	R766722
trans-1,2-Dichloroethylene	<0.5		0.5	ug/L	100	08-DEC-08	R766722
trans-1,3-Dichloropropene	<0.5		0.5	ug/L	1.4	08-DEC-08	R766722
Trichloroethylene	<0.5		0.5	ug/L	20	08-DEC-08	R766722
Trichlorofluoromethane	<1		1	ug/L		08-DEC-08	R766722
Trihalomethanes (total)	<2		2	ug/L		08-DEC-08	R766722
Vinyl chloride	<0.5		0.5	ug/L	0.5	08-DEC-08	R766722
Surr: 1,2-Dichloroethane d4	103		50-150	%		08-DEC-08	R766722
Surr: Toluene-d8	99		70-130	%		08-DEC-08	R766722
Surr: 4-Bromofluorobenzene	99		50-150	%		08-DEC-08	R766722
<b>Individual Analytes</b>							
<b>CCME PAHs</b>							
1-Methylnaphthalene	<0.02		0.02	ug/L	2.5	05-DEC-08	R765675
2-Methylnaphthalene	<0.02		0.02	ug/L	2.5	05-DEC-08	R765675
Acenaphthene	<0.02		0.02	ug/L	1	05-DEC-08	R765675
Acenaphthylene	<0.02		0.02	ug/L	1	05-DEC-08	R765675
Acridine	<4		4	ug/L		05-DEC-08	R765675
Anthracene	<0.02		0.02	ug/L	0.05	05-DEC-08	R765675
Benzo(a)anthracene	<0.02		0.02	ug/L	0.10	05-DEC-08	R765675
Benzo(a)pyrene	<0.005		0.005	ug/L	0.005	05-DEC-08	R765675

\*\* analytical results for this parameter exceed criteria limits listed on this report

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L714725-8 BH-5 Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>Individual Analytes</b>							
<b>CCME PAHs</b>							
Benzo(b)fluoranthene	<0.02		0.02	ug/L	0.05	05-DEC-08	R765675
Benzo(g,h,i)perylene	<0.02		0.02	ug/L	0.1	05-DEC-08	R765675
Benzo(k)fluoranthene	<0.02		0.02	ug/L	0.05	05-DEC-08	R765675
Chrysene	<0.02		0.02	ug/L	0.05	05-DEC-08	R765675
Dibenzo(ah)anthracene	<0.02		0.02	ug/L	0.1	05-DEC-08	R765675
Fluoranthene	<0.02		0.02	ug/L	1	05-DEC-08	R765675
Fluorene	<0.02		0.02	ug/L	1	05-DEC-08	R765675
Indeno(1,2,3-cd)pyrene	<0.02		0.02	ug/L	0.1	05-DEC-08	R765675
Naphthalene	<0.02		0.02	ug/L	7	05-DEC-08	R765675
Phenanthrene	<0.02		0.02	ug/L	1	05-DEC-08	R765675
Pyrene	<0.02		0.02	ug/L	0.05	05-DEC-08	R765675
Quinoline	<0.02		0.02	ug/L		05-DEC-08	R765675
Surrogate: 2-Fluorobiphenyl	80		29-139	%		05-DEC-08	R765675
Surrogate: d14-Terphenyl	93		50-150	%		05-DEC-08	R765675
L714725-9 MW5S Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>BTEX, F1-F4 (O.Reg.153/04)</b>							
<b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	05-DEC-08	R765687
Ethyl Benzene	0.6		0.5	ug/L	2.4	05-DEC-08	R765687
m+p-Xylenes	2		1	ug/L		05-DEC-08	R765687
o-Xylene	0.9		0.5	ug/L		05-DEC-08	R765687
Toluene	2.2		0.5	ug/L	** 0.8	05-DEC-08	R765687
Xylene, (total)	2.9		1.5	ug/L	72	05-DEC-08	R765687
Surrogate: 2,5-Dibromotoluene	125		25-175	%		05-DEC-08	R765687
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		05-DEC-08	
F1-BTEX	<100		100	ug/L		05-DEC-08	
F2 (C10-C16)	<100		100	ug/L		05-DEC-08	
F3 (C16-C34)	<250		250	ug/L		05-DEC-08	
F4 (C34-C50)	<250		250	ug/L		05-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		05-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765719
<b>F2-F4 (O.Reg.153/04)</b>							
Prep/Analysis Dates						05-DEC-08	R765850
Surrogate: Octacosane	80		49-120	No Unit %		05-DEC-08	R765850
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	08-DEC-08	R766845
Arsenic (As)	<1		1	ug/L	25	08-DEC-08	R766845
Barium (Ba)	1440		10	ug/L		08-DEC-08	R766845
Beryllium (Be)	<1		1	ug/L	4	10-DEC-08	R767654

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714725-9 MW5S Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>TABLE 1 COMPLETE METALS</b> <b>Standard Metal Scan</b>							
Boron (B)	100		50	ug/L	200	08-DEC-08	R766845
Cadmium (Cd)	0.8		0.1	ug/L	** 0.5	08-DEC-08	R766845
Chromium (Cr)	5		1	ug/L	8.9	08-DEC-08	R766845
Cobalt (Co)	4.4		0.5	ug/L	** 0.9	08-DEC-08	R766845
Copper (Cu)	6		1	ug/L	** 2.5	08-DEC-08	R766845
Lead (Pb)	<1		1	ug/L	1	08-DEC-08	R766845
Molybdenum (Mo)	4		1	ug/L	40	08-DEC-08	R766845
Nickel (Ni)	20		2	ug/L	25	08-DEC-08	R766845
Selenium (Se)	<5		5	ug/L	5	08-DEC-08	R766845
Silver (Ag)	<0.1		0.1	ug/L	0.25	08-DEC-08	R766845
Sodium (Na)	3600000	DLM	500000	ug/L		11-DEC-08	R768311
Thallium (Tl)	<0.3		0.3	ug/L	0.5	08-DEC-08	R766845
Vanadium (V)	<1		1	ug/L	6	08-DEC-08	R766845
Zinc (Zn)	64		3	ug/L	** 20	08-DEC-08	R766845
L714725-10 MW5D Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, ALL PROPERTIES		
<b>BTEX, F1-F4 (O.Reg.153/04)</b> <b>BTEX (O.Reg.153/04)</b>							
Benzene	<0.5		0.5	ug/L	5	05-DEC-08	R765687
Ethyl Benzene	0.6		0.5	ug/L	2.4	05-DEC-08	R765687
m+p-Xylenes	2		1	ug/L		05-DEC-08	R765687
o-Xylene	1.3		0.5	ug/L		05-DEC-08	R765687
Toluene	2.6		0.5	ug/L	** 0.8	05-DEC-08	R765687
Xylene, (total)	3.3		1.5	ug/L	72	05-DEC-08	R765687
Surr: 2,5-Dibromotoluene	119		25-175	%		05-DEC-08	R765687
<b>CCME Total Hydrocarbons</b>							
F1 (C6-C10)	<100		100	ug/L		05-DEC-08	
F1-BTEX	<100		100	ug/L		05-DEC-08	
F2 (C10-C16)	<100		100	ug/L		05-DEC-08	
F3 (C16-C34)	<250		250	ug/L		05-DEC-08	
F4 (C34-C50)	<250		250	ug/L		05-DEC-08	
Total Hydrocarbons (C6-C50)	<250		250	ug/L		05-DEC-08	
Chromatogram to baseline at nC50	YES			No Unit		05-DEC-08	
Analysis Date				No Unit		04-DEC-08	R765719
<b>F2-F4 (O.Reg.153/04)</b> Prep/Analysis Dates						05-DEC-08	R765850
Surr: Octacosane	83		49-120	No Unit %		05-DEC-08	R765850
<b>TABLE 1 COMPLETE METALS</b> <b>Standard Metal Scan</b>							
Antimony (Sb)	<5		5	ug/L	6	08-DEC-08	R766845
Arsenic (As)	1		1	ug/L	25	08-DEC-08	R766845
Barium (Ba)	480		10	ug/L		08-DEC-08	R766845
Beryllium (Be)	<1		1	ug/L	4	10-DEC-08	R767654

\*\* analytical results for this parameter exceed criteria limits listed on this report

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Sample Details/Parameters	Result	Qualifier	D.L.	Units	Criteria Specific Limits	Analyzed	Batch
L714725-10 MW5D Sampled By: LUKE T on 03-DEC-08 Matrix: WATER					GROUNDWATER, <u>ALL PROPERTIES</u>		
<b>TABLE 1 COMPLETE METALS</b>							
<b>Standard Metal Scan</b>							
Boron (B)	150		50	ug/L	200	08-DEC-08	R766845
Cadmium (Cd)	<0.1		0.1	ug/L	0.5	08-DEC-08	R766845
Chromium (Cr)	4		1	ug/L	8.9	08-DEC-08	R766845
Cobalt (Co)	1.8		0.5	ug/L	** 0.9	08-DEC-08	R766845
Copper (Cu)	3		1	ug/L	** 2.5	08-DEC-08	R766845
Lead (Pb)	<1		1	ug/L	1	08-DEC-08	R766845
Molybdenum (Mo)	19		1	ug/L	40	08-DEC-08	R766845
Nickel (Ni)	10		2	ug/L	25	08-DEC-08	R766845
Selenium (Se)	6		5	ug/L	** 5	08-DEC-08	R766845
Silver (Ag)	<0.1		0.1	ug/L	0.25	08-DEC-08	R766845
Sodium (Na)	2600000	DLM	500000	ug/L		11-DEC-08	R768311
Thallium (Tl)	<0.3		0.3	ug/L	0.5	08-DEC-08	R766845
Vanadium (V)	<1		1	ug/L	6	08-DEC-08	R766845
Zinc (Zn)	3		3	ug/L	20	08-DEC-08	R766845

\*\* analytical results for this parameter exceed criteria limits listed on this report

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## Sample Parameter Qualifier key listed:

Qualifier	Description
DLM	Detection Limit Adjustment For Sample Matrix Effects
G	QC result did not meet ALS DQO. Refer to narrative comments for further information.

## Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
AS,SB,SE-3050-MS-WT	Soil	As, Sb and Se by ICP/MS		SW846 3050B/6020A
B-AVAIL-WT	Soil	Boron (B), Available		HW EXTR, EPA 6010B
BTX-R153-WT	Water	BTEX (O.Reg.153/04)		MOE DECPH-E3421/CCME Tier 1
CR-CR6-WT	Soil	Hexavalent Chromium in Soil		EPA 7196
ETL-TVH,TEH-CCME-WT	Water	CCME Total Hydrocarbons		CCME CWS-PHC Dec-2000 - Pub# 1310

Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

ETL-TVH,TEH-CCME-WT	Soil	CCME Total Hydrocarbons	CCME CWS-PHC Dec-2000 - Pub# 1310
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Analytical methods used for analysis of CCME Petroleum Hydrocarbons have been validated and comply with the Reference Method for the CWS PHC.

Hydrocarbon results are expressed on a dry weight basis.

In cases where results for both F4 and F4G are reported, the greater of the two results must be used in any application of the CWS PHC guidelines and the gravimetric heavy hydrocarbons cannot be added to the C6 to C50 hydrocarbons.

In samples where BTEX and F1 were analyzed , F1-BTEX represents a value where the sum of Benzene, Toluene, Ethylbenzene and total Xylenes has been subtracted from F1.

In samples where PAHs, F2 and F3 were analyzed, F2-Naphth represents the result where Naphthalene has been subtracted from F2. F3-PAH represents a result where the sum of Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, and Pyrene has been subtracted from F3.

Unless otherwise qualified, the following quality control criteria have been met for the F1 hydrocarbon range:

1. All extraction and analysis holding times were met.
2. Instrument performance showing response factors for C6 and C10 within 30% of the response factor for toluene.
3. Linearity of gasoline response within 15% throughout the calibration range.

Unless otherwise qualified, the following quality control criteria have been met for the F2-F4 hydrocarbon ranges:

1. All extraction and analysis holding times were met.
2. Instrument performance showing C10, C16 and C34 response factors within 10% of their average.
3. Instrument performance showing the C50 response factor within 30% of the average of the C10, C16 and C34 response factors.
4. Linearity of diesel or motor oil response within 15% throughout the calibration range.

F1-WT	Water	F1 (O.Reg.153/04)	MOE DECPH-E3421/CCME Tier 1
F1-WT	Soil	F1 (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
F2-F4-WT	Water	F2-F4 (O.Reg.153/04)	MOE DECPH-E3421/CCME Tier 1
F2-F4-WT	Soil	F2-F4 (O.Reg.153/04)	MOE DECPH-E3398/CCME Tier 1
HG-WT	Soil	Mercury by CVAA	SW846 7470A
MET-R153-WT	Water	Standard Metal Scan	EPA 200.8
MET-R153-WT	Soil	Standard Metal Scan (ICP)	EPA 3050
MOISTURE-WT	Soil	% Moisture	Gravimetric: Oven Dried
PAH-CCME-WT	Water	CCME PAHs	SW846 8270
PH-R153-WT	Soil	pH	MOEE E3137A

## Reference Information

5-698-17-02

VOC-CCME-TABLE1-WT	Soil	Volatile Organics (153/04) Table 1	MOE-E3254
VOC-ROU-NO-BTX-WT	Water	Volatile Organic Compounds	SW846 8260

Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

55492

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
WT	ALS LABORATORY GROUP - WATERLOO, ONTARIO, CAN		

### GLOSSARY OF REPORT TERMS

**Surr** - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million

mg/L (units) - unit of concentration based on volume, parts per million

< - Less than

D.L. - Detection Limit

N/A - Result not available. Refer to qualifier code and definition for explanation

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

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

ALS provides criteria information as a service to you, our customer. Every attempt is made to ensure the criteria information in this report is accurate and current, however, it is not guaranteed. ALS recommends review of the most current version of the regulation, and assumes no responsibility for the accuracy of the criteria levels indicated.



**Environmental Division**

## **ALS Laboratory Group Quality Control Report**

Workorder: L714725

Report Date: 12-DEC-08

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Client: XCG CONSULTANTS LTD.  
820 TRILLIUM DRIVE  
KITCHENER ON N2R 1K4

Contact: THOMAS KOLODZIEJ

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>BTX-R153-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R765687</b>							
<b>WG881061-1</b>	<b>CVS</b>							
Ethyl Benzene			114		%		80-117	05-DEC-08
m+p-Xylenes			118		%		75-127	05-DEC-08
o-Xylene			117		%		81-118	05-DEC-08
Toluene			115		%		79-117	05-DEC-08
Benzene			117		%		79-117	05-DEC-08
<b>WG881061-3</b>	<b>DUP</b>	<b>L715004-7</b>						
Benzene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	05-DEC-08
Ethyl Benzene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	05-DEC-08
m+p-Xylenes		<1	<1	RPD-NA	ug/L	N/A	39	05-DEC-08
o-Xylene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	05-DEC-08
Toluene		<0.5	<0.5	RPD-NA	ug/L	N/A	39	05-DEC-08
<b>WG881061-2</b>	<b>MB</b>							
Benzene			<0.5		ug/L		0.5	05-DEC-08
Ethyl Benzene			<0.5		ug/L		0.5	05-DEC-08
m+p-Xylenes			<1		ug/L		1	05-DEC-08
o-Xylene			<0.5		ug/L		0.5	05-DEC-08
Toluene			<0.5		ug/L		0.5	05-DEC-08
<b>F1-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R765719</b>							
<b>WG881062-1</b>	<b>CVS</b>							
TVH: (C6-C10 / No BTEX Correction)			98		%		54-126	04-DEC-08
<b>WG881062-3</b>	<b>DUP</b>	<b>L715004-7</b>						
TVH: (C6-C10 / No BTEX Correction)		<100	<100	RPD-NA	ug/L	N/A	30	04-DEC-08
<b>WG881062-2</b>	<b>MB</b>							
TVH: (C6-C10 / No BTEX Correction)			<100		ug/L		100	04-DEC-08
<b>F2-F4-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R765850</b>							
<b>WG882072-1</b>	<b>CVS</b>							
F2 (C10-C16)			90		%		80-120	05-DEC-08
F3 (C16-C34)			97		%		80-120	05-DEC-08
F4 (C34-C50)			105		%		80-120	05-DEC-08
<b>WG881112-2</b>	<b>LCS</b>							
F2 (C10-C16)			79		%		40-120	05-DEC-08
F3 (C16-C34)			90		%		56-104	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
F2-F4-WT	Water							
Batch	R765850							
WG881112-2	LCS							
F4 (C34-C50)			98		%		50-110	05-DEC-08
WG881112-3	LCSD	WG881112-2						
F2 (C10-C16)			79	80	%	2.2	45	05-DEC-08
F3 (C16-C34)			90	91	%	1.4	45	05-DEC-08
F4 (C34-C50)			98	106	%	7.3	45	05-DEC-08
WG881112-1	MB							
F2 (C10-C16)			<100		ug/L		100	05-DEC-08
F3 (C16-C34)			<250		ug/L		250	05-DEC-08
F4 (C34-C50)			<250		ug/L		250	05-DEC-08
MET-R153-WT	Water							
Batch	R766845							
WG882923-1	CVS							
Antimony (Sb)			100		%		80-120	08-DEC-08
Arsenic (As)			109		%		80-120	08-DEC-08
Barium (Ba)			104		%		80-120	08-DEC-08
Boron (B)			112		%		70-130	08-DEC-08
Cadmium (Cd)			108		%		80-120	08-DEC-08
Chromium (Cr)			112		%		80-120	08-DEC-08
Cobalt (Co)			112		%		80-120	08-DEC-08
Copper (Cu)			114		%		80-120	08-DEC-08
Lead (Pb)			109		%		80-120	08-DEC-08
Molybdenum (Mo)			114		%		80-120	08-DEC-08
Nickel (Ni)			113		%		80-120	08-DEC-08
Selenium (Se)			104		%		80-120	08-DEC-08
Silver (Ag)			103		%		80-120	08-DEC-08
Thallium (Tl)			109		%		63-138	08-DEC-08
Vanadium (V)			110		%		63-138	08-DEC-08
Zinc (Zn)			114		%		80-120	08-DEC-08
WG882923-5	DUP	WG882923-4						
Antimony (Sb)			<50	<50	DLM	ug/L	N/A	08-DEC-08
Arsenic (As)			20	20	DLM	ug/L	0	08-DEC-08
Barium (Ba)			400	400	DLM	ug/L	0	08-DEC-08
Boron (B)			2400	2300	DLM	ug/L	2.4	08-DEC-08
Cadmium (Cd)			<1	<1				

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Water							
Batch R766845	DUP	WG882923-4						
WG882923-5	DUP	WG882923-4						
Cadmium (Cd)		<1	<1	DLM	ug/L	N/A	26	08-DEC-08
Chromium (Cr)		40	50	DLM	ug/L	0	40	08-DEC-08
Cobalt (Co)		17	16	DLM	ug/L	0	20	08-DEC-08
Copper (Cu)		<10	<10	DLM	ug/L	N/A	26	08-DEC-08
Lead (Pb)		<10	<10	DLM	ug/L	N/A	20	08-DEC-08
Molybdenum (Mo)		<10	<10	DLM	ug/L	N/A	26	08-DEC-08
Nickel (Ni)		30	30	DLM	ug/L	0	80	08-DEC-08
Selenium (Se)		<50	<50	DLM	ug/L	N/A	26	08-DEC-08
Silver (Ag)		<1	<1	DLM	ug/L	N/A	26	08-DEC-08
Thallium (Tl)		<3	<3	DLM	ug/L	N/A	26	08-DEC-08
Vanadium (V)		10	10	DLM	ug/L	0	40	08-DEC-08
Zinc (Zn)		<30	<30	DLM	ug/L	N/A	20	08-DEC-08
WG882923-3	MB							
Antimony (Sb)			<5		ug/L		5	08-DEC-08
Arsenic (As)			<1		ug/L		1	08-DEC-08
Barium (Ba)			<10		ug/L		10	08-DEC-08
Boron (B)			<50		ug/L		50	08-DEC-08
Cadmium (Cd)			<0.1		ug/L		0.1	08-DEC-08
Chromium (Cr)			<1		ug/L		1	08-DEC-08
Cobalt (Co)			<0.5		ug/L		0.5	08-DEC-08
Copper (Cu)			<1		ug/L		1	08-DEC-08
Lead (Pb)			<1		ug/L		1	08-DEC-08
Molybdenum (Mo)			<1		ug/L		1	08-DEC-08
Nickel (Ni)			<2		ug/L		2	08-DEC-08
Selenium (Se)			<5		ug/L		5	08-DEC-08
Silver (Ag)			<0.1		ug/L		0.1	08-DEC-08
Thallium (Tl)			<0.3		ug/L		0.3	08-DEC-08
Vanadium (V)			<1		ug/L		1	08-DEC-08
Zinc (Zn)			<3		ug/L		3	08-DEC-08
Batch R767654	CVS							
WG884057-1	CVS							
Beryllium (Be)			109		%		80-120	10-DEC-08
Sodium (Na)			102		%		63-138	10-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Water							
Batch	R767654							
WG884057-5	DUP	WG884057-4						
Beryllium (Be)		<1	<1	RPD-NA	ug/L	N/A	26	10-DEC-08
Sodium (Na)		20000	20600		ug/L	3.1	26	10-DEC-08
WG884057-3	MB							
Beryllium (Be)			<1		ug/L		1	10-DEC-08
Sodium (Na)			<500		ug/L		500	10-DEC-08
Batch	R768311							
WG884648-1	CVS							
Antimony (Sb)		94		%		80-120	11-DEC-08	
Arsenic (As)		104		%		80-120	11-DEC-08	
Barium (Ba)		98		%		80-120	11-DEC-08	
Boron (B)		108		%		70-130	11-DEC-08	
Cadmium (Cd)		104		%		80-120	11-DEC-08	
Chromium (Cr)		104		%		80-120	11-DEC-08	
Cobalt (Co)		104		%		80-120	11-DEC-08	
Copper (Cu)		101		%		80-120	11-DEC-08	
Lead (Pb)		100		%		80-120	11-DEC-08	
Molybdenum (Mo)		103		%		80-120	11-DEC-08	
Nickel (Ni)		105		%		80-120	11-DEC-08	
Selenium (Se)		101		%		80-120	11-DEC-08	
Silver (Ag)		92		%		80-120	11-DEC-08	
Sodium (Na)		105		%		63-138	11-DEC-08	
Thallium (Tl)		105		%		63-138	11-DEC-08	
Vanadium (V)		102		%		63-138	11-DEC-08	
Zinc (Zn)		106		%		80-120	11-DEC-08	
WG884648-5	DUP	WG884648-4						
Antimony (Sb)		<500	<500	DLM	ug/L	N/A	20	11-DEC-08
Arsenic (As)		<100	<100	DLM	ug/L	N/A	20	11-DEC-08
Barium (Ba)		<1000	<1000	DLM	ug/L	N/A	20	11-DEC-08
Boron (B)		<5000	<5000	DLM	ug/L	N/A	20	11-DEC-08
Cadmium (Cd)		<10	<10	DLM	ug/L	N/A	26	11-DEC-08
Chromium (Cr)		<100	<100	DLM	ug/L	N/A	26	11-DEC-08
Cobalt (Co)		<50	<50	DLM	ug/L	N/A	26	11-DEC-08
Copper (Cu)		<100	<100	DLM	ug/L	N/A	26	11-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Water							
Batch R768311								
WG884648-5 DUP	WG884648-4							
Lead (Pb)	<100	<100	DLM	ug/L	N/A	20	11-DEC-08	
Molybdenum (Mo)	<100	<100	DLM	ug/L	N/A	26	11-DEC-08	
Nickel (Ni)	<200	<200	DLM	ug/L	N/A	26	11-DEC-08	
Selenium (Se)	<500	<500	DLM	ug/L	N/A	26	11-DEC-08	
Silver (Ag)	<10	<10	DLM	ug/L	N/A	26	11-DEC-08	
Sodium (Na)	360000	350000	DLM	ug/L	10000	200000	11-DEC-08	
Thallium (Tl)	<30	<30	DLM	ug/L	N/A	26	11-DEC-08	
Vanadium (V)	<100	<100	DLM	ug/L	N/A	26	11-DEC-08	
Zinc (Zn)	<300	<300	DLM	ug/L	N/A	20	11-DEC-08	
WG884648-3 MB								
Antimony (Sb)		<5		ug/L		5	11-DEC-08	
Arsenic (As)		<1		ug/L		1	11-DEC-08	
Barium (Ba)		<10		ug/L		10	11-DEC-08	
Boron (B)		<50		ug/L		50	11-DEC-08	
Cadmium (Cd)		<0.1		ug/L		0.1	11-DEC-08	
Chromium (Cr)		<1		ug/L		1	11-DEC-08	
Cobalt (Co)		<0.5		ug/L		0.5	11-DEC-08	
Copper (Cu)		<1		ug/L		1	11-DEC-08	
Lead (Pb)		<1		ug/L		1	11-DEC-08	
Molybdenum (Mo)		<1		ug/L		1	11-DEC-08	
Nickel (Ni)		<2		ug/L		2	11-DEC-08	
Selenium (Se)		<5		ug/L		5	11-DEC-08	
Silver (Ag)		<0.1		ug/L		0.1	11-DEC-08	
Sodium (Na)		<500		ug/L		500	11-DEC-08	
Thallium (Tl)		<0.3		ug/L		0.3	11-DEC-08	
Vanadium (V)		<1		ug/L		1	11-DEC-08	
Zinc (Zn)		<3		ug/L		3	11-DEC-08	
Batch R768731								
WG885276-1 CVS								
Beryllium (Be)		104		%		80-120	12-DEC-08	
Sodium (Na)		100		%		63-138	12-DEC-08	
WG885276-5 DUP	WG885276-4							
Beryllium (Be)	<1	<1	RPD-NA	ug/L	N/A	26	12-DEC-08	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Water							
Batch R768731								
WG885276-5 DUP	WG885276-4							
Sodium (Na)	<500	<500		RPD-NA	ug/L	N/A	26	12-DEC-08
WG885276-3 MB								
Beryllium (Be)		<1			ug/L		1	12-DEC-08
Sodium (Na)		<500			ug/L		500	12-DEC-08
PAH-CCME-WT	Water							
Batch R765675								
WG881729-1 CVS								
1-Methylnaphthalene		92			%		71-125	05-DEC-08
2-Methylnaphthalene		78			%		70-117	05-DEC-08
Acenaphthene		92			%		77-128	05-DEC-08
Acenaphthylene		91			%		70-125	05-DEC-08
Acridine		112			%		55-145	05-DEC-08
Anthracene		92			%		74-126	05-DEC-08
Benzo(a)anthracene		94			%		77-131	05-DEC-08
Benzo(a)pyrene		89			%		48-149	05-DEC-08
Benzo(b)fluoranthene		89			%		62-135	05-DEC-08
Benzo(g,h,i)perylene		94			%		73-128	05-DEC-08
Benzo(k)fluoranthene		97			%		69-132	05-DEC-08
Chrysene		95			%		75-130	05-DEC-08
Dibenzo(ah)anthracene		94			%		66-136	05-DEC-08
Fluoranthene		91			%		75-122	05-DEC-08
Fluorene		92			%		76-127	05-DEC-08
Indeno(1,2,3-cd)pyrene		91			%		62-139	05-DEC-08
Naphthalene		81			%		79-126	05-DEC-08
Phenanthrene		92			%		79-126	05-DEC-08
Pyrene		92			%		76-126	05-DEC-08
Quinoline		103			%		55-145	05-DEC-08
WG881411-2 LCS								
1-Methylnaphthalene		60			%		25-131	05-DEC-08
2-Methylnaphthalene		51			%		25-123	05-DEC-08
Acenaphthene		70			%		38-143	05-DEC-08
Acenaphthylene		71			%		43-145	05-DEC-08
Acridine		105			%		55-145	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-CCME-WT	Water							
Batch	R765675							
WG881411-2	LCS							
Anthracene			89		%		44-129	05-DEC-08
Benzo(a)anthracene			90		%		48-143	05-DEC-08
Benzo(a)pyrene			84		%		39-137	05-DEC-08
Benzo(b)fluoranthene			78		%		42-153	05-DEC-08
Benzo(g,h,i)perylene			82		%		42-157	05-DEC-08
Benzo(k)fluoranthene			102		%		37-158	05-DEC-08
Chrysene			97		%		48-149	05-DEC-08
Dibenzo(ah)anthracene			76		%		41-141	05-DEC-08
Fluoranthene			94		%		46-146	05-DEC-08
Fluorene			75		%		37-140	05-DEC-08
Indeno(1,2,3-cd)pyrene			81		%		42-139	05-DEC-08
Naphthalene			59		%		29-127	05-DEC-08
Phenanthrene			86		%		43-137	05-DEC-08
Pyrene			95		%		58-132	05-DEC-08
Quinoline			89		%		55-145	05-DEC-08
WG881411-3	LCSD	WG881411-2						
1-Methylnaphthalene		60	58		%	3.6	45	05-DEC-08
2-Methylnaphthalene		51	49		%	3.6	50	05-DEC-08
Acenaphthene		70	66		%	5.8	45	05-DEC-08
Acenaphthylene		71	68		%	4.4	45	05-DEC-08
Acridine		105	117		%	11	45	05-DEC-08
Anthracene		89	92		%	2.4	50	05-DEC-08
Benzo(a)anthracene		90	92		%	2.2	45	05-DEC-08
Benzo(a)pyrene		84	85		%	0.50	45	05-DEC-08
Benzo(b)fluoranthene		78	79		%	0.97	45	05-DEC-08
Benzo(g,h,i)perylene		82	80		%	2.5	45	05-DEC-08
Benzo(k)fluoranthene		102	102		%	0.015	45	05-DEC-08
Chrysene		97	99		%	2.5	45	05-DEC-08
Dibenzo(ah)anthracene		76	74		%	2.3	45	05-DEC-08
Fluoranthene		94	96		%	1.6	45	05-DEC-08
Fluorene		75	72		%	4.0	45	05-DEC-08
Indeno(1,2,3-cd)pyrene		81	80		%	2.0	45	05-DEC-08
Naphthalene		59	61		%	2.6	45	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-CCME-WT	Water							
Batch	R765675							
WG881411-3	LCSD	WG881411-2						
Phenanthrene		86	89	%	3.0	45	05-DEC-08	
Pyrene		95	97	%	1.7	45	05-DEC-08	
Quinoline		89	90	%	0.45	45	05-DEC-08	
WG881411-1	MB							
1-Methylnaphthalene			<0.02	ug/L		0.02	05-DEC-08	
2-Methylnaphthalene			<0.02	ug/L		0.02	05-DEC-08	
Acenaphthene			<0.02	ug/L		0.02	05-DEC-08	
Acenaphthylene			<0.02	ug/L		0.02	05-DEC-08	
Acridine			<4	ug/L		4	05-DEC-08	
Anthracene			<0.02	ug/L		0.02	05-DEC-08	
Benzo(a)anthracene			<0.02	ug/L		0.02	05-DEC-08	
Benzo(a)pyrene			<0.005	ug/L		0.005	05-DEC-08	
Benzo(b)fluoranthene			<0.02	ug/L		0.02	05-DEC-08	
Benzo(g,h,i)perylene			<0.02	ug/L		0.02	05-DEC-08	
Benzo(k)fluoranthene			<0.02	ug/L		0.02	05-DEC-08	
Chrysene			<0.02	ug/L		0.02	05-DEC-08	
Dibenzo(ah)anthracene			<0.02	ug/L		0.02	05-DEC-08	
Fluoranthene			<0.02	ug/L		0.02	05-DEC-08	
Fluorene			<0.02	ug/L		0.02	05-DEC-08	
Indeno(1,2,3-cd)pyrene			<0.02	ug/L		0.02	05-DEC-08	
Naphthalene			<0.02	ug/L		0.02	05-DEC-08	
Phenanthrene			<0.02	ug/L		0.02	05-DEC-08	
Pyrene			<0.02	ug/L		0.02	05-DEC-08	
Quinoline			<0.02	ug/L		0.02	05-DEC-08	
Batch	R767652							
WG882763-1	CVS							
1-Methylnaphthalene			89	%		71-125	10-DEC-08	
2-Methylnaphthalene			78	%		70-117	10-DEC-08	
Acenaphthene			92	%		77-128	10-DEC-08	
Acenaphthylene			89	%		70-125	10-DEC-08	
Acridine			111	%		55-145	10-DEC-08	
Anthracene			90	%		74-126	10-DEC-08	
Benzo(a)anthracene			93	%		77-131	10-DEC-08	

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PAH-CCME-WT	Water							
Batch	R767652							
WG882763-1	CVS							
Benzo(a)pyrene			85		%		48-149	10-DEC-08
Benzo(b)fluoranthene			102		%		62-135	10-DEC-08
Benzo(g,h,i)perylene			89		%		73-128	10-DEC-08
Benzo(k)fluoranthene			82		%		69-132	10-DEC-08
Chrysene			94		%		75-130	10-DEC-08
Dibenzo(ah)anthracene			83		%		66-136	10-DEC-08
Fluoranthene			88		%		75-122	10-DEC-08
Fluorene			91		%		76-127	10-DEC-08
Indeno(1,2,3-cd)pyrene			83		%		62-139	10-DEC-08
Naphthalene			102		%		79-126	10-DEC-08
Phenanthrene			92		%		79-126	10-DEC-08
Pyrene			90		%		76-126	10-DEC-08
Quinoline			110		%		55-145	10-DEC-08
WG881823-2	LCS							
1-Methylnaphthalene			72		%		25-131	10-DEC-08
2-Methylnaphthalene			66		%		25-123	10-DEC-08
Acenaphthene			88		%		38-143	10-DEC-08
Acenaphthylene			81		%		43-145	10-DEC-08
Acridine			100		%		55-145	10-DEC-08
Anthracene			100		%		44-129	10-DEC-08
Benzo(a)anthracene			111		%		48-143	10-DEC-08
Benzo(a)pyrene			96		%		39-137	10-DEC-08
Benzo(b)fluoranthene			118		%		42-153	10-DEC-08
Benzo(g,h,i)perylene			103		%		42-157	10-DEC-08
Benzo(k)fluoranthene			104		%		37-158	10-DEC-08
Chrysene			109		%		48-149	10-DEC-08
Dibenzo(ah)anthracene			101		%		41-141	10-DEC-08
Fluoranthene			106		%		46-146	10-DEC-08
Fluorene			97		%		37-140	10-DEC-08
Indeno(1,2,3-cd)pyrene			106		%		42-139	10-DEC-08
Naphthalene			81		%		29-127	10-DEC-08
Phenanthrene			102		%		43-137	10-DEC-08
Pyrene			105		%		58-132	10-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
<b>PAH-CCME-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R767652</b>							
<b>WG881823-2</b>	<b>LCS</b>							
Quinoline			91		%		55-145	10-DEC-08
<b>WG881823-1</b>	<b>MB</b>							
1-Methylnaphthalene			<0.02		ug/L		0.02	10-DEC-08
2-Methylnaphthalene			<0.02		ug/L		0.02	10-DEC-08
Acenaphthene			<0.02		ug/L		0.02	10-DEC-08
Acenaphthylene			<0.02		ug/L		0.02	10-DEC-08
Acridine			<4		ug/L		4	10-DEC-08
Anthracene			<0.02		ug/L		0.02	10-DEC-08
Benzo(a)anthracene			<0.02		ug/L		0.02	10-DEC-08
Benzo(a)pyrene			<0.005		ug/L		0.005	10-DEC-08
Benzo(b)fluoranthene			<0.02		ug/L		0.02	10-DEC-08
Benzo(g,h,i)perylene			<0.02		ug/L		0.02	10-DEC-08
Benzo(k)fluoranthene			<0.02		ug/L		0.02	10-DEC-08
Chrysene			<0.02		ug/L		0.02	10-DEC-08
Dibenzo(ah)anthracene			<0.02		ug/L		0.02	10-DEC-08
Fluoranthene			<0.02		ug/L		0.02	10-DEC-08
Fluorene			<0.02		ug/L		0.02	10-DEC-08
Indeno(1,2,3-cd)pyrene			<0.02		ug/L		0.02	10-DEC-08
Naphthalene			<0.02		ug/L		0.02	10-DEC-08
Phenanthrene			<0.02		ug/L		0.02	10-DEC-08
Pyrene			<0.02		ug/L		0.02	10-DEC-08
Quinoline			<0.02		ug/L		0.02	10-DEC-08
<b>VOC-ROU-NO-BTX-WT</b>	<b>Water</b>							
<b>Batch</b>	<b>R766722</b>							
<b>WG882446-1</b>	<b>CVS</b>							
1,1,1,2-Tetrachloroethane			82		%		75-120	08-DEC-08
1,1,1-Trichloroethane			97		%		74-124	08-DEC-08
1,1,2,2-Tetrachloroethane			93		%		62-130	08-DEC-08
1,1,2-Trichloroethane			91		%		76-119	08-DEC-08
1,1-Dichloroethane			100		%		74-126	08-DEC-08
1,1-Dichloroethylene			96		%		67-127	08-DEC-08
1,2-Dichlorobenzene			95		%		77-119	08-DEC-08
1,2-Dichloroethane			99		%		70-132	08-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch	R766722							
WG882446-1	CVS							
1,2-Dichloropropane			92		%		75-126	08-DEC-08
1,3-Dichlorobenzene			93		%		74-120	08-DEC-08
1,4-Dichlorobenzene			92		%		74-122	08-DEC-08
2-Hexanone			91		%		47-149	08-DEC-08
Acetone			88		%		32-175	08-DEC-08
Bromodichloromethane			89		%		71-124	08-DEC-08
Bromoform			83		%		63-126	08-DEC-08
Bromomethane			91		%		45-138	08-DEC-08
Carbon Disulfide			88		%		47-133	08-DEC-08
Carbon tetrachloride			82		%		69-129	08-DEC-08
Chlorobenzene			94		%		78-120	08-DEC-08
Dibromochloromethane			89		%		69-120	08-DEC-08
Chloroethane			94		%		64-130	08-DEC-08
Chloroform			97		%		63-138	08-DEC-08
Chloromethane			101		%		43-142	08-DEC-08
cis-1,2-Dichloroethylene			89		%		77-121	08-DEC-08
cis-1,3-Dichloropropene			78		%		63-138	08-DEC-08
Dichlorodifluoromethane			84		%		60-125	08-DEC-08
1,2-Dibromoethane			99		%		75-125	08-DEC-08
Methyl Ethyl Ketone			78		%		47-155	08-DEC-08
Methyl Isobutyl Ketone			84		%		60-132	08-DEC-08
MTBE			107		%		62-128	08-DEC-08
Dichloromethane			96		%		78-121	08-DEC-08
Styrene			79		%		72-130	08-DEC-08
Tetrachloroethylene			91		%		78-130	08-DEC-08
trans-1,2-Dichloroethylene			94		%		63-138	08-DEC-08
trans-1,3-Dichloropropene			85		%		63-138	08-DEC-08
Trichloroethylene			90		%		74-124	08-DEC-08
Trichlorofluoromethane			105		%		67-133	08-DEC-08
Vinyl chloride			101		%		55-145	08-DEC-08
WG882446-4	DUP	WG882446-3						
1,1,1,2-Tetrachloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08
1,1,1-Trichloroethane		<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-ROU-NO-BTX-WT	Water							
Batch	R766722							
WG882446-4	DUP	WG882446-3						
1,1,2,2-Tetrachloroethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,1,2-Trichloroethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,1-Dichloroethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,1-Dichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,2-Dichlorobenzene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,2-Dichloroethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,2-Dichloropropane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,3-Dichlorobenzene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,4-Dichlorobenzene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
2-Hexanone	<20	<20	RPD-NA	ug/L	N/A	20	08-DEC-08	
Acetone	<20	<20	RPD-NA	ug/L	N/A	20	08-DEC-08	
Bromodichloromethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Bromoform	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Bromomethane	0.6	0.5	J	ug/L	0.1	0.2	08-DEC-08	
Carbon Disulfide	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Carbon tetrachloride	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Chlorobenzene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Dibromochloromethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Chloroethane	<1	<1	RPD-NA	ug/L	N/A	20	08-DEC-08	
Chloroform	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Chloromethane	<1	<1	RPD-NA	ug/L	N/A	20	08-DEC-08	
cis-1,2-Dichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
cis-1,3-Dichloropropene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Dichlorodifluoromethane	<1	<1	RPD-NA	ug/L	N/A	20	08-DEC-08	
1,2-Dibromoethane	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Methyl Ethyl Ketone	<20	<20	RPD-NA	ug/L	N/A	20	08-DEC-08	
Methyl Isobutyl Ketone	<20	<20	RPD-NA	ug/L	N/A	20	08-DEC-08	
MTBE	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Dichloromethane	<0.5	<0.5	RPD-NA	ug/L	N/A	31	08-DEC-08	
Styrene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Tetrachloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
trans-1,2-Dichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
trans-1,3-Dichloropropene	<0.5	<0.5						08-DEC-08

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VOC-ROU-NO-BTX-WT	Water							
Batch R766722								
WG882446-4 DUP	WG882446-3							
trans-1,3-Dichloropropene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Trichloroethylene	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
Trichlorofluoromethane	<1	<1	RPD-NA	ug/L	N/A	20	08-DEC-08	
Vinyl chloride	<0.5	<0.5	RPD-NA	ug/L	N/A	20	08-DEC-08	
WG882446-2 MB								
1,1,1,2-Tetrachloroethane		<0.5		ug/L		0.5	08-DEC-08	
1,1,1-Trichloroethane		<0.5		ug/L		0.5	08-DEC-08	
1,1,2,2-Tetrachloroethane		<0.5		ug/L		0.5	08-DEC-08	
1,1,2-Trichloroethane		<0.5		ug/L		0.5	08-DEC-08	
1,1-Dichloroethane		<0.5		ug/L		0.5	08-DEC-08	
1,1-Dichloroethylene		<0.5		ug/L		0.5	08-DEC-08	
1,2-Dichlorobenzene		<0.5		ug/L		0.5	08-DEC-08	
1,2-Dichloroethane		<0.5		ug/L		0.5	08-DEC-08	
1,2-Dichloropropane		<0.5		ug/L		0.5	08-DEC-08	
1,3-Dichlorobenzene		<0.5		ug/L		0.5	08-DEC-08	
1,4-Dichlorobenzene		<0.5		ug/L		0.5	08-DEC-08	
2-Hexanone		<20		ug/L		20	08-DEC-08	
Acetone		<20		ug/L		20	08-DEC-08	
Bromodichloromethane		<0.5		ug/L		0.5	08-DEC-08	
Bromoform		<0.5		ug/L		0.5	08-DEC-08	
Carbon Disulfide		<0.5		ug/L		0.5	08-DEC-08	
Carbon tetrachloride		<0.5		ug/L		0.5	08-DEC-08	
Chlorobenzene		<0.5		ug/L		0.5	08-DEC-08	
Dibromochloromethane		<0.5		ug/L		0.5	08-DEC-08	
Chloroethane		<1		ug/L		1	08-DEC-08	
Chloroform		<0.5		ug/L		0.5	08-DEC-08	
Chloromethane		<1		ug/L		1	08-DEC-08	
cis-1,2-Dichloroethylene		<0.5		ug/L		0.5	08-DEC-08	
cis-1,3-Dichloropropene		<0.5		ug/L		0.5	08-DEC-08	
Dichlorodifluoromethane		<1		ug/L		1	08-DEC-08	
1,2-Dibromoethane		<0.5		ug/L		0.5	08-DEC-08	
Methyl Ethyl Ketone		<20		ug/L		20	08-DEC-08	
Methyl Isobutyl Ketone		<20		ug/L		20	08-DEC-08	

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VOC-ROU-NO-BTX-WT	Water							
Batch R766722								
WG882446-2 MB								
MTBE			<0.5		ug/L		0.5	08-DEC-08
Dichloromethane			<0.5		ug/L		0.5	08-DEC-08
Styrene			<0.5		ug/L		0.5	08-DEC-08
Tetrachloroethylene			<0.5		ug/L		0.5	08-DEC-08
trans-1,2-Dichloroethylene			<0.5		ug/L		0.5	08-DEC-08
trans-1,3-Dichloropropene			<0.5		ug/L		0.5	08-DEC-08
Trichloroethylene			<0.5		ug/L		0.5	08-DEC-08
Trichlorofluoromethane			<1		ug/L		1	08-DEC-08
Vinyl chloride			<0.5		ug/L		0.5	08-DEC-08
Bromomethane			1.1	A	ug/L		0.5	08-DEC-08
COMMENTS: Method blank positive; related samples have been qualified accordingly.								
AS,SB,SE-3050-MS-WT	Soil							
Batch R767196								
WG883491-2 CVS								
Antimony (Sb)			93		%		63-138	09-DEC-08
Arsenic (As)			104		%		63-138	09-DEC-08
Selenium (Se)			98		%		63-138	09-DEC-08
WG881744-4 DUP		WG881744-3						
Antimony (Sb)		<1	<1	RPD-NA	mg/kg	N/A	26	09-DEC-08
Arsenic (As)		1	1	J	mg/kg	0	4	09-DEC-08
Selenium (Se)		<1	<1	RPD-NA	mg/kg	N/A	26	09-DEC-08
WG881744-2 LCS								
Arsenic (As)			83		%		63-138	09-DEC-08
Selenium (Se)			75		%		63-138	09-DEC-08
WG881744-1 MB								
Antimony (Sb)			<1		mg/kg		1	09-DEC-08
Arsenic (As)			<1		mg/kg		1	09-DEC-08
Selenium (Se)			<1		mg/kg		1	09-DEC-08
B-AVAIL-WT	Soil							
Batch R765821								
WG881766-3 DUP		L714725-3						
Boron (B), Available		0.2	0.2	J	ug/g	0.0	0.4	05-DEC-08
WG881766-2 LCS								
Boron (B), Available			102		%		60-140	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed	
F2-F4-WT	Soil								
Batch R765825									
WG881099-2 LCS									
F2 (C10-C16)			89		%		54-120	05-DEC-08	
F3 (C16-C34)			90		%		60-106	05-DEC-08	
F4 (C34-C50)			91		%		52-122	05-DEC-08	
WG881099-3 LCSD		WG881099-2							
F2 (C10-C16)			89	88	%	1.5	45	05-DEC-08	
F3 (C16-C34)			90	87	%	3.5	45	05-DEC-08	
F4 (C34-C50)			91	87	%	4.2	45	05-DEC-08	
WG881099-1 MB									
F2 (C10-C16)			<10		mg/kg		10	05-DEC-08	
F3 (C16-C34)			<50		mg/kg		50	05-DEC-08	
F4 (C34-C50)			<50		mg/kg		50	05-DEC-08	
HG-WT	Soil								
Batch R765905									
WG881773-3 DUP		L714516-1							
Mercury (Hg)			<0.05	<0.05	RPD-NA	ug/g	N/A	20	05-DEC-08
WG881773-4 LCS									
Mercury (Hg)				111		%		70-130	05-DEC-08
WG881773-1 MB									
Mercury (Hg)				<0.05		ug/g		0.05	05-DEC-08
MET-R153-WT	Soil								
Batch R765820									
WG881769-2 CVS									
Barium (Ba)				101		%		80-120	05-DEC-08
Beryllium (Be)				95		%		80-120	05-DEC-08
Cadmium (Cd)				99		%		80-120	05-DEC-08
Chromium (Cr)				98		%		80-120	05-DEC-08
Cobalt (Co)				100		%		80-120	05-DEC-08
Copper (Cu)				99		%		80-120	05-DEC-08
Lead (Pb)				87		%		80-120	05-DEC-08
Molybdenum (Mo)				94		%		80-120	05-DEC-08
Nickel (Ni)				101		%		80-120	05-DEC-08
Silver (Ag)				89		%		80-120	05-DEC-08
Thallium (Tl)				99		%		80-120	05-DEC-08
Vanadium (V)				91		%		80-120	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-R153-WT	Soil							
Batch	R765820							
WG881769-2	CVS							
Zinc (Zn)			94		%		80-120	05-DEC-08
WG881744-4	DUP	WG881744-3						
Barium (Ba)		12	12		mg/kg	1.7	20	05-DEC-08
Beryllium (Be)		<0.5	<0.5	RPD-NA	mg/kg	N/A	20	05-DEC-08
Cadmium (Cd)		<0.5	<0.5	RPD-NA	mg/kg	N/A	20	05-DEC-08
Chromium (Cr)		6	7	J	mg/kg	0	4	05-DEC-08
Cobalt (Co)		3	3	J	mg/kg	0	4	05-DEC-08
Copper (Cu)		7	7	J	mg/kg	0	4	05-DEC-08
Lead (Pb)		8	8	J	mg/kg	0	4	05-DEC-08
Molybdenum (Mo)		<1	<1	RPD-NA	mg/kg	N/A	20	05-DEC-08
Nickel (Ni)		4	4	J	mg/kg	0	4	05-DEC-08
Silver (Ag)		<0.2	<0.2	RPD-NA	mg/kg	N/A	20	05-DEC-08
Thallium (Tl)		<1	<1	RPD-NA	mg/kg	N/A	20	05-DEC-08
Vanadium (V)		10	11		mg/kg	6.0	20	05-DEC-08
Zinc (Zn)		36	37		mg/kg	2.9	20	05-DEC-08
WG881744-2	LCS							
Barium (Ba)			101		%		80-120	05-DEC-08
Beryllium (Be)			95		%		80-120	05-DEC-08
Cadmium (Cd)			94		%		80-120	05-DEC-08
Chromium (Cr)			101		%		80-120	05-DEC-08
Cobalt (Co)			99		%		80-120	05-DEC-08
Copper (Cu)			100		%		80-120	05-DEC-08
Lead (Pb)			97		%		80-120	05-DEC-08
Nickel (Ni)			98		%		80-120	05-DEC-08
Thallium (Tl)			93		%		80-120	05-DEC-08
Vanadium (V)			96		%		80-120	05-DEC-08
Zinc (Zn)			96		%		80-120	05-DEC-08
WG881744-1	MB							
Barium (Ba)			<1		mg/kg	1		05-DEC-08
Beryllium (Be)			<0.5		mg/kg	0.5		05-DEC-08
Cadmium (Cd)			<0.5		mg/kg	0.5		05-DEC-08
Chromium (Cr)			<1		mg/kg	1		05-DEC-08
Cobalt (Co)			<1		mg/kg	1		05-DEC-08

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<b>MET-R153-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765820</b>							
<b>WG881744-1</b>	<b>MB</b>							
Copper (Cu)			<1		mg/kg	1	05-DEC-08	
Lead (Pb)			<1		mg/kg	1	05-DEC-08	
Molybdenum (Mo)			<1		mg/kg	1	05-DEC-08	
Nickel (Ni)			<1		mg/kg	1	05-DEC-08	
Silver (Ag)			<0.2		mg/kg	0.2	05-DEC-08	
Thallium (Tl)			<1		mg/kg	1	05-DEC-08	
Vanadium (V)			<1		mg/kg	1	05-DEC-08	
Zinc (Zn)			<1		mg/kg	1	05-DEC-08	
<b>MOISTURE-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R765335</b>							
<b>WG881430-3</b>	<b>DUP</b>	<b>L714453-2</b>						
% Moisture		17.8	16.9		%	5.5	26	04-DEC-08
<b>WG881430-2</b>	<b>LCS</b>							
% Moisture			100		%		79-120	04-DEC-08
<b>WG881430-1</b>	<b>MB</b>							
% Moisture			<0.5		%		0.5	04-DEC-08
<b>PH-R153-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R766985</b>							
<b>WG883341-1</b>	<b>CVS</b>							
pH			100		%		63-138	08-DEC-08
<b>WG883341-2</b>	<b>DUP</b>	<b>L714872-1</b>						
pH		10.9	10.9		pH units	0.55	26	08-DEC-08
<b>WG883341-3</b>	<b>DUP</b>	<b>L715360-10</b>						
pH		6.41	6.44		pH units	0.47	26	08-DEC-08
<b>VOC-CCME-TABLE1-WT</b>	<b>Soil</b>							
<b>Batch</b>	<b>R766147</b>							
<b>WG881661-1</b>	<b>CVS</b>							
1,1,1,2-Tetrachloroethane			98		%		75-125	05-DEC-08
1,1,1-Trichloroethane			100		%		75-125	05-DEC-08
1,1,2,2-Tetrachloroethane			92		%		75-125	05-DEC-08
1,1,2-Trichloroethane			100		%		75-125	05-DEC-08
1,1-Dichloroethane			101		%		75-125	05-DEC-08
1,1-Dichloroethylene			98		%		75-125	05-DEC-08
1,2-Dichlorobenzene			99		%		75-125	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R766147							
WG881661-1	CVS							
1,2-Dichloroethane			107		%		75-125	05-DEC-08
1,2-Dichloropropane			104		%		75-125	05-DEC-08
1,3-Dichlorobenzene			101		%		75-125	05-DEC-08
1,4-Dichlorobenzene			99		%		75-125	05-DEC-08
2-Hexanone			109		%		75-125	05-DEC-08
Acetone			103		%		75-125	05-DEC-08
Benzene			106		%		75-125	05-DEC-08
Bromodichloromethane			102		%		75-125	05-DEC-08
Bromoform			102		%		75-125	05-DEC-08
Bromomethane			98		%		55-145	05-DEC-08
Carbon Disulfide			95		%		75-125	05-DEC-08
Carbon tetrachloride			101		%		75-125	05-DEC-08
Chlorobenzene			102		%		75-125	05-DEC-08
Dibromochloromethane			91		%		75-125	05-DEC-08
Chloroethane			102		%		75-125	05-DEC-08
Chloroform			101		%		75-125	05-DEC-08
Chloromethane			98		%		75-125	05-DEC-08
cis-1,2-Dichloroethylene			93		%		75-125	05-DEC-08
cis-1,3-Dichloropropene			109		%		75-125	05-DEC-08
Dibromomethane			103		%		55-145	05-DEC-08
Dichlorodifluoromethane			90		%		75-125	05-DEC-08
Ethyl Benzene			103		%		75-125	05-DEC-08
1,2-Dibromoethane			97		%		55-145	05-DEC-08
m+p-Xylenes			103		%		75-125	05-DEC-08
Methyl Ethyl Ketone			108		%		75-125	05-DEC-08
Methyl Isobutyl Ketone			113		%		55-145	05-DEC-08
MTBE			105		%		75-125	05-DEC-08
Dichloromethane			103		%		55-145	05-DEC-08
o-Xylene			103		%		75-125	05-DEC-08
Styrene			99		%		75-125	05-DEC-08
Tetrachloroethylene			101		%		75-125	05-DEC-08
Toluene			105		%		75-125	05-DEC-08
trans-1,2-Dichloroethylene			105		%		75-125	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R766147							
WG881661-1	CVS							
trans-1,3-Dichloropropene			93		%		75-125	05-DEC-08
Trichloroethylene			100		%		75-125	05-DEC-08
Trichlorofluoromethane			109		%		66-137	05-DEC-08
Vinyl chloride			103		%		75-125	05-DEC-08
WG881226-3	DUP	WG881226-2						
1,1,1,2-Tetrachloroethane		N/A	<0.008	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,1,1-Trichloroethane		N/A	<0.008	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,1,2,2-Tetrachloroethane		N/A	<0.004	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,1,2-Trichloroethane		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,1-Dichloroethane		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,1-Dichloroethylene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,2-Dichlorobenzene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,2-Dichloroethane		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,2-Dichloropropane		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,3-Dichlorobenzene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,4-Dichlorobenzene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
2-Hexanone		N/A	<0.2	RPD-NA	mg/kg	N/A	39	05-DEC-08
Acetone		N/A	<0.5	RPD-NA	mg/kg	N/A	39	05-DEC-08
Benzene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
Bromodichloromethane		N/A	<0.005	RPD-NA	mg/kg	N/A	39	05-DEC-08
Bromoform		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
Bromomethane		N/A	<0.003	RPD-NA	mg/kg	N/A	39	05-DEC-08
Carbon Disulfide		N/A	<0.02	RPD-NA	mg/kg	N/A	39	05-DEC-08
Carbon tetrachloride		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
Chlorobenzene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
Dibromochloromethane		N/A	<0.003	RPD-NA	mg/kg	N/A	39	05-DEC-08
Chloroethane		N/A	<0.03	RPD-NA	mg/kg	N/A	39	05-DEC-08
Chloroform		N/A	<0.006	RPD-NA	mg/kg	N/A	39	05-DEC-08
Chloromethane		N/A	<0.03	RPD-NA	mg/kg	N/A	39	05-DEC-08
cis-1,2-Dichloroethylene		N/A	<0.02	RPD-NA	mg/kg	N/A	39	05-DEC-08
cis-1,3-Dichloropropene		N/A	<0.003	RPD-NA	mg/kg	N/A	39	05-DEC-08
Dibromomethane		N/A	<0.01	RPD-NA	mg/kg	N/A	39	05-DEC-08
Dichlorodifluoromethane		N/A	<0.03	RPD-NA	mg/kg	N/A	39	05-DEC-08

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<b>VOC-CCME-TABLE1-WT      Soil</b>								
<b>Batch</b>	<b>R766147</b>							
<b>WG881226-3      DUP</b>		<b>WG881226-2</b>						
Ethyl Benzene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
1,2-Dibromoethane		N/A	<0.004	RPD-NA	mg/kg	N/A	39	05-DEC-08
m+p-Xylenes		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
Methyl Ethyl Ketone		N/A	<0.2	RPD-NA	mg/kg	N/A	39	05-DEC-08
Methyl Isobutyl Ketone		N/A	<0.2	RPD-NA	mg/kg	N/A	39	05-DEC-08
MTBE		N/A	<0.2	RPD-NA	mg/kg	N/A	39	05-DEC-08
Dichloromethane		N/A	<0.003	RPD-NA	mg/kg	N/A	39	05-DEC-08
o-Xylene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
Styrene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
Tetrachloroethylene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
Toluene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
trans-1,2-Dichloroethylene		N/A	<0.002	RPD-NA	mg/kg	N/A	39	05-DEC-08
trans-1,3-Dichloropropene		N/A	<0.003	RPD-NA	mg/kg	N/A	39	05-DEC-08
Trichloroethylene		N/A	<0.004	RPD-NA	mg/kg	N/A	39	05-DEC-08
Trichlorofluoromethane		N/A	<0.03	RPD-NA	mg/kg	N/A	39	05-DEC-08
Vinyl chloride		N/A	<0.003	RPD-NA	mg/kg	N/A	39	05-DEC-08
<b>WG881226-1      MB</b>								
1,1,1,2-Tetrachloroethane			<0.008		mg/kg		0.008	05-DEC-08
1,1,1-Trichloroethane			<0.008		mg/kg		0.008	05-DEC-08
1,1,2,2-Tetrachloroethane			<0.004		mg/kg		0.004	05-DEC-08
1,1,2-Trichloroethane			<0.002		mg/kg		0.002	05-DEC-08
1,1-Dichloroethane			<0.002		mg/kg		0.002	05-DEC-08
1,1-Dichloroethylene			<0.002		mg/kg		0.002	05-DEC-08
1,2-Dichlorobenzene			<0.002		mg/kg		0.002	05-DEC-08
1,2-Dichloroethane			<0.002		mg/kg		0.002	05-DEC-08
1,2-Dichloropropane			<0.002		mg/kg		0.002	05-DEC-08
1,3-Dichlorobenzene			<0.002		mg/kg		0.002	05-DEC-08
1,4-Dichlorobenzene			<0.002		mg/kg		0.002	05-DEC-08
2-Hexanone			<0.2		mg/kg		0.2	05-DEC-08
Acetone			<0.5		mg/kg		0.5	05-DEC-08
Benzene			<0.002		mg/kg		0.002	05-DEC-08
Bromodichloromethane			<0.005		mg/kg		0.005	05-DEC-08
Bromoform			<0.002		mg/kg		0.002	05-DEC-08

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Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
VOC-CCME-TABLE1-WT	Soil							
Batch	R766147							
WG881226-1	MB							
Bromomethane			<0.003		mg/kg	0.003	05-DEC-08	
Carbon Disulfide			<0.02		mg/kg	0.02	05-DEC-08	
Carbon tetrachloride			<0.002		mg/kg	0.002	05-DEC-08	
Chlorobenzene			<0.002		mg/kg	0.002	05-DEC-08	
Dibromochloromethane			<0.003		mg/kg	0.003	05-DEC-08	
Chloroethane			<0.03		mg/kg	0.03	05-DEC-08	
Chloroform			<0.006		mg/kg	0.006	05-DEC-08	
Chloromethane			<0.03		mg/kg	0.03	05-DEC-08	
cis-1,2-Dichloroethylene			<0.02		mg/kg	0.02	05-DEC-08	
cis-1,3-Dichloropropene			<0.003		mg/kg	0.003	05-DEC-08	
Dibromomethane			<0.01		mg/kg	0.01	05-DEC-08	
Dichlorodifluoromethane			<0.03		mg/kg	0.03	05-DEC-08	
Ethyl Benzene			<0.002		mg/kg	0.002	05-DEC-08	
1,2-Dibromoethane			<0.004		mg/kg	0.004	05-DEC-08	
m+p-Xylenes			<0.002		mg/kg	0.002	05-DEC-08	
Methyl Ethyl Ketone			<0.2		mg/kg	0.2	05-DEC-08	
Methyl Isobutyl Ketone			<0.2		mg/kg	0.2	05-DEC-08	
MTBE			<0.2		mg/kg	0.2	05-DEC-08	
Dichloromethane			<0.003		mg/kg	0.003	05-DEC-08	
o-Xylene			<0.002		mg/kg	0.002	05-DEC-08	
Styrene			<0.002		mg/kg	0.002	05-DEC-08	
Tetrachloroethylene			<0.002		mg/kg	0.002	05-DEC-08	
Toluene			<0.002		mg/kg	0.002	05-DEC-08	
trans-1,2-Dichloroethylene			<0.002		mg/kg	0.002	05-DEC-08	
trans-1,3-Dichloropropene			<0.003		mg/kg	0.003	05-DEC-08	
Trichloroethylene			<0.004		mg/kg	0.004	05-DEC-08	
Trichlorofluoromethane			<0.03		mg/kg	0.03	05-DEC-08	
Vinyl chloride			<0.003		mg/kg	0.003	05-DEC-08	

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## Legend:

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Limit 99% Confidence Interval (Laboratory Control Limits)

DUP Duplicate

RPD Relative Percent Difference

N/A Not Available

LCS Laboratory Control Sample

SRM Standard Reference Material

MS Matrix Spike

MSD Matrix Spike Duplicate

ADE Average Desorption Efficiency

MB Method Blank

IRM Internal Reference Material

CRM Certified Reference Material

CCV Continuing Calibration Verification

CVS Calibration Verification Standard

LCSD Laboratory Control Sample Duplicate

## Sample Parameter Qualifier Definitions:

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Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
G	QC result did not meet ALS DQO. Refer to narrative comments for further information.
J	Duplicate results and limits are expressed in terms of absolute difference.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.