SPRING 2012 SEMI-ANNUAL MONITORING REPORT

WASTE MANAGEMENT OF CANADA
RICHMOND LANDFILL
TOWN OF GREATER NAPANEE, ONTARIO

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1. INTRODUCTION

The purpose of this document is to present results and to provide an interpretation of the data that were collected during the spring 2012 semi-annual monitoring event at the Waste Management of Canada Corporation (WM) Richmond Landfill.

The WM Richmond Landfill is approved as a 16.2 hectare waste disposal (landfilling) facility within a total site area of 138 hectares, located on parts of Lots 1, 2 and 3, Concession IV of the former Township of Richmond, now in the Town of Greater Napanee, Ontario.

2. MONITORING PROGRAM

2.1 PROGRAM METHODOLOGY

The spring 2012 semi-annual monitoring event was conducted in accordance to the updated Environmental Monitoring Plan for the site dated June 29, 2010 (herein referred to as the "EMP"). The amended Environmental Compliance Approval (ECA) number A371203, issued by MOE January 9, 2012 stipulates (Condition 8.5(a)) that the monitoring programs shall be carried out for groundwater, surface water and landfill gas on an interim basis in accordance with the June 29, 2010 EMP, until a new monitoring program has been approved.

The site layout and monitoring locations are shown on Figure 1. The monitoring programs for groundwater, surface water, leachate and landfill gas are summarized in Table 1.

The spring monitoring event was conducted between April 20 and May 10, 2012. The activities completed included:

- Water levels were recorded on April 20, 2012, except from groundwater monitors M15 (dry), M19 and OW57 (damaged), and M77 (missed);
- Leachate samples were collected from the North Chamber and South Chamber on April 23, 2012, and analyzed for the suite of groundwater inorganic and general parameters, as well as for VOCs;
- Eight (8) off-site domestic water supply wells were sampled on April 23, 2012. Water samples from private supply wells were analyzed for groundwater inorganic and general parameters, as well as for VOCs;
- A total of 41 groundwater monitors were sampled on April 24 and 25, 2012, while M107 was sampled on May 10, 2012. Monitoring wells M57 and M75 were sampled despite integrity concerns due to the presence of bentonite fines in the purge water. Three (3)

groundwater monitoring wells could not be sampled because they (a) had insufficient recovery for sampling after purging (M29 and M39), or (b) were damaged (the standpipe in M58-4 was broken below the ground surface and contained bentonite). Samples were analyzed for the suite of groundwater inorganic and general parameters, as well as for VOCs;

- Surface water sampling was conducted on April 23, 2012 from locations S2, S3, S4R, S5, S6, S7 and S8R. Surface water samples were analyzed for the surface water inorganic and general parameters, as well as for VOCs;
- Landfill gas migration monitoring was conducted on April 24, 2012. Field measurements were made with a RKI Eagle probe calibrated to methane gas response at six (6) gas monitors (GM1, GM3, GM4-1, GM4-2, GM5 and GM6); and
- Additionally, six (6) field duplicate samples, two (2) field blanks, and two (2) trip blanks were collected during the spring sampling event, for a total of ten (10) Quality Assurance/Quality Control (QA/QC) samples. Deionised water for analysis of blank samples was supplied by the laboratory.

2.2 Water/Leachate Sample Collection and Laboratory Analysis

Groundwater and surface water samples were collected in accordance with accepted industry protocols. Groundwater samples were collected using dedicated Waterra inertial lift pumps connected to dedicated polyethylene tubing. Three casing volumes of water were purged from each monitoring well prior to the collection of groundwater samples. During purging, readings for pH, conductivity and temperature were recorded on a regular basis. The stabilization of the parameters was used to assess when well purging was complete. Low producing wells were purged dry and allowed to recover prior to sampling. If the monitoring well had not recovered sufficiently for sampling within 24 hours, the monitor was considered dry and a sample was not collected.

Domestic supply wells were sampled at an access point before any treatment system. A typical sampling location was a tap or access located near the pressure tank or when access to the treatment system was not available, the sample was collected from the kitchen tap (with the aerator screen removed). Prior to collecting the water sample, the water was allowed to run for a minimum of five but more typically closer to 10 minutes to ensure the volume of the pressure tank and supply line was purged and that the sample would be representative of well water conditions.

Surface water samples were collected using a clean bottle where water depth was sufficient; at sampling locations where water depth was an issue, a 50 cc syringe was used to carefully collect the surface water as not to disturb the bottom sediments. Surface water sampling locations were

sampled from downstream to upstream to prevent any re-suspension of sediment impacting the downstream sampling locations. The pH, temperature, and conductivity of the surface water were obtained in the field at all surface water sampling points while minimizing disturbance of the bottom sediment.

Leachate samples were collected from the North Chamber and South Chamber collection sumps. The North Chamber sample was collected by lowering a 20L bucket into the vault allowing it to fill and then lifting it to surface. The sample was placed in laboratory supplied preserved bottles by filling one of the non-preserved bottles and carefully decanting into the smaller sampling bottles. The South Chamber sample was collected from the pump out valve system at surface. The flow valve was partially opened to fill one of the non preserved bottles provided by the laboratory, and used to decant into the other sampling bottles.

All water/leachate samples were placed in bottles supplied and prepared by the laboratory. The samples were packed in coolers with ice and shipped by courier to the laboratory. All samples were analysed by Maxxam Analytics Inc. of Mississauga, ON, which is accredited by the *Canadian Association for Laboratory Accreditation Inc. (CALA).* Table 2 presents a summary of groundwater, surface water and leachate analytical parameters.

2.3 GROUNDWATER ELEVATIONS

Prior to collecting groundwater samples, water levels were recorded to the nearest 0.01 m using an electronic water level meter. Table 3 presents groundwater elevation monitoring locations.

3. MONITORING RESULTS AND DISCUSSION

Background information concerning the site geology and hydrogeology was described in detail in the Site Conceptual Model (SCM) report[1], and is summarized here. The SCM report describes the groundwater flow conditions at the Richmond Landfill. Based on the results from extensive studies conducted previously at the site, the basic hydrogeological framework for the facility has been defined as follows:

- the active groundwater flow zone at the site extends to a depth of approximately 30 metres below the top of bedrock;
- the shallow groundwater flow zone is conceptualized as the overburden, the overburden-bedrock contact and the upper one to two metres of bedrock;

[1] *Site Conceptual Model Report, WM Richmond Landfill*, prepared by Dr. B.H. Kueper and WESA Inc., October 2009

- the direction of groundwater flow in the shallow flow zone is strongly influenced by topography;
- the intermediate bedrock flow zone extends from one to two metres below top of bedrock to a depth of approximately 30 metres below top of bedrock;
- groundwater flows through a well-connected network of fractures in the upper 30 metres of bedrock;
- the dominant fracture orientation is horizontal to sub-horizontal; however, vertical to subvertical fractures are present providing hydraulic connection between horizontal fractures;
- hydraulic connection of fractures exists in the intermediate bedrock flow zone to the west, south and east of the site (horizontal and vertical connections);
- intermediate bedrock flownets show that groundwater generally flows to the west from the western edge of the landfill, to the south-southeast from the southern edge of the landfill, to the southwest from the southwest corner of the landfill and north to northwest from the northwest portion of the landfill;
- the hydraulic conductivity of the intermediate bedrock is lower to the north and east of the landfill compared to other areas of the site, implying that the rate of groundwater flow is lower than in areas south, southeast and west of the landfill; and
- flow directions in the intermediate bedrock zone are variable with season.

3.1 LEACHATE RESULTS

The leachate chemistry results for April 23, 2012 are summarized in Table 4. Leachate at the Richmond Landfill is characterized by elevated concentrations of general water quality parameters such as alkalinity, ammonia, chloride, conductivity, DOC, hardness, sodium and TKN, as well as selected VOCs for both the North and South Chamber samples. In general, the parameters that characterize the leachate are more elevated in the samples collected from the South Chamber compared to the North Chamber.

3.2 GROUNDWATER RESULTS

3.2.1 Groundwater Elevations

Groundwater elevations from program monitoring wells were measured on April 20, 2012 and are presented in Table 5. The groundwater flow direction within the shallow and intermediate bedrock groundwater flow zones are shown on Figures 2 and 3, respectively. The groundwater flow directions were inferred by interpolating the hydraulically responsive wells screened within the corresponding groundwater flow zone, and are consistent with historical results.

The spring 2012 shallow groundwater flownet (Figure 2) is consistent with historical results and shows that the Empey Hill drumlin southwest from the landfill creates a flow divide with shallow groundwater being directed both to the north and the south. The northerly flowing groundwater is oriented toward Marysville Creek, while shallow groundwater to the south flows towards Beechwood Ditch. Shallow groundwater south of Beechwood Road flows locally to the north-northwest, towards an area of lower hydraulic head that may be influenced by the pond system in the south part of the site (see Figure 2). Shallow groundwater east of the landfill is influenced by a local zone of higher water levels in the vicinity of monitoring well M96. Shallow groundwater north of M96 flows to the north while groundwater south of M96 flows to the south-southeast.

The spring 2012 intermediate bedrock zone flownet is presented on Figure 3. Water levels from four (4) intermediate bedrock monitors identified as "responsive" in the 2009 SCM report were not used to prepare the spring 2012 flownet. The wells were excluded from the interpolation on the basis of: (a) integrity concerns with the bentonite seal (M57); and (b) water levels were not static, believed to be recovering from past sampling events (M57, M70-1 and M82-1). Groundwater in the intermediate bedrock flow zone generally flows to the north, west, and south relative to the landfill. Overall, the directions of groundwater flow within the intermediate flow zone are consistent with the regional directions of groundwater flow, towards the south.

3.2.2 Groundwater Analytical Results

Results from the groundwater monitoring wells sampled in spring 2012 are presented in Table 6a. Groundwater quality data for the spring 2012 monitoring event are similar to historical results, and discussed in this section.

Slightly elevated concentrations of a number of water quality parameters (e.g., alkalinity, chloride, conductivity, DOC, iron, manganese, sodium and/or TDS) were observed in some shallow groundwater zone monitoring wells located in close proximity to the landfill footprint (M41, M66-2, M101, M102 and M103). All VOCs were below the laboratory reporting limit, with the exception of low but detectable levels of 1,1,1-TCA, 1,1-DCA, 1,1-DCE, cis-1,2-DCE, tetrachloroethylene, trichloroethylene at M54-4, and 1,1-DCE at M101. In other areas of the site, there is no evidence of groundwater impacts away from the landfill footprint in the shallow groundwater flow zone. Isolated occurrences of elevated concentrations of water quality parameters (i.e., one or two parameters per sample) are seen elsewhere on the Site. No indications of elevated concentrations related to impacts are identified at the property boundary in the shallow flow zone.

Analytical results from intermediate bedrock groundwater monitors sampled in spring 2012 show that groundwater quality in this groundwater flow zone is highly variable across the site. VOCs were below the laboratory reporting limit at most intermediate bedrock monitors, with the exception of select VOCs such as 1,1-DCA, 1,1-DCE, chloroethane, chloromethane, vinyl chloride and/or BTEX, which were measured in small but detectable quantities at some locations (e.g., M6-3, M9-3, M10-1, M49-1, M57, M70-1, M82-1, M91-1, M105 and M106). These findings are consistent with historical results. Intermediate bedrock zone groundwater and surface water chemistry conditions south of the landfill were reviewed in a technical memorandum submitted to the MOE[2] (dated June 14, 2010). Additional investigative work related to the observed chemistry south of the landfill is ongoing (Action Plan). The results and interpretations from this study will be reported to the MOE in a technical report as per Condition 8.5(b) of the Amended ECA.

Continued monitoring of the groundwater chemistry in the monitoring wells around the landfill and in the low head areas is warranted to assess any temporal trends in the groundwater conditions.

3.2.3 Guideline B-7 Reasonable Use Limits (RULs)

Selected monitoring wells within the low-head areas of the WM Richmond Landfill in both the Shallow and Intermediate Bedrock Flow Zones are compared to the RULs derived from laboratory analytical results (Table 6b). Proposed RULs for leachate indicator parameters and trigger monitors were presented in the EMP dated June 29, 2010. These will be re-examined as part of ongoing investigations (Action Plan), but are used here on an interim basis.

Slightly elevated concentrations of a number of inorganic or general water quality parameters (e.g., chloride, chromium, DOC, iron, manganese, sodium and/or TDS) were observed in shallow groundwater zone monitoring wells (M54-4, M66-2, M67-2, M80-2, M87-2 and OW37-s).

Slightly elevated concentrations of a number of water quality parameters (e.g alkalinity, boron, chloride, chromium, DOC, iron, manganese, sodium and/or TDS) were observed in some intermediate groundwater zone monitoring wells (M10-1, M49-1, M57, M70-1, M82-1 and M107). All VOCs were below the respective RULs, with the exception of benzene for monitoring wells M57 and M70-1.

[2] *On-Site Groundwater and Surface Water Quality Assessment, Waste Management (WM) Richmond Landfill*, technical memorandum to Chris Prucha (WM), June 14, 2010.

3.2.4 Status of Monitoring Wells and Compliance with Ontario Regulation 903

During the spring 2012 monitoring event, the conditions of monitoring wells were inspected. Any repairs, such as new locks, labels or well caps, etc. were made as necessary. Watertight casings and seals remain in place at all monitors to ensure that surface water or foreign materials do not infiltrate the wells. The monitoring wells comply with the applicable sections of Ontario Regulation 903 relevant to "test holes" as defined in the regulation, as well as the overall intent of the regulation to protect groundwater supplies. With the exception of monitors M19, M58-4 and OW57 (damaged) as well as M57 and M75 (integrity of the bentonite seals in monitors suspect due to the presence of bentonite in purge water), all of the monitoring wells included in the EMP are currently active.

3.2.5 Off-Site Domestic Water Supply Well Results

Results from off-site private water supply wells sampled in spring 2012 are presented in Table 7.

Comparison with Ontario Drinking Water Quality Objectives and Guidelines (ODWSOG, 2006) revealed all parameters were below their respective maximum acceptable concentrations (MAC) or interim maximum acceptable concentrations (IMAC) as specified in Table 2 of the ODWSOG, with the exception of lead (0.015 mg/L vs 0.01 mg/L) at 1181 Beechwood Road. Some inorganic parameters (general chemistry and dissolved metals) were measured at concentrations exceeding their respective aesthetic objective (AO) or operational guideline (OG) from Table 4 of the ODWSOG.

As was the case in previous sampling events, most volatile organic compounds (VOCs) in off-site supply wells were reported below the laboratory reporting limit (RL) at all locations, with the exception of some VOCs that were detected in measurable quantities above the RL at some locations. In all cases, VOC concentrations were below the MAC or AO.

The moderate mineralization observed at the private water supply wells sampled (elevated hardness, TDS and sodium) is consistent with the local hydrogeological setting (carbonate aquifer with documented saline groundwater at depth). The origin of the elevated concentration in some dissolved metals (iron, manganese) and DOC at some locations is unknown. The low levels of VOCs observed at some locations adjacent to 1252 Beechwood Road are likely attributable to the historical release of VOCs at this location (former abattoir).

3.2.6 Groundwater Chemistry Quality Assurance / Quality Control (QA/QC)

An evaluation of the QA/QC data (from duplicate and blank samples) is included in Appendix A, where analytical results are compared between regular samples and their corresponding field duplicate samples, submitted to the laboratory without identifying the location they were collected from. A standard margin of error of 20% (relative percent difference (RPD) between regular sample and duplicate) was deemed acceptable for field duplicates. In general, the comparison between samples and duplicates shows very good correlation for the majority of analyzed constituents. All parameters for groundwater duplicate QA/QC sampling were well within the 20% margin of error with few exceptions as summarized in Appendix A. Of these few that had RPD greater than 20%, all except two (chemical oxygen demand at M105; and dissolved organic demand at M81) were measured at low concentrations (less than 5 times the RDL) and are therefore within acceptable margin of error. All parameters were near or below the RDL in equipment and field blanks.

3.3 Surface Water Results

The two water courses that may receive surface water/storm water runoff from the Richmond Landfill are Marysville Creek to the north of the waste mound and Beechwood Ditch to the south (Figure 1). The Beechwood Ditch is a man-made surface water course that flows from the east onto WM property. It then flows west across a portion of the site before again crossing Beechwood Road and travelling southwest to cross County Road 10, and joins Marysville Creek east of Highway 49 and north of Highway 401. Both the Beechwood Ditch and Marysville Creek flow intermittently in the vicinity of the landfill. Marysville Creek has some base flow locally, and flows on a continuous basis west of County Road 10 (Deseronto Road). Marysville Creek eventually discharges into the Bay of Quinte at Hungry Bay.

All surface water monitoring locations are shown on Figure 1.

3.3.1 Surface Water Flow Rates

Visual observations of surface water flow and general water characteristics for the spring sampling program are summarized in Table 8. In general, surface water flow rates were variable, ranging from negligible (at S4R and S5) to 4.83 m^3/s (at S7).

3.3.2 Surface Water Analytical Results

The results from the surface water locations sampled in spring 2012 are presented in Table 9, and are similar to historical results.

Surface water quality from samples collected in spring 2012 was compared to the Provincial Water Quality Objectives (PWQO) (see Table 9). Background surface water quality was monitored from upstream station S2 for Marysville Creek, while background surface water quality for Beechwood Ditch was monitored at station S5. Storm water runoff from the existing landfill area flows to one of three storm water sedimentation retention ponds, located to the northeast, northwest and south of the landfill footprint. The retention pond located south of the landfill was reconstructed in 2008 and now has an increased storage volume and, as a result, an increased retention time.

All constituents analysed in surface water samples were below their respective PWQO, with the exception of (a) phenols which were detected at concentrations slightly exceeding the PWQO of 0.001 mg/L at all upstream and downstream locations, ranging between 0.0015 mg/L and 0.003 mg/L; (b) phosphorus which was detected at concentrations slightly exceeding the PWQO of 0.03 mg/L at all upstream and downstream locations, ranging between 0.055 mg/L and 0.33 mg/L; (c) iron which was detected at concentrations slightly exceeding the PWQO of 0.3 mg/L at all upstream and downstream locations except S8R (downstream), ranging between 0.37 mg/L and 1.5 mg/L; and (d) copper at S4R (downstream), measured at 0.008 mg/L, slightly higher than the PWQO range (0.005 mg/L).

Results from spring 2012 indicate that the landfill is not causing adverse impacts to surface water quality.

3.3.4 Surface Water Quality Assurance / Quality Control (QA/QC)

An evaluation of the QA/QC data (from duplicate and blank samples) is included in Appendix A, where analytical results are compared between regular samples and their corresponding field duplicate samples, submitted to the laboratory without identifying the location they were collected from. A standard margin of error of 20% was deemed acceptable for field duplicates. In general, the comparison between samples and duplicates shows very good correlation for the majority of analyzed constituents. All parameters for the surface water duplicate QA/QC sample (location S3) were well within the 20% margin of error, with the exception of total suspended solids.

3.4 SUBSURFACE GAS SAMPLING

On April 24, 2012, WESA inspected the subsurface gas monitoring probes and obtained measurements at all locations. Measurements were made using a RKI Eagle probe calibrated to methane gas response. The location and condition of the gas monitors and the measurement results are shown in Table 10. Readings were 0 ppm at all locations except GM4-1 (970 ppm, well below the lower explosive limit (LEL) of 5% or 50,000 ppm).

4. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The spring 2012 monitoring program included the collection of groundwater, leachate and surface water samples, as well as landfill gas monitoring, in accordance with the site groundwater monitoring requirements outlined in the revised EMP dated June 29, 2010, as specified in the Amended Environmental Compliance Approval (ECA) issued on January 9, 2012.

The following were completed between April 20 and April 25, 2012:

- Water levels were measured from 67 groundwater monitoring wells thirty-six (37) in the shallow groundwater flow zone and thirty (30) in the intermediate bedrock flow zone).
- Fourty-one (41) groundwater monitors (seventeen (17) completed in the shallow zone and twenty-four (24) in the intermediate bedrock) were sampled for analytical testing.
- Eight (8) off-site domestic water supply wells located along Beechwood Road were sampled for analytical testing.
- Seven (7) surface water locations were sampled for analytical testing.
- A total of ten (10) Quality Assurance/Quality Control (QA/QC) samples were collected (6 field duplicates, two (2) field blanks and two (2) trip blanks).
- Subsurface gas concentrations were recorded from six on-site gas monitoring wells.

4.1 GROUNDWATER

- Groundwater flow directions interpreted from monitors known to be hydraulically active were consistent with historical flownets:
  - Shallow groundwater flow is influenced by local topographic highs in the southwestern (Empey Hill Drumlin) and eastern (groundwater monitor M96 area) portions of the site, and is characterized by a flow divide with shallow groundwater being directed both to the north (toward Marysville Creek) and the south (toward Beechwood Ditch).

  - Groundwater in the intermediate bedrock flow zone generally flows to the north, west, and south relative to the landfill. Overall, the directions of groundwater flow within the intermediate flow zone are consistent with the regional directions of groundwater flow, towards the south.
- Groundwater quality data from spring 2012 are generally consistent with historical results.
- Slightly elevated concentrations of a number of water quality parameters are seen in the shallow groundwater zone northwest and north of the Phase 1 landfill footprint. In other areas of the site, there is no evidence of groundwater impact away from the landfill footprint in the shallow groundwater flow zone.
- The geochemical results for the intermediate bedrock groundwater flow zone indicate higher concentrations of water quality parameters south of the landfill relative to the concentrations west and north of the landfill. The higher concentrations are downgradient from the landfill footprint and occur in monitoring wells that are known to be hydraulically connected to each other. These concentrations may reflect minor groundwater impacts from site activities.
- The moderate mineralization observed at the off-site private water supply wells along Beechwood Road (elevated hardness, TDS and sodium) is consistent with the local hydrogeological setting (carbonate aquifer with documented saline groundwater at depth). The origin of the elevated concentration in some dissolved metals (iron, manganese) and DOC at some locations is unknown. The low levels of VOCs observed at some locations adjacent to 1252 Beechwood Road are likely attributable to the historical release of VOCs at this location (former abattoir).
- Continued groundwater monitoring within the shallow and intermediate bedrock groundwater flow zones between the landfill footprint and the low-head areas is warranted in order to further examine groundwater quality and any trends over time.
- It is recommended that the following groundwater monitoring wells be replaced, upgraded or removed from the monitoring program for the reasons stated below, as these wells have become unreliable for water level and/or quality monitoring as a result of these issues:
  - M29 and M39: low recovery small diameter (2.54 cm) overburden monitors that are often dry and/or cannot be sampled after being purged dry;
  - M57 and M75: integrity concerns with the bentonite seals (presence of bentonite in purge water); and
  - M19, M58-4 and OW57: damaged monitors.

Repair, upgrade or replacement of these wells will be subject to the outcome from the ongoing investigation (Action Plan), and will be documented in the revised EMP (as per Condition 8.5(b) of the Amended ECA.

4.2 SURFACE WATER

- The concentrations observed are within the range of historical monitoring results.
- Concentrations of phenols and total phosphorus exceeded the PWQO objective during the 2012 sampling event for all upstream and downstream locations. Concentrations of iron were above the PWQO at all upstream and downstream locations except for S8R (downstream). Copper was also above the PWQO at the downstream location S4R (downstream).
- The results indicate that surface water runoff from the site or discharge of contaminated groundwater is not affecting Marysville Creek or Beechwood Ditch.
- Surface water sampling locations S6 and S7 were added in the 2012 surface water sampling program as requested by MOE.

4.3 SUBSURFACE GAS

- All measurements for methane gas were below the LEL of 5%, or 50,000 ppm.

5. LIMITING CONDITIONS

The spring 2012 monitoring program involved the collection of leachate, groundwater (from on-site monitoring wells and off-site domestic supply wells) and surface water for analyses at the site monitoring locations. The data collected during this investigation represent the conditions at the sampled locations only.

The conclusions presented in this report represent our professional opinion and are based on the conditions observed on the dates set out in the report, the information available at the time this report was prepared, the scope of work, and any limiting conditions noted herein.

WESA provides no assurances regarding changes to conditions subsequent to the time of the assessment. WESA makes no warranty as to the accuracy or completeness of the information provided by others or of the conclusions and recommendations predicated on the accuracy of that information.

This report has been prepared for Waste Management of Canada. Any use a third party makes of this report, any reliance on the report, or decisions based upon the report, are the responsibility of those third parties unless authorization is received from WESA in writing. WESA accepts no responsibility for any loss or damages suffered by any unauthorized third party as a result of decisions made or actions taken based on this report.

This report was written by Véronique Maynard of WESA and reviewed by François Richard and David Harding of WESA.

Respectfully submitted,

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TABLES

Table 1: Summary of Environmental Monitoring Program

Monitoring Locations		Parameter Suite	Monitoring Frequency
Shallow Groundwater Flow Zone Monitors			
M12, M14, M15, M16, M18, M19, M23, M27, M28, M29, M30, M31, M35, M38, M39, M41, M47-3, M53-4, M54-4, M58-4, M60-4, M66-2, M67-2, M68-4, M70-3, M77, M80-2, M81, M87-2, M88-2, M89-2, M96, M97, M98, M99-2, M100, M101, M102, M103, OW37-*s*, OW57		Groundwater Elevations	Semi-annual: Spring and Fall
M29, M39, M41, M53-4, M54-4, M58-4, M66-2, M67-2, M68-4, M70-3, M80-2, M81, M87-2, M96, M97, M99-2, M101, M102, M103, OW37-*s*		Groundwater Inorganic & General	Semi-annual: Spring and Fall
M41, M58-4, M96, M97, M53-4, M54-4, M66-2, M67-2, M70-3, M80-2, M87-2, M101, M102, M103, OW37-*s*		VOCs	Annual: Spring
Intermediate Bedrock Groundwater Flow Zone Monitors			
M3A-3, M9-3, M10-1, M49-1, M50-3, M56-2, M57, M58-3, M59-2, M59-3, M59-4, M60-1, M63-2, M64-2, M70-1, M71, M72, M73, M74, M80-1, M82-1, M82-2, M91-1, M95-1, M105, M107*, OW54-i, OW54-d		Groundwater Elevations	Semi-annual: Spring and Fall
M5-3, M6-3, M9-3, M10-1, M49-1, M56-2, M57, M58-3, M59-2, M59-3, M59-4, M70-1, M71, M72, M74, M75, M80-1, M82-1, M82-2, M91-1, M95-1, M105, M107*, OW54-d		Groundwater Inorganic & General	Semi-annual: Spring and Fall
M5-3, M6-3, M9-3, M10-1, M49-1, M56-2, M57, M59-3, M70-1, M74, M75, M80-1, M82-1, M82-2, M91-1, M95-1		VOCs	Annual: Spring
Surface Water Sampling Locations			
Beechwood Ditch	S5, S4R and S8R	Surface Water Inorganic and General	Semi-annual: Spring and Fall
	S8R	VOCs	Annual: Spring
Marysville Creek	S2, S3, S6 and S7	Surface Water Inorganic and General	Semi-annual: Spring and Fall
	S2 and S3	VOCs	Annual: Spring
Leachate Monitoring Locations			
North Chamber and South Chamber		Groundwater Inorganic & General VOCs	Annual: Spring
Landfill Gas Monitoring Wells			
GM1, GM3, GM4-1, GM4-2, GM5, GM6		% methane by volume	Semi-annual: Spring and Fall
Off-site Domestic Water Supply Wells			
1097 Beechwood Road 1121 Beechwood Road 1144 Beechwood Road 1181 Beechwood Road	1206 Beechwood Road 1250 Beechwood Road 1252 Beechwood Road 1264 Beechwood Road	Groundwater Inorganic & General, VOCs	Semi-annual: Spring and Fall

* M107: Originally labelled as M106 in EMP dated June 29, 2010

Table 2. Analytical Parameters for Water and Leachate Samples

Groundwater Inorganic and General Parameters		
Alkalinity	Conductivity	Nitrite
Ammonia (total)	Copper	pH
Arsenic	Dissolved organic carbon	Phenols
Barium	Hardness	Phosphorus (total)
Biological oxygen demand	Iron	Potassium
Boron	Lead	Sodium
Cadmium	Magnesium	Sulphate
Calcium	Manganese	Total dissolved solids
Chemical oxygen demand	Mercury	Total Kjeldahl Nitrogen
Chloride	Naphthalene	Zinc
Chromium (total)	Nitrate	

Surface Water Inorganic and General Parameters		
Alkalinity	Cyanide (free)	Total dissolved solids
Ammonia (total)	Hardness	Total kjeldahl nitrogen
Arsenic	Iron	Total phosphorus
Barium	Lead	Total suspended solids
Biological oxygen demand	Magnesium	Zinc
Boron	Mercury	
Cadmium	Naphthalene	
Calcium	Nitrate	*Field measured:*
Chemical oxygen demand	Nitrite	conductivity
Chloride	Phenols	dissolved oxygen
Chromium (total)	Potassium	estimated flow rate
Conductivity	Sodium	pH
Copper	Sulphate	temperature

Volatile Organic Compounds (VOCs)		
1,1,1,2-Tetrachloroethane	Benzene	Ethylbenzene
1,1,1-Trichloroethane	Bromodichloromethane	m&p-Xylene
1,1,2,2-Tetrachloroethane	Bromoform	o-Xylene
1,1,2-Trichloroethane	Bromomethane	Styrene
1,1-Dichloroethane	Carbon tetrachloride	Toluene
1,1-Dichloroethylene	Chlorobenzene	Trans-1,2-Dichloroethylene
1,2-Dibromoethane	Chloroethane	Trans-1,3-Dichloropropylene
1,2-Dichlorobenzene	Chloroform	Tetrachloroethylene
1,2-Dichloroethane	Chloromethane	Trichloroethylene
1,2-Dichloropropane	Cis-1,2-Dichloroethylene	Trichlorofluoromethane
1,3,5-Trimethylbenzene	Cis-1,3-Dichloropropylene	Vinyl chloride
1,3-Dichlorobenzene	Dichloromethane (methylene chloride)	
1,4-Dichlorobenzene	Dibromochloromethane	

Table 3. Groundwater Elevation Monitoring Locations

Location	Shallow Groundwater Flow Zone			Intermediate Groundwater Flow Zone		
West of landfill footprint	M27	M58-4	M98	M3A-3	M59-4	M82-1
	M28	M67-2	M99-2	M56-2	M72	M82-2
	M29	M87-2	M100	M58-3	M73	M91-1
	M30	M88-2	M101	M59-2	M74	M95-1
	M31	M89-2	M102	M59-3		
	M38	M97	OW37-s			
North of landfill footprint	M35	M66-2		M60-1		
	M39	M103				
	M60-4					
South of landfill footprint	M12	M18	M80-2	M9-3	M64-2	M105
	M14	M41	M81	M10-1	M71	M107*
	M15	M53-4	OW57	M49-1	M80-1	
	M16	M54-4		M57	OW54-i	
				M63-2	OW54-d	
East of landfill footprint	M19	M68-4	M96	M50-3		
	M23	M70-3		M70-1		
	M47-3	M77				

* M107: Originally labelled as M106 in EMP dated June 29, 2010

Table 4: Leachate Chemistry Results - April 23, 2012

Constituent	Units	North Chamber	South Chamber
1,1,1,2-Tetrachloroethane	mg/L	< 0.01	< 0.01
1,1,1-Trichloroethane	mg/L	< 0.005	< 0.005
1,1,2,2-Tetrachloroethane	mg/L	< 0.01	< 0.01
1,1,2-Trichloroethane	mg/L	< 0.01	< 0.01
1,1-Dichloroethane	mg/L	< 0.005	< 0.005
1,1-Dichloroethylene	mg/L	< 0.005	< 0.005
1,2-Dibromoethane	mg/L	< 0.01	< 0.01
1,2-Dichlorobenzene (o)	mg/L	< 0.01	< 0.01
1,2-Dichloroethane	mg/L	< 0.01	< 0.01
1,2-Dichloropropane	mg/L	< 0.005	< 0.005
1,3,5-Trimethylbenzene	mg/L	< 0.01	< 0.01
1,3-Dichlorobenzene (m)	mg/L	< 0.01	< 0.01
1,4-Dichlorobenzene (p)	mg/L	< 0.01	< 0.01
Alkalinity	mg/L	6700	8100
Ammonia	mg/L	1150	1440
Arsenic	mg/L	0.054	0.046
Barium	mg/L	0.35	0.34
Benzene	mg/L	< 0.005	0.0061
Biochemical Oxygen Demand	mg/L	200	360
Boron	mg/L	9.8	12
Bromodichloromethane	mg/L	< 0.005	< 0.005
Bromoform	mg/L	< 0.01	< 0.01
Bromomethane	mg/L	< 0.025	< 0.025
Cadmium	mg/L	< 0.001	< 0.001
Calcium	mg/L	130	74
Carbon Tetrachloride	mg/L	< 0.005	< 0.005
Chemical Oxygen Demand	mg/L	2900	3400
Chloride	mg/L	2100	2400
Chlorobenzene	mg/L	< 0.005	< 0.005
Chloroethane	mg/L	< 0.01	< 0.01
Chloroform	mg/L	< 0.005	< 0.005
Chloromethane	mg/L	< 0.025	< 0.025
Chromium	mg/L	0.28	0.29

Table 4: Leachate Chemistry Results - April 23, 2012

Constituent	Units	North Chamber	South Chamber
Cis-1,2-Dichloroethylene	mg/L	< 0.005	< 0.005
Cis-1,3-Dichloropropylene	mg/L	< 0.01	< 0.01
Conductivity	µS/cm	18400	21800
Copper	mg/L	0.014	0.013
Dichloromethane	mg/L	< 0.025	< 0.025
Dissolved Organic Carbon	mg/L	871	940
Ethylbenzene	mg/L	0.012	0.028
Hardness	mg/L	930	750
Iron	mg/L	14	1.5
Lead	mg/L	0.0089	0.0073
m+p-Xylene	mg/L	0.055	0.047
Magnesium	mg/L	150	140
Manganese	mg/L	0.4	0.24
Mercury	mg/L	< 0.0002	< 0.0002
Naphthalene	mg/L	< 0.025	0.028
Nitrate	mg/L	< 2	< 2
Nitrite	mg/L	< 0.2	< 0.2
o-Xylene	mg/L	0.016	0.022
pH (Lab)	unitless	7.57	7.71
Phenols	mg/L	0.54	0.52
Phosphorus (total)	mg/L	7.4	12
Potassium	mg/L	540	640
Sodium	mg/L	2000	2500
Styrene	mg/L	< 0.01	< 0.01
Sulphate	mg/L	110	< 50
Tetrachloroethylene	mg/L	< 0.005	< 0.005
Toluene	mg/L	< 0.01	0.03
Total Dissolved Solids	mg/L	7650	9210
Total Kjeldahl Nitrogen	mg/L	1300	1600
Trans-1,2-dichloroethylene	mg/L	< 0.005	< 0.005
Trans-1,3-dichloropropene	mg/L	< 0.01	< 0.01
Trichloroethylene	mg/L	< 0.005	< 0.005
Trichlorofluoromethane	mg/L	< 0.01	< 0.01
Vinyl Chloride	mg/L	< 0.01	< 0.01
Zinc	mg/L	0.089	0.072

Table 5: Groundwater Elevations - April 20, 2012

Monitoring Well	Water Level (masl)	Monitoring Well	Water Level (masl)	Monitoring Well	Water Level (masl)	Monitoring Well	Water Level (masl)
Shallow Groundwater Flow Zone							
M12	125.24	M31	124.20	M67-2	122.59	M98	129.64
M14	126.45	M35	124.11	M68-4	123.95	M99-2	129.85
M15	DRY	M38	124.63	M70-3	126.99	M100	124.52
M16	124.30	M39	123.61	M77*	-	M101	123.81
M18	127.08	M41	125.05	M80-2	123.43	M102	123.93
M19	DAMAGED	M47-3	124.68	M81	124.41	M103	123.39
M23	127.11	M53-4	124.70	M87-2	124.16	OW37-s	121.99
M27	125.61	M54-4	124.20	M88-2	128.15	OW57	DAMAGED
M28	125.85	M58-4	124.56	M89-2	129.13		
M29	123.52	M60-4	124.25	M96	128.74		
M30	123.79	M66-2	123.05	M97	125.27		
Intermediate Bedrock Groundwater Flow Zone							
M3A-3	124.74	M59-2	123.03	M72	122.80	M105	121.21
M9-3	122.12	M59-3	122.99	M73	122.86	M106	122.96
M10-1	121.62	M59-4	123.01	M74	123.54	M107	121.86
M49-1	121.47	M60-1	122.92	M80-1	123.05	M108	121.14
M50-3	124.51	M63-2	121.13	M82-1	121.28	OW54-d	121.51
M56-2	123.00	M64-2	118.72	M82-2	122.74	OW54-i	121.52
M57	112.84	M70-1	117.77	M91-1	123.01		
M58-3	123.03	M71	122.02	M95-1	122.87		

*** M77: Water level not recorded (missed)**

Table 6a: Groundwater Quality Results - April 24-May 10, 2012

Name	Date	Alkalinity	Ammonia	Arsenic	Barium	Biochemical Oxygen Demand	Boron	Cadmium	Calcium	Chemical Oxygen Demand	Chloride	Chromium	Conductivity	Copper	Dissolved Organic Carbon	Hardness	Iron	Lead	Magnesium	Manganese	Mercury	Naphthalene	Nitrate	Nitrite	pH (Lab)	Phenols	Phosphorus (total)	Potassium	Sodium	Sulphate	Total Dissolved Solids	Total Kjeldahl Nitrogen	Zinc
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	unitless	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Shallow Groundwater Flow Zone*																																	
M41	25/04/2012	470	< 0.15	< 0.001	0.083	< 2	0.054	< 0.0001	150	11	180	0.012	1590	0.0015	5.9	700	0.15	< 0.0005	80	0.048	< 0.0002	< 0.0005	< 0.1	< 0.01	7.87	< 0.001	0.05	15	41	87	1010	0.8	< 0.005
M53-4	25/04/2012	350	< 0.15	< 0.001	0.038	< 2	< 0.01	< 0.0001	120	20	6	< 0.005	884	< 0.001	2.1	410	0.32	< 0.0005	25	0.097	< 0.0002	< 0.0005	< 0.1	< 0.01	8.01	< 0.001	0.05	0.32	39	130	526	< 0.7	< 0.005
M54-4	24/04/2012	380	< 0.15	< 0.001	0.15	< 2	0.044	< 0.0001	120	12	44	0.013	890	< 0.001	1.7	390	< 0.1	< 0.0005	23	0.0052	< 0.0002	< 0.0005	0.1	< 0.01	7.92	< 0.001	0.47	1.2	53	33	526	< 0.7	< 0.005
M66-2	24/04/2012	320	< 0.15	0.0024	0.025	< 2	0.85	< 0.0001	130	13	140	0.005	1750	< 0.001	1.5	560	0.6	< 0.0005	55	0.036	< 0.0002	< 0.0005	< 0.1	< 0.01	7.9	< 0.001	0.06	6.4	180	370	1110	3.8	< 0.005
M67-2	24/04/2012	340	0.67	0.0021	0.25	7	0.69	< 0.0001	57	25	6	0.01	743	< 0.001	1.9	270	2.6	< 0.0005	30	0.064	< 0.0002	< 0.0005	< 0.1	0.012	7.99	-	0.17	7.8	63	51	468	1.4	< 0.005
M68-4	24/04/2012	270	< 0.15	< 0.001	0.072	4	0.02	< 0.0001	98	21	17	< 0.005	603	< 0.001	2.1	310	0.14	< 0.0005	15	0.066	< 0.0002	< 0.0005	< 0.1	< 0.01	7.74	< 0.001	0.19	0.24	16	25	366	0.8	< 0.005
M70-3	24/04/2012	290	< 0.15	< 0.001	0.027	< 2	0.011	< 0.0001	160	18	39	0.008	1120	< 0.001	2.9	570	0.21	< 0.0005	41	0.075	< 0.0002	< 0.0005	< 0.1	< 0.01	7.81	< 0.001	0.11	0.38	28	260	774	< 0.7	< 0.005
M80-2	24/04/2012	280	< 0.15	< 0.001	0.069	4	0.092	< 0.0001	72	15	32	0.024	730	< 0.001	1.1	340	0.37	< 0.0005	38	0.0086	< 0.0002	< 0.0005	< 0.1	< 0.01	7.9	< 0.001	1.1	4.2	20	60	432	0.9	< 0.005
M81	24/04/2012	360	< 0.15	< 0.001	0.23	< 2	0.035	< 0.0001	110	7.3	61	< 0.005	916	< 0.001	1.2	480	< 0.1	< 0.0005	52	0.018	< 0.0002	< 0.0005	< 0.1	< 0.01	7.86	< 0.001	0.11	2.2	10	41	534	< 0.7	< 0.005
M87-2	25/04/2012	220	< 0.15	0.0011	0.054	< 2	0.032	< 0.0001	54	16	30	0.018	595	< 0.001	3.7	280	< 0.1	< 0.0005	36	0.0039	< 0.0002	< 0.0005	< 0.1	< 0.01	8.11	< 0.001	0.63	2	12	50	334	< 0.7	< 0.005
M96	24/04/2012	310	< 0.15	< 0.001	0.17	< 2	0.054	< 0.0001	120	8	4	< 0.005	674	0.004	1.4	440	2.3	0.0013	36	0.085	< 0.0002	< 0.0005	1.9	< 0.01	7.91	0.0017	0.14	4.1	22	37	398	< 0.7	< 0.005
M97	25/04/2012	220	< 0.15	0.0013	0.071	< 2	0.061	< 0.0001	32	26	6	0.036	501	< 0.001	1.2	210	< 0.1	< 0.0005	32	0.0031	< 0.0002	< 0.0005	< 0.1	< 0.01	7.99	< 0.001	2.4	2	25	45	280	1	< 0.005
M99-2	25/04/2012	280	0.25	0.0019	0.043	< 2	0.083	< 0.0001	63	32	30	0.033	838	< 0.001	2.5	400	0.51	< 0.0005	59	0.019	< 0.0002	< 0.0005	< 0.1	< 0.01	8.06	< 0.001	0.79	2.8	19	130	474	2.4	< 0.005
M101	24/04/2012	430	< 0.15	< 0.001	0.15	< 2	0.087	< 0.0001	150	22	73	0.013	1150	< 0.001	3.7	580	< 0.1	< 0.0005	51	0.017	< 0.0002	< 0.0005	< 0.1	< 0.01	7.78	0.001	0.27	3.7	17	81	730	0.9	< 0.005
M102	24/04/2012	460	< 0.15	< 0.001	0.14	< 2	0.028	< 0.0001	170	20	43	< 0.005	1110	< 0.001	3.6	570	0.94	< 0.0005	36	0.38	< 0.0002	< 0.0005	< 0.1	< 0.01	7.64	-	0.11	1.9	26	73	674	0.8	< 0.005
M103	24/04/2012	800	< 0.15	< 0.001	0.16	< 2	0.24	< 0.0001	140	21	110	< 0.005	1780	0.0011	5.5	730	< 0.1	< 0.0005	92	0.026	< 0.0002	< 0.0005	< 0.1	< 0.01	7.75	< 0.001	0.1	6.6	140	40	1040	0.9	< 0.005
OW37-s	25/04/2012	81	< 0.15	< 0.001	0.026	< 2	0.017	< 0.0001	16	7.3	15	< 0.005	215	< 0.001	0.6	51	< 0.1	< 0.0005	3	0.068	< 0.0002	< 0.0005	< 0.1	< 0.01	7.85	< 0.001	< 0.03	3	8.2	3	74	< 0.7	< 0.005
Intermediate BedrockGroundwater Flow Zone																																	
M5-3	24/04/2012	460	1.29	< 0.001	0.18	12	1.1	< 0.0001	35	20	39	< 0.005	985	< 0.001	0.9	190	< 0.1	< 0.0005	26	0.0035	< 0.0002	< 0.0005	< 0.1	< 0.01	8.04	0.038	< 0.03	13	140	31	536	1.7	< 0.005
M6-3	24/04/2012	1900	4.65	< 0.002	1.4	< 2	0.18	< 0.0001	800	140	1100	0.017	11200	0.0019	36.9	2000	< 0.1	0.00066	0.19	< 0.002	< 0.0002	< 0.0005	< 0.1	< 0.01	12.4	0.0077	< 0.15	55	560	18	4070	13	< 0.005
M9-3	25/04/2012	280	1.07	< 0.001	0.04	4	0.49	< 0.0001	43	15	65	< 0.005	764	< 0.001	2.2	210	0.11	< 0.0005	25	0.029	< 0.0002	< 0.0005	< 0.1	< 0.01	8.13	0.0027	< 0.03	14	70	19	386	1.4	< 0.005
M10-1	25/04/2012	390	0.41	0.0019	0.17	< 2	0.15	< 0.0001	110	25	73	< 0.005	972	< 0.001	6	370	13	< 0.0005	25	0.62	< 0.0002	< 0.0005	< 0.1	< 0.01	7.75	< 0.001	0.04	4	58	16	536	1.2	< 0.005
M49-1	25/04/2012	420	1.4	< 0.001	0.049	7	0.81	< 0.0001	13	65	450	< 0.005	2330	< 0.001	9.5	57	< 0.1	< 0.0005	6	0.0069	< 0.0002	< 0.0005	< 0.1	< 0.01	8.29	0.021	1.3	8.7	460	36	1260	2.8	< 0.005
M56-2	25/04/2012	270	< 0.15	< 0.001	0.17	< 2	0.068	< 0.0001	74	11	24	< 0.005	739	< 0.001	1.6	360	< 0.1	< 0.0005	42	0.054	< 0.0002	< 0.0005	< 0.1	< 0.01	8.08	< 0.001	< 0.03	3.1	12	93	440	< 0.7	< 0.005
M57	25/04/2012	160	5.73	0.0065	0.02	10	1.1	< 0.0001	18	35	620	< 0.005	2890	< 0.001	4.3	55	< 0.1	< 0.0005	2.5	< 0.002	< 0.0002	< 0.0005	< 0.1	< 0.01	8.55	0.0022	0.15	16	560	150	1480	6.6	< 0.005
M58-3	25/04/2012	310	< 0.15	< 0.001	0.14	< 2	0.013	< 0.0001	85	10	5	< 0.005	649	< 0.001	1	340	< 0.1	< 0.0005	31	< 0.002	< 0.0002	< 0.0005	0.21	< 0.01	8.02	< 0.001	< 0.03	1.6	5	36	366	< 0.7	< 0.005
M59-2	24/04/2012	420	0.43	< 0.001	0.21	< 2	0.22	< 0.0001	130	20	60	< 0.005	1020	< 0.001	6.2	480	< 0.1	< 0.0005	38	0.014	< 0.0002	< 0.0005	< 0.1	< 0.01	7.7	0.0062	< 0.03	5.6	35	46	596	1.2	< 0.005
M59-3	24/04/2012	240	< 0.15	0.0019	0.074	< 2	0.038	< 0.0001	96	16	23	< 0.005	602	< 0.001	2.1	290	< 0.1	< 0.0005	12	0.015	< 0.0002	< 0.0005	0.45	< 0.01	7.75	< 0.001	< 0.03	1.4	12	38	354	< 0.7	< 0.005
M59-4	24/04/2012	280	0.37	0.0021	0.096	6	0.43	< 0.0001	64	14	6	< 0.005	620	< 0.001	1.5	290	0.74	< 0.0005	33	0.026	< 0.0002	< 0.0005	0.14	0.055	7.87	0.003	0.09	6.3	17	39	338	1	< 0.005
M70-1	24/04/2012	340	3.18	< 0.005	0.14	< 2	2.8	< 0.0005	220	61	2700	< 0.005	9470	< 0.005	1.6	1100	6	< 0.0025	140	0.081	< 0.0002	< 0.0005	< 0.1	< 0.01	7.61	< 0.001	0.04	34	1600	320	5820	4	< 0.025
M71	25/04/2012	570	1.51	< 0.001	0.045	9	0.45	< 0.0001	150	31	170	< 0.005	1620	< 0.001	7.6	560	0.19	< 0.0005	44	0.015	< 0.0002	< 0.0005	< 0.1	< 0.01	7.82	0.0031	0.04	12	120	14	874	2.4	< 0.005
M72	25/04/2012	270	0.52	< 0.001	0.15	11	0.34	< 0.0001	55	20	26	< 0.005	622	< 0.001	1.4	270	< 0.1	< 0.0005	32	0.003	< 0.0002	< 0.0005	< 0.1	< 0.01	8.2	0.025	0.04	7.9	17	37	332	1	< 0.005
M74	25/04/2012	300	1.16	< 0.001	0.075	4	0.88	< 0.0001	35	36	18	< 0.005	691	< 0.001	1.1	170	< 0.1	< 0.0005	20	0.019	< 0.0002	< 0.0005	< 0.1	< 0.01	8.19	0.0017	0.35	13	77	40	350	1.5	< 0.005
M75	25/04/2012	480	2.69	< 0.001	0.062	7	1.2	< 0.0001	31	320	82	0.037	1180	< 0.001	3.3	160	< 0.1	< 0.0005	19	0.016	< 0.0002	< 0.0005	< 0.1	< 0.01	8.28	0.03	0.53	17	200	43	644	6	< 0.005
M80-1	24/04/2012	140	0.35	< 0.001	0.042	11	0.36	< 0.0001	22	31	9	< 0.005	366	< 0.001	0.7	110	< 0.1	< 0.0005	13	0.0049	< 0.0002	< 0.0005	< 0.1	< 0.01	7.73	0.036	< 0.03	4.4	32	37	206	< 0.7	< 0.005
M82-1	25/04/2012	340	0.77	0.0027	0.17	< 2	0.91	< 0.0001	58	19	46	< 0.005	928	< 0.001	2.6	260	0.48	< 0.0005	27	0.0075	< 0.0002	< 0.0005	< 0.1	< 0.01	8.12	0.0013	< 0.03	10	94	76	514	1.2	< 0.005
M82-2	25/04/2012	330	0.19	< 0.001	0.13	< 2	0.12	< 0.0001	110	15	21	< 0.005	779	< 0.001	2.1	380	< 0.1	< 0.0005	28	0.017	< 0.0002	< 0.0005	< 0.1	< 0.01	7.99	0.0012	0.03	3.8	16	67	442	< 0.7	< 0.005
M91-1	25/04/2012	290	0.67	< 0.001	0.084	5	0.73	< 0.0001	46	12	19	< 0.005	702	< 0.001	1.2	210	0.11	< 0.0005	22	0.0088	< 0.0002	< 0.0005	< 0.1	< 0.01	8.1	< 0.001	0.04	8	67	52	354	1	< 0.005
M95-1	25/04/2012	330	< 0.15	< 0.001	0.14	< 2	0.026	< 0.0001	110	13	7	< 0.005	723	< 0.001	1.5	390	< 0.1	< 0.0005	26	0.0024	< 0.0002	< 0.0005	< 0.1	< 0.01	7.99	< 0.001	0.03	2.2	6.4	56	406	< 0.7	< 0.005
M105	24/04/2012	530	0.77	< 0.001	0.2	< 2	0.33	< 0.0001	130	31	140	< 0.005	1410	< 0.001	6.8	550	< 0.1	< 0.0005	53	0.0073	< 0.0002	< 0.0005	< 0.1	< 0.01	7.62	0.0042	0.03	9	78	17	778	2	< 0.005
M106	24/04/2012	370	1.93	< 0.001	0.086	12	1.4	< 0.0001	81	44	890	< 0.005	3690	< 0.005	1.4	400	< 0.1	< 0.0005	49	< 0.002	< 0.0002	< 0.0005	< 0.1	< 0.01	7.97	0.078	< 0.03	18	570	79	1960	5	< 0.025
M107**	10/05/2012	390	< 0.15	< 0.001	0.073	< 2	0.12	< 0.0001	95	22	43	< 0.005	891	< 0.001	5.3	340	4.2	< 0.0005	24	0.3	< 0.0002	< 0.0005	< 0.1	< 0.01	7.78	< 0.001	0.03	2.8	48	17	462	3.3	< 0.005
OW54-d	25/04/2012	270	1	< 0.001	0.045	< 2	0.51	< 0.0001	44	11	72	< 0.005	810	< 0.001	1.2	230	< 0.1	< 0.0005	28	0.026	< 0.0002	< 0.0005	< 0.1	< 0.01	8.12	< 0.001	0.03	13	78	32	392	1.3	< 0.005

*** Shallow groundwater monitoring wells not sampled: M29, M39, M58-4 (see text for details)**

**** M107: Originally labelled as M106 in EMP dated June 29, 2010**

Table 6a: Groundwater Quality Results - April 24-May 10, 2012

Name	Date	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,2-Diboromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	Benzene	Bromodichloromethane	Bromoform	Bromomethane	Carbon Tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	Cis-1,2-Dichloroethylene	Cis-1,3-Dichloropropylene	Dibromochloromethane	Dichloromethane	Ethylbenzene	m&p-Xylene	o-Xylene	Styrene	Toluene	Trans-1,2-Dichloroethylene	Trans-1,3-Dichloropropylene	Tetrachloroethylene	Trichloroethylene	Trichlorofluoromethane	Vinyl Chloride
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Shallow Groundwater Flow Zone*																																						
M41	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M53-4	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M54-4	24/04/2012	< 0.0002	0.0049	< 0.0002	< 0.0002	0.00071	0.00014	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	0.0012	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	0.0075	0.00032	< 0.0002	< 0.0002
M66-2	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M67-2	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M68-4	24/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M70-3	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M80-2	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M81	24/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M87-2	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M96	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M97	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M99-2	25/04/2012	-	-	-	-	-	-	-	-	-	-	< 0.0002	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M101	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	0.00027	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M102	24/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M103	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
OW37-s	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
Intermediate BedrockGroundwater Flow Zone																																						
M5-3	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M6-3	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	0.00018	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.0014	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	0.00035	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	0.00029	0.002	0.00066	< 0.0002	0.0035	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M9-3	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	0.00018	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.00022	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	0.004	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M10-1	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	0.0033	0.00023	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.00014	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	0.009	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	0.00021
M49-1	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.00013	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M56-2	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M57	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	0.0048	0.00014	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.0029	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	0.00057	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	0.00019	0.0014	0.00043	< 0.0002	0.0014	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M58-3	25/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M59-2	24/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M59-3	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M59-4	24/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M70-1	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.0026	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M71	25/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M72	25/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M74	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M75	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M80-1	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M82-1	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.00012	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	0.00013	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M82-2	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M91-1	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.00046	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M95-1	25/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M105	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	0.00079	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M106	24/04/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	0.006	0.0017	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	0.0007	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0002	< 0.0001	0.012	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	0.0005	< 0.0001	< 0.0002	0.00086	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
M107**	10/05/2012	< 0.0002	< 0.0001	< 0.0002	< 0.0002	0.0018	0.00017	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0005	< 0.0001	< 0.0001	0.0076	< 0.0001	< 0.0005	< 0.0001	< 0.0002	< 0.0002	< 0.0005	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0002	< 0.0001	< 0.0002	< 0.0001	< 0.0001	< 0.0002	< 0.0002
OW54-d	25/04/2012	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*** Shallow groundwater monitoring wells not sampled: M29, M39, M58-4 (see text for details)**

**** M107: Originally labelled as M106 in EMP dated June 29, 2010**

Table 6b: Groundwater Quality Results and Reasonable Use Limits - April 24-May 10, 2012

Name	Date	Alkalinity	Ammonia	Biochemical Oxygen Demand	Boron	Chemical Oxygen Demand	Chloride	Chromium	Conductivity	Dissolved Organic Carbon	Iron	Manganese	Naphthalene	Phenols	Phosphorus (total)	Potassium	Sodium	Total Dissolved Solids	Total Kjeldahl Nitrogen	Zinc	1,3,5-Trimethylbenzene	1,4-Dichlorobenzene	Benzene	Chlorobenzene	Ethylbenzene	m&p-Xylene	o-Xylene	Toluene
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	µS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Shallow Groundwater Flow Zone*																												
RUL		**386**	**-**	**-**	**1.27**	**-**	**128**	**0.014**	**-**	**3.1**	**0.18**	**0.028**	**-**	**-**	**-**	**-**	**104**	**415**	**-**		**-**	**0.0013**	**0.0014**	**0.02**	**0.0013**	**0.15**		**0.0121**
M54-4	24/04/2012	380	< 0.15	< 2	0.044	12	44	0.013	890	1.7	< 0.1	0.0052	< 0.0005	< 0.001	0.47	1.2	53	***526***	< 0.7	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M66-2	24/04/2012	320	< 0.15	< 2	0.85	13	***140***	0.005	1750	1.5	***0.6***	***0.036***	< 0.0005	< 0.001	0.06	6.4	***180***	***1110***	3.8	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M67-2	24/04/2012	340	0.67	7	0.69	25	6	0.01	743	1.9	***2.6***	***0.064***	< 0.0005	-	0.17	7.8	63	***468***	1.4	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M80-2	24/04/2012	280	< 0.15	4	0.092	15	32	***0.024***	730	1.1	***0.37***	0.0086	< 0.0005	< 0.001	1.1	4.2	20	***432***	0.9	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M87-2	25/04/2012	220	< 0.15	< 2	0.032	16	30	***0.018***	595	***3.7***	< 0.1	0.0039	< 0.0005	< 0.001	0.63	2	12	334	< 0.7	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
OW37-s	25/04/2012	81	< 0.15	< 2	0.017	7.3	15	< 0.005	215	0.6	< 0.1	***0.068***	< 0.0005	< 0.001	< 0.03	3	8.2	74	< 0.7	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
Intermediate BedrockGroundwater Flow Zone																												
RUL		**403**	**-**	**-**	**1.3**	**-**	**130**	**0.014**	**-**	**3.4**	**0.18**	**0.037**	**-**	**-**	**-**	**-**	**106**	**478**	**-**		**-**	**0.0013**	**0.0014**	**-**	**0.0013**	**0.15**		**0.0121**
M10-1	25/04/2012	390	0.41	< 2	0.15	25	73	< 0.005	972	***6***	***13***	***0.62***	< 0.0005	< 0.001	0.04	4	58	***536***	1.2	< 0.005	< 0.0002	< 0.0002	0.00014	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M49-1	25/04/2012	***420***	1.4	7	0.81	65	***450***	< 0.005	2330	***9.5***	< 0.1	0.0069	< 0.0005	0.021	1.3	8.7	***460***	***1260***	2.8	< 0.005	< 0.0002	< 0.0002	0.00013	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M56-2	25/04/2012	270	< 0.15	< 2	0.068	11	24	< 0.005	739	1.6	< 0.1	***0.054***	< 0.0005	< 0.001	< 0.03	3.1	12	440	< 0.7	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M57	25/04/2012	160	5.73	10	1.1	35	***620***	< 0.005	2890	***4.3***	< 0.1	< 0.002	< 0.0005	0.0022	0.15	16	***560***	***1480***	6.6	< 0.005	< 0.0002	< 0.0002	***0.0029***	< 0.0001	0.00019	0.0014	0.00043	0.0014
M58-3	25/04/2012	310	< 0.15	< 2	0.013	10	5	< 0.005	649	1	< 0.1	< 0.002	< 0.0005	< 0.001	< 0.03	1.6	5	366	< 0.7	< 0.005	< 0.0002	-	-	-	-	-	-	-
M70-1	24/04/2012	340	3.18	< 2	***2.8***	61	***2700***	< 0.005	9470	1.6	***6***	***0.081***	< 0.0005	< 0.001	0.04	34	***1600***	***5820***	4	< 0.025	< 0.0002	< 0.0002	***0.0026***	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M80-1	24/04/2012	140	0.35	11	0.36	31	9	< 0.005	366	0.7	< 0.1	0.0049	< 0.0005	0.036	< 0.03	4.4	32	206	< 0.7	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M82-1	25/04/2012	340	0.77	< 2	0.91	19	46	< 0.005	928	2.6	***0.48***	0.0075	< 0.0005	0.0013	< 0.03	10	94	***514***	1.2	< 0.005	< 0.0002	< 0.0002	0.00012	< 0.0001	< 0.0001	< 0.0001	0.00013	< 0.0002
M82-2	25/04/2012	330	0.19	< 2	0.12	15	21	< 0.005	779	2.1	< 0.1	0.017	< 0.0005	0.0012	0.03	3.8	16	442	< 0.7	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M91-1	25/04/2012	290	0.67	5	0.73	12	19	< 0.005	702	1.2	0.11	0.0088	< 0.0005	< 0.001	0.04	8	67	354	1	< 0.005	< 0.0002	< 0.0002	0.00046	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M95-1	25/04/2012	330	< 0.15	< 2	0.026	13	7	< 0.005	723	1.5	< 0.1	0.0024	< 0.0005	< 0.001	0.03	2.2	6.4	406	< 0.7	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002
M107**	10/05/2012	390	< 0.15	< 2	0.12	22	43	< 0.005	891	***5.3***	***4.2***	***0.3***	< 0.0005	< 0.001	0.03	2.8	48	462	3.3	< 0.005	< 0.0002	< 0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002

*** Shallow groundwater monitoring wells not sampled: M29, M39, M58-4 (see text for details)**

**** M107: Originally labelled as M106 in EMP dated June 29, 2010**

Groundwater results exceed Reasonable Use Limits (RUL)

Table 7: Water Quality Results from Off-Site Domestic Supply Wells - April 23, 2012

		ODWSOG		1097 Beechwood Rd	1121 Beechwood Rd	1144 Beechwood Rd	1181 Beechwood Rd	1206 Beechwood Rd	1250 Beechwood Rd	1252 Beechwood Rd	1264 Beechwood Rd
Inorganic and General Parameters											
Alkalinity (as CaCO3)	mg/L	30-500	OG	200	260	480	420	410	290	490	470
Ammonia	mg/L			< 0.15	< 0.15	0.89	4.38	0.47	0.25	0.59	0.48
Arsenic	mg/L	0.025	IMAC	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	0.0017	< 0.001	< 0.001
Barium	mg/L	1	MAC	0.059	0.058	0.026	0.15	0.11	0.11	0.24	0.085
Biochemical Oxygen Demand	mg/L			< 2	< 2	< 2	5	< 2	< 2	5	3
Boron	mg/L	5	IMAC	0.04	0.026	0.31	1.1	0.037	0.085	0.22	0.31
Cadmium	mg/L	0.005	IMAC	< 0.0001	0.00018	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Calcium	mg/L			72	81	140	110	130	86	140	140
Chemical Oxygen Demand	mg/L			6.4	< 4	17	28	19	6.1	28	22
Chloride	mg/L	250	AO	13	14	120	***480***	42	26	110	120
Chromium	mg/L	0.05	MAC	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Conductivity	µS/cm			486	617	1310	2430	906	635	1220	1240
Copper	mg/L	1	AO	0.0059	0.0017	< 0.001	0.0024	0.0016	< 0.001	0.0061	< 0.001
Dissolved Organic Carbon	mg/L	5	AO	2.3	1.5	4.9	4.2	***6.7***	4	***8***	***6.3***
Hardness (as CaCO3)	mg/L	80-100	OG	***230***	***320***	***550***	***520***	***410***	***290***	***500***	***520***
Iron	mg/L	0.3	AO	< 0.1	< 0.1	< 0.1	***3.2***	***2.8***	***10***	***17***	***4.7***
Lead	mg/L	0.01	MAC	< 0.0005	< 0.0005	< 0.0005	***0.015***	< 0.0005	< 0.0005	0.002	< 0.0005
Magnesium	mg/L			11	28	46	61	20	18	34	39
Manganese	mg/L	0.05	AO	< 0.002	0.024	0.0041	0.029	***7.1***	***0.79***	***0.87***	***0.53***
Mercury	mg/L	0.001	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Naphthalene	mg/L	10	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005
Nitrate	mg/L	10	MAC	3	0.69	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Nitrite	mg/L	1	MAC	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
pH (Lab)	unitless	6.5-8.5	OG	8.09	8	7.56	7.87	7.76	7.79	7.66	7.76
Phenols	mg/L			< 0.001	< 0.001	0.0036	0.015	< 0.001	< 0.001	0.0047	< 0.001
Phosphorus (total)	mg/L			0.04	< 0.03	< 0.03	0.28	0.36	< 0.03	0.04	0.04
Potassium	mg/L			5.5	2.3	11	16	6	3.1	4.9	6.6
Sodium	mg/L	200 20	AO (see note)	9.6	15	***84***	***290***	***25***	***30***	***83***	***97***
Sulphate	mg/L	500	AO	25	54	32	19	25	14	< 1	14
Total Dissolved Solids	mg/L	500	AO	240	354	***704***	***1260***	***530***	336	***668***	***672***
Total Kjeldahl Nitrogen	mg/L			< 0.7	< 0.7	1.5	4.8	1.4	0.7	1.1	1.2
Zinc	mg/L	5	AO	0.023	0.027	< 0.005	0.11	0.024	0.028	0.5	0.033

Table 7: Water Quality Results from Off-Site Domestic Supply Wells - April 23, 2012

		ODWSOG		1097 Beechwood Rd	1121 Beechwood Rd	1144 Beechwood Rd	1181 Beechwood Rd	1206 Beechwood Rd	1250 Beechwood Rd	1252 Beechwood Rd	1264 Beechwood Rd
Volatile Organic Compounds (VOC)											
1,1,1,2-Tetrachloroethane	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
1,1,1-Trichloroethane	mg/L			< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0072	< 0.0001
1,1,2,2-Tetrachloroethane	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
1,1,2-Trichloroethane	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
1,1-Dichloroethane	mg/L			< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00027	0.0033	0.012	0.00026
1,1-Dichloroethylene	mg/L	0.014	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.00013	0.0017	0.00033
1,2-Dibromoethane	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
1,2-Dichlorobenzene (o)	mg/L	0.2 0.003	MAC AO	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
1,2-Dichloroethane	mg/L	0.005	IMAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
1,2-Dichloropropane	mg/L			< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
1,3,5-Trimethylbenzene	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
1,3-Dichlorobenzene (m)	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
1,4-Dichlorobenzene (p)	mg/L	0.005 0.001	MAC AO	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
Benzene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	0.00012	< 0.0001	< 0.0001	< 0.0002	0.00019
Bromodichloromethane	mg/L			0.00067	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Bromoform	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
Bromomethane	mg/L			< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005
Carbon Tetrachloride	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Chlorobenzene	mg/L			< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Chloroethane	mg/L			< 0.0002	< 0.0002	0.0005	< 0.0002	0.00041	0.0018	0.0065	0.012
Chloroform	mg/L			0.0035	0.00072	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Chloromethane	mg/L			< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.001	< 0.0005
Cis-1,2-Dichloroethylene	mg/L			< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Cis-1,3-Dichloropropylene	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
Dichloromethane	mg/L	0.05	MAC	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0026	< 0.0005	< 0.001	< 0.0005
Ethylbenzene	mg/L	0.002	AO	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
m+p-Xylene	mg/L			< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
o-Xylene	mg/L			< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Styrene	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
Tetrachloroethylene	mg/L	0.03	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Toluene	mg/L	0.024	AO	< 0.0002	< 0.0002	< 0.0002	0.0004	< 0.0002	< 0.0002	< 0.0004	< 0.0002
Total Xylenes	mg/L	0.3	AO	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Trans-1,2-dichloroethylene	mg/L			< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Trans-1,3-dichloropropene	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
Trichloroethylene	mg/L	0.005	MAC	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0002	< 0.0001
Trichlorofluoromethane	mg/L			< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002
Vinyl Chloride	mg/L	0.002	MAC	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0004	< 0.0002

Exceeds PWQO

ODWSOG: Ontario Drinking Water Objective Standards and Guidelines
OG: Operational Guidelines
MAC: Maximum Acceptable Concentration
IMAC: Interim Maximum Acceptable Concentration
AO: Asthetic Objectives

Note: The aesthetic objective for sodium in drinking water is 200 mg/L. The local Medical Officer of Health should be notified when the sodium concentration exceeds 20 mg/L so that this information may be communicated to local physicians for their use with patients on sodium restricted diets.

Table 8: Surface Water Characteristics - April 23, 2012

Date	Parameter		Surface Water Station						
			S2	S3	S4R	S5	S6	S7	S8R
23-Apr-12	Velocity:	m/s	6.3	4.43	NM	NM	3.90	7.26	15
	Depth:	m	0.13	0.60	0.64	0.10	0.14	0.19	0.06
	Width:	m	1.53	0.12	1.15	2.00	1.50	3.50	0.74
	Estimated Flow Rate:	m^3/s	1.25	0.32	NM	NM	0.82	4.83	0.67

NM: Not Measured (flow was insufficient to register on the flow meter - very small flow observed)

Table 9: Surface Water Quality Results - April 23, 2012

			Marysville Creek				Beechwood Ditch		
			S2	S3	S6	S7	S5	S4R	S8R
			(upstream)	(downstream)	(downstream)	(downstream)	(upstream)	(downstream)	(downstream)
		Date	23/04/2012	23/04/2012	23/04/2012	23/04/2012	23/04/2012	23/04/2012	23/04/2012
Reading Name	Units	PWQO							
Inorganic and General Parameters									
Alkalinity	mg/L		210	220	230	220	240	150	230
Ammonia	mg/L		0.18	0.26	< 0.15	< 0.15	< 0.15	0.28	< 0.15
Ammonia (unionized)	mg/L	0.02	0.001	0.002	< 0.001	< 0.001	< 0.001	0.006	< 0.001
Arsenic	mg/L	0.1	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Barium	mg/L		0.041	0.041	0.039	0.039	0.036	0.042	0.045
Biochemical Oxygen Demand	mg/L		3	< 2	< 2	< 2	< 2	10	< 2
Boron	mg/L	0.2	< 0.02	0.022	< 0.02	0.022	< 0.02	< 0.02	< 0.02
Cadmium	mg/L	0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001
Calcium	mg/L		76	78	75	79	76	60	77
Chemical Oxygen Demand	mg/L		50	45	41	45	35	81	32
Chloride	mg/L		19	19	16	19	7	4	5
Chromium	mg/L	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Conductivity	µS/cm		467	486	478	484	479	470	454
Copper	mg/L	0.005	0.002	< 0.002	< 0.002	< 0.002	< 0.002	*0.008*	0.003
Cyanide (free)	mg/L	0.005	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Hardness	mg/L		220	230	230	230	240	200	240
Iron	mg/L	0.3	*0.62*	*0.48*	*0.49*	*0.49*	*0.37*	*1.5*	0.11
Lead	mg/L	0.025	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0007	< 0.0005
Magnesium	mg/L		11	13	12	13	16	17	14
Mercury	mg/L	0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002	< 0.0002
Naphthalene	mg/L	0.007	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025	< 0.0025
Nitrate	mg/L		< 0.1	< 0.1	< 0.1	< 0.1	0.11	0.79	< 0.1
Nitrite	mg/L		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.026	< 0.01
Phenols	mg/L	0.001	*0.0018*	*0.0015*	*0.002*	*0.0015*	*0.0015*	*0.003*	*0.0021*
Phosphorus (total)	mg/L	0.03	*0.093*	*0.09*	*0.08*	*0.089*	*0.098*	*0.33*	*0.055*
Potassium	mg/L		2.7	3.6	2.8	3.2	4.2	5.5	2.1
Sodium	mg/L		11	13	10	13	6.8	21	8
Sulphate	mg/L		14	9	12	10	16	86	14
Total Dissolved Solids	mg/L		216	220	220	214	250	274	196
Total Kjeldahl Nitrogen	mg/L		1.3	1.6	1.1	1.3	1.2	3.9	1.3
Total Suspended Solids	mg/L		3	11	4	5	3	17	4
Zinc	mg/L	0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
VOCs									
1,1,1,2-Tetrachloroethane	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
1,1,1-Trichloroethane	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
1,1,2,2-Tetrachloroethane	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
1,1,2-Trichloroethane	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
1,1-Dichloroethane	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
1,1-Dichloroethylene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
1,2-Dibromoethane	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
1,2-Dichlorobenzene (o)	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
1,2-Dichloroethane	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
1,2-Dichloropropane	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
1,3,5-Trimethylbenzene	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
1,3-Dichlorobenzene (m)	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
1,4-Dichlorobenzene (p)	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Benzene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Bromodichloromethane	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Bromoform	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Bromomethane	mg/L		< 0.0025	< 0.0025	-	-	-	-	< 0.0025
Carbon Tetrachloride	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Chlorobenzene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Chloroethane	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Chloroform	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Chloromethane	mg/L		< 0.0025	< 0.0025	-	-	-	-	< 0.0025
Cis-1,2-Dichloroethylene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Cis-1,3-Dichloropropylene	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Dibromochloromethane	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Dichloromethane	mg/L		< 0.0025	< 0.0025	-	-	-	-	< 0.0025
Ethylbenzene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
m&p-xylene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
o-Xylene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Styrene	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Toluene	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Trans-1,2-dichloroethylene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Trans-1,3-dichloropropylene	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Tetrachloroethylene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Trichloroethylene	mg/L		< 0.0005	< 0.0005	-	-	-	-	< 0.0005
Trichlorofluoromethane	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Vinyl Chloride	mg/L		< 0.001	< 0.001	-	-	-	-	< 0.001
Field Measured									
Conductivity (Field)	µS/cm		275	284	281	288	257	278	258
Dissoved Oxygen (Field)	mg/L		10.12	10.4	10.4	10.44	9.52	10.94	10.79
pH (Field)	unitless	6.5-8.5	7.75	7.76	7.17	7.8	7.6	8.15	7.78
Temperature (Field)	°C		6.42	6.19	6.42	6.28	5.59	6.96	5.51

Exceeds PWQO

Table 10: Subsurface Gas Monitoring Results - April 24, 2012

Gas Monitor	Location	Reading (ppm)
GM1	North of garage area, south of waste mound	10
GM3	North-east corner of waste mound	0
GM4-1	South-east corner of waste mound	970
GM4-2		0
GM5	North-west corner of waste mound	0
GM6	North of waste mound	0

FIGURES

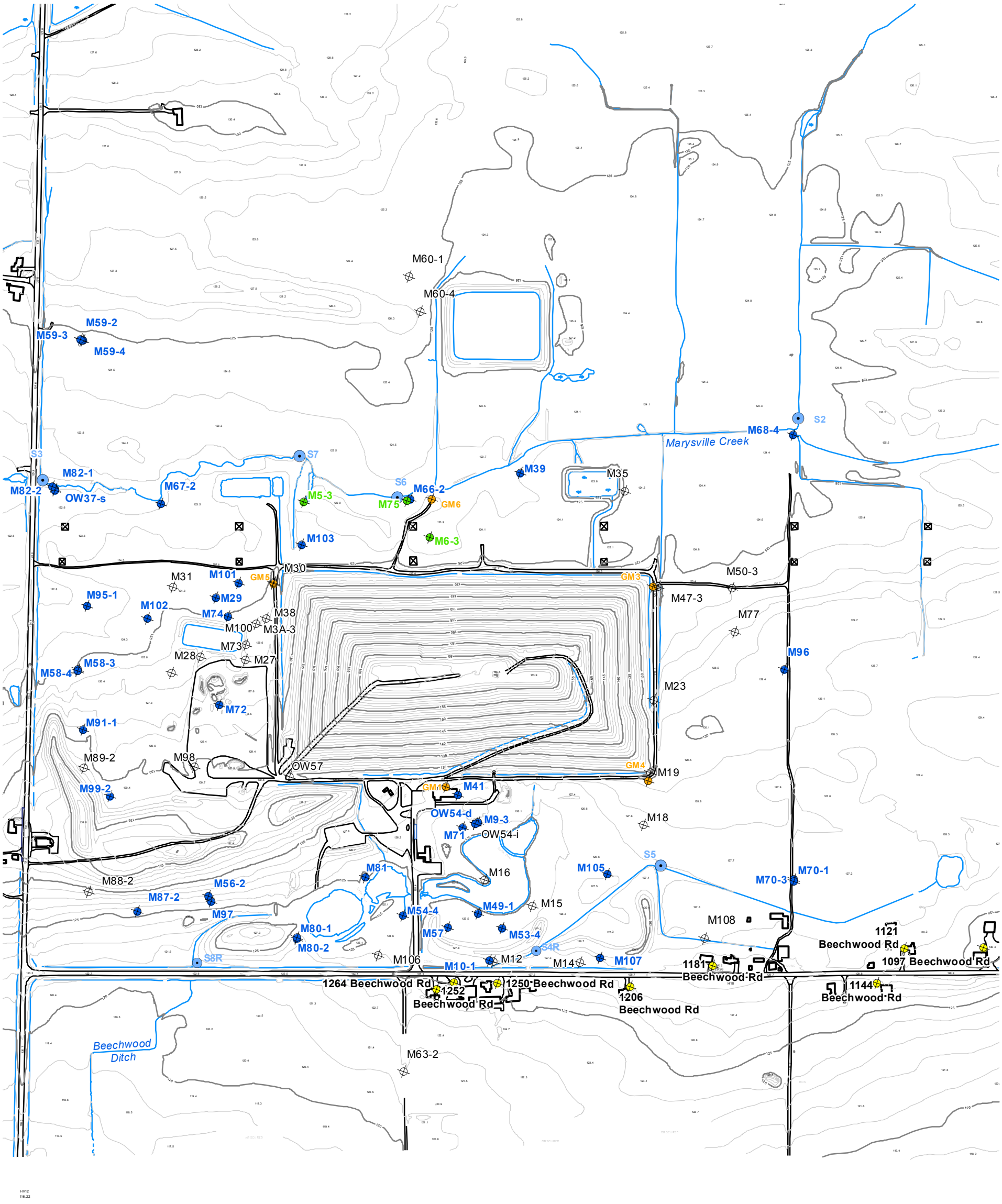

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Figure 1:
Site Plan and Monitoring Locations

M35 — Monitoring Well Used to Measure Water Level (Not Sampled)
M53-4 — Monitoring Well Used to Measure Water Level and Sampled for Chemistry
M5-3 — Monitoring Well Sampled for Chemistry (Not used for Water Levels)
1097 Beechwood — Domestic Water Supply Well Sampled for Chemistry
GM1 — Gas Monitoring Well
S2 — Surface Water Monitoring Location

Project : K-B10300-00-04
Data Source: WM Canada, WESA, HPA Ltd. Base Mapping 2009
Date: July 2012

0 12.5 25 50 75 100
Metres

Prepared by:
WESA Geomatics

Units:
UTM NAD 83 Zone 18

Scale: 1:6000

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WM WASTE MANAGEMENT

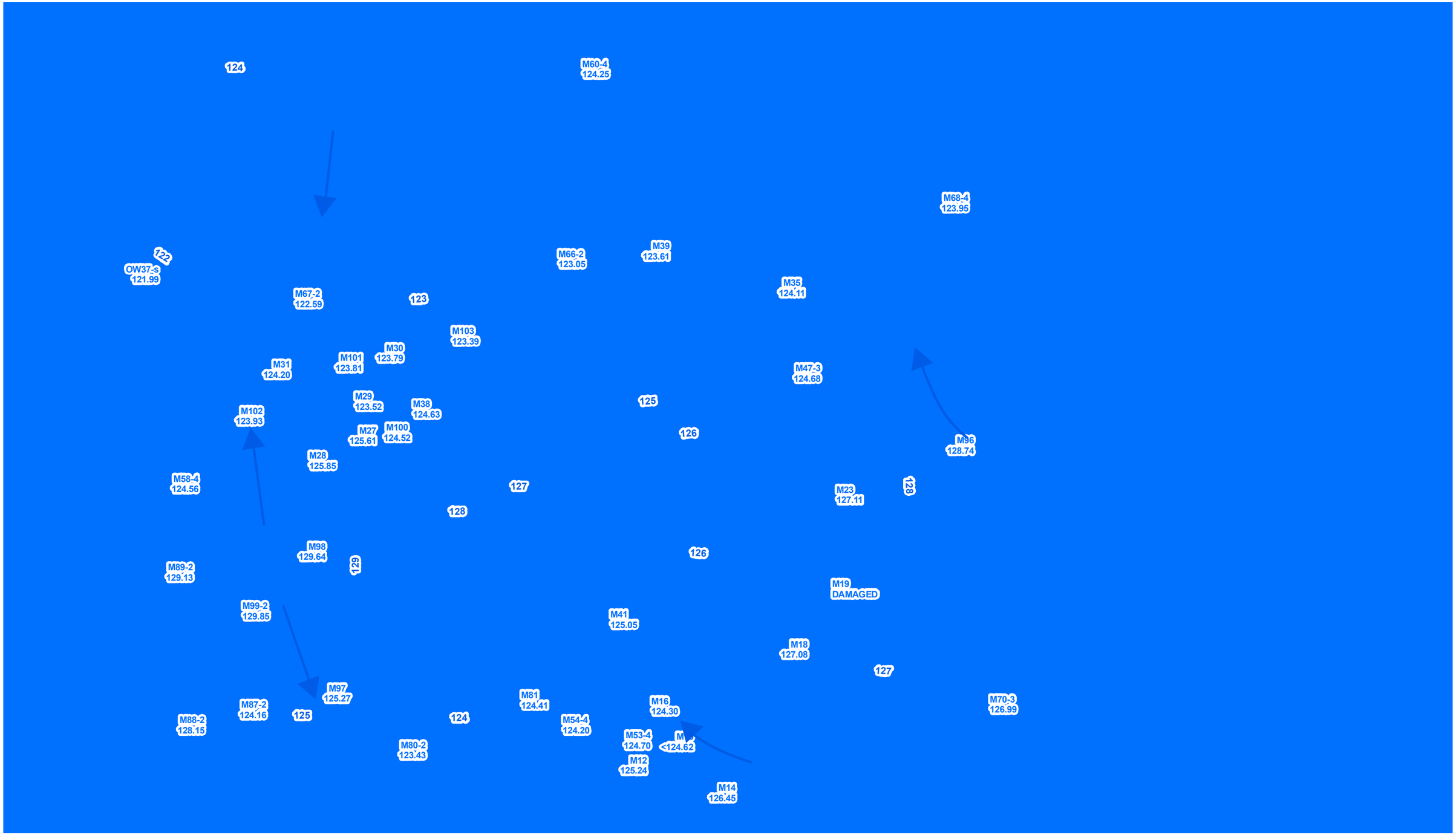

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Figure 2:
Shallow Groundwater Flow Zone Potentiometric Surface - April 20, 2012

M58-4 Shallow Groundwater Zone Elevation Monitor
Topographic Contour Lines
Surface Water
Hydro Tower
Potentiometric Surface (masl)
Inferred Groundwater Flow Direction

Note: M15: Flowing artesian conditions

Project : K-B10300-00-04
Data Source: WM Canada, WESA, HPA Ltd. Base Mapping 2009
Date: July 2012

0 12.5 25 50 75 100
Meters

Prepared by:
WESA Geomatics

Units:
UTM NAD 83 Zone 18

Scale: 1:5000

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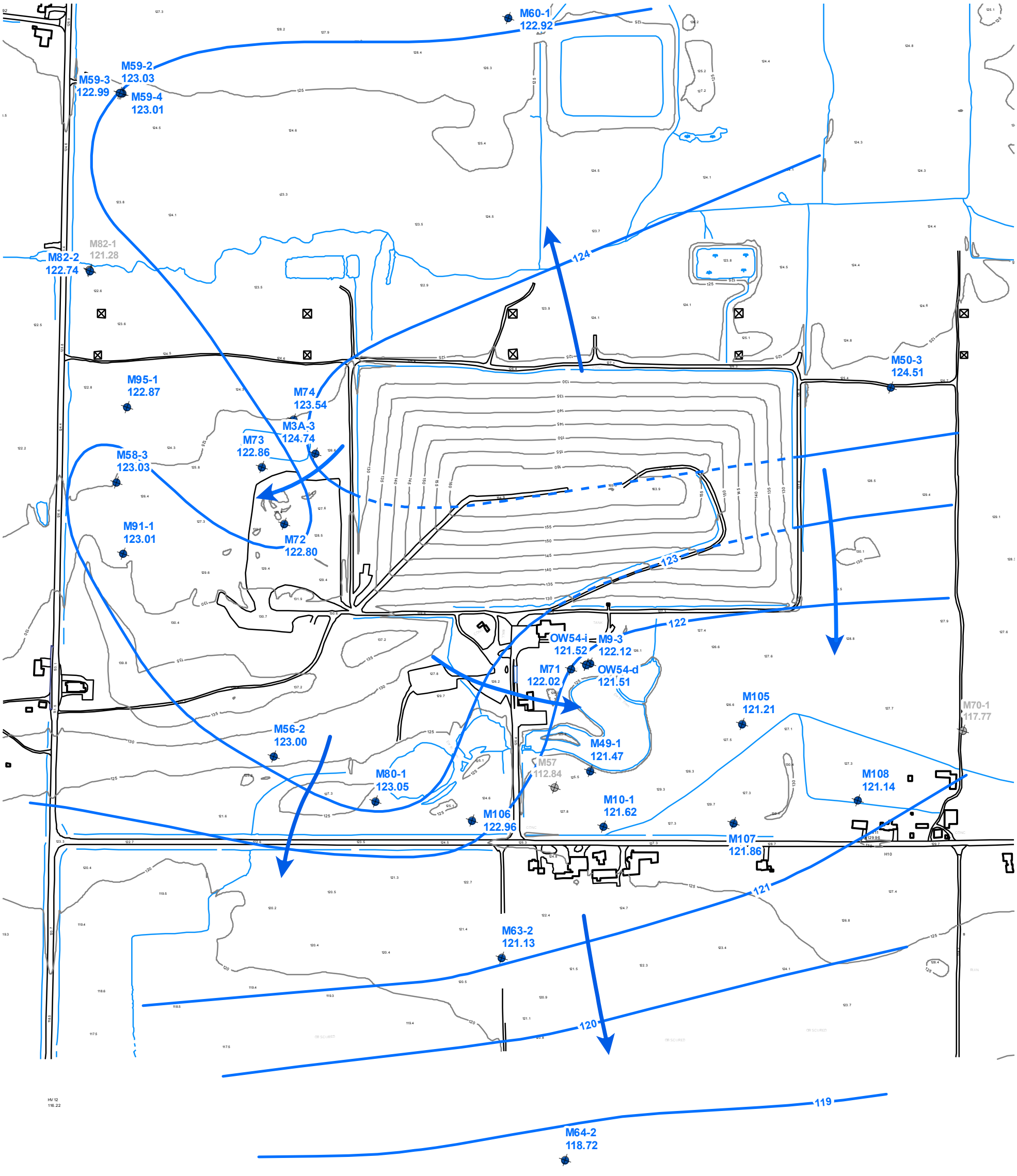

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M58-3 Intermediate Groundwater Zone Elevation Monitor
Topographic Contour Lines
Potentiometric Surface (masl)
Inferred Groundwater Flow Direction
Hydro Tower
Surface Water

Note: M57, M70-1, M82-1,: **Not used in contouring (see text for details)**

Project : K-B10300-00-04
Data Source: WM Canada, WESA, HPA Ltd. Base Mapping 2009
Date: July 2012

25 12.5 0 25 50
Meters

Prepared by:
WESA Geomatics

Units:
UTM NAD 83 Zone 18

Scale: 1:5000

Figure 3:
Intermediate Bedrock Groundwater Flow Zone Potentiometric Surface - April 20, 2012

APPENDIX A

Results from Analytical Quality Assurance / Quality Control (QA/QC) Program

APPENDIX A - RESULTS FROM QUALITY ASSURANCE / QUALITY CONTROL (QA/QC) PROGRAM

Summary of Results with Relative Percent Difference (RPD[1]) greater than 20%

Well	Parameter	Unit	Regular Sample	Field Duplicate	RPD (%)	MDL[2]	Comment
M101	Chemical Oxygen Demand	mg/L	11	22	66.67	4	Less than ~5 x MDL
M101	Total Kjeldahl Nitrogen	mg/L	0.7	0.9	25.00	0.7	Less than ~5 x MDL
M105	Chemical Oxygen Demand	mg/L	25	31	21.43	4	
M105	Phenols	mg/L	0.0026	0.0042	47.06	0.001	Less than ~5 x MDL
M105	Total Kjeldahl Nitrogen	mg/L	1.5	2	28.57	0.7	Less than ~5 x MDL
M81	Boron	mg/L	0.028	0.035	22.22	0.01	Less than ~5 x MDL
M81	Chemical Oxygen Demand	mg/L	16	7.3	74.68	4	Less than ~5 x MDL
M81	Disolved Organic Carbon	mg/L	1.5	1.2	22.22	0.2	
M82-2	Chemical Oxygen Demand	mg/L	12	15	22.22	4	Less than ~5 x MDL
S3	Total Kjeldahl Nitrogen	mg/L	1.1	1.6	37.04	0.7	Less than ~5 x MDL
S3	Total Suspended Solids	mg/L	9	11	20.00	1	

Note 1: RPD (%) = 100 * ABS (Regular Sample - Duplicate Sample) / ([Regular Sample + Duplicate Sample] / 2)
Note 2: MDL = Laboratory Method Detection Limit

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012

Parameter	Units	M101 (Regular Sample)	M101 (Field Duplicate)	RPD (%)
1,1,1,2-Tetrachloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1,1-Trichloroethane	mg/L	< 0.0001	< 0.0001	0.00
1,1,2,2-Tetrachloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1,2-Trichloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1-Dichloroethane	mg/L	0.00028	0.00027	3.64
1,1-Dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
1,2-Dibromoethane	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichlorobenzene (o)	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichloropropane	mg/L	< 0.0001	< 0.0001	0.00
1,3,5-Trimethylbenzene	mg/L	< 0.0002	< 0.0002	0.00
1,3-Dichlorobenzene (m)	mg/L	< 0.0002	< 0.0002	0.00
1,4-Dichlorobenzene (p)	mg/L	< 0.0002	< 0.0002	0.00
Alkalinity	mg/L	430	430	0.00
Ammonia	mg/L	< 0.15	< 0.15	0.00
Arsenic	mg/L	< 0.001	< 0.001	0.00
Barium	mg/L	0.16	0.15	6.45
Benzene	mg/L	< 0.0001	< 0.0001	0.00
Biochemical Oxygen Demand	mg/L	< 2	< 2	0.00
Boron	mg/L	0.077	0.087	12.20
Bromodichloromethane	mg/L	< 0.0001	< 0.0001	0.00
Bromoform	mg/L	< 0.0002	< 0.0002	0.00
Bromomethane	mg/L	< 0.0005	< 0.0005	0.00
Cadmium	mg/L	< 0.0001	< 0.0001	0.00
Calcium	mg/L	150	150	0.00
Carbon Tetrachloride	mg/L	< 0.0001	< 0.0001	0.00
Chemical Oxygen Demand	mg/L	11	22	66.67
Chloride	mg/L	75	73	2.70
Chlorobenzene	mg/L	< 0.0001	< 0.0001	0.00
Chlorodibromomethane	mg/L	< 0.0002	< 0.0002	0.00
Chloroethane	mg/L	< 0.0002	< 0.0002	0.00
Chloroform	mg/L	< 0.0001	< 0.0001	0.00
Chloromethane	mg/L	< 0.0005	< 0.0005	0.00
Chromium	mg/L	0.014	0.013	7.41
Cis-1,2-Dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Cis-1,3-Dichloropropylene	mg/L	< 0.0002	< 0.0002	0.00
Conductivity	µS/cm	1150	1150	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012 (continued)

Parameter	Units	M101 (Regular Sample)	M101 (Field Duplicate)	RPD (%)
Copper	mg/L	< 0.001	< 0.001	0.00
Dichloromethane	mg/L	< 0.0005	< 0.0005	0.00
Dissolved Organic Carbon	mg/L	4.3	3.7	15.00
Ethylbenzene	mg/L	< 0.0001	< 0.0001	0.00
Hardness	mg/L	590	580	1.71
Iron	mg/L	< 0.1	< 0.1	0.00
Lead	mg/L	< 0.0005	< 0.0005	0.00
m+p-Xylene	mg/L	< 0.0001	< 0.0001	0.00
Magnesium	mg/L	51	51	0.00
Manganese	mg/L	0.016	0.017	6.06
Mercury	mg/L	< 0.0002	< 0.0002	0.00
Naphthalene	mg/L	< 0.0005	< 0.0005	0.00
Nitrate	mg/L	< 0.1	< 0.1	0.00
Nitrate + Nitrite	mg/L	< 0.1	< 0.1	0.00
Nitrite	mg/L	< 0.01	< 0.01	0.00
o-Xylene	mg/L	< 0.0001	< 0.0001	0.00
pH (Lab)	unitless	7.71	7.78	0.90
Phenols	mg/L	< 0.001	0.001	0.00
Phosphorus (total)	mg/L	0.25	0.27	7.69
Potassium	mg/L	3.9	3.7	5.26
Sodium	mg/L	18	17	5.71
Styrene	mg/L	< 0.0002	< 0.0002	0.00
Sulphate	mg/L	80	81	1.24
Tetrachloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Toluene	mg/L	< 0.0002	< 0.0002	0.00
Total Dissolved Solids	mg/L	748	730	2.44
Total Kjeldahl Nitrogen	mg/L	0.7	0.9	25.00
Total Xylenes	mg/L	< 0.0001	< 0.0001	0.00
Trans-1,2-dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Trans-1,3-dichloropropene	mg/L	< 0.0002	< 0.0002	0.00
Trichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Trichlorofluoromethane	mg/L	< 0.0002	< 0.0002	0.00
Vinyl Chloride	mg/L	< 0.0002	< 0.0002	0.00
Zinc	mg/L	< 0.005	< 0.005	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012

Parameter	Units	M105 (Regular Sample)	M105 (Field Duplicate)	RPD (%)
1,1,1,2-Tetrachloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1,1-Trichloroethane	mg/L	< 0.0001	< 0.0001	0.00
1,1,2,2-Tetrachloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1,2-Trichloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1-Dichloroethane	mg/L	< 0.0001	< 0.0001	0.00
1,1-Dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
1,2-Dibromoethane	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichlorobenzene (o)	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichloropropane	mg/L	< 0.0001	< 0.0001	0.00
1,3,5-Trimethylbenzene	mg/L	< 0.0002	< 0.0002	0.00
1,3-Dichlorobenzene (m)	mg/L	< 0.0002	< 0.0002	0.00
1,4-Dichlorobenzene (p)	mg/L	< 0.0002	< 0.0002	0.00
Acetone	mg/L	< 0.01	< 0.01	0.00
Alkalinity	mg/L	520	530	1.90
Ammonia	mg/L	0.77	0.77	0.00
Arsenic	mg/L	< 0.001	< 0.001	0.00
Barium	mg/L	0.2	0.2	0.00
Benzene	mg/L	< 0.0001	< 0.0001	0.00
Biochemical Oxygen Demand	mg/L	< 2	< 2	0.00
Boron	mg/L	0.32	0.33	3.08
Bromodichloromethane	mg/L	< 0.0001	< 0.0001	0.00
Bromoform	mg/L	< 0.0002	< 0.0002	0.00
Bromomethane	mg/L	< 0.0005	< 0.0005	0.00
Cadmium	mg/L	< 0.0001	< 0.0001	0.00
Calcium	mg/L	130	130	0.00
Carbon Tetrachloride	mg/L	< 0.0001	< 0.0001	0.00
Chemical Oxygen Demand	mg/L	25	31	21.43
Chloride	mg/L	140	140	0.00
Chlorobenzene	mg/L	< 0.0001	< 0.0001	0.00
Chlorodibromomethane	mg/L	< 0.0002	< 0.0002	0.00
Chloroethane	mg/L	0.00073	0.00079	7.89
Chloroform	mg/L	< 0.0001	< 0.0001	0.00
Chloromethane	mg/L	< 0.0005	< 0.0005	0.00
Chromium	mg/L	< 0.005	< 0.005	0.00
Cis-1,2-Dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Cis-1,3-Dichloropropylene	mg/L	< 0.0002	< 0.0002	0.00
Conductivity	µS/cm	1390	1410	1.43
Copper	mg/L	< 0.001	< 0.001	0.00
Dichlorodifluoromethane	mg/L	< 0.0005	< 0.0005	0.00
Dichloromethane	mg/L	< 0.0005	< 0.0005	0.00
Dissolved Organic Carbon	mg/L	6.6	6.8	2.99
Ethylbenzene	mg/L	< 0.0001	< 0.0001	0.00
Hardness	mg/L	550	550	0.00
Hexane	mg/L	< 0.0005	< 0.0005	0.00
Iron	mg/L	< 0.1	< 0.1	0.00
Lead	mg/L	< 0.0005	< 0.0005	0.00
m+p-Xylene	mg/L	< 0.0001	< 0.0001	0.00
Magnesium	mg/L	53	53	0.00
Manganese	mg/L	0.0073	0.0073	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012 (continued)

Parameter	Units	M105 (Regular Sample)	M105 (Field Duplicate)	RPD (%)
Mercury	mg/L	< 0.0002	< 0.0002	0.00
Methyl Ethyl Ketone	mg/L	< 0.005	< 0.005	0.00
Methyl Isobutyl Ketone	mg/L	< 0.005	< 0.005	0.00
Methyl Tert Butyl Ether	mg/L	< 0.0002	< 0.0002	0.00
Naphthalene	mg/L	< 0.0005	< 0.0005	0.00
Nitrate	mg/L	< 0.1	< 0.1	0.00
Nitrate + Nitrite	mg/L	< 0.1	< 0.1	0.00
Nitrite	mg/L	< 0.01	< 0.01	0.00
o-Xylene	mg/L	< 0.0001	< 0.0001	0.00
pH (Lab)	unitless	7.56	7.62	0.79
Phenols	mg/L	0.0026	0.0042	47.06
Phosphorus (total)	mg/L	0.03	0.03	0.00
Potassium	mg/L	8.8	9	2.25
Sodium	mg/L	77	78	1.29
Styrene	mg/L	< 0.0002	< 0.0002	0.00
Sulphate	mg/L	18	17	5.71
Tetrachloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Toluene	mg/L	< 0.0002	< 0.0002	0.00
Total Dissolved Solids	mg/L	806	778	3.54
Total Kjeldahl Nitrogen	mg/L	1.5	2	28.57
Total Xylenes	mg/L	< 0.0001	< 0.0001	0.00
Trans-1,2-dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Trans-1,3-dichloropropene	mg/L	< 0.0002	< 0.0002	0.00
Trichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Trichlorofluoromethane	mg/L	< 0.0002	< 0.0002	0.00
Vinyl Chloride	mg/L	< 0.0002	< 0.0002	0.00
Zinc	mg/L	< 0.005	< 0.005	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012

Parameter	Units	M56-2 (Regular Sample)	M56-2 (Field Duplicate)	RPD (%)
1,1,1,2-Tetrachloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1,1-Trichloroethane	mg/L	< 0.0001	< 0.0001	0.00
1,1,2,2-Tetrachloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1,2-Trichloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1-Dichloroethane	mg/L	< 0.0001	< 0.0001	0.00
1,1-Dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
1,2-Dibromoethane	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichlorobenzene (o)	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichloropropane	mg/L	< 0.0001	< 0.0001	0.00
1,3,5-Trimethylbenzene	mg/L	< 0.0002	< 0.0002	0.00
1,3-Dichlorobenzene (m)	mg/L	< 0.0002	< 0.0002	0.00
1,4-Dichlorobenzene (p)	mg/L	< 0.0002	< 0.0002	0.00
Acetone	mg/L	< 0.01	< 0.01	0.00
Alkalinity	mg/L	270	270	0.00
Ammonia	mg/L	< 0.15	< 0.15	0.00
Arsenic	mg/L	< 0.001	< 0.001	0.00
Barium	mg/L	0.18	0.17	5.71
Benzene	mg/L	< 0.0001	< 0.0001	0.00
Biochemical Oxygen Demand	mg/L	< 2	< 2	0.00
Boron	mg/L	0.068	0.068	0.00
Bromodichloromethane	mg/L	< 0.0001	< 0.0001	0.00
Bromoform	mg/L	< 0.0002	< 0.0002	0.00
Bromomethane	mg/L	< 0.0005	< 0.0005	0.00
Cadmium	mg/L	< 0.0001	< 0.0001	0.00
Calcium	mg/L	76	74	2.67
Carbon Tetrachloride	mg/L	< 0.0001	< 0.0001	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012 (continued)

Parameter	Units	M56-2 (Regular Sample)	M56-2 (Field Duplicate)	RPD (%)
Chemical Oxygen Demand	mg/L	12	11	8.70
Chloride	mg/L	24	24	0.00
Chlorobenzene	mg/L	< 0.0001	< 0.0001	0.00
Chlorodibromomethane	mg/L	< 0.0002	< 0.0002	0.00
Chloroethane	mg/L	< 0.0002	< 0.0002	0.00
Chloroform	mg/L	< 0.0001	< 0.0001	0.00
Chloromethane	mg/L	< 0.0005	< 0.0005	0.00
Chromium	mg/L	< 0.005	< 0.005	0.00
Cis-1,2-Dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Cis-1,3-Dichloropropylene	mg/L	< 0.0002	< 0.0002	0.00
Conductivity	µS/cm	741	739	0.27
Copper	mg/L	< 0.001	< 0.001	0.00
Dichloromethane	mg/L	< 0.0005	< 0.0005	0.00
Dissolved Organic Carbon	mg/L	1.7	1.6	6.06
Ethylbenzene	mg/L	< 0.0001	< 0.0001	0.00
Hardness	mg/L	370	360	2.74
Iron	mg/L	< 0.0005	< 0.0005	0.00
Lead	mg/L	< 0.1	< 0.1	0.00
m+p-Xylene	mg/L	< 0.0005	< 0.0005	0.00
Magnesium	mg/L	< 0.0001	< 0.0001	0.00
Manganese	mg/L	42	42	0.00
Mercury	mg/L	0.052	0.054	3.77
Naphthalene	mg/L	< 0.0005	< 0.0005	0.00
Nitrate	mg/L	< 0.1	< 0.1	0.00
Nitrate + Nitrite	mg/L	< 0.1	< 0.1	0.00
Nitrite	mg/L	< 0.01	< 0.01	0.00
o-Xylene	mg/L	< 0.0001	< 0.0001	0.00
pH (Lab)	unitless	8.05	8.08	0.37
Phenols	mg/L	< 0.001	< 0.001	0.00
Phosphorus (total)	mg/L	0.04	< 0.03	0.00
Potassium	mg/L	3.2	3.1	3.17
Sodium	mg/L	12	12	0.00
Styrene	mg/L	< 0.0002	< 0.0002	0.00
Sulphate	mg/L	93	93	0.00
Tetrachloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Toluene	mg/L	< 0.0002	< 0.0002	0.00
Total Dissolved Solids	mg/L	418	440	5.13
Total Kjeldahl Nitrogen	mg/L	< 0.7	< 0.7	0.00
Trans-1,2-dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Trans-1,3-dichloropropene	mg/L	< 0.0002	< 0.0002	0.00
Trichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Trichlorofluoromethane	mg/L	< 0.0002	< 0.0002	0.00
Vinyl Chloride	mg/L	< 0.0002	< 0.0002	0.00
Zinc	mg/L	< 0.005	< 0.005	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012

Parameter	Units	M81 (Regular Sample)	M81 (Field Duplicate)	RPD (%)
Alkalinity	mg/L	360	360	0.00
Ammonia	mg/L	< 0.15	< 0.15	0.00
Arsenic	mg/L	< 0.001	< 0.001	0.00
Barium	mg/L	0.22	0.23	4.44
Biochemical Oxygen Demand	mg/L	< 2	< 2	0.00
Boron	mg/L	0.028	0.035	22.22
Cadmium	mg/L	< 0.0001	< 0.0001	0.00
Calcium	mg/L	110	110	0.00
Chemical Oxygen Demand	mg/L	16	7.3	74.68
Chloride	mg/L	62	61	1.63
Chromium	mg/L	< 0.005	< 0.005	0.00
Conductivity	µS/cm	917	916	0.11
Copper	mg/L	< 0.001	< 0.001	0.00
Disolved Organic Carbon	mg/L	1.5	1.2	22.22
Hardness	mg/L	480	480	0.00
Iron	mg/L	< 0.1	< 0.1	0.00
Lead	mg/L	< 0.0005	< 0.0005	0.00
Magnesium	mg/L	50	52	3.92
Manganese	mg/L	0.018	0.018	0.00
Mercury	mg/L	< 0.0002	< 0.0002	0.00
Naphthalene	mg/L	< 0.0005	< 0.0005	0.00
Nitrate	mg/L	< 0.1	< 0.1	0.00
Nitrate + Nitrite	mg/L	< 0.1	< 0.1	0.00
Nitrite	mg/L	< 0.01	< 0.01	0.00
pH (Lab)	unitless	7.8	7.86	0.77
Phenols	mg/L	< 0.001	< 0.001	0.00
Phosphorus (total)	mg/L	0.11	0.11	0.00
Potassium	mg/L	2.3	2.2	4.44
Sodium	mg/L	9.8	10	2.02
Sulphate	mg/L	41	41	0.00
Total Dissolved Solids	mg/L	542	534	1.49
Total Kjeldahl Nitrogen	mg/L	< 0.7	< 0.7	0.00
Zinc	mg/L	< 0.005	< 0.005	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012

Parameter	Units	M82-2 (Regular Sample)	M82-2 (Field Duplicate)	RPD (%)
1,1,1,2-Tetrachloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1,1-Trichloroethane	mg/L	< 0.0001	< 0.0001	0.00
1,1,2,2-Tetrachloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1,2-Trichloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,1-Dichloroethane	mg/L	< 0.0001	< 0.0001	0.00
1,1-Dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
1,2-Dibromoethane	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichlorobenzene (o)	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichloroethane	mg/L	< 0.0002	< 0.0002	0.00
1,2-Dichloropropane	mg/L	< 0.0001	< 0.0001	0.00
1,3,5-Trimethylbenzene	mg/L	< 0.0002	< 0.0002	0.00
1,3-Dichlorobenzene (m)	mg/L	< 0.0002	< 0.0002	0.00
1,4-Dichlorobenzene (p)	mg/L	< 0.0002	< 0.0002	0.00
Alkalinity	mg/L	330	330	0.00
Ammonia	mg/L	0.21	0.19	10.00
Arsenic	mg/L	< 0.001	< 0.001	0.00
Barium	mg/L	0.13	0.13	0.00
Benzene	mg/L	< 0.0001	< 0.0001	0.00
Biochemical Oxygen Demand	mg/L	< 2	< 2	0.00
Boron	mg/L	0.12	0.12	0.00
Bromodichloromethane	mg/L	< 0.0001	< 0.0001	0.00
Bromoform	mg/L	< 0.0002	< 0.0002	0.00
Bromomethane	mg/L	< 0.0005	< 0.0005	0.00
Cadmium	mg/L	< 0.0001	< 0.0001	0.00
Calcium	mg/L	110	110	0.00
Carbon Tetrachloride	mg/L	< 0.0001	< 0.0001	0.00
Chemical Oxygen Demand	mg/L	12	15	22.22
Chloride	mg/L	21	21	0.00
Chlorobenzene	mg/L	< 0.0001	< 0.0001	0.00
Chlorodibromomethane	mg/L	< 0.0002	< 0.0002	0.00
Chloroethane	mg/L	< 0.0002	< 0.0002	0.00
Chloroform	mg/L	< 0.0001	< 0.0001	0.00
Chloromethane	mg/L	< 0.0005	< 0.0005	0.00
Chromium	mg/L	< 0.005	< 0.005	0.00
Cis-1,2-Dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Cis-1,3-Dichloropropylene	mg/L	< 0.0002	< 0.0002	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012 (continued)

Parameter	Units	M82-2 (Regular Sample)	M82-2 (Field Duplicate)	RPD (%)
Conductivity	µS/cm	782	779	0.38
Copper	mg/L	< 0.001	< 0.001	0.00
Dichloromethane	mg/L	< 0.0005	< 0.0005	0.00
Dissolved Organic Carbon	mg/L	2.5	2.1	17.39
Ethylbenzene	mg/L	< 0.0001	< 0.0001	0.00
Hardness	mg/L	380	380	0.00
Iron	mg/L	< 0.1	< 0.1	0.00
Lead	mg/L	< 0.0005	< 0.0005	0.00
m+p-Xylene	mg/L	< 0.0001	< 0.0001	0.00
Magnesium	mg/L	29	28	3.51
Manganese	mg/L	0.018	0.017	5.71
Mercury	mg/L	< 0.0002	< 0.0002	0.00
Naphthalene	mg/L	< 0.0005	< 0.0005	0.00
Nitrate	mg/L	< 0.1	< 0.1	0.00
Nitrate + Nitrite	mg/L	< 0.1	< 0.1	0.00
Nitrite	mg/L	< 0.01	< 0.01	0.00
o-Xylene	mg/L	< 0.0001	< 0.0001	0.00
pH (Lab)	unitless	8.01	7.99	0.25
Phenols	mg/L	0.0012	0.0012	0.00
Phosphorus (total)	mg/L	< 0.03	0.03	0.00
Potassium	mg/L	3.9	3.8	2.60
Sodium	mg/L	16	16	0.00
Styrene	mg/L	< 0.0002	< 0.0002	0.00
Sulphate	mg/L	65	67	3.03
Tetrachloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Toluene	mg/L	< 0.0002	< 0.0002	0.00
Total Dissolved Solids	mg/L	468	442	5.71
Total Kjeldahl Nitrogen	mg/L	< 0.7	< 0.7	0.00
Trans-1,2-dichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Trans-1,3-dichloropropene	mg/L	< 0.0002	< 0.0002	0.00
Trichloroethylene	mg/L	< 0.0001	< 0.0001	0.00
Trichlorofluoromethane	mg/L	< 0.0002	< 0.0002	0.00
Vinyl Chloride	mg/L	< 0.0002	< 0.0002	0.00
Zinc	mg/L	< 0.005	< 0.005	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Duplicate vs. Regular Samples - Spring 2012

Parameter	Units	S3 (Regular Sample)	S3 (Field Duplicate)	RPD (%)
Alkalinity	mg/L	230	220	4.44444
Ammonia	mg/L	< 0.15	< 0.15	0.00
Arsenic	mg/L	< 0.001	< 0.001	0.00
Barium	mg/L	0.039	0.041	5
Biochemical Oxygen Demand	mg/L	< 2	< 2	0.00
Boron	mg/L	0.022	0.022	0
Cadmium	mg/L	< 0.0001	< 0.0001	0.00
Calcium	mg/L	76	78	2.5974
Chemical Oxygen Demand	mg/L	43	45	4.54545
Chloride	mg/L	19	19	0
Chromium	mg/L	< 0.005	< 0.005	0.00
Conductivity	µS/cm	485	486	0.20597
Copper	mg/L	< 0.002	< 0.002	0.00
Cyanide	mg/L	< 0.002	< 0.002	0.00
Hardness	mg/L	230	230	0
Iron	mg/L	0.47	0.48	2.10526
Lead	mg/L	< 0.0005	< 0.0005	0.00
Magnesium	mg/L	13	13	0
Manganese	mg/L	0.1	0.11	9.52381
Mercury	mg/L	< 0.0002	< 0.0002	0.00
Naphthalene	mg/L	< 0.0025	< 0.0025	0.00
Nitrate	mg/L	< 0.1	< 0.1	0.00
Nitrate + Nitrite	mg/L	< 0.1	< 0.1	0.00
Nitrite	mg/L	< 0.001	< 0.001	0.00
pH (Lab)	unitless	7.76	7.76	0
Phenols	mg/L	0.0016	0.0015	6.45161
Phosphorus (total)	mg/L	0.084	0.09	6.89655
Potassium	mg/L	3.6	3.6	0
Sodium	mg/L	13	13	0
Sulphate	mg/L	9	9	0
Total Dissolved Solids	mg/L	250	220	12.766
Total Kjeldahl Nitrogen	mg/L	1.1	1.6	37.037
Total Suspended Solids	mg/L	9	11	20
Zinc	mg/L	< 0.005	< 0.005	0.00

Note: Shaded value indicates RDP% higher than 20%

Detailed Results from Field Blank Sample - Spring 2012

Reading Name	Units	2012-04-24 Field Blank
1,1,1,2-Tetrachloroethane	mg/L	< 0.0002
1,1,1-Trichloroethane	mg/L	< 0.0001
1,1,2,2-Tetrachloroethane	mg/L	< 0.0002
1,1,2-Trichloroethane	mg/L	< 0.0002
1,1-Dichloroethane	mg/L	< 0.0001
1,1-Dichloroethylene	mg/L	< 0.0001
1,2-Dibromoethane	mg/L	< 0.0002
1,2-Dichlorobenzene (o)	mg/L	< 0.0002
1,2-Dichloroethane	mg/L	< 0.0002
1,2-Dichloropropane	mg/L	< 0.0001
1,3,5-Trimethylbenzene	mg/L	< 0.0002
1,3-Dichlorobenzene (m)	mg/L	< 0.0002
1,4-Dichlorobenzene (p)	mg/L	< 0.0002
Acetone	mg/L	< 0.01
Benzene	mg/L	< 0.0001
Bromodichloromethane	mg/L	< 0.0001
Bromoform	mg/L	< 0.0002
Bromomethane	mg/L	< 0.0005
Carbon Tetrachloride	mg/L	< 0.0001
Chlorobenzene	mg/L	< 0.0001
Chlorodibromomethane	mg/L	< 0.0002
Chloroethane	mg/L	< 0.0002
Chloroform	mg/L	< 0.0001
Chloromethane	mg/L	< 0.0005
Cis-1,2-Dichloroethylene	mg/L	< 0.0001
Cis-1,3-Dichloropropylene	mg/L	< 0.0002
Dichlorodifluoromethane	mg/L	< 0.0005
Dichloromethane	mg/L	< 0.0005
Ethylbenzene	mg/L	< 0.0001
Hexane	mg/L	< 0.0005
m+p-Xylene	mg/L	< 0.0001
Methyl Ethyl Ketone	mg/L	< 0.005
Methyl Isobutyl Ketone	mg/L	< 0.005
Methyl Tert Butyl Ether	mg/L	< 0.0002
Naphthalene	mg/L	< 0.0005
o-Xylene	mg/L	< 0.0001
Styrene	mg/L	< 0.0002
Tetrachloroethylene	mg/L	< 0.0001
Toluene	mg/L	< 0.0002
Total Xylenes	mg/L	< 0.0001
Trans-1,2-dichloroethylene	mg/L	< 0.0001
Trans-1,3-dichloropropene	mg/L	< 0.0002
Trichloroethylene	mg/L	< 0.0001
Trichlorofluoromethane	mg/L	< 0.0002
Vinyl Chloride	mg/L	< 0.0002

Detailed Results from Field Blank Sample - Spring 2012

Parameter	Units	2012-04-24 Field Blank
Alkalinity	mg/L	< 1
Ammonia	mg/L	< 0.3
Arsenic	mg/L	< 0.001
Barium	mg/L	< 0.002
Biochemical Oxygen Demand	mg/L	< 2
Boron	mg/L	< 0.01
Cadmium	mg/L	< 0.0001
Calcium	mg/L	0.36
Chemical Oxygen Demand	mg/L	11
Chloride	mg/L	< 1
Chromium	mg/L	< 0.005
Conductivity	µS/cm	2
Copper	mg/L	< 0.001
Dissolved Organic Carbon	mg/L	0.3
Hardness	mg/L	1.2
Iron	mg/L	< 0.1
Lead	mg/L	< 0.0005
Magnesium	mg/L	0.081
Manganese	mg/L	< 0.002
Mercury	mg/L	< 0.0002
Naphthalene	mg/L	< 0.0005
Nitrate	mg/L	< 0.1
Nitrate + Nitrite	mg/L	< 0.1
Nitrite	mg/L	< 0.01
pH (Lab)	unitless	5.73
Phenols	mg/L	< 0.001
Phosphorus (total)	mg/L	< 0.03
Potassium	mg/L	< 0.2
Sodium	mg/L	< 0.1
Sulphate	mg/L	< 1
Total Dissolved Solids	mg/L	< 10
Total Kjeldahl Nitrogen	mg/L	< 0.7
Zinc	mg/L	< 0.005

Detailed Results from Field Blank Sample - Spring 2012

Reading Name	Units	2012-04-25 Field Blank
1,3,5-Trimethylbenzene	mg/L	< 0.0002
Alkalinity	mg/L	2.3
Ammonia	mg/L	< 0.3
Arsenic	mg/L	< 0.001
Barium	mg/L	< 0.002
Biochemical Oxygen Demand	mg/L	< 2
Boron	mg/L	< 0.01
Cadmium	mg/L	< 0.0001
Calcium	mg/L	< 0.2
Chemical Oxygen Demand	mg/L	10
Chloride	mg/L	< 1
Chromium	mg/L	< 0.005
Conductivity	µS/cm	1
Copper	mg/L	< 0.001
Dissolved Organic Carbon	mg/L	0.3
Hardness	mg/L	< 1
Iron	mg/L	< 0.1
Lead	mg/L	< 0.0005
Magnesium	mg/L	< 0.05
Manganese	mg/L	< 0.002
Mercury	mg/L	< 0.0002
Naphthalene	mg/L	< 0.0005
Nickel	mg/L	< 0.001
Nitrate	mg/L	< 0.1
Nitrate + Nitrite	mg/L	< 0.1
Nitrite	mg/L	< 0.01
pH (Lab)	unitless	6.84
Phenols	mg/L	< 0.001
Phosphorus (total)	mg/L	< 0.03
Potassium	mg/L	< 0.2
Sodium	mg/L	< 0.1
Sulphate	mg/L	< 1
Total Dissolved Solids	mg/L	< 10
Total Kjeldahl Nitrogen	mg/L	< 0.7
Zinc	mg/L	< 0.005

Detailed Results from Trip Blank Sample - Spring 2012

Reading Name	Units	2012-04-24 Trip Blank
1,1,1,2-Tetrachloroethane	mg/L	< 0.0002
1,1,1-Trichloroethane	mg/L	< 0.0001
1,1,2,2-Tetrachloroethane	mg/L	< 0.0002
1,1,2-Trichloroethane	mg/L	< 0.0002
1,1-Dichloroethane	mg/L	< 0.0001
1,1-Dichloroethylene	mg/L	< 0.0001
1,2-Dibromoethane	mg/L	< 0.0002
1,2-Dichlorobenzene (o)	mg/L	< 0.0002
1,2-Dichloroethane	mg/L	< 0.0002
1,2-Dichloropropane	mg/L	< 0.0001
1,3,5-Trimethylbenzene	mg/L	< 0.0002
1,3-Dichlorobenzene (m)	mg/L	< 0.0002
1,4-Dichlorobenzene (p)	mg/L	< 0.0002
Acetone	mg/L	< 0.01
Benzene	mg/L	< 0.0001
Bromodichloromethane	mg/L	< 0.0001
Bromoform	mg/L	< 0.0002
Bromomethane	mg/L	< 0.0005
Carbon Tetrachloride	mg/L	< 0.0001
Chlorobenzene	mg/L	< 0.0001
Chlorodibromomethane	mg/L	< 0.0002
Chloroethane	mg/L	< 0.0002
Chloroform	mg/L	< 0.0001
Chloromethane	mg/L	< 0.0005
Cis-1,2-Dichloroethylene	mg/L	< 0.0001
Cis-1,3-Dichloropropylene	mg/L	< 0.0002
Dichlorodifluoromethane	mg/L	< 0.0005
Dichloromethane	mg/L	< 0.0005
Ethylbenzene	mg/L	< 0.0001
Hexane	mg/L	< 0.0005
m+p-Xylene	mg/L	< 0.0001
Methyl Ethyl Ketone	mg/L	< 0.005
Methyl Isobutyl Ketone	mg/L	< 0.005
Methyl Tert Butyl Ether	mg/L	< 0.0002
Naphthalene	mg/L	< 0.0005
o-Xylene	mg/L	< 0.0001
Styrene	mg/L	< 0.0002
Tetrachloroethylene	mg/L	< 0.0001
Toluene	mg/L	< 0.0002
Total Xylenes	mg/L	< 0.0001
Trans-1,2-dichloroethylene	mg/L	< 0.0001
Trans-1,3-dichloropropene	mg/L	< 0.0002
Trichloroethylene	mg/L	< 0.0001
Trichlorofluoromethane	mg/L	< 0.0002
Vinyl Chloride	mg/L	< 0.0002

Detailed Results from Trip Blank Sample - Spring 2012

Parameter	Units	2012-04-24 Trip Blank
Alkalinity	mg/L	< 1
Ammonia	mg/L	< 0.15
Arsenic	mg/L	< 0.001
Barium	mg/L	< 0.002
Biochemical Oxygen Demand	mg/L	< 2
Boron	mg/L	< 0.01
Cadmium	mg/L	< 0.0001
Calcium	mg/L	< 0.2
Chemical Oxygen Demand	mg/L	10
Chloride	mg/L	< 1
Chromium	mg/L	< 0.005
Conductivity	µS/cm	2
Copper	mg/L	< 0.001
Dissolved Organic Carbon	mg/L	< 0.2
Hardness	mg/L	< 1
Iron	mg/L	< 0.1
Lead	mg/L	< 0.0005
Magnesium	mg/L	< 0.05
Manganese	mg/L	< 0.002
Mercury	mg/L	< 0.0002
Naphthalene	mg/L	< 0.0005
Nitrate	mg/L	< 0.1
Nitrate + Nitrite	mg/L	< 0.1
Nitrite	mg/L	< 0.01
pH (Lab)	unitless	5.9
Phenols	mg/L	< 0.001
Phosphorus (total)	mg/L	< 0.03
Potassium	mg/L	< 0.2
Sodium	mg/L	< 0.1
Sulphate	mg/L	< 1
Total Dissolved Solids	mg/L	< 10
Total Kjeldahl Nitrogen	mg/L	< 0.7
Zinc	mg/L	< 0.005

Detailed Results from Trip Blank Sample - Spring 2012

Parameter	Units	2012-04-25 Trip Blank
1,3,5-Trimethylbenzene	mg/L	< 0.0002
Alkalinity	mg/L	2.3
Ammonia	mg/L	< 0.15
Arsenic	mg/L	< 0.001
Barium	mg/L	< 0.002
Biochemical Oxygen Demand	mg/L	< 2
Boron	mg/L	< 0.01
Cadmium	mg/L	< 0.0001
Calcium	mg/L	< 0.2
Chemical Oxygen Demand	mg/L	7.5
Chloride	mg/L	< 1
Chromium	mg/L	< 0.005
Conductivity	µS/cm	2
Copper	mg/L	< 0.001
Dissolved Organic Carbon	mg/L	< 0.2
Hardness	mg/L	< 1
Iron	mg/L	< 0.1
Lead	mg/L	< 0.0005
Magnesium	mg/L	< 0.05
Manganese	mg/L	< 0.002
Mercury	mg/L	< 0.0002
Naphthalene	mg/L	< 0.0005
Nitrate	mg/L	< 0.1
Nitrate + Nitrite	mg/L	< 0.1
Nitrite	mg/L	< 0.01
pH (Lab)	unitless	6.81
Phenols	mg/L	< 0.001
Phosphorus (total)	mg/L	< 0.03
Potassium	mg/L	< 0.2
Sodium	mg/L	< 0.1
Sulphate	mg/L	< 1
Total Dissolved Solids	mg/L	< 10
Total Kjeldahl Nitrogen	mg/L	< 0.7
Zinc	mg/L	< 0.005