



August 2013

HISTORIC WASTE SITE INVESTIGATION - FINAL REPORT

1, 15 and 25 Industrial Street (Site X4108), Orillia, Ontario

Submitted to:

City of Orillia
50 Andrew Street South
Suite 300
Orillia, ON L3V 7T5
Attention: Mr. Ian Sugden

Report Number: 11-1170-0079

Distribution:

3 Copies - The City of Orillia
1 Copy - Golder Associates Ltd.





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1.0 INTRODUCTION

Golder Associates Ltd. (Golder) was retained by the City of Orillia (the City) to complete assessments of a number of historical waste disposal sites identified by the Ministry of the Environment (MOE) within the limits of the City of Orillia. The primary objective of the assessments was to confirm and delineate waste disposal sites identified within the City's Official Plan and to determine if, and by how much, the 500 metre "Waste Disposal Site Assessment Areas" (WDA) for the sites could be reduced, or if some of these sites could be delisted by the MOE. Authorization to proceed with this investigation was received from the City on December 12, 2011.

The MOE Waste Disposal Inventory identified six closed waste disposal sites within the City. These sites are contained within a "Waste Disposal Inventory" initially prepared for the MOE by York University in 1979, and updated by the MOE as recently as 1991. There is generally little information provided on many of these sites included in the inventory, and a copy of the original 1979 York University report, which provided a brief description of the site indicating why it was identified, was not available from the MOE. These waste disposal sites were reported to have been operated from approximately 1940 to 1971; a seventh site, the Kitchener Street Waste Diversion Site, has been active since 1967. The Snow Dump fill area located at 40 Kitchener Street was included in the D-4 Assessment Study in addition to the seven sites identified by the MOE Waste Disposal Inventory. The exact limits of waste disposed at the six closed sites are not known. It is further noted that residential, commercial, and industrial development has encroached on the areas formerly used as waste fill sites and as these waste sites were largely "unorganized" there are no records of types or methods of waste placement.

The impact of waste sites is a factor of the type and age of the material deposited, the depth of waste, the cover material and the local hydrogeology and (if present) surface water body characteristics. As a result, investigations of areas where waste is known to have been deposited must assess these factors in order to determine the potential for impact. Older waste fill areas containing little putrescible material and pre-dating the use of industrial organics may be relatively innocuous, whereas those containing large amounts of organic material or liquid waste can continue to generate landfill gas or seepage although more than twenty-five (25) years has passed since closure of these sites.

The identified sites are as follows:

- Industrial Street: Reported to be located in the area surrounded by Elgin Street to the north, Front Street to the west, The City's Lightfoot Trail to the east and Industrial Street to the south and located within 1, 15, and 25 Industrial Street. The Site, which is owned by private individuals, was closed in 1958 and is referred to in the MOE Waste Site Inventory as Site No. X 4108. It is considered that this Site was identified on the basis of wood waste disposal on the property;
- Cochrane and West Street: Reported to be located on the east side of West Street South, between Queen Street and Cochrane Street. Described by the City as being located within 174 West Street South, 250 West Street South, 45 Cochrane Street, and 55 Queen Street East. The Site, which is owned by private individuals, was closed in 1945 and is referred to in the MOE Waste Site Inventory as Site No. X 4109;
- Kitchener Park Landfill (KPL): Located on the south side of Kitchener Street extending to Lake Simcoe. Described by the City as located at 25 Kitchener Street. The Site, which is owned by the City, was closed in 1967 and is referred to in the MOE Waste Site Inventory as Site No. X 4110;



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- West Street near Queen Street: Reported to be located the area west of West Street South, south of Queen Street, and west of Norweld Drive and referred to as the MURF Property relating to the former proposed Multi Use Recreational Facility planned for development. Described by the City as located within 255 and 325 West Street South. The 255 West Street South portion of the Site is owned by the City; 325 West Street South is owned by private individuals. The Site was closed in the 1980s and is referred to in the MOE Waste Site Inventory as Site No. X 4129. A Certificate of Property Use has been issued for this property;
- Industrial and Moffat: Reported to be located at the intersection of Atherley Road and Millard Street, but described in Appendix "C" of the RFP as Industrial and Moffat Street. The property, which is owned by private individuals was closed 1971 and is referred to in the MOE Waste Site Inventory as Site No. X 4130;
- Kitchener Street Waste Diversion Site: The Site is located in the area south of Highway 12, east of the former CN Railway, north of Lake Simcoe, and west of Kitchener Street. The Site address is 100 Kitchener Street and is owned by the City. The landfill has been active since 1967 and is operated under MOE Certificate of Approval (CofA) No. A250601; and,
- Snow Dump Fill Area: This Site is located on the north side of Kitchener Street. Described by the City as located at 40 Kitchener Street. The Site, which is owned by the City, is currently a wastewater treatment centre (WWTC) and snow dump. The scope involved only the snow dump fill area on the property and excluded any work near the WWTC. The presence of waste has not been confirmed; however fill was reportedly placed at this location.

Based on an aerial photograph review, discussions with City staff and people familiar with the sites, it was determined that a seventh site, Site X4130 was erroneously included in the MOE's Waste Disposal Inventory. The MOE has agreed verbally that this Site may be delisted following their review of signed affidavits confirming this is not a waste disposal site. This property is not included within these investigations.

This report pertains to the former Industrial Street site (i.e. X4108), as described above (see Figure 2). Separate reports were prepared for the remaining Sites.



2.0 SCOPE OF WORK

2.1 Historical Review

An initial assessment carried out by Golder was in general accordance with Canadian Standards Association (CSA) Z768-01 requirements for Phase I ESAs and included the following scope of work:

- a review of reasonably accessible historical and regulatory records relating to the Site and adjacent properties;
- interviews with relevant persons;
- visual Site reconnaissance; and,
- the preparation of a Phase I ESA report.

The Phase I ESA was completed using available information to assist in evaluating whether issues of potential environmental concern may be present at the Site. It should be noted that a Phase I ESA cannot confirm the presence or absence of contaminants at the Site, which can only be confirmed through a program of intrusive testing including sampling and analysis of soil and groundwater. This assessment included a cursory overview of the neighbouring land uses from the Site or from publically accessible areas and does not constitute an assessment of the adjacent facilities.

2.2 Subsurface Investigation

Subsurface investigations were completed on lands owned by the City of Orillia, largely consisting of road allowances. On-site investigations on this private site were not completed.

Golder retained the services of Geo-Environmental Drilling Inc. of Milton, Ontario for borehole drilling and monitoring well installation, which were completed between July 27 and 31, 2012. Geo-Environmental Drilling is licensed as a well contractor by the MOE (license number 6607). The boreholes were advanced using a CME 75 truck mounted auger rig. Soil samples were obtained at regular depth intervals using 35 mm split spoon soil sampling equipment. All sampling equipment was cleaned between sampling intervals. The subsurface investigation included the following:

- Supervision of the drilling of four boreholes (BH12-10 through BH12-13), advanced to depths ranging from 4.42 (14.5 feet) to 5.18 m (17 feet) below grade;
- Installation of two multi-level well nests. The deepest well at each well nest location was installed to intersect the water table. A shallow landfill gas probe was installed within the unsaturated zone at the same location;
- Installation of an additional two gas probes;
- Collection of soil samples during drilling, retained for visual characterization, head space screening of organic compounds and possible submission to the analytical laboratory;
- Development, purging, and sampling the two monitoring wells upon completion of their installation;
- Selection of soil samples to be submitted for analysis of select parameters. A minimum of one soil sample was submitted for each borehole for analysis of volatile organic compounds (VOC), polycyclic aromatic



hydrocarbons (PAH), O. Reg. 153/04 metals, and/or inorganics. These samples were submitted to assess the soil quality in the vicinity of the Site. One “worst case” soil sample was also selected and submitted for O. Reg. 558 waste classification;

- Submission of groundwater samples from each monitoring well for analysis of leachate parameters including VOC, PHC F1 to F4, PAH, O. Reg. 153/04 metals, and/or inorganics;
- Measurement of headspace vapour concentrations in the two monitoring wells using a RKI Eagle II combustible gas meter calibrated to both hexane (for detection of hydrocarbons) and isobutylene (for detection of volatile organic compounds);
- Measurement landfill gas concentrations in the four gas probes using a GEM 2000 gas meter and recording methane, carbon dioxide and oxygen;
- Arrangement for the survey of the elevation and location of all borehole/monitoring well locations by the City's surveyor; and,
- Completion of rising head tests in each monitoring well to determine hydraulic conductivity.

2.3 Impact Assessment Using D-4 Guidelines

The available information was reviewed in the context of D-4 Guidelines to determine the extent of impact of the waste Site. Factors to be considered when land use is proposed on or within 500 metres a non-operating site include: ground and surface water contamination by leachate, surface runoff, ground settlement, visual impact, soil contamination and hazardous waste, and in particular, landfill-generated gases. The focus of the current study completed by Golder includes groundwater, leachate and landfill gas (i.e., methane) migration from the Site to adjacent properties. Visual impacts are commented on only for sites where an elevated waste mound is present. Comments are provided on general direction of runoff from the Site, where possible. The scope of the current study completed by Golder does not include assessment of ground settlement or contaminated soils and impacts on private sites, other than to comment on available historical information.



3.0 HISTORICAL REVIEW FINDINGS

3.1 Information Review

In order to research the historical conditions at the Site, a review of information from the following sources was conducted:

- Aerial Photographs were obtained from the National Air Photo Library and reviewed by Golder for the years 1945, 1965, 1967, 1976, and 1984, as well as Google Earth Images from 2011;
- City Directory review completed by LGI Copy Services Canada on behalf of Golder;
- Fire Insurance Plans and other Plans / Reports obtained by Risk Management Services formerly CGI Information Systems and Management Consultants;
- Technical Standards and Safety Authority ("TSSA"), Fuels Safety Division;
- Ministry of the Environment, Barrie District Office;
- A Standard EcoLog ERIS Report issued on March 30, 2012 for the Site and surrounding properties within 250 m of the Site;
- Various MOE databases were searched by and reported in the EcoLog ERIS Database Report, including:
 - "Waste Disposal Site Inventory" (June 1991);
 - "Waste Disposal Sites" (1970 – Mar 2012);
 - "Ontario Regulation 347 Waste Generators Summary" (1986 to Oct 2012);
 - Ontario Spills" (1988 – 2011);
 - "List of TSSA Expired Facilities" (current to February 2012);
 - "Compliance and Convictions" (1989 – Feb 2012);
 - "TSSA Fuel Storage Tank" (current to June 2011);
 - "Ontario Inventory of PCB Storage Sites" (1987 – Oct 2004);
 - "Private and Retail Fuel Storage Tanks" (1989 – 1996); and,
 - "Ontario Regulation 347 Waste Receivers Summary" (1986 – 2008).
- The MOE database Publications "Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario" (November 1988), and "Coal Gasification Plant Waste Sites in Ontario" (April 1987) were reviewed in-house for the Site by Golder Associates on February 28, 2012. On-line databases for Hazardous Waste Information Network (HWIN), the Environmental Bill of Rights (EBR; on-line registry of approval applications, orders and decisions), and the Brownfields Environmental Site Registry (registry of sites for which a Record of Site Condition has been filed with the MOE under Ontario Regulation 153/04) was reviewed for the Site by Golder on June 5, 2012;
- Previous Environmental Reports;



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- City of Orillia – Public Works Department
- Published geological maps and reports;
- Interviews with persons familiar with the Site; and,
- Visual Site reconnaissance.

3.1.1 Aerial Photograph Review

Aerial photographs of the Site and vicinity for the years 1945, 1965, 1967, 1976, and 1984, as well as Google Earth Images from 2009 were reviewed. Copies of the aerial photographs are provided in Appendix A (Figures A-1 through A-7).

Changes in the presence or absence of structures on the Site and surrounding areas were noted. Based on the review of aerial photographs, the following was noted:

Table 3.1: Aerial Photograph Review

Year	Site	Surrounding Area
1945	The Site appears to be disturbed, with debris accumulated on the middle and eastern portions of the Site. One building appears to be present on the middle portion of the Site.	North: Railway tracks, followed by vacant land, residential properties and Lake Couchiching. East: Forest Avenue North, followed by vacant land. South: Atherley Road, followed by railway tracks and residential properties. West: Vacant land, followed by railway tracks, and an unknown road.
1965	The Site still appears disturbed, with many trails present, especially on the western portion of the Site. An additional two buildings have been constructed on the middle portion of the Site, and several larger buildings have been constructed on the eastern portion of the Site.	No significant changes as per the 1945 aerial photograph.
1967	No significant changes as per the 1965 aerial photograph with the exception that an additional large rectangular building has been constructed on the eastern portion of the Site.	No significant changes as per the 1965 aerial photograph.
1976	No significant changes as per the 1967 aerial photograph.	No significant changes as per the 1967 aerial photograph.
1984	Industrial operations appear to be present on the middle and eastern portions of the Site. The western portion of the Site is still very disturbed.	No significant changes as per the 1976 aerial photograph, with the exception that the number of residential properties to the north and south has increased.
2011 (Google Earth Image)	No significant changes as per the 1984 aerial photograph.	No significant changes as per the 1984 aerial photograph.



Based on the review of aerial photographs, the disturbed land on the west of the Site, as well as the possible industrial activities on the middle to eastern portion of the Site from 1945 onwards, represent issues of potential environmental concern for the Site. No evidence of the former wood waste pile was observed however, no aerial photographs were available for the time period where it was reported to exist.

3.1.2 Risk Management Services

Golder contacted RMS and requested to obtain copies of Fire Insurance Plans (FIPs) related to the Site, as well as Site Specific Plans and Property Underwriters' Reports (PUR) and Property Underwriters' Plans (PUP) for the Site. A response was received from RMS dated April 24, 2012, indicating that one PUR from 1982, two PURs from 1987, and two PUPs from 1982 and 1987 were available for site address 1 Industrial Street, as follows:

1982 PUR and 1982 Site Plan

- The name of risk (building occupant) in the 1982 PUR and the 1982 Site Plan for 1 Industrial Street was reported as Embury Company, Plant No. 2, Anodizing Division. Activities at the Site reportedly consisted of coils of aluminum which was processed by decoiling, degreasing in caustic, etched, anodizing and sealing in ionized water;
- The property was reportedly developed including one building, reportedly constructed in the 1950s. Two additions were reportedly constructed onto the building in 1973 and 1981. The building was reportedly constructed of concrete block walls and floors, and a steel deck roof with wooden joists. The total grade floor area of the building was reported as 29,484 ft² (2,742 m²);
- The ceiling of a masonry room located in the northeast portion of the building was reported to be asbestos sheets on wood frame work;
- The maintenance shop located within the building reportedly contained a drill, band saw, electric arc welder, oxy-acetylene unit and a grinder;
- Two 15,925 L above ground storage tanks ("ASTs") reportedly containing a caustic cleaner and sulphuric acid were reported to be present in a concrete floor pit within the property building; and,
- Heating for the Site building was reportedly provided by a gas process boiler, and electric baseboards.

1987 PUR and 1987 Site Plan

- The name of risk on the 1987 PUR and PUP is Embury Company Limited;
- One building was reported to be present on the property. The building was reported to be in good condition;
- Heat for the building was reportedly provided by a gas boiler system as well as electric baseboards. The boiler was reportedly vented by a metal stack that pierced the north wall of the building;
- The two ASTs containing a caustic cleaner and sulphuric acid were reported to still be present within the property building; and,
- Railway tracks are depicted south of the Site on the 1987 PUP, across Industrial Street.

A copy of the RMS report is provided in Appendix B.



3.1.3 City Directory Review

A review of available historical city directories for the years 1961, 1966, 1976, 1982, 1986, 1996/1997, and 1998/1999 was completed by LGI on behalf of Golder Associates for the Site, as well as for surrounding properties along Atherley Road, Cedar Island Road, Cedarmore Road, Davey Drive, East Street, Forest Avenue North, Front Street South, Industrial Street, Lakeview Crescent, Millard Street, and Moffat Street. Based on Golder's review of the information provided by LGI, the following was noteworthy:

On-Site

- The Site address 1 Industrial Street was listed in the 1966 city directory as Lloyd Metal Manufacturing. It was listed in the 1982 and 1986 city directories as Embury Co. This address was listed in the 1996/1997 and 1998/1999 city directories as Ebmary Co., Jackson Transportation, McCauley Ford Tractor & Equipment and Aknor Construction. 1 Industrial Street was not listed in the other reviewed city directories. The other two addresses associated with the Site (15 and 25 Industrial Street) were not listed in any of the reviewed city directories.

Off-Site

Based on the review of surrounding properties, the following was of note:

North:

- The property located at 147 Cedar Island North, approximately 200 m north of the Site, was listed as Crawford & Sons Fuels in the 1976 city directory. This address was not listed in any of the other reviewed city directories.

South:

- 131 Atherley Road, located approximately 50 m south of the Site, was listed in the 1966 city directory as Eastcott Service Station. This address was listed in the 1976 city directory as Gulf, and in the 1986 city directory as Mariposa Motors. In the 1996/1997 and 1998/1999 city directories 131 Atherley Road was listed as Budget Car-Truck Rentals.
- The property located at 299 Atherley Road, approximately 25 m south of the Site, was listed in the 1961 city directory as Taylor's Service Centre. It was listed as Davenport Motors in the 1996/1997 and 1998/1999 city directories. This address was not listed in any of the other reviewed city directories.
- The property located at 184 Gill Street, located approximately 175 m south of the Site, was listed in the 1961 city directories as Hannah Motors, and in the 1966 city directories as Ferrier Auto Sales. This address was listed in the 1976 city directory as Imperial Car Wash/Polar Ice Co./U-Haul Co, and in the 1982, 1986, 1996/1997 and 1998/1999 city directories it was listed as Sunshine Super Wash;
- The property located at 201 Gill Street, approximately 175 m south of the Site, was listed as Whitehead Service Station in the 1961 city directory. This address was listed in the 1966, 1976, 1982, 1986, 1996/1997 and 1998/1999 city directories as Thor Motors.



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- 209 Front Street South was listed in the 1976, 1982, and 1986 city directories as Thor Motors. This address was listed in the 1996/1997 and 1998/1999 city directories as Champlain Collision. 209 front Street South was not listed in any of the other reviewed city directories.
- 180 Front Street South was listed in the 1961 and 1966 city directories as Tytler's Cycles and Sports. In the 1976 city directories this address was listed as Holiday Rent A Car and in the 1996/1997 and 1998/1999 city directories this address was listed as Miller Furnishings/Pasquale's Bakery/Countrywide Lifestyles Realty. This address was not listed in any of the other reviewed city directories.

West:

- The property located at 169 Front Street South, approximately 250 m west of the Site, was listed as Dominion Lumber in the 1961, 1966, 1976, 1982, and 1986 city directories. This address was listed in the 1996/1997 and 1998/1999 city directories as Home Hardware and Dominion Carpet Centre;
- The property located at 129 Front Street South, approximately 200 m west of the Site, was listed as Buchanan Ltd. in the 1961 and 1966 city directories. It was listed as Pal Engines Inc. in the 1976 and 1986 city directories, and as Pal Engines Inc., Able Taxi, MDM Liquidation and G&H Auto Service in the 1996/1997 and 1998/1999 city directories;
- The property located at 155 Front Street South, approximately 160 m west of the Site, was listed as Orillia Works and Sanitation in the 1961 and 1966 city directories. It was listed in the 1976 city directories as Orillia Dodge Chrysler, and in the 1982 city directory as Bun Centre. In the 1986 city directories it was listed as Canadian Tire Corporation Centre. This address was listed in the 1996/1997 and 1998/1999 city directories as multi tenant commercial;

Based on the city directory review, the historical industrial use of the Site, as well as the surrounding properties to the north, south and west of the Site, represent potential issues of potential environmental concern relative to the environmental conditions at the Site. A copy of the city directory search is provided in Appendix C.

3.1.4 Technical Standards and Safety Authority, Fuel Safety Division Records

The TSSA maintains records related to registered underground storage tanks ("UST") for petroleum-related products. The TSSA was contacted to establish the status of the Site and to identify outstanding instructions, incident reports, fuel oil spills or contamination records. On March 23, 2012, Sarah Quibell of the TSSA reported via e-mail that there were no records on file pertaining to the Site. A copy of the TSSA response is provided in Appendix C.

3.1.5 Ministry of the Environment

The Barrie District Office of the MOE was contacted to determine if the MOE has maintained a file with respect to the Site. Specifically, the MOE was asked to respond in writing to the following questions:

- Has the MOE ever issued any approvals, permits or licences for the Site?
- Has the MOE ever issued any control orders or violation notices with respect to the Site?

At the time of preparation of this report, the MOE had not issued a response to Golder.



3.1.6 Lake Simcoe Conservation Authority

The Lake Simcoe Region Conservation Authority (“LSRCA”) mapping indicates that the Site is not regulated by a conservation authority. A copy of the LSRCA mapping is provided in Appendix C.

3.1.7 EcoLog ERIS Report

An EcoLog Environmental Risk Information Services Ltd. (“EcoLog ERIS”) report is a site-specific summary of historical environmental information for properties in Canada. The report provides a summary of research, tabulation and identification of key federal, provincial and private sector databases to identify environmental elements within a 250 m radius of the Site. This is used to aid in the identification of possible environmental concerns or risks for commercial, industrial and residential sites.

Golder retained EcoLog ERIS to complete a Standard search for the Site and surrounding properties within 250 m from the Site. Based on Golder’s review of the information provided, the following information pertaining to the Site was noteworthy:

On-Site

- The Site address, 1 Industrial Street, was listed as Embury Co. Limited in the Certificate of Approvals database with one Certificate of Approval (“C of A”) for air under certificate number 7811-7XGLJA. Further to this, 1 Industrial Street was listed in the Environmental Registry database with one record under EBR Registry number 010-4096 for approval for discharge into the natural environment other than water, for the year 2008. Lastly, this address was listed in the National Pollutant Release Inventory as Embury Company under NPRI number 7141 for the years 2001 to 2009;
- The Site address 15 Industrial Street was listed as Orillia Power Corporation in the Ontario Regulation 347 Waste Generators Summary database under generator number ON0535404 as a generator of various wastes including aliphatic solvents (code 212) and waste oils & lubricants (code 252) and phenolic wastes (code 266) for the years 1997-2004, and under generator number ON6767247 as a generator of waste oils & lubricants for the year 2005.
- The Site was listed with two records in Anderson’s Waste Disposal Sites database. One of the records indicated that a dump was present in the 1960s on the north side of the CNR tracks, north of Atherley Road and at the west end of Industrial Street. This dump was reported under reference number MOEE 4130, corresponding to the listing in the Waste Disposal Site Inventory. The other record reported that a dump was present in the 1950s at the north end of the CNR tracks, 100 m north of Atherley Road, west of the intersection of Industrial Street and Moffat Street. The reference number associated with this dump was reported as MOEE 4108 corresponding to the listing in the Waste Disposal Site Inventory for the subject site; and,
- The Site was listed in the Waste Disposal Sites – MOE 1991 Historical Approval Inventory with one record of a closed waste disposal site under Site No. X4108. The waste site has reportedly been closed since 1958. The waste site was classified as urban/municipal domestic waste with a potential for human impact.



Off-Site

- The property at 151 Cedar Island Road, located approximately 250 m northwest of the Site, was listed in the Ontario Spills database with one record of a sewage spill to land, due to a broken sewer main. The spill reportedly occurred on June 5, 1995. Environmental impact was reported as possible;
- The property located at 129 Front Street, approximately 250 m south west of the Site, was listed with one record of a spill reported to occur on May 18, 1995. The spill reportedly consisted of 20 L of waste oil to a gravel area from a corroded drum. Soil contamination was reportedly confirmed;
- The property located at 184 Gill Street, located approximately 170 m south of the Site, was listed as Sunshine Super Wash in the Private and Retail Fuel Storage Tanks database with one record under license number 0026170001. No information was provided regarding the tank capacity;
- The property located at 275 Atherley Road, approximately 30 m south of the Site, was listed as OLCO Petroleum Group Inc. in the Private and Retail Fuel Storage Tanks database with one record of a retail fuel storage tank under license number 0076339597. The capacity of the tank was reported at 21,997 L; and,
- The property located at 136 Davey Drive, Orillia, approximately 100 m north of the Site, was listed in the TSSA Incidents database with one record under incident number 245542. It was reported that a main distribution plastic pipeline was hit at this location. No further information was provided.

Based on the review of the Ecolog ERIS report, the historical dumps reported to be on-Site were obtained from the MOE Waste Disposal Site Inventory. The historical industrial activities on-Site represent issues of potential environmental concern for the Site. Furthermore, based on the anticipated northerly direction of groundwater flow at the Site, the properties located south of the Site (184 Gill Street and 275 Atherley Road) represent potential issues of environmental concern for the Site. A copy of the EcoLog ERIS report is provided in Appendix D.

3.1.8 MOE Databases

The MOE Publications "Ontario Inventory of PCB Storage Sites" (1987 – Oct 2004), "Waste Disposal Site Inventory" (June 1991), "Ontario Regulation 347 Waste Generators Summary" (1986 to Oct 2012), "Ontario Regulation 347 Waste Receivers Summary" (1986 – 2008) (updated to reflect standard select report), were searched by and reported in the EcoLog ERIS Database Report. The MOE database Publications "Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario" (November 1988), and "Coal Gasification Plant Waste Sites in Ontario" (April 1987) were reviewed in-house for the Site by Golder on February 28, 2012. The on-line databases for HWIN, EBR Environmental Registry (EBR), and Brownfields Environmental Site Registry was reviewed for the Site by Golder on July 6, 2012. These sources indicated the following:

- The Site is not listed as a PCB Storage site, and there are no PCB storage sites listed within a 250 m radius of the Site;
- The Site is listed as a closed waste disposal site as Site No. X4108 and has reportedly been closed since 1958. The waste site was classified as urban/municipal domestic waste with a potential for human impact;



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- The Site is not listed as a site using or producing coal tar and related tars, and there are no sites using or producing coal tar and related tars listed within 250 m of the Site;
- The Site is not listed as a coal gasification plant waste site, and there are no sites listed as a coal gasification waste plant listed within 250 m of the Site;
- The Site was not listed in the HWIN database;
- The Site was listed with one record under EBR Registry number 010-4096 for approval for discharge into the natural environment other than water for the year 2008. This record referred to Site address 1 Industrial Street, Embury Company Limited. This facility was reported to anodize coiled sheet aluminum. The approval was reportedly for the addition of a caustic etching and acid anodizing process line with scrubber and a custom water cooling system. Emissions to the atmosphere include nitrogen oxides, sulphuric acid and sodium hydroxide; and,
- The Site was not listed in the Brownfields Environmental Site Registry.

Based on the review of the MOE databases, the historical dump reported to be on-Site, as well as the historical industrial activities on-Site, represent potential issues of environmental concern for the Site.

3.1.9 Land Title Records

A land title search for the Subject Property was conducted by Ecolog ERIS on behalf of Golder. Based on Golder's review of the land title search, the Site was owned by private individuals from 1829 to 1967, when it was transferred to Dimension Enterprises Co. Ltd. in 1963. It was then transferred to private individual Glen David Derbrecker, who sold it to Bayland Development Corporation. The Site was then transferred to The Corporation of the City of Orillia, who sold it to Rexton Developments Ltd in 2005. A copy of the land title information is provided in Appendix E.

3.1.10 Previous Environmental Reports

The following previous environmental reports were reviewed in conjunction with this Phase I ESA:

- *"Phase II Environmental Subsurface Investigation, PIN 46108, Parcel 46108B, Mile 42.70 to 42. 81, Abandoned Midland Subdivision, Orillia, Ontario"*, dated June 7, 1999, completed by Jacques Whitford Environmental Limited ("JWEL") and prepared for CN Railway Properties ("1999 Jacques Whitford Report")
- *"Phase II Environmental Site Assessment, Elgin Street/Cedar Island Road, Orillia, Ontario"*, dated June 2007, completed by Fisher Environmental Ltd. ("Fisher") and prepared for Rexton Developments Limited ("2007 Fisher Report"); and,
- *"Landfill Impact Assessment, Demolition and Residential Lot Development, 141 Atherley Road, Part of Lot 10, Concession 5, Formerly Township of South Orillia, County of Simcoe, Ontario"*, dated May 2, 2011, completed by Terraprobe Inc. ("Terraprobe") and prepared for 1328539 Ont. Inc. ("2011 Terraprobe Report").

The above referenced reports include information from previously completed work programs, which were not provided to Golder for review. We have relied on the information in these reports to describe the previous findings. Based on Golder's review of the aforementioned reports, the following is noteworthy:



1999 Jacques Whitford Report

Jacques Whitford Environmental Limited was retained by CN Railway Properties to carry out a Phase II ESA in 1999 in the former railway line located adjacent to the west of the Site. Based on Golder's review of the 1999 JWEL Report, the following is of note

- The property was comprised of approximately 1.69 Ha of land bounded by Elgin Street to the north, past King Street to the south and curves to the southeast toward Davey Drive;
- The subsurface investigation reportedly included the drilling of nine boreholes, installation of one monitoring well, and the excavation of four test pits;
- Fifteen soil samples were submitted for analysis of metals, BTEX, TPH (gas/diesel), and/or TPH (heavy oils);
- One groundwater sample was submitted for analysis of BTEX, TPH (gas/diesel), and TPH (heavy oils);
- The stratigraphy encountered in the boreholes and test pits consisted of gravel fill to a maximum depth of 0.6 m below grade overlying sand and gravel and/or peat and/or sand fill to a maximum depth of approximately 2.1 m below grade. A native clayey silt layer was encountered below the fill material. The clayey silt was underlain by sand at a depth of approximately 4.6 m below grade; and,
- Two surficial soil samples (0.00 m to 0.06 m below grade) exceeded the MOE Table B criteria (non-potable, industrial/commercial land use, medium to fine textured soils) for beryllium.

It should be noted that the Site is located within a potable groundwater condition and additional exceedances of the current standards may have existed at the Site. No household or wood waste was noted in the JWEL report, only fill material to depths of 2.1 m below grade.

2007 Fisher Report

Fisher was reportedly retained by Rexton Developments Ltd. to carry out a Phase II ESA in 2007 at a property located at Elgin Street/Cedar Island Road, located approximately 250 m northwest of the Site. Based on Golder's review of the 2007 Fisher Report, the following is of note:

- The property located at Elgin Street/Cedar Island Road was described as being irregular in shape, and located in the area bounded by Elgin Street, Cedar Island Road, and walkways overlying former railway to the north and east, Lake Street and King Street to the west, and, Atherley Road and railway tracks to the south (i.e., the western portion of the Site). The property was reported to be in a mixed residential and commercial area in the City of Orillia;
- Phase I and Phase II ESAs were reportedly conducted on the western and northern portions of the property by ADAMAS in 1992 and 1993, respectively. The work completed during the Phase II ESAs identified the presence of heavy metals in soils in both the western and northern portions of the property. Minor total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, xylenes (BTEX) impacts were identified in the western portion of the property;
- Surficial soil stratigraphy included topsoil from surface at some locations to depths of up to 0.25 m, peat from surface or under the topsoil to depths of up to 3.73 m below grade, fill materials from surface or below



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topsoil/peat to depths of up to 3.81 m. The native subsurface soils consisted of silt to clayey silt or silt/silt and sand/sandy silt to depths of up to 9.6 m below grade;

- An information review letter was reportedly conducted by Golder in 1997 for Canadian National Real Estate Management (CNREM). The letter reportedly included a review of the previous reports identifying several uncertainties associated with the environmental status of the property, and recommended further installation of ten monitoring wells along the west and east property boundaries, as well as additional soil sampling at ten locations in the area of known metal impact. This work was not completed;
- Fisher advanced sixteen boreholes at the property; five of the boreholes were completed as monitoring wells. The results of the chemical analysis for six of the analyzed surficial soil samples (i.e., up to 1.2 m below grade) reportedly exceeded the Ministry of Environment Standards, "Soil, Groundwater and Sediment Standards for use Under Part XV.1 of the Environmental Protection Act", March 9, 2004, Table 3: Residential/Parkland/Community Property Use for soil in a non-potable groundwater condition (coarse textured soils) for select metals (antimony, arsenic, lead, cobalt, nickel, silver) and PAH (chrysene and benzo(a)pyrene). The impacts were noted throughout the Site, including along the northern and eastern limits of the Site. The total volume of impacted soils that was recommended to be removed was from the property was approximately 13,340 m³; and,
- One groundwater sample exceeded the MOE Table 3 standards for arsenic.

It should be noted that the Site is located within a potable groundwater condition and additional exceedances of the current standards may have existed at the Site. No household or wood waste was noted in the Fisher report, only fill material to depths of 3.8 m below grade.

2011 Terraprobe Report

Terraprobe was reportedly retained to carry out a D4 Landfill Impact Assessment for an approximate 0.66 acre (0.27 ha) undeveloped lot proposed for multi-storey residential development and asphalt parking located at 141 Atherley Road, Part Lot 10, Concession 5, formerly Township of South Orillia, now City of Orillia, County of Simcoe, Ontario. This property is located just south of the Site currently under assessment for this Phase I ESA. Based on Golder's review of the 2011 Terraprobe Report, the following is of note:

- This D4 Study had reportedly been carried out for 1328539 Ont. Inc. for lands located at 141 Atherley Road (south of the Site on the south side of Atherley Road, approximately 18 m west of Millard Street). This property was reported to be a potential waste disposal location, and the D4 was conducted in accordance with the guidelines presented by the MOE.
- The Site (1, 15, and 25 Industrial Street) is reportedly located downgradient of the property as shallow groundwater flow is anticipated to be in a northerly/easterly direction towards the north/Lake Couchiching or to the East of Lake Simcoe.
- The exact location, size, nature of waste received and the number of years waste disposal site X4108 operated are unknown; as well as, whether or not leachate and landfill gas monitoring has been conducted within waste disposal site X4108 site boundaries. It is reasonably assumed that methane migration and production is not occurring and will not adversely affect the D-4 Assessment subject lands.



3.1.11 City of Orillia – Public Works Department

2004 Memo to File – City of Orillia

Based on a memo to file, submitted by Brent Burgin dated December 13, 2004, the following information was obtained regarding 1 Industrial Drive:

- Two fires occurred (July 10 and 11, 1997), in general approximately nine fires occur per year;
- A UST was identified at the property by Eric DeHart in a memo dated April 30, 1997;
- An order was issued by the MOE, Barrie District Office, on September 23, 1992 to “clean up any remaining waste on the property within one year.”
- A memo from Andrew Fyfe to Eric DeHart indicates a smelter during the early 1900s (molybdenum, silver, cobalt, mercury) slag dumped west of the smelter;
- O'Connor Associates Environmental Inc. report on ESA Level I on adjacent Canadian National Railway Lands was referenced (report not provided for review, however, drawing received and included in Appendix C), which identified the wood waste on the Site. The 1991 O'Connor Associates drawing indicates that adjacent lands in the 1950s included the presence of former wood finishing shop located north of Atherley Road, between Moffat and East Streets. A possible wood waste pile was reported to the northwest of this shop, in the northern portion of the Site. The eastern portion of the Site was developed for industrial use, including Heyward and Wakefield with fuel tanks located along the north property limit.

2010 City of Orillia Technical Memorandum

Based on a memorandum from Brent Burgin to Jill Lewis, both from the City of Orillia, dated July 13, 2010, the following information was obtained regarding 25 Industrial Drive:

- Historic land use at Site X4108 includes heavy industrial operations. A review of the property shows waste disposal including wood waste and demolition as well as a former underground fuel storage tank. Moreover, it is suspected there may be metals contamination as a result of fall-out from a smelter at this Site during the early 1900's;
- There are no records of domestic waste deposited at the Site; and,
- The property was requested to be flagged for industrial contamination and dumping, and notification to potential purchasers. However, it is not believed that the site belongs on the List of Historic Domestic Landfill Sites.

2010 E-Mail Correspondence

Based on an e-mail from Christine Cezar to Jill Lewis, both from the City of Orillia, dated August 18, 2010, the following information was obtained regarding 1 Industrial Drive:

- It was the City's Pollution Control Division's opinion that most of the file information was related to disposal and treatment of liquid industrial waste rather than land filling;
- Lloyd Metal Manufacturing Company Ltd. and Heywood-Wakefield Company of Canada Ltd. were identified in several reports as contaminators of Lake Couchiching; contributing numerous types of liquid wastes



related to metal finishing industries in various surface and subsurface treatment processes on these sites, including chromium, nickel, and aluminum. These include lagoons, saw dust filled pits, limestone leaching pits and surface saw dust treatment. These waste treatment processes were approved or recommended by the Ontario Water Resources Representatives; and,

- The property was again requested to be flagged for industrial contamination and dumping, and notification to potential purchasers, but not be included on the List of Historic Domestic Landfill Sites.

3.2 Site Reconnaissance

On September 6, 2012, a visual walk-over reconnaissance of the Site was conducted by Golder. Mr. Flaherty has six years of experience conducting Phase I ESA site visits. The properties located at 1 Industrial Street, 15 Industrial Street, and 25 Industrial Street were only assessed from publically owned lands at the time of the Site reconnaissance as they are privately owned and the City did provide approval to approach the owners at that time. The weather was sunny and 20 °C. A photographic record of the reconnaissance is provided as Appendix F. The results of the reconnaissance are discussed below.

3.2.1 Specific Observations

At the time of the Site visit, 25 Industrial Street was in a vacant and undeveloped state. An approximate 1,000 m² poured concrete slab was noted on the eastern side of 25 Industrial Street (central area of the Site), which is consistent with the location of historical buildings noted during the aerial photograph review. The slab appeared to be in good condition with no staining, drains or trenches noted. Former rail line rights of way were observed to the north and south side of the site. Areas of disturbed land were seen in the central portion of the 25 Industrial Street property. An approximate 500 m² mound of fill was observed southeast of the poured concrete slab. No debris or waste was observed on the property. No AST were seen on property during the Site visit. Site drainage appeared to be from east to west into a low lying flat area. No water wells were observed at the Site.

15 Industrial Street consists of a hydro substation owned by Orillia Power as well as a radio tower presumably owned by Bell Canada. Directly adjacent to the radio tower is a 1 storey brick communications building. The building appeared to have a poured concrete foundation with a basement. HVAC systems, including an air conditioning unit and a natural gas heating system were observed. One vent was noted on the roof of the building. One shed was also noted on the southeast corner of the property. Transformers were observed at the hydro substation. An additional transformer was seen west of the radio tower. It is not known if the transforms contain PCB. Based on an e-mail dated January 7, 2013 from Orillia Power, the transformers existing on-Site were reported to be non-PCB containing, but it could not be confirmed that the concentration was zero. No spills were reported, however their records only date back 30 years. Stressed vegetation was noted throughout the property. No debris or waste was observed on the property. No AST were seen on property during the Site visit. Site drainage appeared to be from east to west. No water wells were observed at the Site.

The property located at 1 Industrial Street is currently occupied by Embury Co. Limited. The building located at 1 Industrial Street appears to be approximately 40 years of age with a floor area of approximately 2,600 m². Industrial Street as well as the parking area in the vicinity of the building appears to be gravel based. One bay door was observed on the southwest side of the building, which is likely associated with shipping and receiving during day to day operations. No additions or major renovations were apparent from publically accessible areas.



Two vents were noted on the roof indicating manufacturing operations inside the building. No AST were visible during the Site visit nor was the building's chemical storage area.

No water wells were observed at the Site and the domestic water source and sewer services are supplied to the Site by the City.

3.2.2 Surface Water Drainage

The Site is mostly flat, with the exception of an approximate 500 m² mound (i.e., less than 2 m high) of fill observed southeast of the poured concrete slab at 25 Industrial Street. Surface water drainage for the area in the vicinity of the Site is likely north, similar to groundwater flow, modified slightly by local ditches and swales. Drainage within the site is largely from east to west based on an observed slight topographic slope. To the north of the Site, the bike path is elevated above the surrounding lands and drainage from the Site would generally be to the swale/ditch immediately north, then following the ditches/culverts leading across the bike path to Lake Simcoe.

3.2.3 Polychlorinated Biphenyls (PCB)

The use of PCB dielectric fluids in electrical equipment such as transformers, fluorescent light ballasts and capacitors was common in industry practice up to about 1980. The Federal Chlorobiphenyls Regulation, OR/91-152 prohibits the use of PCBs in this electrical equipment installed after July 1, 1980. There are federal and provincial regulations that govern the storage and disposal of PCBs and PCB-containing equipment.

It was not possible to identify if the transformers observed on the Site were non-PCB containing, dry-type transformers. Stressed vegetation was observed in the vicinity of the hydro substation and radio tower. The possibility of PCB containing equipment as well as the potential historic use of these materials makes these areas of potential environmental concern.

3.2.4 Air Emissions

Sources of air emission from the Site buildings are generally associated with building heating and ventilation. Two vents were observed on the roof of the building occupied by Embury Co. Limited. It is probable that these vents are associated with manufacturing equipment.

3.2.5 Chemical Storage and Waste Management Activities

No evidence of chemical storage, spills, stains or releases were observed during the site reconnaissance. However, based on the industrial land use noted at 1 Industrial Street it is highly probable that chemicals are stored on site.

Waste management activities were not able to be accessed during the site reconnaissance. No waste or debris was noted during the site visit.

3.2.6 Above Ground and Underground Storage Tanks

No evidence of AST or UST was noted at the time of the Site reconnaissance

3.3 Adjacent Properties

Golder observed the surrounding properties from publicly accessible areas and from the Site. The properties located adjacent to the Site at the time of the Site visit included the following:



North: A City maintained Bike Path (formerly a rail line) with residential properties and a marina beyond on Davey Drive;

South: A former rail line currently being used a walking path followed by Atherley Road. Ricks Upholstery and Ironhold (card and gaming shop) were noted at 191 Atherley Road;

East: Pliant Corporation located directly east of the Site at 301 Forest Avenue with a residential development beyond;

West: Grant Dollar Discount and Giant Tiger commercial complex located at 130 Atherley Road;

3.4 Historical Information Review

Based on the information collected during this assessment, the following information was obtained:

- Based on aerial photograph review, portions of the Site have been used for industrial purposes since at least 1945. No evidence of historical landfilling activities are evident in the aerial photographs; however, there are no photographs available between 1945 and 1965, when the waste disposal activities reportedly occurred;
- Based on a drawing contained on a 1991 O'Connor and Associates report, a wood waste pile was located in the north portion of the Site, north of Moffat Street; and,
- Based on City records, waste disposal including wood waste and building demolition material as well as a former underground fuel storage tank are reported on-Site. It is also suspected there may be metals contamination as a result of fall-out from a smelter at this site during the early 1900s.

The possible presence of a former wood waste pile was further assessed as part of the historic waste disposal subsurface investigation to determine whether impacts existed relating to this former wood waste.



4.0 FIELD INVESTIGATION METHODS – SUBSURFACE INVESTIGATION

The following sections describe the field investigation methods employed during the work program carried out at the locations in the vicinity of the former waste disposal site.

The field work was completed between July 27, 2012 and September 11, 2012. The field work described herein was carried out under the supervision of members of Golder's staff.

4.1 Health and Safety

Prior to initiating the field work, Golder developed and implemented site-specific protocols to protect the health and safety of its employees and subcontractors through the preparation of a Site-specific Health and Safety Plan. An assessment of potential health and safety hazards within the study area and those associated with the proposed work was completed at the beginning of each day of the field program. A health and safety tailgate meeting was held with Golder's subcontractors each day prior to commencement of the field work. A Health and Safety Contractor Checklist for Golder's drilling subcontractor was completed and forwarded to City staff prior to commencement of drilling activities.

Golder coordinated utility clearances with the local utility companies prior to the initiation of the field work. As well, a private locator (Cable Master Inc., of Newmarket, Ontario) was retained to assess for the presence of unidentified buried services in the area of the proposed borehole locations.

4.2 Borehole Advancement

Golder retained the services of Geo-Environmental Drilling Inc. of Milton, Ontario for borehole drilling and monitoring well installation, which were completed between July 27 and 31, 2012. The boreholes were advanced using a CME 75 truck mounted auger rig. Soil samples were obtained at regular depth intervals using 35 mm split spoon soil sampling equipment. All sampling equipment was cleaned between sampling intervals. Four boreholes were advanced (BH12-10 through BH12-13) to depths ranging from 4.42 (14.5 feet) to 5.18 m (17 feet) below grade.

Soil cuttings generated during the drilling of the boreholes were placed in 205 L drums and left on-Site for subsequent disposal by Assured Industrial Services, a MOE licensed waste hauler, of Gormley, Ontario.

4.3 Soil Sampling

Soil samples were obtained at regular depth intervals in the boreholes and were logged in the field noting subsurface conditions and visual evidence of waste and/or contamination. A portion of each soil sample was placed in a sealed plastic bag, and, if analyzed, laboratory supplied sample jars. Bagged portions of the samples were subsequently screened for combustible vapours using either an RKI Eagle organic vapour meter (OVM) calibrated to methane or RKI Eagle 2 gas detector (OVM) calibrated to isobutylene (photoionization detection [PID] for volatile organic compounds). Headspace readings were taken in the plastic soil sample bags' headspace shortly after sample collection. Conditions encountered in the boreholes are summarized on the Record of Borehole Log sheets provided in Appendix G.

Soil samples selected for chemical analysis were immediately placed in coolers with ice and submitted to AGAT Laboratories Ltd. (AGAT) of Mississauga, Ontario, under chain-of-custody. The selection of samples for laboratory analysis was based on the presence of waste, visual and olfactory observations (i.e. odour or staining) during drilling, and headspace readings. One worst case soil sample (labelled TCLP2) was also



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submitted for waste classification to determine an appropriate disposal facility. Table 5.1 provides a summary of the soil samples submitted to AGAT for analysis.

Table 4.1: Summary of Analyzed Soil Samples

Location	Sample I.D.	Sample Depth (mbgs)	Sample Description	Methane Reading (ppm)	PID Reading (ppm)	Requested Analysis
MW12-10	MW12-10-1	0.00 – 0.61	Iron stained fill	610	2	Metals, inorganics
	MW12-10-5	3.05 – 3.66	Worst case OVM and PID readings	920	8	VOC, metals, inorganics
GP12-11	GP12-11-2	0.76 – 1.37	Worst case OVM and PID readings	70	2	VOC, metals, inorganics
	GP12-11-4	2.29 – 2.90	Water table	<25	0	VOC, metals, inorganics
MW12-12	MW12-12-6	3.81 – 4.42	Native soil below peat layer	250	0	VOC, metals, inorganics, PAH
GP12-13	GP12-13-3	1.52 – 2.13	Water table	430	0	VOC, metals, inorganics, PAH
	GP12-13-6	3.81 – 4.42	Silty clay layer	95	2	VOC, metals, inorganics, PAH

Notes:

ppm = parts per million by volume

PAH = polynuclear aromatic hydrocarbons

VOC = volatile organic compounds

PHC = petroleum hydrocarbon fractions F1 to F4

4.4 Well Installation

4.4.1 Monitoring Wells

Two boreholes, (BH12-10 and BH12-12) were completed as combination groundwater and soil gas monitoring wells on July 27 and 31, 2012, respectively. Each monitoring well installation consisted of a single monitoring



well constructed with a nominal 50 mm (2 inch) diameter solid PVC plastic riser pipe fitted with a nominal 50 mm diameter threaded PVC screen, 3.05 m in length. The pipe was pre-washed and delivered to the Site in factory sealed plastic bags. The base of the monitoring well screens was installed below the groundwater at the base of the waste. At each monitoring well location, the annulus of the borehole adjacent to the screened portion of the well was backfilled with silica filter sand to a minimum level of approximately 0.15 m above the top of the screen. The remainder of the borehole annulus adjacent to the well riser pipe was backfilled with bentonite and/or grout to within 0.3 m of ground surface, where a concrete plug was placed. The monitoring wells were completed with a 4-inch diameter stick-up steel protective well casing set in the concrete. Details of the monitoring well installations are provided on the Record of Borehole sheets enclosed in Appendix G. The MOE Well Record for the newly installed wells is provided in Appendix H and locations of MOE recorded wells within 250 m of the Site are provided on Figure 3.

The monitoring wells were surveyed by the City on August 9, 2012. The elevations of the ground surface in the vicinity of the wells, and the top of the measuring pipe were measured relative to a geodetic benchmark. Groundwater levels were measured four times in the monitoring wells between August 1 and September 11, 2012, using an electronic water level tape.

4.4.2 Gas Probes

A shallow nested gas probe was installed at each of the monitoring well locations. In addition to these two locations, an additional two landfill gas probes were installed at boreholes BH12-11 and BH12-13 on July 27 and 31, 2012 (subsequently relabeled GP12-11 and GP12-13, respectively). The landfill gas probe screens were installed in the vadose zone (i.e., above the anticipated groundwater elevation) to facilitate the assessment of the presence/absence of landfill gas.

Each landfill gas probe installation consisted of a single monitoring well constructed with a nominal 50 mm (2 inch) diameter solid PVC plastic riser pipe fitted with a nominal 50 mm diameter threaded PVC screen, ranging in length from 1.52 m (i.e. GP12-10) to 3.05 m (GP12-11 and GP12-13). The pipe was pre-washed and delivered to the Site in factory sealed plastic bags. At each gas probe location, the annulus of the borehole adjacent to the screened portion of the well was backfilled with #2 silica filter sand to just above the top of the screen. The remainder of the borehole annulus adjacent to the well riser pipe was backfilled with bentonite to within 0.15 m of ground surface, where a concrete plug was placed. The gas probes were completed with a 100 mm stick-up steel protective well casing set in the concrete. Details of the landfill gas probe installations are provided on the Record of Borehole sheets contained in Appendix G. The MOE Well Record for the newly installed probes is provided in Appendix H.

Landfill gas probes were surveyed by the City on August 9, 2012. The elevations of the ground surface in the vicinity of the wells/probes, and the top of the measuring pipe were measured relative to a geodetic benchmark.



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Table 4.2: Summary of Monitoring Well and Gas Probe Installations – X4108

Well	Monitoring Pipe Elev. (masl)	Ground Surface Elev. (masl)	Depth to Bottom of Screen (mbgs)	Top of Screen Elev. (masl)	Bottom of Well Elev. (masl)	Screen Installation Description
MW12-10	221.90	221.07	4.57	219.55	216.50	Native clayey silt to silty clay
GP12-10	221.92	221.07	2.29	220.31	218.78	Native clayey silt
GP12-11	222.55	221.74	3.81	220.98	217.93	Native clayey silt to silty clay
MW12-12	221.61	220.73	3.96	219.82	216.77	Surficial silt and gravel fill and fibrous peat
GP12-12	221.74	220.73	2.59	219.67	218.14	Surficial silt and gravel fill and cobbles overlying fibrous peat
GP12-13	220.73	219.68	4.11	218.62	215.57	Surficial sand and gravel fill and clayey silt

4.5 Hydraulic Testing

Hydraulic conductivity estimates were obtained from rising head tests completed at the monitoring wells as part of the current investigation. The results of the tests are presented below in Table 4.3 and are also provided in Appendix I.

Table 4.3: Hydraulic Conductivity Testing Results

Well Location	Hydraulic Conductivity (cm/second)	Screen Material
MW12-10	6.5×10^{-4}	clayey silt to silty clay
MW12-12	2.1×10^{-4}	cobble and peat

The bulk hydraulic conductivity values estimated from rising head tests in the native silt and clay units at MW12-10 was 6.5×10^{-4} , consistent with a silty sand to sand. The calculated hydraulic conductivities of MW12-12, which straddled different geological units was 2.1×10^{-4} cm/s, consistent with a silty sand to sand.

4.6 Groundwater Purging and Sampling

The monitoring wells were equipped with dedicated low density polyethylene (LDPE) tubing and a foot valve (Waterra™-type system) for subsequent well purging and water sampling. The wells were developed by surging using dedicated surge blocks to pump the wells until indicator parameters (i.e., pH, temperature, and conductivity) stabilized, or until ten well volumes were removed from the well, using a hydraulic lift pump to flush



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out the annulus of excess sediment to aid in reduction of silt content in the groundwater samples. The wells were allowed to recover for a minimum of 24 hours prior to sample collection.

Prior to collection of groundwater samples from the wells installed during this investigation, a minimum of approximately three well water volumes were purged from the wells. Purged groundwater was placed in 205 L drums for subsequent disposal off-Site by Assured Industrial Services.

Groundwater samples from the monitoring wells were collected on August 27 and September 11, 2012. At the time of sampling, the groundwater samples were placed in coolers with ice and subsequently submitted to the commercial analytical laboratory under chain-of-custody procedures. Table 5.2 provides a summary of the groundwater samples submitted for laboratory analysis.

During the first groundwater sampling event at each location, the wells were sampled for parameters including: VOC, PHC, metals (excluding iron and manganese), major ions, ammonia, chromium VI, PAH. Based on the results of the first sampling event, analyzed parameters were adjusted to subsequently sample those parameters present at each location. Electrical conductivity, sodium adsorption ratio, cyanide, mercury, and chromium VI was not analyzed during the second round of groundwater sampling.

Table 4.4: Summary of Analyzed Groundwater Samples

Well Number and I.D.	Date Sampled	Final Field pH	Final Field Temp. (°C)	Final Field Cond. (µS/cm)	Total Volume Purged (L)
MW12-10	27-Aug-12	6.87	15.3	872	13.5
	11-Sep-12	7.51	15.9	885	15
MW12-12	27-Aug-12	6.44	15.5	1173	12
	11-Sep-12	6.75	16.1	1144	12

Notes:

µS/cm = micro Siemens per centimetre

VOC = volatile organic compounds

PAH = polynuclear aromatic hydrocarbons

PHC = petroleum hydrocarbon fractions F1 to F4

4.7 Landfill Gas Sampling

Landfill gas sampling was conducted at all landfill gas probes three times at each location between August 23, 2012 and January 9, 2013. The landfill gas sampling event in January 2013 was conducted under frozen ground conditions to assess worst case conditions.

A portable, high volume pump (25 L/min) was used to purge three times the volume of each gas well prior to sampling. Readings including the relative concentrations of carbon dioxide (CO₂), methane (CH₄), and oxygen (O₂) were obtained from the gas probes using a calibrated GEM 2000 air monitor.

Table 1 provides a full list of landfill gas readings in the landfill gas probes. In some locations, groundwater was above the top of the screens and methane gas readings at these locations should be viewed as approximate (i.e., at GP12-13).

4.8 Analytical Program

Golder retained the services of AGAT Laboratories Inc. of Mississauga, Ontario (AGAT) for the chemical analysis of soil and groundwater samples. AGAT is accredited by the Standards Council of Canada/Canadian



Association of Environmental Analytical Laboratories program. Analytical methods are reported by AGAT on the Laboratory Certificates of Analysis provided in Appendices K and L. The standard analytical methods and procedures used, as well as internal laboratory method blanks, duplicates and surrogate recoveries for organic analyses are also provided on the AGAT Laboratory Certificates of Analysis provided in Appendices K and L.

4.8.1 Quality Assurance/Quality Control

AGAT has an in-house quality assurance/quality control (QA/QC) program to govern sample analysis. Standard QA/QC protocols include the analysis of method blanks, matrix spikes, ion balance calculations and 10% replicates for every sample batch. In addition to the quality control employed by AGAT, the following QA/QC samples were also submitted during the work program:

- Two blind field blank samples (both labelled as Field Blank) were submitted for analysis of VOC and/or PHC F1 to F4 during the August and September 2012 sampling events; and,
- Two trip blank samples (both labelled as Trip Blank) were submitted for analysis of VOC during the August and September 2012 sampling events.



5.0 PHYSICAL CHARACTERISTICS

5.1 Utilities and Water Supply

Several utilities run throughout the Sites, including municipal sewer and water services; however, none were located within a 5 m radius of the newly installed monitoring well or gas probe locations. According to the JWEL, 1999 report, municipal sewer and Bell utility lines run along the south side of Elgin Street. Municipal sewer lines also run along Atherley Road, south of the Site. No sewers were noted north of the Site (i.e., in the vicinity of GP12-11, MW12-12, and GP12-13).

5.2 Regional Geologic Setting

According to Barnett, Cowan, and Henry, Quaternary Geology of Ontario, Southern Sheet, Ontario Geological Survey Map 2556 scale 1:1,000,000 (1991), surficial geology in the area consists of glaciolacustrine deposits including silt and clay, minor sand, and basin and quiet water deposits. Ontario Geological Survey, Ministry of Northern Development and Mines, Map 2554, Bedrock Geology of Ontario, Southern Sheet (OGS, 1991), indicates that Middle Ordovician limestone, dolostone, shale, arkose, and sandstone underlies the area of the Site (see Figure 5).

Based on the Site reconnaissance and local topographic mapping ((*Surveys and Mapping Branch, Department of Energy, Mines and Resources, Bolton, 040 P/08, Scale 1:50,000, and published in 1985*), Lake Couchiching is located approximately 40 m north of the Site. It is expected that local and regional groundwater flows in a northerly direction to Lake Couchiching. The presence of buried utilities and structures could potentially influence groundwater flow conditions in the vicinity of the Site.

Previously completed regional studies indicate that quaternary geology in the vicinity of the Site consist of silts and clays deposited in the deep waters of Glacial Lake Algonquin. Bedrock underlying the Orillia area consists of Ordovician age limestones of the Simcoe Group and is found at an elevation of approximately 190 masl (Golder, 2005).

5.3 Site Specific Subsurface Conditions

Details of the conditions encountered in the boreholes are presented on the Record of Borehole sheets provided in Appendix G. Subsurface conditions encountered are specific to the borehole locations and will vary between and beyond borehole and sampling locations.

The soil conditions encountered at the borehole locations generally consisted of silty sand and gravel fill to a maximum depth of 1.52 m, overlying a clayey silt transitioning to a silty clay to the maximum depth of investigation (i.e., 5.18 m below grade). A 0.84 m layer of cobbles, likely base material for the bike path was encountered at GP12-12 underlain by the silty clay. Slag was noted above the fill at GP12-13, likely associated with the former rail line.

No waste materials, other than the fill and slag, were encountered in the boreholes.

No hydrocarbon-related staining or odours were noted in the boreholes. Headspace readings in the soil samples, which are potentially related to PHC or other VOC, ranged less than 25 parts per million (ppm) by volume to 920 ppm (i.e. at GP12-10-5).



HISTORIC WASTE SITE INVESTIGATION - INDUSTRIAL STREET (SITE X4108)

Based on information obtained from the boreholes, the Site is generally underlain by soils, which consist of more than 50 percent by mass of particles that are 75 µm or larger in mean diameter. Therefore, the texture of soil at the Site would likely be classified as coarse grained for the application of site-condition standards set out in O. Reg. 153/04, as amended.

The depths to groundwater in the monitoring wells are summarized in Table 6.1 below. No hydrocarbon-related sheen or odours were noted in groundwater purged from the monitoring wells. The interpreted shallow horizontal groundwater flow direction at the Site as obtained on September 11, 2012 is north toward Lake Couchiching, located approximately 40 m north of the Site (see Figure 4).

Vertical gradients were calculated for the nested monitoring well locations. The vertical gradient could not be calculated at MW12-10/GP12-10 as the gas probe was dry. There was a slight upward gradient at MW12-12/GP12-12 of 0.06 m/m.

Table 5.1: Groundwater Elevations – September 11, 2012

Well	Monitoring Pipe Elev. (masl)	Ground Surface Elev. (masl)	Top of Screen Elev. (masl)	Bottom of Well Elev. (masl)	Groundwater Elevation (masl)
MW12-10	221.90	221.07	219.61	216.56	218.82
GP12-10	221.92	221.07	220.31	218.78	Dry
GP12-11	222.55	221.74	217.93	220.98	219.76
MW12-12	221.61	220.73	219.70	216.65	218.55
GP12-12	221.74	220.73	219.67	218.14	218.47
GP12-13	220.73	219.68	218.62	215.57	218.86

Notes:

mbgs = metres below ground surface

masl = metres above sea level

Figure 4 illustrates the groundwater flow direction obtained from the gas probes (i.e., the shallowest well screens) on September 11, 2012. A summary of groundwater elevations obtained from the on-Site monitoring wells and gas probes is provided in Table J-1 (Appendix J).



6.0 ANALYTICAL FINDINGS

6.1 Applicable Site Condition Standards

The analytical results for soil were compared to the full depth site condition standards for industrial/commercial/community land use, coarse textured soil, listed in Table 2 (potable groundwater situation) of the “*Soil, Groundwater and Sediment Standards for Use Under Part XV.1 of the Environmental Protection Act*”, dated April 15, 2011 (“MOE Table 2 Standards”).

The MOE Table 2 Standards are considered applicable to the site based on the following rationale:

- The Site and adjacent properties obtain their water supply from municipal wells;
- The location of the Site is not inferred to be located in an area of natural significance, and is not less than 30 m from a water body;
- Soil pH is greater than 5 and less than 9;
- The depth to bedrock in the vicinity of the study area is greater than 2 metres below ground; and,
- The Site is currently used for industrial purposes and it is our understanding that the land use will remain industrial/commercial/community.

The MOE Table 2 Standards are provided in Tables 3 through 8 (attached). The respective Ontario Drinking Water Standards (ODWS) are also provided in Tables 6 through 8, as the former waste disposal area lies over a municipal water supply aquifer and the Provincial Water Quality Objectives (PWQO) are also provided due to the proximity of MW12-12 to Lake Couchiching.

6.2 Analytical Results

The soil and groundwater analytical results, and associated MOE Table 2 Standards and/or ODWS, are provided in Tables 2 through 8 (attached).

6.2.1 Quality Assurance/Quality Control

Concentrations of analyzed parameters in the trip blanks and field blank samples were less than their respective laboratory detection limits for analyzed parameters.

Surrogate standard recoveries outside the range, typically, of 70-130% are indicative of questionable results for the tested volatile organic compounds. The reported surrogate recoveries are considered acceptable on this basis.

Matrix spike recoveries outside the typical range of individual parameters are indicative of questionable results for the tested VOC. The reported surrogate recoveries are considered acceptable on this basis.

During the work program, slightly elevated ion balance results (>5%) were noted for major ion analyses in monitoring well MW12-12 in September 2012 only. The ion balance is only slightly elevated (i.e., 5.12%), but is acceptable for the purposes of this monitoring program. Elevated ion balance errors are generally associated with samples containing elevated silt content or more complex chemical composition.



All other laboratory QA/QC results for the monitoring program are within acceptable limits or, based on review of the reported data, do not appear to affect the results.

6.2.2 Soil

Laboratory Certificates of Analysis for soil are provided in Appendix K.

Waste classification analysis on one worst case soil sample (labeled TCLP2) indicated that the soil could be classified as solid non-hazardous waste (see Table 3 attached).

Soil quality in samples collected from cover material within the boreholes (see Tables 4 through 6 attached) met the MOE Table 2 standards for the analyzed parameters, with the exception of the following:

- **Arsenic** (75 µg/g), greater than the MOE Table 2 Standard of 18 µg/g, and **lead** (152 µg/g), greater than the MOE Table 2 Standard of 120 µg/g, in soil sample **MW12-10-1**, consisting of fill at a depth of 0.00 mbgs to 0.61 mbgs; and,
- **Cyanide** (0.329 µg/g), greater than the MOE Table 2 Standard of 0.051 µg/g, and **benzo(a)pyrene** (0.48 µg/g), greater than the MOE Table 2 Standard of 0.3 µg/g, in soil sample **GP12-13-3** at a depth of 1.52 mbgs to 2.13 mbgs located in native soil at the base of the fill.

Impacts are limited to near surface samples at MW12-10-1 and are not near the water table, where impacts would migrate from an upgradient source. At GP12-13-3, the elevated cyanide and benzo(a)pyrene concentrations are found within the saturated soil and it is possible that impacts could have migrated from upgradient of this location. However, impacts associated with the former wood waste pile would also include select metals or elevated methane concentrations. The long history of former industrial activities on-Site could also be contributing to these exceedances.

6.2.3 Groundwater

Laboratory Certificates of Analysis for groundwater are provided in Appendix L.

VOC, Metals, and PAH

Groundwater quality in samples collected the monitoring wells (see Tables 6 through 8) met the ODWS, PWQO, and/or the MOE Table 2 Standards for the analyzed parameters, with the exceptions of the following:

Monitoring Well MW12-10 (Upgradient)

- **Copper** (1.1 µg/L and 1.8 µg/L in August and September 2012, respectively), greater than the ODWS aesthetic objective of 1 µg/L, but well below the MOE Table 2 Standard of 87 µg/L.
- Several PAH parameters are elevated above their respective PWQO; however, this well is not in close proximity to Lake Couchiching and the exceedance of the PWQO is of little relevance at this location.

Monitoring Well MW12-12 (Downgradient)

- **Cis-1,2-dichloroethylene** (3.7 µg/L and 4.3 in µg/L in August and September 2012, respectively), greater than the MOE Table 2 Standard of 1.6 µg/L;
- **Vinyl chloride** (6.6 µg/L and 7.4 in µg/L in August and September 2012, respectively), greater than the ODWS of 2 µg/L and the MOE Table 2 Standard of 1.6 µg/L;



- **Cobalt** (19.3 µg/L and 25.1 µg/L in August and September 2012, respectively), greater than the PWQO of 0.9 µg/L and the MOE Table 2 Standard of 3.8 µg/L;
- **Copper** (1.3 µg/L in September 2012), greater than the ODWS aesthetic objective of 1 µg/L, but well below the MOE Table 2 Standard of 87 µg/L;
- **Fluorene** (0.45 µg/L and 0.20 µg/L in August and September 2012, respectively), greater than the PWQO of 0.2 µg/L, but well below the MOE Table 2 Standard of 120 µg/L;
- **Phenanthrene** (0.89 µg/L and 0.33 µg/L in August and September 2012, respectively), greater than the PWQO of 0.03 µg/L, but below the MOE Table 2 Standard of 1 µg/L;
- **Anthracene** (0.15 µg/L in August 2012), greater than the PWQO of 0.0008 µg/L, but well below the MOE Table 2 Standard of 2.4 µg/L; and,
- **2-and 1-Methylnaphthalene** (2.9 µg/L in August 2012), greater than the PWQO of 2 µg/L, but below the MOE Table 2 Standard of 3.2 µg/L.
- Several additional PAH parameters have laboratory reportable detection limits greater than their associated PWQO, including fluoranthene, benzo(a)anthracene, chrysene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, and benzo(g,h,i)perylene.

The elevated cis-1,2-dichloroethylene and vinyl chloride values at MW12-12 are likely attributable to industrial activities in the vicinity of the Site and are not considered to be associated with the presence of a former wood waste pile. The absence of these parameters upgradient suggests a local source.

Cobalt is used to make alloys, colored pigments, and as a drier for paint and porcelain enamel used on steel bathroom fixtures, large appliances, and kitchen utensils. Cobalt is also released from burning coal and oil, and from car and truck exhaust. The presence of cobalt in groundwater at MW12-12 may be attributable to the former rail line (as coal was historically used as fuel) located in this vicinity and is not considered to be associated with the former wood waste pile.

Copper concentrations are similar upgradient and downgradient of the Site and only slightly elevated relative to the ODWS. Based on this, copper is not considered to be related to the wood waste, and likely not with other on-Site sources.

Major Ions and Indicator Parameters

Concentrations of chloride and sodium are generally higher at MW12-12 than at MW12-10, but remain well below their respective ODWS and MOE Table 2 Standards at both locations. Electrical conductivity is also slightly higher at MW12-12, which indicates that this well is slightly more susceptible to surface infiltration and likely to road salt impacts as supported by the elevated sodium and chloride values at this location.

In the absence of either an MOE Table 2 Standard or ODWS, relative comparisons can be made regarding general water quality for parameters such as electrical conductivity, ammonia as N, calcium, magnesium, chromium VI, potassium, nitrites, and nitrates.

Ammonia and potassium concentrations were also higher at MW12-12 than at MW10-12, however, these values were low (less than 4 mg/L) and not likely indicative of the presence of wood waste.



Concentrations of calcium (up to 165 mg/L) and magnesium (up to 26.8 mg/L) were relatively consistent at both locations, indicating that impacts are not noticeable between upgradient and downgradient locations of the former wood waste pile.

Chromium VI, nitrite, and nitrate were not detected at either location.

Based on the above, the associated analytical results generally appear to be representative and reproducible.

6.2.4 Landfill Gas

Landfill gas (as defined by methane concentrations) has not migrated significantly beyond the former waste disposal site as indicated by non-detectable or low readings of methane at all four gas probes. Methane concentrations are less than or equal to 0.9%, below a concentration of 5%, the Lower Explosive Limit. The highest concentration of methane was noted at MW12-12 (0.9% during the September 2012 monitoring event); methane was not detected at the associated gas probe location or any other probe location during the August 2012 or January 2013 sampling events.



7.0 SUMMARY AND DISCUSSION

7.1 Environmental Conditions

The chemical quality of soil samples collected from the vicinity of the boreholes does not appear to be impacted by the reported presence of the wood waste. Exceedances of the MOE Table 2 Standards for soil are likely attributable to the former rail line located in the vicinity of the MW12-12 or to the historical industrial activities on-Site and not to the presence of the former wood waste. Impacts in soil are limited to near surface samples at MW12-10-1 and are not near the water table, indicating that impacts did not migrate from an upgradient source. At GP12-13-3, elevated cyanide and benzo(a)pyrene concentrations are found within the saturated soil; it is considered possible that these impacts could have migrated from upgradient of this location. It is noted however, that impacts associated with the former wood waste pile would also be expected to include some metals (e.g., iron, manganese) and/or elevated methane concentrations in the soil. As these conditions were not observed, this suggests that other former industrial activities on-Site are the source of, or significant contributors to, these exceedances.

The chemical quality of groundwater samples collected from the monitoring wells did not appear to be impacted by the presence of wood waste. Detected VOC cis-1,2-dichloroethylene and vinyl chloride at MW12-12 are likely attributable to industrial activities in the vicinity of the Site and are not considered to be associated with the presence of a former wood waste disposal site. The absence of these VOC upgradient suggests a local source. The presence of cobalt in groundwater at MW12-12 may be attributable to the former rail line (as coal, containing cobalt, was historically used as fuel) located in this vicinity and is not considered to be associated with the former wood waste. Copper concentrations are slightly elevated relative to the ODWS, but are similar upgradient and downgradient of the Site. Copper is not considered to be related to the wood waste, and likely not with other on-Site sources.

The presence of cobalt in groundwater at MW12-12 may be attributable to the former rail line (as coal, containing cobalt, was historically used as fuel) located in this vicinity and is not considered to be associated with the former wood waste.

Copper concentrations are similar upgradient and downgradient of the Site and only slightly elevated relative to the ODWS. Based on this, copper is not considered to be related to the wood waste, and likely not with other on-Site sources.

Measurement of methane at the gas probes located at the Site indicates non-detectable or trace readings of methane at locations GP12-10 through GP12-13. The only detected concentrations at a gas probe location are less than or equal to 0.1% methane, well below the 5%, the Lower Explosive Limit of methane. The highest concentration of methane was noted at monitoring well MW12-12 (0.9% during the September 2012 monitoring event); methane was not detected at the associated gas probe location or any other probe location during the August 2012 or January 2013 sampling events. Migration of methane from this Site is not considered to be of concern.

7.2 Estimated Extent of Waste

No waste was encountered during the work program; however none of the current investigations took place on site. Fill was encountered at the wells adjacent to the site, to a maximum depth of 1.52 m below grade. The



estimated areal extent of the former wood waste pile is illustrated on Figure 2; however, no definite location could be confirmed and limits of this waste material are estimated.

The estimated waste disposal limits delineated on Figure 2 are based largely on drawing from a 1991 O'Connor Associates drawing provided in a 2004 City of Orillia Memo to File, conversations with City staff familiar with the Site, previous subsurface investigations on and adjacent to the Site, and on the above subsurface scope of work. The waste disposal site does not appear to extend beyond the Site limits.

On-Site waste was not evident during the site reconnaissance and visual impacts are not an issue at this location.

7.3 Interpreted Extent of Environmental Impacts from Waste

As stated in the D-4 Guideline (MOE, 1994), its purpose is to protect the health, safety, convenience and welfare of residents from the potential adverse effects of landfills and dumps by restricting or controlling land use in their vicinity. It complements the Ministry's existing abatement programs, and Ministry staff refer to it when they review land use proposals in the vicinity of landfills. Factors to be considered when land use is proposed on or near a non-operating site include: (i) ground and surface water contamination by leachate, (ii) surface runoff, ground settlement, (iii) visual impact, (iv) soil contamination and hazardous waste, and (iv) landfill-generated gases. Particular attention is given to the production and migration of methane gas. The scope of the current study completed by Golder does not include assessment of ground settlement or contaminated soils and impacts on private sites, other than to comment on available historical information.

The subject Site, referred to in the MOE Waste Inventory as X4108, is located on private property on which no investigations in this current study took place. The extent of impact commented on in this current study is limited to the area surrounding the Site, and is interpreted to the extent possible with the available information.

The interpreted groundwater flow direction under the Site is north toward Lake Couchiching. Monitoring wells MS12-10 and MW12-12 represent upgradient and downgradient locations respectively, relative to the Site.

On the basis of the results of these investigations and the observed historical information, reduction of the standard 500 metre assessment zone for D-4 investigations can be undertaken. Investigations relative to landfill gas are not considered to be required off Site, and, subject to confirmation in the immediate vicinity of the former wood waste, would not likely be required on-Site. Given the groundwater and surface water flow directions and lack of visual impact, investigations for D-4 purposes are not considered necessary to the east/south/west of the property, as outlined on Figure 6. Areas downgradient and downslope of this site should continue to be required to complete evaluations of potential impacts to groundwater and surface water for proposed developments, relative to D-4 guidelines. It is noted that at this Site, a number of issues have been identified which result in moderate exceedances of some soil and groundwater standards, which while unrelated to "waste disposal" as envisioned by D-4 guidelines, should be considered in the context of proposed development. Installation and sampling of wells north of the bike path may assist in further limiting the extent of the D-4 assessment area.

Based on the results of these investigations and the observed historical information for the six City of Orillia historical waste sites, Figure M-1 (Appendix M) summarizes the areas where investigations for D-4 purposes are required.



8.0 RECOMMENDATIONS

Based on the findings of the above scope of work and recommended monitoring program, Golder recommends the following:

- 1) The area under D-4 guidelines can be reduced to the limits of the Site (see Figure 6). Based on the findings of this investigation, a D4 Assessment study to investigate landfill gas is required within the Site limits. Development within the green hatched area on Figure 6 requires a D4 Assessment Study to investigate potential groundwater quality issues only;
- 2) Installation and sampling of wells north of the bike path may be considered to assist in further limiting the extent of the D-4 assessment area; and,
- 3) Decommission the monitoring wells and landfill gas probes installed as part of this investigation (i.e., MW12-10, MW12-12, and GP12-10 to GP12-13) in accordance with O. Reg. 903 when no longer required.



Report Signature Page

GOLDER ASSOCIATES LTD.

Christi Groves, B.Sc.
Environmental Scientist

Paul Dewaele, M.Sc., P.Eng.
Principal, Senior Geo-Environmental Engineer

CLG/TZ/SMF/PJD/JEB/plc

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9.0 LIMITATIONS AND USE OF REPORT

Golder Associates Ltd.'s (Golder's) professional services for this assignment addressed only the geo-environmental (chemical) aspects of the subsurface conditions at this Site. The geotechnical (physical) aspects, including engineering recommendations for the design and construction of building foundations, pavements, underground servicing and the like are outside the terms of reference for this report and have not been investigated or addressed.

This report is based on data and information collected during the subsurface environmental investigation conducted by Golder and is based solely on Site conditions encountered at the time of the field work (i.e., July 27 to September 11, 2012), as described in this report.

In evaluating the Site, Golder has relied in good faith on information provided by others and evaluated only conditions at a limited number of test locations. Only limited chemical analyses of soil samples were carried out. It should be noted that the results of an investigation of this nature should, in no way, be construed as a warranty that the Site is free from any and all contamination from past or current practices.

We accept no responsibility for any deficiency, misstatements or inaccuracies contained in this report as a result of omission, misinterpretations or fraudulent acts of the persons interviewed. Golder accepts no responsibility for any reduction in property value, either real or perceived, as a result of the reporting of factual information herein.

This assessment was carried out using existing historical information as available from various agencies and no assurance is made regarding the accuracy or completeness of this information.

If additional information is obtained during future work at the Site, including excavations, borings, or other studies, and/or if conditions exposed during construction are different from those encountered in this assessment, Golder should be requested to re-evaluate the conclusions presented in this report and provide amendments as required.



10.0 REFERENCES

The following is a list of persons contacted and references reviewed for the purposes of preparing this report:

Source	Date
Aerial Photographs – obtained from National Air Photo Library on behalf of Golder.	1945, 1965, 1967, 1968, 1976, 1984, and 2002
<u>Bedrock Geology of Ontario, Southern Sheet</u> . Map 2544. Ontario Ministry of Development and Mines, 1991.	1991
Chain of Title Report	2012
City Directories, obtained by LGI on behalf of Golder.	1961, 1966, 1976, 1982, 1986, 1996/1997, and 1998/1999
County of Simcoe interactive mapping website, 2012, http://maps.simcoe.ca/ ,	2012
EcoLog Environmental Risk Information Services	March 30, 2012
Fisher Environmental Ltd. Phase II Environmental Site Assessment, Elgin Street/Cedar Island Road, Orillia, Ontario	June 2007
Golder Associates Ltd., 2005. North Simcoe Groundwater Study, WHPA – City of Orillia, Appendix E.	May 2005
Google Earth Images, reviewed online.	2009
Jacques Whitford Environmental Limited. Phase II Environmental Subsurface Investigation, PIN 46108, Parcel 46108B, Mile 42.70 to 42. 81, Abandoned Midland Subdivision, Orillia, Ontario	June 7, 1999
Ontario Ministry of the Environment	Pending
Ontario Ministry of the Environment, June 2003, revised June 2006. Ontario Drinking-Water Quality, Standards and Objectives. PIBS 4449e01	2006
Ontario Ministry of the Environment, Water Well Records database	October 2012
RMS Response	April 4, 2012
<u>Sheet 30S</u> . Map 1335A, Southern Sheet. Geological Survey of Canada, 1971.	1971
Technical Standards and Safety Authority Response	March 23, 2012
Terraprobe Inc. Landfill Impact Assessment, Demolition and Residential Lot Development, 141 Atherley Road, Part of Lot 10, Concession 5, Formerly Township of South Orillia, County of Simcoe, Ontario	May 2, 2011
City of Orillia, Public Works Department	2012



FIGURES

PLOT DATE: August 23, 2013
FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EASITE.dwg [Figure 2]



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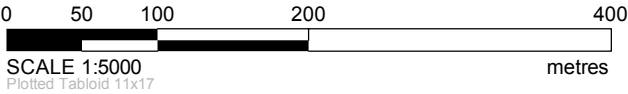
- Waste Site Limits (Approximate)
- 500 m Offset
- Disturbed Area Boundary (Approximate)
- Borehole / Gas Probe
- Monitoring Well / Gas Probe
- Anticipated Groundwater Flow Direction
- 15 Property Address Number

NOTES:

1. DATUM IS UTM NAD83 Zone 17

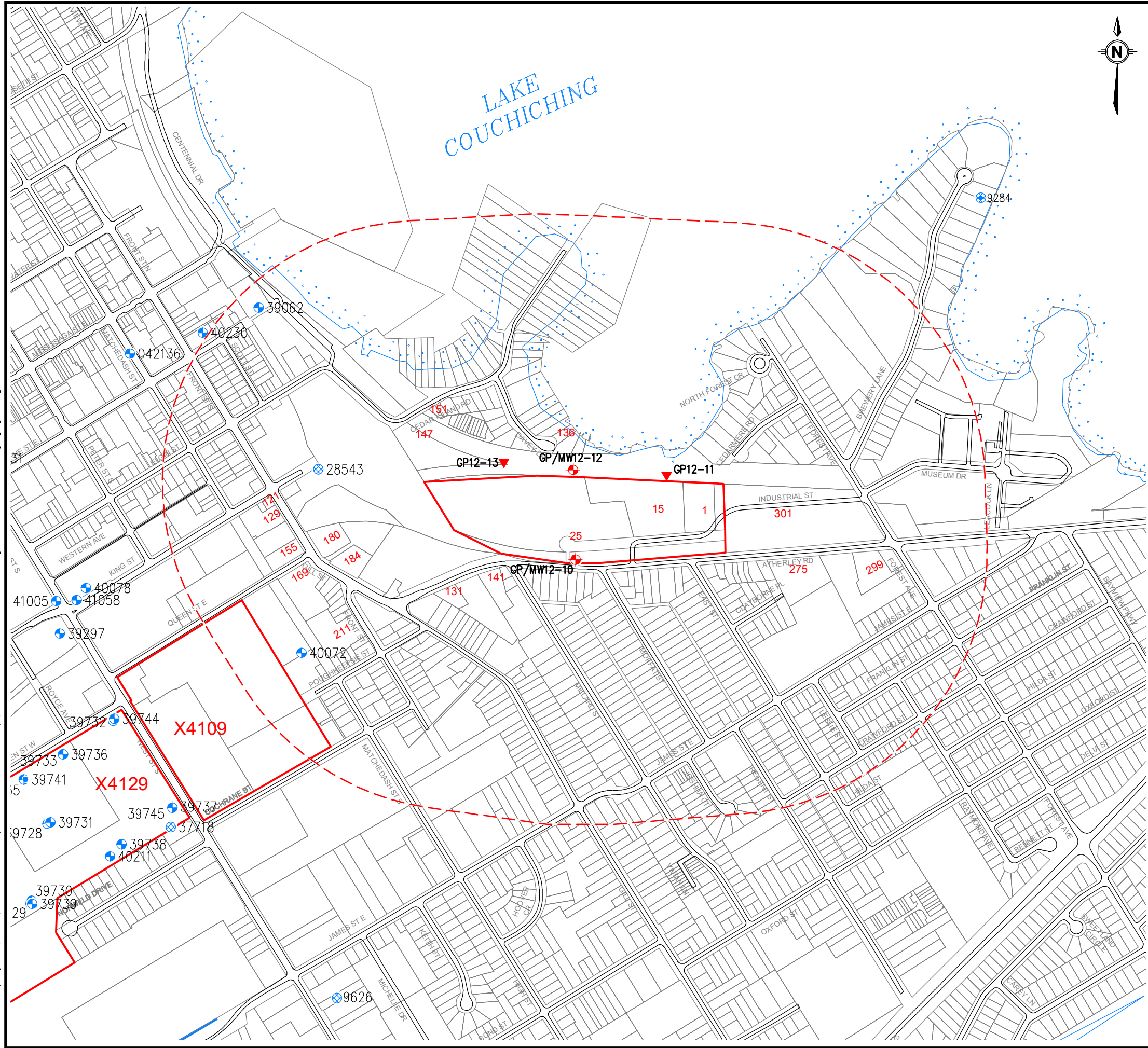
REFERENCES:

1. MAPPING BASED ON CITY OF ORILLIA ASSESSMENT, 2009
2. SATELLITE IMAGERY FROM DISCOVERSIMCOE.CA



TITLE			
SITE LOCATION MAP X4108			
HISTORICAL LANDFILL SITES CITY OF ORILLIA			
 Golder Associates Barrie, Ontario, Canada		SCALE	AS SHOWN
		DATE	07 JAN 2013
		DESIGN	
		CAD	S BOWERMAN
		CHECK	CLG
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PROJECT No.	11-1170-0079	REV.	2
		REVIEW	

PLOT DATE: August 23, 2013
FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EASITE.dwg: [Figure 3]



LEGEND:

- Waste Site Limits (Approximate)
- - - 500 m Offset
- ▼ Borehole / Gas Probe
- ⊕ Monitoring Well / Gas Probe
- Recorded Well
- ⊕ Test Well or Borehole
- ⊗ Drilled Bedrock Well
- 15 Property Address Number

NOTES:

- DATUM IS UTM NAD83 Zone 17

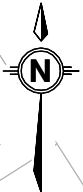
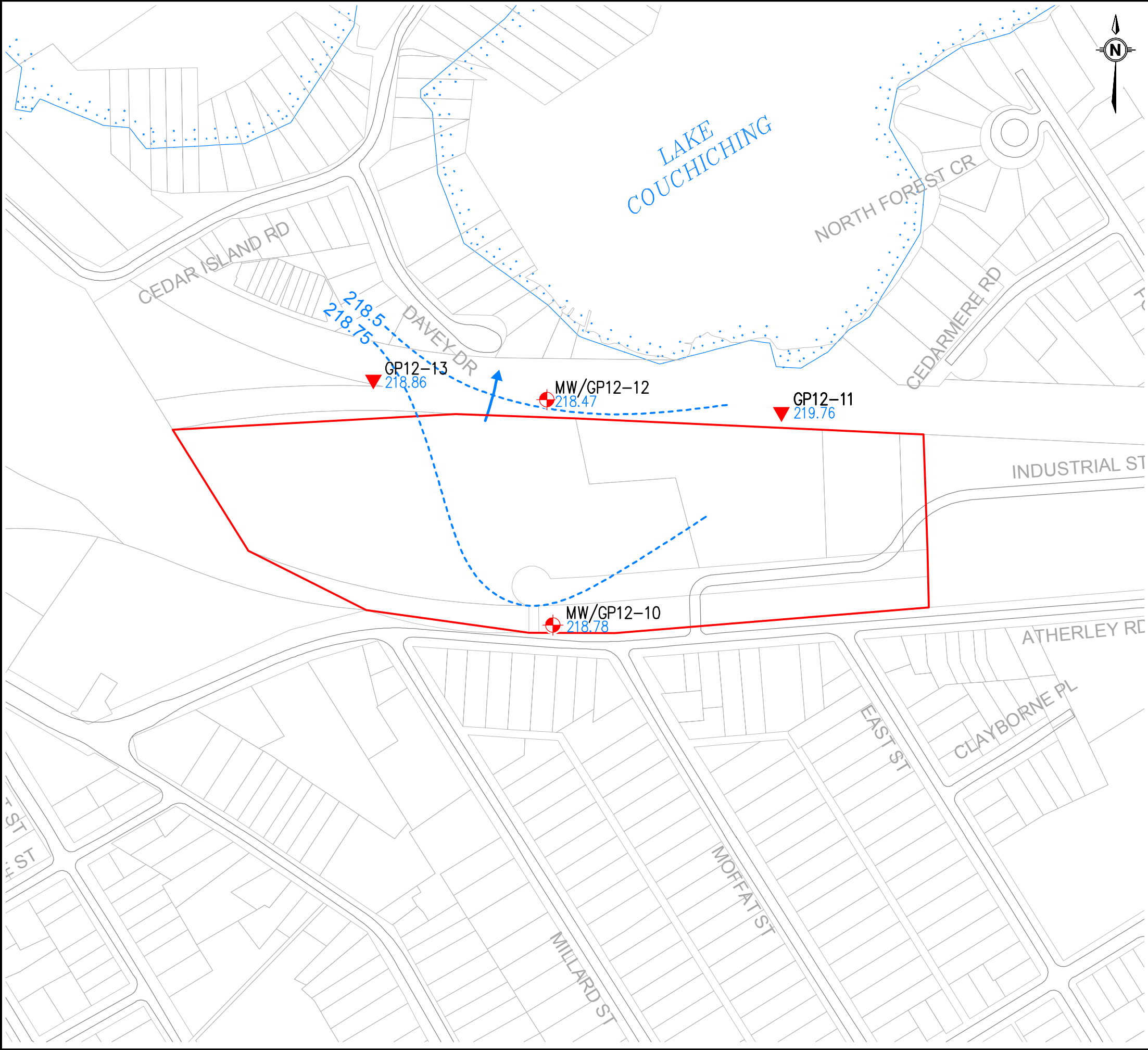
REFERENCES:

- MAPPING BASED ON CITY OF ORILLIA ASSESSMENT, 2009



TITLE			
MOE RECORDED WATER WELL LOCATION MAP X4108			
HISTORICAL LANDFILL SITES CITY OF ORILLIA			
 Barrie, Ontario, Canada		SCALE	AS SHOWN
		DATE	07 JAN 2013
FILE No. 1111700079EASITE.dwg PROJECT No. 11-1170-0079		DESIGN	
		CAD	S BOWERMAN
		CHECK	CLG
		REVIEW	
			FIGURE
			3

PLOT DATE: August 23, 2013
FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAEQUI.dwg\111700079EAEQUI.dwg: [Figure 4]



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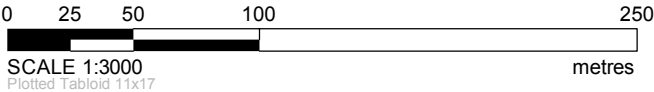
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- Borehole / Gas Probe
- Monitoring Well / Gas Probe
- Interpolated Equipotential Line
- Interpolated Groundwater Flow Direction

NOTES:

- DATUM IS UTM NAD83 Zone 17

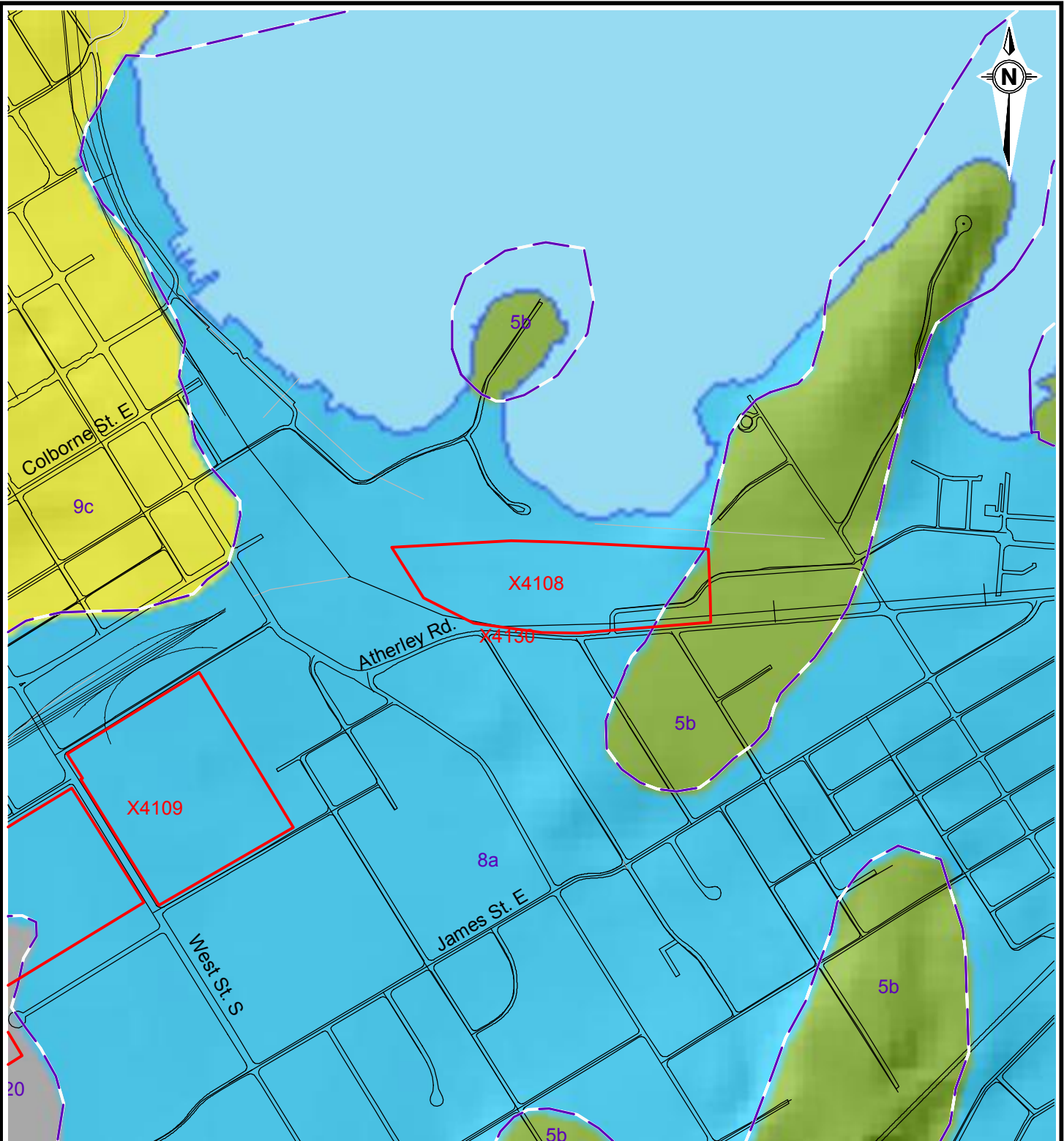
REFERENCES:

- MAPPING BASED ON CITY OF ORILLIA ASSESSMENT, 2009



TITLE			SITE X4108 GROUNDWATER ELEVATIONS SEPT. 11, 2012		
			HISTORICAL LANDFILL SITES CITY OF ORILLIA		
 Golder Associates Barrie, Ontario, Canada			SCALE	AS SHOWN	
			DATE	07 JAN 2013	
			DESIGN		
			CAD	S BOWERMAN	
FILE No. 1111700079EAEQUI.dwg			CHECK	CLG	FIGURE
PROJECT No. 11-1170-0079			REV.		4
			REVIEW		

PLOT DATE: August 23, 2013
 FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAQUAT.dwg



LEGEND:

- | | | |
|----|---|---|
| 20 | Organic Deposits |  Site Boundary |
| 9c | Glaciolacustrine Shallow Water Deposits | |
| 8a | Glaciolacustrine Deep Water Deposits | |
| 5b | Ablation Till | |

NOTE:

Source: Ontario Geological Survey / Geological Survey Canada; 1:50000 Digital compilation, Queen's Printer 2006

0 50 100 250 500

 SCALE 1:10000 metres



SCALE AS SHOWN
 DATE 21 DEC 2012
 DESIGN
 CAD S BOWERMAN

TITLE

QUATERNARY GEOLOGY MAP X4108

FILE No. 1111700079EAQUAT.dwg

CHECK CLG

HISTORICAL LANDFILL SITES
 CITY OF ORILLIA

FIGURE

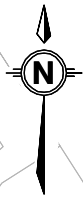
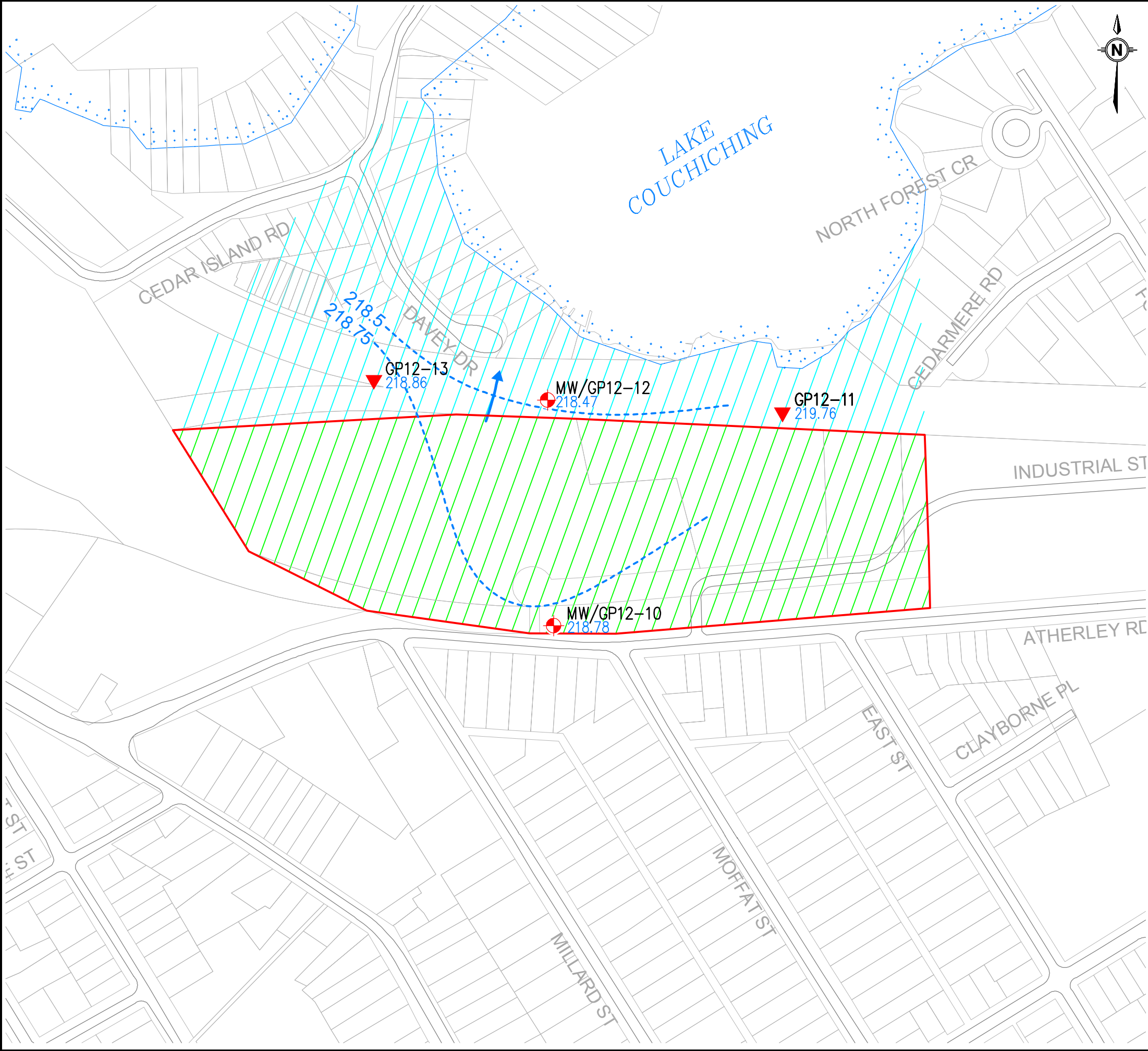
5

PROJECT No. 11-1170-0079

REV.

REVIEW

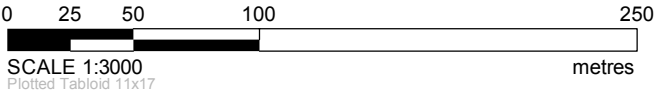
PLOT DATE: August 23, 2013
FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAEQUI.dwg\111700079EAEQUI.dwg: [Figure 6]



- LEGEND:**
- Landfill Limits (Approximate)
 - Borehole / Gas Probe
 - Monitoring Well / Gas Probe
 - Interpolated Equipotential Line
 - Interpolated Groundwater Flow Direction
 - D4 Assessment Required due to Possible Landfill Gas
 - D4 Assessment Required due to Possible Groundwater Impacts

- NOTES:**
- DATUM IS UTM NAD83 Zone 17

- REFERENCES:**
- MAPPING BASED ON CITY OF ORILLIA ASSESSMENT, 2009



TITLE			D4 ASSESSMENT AREAS		
HISTORICAL LANDFILL SITES			CITY OF ORILLIA		
			SCALE	AS SHOWN	
			DATE	05 JUL 2013	
			DESIGN		
			CAD	S BOWERMAN	
FILE No. 1111700079EAEQUI.dwg			CHECK	CLG	FIGURE
PROJECT No. 11-1170-0079			REV.		6
			REVIEW		



TABLES

January 2013

Table 1
Summary of Landfill Gas Concentrations
Site X4108

11-1170-0079

Well ID	Water (m below toc)	Sample Date	Landfill Gas Readings - GEM 2000			
			CH4 (%)	CO2 (%)	O2 (%)	Bal. (%)
GP12-10	dry	23-Aug-12	0.0	2.2	17.8	80.0
GP12-10	dry	11-Sep-12	0.0	2.0	18.2	79.8
GP12-10	2.28	9-Jan-13	0.0	2.1	19.5	78.4
GP12-11	2.87	23-Aug-12	0.0	7.7	11.6	80.7
GP12-11	2.79	11-Sep-12	0.0	6.4	13.8	79.8
GP12-11	2.08	9-Jan-13	0.0	0.2	21.2	78.6
MW12-12	2.96	23-Aug-12	0.1	7.3	11.7	80.9
MW12-12	3.06	11-Sep-12	0.9	3.3	16.8	79.0
GP12-12	3.15	23-Aug-12	0.0	7.3	12.0	80.7
GP12-12	3.27	11-Sep-12	0.0	5.5	14.8	79.7
GP12-12	2.40	9-Jan-13	0.0	2.2	19.9	77.9
GP12-13	1.82	23-Aug-12	0.0	0.0	19.3	80.7
GP12-13	1.87	11-Sep-12	0.1	0.2	20.5	79.2
GP12-13	1.63	9-Jan-13	0.0	0.1	21.3	78.6

Table 2
Soil Analytical Results - Waste Classification
Site X4108

Sample ID	RDL	Units	Leachate	TCLP-2
Sampling Date	<i>na</i>	<i>na</i>	Criteria¹	27-Jul-12
VOCs				
Vinyl Chloride	0.030	mg/L	0.2	<0.030
1,1 Dichloroethene	0.020	mg/L	1.4	<0.020
Dichloromethane	0.030	mg/L	5.0	<0.030
Methyl Ethyl Ketone	0.090	mg/L	200	<0.090
Chloroform	0.020	mg/L	10.0	<0.020
1,2-Dichloroethane	0.020	mg/L	0.5	<0.020
Carbon Tetrachloride	0.020	mg/L	0.5	<0.020
Benzene	0.020	mg/L	0.5	<0.020
Trichloroethene	0.020	mg/L	5.0	<0.020
Tetrachloroethene	0.050	mg/L	3.0	<0.050
Chlorobenzene	0.010	mg/L	8.0	<0.010
1,2-Dichlorobenzene	0.010	mg/L	20.0	<0.010
1,4-Dichlorobenzene	0.010	mg/L	0.5	<0.010
Inorganics				
Fluoride (F-)	0.05	mg/L	150	0.08
Free Cyanide	0.05	mg/L	20.0	<0.05
Nitrate + Nitrite	0.70	mg/L	1000	<0.70
Metals				
Arsenic	0.010	mg/L	2.5	<0.010
Barium	0.100	mg/L	100	0.462
Boron	0.050	mg/L	500	<0.050
Cadmium	0.010	mg/L	0.5	<0.010
Chromium	0.010	mg/L	5.0	<0.010
Lead	0.010	mg/L	5.0	<0.010
Mercury	0.01	mg/L	0.1	<0.01
Selenium	0.010	mg/L	1.0	<0.010
Silver	0.010	mg/L	5.0	<0.010
Uranium	0.050	mg/L	10.0	<0.050
Total PCB	0.005	mg/L	0.3	<0.005
Benzo(a)pyrene	0.001	mg/L	0.001	<0.001
Ignitability	<i>na</i>	<i>na</i>	not ignitable	No

Notes:

1. Schedule 4 = Ministry of Environment (MOE) Regulation 347,
2. *na* = Not applicable
3. mg/L = milligrams per litre
4. Table to be read in conjunction with accompanying report.

Table 3
Soil Analytical Results
Metals and Inorganics
Historical Landfill Sites - City of Orillia

Sample I.D.				MW12-10-1	MW12-10-5	MW12-11-2	MW12-11-4	MW12-12-6	GP12-13-3	GP12-13-6
Borehole (BH) Number				BH12-10		BH12-11		BH12-12	BH12-13	
Site No.				X 4108		X 4108		X 4108	X 4108	
Sampling Depth (m below grade)				0.00 - 0.61	3.05 - 3.66	0.76 - 1.37	2.29 - 2.90	3.81 - 4.42	1.52 - 2.13	3.81 - 4.42
Methane Reading (ppm)				610	920	70	<25	250	430	95
Photoionization Detector Reading (ppm)				2	8	2	2	0	0	2
Sampling Date				27-Jul-12	27-Jul-12	27-Jul-12	27-Jul-12	31-Jul-12	31-Jul-12	31-Jul-12
Parameter	Units	RDL	MOE Table2 Ind/comm/com Standard							
Metals										
Antimony	µg/g	0.8	40	2.6	<0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	1	18	75	2	2	1	1	2	<1
Barium	µg/g	2	670	68	50	336	58	95	66	49
Beryllium	µg/g	0.5	8	0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5
Boron (Hot Water Extractable)	µg/g	0.10	2	0.30	<0.10	0.24	0.21	0.10	0.47	<0.10
Boron	µg/g	5	120	7	6	8	5	6	12	6
Cadmium	µg/g	0.5	1.9	0.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chromium	µg/g	2	160	19	9	72	13	17	4	10
Cobalt	µg/g	0.5	80	16.4	3.4	15.2	3.8	6.3	1.1	3.9
Copper	µg/g	1	230	32	8	31	10	16	14	12
Lead	µg/g	1	120	152	4	10	4	3	1	2
Molybdenum	µg/g	0.5	40	1.8	<0.5	<0.5	<0.5	<0.5	0.8	<0.5
Nickel	µg/g	1	270	28	4	34	7	11	3	7
Selenium	µg/g	0.4	5.5	0.7	<0.4	<0.4	<0.4	<0.4	0.7	<0.4
Silver	µg/g	0.2	40	0.7	<0.2	0.3	<0.2	<0.2	<0.2	<0.2
Thallium	µg/g	0.4	3.3	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	0.5	33	<0.5	<0.5	0.5	<0.5	<0.5	<0.5	<0.5
Vanadium	µg/g	1	86	31	15	67	19	33	10	23
Zinc	µg/g	5	340	121	21	81	24	31	23	20
Chromium, Hexavalent	µg/g	0.2	8	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Cyanide, Free	µg/g	0.040	0.051	<0.040	<0.040	<0.040	<0.040	<0.040	0.329	<0.040
Mercury	µg/g	0.10	3.9	0.15	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Inorganics										
Electrical Conductivity (2:1)	mS/cm	0.005	1.4	0.497	0.093	0.155	0.153	0.178	0.109	0.124
Sodium Adsorption Ratio (2:1)	NA	NA	12	4.55	0.135	0.264	0.381	1.21	0.414	0.673
pH, 2:1 CaCl2 Extraction	pH Units	NA	6.5 - 8.5	7.38	7.69	7.03	7.82	7.20	6.05	7.37

- Notes:
- 1. Methane Reading - measured in ppm (parts per million by volume)
 - 2.Photoionization Detector Reading - measured in ppm (parts per million by volume), calibrated to isobutylene
 - 3. µg/g = Microgram per Gram
 - 4. mS/cm = milliSiemen per centimeter
 - 5. RDL = Laboratory Reportable Detection Limit
 - 6. na = not applicable
 - 7. Table 2 Standard = Ministry of Environment (MOE) "Soil, Groundwater, and Sediment Standards, Part XV.1 Environment Protection Act, April 15, 2011 " full depth generic site condition standards for industrial/commercial/community land use, potable groundwater condition, coarse textured soil
 - 8. Bold type and shaded indicates an exceedance of the MOE Table 2 site condition standard

Table 4
Soil Analytical Results
VOC
Historical Landfill Sites - City of Orillia

Sample I.D.				MW12-10-1	MW12-10-5	GP12-11-2	GP12-11-4	MW12-12-6	GP12-13-3	GP12-13-6
Borehole (BH) Number				BH12-10		BH12-11		BH12-12	BH12-13	
Site No.				X 4108		X 4108		X 4108	X 4108	
Sampling Depth (m below grade)				0.0-0.61	3.05 - 3.66	0.76 - 1.37	2.29 - 2.90	3.81 - 4.42	1.52 - 2.13	3.81 - 4.42
Organic Vapour Meter Reading (ppm)				610	920	70	<25	250	430	95
Photoionization Detector Reading (ppm)				2	8	2	2	0	0	2
Sampling Date				27-Jul-12	27-Jul-12	27-Jul-12	27-Jul-12	31-Jul-12	31-Jul-12	31-Jul-12
Parameter	Units	RDL	MOE Table2 Ind/comm/com Standard							
VOCs										
Acetone	ug/g	0.50	16	-	<0.50	<0.50	<0.50	<0.50	<2.50	<0.50
Benzene	ug/g	0.02	0.32	-	<0.02	<0.02	<0.02	<0.02	<0.10	<0.02
Bromodichloromethane	ug/g	0.05	1.5	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Bromoform	ug/g	0.05	0.61	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Bromomethane	ug/g	0.05	0.05	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Carbon Tetrachloride	ug/g	0.05	0.21	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Chlorobenzene	ug/g	0.05	2.4	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Chloroform	ug/g	0.04	0.47	-	<0.04	<0.04	<0.04	<0.04	<0.20	<0.04
Dibromochloromethane	ug/g	0.05	2.3	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
1,2-Dichlorobenzene	ug/g	0.05	1.2	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
1,3-Dichlorobenzene	ug/g	0.05	9.6	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
1,4-Dichlorobenzene	ug/g	0.05	0.2	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
1,1-Dichloroethane	ug/g	0.02	0.47	-	<0.02	<0.02	<0.02	<0.02	<0.10	<0.02
1,2-Dichloroethane	ug/g	0.03	0.05	-	<0.03	<0.03	<0.03	<0.03	<0.15	<0.03
1,1-Dichloroethylene	ug/g	0.05	0.064	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Cis- 1,2-Dichloroethylene	ug/g	0.02	1.9	-	<0.02	<0.02	<0.02	<0.02	<0.10	<0.02
Trans- 1,2-Dichloroethylene	ug/g	0.05	1.3	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Dichlorodifluoromethane	ug/g	0.05	16	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
1,2-Dichloropropane	ug/g	0.03	0.16	-	<0.03	<0.03	<0.03	<0.03	<0.15	<0.03
(CIS+TRANS)-1,3-Dichloropropene	ug/g	0.04	0.059	-	<0.04	<0.04	<0.04	<0.04	<0.20	<0.04
Ethylbenzene	ug/g	0.05	1.1	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Ethylene Dibromide	ug/g	0.04	0.05	-	<0.04	<0.04	<0.04	<0.04	<0.20	<0.04
n-Hexane	ug/g	0.05	46	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Methylene Chloride	ug/g	0.05	1.6	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Methyl Ethyl Ketone	ug/g	0.50	70	-	<0.50	<0.50	<0.50	<0.50	<2.50	<0.50
Methyl Isobutyl Ketone	ug/g	0.50	31	-	<0.50	<0.50	<0.50	<0.50	<2.50	<0.50
Methyl tert-butyl Ether	ug/g	0.05	1.6	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Styrene	ug/g	0.05	34	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Toluene	ug/g	0.05	6.4	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.04	0.087	-	<0.04	<0.04	<0.04	<0.04	<0.20	<0.04
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Tetrachloroethylene	ug/g	0.05	1.9	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
1,1,1-Trichloroethane	ug/g	0.05	6.1	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
1,1,2-Trichloroethane	ug/g	0.04	0.05	-	<0.04	<0.04	<0.04	<0.04	<0.20	<0.04
Trichloroethylene	ug/g	0.03	0.55	-	<0.03	<0.03	<0.03	<0.03	<0.15	<0.03
Trichlorofluoromethane	ug/g	0.05	4	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Vinyl Chloride	ug/g	0.02	0.032	-	<0.02	<0.02	<0.02	<0.02	<0.10	<0.02
m & p-Xylene	ug/g	0.05	NV	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
o-Xylene	ug/g	0.05	NV	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05
Xylene Mixture	ug/g	0.05	26	-	<0.05	<0.05	<0.05	<0.05	<0.25	<0.05

Notes:

1. Methane Reading - measured in ppm (parts per million by volume)

2.Photoionization Detector Reading - measured in ppm (parts per million by volume), calibrated to isobutylene

3. µg/g = Microgram per Gram

4. RDL = Laboratory Reportable Detection Limit

5. NV = no value

6. Table 2 Standard = Ministry of Environment (MOE) "Soil, Groundwater, and Sediment Standards, Part XV.1 Environment Protection Act, April 15, 2011 " full depth generic site condition standards for industrial/commercial/community land use, potable groundwater condition, coarse textured soil

7. Bold type and shaded indicates an exceedance of the MOE Table 2 site condition standard

Table 5
Soil Analytical Results
Polynuclear Aromatic Hydrocarbons
Historical Landfill Sites - City of Orillia

Sample I.D.				MW12-12-6	GP12-13-3	GP12-13-6
Borehole (BH) Number				BH12-12	BH12-13	
Site No.				X 4109	X 4108	
Sampling Depth (m below grade)				3.81 - 4.42	1.52 - 2.13	3.81 - 4.42
Organic Vapour Meter Reading (ppm)				250	430	95
Photoionization Detector Reading (ppm)				0	0	2
				31-Jul-12	31-Jul-12	31-Jul-12
Parameter	Units	RDL	MOE Table2 Ind/comm/com Standard			
Acenaphthene	µg/g	0.05	21	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.05	0.15	<0.05	<0.05	<0.05
Anthracene	µg/g	0.05	0.67	<0.05	0.05	<0.05
Benz(a)anthracene	µg/g	0.05	0.96	<0.05	0.65	<0.05
Benzo(a)pyrene	µg/g	0.05	0.3	<0.05	0.48	<0.05
Benzo(b)fluoranthene	µg/g	0.05	0.96	<0.05	0.35	<0.05
Benzo(g,h,i)perylene	µg/g	0.05	9.6	<0.05	0.10	<0.05
Benzo(k)fluoranthene	µg/g	0.05	0.96	<0.05	0.07	<0.05
Chrysene	µg/g	0.05	9.6	<0.05	2.0	<0.05
Dibenz(a,h)anthracene	µg/g	0.05	0.1	<0.05	0.09	<0.05
Fluoranthene	µg/g	0.05	9.6	<0.05	0.54	<0.05
Fluorene	µg/g	0.05	9.6	<0.05	0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.05	0.76	<0.05	0.09	<0.05
2-and 1-methyl Naphthalene	µg/g	0.05	30	<0.05	0.06	<0.05
Naphthalene	µg/g	0.05	9.6	<0.05	<0.05	<0.05
Phenanthrene	µg/g	0.05	12	<0.05	0.12	<0.05
Pyrene	µg/g	0.05	96	<0.05	0.43	<0.05

Notes:

1. Methane Reading - measured in ppm (parts per million by volume)
2. Photoionization Detector Reading - measured in ppm (parts per million by volume), calibrated to isobutylene
3. µg/g = Microgram per Gram
4. RDL = Laboratory Reportable Detection Limit
5. Table 2 Standard = Ministry of Environment (MOE) "Soil, Groundwater, and Sediment Standards, Part XV.1 Environment Protection Act, April 15, 2011 " full depth generic site condition standards for industrial/community land use, potable groundwater condition, coarse textured soil
6. Bold type and shaded indicates an exceedance of the MOE Table 2 site condition standard

Table 6
Groundwater Analytical Results
Metals and Inorganics
Historical Landfill Sites - City of Orillia

Monitoring Well Location					MW12-10		MW12-12	
Sampling Date					27-Aug-12	11-Sep-12	27-Aug-12	11-Sep-12
Parameter	Units	RDL	ODWS	MOE Table 2 Standards				
Dissolved Metals								
Barium	µg/L	2.0	1000	1000	170	156	199	200
Beryllium	µg/L	0.5	NS	4.0	<0.5	<0.5	<0.5	<0.5
Boron	µg/L	10.0	5000	5000	43.3	52.4	55.8	70.3
Cadmium	µg/L	0.2	5	2.7	<0.2	<0.2	<0.2	<0.2
Chromium (Total Dissolved)	µg/L	2.0	50	50	<2.0	2.4	<2.0	3.5
Cobalt	µg/L	0.5	NS	3.8	2.8	2.3	19.3	25.1
Copper	µg/L	1.0	1000 (AO)	87	1.1	1.8	<1.0	1.3
Iron	mg/L	0.010	0.3 (AO)	NV	-	<0.010	-	5.58
Lead	µg/L	0.5	10	10	<0.5	<0.5	<0.5	<0.5
Manganese	mg/L	0.002	0.05 (AO)	NV	-	0.293	-	1.48
Molybdenum	µg/L	0.5	NS	70	1.3	1.4	2.5	1.9
Nickel	µg/L	1.0	NS	100	5.6	<1.0	10.7	5.7
Silver	µg/L	0.2	NS	1.5	<0.2	<0.2	<0.2	<0.2
Thallium	µg/L	0.3	NS	2	<0.3	<0.3	<0.3	<0.3
Uranium	µg/L	0.5	20	20	3.8	3.5	2.8	2.8
Vanadium	µg/L	0.4	NS	6.2	0.4	0.8	1.0	1.9
Zinc	µg/L	5.0	5000 (AO)	1100	<5.0	11.0	<5.0	5.4
Inorganics								
Electrical Conductivity	uS/cm	2	NS	NV	800	-	1070	-
pH	pH Units	NA	6.5-8.5 (OG)	6.5-8.5	7.93	8.02	7.91	8.03
Sodium Adsorption Ratio	-	-	NS	-	0.164	-	1.74	-
Cyanide	µg/L	2	200	66	<2	-	<2	-
Mercury	µg/L	0.02	1	0.29	<0.02	-	<0.02	-
Chloride	mg/L	0.1	250 (AO)	790	15.9	27.5	37.2	40.4
Sulphate	mg/L	0.1	500 (AO)	NV	21.9	24.2	19.8	18.1
Ammonia as N	mg/L	0.02	NS	NV	1.33	0.51	3.99	1.47
Calcium	mg/L	0.05	NS	NV	149	149	144	165
Magnesium	mg/L	0.05	NS	NV	26.8	25.9	20.9	23.3
Chromium VI	µg/L	5	NS	25	<5	-	<5	-
Sodium	µg/L	0.5	200000 (AO)	490	8.32	8.80	84.7	92.8
Potassium	mg/L	0.05	NS	NV	2.68	2.98	3.69	3.52
Nitrate as N	mg/L	0.05	10.0	NV	<0.05	<0.10	<0.05	<0.10
Nitrite as N	mg/L	0.05	1.0	NV	<0.05	<0.10	<0.05	<0.10
Alkalinity (as CaCO3)	mg/L	5	30-500 (OG)	NV	416	420	541	569
Total Hardness (as CaCO3)	mg/L	0.5	80-100 (OG)	NV	-	479	-	508

- Notes:
- 1. NS = No standard
 - 2. NV = No value
 - 3. NO = No objective
 - 4. µg/L = Microgram per Litre
 - 5. mg/L = Milligrams per Litre
 - 6. µS/cm = MicroSiemens per centimeter
 - 7. - = Not analysed
 - 8. RDL = Laboratory Reportable Detection Limit
 - 9. ODWS = Ontario Drinking Water Standards, June, 2006
 - 10. PWQO = MOE Provincial Water Quality Objectives, July, 1994
 - 11. Table 2 Standard = Ministry of Environment (MOE) "Soil, Groundwater, and Sediment Standards, Part XV.1 Environment Protection Act, April 15, 2011 " full depth generic site condition standards for all types of land uses, potable groundwater condition, coarse textured soil
 - 12. Bold type and outlined indicates an exceedance of the ODWS
 - 13. Italicized indicates an exceedance of the PWQO
 - 14. Bold type and shaded indicates an exceedance of the MOE Table 2 site condition standard

Table 7
Groundwater Analytical Results
VOC and Petroleum Hydrocarbons
Historical Landfill Sites - City of Orillia

Monitoring Well Location						MW12-10		MW12-12		Field Blank		Trip Blank	
Site No.						X 4108		X 4108		NA		NA	
Sampling Date						27-Aug-12	11-Sep-12	27-Aug-12	11-Sep-12	27-Aug-12	11-Sep-12	Aug-12	Sep-12
Parameter	Units	RDL	ODWS	PWQO	MOE Table 2 Standard								
VOC													
Acetone	µg/L	1.0	NS	NO	2700	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzene	µg/L	0.20	5	100	5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	0.20	NS	200	16	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Bromoform	µg/L	0.10	NS	60	25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Bromomethane	µg/L	0.20	NS	0.9	0.89	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Carbon Tetrachloride	µg/L	0.20	5	NO	0.79	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chlorobenzene	µg/L	0.10	NS	15	30	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Chloroform	µg/L	0.20	NS	NO	2.4	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibromochloromethane	µg/L	0.10	NS	NO	25	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	0.10	200	2.5	3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,3-Dichlorobenzene	µg/L	0.10	NS	2.5	59	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	0.10	5	4	1	0.64	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Dichlorodifluoromethane	µg/L	0.20	NS	NO	590	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L	0.30	NS	200	5	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,2-Dichloroethane	µg/L	0.20	5	100	1.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1-Dichloroethylene	µg/L	0.30	14	40	1.6	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
cis- 1,2-Dichloroethylene	µg/L	0.20	NS	200	1.6	<0.20	<0.20	3.7	4.3	<0.20	<0.20	<0.20	<0.20
trans- 1,2-Dichloroethylene	µg/L	0.20	NS	200	1.6	<0.20	<0.20	0.38	0.48	<0.20	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	0.20	NS	0.7	5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,3-Dichloropropene	µg/L	0.30	NS	7	0.5	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Ethylbenzene	µg/L	0.10	2.4 (AO)	8	2.4	0.12	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Ethylene Dibromide	µg/L	0.10	NS	5	0.2	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
n-Hexane	µg/L	0.20	NS	NO	51	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Methylene Chloride	µg/L	0.30	NS	100	50	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
Methyl Isobutyl Ketone	µg/L	1.0	NS	NO	640	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl Ethyl Ketone	µg/L	1.0	NS	NO	1800	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-butyl ether	µg/L	0.20	NS	200	15	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Styrene	µg/L	0.10	NS	4	5.4	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,1,2-Tetrachloroethane	µg/L	0.10	NS	20	1.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	0.10	NS	70	1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Tetrachloroethylene	µg/L	0.20	30	50	1.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Toluene	µg/L	0.20	24 (AO)	0.8	24	0.41	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	0.30	NS	10	200	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30	<0.30
1,1,2-Trichloroethane	µg/L	0.20	NS	800	4.7	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichloroethylene	µg/L	0.20	5	20	1.6	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Vinyl Chloride	µg/L	0.17	2	600	0.5	<0.17	<0.17	6.6	7.1	<0.17	<0.17	<0.17	<0.17
m & p-Xylene	µg/L	0.20	NS	2	NV	0.28	0.23	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
o-Xylene	µg/L	0.10	NS	40	NV	0.12	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Xylene Mixture	µg/L	0.20	300 (AO)	NO	300	0.40	0.33	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	0.40	NS	NO	150	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Petroleum Hydrocarbons													
C6 - C10 (PHC F1 minus BTEX)	µg/L	25	NS	NO	750	<25	<25	<25	<25	-	<25	-	-
C10 to C16 (PHC F2 minus Naphthalene)***	µg/L	100	NS	NO	150	<100	<100	<100	<100	-	<100	-	-
C16 - C34 (PHC F3 minus PAHs)***	µg/L	100	NS	NO	500	<100	<100	<100	<100	-	<100	-	-
C34 - C50 (PHC F4)***	µg/L	100	NS	NO	500	<100	<100	<100	<100	-	<100	-	-

Notes:

1. NA = not applicable

2. NS = No standard

3. NV = No value

4. NO = No objective

5. µg/L = Microgram per Litre

6. - = not analysed

7. RDL = Laboratory Reportable Detection Limit

8. ODWS = Ontario Drinking Water Standards, June, 2006

9. PWQO = MOE Provincial Water Quality Objectives, July, 1994

10. Table 2 Standard = Ministry of Environment (MOE) "Soil, Groundwater, and Sediment Standards, Part XV.1 Environment Protection Act, April 15, 2011 " full depth generic site condition standards for all types of land uses, potable groundwater condition, coarse textured soil

11. Bold type and outlined indicates an exceedance of the ODWS

12. Italicized indicates an exceedance of the PWQO

13. Bold type and shaded indicates an exceedance of the MOE Table 2 site condition standard

Table 8
Groundwater Analytical Results
Polynuclear Aromatic Hydrocarbons
Historical Landfill Sites - City of Orillia

Monitoring Well Location					MW12-10	MW12-10	MW12-12	MW12-12
					X 4108		X 4108	
Sampling Date					27-Aug-12	11-Sep-12	27-Aug-12	11-Sep-12
Parameter	Units	RDL	ODWS	MOE Table 2 Standards				
Polycyclic Aromatic Hydrocarbons								
Naphthalene	µg/L	0.20	NS	11	<0.20	<0.20	0.52	<0.20
Acenaphthylene	µg/L	0.20	NS	1	<0.20	<0.20	<0.20	<0.20
Acenaphthene	µg/L	0.20	NS	4.1	<0.20	<0.20	<0.20	<0.20
Fluorene	µg/L	0.20	NS	120	0.33	<0.20	0.45	0.20
Phenanthrene	µg/L	0.10	NS	1	0.19	<0.10	0.89	0.33
Anthracene	µg/L	0.10	NS	2.4	<0.10	<0.10	0.15	<0.10
Fluoranthene	µg/L	0.20	NS	0.41	<0.20	<0.20	<0.20	<0.20
Pyrene	µg/L	0.20	NS	4.1	<0.20	<0.20	<0.20	<0.20
Benz(a)anthracene	µg/L	0.20	NS	1.0	<0.20	<0.20	<0.20	<0.20
Chrysene	µg/L	0.10	NS	0.1	<0.10	<0.10	<0.10	<0.10
Benzo(b)fluoranthene	µg/L	0.10	NS	0.1	<0.10	<0.10	<0.10	<0.10
Benzo(k)fluoranthene	µg/L	0.10	NS	0.1	<0.10	<0.10	<0.10	<0.10
Benzo(a)pyrene	µg/L	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.20	NS	0.2	<0.20	<0.20	<0.20	<0.20
Dibenz(a,h)anthracene	µg/L	0.20	NS	0.2	<0.20	<0.20	<0.20	<0.20
Benzo(g,h,i)perylene	µg/L	0.20	NS	0.2	<0.20	<0.20	<0.20	<0.20
2-and 1-methyl Naphthalene	µg/L	0.20	NS	3.2	1.3	<0.20	2.9	0.84

Notes:

1. NS = No standard
2. NO = No objective
3. µg/L = Microgram per Litre
4. RDL = Laboratory Reportable Detection Limit
5. ODWS = Ontario Drinking Water Standards, June, 2006
6. PWQO = MOE Provincial Water Quality Objectives, July, 1994
7. Table 2 Standard = Ministry of Environment (MOE) "Soil, Groundwater, and Sediment Standards, Part XV.1 Environment Protection Act, April 15, 2011 " full depth generic site condition standards for all types of land uses, potable groundwater condition, coarse textured soil
8. Bold type and outlined indicates an exceedance of the ODWS
9. Italicized indicates an exceedance of the PWQO
10. Bold type and shaded indicates an exceedance of the MOE Table 2 site condition standard



APPENDIX A

Aerial Photographs

PLOT DATE: August 23, 2013
 FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAAIR1945.dwg



LEGEND:

— Site Boundary

NOTE:

1. Projection UTM NAD83 Zone 17

0 50 100 200 400
 SCALE 1:10000 metres



SCALE AS SHOWN
 DATE 20 DEC 2012
 DESIGN
 CAD S BOWERMAN

TITLE

AIR PHOTO 1945

FILE No. 1111700079EAAIR1945.dwg

CHECK CLG

PROJECT No. 11-1170-0079 REV.

REVIEW

**HISTORICAL LANDFILL SITES
 CITY OF ORILLIA**

FIGURE

A-1

PLOT DATE: August 23, 2013
 FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAAIR1965.dwg



LEGEND:

— Site Boundary

NOTE:

1. Projection UTM NAD83 Zone 17

0 50 100 200 400
 SCALE 1:10000 metres



SCALE AS SHOWN
 DATE 20 DEC 2012
 DESIGN
 CAD S BOWERMAN

TITLE

AIR PHOTO 1965

FILE No. 1111700079EAAIR1965.dwg

CHECK CLG

PROJECT No. 11-1170-0079 REV.

REVIEW

**HISTORICAL LANDFILL SITES
 CITY OF ORILLIA**

FIGURE

A-2

PLOT DATE: August 23, 2013
 FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAAIR1967.dwg



LEGEND:

—— Site Boundary

NOTE:

1. Projection UTM NAD83 Zone 17

0 50 100 200 400
 SCALE 1:10000 metres



SCALE AS SHOWN
 DATE 20 DEC 2012
 DESIGN
 CAD S BOWERMAN

TITLE

AIR PHOTO 1967

FILE No. 1111700079EAAIR1967.dwg

CHECK CLG

**HISTORICAL LANDFILL SITES
 CITY OF ORILLIA**

FIGURE

A-3

PROJECT No. 11-1170-0079

REV.

REVIEW

PLOT DATE: August 23, 2013
 FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAAIR1968.dwg



LEGEND:

— Site Boundary

NOTE:

1. Projection UTM NAD83 Zone 17

0 50 100 200 400
 SCALE 1:10000 metres



SCALE AS SHOWN
 DATE 20 DEC 2012
 DESIGN
 CAD S BOWERMAN

TITLE

AIR PHOTO 1968

FILE No. 1111700079EAAIR1968.dwg

CHECK CLG

**HISTORICAL LANDFILL SITES
 CITY OF ORILLIA**

FIGURE

A-4

PROJECT No. 11-1170-0079

REV.

REVIEW

PLOT DATE: August 23, 2013
FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAAIR1976.dwg



LEGEND:

— Site Boundary

NOTE:

1. Projection UTM NAD83 Zone 17

0 50 100 200 400
SCALE 1:10000 metres



SCALE AS SHOWN
DATE 20 DEC 2012
DESIGN
CAD S BOWERMAN

TITLE

AIR PHOTO 1976

FILE No. 1111700079EAAIR1976.dwg

CHECK NLP

**HISTORICAL LANDFILL SITES
CITY OF ORILLIA**

FIGURE

A-5

PROJECT No. 11-1170-0079

REV.

REVIEW

PLOT DATE: August 23, 2013
 FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAAIR1984.dwg



LEGEND:

— Site Boundary

NOTE:

1. Projection UTM NAD83 Zone 17

0 50 100 200 400
 SCALE 1:10000 metres



SCALE AS SHOWN
 DATE 20 DEC 2012
 DESIGN
 CAD S BOWERMAN

TITLE

AIR PHOTO 1984

FILE No. 1111700079EAAIR1984.dwg

CHECK CLG

PROJECT No. 11-1170-0079 REV.

REVIEW

**HISTORICAL LANDFILL SITES
 CITY OF ORILLIA**

FIGURE

A-6

PLOT DATE: August 23, 2013
FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAAIR2002.dwg



LEGEND:

— Site Boundary

NOTE:

1. Projection UTM NAD83 Zone 17

0 50 100 200 400
SCALE 1:10000 metres



SCALE AS SHOWN
DATE 20 DEC 2012
DESIGN
CAD S BOWERMAN

TITLE

AIR PHOTO 2002

FILE No. 1111700079EAAIR2002.dwg

CHECK CLG

PROJECT No. 11-1170-0079

REV.

REVIEW

**HISTORICAL LANDFILL SITES
CITY OF ORILLIA**

FIGURE

A-7



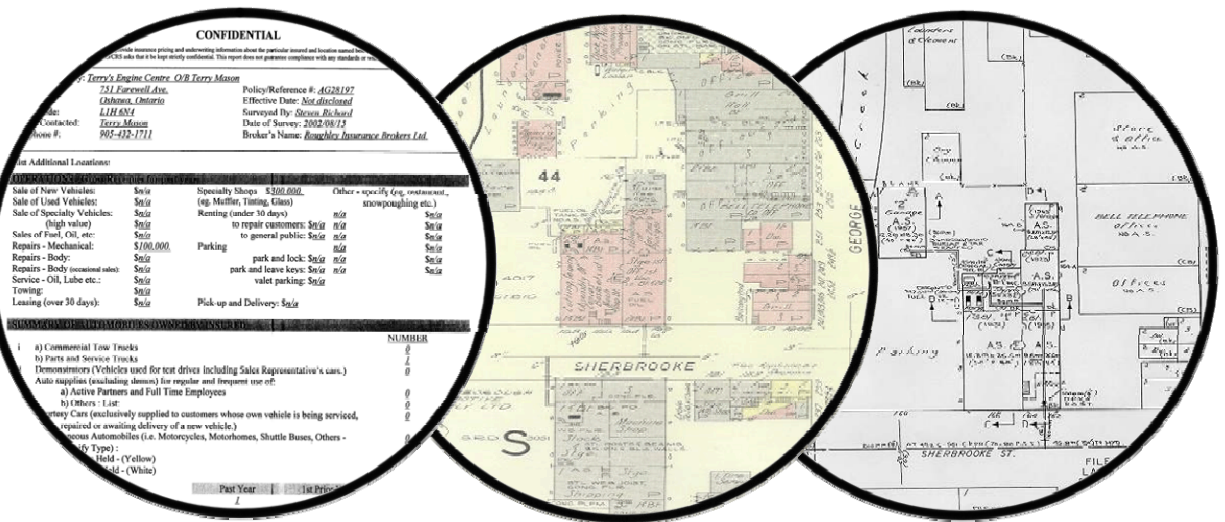
APPENDIX B

RMS Report

HEIRS™



Historical
Environmental
Information
Reporting
System



RISK MANAGEMENT SERVICES
An **SCM** Company

150 Commerce Valley Drive W
Thornhill, ON L3T 7Z3
Tel: (905) 882-6300 ext 5410
www.scm-rms.ca

Report Completed By:
Vanessa Ode

Site Address:

1, 15 & 25 Industrial St
Orillia, ON

Project No:

11-1170-0079

Requested by:

T. Zunti
Golder Associates

Date Completed:

April 4, 2012

RMS Environmental Services
Historical Environmental Information Reporting System (HEIRS™)

April 4, 2012

Tamara Zunti
Golder Associates
100 Scotia Ct
Whitby, ON, L1N 8Y6

Dear Tamara ,

Re: **Your Site Address: 1, 15 & 25 Industrial St, Orillia, ON**
Your Reference No.: 11-1170-0079

As requested, we have searched our records regarding the above site and the following information was found:

Information	Date(s)	Comment	Cost
Research Fee per street address		\$50.00 flat fee per street address (x3)	\$150.00
Fire Insurance Plans	NRF	\$100.00 for each Fire Insurance Plan.	
Reports: All Risk/Multi-Risk Inspection COPE Other	1987, 1982 1987	\$55.00 for each Inspection/Survey Report.	\$165.00
Site Plan(s)	1987, 1982	\$70.00 for each Site Plan.	\$140.00
Two (2) or Four (4) Day Rush Fee			
Min. order fee of \$155 applies			Total
			\$455.00

NRF: No Records Found. NO: Not Ordered.

The cost is \$455.00 plus courier charges (if applicable) and HST. See Terms and Conditions on page 2 of this letter.

Thank you for employing the services of SCM Risk Management Services Inc.

Vanessa Ode
RMS Environmental Services



150 Commerce Valley Drive W
Markham, Ontario
L3T 7Z3

T: 905.882.6300
Toll Free: 1.800.268.8080
F: 905.695.6543

An **SCM** Company
www.scm-rms.ca

RMS Environmental Services

Historical Environmental Information Reporting System (HEIRS™)

Terms and Conditions

Report

The documents (hereinafter referred to as the "Documents") to be released as part of the report (hereinafter referred to as the "Report") to be delivered to the purchaser as set out above are documents in RMS's records relating to the described property (hereinafter referred to as the "Property"). RMS makes no representations or warranties respecting the Documents whatsoever, including, without limitation, with respect to the completeness, accuracy or usefulness of the Documents, and does not represent or warrant that these are the only plans and reports prepared in association with the Property. The Documents are current as of the date(s) indicated on them. Interpretation of the Documents, if any, is by inference based upon the information which is apparent and obvious on the face of the Documents only. RMS does not represent, warrant or guarantee that interpretations other than those referred to do not exist from other sources. The Report will be prepared for use by the purchaser of the services as shown above hereof only.

Disclaimer

RMS disclaims responsibility for any losses or damages of any kind whatsoever, whether consequential or other, however caused, incurred or suffered, arising directly or indirectly as a result of the services (which services include, but are not limited to, the preparation of the Report provided hereunder), including but not limited to, any losses or damages arising directly or indirectly from any breach of contract, fundamental or otherwise, from reliance on RMS Reports or from any tortious acts or omissions of RMS's agents, employees or representatives.

Entire Agreement

The parties hereto acknowledge and agree to be bound by the terms and conditions hereof. The request form constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, negotiations and discussions, whether oral or written, and there are no representations or warranties, or other agreements between the parties in connection with the subject matter hereof except as specifically set forth herein. No supplement, modification, waiver, or termination of the request shall be binding, unless confirmed in writing by the parties hereto.

Governing Document

In the event of any conflicts or inconsistencies between the provisions hereof and the Reports, the rights and obligations of the parties shall be deemed to be governed by the request form, which shall be the paramount document.

Law

This agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

INSURERS' ADVISORY ORGANIZATION
Ontario

CONFIDENTIAL

INSPECTION REPORT

File No. 03133
Reference: 089426

Sheet Key Block
298

NAME OF RISK: Embury Company, Plant 2,
Anodizing Division
Attn: Mr. Embury

LOCATION: 1 Industrial Street,
Orillia, Ontario

SURVEYED BY: Gerry Sams

SURVEY DATE: September 23, 1987

This document is owned by Risk Management Services Inc. and is subject to copyright protection. Please see the purchase order relating to the release of this document for complete terms and conditions.

IAO reports, prepared in compliance with commonly accepted risk control standards existing at the time services are rendered, are developed from an inspection of the premises and/or from data supplied by or on behalf of the Purchaser. IAO does not purport to list all hazards. While changes and modifications referred to in the reports are designed to upgrade protection and loss prevention of the premises, IAO assumes no responsibility for management and control of these activities. IAO will not be responsible to the Purchaser for any loss or damages, whether consequential or other, however caused, incurred or suffered, as a result of the service being provided.

GENERAL COMMENTS

OCCUPANCY: Aluminum finishing

Grading of risk in class: Average

CONSTRUCTION

FIRE DIVISIONS: Single Fire Division

Additions: 1950's Additions

Repair: Good

Basement: Bst

INTERIOR FINISH - Walls: 27.9cm (11") concrete block

(e) Floors: Concrete

98% 0% 2%

INTERIOR FINISH - Ceilings: 98% 0% 2%

(k) Combustible Concealed Spaces: Minor

Non-Combustible Concealed Spaces: Minor

(l) Smoke and Heat Venting: Adequate

COMBUSTIBLE CONCEALED SPACES: (f) Roof: 74% steel deck; 17% plank on steel;
9% wood joist

(g) Supporting Steel: Inadequately protected

(h) Total Grade Floor Area: 2,739.1 sq. m (29,484 sq. ft.)

(i) Vertical openings: None

(j) Interior Finish:

Open Non-Combustible Combustible

HAZARDS

COMMON HAZARD:

Heating: Heat is provided by electric baseboards in the office and by the gas process boiler. See "Special Hazards" below.

Air-Conditioning: None

Electrical: Wiring is protected by automatic circuit breakers.

SPECIAL HAZARDS: Safe

(i) The "Cleaver Brooks" Underwriters' Laboratories of Canada labelled gas process boiler is located within a masonry room in the northeast corner of the building. The room is constructed of 150mm (6") concrete block walls having wall openings protected by a metal panel door and by a "Warnock Herssy" 1 1/2 hour rated fire door, installed on an Underwriters' Laboratories of Canada 1 1/2 hour door frame. This door is not self-closing (Recommendation made). The ceiling is asbestos sheets on wood framework.

The boiler is equipped with safety shut-off devices. The boiler is vented by a metal stack that pierces the north wall of the building.

(ii) The process line is steam heated from the boiler and current is generated from a 1928 generator producing 4,000 amp D.C. and up to 50 volts maximum, with a 25 volt working voltage.

(iii) Two 15,911 L (3,500 gallon) tanks containing a caustic cleaner and

sulphuric acid are installed in a concrete floor pit 1.5m (5') in depth, 3m x 6.1m (10' x 20') and separated from each other by a concrete partition wall. The receiving pits have been approved by Environment Canada.

RADIOACTIVE MATERIAL: None

HIGH PILING: None

HOUSEKEEPING: Safe

HAZARDOUS MATERIAL: None

EXPOSURES:

North	Protection Required: N	Protection Provided: N
	None	
South	Protection Required: N	Protection Provided: N
	None	
East	Protection Required: N	Protection Provided: N
	None	
West	Protection Required: N	Protection Provided: N
	None	

ACTIVITY: Quiet 16 - 24 Hrs/Day 5 Days/Wk

SMOKING RESTRICTED: No

ELECTRONIC DATA PROCESSING: No

PROCESS DESCRIPTION: Twelve hands are employed anodizing coils of aluminum on a continuous line. Coils of aluminum are decoiled, degreased in caustic, etched, desmut, anodized, dyed and sealed in ionized water, then recoiled. A second line is set up for clear anodizing. A propane lift truck is used for stock transfers. The maintenance shop contains a drill, band saw, electric arc welder, oxy-acetylene unit and a grinder.

MAINTENANCE WELDING: Yes Permit System used No

PROTECTION

SPRINKLER PROTECTION:

- (i) 0% Area Sprinklered
- (b) Other

OTHER PROTECTION:

Extinguishers: Standard

Standpipe and Hose: None

Watchman Service: None

Special Equipment: None

Outside

OUTSIDE PROTECTION:

Public Hydrants: Standard

The standard public fire hydrant protection consists of two hydrants on 150mm (6") water main located within 30.5m (100') and 106.7m (350') of the building. A third hydrant is located on Atherley Road 64m (210') distance from the building on a 200mm (8") water main but located across the tracks.

Private Hydrants: None

Public Fire Department: Paid & Volunteer Distance to Fire Hall
1.4 km (0.9 miles)

Private Fire Department: No

Accessibility: To Property: Fair

Into Building: Good

Access to the risk is hampered by railway crossings
and narrow access roads.

EXTENDED COVERAGE

WINDSTORM - No

LIGHTNING (FEATURES) - No

EXPLOSION - No

(d) Sprinkler Leakage: Not applicable

RIOT, VANDALISM, MALICIOUS ACTS

Access Restricted: No

Guard Supervised: No Yards Lit

Remote from Populated Areas: No

IMPACT HAZARDS:

BUSINESS INTERRUPTION

Seasonal: No

Operational: 16 - 24 Hrs/Day 5 Days/Wk.

Interdependency: No

Raw Materials: Domestic

Stock On Hand: 1 month

Stock Replacement Time: 2 days

Computer Programming: No

Single Train Production: Yes - Production is dependent on the process boiler.

Vital Machinery Custom Made: No

Replacement Time: No

Private Power Generation: No

Alternate Power Generation: No - Process water must be treated (i.e. PH adjusted) before being discharged into the sewers.

ADDITIONAL BUSINESS INTERRUPTION DETAILS:

No

UNDESIRABLE FEATURES

PROMINENT:

None

OTHER:

Boiler room door not self-closing.

REPORT DETAILS

2(j) Interior Finish: Walls and ceilings are open except for the office area that has a pulpboard tile ceiling and wood panelled walls.

MANAGEMENT - LOSS PREVENTION PROGRAMMES

COPE (Construction, Occupancy, Protection, Exposure) REPORT

Risk: EMBURY COMPANY LIMITED
1 INDUSTRIAL STREET
ORILLIA, ONTARIO
?

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Reference No. 10894264 / Building No. 01

(Surveyed By G. SAMS on 23 SEP 87)

Please note that the information contained in this report was gathered during a physical inspection of the risk by an IAO Loss Control Representative.

If you wish to obtain building or contents rates for this risk, please refer to the Rate Card in the list of products available for this risk. Please call the IAO Help Desk or your local IAO Representative for help in obtaining a rate for this risk, or do it yourself by going to www.iao.ca and using the New X-rate to generate a new rate yourself.

IAO reports, prepared in compliance with commonly accepted risk control standards existing at the time services are rendered, are developed from an inspection of the premises and/or from data supplied by or on behalf of the Purchaser. IAO does not purport to list all hazards. While changes and modifications referred to in the reports are designed to upgrade protection and loss prevention of the premises, IAO assumes no responsibility for management and control of these activities. IAO will not be responsible to the Purchaser for any loss or damages, whether consequential or other, however caused, incurred or suffered, as a result of the service being provided.

----- CODING -----

Industry Code: 359 - MANUFACTURING: Light Products N.O.C.
Construction Code: 2 - Non-Combustible / Masonry Walls
Risk Classification: NS - Non-Sprinklered
Protection Code: 3 - Non-Sprinklered, Fully Protected, Gr 4
Combustibility L2

----- CONSTRUCTION -----

WALLS - MASONRY:
100% HCB 275mm Thick C-2 Type: W-1

COLUMN in WALLS:
33% STEEL C-1

MASONRY and FIRE RESISTIVE FLOOR and ROOFS:
50% GRADE FLOOR CONC Hours: 0.00 Listed? U Type: D-1

NON-COMBUSTIBLE FLOORS and ROOFS:
37% ROOF-CLASS 1 STEEL DECK C-5

FLOORS & ROOFS - COMBUSTIBLE:

13% ROOF-WD PK/WJ

C-2

----- SECONDARY CONSTRUCTION -----

HEIGHT:

Number of Storeys: 1

Basements: N

Combustible Storeys Without Grade Access: 0

AREA:

Grade: 2739 m2 Total: 2739 m2 Effective: 2739 m2

L1, L2 Area 100%

ROOF SURFACE:

100 % APPROVED

COMBUSTIBLE CONCEALED SPACES:

9 % MINOR

COMBUSTIBLE INTERIOR FINISH:

WOOD PANELLING C-1

Prot.: U Flame: *** Unknown Smoke: *** Unknown 2%

BUILDING CONDITION:

GOOD

Type C-.

Year Built: 1950'S Air Conditioning: NIL

Basement: NIL

Elevators: NIL

COMMON HAZARDS: 7211A1 - GAS BOILER
7211B - PERMANENT ELECTRIC

----- PROTECTION -----

MUNICIPAL PROTECTION:

Distance from Hydrants: STANDARD

Congested Area: NO

Distance to Fire Hall: STANDARD

Accessibility: ACROSS TRA

FUS Protection Class: 04

Revised Class: 05

IAO Protection Class: 05

INTERNAL PROTECTION:

MANUAL FIRE FIGHTING EQUIPMENT: Portable Fire Extinguishers
Standpipe and Hose

----- EXPOSURE -----

NONE NOTED:

----- OCCUPANCY - EMBURY CO LTD -----

Industry Code: 359 - MANUFACTURING: Light Products N.O.C.

Occupancy: 6053A - ALUMINUM ANODIZING

Location: 1ST Area: 2739 m2 100.0% of Total

Combustibility Code: L2 - Limited Combustibility

Susceptibility Code: S3 - Moderate Damage

Special Hazard: 7308B2A - PROCESS BOILER

INSURERS' ADVISORY ORGANIZATION
TORONTO

CONFIDENTIAL

INSPECTION REPORT

H Kn Kw L O S W F A (B)

File No: MA 3133 Attach to (1)

Map Checked ☒ Corr. Yes ☐ No ☐Sh. Key Bl. 298 NOR ☒Plan att. ☒ Filed at IAO ☐SPECIAL RISKS ☐

SPRINKLER PROTECTION IN SERVICE

YES ☐ NO ☐ PARTLY ☐MFG. & SPECIAL HAZARDS ☒

DIVISION

Name of Risk: Embury Company, Plant No. 2; Anodizing Division

Location: 1 Industrial Street, Orillia, Ontario

Surveyed by: G. Sams

Date: January 5, 1982

1. OCCUPANCY

(a) Aluminum finishing.

(b) Grading of risk in class - Average ☒ Above ☐ Below ☐

2. CONSTRUCTION

(a) See Multiple Fire Section Sheet ☐Single Fire Division ☒

(b) Built in: 1950's Additions 1973, 1981

Repair: Good ☒ Fair ☐ Poor ☐

4.9 m

(c) Height: Bst. ☐ 1 Sto.(s) (16 Ft.)

(d) Walls: Concrete blocks, 275 mm (11 inch)

(e) Floors: Concrete
74% steel deck; 17% plank on steel;

(f) Roof: 9% wood joist

(g) Supporting Steel None ☐
Adequately Protected - Yes ☐ No ☒(h) Total Grade Floor Area: 2742 m²
(29,484 Sq.Ft.)(i) Vertical openings: None ☒Partially ☐ Unprotected ☐Shut off ☐ Cut off ☐

(j) Interior Finish:

Non
Open Combustible Combustible
Walls: 98 % 2 %Ceil-
ings 98 % 2 %

(k) Combustible Concealed Spaces:

None ☐ Minor ☒ Major ☐

Non-Combustible Concealed Spaces:

None ☐ Minor ☒ Major ☐

(l) Smoke and Heat Venting:

Adequate Yes ☒ No ☐

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3.

HAZARDS

3

FILE NO. MA 3133

None Safe Unsafe

- (a) Common Hazards ☐ ☒ Heating: None ☐ Borrowed ☐
- (b) Special Hazards ☐ ☒ Labelled ☒ Unlabelled ☐
- (c) Radio Active Material ☒ ☐ Gas ☒ Oil ☐ Unit Heaters ☐
- (d) High Piling ☒ ☐ Boiler ☒ Hot Air Furnaces ☐
- (e) Housekeeping ☐ ☒ In Cut-off ☐ In Shut-off ☒
- (f) Hazardous Material ☒ ☐ Open ☐ Room ☒ Other ☒
Electric

Chimneys and Flues:

- (g) Exposures: Standard Yes ☒ No ☐

	None	Light	Moderate	Severe	Yes	Protection Required	Yes	Protection Provided	No
North:	☒	☐	☐	☐	☐	No	☒	Yes	☐
South:	☒	☐	☐	☐	☐	No	☒	Yes	☐
East:	☒	☐	☐	☐	☐	No	☒	Yes	☐
West:	☒	☐	☐	☐	☐	No	☒	Yes	☐

- (h) Activity: Busy ☐ Moderate ☐ Quiet ☒ Hrs/Day ☐ 16 Days/Wk ☐ 5 Silent ☐

- (i) Maintenance Welding Yes ☒ No ☐

Permit System used Yes ☐ No ☒

- (j) Smoking Restricted Yes ☐ No ☒

- (k) Electronic Data Processing Equipment Yes ☐ No ☒

- (l) Process Description:

Nine hands are employed on two eight hour shifts, anodizing coils of aluminum on a continuous line.

Coils of aluminum are decoiled, degreased in caustic, etched, desmut, anodized (10% dyed with cobalt-Anolok 90% clear anodized) and sealed in ionized water, then recoiled. A second line is to be set-up in the immediate future.

A propane lift truck is used for stock transfers.

The maintenance shop contains a drill, band saw, electric arc welder, oxy-acetylene unit and a grinder.

2048-2

PROTECTION

FILE NO. MA 3133

(a) Sprinklers:

- (i) 0% Area Sprinklered % Wet % Dry
- (ii) Date of Sprinklers:%:%
- (iii) Adequate protection against freezing Yes ☐ No ☐
- (iv) Additional sprinklers required Yes ☐ No ☐
- (v) Sprinkler equipment standard Yes ☐ No ☐
- (vi) Alarms: U.L. app. full sup. service ☐ LOCAL ☐ OTHER ☐
- (vii) Water Supplies (a) Overall Grading - Standard ☐ Fair ☐ Poor ☐
- (b) Primary - Municipal ☐ Private ☐
- Standard ☐ Fair ☐ Poor ☐
- (c) Secondary - Required Yes ☐ No ☐
- Standard ☐ Fair ☐ Poor ☐ None ☐
- (viii) Additional System details: Yes ☐ No ☐
- Fire Department Pumper Connection Yes ☐ No ☐

(b) OTHER

- | | Standard | Non-Standard | None |
|--------------------------------------|--|--------------------------|-------------------------------------|
| (i) Extinguishers | ☒ | ☐ | ☐ |
| (ii) Standpipes and Hose | ☐ | ☐ | ☒ |
| (iii) Watchman Service | ☐ | ☐ | ☒ |
| Forced tour system | Yes ☐ No ☐ | | |
| (iv) Special Equipment and Apparatus | ☐ | ☐ | ☐ |

(c) Outside

- (i) Hydrants Public: Standard ☒ Non-Standard ☐ None ☐
- Private: Standard ☐ Non-Standard ☐ None ☒ Tested Yes ☐ No ☐
- (ii) Fire Dept. Public: Paid ☒ & Volunteer ☒ None ☐ Dist. to Fire Hall. (0.9 Miles)
1.4 km
- Private: Yes ☐ No ☒
- (iii) Accessibility -
- | | Good | Fair | Poor |
|--------------|-------------------------------------|-------------------------------------|--------------------------|
| To Property: | ☐ | ☒ | ☐ |
| Into Bldg. | ☒ | ☐ | ☐ |

5.

EXTENDED COVERAGE

5

FILE NO. MA 3133

- (a) Windstorm - Unusual Hazards Yes ☐ No ☒
- (b) Lightning - Unusual Features Yes ☐ No ☒ Properly Grounded Yes ☐ No ☐
- (c) Explosion - Unusual Features Yes ☐ No ☒
- (d) Sprinkler Leakage - Stock - Skidded or Shelved Yes ☐ No ☐
Floors: Drained Yes ☐ No ☐
- (e) Riot, Vandalism, Malicious Acts:
Access restricted Yes ☐ No ☒ Guard Supervised Yes ☐ No ☒ Yards Lit Yes ☐ No ☒
Remote from populated areas Yes ☐ No ☒ Vacant ☐ Silent ☐

6.

BUSINESS INTERRUPTION

(If answer is "Yes" - describe in detail below)

- (a) Seasonal Yes ☐ No ☒ (f) Single Train Production Yes ☒ No ☐
- (b) Operation 16 Hrs/Day 5 Days/Wk. (g) Vital Machinery Custom Made Yes ☐ No ☒
Replacement Time _____
- (c) Interdependency Yes ☐ No ☒
- (d) Raw Materials Mainly Foreign ☐ Domestic ☒
Stock on hand for Undetermined
Stock Replacement Time 2 days
- (e) Computerized Programming Yes ☐ No ☒ (h) Private Power Generation Yes ☐ No ☒
Alternative Power Source Yes ☐ No ☒
- (i) Production Dependent on Pollution Control Equip't Yes ☐ No ☒
- (j) Other Important Features Yes ☐ No ☒
- BUSINESS INTERRUPTION DETAILS:

- 6(f) Production is dependent on the process boiler.
Presently only one production line.

148-4

7.

UNDESIRABLE FEATURES

FILE NO. MA 3133

Prominent: None apparent.

Other: Boiler room door not self-closing.

8.

REPORT DETAILS

2(j) Interior Finish: Walls and ceilings are open except for the office areas that have a pulpboard tile ceiling and wood panelled walls.

3(a) Common Hazards:

(i) Heat is provided by electric baseboards in the office and by the gas process boiler - see 3(b) "Special Hazards" below.

(ii) Wiring is protected by automatic circuit breakers.

3(b) Special Hazards:

(i) The Cleaver Brooks Underwriters' Laboratories of Canada labelled gas process boiler is located within a masonry room in the northeast corner of the building. The room is constructed of 150 mm (6 inch) concrete block walls having wall openings protected by a metal panel door and by a Warnock-Hersey 1 1/2 hour rated fire door, installed on an Underwriters' Laboratories of Canada 1 1/2 hour door frame. This door is not self-closing (Recommendation made). The ceiling is asbestos sheets on wood frame work.

The boiler is equipped with safety shut-off devices and "cuts-out" at 96.6 kPa (14 p.s.i.). The boiler is vented by a metal stack that pierces the north wall of the building.

(ii) The process line is steam heated from the boiler and current is generated from a 1928 generator producing 4,000 amp. D.C. and up to 50 volts maximum; with a 25 volt working voltage.

(iii) Two 15,925 L (3500 gallon) tanks containing a caustic cleaner and sulphuric acid are installed in a concrete floor pit 1.5 m (5 ft.) in depth, 3.1 m x 6.1 m (10' x 20') and separated from each other by a concrete partition wall. The receiving pits have been approved by Environment Canada.

(cont'd)

9. TENANTS:

NONE ☒SEE ATTACHED ☐
LIST

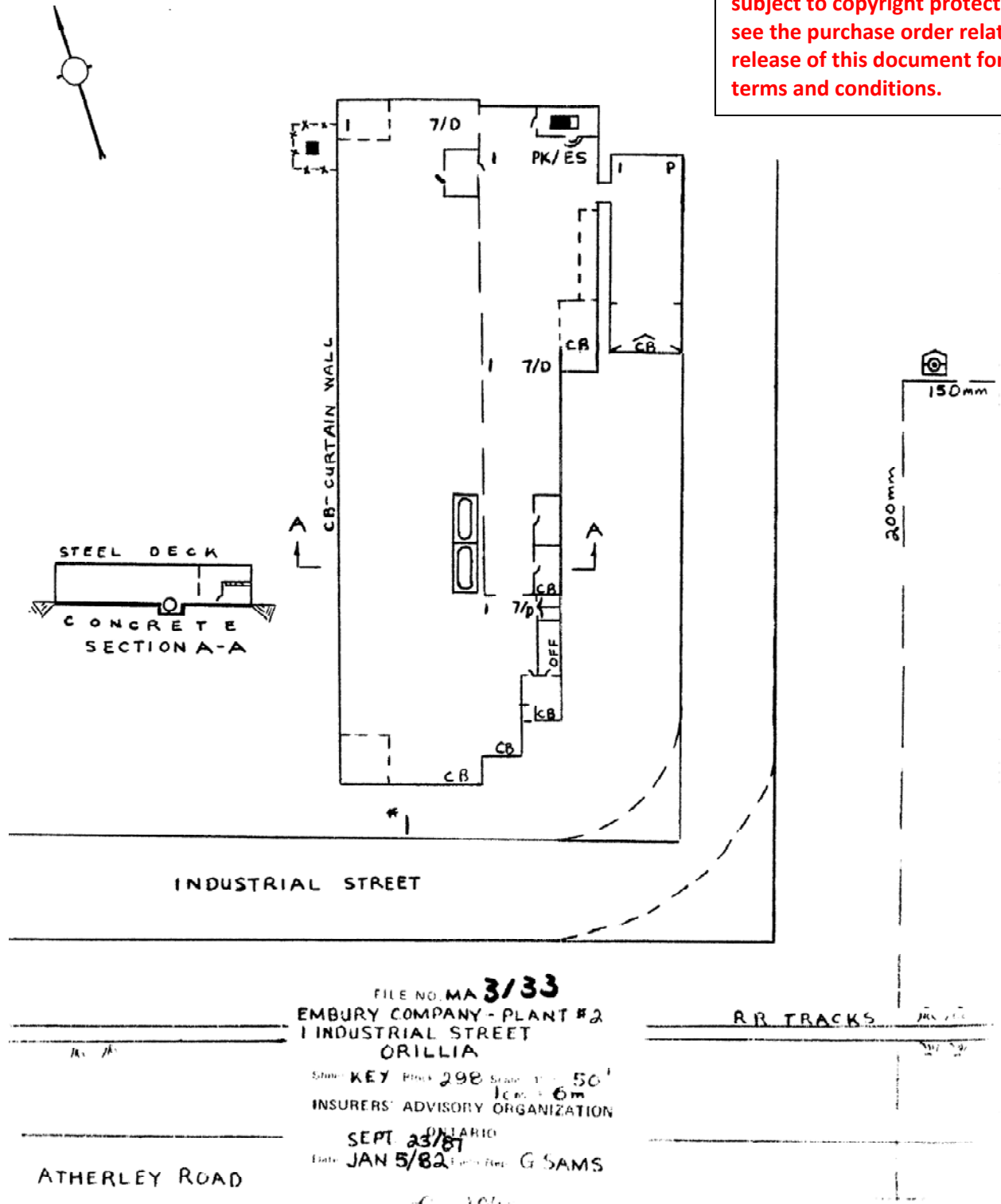
2048-S

8. REPORT DETAILS: (cont'd)

- 4(b)(i) Extinguishers: The standard supply of portable fire extinguishers consists of three "4A;40B,C", five "4A;60B,C", one "2A;10B,C", one "5B,C" on lift truck rated dry chemical units and one "B2,C1" CO₂ unit.
- The extinguishers were last serviced January 26, 1981 and require servicing shortly.
- 4(b)(iv) Special Equipment and Apparatus: A non-standard heat detection unit and burglary "Star Alarm" system installation is presently disconnected; formerly ringing at Insured's home.
- 4(c)(i) Hydrants: The standard public fire hydrant protection consists of two hydrants on 150 mm (6 inch) water main located within 30.5 m and 107 m (10 ft. and 350 ft.) of the building. A third hydrant is located on Atherley Road 64 m (210 ft.) distance from the building on a 200 mm (8 inch) water main but located across the tracks.
- 4(c)(iii) Accessibility: Access to the risk is hampered by railway crossings and narrow access roads.

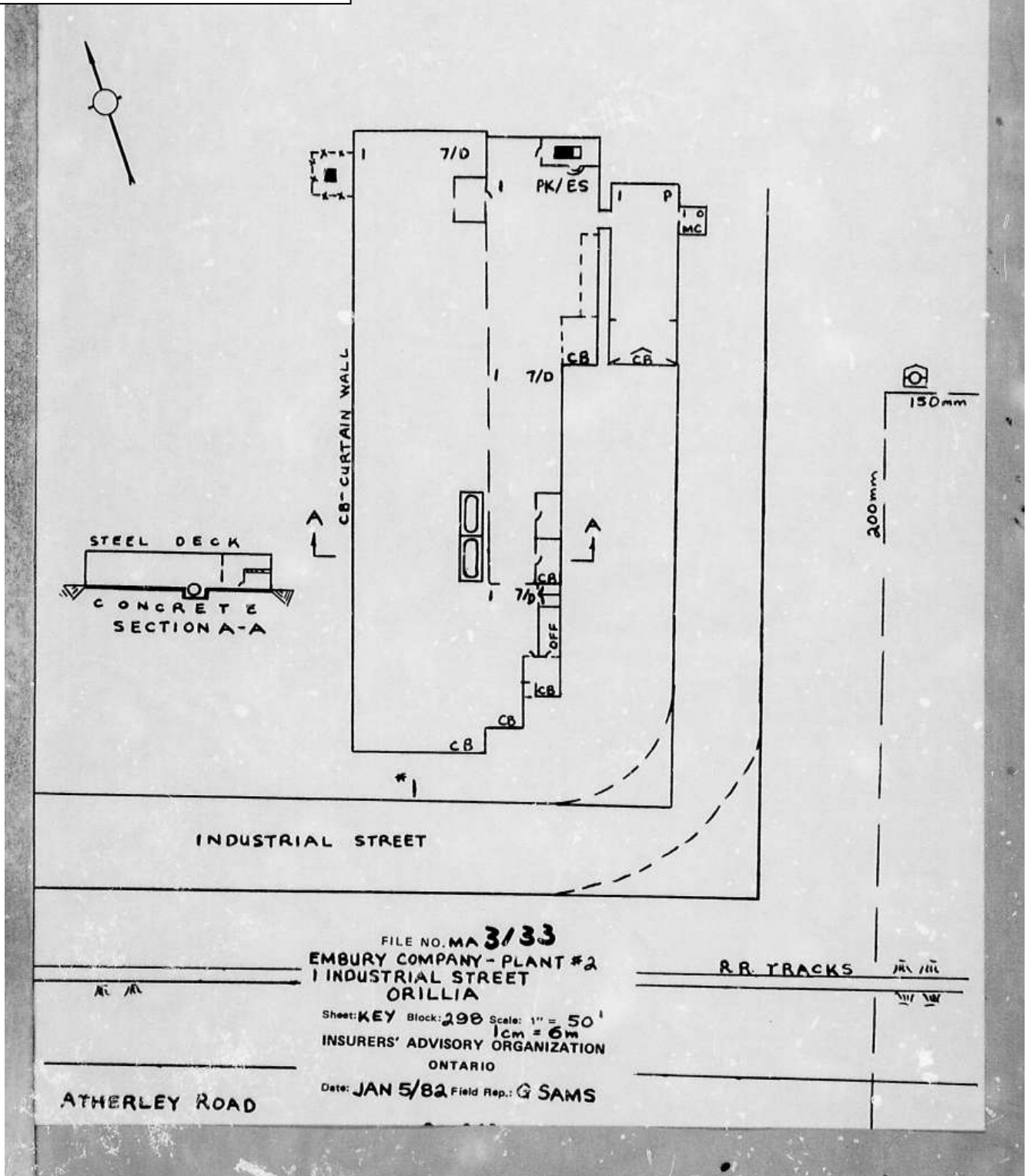
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1982





APPENDIX C

Regulatory Responses

**LGI COPY SERVICES CANADA**www.lgicscanada.com

alantos@lgicscanada.com

Phone: 613-875-7387

Fax: 819-684-7624

PROJECT NUMBER: 11-1170-0079	
Site Address:	Orillia, Ontario
Year: 1998/1999	
Site Listing:	No Civic Address Requested
Adjacent Properties:	
Atherley Road (1-300)	-All Residential 117-Family Sports Swap Shop -Golf Club Repair Shop 119-Craft's With Class 121-Family Variety 131-Budget Car-Truck Rentals 275-Tim Horton Donuts 299-Stevenson Investments -Davenport Motors
Cedar Island Road (All)	-All Residential
Cedarmore Road (All)	-Street Not Listed
Davey Drive (All)	-All Residential 114-Silver Swan Villa Motel
East Street (1-300)	-All Residential
Forest Avenue North (All)	-All Residential 301-Orser Electric -Polyethics Recycling Industries -Uniplast Industries Inc.
Front Street South (70-End)	-All Residential 90-Ark Animal Hospital

	121-Ye Ole Station House 129-Pal Engines Inc. - Able Taxi - MDM Liquidation - G&H Auto Service 150-Multi Tenant Office 155-Multi Tenant Commercial 169-Home Hardware - Dominion Carpet Centre 180-Miller Furnishings - Pasquale's Bakery - Countrywide Lifestyles Realty 182-Sunshine Car Care 209-Champlain Collision Centre
Gill Street (1-300)	-All Residential 184-Sunshine Super Wash 201-Thor Motors Orillia
Industrial Street (All)	1-Embury Co. - Jackson Transportation - McCauley Ford Tractor & Equipment - Aknor Construction
Lakeview Crescent (All)	-All Residential
Millard Street (1-300)	-All Residential
Moffat Street (1-300)	-All Residential

PROJECT NUMBER: 11-1170-0079	
Site Address:	Orillia, Ontario
Year: 1996/1997	
Site Listing:	No Civic Address Requested
Adjacent Properties:	
Atherley Road (1-300)	-All Residential 117-Family Sports Swap Shop - Golf Club Repair Shop 119-Craft's With Class 121-Family Variety

	131-Budget Car-Truck Rentals 275-Tim Horton Donuts 299-Stevenson Investments -Davenport Motors
Cedar Island Road (All)	-All Residential
Cedarmore Road (All)	-Street Not Listed
Davey Drive (All)	-All Residential 114-Silver Swan Villa Motel
East Street (1-300)	-All Residential
Forest Avenue North (All)	-All Residential 301-Orser Electric -Polyethics Recycling Industries -Uniplast Industries Inc.
Front Street South (70-End)	-All Residential 90-Ark Animal Hospital 121-Ye Ole Station House 129-Pal Engines Inc. -Able Taxi -MDM Liquidation -G&H Auto Service 150-Multi Tenant Office 155-Multi Tenant Commercial 169-Home Hardware -Dominion Carpet Centre 180-Miller Furnishings -Pasquale's Bakery -Countrywide Lifestyles Realty 182-Sunshine Car Care 209-Champlain Collision Centre
Gill Street (1-300)	-All Residential 184-Sunshine Super Wash 201-Thor Motors Orillia
Industrial Street (All)	1-Embury Co. -Jackson Transportation

	-McCauley Ford Tractor & Equipment -Aknor Construction
Lakeview Crescent (All)	-All Residential
Millard Street (1-300)	-All Residential
Moffat Street (1-300)	-All Residential

PROJECT NUMBER: 11-1170-0079	
Site Address:	Orillia, Ontario
Year: 1986	
Site Listing:	No Civic Address Requested
Adjacent Properties:	
Atherley Road (1-300)	-All Residential 119-Craft's With Class 120-Huron Stained Glass -Dimension Enterprises 121-Mike's Mart 131-Mariposa Motors 275-Brewer's Retail
Cedar Island Road (All)	-All Residential
Cedarmore Road (All)	-Street Not Listed
Davey Drive (All)	-All Residential 114-Silver Swan Villa Motel
East Street (1-300)	-All Residential
Forest Avenue North (All)	-All Residential 333-Ontario Hydro
Front Street South (70-End)	-All Residential 90-Ark Animal Hospital 120-Via Rail Canada

	129-Pal Engines Inc. 155-Canadian Tire Corp. -Bun Centre 169-Dominion Lumber 209-Thor Motors
Gill Street (1-300)	-All Residential 184-Sunshine Super Wash 201-Thor Motors
Industrial Street (All)	1-Embury Co. 301-Orillia Services -Peniston Ind. -Orser Electric -Uniplast Ind. Corp.
Lakeview Crescent (All)	-All Residential
Millard Street (1-300)	-All Residential
Moffat Street (1-300)	-All Residential

PROJECT NUMBER: 11-1170-0079	
Site Address:	Orillia, Ontario
Year: 1982	
Site Listing:	No Civic Address Requested
Adjacent Properties:	
Atherley Road (1-300)	-All Residential 120-Huron Stained Glass -Dimension Enterprises 121-Mike's Milk 191-Art's One Stop Variety 275-Brewer's Retail
Cedar Island Road (All)	-All Residential
Cedarmore Road (All)	-Street Not Listed
Davey Drive (All)	-All Residential

	114-Silver Swan Villa Motel
East Street (1-300)	-All Residential
Forest Avenue North (All)	-All Residential 333-Ontario Hydro
Front Street South (70-End)	-All Residential 90-Ark Animal Hospital 122-Eddy's Swap Shop & Antiques 129-Pal Engines Inc. 155-Bun Centre 169-Dominion Lumber 209-Thor Motors
Gill Street (1-300)	-All Residential 184-Sunshine Super Wash -Polar Ice Co. 201-Thor Motors
Industrial Street (All)	1-Embury Co. 301-Orillia Services -Peniston Ind. -Orser Electric
Lakeview Crescent (All)	-All Residential
Millard Street (1-300)	-All Residential
Moffat Street (1-300)	-All Residential

PROJECT NUMBER: 11-1170-0079	
Site Address:	Orillia, Ontario
Year: 1976	
Site Listing:	No Civic Address Requested
Adjacent Properties:	
Atherley Road (1-300)	-All Residential

	120-Cozy Corner Rest. & Variety 121-Super Save 131-Gulf 191-Art's One Stop Variety 275-Brewer's Retail
Cedar Island Road (All)	-All Residential 147-Crawford & Sons Fuels
Cedarmore Road (All)	-Street Not Listed
Davey Drive (All)	-All Residential 114-Silver Swan Villa Motel
East Street (1-300)	-All Residential
Forest Avenue North (All)	-All Residential 301-Trend Whol. Electronics -Orser Elect. 303-Wood Metal Serv. -Peniston Ind. 333-Ontario Hydro
Front Street South (70-End)	-All Residential 90-Ark Animal Hospital 121-Robertson Home For Retarded Adults 129-Pal Engines Inc. 155-Orillia Dodge Crysler 169-Dominion Lumber 180-Holiday Rent A Car 209-Thor Motors
Gill Street (1-300)	-All Residential 184-Imperial Car Wash -Polar Ice Co. -U-Haul Co. 201-Thor Motors
Industrial Street (All)	-Orillia Stl Wks -Orillia Services

	-GWB Rope & Twine -Spieth-Anderson -Crothers Ltd.
Lakeview Crescent (All)	-All Residential
Millard Street (1-300)	-All Residential
Moffat Street (1-300)	-All Residential

PROJECT NUMBER: 11-1170-0079	
Site Address:	Orillia, Ontario
Year: 1966	
Site Listing:	No Civic Address Requested
Adjacent Properties:	
Atherley Road (1-300)	-All Residential 120-Cozy Corner Rest. & Variety 121-Red & White Food Master 131-Eastcott Serv Stn 192-Dimension Enterprises 275-Brewer's Retail
Cedar Island Road (All)	-All Residential
Cedarmore Road (All)	-Street Not Listed
Davey Drive (All)	-All Residential 114-Silver Swan Villa Motel
East Street (1-300)	-All Residential
Forest Avenue North (All)	-All Residential 333-Ontario Hydro
Front Street South (70-End)	-All Residential 90-Ark Animal Hospital 121-Plaza Hotel

	129-Buchanan Ltd. 155-Orillia Works & Sanitation 169-Dominion Lumber 180-Tytler's Cycles & Sports 209-Thor Motors
Gill Street (1-300)	-All Residential 184-Ferrier Auto Sales 201-Thor Motors
Industrial Street (All)	1-Lloyd Metal Mfg.
Lakeview Crescent (All)	-All Residential
Millard Street (1-300)	-All Residential 263-Kist Beverages Home Serv
Moffat Street (1-300)	-All Residential

PROJECT NUMBER: 11-1170-0079	
Site Address:	Orillia, Ontario
Year: 1961	
Site Listing:	No Civic Address Requested
Adjacent Properties:	
Atherley Road (1-300)	-All Residential 5-Twin Lakes Lunch 191-Red & White Food Market 275-Brewer's Retail 297-Pinewood Bowlaway 299-Taylor's Service Centre
Cedar Island Road (All)	-All Residential
Cedarmore Road (All)	-Street Not Listed
Davey Drive (All)	-Street Not Listed
East Street (1-300)	-All Residential

Forest Avenue North (All)	-All Residential 333-Ontario Hydro
Front Street South (70-End)	-All Residential 82-Sykes Grocery 121-Plaza Hotel 122-Multi Tenant Commercial 129-Buchanan Ltd. 155-Orillia Works & Sanitation 169-Dominion Lumber 180-Tytler's Cycles
Gill Street (1-300)	-All Residential 184-Hannah Motors 201-Whitehead Serv. Stn.
Industrial Street (All)	-Street Not Listed
Lakeview Crescent (All)	-All Residential
Millard Street (1-300)	-All Residential 263-McCready Beverages
Moffat Street (1-300)	-All Residential

*****Orillia, Ontario is listed from 1961 to 1999 within the city directory archives*****

Groves, Christi

From: squibell@tssa.org on behalf of Public Information Services
<publicinformationservices@tssa.org>
Sent: Friday, March 23, 2012 4:18 PM
To: Zunti, Tamara
Subject: Re: 11-1170-0079 Orillia

Hi Tamara,

Thank you for your inquiry.

We have no record in our database of any fuel storage tanks at the subject address (addresses).

For a further search in our archives please submit your request in writing to Public Information Services via e-mail (publicinformationservices@tssa.org) or through mail along with a fee of \$56.50 (including HST) per location. The fee is payable with credit card (Visa or MasterCard) or with a Cheque made payable to TSSA.

Although TSSA believes the information provided pursuant to your request is accurate, please note that TSSA does not warrant this information in any way whatsoever.

Thank you and have a great day!

Sarah Quibell (née Png)

Public Information Services

TECHNICAL STANDARDS & SAFETY AUTHORITY
"Putting Public Safety First"
14th Floor, Centre Tower
3300 Bloor Street West
Toronto, ON M8X 2X4

www.tssa.org

Toll-Free: 1-877-682-8772

On Fri, Mar 23, 2012 at 1:51 PM, Zunti, Tamara <Tamara_Zunti@golder.com> wrote:

Hello,

Could you please perform a TSSA database record search for any underground storage tanks, registered fuel tanks, outstanding instructions, incident reports, fuel oil spills or contaminations records for the site located at the following addresses:

1. 174 West Street South, Orillia
2. 250 West Street South, Orillia
3. 45 Cochrane Street, Orillia
4. 55 Queen Street East, Orillia
5. 1 Industrial street, Orillia
6. 15 Industrial Street, Orillia
7. 25 Industrial Street, Orillia

Thanks! ☺

Tamara

Tamara Zunti (M.Env.Sc.) | Environmental Specialist | **Golder Associates Ltd.**

100 Scotia Court, Whitby, Ontario, Canada L1N 8Y6

T: [+1 \(905\) 723 2727](tel:+19057232727) | **D:** [+1 \(905\) 723 2727 Ext. 6927](tel:+19057232727) | **F:** [+1 \(905\) 723 2182](tel:+19057232182) | **E:** Tamara.Zunti@golder.com | www.golder.com

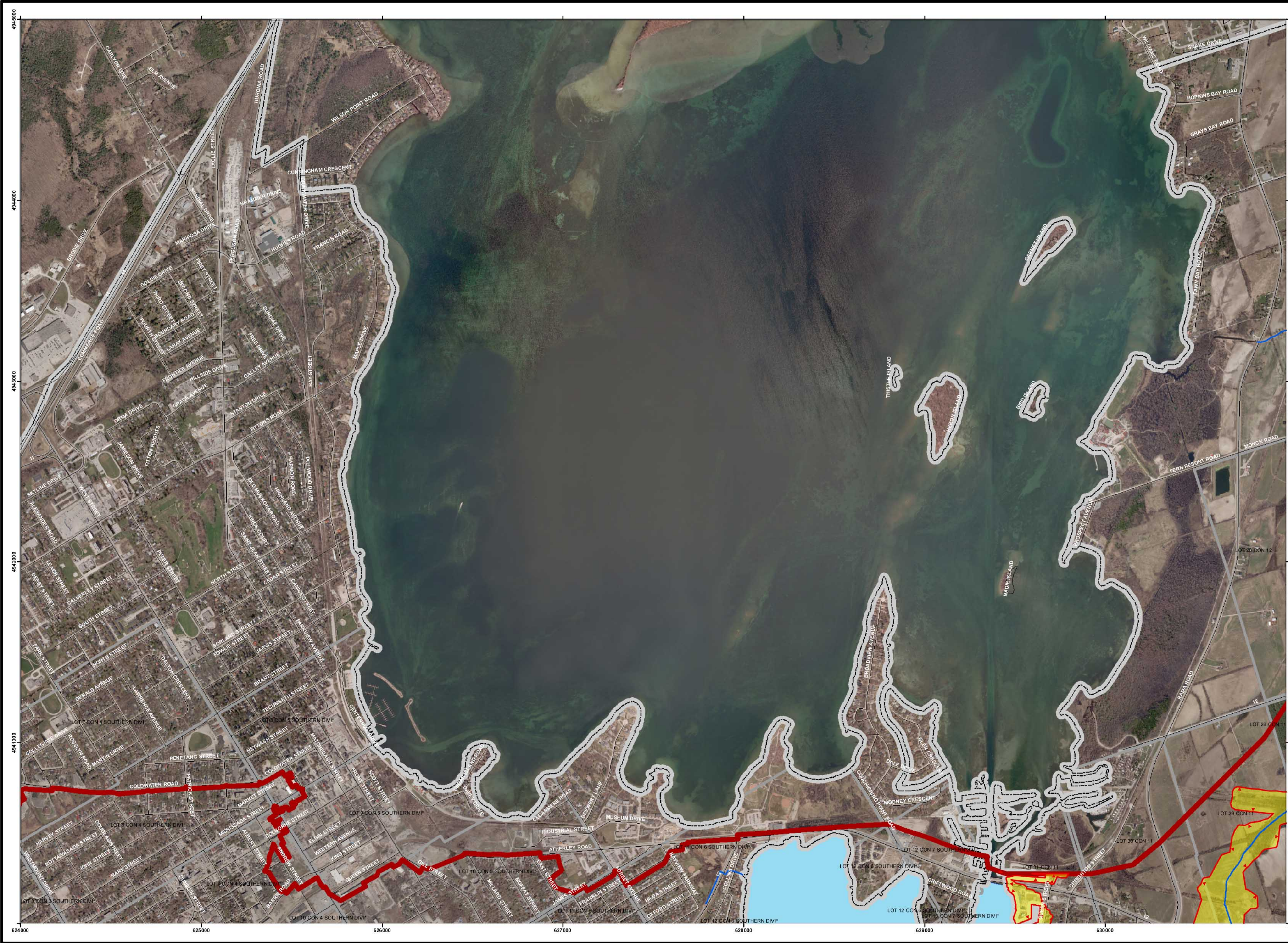
Work Safe, Home Safe

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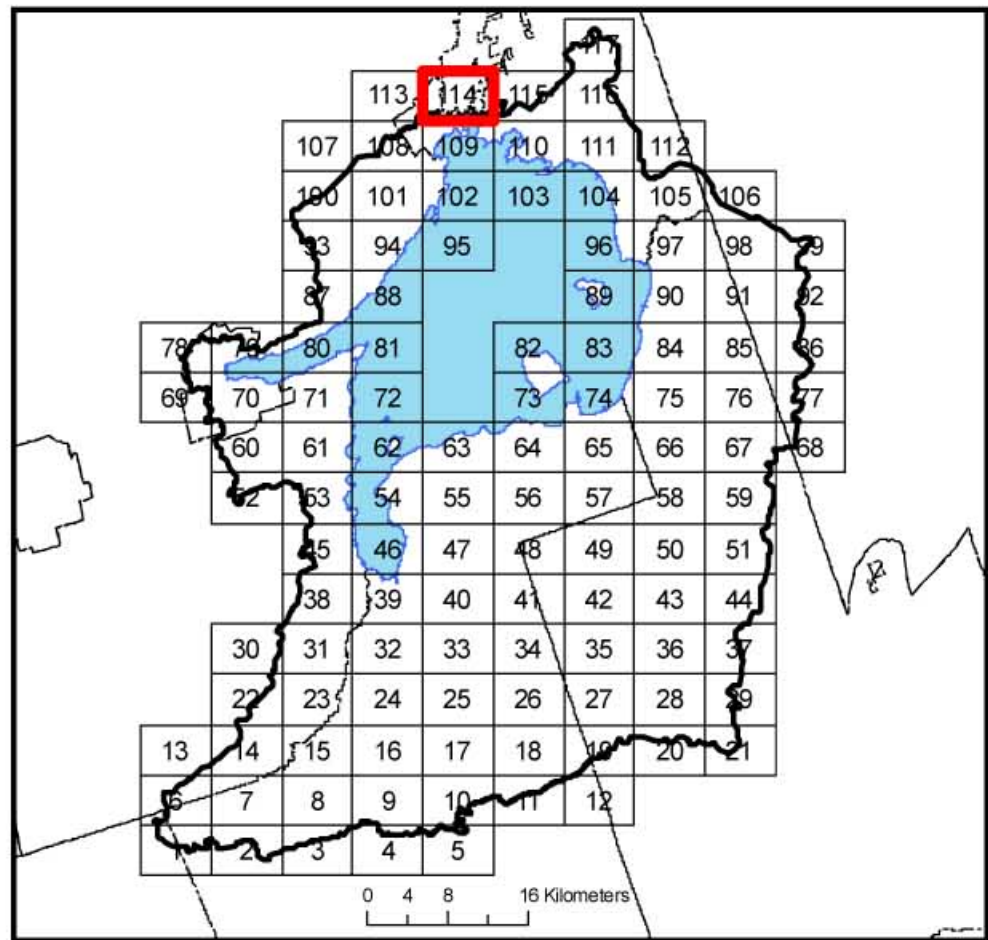


Lake Simcoe
Region
Conservation
Authority



Legend

- WATERCOURSE
- ROAD
- REGULATION AREA
- LOT_CONCESSION
- LSRCA JURISDICTION
- MUNICIPAL BOUNDARY
- LAKE SIMCOE



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			DATE:	JANUARY 2006																																																							
NO.	REVISIONS	DATE	MAPPED BY:	JB																																																							
RIVERINE HAZARDS WERE BASED ON EXISTING FLOOD PLAIN MAPPING. FLOOD PLAIN LIMITS WHERE ENGINEERING PRODUCTS DID NOT EXIST WERE DETERMINED BY LSRCIA STAFF. RIVERINE EROSION HAZARDS WERE DETERMINED BY LSRCIA STAFF. A 15-METER SETBACK WAS APPLIED FROM THE LIMITS OF ALL RIVERINE HAZARDS. SETBACKS WERE DETERMINED BY THE FLOOD ENGINEERING DEVELOPED THROUGH AN ENGINEERING STUDY. SHORELINE EROSION HAZARDS WERE DETERMINED BY LSRCIA STAFF. WETLANDS WERE DELINEATED BY LSRCIA STAFF USING THE ECOLOGICAL ZONE CLASSIFICATION (ECL) SYSTEM AND BY THE MINISTRY OF NATURAL RESOURCES. SETBACKS OF 100-M FROM PROVINCIALLY SIGNIFICANT WETLANDS (PSW) AND 30-M FROM ALL OTHER WETLANDS WERE APPLIED. MEANDERBELT WIDTHS WERE CALCULATED AS 20 TIMES THE BANKFULL WIDTHS ESTIMATED FROM THE CORRESPONDING DRAINAGE AREAS. PLEASE REFER TO "REFERENCE MANUAL FOR DETERMINATION OF REGULATION LIMITS" (LSRCIA, 2006) OR CONTACT LSRCIA (905-896-1281) FOR MORE INFORMATION.										REGULATION OF DEVELOPMENT, INTERFERENCE WITH WETLANDS AND ALTERATIONS TO SHORELINES AND WATERCOURSES.										114																																							
ONTARIO REGULATION 179/06										PLOT DATE: APRIL 2009										FILE LOCATION:					OF 117																																		



APPENDIX D

EcoLog ERIS Report



Canada's Primary Environmental Risk Information Service

Project Site: Historical Landfill Sites Orillia
n/a
Orillia, ON

Client: Tamara Zunti
Golder Associates Ltd.
100 Scotia Court
Whitby, ON L1N8Y6

ERIS Project No: 20120322021

Report Type: Custom Report - .25km Search Radius

Prepared By: Matt Thompson
mthompson@eris.ca

Date: March 30, 2012

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Site Name: Historical Landfill Sites Orillia
Site Address: n/a Orillia, ON
Report Type: Custom Report, 0.25 km Search Radius

	<u>Section</u>
Report Summary <i>This outlines the number of records from each database that fall on the site, and within various distances from the site.</i>	i
Site Diagram <i>The records that were found within a specified distance from the project property (the primary search radius) have been plotted on a diagram to provide you with a visual representation of the information available. Sites will be plotted on the diagram if there is sufficient information from the database source to determine accurate geographic coordinates. Each plotted site is marked with an acronym identifying the database in which the record was found (i.e., WDS for Waste Disposal Sites). These are referred to as "Map Keys". A variety of problems are inherent when attempting to associate various government or private source records with locations. EcoLog ERIS has attempted to make the best fit possible between the available data and their positions on the site diagram.</i>	ii
Site Profile <i>This table describes the records that relate directly to the property that is being researched.</i>	iii
Detail Report <i>This section represents information, by database, for the records found within the primary search radius. Listed at the end of each database are the sites that could not be plotted on the locator diagram because of insufficient address information. These records will not have map keys. They have been included because they may be found to be relevant during a more detailed investigation.</i>	iv

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Appendix: Database Descriptions

Report Summary

Order Number: 20120322021
 Site Name: Historical Landfill Sites Orillia
 Site Address: n/a Orillia, ON
 Report Type: Custom Report, 0.25 km Search Radius

Number of Mappable Records Surrounding the Site

Database		Selected	On-site	Within 0.25	0.25km to 0.25km	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0	0
AGR	Aggregate Inventory	Y	0	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	3	9	0	9
AUWR	Automobile Wrecking & Supplies	Y	0	2	0	2
BORE	Borehole	Y	0	0	0	0
CA	Certificates of Approval	Y	9	52	0	52
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0	0
CHEM	Chemical Register	Y	0	0	0	0
COAL	Coal Gasification Plants	Y	0	0	0	0
CONV	Compliance and Convictions	Y	1	1	0	1
CPU	Certificates of Property Use	Y	2	7	0	7
DRL	Drill Hole Database	Y	0	0	0	0
EASR	Environmental Activity and Sector Registry	Y	0	0	0	0
EBR	Environmental Registry	Y	3	12	0	12
ECA	Environmental Compliance Approval	Y	0	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0	0
EHS	ERIS Historical Searches	Y	4	24	0	24
EIIS	Environmental Issues Information System	Y	0	0	0	0
EXP	List of TSSA Expired Facilities	Y	0	22	0	22
FCON	Federal Convictions	Y	0	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0	0
FOFT	Fisheries & Oceans Fuel Storage Tanks	Y	0	0	0	0
FST	Fuel Storage Tank	Y	0	19	0	19
GEN	Ontario Regulation 347 Waste Generators Summary	Y	18	90	0	90
HINC	TSSA Historic Incidents	Y	0	2	0	2
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0	0
INC	TSSA Incidents	Y	0	3	0	3
LIMO	Landfill Inventory Management Ontario	Y	0	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0	0
MNR	Mineral Occurrences	Y	0	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0	0
NDFT	National Defence & Canadian Forces Fuel Storage Tanks	Y	0	0	0	0
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0	0
NPCB	National PCB Inventory	Y	7	13	0	13
NPRI	National Pollutant Release Inventory	Y	9	12	0	12
OGW	Oil and Gas Wells	Y	0	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	12	19	0	19

Report Summary

Order Number: 20120322021
 Site Name: Historical Landfill Sites Orillia
 Site Address: n/a Orillia, ON
 Report Type: Custom Report, 0.25 km Search Radius

Database		Selected	On-site	Within 0.25	0.25km to 0.25km	Total
ORD	Orders	Y	0	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0	0
PES	Pesticide Register	Y	0	20	0	20
PINC	TSSA Pipeline Incidents	Y	0	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	6	0	6
PTTW	Permit to Take Water	Y	0	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0	0
RSC	Record of Site Condition	Y	6	15	0	15
RST	Retail Fuel Storage Tanks	Y	1	7	0	7
SCT	Scott's Manufacturing Directory	Y	1	32	0	32
SPL	Ontario Spills	Y	1	22	0	22
SRDS	Wastewater Discharger Registration Database	Y	0	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0	0
VAR	Variances for Abandonment of Underground Storage Tanks	Y	0	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	1	0	1
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	1	4	0	4
WWIS	Water Well Information System	Y	24	53	0	53
		TOTAL	102	447	0	447

The databases chosen by the client as per the submitted order form are denoted in the 'Selected' column in the above table. Counts have been provided outside the primary buffer area for cursory examination only. These records have not been examined or verified, therefore, they are subject to change.



Pinpointing Your Environmental Risks

12 Concorde Pl, Suite 800 North York, ON M3C 4J2
416-510-5204

Project Property: Historical Landfill Sites Orillia
n/a
Orillia, ON

ERIS Project #: 20120322021

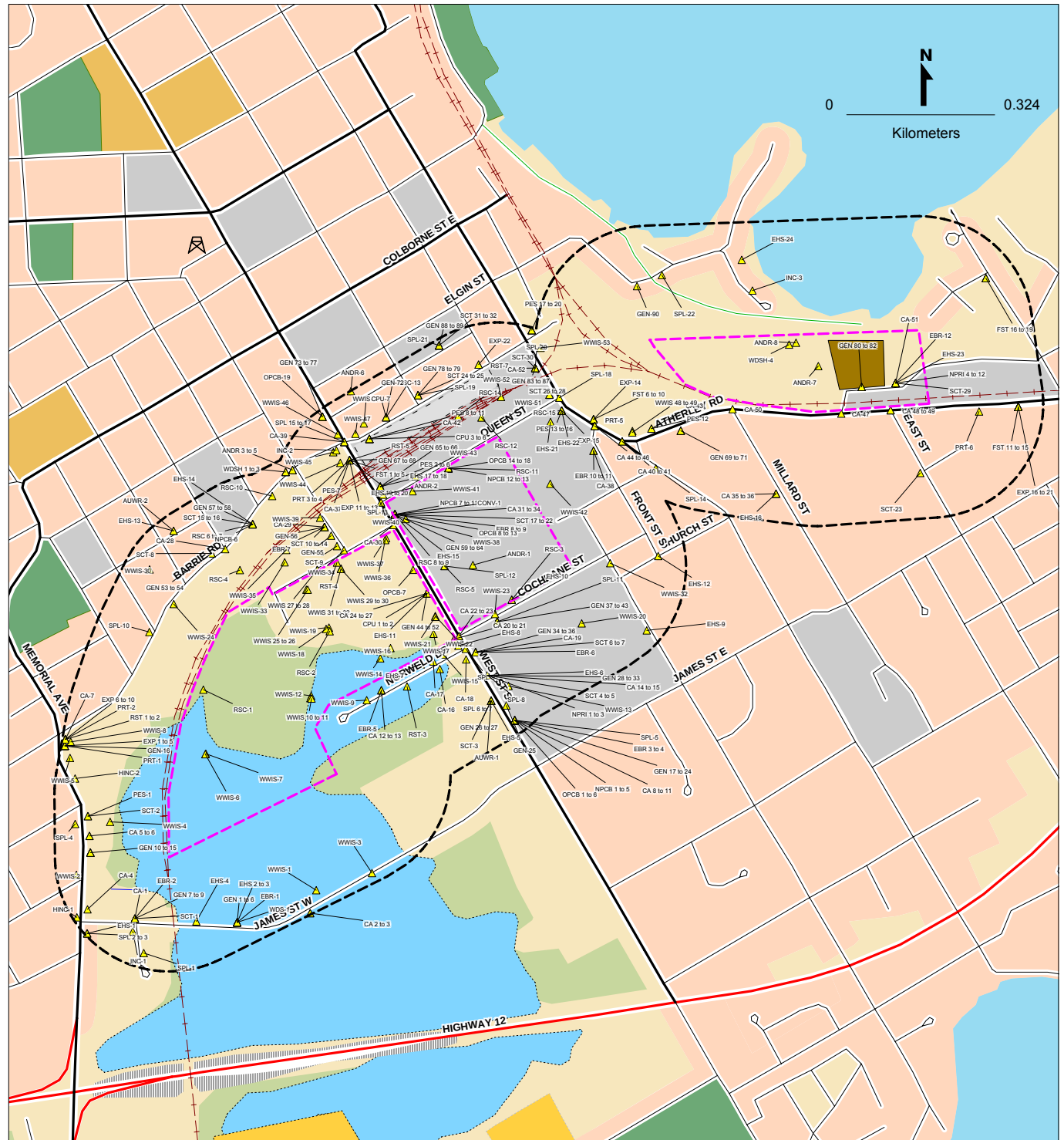
Date: MAR-30-2012

LEGEND

	Project Property	Landuse Classifications
	Database Location	Open Area
Points of Interest		Residential
	Chimney	Commercial
	Silo	Resource and Industrial
Pipe & Transmission Lines		Government and Institutional
	Pipeline	Parks and Recreational
	Transmission Line	Waterbody
	Transmission Tower	Recreation
	Transformer Station	Golf Course/Driving Range
Rail		Park/Sports Field
	Railway - Main	Other Recreation Area
	Railway - Sidetrack	Sports/Race Track
	Railway - Abandoned	Cemetery
	Bridge	Campground
	Tunnel	Vegetation
Transportation - Other		Wooded Area
	Embankment	Orchard
	Trail	Vineyard
	Runway	Industrial Resources
Hydrographic Features		Conveyor
	Permanent Waterway	Crane: Moveable
	Intermittent Waterway	Crane: Stationary
	Open Reservoir	Tank
	Dyke/Levee	Rock Cut
	Dam	Auto Wrecker
	Breakwall	Lumber Yard
	Wetland	Pit

This diagram is to be used solely for relative street location purposes.
It may not accurately portray street or site positions.

SITE DIAGRAM



Site Report

Order Number: 20120322021
 Site Name: Historical Landfill Sites Orillia
 Site Address: n/a Orillia, ON
 Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Certificates of Property Use

Map Key	Company Name	Address	City	Postal Code
CPU-1	The Corporation of the City of Orillia	255 West St South	ORILLIA	
CPU-2	City of Orillia	255 West Street South	Orillia	

Certificates of Approval

Map Key	Company Name	Address	City	Postal Code
CA-24	GALTACO-REDLAW CASTINGS CORP.	255 WEST ST. S.	ORILLIA CITY	
CA-25	REDLAW INDUSTRIES INC.	255 WEST STREET SOUTH	ORILLIA CITY	
CA-26	REDLAW INDUSTRIES INC.	255 WEST STREEET SOUTH	ORILLIA CITY	
CA-27	GALTACO REDLAW CASTINGS CORPORATION	255 WEST ST. S.	ORILLIA CITY	
CA-31	UEI HOLDINGS INC.	174 WEST STREET SOUTH, LOT P	ORILLIA	
CA-32	DORR OLIVER CANADA LTD.	174 WEST STREET SOUTH	ORILLIA CITY	
CA-33	GL&V Canada Inc.	174 West St S	Orillia	
CA-34	DORR OLIVER CANADA LTD.	174 WEST STREET SOUTH	ORILLIA CITY	
CA-51	Embury Co. Limited	1 Industrial St	Orillia	

National PCB Inventory

Map Key	Company Name	Address	City	Postal Code
NPCB-7	G L & VONTARIO		ORILLIA	L3V 6L4
		174 WEST STREET SOUTH		
NPCB-8	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH	ORILLIA	L3V 6L4
NPCB-9	G L & V ONTARIO	174 WEST STREET SOUTH	ORILLIA	L3V 6L4
NPCB-10	G L & V ONTARIO	174 WEST STREET SOUTH	Orillia	
NPCB-11	G.L. AND V. ONTARIO INC.		ORILLIA	L3V 6L4
		174 WEST STREET SOUTH		
NPCB-12	GL & V ONTARIO INC.	55 QUEEN STREET WEST	ORILLA	L3V 7W3
NPCB-13	GL & V ONTARIO INC.		ORILLIA	L3V 6L3
		55 QUEEN STREET WEST		

Anderson's Waste Disposal Sites

Map Key	Company Name	Address	City	Postal Code
---------	--------------	---------	------	-------------

Site Report

Order Number: 20120322021
 Site Name: Historical Landfill Sites Orillia
 Site Address: n/a Orillia, ON
 Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Map Key	Company Name	Address	City	Postal Code
ANDR-1	Cochrane & West Dump (alt)		Orillia	L3V 1M7
ANDR-7	Industrial & Moffatt Dump (alt)		Orillia	L3V 1M7
ANDR-8	Atherley Rd Dump		Orillia	L3V 1M7
<u>Ontario Spills</u>				
Map Key	Company Name	Address	City	Postal Code
SPL-12	FL Smidth Ltd.<UNOFFICIAL>	250 West St. S.	Orillia	L3V 7W4
<u>Ontario Regulation 347 Waste Generators Summary</u>				
Map Key	Company Name	Address	City	Postal Code
GEN-44	OTACO SEATING CO. LTD.	P.O. BOX 2310 255 WEST ST. S.	ORILLIA	L3V 6S2
GEN-45	REDLAW INDUSTRIES INC	DIVISION OF GALTACO INC. 255 WEST STREET SOUTH	ORILLIA	L3V 6L3
GEN-46	GALTACO REDLAW CASTINGS CORPORATION	255 WEST STREET SOUTH	ORILLIA	L3V 6L3
GEN-47	City Of Orillia	255 West Street South	Orillia	L3V 5G8
GEN-48	GALTACO REDLAW CASTINGS CORPOR. 33-061	DIVISION OF GALTACO INC. 255 WEST STREET SOUTH	ORILLIA	L3V 6L3
GEN-49	REDLAW (SEE & USE ON0250002 GALTACO)	255 WEST ST. S.	ORILLIA	L3V 6L3
GEN-50	The Corporation of the City of Orillia	255 West Street South	Orillia	L3V 6L3
GEN-51	The Corporation of the City of Orillia	255 West Street South	Orillia	L3V 6L3
GEN-52	GALTACO REDLAW CASTINGS CORPOR.	DIVISION OF GALTACO INC. 255 WEST STREET SOUTH	ORILLIA	L3V 6L3
GEN-59	GL & V ONTARIO INC. 13-066	174 WEST ST. S.	ORILLIA	L3V 6L4
GEN-60	FLSmidth Ltd	174 West Street South	Orillia	L3V 6L4
GEN-61	DORR-OLIVER CANADA LTD.	174 WEST ST. S.	ORILLIA	L3V 5C6
GEN-62	GL & V ONTARIO INC.	174 WEST ST. S.	ORILLIA	L3V 6L4
GEN-63	GL & V ONTARIO INC.	174 WEST STREET SOUTH	ORILLIA	L3V 6L4
GEN-64	Dorr-Oliver Eimco	174 West Street South	Orilla	

Site Report

Order Number: 20120322021
Site Name: Historical Landfill Sites Orillia
Site Address: n/a Orillia, ON
Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Map Key	Company Name	Address	City	Postal Code
GEN-80	ORILLIA WATER, LIGHT & POWER COMMISSION	15 INDUSTRIAL STREET	ORILLIA	
GEN-81	ORILLIA POWER CORPORATION	PO BOX 398 15 INDUSTRIAL STREET	ORILLIA	
GEN-82	orillia power corporation	15 Industrial Street	Orillia	L3V 6J9

Waste Disposal Sites - MOE 1991 Historical Approval Inventory

Map Key	Company Name	Address	City	Postal Code
WDSH-4		Atherly Road	ORILLIA	

Record of Site Condition

Map Key	Company Name	Address	City	Postal Code
RSC-1	The Corporation of the City of Orillia	255 West Street South and 25 Queen Street, Orillia, Ontario		
RSC-2	The Corporation of the City of Orillia	255 West Street South and 25 Queen Street, Orillia, Ontario		
RSC-3	4417917 CANADA INC.	45 COCHRANE ST, ORILLIA, ON, L3V 1M7,		
RSC-5	4417917 CANADA INC.	250 WEST ST S, ORILLIA, ON, L3V 1M7,		L3V 7W4
RSC-8	4417917 Canada Inc.	174 WEST ST S, ORILLIA, ON, L3V 6L4,		
RSC-9	4417917 Canada Inc.	174 WEST ST S, ORILLIA, ON, L3V 6L4,		

ERIS Historical Searches

Map Key	Company Name	Address	City	Postal Code
EHS-10		45 Cochrane St	Orillia	
EHS-11		255 West Street South,	Orillia	
EHS-15		174 West Street South	Orillia	
EHS-23		1 Industrial Street	Orillia	

Inventory of PCB Storage Sites

Map Key	Company Name	Address	City	Postal Code
OPCB-7	GALTACO-REDLAW CASTINGS LTD	225 WEST ST. SOUTH	ORILLA	L3V 6L3
OPCB-8	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH	ORILLIA	L3V 6L4
OPCB-9	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH	ORILLIA	L3V 6L4

Site Report

Order Number: 20120322021
Site Name: Historical Landfill Sites Orillia
Site Address: n/a Orillia, ON
Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Map Key	Company Name	Address	City	Postal Code
OPCB-10	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH	ORILLIA	L3V 6L4
OPCB-11	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH	ORILLIA	L3V 6L4
OPCB-12	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH	ORILLIA	L3V 6L4
OPCB-13	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH	ORILLIA	L3V 6L4
OPCB-14	GL & V ONTARIO INC.	55 QUEEN STREET WEST	ORILLA	L3V 7W3
OPCB-15	GL & V ONTARIO INC.	55 QUEEN STREET WEST	ORILLA	L3V 7W3
OPCB-16	GL & V ONTARIO INC.	55 QUEEN STREET WEST	ORILLA	L3V 7W3
OPCB-17	GL & V ONTARIO INC.	55 QUEEN STREET WEST	ORILLA	L3V 7W3
OPCB-18	GL & V ONTARIO INC.	55 QUEEN STREET WEST	ORILLA	L3V 7W3

Water Well Information System

Map Key	Company Name	Address	City	Postal Code
WWIS-6			ORILLIA	
WWIS-7			ORILLIA	
WWIS-10			ORILLIA	
WWIS-11			ORILLIA	
WWIS-12			ORILLIA	
WWIS-14			ORILLIA	
WWIS-16			ORILLIA	
WWIS-17				
		lot 10		
WWIS-18			ORILLIA	
WWIS-19			ORILLIA	
WWIS-21			ORILLIA	
WWIS-22			ORILLIA	
WWIS-25			ORILLIA	
WWIS-26			ORILLIA	
WWIS-27			ORILLIA	
WWIS-28			ORILLIA	
WWIS-29			ORILLIA	

Site Report

Order Number: 20120322021
Site Name: Historical Landfill Sites Orillia
Site Address: n/a Orillia, ON
Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Map Key	Company Name	Address	City	Postal Code
WWIS-30				
WWIS-31			ORILLIA	
WWIS-32			Orillia	
WWIS-36			ORILLIA	
WWIS-37			ORILLIA	
WWIS-38				
WWIS-41			ORILLIA	

Scott's Manufacturing Directory

Map Key	Company Name	Address	City	Postal Code
SCT-29	Embury Company	1 Industrial St	Orillia	L3V 6K7

Compliance and Convictions

Map Key	Company Name	Address	City	Postal Code
CONV-1	DORR-OLIVER CANADA LIMITED		ORILLIA	

Environmental Registry

Map Key	Company Name	Address	City	Postal Code
EBR-8	GL&V Canada Inc.	174 West Street South	Orillia	L3V 6L4
EBR-9	UEI Holdings Inc	174 West Street South	City of Orillia	
EBR-12	Embury Co. Limited	1 Industrial Street	Orillia	

National Pollutant Release Inventory

Map Key	Company Name	Address	City	Postal Code
NPRI-4	EMBURY	1 INDUSTRIAL Road	Orillia	L3V 6K7
NPRI-5	EMBURY	1 INDUSTRIAL Road	Orillia	L3V 6K7
NPRI-6	EMBURY	1 INDUSTRIAL Road	Orillia	
NPRI-7	EMBURY	1 INDUSTRIAL Road	Orillia	
NPRI-8	EMBURY	1 INDUSTRIAL Road	Orillia	L3V 6K7
NPRI-9	Embury Company	1 Industrial Road	Orillia	L3V 6K7
NPRI-10	Embury Company	1 Industrial Road	Orillia	L3V 6K7

Site Report

Order Number: 20120322021
Site Name: Historical Landfill Sites Orillia
Site Address: n/a Orillia, ON
Report Type: Custom Report, 0.25 km Search Radius

FOR COMPLETE INFORMATION, REFER TO DETAIL REPORT

Map Key	Company Name	Address	City	Postal Code
NPRI-11	Embury Company	1 Industrial Road	Orillia	L3V 6K7
NPRI-12	EMBURY	1 INDUSTRIAL Road	Orillia	
<u>Retail Fuel Storage Tanks</u>				
Map Key	Company Name	Address	City	Postal Code
RST-4	BAER HARBOUR	27 QUEEN ST	ORILLIA	L3V 1B5

Detail Report

Order Number: 20120322021
Site Name: Historical Landfill Sites Orillia
Site Address: n/a Orillia ON
Report Type: Custom Report, 0.25 km Search Radius

If information is required for sites located beyond the selected address, please contact your ERIS representative.

Anderson's Waste Disposal Sites
Automobile Wrecking & Supplies
Certificates of Approval
Compliance and Convictions
Certificates of Property Use
Environmental Registry
ERIS Historical Searches
List of TSSA Expired Facilities
Fuel Storage Tank
Ontario Regulation 347 Waste Generators Summary
TSSA Historic Incidents
TSSA Incidents
National Analysis of Trends in Emergencies System (NATES)
National Environmental Emergencies System (NEES)
National PCB Inventory
National Pollutant Release Inventory
Inventory of PCB Storage Sites
Pesticide Register
Private and Retail Fuel Storage Tanks
Permit to Take Water
Record of Site Condition
Retail Fuel Storage Tanks
Scott's Manufacturing Directory

Ontario Spills

Waste Disposal Sites - MOE CA Inventory

Waste Disposal Sites - MOE 1991 Historical Approval Inventory

Water Well Information System

Anderson's Waste Disposal Sites

Map Key	Name	Facility	Location	City/Town	Known Active Decade	Reference #
ANDR-1	Cochrane & West Dump (alt) Related Site(s)	Dump	plots to NE corner of intersection of Cochrane St* and West St*	Orillia	1940s	MOEE 4109 (alt)
ANDR-2	West St Dump '29 (alt) Related Site(s)	Dump	plots to just W of West St*, and just S of Queen St W*	Orillia	1960s	MOEE 4129 (alt)
ANDR-3	Cochrane & West Dump (official) Related Site(s)	Dump	plots to W side of Royce Ave*, S of Barrie Rd*, N of CNR R-O-W	Orillia	1940s	MOEE 4109
ANDR-4	Western & West Dump (official) Related Site(s)	Dump	plots to W side of Royce Ave*, S of Barrie Rd*, N of CNR R-O-W, W of the intersections of Western*, West* & King Sts*	Orillia	1940s, 1950s	MOEE 4128
ANDR-5	West St Dump '29 (official) Related Site(s)	Dump	plots to W side of Royce Ave*, S of Barrie Rd*, N of CNR R-O-W	Orillia	1960s	MOEE 4129
ANDR-6	Western & West Dump (alt) Related Site(s)	Dump	plots to intersection of Western Ave* and West St*	Orillia	1940s, 1950s	MOEE 4128 (alt)
ANDR-7	Industrial & Moffatt Dump (alt) Related Site(s)	Dump	Industrial St & Moffatt St; on N side of CNR R-O-W, N of end of Moffatt St, at W end of Industrial St, N of Atherley Rd	Orillia	1960s	MOEE 4130 (alt)
ANDR-8	Atherley Rd Dump Related Site(s)	Dump	N of CNR R-O-W, 100m N of Atherley Rd*, W of intersection of Industrial St* & Moffatt St*	Orillia	1950s	MOEE 4108
ANDR-9	Industrial & Moffatt Dump (official) Related Site(s)	Dump	50m NW of Bass Lake Sideroad*, 150m E of Hawthorn Pl*, adj residential area	Orillia	1960s	MOEE 4130

Automobile Wrecking & Supplies

Map Key	Company	Address	Facility	Description
AUWR-1	FRANCOZ IRON & METALS	351 WEST ST S ORILLIA L3V 5H1	SCRAP METALS	
AUWR-2	T & VEE AUTO BODY	120 POWLEY ST ORILLIA L3V 2T6	AUTOMOBILE WRECKING & RECYCLING	

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-1	United Propeller & Machine Inc.	220 James Street West Orillia L3V 6Y3	5683-7F2LKB	2008	5/27/2008	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-2	The Corporation of the City of Orillia	125 James Street West Orillia	0537-6JUR55	2006	1/5/2006	Municipal and Private Sewage Works	Revoked and/or Replaced	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-3	The Corporation of the City of Orillia	125 James St W Orillia	6875-7NSHTX	2009	1/30/2009	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-4	THEODORE TSELIKIS	PRIV.SWM-282/284 MEMORIAL AVE. ORILLIA CITY L3V 5X6	3-0801-96-	96	8/6/1996	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-5	1072815 ONTARIO INC., MISTER TRANSMISSIO	208 MEMORIAL AVENUE ORILLIA CITY L3V 5X6	8-5118-95-	95	9/12/1995	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: WASTE OIL FURNACE MODEL CB-1800 Contaminants: Arsenic, Cadmium, Chromium, Lead, Manganese, Zinc, Nitrogen Oxides, Sulphur Dioxide, Iron (Metallic), Suspended Particulate Matter Emission Control:					
CA-6	SHAKELL ELECTRIC MOTOR SERVICES	208 MEMORIAL AVE. ORILLIA CITY L3V 5X6	8-3178-89-	89	10/10/1989	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: BAKE OVEN ? Contaminants: Emission Control:					
CA-7	Mac's Convenience Stores Inc.	174-176 Memorial Ave Orillia L3V 5X6	5236-8MQLE3	2011	10/26/2011	Industrial Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-8	Orillia Power Distribution Corporation	360 West Street South Orillia	A800924	2001	3/20/2001	Waste Management Systems	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-9		360 West Street South Orillia L3V 5G8	8-1160-98-006	01	6/19/01	Industrial air	Approved	Notice
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		Orillia Power Distribution Corporation 360 West Street South, P. O. Box 398 Orillia L3V 6J9 The company name has changed from Orillia Water, Light & Power Commission to Orillia Power Distribution Corporation			
CA-10	ORILLIA WATER, LIGHT & POWER COMMISSION	360 WEST ST.S. (8-1160-98) ORILLIA L3V 5G8	8-1108-98-	98	8/26/1998	Industrial air	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		EXHAUST FAN TO VENT VEHICLE FUMES			
CA-11	ORILLIA WATER, LIGHT & POWER COMMISSION	360 WEST ST.S., 8-1108-98-000 ORILLIA L3V 5G8	8-1160-98-	98	10/23/1998	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		EXHAUST FAN FOR MECHANIC'S WORK AREA Nitrogen Oxides No Controls			
CA-12	Glen Harper	120 Norweld Dr Orillia L3V 7W5	8645-7T4PFV	2009	6/18/2009	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-13	Wide Flange Inc.	120 Norweld Dr Lot 10, Concession 4, Part 10, reference Plan 27277 Orillia	4671-7LTQ6K	2009	1/29/2009	Industrial Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-14	CANADA WOOD SPECIALTY CO. (1983) LTD.	300 WEST STREET SOUTH ORILLIA CITY L3V 5G8	8-3369-94-	94	9/8/1994	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: 385 H.P. WOOD FIRED BOILER Contaminants: Suspended Particulate Matter, Nitrogen Oxides, Sulphur Dioxide, Carbon Monoxide, Other Organic Compounds Emission Control: Cyclone, Baghouse (Incl Vent Fil.),					
CA-15	CANADA WOOD SPECIALITY CO. (1983) LTD.	300 WEST STREET SOUTH ORILLIA CITY L3V 5G8	8-3277-93-	93	9/30/1993	Industrial air	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: 2) NEW SETTLING CHAMBERS, 2) CHIMNEYS Contaminants: Emission Control:					
CA-16	NOR-WELD LTD.	SWM-103 NORWELD DRIVE ORILLIA L3V 7Z2	3-0779-98-	98	6/23/1998	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-17	NOR-WELD LTD.	SWM-104 NORWELD DR. ORILLIA CITY L3V 7W5	3-1827-97-	97	1/7/1998	Municipal sewage		
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-18	WIDE FLANGE INC.	SWM - 325 WEST STREET SOUTH ORILLIA CITY	3-0391-96-	96	5/7/1996	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-19	Sheridan Gymnasium Equipment Limited	290 West Street South Orillia L3V 5G8	6263-6H6P5X	2005	10/17/2005	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-20	527533 ONTARIO LIMITED	315 WEST ST. S. (SWM) ORILLIA CITY L3V 5G9	3-0868-94-	94	7/15/1994	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-21	585764 ONTARIO LTD.	315 WEST STREET SOUTH (SWM) ORILLIA CITY L3V 5G9	3-0798-94-	94	7/13/1994	Municipal sewage	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-22	WIDEFLANGE INC.	WEST ST.S./COCHRANE ST. ORILLIA CITY	7-0462-94-	94	6/7/1994	Municipal water	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-23	WIDEFLANGE INC.	WEST ST.S./COCNRANE ST. (SWM) ORILLIA CITY	3-0611-94-	94	6/7/1994	Municipal sewage	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-24	GALTACO-REDLAW CASTINGS CORP.	255 WEST ST. S. ORILLIA CITY	8-3186-88-	88	2/7/1989	Industrial air	Approved in 1989	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: RELOCATED COOLING LINE EXHAUST 8-3185-88 Contaminants: Odour/Fumes Emission Control: No Controls					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-25	REDLAW INDUSTRIES INC.	255 WEST STREET SOUTH ORILLIA CITY	8-3111-88-	88	2/10/1989	Industrial air	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: 8-3185-88/8-3186-88 Contaminants: Emission Control:					
CA-26	REDLAW INDUSTRIES INC.	255 WEST STREEET SOUTH ORILLIA CITY	8-3110-88-	88	2/10/1989	Industrial air	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: SEE NO. 8-3185-88 3-3186-88 Contaminants: Emission Control:					
CA-27	GALTACO REDLAW CASTINGS CORPORATION	255 WEST ST. S. ORILLIA CITY	8-3185-88-	88	2/7/1989	Industrial air	Approved in 1989	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: PRESS POUR FURNACE 8-3186-88 Contaminants: Suspended Particulate Matter Emission Control:					
CA-28	ORILLIA CITY, ENGINEERING DEPARTMENT	BARRIE RD./WYANDOTTE ST. ORILLIA CITY	7-0371-99-	99	6/16/1999	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-29	703635 Ontario Inc.	3 Royce Avenue Orillia L3V 5H8	9885-5M4HPU	2003	5/12/2003	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-30	ORILLIA CITY	QUEEN ST./WEST ST. NORTH ORILLIA CITY	7-0913-90-	90	6/22/1990	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-31	UEI HOLDINGS INC.	174 WEST STREET SOUTH, LOT P ORILLIA	8-1148-98-	98	12/18/1998	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		DUST COLLECTOR FOR THERMAL RECLAIMER			
CA-32	DORR OLIVER CANADA LTD.	174 WEST STREET SOUTH ORILLIA CITY	8-3019-89-	89	8/29/1989	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		8-3018-89;NEW SHAKEOUT TO EXIST.ROTOCLON			

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-33	GL&V Canada Inc.	174 West St S Orillia	8601-7FYPVQ	2008	6/27/2008	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-34	DORR OLIVER CANADA LTD.	174 WEST STREET SOUTH ORILLIA CITY	8-3018-89-	89	8/25/1989	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: 8-3019-89;FOUNDRY SAND RECLAMATION SYSTE Contaminants: Emission Control:					
CA-35	NEW HILLMOUNT CONSTRUCTION CO. LTD.	263 MILLARD ST.,PT.LOT 10 SWM ORILLIA CITY L3V 4H2	3-1460-94-	94	11/4/1994	Municipal sewage	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-36	NEW HILLMOUNT CONSTRUCTION CO. LTD.	263 MILLARD ST.,PT.LOT 10 SWM ORILLIA CITY L3V 4H2	3-1460-94- 006	94	11/23/94	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-37	THOMAS S. PARISH LIMITED	135 WEST STREET SOUTH ORILLIA CITY L3V 5G7	8-3289-94-	94	6/29/1994	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: WASTE OIL FURNACE MODEL REZNOR RAD-235 Contaminants: Emission Control:					
CA-38	THOR MOTORS (ORILLIA) LTD.	211 FRONT STREET ORILLIA	8-1303-97-	97	//	Industrial air	In progress	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: WASTE OIL FURNACE MODEL RA(D)-235 Contaminants: Emission Control:					
CA-39	ORILLIA CITY	BARRIE ST./WEST ST./WYANDOTTE ORILLIA CITY	7-0412-95-	95	5/26/1995	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-40	ORILLIA CITY - HIGHWAY #12 BYPASS	ATHERLEY RD./GILL ST. ORILLIA CITY	7-0447-92-	92	6/10/1992	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-41	ORILLIA CITY - HIGHWAY #12 BYPASS	ATHERLEY RD./GILL ST. ORILLIA CITY	3-0522-92-	92	6/10/1992	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-42	BEAVER LUMBER COMPANY LIMITED	SWM - 5 KING STREET ORILLIA CITY L3V 1R2	3-0134-97-	97	3/3/1997	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-43	ORILLIA CITY	130 ATHERLEY RD. ORILLIA CITY L3V 1N3	3-0315-95-	95	4/6/1995	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-44	ORILLIA CITY	FRONT ST/GILL ST. ORILLIA CITY	3-0331-95-	95	4/5/1995	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-45		Front St./ Gill St. Orillia	7950-5BHPX2	02	6/29/02	Municipal & Private sewage	Approved	New Certificate of Approval
			Client Name:		The Corporation of the City of Orillia			
			Client Address:		50 Andrew Street South			
			Client City:		Orillia			
			Client Postal Code:		L3V 7T5			
			Project Description:		This application is for the construction of storm sewers on Gill Street, Front Street and Queen Street.			
			Contaminants:					
			Emission Control:					
CA-46		Front St./ Gill St. Orillia	6991-5BHPQJ	02	6/29/02	Municipal & Private water	Approved	New Certificate of Approval
			Client Name:		The Corporation of the City of Orillia			
			Client Address:		50 Andrew Street South			
			Client City:		Orillia			
			Client Postal Code:		L3V 7T5			
			Project Description:		This application is for the construction of watermain on Front Street and Gill Street.			
			Contaminants:					
			Emission Control:					
CA-47	ORILLIA CITY	INDUSTRIAL ST./ATHERLEY RD. ORILLIA CITY	3-1231-90-	90	7/20/1990	Municipal sewage	Approved	
			Client Name:					
			Client Address:					
			Client City:					
			Client Postal Code:					
			Project Description:					
			Contaminants:					
			Emission Control:					
CA-48	ORILLIA CITY	ATHERLEY RD./EAST ST./BAYVIEW ORILLIA CITY	7-0114-93-	93	3/24/1993	Municipal water	Approved	
			Client Name:					
			Client Address:					
			Client City:					
			Client Postal Code:					
			Project Description:					
			Contaminants:					
			Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
CA-49	ORILLIA CITY	ATHERLEY RD./EAST ST./BAYVIEW ORILLIA CITY	3-0151-93-	93	3/24/1993	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-50	ORILLIA CITY	ATHERLEY RD./MILLARD ST. ORILLIA CITY	3-0218-93-	93	4/1/1993	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-51	Embury Co. Limited	1 Industrial St Orillia	7811-7XGLJA	2010	1/15/2010	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
CA-52	PAL ENGINES INC.	129 FRONT ST. S. ORILLIA CITY L3V 4S6	8-3012-86-	86	4/9/1986	Industrial air	Cancelled	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: OVEN TO CLEAN GREASE FROM ENGINE BLOCKS Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	ORILLIA CITY	JAMES STREET PUMPING STATION ORILLIA CITY	8-3371-94-	94	11/30/1994	Industrial air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: WET WELL VENT & STANDBY POWER AT P.S. Contaminants: Hydrogen Sulphide Emission Control: No Controls					
n/a	ORILLIA CITY	ATHERLEY RD. ORILLIA CITY	3-1053-87-	87	7/9/1987	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	JAMES STREET WEST ORILLIA CITY	3-0786-86-	86	7/25/1986	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	WEST STREET NORTH ORILLIA CITY	3-0897-86-	86	8/1/1986	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	ORILLIA CITY JAMES ST. SEWAGE P.HOUSE	WATER POLLUTION CONTROL PLANT ORILLIA CITY	3-1553-86-	86	7/8/1988	Municipal sewage	Approved in 1987	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY, ATHERLEY ROAD	MILLARD STREET ORILLIA CITY	3-0735-88-	88	8/5/1988	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	OTTO CSEKEY	WEST STREET ORILLIA CITY	3-0989-88-	88	8/11/1988	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	MEMORIAL AVENUE INVESTMENTS LIMITED	MEMORIAL AVE. COMMERCIAL DEVEL ORILLIA CITY	3-1872-88-	88	11/3/1988	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	780327 ONTARIO LIMITED	PRIVATE INT. STS. BARRIE RD. ORILLIA CITY	3-0168-89-	89	7/18/1989	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	CARL MCDAID ENTERPRISES LIMITED PRIVATE	LOT 1, REG. PLAN 395, WEST ST. ORILLIA CITY	3-0617-89-	89	7/25/1989	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	WEST ST. N. ORILLIA CITY	3-0756-89-	89	7/28/1989	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	T. TSELIKIS - REG. PLAN 673	MEMORIAL AVENUE ORILLIA CITY	3-2132-89-	89	12/21/1989	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	A.H. DOUGLAS INVESTMENTS CORP. LTD.	S.W. CORNER MEMORIAL AVE. ORILLIA CITY	3-1027-89-	89	1/23/1990	Municipal sewage	Approved in 1990	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	MICHAEL B. SMITH-LOTS 8 TO 11	MILLARD ST. TOWNHOUSES ORILLIA CITY	3-0267-90-	90	7/12/1990	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY - ATHERLEY RD.FILE#E01-REP	ATHERLEY RD/MOFFATT ST/BAY ST. ORILLIA CITY	3-1873-91-	91	2/12/1992	Municipal sewage	Approved in 1992	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	JAMES ST. WEST ORILLIA CITY	7-0630-86-	86	7/25/1986	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	ORILLIA CITY, ATHERLEY ROAD	MILLAR STREET ORILLIA CITY	7-0644-88-	88	8/5/1988	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	780327 ONTARIO LIMITED	PRIVATE INT. STRS BARRIE RD. ORILLIA CITY	7-0158-89-	89	5/12/1989	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	QUEEN ST. W. ORILLIA CITY	7-0014-89-	89	6/30/1989	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	CARL MCDAIDE ENTERPRISES LTD. PRIVATE	LOT 1, REG. PLAN 395, WEST ST. ORILLIA CITY	7-0543-89-	89	7/25/1989	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	ORILLIA CITY	WEST ST. SOUTH ORILLIA CITY	7-0320-89-	89	7/28/1989	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	MICHAEL B. SMITH-LOTS 8 TO 11	MILLARD STREET - TOWNHOUSES ORILLIA CITY	7-0211-90-	90	7/12/1990	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	BARRIE RD./WEST ST./ALBERT ST. ORILLIA CITY	3-0550-95-	95	5/26/1995	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	GOLDWING FABRICATING LIMITED	WEST ST.S., LOTS 3&4 (SWM) ORILLIA CITY	3-0797-94-	94	7/12/1994	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	638230 ONTARIO LIMITED	JAMES ST./MARGARET ST. SUBD. ORILLIA CITY	3-1421-94-	94	11/3/1994	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	638230 ONTARIO LIMITED	ENDAAJIG CIRCLE/JAMES ST. ORILLIA CITY	7-1065-94-	94	11/1/1994	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	ATHERLEY RD. ORILLIA CITY	7-0893-87-	87	7/9/1987	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	OTTO CSEKEY	WEST STREET ORILLIA CITY	7-0861-88-	88	8/11/1988	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	WIDE FLANGE INC.	NOR-WELD DR/WEST/COCHRANE STS. ORILLIA CITY	7-0348-96-	96	5/7/1996	Municipal water	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	WIDE FLANGE INC.	NOR-WELD DR/WEST/COCHRANE STS. ORILLIA CITY	3-0390-96-	96	5/7/1996	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	FRONT ST./MATCHEDASH ST. ORILLIA CITY	3-0449-96-	96	5/27/1996	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	ORILLIA CITY	ATHERLEY ROAD SAN. FORCEMAIN ORILLIA CITY	3-1128-97-	97	8/25/1997	Municipal sewage	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	Memorial Avenue Storm Sewers	Lots 10 and 11, Concession 4 Orillia	4440-5ALQ9X	02	6/3/02	Municipal & Private sewage	Approved	New Certificate of Approval
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		The Corporation of the City of Orillia 50 Andrew Street South Orillia L3V 7T5 Approval is sought for the construction of storm sewers on Memorial Avenue and James Street.			
n/a	187 Front Street	Lot 1, West Side of Front Street, R.P. 610 Orillia	0703-4VRNKT	01	4/13/01	Industrial air	Approved	New Certificate of Approval
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:		AMEC Earth & Environmental Limited 610 Newbold Street london N6E 2T6 This application is for an Air Certificate of Approval for the purpose of site remediation by injecting a proprietary product designed to time-release oxygen into the subsurface in order to accelerate the natural attenuation of petroleum hydrocarbon compounds. This is a passive process. Emissions to the atmosphere will be through the soil over the area characterized as being contaminated.			
n/a	Circoflex (2002) Corporation	Barrie Road Orillia	3102-6H4HM9	2005	10/14/2005	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	The Corporation of the City of Orillia	West St N Orillia	3305-733K9H	2007	5/22/2007	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	The Corporation of the City of Orillia	West Street, Queen Street, Cochrane Street and James Street Orillia	5660-68HSB8	2005	1/12/2005	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	The Corporation of the City of Orillia	Front Street South Orillia	7115-5Y8RW6	2004	4/23/2004	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	The Corporation of the City of Orillia	35 metres south of Atherley Road to James Street Orillia	8161-5YUQ8A	2004	5/11/2004	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	The Corporation of the Township of Ramara	85 Patricia Dr Atherley Orillia	2294-8JAQ43	2011	6/30/2011	Air	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Certificates of Approval

Map Key	Company	Address	Certificate #	Application Year	Issue Date	Approval Type	Status	Application Type
n/a	Thor Motors (Orillia) Limited	201 Gill St Lot 10, Concession 5 Orillia	2946-8KMPKU	2011	8/31/2011	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					
n/a	The Corporation of the City of Orillia	West Street From Highway 12 Bypass to Shannon Street Orillia	2381-8MKLE5	2011	10/19/2011	Municipal and Private Sewage Works	Approved	
			Client Name: Client Address: Client City: Client Postal Code: Project Description: Contaminants: Emission Control:					

Compliance and Convictions

Map Key	Company	Address	File No.	Crown Brief No.	Ministry District	Region
CONV-1	DORR-OLIVER CANADA LIMITED	ORILLIA	Description: DEPOSITING WASTE ON LAND - NOT AN APPROVED SITE			
			<u>Date Charged</u>	<u>Fine</u>	<u>Act/Regulation/Section</u>	<u>Charge Disposition</u>
			1991	20000	EPA- -39	
n/a	CANADIAN WASTE SERVICES INC.			97-0117-0141	SARNIA & HURON COUNTY	SOUTH WEST REGION
			Description: OPERATE A WASTE MANAGEMENT SYSTEM - VEHICLE BODY NOT LEAKPROOF.			
			<u>Date Charged</u>	<u>Fine</u>	<u>Act/Regulation/Section</u>	<u>Charge Disposition</u>
			10/15/97	\$300.00	EPA-347-16(3)	SUSPENDED SENTENCE

Certificates of Property Use

Map Key	Company	Address	Year	EBR Registry No.	Ministry Ref. No.	Type
CPU-1	The Corporation of the City of Orillia	255 West St South ORILLIA	2011	011-2570	7184-85KNQZ	Instrument Proposal
CPU-2	City of Orillia	255 West Street South Orillia	2007	010-0168	8750-67YK3U	Instrument Proposal
CPU-3	2124326 Ontario Inc.	5 King Street Orillia L3V 1R2	2009	010-7127	3738-6XTSX4	Instrument Proposal
CPU-4	Home Hardware Stores Ltd.	5 King Street West ORILLIA	2006	IA06E1314	3645-6KYPSZ	Instrument Decision
CPU-5	Home Hardware Stores Ltd.	5 King Street Orillia L3V 1R2	2010	010-3671	3738-6XTSX4	Instrument Proposal
CPU-6	Home Hardware Stores Ltd.	5 King Street West Orillia	2007	010-1734	3645-6KYPSZ-2	Instrument Proposal

Certificates of Property Use

Map Key	Company	Address	Year	EBR Registry No.	Ministry Ref. No.	Type
CPU-7	Moorsom Development Ltd.	4 King Street West Orillia	2008	010-5525	7121-7M7KFN	Instrument Proposal
				Instrument Type: (EPA s. 168.6) - Certificate of Property Use		
				Proposal Date: December 22, 2008		
				Location: 4 King Street West Orillia		
				Proponent Address: 34 Owl's Foot Crescent Aurora Ontario Canada L4G 6A2		

Environmental Registry

Map Key	Company	Address	Year	EBR Registry No.	Ministry Ref. No.	Type
EBR-1	McGill Environmental Services Ltd.	180 James Street West City of Orillia	1998	IA8E1174		Instrument
			Instrument Type:	EPA s. 27 - Approval for a waste disposal site.		
			Proposal Date:	8/18/98		
			Location:	City of Orillia		
			Proponent Address:	McGill Environmental Services Ltd.P.O. Box 814,Orillia, Ontario, L3V 6K8		
EBR-2	United Propeller & Machine Inc.	220 James Street West Orillia L3V 6Y3	2006	IA06E0698	1516-6Q3T39	Instrument Proposal
			Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9		
			Proposal Date:			
			Location:	220 James Street West Orillia Ontario		
			Proponent Address:	220 James Street West Orillia Ontario L3V 6Y3		
EBR-3	Orillia Water	360 West Street South City of Orillia L3V 5G8	1998	IA8E0760		Instrument
			Instrument Type:	EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)		
			Proposal Date:	5/29/98		
			Location:	City of Orillia		
			Proponent Address:	Orillia Water, Light & Power Commission,360 West Street South,Orillia, Ontario,L3V 5J9 PHONE; (705) 326-7315FAX; (705) 326-0800,		
EBR-4	Orillia Water	360 West Street South City of Orillia L3V 5G8	1998	IA8E1140		Instrument
			Instrument Type:	EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)		
			Proposal Date:	8/13/98		
			Location:	City of Orillia		
			Proponent Address:	Orillia Water, Light & Power Commission360 West Street South,Orillia, Ontario, L3V 5J9		
EBR-5	Harper's Collision	120 Norweld Drive Orillia L3V 7Z2	2008	010-5213	3114-7L4SKA	Instrument Proposal
			Instrument Type:	(EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)		
			Proposal Date:	November 18, 2008		
			Location:	120 Norweld Drive Orillia County of Simcoe L3V 7Z2		
			Proponent Address:	7 James Street East Orillia Ontario Canada L3V 1K9		
EBR-6	Sheridan Gymnasium Equipment Limited	290 West Street South Orillia L3V 5G8	2005	IA05E0979	3526-6DJRX5	Instrument Decision
			Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9		
			Proposal Date:			
			Location:	290 West Street South Orillia Ontario L3V 5G8		
			Proponent Address:	290 West Street South Orillia Ontario L3V 5G8		

Environmental Registry

Map Key	Company	Address	Year	EBR Registry No.	Ministry Ref. No.	Type
EBR-7	703635 Ontario Inc.	3 Royce Avenue Suite 1 Orillia L3V 5H8	2003	IA03E0271		Instrument
			Instrument Type:	EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)		
			Proposal Date:	2/28/03		
			Location:	3 Royce Avenue Suite 1, Orillia, Ontario, L3V 5H8		
			Proponent Address:	703635 Ontario Inc. 3 Royce Avenue Suite 1, Orillia, Ontario, L3V 5H8		
EBR-8	GL&V Canada Inc.	174 West Street South Orillia L3V 6L4	2007	010-0390	8402-726R42	Instrument Proposal
			Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9		
			Proposal Date:	April 20, 2007		
			Location:	174 West Street South Orillia County of Simcoe L3V 6L4 CITY OF ORILLIA		
			Proponent Address:	174 West Street South Orillia Ontario Canada L3V 6L4		
EBR-9	UEI Holdings Inc	174 West Street South City of Orillia	1998	IA8E1083		Instrument
			Instrument Type:	EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)		
			Proposal Date:	7/31/98		
			Location:	City of Orillia		
			Proponent Address:	UEI Holdings Inc. 1825 Inkster Boulevard, Winnipeg, Manitoba, R2X 1R3		
EBR-10	Thor Motors (Orillia) Limited	211 Front Street Orillia	2005	IA05E1270	1672-5E2QS3	Instrument Decision
			Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9		
			Proposal Date:			
			Location:	211 Front Street Orillia Ontario		
			Proponent Address:	P.O. Box 758, 201 Gill Street Orillia Ontario L3V 6K7		
EBR-11	Thor Motors (Orillia) Ltd.	211 Front Street City of Orillia	1997	IA7E1918		Instrument
			Instrument Type:	EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)		
			Proposal Date:			
			Location:	City of Orillia		
			Proponent Address:	Thor Motors (Orillia) Ltd. Box 758, 201 Gill Street, Orillia, Ontario, L3V 6K7		
EBR-12	Embury Co. Limited	1 Industrial Street Orillia	2008	010-4096	8941-7G4P8V	Instrument Proposal
			Instrument Type:	(EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)		
			Proposal Date:	July 04, 2008		
			Location:	1 Industrial Street Orillia County of Simcoe		
			Proponent Address:	1 Industrial Street Orillia Ontario Canada L3V 6K7		

Environmental Registry

Map Key	Company	Address	Year	EBR Registry No.	Ministry Ref. No.	Type
n/a	AMEC Earth & Environmental Limited	Lot 1, West Side of Front Street Orillia	2001	IA01E0140		Instrument
			Instrument Type:	EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)		
			Proposal Date:			
			Location:	Lot 1, West Side of Front Street, R.P. 610, Orillia, Ontario Orillia		
			Proponent Address:	AMEC Earth & Environmental Limited 610 Newbold Street, London, Ontario, N6E 2T6		
n/a	Warner's Collision Centre Ltd.	9 James St Orillia	2006	IA06E1531	5425-6WASMP	Instrument Decision
			Instrument Type:	Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9		
			Proposal Date:	December 13, 2006		
			Location:	9 James St Orillia Ontario Orillia		
			Proponent Address:	9 James St Orillia Ontario L3V 1K9		

ERIS Historical Searches

Map Key	Company	Address	Order No.	Report Date	Report Type	Search Radius (km)
EHS-1		294 Memorial Avenue Orillia L3V 5X6	20060314018 Addit. Info Ordered:	3/23/2006	Basic Report	0.25
EHS-2		180 James Street West Orillia L3V 6K8	20061020024 Addit. Info Ordered:	10/23/2006	Complete Report	0.25
EHS-3		180 James St West Orillia L3V 6K8	20010203022 Addit. Info Ordered:	2/14/01	Complete Report	0.30
EHS-4		190 James Street West Orillia	20080125014 Addit. Info Ordered:	1/31/2008	Custom Report	0.5
EHS-5		351 West Street South Orillia L3V 5H1	20070514010 Addit. Info Ordered:	5/17/2007	CAN - Complete Report	0.25
EHS-6		300 West St S Orillia L3V 5G8	20080814029 Addit. Info Ordered:	8/25/2008	Complete Report	0.25
EHS-7		108 Norweld Dr Orillia L3V 7W5	20101111008 Addit. Info Ordered:	11/22/2010 Aerial Photos	Standard Report	0.25
EHS-8		West St S and Queen St W Orillia	20070601022 Addit. Info Ordered:	6/13/2007	CAN - Custom Report	0.5
EHS-9		301 Matchedash St S Orillia L3V 0C4	20110822003 Addit. Info Ordered:	8/23/2011	Site Report	0.25
EHS-10		45 Cochrane St Orillia	20110829034 Addit. Info Ordered:	10/6/2011	Custom Report	0.25

ERIS Historical Searches

Map Key	Company	Address	Order No.	Report Date	Report Type	Search Radius (km)
EHS-11		255 West Street South, Orillia	20050401040	4/7/2005		0.3
			Addit. Info Ordered:			
EHS-12		Front St && Church St Legal Disc. City of Orillia	20031222008	1/5/04	Basic Report	0.25
			Addit. Info Ordered:	Fire Insur. Maps and/or Site Plans and/or Inspection Reports; Aerials Photos and/or Topographical Maps		
EHS-13		120 Powley St. Orillia L3V 2T6	20110513028	5/16/2011	Site Report	0.25
			Addit. Info Ordered:			
EHS-14		95 Barrie Road Orillia	20100427012	5/5/2010	Standard Select Report	0.25
			Addit. Info Ordered:			
EHS-15		174 West Street South Orillia	20010709014	7/13/01	Complete Report	0.50
			Addit. Info Ordered:			
EHS-16		263 Millard Street Orillia L3V 4H2	20091021032	10/30/2009	Standard Report	0.25
			Addit. Info Ordered:			
EHS-17		150 West St Simcoe N3Y 5C1	20040408020	4/13/04	Custom Report	0.25
			Addit. Info Ordered:			
EHS-18		150 West Street Simcoe (Norfolk)	20050919003	9/22/2005	Complete Report	0.25
			Addit. Info Ordered:	Additional AND Report		
EHS-19		135 West Street South Orillia L3V 5G7	20081110011	11/19/2008	Standard Report	0.25
			Addit. Info Ordered:	Fire Insur. Maps and/or Site Plans; Title Search		
EHS-20		135 West St S Orillia L3V 5G7	20100706033	10/18/2010	Custom Report	0.25
			Addit. Info Ordered:			

ERIS Historical Searches

Map Key	Company	Address	Order No.	Report Date	Report Type	Search Radius (km)
EHS-21		169 Front St Orillia	20100506004	5/14/2010	Standard Report	0.25
			Addit. Info Ordered:			
EHS-22		169 Front Street South Orillia L3V 4S8	20080611017	6/20/2008	Basic Report	0.25
			Addit. Info Ordered:			
EHS-23		1 Industrial Street Orillia	20100714052	7/20/2010	Standard Report	0.25
			Addit. Info Ordered:	Fire Insur. Maps and/or Site Plans; Title Searches; City Directory		
EHS-24		114 Davey Drive Orillia L3V 4G8	20071205031	12/14/2007	CAN - Basic Report	0.25
			Addit. Info Ordered:	Fire Insur. Maps And /or Site Plans		

List of TSSA Expired Facilities

Map Key	Company	Address	Instance ID	Instance Number	Context	Status:
EXP-1	LARRY HAWRYLUK 676872 ONTARIO INC	176 MEMORIAL AVE ORILLIA L3V 5X6	397694	9859825	FS Facility	EXPIRED
			Description:	FS Gasoline Station - Full Serve		
EXP-2	1569362 ONTARIO INC O/A MEMORIAL SUNOCO	176 MEMORIAL AVE ORILLIA L3V 5X6	82335	11399484	FS Piping	EXPIRED
			Description:	FS Piping		
EXP-3	1569362 ONTARIO INC O/A MEMORIAL SUNOCO	176 MEMORIAL AVE ORILLIA L3V 5X6	82524	11399469	FS Liquid Fuel Tank	EXPIRED
			Description:	FS Liquid Fuel Tank		
EXP-4	1569362 ONTARIO INC O/A MEMORIAL SUNOCO	176 MEMORIAL AVE ORILLIA L3V 5X6	82050	11399453	FS Liquid Fuel Tank	EXPIRED
			Description:	FS Liquid Fuel Tank		
EXP-5	1630226 ONTARIO INC	176 MEMORIAL AVE ORILLIA L3V 5X6	15798	10314976	FS Facility	EXPIRED
			Description:	FS Gasoline Station - Self Serve		
EXP-6	ULTRAMAR CANADA INC	174 MEMORIAL AVE ORILLIA L3V 5X6	49600	10892646	FS Piping	EXPIRED
			Description:	FS Piping		
EXP-7	ULTRAMAR CANADA INC	174 MEMORIAL AVE ORILLIA L3V 5X6	393938	9703645	FS Facility	EXPIRED
			Description:	FS Gasoline Station - Full Serve		
EXP-8	ULTRAMAR CANADA INC	174 MEMORIAL AVE ORILLIA L3V 5X6	49921	10892629	FS Piping	EXPIRED
			Description:	FS Piping		
EXP-9	ULTRAMAR CANADA INC	174 MEMORIAL AVE ORILLIA L3V 5X6	51144	10892637	FS Liquid Fuel Tank	EXPIRED
			Description:	FS Liquid Fuel Tank		
EXP-10	ULTRAMAR CANADA INC	174 MEMORIAL AVE ORILLIA L3V 5X6	50158	10892622	FS Liquid Fuel Tank	EXPIRED
			Description:	FS Liquid Fuel Tank		

List of TSSA Expired Facilities

Map Key	Company	Address	Instance ID	Instance Number	Context	Status:
EXP-11	CANADIAN TIRE GAS BAR #1687	135 WEST ST S ORILLIA L3V 5G7	290027	29998223	FS Facility	EXPIRED
			Description:	FS Cylinder Exchange		
EXP-12	CANADIAN TIRE CORP LTD C/O Canadian Tire Petroleum 17 Flr**	135 WEST ST S ORILLIA L3V 5G7	391767	9645039	FS Facility	EXPIRED
			Description:	FS Propane Refill Cntr - Cylr Fill		
EXP-13	CANADIAN TIRE CORP LTD C/O Canadian Tire Petroleum 17 Flr**	135 WEST ST S ORILLIA L3V 5G7	50525	10893120	FS Propane Tank	EXPIRED
			Description:	FS Propane Tank		
EXP-14	1304048 ONTARIO INC	184 GILL ST ORILLIA L3V 4K1	385785	9581175	FS Facility	EXPIRED
			Description:	FS Gasoline Station - Full Serve		
EXP-15	1320883 ONTARIO LTD O/A PETRO CANADA	169 FRONT ST S ORILLIA L3V 4S8	99182	13491029	FS Facility	EXPIRED
			Description:	FS Cylinder Exchange		
EXP-16	PIONEER ENERGY MANAGEMENT INC.	285 ATHERLEY RD ORILLIA L3V 1N7	68512	11088451	FS Liquid Fuel Tank	EXPIRED
			Description:	FS Liquid Fuel Tank		
EXP-17	PIONEER ENERGY MANAGEMENT INC.	285 ATHERLEY RD ORILLIA L3V 1N7	83196	11404870	FS Piping	EXPIRED
			Description:	FS Piping		
EXP-18	PIONEER ENERGY MANAGEMENT INC.	285 ATHERLEY RD ORILLIA L3V 1N7	67691	11088463	FS Liquid Fuel Tank	EXPIRED
			Description:	FS Liquid Fuel Tank		
EXP-19	PIONEER ENERGY MANAGEMENT INC.	285 ATHERLEY RD ORILLIA L3V 1N7	68174	11088430	FS Liquid Fuel Tank	EXPIRED
			Description:	FS Liquid Fuel Tank		
EXP-20	PIONEER ENERGY MANAGEMENT INC.	285 ATHERLEY RD ORILLIA L3V 1N7	67923	11088444	FS Liquid Fuel Tank	EXPIRED
			Description:	FS Liquid Fuel Tank		

List of TSSA Expired Facilities

Map Key	Company	Address	Instance ID	Instance Number	Context	Status:
EXP-21	PIONEER ENERGY MANAGEMENT INC.	285 ATHERLEY RD ORILLIA L3V 1N7	397245	9879238	FS Facility	EXPIRED
			Description:		FS Gasoline Station - Full Serve	
EXP-22	RANEY FUELS INC	68 KING ST ORILLIA L3V 1R3	18478	10451199	FS Highway Tank - Gas/Diesel	EXPIRED
			Description:		FS HIGHWAY TANK - GASOLINE/DIESEL	

Fuel Storage Tank

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-1	CANADIAN TIRE CORP LTD C/O Canadian Tire Petroleum 17 Flr**	135 WEST ST S ORILLIA L3V 5G7			June 2010	Retail Fuel Outlet	FS GASOLINE STATION - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	75000	2007	Fiberglass	Double Wall UST - Gasoline
FST-2	CANADIAN TIRE CORP LTD C/O Canadian Tire Petroleum 17 Flr	135 WEST ST S ORILLIA L3V 5G7	5/24/2002	Licensed	December 2008	Retail Fuel Outlet	Gasoline Station - Self Serve
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	75000	2007		Liquid Fuel Double Wall UST - Gasoline
			Active	75000	2007		Liquid Fuel Double Wall UST - Gasoline
FST-3	CANADIAN TIRE CORP LTD C/O Canadian Tire Petroleum 17 Flr**	135 WEST ST S ORILLIA L3V 5G7			January 2010	Retail Fuel Outlet	FS GASOLINE STATION - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	75000	2007	Fiberglass	Double Wall UST - Gasoline
FST-4	CANADIAN TIRE CORP LTD **	135 WEST ST S ORILLIA L3V 5G7	5/24/2002	Licensed	August 2007	Retail Fuel Outlet	Gasoline Station - Self Serve
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	45400	1970		Liquid Fuel Single Wall UST - Gasoline
			Active	45400	1970		Liquid Fuel Single Wall UST - Gasoline
			Active	45400	1970		Liquid Fuel Single Wall UST - Gasoline

Fuel Storage Tank

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-5	CANADIAN TIRE CORP LTD C/O Canadian Tire Petroleum 17 Flr**	135 WEST ST S ORILLIA L3V 5G7			June 2011	Retail Fuel Outlet	FS GASOLINE STATION - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	75000	2007	Fiberglass	Double Wall UST - Gasoline
			Active	75000	2007	Fiberglass	Double Wall UST - Gasoline
FST-6	1569362 ONTARIO INC O/A SUNOCO CARWASH	184 GILL ST ORILLIA L3V 4K1	12/7/2005 10:55:00 AM	Licensed	December 2008	Retail Fuel Outlet	Gasoline Station - Split Serve
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	50000	1999		Liquid Fuel Single Wall UST - Gasoline
			Active	50000	1999		Liquid Fuel Single Wall UST - Gasoline
			Active	50000	1999		Liquid Fuel Single Wall UST - Gasoline
			Active	150000	1999		Liquid Fuel Single Wall UST - Gasoline
FST-7	SUNSHINE SUPER WASH	184 GILL ST ORILLIA L3V 4K1			June 2011	Retail Fuel Outlet	FS GASOLINE STATION - SPLIT SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	50000	1999	Fiberglass	Double Wall UST - Gasoline
			Active	50000	1999	Fiberglass	Double Wall UST - Gasoline
			Active	50000	1999	Fiberglass	Double Wall UST - Gasoline
FST-8	SUNSHINE SUPER WASH	184 GILL ST ORILLIA L3V 4K1			June 2010	Retail Fuel Outlet	FS GASOLINE STATION - SPLIT SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	50000	1999	Fiberglass	Double Wall UST - Gasoline

Fuel Storage Tank

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-9	1569362 ONTARIO INC O/A SUNOCO CARWASH	184 GILL ST ORILLIA L3V 4K1	12/7/2005	Licensed	August 2007	Retail Fuel Outlet	Gasoline Station - Split Serve
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	50000	1999		Liquid Fuel Single Wall UST - Gasoline
			Active	50000	1999		Liquid Fuel Single Wall UST - Gasoline
			Active	150000	1999		Liquid Fuel Single Wall UST - Gasoline
			Active	50000	1999		Liquid Fuel Single Wall UST - Gasoline
FST-10	SUNSHINE SUPER WASH	184 GILL ST ORILLIA L3V 4K1			January 2010	Retail Fuel Outlet	FS GASOLINE STATION - SPLIT SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	50000	1999	Fiberglass	Double Wall UST - Gasoline
FST-11	PIONEER PETROLEUMS MANAGEMENT INC**	285 ATHERLEY RD ORILLIA L3V 1N7	6/3/2002	Licensed	December 2008	Retail Fuel Outlet	Gasoline Station - Self Serve
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	25000	1991		Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1991		Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1991		Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1991		Liquid Fuel Single Wall UST - Gasoline

Fuel Storage Tank

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-12	PIONEER PETROLEUMS MANAGEMENT INC**	285 ATHERLEY RD ORILLIA L3V 1N7	6/3/2002	Licensed	August 2007	Retail Fuel Outlet	Gasoline Station - Self Serve
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	25000	1991		Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1991		Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1991		Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1991		Liquid Fuel Single Wall UST - Gasoline
FST-13	PIONEER PETROLEUMS MANAGEMENT INC**	285 ATHERLEY RD ORILLIA L3V 1N7			January 2010	Retail Fuel Outlet	FS GASOLINE STATION - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	25000	1992	Sacrificial anode	Liquid Fuel Single Wall UST - Gasoline
FST-14	PIONEER ENERGY MANAGEMENT INC.	285 ATHERLEY RD ORILLIA L3V 1N7			June 2011	Retail Fuel Outlet	FS GASOLINE STATION - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	25000	1992	Sacrificial anode	Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1992	Sacrificial anode	Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1992	Sacrificial anode	Liquid Fuel Single Wall UST - Gasoline
			Active	25000	1992	Sacrificial anode	Liquid Fuel Single Wall UST - Gasoline
FST-15	PIONEER PETROLEUMS MANAGEMENT INC**	285 ATHERLEY RD ORILLIA L3V 1N7			June 2010	Retail Fuel Outlet	FS GASOLINE STATION - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	25000	1992	Sacrificial anode	Liquid Fuel Single Wall UST - Gasoline

Fuel Storage Tank

Map Key	Company	Address	License Issue Date	Tank Status	Tank Status As Of	Operation Type	Facility Type
FST-16	ONTARIO HYDRO	333 FOREST AV ORILLIA	3/1/1991	Licensed	August 2007	Private Fuel Outlet	Gasoline Station - Self Serve
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	9000	1979		Liquid Fuel Single Wall UST - Gasoline
			Active	9000			Liquid Fuel Single Wall UST - Diesel
FST-17	ONTARIO HYDRO	333 FOREST AV ORILLIA L4M 5H5			January 2010	Private Fuel Outlet	FS PRIVATE FUEL OUTLET - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	9000		Fiberglass	Liquid Fuel Single Wall UST - Diesel
			Active	9000	1979	Impressed Current	Liquid Fuel Single Wall UST - Gasoline
FST-18	ONTARIO HYDRO	333 FOREST AV ORILLIA L4M 5H5			June 2011	Private Fuel Outlet	FS PRIVATE FUEL OUTLET - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	9000	1979	Impressed Current	Liquid Fuel Single Wall UST - Gasoline
			Active	9000		Fiberglass	Liquid Fuel Single Wall UST - Diesel
FST-19	ONTARIO HYDRO	333 FOREST AV ORILLIA L4M 5H5			June 2010	Private Fuel Outlet	FS PRIVATE FUEL OUTLET - SELF SERVE
			<u>Status</u>	<u>Capacity (L)</u>	<u>Year of Installation</u>	<u>Corrosion Protection</u>	<u>Tank Fuel Type</u>
			Active	9000		Fiberglass	Liquid Fuel Single Wall UST - Diesel
			Active	9000	1979	Impressed Current	Liquid Fuel Single Wall UST - Gasoline

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-1	Waste Services (CA) Inc.	180 JAMES STREET WEST ORILLIA L3V 6K8		Generator #: ON1325300 Approval Yrs: As of Oct 2010	251	Waste oils/sludges (petroleum based)
					252	Waste crankcase oils and lubricants
GEN-2	CAPITAL ENVIRONMENTAL RESOURCE INC.	180 JAMES STREET WEST ORILLIA L3V 6K8		Generator #: ON1325300 Approval Yrs: 02,03,04	251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
GEN-3	MCGILL ENVIRONMENTAL SERVICES LTD	180 JAMES STREET WEST ORILLIA L3V 6K8	7759	OTHER SCI./TECH. OF. Generator #: ON1325300 Approval Yrs: 92,93,97,98	252	WASTE OILS & LUBRICANTS
GEN-4	MCGILL ENVIRONMENTAL SERVICES LTD.25-761	180 JAMES ST. WEST BOX 814 ORILLIA L3V 6K8	7759	OTHER SCI./TECH. OF. Generator #: ON1325300 Approval Yrs: 94,95,96	252	WASTE OILS & LUBRICANTS
GEN-5	Waste Services (CA) Inc.	180 JAMES STREET WEST ORILLIA L3V 6K8	562110	Waste Collection Generator #: ON1325300 Approval Yrs: 07,08	251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
GEN-6	MCGILL ENVIRONMENTAL SERVICES LTD.	180 JAMES STREET WEST ORILLIA L3V 6K8	7759	OTHER SCI./TECH. OF. Generator #: ON1325300 Approval Yrs: 99,00,01	252	WASTE OILS & LUBRICANTS
GEN-7	ARTECH PROMOTIONAL WEAR	220 JAMES STREET, UNIT #2 ORILLIA L3V 6Y3	5319	OTHER APPAREAL, WH. Generator #: ON2292400 Approval Yrs: 97	213	PETROLEUM DISTILLATES
GEN-8	SUPERIOR RUSTPROOFING INC.	220 JAMES STREET WEST, UNIT 3 ORILLIA L3V 6Y3	6359	OTHER VEH. REPAIR Generator #: ON2101900 Approval Yrs: 95,96,97,98,99,00,01	150	INERT INORGANIC WASTES
GEN-9	ARTECH PROMOTIONAL WEAR(OUT OF BUSINESS)	220 JAMES STREET, UNIT #2 ORILLIA L3V 6Y3	5319	OTHER APPAREAL, WH. Generator #: ON2292400 Approval Yrs: 98,99	213	PETROLEUM DISTILLATES

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-10	SIMCOE COUNTY DISTRICT HEALTH UNIT	210 MEMORIAL AVNEUE, UNIT 126 ORILLIA L3V 7V1	8635	PUB. HEALTH CLINICS	312	PATHOLOGICAL WASTES
				Generator #: ON1115105 Approval Yrs: 95,96,97,98,99,00,01		
GEN-11	SIMCOE COUNTY DISTRICT HEALTH UNIT	126-210 Memorial Ave West ORILLIA	621390	Offices of All Other Health Practitioners	312	PATHOLOGICAL WASTES
				Generator #: ON1115105 Approval Yrs: 03,04,05		
GEN-12	Country Drug Stores Ltd.	210 Memorial Avenue Orillia L3V 7V1	414510	Pharmaceuticals & Pharmacy Supplies Whl.	261	PHARMACEUTICALS
				Generator #: ON1366366 Approval Yrs: 03,04,05,06	312	PATHOLOGICAL WASTES
GEN-13	COUNTRY DRUG STORES LTD.	210 MEMORIAL AVE. ORILLIA L3V 7V1				
				Generator #: ON2645521 Approval Yrs: 03,04		
GEN-14	ORILLIA CITY CLEANERS	210 MEMORIAL AVE. UNIT 126 C ORILLIA L3V 7V1	812320	Dry Cleaning & Laundry Serv. (exc. Coin-Op.)		
				Generator #: ON7340305 Approval Yrs: 03,04		
GEN-15	SIMCOE Muskoka DISTRICT HEALTH UNIT	126-210 Memorial Ave West ORILLIA	621390	Offices of All Other Health Practitioners	312	PATHOLOGICAL WASTES
				Generator #: ON1115105 Approval Yrs: 06		
GEN-16	Clarkway Construction Ltd	176 Memorial Ave Orillia L3V 5X6			251	Waste oils/sludges (petroleum based)
				Generator #: ON3508096 Approval Yrs: As of Oct 2010		
GEN-17	ORILLIA POWER CORPORATION	360 WEST STREET SOUTH ORILLIA L3V 5G8			212	Aliphatic solvents and residues
					243	PCB
					251	Waste oils/sludges (petroleum based)
					252	Waste crankcase oils and lubricants

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-18	ORILLIA WATER, LIGHT & POWER COMMISSION	WEST STREET SOUTH PLAN 269 ORILLIA	9911	IND. MACH. RENTAL	122	ALKALINE WASTES - OTHER METALS
					251	OIL SKIMMINGS & SLUDGES
GEN-19	ORILLIA WATER, LIGHT (OUT OF BUSINESS)	WEST STREET SOUTH PLAN 269 ORILLIA	9911	IND. MACH. RENTAL	122	ALKALINE WASTES - OTHER METALS
					251	OIL SKIMMINGS & SLUDGES
GEN-20	ORILLIA POWER CORPORATION	360 WEST STREET SOUTH ORILLIA L3V 6J9			146	OTHER SPECIFIED INORGANICS
					243	PCB'S
					112	ACID WASTE - HEAVY METALS
					122	ALKALINE WASTES - OTHER METALS
					148	INORGANIC LABORATORY CHEMICALS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					221	LIGHT FUELS
					241	HALOGENATED SOLVENTS
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
GEN-21	ORILLIA POWER DISTRIBUTION CORPORATION	360 WEST STREET SOUTH ORILLIA L3V 6J9	4911	ELECT. POWER SYS.	112	ACID WASTE - HEAVY METALS
					122	ALKALINE WASTES - OTHER METALS
					148	INORGANIC LABORATORY CHEMICALS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					221	LIGHT FUELS
					241	HALOGENATED SOLVENTS
					243	PCB'S
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-22	ORILLIA WATER LIGHT & POWER COMM. 29-127	360 WEST STREET SOUTH P.O. BOX 398 ORILLIA L3V 5G8	4911 Generator #: ON0535400 Approval Yrs: 94,95	ELECT. POWER SYS.	122	ALKALINE WASTES - OTHER METALS
					213	PETROLEUM DISTILLATES
					241	HALOGENATED SOLVENTS
					243	PCB'S
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
GEN-23	ORILLIA WATER LIGHT & POWER COMMISSION	360 WEST STREET SOUTH ORILLIA L3V 6J9	4911 Generator #: ON0535400 Approval Yrs: 92,93,96,97,98,99	ELECT. POWER SYS.	112	ACID WASTE - HEAVY METALS
					122	ALKALINE WASTES - OTHER METALS
					148	INORGANIC LABORATORY CHEMICALS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					221	LIGHT FUELS
					241	HALOGENATED SOLVENTS
					243	PCB'S
GEN-24	ORILLIA WATER LIGHT & POWER COMM.	360 WEST STREET SOUTH P.O. BOX 398 ORILLIA L3V 5G8	4911 Generator #: ON0535400 Approval Yrs: 89	ELECT. POWER SYS.	251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
					122	ALKALINE WASTES - OTHER METALS
					213	PETROLEUM DISTILLATES
					241	HALOGENATED SOLVENTS
GEN-25	ORILLIA WATER LIGHT & POWER COMM.	340 WEST STREET SOUTH P.O. BOX 398 ORILLIA L3V 5G8	4911 Generator #: ON0535400 Approval Yrs: 86,87,88	ELECT. POWER SYS.	251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
					213	PETROLEUM DISTILLATES
					241	HALOGENATED SOLVENTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-26	FRANCOZ METAL CORP. LTD. 15-187	351 WEST STREET SOUTH ORILLIA L3V 5H1	0000	*** NOT DEFINED ***		
			Generator #:	ON0641600		
			Approval Yrs:	92,93,94		
GEN-27	FRANCOZ METAL CORP. LTD.	351 WEST STREET SOUTH ORILLIA L3V 5H1	0000	*** NOT DEFINED ***		
			Generator #:	ON0641600		
			Approval Yrs:	86,87,88,89,90		
GEN-28	CANADA WOOD SPEC CO(1983)LTD.(THE)	300 WEST STREET, SOUTH, ORILLIA, L3V 5G8	0000	*** NOT DEFINED ***	145	PAINT/PIGMENT/COATING RESIDUES
			Generator #:	ON0977500	211	AROMATIC SOLVENTS
			Approval Yrs:	88,89,90		
GEN-29	THE CANADA WOOD SPEC CO (1983) LTD	300 WEST STREET, SOUTH, ORILLIA, L3V 5G8	0000	*** NOT DEFINED ***		
			Generator #:	ON0977500		
			Approval Yrs:	86,87		
GEN-30	CANADA WOOD SPEC CO(1983)LTD.(THE)37-375	300 WEST STREET, SOUTH, ORILLIA, L3V 5G8	3751	PAINT & VARNISH IND.	145	PAINT/PIGMENT/COATING RESIDUES
			Generator #:	ON0977500	211	AROMATIC SOLVENTS
			Approval Yrs:	94,95		
GEN-31	Canada Wood Specialties Inc.	300 West Street South Orillia L3V 6K2			252	WASTE OILS & LUBRICANTS
			Generator #:	ON0977500		
			Approval Yrs:	02,03,04		
GEN-32	CANADA WOOD SPEC. COMPANY (1983) LIMITED	300 WEST STREET SOUTH ORILLIA L3V 6K2	3751	PAINT & VARNISH IND.	145	PAINT/PIGMENT/COATING RESIDUES
			Generator #:	ON0977500	211	AROMATIC SOLVENTS
			Approval Yrs:	99,00,01	252	WASTE OILS & LUBRICANTS
GEN-33	CANADA WOOD SPEC. CO. (1983) LTD. (THE)	300 WEST STREET SOUTH ORILLIA L3V 6K2	3751	PAINT & VARNISH IND.	145	PAINT/PIGMENT/COATING RESIDUES
			Generator #:	ON0977500	211	AROMATIC SOLVENTS
			Approval Yrs:	92,93,96,97,98	252	WASTE OILS & LUBRICANTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-34	Sheridan Seating Inc.	290 West St. S. Orillia L3V 5G8	Generator #: ON6015630 Approval Yrs: As of Oct 2010		145	Wastes from the use of pigments, coatings and paints
GEN-35	Sheridan Seating Inc.	290 West St. S. Orillia L3V 5G8	339920 Generator #: ON6015630 Approval Yrs: 06,07,08	Sporting and Athletic Goods Manufacturing	145 211	PAINT/PIGMENT/COATING RESIDUES AROMATIC SOLVENTS
GEN-36	Sheridan Gymnasium Equipment Limited	290 West St. S. Orillia L3V 5G8	339920 Generator #: ON6015630 Approval Yrs: 05	Sporting and Athletic Goods Manufacturing	145 211	PAINT/PIGMENT/COATING RESIDUES AROMATIC SOLVENTS
GEN-37	PENETANG-MIDLAND COACH LINES LTD. 31-428	10 COCHRANE STREET ORILLIA L3V 6H9	4573 Generator #: ON0138907 Approval Yrs: 92,93,95,96	SCHOOL BUS OPER.	213 251 252	PETROLEUM DISTILLATES OIL SKIMMINGS & SLUDGES WASTE OILS & LUBRICANTS
GEN-38	PENETANG-MIDLAND COACH LINES LTD.	10 COCHRANE ST., ORILLIA C/O 475 BAY STREET MIDLAND L4R 1L1	4573 Generator #: ON0138907 Approval Yrs: 90	SCHOOL BUS OPER.	213 251 252	PETROLEUM DISTILLATES OIL SKIMMINGS & SLUDGES WASTE OILS & LUBRICANTS
GEN-39	PENETANG-MIDLAND COACH LINES LTD.	10 COCHRANE STREET ORILLIA L3V 6H9	4573 Generator #: ON0138907 Approval Yrs: 88,89	SCHOOL BUS OPER.	213 252	PETROLEUM DISTILLATES WASTE OILS & LUBRICANTS
GEN-40	PENETANG-MIDLAND COACH LINES LTD. 31-428	10 COCHRANE ST., ORILLIA C/O 475 BAY STREET MIDLAND L4R 1L1	4573 Generator #: ON0138907 Approval Yrs: 94	SCHOOL BUS OPER.	213 251 252	PETROLEUM DISTILLATES OIL SKIMMINGS & SLUDGES WASTE OILS & LUBRICANTS
GEN-41	PENETANG-MID(OUT OF BUSINESS)LTD.	10 COCHRANE STREET ORILLIA L3V 6H9	4573 Generator #: ON0138907 Approval Yrs: 99,00	SCHOOL BUS OPER.	213 251 252	PETROLEUM DISTILLATES OIL SKIMMINGS & SLUDGES WASTE OILS & LUBRICANTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-42	PENETANG-MIDLAND COACH LINES LTD	10 COCHRANE STREET ORILLIA L3V 6H9	4573	SCHOOL BUS OPER.	213	PETROLEUM DISTILLATES
			Generator #:	ON0138907	251	OIL SKIMMINGS & SLUDGES
			Approval Yrs:	97	252	WASTE OILS & LUBRICANTS
GEN-43	PENETANG-MIDLAND COACH LINES LTD.	10 COCHRANE STREET ORILLIA L3V 6H9	4573	SCHOOL BUS OPER.	213	PETROLEUM DISTILLATES
			Generator #:	ON0138907	251	OIL SKIMMINGS & SLUDGES
			Approval Yrs:	98	252	WASTE OILS & LUBRICANTS
GEN-44	OTACO SEATING CO. LTD.	P.O. BOX 2310 255 WEST ST. S. ORILLIA L3V 6S2	0000	*** NOT DEFINED ***		
			Generator #:	ON0135900		
			Approval Yrs:	86,87,88,89,90,92,93,94		
GEN-45	REDLAW INDUSTRIES INC	DIVISION OF GALTACO INC. 255 WEST STREET SOUTH ORILLIA L3V 6L3	2941	IRON FOUNDARIES	146	OTHER SPECIFIED INORGANICS
			Generator #:	ON0250002	232	POLYMERIC RESINS
			Approval Yrs:	86,87	241	HALOGENATED SOLVENTS
			252	WASTE OILS & LUBRICANTS		
			145	PAINT/PIGMENT/COATING RESIDUES		
GEN-46	GALTACO REDLAW CASTINGS CORPORATION	255 WEST STREET SOUTH ORILLIA L3V 6L3	2941	IRON FOUNDARIES	145	PAINT/PIGMENT/COATING RESIDUES
			Generator #:	ON0250002	146	OTHER SPECIFIED INORGANICS
			Approval Yrs:	92,93,97,98	213	PETROLEUM DISTILLATES
			232	POLYMERIC RESINS		
			241	HALOGENATED SOLVENTS		
			243	PCB'S		
			252	WASTE OILS & LUBRICANTS		
GEN-47	City Of Orillia	255 West Street South Orillia L3V 5G8	Generator #:	ON2724380	241	Halogenated solvents and residues
			Approval Yrs:	As of Oct 2010		

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-48	GALTACO REDLAW CASTINGS CORPOR. 33-061	DIVISION OF GALTACO INC. 255 WEST STREET SOUTH ORILLIA L3V 6L3	2941	IRON FOUNDARIES Generator #: ON0250002 Approval Yrs: 94,95,96	145	PAINT/PIGMENT/COATING RESIDUES
					146	OTHER SPECIFIED INORGANICS
					213	PETROLEUM DISTILLATES
					232	POLYMERIC RESINS
					241	HALOGENATED SOLVENTS
					243	PCB'S
					252	WASTE OILS & LUBRICANTS
GEN-49	REDLAW (SEE & USE ON0250002 GALTACO)	255 WEST ST. S. ORILLIA L3V 6L3	0009	*** ERROR RECORD *** Generator #: ON0251700 Approval Yrs: 92,93		
GEN-50	The Corporation of the City of Orillia	255 West Street South Orillia L3V 6L3	913910	Other Local Municipal and Regional Public Administration Generator #: ON1439214 Approval Yrs: 05,06,07,08	221	LIGHT FUELS
					222	HEAVY FUELS
					241	HALOGENATED SOLVENTS
					251	OIL SKIMMINGS & SLUDGES
GEN-51	The Corporation of the City of Orillia	255 West Street South Orillia L3V 6L3		Generator #: ON1439214 Approval Yrs: As of Oct 2010	222	Heavy fuels
					241	Halogenated solvents and residues
					251	Waste oils/sludges (petroleum based)
GEN-52	GALTACO REDLAW CASTINGS CORPOR.	DIVISION OF GALTACO INC. 255 WEST STREET SOUTH ORILLIA L3V 6L3	2941	IRON FOUNDARIES Generator #: ON0250002 Approval Yrs: 88,89,90	145	PAINT/PIGMENT/COATING RESIDUES
					146	OTHER SPECIFIED INORGANICS
					213	PETROLEUM DISTILLATES
					232	POLYMERIC RESINS
					241	HALOGENATED SOLVENTS
					252	WASTE OILS & LUBRICANTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-53	Scott's Auto & Marine Electric	92 Barrie Road,Unit 2 Orillia L3V 2P9		Generator #: ON8306460 Approval Yrs: As of Oct 2010	213	Petroleum distillates
GEN-54	Scott's Auto & Marine Electric	92 Barrie Road,Unit 2 Orillia L3V 2P9	336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing Generator #: ON8306460 Approval Yrs: 07,08	213	PETROLEUM DISTILLATES
GEN-55	PV Investments Ontario Ltd.	1 & 3 Royce Avenue Orillia L3V5H8		Generator #: ON5047086 Approval Yrs: As of June 2009	145 221 252 263	Wastes from the use of pigments, coatings and paints Light fuels Waste crankcase oils and lubricants Misc. waste organic chemicals
GEN-56	ORILLIA AUTO RECYCLERS	3 ROYCE AVENUE UNIT 13 ORILLIA L3V 5H8	418110	Recyclable Metal Wholesaler-Distributors Generator #: ON9981009 Approval Yrs: 04		
GEN-57	CIRCOFLEX CORP.	95 BARRIE ROAD ORILLIA L3V 2P6	335990	All Other Electrical Equipment and Component Manufacturing Generator #: ON9067476 Approval Yrs: 04		

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-58	The City of Orillia	95 Barrie Rd. Orillia L3V 2P6	Generator #: Approval Yrs:	ON1679970 02,03,04	122	ALKALINE WASTES - OTHER METALS
					145	PAINT/PIGMENT/COATING RESIDUES
					146	OTHER SPECIFIED INORGANICS
					148	INORGANIC LABORATORY CHEMICALS
					211	AROMATIC SOLVENTS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					221	LIGHT FUELS
					232	POLYMERIC RESINS
					243	PCB'S
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
					263	ORGANIC LABORATORY CHEMICALS
					265	GRAPHIC ART WASTES
					331	WASTE COMPRESSED GASES
GEN-59	GL & V ONTARIO INC. 13-066	174 WEST ST. S. ORILLIA L3V 6L4	2941	IRON FOUNDARIES Generator #: Approval Yrs:	113	ACID WASTE - OTHER METALS
					211	AROMATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					243	PCB'S
					252	WASTE OILS & LUBRICANTS
					253	EMULSIFIED OILS
GEN-60	FLSmith Ltd	174 West Street South Orillia L3V 6L4	Generator #: Approval Yrs:	ON8206094 As of Oct 2010	145	Wastes from the use of pigments, coatings and paints
					263	Misc. waste organic chemicals

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-61	DORR-OLIVER CANADA LTD.	174 WEST ST. S. ORILLIA L3V 5C6	2941	IRON FOUNDARIES	113	ACID WASTE - OTHER METALS
					211	AROMATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					252	WASTE OILS & LUBRICANTS
					253	EMULSIFIED OILS
GEN-62	GL & V ONTARIO INC.	174 WEST ST. S. ORILLIA L3V 6L4	2941	IRON FOUNDARIES	113	ACID WASTE - OTHER METALS
					211	AROMATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					252	WASTE OILS & LUBRICANTS
					253	EMULSIFIED OILS
GEN-63	GL & V ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4	2941	IRON FOUNDARIES	113	ACID WASTE - OTHER METALS
					211	AROMATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					243	PCB'S
					252	WASTE OILS & LUBRICANTS
GEN-64	Dorr-Oliver Eimco	174 West Street South Orilla	2941	IRON FOUNDARIES	113	ACID WASTE - OTHER METALS
					211	AROMATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					243	PCB'S
					252	WASTE OILS & LUBRICANTS
GEN-65	GREAT ATLANTIC & PACIFIC CO. OF CDA.LTD.	A & P #487 150 WEST STREET SIMCOE M3Y 5C1	6571	CAMERA/PHOTO. SUPPLY	113	ACID WASTE - OTHER METALS
					211	AROMATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					243	PCB'S
					252	WASTE OILS & LUBRICANTS
GEN-66	CARMAN CAMERAS	150 WEST STREET SIMCOE N3Y 5C1	6571	CAMERA/PHOTO. SUPPLY	113	ACID WASTE - OTHER METALS
					211	AROMATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					243	PCB'S
					252	WASTE OILS & LUBRICANTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-67	Canadian Tire Corporation Limited	135 West Street South Orillia L3V 5G7	447110	Gasoline Stations with Convenience Stores	221	LIGHT FUELS
			Generator #: Approval Yrs:	ON8740836 07,08		
GEN-68	Canadian Tire Corporation Limited Petroleum	135 West Street South Orillia L3V 5G7			221	Light fuels
			Generator #: Approval Yrs:	ON8740836 As of Jan 2010	251	Waste oils/sludges (petroleum based)
GEN-69	HURONIA TRANSPORTATION SVCS INC.	131 ATHERLEY ROAD ORILLIA L3V 1N4	9921	AUTO./TRUCK RENTAL	213	PETROLEUM DISTILLATES
			Generator #: Approval Yrs:	ON0982001 90	252	WASTE OILS & LUBRICANTS
GEN-70	HURONIA TRANSPORTATION SVCS INC. 19-523	131 ATHERLEY ROAD ORILLIA L3V 1N4	9921	AUTO./TRUCK RENTAL	213	PETROLEUM DISTILLATES
			Generator #: Approval Yrs:	ON0982001 92,93,94,95,96,97,98	252	WASTE OILS & LUBRICANTS
GEN-71	HURONIA TRANSPORTATION SERVICES INC.	131 ATHERLEY ROAD ORILLIA L3V 1N4	9921	AUTO./TRUCK RENTAL	213	PETROLEUM DISTILLATES
			Generator #: Approval Yrs:	ON0982001 99,00,01	252	WASTE OILS & LUBRICANTS
GEN-72	GREAT ATLANTIC & PACIFIC CO. OF CDA.LTD.	A & P SUPER FRESH #156 4 KING STREET ORILLIA L3V 1R1	6571	CAMERA/PHOTO. SUPPLY	264	PHOTOPROCESSING WASTES
			Generator #: Approval Yrs:	ON0928763 98,99,00,01		
GEN-73	VULCAN-HART CANADA INC.	79 WEST STREET SOUTH ORILLIA L3V 5G5	3321	MAJOR APPLIANCE IND.	123	ALKALINE PHOSPHATES
			Generator #: Approval Yrs:	ON0332800 98	211	AROMATIC SOLVENTS
GEN-74	VULCAN-HART CANADA INC	79 WEST STREET SOUTH ORILLIA L3V 5G5	3321	MAJOR APPLIANCE IND.	123	ALKALINE PHOSPHATES
			Generator #: Approval Yrs:	ON0332800 86,87,88,89,90	211	AROMATIC SOLVENTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-75	PMI FOOD EQUIPMENT GROUP CANADA 31-572	79 WEST STREET SOUTH ORILLIA L3V 5G5	4911	ELECT. POWER SYS.	243	PCB'S
			Generator #:	ON0451302		
			Approval Yrs:	92,93,94,95,96,97,98		
GEN-76	VULCAN-HART CANADA INC 40-022	79 WEST STREET SOUTH ORILLIA L3V 5G5	3321	MAJOR APPLIANCE IND.	123	ALKALINE PHOSPHATES
			Generator #:	ON0332800	211	AROMATIC SOLVENTS
			Approval Yrs:	92,93,94,95,96,97		
GEN-77	PMI FOOD EQUIPMENT GROUP CANADA	79 WEST STREET SOUTH ORILLIA L3V 5G5	4911	ELECT. POWER SYS.	243	PCB'S
			Generator #:	ON0451302		
			Approval Yrs:	90,99,00,01		
GEN-78	COXCO (1968) LTD	PO BOX 335 112 PETER ST. S. ORILLIA L3V 5B6	0001	REG. REJECTED		
			Generator #:	ON0273800		
			Approval Yrs:	86,87,88,89,90		
GEN-79	COXCO (1968) LTD 009	11- PO BOX 335 112 PETER ST. S. ORILLIA L3V 5B6	0001	REG. REJECTED		
			Generator #:	ON0273800		
			Approval Yrs:	92,93,94		
GEN-80	ORILLIA WATER, LIGHT & POWER COMMISSION	15 INDUSTRIAL STREET ORILLIA	4911	ELECT. POWER SYS.	148	INORGANIC LABORATORY CHEMICALS
			Generator #:	ON0535404	213	PETROLEUM DISTILLATES
			Approval Yrs:	97,98,99,00,01	221	LIGHT FUELS
					252	WASTE OILS & LUBRICANTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-81	ORILLIA POWER CORPORATION	PO BOX 398 15 INDUSTRIAL STREET ORILLIA	221111 Generator #: ON0535404 Approval Yrs: 02,03,04	Hydro-Electric Power Generation	243	PCB'S
					112	ACID WASTE - HEAVY METALS
					148	INORGANIC LABORATORY CHEMICALS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					221	LIGHT FUELS
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
					266	PHENOLIC WASTES
GEN-82	orillia power corporation	15 Industrial Street Orillia L3V 6J9	221112 Generator #: ON6767247 Approval Yrs: 05	Fossil-Fuel Electric Power Generation	252	WASTE OILS & LUBRICANTS
GEN-83	PAL ENGINES INC.	129 FRONT STREET SOUTH ORILLIA L3V 4S6	3251 Generator #: ON0815700 Approval Yrs: 99,00,01	VEHICLE ENGINE IND.	122	ALKALINE WASTES - OTHER METALS
					213	PETROLEUM DISTILLATES
					241	HALOGENATED SOLVENTS
GEN-84	PAL ENGINES INC. 258	30- 129 FRONT ST., SOUTH ORILLIA L3V 4S6	3251 Generator #: ON0815700 Approval Yrs: 94,95,96	VEHICLE ENGINE IND.	122	ALKALINE WASTES - OTHER METALS
					213	PETROLEUM DISTILLATES
					241	HALOGENATED SOLVENTS
GEN-85	PAL ENGINES INC	129 FRONT STREET SOUTH ORILLIA L3V 4S6	3251 Generator #: ON0815700 Approval Yrs: 92,93,97,98	VEHICLE ENGINE IND.	122	ALKALINE WASTES - OTHER METALS
					213	PETROLEUM DISTILLATES
					241	HALOGENATED SOLVENTS
GEN-86	PAL ENGINES INC.	129 FRONT ST., SOUTH ORILLIA L3V 4S6	3251 Generator #: ON0815700 Approval Yrs: 86,87,88,89,90	VEHICLE ENGINE IND.	122	ALKALINE WASTES - OTHER METALS
					213	PETROLEUM DISTILLATES
					241	HALOGENATED SOLVENTS

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
GEN-87	Orillia Bakery	129 Front St. South Orillia L3V 4S6	311811	Retail Bakeries	253	EMULSIFIED OILS
			Generator #:	ON4096007		
			Approval Yrs:	07,08		
GEN-88	ANBER SPECIALTIES LTD.	64 WESTERN AFVE. ORILLIA L3V 1R7	3041	COATING OF METAL PR.	121	ALKALINE WASTES - HEAVY METALS
			Generator #:	ON0836400		
			Approval Yrs:	86,87,88,89,90		
GEN-89	ANBER SPECIALTIES LTD. 03-248	64 WESTERN AFVE. ORILLIA L3V 1R7	3041	COATING OF METAL PR.	121	ALKALINE WASTES - HEAVY METALS
			Generator #:	ON0836400		
			Approval Yrs:	92,93,94,95,96,97,98		
GEN-90	WRIGLEY FUELS LTD	147 CEDAR ISLAND RD ORILLIA L3V 1S9	0000	*** NOT DEFINED ***		
			Generator #:	ON0272500		
			Approval Yrs:	86,87,88,89,90,92,93,94		
n/a	CANADIAN PACIFIC RAIL	UNTOFF LOT 9 CONC 4, TWP. OF N. ORILLIA P.O. BOX 4100 AGINCOURT M1S 4A8	4531	RAILWAY TRANS. IND.	221	LIGHT FUELS
			Generator #:	ON0048135		
			Approval Yrs:	90		
n/a	CANADIAN PACIFIC RAIL 08-760	UNTOFF LOT 9 CONC 4, TWP. OF N. ORILLIA P.O. BOX 4100 AGINCOURT M1S 4A8	4531	RAILWAY TRANS. IND.	221	LIGHT FUELS
			Generator #:	ON0048135		
			Approval Yrs:	92,93,94,95,96,97		
n/a	CANADIAN PACIFIC RAILWAY COMPANY	UHTOFF-LOT 9, CONCESSION 4 TOWNSHIP OF NORTH ORILLIA COUNTY OF SIMCOE	4531	RAILWAY TRANS. IND.	221	LIGHT FUELS
			Generator #:	ON0048135		
			Approval Yrs:	98		
n/a	ORILLIA WATER, LIGHT & POWER COMM.	WEST STREET SOUTH PL. 269 C/O P.O.BOX 398, 360 WEST ST. SOUTH ORILLIA L3V 6J9	9911	IND. MACH. RENTAL	122	ALKALINE WASTES - OTHER METALS
			Generator #:	ON0535401	251	OIL SKIMMINGS & SLUDGES
			Approval Yrs:	89		

Ontario Regulation 347 Waste Generators Summary

Map Key	Company	Address	SIC Code	SIC Description	Waste Code	Waste Description
n/a	ORILLIA WATER, LIGHT & POWER COMM.29-439	WEST STREET SOUTH PL. 269 C/O P.O.BOX 398, 360 WEST ST. SOUTH ORILLIA L3V 6J9	9911	IND. MACH. RENTAL Generator #: ON0535401 Approval Yrs: 94,95,96	122	ALKALINE WASTES - OTHER METALS
					251	OIL SKIMMINGS & SLUDGES
n/a	CORP. OF TOWNSHIP OF ORILLIA	PART LOT 9 & 10 PLAN 171 CONCESSION 5 SOUTH DIVISION ORILLIA L3V 6J3	3371	ELECT. TRANSFORMER Generator #: ON0941001 Approval Yrs: 88,89,90	112	ACID WASTE - HEAVY METALS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					222	HEAVY FUELS
					241	HALOGENATED SOLVENTS
n/a	SEVERN, CORPORATION OF THE TOWNSHIP OF	PART LOT 9 & 10, PLAN 171 CONCESSION 5 SOUTH DIVISION ORILLIA	3371	ELECT. TRANSFORMER Generator #: ON0941001 Approval Yrs: 92,93,94,95,96,97,98,99,00, 01,02,03,04,05,06,07,08	112	ACID WASTE - HEAVY METALS
					146	OTHER SPECIFIED INORGANICS
					212	ALIPHATIC SOLVENTS
					213	PETROLEUM DISTILLATES
					221	LIGHT FUELS
					222	HEAVY FUELS
					241	HALOGENATED SOLVENTS
					251	OIL SKIMMINGS & SLUDGES
					252	WASTE OILS & LUBRICANTS
n/a	Glendinning Funearl Home Ltd.	36 FRONT STREET NORFOLK L3V 4R9		Generator #: ON7855526 Approval Yrs: 02,03,04,05,06	312	PATHOLOGICAL WASTES
n/a	SEVERN, CORPORATION OF THE TOWNSHIP OF	PART LOT 9 & 10, PLAN 171 CONCESSION 5 SOUTH DIVISION ORILLIA L3V 6J3		Generator #: ON0941001 Approval Yrs: As of Oct 2010	212	Aliphatic solvents and residues
					252	Waste crankcase oils and lubricants

TSSA Historic Incidents

Map Key	Company	Address	External File Num	Date of Occurrence	Fuel Occurrence Type	Fuel Type Involved
HINC-1		269 MEMORIAL AVENUE ORILLIA L3V 5X9	FS INC 0611-04045	11/21/2006	Fire	Natural Gas
			Status Desc: Completed - Causal Analysis(End) Job Type Desc: Incident/Near-Miss Occurrence (FS) Oper. Type Involved: Commercial (e.g. restaurant, business unit, etc) Service Interruptions: No Property Damage: Yes Fuel Life Cycle Stage: Utilization Root Cause: Root Cause: Equipment/Material/Component:No Procedures:Yes Maintenance:No Design:No Training:Yes Management:No Human Factors:Yes Reported Details: Fuel Category: Gaseous Fuel Occurrence Type: Incident Affiliation: Safety Authorities (MOL, ESA, Insurers, etc.) County Name: Simcoe Approx. Quant. Rel: Nearby body of water: Enter Drainage Syst.: Approx. Quant. Unit: Environmental Impact:			
HINC-2		190 MEMORIAL AVENUE ORILLIA L3V 5X6	FS INC 0706-02691	5/31/2007	Vapour Release	Natural Gas
			Status Desc: Completed - Causal Analysis(End) Job Type Desc: Incident/Near-Miss Occurrence (FS) Oper. Type Involved: Construction Site (pipeline strike) Service Interruptions: Yes Property Damage: No Fuel Life Cycle Stage: Transmission, Distribution and Transportation Root Cause: Root Cause: Equipment/Material/Component:No Procedures:No Maintenance:No Design:No Training:No Management:Yes Human Factors:No Reported Details: Fuel Category: Gaseous Fuel Occurrence Type: Incident Affiliation: Safety Authorities (MOL, ESA, Insurers, etc.) County Name: Simcoe Approx. Quant. Rel: Nearby body of water: Enter Drainage Syst.: Approx. Quant. Unit: Environmental Impact:			

TSSA Incidents

Map Key	Company	Address	Incident ID	Incident Number	SR Type	Status Code
INC-1		9 JAMES CT, ORILLIA L3V 7T6	2394296	242958	FS-Incident	Causal Analysis Complete
			Summary: 9 JAMES CT, ORILLIA - 1/2" PIPELINE HIT Drainage System: Sub Surface Contam.: Aff. Prop. Use Water: Contam. Migrated: Contact Natural Env.: Near Body of Water: Approx. Quant. Rel.: Equipment Model: Serial No: Residential App. Type: Commercial App. Type: Industrial App. Type: Institutional App. Type: Venting Type: Vent Connector Mater.: Vent Chimney Mater.: Notes: Pipeline Type: Transmission Pipeline Pipeline Involved: Transmission pipeline Pipe Material: Plastic Depth Ground Cover: na Regulator Location: Outside Regulator Type: Service Regulator (up to 60 psi intake) Operation Pressure: ip Pipeline Notes: Liquid Prop Make: Liquid Prop Model: Liquid Prop Serial No: Equipment Type: Cylinder Capacity: Cylinder Capac. Units: Cylinder Material Type: Tank Capacity: Tank Material Type: Tank Storage Type: Tank Location Type: Pump Flow Rate Capac: Liquid Prop Notes:			

TSSA Incidents

Map Key	Company	Address	Incident ID	Incident Number	SR Type	Status Code
INC-2		37 BARRIE ROAD, ORILLIA	2482572	331102	FS-Incident	Causal Analysis Complete
			Summary: 37 BARRIE ROAD, ORILLIA - 3/4" PIPELINE HIT Drainage System: Sub Surface Contam.: Aff. Prop. Use Water: Contam. Migrated: Contact Natural Env.: Near Body of Water: Approx. Quant. Rel.: Equipment Model: Serial No: Residential App. Type: Commercial App. Type: Industrial App. Type: Institutional App. Type: Venting Type: Vent Connector Mater.: Vent Chimney Mater.: Notes: Pipeline Type: Service / Riser Distribution Pipeline Pipeline Involved: Pipe Material: Steel Depth Ground Cover: Regulator Location: Outside Regulator Type: Service Regulator (up to 60 psi intake) Operation Pressure: IP Pipeline Notes: Liquid Prop Make: Liquid Prop Model: Liquid Prop Serial No: Equipment Type: Cylinder Capacity: Cylinder Capac. Units: Cylinder Material Type: Tank Capacity: Tank Material Type: Tank Storage Type: Tank Location Type: Pump Flow Rate Capac: Liquid Prop Notes:			

TSSA Incidents

Map Key	Company	Address	Incident ID	Incident Number	SR Type	Status Code
INC-3		136 DAVEY DR, ORILLIA L3V 4G8	2396882	245542	FS-Incident	Causal Analysis Complete
			Summary: 136 DAVEY DR, ORILLIA - 1-1/4" PIPELINE HIT Drainage System: Sub Surface Contam.: Aff. Prop. Use Water: Contam. Migrated: Contact Natural Env.: Near Body of Water: Approx. Quant. Rel.: Equipment Model: Serial No: Residential App. Type: Commercial App. Type: Industrial App. Type: Institutional App. Type: Venting Type: Vent Connector Mater.: Vent Chimney Mater.: Notes: Pipeline Type: Main Distribution Pipeline Pipeline Involved: Pipe Material: Plastic Depth Ground Cover: Regulator Location: Outside Regulator Type: Service Regulator (up to 60 psi intake) Operation Pressure: IP Pipeline Notes: Liquid Prop Make: Liquid Prop Model: Liquid Prop Serial No: Equipment Type: Cylinder Capacity: Cylinder Capac. Units: Cylinder Material Type: Tank Capacity: Tank Material Type: Tank Storage Type: Tank Location Type: Pump Flow Rate Capac Liquid Prop Notes:			

National Analysis of Trends in Emergencies System (NATES)

Map Key	Company	Address	File No.	Spill Date	Lead Agency	DOE on Scene	Reported By
n/a	ONTARIO HYDRO	SIMCOECOUNTY	44622S	860708			Province
			Material Reaction: Basin: St. Lawrence River Drainage Air: Land: Y Fresh Water: Ground Water: Salt Water: Other Environment: Waterbody: Cause: Valve, Fitting Leak Reason: Fire, Explosion Source: Other Sector: Energy Generation Ship No.: Ship Name: Clean Up By: polluter Disposal Method: landfill Recovery %: 100.00 Act Invoked: None Enforcement Resp: Fish Kill: N Oiled Birds: N Other Kill: N Vegetation Damage: N Property Damage: N Drinking Water: N Income Loss: N Other Consequences: N No. of Injuries: No. of Evacuations: Fine: 0.00 No. of Dead: Cleanup Cost: 0.00 Material: oil pcb contaminated Amount (ton): 0.03 Volume (L): 19.00 Concentration: 50.00B Phase: Additional Info:				

National Environmental Emergencies System (NEES)

Map Key	Company	Address	Incident Date	Contaminant
n/a	ONTARIO HYDRO	SIMCOECOUNTY	7/8/86	oil pcb contaminated
			Amount:	0.03
			Units:	Tonnes (Metric)
			Quantity:	
			Cause:	Valve, Fitting Leak
			Source:	Other
			Reason:	Fire, Explosion
			Sector:	Energy Generation

National PCB Inventory

Map Key	Company	Address	Company Code	Transaction Date	Inspection Date	Industry	Site Status	
NPCB-1	ORILLIA WATER, LIGHTS & POWER COMM.	360 WEST STREET SOUTH ORILLIA L3V 5G8	F1086			UNDEFINED		
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
NPCB-2	ORILLIA WATER, LIGHTS & POWER COMM.	360 WEST STREET SOUTH ORILLIA L3V 5G8	F1197	1/29/1996				
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
		0.00 KG			Stored for Disposal	Askarel		
NPCB-3	ORILLIA POWER DISTRIBUTION CORPORATION	BOX 398 360 WEST STREET SOUTH ORILLIA L3V 5G8	O0051	4/21/1998		UTILITY	STORAGE ONLY (NON FEDERAL)	
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
DO80608	1	205 L		BARREL OTHER SOLIDS/FULL	STORED FOR DISPOSAL	UNKNOWN/HIGH		
DO80607	12	2357.5 L		BARREL MINERAL OIL/FULL	STORED FOR DISPOSAL	MINERAL OIL/PCB		
NPCB-4	ORILLIA WATER, LIGHT & POWER COMMISSION	BOX 398; 360 WEST STREET SOUTH ORILLIA L3V 5G8	O0051	10/25/1990		Utility		
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
NPCB-5	Orillia Power Distribution Corporation	360 WEST STREET SOUTH BOX 398 Orillia L3V 5G8	O0051	2/1/2001		Utility	Stored for Disposal	
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
					Stored for disposal	Mineral Oil/PCB		
					Stored for disposal	Unknown/High		

National PCB Inventory

Map Key	Company	Address	Company Code	Transaction Date	Inspection Date	Industry	Site Status
NPCB-6	LOMAR PROPERTIES	95 BARRIE ROAD ORILLIA L3V 2P6	O1034	4/29/1993		OTHER	NEVER BEEN INSPECT. (CAP ONLY)

<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
OR48729	1	4.55 L	16948	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48736	1	4.55 L	17553	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48725	1	4.55 L		CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48738	1	4.55 L	17531	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48732	1	4.55 L	36197	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48717	1	4.55 L	16190	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48739	1	4.55 L	17532	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48726	1	4.55 L	17541	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48727	1	4.55 L	33508	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48728	1	4.55 L	33501	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47402	1	4.5 L	4556	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47403	1	4.5 L	4557	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48708	1	4.55 L	16955	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47404	1	9.4 L	7737607	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47409	1	9.4 L	7737563	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47406	1	9.4 L	7737609	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47407	1	9.4 L	7737601	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47408	1	9.4 L	7737603	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48716	1	4.55 L	16945	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47412	1	9.4 L	7742562	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48713	1	4.55 L	16950	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR47400	1	4.5 L	2000	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48712	1	4.55 L	17537	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48711	1	4.55 L	17556	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48710	1	4.55 L	17529	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48709	1	4.55 L	17551	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		
OR48714	1	4.55 L	17538	CAPACITOR/FULL	IN-USE	ASKAREL/ASKAREL		

National PCB Inventory

Map Key	Company		Address	Company Code	Transaction Date	Inspection Date	Industry	Site Status
OR48707	1	4.55 L	17536	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR47411	1	9.4 L	7747491	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR47410	1	9.4 L	7737610	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR47405	1	9.4 L	7737605	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR47401	1	4.5 L	1280	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR47413	1	9.4 L	7742564	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48705	1	4.55 L	33502	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48720	1	4.55 L	17534	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48730	1	4.55 L	16958	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48706	1	4.55 L	17540	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48715	1	4.55 L	16952	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48740	1	4.55 L	15435	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48737	1	4.55 L	17527	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48724	1	4.55 L	36199	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48723	1	4.55 L	36192	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48731	1	4.55 L	16956	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48733	1	4.55 L	33492	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48734	1	4.55 L	17539	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48735	1	4.55 L	17533	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48718	1	4.55 L	16951	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48719	1	4.55 L	16947	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48722	1	4.55 L	17535	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	
OR48721	1	4.55 L	16954	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	

National PCB Inventory

Map Key	Company	Address	Company Code	Transaction Date	Inspection Date	Industry	Site Status
NPCB-7	G L & VONTARIO	174 WEST STREET SOUTH ORILLIA L3V 6L4	O0755	3/22/1991	1/30/2001	METAL REFINING	STORAGE ONLY (NON FEDERAL)

<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
OR51961	1	15.4 L	41351	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51962	1	15.4 L	41352	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51957	1	15.4 L	41344	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51956	1	15.4 L	41343	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51861	1	15.4 L	D322298	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51948	1	4.5 L		CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51832	2	15.4 L	41370	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51859	1	15.4 L	41437	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51906	1	15.4 L	41366	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51900	1	15.4 L	41327	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51903	1	15.4 L	41339	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51907	1	15.4 L	41367	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51830	1	15.4 L	41363	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51908	1	15.4 L	41368	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51952	1	15.4 L	41334	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51833	1	15.4 L	41374	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51912	1	15.4 L	41386	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51911	1	15.4 L	41385	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51910	1	15.4 L	41377	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51949	1	4.5 L		CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51877	1	15.4 L	41271	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51878	1	15.4 L	41279	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51950	1	4.5 L		CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51842	1	15.4 L	41395	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51930	1	15.4 L	41433	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51890	1	15.4 L	41306	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51815	1	15.4 L	41299	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		

National PCB Inventory

Map Key	Company		Address	Company Code	Transaction Date	Inspection Date	Industry	Site Status
OR51814	1	15.4 L	41295	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51813	1	15.4 L	41294	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51822	1	15.4 L	41238	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51938	1	15.4 L	45617	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51844	1	15.4 L	41404	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51939	1	15.4 L	45619	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51913	1	15.4 L	41388	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51811	1	15.4 L	41287	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51810	1	15.4 L	41276	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51874	1	15.4 L	41267	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51873	1	15.4 L	41265	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51816	1	15.4 L	41301	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51863	1	15.4 L	41247	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51928	1	15.4 L	41428	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51929	1	15.4 L	41432	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51879	1	15.4 L	41280	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51812	1	15.4 L	41288	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51872	1	15.4 L	41264	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51835	2	15.4 L	41380	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51891	1	15.4 L	41308	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51892	1	15.4 L	41310	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51893	1	15.4 L	41312	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51894	1	15.4 L	41313	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51895	1	15.4 L	41314	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51896	1	15.4 L	41315	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51897	1	15.4 L	41316	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51871	1	15.4 L	41263	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51898	1	15.4 L	41319	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51870	1	15.4 L	41262	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51834	1	15.4 L	41378	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51831	1	15.4 L	41365	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	

National PCB Inventory

Map Key	Company		Address	Company Code	Transaction Date	Inspection Date	Industry	Site Status
OR51857	1	15.4 L	41429	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51860	1	15.4 L	41439	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51924	1	15.4 L	41410	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51942	1	15.4 L	45625	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51852	1	15.4 L	41420	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51851	1	15.4 L	41416	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51850	1	15.4 L	41414	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51849	1	15.4 L	41413	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51899	1	15.4 L	41320	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51862	1	15.4 L	D292074	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51869	1	15.4 L	41261	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51823	1	15.4 L	41330	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51926	1	15.4 L	41419	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51854	1	15.4 L	41423	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51867	1	15.4 L	41255	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51855	1	15.4 L	41424	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51923	1	15.4 L	41403	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51922	1	15.4 L	41400	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51921	1	15.4 L	41399	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51920	1	15.4 L	41398	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51919	1	15.4 L	41397	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51918	1	15.4 L	41393	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51917	1	15.4 L	41392	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51916	1	15.4 L	41391	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51915	1	15.4 L	41390	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51914	1	15.4 L	41389	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51925	1	15.4 L	41415	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51864	1	15.4 L	41248	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51933	1	15.4 L	41632	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51936	1	15.4 L	45615	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51821	2	15.4 L	41325	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		

National PCB Inventory

Map Key	Company	Address		Company Code	Transaction Date	Inspection Date	Industry	Site Status
OR51820	1	15.4 L	41317	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51819	1	15.4 L	41307	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51932	1	15.4 L	41438	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51937	1	15.4 L	45616	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51934	2	15.4 L	45612	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51935	1	15.4 L	45613	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51818	1	15.4 L	41304	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51817	1	15.4 L	41303	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51953	1	15.4 L	41336	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51955	1	15.4 L	41342	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51958	1	15.4 L	41346	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51954	1	15.4 L	41341	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51943	1	15.4 L	45626	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51808	1	15.4 L	41266	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51947	1	4.5 L		CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51941	1	15.4 L	45624	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51901	1	15.4 L	41331	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51800	1	15.4 L	41240	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
DO00309	13	59 L		CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51828	2	15.4 L	41360	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51827	1	15.4 L	41357	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51826	1	15.4 L	41356	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51825	2	15.4 L	41353	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51824	1	15.4 L	41332	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51856	1	15.4 L	41425	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51945	1	4.5 L		CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51865	1	15.4 L	41249	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51880	1	15.4 L	41282	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51881	1	15.4 L	41283	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51882	1	15.4 L	41284	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	
OR51866	1	15.4 L	41250	CAPACITOR/FULL		STORED FOR DISPOSAL	ASKAREL/ASKAREL	

National PCB Inventory

Map Key	Company		Address	Company Code	Transaction Date	Inspection Date	Industry	Site Status
OR51883	1	15.4 L	41285	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51884	1	15.4 L	41286	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51885	1	15.4 L	41291	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51886	1	15.4 L	41292	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51836	1	15.4 L	41382	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51909	1	15.4 L	41376	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51951	1	4.5 L		CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51888	1	15.4 L	41298	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51843	1	15.4 L	41400	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51931	1	15.4 L	41434	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51841	1	15.4 L	41394	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51902	1	15.4 L	41338	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51858	1	15.4 L	41435	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51905	1	15.4 L	41355	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51940	1	15.4 L	45620	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51904	1	15.4 L	41347	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51829	1	15.4 L	41361	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51946	1	4.5 L		CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51807	1	15.4 L	41258	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51806	1	15.4 L	41256	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51805	1	15.4 L	41254	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51804	1	15.4 L	41252	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51803	1	15.4 L	41251	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51802	1	15.4 L	41244	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51801	1	15.4 L	41242	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51853	1	15.4 L	41421	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51944	1	15.4 L	45629	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51809	1	15.4 L	41273	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51840	1	15.4 L	41392	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51889	1	15.4 L	41300	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	
OR51839	1	15.4 L	41389	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL	

National PCB Inventory

Map Key	Company	Address		Company Code	Transaction Date	Inspection Date	Industry	Site Status
OR51838	1	15.4 L	41385	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51837	1	15.4 L	41384	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51887	1	15.4 L	41293	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51876	1	15.4 L	41270	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51845	2	15.4 L	41405	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51846	1	15.4 L	41408	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51847	1	15.4 L	41409	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51848	1	15.4 L	41411	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51868	1	15.4 L	41259	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51875	1	15.4 L	41268	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51927	1	15.4 L	41426	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51959	1	15.4 L	41348	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
OR51960	1	15.4 L	41349	CAPACITOR/FULL	STORED FOR DISPOSAL	ASKAREL/ASKAREL		
NPCB-8	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4		F1206	1/29/1996			
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
		35.00 KG			Stored for Disposal	Askarel		
NPCB-9	G L & V ONTARIO	174 WEST STREET SOUTH ORILLIA L3V 6L4		O0755	3/22/1991	3/19/1991	Metal Refining	
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
NPCB-10	G L & V ONTARIO	174 WEST STREET SOUTH Orillia		O0755	3/19/1991	1/30/2001	Metal Refining	Stored for Disposal
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
					Stored for disposal	Askarel/Askarel	IN STORAGE	

National PCB Inventory

Map Key	Company	Address		Company Code	Transaction Date	Inspection Date	Industry	Site Status	
NPCB-11	G.L. AND V. ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4		F1095			UNDEFINED		
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>	
NPCB-12	GL & V ONTARIO INC.	55 QUEEN STREET WEST ORILLIA L3V 7W3		F1178	1/29/1996				
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>	
		2.00 KG			Stored for Disposal	Low 50 - 10,000 ppm			
		150.00 KG			Stored for Disposal	Low 50 - 10,000 ppm			
		479.00 KG			Stored for Disposal	Unknown concentration			
NPCB-13	GL & V ONTARIO INC.	55 QUEEN STREET WEST ORILLIA L3V 6L3		F1072			UNDEFINED		
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>	
n/a	CITY OF ORILLIA	SANITARY PUMPING STATION; JAMES STREET ORILLIA		O0237B	8/29/1990		Government (not Fed)		
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>	
		4.50 L			In-Use	Askarel			
n/a	CITY OF ORILLIA	JAMES STREET; P.O. BOX 340 ORILLIA L3VJ1		F1202	1/29/1996				
<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>	<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>	
		0.00 KG			Stored for Disposal	Unknown concentration			
		150.00 KG			Stored for Disposal	High > 10,000 ppm			

National PCB Inventory

Map Key	Company		Address		Company Code	Transaction Date	Inspection Date	Industry	Site Status	
n/a	CITY OF ORILLIA		Sanitary Pumping Station James St. or Fittons Rd. Orillia		O0237	11/9/1989		Government (not Fed)	In- Use	
	<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>		<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
						In-Use		Askarel/Askarel	PUMP 1- Fittons Road	
						In-Use		Askarel/Askarel	PUMP 1- James Street	
						In-Use		Askarel/Askarel	PUMP 2- Fittons Road	
						In-Use		Askarel/Askarel	PUMP 2- James Street	
						In-Use		Askarel/Askarel	PUMP 3- Fittons Road	
						Stored for disposal		Askarel/Askarel	PUBLIC WORKS YARD	
n/a	CITY OF ORILLIA		PO BOX 340 STN MAIN JAMES ST ORILLIA L3V 6J1		F1091			UNDEFINED		
	<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>		<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
n/a	CITY OF ORILLIA		SANITARY PUMPING STATION JAMES ST OR FITTONS RD ORILLIA L3V 6J1		O0237	8/31/1993		GOVERNMENT (NOT FEDERAL)	INSPECTED SITES (NOT FEDERAL)	
	<u>Label</u>	<u>No. of Items</u>	<u>Contents</u>	<u>Serial No.</u>	<u>Item/State</u>	<u>Status</u>		<u>PCB Type/Code</u>	<u>Location</u>	<u>Manufacturer</u>
	OR49590	1	4.5 L	7524409	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	PUMP 3-FITTONS RD	
	OR49591	1	4.5 L	12G5516	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	PUMP 1 - JAMES ST	
	OR48515	1	1.74 L	7718314	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL		
	OR48513	1	1.74 L	7718314	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL		
	OR49588	1	4.5 L	7524340	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	MUMP 1-FITTONS RD	
	OR48516	1	1.74 L	7718314	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL		
	OR48514	1	1.74 L	7718314	CAPACITOR/FULL	STORED FOR DISPOSAL		ASKAREL/ASKAREL		
	OR49592	1	4.5 L	03G1504	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	PUMP 2-JAMES ST	
	OR49589	1	4.5 L	7524338	CAPACITOR/FULL	IN-USE		ASKAREL/ASKAREL	PUMP 2-FITTONS RD	

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude	
NPRI-1	CANADA WOOD SPECIALTIES	300 WEST ST. S. BOX 458 ORILLIA L3V 5G8	10934	2005	-79.4156	44.6033	
							<u>Air</u>
							1.50
							1.24
NPRI-2	CANADA WOOD SPECIALTIES INC.	300 West St. South Orillia L3V 5G8	10934	2003			<u>Substances Released</u>
							PM10 - Particulate Matter <= 10 Microns
							PM2.5 - Particulate Matter <= 2.5 Microns
NPRI-3	CANADA WOOD SPECIALTIES	300 WEST ST. S. BOX 458 ORILLIA L3V 5G8	10934	2006	-79.4156	44.6033	<u>Air</u>
							1.23
							0.93
NPRI-4	EMBURY	1 INDUSTRIAL Road Orillia L3V 6K7	7141	2008	-79.6965	43.7021	<u>Substances Released</u>
							Sulphuric acid
NPRI-5	EMBURY	1 INDUSTRIAL Road Orillia L3V 6K7	7141	2007			<u>Air</u>
							tonnes

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude	Latitude	
NPRI-6	EMBURY	1 INDUSTRIAL Road Orillia	7141	2006	-79.6965	43.7021	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						tonnes	Sulphuric acid
NPRI-7	EMBURY	1 INDUSTRIAL Road Orillia	7141	2005	-79.6965	43.7021	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						tonnes	Sulphuric acid
NPRI-8	EMBURY	1 INDUSTRIAL Road Orillia L3V 6K7	7141	2009	-79.4002	44.6061	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						tonnes	Sulphuric acid
NPRI-9	Embury Company	1 Industrial Road Orillia L3V 6K7	7141	2003			
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
						tonnes	Sulphuric acid
NPRI-10	Embury Company	1 Industrial Road Orillia L3V 6K7	7141	2002			
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>
			0	0	0	tonnes	Sulphuric acid

National Pollutant Release Inventory

Map Key	Company	Address	NPRI #	Year	Longitude		Latitude	
NPRI-11	Embury Company	1 Industrial Road Orillia L3V 6K7	7141	2001				
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>	
			0.00	0.00	0.00	tonnes	Sulphuric acid	
NPRI-12	EMBURY	1 INDUSTRIAL Road Orillia	7141	2004	-79.6965		43.7021	
			<u>Air</u>	<u>Water</u>	<u>Land</u>	<u>Units</u>	<u>Substances Released</u>	
						tonnes	Sulphuric acid	

Inventory of PCB Storage Sites

Map Key	Company	Address	Year	Site Number	Quantity	Description
OPCB-1	ORILLIA WATER, LIGHTS & POWER COMM.	360 WEST STREET SOUTH ORILLIA L3V 5G8	1998	30387A009	2.00	Number of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg
					300.00	Calculated Weight of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg
OPCB-2	ORILLIA WATER, LIGHTS & POWER COMM.	360 WEST STREET SOUTH ORILLIA L3V 5G8	2000	30387A009	2.00	Number of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg
					300.00	Calculated Weight of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg
OPCB-3	ORILLIA WATER, LIGHTS & POWER COMM.	360 WEST STREET SOUTH ORILLIA L3V 5G8	2003	30387A009	1.00	Number of Drums of Soil with Low Level PCBs (< 1000 ppm) kg
					400.00	Weight of Drums of Soil with Low Level PCBs (< 1000 ppm) kg
OPCB-4	ORILLIA WATER, LIGHTS & POWER COMM.	360 WEST STREET SOUTH ORILLIA L3V 5G8	1995	30387A009	2.00	Number of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg
					300.00	Weight of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg
OPCB-5	ORILLIA WATER, LIGHTS & POWER COMM.	360 WEST STREET SOUTH ORILLIA L3V 5G8	1999	30387A009	2.00	Number of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg
					300.00	Calculated Weight of Drums of Other Material with Low Level PCBs (< 1000 ppm) kg
OPCB-6	ORILLIA WATER, LIGHTS & POWER COMM.	360 WEST STREET SOUTH ORILLIA L3V 5G8	2004	30387A009	1	Number of Drums of Soil with Low Level PCBs (< 1000 ppm) kg
					400	Calculated Weight (Kg) of Drums of Soil with Low Level PCBs (< 1000 ppm) kg
OPCB-7	GALTACO-REDLAW CASTINGS LTD	225 WEST ST. SOUTH ORILLA L3V 6L3	2004	30382A006	176	Number of Capacitors with High Level PCBs (>1000 ppm)

Inventory of PCB Storage Sites

Map Key	Company	Address	Year	Site Number	Quantity	Description
OPCB-8	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4	2004	30391A006	176	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-9	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4	1999	30391A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-10	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4	1998	30391A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-11	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4	2000	30391A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-12	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4	1995	30391A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-13	G. L. AND V. ONTARIO INC.	174 WEST STREET SOUTH ORILLIA L3V 6L4	2003	30391A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-14	GL & V ONTARIO INC.	55 QUEEN STREET WEST ORILLA L3V 7W3	1995	30382A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-15	GL & V ONTARIO INC.	55 QUEEN STREET WEST ORILLA L3V 7W3	1999	30382A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-16	GL & V ONTARIO INC.	55 QUEEN STREET WEST ORILLA L3V 7W3	1998	30382A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-17	GL & V ONTARIO INC.	55 QUEEN STREET WEST ORILLA L3V 7W3	2000	30382A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)
OPCB-18	GL & V ONTARIO INC.	55 QUEEN STREET WEST ORILLA L3V 7W3	2003	30382A006	176.00	Number of Capacitors with High Level PCBs (>1000 ppm)

Inventory of PCB Storage Sites

Map Key	Company	Address	Year	Site Number	Quantity	Description
OPCB-19	PMI FOOD EQUIPMENT GROUP CANADA	79 WEST STREET ORILLIA	1992	30390A036		
n/a	CITY OF ORILLIA	JAMES STREET P.O. BOX 340 ORILLA L3V 6J1	2000	30389A166		
n/a	CITY OF ORILLIA	JAMES STREET P.O. BOX 340 ORILLA L3V 6J1	1998	30389A166	3.00	Number of Drums of Ballasts with High Level PCBs (>1000 ppm)
					600.00	Calculated Weight (Kg) of Drums of Ballasts with High Level PCBs (>1000 ppm)
					1.00	Number of Drums of Other Material with High Level PCBs (>1000 ppm)
					150.00	Calculated Weight (Kg) of Drums of Other Material with High Level PCBs (>1000 ppm) kg
n/a	CITY OF ORILLIA	JAMES STREET P.O. BOX 340 ORILLA L3V 6J1	1999	30389A166	3.00	Number of Drums of Ballasts with High Level PCBs (>1000 ppm)
					600.00	Calculated Weight (Kg) of Drums of Ballasts with High Level PCBs (>1000 ppm)
					1.00	Number of Drums of Other Material with High Level PCBs (>1000 ppm)
					150.00	Calculated Weight (Kg) of Drums of Other Material with High Level PCBs (>1000 ppm) kg
n/a	CITY OF ORILLIA	JAMES STREET P.O. BOX 340 ORILLA L3V 6J1	1995	30389A166	3.00	Number of Drums of Ballasts with High Level PCBs (>1000 ppm)
					600.00	Weight of Drums of Ballasts with High Level PCBs (>1000 ppm) kg
					1.00	Number of Drums of Other Material with High Level PCBs (>1000 ppm)
					150.00	Weight of Drums of Other Material with High Level PCBs (>1000 ppm) kg

Pesticide Register

Map Key	Company	Address	Licence No.	Licence Type
PES-1	ROBERTSON'S WILDLIFE AND PEST CONTROL	3-200 MEMORIAL AVE, SUITE 102 ORILLIA L3V 5X6		Operator
PES-2	K MART CANADA LIMITED #5521	150 WEST STREET SIMCOE N3Y 5C1		Vendor
PES-3	MIRACLE FOOD MART DIV. OF STEINBERGS LIMITED #287	150 WEST STREET SIMCOE N3Y 5C1		Vendor
PES-4	GIANT TIGER STORE # 106 - TORA SIMCOE LIMITED	150 WEST ST SIMCOE N3Y 5C1		Limited Vendor
PES-5	METRO ONTARIO INC O/A METRO/FOOD BASICS # 888	150 WEST STREET SIMCOE N3Y5C1		Vendor
PES-6	GIANT TIGER STORE # 106 - TORA SIMCOE LIMITED	150 WEST ST SIMCOE N3Y 5C1		Vendor
PES-7	CANADIAN TIRE ASSOC. STORE #74 PARISH, T.S. LTD	135 WEST STREET SOUTH ORILLIA L3V 5G7		Vendor
PES-8	HOME BUILDING CENTRE - ORILLIA	5 KING ST ORILLIA L3V 1R2		Vendor
PES-9	HOME BUILDING CENTRE - ORILLIA	5 KING STREET ORILLIA L3V 1R2	23-01-12031-0	Limited Vendor
PES-10	HOME BUILDING CENTRE - ORILLIA	5 KING ST ORILLIA L3V 1R2		Limited Vendor
PES-11	BEAVER LUMBER	5 KING STREET ORILLIA L3V 1R2		Vendor

Pesticide Register

Map Key	Company	Address	Licence No.	Licence Type
PES-12	TORA ORILLIA LIMITED O/A GIANT TIGER #174	130 ATHERLY ROAD ORILLIA L3V1N3		Vendor
PES-13	ORILLIA HOME HARDWARE BUILDING CENTRE	169 FRONT ST S ORILLIA L3V 4S8	23-01-12232-0	Limited Vendor
PES-14	DOMINION LUMBER	169 FRONT ST S ORILLIA L3V 4S8	23-01-09886-0	Limited Vendor
PES-15	DOMINION LUMBER	169 FRONT STREET SOUTH ORILLIA L3V 4S8		Vendor
PES-16	ORILLIA HOME HARDWARE BUILDING CENTRE	169 FRONT ST S ORILLIA L3V 4S8		Vendor
PES-17	SWITZER HOMECARE	100 KING STREET ORILLIA L3V 1R5	23-01-10670-0	Limited Vendor
PES-18	SWITZER PLANNING MILLS LTD	100 KING STREET EAST ORILLIA L3V1R5		Vendor
PES-19	2201221 ONTARIO INC. O/A RONA ORILLIA	100 KING ST. E ORILLIA L3V1R5		Vendor
PES-20	SWITZER PLANNING MILLS LTD	100 KING STREET EAST ORILLIA L3V1R5		Limited Vendor

Private and Retail Fuel Storage Tanks

Map Key	Company	Address	Location ID	Type	Expiry Date	Capacity (L)	Licence #
PRT-1	ULTRAMAR CANADA INC	176 MEMORIAL AV ORILLIA L3V 5X6	18452	retail	1995-07-31	100000	0060146001
PRT-2	ULTRAMAR CANADA INC	174 MEMORIAL AV ORILLIA L3V5X6	10586	retail	1996-04-30	100000	0050788001
PRT-3	CANADIAN TIRE CORP LTD PETROLEUM DIVISION - SUSAN	135 WEST ST S ORILLIA L3V5G7	10604	retail	1995-06-30	2000	0034017001
PRT-4	CANADIAN TIRE CORP LTD PETROLEUM DIVISION - SUSAN	135 WEST ST S ORILLIA L3V 5G7	10604	retail	1995-06-30	0	0012228007
PRT-5	SUNSHINE SUPER WASH	184 GILL ST ORILLIA L3V 4K1	10570	retail	1995-08-31	0	0026170001
PRT-6	OLCO PETROLEUM GROUP INC ATTN LORI WARE	275 ATHERLEY RD	18672	retail	1995-12-31	21997	0076339597
n/a	ULTRAMAR CANADA INC	LOT 10 CON 6 ATHERLY RD ORILLIA	10556	retail	1991-09-30	90920	0027771001

Permit to Take Water

Map Key	Company	Address	Year	EBR Registry No.	Ministry Ref. No.	Type
n/a	Nelson Aggregates Co.	Lot: 7 8 9 10, Concession: 4 Orillia	2012	011-5544	2258-8QEM	Instrument Proposal
				Instrument Type:	(OWRA s. 34) - Permit to take water	
				Proposal Date:	January 12, 2012	
				Location:	Lot: 7 8 9 10, Concession: 4, Geographic Township of Orillia, County of Simcoe	
				Proponent Address:	3114 Burnside Line Orillia Ontario Canada L3V 6H4	

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-1	The Corporation of the City of Orillia	255 West Street South and 25 Queen Street, Orillia, Ontario	21-Jun-11			29-Dec-06		
			Registration #:	112721				
			Stratified (Y/N):					
			Criteria:					
			Consultant:					
			District Office:	ORILLIA				
			Intended Prop Use:	Parkland				
			Current Property Use:	Industrial				
			Certificate Prop Use #:	7184-85KNQZ				
			Applicable Standards:	Background Site Conditions Standard, with Nonpotable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use with Risk				
			Legal Description:	ENTIRE LEGAL DESCRIPTION: Lot 1 East Side of Andrew Street, 2 East Side of Andrew Street, 1 West Side of West Street, 2 West Side of West Street, A West Side of Andrew Street, PLaN 269, South Orillia; Powley Street, Plan 269, South Orillia; Part Andrew Street, Plan 269, South Orillia; Part Lot B West Side of Andrew Street, 3 West Side of West Street, 3 East Side of Andrew Street, Plan 269, South Orillia; Part Lot 10, Concession 4, South Orillia Parts 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 & 12, PLAN 51R-18267; Orillia. RSC LEGAL DESCRIPTION: Parts 3 and 4, Plan 51R-35003, City of Orillia, County of Simcoe				
			Prop. Identification #:	58643-0063(R)				
			Entire legal prop. (y/n):	No				
UTM Coordinates:	NAD83 17-625325-4939737							
Latitude & Longitude:	44.60006430N 79.42084000W (converted from UTM)							
Accuracy Estimate:	21 to 100 meters							
Measurement Method:	Digitized from a satellite image							
CPU Issued Sect 1686:	Yes							
RSC-2	The Corporation of the City of Orillia	255 West Street South and 25 Queen Street, Orillia, Ontario	21-Jun-11			29-Dec-09		
			Registration #:	113159				
			Stratified (Y/N):					
			Criteria:					
			Consultant:					
			District Office:	ORILLIA				
			Intended Prop Use:	Parkland				
			Current Property Use:	Industrial				
			Certificate Prop Use #:	7184-85KNQZ				
			Applicable Standards:	Full Depth Site Conditions Standard, with Nonpotable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use with Risk				
			Legal Description:	ENTIRE LEGAL DESCRIPTION: Lot 1 East Side of Andrew Street, 2 East Side of Andrew Street, 1 West Side of West Street, 2 West Side of West Street, A West Side of Andrew Street, PLaN 269, South Orillia; Powley Street, Plan 269, South Orillia; Part Andrew Street, Plan 269, South Orillia; Part Lot B West Side of Andrew Street, 3 West Side of West Street, 3 East Side of Andrew Street, Plan 269, South Orillia; Part Lot 10, Concession 4, South Orillia Parts 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 & 12, PLAN 51R-18267; Orillia. RSC LEGAL DESCRIPTION: Parts 1 and 2, Plan 51R-35003, City of Orillia, County of Simcoe				
			Prop. Identification #:	58643-0063(R)				
			Entire legal prop. (y/n):	No				
UTM Coordinates:	NAD83 17-625600-4939870							
Latitude & Longitude:	44.60121320N 79.41734370W (converted from UTM)							
Accuracy Estimate:	21 to 100 meters							
Measurement Method:	Digitized from a satellite image							
CPU Issued Sect 1686:	Yes							

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-3	4417917 CANADA INC.	45 COCHRANE ST, ORILLIA, ON, L3V 1M7,	5-Apr-11			2-Feb-11		
			Registration #: 102114 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Residential Current Property Use: Industrial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Potable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use Legal Description: PT LT B PL 365 SOUTH ORILLIA; 62 N/S COCHRANE ST, 63 N/S COCHRANE ST, 79 N/S COCHRANE ST, 58 S/S POUGHKEEPSIE ST, 59 S/S POUGHKEEPSIE ST, 78 S/S POUGHKEEPSIE ST, 64 E/S SOUTH PETER ST, 65 E/S SOUTH PETER ST, 66 E/S SOUTH PETER ST, 67 E/S SOUTH PETER ST, 68 E/S SOUTH PETER ST, 69 E/S SOUTH PETER ST, 70 E/S SOUTH PETER ST, 71 E/S SOUTH PETER ST PL 610 ORILLIA; PT LANE PL 610 ORILLIA; PT SOUTH PETER ST, POUGHKEEPSIE ST PL 604 ORILLIA PARTIALLY CLOSED BY RO55608 & RO77909; PT 3, 51R28091; S/T THE INTEREST OF THE MUNICIPALITY; ORILLIA Prop. Identification #: 58671-0042 (LT) Entire legal prop. (y/n): Yes UTM Coordinates: NAD83 17-626026-4940021 (converted from Latitude & Longitude) Latitude & Longitude: 44.60250000N 79.41194440W Accuracy Estimate: 6 to 10 meters Measurement Method: Digitized from a map CPU Issued Sect 1686: No					

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-4	Circoflex (2002) Corporation	The legal description has not been assigned a municipal address. ORILLIA	8-Sep-05			29-Aug-05		
			Registration #: 1865 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Residential Current Property Use: Industrial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Nonpotable Ground Water, Medium/Fine Textured Soil, for Residential/Parkland/Institutional property use Legal Description: Legal Description of property described in SC184694: All of Lots 20, 21, 29, 30, 31, 32, 33, 34, 35 and 36 South Side of Mill Street, now Barrie Road and, All of Lots 12, 13, 22, 23, 24, 25, 26, 27 and 28 North Side of Elizabeth Street, now McKinnell Street and, All of Lots 43 and 44 West Side of Andrew Street and, Part of Lots 14 and 15 North Side of Elizabeth Street, now McKinnell Street and, Part of Lot 19 South Side of Mill Street, now Barrie Road and, Part of Elizabeth Street, now McKinnell Street, closed by By-Law 553 - Inst. No. ORI20697, closed by By-Law 3016 - Inst. No. ORI34450 and, Part of Wyandot Street, closed by By-Law 451 - Inst. No. 20696 Registered Plan 158 in The City of Orillia, County of Simcoe described as Parts 1, 2, 3, 4 and 5 Plan 51R-6242. Subject to an easement as set out in Inst. No.'s ORI24311 and ORI34453, lying within the limits of Part 4 Plan 51R-6242. And the legal description of the RSC#1865 is: All of Lots 20 and 21 South Side of Mill Street, now Barrie Road and, All of Lots 12 and 13 North Side of Elizabeth Street, now McKinnell Street and, Part of Lots 19 and 29 South Side of Mill Street, now Barrie Road and, Part of Lots 14, 15 and 28 North Side of Elizabeth Street, now McKinnell Street and, Part of Elizabeth Street, now McKinnell Street, closed by By-Law 553 - Inst. No. ORI20697, closed by By-Law 3016 - Inst. No. ORI34450 and, Part of Wyandot Street, closed by By-Law 451 - Inst. No. 20696 Registered Plan 158 in The City of Orillia, County of Simcoe as shown on a preliminary reference plan prepared by Jones Geomatics Ontario Inc. Prop. Identification #: Entire legal prop. (y/n): No UTM Coordinates: NAD83 17-625400-4940000 Latitude & Longitude: 44.60241800N 79.41983120W (converted from UTM) Accuracy Estimate: 21 to 100 meters Measurement Method: Interpolation from a map CPU Issued Sect 1686: No					

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-5	4417917 CANADA INC.	250 WEST ST S, ORILLIA, ON, L3V 1M7, L3V 7W4	5-Apr-11			22-Feb-11		
			Registration #: 102112 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Residential Current Property Use: Industrial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Nonpotable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use Legal Description: PT BLK P PL 604 ORILLIA; PT LT A, B PL 365 SOUTH ORILLIA; PT POUGHKEEPSIE ST PL 604 ORILLIA PT 4, 51R28091; S/T THE INTEREST OF THE MUNICIPALITY; ORILLIA Prop. Identification #: 58671-0041 (LT) Entire legal prop. (y/n): Yes UTM Coordinates: NAD83 17-625849-4940018 (converted from Latitude & Longitude) Latitude & Longitude: 44.60250000N 79.41416670W Accuracy Estimate: 6 to 10 meters Measurement Method: Digitized from a map CPU Issued Sect 1686: No					

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-6	Skylite Residential Inc.	95 Barrie Road, Orillia, Ontario Orillia	27-Jun-06			14-Jun-06		
			Registration #: 3392 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Residential Current Property Use: Industrial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Nonpotable Ground Water, Medium/Fine Textured Soil, for Residential/Parkland/Institutional property use Legal Description: Legal Description of property described in SC184694: All of Lots 20, 21, 29, 30, 31, 32, 33, 34, 35 and 36 South Side of Mill Street, now Barrie Road and, All of Lots 12, 13, 22, 23, 24, 25, 26, 27 and 28 North Side of Elizabeth Street, now McKinnell Street and, All of Lots 43 and 44 West Side of Andrew Street and, Part of Lots 14 and 15 North Side of Elizabeth Street, now McKinnell Street and, Part of Lot 19 South Side of Mill Street, now Barrie Road and, Part of Elizabeth Street, now McKinnell Street, closed by By-Law 553 - Inst. No. ORI20697, closed by By-Law 3016 - Inst. No. ORI34450 and, Part of Wyandot Street, closed by By-Law 451 - Inst. No. 20696 Registered Plan 158 in The City of Orillia, County of Simcoe described as Parts 1, 2, 3, 4 and 5 Plan 51R-6242. Subject to an easement as set out in Inst. No.'s ORI24311 and ORI34453, lying within the limits of Part 4 Plan 51R-6242. And the legal description of the RSC#1865 is: All of Lots 20 and 21 South Side of Mill Street, now Barrie Road and, All of Lots 12 and 13 North Side of Elizabeth Street, now McKinnell Street and, Part of Lots 19 and 29 South Side of Mill Street, now Barrie Road and, Part of Lots 14, 15 and 28 North Side of Elizabeth Street, now McKinnell Street and, Part of Elizabeth Street, now McKinnell Street, closed by By-Law 553 - Inst. No. ORI20697, closed by By-Law 3016 - Inst. No. ORI34450 and, Part of Wyandot Street, closed by By-Law 451 - Inst. No. 20696 Registered Plan 158 in The City of Orillia, County of Simcoe as shown on a preliminary reference plan prepared by Jones Geomatics Ontario Inc. Prop. Identification #: PIN 586430047 (LT) Entire legal prop. (y/n): No UTM Coordinates: NAD83 17-625380-4939980 Latitude & Longitude: 44.60224150N 79.42008800W (converted from UTM) Accuracy Estimate: 6 to 10 meters Measurement Method: Digitized from a map CPU Issued Sect 1686: No					

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-7	Skylite Residential Inc.	95 Barrie Road, Orillia Orillia	28-Jul-06			26-Jun-06		
			Registration #:	3450				
			Stratified (Y/N):					
			Criteria:					
			Consultant:					
			District Office:	ORILLIA				
			Intended Prop Use:	Residential				
			Current Property Use:	Industrial				
			Certificate Prop Use #:	No CPU				
			Applicable Standards:	Full Depth Site Conditions Standard, with Nonpotable Ground Water, Medium/Fine Textured Soil, for Residential/Parkland/Institutional property use				
			Legal Description:	Legal Description of property described in SC184694: All of Lots 20, 21, 29, 30, 31, 32, 33, 34, 35 and 36 South Side of Mill Street, now Barrie Road and, All of Lots 12, 13, 22, 23, 24, 25, 26, 27 and 28 North Side of Elizabeth Street, now McKinnell Street and, All of Lots 43 and 44 West Side of Andrew Street and, Part of Lots 14 and 15 North Side of Elizabeth Street, now McKinnell Street and, Part of Lot 19 South Side of Mill Street, now Barrie Road and, Part of Elizabeth Street, now McKinnell Street, closed by By-Law 553 - Inst. No. ORI20697, closed by By-Law 3016 - Inst. No. ORI34450 and, Part of Wyandot Street, closed by By-Law 451 - Inst. No. 20696 Registered Plan 158 in The City of Orillia, County of Simcoe described as Parts 1, 2, 3, 4 and 5 Plan 51R-6242. Subject to an easement as set out in Inst. No.'s ORI24311 and ORI34453, lying within the limits of Part 4 Plan 51R-6242. And the legal description of the RSC#1865 is: All of Lots 20 and 21 South Side of Mill Street, now Barrie Road and, All of Lots 12 and 13 North Side of Elizabeth Street, now McKinnell Street and, Part of Lots 19 and 29 South Side of Mill Street, now Barrie Road and, Part of Lots 14, 15 and 28 North Side of Elizabeth Street, now McKinnell Street and, Part of Elizabeth Street, now McKinnell Street, closed by By-Law 553 - Inst. No. ORI20697, closed by By-Law 3016 - Inst. No. ORI34450 and, Part of Wyandot Street, closed by By-Law 451 - Inst. No. 20696 Registered Plan 158 in The City of Orillia, County of Simcoe as shown on a preliminary reference plan prepared by Jones Geomatics Ontario Inc. (RSC applies to entire property except Part 1 (RSC#1865) and Parts 2,3 and 4 (RSC#3392). RSC covers the area described as Parts 5 to 13 on Plan 51R-34648 and Lots 22 - 36 and Lots 44 and 45 on RPlan 158 and parts of Elizabeth Street (closed by by-law 553 Inst. No. 20697 and by-law 3016 Inst. No. 34450) .				
			Prop. Identification #:	PIN 586430047 (LT)				
			Entire legal prop. (y/n):	No				
			UTM Coordinates:	NAD83 17-625480-4940100				
			Latitude & Longitude:	44.60330390N 79.41879910W (converted from UTM)				
			Accuracy Estimate:	6 to 10 meters				
			Measurement Method:	Digitized from a map				
			CPU Issued Sect 1686:	No				

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-8	4417917 Canada Inc.	174 WEST ST S, ORILLIA, ON, L3V 6L4,	6-Apr-11			10-Jan-11		
			Registration #: 101914 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Residential Current Property Use: Industrial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Nonpotable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use		Legal Description: PT W PT LT 9 CON 5 SOUTH ORILLIA; PT BLK P PL 604 ORILLIA PT 1, 51R28091; ORILLIA Prop. Identification #: 58671-0040 (LT) Entire legal prop. (y/n): Yes UTM Coordinates: NAD83 17-625874-4939407 (converted from Latitude & Longitude) Latitude & Longitude: 44.59700000N 79.41400000W Accuracy Estimate: 6 to 10 meters Measurement Method: Digitized from a map CPU Issued Sect 1686: No			
RSC-9	4417917 Canada Inc.	174 WEST ST S, ORILLIA, ON, L3V 6L4,	30-Jun-11			15-Jun-11		
			Registration #: 114931 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Residential Current Property Use: Industrial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Nonpotable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use		Legal Description: PT W PT LT 9 CON 5 SOUTH ORILLIA; PT BLK P PL 604 ORILLIA PT 1, 51R28091; ORILLIA Prop. Identification #: 58671-0040 (LT) Entire legal prop. (y/n): Yes UTM Coordinates: NAD83 17-625759-4940140 (converted from Latitude & Longitude) Latitude & Longitude: 44.60361110N 79.41527780W Accuracy Estimate: 11 to 20 meters Measurement Method: Digitized from a map CPU Issued Sect 1686: No			

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-10	Serenity Residentials Inc.	85 BARRIE RD, ORILLIA, ON, L3V 2P6 L3V 2P6	28-Jul-10			28-May-10		
			Registration #: 81718 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Residential Current Property Use: Commercial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Nonpotable Ground Water, Medium/Fine Textured Soil, for Residential/Parkland/Institutional property use Legal Description: PT LT 9 CON 4 SOUTH ORILLIA; PT BURNET ST PL 158 CLOSED BY BYLAW RO91419 AS PTS 2 & 3 51R28268; S/T EASEMENT IN FAVOUR OF THE CORPORATION OF THE CITY OF ORILLIA OVER PT 3 51R28268 AS IN RO1400928, S/T EASEMENT AS IN SC518613; ORILLIA-----RSC LEGAL DESCRIPTION: Parts 2 and 3, Plan 51R-28268, City of Orillia, County of Simcoe Prop. Identification #: 58643-0116(LT) Entire legal prop. (y/n): No UTM Coordinates: NAD83 17-625496-4940078 Latitude & Longitude: 44.60310320N 79.41860290W (converted from UTM) Accuracy Estimate: 6 to 10 meters Measurement Method: Digitized from a map CPU Issued Sect 1686: No					

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-11	4417917 Canada Inc.	55 QUEEN ST, ORILLIA, ON, L3V 6L4 L3V 7W3	15-Jun-11			31-May-11		
			Registration #:		110114			
			Stratified (Y/N):					
			Criteria:					
			Consultant:					
			District Office:		ORILLIA			
			Intended Prop Use:		Residential			
			Current Property Use:		Industrial			
			Certificate Prop Use #:		No CPU			
			Applicable Standards:		Full Depth Site Conditions Standard, with Nonpotable Ground Water, Medium/Fine Textured Soil, for Residential/Parkland/Institutional property use			
			Legal Description:		ALL AND SINGULAR that certain parcel or tract of land and premises situate lying and being in the City of Orillia, in the County of Simcoe and being composed of part of the west part of Lot 9, Concession 5 and part of Lot A, Registered Plan 365 and parts of Blocks P and O, Registered Plan 604 and part of Lot 80 on the north side of Poughkeepsie and east side of Peter Street South, Registered Plan 610 and part of Peter Street South and part of Poughkeepsie, Registered Plan 604 (Geographic Township of South Orillia) being more particularly described as follows: Being composed of all of Part 2, Plan 51R-28091 save and except the lands more particularly described as follows: ALL AND SINGULAR that certain parcel or tract of land and premises situate lying and being in the City of Orillia, in the County of Simcoe and being composed of part of Blocks P and O and part of Poughkeepsie Street, Registered Plan 604 and part of Lot 80, Registered Plan 610 and part of the west part of Lot 9, Concession 5, more particularly described as follows: PREMISING that the easterly limit of Part 2 has an astronomic bearing of N30 degrees 43'20" W as shown on deposited plan 51R-28091 and relating all bearing herein thereto. COMMENCING at a point in the northerly limit of Poughkeepsie Street, distant S60 degrees 42'30"W 53.176 metres from the south-easterly corner of Lot 80 north side of Poughkeepsie Street, Registered Plan 610. THENCE S30 degrees 43'20" E along the easterly limit of Part 2, Plan 51R-28091 a distance of 17.450 metres to a Standard Iron Bar. THENCE S60 degrees 32' 00"W a distance of 65.781 metres to a Iron Bar. THENCE N31 degrees 15' 45"W a distance of 230.239 metres to a Iron Bar. THENCE N58 degrees 59' 20"E a distance of 67.939 metres to a Standard Iron Bar. THENCE S30 degrees 43'20"E a distance of 214.553 metres, more or less, to the point of commencement of the herein described parcel of land. THENCE S30 degrees 43'20" E along the easterly limit of Part 2, Plan 51R-28091 a distance of 17.450 metres to a Standard Iron Bar. THENCE S60 degrees 32 ' 00" W a distance of 65.78l metres to a Iron Bar. THENCE N31 degrees 15'45"W a distance of 230.239 metres to a Iron Bar. THENCE N58 degrees 59'20"E a distance of 67.939 metres to a Standard Iron Bar. THENCE S30 degrees 43' 20"E a distance of 214.553 metres, more or less, to the point of commencement of the herein described parcel of land.			
			Prop. Identification #:		58671-0042 (LT)			
			Entire legal prop. (y/n):		No			
			UTM Coordinates:		NAD83 17-625937-4940297 (converted from Latitude & Longitude)			
			Latitude & Longitude:		44.60500000N 79.41300000W			
			Accuracy Estimate:		11 to 20 meters			
			Measurement Method:		Global Positioning System			
			CPU Issued Sect 1686:		No			

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-12	2124326 Ontario Inc.	No municipal address. ORILLIA	12-May-11			25-Oct-10		
			Registration #: 65714 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Parkland Current Property Use: Industrial Certificate Prop Use #: 0431-7QQNN3 Applicable Standards: Full Depth Site Conditions Standard, with Potable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use with Risk As Legal Description: PIN 58671-0076: LTS 11 TO 20 N/S QUEEN ST PL 133 AKA PL 159, ORILLIA PT 1, 2, 3, 4, 5, & 6 51R28482, SAVE & EXCEPT PT 15 PL 51R35037; S/T EASEMENT OVER PT LTS 11-20 N/S QUEEN ST PL 133 AKA 159 PT 5 51R29945 AS IN SC92947; ORILLIA. AND, PIN 58671-0079: PETER STREET PL 133 AKA PL 159 ORILLIA ADJACENT TO LOT 10 & 11 N/S QUEEN STREET PL 133 EXCEPT PART 13 PLAN 51R35037 (CLOSED BY BY-LAW SC612928), S/T EASEMENT IN GROSS OVER PARTS 11 & 12 PL 51R35037 AS IN SC613006, S/T EASEMENT OVER PT 12 PL 51R35037 IN FAVOR OF THE OWNER(S) QUEEN ST PL 604 ORILLIA, QUEEN ST PL 133 AKA 159 ORILLIA, PT BLK R PL 604 PT 2 51R8112 LYING S OF QUEEN BTN FRONT AND WEST ST AND PT LT 9 CON 4 S.ORILLIA, PT LT 9 S/BURNET ST PL 158 SOUTH ORILLIA, PT OF BURNET STREET PL 158 SOUTH ORILLIA CLOSED BY RO91419; PT 1 51R28268 AS IN SC613006, S/T EASEMENT EXCEPT PT 12 PL 51R35037 IN FAVOR OF THE OWNER QUEEN ST PL 604 ORILLIA, QUEEN ST PL 133 AKA 159 ORILLIA, PT BLK R PL 604 PT 2 51R8112 LYING S OF QUEEN BTN FRONT AND WEST ST & PT LT 9 CON 4 SOUTH ORILLIA, PT LT 9 S/BURNET ST PL 158 SOUTH ORILLIA, PT OF BURNET STREET PL 158 SOUTH ORILLIA CLOSED BY RO91419; PT 1 51R28268 AS IN SC613006; ORILLIA Prop. Identification #: PIN 58671-0076 and PIN 58671-0079 Entire legal prop. (y/n): Yes UTM Coordinates: NAD83 17-625924-4940344 Latitude & Longitude: 44.60542210N 79.41314650W (converted from UTM) Accuracy Estimate: 2 to 5 meters Measurement Method: Digitized from a satellite image CPU Issued Sect 1686: Yes					

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type		
RSC-13	Moorsom Development Ltd.	4 KING ST, ORILLIA, ON, L3V 1R1 ORILLIA L3V 1R1	25-Feb-09			13-May-08				
									Registration #:	47913
									Stratified (Y/N):	
									Criteria:	
									Consultant:	
									District Office:	ORILLIA
									Intended Prop Use:	Commercial
									Current Property Use:	Commercial
									Certificate Prop Use #:	7121-7M7KFN
									Applicable Standards:	Full Depth Site Conditions Standard, with Nonpotable Ground Water, Medium/Fine Textured Soil, for Industrial/Commercial/Community property use with Ri
									Legal Description:	LT 7 N/S KING ST, 8 N/S KING ST, 9 N/S KING ST, 10 N/S KING ST PL 58 ORILLIA; PT LT 1 N/S KING ST, 2 N/S KING ST, 3 N/S KING ST, 4 N/S KING ST, 5 N/S KING ST, 6 N/S KING ST PL 58 ORILLIA PTS 5 & 6 51R11444 & PT 1, 51R11472; ORILLIA
									Prop. Identification #:	58668-0076LT
									Entire legal prop. (y/n):	Yes
									UTM Coordinates:	NAD83 17-625689-4940365
									Latitude & Longitude:	44.60565220N 79.41610160W (converted from UTM)
Accuracy Estimate:	6 to 10 meters									
Measurement Method:	Digitized from a map									
CPU Issued Sect 1686:	Yes									
RSC-14	2082473 Ontario Inc.	No Municipal Address Available ORILLIA	28-Dec-07			30-Nov-05				
									Registration #:	40907
									Stratified (Y/N):	
									Criteria:	
									Consultant:	
									District Office:	ORILLIA
									Intended Prop Use:	Parkland
									Current Property Use:	Industrial
									Certificate Prop Use #:	3120-76YLCX
									Applicable Standards:	Full Depth Site Conditions Standard, with Potable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use with Risk As
									Legal Description:	LT 1 N/S Queen ST, 2 N/S Queen ST, 3 N/S Queen ST, 4 N/S Queen ST, 5 N/S Queen ST, 6 N/S Queen ST, 7 N/S Queen ST, 8 N/S Queen ST, 9 N/S Queen ST, 10 N/S Queen ST, PL 133 AKA PL 159 Orillia PT 1, 2, 3, 51R28282; S/T Easement Over PT. LTS 1-10 N/S Queen ST PL 133 AKA 159 PT 1 51R29945 as in SC92947; Orillia
									Prop. Identification #:	58671-0065 LT
									Entire legal prop. (y/n):	Yes
									UTM Coordinates:	NAD83 17-625873-4940346
									Latitude & Longitude:	44.60544910N 79.41378840W (converted from UTM)
Accuracy Estimate:	6 to 10 meters									
Measurement Method:	Digitized from a map									
CPU Issued Sect 1686:	Yes									

Record of Site Condition

Map Key	Company	Address	Date Submitted	Date Acknowledg.	Date Returned	Certification Date	Soil Type	Restoration Type
RSC-15	New Path Foundation	169 FRONT ST S, ORILLIA, ON, L3V 4S8 L3V 4S8	7-Jun-10			30-Mar-10		
			Registration #: 78915 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Residential Current Property Use: Commercial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Nonpotable Ground Water, Coarse Textured Soil, for Residential/Parkland/Institutional property use Legal Description: PT BLK R PL 604, PT LT 81 W/MARA RD IN REAR OF LTS 1 TO 9 W/S FRONT STPL 610, PT LT 10 CON 5 SOUTH ORILLIA, PT W PT LT 9 CON 5 SOUTH ORILLIA AS IN RO1201630 AND PTS 1 & 3 PL 51R8112 EXCEPT PT 1 ON PL 51R36271; ORILLIA and PART OF BLOCK O PL 604 & PART OF LOT 80 N/S POUGHKEEPSIE ST & E/S PETER STREET PLAN 610 EXCEPT PART 1 ON PL 51R34677; PART OF WEST PART OF LOT 9 CONCESSION 5 (SOUTH ORILLIA) AS IN RO 1080712; ORILLIA Prop. Identification #: 58671 - 0082 LT and 56871 - 0070 LT Entire legal prop. (y/n): Yes UTM Coordinates: NAD83 17-626079-4940294 Latitude & Longitude: 44.60494500N 79.41120620W (converted from UTM) Accuracy Estimate: 6 to 10 meters Measurement Method: Lookup from Gazetteer CPU Issued Sect 1686: No					
n/a	Wide Flange Inc.	Orillia (west end Norweld Drive) Orillia	19-Dec-05			14-Jul-03		
			Registration #: 2698 Stratified (Y/N): Criteria: Consultant: District Office: ORILLIA Intended Prop Use: Commercial Current Property Use: Industrial Certificate Prop Use #: No CPU Applicable Standards: Full Depth Site Conditions Standard, with Potable Ground Water, Medium/Fine Textured Soil, for Industrial/Commercial/Community property use Legal Description: Part of Lot 10, Concession IV (formerly Township of Orillia-Southern Division) and Lots 4 and 5 and Part of Lot 3, West Side of West Street, and Lots 4 and 5 and Part of Lot 3, East Side of Andrew Street and Part of Blocks B and C and Part of Andrew Street, Plan No. 269 being Parts 1 to 12 (inclusive) on Plan No. 51R-16361, City of Orillia, County of Simcoe (RSC applies to Part 1 on Plan No. 51R-16361, City of Orillia, County of Simcoe) Prop. Identification #: Entire legal prop. (y/n): No UTM Coordinates: NAD83 17-625500-4939600 Latitude & Longitude: 44.59880090N 79.41866920W (converted from UTM) Accuracy Estimate: 101 to 200 meters Measurement Method: Interpolation from a map CPU Issued Sect 1686: No					

Retail Fuel Storage Tanks

Map Key	Company	Address	Facility	Description
RST-1	LARRY'S XL	174 MEMORIAL AVE ORILLIA L3V 5X6	SERVICE STATIONS-GASOLINE, OIL & NATURAL GAS	
RST-2	LARRY'S XL	174 MEMORIAL ORILLIA L3V 5X6	Service Stations-Gasoline, Oil & Natural Gas	
RST-3	NORWELD DRIVE SELF STORAGE	109 NORWELD DR ORILLIA L3V 7Z2	MARINAS	
RST-4	BAER HARBOUR	27 QUEEN ST ORILLIA L3V 1B5	MARINAS	
RST-5	CANADIAN TIRE GAS BAR	135 WEST ST S ORILLIA L3V 5G7	SERVICE STATIONS-GASOLINE, OIL & NATURAL GAS	
RST-6	SUNOCO INC	184 GILL ST ORILLIA L3V4K1	Service Stations-Gasoline, Oil & Natural Gas	
RST-7	RANEY FUELS INC	68 KING ST ORILLIA L3V 1R3	Oils-Fuel	Petroleum Products, Wholesale
n/a	PETRO GOLD INC	2304 KING ST ORILLIA L0K 1B0	Service Stations-Gasoline, Oil & Natural Gas	

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft ²)	Employment	SIC/NAICS Code	Description
SCT-1	ARTECH PROMOTIONAL WEAR	220 JAMES ST W UNIT 2 ORILLIA L3V 6Y3	1980	0	20	2395	PLEATING, DECORATIVE AND NOVELTY STITCHING, AND TUCKING FOR THE TRADE
						3999	MANUFACTURING INDUSTRIES, NOT ELSEWHERE CLASSIFIED
						5136	MEN'S AND BOYS' CLOTHING AND FURNISHINGS
						5137	WOMEN'S, CHILDREN'S, AND INFANTS' CLOTHING AND ACCESSORIES
						5199	NONDURABLE GOODS, NOT ELSEWHERE CLASSIFIED
SCT-2	Smith Drafting Products Inc.	200 Memorial Ave Unit 3 Orillia L3V 5X6	01-JUL-58	4000		417930	Professional Machinery, Equipment and Supplies Wholesaler-Distributors
						334512	Measuring, Medical and Controlling Devices Manufacturing
						337127	Institutional Furniture Manufacturing
						337214	Office Furniture (except Wood) Manufacturing
						335120	Lighting Fixture Manufacturing
SCT-3	FRANCOZ METAL CORPORATION LTD.	351 WEST ST S ORILLIA L3V 5H1	1928	0	28	3334	PRIMARY PRODUCTION OF ALUMINUM
SCT-4	CANADA WOOD SPECIALTY CO. 1983	300 WEST ST S ORILLIA L3V 5G8	1983	0	59	2421	SAWMILLS AND PLANING MILLS, GENERAL
						2499	WOOD PRODUCTS, NOT ELSEWHERE CLASSIFIED
SCT-5	Canada Wood Specialties Inc.	300 West St S Orillia L3V 5G8	1899			321999	All Other Miscellaneous Wood Product Manufacturing
SCT-6	Sheridan Seating Inc.	290 West St S Orillia L3V 5G8	01-JAN-78	30000		337127	Institutional Furniture Manufacturing
						337127	Institutional Furniture Manufacturing
						339990	All Other Miscellaneous Manufacturing

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft ²)	Employment	SIC/NAICS Code	Description
SCT-7	Sheridan Gymnasium Equipment	290 West St S Orillia L3V 5G8	1978	30000	50	337127	Institutional Furniture Manufacturing
SCT-8	Scott's Auto Marine Electric	92 Barrie Rd Unit 2 Orillia L3V 2P9	01-JUL-99	3500		332710	Machine Shops
						332710	Machine Shops
						336320	Motor Vehicle Electrical and Electronic Equipment Manufacturing
						335312	Motor and Generator Manufacturing
SCT-9	OLD TYMER WELDING	1 ROYCE AVE ORILLIA L3V 5H8	1994	0	10	3441	FABRICATED STRUCTURAL METAL
						3446	ARCHITECTURAL AND ORNAMENTAL METAL WORK
SCT-10	Dowdell Optical Laboratory Inc.	3 Royce Ave Unit 16 Orillia L3V 5H8	1993	1400	2		
SCT-11	PRINTING PLUS (1996)	3 ROYCE AVE UNIT 6 ORILLIA L3V 5H8	1989	1400	3	2752	COMMERCIAL PRINTING, LITHOGRAPHIC
SCT-12	Printing Plus (1996) Ltd.	3 Royce Ave Unit 6 Orillia L3V 5H8	8/1/1996			323119	Other Printing
SCT-13	Printing Plus (1996) Ltd.	3 Royce Ave Unit 6 Orillia L3V 5H8	1996			323119	Other Printing
SCT-14	DOWDELL OPTICAL LABORATORY INC	3 ROYCE AVE UNIT 16 ORILLIA L3V 5H8	1993	1400	2	3827	OPTICAL INSTRUMENTS AND LENSES
						5048	OPHTHALMIC GOODS
						339110	Medical Equipment and Supplies Manufacturing

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft ²)	Employment	SIC/NAICS Code	Description
SCT-15	DELCOIL INC.	95 BARRIE RD ORILLIA L3V 2P6	1991	4400	7	3052	RUBBER & PLASTICS HOSE & BELTING
SCT-16	BANKS STAIRS	95 BARRIE RD ORILLIA L3V 2P6	0000	0	2	2431 321919	MILLWORK Other Millwork
SCT-17	GL&V PROCESS EQUIPMENT GROUP	174 WEST ST S ORILLIA L3V	0000	0	0	3569 3589 3599 3325 3532 3554 3559	GENERAL INDUSTRIAL MACHINERY AND EQUIPMENT, NOT ELSEWHERE CLASSIFIED SERVICE INDUSTRY MACHINERY, NOT ELSEWHERE CLASSIFIED INDUSTRIAL AND COMMERCIAL MACHINERY AND EQUIPMENT, NOT ELSEWHERE CLASSIFIED STEEL FOUNDRIES, NOT ELSEWHERE CLASSIFIED MINING MACHINERY AND EQUIPMENT, EXCEPT OIL AND GAS FIELD MACHINERY AND EQUIPMENT PAPER INDUSTRIES MACHINERY SPECIAL INDUSTRY MACHINERY, NOT ELSEWHERE CLASSIFIED
SCT-18	FLSmith Ltd.	174 West St S Orillia L3V 6L4	01-JUN-61	16000		417230 236210 417210 417220	Industrial Machinery, Equipment and Supplies Wholesaler- Distributors Industrial Building and Structure Construction Construction and Forestry Machinery, Equipment and Supplies Wholesaler- Distributors Mining and Oil and Gas Well Machinery, Equipment and Supplies Wholesaler- Distributors

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft ²)	Employment	SIC/NAICS Code	Description
SCT-19	GL & V Dorr-Oliver - Div. of Canada Inc.	174 West St S Orillia	1992		125	416210	Metal Service Centres
						416390	Other Specialty-Line Building Supplies Wholesaler- Distributors
						417220	Mining and Oil and Gas Well Machinery, Equipment and Supplies Wholesaler- Distributors
						417230	Industrial Machinery, Equipment and Supplies Wholesaler- Distributors
SCT-20	Dorr-Oliver EIMCO A GI & V Co.	174 West St S Orillia L3V	1992		140	325999	All Other Miscellaneous Chemical Product Manufacturing
						333130	Mining and Oil and Gas Field Machinery Manufacturing
						333291	Paper Industry Machinery Manufacturing
						333299	All Other Industrial Machinery Manufacturing
						333310	Commercial and Service Industry Machinery Manufacturing
						333990	All Other General-Purpose Machinery Manufacturing
SCT-21	GL&V/DORR-OLIVER CANADA INC.	174 West St S Orillia L3V 6L4	1992	0	125	333416	Heating Equipment and Commercial Refrigeration Equipment Manufacturing
						333990	All Other General-Purpose Machinery Manufacturing
						333310	Commercial and Service Industry Machinery Manufacturing
						331514	Steel Foundries
						332410	Power Boiler and Heat Exchanger Manufacturing
						332710	Machine Shops
						333130	Mining and Oil and Gas Field Machinery Manufacturing
						333291	Paper Industry Machinery Manufacturing
						333299	All Other Industrial Machinery Manufacturing

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft ²)	Employment	SIC/NAICS Code	Description
SCT-22	Dorr-Oliver Eimco - Div. of	174 West St S Orillia L3V 6L4	01-JUL-90			417220	Mining and Oil and Gas Well Machinery, Equipment and Supplies Wholesaler-Distributors
						417210	Construction and Forestry Machinery, Equipment and Supplies Wholesaler-Distributors
						417230	Industrial Machinery, Equipment and Supplies Wholesaler-Distributors
						418410	Chemical (except Agricultural) and Allied Product Wholesaler-Distributors
SCT-23	HOMESTEAD GLASS STUDIO	307 EAST ST ORILLIA L3V 4C1	1991	0	1	3229	PRESSED AND BLOWN GLASS AND GLASSWARE, NOT ELSEWHERE CLASSIFIED
						3231	GLASS PRODUCTS, MADE OF PURCHASED GLASS
						327214	Glass Manufacturing
						327215	Glass Product Manufacturing from Purchased Glass
SCT-24	Coxco (1968) Ltd.	112 Peter St S Orillia L3V 5B6	7/1/1968	20000		333416	Heating Equipment and Commercial Refrigeration Equipment Manufacturing
						332329	Other Ornamental and Architectural Metal Product Manufacturing
						332329	Other Ornamental and Architectural Metal Product Manufacturing
SCT-25	COXCO (1968) LIMITED	112 PETER ST S ORILLIA L3V 5B6	1968	20000	9	3444	SHEET METAL WORK
						3499	FABRICATED METAL PRODUCTS, NOT ELSEWHERE CLASSIFIED
						3585	AIR-CONDITIONING AND WARM AIR HEATING EQUIPMENT, AND COMMERCIAL AND INDUSTRIAL REFRIGERATION

Scott's Manufacturing Directory

Map Key	Company	Address	Established	Plant Size (ft²)	Employment	SIC/NAICS Code	Description
SCT-26	Ulrich Family Meats Inc.	155 Front St S Unit B Orillia L3V 4S6	01-JUN-95	850		311611	Animal (except Poultry) Slaughtering
						311614	Rendering and Meat Processing from Carcasses
SCT-27	ULRICH FAMILY MEATS	155 FRONT ST S ORILLIA L3V 4S6	1995	850	3	2011	MEAT PACKING PLANTS
SCT-28	Orillia Bakery & Deli Ltd.	155 Front St S Orillia L3V 4S6	01-SEP-81			311811	Retail Bakeries
						311811	Retail Bakeries
SCT-29	Embury Company	1 Industrial St Orillia L3V 6K7	01-AUG-60	6000		332810	Coating, Engraving, Heat Treating and Allied Activities
SCT-30	PAL ENGINES INC.	129 FRONT ST S ORILLIA L3V 4S6	1979	16000	4	3519	INTERNAL COMBUSTION ENGINES, N.E.C.
						3714	MOTOR VEHICLE PARTS & ACCESSORIES
SCT-31	CRANNEY SHEET METAL	64 WESTERN AVE ORILLIA L3V 1R7	1994	2400	2	332319	Other Plate Work and Fabricated Structural Product Manufacturing
						332329	Other Ornamental and Architectural Metal Products Manufacturing
						3443	FABRICATED PLATE WORK (BOILER SHOPS)
						3444	SHEET METAL WORK
SCT-32	Cranney Sheet Metal Inc.	64 Western Ave Orillia L3V 1R7	1994	2400	2		
n/a	OLD TYMER WELDING INC.	FOREST HOME IND PARK RR 1 ORILLIA L3V 6H1	1994	0	10	332319	Other Plate Work and Fabricated Structural Product Manufacturing
						332329	Other Ornamental and Architectural Metal Products Manufacturing

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-1	UNKNOWN	OUTFALL TO CANAL BEHIND JAMES COURT. ORILLIA CITY	5161	6/16/1988	6/16/1988		
			Incident Summary:		RED FLUID FROM STORM OUTFALL TO CANAL.		
			Incident Cause:		WASTEWATER DISCHARGE TO WATERCOURSE		
			Incident Reason:		ERROR		
			Nature of Impact:				
			Receiving Medium:		WATER		
			Environmental Impact:				
SPL-2	TRANSPORT TRUCK	294 MEMORIAL DR. AT THE PIZZA HUT MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY L3V 5X6	107618	11/23/1994	11/23/1994		
			Incident Summary:		RYDER TRUCK RENTALS- 90 LITRES OF DIESEL FUEL TO RD. FROM TRUCK'S TANK.		
			Incident Cause:		OTHER CONTAINER LEAK		
			Incident Reason:		ERROR		
			Nature of Impact:		Soil contamination		
			Receiving Medium:		LAND		
			Environmental Impact:		CONFIRMED		
SPL-3	Union Gas<UNOFFICIAL>	294 Memorial Ave. Orillia L3V 5X6	4831-8FSNE4	4/10/2011	4/10/2011	NATURAL GAS (METHANE)	0 other - see incident description
			Incident Summary:		TSSA: Pizza Hut Natural Gas Leak		
			Incident Cause:				
			Incident Reason:				
			Nature of Impact:		Air Pollution; Human Health/Safety		
			Receiving Medium:				
			Environmental Impact:		Confirmed		
SPL-4	S.21<UNOFFICIAL>	205 Memorial Ave. Orillia L3V 5X8	1088-5VKLEC	1/22/2004	1/26/2004	FUEL (N.O.S.)	
			Incident Summary:		Orillia-Company digging and ruptured fuel lines.		
			Incident Cause:		Pipe Or Hose Leak		
			Incident Reason:		Error- Operator error		
			Nature of Impact:		Soil Contamination		
			Receiving Medium:		Land		
			Environmental Impact:		Possible		
SPL-5	Orillia Power Distribution Corporation	360 West Street Orillia	5455-848LWT		4/5/2010	HYDRAULIC OIL	0.5 L
			Incident Summary:		Spill of 1/2L hydraulic oil to Severn R. from Orillia Power		
			Incident Cause:				
			Incident Reason:				
			Nature of Impact:		Surface Water Pollution		
			Receiving Medium:				
			Environmental Impact:		Confirmed		

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-6	FRANCOZ METAL CORPORATION LIM	ORILLIA PLANT WEST STREET SOUTH ORILLIA CITY L3V 5H1	351 166420	4/11/1999	4/11/1999		
				Incident Summary:	FRANCOZ METAL-5,000 TIRES100 WRECKED AUTOS BURNED IN FIRE,HEAVY SMOKE.		
				Incident Cause:	OTHER CAUSE (N.O.S.)		
				Incident Reason:	FIRE/EXPLOSION		
				Nature of Impact:	Multi Media Pollution		
				Receiving Medium:	LAND / AIR		
				Environmental Impact:	POSSIBLE		
SPL-7	FRANCOZ METAL CORPORATION LIM	ORILLIA PLANT WEST STREET SOUTH ORILLIA CITY L3V 5H1	351 47397	3/8/1991	3/8/1991		
				Incident Summary:	CITY OF ORILLIA - 25 L MINERAL OIL TO GRND FROM FILTER AT FRANCOZ METAL		
				Incident Cause:	OTHER CONTAINER LEAK		
				Incident Reason:	ERROR		
				Nature of Impact:			
				Receiving Medium:	LAND		
				Environmental Impact:	NOT ANTICIPATED		
SPL-8	FRANCOZ METAL CORPORATION LIM	300 WEST STREET SOUTH FRANCIS METAL CORP. LTD. ORILLIA PLANT WEST STREET SOUTH ORILLIA CITY L3V 5G8	351 82565	3/9/1993	3/9/1993		
				Incident Summary:	FRANCOZ METAL CORP LTD. -30L CRANKCASE OIL TO LAND& STORM FROM TRUCK.		
				Incident Cause:	OTHER CONTAINER LEAK		
				Incident Reason:	UNKNOWN		
				Nature of Impact:	Water course or lake		
				Receiving Medium:	LAND / WATER		
				Environmental Impact:	POSSIBLE		
SPL-9	Union Gas Limited	Corner of West Street and Norweld Avenue<UNOFFICIAL> Orillia	7804-6CAQBQ	5/11/2005	5/9/2005	NATURAL GAS (METHANE)	
				Incident Summary:	TSSA-FSB: Orillia-gas line break		
				Incident Cause:	Pipe Or Hose Leak		
				Incident Reason:	Damage By Moving Equipment - Containers damaged by moving		
				Nature of Impact:	Air Pollution; Human Health/Safety		
				Receiving Medium:	Air		
				Environmental Impact:	Possible		
SPL-10	PRIVATE OWNER	166 BARRIE RD. MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY L3V 2R2	99160	4/27/1994	4/27/1994		
				Incident Summary:	RESIDENT: EST. 5 L USED MOTOR OIL TO STORM SEWER (REPEAT OFFENDER).		
				Incident Cause:	OTHER CONTAINER LEAK		
				Incident Reason:	INTENTIONAL/PLANNED		
				Nature of Impact:	Water course or lake		
				Receiving Medium:	WATER		
				Environmental Impact:	POSSIBLE		

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-11	PENETANG, MIDLAND COACHLINES	10 COCHRANE STREET ORILLIA CITY	83128	3/22/1993	3/25/1993		
			Incident Summary: PENETANG, MIDLAND COACH- LINES: 50 L DIESEL FUEL TO GROUND DURING FILLING. Incident Cause: CONTAINER OVERFLOW Incident Reason: EQUIPMENT FAILURE Nature of Impact: Soil contamination Receiving Medium: LAND Environmental Impact: CONFIRMED				
SPL-12	FL Smidth Ltd.<UNOFFICIAL>	250 West St. S. Orillia L3V 7W4	3372- 8PDRRU	12/9/2011	12/9/2011	CONTAMINATED SOIL	20.75 ton (Imperial)
			Incident Summary: FL Smidth Ltd.: unkn. spill from UST Incident Cause: Tank (Underground) Leak Incident Reason: Spill Nature of Impact: Soil Contamination Receiving Medium: Sewage - Municipal/Private and Commercial Environmental Impact: Confirmed				
SPL-13	ORILLIA HYDRO	WEST STREET SOUTH & QUEEN STEEET TRANSFORMER ORILLIA CITY	96468	2/18/1994	2/18/1994		
			Incident Summary: ORILLIA HYDRO: TRANSFORMER FIRE. Incident Cause: COOLING SYSTEM LEAK Incident Reason: FIRE/EXPLOSION Nature of Impact: Receiving Medium: AIR Environmental Impact: POSSIBLE				
SPL-14	TRANSPORT TRUCK	GILL ST/PLOUGHKEEPSIE ST. MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY	116667	8/2/1995	8/2/1995		
			Incident Summary: PENETANG MIDLAND COACH LINES-20 L DIESEL TO GROUND FROM BUS, CLEANED Incident Cause: OTHER CONTAINER LEAK Incident Reason: ERROR Nature of Impact: Receiving Medium: LAND Environmental Impact: NOT ANTICIPATED				
SPL-15	PRIVATE OWNER	AT WEST ST. & BARRIE RD. MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY	243501	10/28/2002	10/28/2002		
			Incident Summary: PRIVATE MOTOR VEHICLE -SMALL AMOUNT OF RADIATORFLUID TO CATCH BASIN. Incident Cause: OTHER CONTAINER LEAK Incident Reason: EQUIPMENT FAILURE Nature of Impact: Water course or lake Receiving Medium: WATER Environmental Impact: CONFIRMED				

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-16	TRANSPORT TRUCK	WEST STREET SOUTH & KING STREET MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY	123758	2/20/1996	2/20/1996	TRANSPORT TRUCK: 450 L DIESEL FUEL FROM SADDLE TANKS TO ASPHALT: WORKS PIPE/HOSE LEAK ERROR Other LAND NOT ANTICIPATED	
SPL-17	TRANSPORT TRUCK	WEST ST SOUTH/KING ST. MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY	115520	7/10/1995	7/10/1995	DAVEY GRAVEL-10 L HYDRAU-LIC OIL ONTO ROAD FROM TRUCK, WORKS, CLEANING UP OTHER TRANSPORTATION ACCIDENT EQUIPMENT FAILURE LAND NOT ANTICIPATED	
SPL-18	UNKNOWN	QUEEN ST EAST/WEST OF FRONT ST, DRAINAGE DITCH LEADING TO LAKE COUCHICHING ORILLIA CITY	34438	5/9/1990	5/9/1990	FUEL OIL IN DITCH, SOURCE UNKNOWN - WORKS DEPT. COLLECTING OIL. UNKNOWN UNKNOWN Water course or lake LAND / WATER POSSIBLE	
SPL-19	PRIVATE BUSINESS	112 PETERS STREET SOUTH STORAGE TANK ORILLIA CITY	105389	9/19/1994	9/19/1994	COSTCO UST: CONTAMINATED SOIL CAUSED BY FUEL OIL UST LEAK UNDERGROUND TANK LEAK CORROSION Soil contamination LAND CONFIRMED	
SPL-20	PRIVATE OWNER	129 FRONT STREET SOUTH STORAGE TANK/BARREL ORILLIA CITY L3V 4S6	113325	5/18/1995	5/18/1995	PAL ENGINE REPAIR: 20 L WASTE OIL TO GRAVEL AREA FROM CORRODED DRUM: WORKS OTHER CONTAINER LEAK CORROSION Soil contamination LAND CONFIRMED	

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
SPL-21	COMMERCIAL BUILDING	64 WESTERN AVE. ORILLIA CITY L3V 1R7	74586	8/11/1992	8/12/1992		
			Incident Summary:	45 GAL. DRUM OF WASTE	SOLVENTS/PAINTS/LAQUERS	SPILLED TO STREET.	
			Incident Cause:	OTHER CONTAINER LEAK			
			Incident Reason:	VANDALISM			
			Nature of Impact:				
			Receiving Medium:	LAND			
			Environmental Impact:	NOT ANTICIPATED			
SPL-22	PUC	AT PRIVATE RESIDENCE AT 151 CEDAR ISLAND RD. SANITARY SEWER ORILLIA CITY L3V 1S9	114087	6/5/1995	6/5/1995		
			Incident Summary:	PUC - SEWAGE SPILL TO LAND ON PRIVATE PROPERTY FROM BROKEN LATERAL.			
			Incident Cause:	PIPE/HOSE LEAK			
			Incident Reason:	EQUIPMENT FAILURE			
			Nature of Impact:	Soil contamination			
			Receiving Medium:	LAND			
			Environmental Impact:	POSSIBLE			
n/a	OLCO	ATHERLY ROAD SERVICE STATION ORILLIA CITY	105864	9/30/1994	9/30/1994		
			Incident Summary:	OLCO: 15 L GASOLINE TO GROUND			
			Incident Cause:	CONTAINER OVERFLOW			
			Incident Reason:	ERROR			
			Nature of Impact:	Soil contamination			
			Receiving Medium:	LAND			
			Environmental Impact:	CONFIRMED			
n/a	PRIVATE OWNER	MEMORIAL AVE/CO-OP DRIVE. MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY	111549	4/1/1995	4/1/1995		
			Incident Summary:	PRIVATE OWNERS-4 L OPERA-TING FLUIDS TO GROUND,MVACLEANED UP BY FD.			
			Incident Cause:	OTHER TRANSPORTATION ACCIDENT			
			Incident Reason:	UNKNOWN			
			Nature of Impact:				
			Receiving Medium:	LAND			
			Environmental Impact:	NOT ANTICIPATED			
n/a	CONSTRUCTION COMPANY	MEMORIAL AVENUE ORILLIA CITY	116999	8/10/1995	8/10/1995		
			Incident Summary:	PCL CONSTRUCTION: 90 L CALCIUM CHLORIDE TO PARKING LOT			
			Incident Cause:	ABOVE-GROUND TANK LEAK			
			Incident Reason:	UNKNOWN			
			Nature of Impact:				
			Receiving Medium:	LAND			
			Environmental Impact:	NOT ANTICIPATED			

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
n/a	UNKNOWN	MEMORIAL AVE. ORILLIA CITY	120208	10/30/1995	10/30/1995		
			Incident Summary:	SOURCE UNKNOWN-50 L GASO-LINE DUMPED ON PRIVATE PROPERTY,WORKS,CLEANED UP			
			Incident Cause:	OTHER CONTAINER LEAK			
			Incident Reason:	INTENTIONAL/PLANNED			
			Nature of Impact:	Soil contamination			
			Receiving Medium:	LAND			
			Environmental Impact:	CONFIRMED			
n/a	MOTOR VEHICLE	WEST ST. MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY	68374	3/23/1992	3/25/1992		
			Incident Summary:	MOTOR VEHICLE: 90L DIESEL FUEL LEAK TO PARKING LOT			
			Incident Cause:	OTHER CONTAINER LEAK			
			Incident Reason:	UNKNOWN			
			Nature of Impact:				
			Receiving Medium:	LAND			
			Environmental Impact:	NOT ANTICIPATED			
n/a	ONTARIO HYDRO	BARRIE ROAD MOTOR VEHICLE (OPERATING FLUID) ORILLIA CITY	129114	5/2/1990	5/2/1990		
			Incident Summary:	BACKENTRY: ONTARIO HYDRO-2L OF DIESEL FUEL TO ROADSIDE.			
			Incident Cause:	OTHER CONTAINER LEAK			
			Incident Reason:	UNKNOWN			
			Nature of Impact:	Soil contamination			
			Receiving Medium:	LAND			
			Environmental Impact:	CONFIRMED			
n/a	UNKNOWN	FROM PROPERTY AT MEMORIAL AVE. & PROGRESS DR. TO MILL CREEK. ORILLIA CITY	125374	4/22/1996	4/22/1996		
			Incident Summary:	PRIVATE PROPERTY: OIL SHEEN WASHING INTO CREEK,WORKS DEPT. BOOMED.			
			Incident Cause:	OTHER CAUSE (N.O.S.)			
			Incident Reason:	OTHER			
			Nature of Impact:	Water course or lake			
			Receiving Medium:	LAND / WATER			
			Environmental Impact:	POSSIBLE			
n/a	PRIVATE OWNER	ATERLEY RD AT THE NARROWS/SUNOCO STATION. SEPTIC SYSTEM ORILLIA CITY	SERVICE 146500	9/15/1997	9/15/1997		
			Incident Summary:	SUNOCO SERVICE STN-SEPTIC SYSTEM LEAK,WORKS,PUBLIC HEALTH.LEAK/TK PUMPED OUT			
			Incident Cause:	OTHER CAUSE (N.O.S.)			
			Incident Reason:	OTHER			
			Nature of Impact:	Soil contamination			
			Receiving Medium:	LAND			
			Environmental Impact:	POSSIBLE			

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
n/a	MILLER PAVING	ATHERLY RD, CLOSE TO HWY 12 BY THE LEACOCK MUSEUM ORILLIA CITY	226611	5/29/2002	5/29/2002		
			Incident Summary: MILLER PAVING (PETROLEUM) MVA: 30-40L DIESEL TO WET DITCH. Incident Cause: TRUCK/TRAILER OVERTURN Incident Reason: UNKNOWN Nature of Impact: Soil contamination Receiving Medium: LAND Environmental Impact: POSSIBLE				
n/a		At the Intersection of Atherly Rd. and Hwy. 12 bypass south Orillia	8644-5Y8P5N	4/20/2004	4/20/2004	GASOLINE/WATER MIXTURE	
			Incident Summary: Orillia-10 L mixed gas spill from car to C/B. Incident Cause: Unknown Incident Reason: Other - Reason not otherwise defined Nature of Impact: Surface Water Pollution Receiving Medium: Water Environmental Impact: Possible				
n/a		DITCH AT MILLARD ST.<UNOFFICIAL> Orillia	5280-6T7NGA	8/31/2006	8/31/2006	OIL (PETROLEUM BASED, NOT SPECIFIED)	Not specified Not specified
			Incident Summary: Ukn source,oil slick in ditch at Millard St., Orillia Incident Cause: Other Discharges Incident Reason: Nature of Impact: Soil Contamination Receiving Medium: Land Environmental Impact: Possible				
n/a	The Corporation of the City of Orillia	James St Orillia	5423-73NJAL		5/29/2007	GASOLINE	100 L
			Incident Summary: Orilla Works: gasoline to works yard, cleaned Incident Cause: Incident Reason: Nature of Impact: Soil Contamination Receiving Medium: Land Environmental Impact: Confirmed				
n/a		Atherly Road and Front Street and Gill Street<UNOFFICIAL> Orillia	2076-7FLMEK		6/14/2008	BLOOD	500 mL
			Incident Summary: MVA, 500 mL blood to CB, Orillia Incident Cause: Other Transport Accident Incident Reason: Other - Reason not otherwise defined Nature of Impact: Other Impact(s) Receiving Medium: Environmental Impact: Not Anticipated				

Ontario Spills

Map Key	Company	Address	Ref No.	Incident Dt	MOE Reported Dt	Contaminant Name	Contaminant Quantity
n/a	The Corporation of the City of Orillia	Norweld Drive Orillia	4202- 7VWHRM		9/15/2009	FUEL OIL	
			Incident Summary:		Orillia Fire Department: fuel/water to catch basin		
			Incident Cause:		Other Discharges		
			Incident Reason:		Equipment Failure		
			Nature of Impact:		Other Impact(s)		
			Receiving Medium:				
			Environmental Impact:		Confirmed		
n/a	Orillia Power Distribution Corporation	Orillia	3826- 8AHPMP		10/23/2010	HYDRAULIC OIL	2 gal-Imp
			Incident Summary:		Orillia Power Corp: 2 gal hydraulic oil to rd, clnd		
			Incident Cause:				
			Incident Reason:				
			Nature of Impact:		Soil Contamination		
			Receiving Medium:				
			Environmental Impact:		Not Anticipated		

Waste Disposal Sites - MOE CA Inventory

Map Key	Related Site(s)	Operation Name	Site Address
WDS-1		Waste Services (CA) Inc.	180 James St W , , Orillia
		Certificate No.: A252602	Mobile Units:
		Issue Date: 9/17/2008	Mobile Description:
		Status: Approved	Mobile Capacity:
		Application Status:	Mobile Unit Cert. No.:
		Concession:	Waste Type:
		Lot:	Waste Type Other:
			Waste Class:
			Other Approvals/Permits:
		Region/County:	
		Proponent:	
		Address:	Project Description:
		City:	
		Facility Type:	
		District Office:	
		Municipalities Served:	Approval Description:
		Total Area (ha):	
		Landfill Capacity (m³):	Waste Description:
		Landfill Monitoring:	
		Landfill Control Type:	
		Est. Closure Date:	
		Transfer Area (ha)	Site Closing Description: A252602
		Transfer Capacity (m³):	
		Transfer Sites Cert. No.:	
		Incinerator Area (ha):	
		Incinerator Capacity (t):	
		Processing Area (m³):	
		Processing Capacity (m³/d):	
		Processing Volume (m³):	
		Processing Feed (m³):	

Waste Disposal Sites - MOE CA Inventory

Map Key	Related Site(s)	Operation Name	Site Address
n/a			, James Street West, Orillia
		Certificate No.: A252602	Mobile Units:
		Issue Date: 2/26/2002	Mobile Description:
		Status: Approved	Mobile Capacity:
		Application Status: Notice	Mobile Unit Cert. No.:
		Concession:	Waste Type:
		Lot:	Waste Type Other:
			Waste Class:
			Other Approvals/Permits:
		Region/County: County of Simcoe	
		Proponent: Capital Environmental Resource Inc.	
			Project Description: approval is sought to amend the company name
		Address: 1005 Skyview Drive	
		City: Burlington	
		Facility Type: Transfer	
		District Office: Barrie	
		Municipalities Served: Ontario	Approval Description:
		Total Area (ha): 0.0001	
		Landfill Capacity (m³):	Waste Description:
		Landfill Monitoring:	
		Landfill Control Type:	
		Est. Closure Date:	
		Transfer Area (ha)	Site Closing Description: A252602
		Transfer Capacity (m³): 0	
		Transfer Sites Cert. No.: Any MOE approved site	
		Incinerator Area (ha):	
		Incinerator Capacity (t):	
		Processing Area (m³):	
		Processing Capacity (m³/d):	
		Processing Volume (m³):	
		Processing Feed (m³):	

Waste Disposal Sites - MOE CA Inventory

Map Key	Related Site(s)	Operation Name	Site Address
n/a		MCGILL ENVIRONMENTAL SERVICES	, , ORILLIA, CITY OF
		Certificate No.: A252602	Mobile Units:
		Issue Date: 04/23/1999	Mobile Description:
		Status: Approved	Mobile Capacity: 0
		Application Status:	Mobile Unit Cert. No.:
		Concession: 4, PART 3	Waste Type:
		Lot: 10, WEST 1/2	Waste Type Other: No
			Waste Class:
		Region/County: SIMCOE COUNTY	Other Approvals/Permits:
		Proponent: CAPITAL ENVIRONMENTAL INC.	
		Address: P.O. BOX 814	Project Description:
		City: ORILLIA, ONTARIO	
		Facility Type: Processing, Transfer Station	
		District Office: Barrie	
		Municipalities Served:	Approval Description:
		Total Area (ha): 0	
		Landfill Capacity (m³): 0	Waste Description:
		Landfill Monitoring:	
		Landfill Control Type:	
		Est. Closure Date:	
		Transfer Area (ha) 0	Site Closing Description: A252602
		Transfer Capacity (m³): 0	
		Transfer Sites Cert. No.:	
		Incinerator Area (ha): 0	
		Incinerator Capacity (t): 0	
		Processing Area (m³): 0	
		Processing Capacity (m³/d): 0	
		Processing Volume (m³): 0	
		Processing Feed (m³): 0	

Waste Disposal Sites - MOE 1991 Historical Approval Inventory

**Note: Status as of October 30, 1990.

Map Key	Company	Address	Site No.	Region	County	Concession	Lot
WDSH-1		West nr. Queen St. ORILLIA N3Y 4K2	X4129	CENTRAL	SIMCOE		West nr. Queen St.
WDSH-2		Cochrane & West St. ORILLIA	X4109	CENTRAL	SIMCOE		Cochrane & West St.
WDSH-3		Western & West St. ORILLIA	X4128	CENTRAL	SIMCOE		Western & West St.

Waste Disposal Sites - MOE 1991 Historical Approval Inventory

**Note: Status as of October 30, 1990.

Map Key	Company	Address	Site No.	Region	County	Concession	Lot
WDSH-4		Atherly Road ORILLIA	X4108	CENTRAL	SIMCOE		Atherly Road
			Easting:		626600		
			Northing:		4940300		
			Zone:		17		
			Date Closed		1958		
			Status:		CLOSED		
			Classification:		A5 - POTENTIAL HUMAN IMPACT-URBAN MUNICIPAL/DOMESTIC WASTE - CLOSED 10-20 YRS		
			%CommercialWste:		n/a		
			%DomesticWste Rec:		n/a		
			%LiquidWste Rec:		n/a		
			%HazardousWste Rec:		n/a		
			%Non-haz.Wste Rec:		n/a		
			%Sewage/Sludge Rec:		n/a		
			%Other Wste Rec:		n/a		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-1			5707937				SIMCOE	ORILLIA CITY
Easting Nad83: 625581.2 Northing Nad83: 4939303 Zone: 17 Utm Reliability: margin of error : 30 m - 100 m Construction Date: 5/25/1971 Primary Water Use: Municipal Secondary Water Use: Well Depth: 39 ft Pump Rate: 6 GPM Static Water Level: 24 ft Flow Rate: Clear/Cloudy: CLOUDY Specific Capacity: Final Well Status: Water Supply Construction Method: Boring Flowing (y/n): N Elevation (m): 216.59938 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: CONCRETE								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			35 ft	35 ft	GREY		CLAY	
			2 ft	37 ft	GREY		SAND	
			2 ft	39 ft	GREY		CLAY, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-2		265 MEMORIAL AVE ORILLIA	5740237				SIMCOE	ORILLIA CITY
Easting Nad83: Northing Nad83: Zone: Utm Reliability: Construction Date: 9/16/2005 Primary Water Use: Not Used Secondary Water Use: Well Depth: 24.6 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Boring Flowing (y/n): Elevation (m): Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			15 ft	15 ft	BROWN		SAND, SILTY, CLAY	
			9.6 ft	24.6 ft	GREY		CLAY, SILTY, SAND	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-3		Orillia	7109774				SIMCOE	ORILLIA CITY
Easting Nad83: 625703 Northing Nad83: 4939343 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 4/23/2008 Primary Water Use: Monitoring Secondary Water Use: Well Depth: 22.7 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Other Method Flowing (y/n): Elevation (m): 217.105407 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: STEEL, PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			8.4 m	19.1 m	GREY	SAND, BOULDERS, SILT		
			3.6 m	22.7 m	GREY	LIMESTONE, ROCK, FRACTURED		
			1.2 m	1.2 m	BROWN	SAND, FILL, GRAVEL		
			2 m	3.2 m	GREY	SILT, FINE SAND, LOOSE		
			3.8 m	7 m	GREY	FINE SAND		
			0.7 m	7.7 m	GREY	SILT, FINE SAND		
			3 m	10.7 m	GREY	SAND, GRAVEL, SILT		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-4			5702969				SIMCOE	ORILLIA CITY
			Easting Nad83: 625125.6 Northing Nad83: 4939444 Zone: 17 Utm Reliability: margin of error : 100 m - 300 m Construction Date: 10/12/1960 Primary Water Use: Industrial Secondary Water Use: Well Depth: 74 ft Pump Rate: 20 GPM Static Water Level: 8 ft Flow Rate: Clear/Cloudy: CLEAR Specific Capacity: Final Well Status: Water Supply Construction Method: Cable Tool Flowing (y/n): N Elevation (m): 222.15747 Elevation Reliability: Depth to Bedrock: 63 Overburden/Bedrock: Bedrock Water Type: FRESH Casing Material: OPEN HOLE, STEEL					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			18 ft	18 ft			PREVIOUSLY DUG	
			45 ft	63 ft			CLAY	
			11 ft	74 ft			LIMESTONE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-5			7166563				SIMCOE	ORILLIA CITY
			Easting Nad83: 625035					
			Northing Nad83: 4939582					
			Zone: 17					
			Utm Reliability: margin of error : 10 - 30 m					
			Construction Date: 6/24/2011					
			Primary Water Use:					
			Secondary Water Use:					
			Well Depth:					
			Pump Rate:					
			Static Water Level:					
			Flow Rate:					
			Clear/Cloudy:					
			Specific Capacity:					
			Final Well Status:					
		Construction Method:						
		Flowing (y/n):						
		Elevation (m):						
		Elevation Reliability:						
		Depth to Bedrock:						
		Overburden/Bedrock:						
		Water Type:						
		Casing Material:						
			Thickness	Original Depth		Material Colour	Material	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-6		ORILLIA	5739742				SIMCOE	ORILLIA CITY
Easting Nad83: 625332 Northing Nad83: 4939596 Zone: 17 Utm Reliability: Construction Date: 5/13/2005 Primary Water Use: Secondary Water Use: Well Depth: 40 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 220.28334 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			10 ft	10 ft	BLACK		TOPSOIL, PEAT	
			10 ft	20 ft	GREY		SAND, SILT	
			10 ft	30 ft	GREY		CLAY	
			10 ft	40 ft	GREY		SAND, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-7		ORILLIA	5739740				SIMCOE	ORILLIA CITY
Easting Nad83: 625333 Northing Nad83: 4939597 Zone: 17 Utm Reliability: Construction Date: 5/9/2005 Primary Water Use: Secondary Water Use: Well Depth: 55 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 220.355255 Elevation Reliability: Depth to Bedrock: 40 Overburden/Bedrock: Mixed in a Layer Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			10 ft	10 ft	BLACK		TOPSOIL, PEAT	
			10 ft	20 ft	GREY		SAND, SILT	
			10 ft	30 ft	GREY		CLAY	
			10 ft	40 ft	GREY		SAND, SILT	
			15 ft	55 ft	GREY		CLAY, FRACTURED, ROCK	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-8		Orillia	7137007				SIMCOE	ORILLIA CITY
Easting Nad83: 625036 Northing Nad83: 4939617 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 11/27/2009 Primary Water Use: Monitoring Secondary Water Use: Well Depth: 20 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Boring Flowing (y/n): Elevation (m): 227.216339 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			5 ft	5 ft	BROWN	SAND, GRAVEL, HARD		
			5 ft	10 ft	GREY	SILT, SAND, CLAY		
			10 ft	20 ft	GREY	LIMESTONE, SHALE, WEATHERED		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-9		ORILLIA	7049111				SIMCOE	ORILLIA CITY
Easting Nad83: 625684 Northing Nad83: 4939721 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 4/13/2007 Primary Water Use: Secondary Water Use: Well Depth: 20.1 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Diamond Flowing (y/n): Elevation (m): 221.4104 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			1.9 m	1.9 m	GREY		FILL, GRAVEL	
			1.1 m	3 m	GREY		PEAT, WOOD FRAGMENTS	
			4.1 m	7.1 m	GREY		CLAY, SAND, STICKY	
			4.8 m	11.9 m	GREY		SAND, SILTY, CLAY	
			6.7 m	18.6 m	GREY		SAND, GRAVEL, SILT	
			1.4 m	20 m	GREY		SAND, SILTY, TILL	
			0.1 m	20.1 m	GREY		LIMESTONE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-10		ORILLIA	5739739				SIMCOE	ORILLIA CITY
			Easting Nad83: 625563 Northing Nad83: 4939722 Zone: 17 Utm Reliability: Construction Date: 5/15/2005 Primary Water Use: Secondary Water Use: Well Depth: 59 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.755584 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			2 ft	2 ft		BLACK	TOPSOIL	
			36 ft	38 ft		GREY	CLAY	
			16 ft	54 ft		GREY	SILT, SAND, CLAY	
			5 ft	59 ft		GREY	TILL, SAND	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-11		ORILLIA	5739729				SIMCOE	ORILLIA CITY
Easting Nad83: 625560 Northing Nad83: 4939723 Zone: 17 Utm Reliability: Construction Date: 5/16/2005 Primary Water Use: Secondary Water Use: Well Depth: 40 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.807693 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			2 ft	2 ft	BLACK		TOPSOIL	
			36 ft	38 ft	GREY		CLAY	
			2 ft	40 ft	GREY		SAND, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-12		ORILLIA	5739730				SIMCOE	ORILLIA CITY
Easting Nad83: 625562 Northing Nad83: 4939728 Zone: 17 Utm Reliability: Construction Date: 5/4/2005 Primary Water Use: Secondary Water Use: Well Depth: 15 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.839965 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			Thickness	Original Depth	Material Colour		Material	
			2 ft	2 ft	BLACK		TOPSOIL	
			13 ft	15 ft	GREY		CLAY	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-13		ORILLIA	7049113				SIMCOE	ORILLIA TOWNSHIP
Easting Nad83: 625995 Northing Nad83: 4939758 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 6/8/2007 Primary Water Use: Monitoring Secondary Water Use: Well Depth: 23 m Pump Rate: LPM Static Water Level: m Flow Rate: LPM Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Diamond Flowing (y/n): Elevation (m): 222.044738 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			1.3 m	1.3 m	BROWN	FILL, SAND, GRAVEL		
			0 m	1.3 m	BROWN	PEAT, CLAY		
			3.4 m	4.7 m	GREY	CLAY, SILTY		
			2.8 m	7.5 m	GREY	SILT, SANDY, CLAY		
			12 m	19.5 m	GREY	BOULDERS, LIMESTONE		
			3.5 m	23 m	GREY	LIMESTONE		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-14		ORILLIA	5740211				SIMCOE	ORILLIA CITY
Easting Nad83: 625712 Northing Nad83: 4939813 Zone: 17 Utm Reliability: Construction Date: 5/11/2005 Primary Water Use: Not Used Secondary Water Use: Well Depth: 24 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Boring Flowing (y/n): Elevation (m): 220.874069 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			10 m	10 m	BROWN		FILL, SAND, GRAVEL	
			14 m	24 m	GREY		SILT, CLAY, GRAVEL	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-15		ORILLIA	7049112				SIMCOE	ORILLIA CITY
Easting Nad83: 625850 Northing Nad83: 4939824 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 4/24/2007 Primary Water Use: Secondary Water Use: Well Depth: 23.6 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Diamond Flowing (y/n): Elevation (m): 221.015655 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			1.3 m	1.3 m	BROWN	FILL, SAND, GRAVEL		
			0.5 m	1.8 m	BROWN	PEAT, WOOD FRAGMENTS		
			4.2 m	6 m	GREY	CLAY, WOOD FRAGMENTS		
			8.6 m	14.6 m	BROWN	SILT, SANDY, CLAY		
			0.4 m	15 m	GREY	SAND, GRAVEL, COARSE SAND		
			3.4 m	18.4 m	GREY	SAND, MEDIUM SAND, COARSE SAND		
			0.3 m	18.7 m	GREY	SAND, BOULDERS		
			1.8 m	20.5 m	GREY	SAND, SILTY, TILL		
			3.1 m	23.6 m	GREY	LIMESTONE		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-16		ORILLIA	5739738				SIMCOE	ORILLIA CITY
Easting Nad83: 625734 Northing Nad83: 4939836 Zone: 17 Utm Reliability: Construction Date: 5/13/2005 Primary Water Use: Secondary Water Use: Well Depth: 35 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.217269 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			10 ft	10 ft	BLACK		TOPSOIL	
			7 ft	17 ft	GREY		CLAY	
			18 ft	35 ft	GREY		SAND, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-17		lot 10	5737718	010			SIMCOE	ORILLIA CITY
Easting Nad83: 625828 Northing Nad83: 4939869 Zone: 17 Utm Reliability: margin of error : 300 m - 1 km Construction Date: 1/10/2003 Primary Water Use: Domestic Secondary Water Use: Well Depth: 80 ft Pump Rate: 8 GPM Static Water Level: 24 ft Flow Rate: Clear/Cloudy: CLEAR Specific Capacity: Final Well Status: Water Supply Construction Method: Air Percussion Flowing (y/n): N Elevation (m): 220.787063 Elevation Reliability: Depth to Bedrock: 21 Overburden/Bedrock: Bedrock Water Type: FRESH Casing Material: STEEL, OPEN HOLE								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			21 ft	21 ft		CLAY, STONES		
			53 ft	74 ft		LIMESTONE		
			6 ft	80 ft	RED	GRANITE		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-18		ORILLIA	5739728				SIMCOE	ORILLIA CITY
Easting Nad83: 625592 Northing Nad83: 4939875 Zone: 17 Utm Reliability: Construction Date: 3/10/2005 Primary Water Use: Secondary Water Use: Well Depth: 60 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.58023 Elevation Reliability: Depth to Bedrock: 55 Overburden/Bedrock: Bedrock Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			2 ft	2 ft	BLACK		TOPSOIL	
			28 ft	30 ft	GREY		CLAY	
			25 ft	55 ft	GREY		SILT, SAND	
			5 ft	60 ft	GREY		GRANITE, SAND, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-19		ORILLIA	5739731				SIMCOE	ORILLIA CITY
Easting Nad83: 625598 Northing Nad83: 4939878 Zone: 17 Utm Reliability: Construction Date: 5/13/2005 Primary Water Use: Secondary Water Use: Well Depth: 40 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.518035 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			2 ft	2 ft	BLACK		TOPSOIL	
			28 ft	30 ft	GREY		CLAY	
			10 ft	40 ft	GREY		SAND, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-20		Orillia	7114183				SIMCOE	ORILLIA CITY
Easting Nad83: 626153 Northing Nad83: 4939898 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 8/22/2008 Primary Water Use: Other Secondary Water Use: Well Depth: 60 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Rotary (Convent.) Flowing (y/n): Elevation (m): 220.959426 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			60 ft	60 ft	GREY		SAND, GRAVEL	
					GREY		SILT, SAND	
				20 ft			VERY, SILTY	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-21		ORILLIA	5739745				SIMCOE	ORILLIA CITY
			Easting Nad83: 625831 Northing Nad83: 4939906 Zone: 17 Utm Reliability: Construction Date: 5/12/2005 Primary Water Use: Secondary Water Use: Well Depth: 35 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 220.843093 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			2 ft	2 ft		BLACK	TOPSOIL	
			8 ft	10 ft		GREY	SAND, SILT	
			10 ft	20 ft		GREY	CLAY	
			15 ft	35 ft		GREY	SAND, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-22		ORILLIA	5739737				SIMCOE	ORILLIA CITY
Easting Nad83: 625831 Northing Nad83: 4939908 Zone: 17 Utm Reliability: Construction Date: 5/11/2005 Primary Water Use: Secondary Water Use: Well Depth: 65 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 220.863677 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			2 ft	2 ft	BLACK		TOPSOIL	
			8 ft	10 ft	BROWN		SAND	
			10 ft	20 ft	GREY		CLAY	
			45 ft	65 ft	GREY		SAND, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-23		ORILLIA	7049114				SIMCOE	ORILLIA CITY
Easting Nad83: 625962 Northing Nad83: 4939915 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 5/16/2007 Primary Water Use: Secondary Water Use: Well Depth: 19.1 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Diamond Flowing (y/n): Elevation (m): 221.172897 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			1.3 m	1.3 m	BROWN	FILL, COARSE SAND, GRAVEL		
			0.1 m	1.4 m	BROWN	PEAT, WOOD FRAGMENTS		
			3.2 m	4.6 m	GREY	SAND, SILT, CLAYEY		
			4.6 m	9.2 m	GREY	SAND, SILTY, CLAY		
			1.6 m	10.8 m	GREY	SAND, SILT		
			4.9 m	15.7 m	GREY	GRAVEL, BOULDERS		
			2.5 m	18.2 m	GREY	SILT, TILL, SANDY		
			0.9 m	19.1 m	GREY	LIMESTONE		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-24			5702654				SIMCOE	ORILLIA CITY
			Easting Nad83: 625256.6 Northing Nad83: 4939923 Zone: 17 Utm Reliability: unknown UTM Construction Date: 11/9/1955 Primary Water Use: Secondary Water Use: Well Depth: 59 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Abandoned-Supply Construction Method: Rotary (Convent.) Flowing (y/n): Elevation (m): 224.379058 Elevation Reliability: Depth to Bedrock: 56 Overburden/Bedrock: Bedrock Water Type: Casing Material:					
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			3 ft	3 ft			FILL	
			7 ft	10 ft			CLAY, SILT	
			7 ft	17 ft			MEDIUM SAND, SILT	
			8 ft	25 ft			GRAVEL, CLAY, BOULDERS	
			31 ft	56 ft			GRAVEL, MEDIUM SAND, CLAY	
			3 ft	59 ft			LIMESTONE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-25		ORILLIA	5739735				SIMCOE	ORILLIA CITY
Easting Nad83: 625550 Northing Nad83: 4939960 Zone: 17 Utm Reliability: Construction Date: 5/11/2005 Primary Water Use: Secondary Water Use: Well Depth: 60 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Construction Method: Other Method Flowing (y/n): Elevation (m): 221.115829 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			2 ft	2 ft	BLACK		TOPSOIL	
			13 ft	15 ft	GREY		SAND, SILT	
			15 ft	30 ft	GREY		CLAY	
			30 ft	60 ft	GREY		SAND, SILT, CLAY	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-26		ORILLIA	5739741				SIMCOE	ORILLIA CITY
			Easting Nad83: 625547 Northing Nad83: 4939960 Zone: 17 Utm Reliability: Construction Date: 5/12/2005 Primary Water Use: Secondary Water Use: Well Depth: 35 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.078277 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			2 ft	2 ft		BLACK	TOPSOIL	
			13 ft	15 ft		GREY	SAND, SILT	
			15 ft	30 ft		GREY	CLAY	
			5 ft	35 ft		GREY	SAND, SILT	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-27		ORILLIA	7041568				SIMCOE	ORILLIA CITY
Easting Nad83: 625570 Northing Nad83: 4940004 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 4/5/2006 Primary Water Use: Not Used Secondary Water Use: Well Depth: 22 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Boring Flowing (y/n): Elevation (m): 221.297531 Elevation Reliability: Depth to Bedrock: 59 Overburden/Bedrock: Bedrock Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			0.5 m	0.5 m	BLACK		TOPSOIL	
			4.5 m	5 m	GREY		SAND, SILT	
			5 m	10 m	GREY		CLAY	
			8 m	18 m	GREY		SAND, SILT, CLAY	
			4 m	22 m	GREY		LIMESTONE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-28		ORILLIA	7041569				SIMCOE	ORILLIA CITY
Easting Nad83: 625570 Northing Nad83: 4940004 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 4/5/2006 Primary Water Use: Secondary Water Use: Well Depth: Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Abandoned-Other Construction Method: Flowing (y/n): Elevation (m): 221.297531 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: No formation data Water Type: Casing Material:								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-29		ORILLIA	5739733				SIMCOE	ORILLIA CITY
Easting Nad83: 625622 Northing Nad83: 4940007 Zone: 17 Utm Reliability: Construction Date: 5/10/2005 Primary Water Use: Secondary Water Use: Well Depth: 35 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Construction Method: Flowing (y/n): Elevation (m): 221.478271 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			2 ft	2 ft	BLACK		TOPSOIL	
			8 ft	10 ft	GREY		SAND, SILT, CLAY	
			18 ft	28 ft	GREY		CLAY	
			7 ft	35 ft	GREY		SAND, SILT, CLAY	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-30			5702655				SIMCOE	ORILLIA CITY
			Easting Nad83: 625201.6 Northing Nad83: 4939998 Zone: 17 Utm Reliability: unknown UTM Construction Date: 11/17/1955 Primary Water Use: Secondary Water Use: Well Depth: 65 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Abandoned-Supply Construction Method: Rotary (Convent.) Flowing (y/n): Elevation (m): 223.268829 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material:					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			1 ft	1 ft			TOPSOIL	
			7 ft	8 ft		YELLOW	CLAY	
			9 ft	17 ft			CLAY, SILT, GRAVEL	
			22 ft	39 ft			GRAVEL, MEDIUM SAND	
			6 ft	45 ft		GREY	CLAY, MEDIUM SAND	
			7 ft	52 ft			GRAVEL, MEDIUM SAND, CLAY	
			13 ft	65 ft			GRAVEL, MEDIUM SAND	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-31		ORILLIA	5739736				SIMCOE	ORILLIA CITY
Easting Nad83: 625622 Northing Nad83: 4940008 Zone: 17 Utm Reliability: Construction Date: 4/28/2005 Primary Water Use: Secondary Water Use: Well Depth: 52 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.466369 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			2 ft	2 ft	BLACK		TOPSOIL	
			8 ft	10 ft	GREY		SAND, SILT	
			18 ft	28 ft	GREY		CLAY	
			24 ft	52 ft	GREY		SAND, SILT, CLAY	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-32		Orillia	7109775				SIMCOE	ORILLIA CITY
Easting Nad83: 626213 Northing Nad83: 4940031 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 4/18/2008 Primary Water Use: Monitoring Secondary Water Use: Well Depth: 20.11 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Diamond Flowing (y/n): Elevation (m): 219.674774 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: STEEL, STEEL, PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			0.7 m	0.7 m	BROWN	SAND, FILL, GRAVEL		
			3 m	3.7 m	BROWN	SILT, FINE SAND, DRY		
			3.5 m	7.2 m	GREY	FINE SAND, MEDIUM SAND, LOOSE		
			1.4 m	8.6 m	GREY	SILT, FINE SAND		
			0.8 m	9.4 m	GREY	SILT, TILL, GRAVEL		
			1.9 m	11.3 m	GREY	SAND, FINE-GRAINED, MEDIUM-GRAINED		
			5.2 m	16.5 m	GREY	SAND, BOULDERS, SILT		
			3.61 m	20.11 m	GREY	LIMESTONE, ROCK, FRACTURED		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-33		Orillia	7123882				SIMCOE	ORILLIA CITY
Easting Nad83: 625498 Northing Nad83: 4940019 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 5/26/2009 Primary Water Use: Secondary Water Use: Well Depth: 12 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Geoprobe Flowing (y/n): Elevation (m): 222.296539 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			3 ft	3 ft		BROWN	SAND, PEAT, LOOSE	
			9 ft	12 ft		GREY	SAND, SILT, LOOSE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-34		ORILLIA	7038508				SIMCOE	ORILLIA CITY
Easting Nad83: 625628 Northing Nad83: 4940048 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 10/20/2006 Primary Water Use: Secondary Water Use: Well Depth: 4.88 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Construction Method: Other Method Flowing (y/n): Elevation (m): 221.765029 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			0.3 m	0.3 m	BLACK			
			3.36 m	3.66 m	BROWN	FILL, WOOD FRAGMENTS		
			1.22 m	4.88 m	GREY	CLAY, SILT		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-35		Orillia	7123881				SIMCOE	ORILLIA CITY
Easting Nad83: 625501 Northing Nad83: 4940046 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 5/26/2009 Primary Water Use: Test Hole Secondary Water Use: Monitoring Well Depth: 12 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Geoprobe Flowing (y/n): Elevation (m): 222.199737 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			3 ft	3 ft		BROWN	SAND, PEAT, LOOSE	
			9 ft	12 ft		GREY	SAND, SILT, LOOSE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-36		ORILLIA	5739732				SIMCOE	ORILLIA CITY
Easting Nad83: 625718 Northing Nad83: 4940072 Zone: 17 Utm Reliability: Construction Date: 5/2/2005 Primary Water Use: Secondary Water Use: Well Depth: 47 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.501358 Elevation Reliability: Depth to Bedrock: 46 Overburden/Bedrock: Bedrock Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			8 ft	10 ft	BROWN		SAND	
			13 ft	23 ft	GREY		CLAY	
			23 ft	46 ft	GREY		SAND, SILT, CLAY	
			1 ft	47 ft	GREY		LIMESTONE	
			2 ft	2 ft	BLACK		TOPSOIL	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-37		ORILLIA	5739744				SIMCOE	ORILLIA CITY
Easting Nad83: 625720 Northing Nad83: 4940076 Zone: 17 Utm Reliability: Construction Date: 5/5/2005 Primary Water Use: Secondary Water Use: Well Depth: 32 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Other Method Flowing (y/n): Elevation (m): 221.50386 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			2 ft	2 ft	BLACK		TOPSOIL	
			8 ft	10 ft	GREY		SAND, SILT	
			13 ft	23 ft	GREY		CLAY	
			9 ft	32 ft	GREY		SAND, SILT, CLAY	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-38			7165473				SIMCOE	ORILLIA CITY
			Easting Nad83: 625762 Northing Nad83: 4940119 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 6/15/2011 Primary Water Use: Secondary Water Use: Well Depth: Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Construction Method: Flowing (y/n): Elevation (m): Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material:					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-39		Orillia	7123880				SIMCOE	ORILLIA CITY
			Easting Nad83: 625574 Northing Nad83: 4940118 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 5/26/2009 Primary Water Use: Test Hole Secondary Water Use: Monitoring Well Depth: 12 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Geoprobe Flowing (y/n): Elevation (m): 222.478683 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			3 ft	3 ft		BROWN	SAND, PEAT, LOOSE	
			9 ft	12 ft		GREY	SILT, SAND, LOOSE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-40		CORNER OF QUEEN STREET WEST & WEST STREET ORILLIA	5739753				SIMCOE	ORILLIA CITY
			Easting Nad83: Northing Nad83: Zone: Utm Reliability: Construction Date: 5/13/2005 Primary Water Use: Secondary Water Use: Well Depth: 3.1 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Driving Flowing (y/n): Elevation (m): Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	
			1.22 m	1.22 m		BROWN	SAND, SOFT	
			1.88 m	3.1 m		GREY	SAND, SILT, CLAY	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-41		ORILLIA	7140720				SIMCOE	ORILLIA CITY
Easting Nad83: 625776 Northing Nad83: 4940180 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 1/5/2010 Primary Water Use: Monitoring Secondary Water Use: Well Depth: 21.2 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Diamond Flowing (y/n): Elevation (m): 221.471954 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: STEEL, PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			1.6 m	1.6 m	BROWN	SAND, SILTY, FILL		
			0.8 m	2.4 m	BROWN	PEAT, WOOD FRAGMENTS, OTHER		
			2.6 m	5 m	GREY	CLAY, SILTY, SAND		
			5 m	10 m	GREY	FINE SAND, SILTY, GRAVEL		
			3.6 m	13.6 m	GREY	FINE SAND, SILTY, SILT		
			2.7 m	16.3 m	GREY	MEDIUM SAND, COARSE SAND, LIMESTONE		
			0.8 m	17.1 m	GREY	LIMESTONE, BOULDERS, SHALE		
			4.1 m	21.2 m	GREY	LIMESTONE, FRACTURED, WEATHERED		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-42		ORILLIA	5740072				SIMCOE	ORILLIA CITY
Easting Nad83: 626078 Northing Nad83: 4940202 Zone: 17 Utm Reliability: Construction Date: 6/22/2005 Primary Water Use: Not Used Secondary Water Use: Well Depth: 6.1 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Boring Flowing (y/n): Elevation (m): 221.596343 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			1.5 m	1.5 m	BROWN		FILL	
			2.2 m	3.7 m	BROWN		SAND, SILT, LOOSE	
			2.4 m	6.1 m	GREY		SAND, SILT, LOOSE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-43		ORILLA	7051537				SIMCOE	ORILLIA CITY
Easting Nad83: 625782 Northing Nad83: 4940213 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 7/19/2006 Primary Water Use: Secondary Water Use: Well Depth: Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Abandoned-Other Construction Method: Flowing (y/n): Elevation (m): 221.745254 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material:								
			Thickness Original Depth				Material Colour Material	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-44		lot 9 con 4 ORILLIA	5739297	009	04	SD	SIMCOE	ORILLIA CITY
Easting Nad83: 625616 Northing Nad83: 4940239 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 11/18/2004 Primary Water Use: Not Used Secondary Water Use: Well Depth: Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Other Method Flowing (y/n): Elevation (m): 222.552948 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: No formation data Water Type: Casing Material: PLASTIC Thickness Original Depth Material Colour Material								

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-45		Orillia	7130856				SIMCOE	ORILLIA CITY
Easting Nad83: 625600 Northing Nad83: 4940262 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: Primary Water Use: Monitoring Secondary Water Use: Well Depth: 4.6 m Pump Rate: Static Water Level: 1.2 m Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Boring Flowing (y/n): Elevation (m): 222.432708 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Not stated Casing Material: PLASTIC, PLASTIC, PLASTIC, PLASTIC, PLASTIC, PLASTIC, PLASTIC, PLASTIC, PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			1.5 m	1.5 m	BROWN	SAND, GRAVEL, FILL		
			2 m	3.5 m	BROWN	CLAY, SILT, LOOSE		
			1.1 m	4.6 m	BROWN	FINE SAND, SILT		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-46		ORILLIA	5741005				SIMCOE	ORILLIA CITY
Easting Nad83: 625609 Northing Nad83: 4940301 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 7/25/2006 Primary Water Use: Not Used Secondary Water Use: Well Depth: 5 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Boring Flowing (y/n): Elevation (m): 222.712966 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			1.5 m	1.5 m	BROWN	SAND, SILT, LOOSE		
			3.5 m	5 m	BROWN	SAND, CLAY, LOOSE		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-47		lot 9 con 5 ORILLIA	5741058	009	05		SIMCOE	ORILLIA CITY
Easting Nad83: 625648 Northing Nad83: 4940303 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 8/4/2006 Primary Water Use: Not Used Secondary Water Use: Well Depth: 5.5 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Flowing (y/n): Elevation (m): 222.511459 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			0.2 m	0.2 m	GREY			
			0.1 m	0.3 m	BROWN		FILL	
			2.8 m	3.1 m	BROWN		TOPSOIL, SANDY	
			2.4 m	5.5 m	BROWN		SAND	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-48		ORILLIA	7046679				SIMCOE	ORILLIA CITY
Easting Nad83: 626256 Northing Nad83: 4940318 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 5/8/2007 Primary Water Use: Not Used Secondary Water Use: Well Depth: Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Rotary (Convent.) Flowing (y/n): Elevation (m): 221.524932 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material: PLASTIC Thickness Original Depth Material Colour Material								

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-49			7053793				SIMCOE	ORILLIA CITY
			Easting Nad83: 626256 Northing Nad83: 4940321 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 11/15/2007 Primary Water Use: Secondary Water Use: Well Depth: Pump Rate: LPM Static Water Level: m Flow Rate: LPM Clear/Cloudy: Specific Capacity: Final Well Status: Construction Method: Flowing (y/n): Elevation (m): 221.479385 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material:					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-50		ORILLIA	5740078				SIMCOE	ORILLIA CITY
Easting Nad83: 625666 Northing Nad83: 4940326 Zone: 17 Utm Reliability: Construction Date: 9/13/2005 Primary Water Use: Secondary Water Use: Well Depth: 5 m Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Rotary (Convent.) Flowing (y/n): Elevation (m): 222.421783 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>	<u>Material</u>		
			0.6 m	0.6 m	GREY	SAND, GRAVEL, DRY		
			0.9 m	1.5 m	GREY	SAND, CLAY		
			3.5 m	5 m	GREY	SAND, CLAY, WATER-BEARING		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-51			7156715				SIMCOE	ORILLIA CITY
			Easting Nad83: 625973 Northing Nad83: 4940339 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 10/25/2010 Primary Water Use: Secondary Water Use: Well Depth: Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Construction Method: Flowing (y/n): Elevation (m): Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material:					
			<u>Thickness</u>	<u>Original Depth</u>		<u>Material Colour</u>	<u>Material</u>	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-52		lot 14 ORILLIA	5741370	014			SIMCOE	ORILLIA CITY
Easting Nad83: 625966 Northing Nad83: 4940390 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 10/20/2006 Primary Water Use: Not Used Secondary Water Use: Well Depth: Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Rotary (Convent.) Flowing (y/n): Elevation (m): 221.76651 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: No formation data Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
WWIS-53		Orillia	7135565				SIMCOE	ORILLIA CITY
Easting Nad83: 626051 Northing Nad83: 4940499 Zone: 17 Utm Reliability: margin of error : 10 - 30 m Construction Date: 5/27/2009 Primary Water Use: Test Hole Secondary Water Use: Well Depth: 20 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Test Hole Construction Method: Driving Flowing (y/n): Elevation (m): 222.104248 Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Water Type: Casing Material:								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			6 ft	6 ft	BROWN		FILL, ROCK, SAND	
			10 ft	16 ft	GREY		SAND, SILTY, WATER-BEARING	
			4 ft	20 ft	BROWN		SAND	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 10	5722828	010			SIMCOE	ORILLIA TOWNSHIP
Easting Nad83: Northing Nad83: Zone: 17 Utm Reliability: unknown UTM Construction Date: 10/30/1987 Primary Water Use: Domestic Secondary Water Use: Well Depth: 50 ft Pump Rate: 10 GPM Static Water Level: 40 ft Flow Rate: Clear/Cloudy: CLEAR Specific Capacity: Final Well Status: Water Supply Construction Method: Cable Tool Flowing (y/n): N Elevation (m): Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: STEEL								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			48 ft	48 ft			SAND	
			2 ft	50 ft			COARSE GRAVEL	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 9	5723643	009		SD	SIMCOE	ORILLIA TOWNSHIP
Easting Nad83: Northing Nad83: Zone: 17 Utm Reliability: unknown UTM Construction Date: 7/5/1988 Primary Water Use: Livestock Secondary Water Use: Well Depth: 50 ft Pump Rate: 5 GPM Static Water Level: 36 ft Flow Rate: Clear/Cloudy: CLEAR Specific Capacity: Final Well Status: Observation Wells Construction Method: Cable Tool Flowing (y/n): N Elevation (m): Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: FRESH Casing Material: GALVANIZED								
			Thickness Original Depth	Material Colour Material				
			45 ft	45 ft	HARDPAN, CLAY, BOULDERS			
			5 ft	50 ft	GRAVEL			

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 9	5734308	009		ND	SIMCOE	ORILLIA TOWNSHIP
Easting Nad83: Northing Nad83: Zone: 17 Utm Reliability: unknown UTM Construction Date: 9/16/1998 Primary Water Use: Domestic Secondary Water Use: Well Depth: 100 ft Pump Rate: 25 GPM Static Water Level: 20 ft Flow Rate: Clear/Cloudy: CLEAR Specific Capacity: Final Well Status: Water Supply Construction Method: Air Percussion Flowing (y/n): N Elevation (m): Elevation Reliability: Depth to Bedrock: 1 Overburden/Bedrock: Bedrock Water Type: Casing Material: OPEN HOLE, STEEL								
			Thickness Original Depth		Material Colour	Material		
			1 ft	1 ft	BLACK	TOPSOIL		
			99 ft	100 ft	BLACK	GRANITE		

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 9	5734773	009		ND	SIMCOE	ORILLIA TOWNSHIP
Easting Nad83: Northing Nad83: Zone: 17 Utm Reliability: unknown UTM Construction Date: 6/21/1999 Primary Water Use: Domestic Secondary Water Use: Well Depth: 312 ft Pump Rate: Static Water Level: 8 ft Flow Rate: Clear/Cloudy: CLOUDY Specific Capacity: Final Well Status: Water Supply Construction Method: Air Percussion Flowing (y/n): N Elevation (m): Elevation Reliability: Depth to Bedrock: 14 Overburden/Bedrock: Bedrock Water Type: FRESH Casing Material: STEEL								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			14 ft	14 ft	BROWN		SAND, SOFT	
			146 ft	160 ft	GREY		GRANITE	
			11 ft	171 ft	RED		GRANITE	
			141 ft	312 ft	GREY		GRANITE	

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		lot 10	5735603	010		ND	SIMCOE	ORILLIA TOWNSHIP
Easting Nad83: Northing Nad83: Zone: 17 Utm Reliability: unknown UTM Construction Date: 9/6/2000 Primary Water Use: Domestic Secondary Water Use: Well Depth: 64 ft Pump Rate: 10 GPM Static Water Level: 52 ft Flow Rate: Clear/Cloudy: CLEAR Specific Capacity: Final Well Status: Water Supply Construction Method: Cable Tool Flowing (y/n): N Elevation (m): Elevation Reliability: Depth to Bedrock: 61 Overburden/Bedrock: Bedrock Water Type: FRESH Casing Material: STEEL, OPEN HOLE Thickness Original Depth 61 ft 61 ft 3 ft 64 ft Material Colour Material HARDPAN, BOULDERS, CLAY LIMESTONE								

Water Well Information System

Map Key	Company	Address	Well Id	Lot	Concession	Concession Name	County	Municipality
n/a		QUEEN ST W 88 ORILLIA	5739298				SIMCOE	ORILLIA CITY
Easting Nad83: Northing Nad83: Zone: Utm Reliability: unknown UTM Construction Date: 10/18/2004 Primary Water Use: Not Used Secondary Water Use: Well Depth: 25 ft Pump Rate: Static Water Level: Flow Rate: Clear/Cloudy: Specific Capacity: Final Well Status: Observation Wells Construction Method: Boring Flowing (y/n): Elevation (m): Elevation Reliability: Depth to Bedrock: Overburden/Bedrock: Overburden Water Type: Casing Material: PLASTIC								
			<u>Thickness</u>	<u>Original Depth</u>	<u>Material Colour</u>		<u>Material</u>	
			6 ft	6 ft	BROWN		SAND, GRAVEL	
			15 ft	21 ft	GREY		CLAY	
			4 ft	25 ft	GREY		SILT, SAND, CLAY	

Appendix: Ontario Database Descriptions

EcoLog Environmental Risk Information Services Ltd can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to EcoLog ERIS at the time of update. **Note:** Databases denoted with “*” indicates that the database will no longer be updated. See the individual database descriptions for more information.

Provincial Government Source Databases:

Abandoned Aggregate Inventory Up to Sept 2002

AAGR

The MAAP Program maintains a database of all abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.

Aggregate Inventory Up to Jun 2011

AGR

The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. Please note that the database is only referenced by lot/concession and city/town location. The database provides information regarding the registered owner/operator, location, status, licence type, and maximum tonnage.

Abandoned Mines Information System 1800-Jan 2012

AMIS

The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: “the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete”. Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Borehole 1875-Aug 2011

BORE

A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc.

For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Certificates of Approval 1985-Oct 30, 2011*

CA

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

TSSA Commercial Fuel Oil Tanks 1948-Aug 2011**CFOT**

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (TSSA). This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

Inventory of Coal Gasification Plants and Coal Tar Sites April 1987 and November 1988***COAL**

This inventory includes both the “Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987” and the “Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Compliance and Convictions 1989-Feb 2012**CONV**

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Certificates of Property Use 1994-Feb 2012**CPU**

This is a subset taken from Ontario’s Environmental Registry (EBR) database. It will include all CPU’s on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Drill Holes 1886-Oct 2011**DRL**

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a “Report of Work”.

Environmental Activity and Sector Registry Oct 31, 2011-Feb 2012**EASR**

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren’t subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

Environmental Registry 1994-Feb 2012**EBR**

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Environmental Compliance Approval Oct 31, 2011-Feb 2012**ECA**

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For CofA's prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

List of TSSA Expired Facilities Current to Feb 2012**EXP**

This is a list of all expired facilities that fall under the TSSA (TSS Act & Safety Regulations), including the six regulations that exist under the Fuels Safety Division. It will include facilities such as private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. These tanks have been removed and automatically fall under the expired facilities inventory held by TSSA.

TSSA Fuel Storage Tanks Current to Jun 2011**FST**

The Technical Standards & Safety Authority (TSSA), under the *Technical Standards & Safety Act* of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

Ontario Regulation 347 Waste Generators Summary 1986-Oct 2010**GEN**

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

TSSA Historic Incidents 2006-June 2009**HINC**

This database will cover all incidences recorded by TSSA with their older system, before they moved to their new management system. TSSA's Fuels Safety Program administers the *Technical Standards & Safety Act* 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. We also work to protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from pipelines, diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

TSSA Incidents June 2009-Mar 2012**INC**

TSSA's Fuels Safety Program administers the *Technical Standards & Safety Act* 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

Landfill Inventory Management Ontario 2010**LIMO**

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills will include information such as site owner, site location and certificate of approval # and status.

Mineral Occurrences 1846-Nov 2011**MNR**

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the planimetric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

Non-Compliance Reports 1992(water only), 1994-2010**NCPL**

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

Ontario Oil and Gas Wells 1800-Jun 2011**OOGW**

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, well cap date, licence no., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Ontario Inventory of PCB Storage Sites 1987-Oct 2004**OPCB**

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Orders 1994-Feb 2012**ORD**

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Pesticide Register 1988-Mar 2011**PES**

The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

TSSA Pipeline Incidents June 2009-Mar 2012**PINC**

TSSA's Fuels Safety Program administers the *Technical Standards & Safety Act* 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. This database will include spills, strike and leaks from recorded by the TSSA.

Private and Retail Fuel Storage Tanks 1989-1996***PRT**

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Permit to Take Water 1994-Feb 2012**PTTW**

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Ontario Regulation 347 Waste Receivers Summary 1986-2008**REC**

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Record of Site Condition 1997-Sept 2001, Oct 2004-Feb 2012**RSC**

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up. RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Ontario Spills 1988-2011**SPL**

This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

Wastewater Discharger Registration Database 1990-2010**SRDS**

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

TSSA Variances for Abandonment of Underground Storage Tanks Current to October 2011**VAR**

The TSSA, Under the Liquid Fuels Handling Code and the Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, you may apply to seek a variance from this code requirement. This is a list of all variances granted for abandoned tanks.

Waste Disposal Sites - MOE CA Inventory 1970-Feb 2012**WDS**

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Waste Disposal Sites - MOE 1991 Historical Approval Inventory Up to Oct 1990***WDSH**

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Water Well Information System 1955-2011**WWIS**

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Federal Government Source Databases:**Diagram Identifier:****Environmental Effects Monitoring 1992-2007*****EEM**

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

Environmental Issues Inventory System 1992-2001***EIIS**

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

Federal Convictions 1988-Jun 2007**FCON**

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Contaminated Sites on Federal Land June 2000-Jan 2012**FCS**

The Treasury Board of Canada Secretariat maintains an inventory of all known contaminated sites held by various Federal departments and agencies. This inventory does not include properties owned by Crown corporations, but does contain non-federal sites for which the Government of Canada has accepted some or all financial responsibility. All sites have been classified through a system developed by the Canadian Council of Ministers of the Environment. The database provides information on company name, location, site ID #, property use, classification, current status, contaminant type and plan of action for site remediation.

Fisheries & Oceans Fuel Tanks 1964-Sept 2003**FOFT**

Fisheries & Oceans Canada maintains an inventory of all aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Indian & Northern Affairs Fuel Tanks 1950-Aug 2003**IAFT**

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

National Analysis of Trends in Emergencies System (NATES) 1974-1994***NATE**

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

National Defence & Canadian Forces Fuel Tanks Up to May 2001***NDFT**

The Department of National Defence and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

National Defence & Canadian Forces Spills Mar 1999-Aug 2010**NDSP**

The Department of National Defence and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

National Defence & Canadian Forces Waste Disposal Sites 2001-April 2007**NDWD**

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

National Environmental Emergencies System (NEES) 1974-2003**NEES**

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for all previous Environment Canada spill datasets. NEES is composed of the historic datasets – or Trends – which dates from approximately 1974 to present. **NEES Trends** is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

National PCB Inventory 1988-2008**NPCB**

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites.

National Pollutant Release Inventory 1993-2009**NPRI**

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

Parks Canada Fuel Storage Tanks 1920-Jan 2005**PCFT**

Canadian Heritage maintains an inventory of all known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Transport Canada Fuel Storage Tanks 1970-March 2007**TCFT**

With the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. This inventory will also include The Pickering Lands, which refers to the 7,530 hectares (18,600 acres) of land in Pickering, Markham and Uxbridge - owned by the Government of Canada since 1972. Properties on this land has been leased by the government since 1975, falls under the Site Management Policy of Transport Canada, but administered by Public Works and Government Services Canada. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

Private Source Databases:**Anderson's Waste Disposal Sites 1860s-Present****ANDR**

The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the *Ontario MOE Waste Disposal Site Inventory*, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. *Please note that the data is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.*

Automobile Wrecking & Supplies 2001-Jun 2010

AUWR

This database provides an inventory of all known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Chemical Register 1992, 1999-Jun 2010

CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

ERIS Historical Searches 1999-Sept 2011

EHS

EcoLog ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Canadian Mine Locations 1998-2009

MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Oil and Gas Wells Oct 2001-2011

OGW

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickles' database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Canadian Pulp and Paper 1999, 2002, 2004, 2005, 2009

PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Retail Fuel Storage Tanks 2000-Jun 2010

RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks. Information is provided on company name, location and type of business.

Scott's Manufacturing Directory 1992-Mar 2011

SCT

Scott's Directories is a data bank containing information on over 70,000 manufacturers in Ontario. Even though Scott's listings are voluntary, it is the most comprehensive database of Ontario manufacturers available. Information concerning a company's address, plant size, and main products are included in this database. This database begins with 1992 information and is updated annually.

Anderson's Storage Tanks 1915-1953*

TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. *Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.*



APPENDIX E

Land Title Information

CHAIN OF TITLE REPORT

Site # 2
1 Industrial Street, Orillia
Lot 1 Plan 903

PIN 58670-0030(LT)

Page 1

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
	Patent	01 09 1826	Crown	Thomas BAILEY
165	Deed	09 09 1829	Thomas Bailey	William LAUGHTON
645	Deed	24 05 1833	William Laughton	Thomas ATKINSON
2115	Deed	01 04 1886	Thomas Atkinson – estate	Lydia MAINER
2116	Deed	01 04 1886	Lydia Mainer	Elizabeth BELL
3113	Deed	17 09 1888	Elizabeth Bell	Henry BOYES
7843	Deed	11 06 1906	Henry Boyes	William MCNULLTY
10998	Deed	27 07 1912	William McNullty	William GOFFATT

Cont'd on page 2

CHAIN OF TITLE REPORT

Site # 2
1 Industrial Street, Orillia
Lot 1 Plan 903

Page 2

PIN 58670-0030(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
13170	Deed	24 03 1916	William Goffatt	Leo MILLIGAN
21898	Tax Deed	01 03 1937	The Town of Orillia	Municipal Corporation of The Town of Orillia
29433	Deed	19 03 1948	Municipal Corporation of The Town of Orillia	W. KILBY & Sons Ltd.
181850	Deed (Foreclosure)	26 03 1964	Jim Kennedy	Donald HUNTER
RO729302	Deed	02 03 1981	Donald Hunter	Embury Co. Limited
SC309542	Deed	01 03 2005	Embury Co. Limited	2065597 Ontario Inc.
SC864160	Deed	05 11 2010	206597 Ontario Inc.	Fairfax Orillia Holdings Ltd.
SC864252	Notice of Lease	08 11 2010	Fairfax Orillia Holdings Ltd.	Fairfax Partners Corp.

CHAIN OF TITLE REPORT

Site # 2
1 Industrial Street, Orillia
Block A Plan 1083

Page 1

PIN 58670-0029(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
	Patent	01 09 1826	Crown	Thomas BAILEY
165	Deed	09 09 1829	Thomas Bailey	William LAUGHTON
645	Deed	24 05 1833	William Laughton	Thomas ATKINSON
58986	Deed	09 11 1870	Thomas Atkinson	Alexander MURRAY
80971	Deed	13 01 1875	Alexander Murray – estate	Samuel WATSON
10147	Deed	28 09 1911	Samuel Watson – estate	The Municipal Corporation of the Town of Orillia
10323	Deed	20 06 1912	The Municipal Corporation of The Town of Orillia	William GOFFATT
11696	Deed	02 07 1912	William Goffatt	The Municipal Corporation of the Town of Orillia

Cont'd on page 2

CHAIN OF TITLE REPORT

Site # 2
1 Industrial Street, Orillia
Block A Plan 1083

Page 2

PIN 58670-0029(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
36193	Deed	02 10 1953	The Corporation of The Town of Orillia	A. James Lloyd
RO213401	Deed	24 11 1965	A. James Lloyd	Lloyd Metal Manufacturing Company Limited
SC309541	Deed	01 03 2005	Lloyd Metal Manufacturing Company Limited	2065597 Ontario Inc.
SC864160	Deed	05 11 2010	2065597 Ontario Inc.	Fairfax Orillia Holdings Ltd.
SC864252	Notice of Lease	08 11 2010	Fairfax Orillia Holdings Ltd.	Fairfax Partners Corp.
SC976182	Deed	24 04 2012	Fairfax Orillia Holdings Ltd.	Fairfax Real Estate Holdings Ltd.

CHAIN OF TITLE REPORT

Site # 2
25 Industrial Street, Orillia
Blocks A, E, F, G & H Plan 1269

Page 1

PIN 58670-0025(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
	Patent	01 09 1826	Crown	Thomas BAILEY
165	Deed	09 09 1829	Thomas Bailey	William LAUGHTON
645	Deed	24 05 1833	William Laughton	Thomas ATKINSON
58986	Deed	09 11 1870	Thomas Atkinson	Alexander MURRAY
80971	Deed	13 01 1875	Alexander Murray – estate	Samuel WATSON
10147	Deed	28 09 1911	Samuel Watson – estate	The Municipal Corporation of the Town of Orillia
10323	Deed	20 06 1912	The Municipal Corporation of The Town of Orillia	William GOFFATT
11696	Deed	02 07 1912	William Goffatt	The Municipal Corporation of the Town of Orillia
Cont'd on page 2				

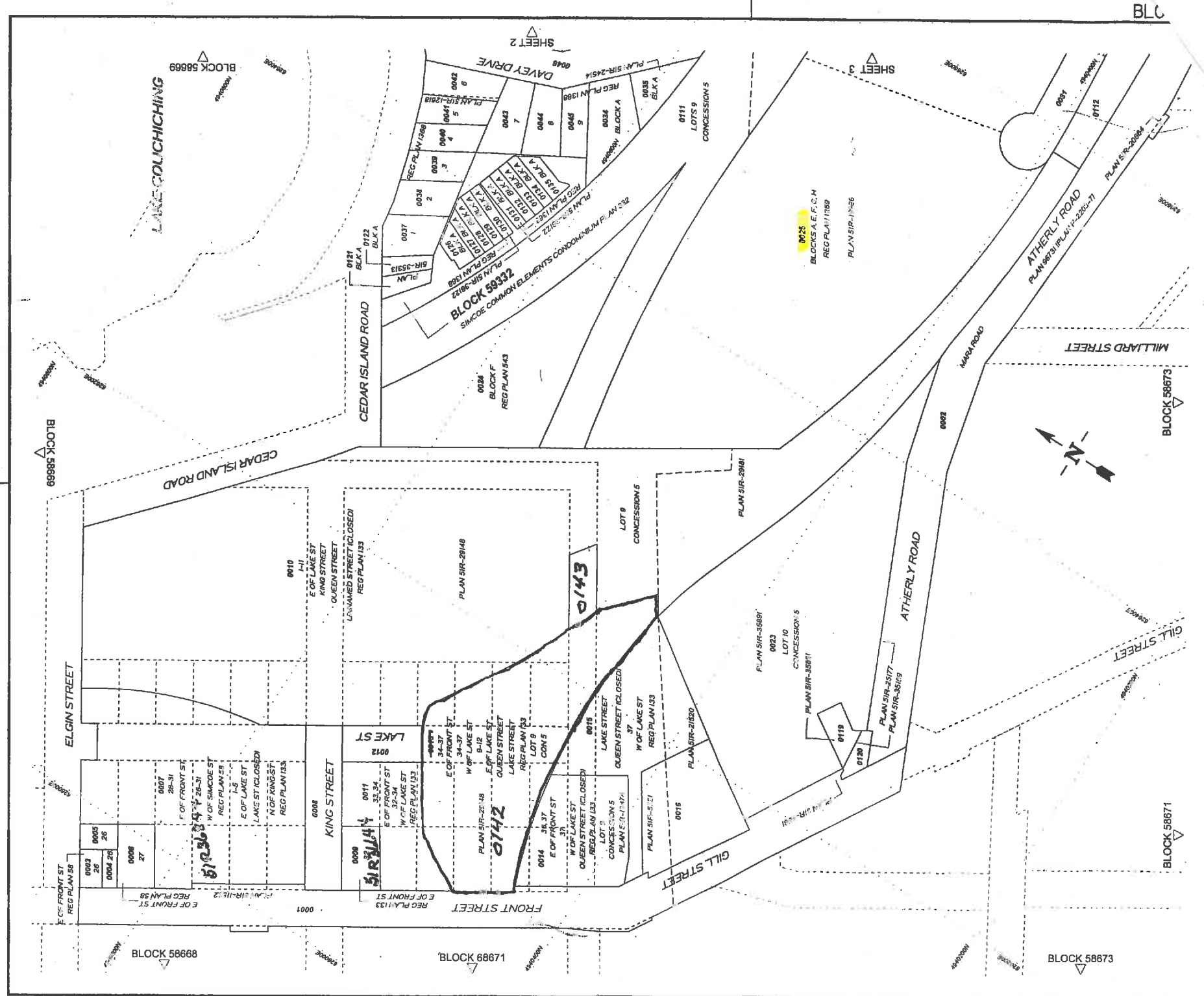
CHAIN OF TITLE REPORT

Site # 2
25 Industrial Street, Orillia
Blocks A, E, F, G & H Plan 1269

Page 2

PIN 58670-0025(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
166290	Deed	21 05 1963	The Corporation of The Town of Orillia	Dimension Enterprises Co. Ltd.
239973	Deed	29 03 1967	Brallia Enterprises Limited (formerly Dimension Enterprises Co. Ltd)	Glen David DERBECKER
RO1093567	Deed	28 12 1989	Glen David Derbecker	Bayland Development Corporation
SC306866	Tax Deed	17 02 2005	The Corporation of The City of Orillia	Rexton Developments Ltd.



Ministry of Government and Consumer Services

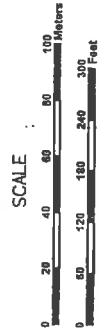
PROPERTY INDEX MAP
BLOCK 58670
CITY OF ORILLIA
COUNTY OF SIMCOE
10 OFFICE 511

NO. 7

LEGEND

- FRESHWATER PROPERTY BOUNDARY
- LEASOLD PROPERTY BOUNDARY
- LIMITED INTEREST PROPERTY BOUNDARY
- FRESHWATER PROPERTY NUMBER
- LEASOLD PROPERTY NUMBER
- LIMITED INTEREST PROPERTY NUMBER
- TOWNSHIP FABRIC
- STREAMS, RIVERS
- UNDERLYING FABRIC EASEMENT
- UTM GRID
- ADJOINING MAP NUMBER
- BLOCK 58671
- BLOCK 58673
- BLOCK 58674

THIS INDEX MAP SHOWS ALL PROPERTIES EXISTING IN BLOCK 58670 - SHEET 1 ON JULY 01, 2008



THE UNCLE IDENTIFIER FOR ANY PROPERTY E.G. 00218 - 01471 IS COMPOSED OF THE MAP BLOCK NUMBER 00218 AND THE FOUR DIGIT NUMBER 01471 WHICH APPEARS IN THE ACTIVATED PROPERTY

CHAIN OF TITLE REPORT

Site # 3
Millard Street @ Atherley Road, Orillia
Part Lot 10 Con 5 South Orillia as in RO1345368

Chain 1

Page 1

PIN 58673-0052(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
	Patent	01 09 1826	Crown	Horace BAILEY
165	Deed	09 09 1829	Horace Bailey	William LAUGHTON
7011	Deed	08 08 1833	William Laughton	Jacob GILL
38096	Deed	31 12 1962	Jacob Gill – estate	James MILLARD
18490	Deed	10 02 1927	James Millard – estate	Ada DUNN
21953	Deed	22 04 1937	Ada Dunn	J. Bennington OLAN
23224	Deed	16 11 1940	J. Bennington Olan	Ruby ALAN
23457	Deed	08 07 1941	Ruby Alan	J. Bennington OLAN & Agnes OLAN

Cont'd on page 2

CHAIN OF TITLE REPORT

Site # 3
Millard Street @ Atherley Road, Orillia
Part Lot 10 Con 5 South Orillia as in RO1345368

Chain 1

Page 2

PIN 58673-0052(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
36521	Deed	18 01 1954	J. Bennington Olan & Agnes Olan	Clarence DWINELL
298961	Deed	29 05 1969	Clarence Dwinnell	Wilfred & Lillian POLMATEER
RO1031230	Deed	07 11 1988	Wilfred & Lillian Polmateer	Cheryl Lynn MCCULLOUGH and Raymond Chester MCCULLOUGH
RO1345368	Deed	15 05 1997	Cheryl Lynn McCullough & Raymond Chester McCullough	Wilfred Reginald Lloyd POLMATEER and Lillian Lenora POLMATEER
SC335807	Deed	09 06 2005	Lillian Lenora Polmateer and Wilfred Reginald Lloyd Polmateer	Wilfred Reginald Lloyd POLMATEER and Lillian Lenora POLMATEER
SC621492	Deed	31 01 2008	Lillian Lenora Polmateer and Wilfred Reginald Lloyd Polmateer	1328538 Ontario Inc.

Properties

58673 -- 0052 LT Interest/Estate Fee Simple
PT LT 10 CON 5 SOUTH ORILLIA AS IN RO1345368; ORILLIA
00147 ATHERLEY RD
ORILLIA

Consideration

\$63,500.00

Transferor(s)

(s) hereby transfers the land to the transferee(s).

POLMATEER, LILLIAN LENORA
147 Atherley Road
ORILLIA, Ontario L3V 1N4

years of age.

INALD LLOYD POLMATEER and I are spouses of one another and are both parties to this document is not authorized under Power of Attorney by this party.

Polmateer, Wilfred Reginald Lloyd

years of age.

RA POLMATEER and I are spouses of one another and are both parties to this document is not authorized under Power of Attorney by this party.

<i>Transferee(s)</i>	<i>Capacity</i>	<i>Share</i>

1328538 ONTARIO INC.
101 Duncan Mill Road
Suite 406
DON MILLS, Ontario M3B 1Z3

1328538 ONTARIO INC.
Registered Owner

Capacity Share

STATEMENT OF THE TRANSFEROR (S): The transferor(s) verifies that to the best of the transferor's knowledge and belief, this transfer does not contravene the Planning Act.

STATEMENT OF THE SOLICITOR FOR THE TRANSFEROR(S): I have explained the effect of the Planning Act to the transferor(s) and I have made inquiries of the transferor(s) to determine that this transfer does not contravene that Act and based on the information supplied by the transferor(s), to the best of my knowledge and belief, this transfer does not contravene that Act. I am an Ontario solicitor in good standing.

STATEMENT OF THE SOLICITOR FOR THE TRANSFEREE (S): I have investigated the title to this land and to abutting land where relevant and I am satisfied that the title records reveal no contravention as set out in the Planning Act, and to the best of my knowledge and belief this transfer does not contravene the Planning Act. I act independently of the solicitor for the transferor(s) and I am an Ontario solicitor in good standing.

Signed By

us Jr Evans

s Jr Evans
93 Coldwater St. E., P.O. Box 310

Orillia
93 Coldwater St. E., P.O. Box 310
acting for
Transferor(s)

acting for Signed 2008 01 30

256146

256146

250044

250044
15-7205 Goreway Drive
Mississauga
L4T 2T9

15-7205 Goreway Drive
Mississauga

acting for Signed 2008 01 25

671-1178

671-1178

6718030

718030

CHAIN OF TITLE REPORT

Site # 3
Millard Street @ Atherley Road, Orillia
Part Lot 10 Con 5 South Orillia as in RO1345368

Chain 2

Page 1

PIN 58673-0052(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
	Patent	01 09 1826	Crown	Horace BAILEY
165	Deed	09 09 1829	Horace Bailey	William LAUGHTON
7011	Deed	08 08 1833	William Laughton	Jacob GILL
38096	Deed	31 12 1962	Jacob Gill – estate	James MILLARD
18490	Deed	10 02 1927	James Millard – estate	Ada DUNN
21953	Deed	22 04 1937	Ada Dunn	J. Bennington OLAN
23224	Deed	16 11 1940	J. Bennington Olan	Ruby ALAN
23457	Deed	08 07 1941	Ruby Alan	J. Bennington OLAN & Agnes OLAN

Cont'd on page 2

CHAIN OF TITLE REPORT

Site # 3
Millard Street @ Atherley Road, Orillia
Part Lot 10 Con 5 South Orillia as in RO1345368

Chain 2

Page 2

PIN 58673-0052(LT)

INSTR. #	DOC. TYPE	REG. DATE	PARTY FROM	PARTY TO
872047	Deed	01 08 1985	James Bennington Olan – estate	Kwong To SIT and King Sau SIT
RO1075871	Deed	01 09 1989	Kwong To Sit & King Sau Sit	Michael Bryan SMITH, in trust
LT376188	Deed (Power of Sale)	26 01 1999	Manulife Bank of Canada	1328539 Ontario Inc.



0267A

Form 1 - Land Registration Reform Act

FOR OFFICE USE ONLY

376188

01 26 18 10

NEW PROPERTY IDENTIFIERS

NEW PROPERTY IDENTIFIERS

EXECUTIONS

ADDITIONAL: See Schedule

ADDITIONAL: See Schedule

(1) Registry ☐ Land Titles ☒ (2) Page 1 of 17 pages

(3) Property Identifier(s) Block Property

(4) Consideration TWENTY-TWO THOUSAND-- dollars \$22,000.00

(5) Description This is a: Property Division ☐ Property Consolidation ☐ Parcel 10-2, Section 51-S.O.-5 being composed of Part of lot 10. Concession 5, City of Orillia in the County of Simcoe designated as Parts 1 and 2, Plan 51R-23568 formerly Townships of South City/11/10 Land Registry Office for the Land Titles Division of Simcoe (No. 51) Barrie

(6) This Document Contains: (a) Redescription New Easement Plan/Sketch ☐ (b) Schedule for: Description ☐ Additional Parties ☐ Other ☒ (7) Interest/State Transferred Fee Simple

(8) Transferor(s) The transferor hereby transfers the land to the transferee and certifies that the transferor is at least eighteen years old and that This Transfer is pursuant to a power of sale contained in Charge No.: 01108525 and in accordance with Part III of the Mortgages Act.

Name(s) MANULIFE BANK OF CANADA Date of Signature Y M D 1999 01 20

Signature(s) [Signature] Per: Victor Stangor Manager, Credit

We have the authority to bind the Corporation.

(9) Spouse(s) of Transferor(s) I hereby consent to this transaction

Name(s) [Signature] Date of Signature Y M D 1999 01 20

(10) Transferor(s) Address for Service 200 Bloor Street East, 6th Floor, Toronto, Ontario M4W 1E5.

(11) Transferee(s) 1328539. ONTARIO. INC.

(12) Transferee(s) Address for Service 101 Duncan Mill Road, Ste. 406, Don Mills, Ontario M3B 1Z3.

(13) Transferor(s) The transferor verifies that to the best of the transferor's knowledge and belief, this transfer does not contravene section 50 of the Planning Act.

Date of Signature Y M D

Signature [Signature]

(14) Solicitor for Transferor(s) I have explained the effect of section 50 of the Planning Act to the transferor and I have made inquiries of the transferor to determine that this transfer does not contravene that section and based on the information supplied by the transferor, to the best of my knowledge and belief, this transfer does not contravene that section. I am an Ontario solicitor in good standing.

Name and Address of Solicitor

(15) Assessment Roll Number 43 52 010 107 14100 City, Municipality, Map, Sub. par.

(16) Municipal Address of property 145 Atherley Road Orillia, Ontario L3V 1N5

(17) Document Prepared by: Joseph Agueci AGUECI & CALABRETTA 1600 Steeles Avenue West Suite 312 Concord, Ontario, L4K 4M2

(18) Solicitor for Transferee(s) I have investigated the title to this land and to adjoining land where relevant and I am satisfied that the title records reveal no contravention as set out in subclause 50 (22) (c) (ii) of the Planning Act and that to the best of my knowledge and belief this transfer does not contravene section 50 of the Planning Act. I act independently of the solicitor for the transferor(s) and I am an Ontario solicitor in good standing.

Name and Address of Solicitor

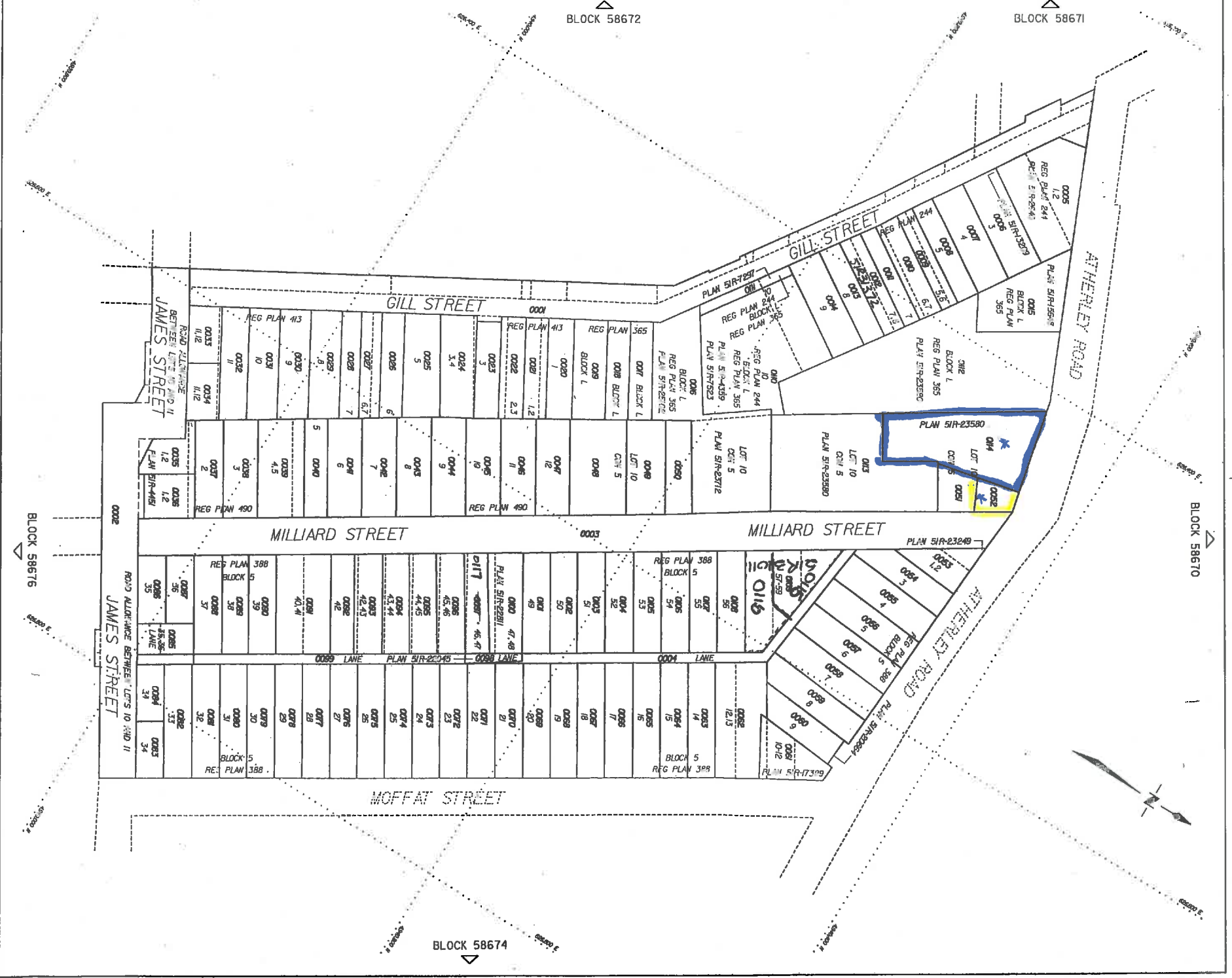
After Statement by Solicitor (if necessary)

Signature [Signature]

Date of Signature Y M D

Registration Fee 110- Land Transfer Tax 160- Total

SITE #3
XH130



MINISTRY OF
CONSUMER AND
BUSINESS
SERVICES

THIS INDEX MAP SHOWS ALL
PROPERTIES EXISTING IN
BLOCK 58673 - SHEET 1
ON AUGUST 1, 2001

SCALE



PROPERTY INDEX MAP
BLOCK 58673
CITY OF ORILLIA
COUNTY OF SIMCOE
(OFFICE 51)

LEGEND

- FEDERAL PROPERTY BOUNDARY
- LEGISLATED PROPERTY BOUNDARY
- NATURAL RESOURCE PROPERTY BOUNDARY
- FEDERAL PROPERTY NUMBER
- LEGISLATED PROPERTY NUMBER
- NATURAL RESOURCE PROPERTY NUMBER
- TOWNSHIP PLANNING
- STRAIGHT, FINISH
- UNDERLYING PLANNING, EASEMENT
- UTL. ENCL.
- ADJOINING MAP NUMBER

NOTES

NORTH AMERICAN DATUM 1983
UNIVERSAL TRANSVERSE MERCATOR PROJECTION
ZONE 17 CENTRAL MERIDIAN 87°
THIS IS NOT A PLAN
OF SURVEY
THIS MAP WAS COMPILED FROM PLANS AND
DOCUMENTS RECORDED IN THE LAND REGISTRY
SYSTEM AND HAS BEEN PREPARED FOR PROPERTY
PURPOSES ONLY.
FOR INFORMATION OF PROPERTY OWNERS
ONLY MAJOR EASEMENTS
ARE SHOWN
REFERENCE PLANS UNDER THE MORE RECENT
REFERENCE PLANS ARE NOT ELIMINATED
LAST EDITED: 2001

0001	0002	0003	0004	0005	0006	0007	0008	0009	0010
0011	0012	0013	0014	0015	0016	0017	0018	0019	0020



APPENDIX F

Site Photographs



Photograph 1: View of radio tower and Hydro sub-station looking south



Photograph 2: View of Embury Co. looking southeast



Photograph 3: View of the former wood finishing shop location looking west



Photograph 4: View of the disturbed area noted in the aerial photographs looking southwest



Photograph 5: View of the former rail line south of the Site looking west



Photograph 6: Transformer located adjacent to the radio tower



Photograph 7: Mound of fill looking south



Photograph 8: View of the bike path, north of the Site looking west



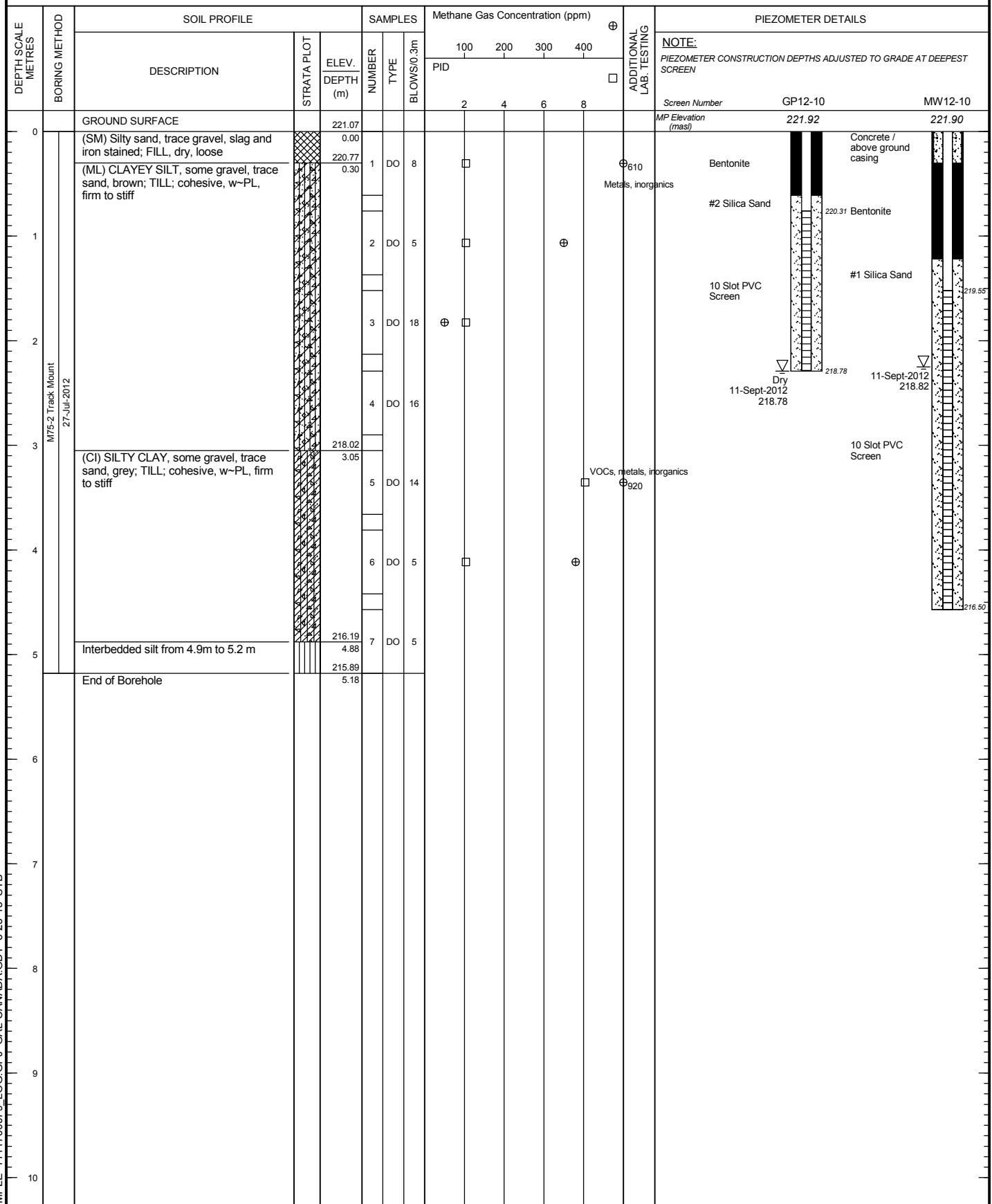
APPENDIX G

Record of Borehole Log Sheets

SHEET 1 OF 1

DATUM: Geodetic

PENETRATION TEST HAMMER, 64kg; DROP, 760mm



3BAR_ENV_SIMPLE 1111700079_LOG.GPJ GAL-CANADA.GDT 8-23-13 STB

DEPTH SCALE

1 : 50

LOGGED: SMF

CHECKED: NLP

PROJECT: 11-1170-0079

RECORD OF BOREHOLE: GP12-11

SHEET 1 OF 1

LOCATION: N ;E

BORING DATE: 27-Jul-2012

DATUM: Geodetic

SAMPLER HAMMER, 64kg; DROP, 760mm

PENETRATION TEST HAMMER, 64kg; DROP, 760mm

DEPTH SCALE METRES	BORING METHOD	SOIL PROFILE		SAMPLES		Methane Gas Concentration (ppm)				ADDITIONAL LAB. TESTING	PIEZOMETER DETAILS		
		DESCRIPTION	STRATA PLOT	ELEV. DEPTH (m)	NUMBER	TYPE	BLOWS/0.3m	100 200 300 400				NOTE:	
								PID					
								2	4	6	8		
0	M75-2 Track Mount 27-Jul-2012	GROUND SURFACE		221.74									MP Elevation (masl) 222.55
		(SM) Silty sand and gravel, brown; FILL, dry, compact		0.00									
		(ML) CLAYEY SILT to (CI) SILTY CLAY, red brown and grey, mottled; cohesive, w~PL, very stiff		221.44 0.30	1	DO	13	⊕	□				Bentonite
													#2 Silica Sand
1					2	DO	20	⊕	□				
			(ML) CLAYEY SILT, some gravel, trace sand, brown; TILL; cohesive, w~PL, firm to hard		220.22 1.52	3	DO	17	⊕	□			
2													
		Wet seam at 2.74 m to 3.05 m		218.69	4	DO	9	⊕	□				
3													
					5	DO	5	⊕	□				
4		Gravel content increasing from 3.81 m to 4.42 m											
					6	DO	60	⊕	□				
		End of Borehole		217.32 4.42									
5													
6													
7													
8													
9													
10													

BAR ENV SIMPLE 1111700079 LOG.GPJ GAL-CANADA.GDT 8-23-13 STB

DEPTH SCALE

1 : 50



LOGGED: SMF

CHECKED: NLP

PROJECT: 11-1170-0079

RECORD OF BOREHOLE: MW12-12 / GP12-12

SHEET 1 OF 1

LOCATION: N :E

BORING DATE: 31-Jul-2012

DATUM: Geodetic

SAMPLER HAMMER, 64kg; DROP, 760mm

PENETRATION TEST HAMMER, 64kg; DROP, 760mm

DEPTH SCALE METRES	BORING METHOD	SOIL PROFILE			SAMPLES		Methane Gas Concentration (ppm)				ADDITIONAL LAB. TESTING	PIEZOMETER DETAILS				
		DESCRIPTION	STRATA PLOT	ELEV. DEPTH (m)	NUMBER	TYPE	BLOWS/0.3m	100 200 300 400				NOTE: PIEZOMETER CONSTRUCTION DEPTHS ADJUSTED TO GRADE AT DEEPEST SCREEN				
								PID								
		GROUND SURFACE		220.73				2	4	6	8		Screen Number	GP12-12	MW12-12	
0	M75-2 Track Mount 31-Jul-2012	(SM) Silty sand and gravel, brown; FILL, moist, compact (ML) Silt and gravel, some clay, brown; FILL, dry, compact		0.05	1	DO	14					⊕	MP Elevation (masl)	221.74	221.61	
		Boulders and cobbles encountered from 1.2 m to 2.3 m														
1																
2																
		(CI) Silty clay, some gravel, brown; FILL; cohesive, w~PL, firm Fibrous PEAT, dark brown, roots; non-cohesive, w>PL, very soft to soft		218.52 2.21 2.29	4	DO	4						⊕			
3																
4						5	DO	0						⊕		
					6	DO	2						⊕			

DEPTH SCALE

1 : 50



LOGGED: JMF

CHECKED: NLP

BAR ENV_SIMPLE 1111700079 LOG.GPJ GAL-CANADA.GDT 8-23-13 STB

PROJECT: 11-1170-0079

RECORD OF BOREHOLE: GP12-13

SHEET 1 OF 1

LOCATION: N ;E

BORING DATE: 31-Jul-2012

DATUM: Geodetic

SAMPLER HAMMER, 64kg; DROP, 760mm

PENETRATION TEST HAMMER, 64kg; DROP, 760mm

DEPTH SCALE METRES	BORING METHOD	SOIL PROFILE		SAMPLES			Methane Gas Concentration (ppm)				ADDITIONAL LAB. TESTING	PIEZOMETER DETAILS		
		DESCRIPTION	STRATA PLOT	ELEV. DEPTH (m)	NUMBER	TYPE	BLOWS/0.3m	100 200 300 400				NOTE:		
								PID						
								2	4	6	8			
0		GROUND SURFACE		219.68									MP Elevation (masl) 220.73	
	M75-2 Track Mount 31-Jul-2012	TOPSOIL		0.00									Bentonite #2 Silica Sand 11-Sept-2012 218.86 10 Slot PVC Screen	
		SLAG		0.08										
		(SP) Sand and gravel, some silt, brown; FILL, moist, compact		219.40										
				0.28	1	DO	14	☐	⊕					
1						2	DO	13	☐	⊕				

Bentonite

#2 Silica Sand
11-Sept-2012
218.8610 Slot PVC
Screen

218.61

215.57

DEPTH SCALE

1 : 50



LOGGED: JMF

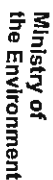
CHECKED: NLP

BAR ENV SIMPLE 1111700079 LOG.GPJ GAL-CANADA.GDT 8-23-13 STB



APPENDIX H

MOE Well Records



(Only for Multiple Test Holes or Dewatering Wells)

☒ Metric ☐ Imperial

Print or Type

A134153

Page 1 of 2

County/District/Upper Tier Municipality

Unit Mode of Operation

GOI

☐ Differentiated, specify:

Mandatory Attachments/Additional Information

☒ Land Owner Consent Form must be attached.

☒ Detailed Drawing of All Well Locations must be attached.

I, the person constructing the well, will promptly submit to the Director, on request, any additional information in my custody or control related to any well in the well cluster that I have constructed.

Edward

Signature of Technician/Contractor

2012/01

Date (yy/mm/dd)

☒ Land Owner Consent Form must be attached

☒ Detailed Drawing of All Well Locations must be attached

I, the person constructing the well, will promptly submit to the Director, on request, any additional information in my custody or control related to any well in the well cluster that I have constructed.

David
Signature of Technician/Contractor

Date (yyyy/mm/dd) 2012/07/3

[illegible]

Province

Address Platinum Mills Dr

2015/07/31

Comments:	
-----------	--

1915/6

Signature of Web Technician

Date Submitted (www/mm/dd)

2004 01 06 09:00:00

1991E (2011/04) Queen's Printer for Ontario, 2011

Ministry's Copy



Ontario

Ministry of
the Environment

Well Record for Well Cluster - Part 2 of 3
Land Owner Consent

This form is to be completed by the person who constructs or abandons test holes or dewatering wells that form all or part of a well cluster. If this form is being used to report any well abandonment, these wells must have been previously reported as part of a single well cluster.

Note: For well cluster records, only the owners of the land on which the wells are situated are to give written consent. If the well purchaser (e.g. a consultant who hires the driller) is not the owner of the land, then the well purchaser cannot sign the consent form.

By signing this form, land owners are providing consent to use one well record to report a well cluster of test holes or dewatering wells in accordance with section 16.4 of Regulation 903 made under the *Ontario Water Resources Act*.

This completed **Well Record for Well Cluster Part 2 - Land Owner Consent** must be attached to Parts 1 and 3.

* Please PRINT if completing by hand.

Well Tag Number: # A134153
"Well Record for Well Cluster" Audit Number: # C19157

Well # on Detailed Drawing	Property Location Description	Land Owner's Name	Signature of Land Owner	Date Signed (yyyy/mm/dd)
MW 12-10	25 Industrial St Orillia	City of Orillia		
GP 12-10	↓	↓		
MW 12-12				
GP 12-12				
GP 12-13				

PLOT DATE: July 16, 2012
 FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-BA-\ORILLIA_HISTBASITE.dwg



LEGEND:

- Landfill Limits
- ▼ Proposed Borehole / Gas Probe
- ⊕ Proposed Monitoring Well / Gas Probe

NOTE:

1. PROJECTION UTM NAD83 Zone 17
2. OROTHOIMAGERY DiscoverSimcoe.ca

0 50 100 150 200
 SCALE 1:5000 metres



SCALE AS SHOWN
 DATE 05 JUL 2012
 DESIGN
 CAD S BOWERMAN

TITLE

**HISTORICAL LANDFILL SITES
 PROPOSED MONITORING WELL / GAS
 PROBE LOCATIONS
 SITE X4108**

FILE No. ORILLIA_HISTBASITE.dwg

PROJECT No. 11-1170-0079

REV.

CHECK

REVIEW

CITY OF ORILLIA

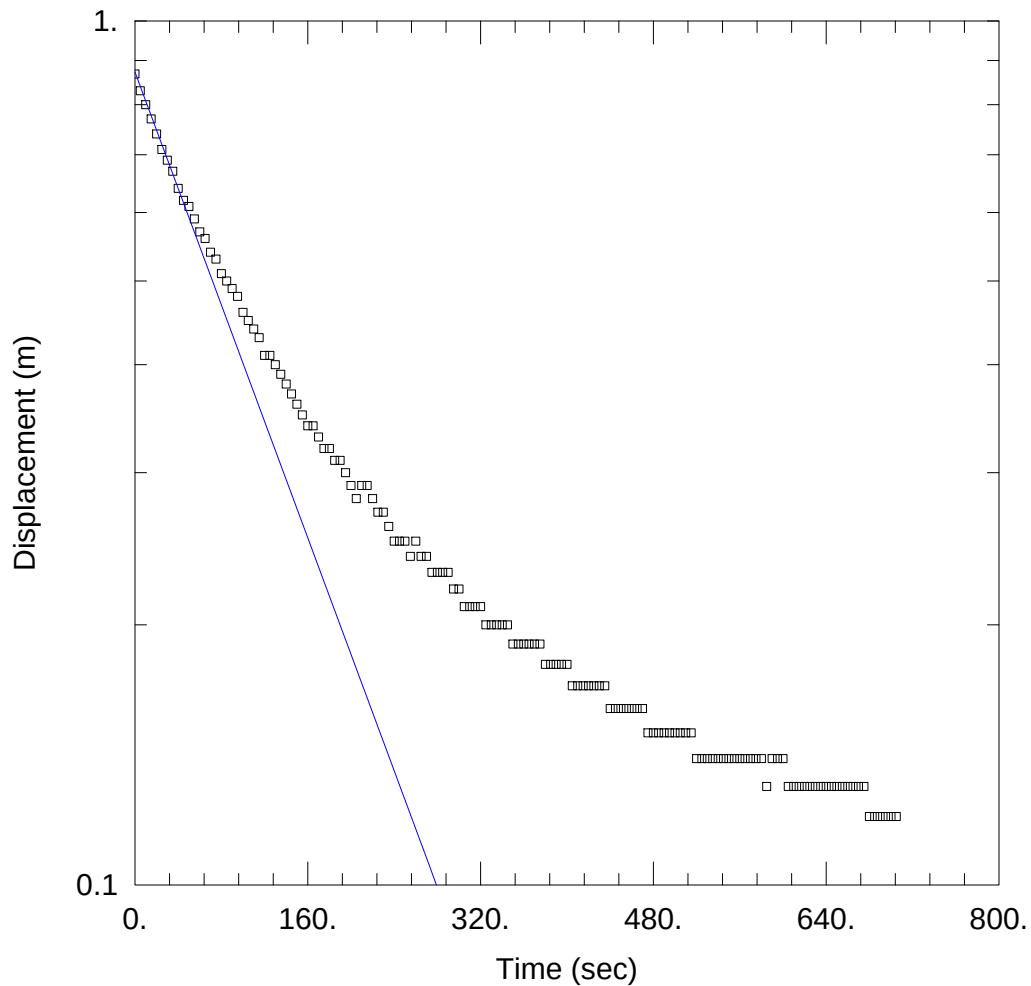
FIGURE

9



APPENDIX I

Hydraulic Testing



WELL TEST ANALYSIS

Data Set: N:\...MW12-10_LoggerData.aqt

Date: 12/13/12

Time: 14:49:57

PROJECT INFORMATION

Company: Golder Associates

Client: Orillia Historic Waste Sites

Project: 11-1170-0079

Location: Orillia

Test Well: MW12-10

Test Date: 11-Sept-2012

AQUIFER DATA

Saturated Thickness: 1.488 m

Anisotropy Ratio (K_z/K_r): 1.

WELL DATA (New Well)

Initial Displacement: 0.868 m

Static Water Column Height: 1.488 m

Total Well Penetration Depth: 4.57 m

Screen Length: 3.05 m

Casing Radius: 0.0255 m

Well Radius: 0.0255 m

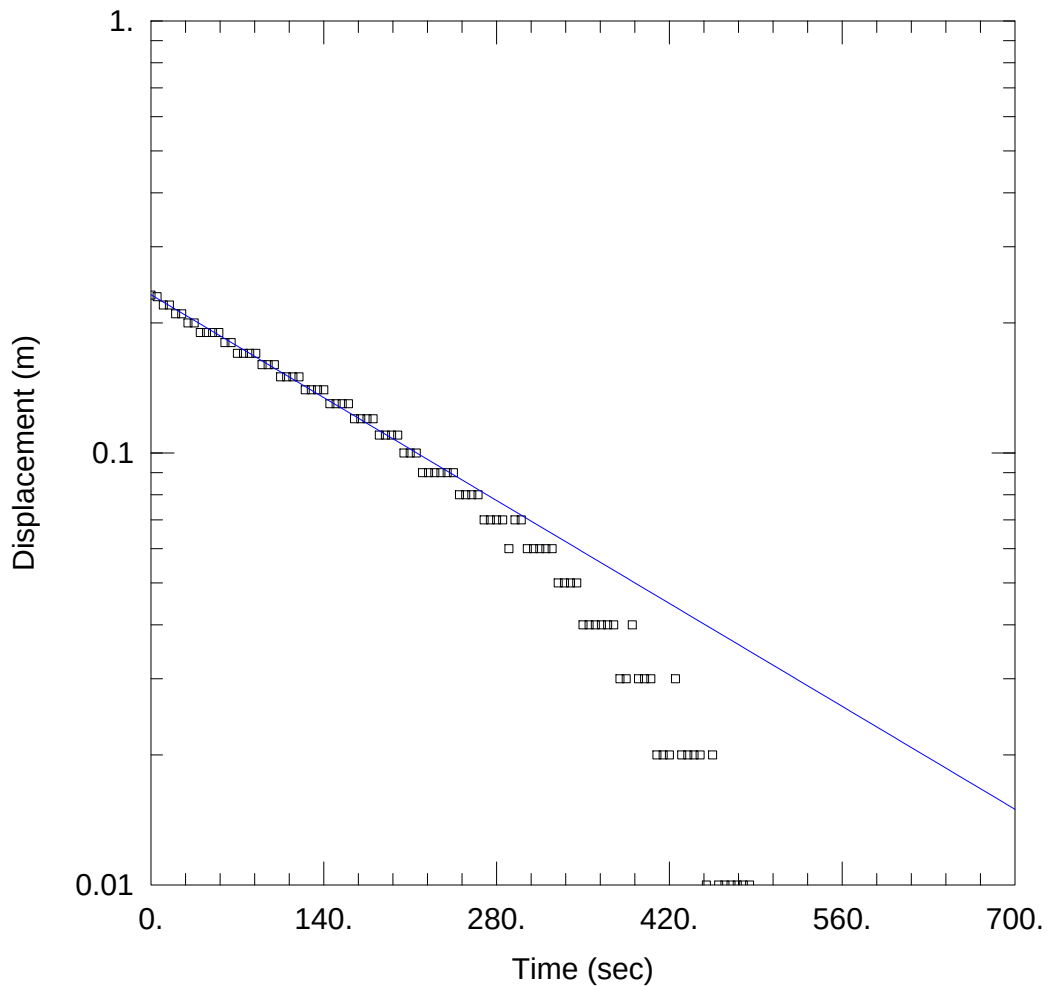
SOLUTION

Aquifer Model: Unconfined

Solution Method: Bouwer-Rice

$K = 0.0006464$ cm/sec

$y_0 = 0.8725$ m



WELL TEST ANALYSIS

Data Set: N:\...MW12-12_LoggerData.aqt

Date: 12/13/12

Time: 14:50:46

PROJECT INFORMATION

Company: Golder Associates

Client: Orillia Historic Waste Sites

Project: 11-1170-0079

Location: Orillia

Test Well: MW12-12

Test Date: 11-Sept-2012

AQUIFER DATA

Saturated Thickness: 2.288 m

Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (New Well)

Initial Displacement: 0.232 m

Static Water Column Height: 0.902 m

Total Well Penetration Depth: 3.96 m

Screen Length: 3.05 m

Casing Radius: 0.0255 m

Well Radius: 0.0255 m

SOLUTION

Aquifer Model: Confined

Solution Method: Bouwer-Rice

K = 0.000212 cm/sec

y0 = 0.2324 m



APPENDIX J

Groundwater Elevations

Table J-1
Groundwater Elevations
Site X4108

Well ID	Ground Elevation (masl)	Monitoring Pipe Elevation (masl)	Depth to Bottom of Well (mbgs)	Base of Well Elevation (masl)	Top of Screen Elevation (masl)	Date	Depth to Groundwater (mbmp)	Depth to Groundwater (mbgs)	Groundwater Elevation (masl)
MW12-10	221.07	221.90	4.57	216.50	219.55	8/1/2012	2.97	2.14	218.93
						8/23/2012	3.00	2.17	218.90
						8/27/2012	3.04	2.20	218.87
						9/11/2012	3.08	2.25	218.82
GP12-10	221.07	221.92	2.29	218.78	220.31	8/23/2012	dry	dry	NA
						8/27/2012	dry	dry	NA
						9/11/2012	dry	dry	NA
						1/9/2013	2.28	2.12	219.64
GP12-11	221.74	222.55	3.81	217.93	220.98	8/23/2012	2.87	2.06	219.68
						8/27/2012	3.53	2.72	219.02
						9/11/2012	2.79	1.98	219.76
						1/9/2013	2.08	1.27	220.47
MW12-12	220.73	221.61	3.96	216.77	219.82	8/1/2012	3.10	2.22	218.51
						8/23/2012	2.96	2.08	218.65
						8/27/2012	3.01	2.13	218.60
						9/11/2012	3.06	2.18	218.55
GP12-12	220.73	221.74	2.59	218.14	219.67	8/23/2012	3.15	2.14	218.59
						8/27/2012	3.31	2.30	218.44
						9/11/2012	3.27	2.26	218.47
						1/9/2013	2.40	1.39	219.34
GP12-13	219.68	220.73	4.11	215.57	218.62	8/23/2012	1.82	0.77	218.91
						8/27/2012	2.16	1.12	218.57
						9/11/2012	1.87	0.82	218.86
						1/9/2013	1.63	0.58	219.10

Notes:
masl = metres above sea level
mbmp = metres below monitoring pipe
mbgs = metres below ground surface



APPENDIX K

Laboratory Certificates of Analysis - Soil

CLIENT NAME: GOLDER ASSOCIATES LTD.
121 COMMERCE PARK DRIVE, UNIT L
BARRIE, ON L4N8X1
(705) 722-4492

ATTENTION TO: Christi Groves

PROJECT NO: 11-1170-0079

AGAT WORK ORDER: 12T625192

SOIL ANALYSIS REVIEWED BY: Mike Muneswar, BSc (Chem), Senior Inorganic Analyst

TRACE ORGANICS REVIEWED BY: Jacky Takeuchi, BScH (Chem Eng), BSc (Bio), C.Chem, Laboratory Manager

DATE REPORTED: Aug 07, 2012

PAGES (INCLUDING COVER): 12

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*NOTES

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.



Certificate of Analysis

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE SAMPLED: Jul 27, 2012

DATE RECEIVED: Jul 30, 2012

DATE REPORTED: Aug 07, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	MW12-10-1 3565967	MW12-10-5 3565968	MW12-11-2 3565970	MW12-11-4 3565972
Antimony	µg/g	40	0.8	2.6	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	75	2	2	1
Barium	µg/g	670	2	68	50	336	58
Beryllium	µg/g	8	0.5	0.5	<0.5	1.4	<0.5
Boron	µg/g	120	5	7	6	8	5
Boron (Hot Water Soluble)	µg/g	2	0.10	0.30	<0.10	0.24	0.21
Cadmium	µg/g	1.9	0.5	0.6	<0.5	<0.5	<0.5
Chromium	µg/g	160	2	19	9	72	13
Cobalt	µg/g	80	0.5	16.4	3.4	15.2	3.8
Copper	µg/g	230	1	32	8	31	10
Lead	µg/g	120	1	152	4	10	4
Molybdenum	µg/g	40	0.5	1.8	<0.5	<0.5	<0.5
Nickel	µg/g	270	1	28	4	34	7
Selenium	µg/g	5.5	0.4	0.7	<0.4	<0.4	<0.4
Silver	µg/g	40	0.2	0.7	<0.2	0.3	<0.2
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4	<0.4
Uranium	µg/g	33	0.5	<0.5	<0.5	0.5	<0.5
Vanadium	µg/g	86	1	31	15	67	19
Zinc	µg/g	340	5	121	21	81	24
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2	<0.2
Cyanide	µg/g	0.051	0.040	<0.040	<0.040	<0.040	<0.040
Mercury	µg/g	3.9	0.10	0.15	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.497	0.093	0.155	0.153
Sodium Adsorption Ratio	NA	12	NA	4.55	0.135	0.264	0.381
pH, 2:1 CaCl2 Extraction	pH Units		NA	7.38	7.69	7.03	7.82

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(ICC) - Current

3565959-3565972 EC & SAR were determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio.

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Soil)

DATE SAMPLED: Jul 27, 2012

DATE RECEIVED: Jul 30, 2012

DATE REPORTED: Aug 07, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	MW12-10-5	MW12-11-2	MW12-11-4
				3565968	3565970	3565972
Dichlorodifluoromethane	µg/g	16	0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.55	0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g		0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.05	<0.05	<0.05	<0.05
Styrene	ug/g	34	0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.05	<0.05	<0.05	<0.05

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Soil)						
DATE SAMPLED: Jul 27, 2012		DATE RECEIVED: Jul 30, 2012		DATE REPORTED: Aug 07, 2012		SAMPLE TYPE: Soil
Parameter	Unit	G / S	RDL	MW12-10-5 3565968	MW12-11-2 3565970	MW12-11-4 3565972
o-Xylene	ug/g		0.05	<0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.05	<0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.05	<0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.05	<0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.05	<0.05	<0.05	<0.05
1,3-Dichloropropene	µg/g	0.059	0.04	<0.04	<0.04	<0.04
n-Hexane	µg/g	46	0.05	<0.05	<0.05	<0.05
Moisture Content	%		0.1	13.6	24.8	10.7
Surrogate	Unit	Acceptable Limits				
Toluene-d8	% Recovery	50-140		102	101	90
4-Bromofluorobenzene	% Recovery	50-140		92	89	89

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(ICC) - Current

3565959-3565972 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

Certified By:



Guideline Violation

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
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CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	GUIDEVALUE	RESULT
3565967	MW12-10-1	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Arsenic	18	75
3565967	MW12-10-1	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Lead	120	152

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Soil Analysis															
RPT Date: Aug 07, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1	3565972	< 0.8	< 0.8	0.0%	< 0.8	106%	70%	130%	87%	80%	120%	86%	70%	130%
Arsenic	1	3565972	1	2	NA	< 1	100%	70%	130%	113%	80%	120%	113%	70%	130%
Barium	1	3565972	58	62	6.7%	< 2	97%	70%	130%	103%	80%	120%	99%	70%	130%
Beryllium	1	3565972	< 0.5	< 0.5	0.0%	< 0.5	99%	70%	130%	112%	80%	120%	106%	70%	130%
Boron	1	3565972	5	6	18.2%	< 5	75%	70%	130%	109%	80%	120%	104%	70%	130%
Boron (Hot Water Soluble)	1	3565967	0.30	0.29	3.4%	< 0.10	99%	60%	140%	102%	70%	130%	95%	60%	140%
Cadmium	1	3565972	< 0.5	< 0.5	0.0%	< 0.5	103%	70%	130%	105%	80%	120%	103%	70%	130%
Chromium	1	3565972	13	13	0.0%	< 2	91%	70%	130%	107%	80%	120%	108%	70%	130%
Cobalt	1	3565972	3.8	4.0	5.1%	< 0.5	104%	70%	130%	108%	80%	120%	105%	70%	130%
Copper	1	3565972	10	11	9.5%	< 1	101%	70%	130%	109%	80%	120%	101%	70%	130%
Lead	1	3565972	4	4	0.0%	< 1	102%	70%	130%	99%	80%	120%	92%	70%	130%
Molybdenum	1	3565972	< 0.5	< 0.5	0.0%	< 0.5	101%	70%	130%	111%	80%	120%	109%	70%	130%
Nickel	1	3565972	7	7	0.0%	< 1	105%	70%	130%	106%	80%	120%	101%	70%	130%
Selenium	1	3565972	< 0.4	< 0.4	0.0%	< 0.4	95%	70%	130%	105%	80%	120%	103%	70%	130%
Silver	1	3565972	< 0.2	< 0.2	0.0%	< 0.2	71%	70%	130%	105%	80%	120%	102%	70%	130%
Thallium	1	3565972	< 0.4	< 0.4	0.0%	< 0.4	95%	70%	130%	108%	80%	120%	98%	70%	130%
Uranium	1	3565972	< 0.5	< 0.5	0.0%	< 0.5	99%	70%	130%	106%	80%	120%	101%	70%	130%
Vanadium	1	3565972	19	21	10.0%	< 1	92%	70%	130%	105%	80%	120%	107%	70%	130%
Zinc	1	3565972	24	26	8.0%	< 5	97%	70%	130%	110%	80%	120%	112%	70%	130%
Chromium VI	1	3565967	< 0.2	< 0.2	0.0%	< 0.2	92%	70%	130%	92%	80%	120%	94%	70%	130%
Cyanide	1	3565962	< 0.040	< 0.040	0.0%	< 0.040	93%	70%	130%	99%	80%	120%	95%	70%	130%
Mercury	1	3565972	< 0.10	< 0.10	0.0%	< 0.10	98%	70%	130%	95%	80%	120%	95%	70%	130%
Electrical Conductivity (2:1)	1	3565967	0.497	0.509	2.4%	< 0.005	96%	90%	110%	NA			NA		
Sodium Adsorption Ratio	1	3565967	4.55	4.75	4.2%	NA	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	1	3565967	7.38	7.36	0.3%		99%	90%	110%	NA			NA		

Comments: RPD Qualifier: Arsenic - NA signifies Not Applicable - The average for the sample and duplicate is less than 5X RDL, thus, lab's RPD acceptance criteria are not applicable.

Certified By:



Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Trace Organics Analysis

RPT Date: Aug 07, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	1		< 0.05	< 0.05	0.0%	< 0.05	82%	50%	140%	74%	50%	140%	75%	50%	140%
Vinyl Chloride	1		< 0.02	< 0.02	0.0%	< 0.02	87%	50%	140%	71%	50%	140%	89%	50%	140%
Bromomethane	1		< 0.05	< 0.05	0.0%	< 0.05	76%	50%	140%	90%	50%	140%	70%	50%	140%
Trichlorofluoromethane	1		< 0.05	< 0.05	0.0%	< 0.05	92%	50%	140%	95%	50%	140%	91%	50%	140%
Acetone	1		< 0.50	< 0.50	0.0%	< 0.50	80%	50%	140%	85%	50%	140%	91%	50%	140%
1,1-Dichloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	117%	50%	140%	108%	60%	130%	101%	50%	140%
Methylene Chloride	1		< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	110%	60%	130%	82%	50%	140%
Trans- 1,2-Dichloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	86%	50%	140%	95%	60%	130%	87%	50%	140%
Methyl tert-butyl Ether	1		< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	NA	60%	130%	NA	50%	140%
1,1-Dichloroethane	1		< 0.02	< 0.02	0.0%	< 0.02	89%	50%	140%	106%	60%	130%	76%	50%	140%
Methyl Ethyl Ketone	1		< 0.50	< 0.50	0.0%	< 0.50	81%	50%	140%	118%	50%	140%	97%	50%	140%
Cis- 1,2-Dichloroethylene	1		< 0.02	< 0.02	0.0%	< 0.02	90%	50%	140%	105%	60%	130%	95%	50%	140%
Chloroform	1		< 0.04	< 0.04	0.0%	< 0.04	97%	50%	140%	111%	60%	130%	92%	50%	140%
1,2-Dichloroethane	1		< 0.03	< 0.03	0.0%	< 0.03	105%	50%	140%	96%	60%	130%	101%	50%	140%
1,1,1-Trichloroethane	1		< 0.05	< 0.05	0.0%	< 0.05	92%	50%	140%	110%	60%	130%	100%	50%	140%
Carbon Tetrachloride	1		< 0.05	< 0.05	0.0%	< 0.05	97%	50%	140%	120%	60%	130%	98%	50%	140%
Benzene	1		< 0.02	< 0.02	0.0%	< 0.02	83%	50%	140%	94%	60%	130%	99%	50%	140%
1,2-Dichloropropane	1		< 0.03	< 0.03	0.0%	< 0.03	81%	50%	140%	94%	60%	130%	94%	50%	140%
Trichloroethylene	1		< 0.03	< 0.03	0.0%	< 0.03	86%	50%	140%	106%	60%	130%	104%	50%	140%
Bromodichloromethane	1		< 0.05	< 0.05	0.0%	< 0.05	92%	50%	140%	114%	60%	130%	111%	50%	140%
Methyl Isobutyl Ketone	1		< 0.50	< 0.50	0.0%	< 0.50	109%	50%	140%	97%	50%	140%	88%	50%	140%
1,1,2-Trichloroethane	1		< 0.04	< 0.04	0.0%	< 0.04	101%	50%	140%	102%	60%	130%	120%	50%	140%
Toluene	1		< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	100%	60%	130%	110%	50%	140%
Dibromochloromethane	1		< 0.05	< 0.05	0.0%	< 0.05	94%	50%	140%	109%	60%	130%	91%	50%	140%
Ethylene Dibromide	1		< 0.04	< 0.04	0.0%	< 0.04	118%	50%	140%	113%	60%	130%	88%	50%	140%
Tetrachloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	109%	50%	140%	94%	60%	130%	111%	50%	140%
1,1,1,2-Tetrachloroethane	1		< 0.04	< 0.04	0.0%	< 0.04	NA	50%	140%	103%	60%	130%	111%	50%	140%
Chlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	112%	50%	140%	99%	60%	130%	92%	50%	140%
Ethylbenzene	1		< 0.05	< 0.05	0.0%	< 0.05	118%	50%	140%	98%	60%	130%	91%	50%	140%
m & p-Xylene	1		< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	105%	60%	130%	109%	50%	140%
Bromoform	1		< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	115%	60%	130%	104%	50%	140%
Styrene	1		< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	96%	60%	130%	107%	50%	140%
1,1,2,2-Tetrachloroethane	1		< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	120%	60%	130%	85%	50%	140%
o-Xylene	1		< 0.05	< 0.05	0.0%	< 0.05	109%	50%	140%	113%	60%	130%	113%	50%	140%
1,3-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	110%	50%	140%	113%	60%	130%	110%	50%	140%
1,4-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	84%	50%	140%	115%	60%	130%	110%	50%	140%
1,2-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	103%	50%	140%	106%	60%	130%	105%	50%	140%
Xylene Mixture	1		< 0.05	< 0.05	0.0%	< 0.05	109%	50%	140%	113%	60%	130%	113%	50%	140%
1,3-Dichloropropene	1		< 0.04	< 0.04	0.0%	< 0.04	85%	50%	140%	119%	60%	130%	102%	50%	140%

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625192

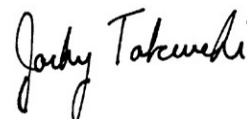
PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Trace Organics Analysis (Continued)

RPT Date: Aug 07, 2012			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	1		< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	75%	60%	130%	78%	50%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	1		< 0.05	< 0.05	0.0%	< 0.05	95%	50%	140%	69%	50%	140%	80%	50%	140%
Acenaphthylene	1		< 0.05	< 0.05	0.0%	< 0.05	101%	50%	140%	106%	50%	140%	75%	50%	140%
Acenaphthene	1		< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	108%	50%	140%	77%	50%	140%
Fluorene	1		< 0.05	< 0.05	0.0%	< 0.05	97%	50%	140%	105%	50%	140%	74%	50%	140%
Phenanthrene	1		< 0.05	< 0.05	0.0%	< 0.05	89%	50%	140%	101%	50%	140%	73%	50%	140%
Anthracene	1		< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	107%	50%	140%	77%	50%	140%
Fluoranthene	1		< 0.05	< 0.05	0.0%	< 0.05	97%	50%	140%	111%	50%	140%	84%	50%	140%
Pyrene	1		< 0.05	< 0.05	0.0%	< 0.05	98%	50%	140%	110%	50%	140%	83%	50%	140%
Benz(a)anthracene	1		< 0.05	< 0.05	0.0%	< 0.05	94%	50%	140%	104%	50%	140%	77%	50%	140%
Chrysene	1		< 0.05	< 0.05	0.0%	< 0.05	108%	50%	140%	113%	50%	140%	96%	50%	140%
Benzo(b)fluoranthene	1		< 0.05	< 0.05	0.0%	< 0.05	86%	50%	140%	84%	50%	140%	72%	50%	140%
Benzo(k)fluoranthene	1		< 0.05	< 0.05	0.0%	< 0.05	115%	50%	140%	102%	50%	140%	83%	50%	140%
Benzo(a)pyrene	1		< 0.05	< 0.05	0.0%	< 0.05	93%	50%	140%	81%	50%	140%	76%	50%	140%
Indeno(1,2,3-cd)pyrene	1		< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	98%	50%	140%	77%	50%	140%
Dibenz(a,h)anthracene	1		< 0.05	< 0.05	0.0%	< 0.05	95%	50%	140%	100%	50%	140%	84%	50%	140%
Benzo(g,h,i)perylene	1		< 0.05	< 0.05	0.0%	< 0.05	118%	50%	140%	102%	50%	140%	88%	50%	140%
2-and 1-methyl Naphthalene	1		< 0.05	< 0.05	0.0%	< 0.05	92%	50%	140%	98%	50%	140%	71%	50%	140%

Certified By:



Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Arsenic	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Barium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Beryllium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	EPA SW 846 6010C; MSA, Part 3, Ch.21	ICP/OES
Cadmium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Cobalt	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Copper	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Lead	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Molybdenum	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Nickel	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Selenium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Silver	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Thallium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Uranium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Vanadium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Zinc	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium VI	INOR-93-6029	SM 3500 B; MSA Part 3, Ch. 25	SPECTROPHOTOMETER
Cyanide	INOR-93-6052	MOE CN-3015 & E 3009 A; SM 4500 CN	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	McKeague 4.12, SM 2510 B	EC METER
Sodium Adsorption Ratio	INOR-93-6007	McKeague 4.12 & 3.26 & EPA SW-846 6010C	ICP/OES
pH, 2:1 CaCl ₂ Extraction	INOR-93-6031	MSA part 3 & SM 4500-H+ B	PH METER

Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluorene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Phenanthrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benz(a)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Chrysene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(a)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Moisture Content	Org 5506	EPA SW-846 3540 & 8270	BALANCE
Chrysene-d12	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Dichlorodifluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromomethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Acetone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chloroform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Benzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS

Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625192

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromoform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Styrene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
o-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Xylene Mixture	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
n-Hexane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene-d8	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Moisture Content	VOL-91-5002	MOE E3139	BALANCE

CLIENT NAME: GOLDER ASSOCIATES LTD.
121 COMMERCE PARK DRIVE, UNIT L
BARRIE, ON L4N8X1
(705) 722-4492

ATTENTION TO: Christi Groves

PROJECT NO: 11-1170-0079

AGAT WORK ORDER: 12T626528

SOIL ANALYSIS REVIEWED BY: Elizabeth Polakowska, MSc (Animal Sci), PhD (Agri Sci), Inorganic Lab Supervisor

TRACE ORGANICS REVIEWED BY: Jacky Takeuchi, BScH (Chem Eng), BSc (Bio), C.Chem, Laboratory Manager

DATE REPORTED: Aug 09, 2012

PAGES (INCLUDING COVER): 12

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*NOTES

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.



Certificate of Analysis

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - Metals & Inorganics (Soil)

DATE SAMPLED: Jul 31, 2012

DATE RECEIVED: Aug 01, 2012

DATE REPORTED: Aug 09, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	GP12-13-3	GP12-13-6	GP12-12-6
				3576498	3576506	3576510
Antimony	µg/g	40	0.8	<0.8	<0.8	<0.8
Arsenic	µg/g	18	1	2	<1	1
Barium	µg/g	670	2	66	49	95
Beryllium	µg/g	8	0.5	<0.5	<0.5	<0.5
Boron	µg/g	120	5	12	6	6
Boron (Hot Water Soluble)	µg/g	2	0.10	0.47	<0.10	0.10
Cadmium	µg/g	1.9	0.5	<0.5	<0.5	<0.5
Chromium	µg/g	160	2	4	10	17
Cobalt	µg/g	80	0.5	1.1	3.9	6.3
Copper	µg/g	230	1	14	12	16
Lead	µg/g	120	1	1	2	3
Molybdenum	µg/g	40	0.5	0.8	<0.5	<0.5
Nickel	µg/g	270	1	3	7	11
Selenium	µg/g	5.5	0.4	0.7	<0.4	<0.4
Silver	µg/g	40	0.2	<0.2	<0.2	<0.2
Thallium	µg/g	3.3	0.4	<0.4	<0.4	<0.4
Uranium	µg/g	33	0.5	<0.5	<0.5	<0.5
Vanadium	µg/g	86	1	10	23	33
Zinc	µg/g	340	5	23	20	31
Chromium VI	µg/g	8	0.2	<0.2	<0.2	<0.2
Cyanide	µg/g	0.051	0.040	0.329	<0.040	<0.040
Mercury	µg/g	3.9	0.10	<0.10	<0.10	<0.10
Electrical Conductivity (2:1)	mS/cm	1.4	0.005	0.109	0.124	0.178
Sodium Adsorption Ratio	NA	12	NA	0.414	0.673	1.21
pH, 2:1 CaCl2 Extraction	pH Units		NA	6.05	7.37	7.20

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(ICC) - Current

3576498 Note: Due to a high water-absorbing capacity of the sample the extraction EC & SAR determination was prepared at 5:1 ratio (5 parts DI water:1 part soil) instead of prescribed ratio 2:1. The results should be reviewed with discretion.
pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio.

3576506-3576510 EC & SAR were determined on the DI water extract obtained from the 2:1 leaching procedure (2 parts DI water:1 part soil). pH was determined on the 0.01M CaCl2 extract prepared at 2:1 ratio.

Certified By:

Elizabeth Potokowska



Certificate of Analysis

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - PAHs (Soil)

DATE SAMPLED: Jul 31, 2012

DATE RECEIVED: Aug 01, 2012

DATE REPORTED: Aug 09, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	GP12-13-3	GP12-13-6	GP12-12-6
				3576498	3576506	3576510
Naphthalene	µg/g	9.6	0.05	<0.05	<0.05	<0.05
Acenaphthylene	µg/g	0.15	0.05	<0.05	<0.05	<0.05
Acenaphthene	µg/g	21	0.05	<0.05	<0.05	<0.05
Fluorene	µg/g	62	0.05	0.05	<0.05	<0.05
Phenanthrene	µg/g	12	0.05	0.12	<0.05	<0.05
Anthracene	µg/g	0.67	0.05	0.05	<0.05	<0.05
Fluoranthene	µg/g	9.6	0.05	0.54	<0.05	<0.05
Pyrene	µg/g	96	0.05	0.43	<0.05	<0.05
Benz(a)anthracene	µg/g	0.96	0.05	0.65	<0.05	<0.05
Chrysene	µg/g	9.6	0.05	2.0	<0.05	<0.05
Benzo(b)fluoranthene	µg/g	0.96	0.05	0.35	<0.05	<0.05
Benzo(k)fluoranthene	µg/g	0.96	0.05	0.07	<0.05	<0.05
Benzo(a)pyrene	µg/g	0.3	0.05	0.48	<0.05	<0.05
Indeno(1,2,3-cd)pyrene	µg/g	0.76	0.05	0.09	<0.05	<0.05
Dibenz(a,h)anthracene	µg/g	0.1	0.05	0.09	<0.05	<0.05
Benzo(g,h,i)perylene	µg/g	9.6	0.05	0.10	<0.05	<0.05
2-and 1-methyl Naphthalene	µg/g	30	0.05	0.06	<0.05	<0.05
Moisture Content	%		0.1	89.4	20.9	19.2
Surrogate	Unit	Acceptable Limits				
Chrysene-d12	%	50-140		107	51	50

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(ICC) - Current

3576498 Results are based on the air weight of the soil.

Due to the high moisture content of the sample it was air dried prior to extraction.

Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.

3576506-3576510 Results are based on the dry weight of the soil.

Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.

Certified By:

Jacky Takewicki



Certificate of Analysis

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Soil)

DATE SAMPLED: Jul 31, 2012

DATE RECEIVED: Aug 01, 2012

DATE REPORTED: Aug 09, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	GP12-13-3		GP12-13-6		GP12-12-6
				3576498	RDL	3576506	3576510	3576510
Dichlorodifluoromethane	µg/g	16	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Vinyl Chloride	ug/g	0.032	0.10	<0.10	0.02	<0.02	<0.02	<0.02
Bromomethane	ug/g	0.05	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Trichlorofluoromethane	ug/g	4	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Acetone	ug/g	16	2.50	<2.50	0.50	<0.50	<0.50	<0.50
1,1-Dichloroethylene	ug/g	0.064	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Methylene Chloride	ug/g	1.6	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Trans- 1,2-Dichloroethylene	ug/g	1.3	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Methyl tert-butyl Ether	ug/g	1.6	0.25	<0.25	0.05	<0.05	<0.05	<0.05
1,1-Dichloroethane	ug/g	0.47	0.10	<0.10	0.02	<0.02	<0.02	<0.02
Methyl Ethyl Ketone	ug/g	70	2.50	<2.50	0.50	<0.50	<0.50	<0.50
Cis- 1,2-Dichloroethylene	ug/g	1.9	0.10	<0.10	0.02	<0.02	<0.02	<0.02
Chloroform	ug/g	0.47	0.20	<0.20	0.04	<0.04	<0.04	<0.04
1,2-Dichloroethane	ug/g	0.05	0.15	<0.15	0.03	<0.03	<0.03	<0.03
1,1,1-Trichloroethane	ug/g	6.1	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Carbon Tetrachloride	ug/g	0.21	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Benzene	ug/g	0.32	0.10	<0.10	0.02	<0.02	<0.02	<0.02
1,2-Dichloropropane	ug/g	0.16	0.15	<0.15	0.03	<0.03	<0.03	<0.03
Trichloroethylene	ug/g	0.55	0.15	<0.15	0.03	<0.03	<0.03	<0.03
Bromodichloromethane	ug/g	1.5	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Methyl Isobutyl Ketone	ug/g	31	2.50	<2.50	0.50	<0.50	<0.50	<0.50
1,1,2-Trichloroethane	ug/g	0.05	0.20	<0.20	0.04	<0.04	<0.04	<0.04
Toluene	ug/g	6.4	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Dibromochloromethane	ug/g	2.3	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Ethylene Dibromide	ug/g	0.05	0.20	<0.20	0.04	<0.04	<0.04	<0.04
Tetrachloroethylene	ug/g	1.9	0.25	<0.25	0.05	<0.05	<0.05	<0.05
1,1,1,2-Tetrachloroethane	ug/g	0.087	0.20	<0.20	0.04	<0.04	<0.04	<0.04
Chlorobenzene	ug/g	2.4	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Ethylbenzene	ug/g	1.1	0.25	<0.25	0.05	<0.05	<0.05	<0.05
m & p-Xylene	ug/g		0.25	<0.25	0.05	<0.05	<0.05	<0.05
Bromoform	ug/g	0.61	0.25	<0.25	0.05	<0.05	<0.05	<0.05
Styrene	ug/g	34	0.25	<0.25	0.05	<0.05	<0.05	<0.05
1,1,2,2-Tetrachloroethane	ug/g	0.05	0.25	<0.25	0.05	<0.05	<0.05	<0.05

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Soil)							
DATE SAMPLED: Jul 31, 2012		DATE RECEIVED: Aug 01, 2012		DATE REPORTED: Aug 09, 2012		SAMPLE TYPE: Soil	
Parameter	Unit	G / S	RDL	GP12-13-3		GP12-13-6	GP12-12-6
				3576498	RDL	3576506	3576510
o-Xylene	ug/g		0.25	<0.25	0.05	<0.05	<0.05
1,3-Dichlorobenzene	ug/g	9.6	0.25	<0.25	0.05	<0.05	<0.05
1,4-Dichlorobenzene	ug/g	0.2	0.25	<0.25	0.05	<0.05	<0.05
1,2-Dichlorobenzene	ug/g	1.2	0.25	<0.25	0.05	<0.05	<0.05
Xylene Mixture	ug/g	26	0.25	<0.25	0.05	<0.05	<0.05
1,3-Dichloropropene	µg/g	0.059	0.20	<0.20	0.04	<0.04	<0.04
n-Hexane	µg/g	46	0.25	<0.25	0.05	<0.05	<0.05
Moisture Content	%		0.5	79.6	0.1	11.9	18.6
Surrogate	Unit	Acceptable Limits					
Toluene-d8	% Recovery	50-140		116		119	104
4-Bromofluorobenzene	% Recovery	50-140		111		88	91

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(ICC) - Current

3576498 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil. Due to the high moisture content of the sample the reporting detection limit has been raised.

3576506-3576510 The sample was analysed using the high level technique. The sample was extracted using methanol, a small amount of the methanol extract was diluted in water and the purge & trap GC/MS analysis was performed. Results are based on the dry weight of the soil.

Certified By:



AGAT Laboratories

Guideline Violation

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	GUIDEVALUE	RESULT
3576498	GP12-13-3	T2(ICC) - Current	O. Reg. 153(511) - Metals & Inorganics (Soil)	Cyanide	0.051	0.329
3576498	GP12-13-3	T2(ICC) - Current	O. Reg. 153(511) - PAHs (Soil)	Benzo(a)pyrene	0.3	0.48

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T626528

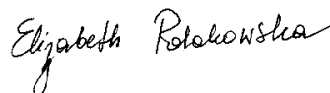
PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Soil Analysis															
RPT Date: Aug 09, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals & Inorganics (Soil)															
Antimony	1		< 0.8	< 0.8	0.0%	< 0.8	100%	70%	130%	84%	80%	120%	84%	70%	130%
Arsenic	1		4	4	0.0%	< 1	103%	70%	130%	111%	80%	120%	108%	70%	130%
Barium	1		64	61	4.8%	< 2	98%	70%	130%	100%	80%	120%	102%	70%	130%
Beryllium	1		0.6	0.6	0.0%	< 0.5	89%	70%	130%	102%	80%	120%	102%	70%	130%
Boron	1		5	5	0.0%	< 5	70%	70%	130%	106%	80%	120%	103%	70%	130%
Boron (Hot Water Soluble)	1	3576498	0.47	0.51	8.1%	< 0.10	96%	60%	140%	104%	70%	130%	101%	60%	140%
Cadmium	1		< 0.5	< 0.5	0.0%	< 0.5	99%	70%	130%	101%	80%	120%	102%	70%	130%
Chromium	1		17	16	6.1%	< 2	103%	70%	130%	107%	80%	120%	104%	70%	130%
Cobalt	1		8.4	8.4	0.0%	< 0.5	102%	70%	130%	105%	80%	120%	97%	70%	130%
Copper	1		20	20	0.0%	< 1	102%	70%	130%	108%	80%	120%	107%	70%	130%
Lead	1		12	11	8.7%	< 1	102%	70%	130%	103%	80%	120%	104%	70%	130%
Molybdenum	1		< 0.5	< 0.5	0.0%	< 0.5	100%	70%	130%	107%	80%	120%	109%	70%	130%
Nickel	1		16	15	6.5%	< 1	102%	70%	130%	105%	80%	120%	97%	70%	130%
Selenium	1		< 0.4	< 0.4	0.0%	< 0.4	92%	70%	130%	101%	80%	120%	99%	70%	130%
Silver	1		< 0.2	< 0.2	0.0%	< 0.2	78%	70%	130%	103%	80%	120%	105%	70%	130%
Thallium	1		< 0.4	< 0.4	0.0%	< 0.4	110%	70%	130%	97%	80%	120%	95%	70%	130%
Uranium	1		0.5	0.5	0.0%	< 0.5	95%	70%	130%	97%	80%	120%	98%	70%	130%
Vanadium	1		25	24	4.1%	< 1	91%	70%	130%	106%	80%	120%	104%	70%	130%
Zinc	1		56	54	3.6%	< 5	101%	70%	130%	115%	80%	120%	114%	70%	130%
Chromium VI	1		< 0.2	< 0.2	0.0%	< 0.2	97%	70%	130%	98%	80%	120%	100%	70%	130%
Cyanide	1		< 0.040	< 0.040	0.0%	< 0.040	104%	70%	130%	101%	80%	120%	79%	70%	130%
Mercury	1		< 0.10	< 0.10	0.0%	< 0.10	96%	70%	130%	97%	80%	120%	93%	70%	130%
Electrical Conductivity (2:1)	1	3576510	0.178	0.176	1.1%	< 0.005	94%	90%	110%	NA			NA		
Sodium Adsorption Ratio	1	3576510	1.21	1.21	0.0%	NA	NA			NA			NA		
pH, 2:1 CaCl2 Extraction	1		7.52	7.55	0.4%	NA	100%	90%	110%	NA			NA		

Comments: NA signifies Not Applicable.

Certified By:



Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Trace Organics Analysis

RPT Date: Aug 09, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Soil)															
Dichlorodifluoromethane	1		< 0.05	< 0.05	0.0%	< 0.05	78%	50%	140%	88%	50%	140%	93%	50%	140%
Vinyl Chloride	1		< 0.02	< 0.02	0.0%	< 0.02	70%	50%	140%	89%	50%	140%	83%	50%	140%
Bromomethane	1		< 0.05	< 0.05	0.0%	< 0.05	86%	50%	140%	110%	50%	140%	95%	50%	140%
Trichlorofluoromethane	1		< 0.05	< 0.05	0.0%	< 0.05	71%	50%	140%	87%	50%	140%	72%	50%	140%
Acetone	1		< 0.50	< 0.50	0.0%	< 0.50	112%	50%	140%	95%	50%	140%	107%	50%	140%
1,1-Dichloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	92%	60%	130%	90%	50%	140%
Methylene Chloride	1		< 0.05	< 0.05	0.0%	< 0.05	116%	50%	140%	105%	60%	130%	119%	50%	140%
Trans- 1,2-Dichloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	98%	50%	140%	102%	60%	130%	102%	50%	140%
Methyl tert-butyl Ether	1		< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	NA	60%	130%	NA	50%	140%
1,1-Dichloroethane	1		< 0.02	< 0.02	0.0%	< 0.02	99%	50%	140%	114%	60%	130%	105%	50%	140%
Methyl Ethyl Ketone	1		< 0.50	< 0.50	0.0%	< 0.50	105%	50%	140%	75%	50%	140%	78%	50%	140%
Cis- 1,2-Dichloroethylene	1		< 0.02	< 0.02	0.0%	< 0.02	106%	50%	140%	114%	60%	130%	103%	50%	140%
Chloroform	1		< 0.04	< 0.04	0.0%	< 0.04	109%	50%	140%	115%	60%	130%	116%	50%	140%
1,2-Dichloroethane	1		< 0.03	< 0.03	0.0%	< 0.03	120%	50%	140%	101%	60%	130%	106%	50%	140%
1,1,1-Trichloroethane	1		< 0.05	< 0.05	0.0%	< 0.05	89%	50%	140%	98%	60%	130%	89%	50%	140%
Carbon Tetrachloride	1		< 0.05	< 0.05	0.0%	< 0.05	83%	50%	140%	89%	60%	130%	85%	50%	140%
Benzene	1		< 0.02	< 0.02	0.0%	< 0.02	95%	50%	140%	99%	60%	130%	96%	50%	140%
1,2-Dichloropropane	1		< 0.03	< 0.03	0.0%	< 0.03	112%	50%	140%	121%	60%	130%	118%	50%	140%
Trichloroethylene	1		< 0.03	< 0.03	0.0%	< 0.03	101%	50%	140%	108%	60%	130%	97%	50%	140%
Bromodichloromethane	1		< 0.05	< 0.05	0.0%	< 0.05	112%	50%	140%	97%	60%	130%	113%	50%	140%
Methyl Isobutyl Ketone	1		< 0.50	< 0.50	0.0%	< 0.50	104%	50%	140%	93%	50%	140%	91%	50%	140%
1,1,2-Trichloroethane	1		< 0.04	< 0.04	0.0%	< 0.04	97%	50%	140%	102%	60%	130%	106%	50%	140%
Toluene	1		< 0.05	< 0.05	0.0%	< 0.05	119%	50%	140%	107%	60%	130%	92%	50%	140%
Dibromochloromethane	1		< 0.05	< 0.05	0.0%	< 0.05	118%	50%	140%	109%	60%	130%	107%	50%	140%
Ethylene Dibromide	1		< 0.04	< 0.04	0.0%	< 0.04	117%	50%	140%	113%	60%	130%	91%	50%	140%
Tetrachloroethylene	1		< 0.05	< 0.05	0.0%	< 0.05	92%	50%	140%	85%	60%	130%	93%	50%	140%
1,1,1,2-Tetrachloroethane	1		< 0.04	< 0.04	0.0%	< 0.04	NA	50%	140%	106%	60%	130%	112%	50%	140%
Chlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	107%	50%	140%	108%	60%	130%	102%	50%	140%
Ethylbenzene	1		< 0.05	< 0.05	0.0%	< 0.05	93%	50%	140%	96%	60%	130%	105%	50%	140%
m & p-Xylene	1		< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	92%	60%	130%	99%	50%	140%
Bromoform	1		< 0.05	< 0.05	0.0%	< 0.05	87%	50%	140%	100%	60%	130%	104%	50%	140%
Styrene	1		< 0.05	< 0.05	0.0%	< 0.05	113%	50%	140%	101%	60%	130%	102%	50%	140%
1,1,2,2-Tetrachloroethane	1		< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	93%	60%	130%	105%	50%	140%
o-Xylene	1		< 0.05	< 0.05	0.0%	< 0.05	104%	50%	140%	100%	60%	130%	112%	50%	140%
1,3-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	117%	50%	140%	95%	60%	130%	111%	50%	140%
1,4-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	111%	50%	140%	111%	60%	130%	106%	50%	140%
1,2-Dichlorobenzene	1		< 0.05	< 0.05	0.0%	< 0.05	111%	50%	140%	113%	60%	130%	117%	50%	140%
Xylene Mixture	1		< 0.05	< 0.05	0.0%	< 0.05	104%	50%	140%	100%	60%	130%	112%	50%	140%
1,3-Dichloropropene	1		< 0.04	< 0.04	0.0%	< 0.04	79%	50%	140%	94%	60%	130%	116%	50%	140%

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T626528

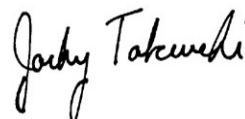
PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Trace Organics Analysis (Continued)

RPT Date: Aug 09, 2012			DUPLICATE				REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	1		< 0.05	< 0.05	0.0%	< 0.05	NA	50%	140%	78%	60%	130%	118%	50%	140%
O. Reg. 153(511) - PAHs (Soil)															
Naphthalene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	52%	50%	140%	67%	50%	140%
Acenaphthylene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	75%	50%	140%	117%	50%	140%
Acenaphthene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	122%	50%	140%	84%	50%	140%	107%	50%	140%
Fluorene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	96%	50%	140%	121%	50%	140%
Phenanthrene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	120%	50%	140%	96%	50%	140%	117%	50%	140%
Anthracene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	115%	50%	140%	116%	50%	140%
Fluoranthene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	93%	50%	140%	114%	50%	140%	90%	50%	140%
Pyrene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	87%	50%	140%	126%	50%	140%	93%	50%	140%
Benz(a)anthracene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	119%	50%	140%	88%	50%	140%	86%	50%	140%
Chrysene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	117%	50%	140%	95%	50%	140%
Benzo(b)fluoranthene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	93%	50%	140%	105%	50%	140%	101%	50%	140%
Benzo(k)fluoranthene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	100%	50%	140%	114%	50%	140%	110%	50%	140%
Benzo(a)pyrene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	85%	50%	140%	77%	50%	140%	91%	50%	140%
Indeno(1,2,3-cd)pyrene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	124%	50%	140%	109%	50%	140%	112%	50%	140%
Dibenz(a,h)anthracene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	112%	50%	140%	105%	50%	140%	113%	50%	140%
Benzo(g,h,i)perylene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	124%	50%	140%	114%	50%	140%	119%	50%	140%
2-and 1-methyl Naphthalene	1	3576510	< 0.05	< 0.05	0.0%	< 0.05	99%	50%	140%	65%	50%	140%	93%	50%	140%

Certified By:



Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Antimony	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Arsenic	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Barium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Beryllium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Boron (Hot Water Soluble)	MET-93-6104	EPA SW 846 6010C; MSA, Part 3, Ch.21	ICP/OES
Cadmium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Cobalt	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Copper	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Lead	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Molybdenum	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Nickel	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Selenium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Silver	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Thallium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Uranium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Vanadium	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Zinc	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Chromium VI	INOR-93-6029	SM 3500 B; MSA Part 3, Ch. 25	SPECTROPHOTOMETER
Cyanide	INOR-93-6052	MOE CN-3015 & E 3009 A; SM 4500 CN	TECHNICON AUTO ANALYZER
Mercury	MET-93-6103	EPA SW-846 3050B & 6020A	ICP-MS
Electrical Conductivity (2:1)	INOR-93-6036	McKeague 4.12, SM 2510 B	EC METER
Sodium Adsorption Ratio	INOR-93-6007	McKeague 4.12 & 3.26 & EPA SW-846 6010C	ICP/OES
pH, 2:1 CaCl ₂ Extraction	INOR-93-6031	MSA part 3 & SM 4500-H+ B	PH METER

Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Acenaphthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluorene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Phenanthrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benz(a)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Chrysene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(b)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(k)fluoranthene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(a)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Dibenz(a,h)anthracene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Benzo(g,h,i)perylene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Moisture Content	Org 5506	EPA SW-846 3540 & 8270	BALANCE
Chrysene-d12	ORG-91-5106	EPA SW846 3541 & 8270	GC/MS
Dichlorodifluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Vinyl Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromomethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Acetone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methylene Chloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trans- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl tert-butyl Ether	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Cis- 1,2-Dichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chloroform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Benzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Trichloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Bromodichloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Dibromochloromethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Chlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Ethylbenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
m & p-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS

Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T626528

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Bromoform	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Styrene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
o-Xylene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Xylene Mixture	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
n-Hexane	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Toluene-d8	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5002	EPA SW-846 5035 & 8260	(P&T)GC/MS
Moisture Content	VOL-91-5002	MOE E3139	BALANCE

CLIENT NAME: GOLDER ASSOCIATES LTD.
121 COMMERCE PARK DRIVE, UNIT L
BARRIE, ON L4N8X1
(705) 722-4492

ATTENTION TO: Christi Groves

PROJECT NO: 11-1170-0079

AGAT WORK ORDER: 12T625198

SOIL ANALYSIS REVIEWED BY: Mike Muneswar, BSc (Chem), Senior Inorganic Analyst

TRACE ORGANICS REVIEWED BY: Jacky Takeuchi, BScH (Chem Eng), BSc (Bio), C.Chem, Laboratory Manager

DATE REPORTED: Aug 07, 2012

PAGES (INCLUDING COVER): 9

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*NOTES

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 12T625198

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

Ignitability in Soil

DATE SAMPLED: Jul 27, 2012

DATE RECEIVED: Jul 30, 2012

DATE REPORTED: Aug 07, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	TCLP 2
Ignitability				3566048
				No

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard
3566048 N = No Ignition when flame was applied.
Wet soil sample with pebbles.

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 12T625198

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 558 Metals and Inorganics

DATE SAMPLED: Jul 27, 2012

DATE RECEIVED: Jul 30, 2012

DATE REPORTED: Aug 07, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	TCLP 2 3566048
Arsenic Leachate	mg/L	2.5	0.010	<0.010
Barium Leachate	mg/L	100	0.100	0.462
Boron Leachate	mg/L	500	0.050	<0.050
Cadmium Leachate	mg/L	0.5	0.010	<0.010
Chromium Leachate	mg/L	5.0	0.010	<0.010
Lead Leachate	mg/L	5.0	0.010	<0.010
Mercury Leachate	mg/L	0.1	0.01	<0.01
Selenium Leachate	mg/L	1.0	0.010	<0.010
Silver Leachate	mg/L	5.0	0.010	<0.010
Uranium Leachate	mg/L	10.0	0.050	<0.050
Fluoride Leachate	mg/L	150	0.05	0.08
Cyanide Leachate	mg/L	20.0	0.05	<0.05
(Nitrate + Nitrite) as N Leachate	mg/L	1000	0.70	<0.70

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Regulation 558

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 12T625198

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

ON Regulation 558 Benzo(a) pyrene

DATE SAMPLED: Jul 27, 2012

DATE RECEIVED: Jul 30, 2012

DATE REPORTED: Aug 07, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	TCLP 2
Benzo(a)pyrene	mg/L	0.001	0.001	<0.001

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Regulation 558
3566048 The sample was leached according to Regulation 558 protocol. Analysis was performed on the leachate.

Certified By:

Jacky Takewicki



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 12T625198

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

ON Regulation 558 PCBs

DATE SAMPLED: Jul 27, 2012

DATE RECEIVED: Jul 30, 2012

DATE REPORTED: Aug 07, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	TCLP 2 3566048
Polychlorinated Biphenyls	mg/L	0.3	0.005	<0.005
Surrogate	Unit	Acceptable Limits		
Decachlorobiphenyl	%	60-130		84

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Regulation 558
3566048 The soil sample was leached using the Regulation 558 procedure. Analysis was performed on the leachate.

Certified By:

Jacky Takewicki



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 12T625198

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

ON Regulation 558 VOCs

DATE SAMPLED: Jul 27, 2012

DATE RECEIVED: Jul 30, 2012

DATE REPORTED: Aug 07, 2012

SAMPLE TYPE: Soil

Parameter	Unit	G / S	RDL	TCLP 2 3566048
Vinyl Chloride	mg/L	0.2	0.030	<0.030
1,1 Dichloroethene	mg/L	1.4	0.020	<0.020
Dichloromethane	mg/L	5.0	0.030	<0.030
Methyl Ethyl Ketone	mg/L	200	0.090	<0.090
Chloroform	mg/L	10.0	0.020	<0.020
1,2-Dichloroethane	mg/L	0.5	0.020	<0.020
Carbon Tetrachloride	mg/L	0.5	0.020	<0.020
Benzene	mg/L	0.5	0.020	<0.020
Trichloroethene	mg/L	5.0	0.020	<0.020
Tetrachloroethene	mg/L	3.0	0.050	<0.050
Chlorobenzene	mg/L	8.0	0.010	<0.010
1,2-Dichlorobenzene	mg/L	20.0	0.010	<0.010
1,4-Dichlorobenzene	mg/L	0.5	0.010	<0.010
Surrogate	Unit	Acceptable Limits		
Toluene-d8	% Recovery	60-130	108	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to Reg. 558
3566048 Sample was prepared using Regulation 558 protocol and a zero headspace extractor.

Certified By:

Judy Takewicki

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625198

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Soil Analysis															
RPT Date: Aug 07, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 558 Metals and Inorganics															
Arsenic Leachate	1		< 0.010	< 0.010	0.0%	< 0.010	98%	90%	110%	105%	80%	120%	103%	70%	130%
Barium Leachate	1		0.805	0.834	3.5%	< 0.100	100%	90%	110%	90%	80%	120%	85%	70%	130%
Boron Leachate	1		0.061	0.066	7.9%	< 0.050	105%	90%	110%	95%	80%	120%	101%	70%	130%
Cadmium Leachate	1		< 0.010	< 0.010	0.0%	< 0.010	97%	90%	110%	99%	80%	120%	103%	70%	130%
Chromium Leachate	1		< 0.010	< 0.010	0.0%	< 0.010	97%	90%	110%	97%	80%	120%	99%	70%	130%
Lead Leachate	1		0.015	0.015	0.0%	< 0.010	109%	90%	110%	102%	80%	120%	97%	70%	130%
Mercury Leachate	1		< 0.01	< 0.01	0.0%	< 0.01	106%	90%	110%	92%	80%	120%	89%	70%	130%
Selenium Leachate	1		< 0.010	< 0.010	0.0%	< 0.010	99%	90%	110%	98%	80%	120%	95%	70%	130%
Silver Leachate	1		< 0.010	< 0.010	0.0%	< 0.010	94%	90%	110%	104%	80%	120%	102%	70%	130%
Uranium Leachate	1		< 0.050	< 0.050	0.0%	< 0.050	97%	90%	110%	102%	80%	120%	93%	70%	130%
Fluoride Leachate	1		0.22	0.23	4.4%	< 0.05	104%	90%	110%	99%	90%	110%	99%	70%	130%
Cyanide Leachate	1		< 0.05	< 0.05	0.0%	< 0.05	100%	90%	110%	103%	90%	110%	99%	70%	130%
(Nitrate + Nitrite) as N Leachate	1		< 0.70	< 0.70	0.0%	< 0.70	85%	80%	120%	93%	80%	120%	88%	70%	130%

Certified By:



Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625198

PROJECT NO: 11-1170-0079

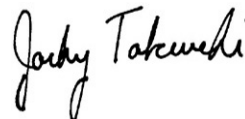
ATTENTION TO: Christi Groves

Trace Organics Analysis

RPT Date: Aug 07, 2012

RPT Date: Aug 07, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
ON Regulation 558 VOCs															
Vinyl Chloride	1		< 0.030	< 0.030	0.0%	< 0.030	82%	60%	140%	76%	60%	140%	93%	60%	140%
1,1 Dichloroethene	1		< 0.020	< 0.020	0.0%	< 0.020	114%	70%	130%	82%	70%	130%	97%	60%	140%
Dichloromethane	1		< 0.030	< 0.030	0.0%	< 0.030	90%	70%	130%	78%	70%	130%	96%	60%	140%
Methyl Ethyl Ketone	1		< 0.090	< 0.090	0.0%	< 0.090	80%	70%	130%	82%	70%	130%	98%	60%	140%
Chloroform	1		< 0.020	< 0.020	0.0%	< 0.020	104%	70%	130%	82%	70%	130%	98%	60%	140%
1,2-Dichloroethane	1		< 0.020	< 0.020	0.0%	< 0.020	83%	70%	130%	81%	70%	130%	96%	60%	140%
Carbon Tetrachloride	1		< 0.020	< 0.020	0.0%	< 0.020	97%	70%	130%	82%	70%	130%	97%	60%	140%
Benzene	1		< 0.020	< 0.020	0.0%	< 0.020	98%	70%	130%	86%	70%	130%	100%	60%	140%
Trichloroethene	1		< 0.020	< 0.020	0.0%	< 0.020	116%	70%	130%	76%	70%	130%	90%	60%	140%
Tetrachloroethene	1		< 0.050	< 0.050	0.0%	< 0.050	120%	70%	130%	85%	70%	130%	98%	60%	140%
Chlorobenzene	1		< 0.010	< 0.010	0.0%	< 0.010	103%	70%	130%	81%	70%	130%	95%	60%	140%
1,2-Dichlorobenzene	1		< 0.010	< 0.010	0.0%	< 0.010	109%	70%	130%	72%	70%	130%	87%	60%	140%
1,4-Dichlorobenzene	1		< 0.010	< 0.010	0.0%	< 0.010	118%	70%	130%	73%	70%	130%	88%	60%	140%
ON Regulation 558 Benzo(a) pyrene															
Benzo(a)pyrene	1		< 0.001	< 0.001	0.0%	< 0.001	98%	70%	130%	99%	70%	130%	85%	70%	130%
ON Regulation 558 PCBs															
Polychlorinated Biphenyls	1		<0.005	<0.005	0.0%	< 0.005	120%	60%	130%	96%	60%	130%	98%	60%	130%

Certified By:



Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T625198

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Soil Analysis			
Ignitability		EPA SW-846 1030	BURN MOLD
Arsenic Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Barium Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Boron Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Cadmium Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Chromium Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Lead Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Mercury Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Selenium Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Silver Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Uranium Leachate	MET-93-6103	EPA SW-846 1311 & 3010A & 6020A	ICP-MS
Fluoride Leachate	INOR-93-6018	EPA SW-846-1311 & SM4500-F- C	ION SELECTIVE ELECTRODE
Cyanide Leachate	INOR-93-6052	EPA SW-846-1311 & MOE 3015 & SM 4500 CN- I	TECHNICON AUTO ANALYZER
(Nitrate + Nitrite) as N Leachate	INOR-93-6053	EPA SW 846-1311 & SM 4500 - NO3- I	LACHAT FIA
Trace Organics Analysis			
Benzo(a)pyrene	ORG-91-5114	EPA SW846 3540 & 8270	GC/MS
Polychlorinated Biphenyls	ORG-91-5112	Regulation 558, EPA SW846 3510C/8082	GC/ECD
Decachlorobiphenyl	ORG-91-5112	EPA SW846 3510C/8082	GC/ECD
Vinyl Chloride	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
1,1 Dichloroethene	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Dichloromethane	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Chloroform	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Benzene	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Trichloroethene	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Tetrachloroethene	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Chlorobenzene	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS
Toluene-d8	VOL-91-5001	EPA SW-846 5230B & 8260	(P&T)GC/MS



APPENDIX L

Laboratory Certificates of Analysis - Groundwater

CLIENT NAME: GOLDER ASSOCIATES LTD.
121 COMMERCE PARK DRIVE, UNIT L
BARRIE, ON L4N8X1
(705) 722-4492

ATTENTION TO: Christi Groves

PROJECT NO: 11-1170-0079

AGAT WORK ORDER: 12T635314

TRACE ORGANICS REVIEWED BY: Inga Kuzmina, Organic Laboratory Supervisor

WATER ANALYSIS REVIEWED BY: Mike Muneswar, BSc (Chem), Senior Inorganic Analyst

DATE REPORTED: Sep 05, 2012

PAGES (INCLUDING COVER): 17

VERSION*: 2

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

***NOTES**

VERSION 2:

Revised Report: Including Alkalinity (December 21st 2012)

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.



Certificate of Analysis

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - PAHs (Water)

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

		SAMPLE DESCRIPTION:		MW12-2	MW12-5	MW12-6	MW12-10	MW12-12
		SAMPLE TYPE:		Water	Water	Water	Water	Water
		DATE SAMPLED:		8/27/2012	8/27/2012	8/27/2012	8/27/2012	8/27/2012
Parameter	Unit	G / S	RDL	3652347	3652353	3652367	3652382	3652397
Naphthalene	µg/L	11	0.20	0.27	<0.20	<0.20	<0.20	0.52
Acenaphthylene	µg/L	1	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Acenaphthene	µg/L	4.1	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Fluorene	µg/L	120	0.20	<0.20	<0.20	<0.20	0.33	0.45
Phenanthrene	µg/L	1	0.10	0.44	<0.10	<0.10	0.19	0.89
Anthracene	µg/L	2.4	0.10	0.14	<0.10	<0.10	<0.10	0.15
Fluoranthene	µg/L	0.41	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Pyrene	µg/L	4.1	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benz(a)anthracene	µg/L	1.0	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Chrysene	µg/L	0.1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(b)fluoranthene	µg/L	0.1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(k)fluoranthene	µg/L	0.1	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo(a)pyrene	µg/L	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.2	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Dibenz(a,h)anthracene	µg/L	0.2	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Benzo(g,h,i)perylene	µg/L	0.2	0.20	<0.20	<0.20	<0.20	<0.20	<0.20
2-and 1-methyl Naphthalene	µg/L	3.2	0.20	0.68	<0.20	<0.20	1.3	2.9
Surrogate	Unit	Acceptable Limits						
Chrysene-d12	%	50-140		103	110	97	98	104

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current
3652347-3652397 Note: The result for Benzo(b)Fluoranthene is the total of the Benzo(b)&(j)Fluoranthene isomers because the isomers co-elute on the GC column.

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Water) F1

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

		SAMPLE DESCRIPTION:		Dup1
		SAMPLE TYPE:		Water
		DATE SAMPLED:		8/27/2012
Parameter	Unit	G / S	RDL	3652415
F1 (C6 to C10)	µg/L		25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25

Comments: 3652415 RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current
The C6-C10 fraction is calculated using Toluene response factor.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.
Total C6-C50 results are corrected for BTEX and PAH contributions.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

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AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

		SAMPLE DESCRIPTION:		MW12-2	MW12-5	MW12-6	MW12-10	MW12-12
		SAMPLE TYPE:		Water	Water	Water	Water	Water
		DATE SAMPLED:		8/27/2012	8/27/2012	8/27/2012	8/27/2012	8/27/2012
Parameter	Unit	G / S	RDL	3652347	3652353	3652367	3652382	3652397
F1 (C6 to C10)	µg/L		25	<25	<25	<25	<25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25	<25	<25	<25	<25
F2 (C10 to C16)	µg/L	150	100	<100	<100	<100	<100	<100
F2 (C10 to C16) minus Naphthalene	µg/L	150	100	<100	<100	<100	<100	<100
F3 (C16 to C34)	µg/L	500	100	110	<100	<100	<100	<100
F3 (C16 to C34) minus PAHs	µg/L	500	100	110	<100	<100	<100	<100
F4 (C34 to C50)	µg/L	500	100	<100	<100	<100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L	500	500	NA	NA	NA	NA	NA
Surrogate	Unit	Acceptable Limits						
Terphenyl	%	60-140		110	89	89	98	76

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current

3652347-3652397 The C6-C10 fraction is calculated using Toluene response factor.

The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.

Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.

Total C6-C50 results are corrected for BTEX and PAH contributions.

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

nC6 and nC10 response factors are within 30% of Toluene response factor.

nC10, nC16 and nC34 response factors are within 10% of their average.

C50 response factor is within 70% of nC10 + nC16 nC34 average.

Linearity is within 15%.

Extraction and holding times were met for this sample.

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

		SAMPLE DESCRIPTION:		MW12-2		MW12-5	MW12-6	MW12-10	MW12-12		Dup1
		SAMPLE TYPE:		Water		Water	Water	Water	Water		Water
		DATE SAMPLED:		8/27/2012		8/27/2012	8/27/2012	8/27/2012	8/27/2012		8/27/2012
Parameter	Unit	G / S	RDL	3652347	RDL	3652353	3652367	3652382	3652397	RDL	3652415
Dichlorodifluoromethane	µg/L	590	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
Vinyl Chloride	µg/L	0.5	0.34	<0.34	0.17	<0.17	<0.17	<0.17	6.6	0.34	<0.34
Bromomethane	µg/L	0.89	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
Trichlorofluoromethane	µg/L	150	0.80	<0.80	0.40	<0.40	<0.40	<0.40	<0.40	0.80	<0.80
Acetone	µg/L	2700	2.0	<2.0	1.0	<1.0	<1.0	<1.0	<1.0	2.0	<2.0
1,1-Dichloroethylene	µg/L	1.6	0.60	<0.60	0.30	<0.30	<0.30	<0.30	<0.30	0.60	<0.60
Methylene Chloride	µg/L	50	0.60	<0.60	0.30	<0.30	<0.30	<0.30	<0.30	0.60	<0.60
trans- 1,2-Dichloroethylene	µg/L	1.6	0.40	<0.40	0.20	<0.20	<0.20	<0.20	0.38	0.40	<0.40
Methyl tert-butyl ether	µg/L	15	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
1,1-Dichloroethane	µg/L	5	0.60	<0.60	0.30	<0.30	<0.30	<0.30	<0.30	0.60	<0.60
Methyl Ethyl Ketone	µg/L	1800	2.0	<2.0	1.0	<1.0	<1.0	<1.0	<1.0	2.0	<2.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.40	<0.40	0.20	<0.20	<0.20	<0.20	3.7	0.40	<0.40
Chloroform	µg/L	2.4	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
1,2-Dichloroethane	µg/L	1.6	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
1,1,1-Trichloroethane	µg/L	200	0.60	<0.60	0.30	<0.30	<0.30	<0.30	<0.30	0.60	<0.60
Carbon Tetrachloride	µg/L	0.79	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
Benzene	µg/L	5.0	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
1,2-Dichloropropane	µg/L	5	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
Trichloroethylene	µg/L	1.6	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
Bromodichloromethane	µg/L	16	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
Methyl Isobutyl Ketone	µg/L	640	2.0	<2.0	1.0	<1.0	<1.0	<1.0	<1.0	2.0	<2.0
1,1,2-Trichloroethane	µg/L	4.7	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
Toluene	µg/L	24	0.40	<0.40	0.20	<0.20	<0.20	0.41	<0.20	0.40	<0.40
Dibromochloromethane	µg/L	25	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20
Ethylene Dibromide	µg/L	0.2	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20
Tetrachloroethylene	µg/L	1.6	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20
Chlorobenzene	µg/L	30	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20
Ethylbenzene	µg/L	2.4	0.20	<0.20	0.10	<0.10	<0.10	0.12	<0.10	0.20	<0.20
m & p-Xylene	µg/L		0.40	<0.40	0.20	<0.20	<0.20	0.28	<0.20	0.40	<0.40
Bromoform	µg/L	25	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

SAMPLE DESCRIPTION:				MW12-2		MW12-5	MW12-6	MW12-10	MW12-12		Dup1
SAMPLE TYPE:				Water		Water	Water	Water	Water		Water
DATE SAMPLED:				8/27/2012		8/27/2012	8/27/2012	8/27/2012	8/27/2012		8/27/2012
Parameter	Unit	G / S	RDL	3652347	RDL	3652353	3652367	3652382	3652397	RDL	3652415
Styrene	µg/L	5.4	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20
1,1,2,2-Tetrachloroethane	µg/L	1	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20
o-Xylene	µg/L		0.20	<0.20	0.10	<0.10	<0.10	0.12	<0.10	0.20	<0.20
1,3-Dichlorobenzene	µg/L	59	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20
1,4-Dichlorobenzene	µg/L	1	0.20	<0.20	0.10	<0.10	<0.10	0.64	<0.10	0.20	<0.20
1,2-Dichlorobenzene	µg/L	3	0.20	<0.20	0.10	<0.10	<0.10	<0.10	<0.10	0.20	<0.20
1,3-Dichloropropene	µg/L	0.5	0.60	<0.60	0.30	<0.30	<0.30	<0.30	<0.30	0.60	<0.60
Xylene Mixture	µg/L	300	0.40	<0.40	0.20	<0.20	<0.20	0.40	<0.20	0.40	<0.40
n-Hexane	µg/L	51	0.40	<0.40	0.20	<0.20	<0.20	<0.20	<0.20	0.40	<0.40
Surrogate	Unit	Acceptable Limits									
Toluene-d8	% Recovery	50-140		82		81	81	81	82		83
4-Bromofluorobenzene	% Recovery	50-140		86		80	86	95	98		100

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

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O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

Parameter	Unit	SAMPLE DESCRIPTION:		FieldBlank	TripBlank
		SAMPLE TYPE:		Water	Water
		DATE SAMPLED:		8/27/2012	8/22/2012
		G / S	RDL	3652425	3652429
Dichlorodifluoromethane	µg/L	590	0.20	<0.20	<0.20
Vinyl Chloride	µg/L	0.5	0.17	<0.17	<0.17
Bromomethane	µg/L	0.89	0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	150	0.40	<0.40	<0.40
Acetone	µg/L	2700	1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	<0.30	<0.30
Methylene Chloride	µg/L	50	0.30	<0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20	<0.20
Methyl tert-butyl ether	µg/L	15	0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L	5	0.30	<0.30	<0.30
Methyl Ethyl Ketone	µg/L	1800	1.0	<1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20	<0.20
Chloroform	µg/L	2.4	0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200	0.30	<0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	<0.20	<0.20
Benzene	µg/L	5.0	0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5	0.20	<0.20	<0.20
Trichloroethylene	µg/L	1.6	0.20	<0.20	<0.20
Bromodichloromethane	µg/L	16	0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L	640	1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	<0.20	<0.20
Toluene	µg/L	24	0.20	<0.20	<0.20
Dibromochloromethane	µg/L	25	0.10	<0.10	<0.10
Ethylene Dibromide	µg/L	0.2	0.10	<0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.10	<0.10	<0.10
Chlorobenzene	µg/L	30	0.10	<0.10	<0.10
Ethylbenzene	µg/L	2.4	0.10	<0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20	<0.20
Bromoform	µg/L	25	0.10	<0.10	<0.10

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Certificate of Analysis

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

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ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Water)

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

		SAMPLE DESCRIPTION:		FieldBlank	TripBlank
		SAMPLE TYPE:		Water	Water
		DATE SAMPLED:		8/27/2012	8/22/2012
Parameter	Unit	G / S	RDL	3652425	3652429
Styrene	µg/L	5.4	0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	1	0.10	<0.10	<0.10
o-Xylene	µg/L		0.10	<0.10	<0.10
1,3-Dichlorobenzene	µg/L	59	0.10	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	1	0.10	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	3	0.10	<0.10	<0.10
1,3-Dichloropropene	µg/L	0.5	0.30	<0.30	<0.30
Xylene Mixture	µg/L	300	0.20	<0.20	<0.20
n-Hexane	µg/L	51	0.20	<0.20	<0.20
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140		98	99
4-Bromofluorobenzene	% Recovery	50-140		89	87

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current
3652347 Dilution factor=2
The sample was diluted because it was foamy. The reporting detection limit has been corrected for the dilution factor used.
3652415 Dilution factor=2
The sample was diluted because it was foamy. The reporting detection limit has been corrected for the dilution factor used.

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

Inorganic Chemistry (Water) - Revised Final Report

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

		SAMPLE DESCRIPTION:		MW12-2	MW12-5	MW12-6	MW12-10	MW12-12	Dup1
		SAMPLE TYPE:		Water	Water	Water	Water	Water	Water
		DATE SAMPLED:		8/27/2012	8/27/2012	8/27/2012	8/27/2012	8/27/2012	8/27/2012
Parameter	Unit	G / S	RDL	3652347	3652353	3652367	3652382	3652397	3652415
Mercury	µg/L	0.29	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chromium VI	µg/L	25	5	<5	<5	<5	<5	<5	<5
Cyanide	µg/L	66	2	<2	2	4	<2	<2	<2
Sodium	µg/L	490000	500	92600	26400	41500	8320	84700	93700
Chloride	µg/L	790000	100	73700	3030	33100	15900	37200	74900
Nitrate as N	µg/L		50	<50	<50	<50	<50	<50	<50
Nitrite as N	µg/L		50	<50	<50	<50	<50	<50	<50
Electrical Conductivity	uS/cm		2	1650	824	742	800	1070	1670
pH	pH Units		NA	7.92	7.92	7.98	7.93	7.91	8.01
Sodium Adsorption Ratio				1.62	0.547	0.973	0.164	1.74	1.63
Calcium	µg/L		50	205000	120000	103000	149000	144000	208000
Magnesium	µg/L		50	24300	33800	20800	26800	20900	24700
Ammonia as N	µg/L		20	49800	1020	289	1330	3990	44400
Potassium	µg/L		50	20900	4920	3470	2680	3690	21200
Sulphate	µg/L		100	3750	66100	52200	21900	19800	3880
Alkalinity (as CaCO3)	mg/L		5	835	417	305	416	541	838

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current
3652347 Revised Dec 21, 2012.
Revision: This report replaces the Certificate of Analysis issued on SEp 05, 2012 - Values for Alkalinity are included in this report.

Certified By:



Certificate of Analysis

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - Metals (Abbrev) (Water)

DATE RECEIVED: 2012-08-28

DATE REPORTED: 2012-09-05

		SAMPLE DESCRIPTION:		MW12-2	MW12-5	MW12-6	MW12-10	MW12-12	Dup1
		SAMPLE TYPE:		Water	Water	Water	Water	Water	Water
		DATE SAMPLED:		8/27/2012	8/27/2012	8/27/2012	8/27/2012	8/27/2012	8/27/2012
Parameter	Unit	G / S	RDL	3652347	3652353	3652367	3652382	3652397	3652415
Barium	µg/L	1000	2.0	402	227	126	170	199	406
Beryllium	µg/L	4.0	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron	µg/L	5000	10.0	1150	186	74.5	43.3	55.8	1160
Cadmium	µg/L	2.7	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium	µg/L	50	2.0	2.7	<2.0	<2.0	<2.0	<2.0	<2.0
Cobalt	µg/L	3.8	0.5	17.7	5.5	4.3	2.8	19.3	17.3
Copper	µg/L	87	1.0	2.9	3.5	2.3	1.1	<1.0	3.3
Lead	µg/L	10	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.5
Molybdenum	µg/L	70	0.5	2.2	6.6	4.0	1.3	2.5	2.2
Nickel	µg/L	100	1.0	22.1	7.2	5.1	5.6	10.7	22.2
Silver	µg/L	1.5	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Thallium	µg/L	2	0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Uranium	µg/L	20	0.5	1.5	8.2	4.4	3.8	2.8	1.6
Vanadium	µg/L	6.2	0.4	0.5	0.6	0.8	0.4	1.0	0.5
Zinc	µg/L	1100	5.0	13.9	<5.0	<5.0	<5.0	<5.0	20.9

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current

Certified By:



Guideline Violation

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	GUIDEVALUE	RESULT
3652347	MW12-2	T2(PGW) - Current	O. Reg. 153(511) - Metals (Abbrev) (Water)	Cobalt	3.8	17.7
3652353	MW12-5	T2(PGW) - Current	O. Reg. 153(511) - Metals (Abbrev) (Water)	Cobalt	3.8	5.5
3652367	MW12-6	T2(PGW) - Current	O. Reg. 153(511) - Metals (Abbrev) (Water)	Cobalt	3.8	4.3
3652397	MW12-12	T2(PGW) - Current	O. Reg. 153(511) - Metals (Abbrev) (Water)	Cobalt	3.8	19.3
3652397	MW12-12	T2(PGW) - Current	O. Reg. 153(511) - VOCs (Water)	Vinyl Chloride	0.5	6.6
3652397	MW12-12	T2(PGW) - Current	O. Reg. 153(511) - VOCs (Water)	cis- 1,2-Dichloroethylene	1.6	3.7
3652415	Dup1	T2(PGW) - Current	O. Reg. 153(511) - Metals (Abbrev) (Water)	Cobalt	3.8	17.3

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Trace Organics Analysis

RPT Date: Sep 05, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Water)															
Dichlorodifluoromethane	1		< 0.20	< 0.20	0.0%	< 0.20	84%	50%	140%	95%	50%	140%	93%	50%	140%
Vinyl Chloride	1		< 0.17	< 0.17	0.0%	< 0.17	91%	50%	140%	106%	50%	140%	105%	50%	140%
Bromomethane	1		< 0.20	< 0.20	0.0%	< 0.20	93%	50%	140%	108%	50%	140%	91%	50%	140%
Trichlorofluoromethane	1		< 0.40	< 0.40	0.0%	< 0.40	84%	50%	140%	99%	50%	140%	97%	50%	140%
Acetone	1		< 1.0	< 1.0	0.0%	< 1.0	119%	50%	140%	108%	50%	140%	118%	50%	140%
1,1-Dichloroethylene	1		< 0.30	< 0.30	0.0%	< 0.30	106%	50%	140%	101%	60%	130%	104%	50%	140%
Methylene Chloride	1		< 0.30	< 0.30	0.0%	< 0.30	108%	50%	140%	107%	60%	130%	88%	50%	140%
trans- 1,2-Dichloroethylene	1		< 0.20	< 0.20	0.0%	< 0.20	97%	50%	140%	101%	60%	130%	96%	50%	140%
Methyl tert-butyl ether	1		< 0.20	< 0.20	0.0%	< 0.20	109%	50%	140%	108%	60%	130%	107%	50%	140%
1,1-Dichloroethane	1		< 0.30	< 0.30	0.0%	< 0.30	110%	50%	140%	106%	60%	130%	96%	50%	140%
Methyl Ethyl Ketone	1		< 1.0	< 1.0	0.0%	< 1.0	NA	50%	140%	107%	50%	140%	100%	50%	140%
cis- 1,2-Dichloroethylene	1		< 0.20	< 0.20	0.0%	< 0.20	91%	50%	140%	104%	60%	130%	94%	50%	140%
Chloroform	1		< 0.20	< 0.20	0.0%	< 0.20	105%	50%	140%	106%	60%	130%	98%	50%	140%
1,2-Dichloroethane	1		< 0.20	< 0.20	0.0%	< 0.20	110%	50%	140%	109%	60%	130%	104%	50%	140%
1,1,1-Trichloroethane	1		< 0.30	< 0.30	0.0%	< 0.30	100%	50%	140%	102%	60%	130%	94%	50%	140%
Carbon Tetrachloride	1		< 0.20	< 0.20	0.0%	< 0.20	99%	50%	140%	102%	60%	130%	96%	50%	140%
Benzene	1		< 0.20	< 0.20	0.0%	< 0.20	115%	50%	140%	105%	60%	130%	98%	50%	140%
1,2-Dichloropropane	1		< 0.20	< 0.20	0.0%	< 0.20	107%	50%	140%	107%	60%	130%	100%	50%	140%
Trichloroethylene	1		< 0.20	< 0.20	0.0%	< 0.20	105%	50%	140%	103%	60%	130%	96%	50%	140%
Bromodichloromethane	1		< 0.20	< 0.20	0.0%	< 0.20	112%	50%	140%	104%	60%	130%	100%	50%	140%
Methyl Isobutyl Ketone	1		< 1.0	< 1.0	0.0%	< 1.0	79%	50%	140%	97%	50%	140%	98%	50%	140%
1,1,2-Trichloroethane	1		< 0.20	< 0.20	0.0%	< 0.20	110%	50%	140%	95%	60%	130%	90%	50%	140%
Toluene	1		< 0.20	< 0.20	0.0%	< 0.20	95%	50%	140%	88%	60%	130%	84%	50%	140%
Dibromochloromethane	1		< 0.10	< 0.10	0.0%	< 0.10	107%	50%	140%	92%	60%	130%	88%	50%	140%
Ethylene Dibromide	1		< 0.10	< 0.10	0.0%	< 0.10	105%	50%	140%	93%	60%	130%	88%	50%	140%
Tetrachloroethylene	1		< 0.20	< 0.20	0.0%	< 0.20	88%	50%	140%	86%	60%	130%	79%	50%	140%
1,1,1,2-Tetrachloroethane	1		< 0.10	< 0.10	0.0%	< 0.10	NA	50%	140%	88%	60%	130%	84%	50%	140%
Chlorobenzene	1		< 0.10	< 0.10	0.0%	< 0.10	97%	50%	140%	89%	60%	130%	84%	50%	140%
Ethylbenzene	1		< 0.10	< 0.10	0.0%	< 0.10	94%	50%	140%	88%	60%	130%	83%	50%	140%
m & p-Xylene	1		< 0.20	< 0.20	0.0%	< 0.20	98%	50%	140%	89%	60%	130%	82%	50%	140%
Bromoform	1		< 0.10	< 0.10	0.0%	< 0.10	105%	50%	140%	92%	60%	130%	88%	50%	140%
Styrene	1		< 0.10	< 0.10	0.0%	< 0.10	94%	50%	140%	92%	60%	130%	85%	50%	140%
1,1,2,2-Tetrachloroethane	1		< 0.10	< 0.10	0.0%	< 0.10	NA	50%	140%	93%	60%	130%	94%	50%	140%
o-Xylene	1		< 0.10	< 0.10	0.0%	< 0.10	100%	50%	140%	89%	60%	130%	82%	50%	140%
1,3-Dichlorobenzene	1		< 0.10	< 0.10	0.0%	< 0.10	107%	50%	140%	91%	60%	130%	87%	50%	140%
1,4-Dichlorobenzene	1		< 0.10	< 0.10	0.0%	< 0.10	103%	50%	140%	93%	60%	130%	85%	50%	140%
1,2-Dichlorobenzene	1		< 0.10	< 0.10	0.0%	< 0.10	110%	50%	140%	92%	60%	130%	90%	50%	140%
1,3-Dichloropropene	1		< 0.30	< 0.30	0.0%	< 0.30	107%	50%	140%	100%	60%	130%	97%	50%	140%
Xylene Mixture	1		< 0.20	< 0.20	0.0%	< 0.20	99%	50%	140%	89%	60%	130%	82%	50%	140%



Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Trace Organics Analysis (Continued)

RPT Date: Sep 05, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	1		< 0.20	< 0.20	0.0%	< 0.20	NA	50%	140%	86%	60%	130%	71%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)															
F1 (C6 to C10)	1		< 25	< 25	0.0%	< 25	112%	60%	140%	94%	60%	140%	83%	60%	140%
F2 (C10 to C16)	1		< 100	< 100	0.0%	< 100	105%	60%	140%	72%	60%	140%	84%	60%	140%
F3 (C16 to C34)	1		< 100	< 100	0.0%	< 100	103%	60%	140%	98%	60%	140%	91%	60%	140%
F4 (C34 to C50)	1		< 100	< 100	0.0%	< 100	105%	60%	140%	88%	60%	140%	88%	60%	140%
O. Reg. 153(511) - PAHs (Water)															
Naphthalene	1		< 0.20	< 0.20	0.0%	< 0.20	77%	50%	140%	78%	50%	140%	72%	50%	140%
Acenaphthylene	1		< 0.20	< 0.20	0.0%	< 0.20	92%	50%	140%	90%	50%	140%	78%	50%	140%
Acenaphthene	1		< 0.20	< 0.20	0.0%	< 0.20	92%	50%	140%	89%	50%	140%	77%	50%	140%
Fluorene	1		< 0.20	< 0.20	0.0%	< 0.20	88%	50%	140%	90%	50%	140%	83%	50%	140%
Phenanthrene	1		< 0.10	< 0.10	0.0%	< 0.10	88%	50%	140%	96%	50%	140%	90%	50%	140%
Anthracene	1		< 0.10	< 0.10	0.0%	< 0.10	99%	50%	140%	105%	50%	140%	90%	50%	140%
Fluoranthene	1		< 0.20	< 0.20	0.0%	< 0.20	88%	50%	140%	99%	50%	140%	84%	50%	140%
Pyrene	1		< 0.20	< 0.20	0.0%	< 0.20	93%	50%	140%	92%	50%	140%	86%	50%	140%
Benz(a)anthracene	1		< 0.20	< 0.20	0.0%	< 0.20	105%	50%	140%	92%	50%	140%	86%	50%	140%
Chrysene	1		< 0.10	< 0.10	0.0%	< 0.10	120%	50%	140%	93%	50%	140%	96%	50%	140%
Benzo(b)fluoranthene	1		< 0.10	< 0.10	0.0%	< 0.10	95%	50%	140%	93%	50%	140%	85%	50%	140%
Benzo(k)fluoranthene	1		< 0.10	< 0.10	0.0%	< 0.10	129%	50%	140%	99%	50%	140%	114%	50%	140%
Benzo(a)pyrene	1		< 0.01	< 0.01	0.0%	< 0.01	121%	50%	140%	88%	50%	140%	89%	50%	140%
Indeno(1,2,3-cd)pyrene	1		< 0.20	< 0.20	0.0%	< 0.20	80%	50%	140%	73%	50%	140%	62%	50%	140%
Dibenz(a,h)anthracene	1		< 0.20	< 0.20	0.0%	< 0.20	79%	50%	140%	75%	50%	140%	72%	50%	140%
Benzo(g,h,i)perylene	1		< 0.20	< 0.20	0.0%	< 0.20	75%	50%	140%	73%	50%	140%	66%	50%	140%
2-and 1-methyl Naphthalene	1		< 0.20	< 0.20	0.0%	< 0.20	85%	50%	140%	80%	50%	140%	74%	50%	140%

Certified By:

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Water Analysis															
RPT Date: Sep 05, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper

O. Reg. 153(511) - Metals (Abbrev) (Water)

Barium	1	3652415	406	421	3.6%	< 2.0	110%	70%	130%	97%	80%	120%	96%	70%	130%
Beryllium	1	3652415	< 0.5	< 0.5	0.0%	< 0.5	110%	70%	130%	100%	80%	120%	101%	70%	130%
Boron	1	3652415	1160	1190	2.6%	< 10.0	103%	70%	130%	96%	80%	120%	97%	70%	130%
Cadmium	1	3652415	< 0.2	< 0.2	0.0%	< 0.2	100%	70%	130%	101%	80%	120%	114%	70%	130%
Chromium	1	3652415	< 2.0	< 2.0	0.0%	< 2.0	104%	70%	130%	100%	80%	120%	99%	70%	130%
Cobalt	1	3652415	17.3	17.1	1.2%	< 0.5	107%	70%	130%	101%	80%	120%	98%	70%	130%
Copper	1	3652415	3.3	3.3	0.0%	< 1.0	99%	70%	130%	94%	80%	120%	98%	70%	130%
Lead	1	3652415	0.5	0.5	0.0%	< 0.5	99%	70%	130%	101%	80%	120%	95%	70%	130%
Molybdenum	1	3652415	2.2	2.5	12.8%	< 0.5	95%	70%	130%	98%	80%	120%	99%	70%	130%
Nickel	1	3652415	22.2	22.6	1.8%	< 1.0	106%	70%	130%	100%	80%	120%	101%	70%	130%
Silver	1	3652415	< 0.2	< 0.2	0.0%	< 0.2	97%	70%	130%	110%	80%	120%	99%	70%	130%
Thallium	1	3652415	< 0.3	< 0.3	0.0%	< 0.3	100%	70%	130%	104%	80%	120%	97%	70%	130%
Uranium	1	3652415	1.6	1.6	0.0%	< 0.5	99%	70%	130%	97%	80%	120%	99%	70%	130%
Vanadium	1	3652415	0.5	0.6	18.2%	< 0.4	102%	70%	130%	100%	80%	120%	100%	70%	130%
Zinc	1	3652415	20.9	20.9	0.0%	< 5.0	105%	70%	130%	110%	80%	120%	100%	70%	130%

Inorganic Chemistry (Water) - Revised Final Report

Mercury	1	3652397	< 0.02	< 0.02	0.0%	< 0.02	101%	70%	130%	98%	80%	120%	95%	70%	130%
Chromium VI	1		< 5	< 5	0.0%	< 5	102%	70%	130%	104%	80%	120%	87%	70%	130%
Cyanide	1		< 2	< 2	0.0%	< 2	94%	70%	130%	99%	80%	120%	88%	70%	130%
Sodium	1	3652353	26400	26500	0.4%	< 500	96%	70%	130%	97%	80%	120%	103%	70%	130%
Chloride	1	3652353	3030	2950	2.7%	< 100	91%	70%	130%	96%	70%	130%	93%	70%	130%
Nitrate as N	1	3652353	< 50	< 50	0.0%	< 50	92%	70%	130%	96%	70%	130%	97%	70%	130%
Nitrite as N	1	3652353	< 50	< 50	0.0%	< 50	NA	70%	130%	99%	70%	130%	105%	70%	130%
Electrical Conductivity	1	3652415	1670	1660	0.6%	< 2	102%	90%	110%	NA			NA		
pH	1	3652415	8.01	8.02	0.1%	NA	100%	90%	110%	NA			NA		
Sodium Adsorption Ratio	1	3652353	0.547	0.546	0.0%	NA	NA	0%	0%	NA	0%	0%	NA	0%	0%
Calcium	1	3652353	120000	121000	0.8%	< 50	102%	90%	110%	104%	90%	110%	103%	70%	130%
Magnesium	1	3652353	33800	34100	0.9%	< 50	107%	90%	110%	108%	90%	110%	107%	70%	130%
Ammonia as N	1		99	87	12.9%	< 20	100%	90%	110%	99%	90%	110%	110%	80%	120%
Potassium	1	3652353	4920	4980	1.2%	< 50	100%	90%	110%	101%	90%	110%	98%	70%	130%
Sulphate	1	3652353	66100	66500	0.6%	< 100	93%	90%	110%	95%	90%	110%	97%	80%	120%
Alkalinity (as CaCO3)	1	3652415	838	836	0.2%	< 5	96%	80%	120%	NA	0%	0%		0%	0%

Comments: NA - Not Applicable.

Certified By:



Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Acenaphthylene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Acenaphthene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Fluorene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Phenanthrene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Anthracene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Fluoranthene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Pyrene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benz(a)anthracene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Chrysene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benzo(b)fluoranthene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benzo(k)fluoranthene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benzo(a)pyrene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Dibenz(a,h)anthracene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benzo(g,h,i)perylene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Chrysene-d12	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
F1 (C6 to C10)	VOL-91-5010	MOE PHC E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	MOE PHC E3421	(P&T)GC/FID
F1 (C6 to C10)	VOL-91-5010	MOE PHC E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	MOE PHC E3421	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5010	MOE PHC E3421	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5010	MOE PHC E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	MOE PHC E3421	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5010	MOE PHC E3421	GC/FID
F4 (C34 to C50)	VOL -91- 5010	MOE PHC- E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	MOE PHC E3421	BALANCE
Terphenyl	VOL-91-5010		GC/FID
Dichlorodifluoromethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Bromomethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Acetone	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
trans- 1,2-Dichloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Chloroform	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Carbon Tetrachloride	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Benzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS

Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Methyl Isobutyl Ketone	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Toluene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Chlorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Bromoform	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Styrene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
o-Xylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Xylene Mixture	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
n-Hexane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Toluene-d8	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS

Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T635314

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Mercury	MET-93-6100	EPA SW-846 7470 & 245.1	CVAAS
Chromium VI	INOR-93-6034	SM 3500-Cr B	SPECTROPHOTOMETER
Cyanide	INOR-93-6052	MOE METHOD CN- 3015 & SM 4500 CN- I	TECHNICON AUTO ANALYZER
Sodium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES
Chloride	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Nitrate as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Nitrite as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Electrical Conductivity	INOR-93-6000	SM 2510 B	PC TITRATE
pH	INOR-93-6000	SM 4500-H+ B	PC TITRATE
Sodium Adsorption Ratio			CALCULATION
Calcium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES
Magnesium	MET-93-6105	EPA SW 846-6010C & 200.7	ICP/OES
Ammonia as N	INOR-93-6002	AQ2 EPA-103A & SM 4500 NH3-F	AQ-2 DISCRETE ANALYZER
Potassium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES
Sulphate	INOR 1004	SM 4110 B	ION CHROMATOGRAPH
Alkalinity (as CaCO ₃)	INOR-93-6000	SM 2320 B	PC TITRATE
Barium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Beryllium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Boron	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Cadmium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Chromium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Cobalt	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Copper	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Lead	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Molybdenum	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Nickel	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Silver	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Thallium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Uranium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Vanadium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Zinc	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS

CLIENT NAME: GOLDER ASSOCIATES LTD.
121 COMMERCE PARK DRIVE, UNIT L
BARRIE, ON L4N8X1
(705) 722-4492

ATTENTION TO: Christi Groves

PROJECT NO: 11-1170-0079

AGAT WORK ORDER: 12T640741

TRACE ORGANICS REVIEWED BY: Inga Kuzmina, Organic Laboratory Supervisor

WATER ANALYSIS REVIEWED BY: Anthony Dapaah, PhD (Chem), Inorganic Lab Manager

DATE REPORTED: Sep 21, 2012

PAGES (INCLUDING COVER): 17

VERSION*: 1

Should you require any information regarding this analysis please contact your client services representative at (905) 712-5100

*NOTES

All samples will be disposed of within 30 days following analysis. Please contact the lab if you require additional sample storage time.



Certificate of Analysis

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - PAHs (Water)

DATE SAMPLED: Sep 11, 2012

DATE RECEIVED: Sep 12, 2012

DATE REPORTED: Sep 21, 2012

SAMPLE TYPE: Water

Parameter	Unit	G / S	RDL	MW12-10	MW12-12
				3698762	3698777
Naphthalene	µg/L	11	0.20	<0.20	<0.20
Acenaphthylene	µg/L	1	0.20	<0.20	<0.20
Acenaphthene	µg/L	4.1	0.20	<0.20	<0.20
Fluorene	µg/L	120	0.20	<0.20	0.20
Phenanthrene	µg/L	1	0.10	<0.10	0.33
Anthracene	µg/L	2.4	0.10	<0.10	<0.10
Fluoranthene	µg/L	0.41	0.20	<0.20	<0.20
Pyrene	µg/L	4.1	0.20	<0.20	<0.20
Benz(a)anthracene	µg/L	1.0	0.20	<0.20	<0.20
Chrysene	µg/L	0.1	0.10	<0.10	<0.10
Benzo(b)fluoranthene	µg/L	0.1	0.10	<0.10	<0.10
Benzo(k)fluoranthene	µg/L	0.1	0.10	<0.10	<0.10
Benzo(a)pyrene	µg/L	0.01	0.01	<0.01	<0.01
Indeno(1,2,3-cd)pyrene	µg/L	0.2	0.20	<0.20	<0.20
Dibenz(a,h)anthracene	µg/L	0.2	0.20	<0.20	<0.20
Benzo(g,h,i)perylene	µg/L	0.2	0.20	<0.20	<0.20
2-and 1-methyl Naphthalene	µg/L	3.2	0.20	<0.20	0.84
Surrogate	Unit	Acceptable Limits			
Chrysene-d12	%	50-140		72	66

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current

3698718-3698777 Note: The result for Benzo(b)Flouranthene is the total of the Benzo(b)&(j)Flouranthene isomers because the isomers co-elute on the GC column.

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

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TEL (905)712-5100
FAX (905)712-5122
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CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - PHCs F1 - F4 (-BTEX) (Water)

DATE SAMPLED: Sep 11, 2012		DATE RECEIVED: Sep 12, 2012		DATE REPORTED: Sep 21, 2012	SAMPLE TYPE: Water
Parameter	Unit	G / S	RDL	FieldBlank 3698792	
F1 (C6 to C10)	µg/L		25	<25	
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25	
F2 (C10 to C16)	µg/L	150	100	<100	
F3 (C16 to C34)	µg/L	500	100	<100	
F4 (C34 to C50)	µg/L	500	100	<100	
Gravimetric Heavy Hydrocarbons	µg/L	500	500	NA	
Surrogate	Unit	Acceptable Limits			
Terphenyl	%	60-140		78	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current

3698792

The C6-C10 fraction is calculated using Toluene response factor.
The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and nC34.
Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.
Total C6-C50 results are corrected for BTEX and PAH contributions.
This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.
nC6 and nC10 response factors are within 30% of Toluene response factor.
nC10, nC16 and nC34 response factors are within 10% of their average.
C50 response factor is within 70% of nC10 + nC16 nC34 average.
Linearity is within 15%.
Extraction and holding times were met for this sample.
Fractions 1-4 are quantified without the contribution of PAHs. Under Ontario Regulation 153, results are considered valid without determining the PAH contribution if not requested by the client.

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Certificate of Analysis

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)

DATE SAMPLED: Sep 11, 2012

DATE RECEIVED: Sep 12, 2012

DATE REPORTED: Sep 21, 2012

SAMPLE TYPE: Water

Parameter	Unit	G / S	RDL	MW12-10	MW12-12
				3698762	3698777
F1 (C6 to C10)	µg/L		25	<25	<25
F1 (C6 to C10) minus BTEX	µg/L	750	25	<25	<25
F2 (C10 to C16)	µg/L	150	100	<100	<100
F2 (C10 to C16) minus Naphthalene	µg/L	150	100	<100	<100
F3 (C16 to C34)	µg/L	500	100	<100	<100
F3 (C16 to C34) minus PAHs	µg/L	500	100	<100	<100
F4 (C34 to C50)	µg/L	500	100	<100	<100
Gravimetric Heavy Hydrocarbons	µg/L	500	500	NA	NA
Surrogate	Unit	Acceptable Limits			
Terphenyl	%	60-140		98	75

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current

3698718-3698777 The C6-C10 fraction is calculated using Toluene response factor.

The C10 - C16, C16 - C34, and C34 - C50 fractions are calculated using the average response factor for n-C10, n-C16, and n-C34.

Gravimetric Heavy Hydrocarbons are not included in the Total C16 - C50 and are only determined if the chromatogram of the C34 - C50 Hydrocarbons indicated that hydrocarbons >C50 are present.

Total C6-C50 results are corrected for BTEX and PAH contributions.

This method complies with the Reference Method for the CWS PHC and is validated for use in the laboratory.

n-C6 and n-C10 response factors are within 30% of Toluene response factor.

n-C10, n-C16 and n-C34 response factors are within 10% of their average.

C50 response factor is within 70% of n-C10 + n-C16 n-C34 average.

Linearity is within 15%.

Extraction and holding times were met for this sample.

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AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

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CANADA L4Z 1Y2
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FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Water)

DATE SAMPLED: Sep 06, 2012

DATE RECEIVED: Sep 12, 2012

DATE REPORTED: Sep 21, 2012

SAMPLE TYPE: Water

Parameter	Unit	G / S	RDL	MW12-10 3698762	MW12-12 3698777	FieldBlank 3698792
Dichlorodifluoromethane	µg/L	590	0.40	<0.20	<0.20	<0.20
Vinyl Chloride	µg/L	0.5	0.34	<0.17	7.1	<0.17
Bromomethane	µg/L	0.89	0.40	<0.20	<0.20	<0.20
Trichlorofluoromethane	µg/L	150	0.80	<0.40	<0.40	<0.40
Acetone	µg/L	2700	2.0	<1.0	<1.0	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.60	<0.30	<0.30	<0.30
Methylene Chloride	µg/L	50	0.60	<0.30	<0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.40	<0.20	0.48	<0.20
Methyl tert-butyl ether	µg/L	15	0.40	<0.20	<0.20	<0.20
1,1-Dichloroethane	µg/L	5	0.60	<0.30	<0.30	<0.30
Methyl Ethyl Ketone	µg/L	1800	2.0	<1.0	<1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.40	<0.20	4.3	<0.20
Chloroform	µg/L	2.4	0.40	<0.20	<0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.40	<0.20	<0.20	<0.20
1,1,1-Trichloroethane	µg/L	200	0.60	<0.30	<0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.40	<0.20	<0.20	<0.20
Benzene	µg/L	5.0	0.40	<0.20	<0.20	<0.20
1,2-Dichloropropane	µg/L	5	0.40	<0.20	<0.20	<0.20
Trichloroethylene	µg/L	1.6	0.40	<0.20	<0.20	<0.20
Bromodichloromethane	µg/L	16	0.40	<0.20	<0.20	<0.20
Methyl Isobutyl Ketone	µg/L	640	2.0	<1.0	<1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.40	<0.20	<0.20	<0.20
Toluene	µg/L	24	0.40	<0.20	<0.20	<0.20
Dibromochloromethane	µg/L	25	0.20	<0.10	<0.10	<0.10
Ethylene Dibromide	µg/L	0.2	0.20	<0.10	<0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.40	<0.20	<0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.20	<0.10	<0.10	<0.10
Chlorobenzene	µg/L	30	0.20	<0.10	<0.10	<0.10
Ethylbenzene	µg/L	2.4	0.20	0.12	<0.10	<0.10
m & p-Xylene	µg/L		0.40	0.23	<0.20	<0.20
Bromoform	µg/L	25	0.20	<0.10	<0.10	<0.10
Styrene	µg/L	5.4	0.20	<0.10	<0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	1	0.20	<0.10	<0.10	<0.10

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AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Water)

DATE SAMPLED: Sep 06, 2012

DATE RECEIVED: Sep 12, 2012

DATE REPORTED: Sep 21, 2012

SAMPLE TYPE: Water

Parameter	Unit	G / S	RDL	MW12-10 3698762	MW12-12 3698777	FieldBlank 3698792
o-Xylene	µg/L		0.20	0.10	<0.10	<0.10
1,3-Dichlorobenzene	µg/L	59	0.20	<0.10	<0.10	<0.10
1,4-Dichlorobenzene	µg/L	1	0.20	<0.10	<0.10	<0.10
1,2-Dichlorobenzene	µg/L	3	0.20	<0.10	<0.10	<0.10
1,3-Dichloropropene	µg/L	0.5	0.60	<0.30	<0.30	<0.30
Xylene Mixture	µg/L	300	0.40	0.33	<0.20	<0.20
n-Hexane	µg/L	51	0.40	<0.20	<0.20	<0.20
Surrogate	Unit	Acceptable Limits				
Toluene-d8	% Recovery	50-140		106	104	105
4-Bromofluorobenzene	% Recovery	50-140		90	91	85

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CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Water)

DATE SAMPLED: Sep 06, 2012

DATE RECEIVED: Sep 12, 2012

DATE REPORTED: Sep 21, 2012

SAMPLE TYPE: Water

Parameter	Unit	G / S	RDL	TripBlank 3698804
Dichlorodifluoromethane	µg/L	590	0.20	<0.20
Vinyl Chloride	µg/L	0.5	0.17	<0.17
Bromomethane	µg/L	0.89	0.20	<0.20
Trichlorofluoromethane	µg/L	150	0.40	<0.40
Acetone	µg/L	2700	1.0	<1.0
1,1-Dichloroethylene	µg/L	1.6	0.30	<0.30
Methylene Chloride	µg/L	50	0.30	<0.30
trans- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20
Methyl tert-butyl ether	µg/L	15	0.20	<0.20
1,1-Dichloroethane	µg/L	5	0.30	<0.30
Methyl Ethyl Ketone	µg/L	1800	1.0	<1.0
cis- 1,2-Dichloroethylene	µg/L	1.6	0.20	<0.20
Chloroform	µg/L	2.4	0.20	<0.20
1,2-Dichloroethane	µg/L	1.6	0.20	<0.20
1,1,1-Trichloroethane	µg/L	200	0.30	<0.30
Carbon Tetrachloride	µg/L	0.79	0.20	<0.20
Benzene	µg/L	5.0	0.20	<0.20
1,2-Dichloropropane	µg/L	5	0.20	<0.20
Trichloroethylene	µg/L	1.6	0.20	<0.20
Bromodichloromethane	µg/L	16	0.20	<0.20
Methyl Isobutyl Ketone	µg/L	640	1.0	<1.0
1,1,2-Trichloroethane	µg/L	4.7	0.20	<0.20
Toluene	µg/L	24	0.20	<0.20
Dibromochloromethane	µg/L	25	0.10	<0.10
Ethylene Dibromide	µg/L	0.2	0.10	<0.10
Tetrachloroethylene	µg/L	1.6	0.20	<0.20
1,1,1,2-Tetrachloroethane	µg/L	1.1	0.10	<0.10
Chlorobenzene	µg/L	30	0.10	<0.10
Ethylbenzene	µg/L	2.4	0.10	<0.10
m & p-Xylene	µg/L		0.20	<0.20
Bromoform	µg/L	25	0.10	<0.10
Styrene	µg/L	5.4	0.10	<0.10
1,1,2,2-Tetrachloroethane	µg/L	1	0.10	<0.10

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Certificate of Analysis

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - VOCs (Water)

DATE SAMPLED: Sep 06, 2012		DATE RECEIVED: Sep 12, 2012		DATE REPORTED: Sep 21, 2012	SAMPLE TYPE: Water
Parameter	Unit	G / S	RDL	TripBlank 3698804	
o-Xylene	µg/L		0.10	<0.10	
1,3-Dichlorobenzene	µg/L	59	0.10	<0.10	
1,4-Dichlorobenzene	µg/L	1	0.10	<0.10	
1,2-Dichlorobenzene	µg/L	3	0.10	<0.10	
1,3-Dichloropropene	µg/L	0.5	0.30	<0.30	
Xylene Mixture	µg/L	300	0.20	<0.20	
n-Hexane	µg/L	51	0.20	<0.20	
Surrogate	Unit	Acceptable Limits			
Toluene-d8	% Recovery	50-140		105	
4-Bromofluorobenzene	% Recovery	50-140		80	

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current
3698718 Dilution factor=2
The sample was diluted because it was foamy. The reporting detection limit has been corrected for the dilution factor used.

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Certificate of Analysis

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

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MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

Inorganic Chemistry (Water)

DATE SAMPLED: Sep 11, 2012				DATE RECEIVED: Sep 12, 2012		DATE REPORTED: Sep 21, 2012		SAMPLE TYPE: Water	
Parameter	Unit	G / S	RDL	MW12-10		MW12-12			
				3698762		3698777			
Chloride	mg/L	790	0.20	27.5		40.4			
Nitrate as N	mg/L		0.10	<0.10		<0.10			
Nitrite as N	mg/L		0.10	<0.10		<0.10			
Sulphate	mg/L		0.20	24.2		18.1			
Calcium	mg/L		0.05	149		165			
Magnesium	mg/L		0.05	25.9		23.3			
Sodium	mg/L	490	0.05	8.80		92.8			
Potassium	mg/L		0.05	2.98		3.52			
pH	pH Units		NA	8.02		8.03			
Ammonia as N	mg/L		0.02	0.51		1.47			
Alkalinity (as CaCO ₃)	mg/L		5	420		569			
Total Hardness (as CaCO ₃)	mg/L		0.5	479		508			

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current

Certified By:



AGAT Laboratories

Certificate of Analysis

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

5835 COOPERS AVENUE
MISSISSAUGA, ONTARIO
CANADA L4Z 1Y2
TEL (905)712-5100
FAX (905)712-5122
<http://www.agatlabs.com>

CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

O. Reg. 153(511) - Metals (Abbrev) (Water) incl. Fe, Mn

DATE SAMPLED: Sep 11, 2012

DATE RECEIVED: Sep 12, 2012

DATE REPORTED: Sep 21, 2012

SAMPLE TYPE: Water

Parameter	Unit	G / S	RDL	MW12-10	MW12-12
				3698762	3698777
Barium	µg/L	1000	2.0	156	200
Beryllium	µg/L	4.0	0.5	<0.5	<0.5
Boron	µg/L	5000	10.0	52.4	70.3
Cadmium	µg/L	2.7	0.2	<0.2	<0.2
Chromium	µg/L	50	2.0	2.4	3.5
Cobalt	µg/L	3.8	0.5	2.3	25.1
Copper	µg/L	87	1.0	1.8	1.3
Lead	µg/L	10	0.5	<0.5	<0.5
Molybdenum	µg/L	70	0.5	1.4	1.9
Nickel	µg/L	100	1.0	<1.0	5.7
Silver	µg/L	1.5	0.2	<0.2	<0.2
Thallium	µg/L	2	0.3	<0.3	<0.3
Uranium	µg/L	20	0.5	3.5	2.8
Vanadium	µg/L	6.2	0.4	0.8	1.9
Zinc	µg/L	1100	5.0	11.0	5.4
Iron	mg/L		0.010	<0.010	5.58
Manganese	mg/L		0.002	0.293	1.48

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard: Refers to T2(PGW) - Current

Certified By:



AGAT Laboratories

Guideline Violation

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

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CLIENT NAME: GOLDER ASSOCIATES LTD.

ATTENTION TO: Christi Groves

SAMPLEID	SAMPLE TITLE	GUIDELINE	ANALYSIS PACKAGE	PARAMETER	GUIDEVALUE	RESULT
3698777	MW12-12	T2(PGW) - Current	O. Reg. 153(511) - Metals (Abbrev) (Water) incl. Fe, Mn	Cobalt	3.8	25.1
3698777	MW12-12	T2(PGW) - Current	O. Reg. 153(511) - VOCs (Water)	Vinyl Chloride	0.5	7.1
3698777	MW12-12	T2(PGW) - Current	O. Reg. 153(511) - VOCs (Water)	cis- 1,2-Dichloroethylene	1.6	4.3

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Trace Organics Analysis

RPT Date: Sep 21, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - VOCs (Water)															
Dichlorodifluoromethane	1		< 0.20	< 0.20	0.0%	< 0.20	106%	50%	140%	114%	50%	140%	109%	50%	140%
Vinyl Chloride	1		< 0.17	< 0.17	0.0%	< 0.17	91%	50%	140%	114%	50%	140%	110%	50%	140%
Bromomethane	1		< 0.20	< 0.20	0.0%	< 0.20	79%	50%	140%	108%	50%	140%	112%	50%	140%
Trichlorofluoromethane	1		< 0.40	< 0.40	0.0%	< 0.40	99%	50%	140%	115%	50%	140%	113%	50%	140%
Acetone	1		< 1.0	< 1.0	0.0%	< 1.0	86%	50%	140%	106%	50%	140%	98%	50%	140%
1,1-Dichloroethylene	1		< 0.30	< 0.30	0.0%	< 0.30	117%	50%	140%	105%	60%	130%	111%	50%	140%
Methylene Chloride	1		< 0.30	< 0.30	0.0%	< 0.30	115%	50%	140%	100%	60%	130%	96%	50%	140%
trans- 1,2-Dichloroethylene	1		< 0.20	< 0.20	0.0%	< 0.20	94%	50%	140%	103%	60%	130%	107%	50%	140%
Methyl tert-butyl ether	1		< 0.20	< 0.20	0.0%	< 0.20	101%	50%	140%	115%	60%	130%	115%	50%	140%
1,1-Dichloroethane	1		< 0.30	< 0.30	0.0%	< 0.30	100%	50%	140%	106%	60%	130%	112%	50%	140%
Methyl Ethyl Ketone	1		< 1.0	< 1.0	0.0%	< 1.0	89%	50%	140%	110%	50%	140%	83%	50%	140%
cis- 1,2-Dichloroethylene	1		< 0.20	< 0.20	0.0%	< 0.20	101%	50%	140%	99%	60%	130%	104%	50%	140%
Chloroform	1		< 0.20	< 0.20	0.0%	< 0.20	111%	50%	140%	109%	60%	130%	112%	50%	140%
1,2-Dichloroethane	1		< 0.20	< 0.20	0.0%	< 0.20	98%	50%	140%	110%	60%	130%	113%	50%	140%
1,1,1-Trichloroethane	1		< 0.30	< 0.30	0.0%	< 0.30	102%	50%	140%	104%	60%	130%	100%	50%	140%
Carbon Tetrachloride	1		< 0.20	< 0.20	0.0%	< 0.20	101%	50%	140%	106%	60%	130%	104%	50%	140%
Benzene	1		< 0.20	< 0.20	0.0%	< 0.20	96%	50%	140%	101%	60%	130%	103%	50%	140%
1,2-Dichloropropane	1		< 0.20	< 0.20	0.0%	< 0.20	93%	50%	140%	109%	60%	130%	99%	50%	140%
Trichloroethylene	1		< 0.20	< 0.20	0.0%	< 0.20	97%	50%	140%	87%	60%	130%	94%	50%	140%
Bromodichloromethane	1		< 0.20	< 0.20	0.0%	< 0.20	107%	50%	140%	107%	60%	130%	104%	50%	140%
Methyl Isobutyl Ketone	1		< 1.0	< 1.0	0.0%	< 1.0	74%	50%	140%	100%	50%	140%	96%	50%	140%
1,1,2-Trichloroethane	1		< 0.20	< 0.20	0.0%	< 0.20	102%	50%	140%	120%	60%	130%	119%	50%	140%
Toluene	1		< 0.20	< 0.20	0.0%	< 0.20	114%	50%	140%	110%	60%	130%	110%	50%	140%
Dibromochloromethane	1		< 0.10	< 0.10	0.0%	< 0.10	118%	50%	140%	114%	60%	130%	111%	50%	140%
Ethylene Dibromide	1		< 0.10	< 0.10	0.0%	< 0.10	115%	50%	140%	109%	60%	130%	114%	50%	140%
Tetrachloroethylene	1		< 0.20	< 0.20	0.0%	< 0.20	110%	50%	140%	112%	60%	130%	101%	50%	140%
1,1,1,2-Tetrachloroethane	1		< 0.10	< 0.10	0.0%	< 0.10	NA	50%	140%	110%	60%	130%	108%	50%	140%
Chlorobenzene	1		< 0.10	< 0.10	0.0%	< 0.10	107%	50%	140%	109%	60%	130%	107%	50%	140%
Ethylbenzene	1		< 0.10	< 0.10	0.0%	< 0.10	97%	50%	140%	102%	60%	130%	98%	50%	140%
m & p-Xylene	1		< 0.20	< 0.20	0.0%	< 0.20	101%	50%	140%	103%	60%	130%	101%	50%	140%
Bromoform	1		< 0.10	< 0.10	0.0%	< 0.10	116%	50%	140%	114%	60%	130%	108%	50%	140%
Styrene	1		< 0.10	< 0.10	0.0%	< 0.10	82%	50%	140%	89%	60%	130%	85%	50%	140%
1,1,1,2,2-Tetrachloroethane	1		< 0.10	< 0.10	0.0%	< 0.10	NA	50%	140%	91%	60%	130%	118%	50%	140%
o-Xylene	1		< 0.10	< 0.10	0.0%	< 0.10	105%	50%	140%	105%	60%	130%	104%	50%	140%
1,3-Dichlorobenzene	1		< 0.10	< 0.10	0.0%	< 0.10	83%	50%	140%	85%	60%	130%	83%	50%	140%
1,4-Dichlorobenzene	1		< 0.10	< 0.10	0.0%	< 0.10	96%	50%	140%	99%	60%	130%	95%	50%	140%
1,2-Dichlorobenzene	1		< 0.10	< 0.10	0.0%	< 0.10	94%	50%	140%	98%	60%	130%	94%	50%	140%
1,3-Dichloropropene	1		< 0.30	< 0.30	0.0%	< 0.30	81%	50%	140%	87%	60%	130%	87%	50%	140%
Xylene Mixture	1		< 0.20	< 0.20	0.0%	< 0.20	103%	50%	140%	104%	60%	130%	103%	50%	140%

Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Trace Organics Analysis (Continued)

RPT Date: Sep 21, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
n-Hexane	1		< 0.20	< 0.20	0.0%	< 0.20	NA	50%	140%	104%	60%	130%	92%	50%	140%
O. Reg. 153(511) - PHCs F1 - F4 (with PAHs) (Water)															
F1 (C6 to C10)	1		< 25	< 25	0.0%	< 25	110%	60%	140%	88%	60%	140%	79%	60%	140%
F2 (C10 to C16)	1	3698723	<100	<100	0.0%	< 100	104%	60%	140%	60%	60%	140%	76%	60%	140%
F3 (C16 to C34)	1	3698723	<100	<100	0.0%	< 100	103%	60%	140%	84%	60%	140%	85%	60%	140%
F4 (C34 to C50)	1	3698723	<100	<100	0.0%	< 100	102%	60%	140%	93%	60%	140%	92%	60%	140%
O. Reg. 153(511) - PAHs (Water)															
Naphthalene	1		< 0.20	< 0.20	0.0%	< 0.20	93%	50%	140%	94%	50%	140%	90%	50%	140%
Acenaphthylene	1		< 0.20	< 0.20	0.0%	< 0.20	98%	50%	140%	98%	50%	140%	86%	50%	140%
Acenaphthene	1		< 0.20	< 0.20	0.0%	< 0.20	100%	50%	140%	93%	50%	140%	85%	50%	140%
Fluorene	1		< 0.20	< 0.20	0.0%	< 0.20	96%	50%	140%	90%	50%	140%	94%	50%	140%
Phenanthrene	1		< 0.10	< 0.10	0.0%	< 0.10	98%	50%	140%	88%	50%	140%	91%	50%	140%
Anthracene	1		< 0.10	< 0.10	0.0%	< 0.10	100%	50%	140%	100%	50%	140%	96%	50%	140%
Fluoranthene	1		< 0.20	< 0.20	0.0%	< 0.20	101%	50%	140%	95%	50%	140%	97%	50%	140%
Pyrene	1		< 0.20	< 0.20	0.0%	< 0.20	98%	50%	140%	98%	50%	140%	93%	50%	140%
Benz(a)anthracene	1		< 0.20	< 0.20	0.0%	< 0.20	92%	50%	140%	91%	50%	140%	77%	50%	140%
Chrysene	1		< 0.10	< 0.10	0.0%	< 0.10	99%	50%	140%	100%	50%	140%	89%	50%	140%
Benzo(b)fluoranthene	1		< 0.10	< 0.10	0.0%	< 0.10	103%	50%	140%	71%	50%	140%	89%	50%	140%
Benzo(k)fluoranthene	1		< 0.10	< 0.10	0.0%	< 0.10	99%	50%	140%	98%	50%	140%	97%	50%	140%
Benzo(a)pyrene	1		< 0.01	< 0.01	0.0%	< 0.01	97%	50%	140%	78%	50%	140%	90%	50%	140%
Indeno(1,2,3-cd)pyrene	1		< 0.20	< 0.20	0.0%	< 0.20	99%	50%	140%	92%	50%	140%	82%	50%	140%
Dibenz(a,h)anthracene	1		< 0.20	< 0.20	0.0%	< 0.20	96%	50%	140%	96%	50%	140%	99%	50%	140%
Benzo(g,h,i)perylene	1		< 0.20	< 0.20	0.0%	< 0.20	101%	50%	140%	91%	50%	140%	87%	50%	140%
2-and 1-methyl Naphthalene	1		< 0.20	< 0.20	0.0%	< 0.20	96%	50%	140%	94%	50%	140%	89%	50%	140%

Certified By:



Quality Assurance

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T640741

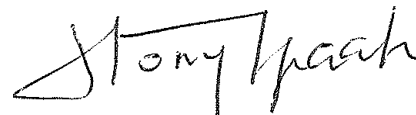
PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

Water Analysis															
RPT Date: Sep 21, 2012			DUPLICATE			Method Blank	REFERENCE MATERIAL			METHOD BLANK SPIKE			MATRIX SPIKE		
PARAMETER	Batch	Sample Id	Dup #1	Dup #2	RPD		Measured Value	Acceptable Limits		Recovery	Acceptable Limits		Recovery	Acceptable Limits	
								Lower	Upper		Lower	Upper		Lower	Upper
O. Reg. 153(511) - Metals (Abbrev) (Water) incl. Fe, Mn															
Barium	1	3698718	405	418	3.2%	< 2.0	100%	70%	130%	104%	80%	120%	112%	70%	130%
Beryllium	1	3698718	< 0.5	< 0.5	0.0%	< 0.5	102%	70%	130%	100%	80%	120%	90%	70%	130%
Boron	1	3698718	1080	944	13.4%	< 10.0	102%	70%	130%	95%	80%	120%	80%	70%	130%
Cadmium	1	3698718	< 0.2	< 0.2	0.0%	< 0.2	100%	70%	130%	109%	80%	120%	102%	70%	130%
Chromium	1	3698718	4.2	4.7	11.2%	< 2.0	98%	70%	130%	104%	80%	120%	99%	70%	130%
Cobalt	1	3698718	20.0	19.9	0.5%	< 0.5	101%	70%	130%	99%	80%	120%	104%	70%	130%
Copper	1	3698718	2.9	2.9	0.0%	< 1.0	101%	70%	130%	110%	80%	120%	100%	70%	130%
Lead	1	3698718	0.5	0.5	0.0%	< 0.5	98%	70%	130%	105%	80%	120%	86%	70%	130%
Molybdenum	1	3698718	2.5	2.5	0.0%	< 0.5	99%	70%	130%	99%	80%	120%	103%	70%	130%
Nickel	1	3698718	15.9	15.3	3.8%	< 1.0	102%	70%	130%	111%	80%	120%	101%	70%	130%
Silver	1	3698718	< 0.2	< 0.2	0.0%	< 0.2	98%	70%	130%	114%	80%	120%	100%	70%	130%
Thallium	1	3698718	< 0.3	< 0.3	0.0%	< 0.3	100%	70%	130%	105%	80%	120%	94%	70%	130%
Uranium	1	3698718	1.8	1.8	0.0%	< 0.5	96%	70%	130%	104%	80%	120%	85%	70%	130%
Vanadium	1	3698718	0.7	0.8	13.3%	< 0.4	100%	70%	130%	103%	80%	120%	106%	70%	130%
Zinc	1	3698718	14.1	14.3	1.4%	< 5.0	101%	70%	130%	105%	80%	120%	105%	70%	130%
Iron	1	3698718	5.08	5.07	0.2%	< 0.010	97%	90%	110%	106%	90%	110%	102%	70%	130%
Manganese	1	3698718	2.22	2.20	0.9%	< 0.002	100%	90%	110%	108%	90%	110%	105%	70%	130%
Inorganic Chemistry (Water)															
Chloride	1	3698723	3.43	3.32	3.3%	< 0.20	95%	90%	110%	99%	90%	110%	95%	80%	120%
Nitrate as N	1	3698723	< 0.10	< 0.10	0.0%	< 0.10	97%	90%	110%	103%	90%	110%	105%	80%	120%
Nitrite as N	1	3698723	< 0.10	< 0.10	0.0%	< 0.10	NA	90%	110%	95%	90%	110%	99%	80%	120%
Sulphate	1	3698723	65.4	64.7	1.1%	< 0.20	91%	90%	110%	95%	90%	110%	88%	80%	120%
Calcium	1	3698718	199	197	1.0%	< 0.05	105%	90%	110%	106%	90%	110%	111%	70%	130%
Magnesium	1		44.2	44.4	0.5%	< 0.05	108%	90%	110%	110%	90%	110%	113%	70%	130%
Sodium	1		12.0	12.1	0.8%	< 0.05	98%	90%	110%	99%	90%	110%	101%	70%	130%
Potassium	1		1.08	1.08	0.0%	< 0.05	101%	90%	110%	101%	90%	110%	106%	70%	130%
pH	1		7.85	7.91	0.8%	NA	100%	90%	110%	NA	0%	0%	NA	0%	0%
Ammonia as N	1		< 0.02	< 0.02	0.0%	< 0.02	98%	90%	110%	97%	90%	110%	112%	80%	120%
Alkalinity (as CaCO3)	1		326	329	0.9%	< 5	95%	80%	120%	NA	0%	0%	NA	0%	0%

Comments: NA - Not Applicable.

Certified By:



Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Trace Organics Analysis			
Naphthalene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Acenaphthylene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Acenaphthene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Fluorene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Phenanthrene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Anthracene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Fluoranthene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Pyrene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benz(a)anthracene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Chrysene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benzo(b)fluoranthene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benzo(k)fluoranthene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benzo(a)pyrene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Indeno(1,2,3-cd)pyrene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Dibenz(a,h)anthracene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Benzo(g,h,i)perylene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
2-and 1-methyl Naphthalene	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
Chrysene-d12	ORG-91-5105	EPA SW-846 3510 & 8270	GC/MS
F1 (C6 to C10)	VOL-91-5010	MOE PHC E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	MOE PHC E3421	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5010	MOE PHC E3421	GC / FID
F3 (C16 to C34)	VOL-91-5010	MOE PHC E3421	GC / FID
F4 (C34 to C50)	VOL-91-5010	MOE PHC E3421	GC / FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	MOE PHC E3421	BALANCE
Terphenyl	VOL-91-5010		GC/FID
F1 (C6 to C10)	VOL-91-5010	MOE PHC E3421	(P&T)GC/FID
F1 (C6 to C10) minus BTEX	VOL-91-5010	MOE PHC E3421	(P&T)GC/FID
F2 (C10 to C16)	VOL-91-5010	MOE PHC E3421	GC/FID
F2 (C10 to C16) minus Naphthalene	VOL-91-5010	MOE PHC E3421	GC/FID
F3 (C16 to C34)	VOL-91-5010	MOE PHC E3421	GC/FID
F3 (C16 to C34) minus PAHs	VOL-91-5010	MOE PHC E3421	GC/FID
F4 (C34 to C50)	VOL -91- 5010	MOE PHC- E3421	GC/FID
Gravimetric Heavy Hydrocarbons	VOL-91-5010	MOE PHC E3421	BALANCE
Terphenyl	VOL-91-5010		GC/FID
Dichlorodifluoromethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Vinyl Chloride	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Bromomethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Trichlorofluoromethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Acetone	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1-Dichloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Methylene Chloride	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
trans- 1,2-Dichloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Methyl tert-butyl ether	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1-Dichloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Methyl Ethyl Ketone	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
cis- 1,2-Dichloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Chloroform	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,2-Dichloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1,1-Trichloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS

Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Carbon Tetrachloride	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Benzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,2-Dichloropropane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Trichloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Bromodichloromethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Methyl Isobutyl Ketone	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1,2-Trichloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Toluene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Dibromochloromethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Ethylene Dibromide	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Tetrachloroethylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1,1,2-Tetrachloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Chlorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Ethylbenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
m & p-Xylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Bromoform	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Styrene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,1,2,2-Tetrachloroethane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
o-Xylene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,3-Dichlorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,4-Dichlorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,2-Dichlorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
1,3-Dichloropropene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Xylene Mixture	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
n-Hexane	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
Toluene-d8	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS
4-Bromofluorobenzene	VOL-91-5001	EPA SW-846 5030 & 8260	(P&T)GC/MS

Method Summary

CLIENT NAME: GOLDER ASSOCIATES LTD.

AGAT WORK ORDER: 12T640741

PROJECT NO: 11-1170-0079

ATTENTION TO: Christi Groves

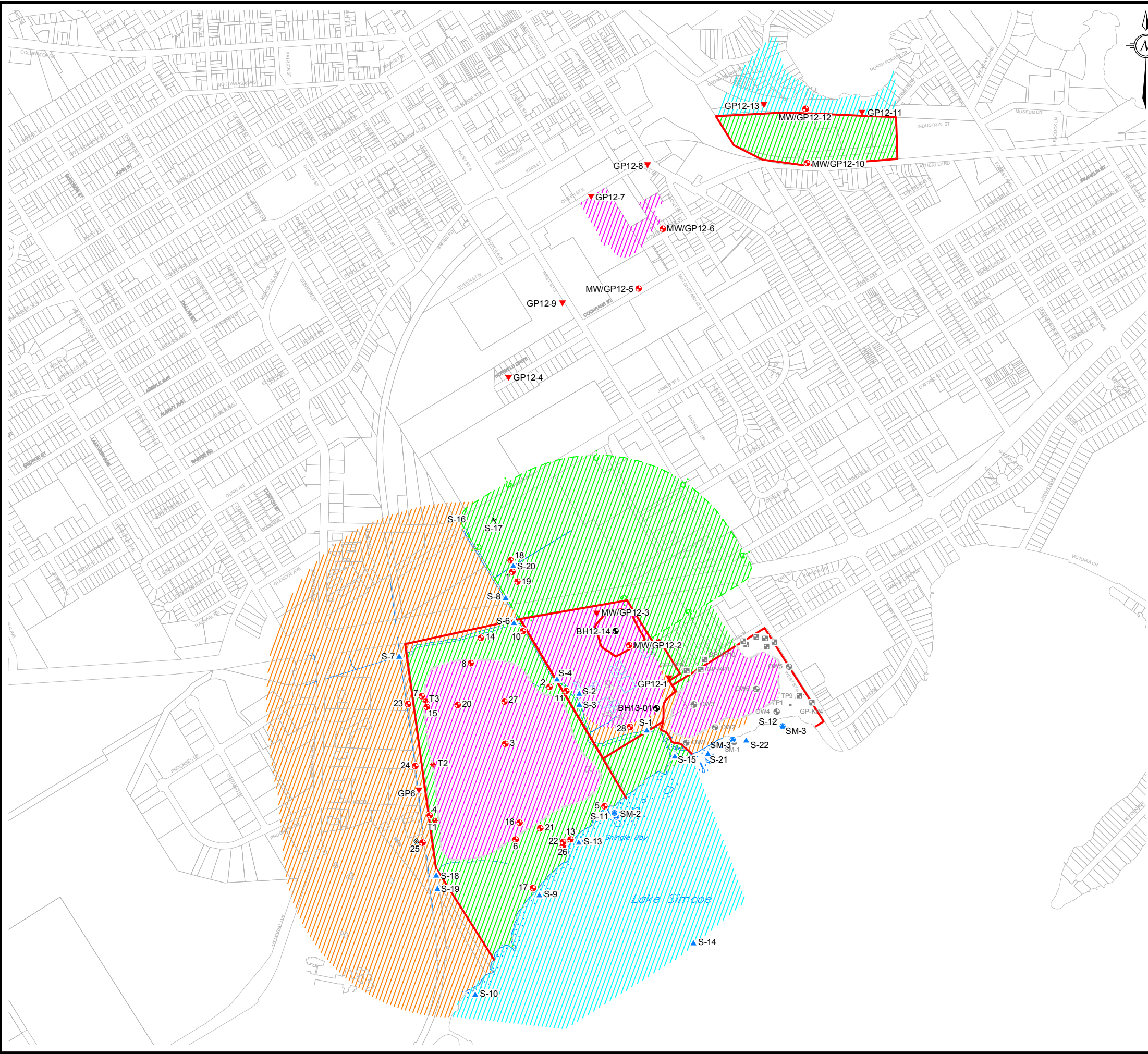
PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Water Analysis			
Chloride	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Nitrate as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Nitrite as N	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Sulphate	INOR-93-6004	SM 4110 B	ION CHROMATOGRAPH
Calcium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES
Magnesium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES
Sodium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES
Potassium	MET-93-6105	EPA SW-846 6010C & 200.7	ICP/OES
pH	INOR-93-6000	SM 4500-H+ B	PC TITRATE
Ammonia as N	INOR-93-6002	AQ2 EPA-103A & SM 4500 NH3-F	AQ-2 DISCRETE ANALYZER
Alkalinity (as CaCO ₃)	INOR-93-6000	SM 2320 B	PC TITRATE
Total Hardness (as CaCO ₃)	MET-93-6105	EPA SW-846 6010C & 200.7 & SM 2340 B	ICP/OES
Barium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Beryllium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Boron	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Cadmium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Chromium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Cobalt	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Copper	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Lead	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Molybdenum	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Nickel	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Silver	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Thallium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Uranium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Vanadium	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Zinc	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Iron	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS
Manganese	MET-93-6103	EPA SW-846 6020A & 200.8	ICP-MS



APPENDIX M

D-4 Assessment Area Summary

PLOT DATE: August 23, 2013
FILENAME: T:\Projects\2011\11-1170-0079 (Orillia Historic Landfills)\-EA-X4108\111700079EAD4SUMMARY.dwg
[Figure M-1]



LEGEND

- Waste Site Limit
- Estimated Extent of Landfill
- D4 Assessment Required due to Possible Landfill Waste
- D4 Assessment Required due to Possible Landfill Gas
- D4 Assessment Required due to Possible Groundwater Impacts
- D4 Assessment Require 500 m Offset Area from Active Landfill
- Observation Well
- Borehole
- Gas Probe
- Groundwater level Monitoring Location
- Surface Water Quality Station / Seepage Monitor

NOTE

- DATUM IS UTM NAD83 Zone 17
- ALL MAPPED BOUNDARIES, LIMITS, AND INTERPOLATED FEATURES ARE APPROXIMATE
- REFER TO KWDS REPORT FOR D-4 REQUIRED 500 m OFFSET AREA
- SITE X4129 CAN BE DE-LISTED FROM MOE DATABASE



UTM NAD 83 ZONE 17
CAD base Courtesy CITY OF ORILLIA; Digital 1:2000 OBM Mapping

TITLE		
D4 ASSESSMENT AREA SUMMARY		
HISTORICAL LANDFILL SITES CITY OF ORILLIA		
 Barrie, Ontario, Canada	SCALE	AS SHOWN
	DATE	23 JUL 2013
	DESIGN	
	CAD	S BOWERMAN
FILE No.	111700079EAD4SUMMARY.dwg	
PROJECT No.	11-1170-0079	REV.
CHECK	CLG	FIGURE
REVIEW		M-1

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Africa	+ 27 11 254 4800
Asia	+ 86 21 6258 5522
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com

Golder Associates Ltd.
121 Commerce Park Drive, Unit L
Barrie, Ontario, L4N 8X1
Canada
T: +1 (705) 722 4492

