

City of Guelph

2014 Annual Report
Closed Eastview Road Landfill Site

Report

City of Guelph

2014 Annual Report

Closed Eastview Road Landfill Site

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Date:

April, 2015

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April 30, 2015

Mili New,
Director, West Central Region
Ministry of the Environment and Climate Change
119 King Street West, 12th Floor
Hamilton, ON L8P 4Y7

Dear Ms. New:

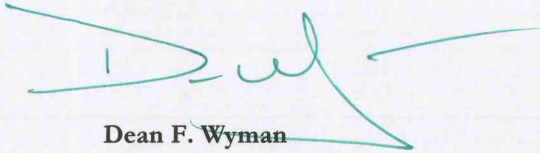
RE: City of Guelph Eastview Landfill Site – 2015 – Annual Report

Pursuant to Condition #5 of the Ministry of the Environment's *Provisional Environmental Compliance Approval for a Waste Disposal Site, No. A170101*, I am pleased to submit the 2014 Annual Report for the Eastview Road Landfill Site in the City of Guelph. The report includes:

- 1) Closed Landfill Operations
- 2) Leachate Collection and Containment Performance Monitoring
- 3) Groundwater Monitoring
- 4) Surface and Stormwater Monitoring
- 5) Landfill Gas Monitoring

I trust that the enclosed report meets the needs of the Ministry, and fulfills the requirements of the Certificate of Approval. If further information is required, or should you have any questions, please do not hesitate to contact us.

Sincerely,



Dean F. Wyman
General Manager, Solid Waste Resources Division

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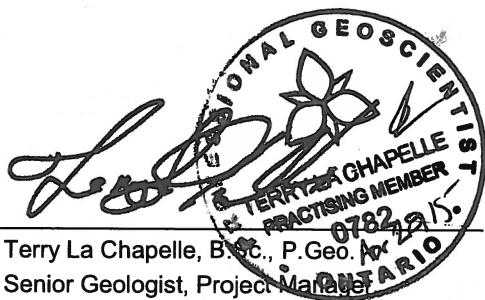
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Executive Summary

The following table presents a summary of the 2014 Annual Report for the Closed Eastview Road Landfill Site. The landfill is operated under two Certificates of Approval (C of A):

- a) Amended Environmental Compliance Approval (ECA) for a Waste Disposal Site No. A170101 under the Environmental Protection Act for the general landfill operation (most recently amended on May 12, 2012 for Post Closure operations and monitoring as revised in Table A).
- b) Certificate of Approval (Sewage) No. 3-0048-90-006 under the Ontario Water Resources Act for the leachate collection system.

Each C of A/ECA specifies annual reporting requirements. These have been outlined in the left-hand columns below, while the right-hand columns provide a summary of the 2014 findings as well as a reference to the section of this report where the reader will find further details.

A. Amended Environmental Compliance Approval No. A170101 for the Waste Disposal Site

Surface Water, Stormwater, Groundwater and Landfill Gas Monitoring

ECA Reporting Requirement	Report Reference and Summary
<p>5) A written report on the development, operation and monitoring of the <i>Site</i>, shall be completed annually (the "Annual Report"). The Annual Report shall be submitted to the <i>District Manager</i>, by April 30th of the year following the period being reported upon.</p>	<p>This report is to fulfill Condition 5.</p>
<p>6) The Annual Report shall include the following:</p> <ul style="list-style-type: none"> (a) The results and an interpretive analysis of the results of all leachate, groundwater surface water and landfill gas monitoring, including an assessment of the need to amend the monitoring programs; (b) An assessment of the operation and performance of all engineered facilities, the need to amend the design or operation of the <i>Site</i>, and the adequacy of and need to implement the contingency plans; (c) A summary of any complaints received and the responses made; (d) A discussion of any operational problems encountered at the <i>Site</i> and corrective action taken; (e) A report on the status of all monitoring wells and a statement as to compliance with <i>Ontario Regulation 903</i>; (f) Changes to the gas collection system and an analysis of the results from the changes; (g) An assessment of the need to continue the operation of the PLCCS, or recommendations regarding any modifications to the PLCCS; 	<ul style="list-style-type: none"> • Leachate quality in the waste and the outwash below the waste is similar to previous years (Section 4.3). • Shallow groundwater quality remains similar to previous years. As the PLCCS continues to operate as designed preventing off-site leachate migration, no new exceedances of Reasonable Use are predicted in the shallow groundwater (Section 4.4). • Lower till groundwater quality is similar to previous years and shows no indication of leachate effects. (Section 4.5.2.2). • Bedrock groundwater quality is similar to previous years and shows no indication of leachate impacts. Reasonable Use is not currently exceeded, nor is it predicted to be exceeded in the future. Initial water quality results from replacement location 37R indicated an improvement compared to former Location 37. Initial water quality results from location 96-I (deep upper bedrock) were similar to 92-I (lower chloride), which it has replaced, however, the new shallow monitor 96-II (shallow upper bedrock) is exhibiting elevated chloride, although significantly lower than at former 37-I. Although elevated, it has shown a decreasing trend over the last two years. Further data required to assess the water quality at these locations (Section 4.5). • Surface water sampling continues to indicate no adverse effects on downstream quality. (Section 5.4). • There is no evidence of gas migration off-site. (Section. 6.0). There are no operational changes recommended for 2014. • There were no recorded complaints in 2014. • The PLCCS is operating as designed and collects leachate effectively. The system creates an inward hydraulic gradient preventing off-site leachate migration. There is no need to implement any additional leachate control measures at this time (Sections 3.4, 3.5, 3.6, 3.7).

Surface Water, Stormwater, Groundwater and Landfill Gas Monitoring

ECA Reporting Requirement	Report Reference and Summary
<p>(h) Assessment of the performance of PLCCS in maintaining the water levels in the outwash beneath the waste at the lowest levels to confirm that it is effective in controlling and collecting leachate from the outwash beneath the landfill;</p> <p>(i) Assessment that the target levels of contaminants are being met. If this is not being met further assessment with respect to boron shall be completed;</p> <p>(j) Assessment of shallow bedrock groundwater elevation trends to determine if any changes are occurring;</p> <p>(k) Assessment of hydraulic gradients between the water levels in the outwash beneath the waste and the shallow bedrock to determine if they are within the historical ranges and/or not changing significantly due to a potential lowering of the shallow bedrock water levels (outside seasonal changes);</p> <p>(l) Assessment of monitoring locations that did not meet the target levels with respect to the current boron concentrations observed at the individual locations of concern; and</p> <p>(m) Any other information with respect to the Site which the <i>Regional Director</i> may require from time to time.</p>	<ul style="list-style-type: none"> • Based on the assessment of target elevations at individual locations, and the overall assessment for the site, future Reasonable Use exceedances in the bedrock aquifer are not predicted (Section 4.5.2). • Groundwater flow is similar to previous years (Section 4.2). Downward flow through the till, beneath the landfill, is only a few centimetres per year • There is no need to implement the contingency plans for groundwater – Section 4.7. • There is no need to implement the contingency plans for surface water – Section 5.5. • There is no need to implement the contingency plans for landfill gas migration off-site – Section 6.5.

Leachate

C of A Reporting Requirement	Report Reference and Summary
<p>8.3 All data, interpretations and recommendations regarding this leachate characterization program and the impact assessment on the Water Pollution Control Plant with respect to both quantity and quality of leachate shall be included in the annual monitoring report.</p>	<ul style="list-style-type: none"> • See Section 3.1, 3.2, 3.3 and 3.4.1, associated Tables and Figures, Appendix B and C. • Quantity of leachate collected and discharged to the sanitary sewer in 2014 was estimated at 153,653 m³. (Section 3.4). • The leachate quality from the Perimeter Leachate Collection System is similar to previous years. • As leachate quality is similar to previous years, there is no significant impact on the Waste Water Treatment Plant. (Section 3.2.1).

B. Certificate of Approval No. 3-0048-90-006 for the Leachate Collection System

C of A Reporting Requirement	Report Reference and Summary
<p>6(a) A monthly summary and interpretation of leachate flows at all pumping stations.</p>	<ul style="list-style-type: none"> • The south system collected slightly more leachate than the west system. Lower collection rates are experienced in the dry summer months (Sections 3.2 and 3.4.1, Tables and Charts in Appendix B).
<p>6(b) A monthly summary and interpretation of leachate levels in all manholes.</p>	<ul style="list-style-type: none"> • The PLCCS is operating as designed (Section 3.3 and 3.5 and associated Tables in Appendix B).
<p>6(c) An estimate of the annual volume of leachate collected.</p>	<ul style="list-style-type: none"> • The total quantity of leachate collected in 2014 was estimated at 153,653 m³. (Section 3.4).

C of A Reporting Requirement	Report Reference and Summary
6(d) An assessment of the efficiency of the system with respect to the quantity of leachate collected, control of groundwater levels upgradient of the containment wall, and control of leachate migration downgradient of the site.	<ul style="list-style-type: none"> The system has continued to function efficiently. The hydraulic gradients are consistently inward across the sheet pile wall thus preventing off-site movement of leachate into the shallow groundwater (Section 3.6).
6(e) An assessment of the need to implement the contingency plan based on Condition 6(d).	<ul style="list-style-type: none"> There is no need to implement contingency measures (Section 3.8).
6(f) Any changes to the operation, procedures or equipment associated with the system.	<ul style="list-style-type: none"> No changes in operation, procedure or equipment occurred in 2014 (Section 3.10).
6(g) Any operational problems encountered and remedial measures taken.	<ul style="list-style-type: none"> Routine system maintenance was undertaken during 2014 (Section 3.9).
6(h) Recommendations respecting any proposed changes in the operation, procedures, equipment or monitoring of the system.	<ul style="list-style-type: none"> No changes are recommended.

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Appendix D. Combustible Gas Monitoring Results

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1. Introduction

1.1 Background

The City of Guelph currently owns the Eastview Road Landfill Site located in the northeast corner of the city. The landfill was in operation until October 2003 and is now closed. The landfill property is about 81 ha of which about 45 ha had been landfilled. The closed landfill is bound by Eastview Road to the south, Speedvale Avenue to the north and Watson Road to the east (Figure 1).

In 2003, the City submitted the closure plan for the landfill site to the MOE. In 2005, the MOE issued an amendment to the Provisional Certificate of Approval # A 170101 (C of A) for post closure of the Closed Eastview Road Landfill Site.

Based on recommendations in response to MOE review comments on the 2007 and 2008 annual reports, the laboratory chemistry results are provided in CD format attached. Also provided on this CD is an electronic copy of the Annual Report. As well, the northeast quadrant pumping volumes were added to the groundwater elevation trends for the deep bedrock monitors (16-VIII and 90-I) for comparison purposes. Further, the measured water temperatures taken during groundwater sampling are now provided in Table A6, Appendix A as requested in the 2008 comments. Table A1, monitor details, has also been updated to include the replacement locations and new locations as well as the current top of pipe elevations for monitoring wells 37-I and 37-II.

In 2011, the City applied for several amendments to the C of A, one of which was the reduction of monitoring as outlined in previous annual reports. This revised monitoring program was accepted by the MOE but still needed to be incorporated into the C of A, through an amendment. As there were several amendments to the C of A that would take time to review and incorporate before the final could be issued, MOE Approvals Branch notified the City that the revised monitoring program could be implemented in the summer of 2011. The revised monitoring program was then initiated for the site for the remainder of that year.

The amended Environmental Compliance Approval (ECA) was issued to the City on May 12, 2012. All operations and monitoring completed in 2014 have been in accordance with the amended ECA.

1.2 Objectives

As part of the requirements under Condition 5 of the current ECA, an Annual Report on the monitoring undertaken at the landfill must be submitted to the MOE no later than April 30 of the following year.

The objective of this Annual Report is to satisfy all the requirements set forth in Condition 6 and 8 in the ECA as well as Section 6 of the Perimeter Leachate Collection and Containment System (PLCCS) C of A, specifically on all aspects of operations and environmental monitoring at the landfill.

1.3 Scope and Organization of this Report

The Annual Report is organized to be comparable with the actual requirements set forth in the ECA/C of A. This has provided a more concise and user friendly reporting style which received a positive response from the MOE during their review of the 1996 Annual Report, the first report in which the concept was initiated. The Executive Summary, at the beginning of this report, is also structured so that each of the reporting requirements of the ECA/C of A. are quoted, cross-referenced to the report and addressed in a summary statement.

Following this introductory section, the balance of the report is structured as follows:

- Section 2** Closed Landfill Operations
- Section 3** Leachate Management
- Section 4** Groundwater Monitoring
- Section 5** Surface Water Monitoring
- Section 6** Landfill Gas Monitoring
- Section 8** Conclusions and Recommendations

The Appendices at the back of the report provide much of the associated technical information.

2. Closed Landfill Operations

2.1 Clean Fill Needs in 2014

Clean fill was brought into the site in 2014 to repair some detected leaks that were found through cap. The fill was spread and compacted over the affected areas.

2.2 Operational Problems and Remedial Measures

A seepage area was found in the summer of 2014 along the western boundary. Remedial effort to contain the seepage were undertaken in the late summer and early fall. This initially consisted of adding cover material ; however, the seepage began to flow again so drill holes were then completed in an effort to drain the seepage water to the deeper more permeable overburden. Due to the nature of the upper fill material, the holes were not effective. In the fall, a drain pipe was installed and tied into the leachate collection system to collect the seepage water. Since this time, no seepages has been observed.

2.3 Public Complaints and Responses

Public complaints are reported to landfill staff for investigation. Copies of complaint records are provided to complainants, if desired, and kept on file at the landfill office. There were no recorded complaints in 2014.

2.4 Recommended/Approved Operational Changes

There are no operational changes recommended for 2014.

3. Leachate Management

3.1 Leachate Quality and Impact on the Waste Water Treatment Plant

3.1.1 Leachate Quality

Based on the amended Certificate of Approval # 3-0048-90-006 (C of A) dated February 15, 1996, sample collection of leachate at the Eastview Road Landfill is required from the main pumping station only. Leachate sampling and assessment are required under the ECA, schedule A, and Condition 8.3. Leachate samples were collected from the main pumping station in 2014. Leachate from the south and west pumping stations is pumped to the main station and then pumped to the municipal sewer for treatment at the Guelph Wastewater Treatment Plant (WWTP). The relative locations of the three-leachate pumping stations at the landfill are shown schematically in Figure 2.

In 2014, the C of A quarterly sampling requirements for the main pumping station were:

- a) pH;
- b) five-day carbonaceous biochemical oxygen demand (CBOD₅);
- c) chemical oxygen demand (COD);
- d) total Kjeldahl nitrogen (TKN);
- e) phenols; and
- f) iron.

Semi-annual samples were collected for the remaining Model Sewer Use by-law parameters listed in Table 1 of the C of A, and for Municipal/Industrial Strategy for Abatement (MISA) parameters listed in Table 2 of the C of A.

3.2 Model Sewer Use By-Law Parameters

3.2.1 Main Pumping Station

The sampling results for the Model Sewer Use by-law parameters are presented in Table 1: Leachate Analytical Data from the Main Pumping Station. The results show that all parameters were within the Model Sewer Use by-law limits for every parameter on every sampling occasion. As well, the water quality results are similar to those observed historically.

In past reports, the loading on the WWTP was calculated. These loadings, specifically for leachate CBOD₅ and TKN, were consistently within 1% of the corresponding WWTP influent loads, and thus considered insignificant. The Manager of the City of Guelph WWTP had continually confirmed these loadings were not significant. Since the water quality collected from the Main Pumping Station continues to be similar to that observed in the past, it is expected that the loadings on the WWTP will continue to be insignificant. In the future, if there is any significant change in the water quality collected (i.e., significant increases in concentrations observed), the loading calculation will be completed to assess the potential affects

3.2.2 Summary

A review of the analytical results of samples collected from the main pumping station for each event in 2014 shows that all parameters were within the Model Sewer Use by-law limits. The leachate would not contribute a significant CBOD₅, TKN or hydraulic load to the WWTP.

Table 1: Leachate Analytical Data from Main Pumping Station



Parameter	Sampling Dates 2014				Model Sewer Use By-Law Limits	2014 Avg. Conc. (mg/L)
	Mar	July	Sept	Nov		
pH	6.99	7.43	7.69	7.63	5.5-9.5	7.44
CBOD5	3	4		5	300	4
COD	63	61		110		78
Oil & Grease (animal)		2		<0.5	150	1.25
Oil & Grease (mineral)		<0.5		<0.5	15	0.5
Suspended Solids		11		8	350	9.5
Total Phosphorus		0.09		0.085	10	0.088
TKN	21				100	21
Phenols	0.011	0.0033	0.0044	0.05	1	0.017
Chlorides		260	510	250	1500	340
Sulphate		35	28	37	1500	33
Aluminum		<0.05		<0.05	50	0.05
Iron	0.23	3.4	0.26	2.1	50	1.496
Fluoride		0.13		0.35	10	0.24
Antimony		<0.05		<0.05	5	0.05
Bismuth		<0.05		<0.05	5	0.05
Boron		1.1	4.7	1.9		2.57
Chromium		<0.05	<0.005	<0.05	5	0.035
Cobalt		<0.05		<0.05	5	0.05
Lead		<0.05		<0.05	5	0.05
Manganese		0.28	0.24	0.33	5	0.28
Molybdenum		<0.05		<0.05	5	0.05
Selenium		<0.05		<0.05	5	0.05
Silver		<0.05		<0.05	5	0.05
Tin		<0.05		<0.05	5	0.05
Titanium		<0.05		<0.05	5	0.05
Vanadium		<0.05		<0.05	5	0.05
Copper		<0.05		<0.05	3	0.05
Nickel		<0.05	0.024	<0.05	3	0.04
Zinc		0.06	0.017	0.1	3	0.059
Cyanide		<0.005		<0.005	2	0.005
Arsenic		<0.05		<0.05	1	0.05
Cadmium		<0.05		<0.05	1	0.05
Mercury		<0.0001		<0.0001	0.1	0.0001

3.3 MISA Priority Pollutants

Leachate samples were collected from the main pumping station for analysis of the MISA parameters listed in Table 2 of the C of A. Samples were collected on July 11, 2014 and November 26, 2014. The analytical results are provided in Table C5 in Appendix C.

The MISA parameters can be divided into two categories, the first being conventional and metals, and the second being organics. All of the parameters in the first category were below Model Sewer Use by-law limits (where applicable), and were detected at relatively low concentrations.

The results of the MISA analysis, are presented in Table C5: C of A MISA Priority Pollutants from the Main Tank in 2014 along with the corresponding method detection limits (MDL). Parameters in the second category, the organics, were generally below the laboratory detection limits, except for the highlighted parameters found in Table C5. As observed in the past, trace levels of the halogenated volatile organics (ATG 16) chlorobenzene/Cis-1,2-Dichloroethylene/Trichloroethylene, non-halogenated volatile organics (ATG 17) – BTEX and base neutral extractables (ATG 19) fluorene/naphthalene/Bis (2-ethylhexyl) phthalate were detected in 2014. Also, as observed on occasion in the past, trace levels of MCPA were detected above detection limits.

As previously observed, low levels of Chlorinated Dibenzo-p-dioxins (ATG 24) continue to be detected. The compound would not be unexpected as they are commonly found in municipal leachate at very low concentrations. However, to put these overall detections into perspective, the calculated toxicity equivalent based on the concentrations detected, is around was between 5.7 and 10.8 pg/L, whereas the Ontario Drinking Water Standard is 15 pg/L.

3.4 Quantity of Leachate Collected

3.4.1 Annual Quantities

The volume of leachate collected is measured by a flow meter located in a chamber adjacent to the main pump station. Table B1 in Appendix B summarizes flow meter readings and flow rates in the Main Pump Station. The flow meter was functioning properly throughout 2014.

As shown in Table B1, in 2014 a total of 153,652 m³ of leachate was collected and discharged to the sanitary sewer. Of the total, about 64,001 m³ was collected by the south station and 89,651 m³ was collected by the west station (Table B2). The annual volume of leachate collected since 1991 is summarized in Table 2. The 2014 volume collected is significantly higher than observed since the mid-1990s. The higher volume collected is related to a significant increase in volume collected from the west system.

Table 2. Quantity of Leachate Collected Annually

Year	Quantity (m ³)	Year	Quantity (m ³)
1991	94,199	2003	94,989
1992	143,095	2004	91,426
1993	126,667	2005	64,525
1994	162,604	2006	83,556
1995	185,761	2007	60,724
1996	156,010	2008	89,750
1997	126,192	2009	83,644
1998	105,575	2010	119,692
1999	94,863	2011	104,412
2000	109,913	2012	113,625
2001	119,813	2013	161,786
2002	99,899	2014	153,653

Section 3.7.1 compares leachate volumes collected in 2014 to leachate production rates calculated via the water budget, to show that the PLCCS is effectively collecting leachate.

3.5 Monthly Leachate Flows in Pump Stations

A summary of estimated leachate flows from the South and West pump stations is shown in Table B2 of Appendix B. Table B2 shows the following:

- a) monthly pumping hours for each pump;
- b) monthly volume of leachate pumped from each pump station; and
- c) the average pumping rate each month, measured in m³/hour of pump operation, for all pumps combined.

Table B3 in Appendix B shows the average daily flow rate, on a monthly basis, from each of the three Pump Stations. The average daily flow rate at the Main Pump Station was highest in November at 662.9 m³/day and lowest in July at 318.6 m³/day. At the South Pump Station the average daily flow rate was highest in April and lowest in February, with recorded rates of 231.5 m³/day and 153.0 m³/day, respectively. At the West Pump Station the average daily flow rate ranged from 437.4 m³/day in November to 188.1 m³/day in July 2014. The average leachate discharge rate from the site in 2014 was 421.5 m³/day. Generally the highest rates are recorded in April as observed at the South Pump station. The significantly higher rates noted in November at the West Pump Station and combined for the Main Pump Station is related to the remedial efforts to control the seepage that was found that was connected to the PLCCS. Flow rates were generally back to normal by January indicating that the water that was feeding the seep has now been drained.

3.6 Monthly Leachate Levels in the Manholes

Leachate levels in the manholes were collected monthly to assess the performance of the PLCCS in maintaining unimpeded flow towards the pump stations. Figure 3 is the leachate and groundwater monitoring site location map, which shows the locations of the manholes and pumping stations.

The leachate levels measured in the collection system during 2014 are summarized in Tables B4 and B5 (Appendix B). These tables also include the collection pipe invert elevations and the top of sheet pile wall elevations adjacent to each manhole. Hydrographs of leachate elevations from selected manholes in both the south and west collection systems are illustrated in Figures 4 and 5.

Under normal operating conditions, the leachate levels measured in the collection system should be lowest at the pump station. This is based on the design of the system, which has increasing invert elevations away from the pump stations. Therefore, higher elevations are expected with increasing distances away from the pump stations as flow is induced through pumping. Below is a brief discussion on the measured leachate elevations in both the south and west collection systems.

South Collection System

Leachate elevations along the southeast section of the south collection system during 2014 show an apparent strong decrease from MH 1S towards the pump station (Figure 4a). This is based on the actual leachate elevations in the manholes.

In the southwest section of the south collection system, leachate elevations were similar to the pump station elevations (Figure 4b). As discussed in the past, only direct pumping of the PLCCS controls this section of the

collection system. The pipe inverts along this section are flat at an elevation of 339.5 mASL, which also corresponds to the pump station invert. Therefore, it is expected that the leachate levels measured in this section would be similar to the pump station levels.

The overall patterns of the leachate levels continue to indicate that the south collection system is working as designed to collect and control leachate from beneath the landfill.

West Collection System

Leachate elevations in the west collection system exhibited a general decreasing trend from MH 2W to the pump station and from MH 8W towards the pump station (Figure 5).

The overall patterns of the leachate levels continue to indicate that the west collection system is working as designed to collect and control leachate from beneath the landfill.

3.7 Effectiveness of the Leachate Collection System

In the following discussion, the overall effectiveness of the leachate collection and containment system will be evaluated based on:

- a) assessing the overall leachate quantity collected through the use of the detailed water budget for 2014;
- b) confirming that leachate flows freely towards the collection system through the outwash below the waste; and
- c) confirming that the sheet pile wall is still effectively preventing off-site leachate migration as indicated by water level differences.

3.7.1 Correlation of Predicted and Actual Leachate Quantities Collected

To provide a benchmark to assess the effectiveness of the PLCCS in the collection of leachate during 2014, a detailed water budget was calculated (Table 3). This water budget is used to predict the approximate amount of available surplus precipitation that could ultimately infiltrate through the landfill cover and waste and then be collected by the PLCCS. It should be noted that the calculations are for infiltration only and do not take into consideration surface water runoff from the landfill, a portion of which could also be collected by the PLCCS.

Table 3. Water Balance Calculation for the Closed Eastview Road Landfill – 2014

Month	Mean Temperature (°C)	Total Precipitation (mm)	Evapotranspiration (mm)	Surplus Water (mm)
January	-11.77	76	0	76
February	-11.04	53.4	0	53.4
March	-7.4	35	0	35
April	5	86.7	25.88	60.82
May	12.97	67.8	75.8	-8
June	19.37	104	130	-26
July	18.98	152.1	124.88	27.22
August	18.77	62.9	72.9	-10
September	15.48	135.1	79.9	55.2
October	9.55	87.6	43.14	44.46
November	-0.37	92.31	0	92.31
December	-1.39	43.2	0	43.2
Total Year		996.11	552.5	443.61
Average Year*		881	566	316

Notes: Soil Moisture Storage Based on 100 mm. / Under Average Conditions for 2014.
* 20 year average (1984-2003) for Guelph Dam

The detailed water budget determined that overall, 2014 was much wetter than an average year (Appendix E). The calculated total yearly surplus precipitation was 443.6 mm (Table 3), which is higher than the average of 316 mm. During an average year, surplus water is available to infiltrate during the winter, spring and fall and there is a deficit of surplus due to high evapotranspiration at ground surface (average surplus) during the summer. In 2014, this was generally the case in May, June and August when a negative surplus was calculated. Therefore, in 2014, the total surplus of water potentially available to infiltrate was calculated at about 487.6 mm (sum of the months with positive surplus). This estimated 487.6 mm of surplus would be more indicative of the total surplus that could be available for infiltration and ultimately collected by the PLCCS, as there is not likely a significant actual loss of stored moisture from the landfill during deficit periods. Using this 487.6 mm, the estimated surplus that could be available to infiltrate into the landfill was only about 74,810 m³. The total quantity of leachate collected during 2014 was estimated at 153,653 m³. Therefore, using the very conservative surplus, it appears that the PLCCS collected about 205% of the estimated volume that could have infiltrated into the landfill.

This, once again, demonstrates that the PLCCS continues to be effective in collecting leachate from beneath the landfill.

3.7.2 Leachate Elevations Beneath the Landfill with Respect to Target Elevations

Leachate flow beneath the landfill is strongly influenced by the PLCCS. This has been demonstrated by leachate elevations measured at locations 51-II, 52-I, 55-I 56-I, 57-I, 58-I and 61-I as well as, to a lesser extent, at locations 63-I, 66-I and 67-I over the years (current levels shown on Figures 6 to 8). This was best demonstrated in the past after the PLCCS was optimized (southeast leg of south collector was lowered), when all leachate levels began to drop. This decrease continued into the late 1990s and then stabilized. Prior to the optimization, it was observed that, corresponding high and low elevations measured in the PLCCS were generally reflected in leachate elevations. Normally, seasonal increases in leachate elevations beneath the landfill in the early spring would also be observed in the collection system. These elevations would then begin to decrease throughout the late spring and into the summer until they stabilized in the collection system. This also showed the influence of the collection system on the leachate levels beneath the site. Since the late 1990s, there has been and continues to be very little seasonal correlation between the leachate levels and the PLCCS. This would be expected as the PLCCS has decreased the leachate levels to their lowest levels based on the design. Generally, it has been observed that during higher precipitation periods, the PLCCS pumping volumes increase. The only exception is noted at the monitors (63-I, 65-I, 66-IR and 67-I) located near the edge of the interpreted outwash limit. These locations have shown a slight increase since their recorded lows in the 1990 and exhibit more seasonal effects.

The effect of the PLCCS on leachate flow beneath the landfill is important. "Target elevations" have been set for leachate levels below the landfill that will minimize groundwater impacts on the bedrock aquifer. To maintain these leachate target elevations, the PLCCS must be effective in controlling and lowering leachate elevations in the outwash beneath the waste. This has been demonstrated, as it is observed that the PLCCS strongly affects leachate elevations in the outwash beneath the waste.

During 2014, leachate elevations at locations 1-IR, 52-I, 56-IR, 57-I and 58-I, as well as 55-IR and 61-IR were below their target elevations throughout the year.

As expected¹, locations 51-II, 63-I, 65-I and 67-I, as well as the replaced location 66-IR, were still above their target elevations. It should be noted that from 1998 until 2003, location 51-II was occasionally below its target elevation. Therefore, the overall lower elevations exhibited at this location has demonstrated that the PLCCS can lower the leachate elevations in the landfill more than the modelling had predicted during drier periods.

1. *Modelling had suggested that these areas would never have leachate elevations that would be below the target elevations. Section 4.5.2.1 later in the report discusses the implications on groundwater quality.*

In conclusion, the PLCCS has once again been demonstrated to be very effective in controlling and collecting leachate from the outwash beneath the landfill.

3.7.3 Effectiveness of the Sheet Pile Wall in Preventing Off-Site Leachate Migration

The sheet pile wall will prevent off-site leachate migration if an inward hydraulic gradient is maintained across it towards the landfill (i.e., groundwater elevations are higher outside the sheet pile wall than leachate elevations inside). To determine the effectiveness of the sheet pile wall, groundwater elevations from the C- Series monitors just outside of the wall (Appendix A) and leachate elevations in the manholes inside the wall (Appendix B) are compared.

Figure 9 illustrates the relationship of the leachate elevations in the south collection system, the landfill just inside the collection system and groundwater elevations in selected monitors outside of the sheet pile wall. Under normal operating conditions, the leachate elevations are always lower than the groundwater elevations measured outside of the sheet pile wall.

Figures 10 and 11 illustrate the difference between the groundwater elevations in the C-Series monitors (outside of the wall) and leachate elevations in the adjacent manholes (inside of the wall). Positive differences denote inward hydraulic gradients. These figures show that inward hydraulic gradients were maintained across the sheet pile wall, with the exception, once again at C13-I-MH1S. In this area, as observed in the past during drier periods, the groundwater level drops below the MH inverts.

Along the west collection system, where the sheet pile does not exist, an inward gradient towards the collector pipe is still generally maintained as shown on Figure 11. Although the sheet pile wall does not exist here, this inward gradient prevents off-site leachate migration.

To determine if any off-site flow may be occurring beneath the sheet pile wall in the localized areas where it could not be advanced into the till, the piezometric elevations in C6-I, C9-I, C10-I and C11-I were compared to leachate elevations in the adjacent manholes. In all cases, a positive difference was maintained ensuring that no outward flow was occurring as shown on Figure 11.

3.7.4 Summary

The PLCCS continues to operate in a very effective manner.

Shallow groundwater is protected by the PLCCS. The leachate levels below the landfill remained consistently below the top of the sheet pile wall that surrounds much of the site. Furthermore, by pumping leachate out of the landfill, an inward gradient is maintained at the perimeter of the landfill (i.e., shallow groundwater flow is inward to the landfill, rather than outward).

In most cases, leachate elevations beneath the landfill were measured well below the target elevations that were originally set for protection of the bedrock aquifer. However, the areas where the modelling predicted that the leachate elevations would be above their target elevations once again showed elevated leachate above their target levels in 2014. The potential effects of these levels above targets are dealt with separately in Section 4.5.2.1.

3.8 Need to Implement Contingency Plans for Leachate Control

The PLCCS is operating as designed and collects leachate effectively. The system creates an inward hydraulic gradient preventing off-site leachate migration. There is no need to implement any additional leachate control measures at this time.

3.9 Operational Problems and Remedial Actions

3.9.1 General PLCCS Operation

Only routine maintenance was conducted on the PLCCS in 2014.

3.9.2 Methane in the Leachate Collection System

Methane may be found in PLCCS manholes due to their proximity to the waste. Consequently, all manholes and Pump Stations have signs warning of the possible presence of landfill gases. Confined space entry procedures are followed when necessary to enter any confined space.

The PLCCS manholes and Pump Stations were monitored during 2014 for methane. Monitoring results are shown in Appendix D in Tables D6 and D7. The table shows two monitoring events for 2014.

South Side Collection System

Table D6 documents methane concentrations in the south PLCCS. During the two monitoring events, MH7S and MH8S both recorded methane concentrations at or below the LEL². MH2S, MH4S and MH5S recorded methane concentrations below the LEL during the March sampling event and MHBS had a trace detection in August. All other manholes showed no methane for both events. Historically, the methane concentrations on the south side of the site have been low. The two monitoring events showed only a trace of methane in the South Pump Station in August. Methane can be expected in the PLCCS manholes because of their proximity to the waste. No remedial action is required since the manholes are already connected to the landfill gas extraction system.

West Side PLCCS

Table D7 documents methane concentrations in the west side PLCCS. In 2014, methane was generally not detected in the manholes during either sample event, with the exception of a trace reading on one occurrence each for MH8W and MH9W. The West Pump Station showed no methane during both monitoring events. No remedial action is required since the manholes are already connected to the landfill gas extraction system.

Main Pump Station

There was no methane measured in the Main Pump Station (MPS) or the Old Main Pump Station (OMPS) during the monitoring events in 2014, as shown in Table D7. No remedial action is required at this time.

3.10 Recommended/Approved Changes to the Leachate Control System

There were no changes to the operation of the leachate control system in 2014. No recommended changes are required in 2015.

2. LEL – Lower Explosive Limit. The LEL for methane gas is 5% by volume in air. Note that methane is only combustible in concentrations between 5% and 15% by volume in air.

4. Groundwater Monitoring

4.1 The 2014 Groundwater Monitoring Program

Groundwater levels are collected from all monitoring locations twice per year. Monthly water levels are measured at all leachate locations and from selected lower till and bedrock locations. All of the data are compiled and presented in Appendix A. Figure 3 is a site plan showing all monitoring locations around the site.

Groundwater quality monitoring is conducted at the landfill in accordance with amended ECA. Table 4 below, outlines the monitoring locations and frequency of sampling conducted during 2014. The groundwater quality results are provided in Appendix C. Standard Quality Assurance/Quality Control (QA/QC) groundwater quality data are not provided in this report but are available on request. It should be noted that the current monitoring program reflects the reductions as accepted by the MOE, as provided in the 2008 annual report.

The focus of the groundwater monitoring program is intended to evaluate water quality based on the leachate indicator parameters and the critical leachate parameters. These parameter lists were agreed upon by the Technical Experts during discussions leading up to the hearing for continued operations of the Eastview Road Landfill. In 1998, the MOE, in their review of the 1997 Annual report, accepted the recommendation for the reduction of the groundwater analytical parameter list to reflect only the leachate indicator parameters and the critical leachate parameters. This parameter list has been in effect since the 1998 monitoring period. In 2001, Iodide (I) and Bromide (Br) were also added to this list.

Table 4. Summary of 2014 Routine Groundwater Sampling

Formation	Monitor Locations	Sampling Program (per year)	Actual Sampling Frequency and Comments
Waste	51-IR, 59-I, 65-I, 67-I	Two Times	Two times during 2014
Waste/Fill Outwash Beneath Waste	51-II, 55-IR, 56-IR, 57-I, 58-I, 61-IR, 63-I, 66-IR	Two times	Two times during 2014
Sandy Outwash	2-I, 10-II, 10-III, 13-IV, 13-V, 14-II, 14-III, 15-IV, 15-V, 18-III, 30-I, C2-I, C6-I, C9-I, C10-I, C11-I	Two times	Two times during 2014
	2-II, 9-I, 11-II, 16-V, 17-IV, 28-I, 35-I	One Time	Once during 2014
Upper Till	4-III, 5-II, 11-I, 13-III, 15-III, 16-IV, 21-IR, 60-II, 60-III	Two Times	Two times during 2014
	17-III, 19-IV	One Time	Once during 2014
Lower Till	4-IIR, 53-IIR, 60-I	Two Times	Two times during 2014
	11-III, 13-II, 15-II, 16-I, 16-VI, 17-II, 19-II	One Time	Once during 2014
Bedrock	4-IR, 37-IR, 37-IIR, 50-I, 53-I, 93-I, 94-I, 95-I, 96-I, 96-II	Four Times	Four times during 2014
	14-IV, 16-VII, 54-I, 90-II,	Two Times	Two times during 2014
	9A-I, 13-I, 15-I, 17-I, 19-I, 20-IR	One Time	Once during 2014

Chemical a) Conductivity, pH, Alkalinity, Phenols, ICAP Metals (including Major Cations Ca, Mg, Na, K and Trace Metals I, Br, Cr, Ni, Fe, Mn, Zn).
Analyses: b) Major Anions (including SO₄, Cl, NO₃, NO₂).
c) Field Parameters: pH, conductivity, temperature.

4.2 Groundwater Elevations and Flow Directions

From the collected data, groundwater flow maps are produced for the shallow groundwater system and the bedrock groundwater system (Figures 12 and 13). As well, groundwater elevation trends for selected shallow groundwater, lower till and bedrock monitors are provided in Appendix A. In general, groundwater elevations across the site typically follow seasonal trends such that water levels are higher during the wetter periods of the spring but decrease during the usually drier summer months.

Overall, groundwater levels trends in 2014 are generally similar to previous years. Generally, groundwater elevations showed increases from the fall lows in 2013 into early spring of 2014. Elevations then increased into the mid-summer. Levels then began to decrease slightly until the end of the year. Generally, both bedrock and overburden monitors exhibited a similar trend. As compared to previous years, seasonal water level fluctuations in 2014 were smaller, with seasonal lows being much higher than historical lows and seasonal highs being lower than historical highs. As well, most bedrock elevations, where comparable, were at their highest levels since the mid-1990s in the spring.

Further to the above, there are two monitoring locations (16 and 90) installed in 2003 that monitor the water levels in the deep bedrock aquifer. There is now sufficient data to assess water level measurements for short term trends in the deep bedrock. As requested by the MOE technical reviewer, the total pumping volume from the northeast quadrant production wells is also reviewed.

As discussed in earlier annual reports, in 2003 and 2004 there appeared to be some correlation to water levels with respect to the pumping. However, there were no apparent effects from pumping throughout 2005 into 2007 based on the water level trends observed. This would be expected as pumping volumes remained fairly stable during this period. During 2008, there were also no apparent effects from the pumping on water level trends even though pumping volumes did show a slight increase. A similar observation was noted in 2009, as the water levels continued to increase into the early part of the year even though overall pumping had begun to increase. By the end of August 2009, pumping volumes had increased again (slightly over 2008) and stabilized, however, water level declines occurred prior to this change, which indicates that this was related to seasonal variation and not the increase in pumping. Unlike the shallow bedrock and overburden, the deep bedrock water levels did not exhibit any increase into the late fall.

The 2010 data, indicates that the pumping volumes still remained at the higher levels (generally within historical norms), but were slightly lower than the latter half of 2009. As discussed above, the water levels continued to decrease until early 2010 and then increased into the summer when there was no change in pumping. As there was no change in pumping between 2009 and 2010, and only slightly lower pumping in 2008, with no apparent effects noted between 2008 and 2009, it is most likely that the greater decrease in seasonal change noted in late 2009 and early 2010 is related to lower surplus precipitation in the late fall/winter-early spring.

Since 2010, the pumping volumes trends have generally remained similar, along with water levels in the deep bedrock appearing to follow seasonal trends. This is further observed in 2014 where the water level trends are generally similar to the shallow system whereas there is a lesser fluctuation between the high and low periods.

Overall, comparing the water levels collected to-date from the deep monitors with the pumping volumes in the northeast quadrant, indicate that there may be some correlation as evident in 2003 and 2004, when the pumping volumes were more variable. Since this time, the pumping volumes were more stable and water level trends appeared to only exhibit season variation similar to the shallow bedrock and overburden, although seasonal variability was higher. Further, even though the pumping volumes did increase in both 2008 and 2009, although still below the maximum historical volume, there was no clear evidence that it was having a noticeable effect on water levels, even though there was a significant drop in water levels noted in late 2009. In 2010, pumping continued at the higher rate, although slightly lower than in 2009. During this period there was still no clear evidence of an effect from pumping on the water levels as the seasonal trends observed were concluded to be related to the drier year and the distribution of precipitation.

Water levels during 2014 continued to respond to seasonal effects and the higher precipitation. The pattern of pumping and water level response does not suggest that there is any measureable effect on the water levels beneath the landfill from water taking in the northeast quadrant in 2014.

The shallow groundwater system lies in the sand and gravel outwash and/or in the upper part of the silty sand till where outwash is absent³. Leachate elevations in monitors 51-IR and 59-I in the landfill waste are found to be perched above the shallow groundwater system and are not used in the evaluation. Figure 12 illustrates the shallow groundwater flow in November 2014. The groundwater flow is similar to previous years⁴

Of note, is the local control that the PLCCS exerts on the shallow groundwater flow system within the landfill. As discussed previously in Section 3.4, the leachate collection system acts to lower leachate levels inside the sheet pile wall below the groundwater levels outside the sheet pile wall, thereby creating inward flow across the wall. This prevents any leachate flow out of the landfill site to the shallow groundwater system. This is best demonstrated along the southwest leg of the south collector. Along this portion, leachate levels measured in the system were, on average throughout most of the year, around 340.12 mASL, whereas outside the system the groundwater levels were on average 342.08 mASL.

Figure 13 illustrates the bedrock groundwater flow in November 2014 below the landfill. The groundwater flow is generally similar to previous years⁵. A total of three additional locations were completed in September 2007, near locations 37/50. These locations were intended to aid in the refinement of the shallow bedrock groundwater flow in this area (near the former entrance to the landfill). These locations have been included as part of the more detailed monthly water level program. It should be noted that these newer locations were installed with a similar screen length and in the approximate same stratigraphic horizon as location 37-I. The addition of these locations on the groundwater flow map continues to show that groundwater flow in the shallow bedrock continues to generally flow towards the landfill from this area and that 37-I is still interpreted as being upgradient. In late 2011/2012, location 37 was decommissioned and moved to an adjacent location on the site property (Figure 3). The replacement monitor, designated 37-IR, was installed at a similar elevation, depth and screened interval, with the initial levels similar to historical.

However, as discussed in the interim report of the further assessment of Location 30/50, the groundwater flow in this area was refined. As has been commented on by the MOE reviewer, flow in this area could also be interpreted to be towards location 50-I in the immediate vicinity of the scale house from the landfill. With the more recent information, it is still apparent that 37-I/37-IR is upgradient of the landfill based on the water levels collected at location 94-I. Some component of flow does appear to be directed towards location 50-I from 94-I and 37-I/37-IR as confirmed by 95-I (between 37-I and 50-I). However, measured groundwater elevations at recent location 93-I (further down Eastview Road to the west) indicates that it is downgradient of 50-I. Therefore, although there is some component of flow that may be towards location 50, it is still expected that overall bedrock groundwater flow ultimately is directed to the west as suggested in our previous and current interpretation. This is further supported by the bedrock topography which indicates an incised bedrock low feature trending from high to low from the east, as discussed in the interim letter report (AECOM, June 2010).

In conclusion, the current interpretation of groundwater flow direction around the site has generally remained similar to previous years.

Further to the above, original location 92-I was moved and a new location was completed further east. Both a deep (monitor 96-I) and shallow upper bedrock monitor (monitor 96-II) was installed at the new location, with the deep monitor replacing 92-I. This location encountered the bedrock at a deeper elevation (~4 m lower) than the original location and location 37R. As well, initial water levels at both the deep and shallow monitors appear much lower than levels closer to the landfill property. It is possible that this location has intercepted a bedrock low that has been suspected in this area and was initially shown on Figure 5 in the 1992 Groundwater and Surface Water Monitoring

3. *The geology of the site has been extensively documented in previous reports; see 1995 Annual Report Section 4.2, pg. 38*

4. *1995 Annual Report, Section 4.3, page 40, Figure 10, 1996 Annual Report, Section 4.2, page 45, Figure 17, 1997 Annual Report Section 4.2, Figure 13, 1998 Annual Report, Section 4.2, Figure 13. 1999 Annual Report, Section 4.2, Figure 13.*

5. *1995 Annual Report - Section 4.3, page 43, Figure 12, 1996 Annual Report, Section 4.2, page 45, Figure 18, 1997 Annual Report Section 4.2, Figure 14, 1998 Annual Report, Section 4.2, Figure 14. 1999 Annual Report, Section 4.2, Figure 14.*

Report, Eastview Road Landfill Site, dated June 1993. An interim hydrogeological/geological assessment with the updated information from Location 37R and location 96 will be provided under separate cover to determine the extent and significance of the geology encountered. Prior to completing this assessment, it would be useful to discuss the current preliminary findings with MOECC Technical Reviewer.

In order to assess downward groundwater flow through the till, several locations were selected to show vertical groundwater elevation trends with depth (Appendix A). The selected locations were chosen to illustrate the relationship of groundwater elevations in the outwash/upper till, lower till and bedrock. These figures also illustrate the seasonal groundwater elevation fluctuations across the site. These figures show that in most cases, downward gradients are observed across the till below the site.

Of importance are the gradients below the landfill footprint. Examining the 2014 gradients between the water levels measured in the outwash beneath the waste only and the interpreted bedrock groundwater surface, the estimated vertical gradients beneath the landfill ranged from 0.00 to 0.20 m/m or on average about 0.09 m/m. The downward movement of groundwater, below the landfill, is estimated to be only 0.0 to 4.38 cm per year or on average 2.01 cm per year. These gradients and downward flow velocities are generally similar to those observed in previous years.

To put these actual flow velocities into perspective, on average, it would take hundreds of years for the leachate to move through the till into the underlying bedrock, based on the 2014 water levels.

In conclusion, vertical gradients towards the bedrock are, on average, very low. The estimated downward flow velocity is also very slow, in the order of only a few centimetres per year.

4.3 Leachate Quality

Section 3.1 examined the quality of the leachate in the PLCCS, as it related to sewer discharge. In this section, the leachate quality measured in groundwater monitors in the waste, and in the outwash beneath the waste, is presented. It is this leachate quality that is most relevant to assessing possible impacts on groundwater quality in the natural environment.

Chemistry results for the leachate are presented in Appendix C. Table 5, is a summary of the critical leachate and leachate indicator parameter list for both the waste and outwash below the waste during 2014. Figure 15 shows the locations of the leachate monitors as well as all the overburden monitors.

Table 5. Summary of Leachate Quality from the Waste and Outwash Beneath the Waste in 2014

Parameters		Waste				Outwash Beneath Waste			
		Avg.	Min.	Max.	Samples	Avg.	Min.	Max.	Samples
General	pH (pH units)	7.58	7.5	7.67	4	7.47	7.17	7.69	16
	Conductivity (µS)	17000	14000	19000	4	4400	1600	7300	16
	Alkalinity (mg/L)	6375	4900	7700	4	1430	590	2900	16
	Hardness (mg/L)	1900	1400	2500	4	1424	750	2700	16
Critical Indicators	Chloride (mg/L)	2250	1900	2500	4	736	190	1700	16
	Boron (mg/L)	30.25	20	44	4	3.69	0.22	7	15
	Phenol (µg/L)	220	110	310	4	<33	<1	140	16
	Iodide (mg/L)	4.43	1.4	12	4	0.78	0.2	1.5	15
Leachate Indicators	Calcium (mg/L)	57	49	67	4	209	140	320	16
	Sodium (mg/L)	1775	1500	2200	4	414	39	820	16
	Magnesium (mg/L)	427.5	310	580	4	220	94	570	16
	Potassium (mg/L)	967.5	680	1300	4	31	1.6	110	16
	Iron (mg/L)	9.2	5.8	14	4	16.01	0.14	71	16
	Manganese (mg/L)	0.062	0.031	0.096	4	0.1542	0.017	0.42	16
	Ammonia (mg/L)	900	770	980	4	27.2	1.8	76	16

Table 5. Summary of Leachate Quality from the Waste and Outwash Beneath the Waste in 2014

Parameters		Waste				Outwash Beneath Waste			
		Avg.	Min.	Max.	Samples	Avg.	Min.	Max.	Samples
Other Constituents	Sulphate (mg/L)	34.5	18	50	4	<7.1	<1	14	16
	Bromide (mg/L)	<32.5	<10	<50	4	<6.8	<1	<10	16
	Nitrate (mg/L)	<1.25	<1	<2	4	<0.15	<0.1	<0.5	16
	Nitrite (mg/L)	<0.13	<0.1	<0.2	4	0.03	<0.01	0.29	16

These concentrations compare closely with previous years. A full description of the historical leachate quality evaluation is discussed in Section 6.2.3.2 (page 100) of the 1995 Annual Report, Gartner Lee Limited dated June 1996.

In general, the leachate quality is characterized by elevated concentrations of chloride, boron, phenols (critical leachate parameters), sodium, potassium, magnesium, iron, manganese, ammonia and alkalinity (leachate indicator parameters). In 2001, iodide and bromide were added to the list as part of an investigation conducted for locations 37/50. Both of these parameters are found to be elevated in the leachate as well.

The concentrations of these parameters vary with location across the landfill but in most cases are elevated above the background concentrations. However, it should be noted that parameters such as chloride and sodium might be elevated in the background due to other sources such as road salt. As well, parameters such as iron, manganese, and ammonia can be elevated due to natural background conditions, in either the sandy outwash (manganese) or the wetland peat (iron and ammonia).

As mentioned in the previous annual report, a change in leachate quality was noted at monitor 51-II, where an increase in leachate strength had occurred. This increasing trend began in late 2006 and persisted into early 2008. Since 2008, no further increase was observed with the concentrations remaining at the higher levels. This monitor is installed in the outwash beneath the waste. Since the increase was sudden, this change may be related to a compromised monitor (possible break or crack in monitor due to shifting) as observed at other locations on the landfill. Although this increase has occurred, the current concentrations observed for the leachate indicators for the most part are still around the upper range found in the outwash beneath the waste. Should a further increase continue, this monitor should be inspected to determine if it has become fully compromised. If this monitor becomes fully compromised, it should be replaced. Currently, concentrations have shown no recent increase into 2014.

Also, as mentioned in the previous annual report, anomalous leachate quality was noted in November 2008 at 51-IR. Several leachate indicator parameters increased significantly, although chloride was reported as less than the laboratory detection limit. In the spring and summer of 2009, the chloride concentration was once again similar to previous years (1450 to 1660 mg/L). However, most of the other indicator parameters remained slightly elevated compared to the historic concentrations for monitor 51-IR. In the fall of 2009, a further increase occurred for all leachate indicators, which persisted into 2011. In fact, the leachate quality concentrations observed are approaching the original leachate quality observed in 51-I, which was replaced by 51-IR in 2003. Monitor 51-I became compromised in 2000 (monitor pipe broken) caused by a blockage. This monitor was constructed in the early 1990s with an extra-long screened interval from 22.6 m to 7.3 m below ground surface and it was inferred that the monitor broke within the screen due to settling of the waste in the landfill. As this was the case, the replacement monitor, 51-IR, was constructed with a shorter screened interval from 22 m to 15.9 m to reduce the risk of a similar problem. Since this time, the leachate quality from the replacement monitor was found to be slightly lower than the original monitor. Since this latest increase was also abrupt, it is possible that this monitor has been partially compromised (possibly cracked) allowing the higher waste leachate that the original monitor reflected to now leak into the monitor. This change in leachate quality is not considered an issue as it remains within the concentrations observed at the other waste monitor 59-I. However, it should be monitored closely to ensure that a full breakage does not occur. If this monitor becomes fully compromised, it should be replaced.

Routine organic analysis of the leachate is performed once per year. The results for 2014 are presented in Appendix C. The results were similar to previous years with low concentrations of BTEX (benzene, toluene, ethylbenzene and xylene) and organic compounds. As well, there were traces of 1,1-dichloroethane, 1,4-dichlorobenzene, chlorobenzene, cis-1,2-Dichloroethylene, methyl-t-butyl ether and 1-1 dichloroethylene in some of the monitors. Higher concentrations of the above parameters are usually associated with leachate in the waste and not in the outwash beneath the waste.

Of all the leachate indicator parameters identified, only boron, chloride and phenols are considered as critical leachate indicator parameters. As the above parameters best characterize the leachate, evaluation of leachate quality within and below the landfill will focus on these parameters. Further to these traditional indicator parameters, iodide and bromide have been included in the leachate indicator parameter list. Studies have shown that iodide can be elevated in landfill leachate, as observed in the leachate from Eastview. Further, brine (salty) water quality is also enriched with iodide, however, road salt impacted water are deplete in iodide. As this is the case, iodide has been added to the critical leachate parameter list.

As observed historically, the concentrations of leachate varied widely throughout and below the landfill during 2014. The ranges observed were: chloride from 190 to 2,500 mg/L; boron from 0.22 to 44 mg/L; and phenols from less than the laboratory detection limit (1 µg/L) to 310 µg/L. These ranges are similar to those observed in the past. As well, the range for iodide was from less than the laboratory detection limit (0.1 mg/L) to 12 mg/L. The iodine of 12 mg/L was observed in the spring at 59-I and appears anomalous as concentrations are generally around the 2-3 mg/L range and the concentration dropped back down in the fall. The higher concentrations are found in the waste and the lower concentrations are found predominantly in the outwash beneath the waste. In 2014, four waste monitors (51-IR, 59-I, 65-I and 67-I) and eight outwash monitors (51-II, 55-IR, 56-IR, 57-I, 58-I, 61-1R, 66-IR and 63-I) were sampled.

Spatially, leachate quality has remained similar at most locations, with the exception of the increase noted at location 51. However, some minor increases in chloride and sodium have been noted at 57-I and 58-I.

Leachate concentrations, as in the past, are significantly higher in the waste than in the outwash beneath the waste. During 2014, the average concentrations of the critical leachate parameters chloride, boron and phenol as well as iodide were:

- a) 2,250 mg/L, 30 mg/L, 220 µg/L and 4.4 mg/L, respectively, in the waste; and
- b) 736 mg/L, 3.7 mg/L, <33 µg/L and <0.78 mg/L, respectively, in the outwash beneath the waste.

In conclusion, the leachate quality remains variable across the site and leachate concentrations are still significantly lower in the outwash below the waste than in the waste.

4.4 Shallow Groundwater Quality

4.4.1 Measured Exceedances of Reasonable Use

As discussed previously in Section 3.4.4, the PLCCS is operating as designed to prevent leachate flow from the landfill into the shallow groundwater system around the site. Therefore, there was no exceedance of Ministry of the Environment Guideline B7, the Reasonable Use Guidelines (RUG), in the shallow groundwater attributable to leachate release in 2014.

The installation of the PLCCS was completed at the site as leachate impacts were once detected in the shallow groundwater system to the south of the site. The intent of the PLCCS was to mitigate any further off-site leachate impacts from occurring.

Shallow groundwater monitoring subsequent to the installation of the PLCCS have been and still are used to confirm that the previously impacted groundwater has, in fact, renovated over time and that no new leachate inputs are present. While the presence of other sources of impacts such as road salt can complicate the analysis, the following is a discussion of the 2014 results.

The residual leachate impacts were best observed in monitor 16-IV and historically in monitors 2-I and C6-I. Chemical trend plots for leachate indicator parameters chloride and boron as well as leachate indicator parameters ammonia, alkalinity and sodium are provided in Appendix C (Figures C1 to C3).

As discussed in previous years, monitor 2-I had exhibited decreasing trends since 1992, after the completion of the PLCCS. In 1996, the trends showed that the water quality was beginning to stabilize indicating that the residual leachate that was present in the past had mostly dissipated. There is no indication of any residual leachate effects in 2014 in monitor 2-I.

Monitor C6-I, closer to the sheet pile wall, still exhibits no appreciable trends during 2014. Although concentrations of both chloride and sodium remain elevated, the concentrations of boron, phenol and ammonia continue to be low and still indicate that there are no leachate effects present in 2014. Further analysis of the groundwater continues to indicate that this location is showing a strong road salt signature, as observed since 1996.

Location 16, as observed since 1998, continues to exhibit very little variation in groundwater quality. Groundwater quality still indicates that there are some very minor residual leachate effects at this location. Chloride concentrations have remained similar, since about 2002. As well, boron has decrease over time and now remains at a concentration of 1.1 mg/L (now below the RUP) compared to those observed in 1998 and 1999 (around 3 mg/L). The boron concentration was above 4 mg/L in 1991. This overall decrease over time has demonstrated that water quality at this monitor has improved. This is further demonstrated by a similar increasing trend in sulphate and calcium as the boron had decreased. Sulphate is generally found to be higher in the natural groundwater than in the leachate. During 2014, all other leachate indicator parameters are similar to historical levels.

Locations 10 and 13 had been exhibiting increased and/or high concentrations of sodium and chloride as indicated in previous reports. This has persisted into 2014 and has been related to road salt due to their locations beside the roadways. A more in-depth investigation undertaken in 1996 in response to PLC concerns found that there were no increasing trends for either alkalinity or boron; however, higher than background ammonia was present and iron was also elevated, especially at location 14. An extensive groundwater analysis was performed which concluded that the sodium and chloride were from road salt. The ammonia and iron are considered to be naturally occurring (coming from the peat). However, starting in 2009, elevated phenolics were observed at monitor 10-III. This change in water quality corresponds with the installation of the water main along Eastview Road, which passed very close to this location. It is therefore concluded that this is the cause of this change.

Further to the above locations showing road salt impacts, in mid-1999 chloride concentrations increased at location 14 and were in the range of 300 to 400 mg/L. However, no increase in sodium was observed at that time. This increase in chloride was attributed to the movement of road salt impacted waters from the upgradient location 13. This increase was the initial front of road salt impacted water to reach location 14, which is why only chloride had increased. This occurs, as chloride is more mobile than sodium. In 2014, water quality at this location remained similar, although there now appears to be some seasonal increases in chloride observed since 2003. In the fall of 2008, chloride and sodium at locations 13 and 14 increased, most noticeably in the shallow monitor 13-V. This jump may be related to the reconstruction of the area at the corner of Watson and Eastview Road as part of the widening of Watson Road. The chloride has now decreased to pre-construction levels since 2013 although sodium still remains slightly above.

Similar to location 14, an increase in chloride, sodium and iron were noted at C11-I upgradient of the leachate collection system, most noticeably since 2012. Based on the water levels (Figure 9) and the location of the sheet

pile wall, this location is upgradient of any leachate sources. However, this location is downgradient of Watson Road and the corner at Eastview Road (location 13). The change in water quality is most likely related to road salt effects at this location. The increase in iron would also be related to this change as water quality upgradient in the outwash at 13-IV has highly elevated iron.

Since 1999, there has been a very minor increase in boron at monitor 15-IV from around 0.2 mg/L to around 1 mg/L by the end of 2002. No other parameters are showing this same trend and further analysis of the data did not indicate any leachate effects. Since this time, boron concentrations decreased to historical levels by 2011. The presence of the elevated boron was most likely related to minor residual leachate impacts similar to that observed at Location 16. In 2014, concentration remained at these background levels.

Further to the above discussion, review of water quality further to the south of Eastview Road at monitor 9-I has shown a slight increasing trend for chloride and sodium starting in 2007 which persisted into 2008. A slight decrease occurred in 2009 but has shown minor increases from this time which has continued into 2012. Concentrations have now shown a decrease into 2014 since the highest level noted in 2012. This change was not considered to be leachate related as the PLCCS is working as designed (no changes at Location 2 or C6-I). Upon further review, the increase began to occur around the same time as the construction activities associated with the housing development on the south side of Eastview Road and the construction of the water main. These activities have been observed to be very close to the Hadati Creek and location 9. Further assessment of this water quality will be undertaken as more data become available, however, it does appear that the cause is related to the construction activities mentioned earlier.

Guideline B7 Criteria

Although there is no new leachate migration downgradient of the landfill, the monitors in this area were still compared to the RUG (Table C7 Appendix C). As observed on this table, there are several locations that exceed the Guideline B7 criteria (RUG) for some parameters. Of all the parameters that exceed the B7 limit, only boron at location 16 is considered related to residual historical leachate impacts as discussed above. All other parameters that exceeded the B7 limit are considered to be either natural or a result of road salt impacts. These include:

- a) Chloride and sodium at locations 10-II, 13-IV and 14-II. The parameters exceed the B7 limit as a result of road salt impacts, as discussed above.
- b) Sulphate at location 18-III. High sulphate concentrations at location 18 have been discussed in the past and are related to gypsum (1992 Groundwater and Surface Water Monitoring Report – Eastview Road Landfill Site, GLL 93-134, dated June 1993).
- c) Elevated iron and manganese were once again noted at locations 2, 9, 10, 13, 14, 15, 16, 17 and 18. These elevated parameters are considered naturally occurring and are related to the wetland and associated peat (iron) and in the outwash sand (manganese), as discussed in Section 4.3.
- d) Nitrite was exceeded at locations 13-IV (fall only) and 16-IV. This also occurred for the first time in the spring of 2012. This is not considered landfill related and is most likely related to changes that have occurred in this area. Nitrate was also observed at 18-III in the fall, as occasionally observed historically.

The chemistry trends (time-concentration plots) to the west of the site are provided in Appendix C (Figures C4 to C6). Groundwater quality in this area is similar to previous years showing road salt effects and exhibit no leachate impacts, although an increasing trend in road salt effects had been noted at 30-I. This would be expected as groundwater flow from the west is towards the site. However, in late 2009, chloride and sodium concentrations abruptly decreased by half and hits of phenols began to occur. Phenol has generally decreased with a hit observed again in 2013, but back down in 2014. During this time, chloride has remained at the lower levels and is currently showing no apparent trends, although a drop was observed in 2014. It appears that this drive point monitor may have become compromised allowing infiltration of surficial water from the wetland.

In conclusion, there are no new exceedances of Reasonable Use measured in the shallow groundwater downgradient of the landfill. Some exceedances due to very minor residual leachate effects still exist, but these are continuing to decrease over time.

4.4.2 Predicted Exceedances of Reasonable Use

If the PLCCS continues to work as designed to prevent any further off-site migration of leachate, no new exceedances of the Reasonable Use Guidelines related to the landfill are predicted in the shallow groundwater.

4.5 Bedrock Groundwater Quality

4.5.1 Measured Exceedances of Reasonable Use

Nineteen bedrock monitoring locations are currently routinely sampled at the Eastview Road Landfill. These locations are shown on Figure 16. Bedrock groundwater quality results are provided in Appendix C with the 2014 results summarized in Table 6.

Groundwater quality in the bedrock in 2014 is generally similar to previous years for most parameters. As discussed in previous reports, the overall average chloride and conductivity had been showing an increasing trend historically. This change in the average was related to the increasing trend noted most noticeably at location 37. As well, location 91-I had also shown initial variable elevated chloride, as well, the recent chloride concentration at location 95 was elevated until early 2012 when an abrupt decrease occurred. This monitor was relocated, in the winter of 2012, approximately 5 m to the east to facilitate the construction of the new road. In late 2011, locations 37 and 92 were re-located to facilitate the development on the adjacent property. Initial water quality from location 37 indicates much lower chloride concentrations than at the original location, however, the new shallow bedrock at location 96 exhibited elevated chloride concentrations compared to monitor 92-I and replaced location 37R, although they have now shown a decreasing trend. Further, monitor 50-I had an increase in chloride in late 2013 with concentrations continuing at these levels in 2014. These will be discussed further below. No other leachate indicator parameters showed any changes. As this was the case, new monitor 96-II was excluded from the Table 6.

Table 6. Summary of Bedrock Groundwater Quality During 2014

Parameters		Bedrock Groundwater Summary			
		Avg.	Min	Max.	Samples
General	pH	8.07	7.73	8.27	54
	Conductivity (µS)	495	280	800	54
	Alkalinity (mg/L)	207	150	370	54
	Hardness (mg/L)	215	71	420	54
Critical Indicators	Chloride (mg/L)	<24	<1	120	54
	Boron (mg/L)	<0.05	<0.01	0.13	54
	Phenol (µg/L)	<1	<1	1.1	54
	Iodide	<0.1	<0.1	<0.1	54
Leachate Indicators	Calcium (mg/L)	46	16	120	54
	Sodium (mg/L)	21	8.8	43	54
	Magnesium (mg/L)	24	7.2	41	54
	Potassium (mg/L)	1.05	0.59	1.6	54
	Iron (mg/L)	<0.25	<0.1	0.88	54
	Manganese (mg/L)	<0.012	<0.002	0.049	54
	Ammonia (mg/L)	<0.28	<0.05	0.55	54
Other Constituents	Sulphate (mg/L)	<19	<1	60	54
	Bromide	<1	<1	<1	54
	Nitrate (mg/L)	<0.1	<0.1	<0.1	54
	Nitrite (mg/L)	<0.01	<0.01	0.03	54

Notes: 96-II was not included in the above table due to elevated chloride.

Long term trends based on the critical leachate indicator parameters boron and chloride have been evaluated. Figures 17 and 18 are the trends for bedrock quality north and south of the site. Figure 17 illustrates the boron trends. As discussed in the past, during a laboratory change in mid-1993, boron concentrations became scattered. In 1995, this scatter began to show a consistent but stable trend. This trend has persisted into 2014. There is no indication of leachate impacts in the bedrock groundwater based on boron alone.

Figure 18 illustrates the chloride trends. As discussed in the past, there was a slight scatter just after a laboratory change in mid-1993, however, the chloride concentrations have exhibited very little variation over time. As stated in previous reports, Location 37 was still exhibiting an increasing trend into the first half of 2011, as was originally observed since 1994. Also, location 50-I, exhibited a slight increasing trend from 1994, which had become stable at around 50 mg/L from 2003 to 2008, but has shown slightly higher concentrations since 2011, with a further increase in 2013. In 1998, chemical analysis of these locations showed that there might be a slight shift in the chemistry towards a road salt or brine water signature at 37-I. As well, to a lesser extent, 50-I was also showing a possible change in chemistry that may be starting to trend to a road salt or brine water signature. In 2008, the data collected continued to show that this trend was occurring in 37-I with a further shift towards a road salt or brine water signature.

To address the increasing chloride in the above wells, an assessment to determine the possible source of these increasing chloride concentrations was conducted (i.e., whether they were from a possible leachate source or from another source). This assessment was discussed in the 2002 annual report.

As recommended by the MOE, six additional bedrock monitors were installed around the site including one location west of location 37 (Figure 3, location 92) in 2003. Groundwater levels collected from these locations have confirmed the interpreted groundwater flow in the bedrock, along Eastview Road.

Further, the assessment of the geology immediately southwest of location 37, at location 92, showed that the bedrock surface was higher, inferring that an incised bedrock low trends through the site. This information suggests that locations 37 and 50 would be upgradient of the landfill, as in past interpretations. This was further confirmed in the interim report on the further assessment of location 37/50. However, even though the MOE reviewer agrees that this interpretation is valid, groundwater flow could also be interpreted as potentially away from the landfill. This concern was raised based on the continued increase of chloride at location 37-I and the fact that 37-I could be interpreted to be upgradient of 50-I.

Based on the above, it was recommended that further investigation in this area was needed to better refine groundwater flow. Therefore, three new bedrock locations were completed in the area around Location 37/50, including near the former scale house, as requested by the MOE. These locations were completed in September 2007 and were designated 93-I, 94-I and 95-I (Figure 3). The construction of these new monitors is similar to that of 37-I, which was originally drilled as a water well and has an open hole to around 5 m deep. The intent was to be able to compare these additional locations with 37-I. A further refinement of the groundwater flow based on the new locations was completed as part of the interim report assessment and discussed in Section 4.2. A summary of the water quality result assessment as discussed in the interim report is provided below.

Water quality sampling has been conducted at the new locations at a frequency of four times a year, starting in November 2007. Review of these data continues to show that the chloride concentrations at 37-I had continued to increase as discussed in previous annual reports. Since 1995, concentrations have increased from around 10 mg/L to around 300 mg/L in 2008 and 2009. A minor increase of chloride was also noted at 50-I where chloride concentrations have increased from around 20 mg/L in 1995 to around 60 to 70 mg/L in 2008 and 2009.

The data collected from these locations show that monitors 93-I and 94-I have chloride concentrations that are very low and similar to background (around 1-4 mg/L). Whereas, monitor 95-I has concentrations that were slightly

higher than the concentrations at monitor 50-I (around 70-100 mg/L). Overall, the water quality observed continues to indicate an off-site source. This is demonstrated at monitor 94-I, located closer to the landfill, which has significantly lower chloride concentrations than monitors 37-I, 95-I and 50-I. If the source of the chloride at monitor 37-I was landfill related, it would be expected that the monitor closer to the source would also be impacted. Further, monitor 95-I exhibits slightly higher chloride concentrations than at the downgradient monitor 50-I, which may also suggest an upgradient source. In 2005, the public well (P13, MOE #6701123) located upgradient and southwest of locations 37/50 on Eastview Road was added to the semi-annual residential well monitoring program. Chloride concentrations at this well were around 80 to 90 mg/L to as high as 105 mg/L in November 2006. These concentrations are on average slightly higher than both monitors 95-I and 50-I. As this public well is considered upgradient of the landfill, this further supports an off-site chloride source.

As stated earlier, the elevated and increasing trend at monitor 37-I did not appear to be landfill related. In the 2002 assessment, the review of the water quality indicated that it was trending towards a road salt/mineralized signature. The current data collected up to 2009 have confirmed this since the change in water quality has now trended to a road salt signature, further indicating a non-landfill source. The reason for the continued increase and highly elevated chloride at this location only is unknown. The monitors (94-I and 95-I) installed in the same hydrogeological stratigraphic interval are found to have significantly lower chloride concentrations and, in the case of 94-I (closer to the landfill), are at background levels. Therefore, it was concluded that the water quality at 37-I appears to be highly suspect.

Based on discussions with MOE reviewer on this interim report, it was agreed that both wells, deep and shallow upper bedrock at location 37, be decommissioned and replaced with a proper monitor construction located just inside of the fence line on the landfill property. In addition, a shallow upper bedrock monitor was to be completed at 92-I. Location 37 was decommissioned and re-located in November/December 2011 in accordance with the MOE request. The monitors at this location were designated 37-IR (shallow) and 37-IIR (deep). Further, original location 92-I was also re-located due to development activities in November 2011 to a new location further to the east outside the area of development. The recommended shallow well was completed in February 2012. The new monitors at this location were designated 96-I (deep) and 96-II (shallow). All new locations were incorporated into the monitoring program in 2012 and are shown on Figure 3.

Water quality results from location 37R, exhibit significantly lower major ions, specifically chloride than at original Location 37. Chloride was generally 30 mg/L or lower in both the deep (37-II) and shallow (37-IR) upper bedrock. It should be noted that the screened interval and stratigraphic depth at 37-IR is the same as the original 37-I, although 37-IR is constructed of a PVC pipe with clay grout seal to surface, whereas 37-I was comprised of an open bedrock hole with a steel casing to surface (i.e., old water well construction). This now suggest that the higher chloride concentrations observed may have been partially related to leakage around the steel casing. These concentrations are also significantly lower than at Location 50, as well. Further data are required to better assess the water quality in this area, but the initial results over the past three years do indicate an improvement in the water quality compared to the former Location 37. It is recommended that these bedrock monitors continue to be part of the quarterly monitoring events.

Initial water quality results for Location 96, indicate that the deep monitor (96-I) appears to have a similar water quality (low chloride) to the former monitor 92-I, which it replaced. However, the new shallow monitor in the upper bedrock is exhibiting elevated chloride, although significantly lower than at former 37-I. These concentrations have been relatively stable at around 130 mg/L (37-I had increased to a high of 359 mg/L) since it was installed but have recently decreased throughout 2014 to 82 mg/L. As stated earlier, based on the preliminary review of the geology, this location may be within a suspected bedrock incised low in this area. As this is the case, an interim hydrogeological/geological assessment with the updated information from Location 37R and location 96 will be provided under separate cover to determine the extent and significance of the geology encountered. Prior to

completing this assessment, it would be useful to discuss the current preliminary findings with MOECC Technical Reviewer. As well, further data are required to better assess the water quality in this area. It is recommended that these bedrock monitors be continue to be part of the quarterly monitoring events.

As mentioned earlier, location 95 had to be relocated to facilitate the construction of the new road for the adjacent development in the winter of 2012. The intent was to relocate it approximately 5 m to the east, off the road allowance, and reinstall with the same monitor installation as 95-I. Water quality collected from the replaced well now exhibits much lower chloride concentrations than original location and more similar to 37-IR. The cause of the lower chloride concentrations at this relocated location is unknown at this time. Further data are required to better assess the water quality in this area.

In 2003, one of the additional locations (monitor 91-I) had also exhibited elevated chloride concentrations. This location is situated upgradient of the landfill along Watson Road and therefore, the chloride did not appear related to the landfill. On a few of occasions, chloride concentrations observed were higher than those presently found at monitor 37-I at that time (up to about 190 mg/L). Periodically, elevated chloride continued at 91-I, generally following seasonal trends, to about 2009. Since this time, concentrations have been generally below 10 mg/L, with a high noted of 40 mg/L in July 2010. The cause of the earlier elevated concentration is not known, however, this location is upgradient of the site and elevated concentrations are not related to the landfill.

In conclusion, there is no indication of leachate impacts in the bedrock groundwater in the area of the landfill based on chloride alone, although elevated and increasing chloride concentrations in some bedrock monitors will continue to be assessed in the future. However, further data are required to better assess the water quality at Locations 37R and 96.

It should be noted that during the assessment of the bedrock groundwater quality, all leachate indicator parameters are used to determine if there are potential landfill impacts occurring. The evaluation of both critical leachate indicator parameters chloride and boron is completed as chloride is very mobile and found at high levels in the landfill leachate and boron, while less mobile than chloride, is only found in the landfill leachate. Due to the fact that chloride can also come from other sources, if it is found to be increasing it would only act as an early warning that a change is occurring that may be related to the landfill or some other source. However, should boron begin to increase on its own or with chloride, it is a more reliable indication that landfill impacts are occurring. Therefore, based on the above assessment of the critical leachate parameters boron and chloride, along with a full analysis of all leachate indicator parameters, there is no indication of leachate impacts in the bedrock groundwater.

In conclusion, the bedrock groundwater quality is similar to previous years.

No leachate effects are observed in the bedrock groundwater, nor would it be expected based on the very slow rate of groundwater flow downwards through the overlying tills.

Since leachate has not been detected in the bedrock, there can be no exceedance of Reasonable Use due to landfill impacts. However, to further confirm this, groundwater quality at the bedrock locations downgradient of the site have been compared to the B7 Guideline Limits (Table C8, Appendix C). As expected, there were no parameters that exceeded the B7 limit in the bedrock. The only exception is at monitor 17-I, where iron continues to exceed the B7 limit. This is considered to be natural and not landfill related for two reasons:

- a) the upgradient monitors, closer to the landfill, had lower iron concentrations; and
- b) the actual concentrations observed at monitor 17-I are within the range observed in the background monitors.

4.5.2 Predicted Exceedances of Reasonable Use

The leachate in the waste, or in the outwash beneath the waste, can move very slowly downward through the till and, eventually, into the bedrock aquifer. Although the groundwater flow in the till is very slow (a few centimetres per year) and leachate will require a long time to reach the bedrock (several hundreds of years), it is still necessary to demonstrate that the contaminant concentrations in the bedrock will remain within the limits dictated in Guideline B-7, the Reasonable Use Guideline (RUG).

Two methods of predicting impacts on groundwater quality are used at the site: the leachate hydraulic target elevations, and monitoring of the water quality in the till above the bedrock. Each is discussed below.

4.5.2.1 Target Elevations

At the Eastview Road Landfill Site, the RUG predictions for the bedrock aquifer were made using a computer model called POLLUTE. A series of modelling runs was completed to back-calculate the leachate water level elevations that need to be maintained beneath the landfill, through operation of the PLCCS, to ensure that the RUG is ultimately met in the bedrock (Gartner Lee, 1993c). These are called the target elevations. Leachate water level elevations in the outwash beneath the waste are measured monthly and compared to target elevations. Section 3.6.2 in this report provides a detailed analysis of the target elevations. In previous years, most areas within the landfill met their target elevations and, therefore, RUG will be met in the bedrock beneath these areas.

A few small, localized areas of the landfill have not met their target elevations over the past few years, either occasionally or consistently (Section 3.6.2), specifically: monitor 51-II, and monitors 62 through 67. Monitor 59 technically does not meet its target elevation as well, but field investigations in 1995 determined that its water level was anomalous compared to monitors at surrounding locations 62 through 67, which are used in the assessment (see the 1997 revised modelling report for more details). Monitoring has, however, demonstrated that the impacts in the outwash below the waste are significantly lower than were assumed in the original POLLUTE modelling, to the extent that RUG can be met in the bedrock despite not meeting the original target elevations at some locations. Based on recommendations made in the 1995 Annual Report⁶, further POLLUTE modelling was conducted in late 1996 and early 1997 with the more up-to-date data to confirm that RUG will be met (Re-Modelling of Leachate Migration in the Tills – Eastview Road Landfill, GLL 96-362 dated May 1997). A brief discussion of the findings of this modelling exercise is provided below for the reader's benefit.

The original modelling incorporated conservative contaminant concentrations for boron and chloride with the smaller database available in 1992. These concentrations were 20 and 45 mg/L for boron and 1,550 mg/L for chloride. However, the addition of several landfill monitoring locations (15) in both the waste and the outwash beneath the waste that had been sampled over three to five years, up to 1996, showed that the leachate quality concentrations were significantly lower than the original contaminant concentrations employed. This is strongly demonstrated in the groundwater quality in the outwash beneath the waste. Monitoring of the outwash beneath the waste has shown that on average boron was about 3 mg/L and chloride was about 350 mg/L since 1994. However, locally some monitors had shown boron and chloride highs of 14.7 mg/L and 960 mg/L, respectively.

To better determine if the localized areas that did not meet, or periodically did not meet, their target elevations would contribute to future RUG exceedance at the bedrock, the POLLUTE modelling was revisited with the more up-to-date data, at that time. To provide conservatism in the model, a concentration for boron of 8 mg/L was used. This concentration was used due to the fluctuations observed at certain locations as stated above. As well, the groundwater elevations used in the model were based on the higher than normal levels observed during 1996 in the outwash below the waste.

6. 1995 Annual Report - Section 6.2.3.3, Page 110.

The POLLUTE modelling was revisited in the northeast area of the landfill (locations 62 through 67) as well as at location 55 and at location 51. Each location was modelled using the original concentration of 20 mg/L, the conservative concentration of 8 mg/L and the actual average concentration from 1995. The results of the study are outlined in the report "Re-Modelling of Leachate Migration in the Tills - Eastview Road Landfill" (GLL 96-362 dated May 1997). The study concluded that there would be no exceedance of the Reasonable Use Guideline concentrations in the bedrock below locations 51, 55 and the northeast area of the landfill, even though original target elevations were not attained. Below is a brief discussion on the monitors that once again did not meet their target elevations, with reference to the revised modelling results (Gartner Lee, 1997), to determine whether or not the failure to meet the target elevations could result in a future exceedance of RUG in the bedrock aquifer.

Location 51

Monitor 51-II did not meet its target elevations during 2014 as water levels were slightly higher. The boron concentrations in the outwash below the landfill in monitor 51-II were marginally higher, averaging 6.60 mg/L in 2014, compared to 6.27 mg/L (1995) used in the revised modelling assessment in 1997, and the 20 mg/L that was used to set the original target elevation. The average downward gradient in 2014 at this monitor was about 0.10 m/m, which translates into a downward velocity of about 1.90 cm/a.

Given the fact that the water levels are slightly above the target elevation, and the boron concentration is only marginally higher than in 1995, there is still little overall concern regarding RUG at this location. (Note that the revised 1997 modelling showed that all scenarios, including boron concentrations as high as 20 mg/L, still resulted in RUG compliance.) As this is the case, a further assessment with the POLLUTE model is not warranted at this time.

Location 63

Since 1996, the average concentration of boron in the outwash at this location was well below the Reasonable Use limit of 1.225 mg/L. Therefore, the B7 limit would also be met in the bedrock below this location regardless of whether or not the target elevation is met. Between 1998 and 2006, samples could not be obtained from this monitor, due to very low water levels. This shows that the leachate had been substantially drawn down in this area, which shows the effectiveness of the PLCCS. As well, the boron concentration would be expected to be similar to historical concentrations, which were very low and decreasing since the monitor was installed in 1995. Although this had been the case, with the slight increase in water levels since the spring of 2007, samples were once again obtained from this location. In 2014, boron had shown a slight increase and is marginally higher than the RUP averaging 1.3 mg/L. Therefore, as the boron concentration is only marginally higher, the RUG will also be met in the bedrock below this location regardless of whether or not the target elevation is met.

Location 65

Similar to Location 63 above, the average concentration of boron in the outwash at this location continues to be well below the Reasonable Use limit of 1.225 mg/L in 2014 at 0.39 mg/L. Therefore, the RUG will also be met in the bedrock below this location regardless of whether or not the target elevation is met.

Location 66-IR

As with Locations 63 and 65 above, the average concentration of boron in the outwash at this location has been well below the Reasonable Use limit of 1.225 mg/L since 1996. Therefore, the RUG would also be met in the bedrock below this location regardless of whether or not the target elevation is met. As with monitor 63-I, samples could not be collected since late 1998 due to very low water levels. However, it was expected that this location still meets the RUG due to the very low boron concentrations observed since it was installed in 1995 (the last boron concentration in Sept 1998 was 0.17 mg/L. This monitor was replaced in April 2007 and is now designated 66-IR. The boron concentration in spring of 2013 was 0.67 mg/L, which is well below the RUP. The fall boron concentration at 66-IR

was found to be 3.6 mg/L. This concentration was considered anomalous as historical concentrations mentioned above have always been low, however the boron increase into 2014 and is now averaging 6.2 mg/L. Although this is the case, the revised 1997 modelling showed that all scenarios, including boron concentrations as high as 20 mg/L still resulted in RUG compliance. Therefore, the RUP would be met. However, further data will be required to assess this apparent change in boron concentrations.

Location 67

Based on the initial boron concentration of 45.35 mg/L, the revised modelling in 1997 indicated that this location could eventually (in about 300 years) exceed the B7 limit in the bedrock. However, it was suspected that this initial boron concentration was not representative and there were already trends at that time suggesting that it would quickly decrease to a point below about 14 mg/L where B7 limit would be achieved. In fact, that is what has happened. By 2000, the measured boron concentration at this location was 2.67 mg/L. As with locations 63 and 66, this location had been essentially dry since 2001 (insufficient volume for sampling). During this period, it was reasonable to assume that there would still be similar boron concentrations in this area, and therefore, the RUG will be met. As with 63-I, the slight increase in water levels at location 67-I allowed sampling to resume in 2007. Similar to monitor 66-IR, and to a lesser extent 63-I, boron at 67-I also jumped in 2014 from 5.9 mg/L to an average of 13.5 mg/L. Although this was the case, this average concentration is slightly lower than 14 mg/L used in the revised modelling assessment in 1997. However, further data will be required to assess this apparent change in boron concentrations.

Notwithstanding the above assessment, it is important to recognize that while the location-by-location assessment of target elevations is a useful guide to the effectiveness of the PLCCS in different parts of the landfill site, Reasonable Use compliance in the bedrock aquifer is applied at the site boundary, so there is a mixing, or averaging, effect that will occur in the groundwater flow system. The revised modelling assessment in 1997 recognized this and modelled the overall effects at the site under long-term average conditions, concluding that the “overall average boron concentrations in the bedrock aquifer will remain well within Reasonable Use Guidelines” (p.9).

Based on the assessment of target elevations at individual locations, and the overall assessment for the site, future Reasonable Use exceedances in the bedrock aquifer are not predicted.

4.5.2.2 Lower Till Groundwater Quality

Sampling and testing the water quality in the lower till provides a predictive “early warning” of any leachate movement towards the bedrock aquifer. Because of the very slow rate of downward flow in the tills beneath the landfill, as noted above, no leachate should be detected in the lower till in 2014 or for many more years in the future.

A summary of groundwater quality in the lower till during 2014 is provided in Table 7 and is similar to previous years. Spatially, the water quality is slightly variable but at each location it is stable (i.e., no apparent trends).

Table 7. Summary of Lower Till Groundwater Quality During 2014

Parameters		Lower Till Groundwater Quality			
		Avg.	Min	Max.	Samples
General	pH (pH units)	8.2	8.09	8.27	8.2
	Conductivity (µS)	320	270	390	320
	Alkalinity (mg/L)	167	140	200	167
	Hardness (mg/L)	88	41	180	88
Critical Indicators	Chloride (mg/L)	<2.35	<1	3.6	<2.35
	Boron (mg/L)	0.12	0.051	0.3	0.12
	Phenol (µg/L)	<1	<1	<1	<1
	Iodide (mg/L)	<0.1	<0.1	<0.1	<0.1

Table 7. Summary of Lower Till Groundwater Quality During 2014

Parameters		Lower Till Groundwater Quality			
		Avg.	Min	Max.	Samples
Leachate Indicators	Calcium (mg/L)	19	12	30	19
	Sodium (mg/L)	38	16	55	38
	Magnesium (mg/L)	9.8	2.7	25	9.8
	Potassium (mg/L)	0.72	0.5	0.9	0.72
	Iron (mg/L)	<0.32	<0.1	1.4	<0.32
	Manganese (mg/L)	0.026	0.0052	0.081	0.026
	Ammonia (mg/L)	0.27	<0.05	0.48	0.27
Other Constituents	Sulphate (mg/L)	7.3	<1	14	7.3
	Bromide	<1	<1	<1	<1
	Nitrate (mg/L)	<0.13	<0.1	0.21	<0.13
	Nitrite (mg/L)	<0.012	<0.01	0.024	<0.012

To assess long term groundwater quality in the lower till as it relates to possible downward groundwater flow, vertical profiles for till monitors and associated bedrock monitors were prepared for selected locations. The groundwater parameters selected for these trends were the critical leachate indicators boron and chloride. The locations were selected to provide background (4, 13 and 19) and locations where there is the possibility of downward migration of contamination (11, 15, 16, 53 and 60). The profiles are provided in Appendix C; Figures C7 to C10 are for chloride, Figures C11 to C14 are for boron and Figures C15 to C18 illustrates the remaining critical leachate indicator parameter phenol.

Historical trend evaluation has been discussed previously. Chloride concentrations at most locations during 2014 are stable and similar to previous years. There is no indication of any leachate impacts in the lower till. However, there are two locations (4 and 53) that warrant further discussion as provided below. These locations were not included in the above statistics.

The first is location 4. In 1999, chloride and sodium were slightly higher compared to historical trends in monitor 4-II. The assessment of this increase, at the time, did not show it to be related to leachate impacts. These slightly higher concentrations generally persisted to about 2002 with some apparent seasonal decreases. In 2003, concentrations increased to their highest levels (chloride 82.1 mg/L), at that time, in the spring but decreased again in the fall. During 2004, these concentrations increased again and by August were at their highest levels ever recorded (chloride 108 mg/L). Further evaluation of the water quality in 2004 indicates a shift to dilute road salt effects. In 2005, chloride concentrations began to decrease again, however, over the long term the overall trend is showing an increase. It is known that the shallow monitor is highly impacted by road salt (4-IIIR). Therefore, based on the changes since 1999 and more recently in 2004, it was concluded that there has been slow leakage through the seal at this monitor. A similar situation was also observed in the early 1990s in the original bedrock monitor (4-I), which was ultimately replaced in 1993. Monitor 4-II, in the lower till, was replaced in April 2007. Water quality results collected for the three subsequent monitoring events in 2007 had shown a significant change in the chloride concentration, which decreased to about 50 to 60 mg/L and persisted into 2008. In 2011, a slight increase was noted, as well as an anomalous jump in the fall. In 2013, concentrations continued to drop but were still above the 2008 levels, although not as high as those observed before the replacement. Concentrations have remained stable at these higher levels throughout 2014. Continued assessment of this location is warranted.

The second location is 53/C2. In late 2003, it was noted that chloride concentrations seemed to increase slightly at 53-II. At the time, it was not considered a concern as it was within the historical range for this location. However during 2004, chloride, and to a lesser degree sodium, calcium, magnesium and sulphate, increased significantly. In fact, the chloride concentration in June of 2004 was similar to that of C2-I in the overlying outwash. It was noted during this period that the water levels also increased by about 1.5 m. It had therefore been concluded, as discussed earlier, that the seal in this monitor was compromised. This location was also replaced in April 2007.

Review of the chloride concentration from the three subsequent monitoring events indicates that the levels decreased over those observed in 2006 (66 mg/L in June 2006 and 25 mg/L in November 2007), although they were still above historical concentrations. In 2008, chloride levels further decreased to around 20 mg/L. These lower concentrations have persisted in to 2014. It is expected that some residual chloride is still present after the replacement of this monitor and that this should clear over time.

Further to the above, a change in water quality in the lower till monitor 60-I was observed in the fall of 2011 that has persisted into 2014. In some cases, there was a decrease in parameter concentrations and for others, an increase or spike, most noticeably ammonia, phenols, iron, calcium and, to a lesser degree, chloride and potassium. A similar change was also noted in the intermediate monitor 60-II. This location is on-site directly adjacent to the landfill along the western access road (Figure 3). The shallow monitor at this location does exhibit leachate effects with shallow groundwater flow directed from here to the PLCCS. This location is also adjacent to the park footprint and, although not within the footprint, some excavation activities were conducted in this area as observed by landfill staff in 2011 (location was now in a depression). Due to this, flooding was noted in the spring so the monitors were extended and the depression filled in. Based on the above, these monitors may have been compromised due to the initial construction activities in 2011. If these changes (increase) persist, this location may need to be replaced as 60-I is monitoring the lower till adjacent to the landfill, although at this time it appears that a slight decrease has occurred since 2013.

These trends do not indicate any leachate impacts in the lower till.

In conclusion, the 2014 chemistry and the vertical profile trends do not indicate any presence of leachate impacts in the lower till. Therefore, it is not predicted that Reasonable Use will be exceeded in the bedrock groundwater.

4.6 Need to Implement Contingency Plans

The groundwater analysis discussed previously in this section indicates that there are no leachate effects related to the landfill in the shallow groundwater system (other than residual contamination pre-dating the PLCCS), in the lower till or in the bedrock. Therefore, there is no need to implement any contingency plans.

4.7 Adequacy of the Monitoring Program and Recommended Changes

The current revised monitoring program is adequate for the site. No changes are recommended.

5. Surface Water Monitoring

The surface water monitoring program in and around the Eastview Road Landfill site consists of nine (9) monitoring stations. The purpose of this program is to establish the surface water quality entering the site, leaving the site, and downstream from the site. Background water quality is also determined by monitoring two stations in adjacent watersheds.

Comparisons are made between the nine stations to determine if the landfill is impacting surface water quality or if the quality is changing over time. The laboratory results are compared against water quality targets established by Gartner Lee Limited (1993), Provincial Water Quality Objectives (PWQO) (MOE 1999), and data collected at the stations since 1992. Surface water quality results for at least the past six years are provided in Appendix C. As requested by the MOE, the laboratory was contacted to provide a lower detection limit for nickel so that it could be compared to the PWQO. Starting in 2011, water quality results now reflect this lower detection limit.

5.1 Objectives

The objectives of the surface water monitoring program are (Gartner Lee Limited, 1993):

- a) to assess whether the landfill is in compliance with surface water quality policies of the MOE;
- b) to evaluate the effectiveness of the perimeter leachate containment and collection system in preventing leachate impacts in Hadati Creek;
- c) to evaluate the effectiveness of sediment control measures in reducing total suspended solids concentrations to the wetland in the southeast part of the site; and
- d) to provide a mechanism which will trigger the implementation of a contingency plan in the event that the landfill is not in compliance with the surface water policies of the MOE.

5.2 Sampling Methodology and Site Descriptions

Nine monitoring stations (Figure 19) are routinely sampled; however, parameter analyses vary between the stations. A typical sampling event consists of measuring field parameters (pH, conductivity, dissolved oxygen, temperature and stream width and depth) as well as collecting water samples and delivering them to a certified laboratory on the same day for analysis for the designated parameters. In 2014, City of Guelph staff collected the water samples and Maxxam Analytics performed the water quality analyses.

5.2.1 Background water Quality Stations

Stations SW15, SW7 and SW5 represent background water quality from different watersheds in the vicinity of the landfill.

SW15 is located in an adjacent watershed on the southeast side of Speedvale Avenue, northeast of the landfill property boundary at Watson Road.

SW7, also located in an adjacent watershed, is on the northeast side of Watson Road approximately halfway between Eastview Road and Grange Road. Due to the housing construction activities along Watson Road, it is most likely this station will become more representative of background rural/urban use.

SW5 is located at the upstream end of the ditch on the southwest side of the landfill property. This is the only surface water flow path entering the site under normal flow conditions and represents background water quality, upstream of the landfill.

5.2.2 On-Site Water Quality Stations

SW1 is located along the southwest ditch at the storm sewer inlet near the landfill entrance off Eastview Road. Water quality at this location indicates the contributions (if any) from the landfill to the southwest ditch by comparison with results from SW5.

SW16 is located at the storm sewer outlet on the southeast side of Eastview Road near the landfill entrance, and indicates the contributions (if any) of drainage from the southwest ditch to Hadati Creek. This site is located downstream of the confluence with the Eastview Road ditch (SW2) and the southwest ditch (SW1).

SW24 was located within the landfill site where runoff could be received during wet weather events. A series of two rock check dams were installed in 1997 to allow suspended sediments to settle out of the runoff prior to discharging from the site. As part of the completion of the Eastview Community Park, two stormwater ponds were added and an upgrade to the check dams was completed in 2014. Sampling of the new pond was undertaken in 2014 to assess baseline data and, if flow is observed through the check dams, TSS samples were taken.

SW4 is located in a drainage ditch at the outlet of the wetland, downstream of SW24 and on the northwest side of Eastview Road.

5.2.3 Downstream Surface Water Stations

SW3A is downstream of the landfill in Hadati Creek, on the southeast side of Eastview Road. The results from this station are compared against the established Provincial Water Quality Objectives (PWQOs).

5.3 2014 Sampling Program

Total precipitation during 2014 was 996 mm, which is much higher than the long-term average annual precipitation of 881 mm. March, May, July, August, and December experienced less precipitation than normal with the remainder of the months experiencing significantly more than normal precipitation. The mean monthly temperature was 5.7 C, which is slightly lower than the long-term average mean temperature of 6.7°C.

Evapotranspiration in 2014 was calculated to be 553 mm, which is marginally lower than the long-term average annual evapotranspiration of 566 mm. The 2014 water surplus (the amount of precipitation remaining after evapotranspiration is subtracted) available for runoff and infiltration was 444 mm, which is much higher than the long-term average of 316 mm. The range of annual water surplus is estimated to be from 207 mm to 480 mm per year, thus the overall surplus water for 2014 was within than the long-term range. In summary, 2014 would be considered a wetter than normal year.

The 2014 sampling program followed the protocol described by AECOM (2009). This included sampling of all monitoring locations, four times a year (when sufficient flow occurs) starting with the Spring Freshet. Samples were collected for TSS in the new stormwater ponds designated as Pond1 and Pond2 (former check dams) in July and August, as well. These sampling events are outlined in Table 8.

Table 8. 2014 Surface Water Sampling Events

Date Sampled	Sampling Event	Comments
March 31, 2014	Spring Freshet	All monitoring locations were sampled
July 16, 2014	Summer Dry	All monitoring locations were sampled
August 6, 2014	Trigger Sample	All monitoring locations were sampled
September 22, 2014	September Wet	All monitoring locations were sampled
December 1, 2014	December Wet	All monitoring locations were sampled

5.4 2014 Sampling Data

Surface water quality results for selected stations and parameters are presented in Table 9. The full surface water data set and field measurements are included in Appendix C (Tables C3 and C4).

Critical Leachate Indicators

Gartner Lee Limited (1993) defined Initial Action Levels (IALs) for five leachate indicator parameters (Table 10). If the concentration of one or more of these parameters exceeds the IAL at SW3A (Hadati Creek), then a series of actions is triggered. These actions include confirmation of the sample concentration within 30 days, followed by additional testing and contingency plan implementation, if necessary. Details of this process are provided in Gartner Lee Limited (1993).

During all sampling events, un-ionized ammonia, phenol, chromium and nickel concentrations were at or below their laboratory analytical detection limits (of 0.001 mg/L, 0.005 mg/L and 0.001 mg/L, respectively) and their initial action level for each parameter at SW3A.

Phenol concentrations were generally low, and were at or below the PWQO (<0.001 mg/L) at SW3A and all other on site and downstream stations, with the exception of July, September and December for some upstream and/or background stations. In July, SW1, SW2 and SW4 had phenol concentration of 0.0031, 0.0023 and 0.0024 mg/L, respectively. Although not required as SW3A was not above the IAL, a trigger sampling event was still completed in August as SW2 (upstream of SW16/SW3a), was slightly above the IAL. All phenol concentrations were below the IAL during this sampling event. In September, SW1 had a phenol concentration of 0.0054 mg/L.

All other stations, including downstream, were below the detection limit. During this period, silt build up in the western drainage ditch was upstream of SW1 was being removed to improve flow, which is most likely the cause of the elevated phenol. In December, background station SW7 had a phenol concentration of 0.0038 mg/L and SW4 had a phenol concentration of 0.0021 mg/L. No follow-up sampling was required as all other downstream stations including SW3A were below the IAL. Occasional phenols hits have generally been observed in the past at both background and downstream stations and are not considered related to the landfill.

Un-ionized ammonia concentrations were calculated using field pH and temperature. At SW3A, downstream of the landfill, the un-ionized ammonia concentrations were low (0.0003 – 0.0013 mg/L), and well below the IAL of 0.04 mg/L. Concentrations at all stations were low, during all sampling events and well below the PWQO.

At SW3A, the conductivity ranged from 360 – 830 $\mu\text{S}/\text{cm}$, and were well below the IAL value of 2,410 $\mu\text{S}/\text{cm}$ during all 2014 sampling events. At SW1 and SW16, concentrations were within historical background values and ranged from 600 to 910 and 590 to 860 $\mu\text{S}/\text{cm}$, respectively. The highest measurement at SW5 (upstream of landfill) was 1,300 $\mu\text{S}/\text{cm}$, which is slightly higher compared to the downstream stations but lower than the historical average for this location (1,794 $\mu\text{S}/\text{cm}$). SW5 is located immediately downstream of Speedvale Avenue. Since SW5 is located upstream of the landfill, it is not susceptible to landfill related influences. SW2 has been added to this table as it collected runoff along Eastview Road that is also directed into Hadati Creek via a culvert upstream of SW16. The conductivity results at SW2 were generally slightly lower to that observed at SW5.

Table 9. Summary of Surface Water Quality, 2014



Parameters		IAL	PWQO	SW5 Upstream of Landfill (West Drainage Ditch)				SW1 Upstream of Storm Culvert (West Drainage Ditch)				SW2 Upstream of Storm Culvert Eastview Road Ditch				SW16 Storm Culvert Discharge (Hadati Creek)				SW-3A Downstream of Landfill (Hadati Creek)			
				Min	Max	Avg	N	Min	Max	Avg	N	Min	Max	Avg	N	Min	Max	Avg	N	Min	Max	Avg	N
General	Field pH	-	6.5-8.5	7.52	7.95	7.76	5	7.28	8.02	7.68	5	7.64	568	119.78	5	7.32	8.26	7.70	5	7.22	7.81	7.58	5
	Alkalinity		140	340	242	5	230	330	282	5	120	330	196	5	170	270	214	5	110	280	212	5	
	Hardness		160	380	276	5	280	370	312	5	160	360	224	5	190	310	250	5	140	320	250	5	
Initial Action Level Parameters	Un-ionized Ammonia	0.04	0.02	0.0018	0.0005	0.0032	5	0.0022	0.0003	0.0046	5	0.0228	0.0005	0.1100	5	0.0013	0.0003	0.0021	5	0.0013	0.0003	0.0026	5
	Conductivity	2410		330	1300	796	5	680	910	810	5	360	930	626	5	590	860	690	5	360	830	656	5
	Chromium	0.2	0.1	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5	<0.005	<0.005	<0.005	5
	Nickel	0.05	0.025	<0.001	0.002	<0.001	5	<0.001	0.001	<0.001	5	<0.001	0.0014	<0.001	5	<0.001	0.002	<0.001	5	<0.001	0.002	<0.001	5
	Phenols	0.002	0.001	<0.001	0.002	<0.001	5	<0.001	0.005	0.0024	5	<0.001	0.0023	<0.001	5	<0.001	0.002	<0.001	5	<0.001	0.002	<0.001	5
	TSS			4	9	6.20	5	<1	3	1.80	5	3	17	6.40	5	1	8	3.40	5	2	11	5.60	5
Additional Parameters	Total Ammonia	-		0.069	0.23	0.15	5	0.12	0.31	0.18	5	0.051	0.39	0.14	5	0.091	0.15	0.11	5	0.087	0.26	0.15	5
	Boron		0.2	<0.01	0.041	0.02	5	<0.01	0.02	0.02	5	<0.01	0.035	0.02	5	<0.01	0.037	0.02	5	<0.01	0.027	0.02	5
	Calcium			45	120	82.60	5	76	110	91.00	5	45	110	67.00	5	60	91	73.80	5	67	95	83.20	5
	Chloride			18	190	97.80	5	68	110	91.20	5	28	99	74.00	5	59	110	87.40	5	34	100	72.80	5
	Iron		0.3	0.16	2	1.12	5	0.13	1.6	0.82	5	0.28	1.4	0.99	5	0.22	1.4	0.74	5	0.41	1.5	1.03	5
	Magnesium			11	27	19.20	5	18	27	22.60	5	9.4	27	15.28	5	13	24	18.20	5	15	23	20.00	5
	Manganese			0.018	0.31	0.18	5	0.04	0.37	0.17	5	0.087	0.17	0.13	5	0.044	0.22	0.11	5	0.1	0.27	0.16	5
	Potassium			1.4	4.4	2.82	5	1.6	2.2	1.86	5	2.5	4.6	3.32	5	1.9	3	2.38	5	2.1	3.4	2.58	5
	Sodium			9.2	150	67.84	5	47	64	56.40	5	18	65	45.20	5	44	61	52.20	5	33	62	53.00	5
Zinc	0.02	0.01	0.064	0.02	5	0.021	0.048	0.03	5	0.01	0.031	0.02	5	0.022	0.054	0.03	5	0.033	0.052	0.04	5		

Notes: all units are mg/L except pH (unitless), temperature (°C) and conductivity (µS/cm)

IAL: Initial Action Level (GLL, 1993)

PWQO: Provincial Water Quality Objective (MOE, 1999)

Bolded values represent concentrations above PWQOs, Bold and Italized values represent concentrations above the IALs and PWQOs

Table 10. Initial Action Levels for Leachate Indicator Parameters

Parameter	Initial Action Level (IAL)
Un-ionized Ammonia (NH ₃)	0.04 mg/L
Chromium (Cr)	0.2 mg/L
Nickel (Ni)	0.050 mg/L
Phenols	0.002 mg/L
Conductivity	2410 µS/cm (2 × geometric mean of laboratory background concentrations)

Chloride concentrations parallel conductivity trends with higher chloride concentrations at stations adjacent/downstream of roads than those at stations isolated/upstream of roads. A statistical summary of chloride concentrations measured at the surface water stations since 1993 is provided in Table 11.

Table 11. Statistical Summary of Chloride Concentrations in Surface Waters Since 1993

Site	Location Description	Minimum (mg/L)	Maximum (mg/L)	Average (mg/L)	Standard Deviation (mg/L)	Number of Observations
SW-15	Reference	21	180	40	20	75
SW-7	Reference	22	384	99	57	64
SW-5	Upstream	7.3	8330	354	926	82
SW-1	On-site	33.3	154	96	23	91
SW-2	On-site	23	664	157	111	78
SW-16	Downstream	38.4	509	123	64	89
SW-3A	Downstream	34	356	121	47	89

5.4.1 Additional Parameters

Additional parameters are measured at the surface water stations in and around the site, and a summary of 2014 analytical results are shown in Table 9. Detailed results for all measured surface water parameters are available in Appendix C (Tables C3 and C4).

No IALs have been established for these additional parameters as natural sources exist around the landfill site, or aquatic toxicity information is lacking. However, comparisons of these parameters at different stations upstream and downstream of the landfill site can be useful to indicate if the landfill is contributing any additional concentrations to Hadati Creek. Furthermore, measured concentrations can be compared to the Provincial Water Quality Objectives (PWQOs), which have been established by the Ontario Ministry of the Environment (1999) as guidelines and objectives for a variety of chemical and bacteriological parameters in surface water.

Similar to previous years, zinc concentrations exceeded its PWQO (0.02 mg/L) at both background and on-site stations. Zinc concentrations were above the PWQO in the southwestern drainage ditch (SW1 all events), downstream in Hadati Creek (SW3A and SW16 all events), the Eastview ditch (SW2 all events) and the discharge to the site (SW5 on one event). This is consistent with results found at the reference site SW7, where zinc was above the PWQO during all events as well. High concentrations in the reference (SW7) and upstream sites (SW5), historically and in 2014, suggest that elevated concentrations of zinc occur naturally in this area. Zinc is not an indicator of leachate at this site. The concentration of zinc was typically lower in the landfill leachate than those found in the surface water samples. Possible sources of this metal include the surrounding soils, natural groundwater discharge, automobiles on the adjacent roads, metals in culverts, debris near the watercourse, and disturbed watercourse sediment in the samples.

Comparison of zinc concentrations measured at SW1 and SW16 found that, generally, concentrations measured downstream are equal to or lower than those measured upstream (Figure 20).

Similar to zinc, iron exceeded its PWQO (0.30 mg/L) at every sampling site in 2014. Iron concentrations were above the PWQO in the southwestern drainage ditch (SW1 all occasions), downstream in Hadati Creek (SW3A and SW16 during all events), the Eastview ditch (SW2 during all events) and the discharge to the site (SW5 three of five events sampled). As well, iron was above the PWQO at the background station reference site (SW7 all events) and background adjacent watershed (SW15 three of five events sampled). Concentrations of iron at the reference sites suggest that elevated concentrations of iron occur naturally in this area. Possible sources of iron include the surrounding soils, automobiles on the adjacent roads, metals in culverts, and disturbed watercourse sediment in the samples.

At all stations, during all sampling events, chromium, nickel and boron were below their PWQO (0.1 mg/L, 0.025 mg/L and 0.2 mg/L, respectively).

In summary, the 2014 data for the Eastview Road Landfill site showed similar trends to those observed in recent years. None of the parameters exceeded their respective IAL values at SW3A. PWQO exceedances of zinc and iron were once again observed, however these parameters are not indicators of leachate. Since the installation of the leachate collection system in 1991, impacted groundwater has not been contributing to surface water flows at the site, resulting in improved water quality than prior to the installation of the system.

5.4.2 Suspended Sediments

Historically, surface water sediment control was achieved using two crescent-shaped rock check dams lined with filter cloth, constructed upstream of station SW24 on the existing channel. During rain events, the check dams promote ponding of water between them, thus decreasing the flow velocity and allowing suspended sediment to settle.

As part of the completion of the Eastview Community Park, two stormwater ponds were completed and an upgrade to the check dams between the two and at the downstream discharge point of the second pond was completed in 2013. Sampling of the new ponds was undertaken in 2014 in July and August for TSS. Pond1 is upstream, whereas Pond2 is the downstream point where it outlets to the southeast wetland area. TSS was found at 2 mg/L in pond1 during both sampling events and 2 and 3 mg/L in July and August in Pond2.

As the landfill is final capped and vegetated and the park in the former burrow pit is also now vegetated and completed, it is no longer expected that TSS will be a potential issue to the southeastern wetland. However, sampling should be completed if significant flowing conditions are observed from these ponds.

5.4.3 Summary

The key highlights of the 2014 surface water sampling program include:

- a) no parameters at SW3A exceeded their respective IAL during the 2014 monitoring period; and
- b) the 2014 surface water chemistry results indicate that the landfill is causing no discernible effect on downstream water quality;

5.5 Adequacy of the Monitoring Program and Recommended Changes

The current revised program is considered adequate to assess potential effects. No changes are recommended.

6. Landfill Gas Monitoring

This section describes the landfill gas monitoring program undertaken in 2014.

6.1 Gas Control System

An active gas control system has been in operation at the site since early 2004.

6.2 Landfill Gas Monitoring

The intent of the landfill gas monitoring program is to identify:

- a) potential off-site migration of combustible gas; and
- b) potential health and safety risks in on-site structures.

6.2.1 On-Site Structure Monitoring

The former scale house (now site office), parks storage shed and the corporate building maintenance shed contain methane detectors which activate when levels reach 20% LEL. To date, there has been no alarm triggered in any on-site building.

6.3 Combustible Gas Monitoring Program

In 2014, combustible gas concentrations in subsurface soils continued to be measured at the following locations:

- a) 16 "BH" series monitors, located in the fill area;
- b) 5 "D" series monitors in the buffer zone between the fill area and sheet pile wall;
- c) 13 "C" monitors located outside the sheet pile wall adjacent to the fill area;
- d) 10 "BH" monitors located in the buffer zone near the property line; and
- e) 6 "GP" probes adjacent to on-site buildings in the southwest corner of the site.

6.3.1 Monitors Within the Landfill ("BH" series)

Gas concentrations in "BH" monitor were measured in March and August 2014 as shown in Table D1 in Appendix D. Methane can be expected in these monitor that are located in the landfill footprint.

Most monitors had methane detected in 2014 at generally low levels. Methane would not be unexpected in the landfill but would be expected to be much higher. The lower reading and/or non-detects are related to the operation of the gas collection system and plant, which is extracting the methane gas from the landfill.

6.3.2 Monitors Adjacent to the PLCCS (C and D Series Monitors)

The "C" and "D" series probes monitor the performance of the PLCCS and are also suitable for gas concentration measurement.

The "D" series monitors are located between the PLCCS and the waste. "C" series monitors are located beyond the PLCCS and sheet pile barrier wall.

West Side of the Site

Methane concentrations measured in west side “C” and “D” monitors are shown in Table D2 in Appendix D. West side PLCCS manhole methane concentrations are tabulated in Table D7. All monitoring events in 2014 from west side “C” and “D” monitors showed methane concentrations of 0%. Methane concentrations in west side PLCCS measured 0% or negligible (0.6%) during the 2014 monitoring events.

Low methane concentrations in “C” series monitors may be expected on the west side of the site from time to time. However, both the high water table and the sheet pile wall act as barriers to gas migration. It is also likely that the PLCCS intercepts landfill gas that may not be collected by the gas control system and vents it to the atmosphere.

South Side of the Site

Table D3 documents methane concentrations in south side “C” and “D” monitors. Table D6 tabulates south side PLCCS manhole methane concentrations.

No methane gas was detected in the C series monitors along and outside the south PLCCS.

As observed historically, negligible to trace methane detections were noted in the D3-I, D4-I and D5-I. Detections of methane gas at these locations would not be unexpected as they are installed between the PLCCS and waste, with the highest generally noted at D3-I.

In the south PLCCS, negligible to trace methane detections were generally observed at MH 4S and MH 5S. Methane was consistently recorded at MH 7S and to a lesser degree at MH 8S.

The above noted trends continue to indicate that minor amounts of landfill gas tends to migrate from the waste toward the PLCCS, most noticeably in the western leg, where it is intercepted and vented to the atmosphere.

Buffer Lands Near the Property Boundary

Ten “BH” monitors are located in the landfill buffer zone to document gas concentration near the property boundary. Monitoring results, as shown in Table D4 of Appendix D, indicate that landfill gas has not migrated to the property boundary.

Southwest Corner of the Site

Six “GP” probes monitor for gas migration and soil-gas conditions adjacent to on-site buildings. Table D5 of Appendix D presents methane measurements at the GP series probes.

At GP97-1, near the southwest property boundary, there was only negligible (0.3%) to no methane recorded in any of the monitoring events. It is therefore concluded that methane migration off-site is not occurring in this area.

At probe GP97-3, north of the Storage Building, gas concentrations in 2014 were measured to be below the LEL in both events.

At probe GP97-4, northeast of the Administration Building, there was only negligible (0.1%) to no methane recorded in 2014.

At probe GP97-5, north of the maintenance shed, there was no methane recorded during monitoring events.

Probe GP00-06, in the flowerbed adjacent to the scale house, continues to have recorded methane concentrations above the LEL during all monitoring events since February 2006. In 2014, both monitoring events continued to show methane concentrations above the LEL. Methane concentrations in GP00-06 ranged from 16.8% to 26.8% in 2014.

At probe GP00-07 located adjacent to the Main pump station, there was only negligible (0.9%) to no methane recorded during either sampling event in 2014.

In general, construction activities undertaken on-site or in buildings where gas may be present, should be undertaken in accordance with the requirements of the Occupational Health and Safety Act and associated regulations. Gas detection systems should continue to monitor for the presence of gas in buildings.

6.4 Measured or Predicted Off-Site Occurrences of Combustible Gas

There have been no measured or predicted occurrences of methane migrating off-site to date. The monitoring program undertaken in 2015 should continue to assess the potential for off-site gas migration.

6.5 Need to Implement Contingency Plans

Given the monitoring data and the physical setting of the site, there is a low likelihood of gas migration off-site. Therefore, there is no need to implement a control system to address gas migration off-site.

6.6 Adequacy of the Monitoring Programs and Recommended Changes

6.6.1 *Monitors within the Waste*

Gas concentrations in BH series monitors within the fill area should continue to be measured at least once in the summer and once in the winter. Additional data may be collected to assist in assessment of the gas collection system operation.

The “C” and “D” probes should continue to be monitored for gas concentrations at least twice a year.

6.6.2 *Buffer Lands near the Property Boundary*

The ten “BH” probes, located in the buffer near the property boundary, should continue to be monitored at least twice a year.

6.6.3 *Southwest Corner of the Site*

The GP probes in the southwest corner of the site should be monitored quarterly for methane.

6.6.4 *PLCCS Gas Monitoring*

The PLCCS manholes and pump stations should be monitored quarterly for methane.

7. Conclusions and Recommendations

7.1 Conclusions

7.1.1 Operations

- a) During 2014, there were no complaints registered at the landfill.
- b) Approximately 153,653 m³ of leachate was collected in 2014 and conveyed to the sanitary sewer.
- c) The PLCCS is operating effectively to collect leachate, prevent its migration, and to minimize leachate mounding within the landfill. Contingency plan implementation is not required at this time.
- d) A seepage area was noted on the western boundary in July 2014. Several attempts were undertaken to remediate the seepages, which was fixed in November when it was ultimately tied into the PLCCS. Based on the volumes collected in November and to a lesser extent December in the PLCCS, it appears that the water that caused the seepage has been drained.
- e) There is no evidence of gas migration off-site.

7.1.2 Monitoring

- a) The quality of the leachate from the PLCCS that is discharged to the municipal sanitary sewer remained within the Model Sewer Use By-Law Guidelines. The leachate CBOD₅, TKN and hydraulic loads are expected to be within 1% of the corresponding WWTP influent loads, as leachate quality remains similar to previous years, and thus would be insignificant.
- b) Leachate quality in 2014 is generally similar to previous years. Higher concentrations are found in the waste and the lower concentrations are found predominantly in the outwash beneath the waste. Critical leachate parameter concentrations are provided below:

Year	Outwash Beneath Waste			Waste		
	Boron*	Chloride*	Iodide*	Boron*	Chloride*	Iodide*
1994	3.0	364		22.9	1,579	
1995	4.0	374		34.3	1,641	
1996	3.83	348		21.0	1,530	
1997	2.47	347		15.7	1,330	
1998	2.53	371		15.54	1,418	
1999	4.57	392		28.09	1,625	
2000	2.16	363		22.77	1,926	
2001	3.55	414	<0.43	27.3	2,358	2.20
2002	1.3	341	<0.47	22.5	2,268	2.22
2003	6.23	593	<0.73	16.7	1,705	1.80
2004	4.9	563	<0.92	17.2	1,516	1.79
2005	2.2	428	<0.46	21.8	1,524	1.82
2006	1.58	332	<1.4	20.34	1,670	1.50
2007	1.9	378	<0.57	17.5	1,325	1.8
2008	2.07	413	<0.81	14.6	1,322	2.1
2009	2.43	515	<0.84	27	2,129	<1.9
2010	2.46	714	0.76	27	2,333	2.2
2011	1.96	701	<0.63	28	2,273	1.8
2012	2.9	878	<0.93	27	2,150	1.9
2013	3	787	<0.94	22	2,200	2.2
2014	3.69	736	0.78	30.25	2250	4.43**

Note: * = Concentrations in mg/L

** = Slightly elevate concentration related to anomalous value if 12 mg/L at 59-l, whereas generally 2-3 mg/L. The slightly higher concentrations in the outwash beneath the waste since 2010 are due to increases observed at 51-ll.

- c) Groundwater flow directions around the site are similar to previous years. Assessment of vertical gradients towards the bedrock is similar to previous years. Vertical gradients are, on average, very low and therefore, the estimated downward flow velocity is also very slow, in the order of only a few centimetres per year.
- d) Landfill leachate effects are contained on-site in the shallow groundwater system as the PLCCS is working as designed. There was no exceedance of Guideline B7, the Reasonable Use Guideline in the shallow groundwater attributable to leachate release in 2014. Historical very minor residual leachate effects are still observed south of the landfill along Eastview Road, outside of the sheet pile wall at location 16, related to boron which dropped below the RUP for the first time in 2014. It is expected that the residual leachate contamination will decrease naturally over time through dilution with clean infiltration and groundwater flow.
- e) If the PLCCS continues to work as designed to prevent any further off-site migration of leachate, no new exceedances of Guideline B7 related to the landfill are predicted in the shallow groundwater.
- f) The bedrock groundwater quality is similar to previous years. Initial water quality results from replacement Location 37R appear to be improved over former Location 37. This indicates that higher chloride concentration at former 37-I may have been partially related to the water well construction of this location. Initial water quality results from new location 96, indicates that deep monitor (96-I) appears to have a similar water quality to the former monitor 92-I (low chloride), which it replaced. However, the new shallow monitor in the upper bedrock is exhibiting elevated chloride, although significantly lower than at former 37-I. Although elevated, it has shown a decreasing trend over the last two years. Further data required to assess the water quality at these locations.
- g) There is no indication of leachate in the bedrock groundwater, thus the Reasonable Use Guidelines are being met.
- h) Guideline B7, the Reasonable Use Guidelines, is predicted to be met in future bedrock groundwater. Target elevations are being met in most areas within the landfill through the operation of the PLCCS. Where target elevations are not being met, the criteria used in the modelling completed in early 1997 were compared to the 2014 results and found to be similar. Therefore, the locations where the target elevations are not being met would not cause Guideline B7, Reasonable Use exceedances in the bedrock groundwater. In addition, the 2014 chemistry and vertical profile trends observed in the lower till do not indicate any presence of leachate impacts, again suggesting that Guideline B7, Reasonable Use will not be exceeded in bedrock groundwater.
- i) The 2014 results show that the landfill has a negligible effect on downstream surface water quality.

7.2 Response to the 2013 Recommendations

Below are the “**Recommendations for 2014**” contained in the 2013 Annual Report. Alongside each recommendation (in bold text) are the actions taken to address these recommendations.

7.2.1 Operations

- a) The City should continue to carefully monitor gas concentrations in all GP probes and particularly probe GP00-06 and probe GP-007. Remedial measures should be implemented as required in this area.

The gas probes were monitored twice in 2014 with no need for remedial measures.

7.2.2 Monitoring

- a) As part of the completion of the Eastview Community Park, two stormwater ponds were added and an upgrade to the check dams was completed in 2013. Sampling of the new pond will be undertaken in 2014 to assess baseline data and if flow is observed through the check dams, TSS samples will be taken.

The ponds were monitored twice in 2014.

7.3 Recommendations for 2015

The following are recommendations for 2014. (Note that these recommendations deal with issues other than the requirements specified in the ECA/C of A for the site).

7.3.1 Operations

- a) The City should continue to monitor gas concentrations in all GP probes and particularly probe GP00-06 and probe GP-007. Remedial measures should be implemented as required in this area.

7.3.2 Monitoring

- b) As part of the completion of the Eastview Community Park, two stormwater ponds were added and an upgrade to the check dams was completed in 2013. Sampling of the new pond will be undertaken in 2015 to assess baseline data and, if flow is observed through the check dams, TSS samples will be taken.

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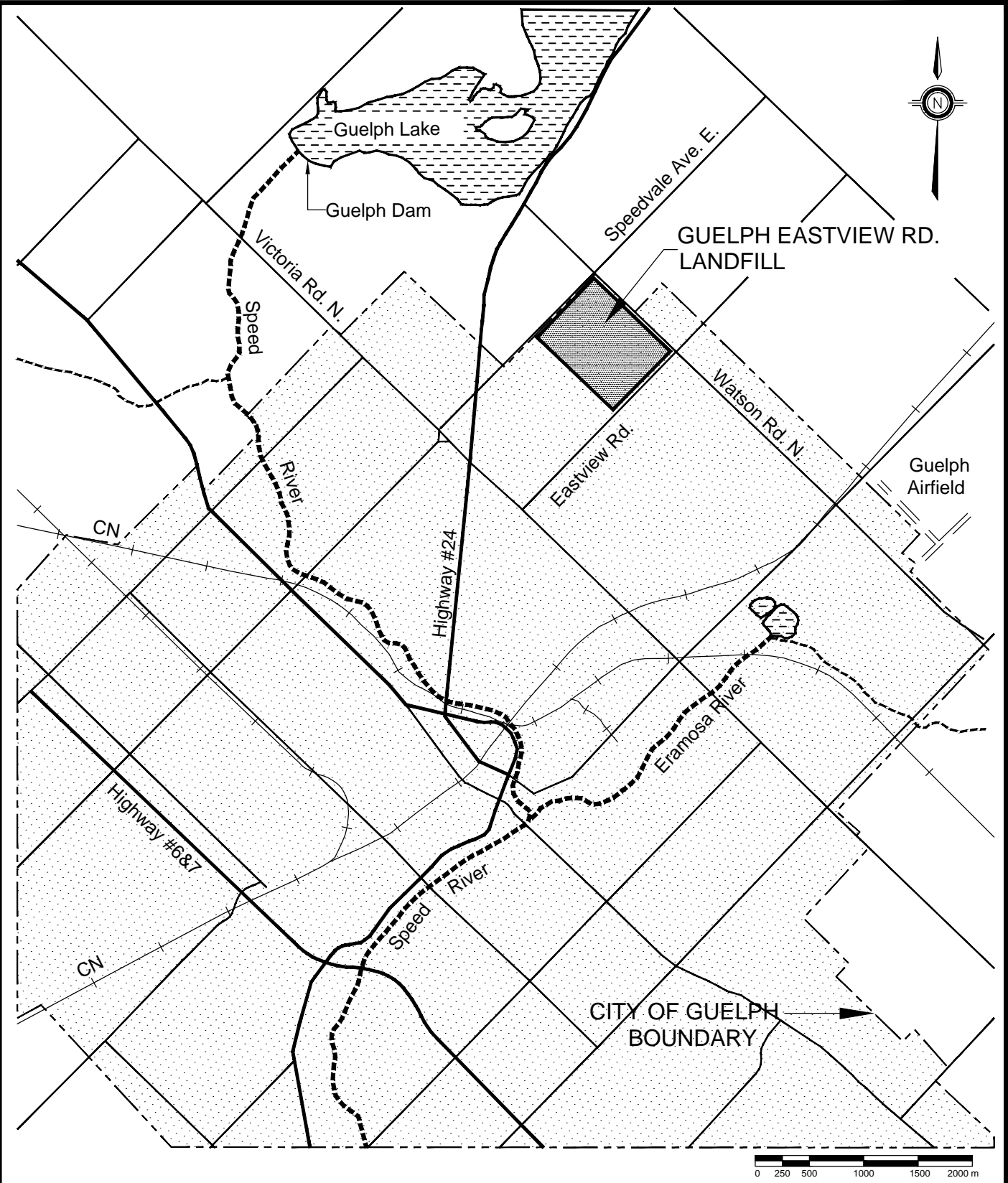
Figures

FILE NAME: 60339708-2014AMR-F01.DWG BY: ----

PLOT: 4/15/2015 2:06:50 PM

BY: ----

FILE NAME: 60339708-2014AMR-F01.DWG BY: ----



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Eastview Road Landfill
City of Guelph

Location Map

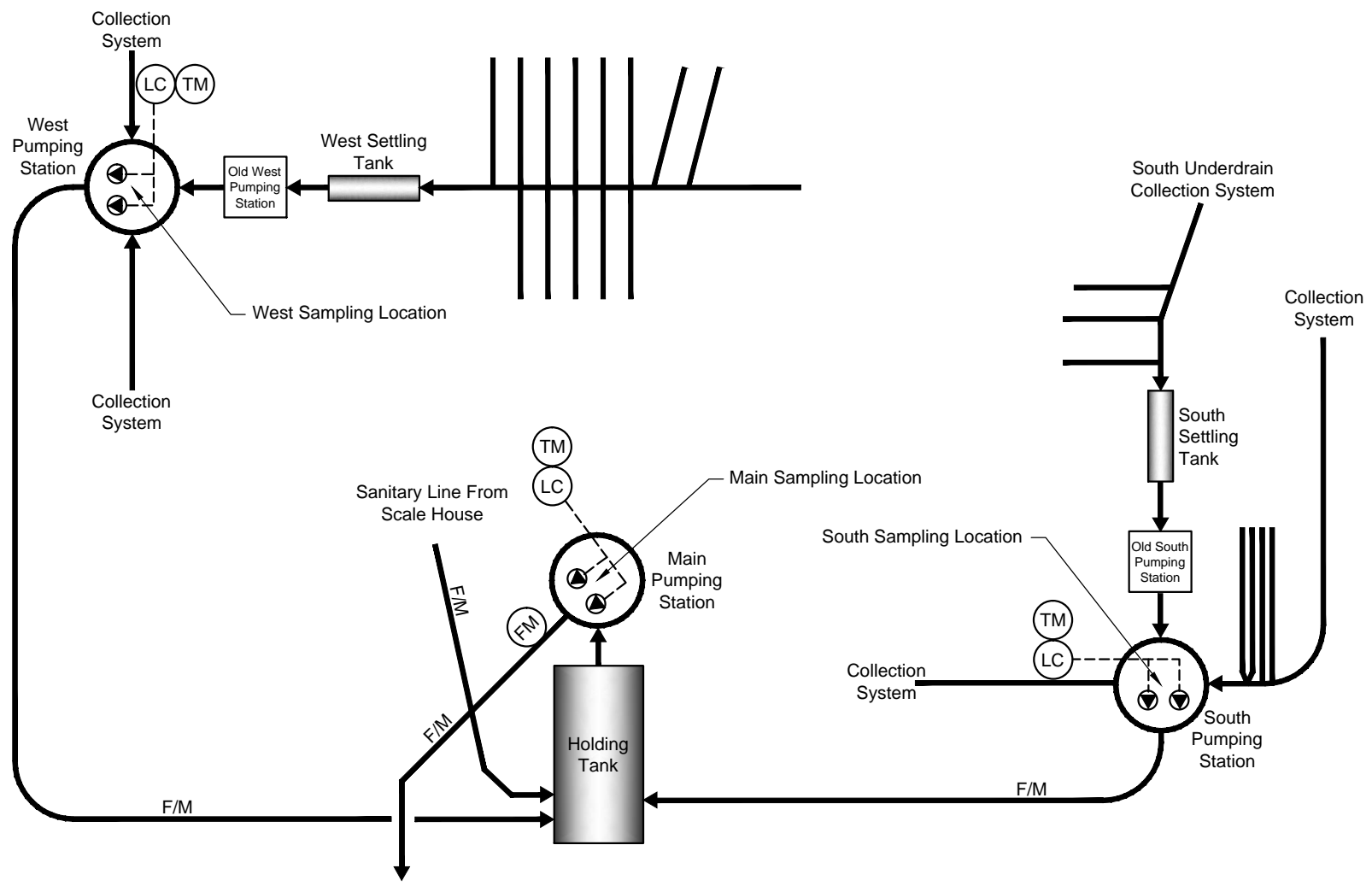
Legend

PROJECT NUMBER
60339708

DATE
April, 2015

FIGURE NUMBER
1

FILE NAME: 60339708-2014AMR-F02.DWG BY: PLOT: 4/20/2015 4:34:56 PM SIZE 8.5" x 11" (215.9mm x 279.4mm)



Legend

(LC)	Level Control
(TM)	Timer
(FM)	Flow Meter
F/M	Force Main



**Eastview Road Landfill
City of Guelph**

**Leachate Collection System
Process Flow Diagram**

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PROJECT NUMBER
60339708

DATE
April, 2015

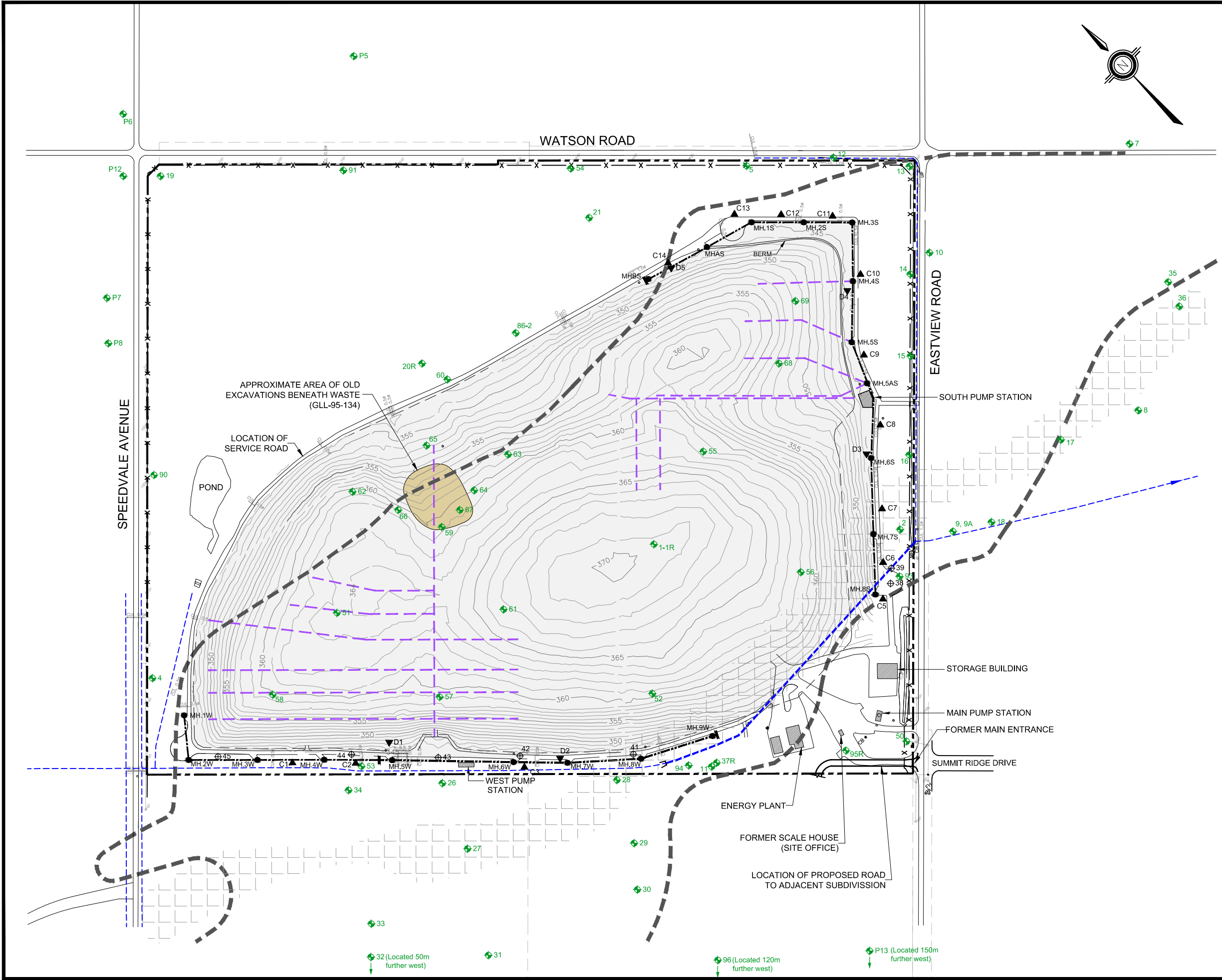
FIGURE
2

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

PLOT: 4/15/2015 2:26:22 PM

BY:----

FILE NAME: 60339708-2014AMR-F03.DWG



Legend

- PROPERTY BOUNDARY
- x - FENCE LINE
- APPROXIMATE EXTENT OF LANDFILL WASTES
- PERIMETER LEACHATE COLLECTION AND CONTAINMENT SYSTEM (PLCCS)
- PLCCS WITH SHEET PILE WALL PRESENT
- SURFACE DRAINAGE AND STORM DITCHES
- BURIED SURFACE WATER CULVERT
- UNDERDRAIN NETWORK
- PERIMETER OF SURFICIAL OUTWASH INTERPRETED FROM 1966 AND 1972 AIR PHOTOGRAPH, BOREHOLE LOGS AND OTHER SITE INFORMATION. (REVISED JULY 1995)
- APPROXIMATE EXTENT OF ESKER FORMATION
- MH.9W LOCATION AND DESIGNATION OF MANHOLES IN LEACHATE CONTAINMENT SYSTEM
- ◆ 30 BOREHOLE/GROUND WATER MONITOR
- ⊕ 38 GOEOTECHNICAL BOREHOLES COMPLETED FOR PRE-CONSTRUCTION OF PLCCS. DESTROYED DURING CONSTRUCTION OF PLCCS IN 1990 - 1991.
- ▲ C6 LOCATION AND DESIGNATION OF GROUND WATER MONITOR TO DOCUMENT LEACHATE CONTAINMENT SYSTEM PERFORMANCE (WATER ELEVATIONS ONLY)
- ▼ D4 LOCATION AND DESIGNATION OF GROUND WATER MONITOR TO DOCUMENT WATER LEVELS UPGRADIENT OF LEACHATE CONTAINMENT SYSTEM (WATER ELEVATIONS ONLY)

0 25 50 100 150 200 m
1 : 5000

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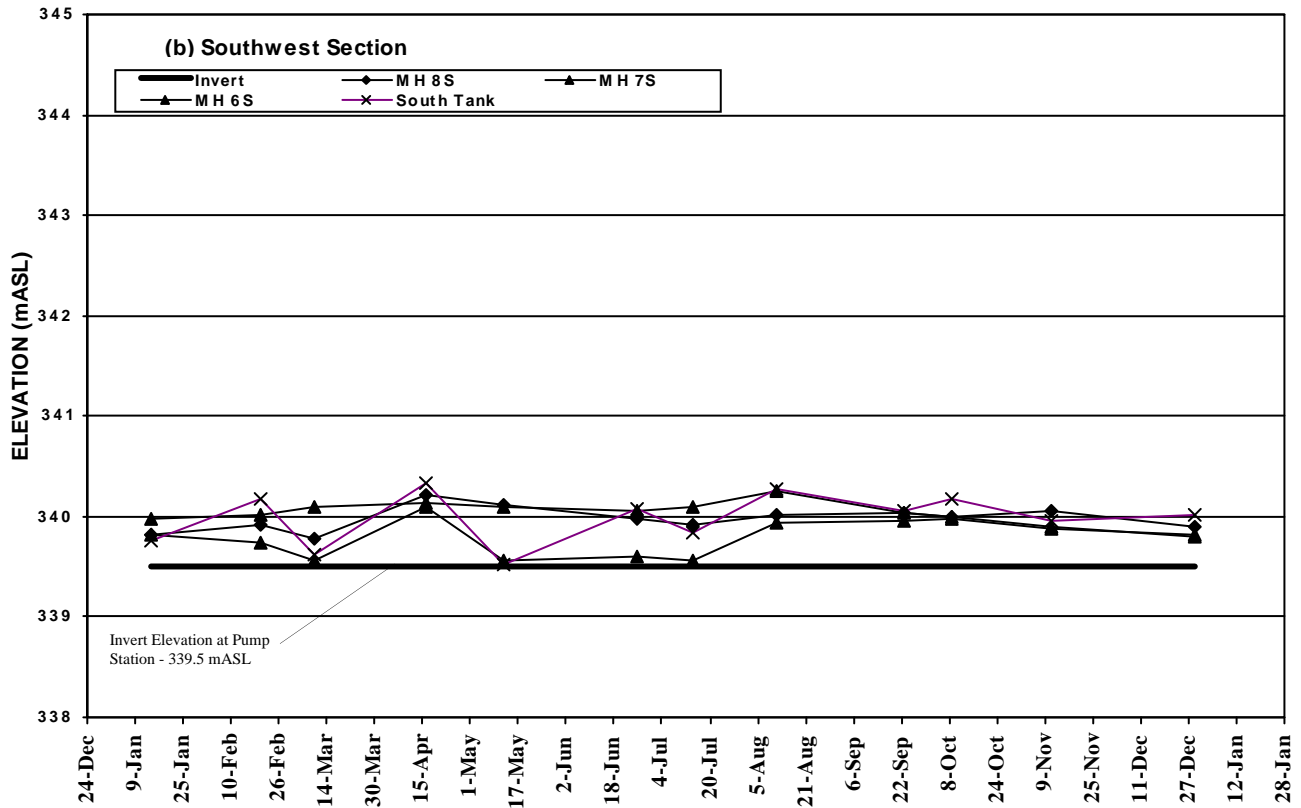
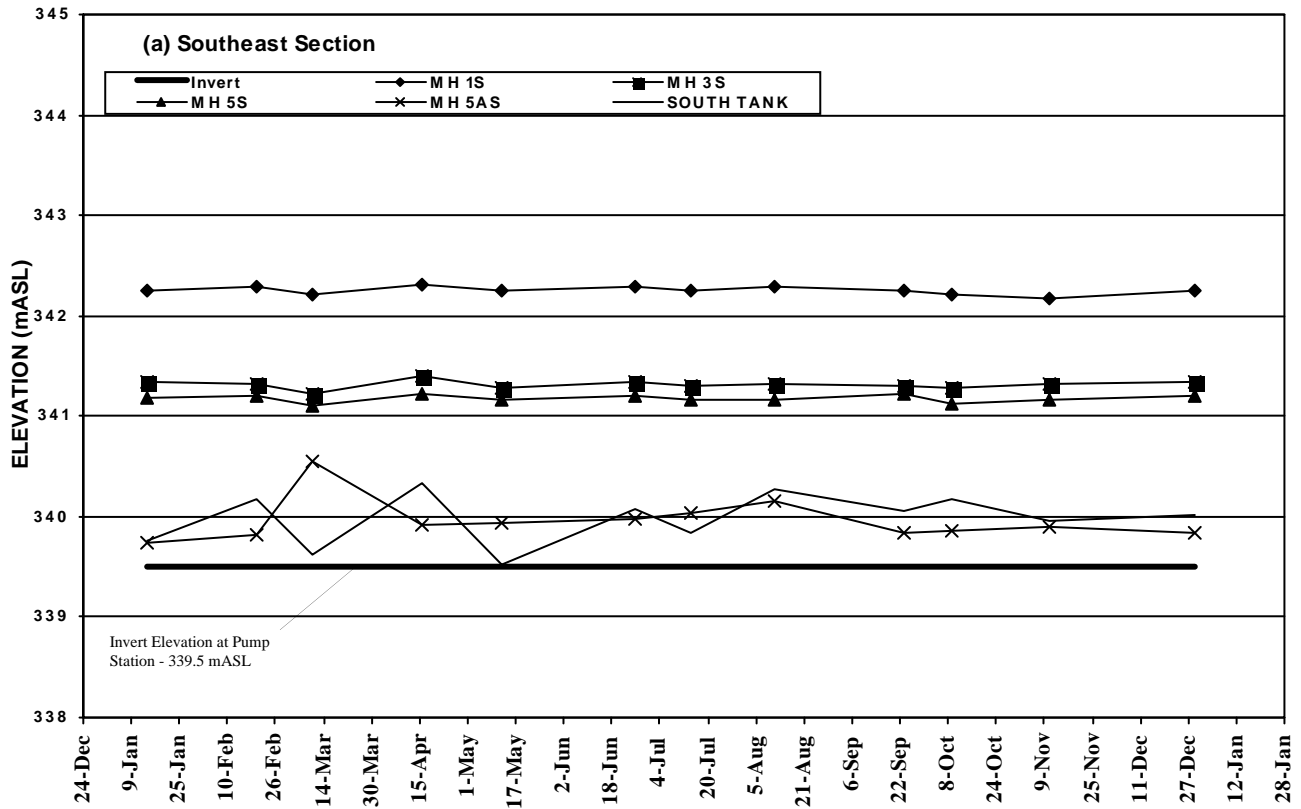
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**Closed Eastview Road Landfill
City of Guelph**

**Leachate and Groundwater
Monitor Site Locations**

PROJECT NUMBER	DATE	FIGURE
60339708	April, 2014	3

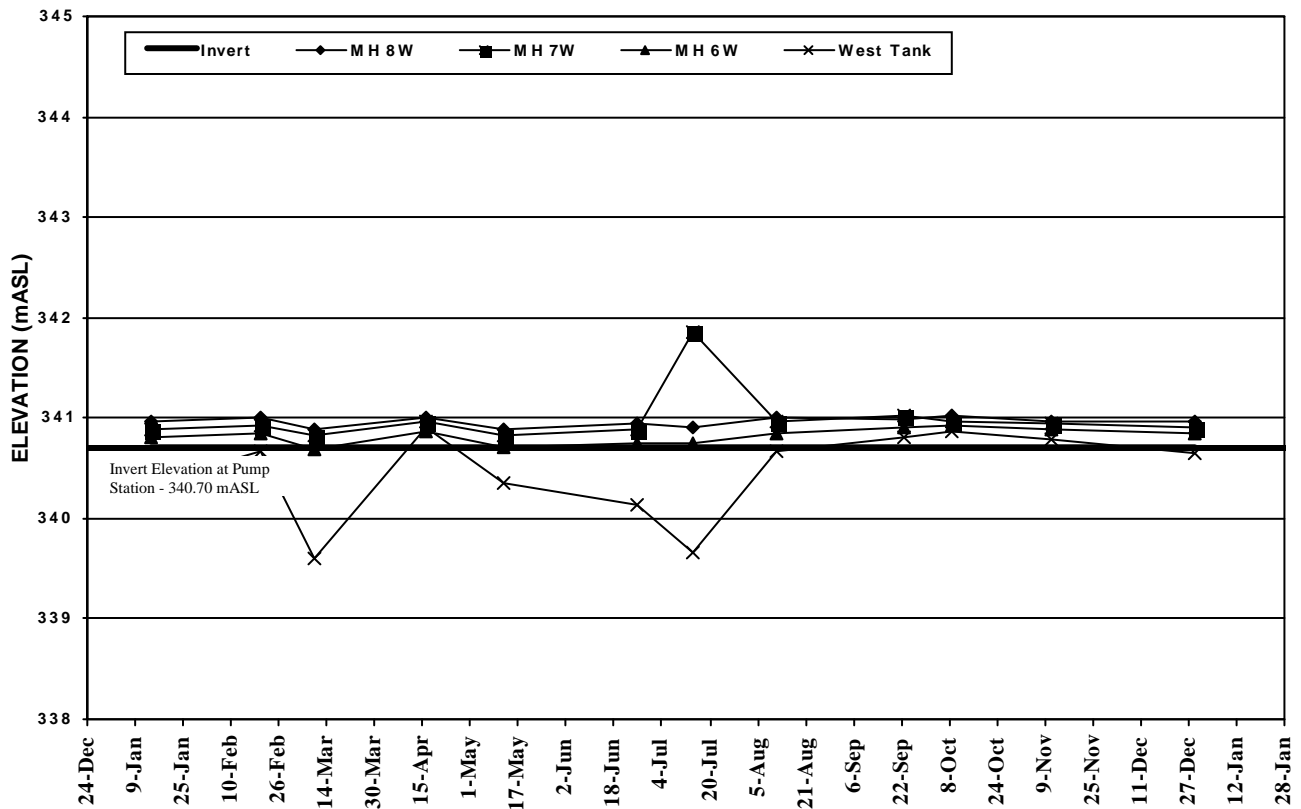
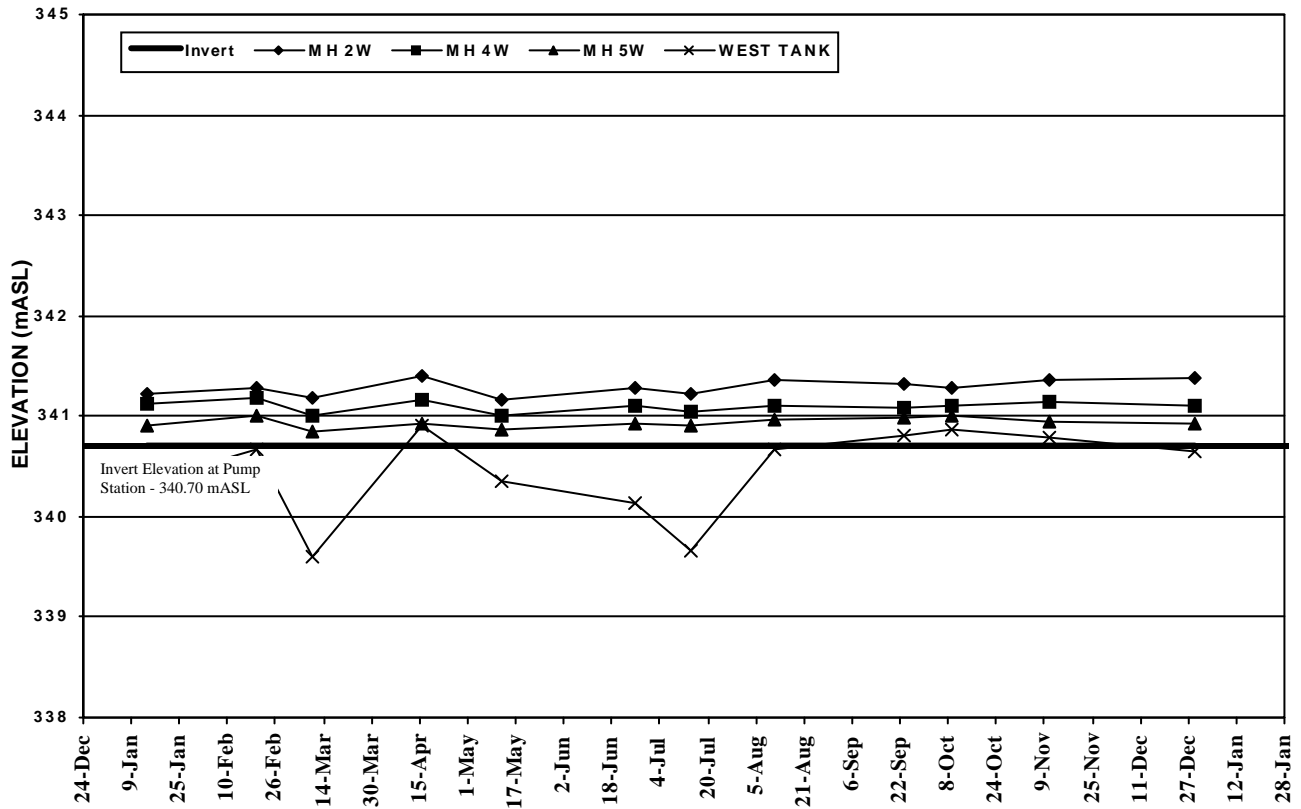


Closed Eastview Road Landfill Site
Leachate Levels Within Collector System
South Collector - 2014

FIGURE

4

60339708
10c Rpt Leachate Elevation Plots South

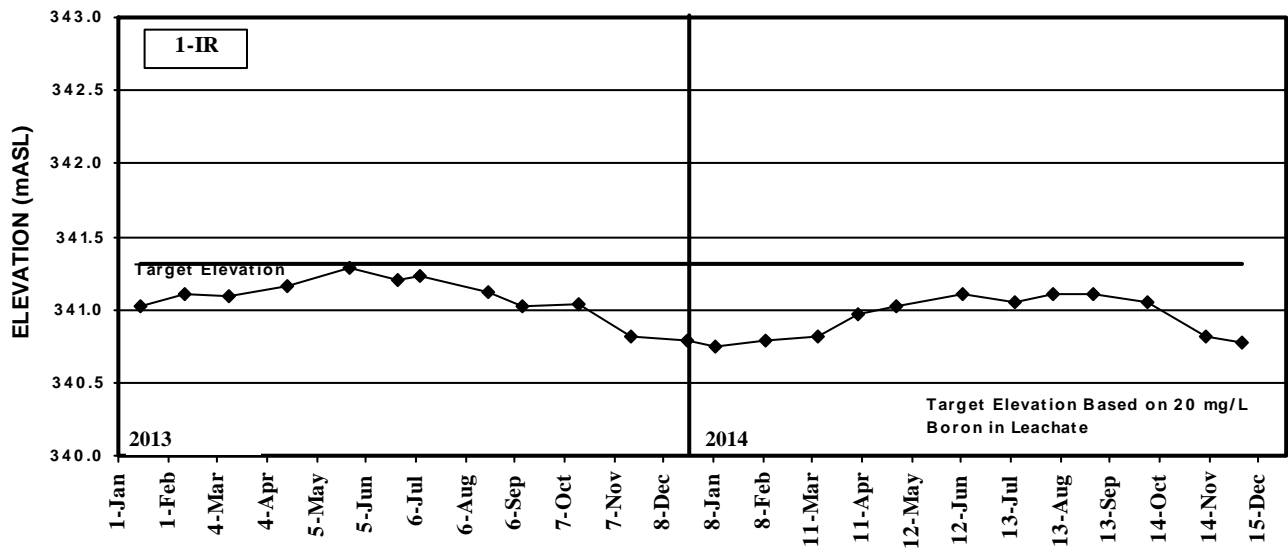
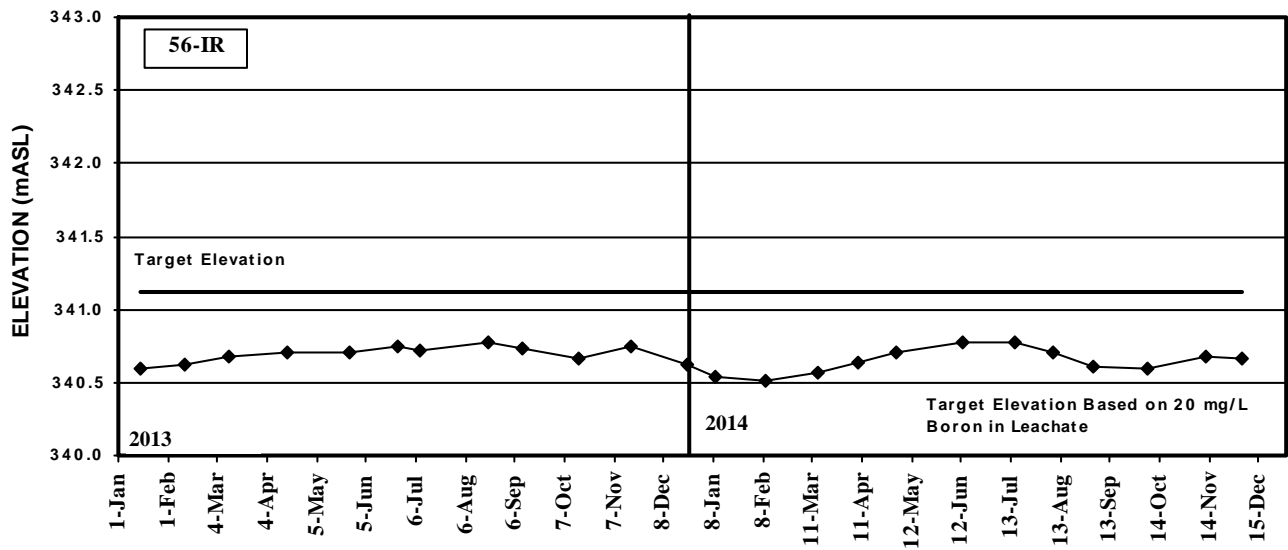
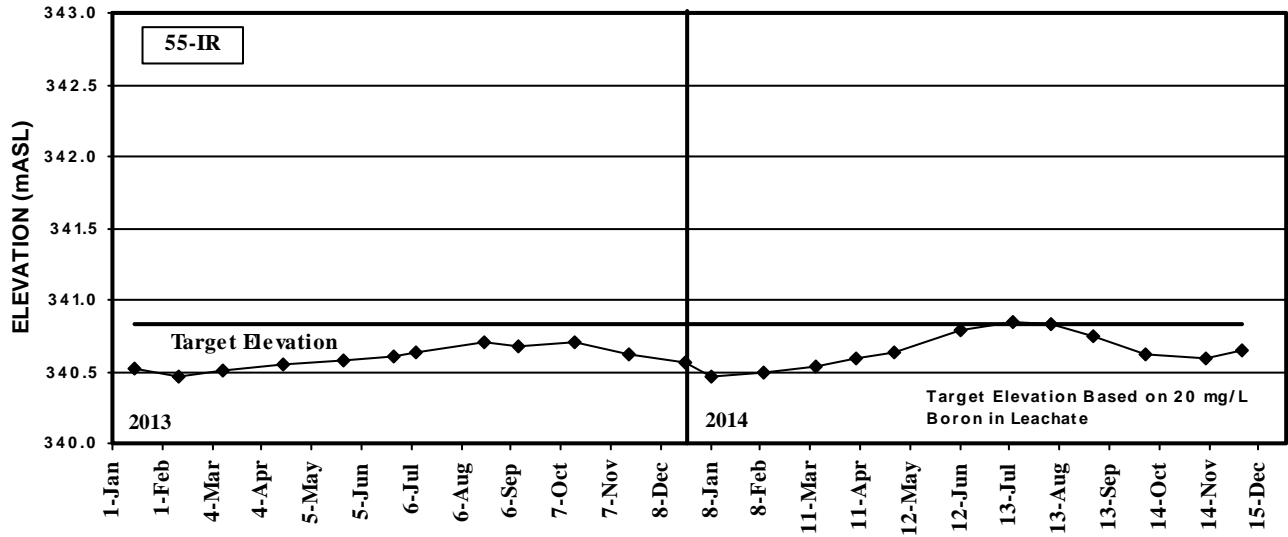


Closed Eastview Road Landfill Site
Leachate Levels Within Collector System
West Collector - 2014

FIGURE

5

60339708
 10c Rpt Leachate Elevation Plots West1



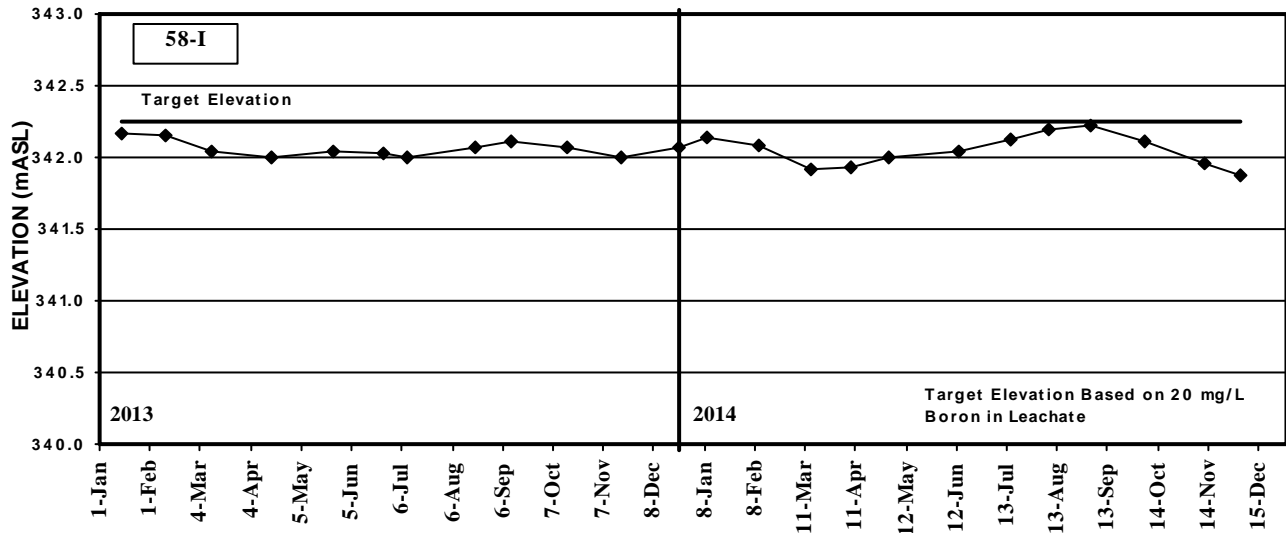
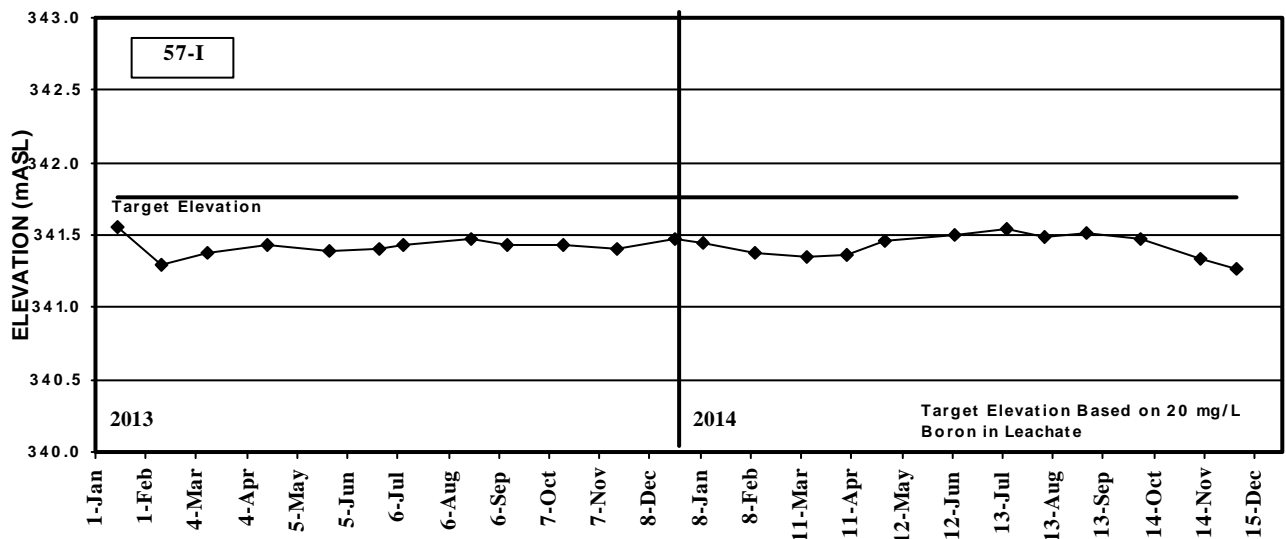
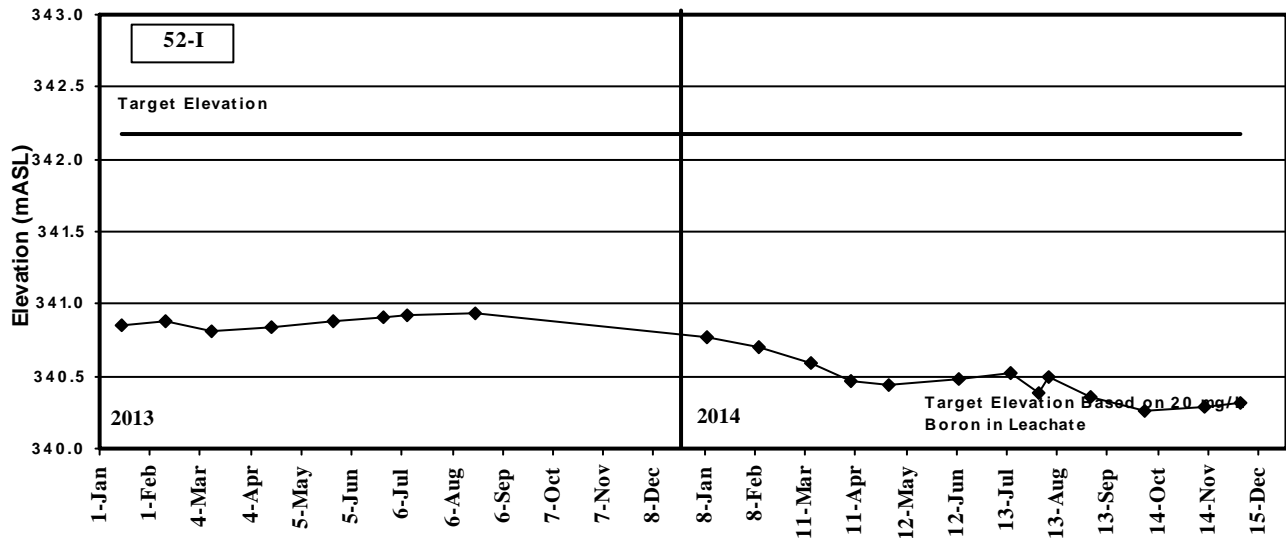
Closed Eastview Road Landfill Site

Leachate Elevation Trends
Southern Area of Landfill

FIGURE

6

60339708
10 Leachate WL Southern Area



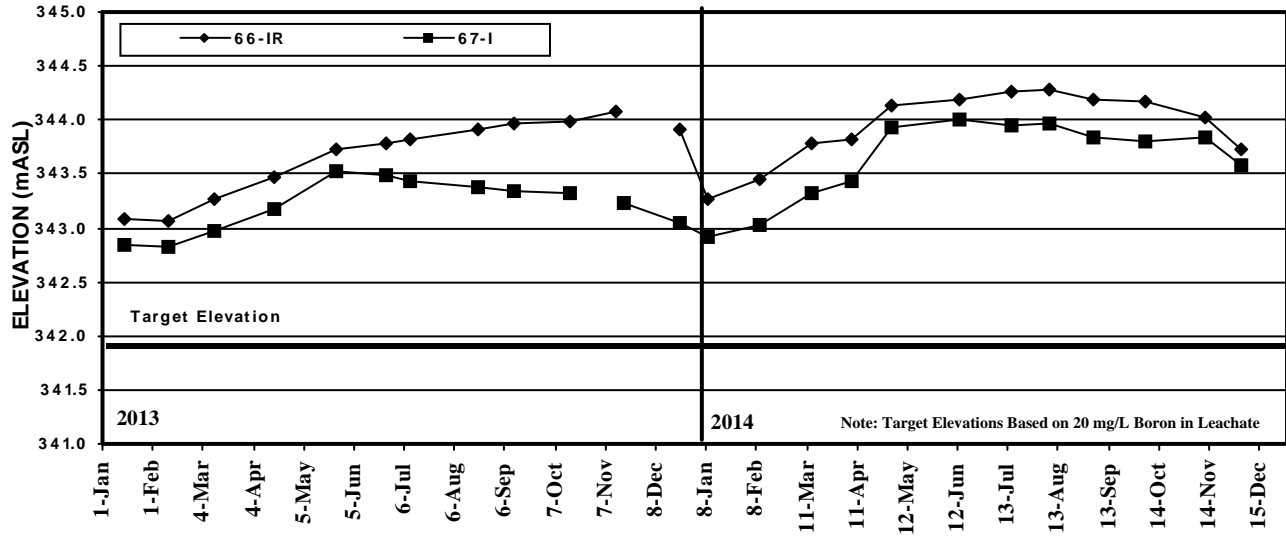
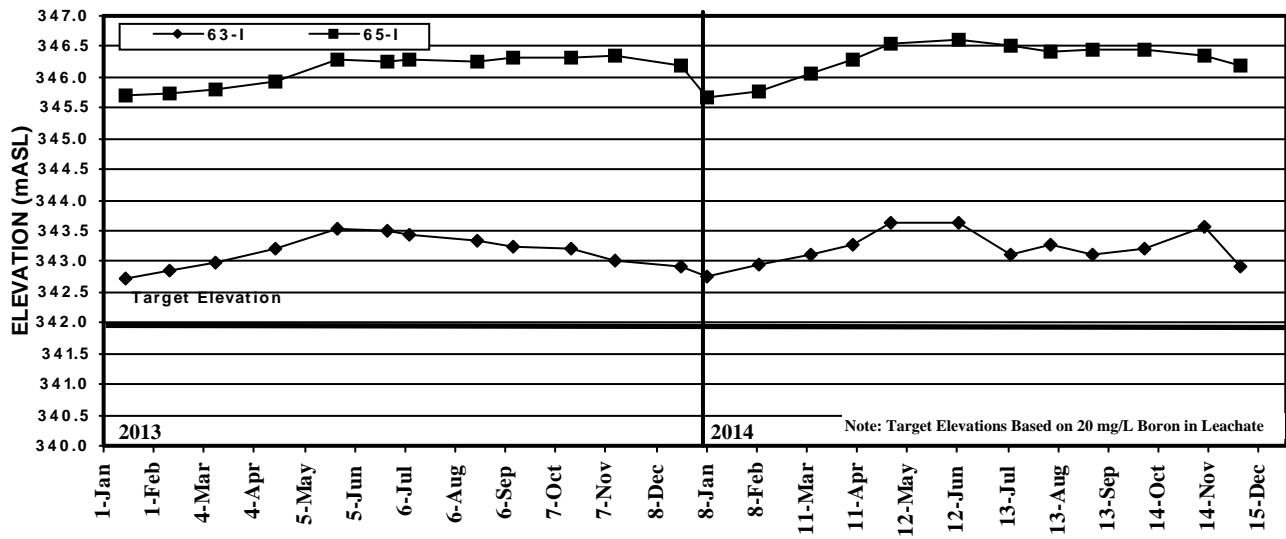
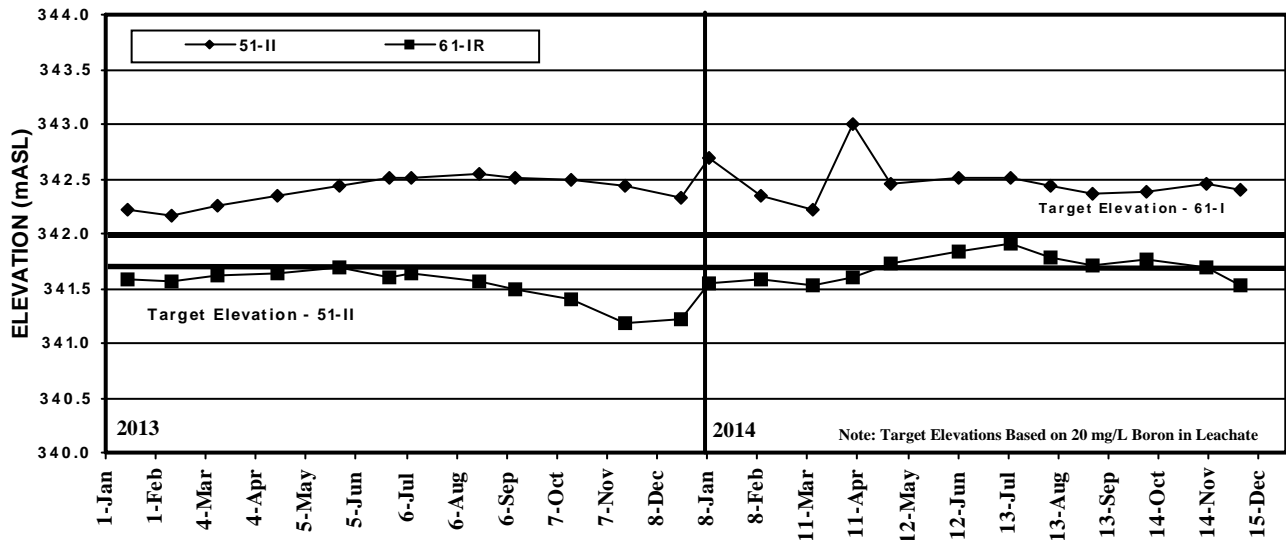
Closed Eastview Road Landfill Site

Leachate Elevation Trends
Western Area of Landfill

FIGURE

7

60339708
10 Leachate WL Western Area



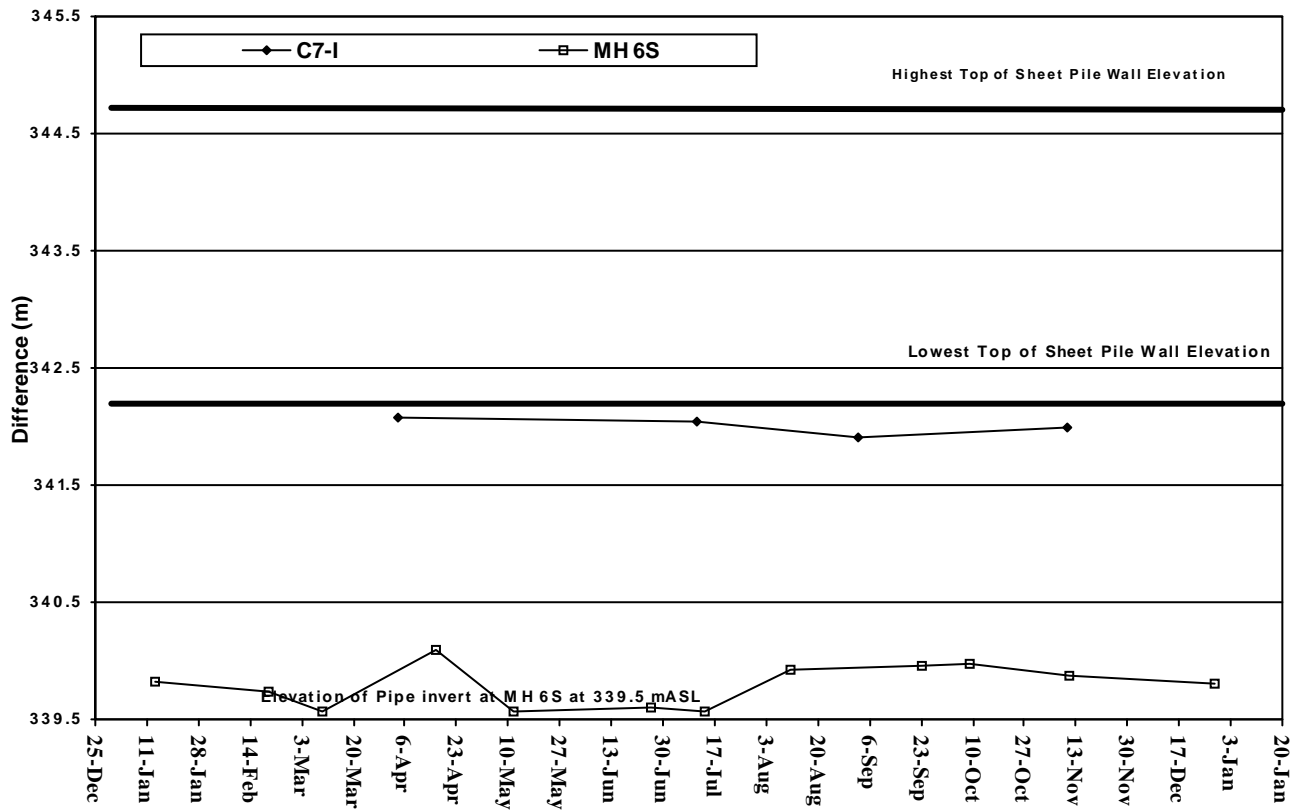
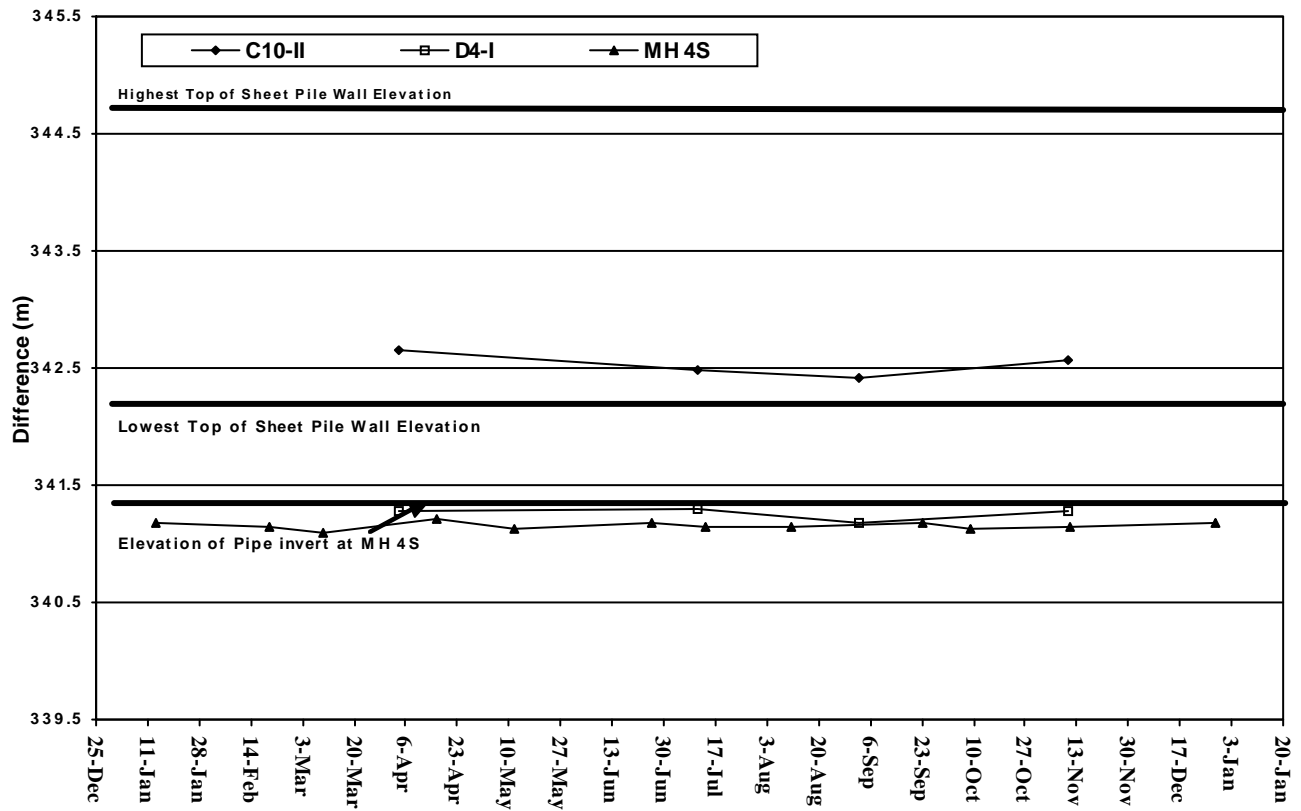
Closed Eastview Road Landfill Site

Leachate Elevation Trends
Interior Area of Landfill

FIGURE

8

60339708
10 Leachate WL Interior Area



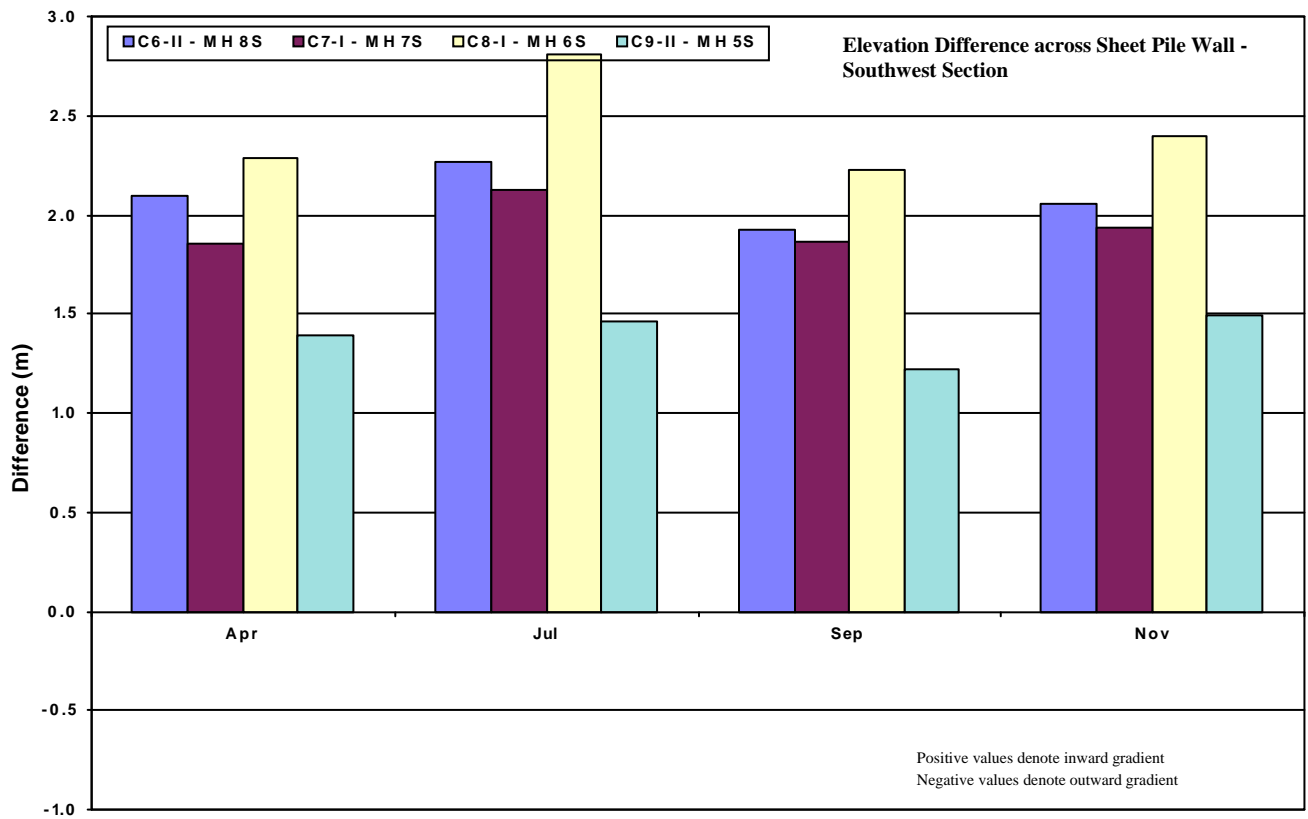
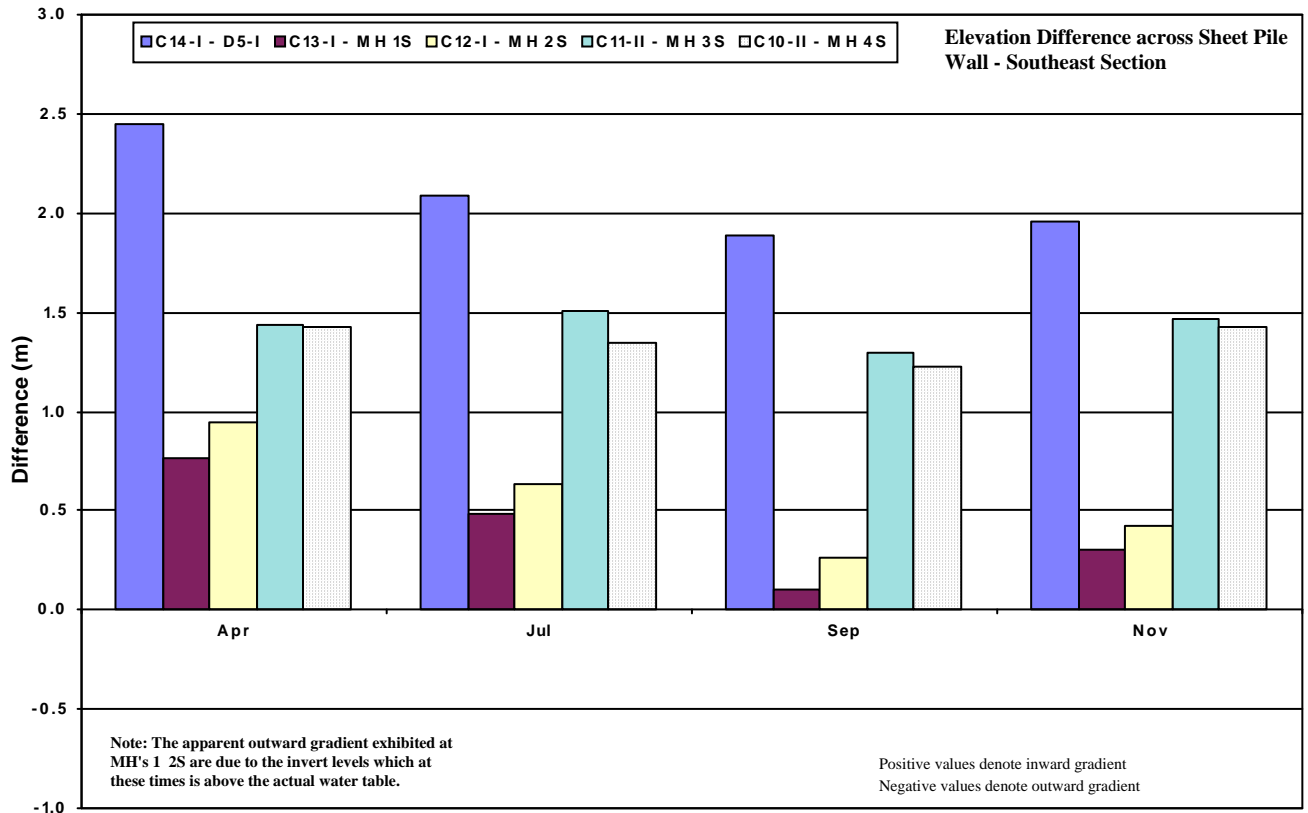
Closed Eastview Road Landfill Site
Water Elevations in the South Collection System
Selected Locations during 2014

FIGURE

9

60339708

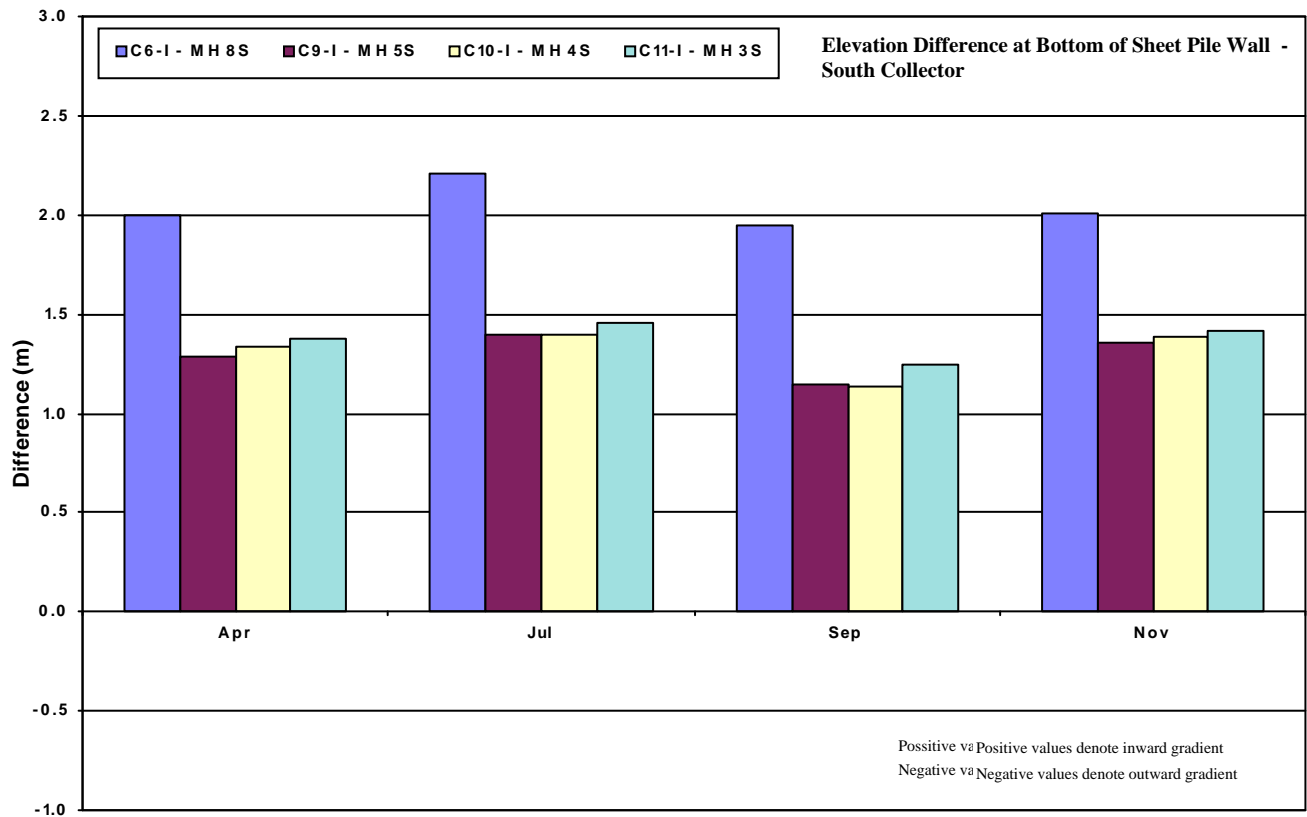
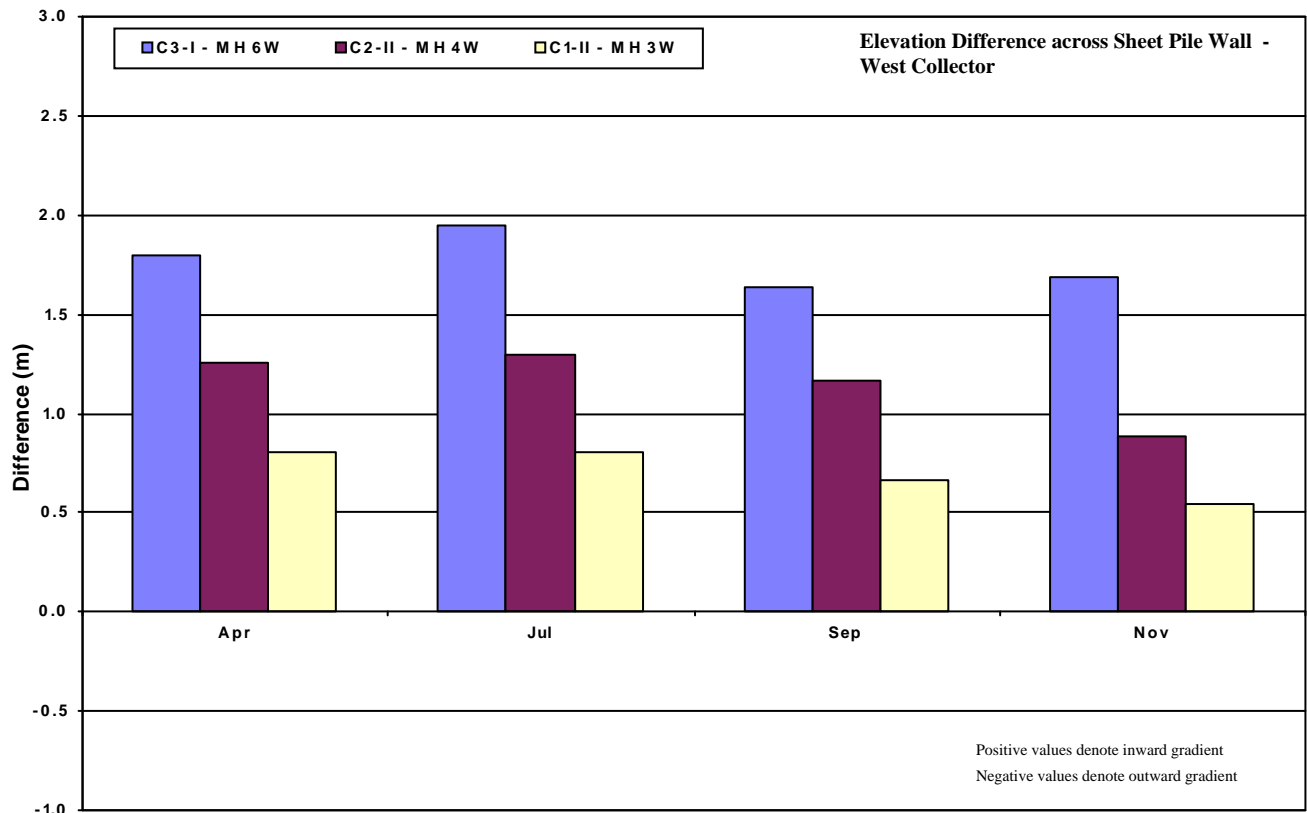
10c Rpt Water Level Comparison Along PLC



Closed Eastview Road Landfill Site
Leachate Elevation Difference Across Sheet Pile Wall
South Collector (2014)

FIGURE
10

60339708
 10d Rpt Leachate Elev Plots Gradient Sou



Closed Eastview Road Landfill Site
Leachate Elevation Difference Across and Bottom of Sheet Pile Wall West and South Collector (2014)

FIGURE 11

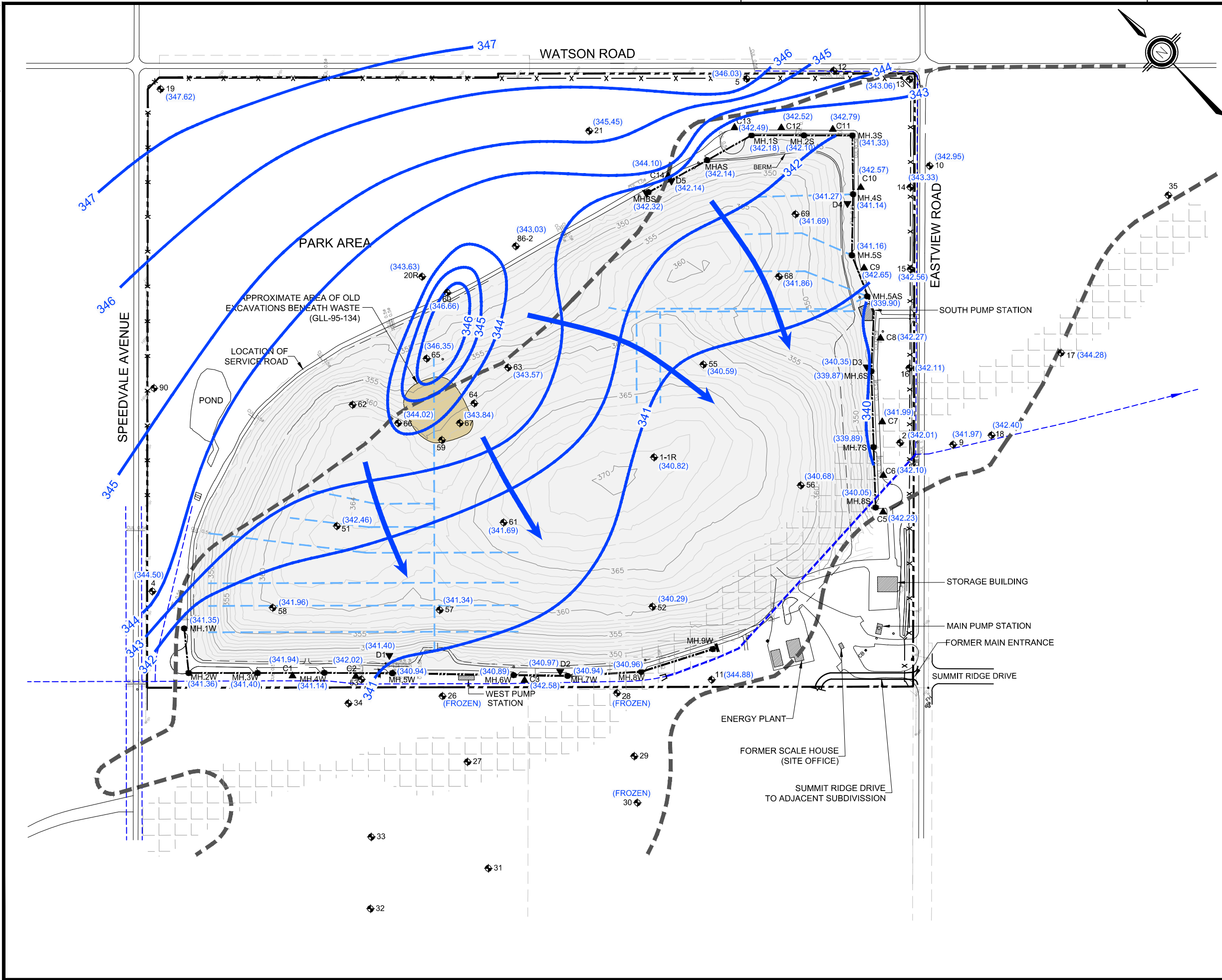
60339708
 10d Rpt Leachate Elev Plots Gradient Wes

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

PLOT: 4/16/2015 10:07:17 AM

BY:----

FILE NAME: 60339708-2014AMR-F12.DWG



Legend

- PROPERTY BOUNDARY
- x- FENCE LINE
- APPROXIMATE EXTENT OF LANDFILL WASTES
- PERIMETER LEACHATE COLLECTION AND CONTAINMENT SYSTEM (PLCCS)
- PLCCS WITH SHEET PILE WALL PRESENT
- SURFACE DRAINAGE AND STORM DITCHES
- BURIED SURFACE WATER CULVERT
- UNDERDRAIN NETWORK
- PERIMETER OF SURFICIAL OUTWASH INTERPRETED FROM 1966 AND 1972 AIR PHOTOGRAPH, BOREHOLE LOGS AND OTHER SITE INFORMATION. (REVISED JULY 1995)
- APPROXIMATE EXTENT OF ESKER FORMATION
- MH. AS LOCATION AND DESIGNATION OF MANHOLES IN LEACHATE CONTAINMENT SYSTEM
- ◆ 7 GROUND WATER MONITOR LOCATION
- ▲ C12 GROUND WATER MONITOR TO DOCUMENT LEACHATE CONTAINMENT SYSTEM PERFORMANCE (WATER ELEVATIONS ONLY)
- ▼ D1 GROUND WATER MONITOR TO DOCUMENT WATER LEVELS UPGRADIENT OF LEACHATE CONTAINMENT SYSTEM (WATER ELEVATIONS ONLY)
- (342.33) GROUND WATER ELEVATION (mASL)
- 343 ELEVATION CONTOUR OF WATER TABLE
- ← INFERRED DIRECTION OF SHALLOW GROUNDWATER FLOW

NOTES:

- Contours not shown in and directly adjacent to PLCCS for legibility.

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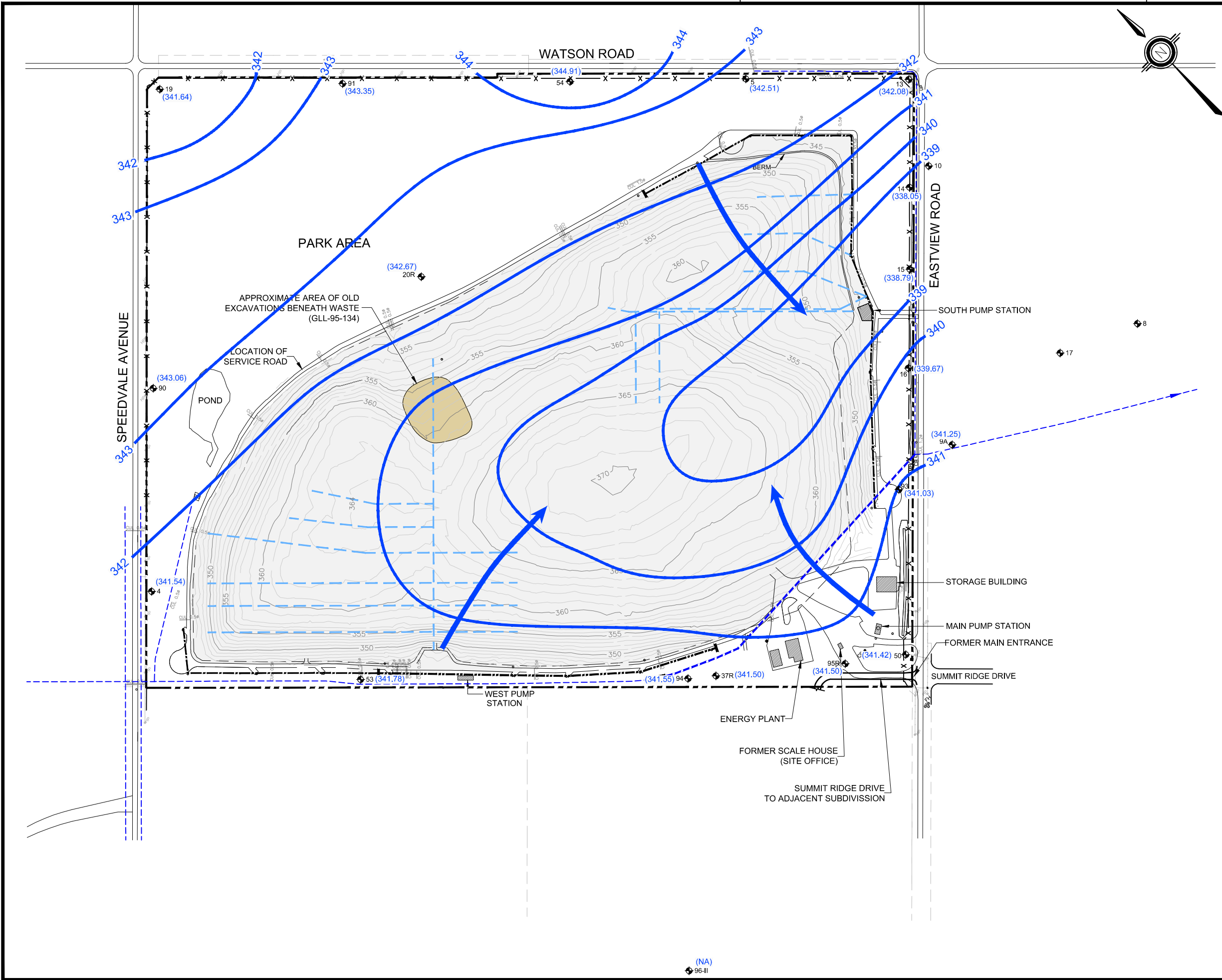
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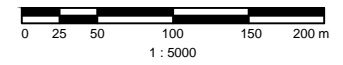
Eastview Road Landfill
City of Guelph

Water Table and Shallow
Groundwater Flow (Nov 2014)

PROJECT NUMBER	DATE	FIGURE
60339708	April, 2015	12



- Legend**
- PROPERTY BOUNDARY
 - x- FENCE LINE
 - APPROXIMATE EXTENT OF LANDFILL WASTES
 - PERIMETER LEACHATE COLLECTION AND CONTAINMENT SYSTEM (PLCCS)
 - PLCCS WITH SHEET PILE WALL PRESENT
 - SURFACE DRAINAGE AND STORM DITCHES
 - BURIED SURFACE WATER CULVERT
 - ◆ 7 GROUND WATER MONITOR LOCATION
 - (338.05) BEDROCK GROUNDWATER ELEVATION (mASL)
 - 343 ELEVATION CONTOUR OF WATER LEVEL IN BEDROCK
 - ← INFERRED DIRECTION OF BEDROCK GROUNDWATER FLOW



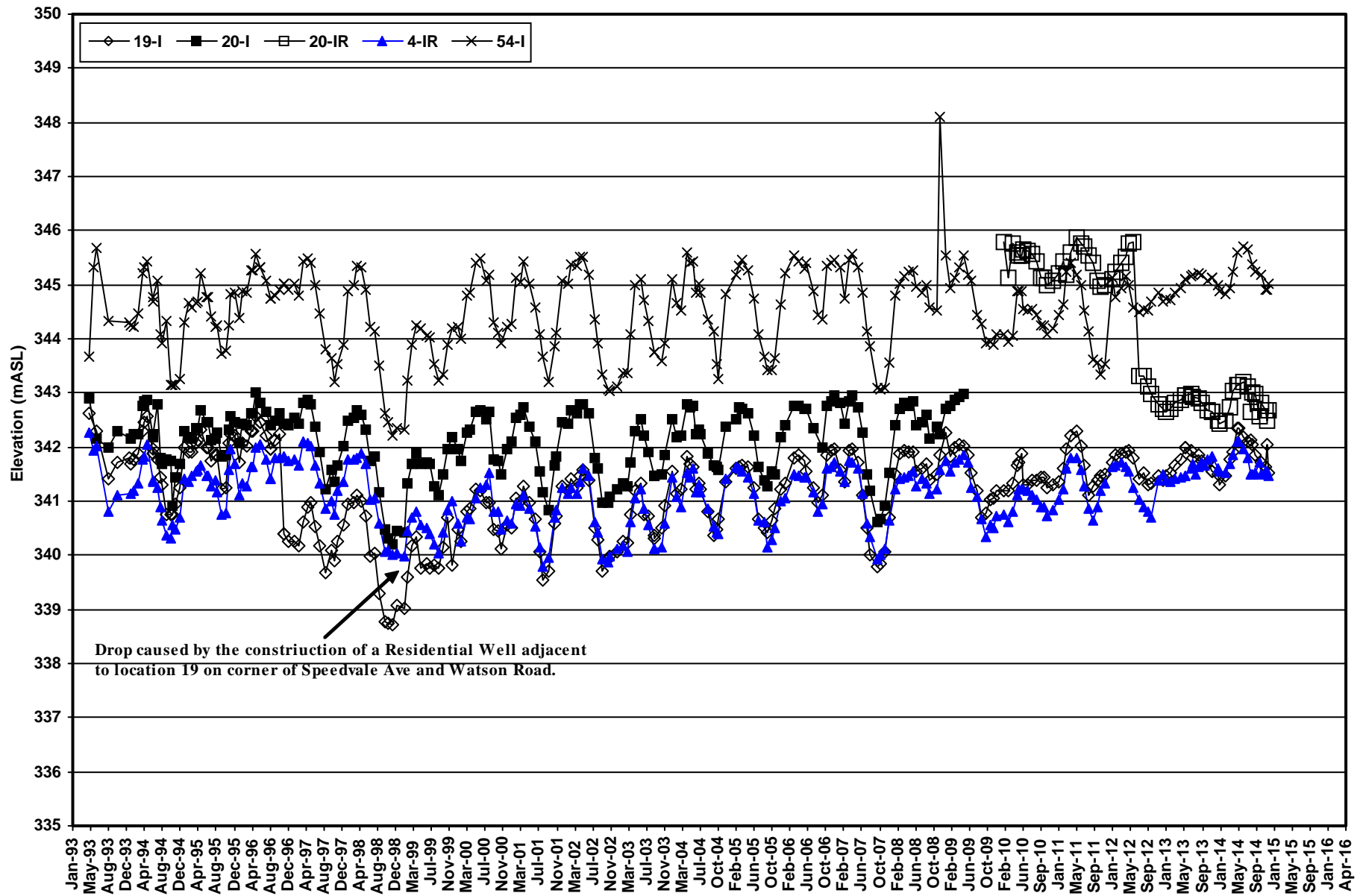
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**Eastview Road Landfill
City of Guelph
Piezometric Heads and
Groundwater Flow in Shallow
Bedrock (Nov 2014)**

PROJECT NUMBER	DATE	FIGURE
60339708	April, 2015	13



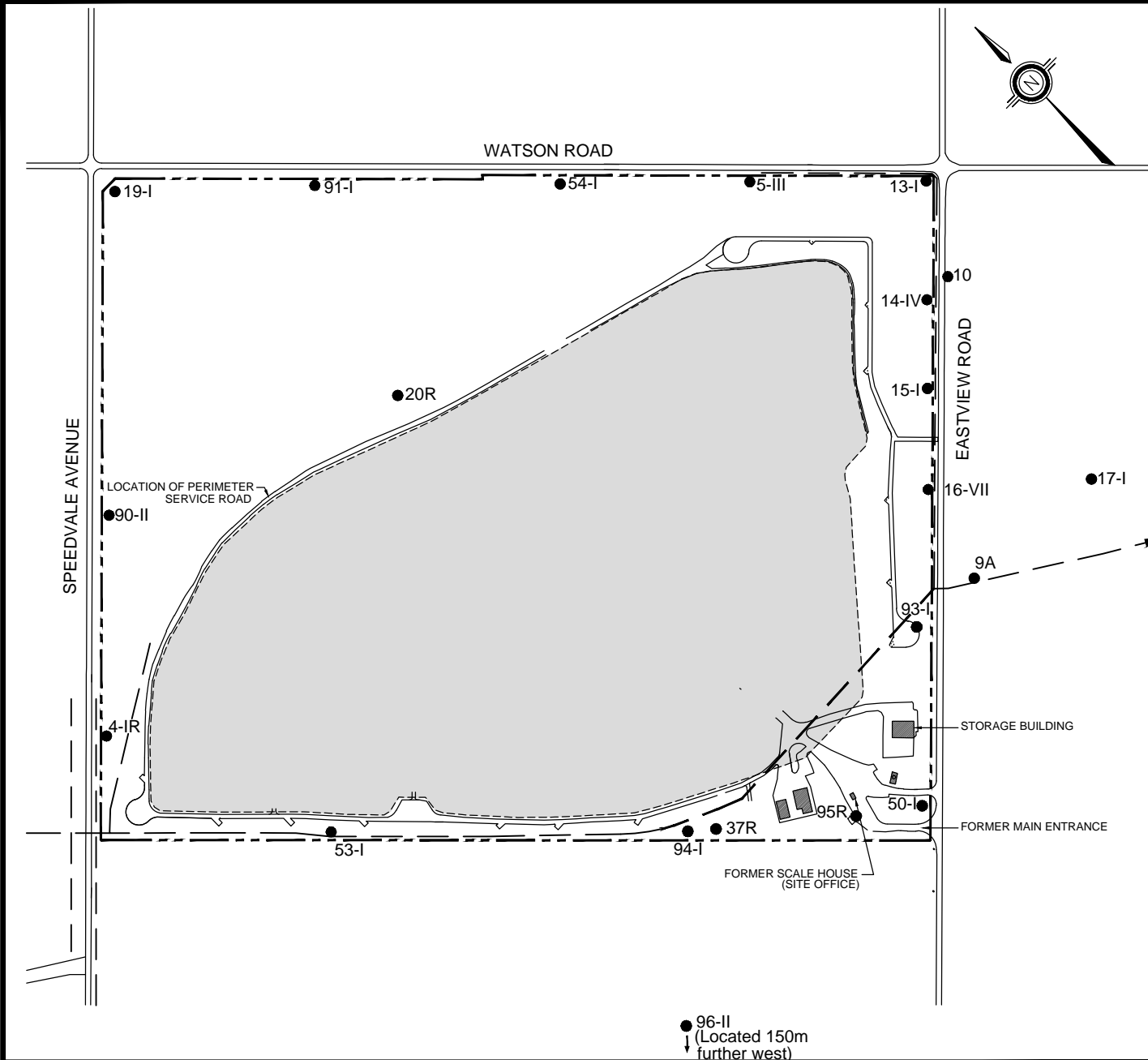
Closed Eastview Road Landfill Site
Bedrock Groundwater Elevations
Locations in the Northeast Area of the Landfill Property

FIGURE
14

60339708

12e Rpt Bedrock Groundwater Elv in NE

FILE NAME: 60339708-2014AMR-F16.DWG BY: ---- PLOT: 4/15/2015 3:30:43 PM SIZE 8.5" x 11" (215.9mm x 279.4mm)



- Legend**
- PROPERTY BOUNDARY
 - APPROXIMATE EXTENT OF LANDFILL WASTES
 - SURFACE DRAINAGE AND STORM DITCHES
 - BURIED STORM SEWER
 - 19-I LOCATION AND DESIGNATION OF SHALLOW BEDROCK MONITORS

NOTES:
 • Existing base information taken from BRAUN CONSULTING ENGINEERING LTD. drawing (Number 88.15-1e, Rev. B, dated June 20/1990).

0 50 100 200 300 m
 1 : 7500

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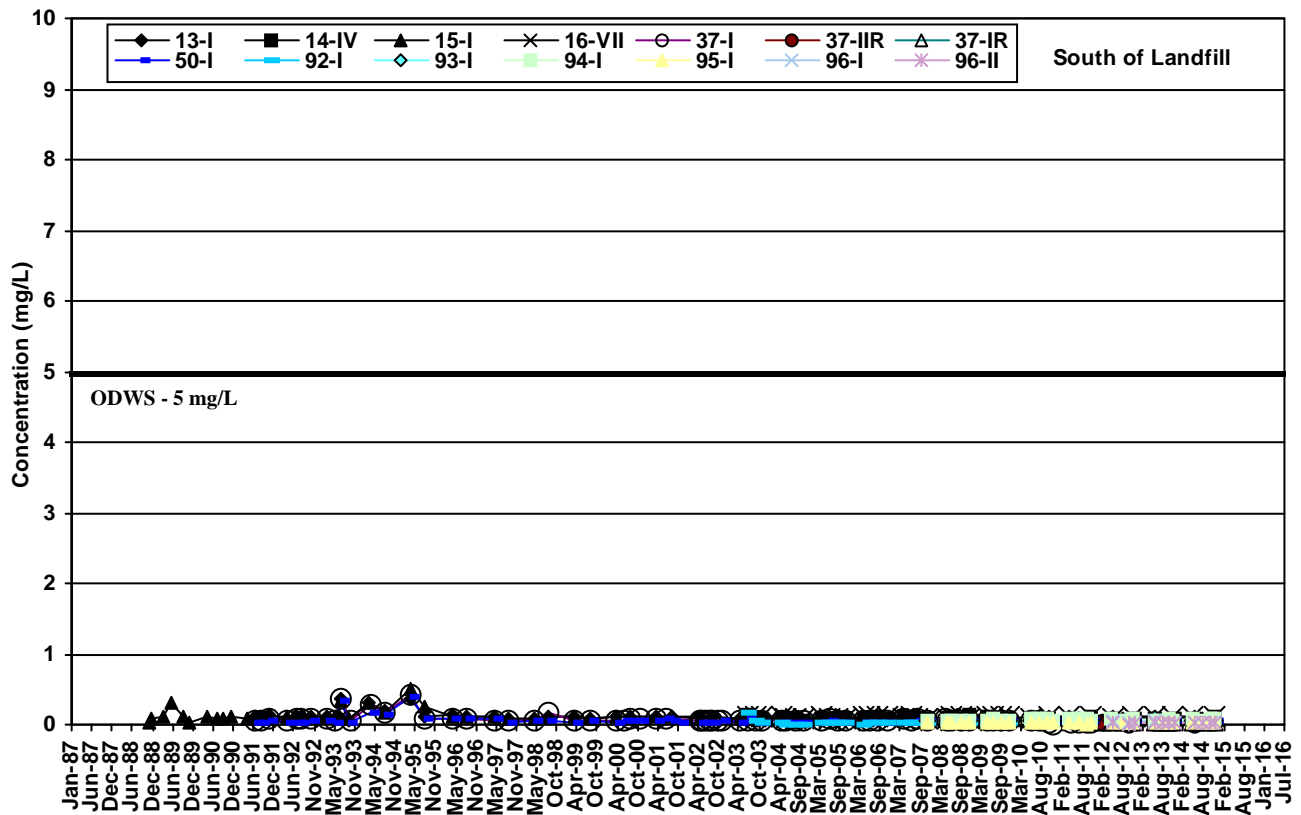
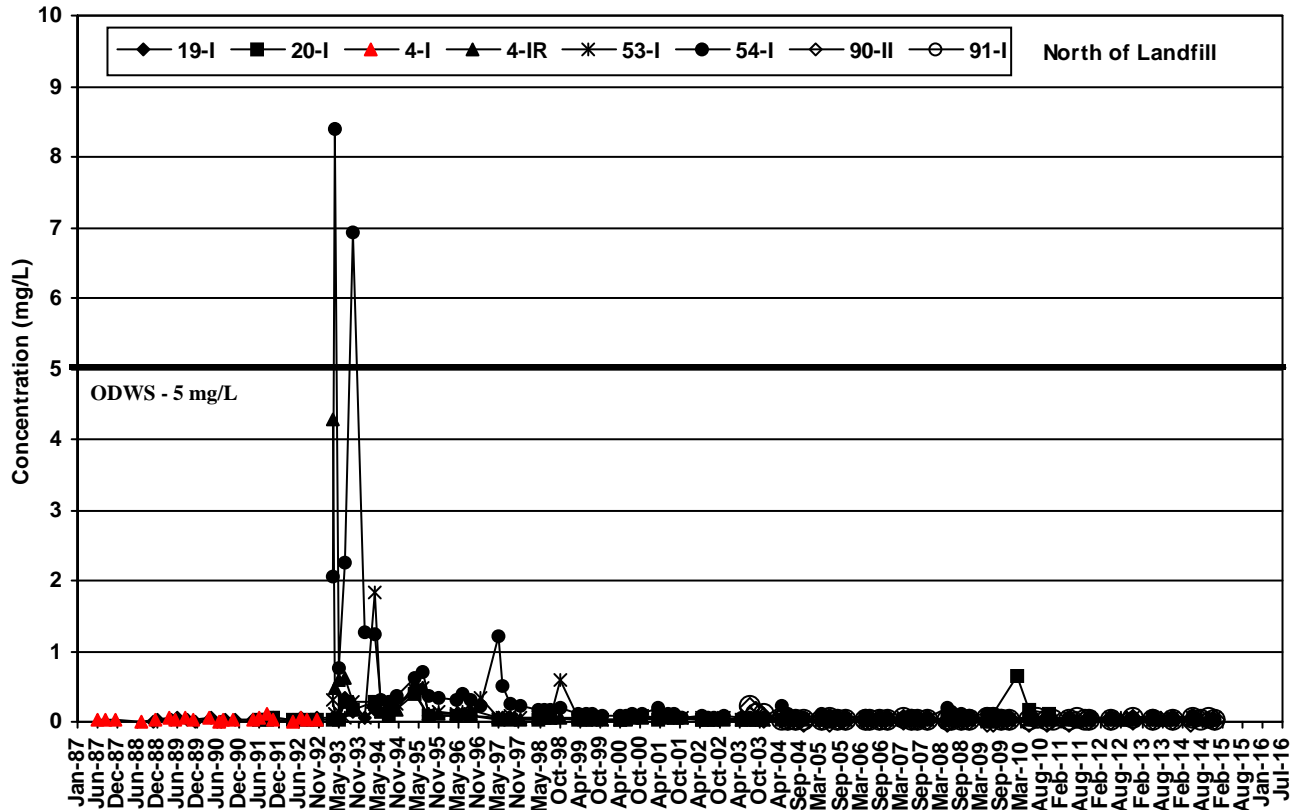


**Eastview Road Landfill
 City of Guelph**

**Routine Groundwater Monitors
 Monitored in Bedrock During 2014**

PROJECT NUMBER	DATE	FIGURE NUMBER
60339708	April, 2015	16

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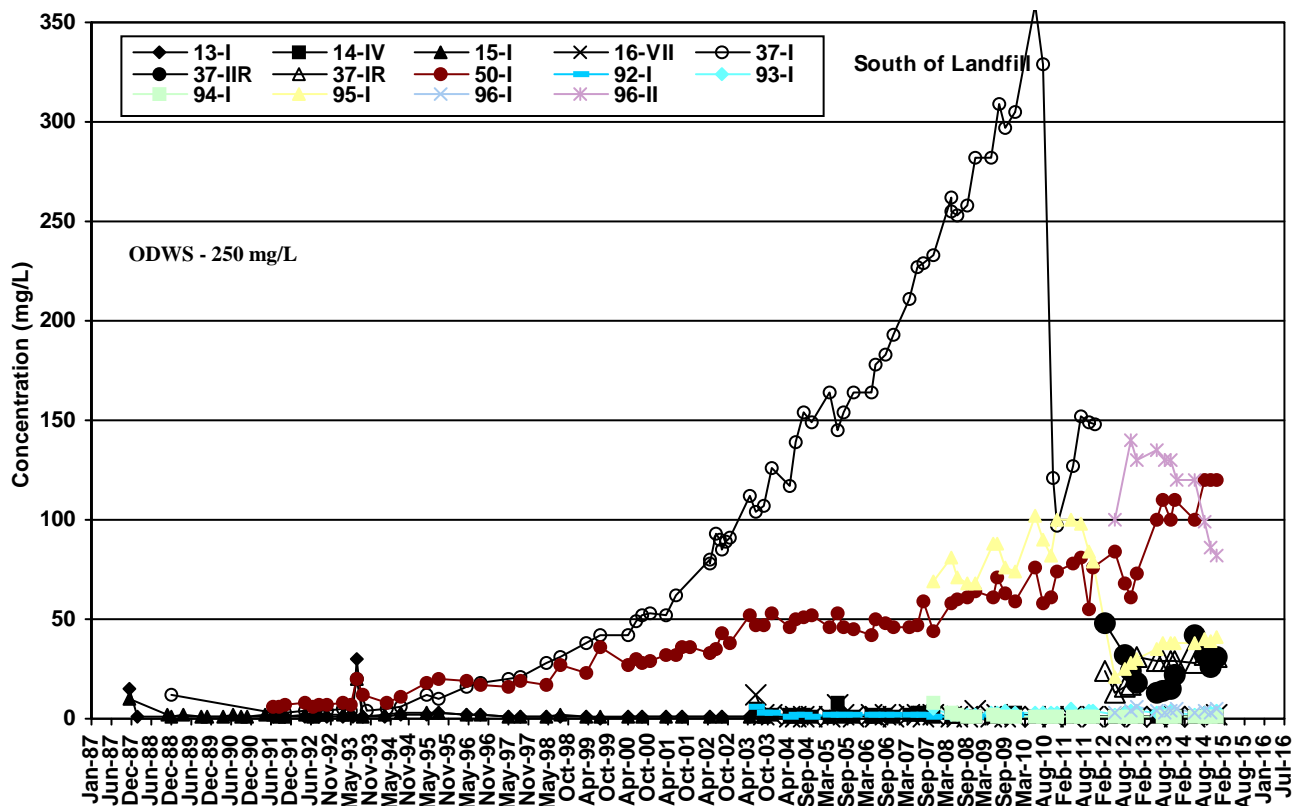
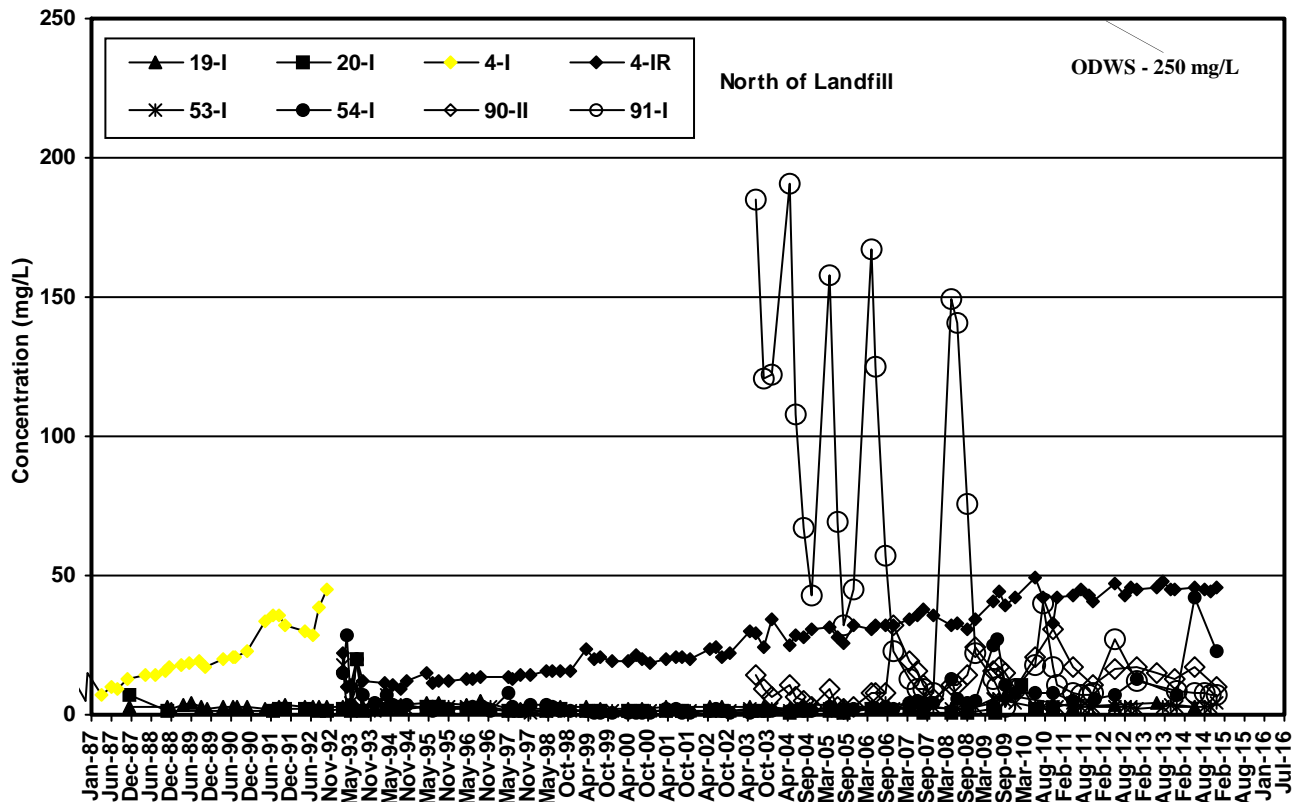
Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Boron Concentrations in Bedrock

FIGURE

17

60339708

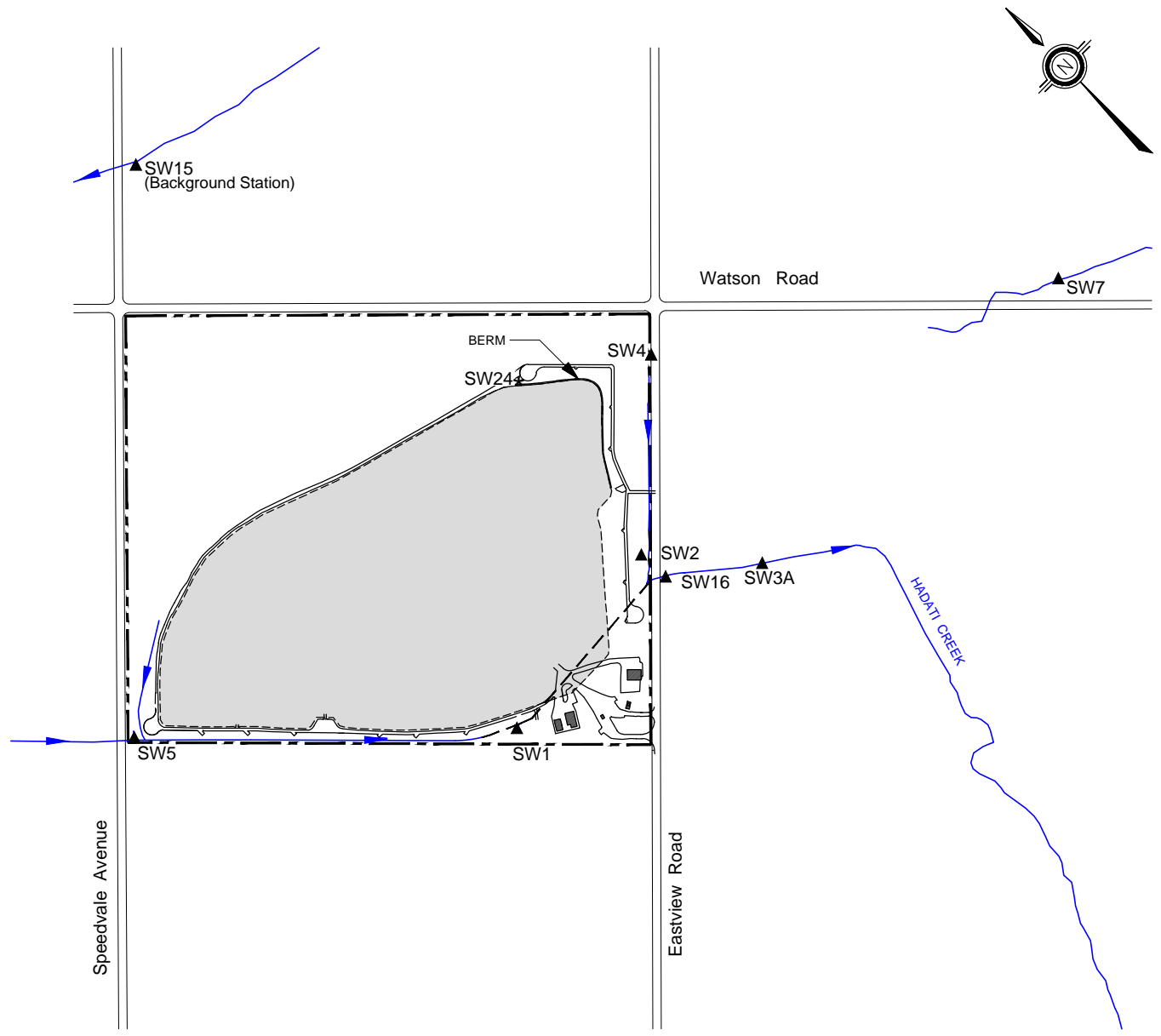
12a Detailed Boron Concentrations in Bed



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Chloride Concentrations in Bedrock

FIGURE
18

60339708
 12a Detailed Chloride Concentrations in

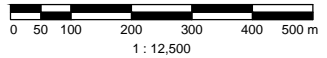


Legend

- PROPERTY BOUNDARY
- APPROXIMATE EXTENT OF LANDFILL WASTES
- SW5 ROUTINE SURFACE WATER SAMPLING STATIONS
- SW24 SEDIMENT SAMPLING STATIONS
- UNDERGROUND PIPE
- DIRECTION OF FLOW

NOTES:

• Existing base information taken from BRAUN CONSULTING ENGINEERING LTD. drawing (Number 88,15-1e, Rev. B, dated June 20/1990).



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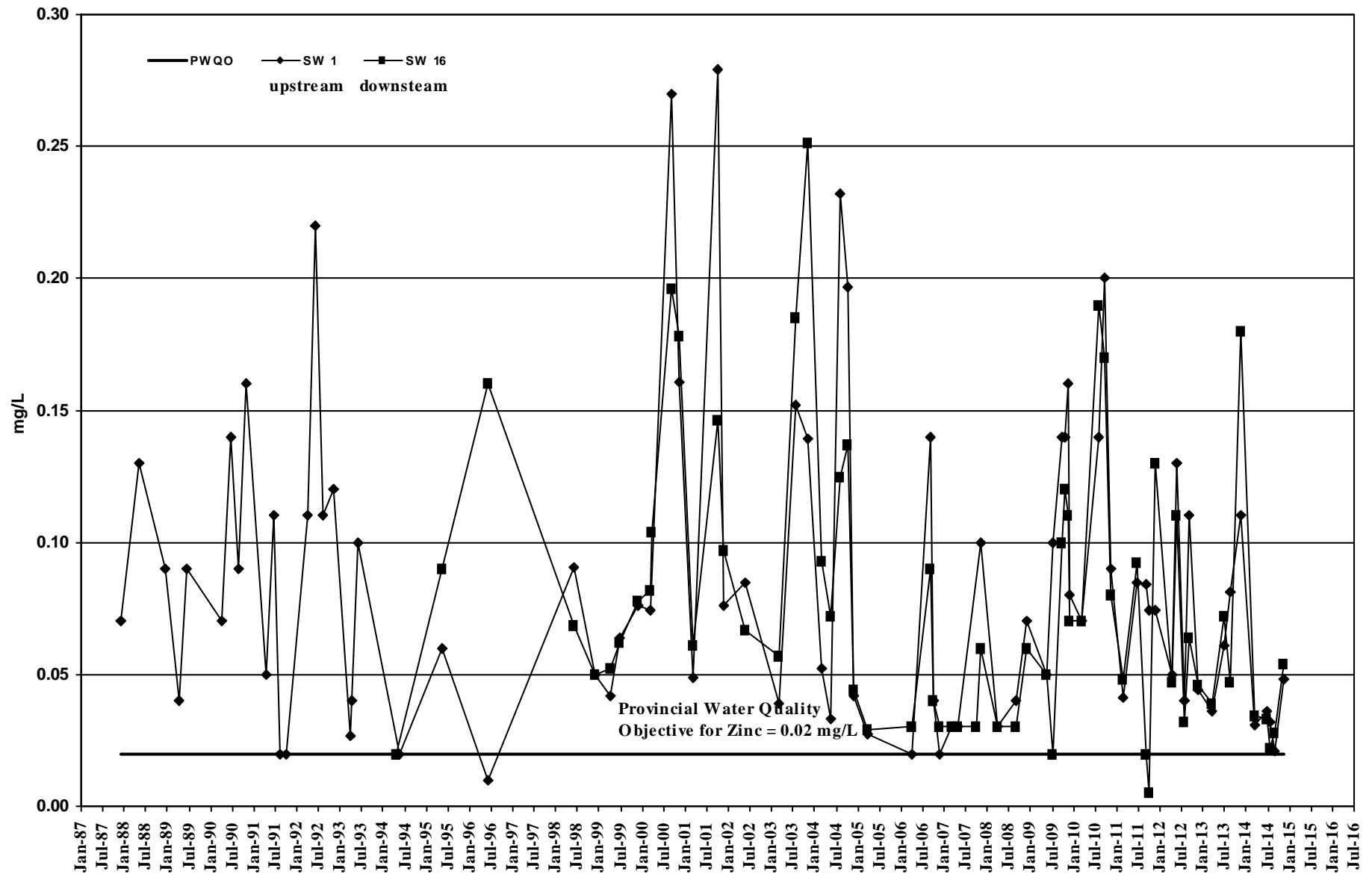


**Eastview Road Landfill
City of Guelph**

Surface Water Monitoring Locations

PROJECT NUMBER	DATE	FIGURE NUMBER
60339708	April, 2015	19

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Closed Eastview Road Landfill Site
Surface Water Quality Trends
Comparison of Zinc at Locations SW 1 and SW 16

FIGURE
20

60339708

12d SW Chem Zn Conc SW1 and SW16

Appendix A

Groundwater Monitoring Data and Elevation Trends

- A1. Monitor Construction Details
- A2. Routine Groundwater Elevations
- A3. Collection System Elevations
(C and D Series Monitors)
- A4. Detailed Bedrock and Lower Till
Elevations
- A5. Detailed Leachate Elevations
- A6. Water Temperatures Taken at Time of
Sampling from Groundwater
Monitors in 2014
Groundwater Elevation Trends
(Figures A1 – A7)

A1: Monitor Construction Details



Borehole		Monitor				Monitor Installation Details			
Monitor	Diameter (mm)	Type	Diameter (mm)	Stick Up (m)	Elevation (mASL)	Screened Interval (m)	Filter Pack (m)	Sealed Interval (m)	Backfilled Interval (m)
2-I		P	32	0.66	343.75	9.8 - 10.4	-	0.1 - 0.3	-
2-II		S	32	0.37	343.50	0.2 - 4.6	-	0.1 - 0.2	-
3-I		S	32	0.79	344.35	0.3 - 6.1	-	0.1 - 0.3	-
4-IR		P	50	0.76	346.17	19.4 - 20.9	19.10 - 20.90	0.0 - 19.1	-
4-II		P	32	0.54	345.90	13.6 - 14.0	-	11.3 - 12.2	-
4-IIR	203	P	51	0.82	345.93	11.9 - 13.7	11.90 - 13.70	0.0 - 11.9	-
4-IIIR		S	50	0.76	345.97	1.1 - 4.1	0.60 - 4.10	0.0 - 0.6	-
5-I		P	50	0.33	346.11	19.5 - 20.0	-	0.0 - 5.2	-
5-II		S	50	0.63	346.63	1.7 - 7.8	-	0.0 - 1.0	-
5-III	96	P	51	0.76	346.96	19.8 - 21.3	19.78 - 25.02	21.3 - 32.5 0 - 25.02	-
7-I		P	50	0.56	344.53	10.2 - 10.7	-	9.8 - 10.1	-
7-II		S	32	0.43	344.40	0.8 - 6.9	-	0.0 - 0.5	-
8-I		P	50	0.59	344.26	9.9 - 10.3	-	7.0 - 9.6	-
8-II		S	32	0.54	344.21	0.3 - 6.4	-	0.0 - 0.3	-
9A-I	101	P	98	0.60	344.38	25.1 - 25.9	25.00 - 25.90	23.8 - 25.0	0.00 - 23.80
9-I	203.2	P	49	0.35	344.02	5.5 - 6.8	5.38 - 7.97	2.0 - 5.4	0.35 - 2.03
9-II	203.2	S	49	0.50	344.16	0.1 - 2.8	0.25 - 3.12	-	0.00 - 0.25
10-I	203.2	P	49	0.35	343.84	4.5 - 5.7	-	0.0 - 4.4	4.42 - 6.10
10-II	203.2	P	49	0.35	343.79	3.0 - 3.6	2.59 - 3.81	0.0 - 2.6	-
10-III	203.2	S	49	0.41	343.82	0.3 - 1.5	0.25 - 1.78	-	0.00 - 0.25
11-I	203.2	P	49	0.40	345.80	4.6 - 5.8	4.18 - 6.10	3.9 - 4.2	3.00 - 3.88
11-II	203.2	S	49	0.43	345.84	0.2 - 2.9	0.00 - 3.22	-	-
11-III	203.2	P	51	0.74	346.56	17.0 - 18.5	16.55 - 18.52	0.0 - 16.6	-
12-I	203.2	P	49	0.57	345.34	5.5 - 6.7	5.44 - 7.04	4.7 - 5.4	0.15 - 4.70
12-II	203.2	P	49	0.58	345.34	3.2 - 3.8	3.10 - 3.78	1.5 - 3.1	0.30 - 1.52
12-III	203.2	S	49	0.55	345.43	0.9 - 2.1	0.30 - 2.29	0.0 - 0.3	-
13-I	76	P	49	0.30	344.63	24.4 - 25.6	23.47 - 25.91	0.0 - 23.5	-
13-II	203.2	P	49	0.48	344.81	19.5 - 20.1	19.00 - 20.09	0.0 - 19.0	-
13-III	203.2	P	49	0.58	344.98	7.6 - 8.8	7.47 - 9.09	6.4 - 7.5	5.94 - 6.40
13-IV	203.2	P	49	0.55	344.84	4.1 - 5.3	3.96 - 5.59	0.3 - 4.0	-
13-V	203.2	S	49	0.52	344.84	0.1 - 2.2	0.10 - 2.24	-	-

Notes: Top of Pipe Elevations for Monitor 37-I and 37-II where fixed on the Table in 2009
 (1 Rpt of Monitor Details/EastvwEAC1/60339708/Apr-15)

A1: Monitor Construction Details



Borehole		Monitor				Monitor Installation Details			
Monitor	Diameter (mm)	Type	Diameter (mm)	Stick Up (m)	Elevation (mASL)	Screened Interval (m)	Filter Pack (m)	Sealed Interval (m)	Backfilled Interval (m)
14-I	203.2	P	49	0.50	344.66	7.6 - 8.9	7.26 - 9.14	0.0 - 7.3	-
14-II	203.2	P	49	0.47	344.67	4.5 - 5.1	4.14 - 5.13	0.0 - 4.1	-
14-III	203.2	S	49	0.59	344.66	0.2 - 2.3	0.15 - 2.29	0.0 - 0.2	-
14-IV	96	P	51	0.76	344.66	25.6 - 27.2	25.63 - 25.02	27.2 - 34.0 0 - 25.02	-
15-I	76	P	49	0.40	344.43	25.9 - 27.1	24.99 - 27.43	0.0 - 25.0	-
15-II	73	P	49	0.54	344.55	19.8 - 21.0	19.20 - 21.94	0.0 - 19.2	-
15-III	203.2	P	49	0.20	344.18	9.0 - 10.2	8.48 - 10.67	0.0 - 8.5	-
15-IV	203.2	P	49	0.47	344.43	5.6 - 6.8	5.44 - 7.31	0.0 - 5.4	-
15-V	203.2	S	49	0.26	344.27	0.1 - 2.3	0.13 - 2.26	0.0 - 0.1	-
16-I	203.2	P	49	0.58	344.34	13.0 - 15.1	12.60 - 15.11	0.0 - 12.6	-
16-II	203.2	P	49	0.58	344.52	7.8 - 8.4	7.47 - 8.38	6.9 - 7.5	3.66 - 6.86
16-III	203.2	P	49	0.47	344.38	5.8 - 6.4	5.18 - 6.40	0.0 - 5.2	-
16-IV	203.2	P	49	0.57	344.44	3.8 - 4.4	3.76 - 4.57	2.1 - 3.8	0.30 - 2.13
16-V	203.2	S	49	0.43	344.46	0.3 - 2.4	0.15 - 2.44	-	-
16-VI	203.2	P	49	0.76	344.63	17.6 - 19.2	17.07 - 19.20	0.0 - 17.1	-
16-VII	96	P	51	0.76	344.22	25.5 - 27.0	25.48 - 19.47	27.0 - 33.8 0 - 19.47	-
16-VIII	200	P	150	0.60	344.11	40.0 - 54.9	-	0 - 40	-
17-I	76	P	49	0.42	346.64	24.4 - 25.6	23.46 - 25.90	0.0 - 23.5	-
17-II	73	P	49	0.50	346.97	18.6 - 19.2	17.83 - 19.20	0.0 - 17.8	-
17-III	203.2	P	49	0.27	346.43	5.9 - 7.1	5.84 - 7.42	2.0 - 5.8	0.00 - 2.00
17-IV	203.2	S	49	0.64	346.88	0.5 - 4.2	1.22 - 4.20	-	0.00 - 1.22
18-I	203.2	P	49	0.63	344.26	8.4 - 9.6	8.92 - 9.91	8.3 - 8.9	2.80 - 8.32
18-II	203	P	49	0.46	344.10	4.5 - 5.7	4.37 - 5.97	3.6 - 4.4	3.00 - 3.60
18-III	203.2	S	49	0.63	344.22	0.1 - 2.9	0.15 - 2.88	-	-
18-IV	203.2	S	49	0.40	344.12	0.5 - 1.7	0.30 - 2.00	-	-
19-I	76	P	49	0.34	349.70	24.6 - 25.8	23.77 - 26.14	1.0 - 23.8	-
19-II	127	P	49	0.41	349.76	19.8 - 21.0	19.20 - 21.34	5.8 - 19.2	0.30 - 5.79
19-III	127	P	49	0.46	349.78	13.7 - 15.0	12.95 - 15.24	7.7 - 13.0	0.30 - 7.71
19-IV	127	S	49	0.46	349.76	6.1 - 8.9	2.68 - 9.14	0.0 - 0.3	0.30 - 2.68
20-I	76	P	49	0.45	345.71	17.6 - 18.8	16.77 - 19.13	0.0 - 16.8	-
20-II	191	P	49	0.56	345.70	13.9 - 15.1	13.72 - 15.39	0.0 - 12.8	12.80 - 13.72

Notes: Top of Pipe Elevations for Monitor 37-I and 37-II where fixed on the Table in 2009
 (1 Rpt of Monitor Details/EastvwEAC1/60339708/Apr-15)

A1: Monitor Construction Details



Borehole		Monitor				Monitor Installation Details			
Monitor	Diameter (mm)	Type	Diameter (mm)	Stick Up (m)	Elevation (mASL)	Screened Interval (m)	Filter Pack (m)	Sealed Interval (m)	Backfilled Interval (m)
20-III	203.2	P	49	0.54	345.73	9.5 - 10.7	9.60 - 10.97	0.0 - 9.6	-
20-IV	127	S	49	0.57	345.76	0.0 - 4.3	0.30 - 4.57	0.0 - 0.3	-
21-I	175	P	50	0.40	348.59	11.0 - 12.5	10.90 - 12.50	8.5 - 10.9 0.2 - 7	7.00 - 8.50
21-II	175	P	50	0.40	348.60	7.0 - 8.5	-	4.0 - 6.4	6.40 - 9.00 0.15 - 4
21-III	175	S	50	0.50	348.66	0.2 - 4.8	0.20 - 4.80	-	-
22-I	175	P	50	0.50	345.75	7.9 - 9.4	7.70 - 9.40	6.6 - 7.7	0.00 - 6.60
22-II	175	S	50	0.30	345.52	0.6 - 5.3	0.20 - 5.30	-	-
23-I	175	P	50	0.60	345.74	8.5 - 10.0	8.40 - 10.00	5.0 - 8.4	0.30 - 5.00
23-II	175	S	50	0.60	345.73	3.2 - 4.7	0.60 - 5.00	0.0 - 0.6	5.40 - 9.60
26-I	38	S	25	0.92	344.00	0.8 - 2.3	-	-	0.00 - 2.28
26-II	38	S	25	0.41	344.00	0.0 - 1.2	-	-	0.00 - 1.20
27-I	38	S	25	0.87	344.39	0.8 - 2.4	-	-	0.00 - 2.40
27-II	38	S	25	0.54	344.39	0.0 - 1.6	-	-	0.00 - 1.60
28-I	38	S	25	0.91	343.97	0.8 - 2.3	-	-	0.00 - 2.29
28-II	38	S	25	0.32	343.97	0.0 - 1.2	-	-	0.00 - 1.20
29-I	32	S	32	0.10	344.08	0.1 - 2.1	-	-	0.00 - 2.10
30-I	38	S	25	0.94	346.17	0.6 - 2.3	-	-	0.00 - 2.26
31-I	38	S	25	0.91	344.65	0.6 - 2.3	-	-	0.00 - 2.29
32-I	38	S	25	0.78	344.52	0.8 - 2.5	-	-	0.00 - 2.50
33-I	38	S	25	0.76	344.36	0.8 - 2.5	-	-	0.00 - 2.50
34-I	38	S	25	1.07	344.53	0.6 - 2.2	-	-	0.00 - 2.20
35-I	38	S	25	1.00	343.75	5.6 - 5.9	-	-	0.00 - 3.90
35-II	38	S	25	1.34	344.13	0.2 - 1.9	-	-	0.00 - 1.86
36-I	101	P	50	0.90	345.98	21.9 - 23.4	21.20 - 23.40	20.0 - 21.2	0.00 - 20.00
37-I	101	P	98		346.41	23.0 - 27.5	-	0.0 - 23.0	-
37-II	101	P	98		346.15	24.4 - 33.7	-	0.0 - 24.4	-
37-IR	96	P	51		346.85	23.7 - 27.3	23.40 - 27.28	0.0 - 23.4	-
37-IIR	96	P	51		347.18	24.4 - 32.6	24.10 - 32.60	0.0 - 24.1	-
50-I	203	P	51	0.90	361.89	39.8 - 41.2	38.60 - 41.90	0.0 - 38.6	-
53-I	96	P	51	0.76	344.41	21.0 - 22.6	20.60 - 22.60	0.0 - 20.6	-
53-II	203	P	51	0.76	344.31	13.9 - 15.4	13.45 - 15.39	0.0 - 13.5	-

Notes: Top of Pipe Elevations for Monitor 37-I and 37-II where fixed on the Table in 2009
 (1 Rpt of Monitor Details/EastvwEAC1/60339708/Apr-15)

A1: Monitor Construction Details



Borehole		Monitor				Monitor Installation Details			
Monitor	Diameter (mm)	Type	Diameter (mm)	Stick Up (m)	Elevation (mASL)	Screened Interval (m)	Filter Pack (m)	Sealed Interval (m)	Backfilled Interval (m)
53-IIR	203	P	51	1.02	344.40	13.7 - 15.2	13.40 - 15.20	0.0 - 13.4	-
54-I	96	P	51	0.76	354.06	25.9 - 27.4	25.60 - 27.40	0.0 - 25.6	-
60-I	203	P	51	0.76	346.74	13.3 - 14.8	13.00 - 14.83	14.8 - 15.4 0 - 13	-
60-II	203	P	51	0.76	346.84	10.7 - 12.2	10.39 - 12.19	0.0 - 10.4	-
60-III	203	S	51	0.76	346.79	0.6 - 5.2	0.30 - 5.18	0.0 - 0.3	-
90-I	200	P	150	0.60	355.82	51.2 - 67.1	-	0 - 51.2	-
90-II	96	P	51	0.76	355.46	31.4 - 32.9	31.42 - 30.81	32.9 - 38.6 0 - 30.81	-
91-I	96	P	51	0.76	351.16	25.5 - 27.0	25.47 - 24.86	27.0 - 41.6 0 - 24.86	-
92-I	96	P	51	0.83	349.56	32.0 - 33.5	31.98 - 31.37	33.5 - 40.5 0 - 31.37	-
93-I	203	P	51	0.80	345.99	24.2 - 28.7	23.47 - 28.73	0.0 - 23.5	-
94-I	203	P	51	0.83	345.07	20.9 - 25.2	20.55 - 25.20	0.0 - 20.6	-
95-I	203	P	51	0.71	358.86	36.5 - 41.4	35.97 - 41.40	0.0 - 36.0	-
96-I	96	P	51	0.85	348.15	36.6 - 36.3	38.08 - 38.08	0.0 - 36.3	-
96-II	96	P	51		348.62	28.8 - 33.3	28.46 - 33.33	0.0 - 28.5	-
C1-I	203	P	51	0.84	344.78	11.3 - 12.8	10.52 - 11.73	0.0 - 10.4	11.73 - 14.15
C1-II	203	S	51	0.78	344.63	0.8 - 3.8	0.40 - 3.05	0.0 - 0.4	3.05 - 4.27
C2-I	203	P	51	0.74	344.36	7.5 - 9.0	7.16 - 7.92	0.0 - 7.0	7.92 - 9.42
C2-II	203	S	51	0.72	344.37	0.9 - 3.7	0.76 - 2.44	0.0 - 0.8	2.44 - 4.27
C3-I	203	S	51	0.74	344.68	1.4 - 4.4	0.46 - 3.05	0.0 - 0.5	3.05 - 5.03
C5-I	203	S	51	0.55	346.84	2.5 - 5.6	2.03 - 4.57	0.0 - 0.5	4.57 - 6.55
C6-I	203	P	51	0.73	345.65	10.0 - 11.5	8.89 - 10.67	0.0 - 0.3	10.67 - 12.77 0.3 - 2.52
C6-II	203	S	51	0.71	345.67	1.5 - 4.6	0.91 - 3.35	0.0 - 0.3	3.35 - 4.57 0.3 - 0.91
C7-I	203	S	51	0.82	345.53	1.5 - 4.6	1.22 - 2.98	0.0 - 0.3	2.98 - 5.03
C8-I	203	S	51	0.80	345.82	1.4 - 4.4	0.91 - 3.05	0.8 - 0.9 0 - 0.3	3.05 - 5.03 0.3 - 0.76
C9-I	203	P	51	0.74	345.03	5.8 - 7.3	5.18 - 6.10	0.0 - 5.2	6.10 - 7.90
C9-II	203	S	51	0.75	345.06	1.2 - 4.3	0.18 - 3.35	0.0 - 0.8	3.35 - 4.32
C10-I	203	P	51	0.72	345.02	6.9 - 8.5	-	0.0 - 6.1	6.10 - 8.76
C10-II	203	S	51	0.74	344.82	1.5 - 4.6	1.22 - 3.05	0.9 - 1.2 0 - 0.22	3.05 - 4.57 0.22 - 0.91
C11-I	203	P	51	0.70	344.88	5.9 - 7.4	-	0.0 - 5.1	5.11 - 7.87
C11-II	203	S	51	0.75	344.94	1.2 - 4.3	0.76 - 2.74	0.0 - 0.8	2.74 - 4.27
C12-I	203	S	51	0.79	345.41	1.3 - 4.3	0.76 - 3.05	0.0 - 0.8	3.05 - 5.03

Notes: Top of Pipe Elevations for Monitor 37-I and 37-II where fixed on the Table in 2009
(1 Rpt of Monitor Details/EastvwEAC1/60339708/Apr-15)

A1: Monitor Construction Details



Borehole		Monitor				Monitor Installation Details			
Monitor	Diameter (mm)	Type	Diameter (mm)	Stick Up (m)	Elevation (mASL)	Screened Interval (m)	Filter Pack (m)	Sealed Interval (m)	Backfilled Interval (m)
C13-I	203	S	51	0.74	345.51	1.3 - 4.4	0.76 - 3.05	0.0 - 0.8	3.05 - 5.03
C14-I	203	S	51	0.76	345.97	1.1 - 4.1	0.61 - 4.10	0.0 - 0.6	-
D1-I	203	S	51	0.75	345.46	1.4 - 4.4	0.53 - 3.96	0.0 - 0.5	3.96 - 5.03
D2-I	203	S	51	0.57	346.00	2.4 - 5.4	1.52 - 4.52	0.0 - 1.5	4.52 - 5.79
D3-I	203	S	51	0.72	344.62	2.3 - 5.4	1.52 - 3.51	1.2 - 1.5 0 - 0.3	3.51 - 5.63 0.3 - 1.2
D4-I	203	S	51	0.76	344.65	1.2 - 4.3	0.91 - 3.05	0.0 - 0.9	3.05 - 4.57
D5-I	203	S	51	0.63	345.96	1.0 - 4.8	0.61 - 4.81	0.0 - 0.6	-
1-I		S	32	0.76	356.04	4.3 - 16.6	-	0.9 - 1.2	-
1-IR	203	P	51	0.76	370.70	28.1 - 29.7	27.76 - 30.20	0.0 - 27.8	-
51-I	203	S	51	0.76	365.80	7.3 - 22.6	-	0.0 - 0.9	0.90 - 25.55
51-IR	203	S	51	0.76	365.19	15.9 - 22.0	15.29 - 15.90	0.0 - 15.3	-
51-II	203	P	51	0.77	365.87	23.6 - 26.7	27.28 - 23.24	10.0 - 23.2 0 - 0.3	0.30 - 10.00 -
52-I	203	S	51	0.76	362.13	8.2 - 20.4	-	0.0 - 1.0	1.00 - 20.50
55-I	203	P	51	0.76	355.06	11.2 - 15.8	11.00 - 15.80	0.0 - 11.0	15.80 - 17.06
56-I	203	P	51	0.76	354.34	12.0 - 18.1	11.40 - 18.05	0.0 - 11.4	18.05 - 18.95
57-I	203	P	51	0.76	360.66	18.5 - 26.1	17.70 - 26.10	12.0 - 17.7 0 - 0.3	26.10 - 27.28 0.3 - 12
58-I	203	P	51	0.92	360.98	20.4 - 18.9	20.42 - 18.00	18.0 - 17.5	20.42 - 21.18 0 - 17.45
59-I	203	S	51	0.76	362.63	10.8 - 20.0	11.00 - 19.97	0.0 - 0.6	19.97 - 20.73 0.6 - 11
61-I	203	P	51	0.76	365.44	23.8 - 25.3	23.10 - 35.30	25.3 - 26.5 0 - 23.1	-
61-IR	203	P	51	0.52	363.59	25.1 - 26.7	24.70 - 26.70	0.0 - 24.7	-
62-I	203	S	51	0.90	361.97	8.3 - 15.9	8.45 - 15.92	0.0 - 1.5	1.52 - 8.45
63-I	203	P	51	0.76	359.76	15.1 - 16.6	14.78 - 17.98	0.0 - 14.8	-
64-I	203	S	51	0.76	347.66	10.3 - 13.4	9.75 - 13.39	8.8 - 9.8 0 - 0.61	0.61 - 8.84 -
65-I	203	S	51	0.76	353.41	5.7 - 10.3	5.44 - 10.26	0.0 - 0.9	0.91 - 5.40
66-I	203	P	51	0.76	362.00	14.3 - 19.6	13.51 - 19.61	12.7 - 13.5	0.91 - 12.70
66-IR	203	P	51	0.87	368.09	19.1 - 20.6	18.40 - 20.60	0.0 - 18.4	-
67-I	203	S	51	0.95	362.34	16.2 - 20.7	15.57 - 20.73	15.1 - 15.6 0 - 0.91	0.91 - 15.09 -
68-I	203	S	51	0.76	353.28	10.7 - 12.2	10.36 - 12.19	10.0 - 10.4 0.91 - 0	0.91 - 9.75 -
69-I	203	S	51	0.76	352.42	11.7 - 14.8	10.09 - 15.09	0.0 - 10.9	-

Notes: Top of Pipe Elevations for Monitor 37-I and 37-II where fixed on the Table in 2009
 (1 Rpt of Monitor Details/EastvwEAC1/60339708/Apr-15)

A2: Groundwater Elevations - - Closed Eastview Road Landfill Site

Monitor	2-I	2-II	4-IR	4-II	4-IIR	4-IIIR	5-II	5-III	9A-I	9-I	9-II	10-I	10-II	10-III	11-I	11-II	11-III	12-I	12-II	12-III
Geologic Unit	Outwash	Outwash	Bedrock	Lower Till	Lower Till	Upper Till	Upper Till	Bedrock	Bedrock	Outwash	Outwash	Upper Till	Outwash	Outwash	Upper Till	Outwash	Lower Till	Upper Till	Upper Till	Fill
Date																				
28-Apr-1992	339.43	341.87		342.12			342.60		341.00	342.01	341.86	342.86	342.86	342.87	343.82	343.92		343.44	343.42	343.24
14-Aug-1992	341.94	342.17		343.65			345.34		341.12	342.29	342.11	342.99	342.86	343.02	344.16	344.15		343.49	343.44	343.33
10-Nov-1992	341.88	341.87		344.11			345.37		341.42	342.12	341.81	343.09	342.94	343.02	343.80	343.74		343.49	343.45	343.34
22-Mar-1993															343.35	343.28			343.30	343.21
22-Apr-1993	341.83	342.17	342.27	343.93		345.05	345.72		341.49	342.12	341.88	343.05	342.84	343.05	343.89	343.83		343.44	343.37	343.33
25-May-1993			341.94																	
08-Jun-1993	341.98	341.57	342.01	343.50		344.44	344.63		341.28	341.62	341.46	342.84	342.70	342.94	343.43	343.31		343.35	343.38	343.28
23-Aug-1993	341.65	341.42	340.80	342.61		343.80	344.29		340.59	341.20	341.12	342.46	342.28	342.46	343.07	343.00		343.19	343.19	343.14
26-Oct-1993	341.88	341.62	341.11	342.85		344.12	344.57		340.86	341.52	341.40	342.75	342.59	342.69	343.32	343.27	341.93	342.91	342.89	342.82
16-Mar-1994																	343.40			
20-Apr-1994	342.06	341.85	341.83	343.64		344.74	345.44		341.24	342.09	341.93	343.02	342.95	343.04	344.13	344.10	343.85	343.40	343.39	343.30
18-Jun-1994	341.73	341.55	341.38	343.15		344.25	344.64		340.87	341.56	341.40	342.64	342.46	342.63	343.31	343.37	343.52	343.27	343.24	343.20
24-Aug-1994	341.33	341.28	340.63	342.30		343.39	343.87		340.44	341.20	341.14	342.12	341.97	342.94	343.15	342.92	343.20	342.72	342.64	342.70
26-Oct-1994	341.60	341.22	340.57	341.86		342.28	343.20		340.20	341.21	341.19	341.94	341.79	342.34	342.07	342.63	343.49	342.42	342.38	DRY
18-Apr-1995	341.87	341.65	341.58	343.45		344.52	344.76		340.94	341.76	341.59	342.76	342.61	342.91	343.50	343.42	343.49	343.43	343.33	343.26
16-Jun-1995	341.78	341.59	341.46	343.26		344.24	344.68		340.87	341.63	341.44	342.59	342.41	342.66	343.53	343.39	343.37	343.16	343.10	343.06
21-Aug-1995	341.77	341.64	341.17	343.11		344.29	344.49		340.88	341.62	341.47	342.64	342.46	342.68	343.69	343.66	343.66	343.16	343.15	343.13
13-Nov-1995	342.02	342.45	341.59	343.65		344.92	345.64		341.14	342.19	341.93	341.92	342.78	342.85	344.48	344.51	343.56	343.49	343.42	343.35
15-Apr-1996	341.81	341.93	341.62	343.58		344.79	345.68		341.13	342.07		342.90	342.76	343.12	343.95	343.96	343.81	343.52	343.38	343.28
13-Jun-1996	341.95	341.90	342.05	343.71		344.75	345.53		341.37	342.15	341.91	342.91	342.74	342.97	344.04	344.00	344.02	343.53	343.39	343.42
15-Aug-1996	341.85	341.79	341.40	343.12		344.08	344.51		340.99	341.77	341.63	342.49	342.44	342.43	343.22	343.16	343.96	343.11	343.02	343.03
12-Nov-1996	341.96	341.80	341.82	343.63		344.57	345.26		341.21	341.97	341.78	342.87	342.69	342.94	343.83	343.77	343.84	343.48	343.39	343.33
21-Apr-1997	341.79	341.77	342.07	343.73		344.43	345.23		342.43	342.16	342.85	342.98	342.65	342.97	343.97	343.88	344.29	343.46	343.33	343.29
09-Jun-1997	341.83	341.67	341.66	343.35		344.18	344.73		341.24	341.77	341.52	342.68	342.54	342.77	343.54	343.43	343.98	343.31	343.21	343.21
18-Aug-1997	341.71	341.64	340.87	342.47		343.23	343.55		340.60	341.35	341.18	342.14	341.97	342.37	342.91	342.76	343.22	342.52	342.40	DRY
10-Nov-1997	341.97	341.89	341.20	342.67		343.52	344.05		340.85	341.93	341.80	342.57	342.43	342.57	343.39	343.28	343.38	342.09	342.98	343.00
14-Apr-1998	341.88	341.70	341.89	343.68		344.36	345.28		341.20	342.04	341.70	342.77	342.60	342.90	343.71	343.60	343.89	343.45	343.32	343.24
10-Jun-1998	341.70	341.49	341.04	343.77		343.95	344.25		340.73	341.47	341.26	342.33	342.18	342.49	343.14	343.01	343.41	342.78	342.67	342.70
10-Aug-1998	341.47	341.34	340.58	342.55		343.53	343.71		340.43	341.27	341.16	342.02	341.86	342.37	342.99	342.84	343.15	342.37	342.24	Dry
09-Nov-1998	341.08	341.06	340.00	341.34		341.46	341.99		339.90	340.96	Dry	341.34	341.20	Dry	342.58	342.41	342.64	341.36	341.24	
16-Apr-1999	341.76	341.65	340.82	343.08		344.35	344.89		340.72	341.86	341.68	342.84	342.68	342.86	344.00	343.91	343.42	343.39	343.31	343.23
23-Jun-1999	341.63	341.50	340.52	342.60		343.82	344.36		340.56	341.43	341.26	342.42	342.28	342.48	343.03	343.01	342.67	342.81	342.78	343.02
16-Aug-1999	341.12	341.44	340.20	343.12		343.08	343.89		340.38	341.33	341.24	342.18	342.05	342.37	342.87	342.86	342.47	342.68	342.74	342.77
16-Nov-1999	341.77	341.68	340.85	343.11		344.43	345.07		340.75	341.84	342.02	342.78	342.65	342.78	343.65	343.67	342.95	343.38	343.38	343.45
12-Apr-2000	341.92	341.80	340.67	343.22		344.77	345.40		340.73	341.95	341.77	342.87	342.72	342.92	343.65	343.67	342.97	343.54	343.57	343.61
19-Jun-2000	342.17	342.07	341.25	343.56		344.70	345.64		341.10	342.49	342.09	343.02	342.88	343.00	344.54	344.64	343.44	343.63	343.62	343.65
14-Aug-2000	341.95	341.85	341.52	343.48		344.43	344.90		341.12	341.92	341.72	342.94	342.80	342.98	343.98	344.00	343.46	343.57	343.56	343.54
06-Nov-2000	341.62	341.53	340.48	342.37		343.29	342.13		340.52	341.48	341.39	342.20	342.07	342.41	342.87	342.86	342.74	342.78	342.82	342.90
02-Apr-2001	341.95	341.85	341.10	343.48		344.63	345.78		341.13	342.61	342.12	342.91	342.77	Frozen	344.44	344.52	343.51	343.64	343.63	343.63
25-Jun-2001	341.67	341.65	340.54	342.92		344.25	344.51		340.70	341.63	341.48	342.62	342.48	342.67	343.48	343.50	343.22	343.20	343.22	343.24
13-Aug-2001	341.33	341.33	339.79	342.00		343.06	344.41		340.20	341.18	341.15	341.93	341.81	342.10	342.85	342.85	342.61	342.33	342.35	342.81
05-Nov-2001	341.85	341.73	340.83	343.13		344.60	345.29		340.73	341.83	341.72	342.70	342.58	342.66	343.99	344.04	343.07	343.56	343.57	343.50
22-Apr-2002	342.04	341.90	341.37	343.52		344.46	345.47		341.21	342.37	342.03	342.95	342.97	342.92	344.54	344.63	343.58	343.54	343.66	342.20
17-Jun-2002	341.95	341.86	341.47	343.52		344.58	345.27		341.18	342.12	341.90	342.75	342.62	342.80	343.74	343.75	343.54	343.61	343.60	343.45
12-Aug-2002	341.39	341.34	340.43	342.43		343.44	343.90		340.49	341.24	341.19	342.01	341.90	342.26	342.90	342.88	342.87	342.54	342.56	342.83
04-Nov-2002	341.75	342.51	339.99	341.84		342.61	343.25		340.60	341.38	341.95	342.63	341.81	342.32	342.93	343.10	342.48	342.46	343.58	N/R

Note: All Water Level in mASL

(9a Rpt 2-I to 12-III WL/EastvwEAC1/60339708/Apr-15)

A2: Groundwater Elevations - - Closed Eastview Road Landfill Site

Monitor	2-I	2-II	4-IR	4-II	4-IIR	4-IIIR	5-II	5-III	9A-I	9-I	9-II	10-I	10-II	10-III	11-I	11-II	11-III	12-I	12-II	12-III
Geologic Unit	Outwash	Outwash	Bedrock	Lower Till	Lower Till	Upper Till	Upper Till	Bedrock	Bedrock	Outwash	Outwash	Upper Till	Outwash	Outwash	Upper Till	Outwash	Lower Till	Upper Till	Upper Till	Fill
Date																				
22-Apr-2003	341.95	341.80	341.06	343.35		344.54	345.48	340.93	342.21	341.94	342.88	342.79	342.92	344.53	344.63	343.18	343.60	343.54	343.52	
23-Jun-2003	341.86	341.70	340.87	343.08		344.16	344.91	345.02	340.86	341.80	341.59	342.76	342.66	342.79	343.64	343.64	343.14	343.38	343.37	343.36
02-Sep-2003	341.34	341.36	340.11	342.26		343.41	343.77	344.56	340.24	341.31	341.29	342.06	341.97	342.21	342.85	342.84	342.52	N/A	N/A	N/A
03-Nov-2003	341.75	342.51	340.60	342.92		344.63	344.95	344.43	340.60	341.93	341.95	342.63	342.54	342.66	343.10	343.10	342.54	343.58	343.58	343.62
19-Apr-2004	342.01	342.04	341.44	343.64		344.69	345.68	344.31	341.17	342.31	342.05	342.92	342.81	342.91	344.07	344.08	343.64	343.66	343.65	343.65
07-Jun-2004	341.89	341.76	341.17	343.19		344.23	344.64	344.29	340.94	341.78	341.64	342.82	342.72	342.74	343.34	343.43	343.35	343.55	343.52	343.49
23-Aug-2004	341.76	341.65	340.87	342.78		343.88	344.11	344.24	340.77	341.49	341.39	342.63	342.53	342.62	343.26	343.24	343.16	343.11	343.10	343.11
01-Nov-2004	341.78	341.75	340.41	342.49		343.62	343.92	344.21	340.69	341.73	341.73	342.48	342.38	342.56	343.15	343.13	342.85	343.17	343.17	343.19
11-Apr-2005	341.95	342.00	341.55	343.63		344.47	345.65	342.71	341.27	342.38	342.12	342.95	342.86	343.00	344.83	344.95	343.89	343.59	343.60	343.57
21-Jun-2005	341.82	341.73	341.15	343.13		344.19	344.60	342.36	340.91	341.81	341.68	342.66	342.56	342.74	343.50	343.55	343.26	343.17	343.21	343.22
31-Aug-2005	341.48	341.52	340.63	342.20		343.16	343.66	341.89	340.50	341.36	341.30	342.24	342.20	342.26	343.04	343.04	342.76	342.73	342.69	Dry
15-Nov-2005	341.70	341.60	340.51	342.61		344.49	344.24	342.17	340.59	341.73	341.70	342.78	342.40	342.65	343.32	343.33	342.77	343.23	343.20	343.23
24-Apr-2006	342.03	342.80	341.48	343.59		344.47	345.42	342.64	341.03	342.05	342.09	342.74	342.66	342.68	344.17	344.10	343.61	343.56	343.65	343.64
07-Jun-2006	342.03	341.90	341.43	343.50		344.31	345.13	342.83	341.13	341.85	341.78	342.84	342.57	342.67	343.69	343.97	343.56	343.60	343.58	343.55
30-Aug-2006	341.79	N/A	340.81	342.80		343.87	344.45	342.31	340.78	341.59	341.80	342.61	342.54	342.62	343.27	343.30	343.13	343.14	343.15	343.16
24-Nov-2006	342.30	342.31	341.63	343.77		344.68	345.63	342.83	341.22	342.10	342.10	342.99	342.87	343.00	344.60	344.78	343.61	343.68	343.64	343.61
10-Apr-2007	342.13	342.10	341.72	343.80		344.68	345.65	342.90	341.23	342.03	342.02	342.96	342.88	342.97	344.87	345.01	343.94	343.76	343.68	343.64
18-Jun-2007	342.01	341.78	341.14		343.10	344.16	344.54	342.20	340.85	341.68	341.36	342.65	342.57	342.65	343.35	343.04	343.31	343.46	343.41	343.38
13-Aug-2007	341.35	341.43	340.33		342.01	343.51	343.21	341.42	340.30	340.89	Dry	341.99	341.90	Dry	342.65	Dry	342.63	342.45	342.43	Dry
15-Nov-2007	341.23	341.18	340.12		341.75	342.48	341.77	342.36	340.20	341.00	341.00	341.84	341.81	341.97	342.48	Dry	342.29	342.76	342.76	Dry
29-Apr-2008	342.07	341.92	341.47		341.68	344.31	345.27	342.78	341.13	341.94	341.89	342.89	342.82	342.88	344.42	344.54	343.98	343.64	343.63	343.64
18-Jun-2008	341.90	341.76	341.27		343.17	344.37	344.81	342.43	340.95	341.72	341.70	342.66	342.62	342.76	343.11	342.17	343.54	343.20	343.20	343.22
11-Sep-2008	342.01	341.94	341.13		343.13	344.16	344.55	342.24	340.77	341.80	341.75	342.57	342.51	342.62	343.15	343.19	343.15	343.17	343.16	343.17
20-Nov-2008			341.57					342.60									343.45			
24-Nov-2008	341.97	341.91			343.59	344.58	345.35		340.30	341.06	341.04	341.74	341.86	341.89	344.15	344.23		342.44	342.70	342.92
27-Apr-2009	342.27	342.80	341.85		343.85	344.73	346.05	342.77	341.25	342.13	342.18	342.95	342.83	342.94	344.54	344.76	343.85	343.66	342.72	343.73
22-Jun-2009	341.91	341.97	341.24		343.27	344.20	344.75	342.46	341.05	341.83	341.86	342.67	342.67	342.82	343.14	344.50	343.91	343.12	343.27	343.22
20-Aug-2009	342.10	342.65			342.65	343.73	344.25		340.63	341.58	341.51	342.46	342.43	342.59	343.05	342.98		342.99	342.91	343.02
24-Aug-2009			340.67					342.13									343.03			
10-Nov-2009	341.87	341.70	340.51		342.46	343.72	344.38	342.21	340.42	341.76	341.74	342.57	342.49	342.62	342.98	343.06	342.81	342.99	342.91	343.02
20-May-2010	342.10	341.99	341.23		343.40	344.43	345.23	342.62	340.79	341.85	341.85	342.84	342.81	342.92	343.88	344.01	343.38	343.08	342.81	343.14
20-Oct-2010	342.02	341.93	340.88		344.09	343.37	345.07	342.67	340.73	341.95		342.74	342.82	342.86	343.48	343.88	342.99	343.08	342.81	343.14
18-Apr-2011	342.09	342.44	341.81		343.84	344.90	345.52	342.75	341.26	342.23	342.08	342.78	342.83	342.93	343.97	344.13	343.75	343.20	343.28	343.27
01-Nov-2011	342.02	341.93	341.20		342.89	344.09	344.67		340.38	341.19	341.24	342.73	342.77	342.87	343.64	343.73	343.14	343.00	343.20	343.14
07-May-2012	341.79	342.02	341.56		344.31	343.69	345.37	342.40	341.06	341.89	342.04	342.81	342.77	342.89	343.15	343.29	343.51	343.25	343.26	343.29
21-May-2012	341.95	341.87	341.38		343.39	344.38	345.16	342.38	NA	NA	NA	342.63	342.69	342.83	343.49	343.62	343.35	343.07	342.99	343.08
21-May-2013	341.67	342.06	341.48		343.45	344.41	345.65	343.35	341.09	342.01	342.11	342.92	342.85	342.92	343.52	343.62	343.43	343.32	343.35	343.36
13-Nov-2013	342.08	341.96	341.83		343.73	344.67	345.47	343.52	340.58	341.72	341.83	342.91	342.85	342.63	343.95	343.92	343.72	343.08	343.13	343.10
10-May-2014	342.14	342.17	342.11		343.84	344.83	345.63	343.05	341.35	342.16	342.13	342.93	342.87	342.94	344.23	344.42	343.99	343.50	343.49	343.39
20-Nov-2014	341.92	342.01	341.54		343.48	344.50	346.03		341.25	341.86	341.97	342.94	342.95	342.96	344.76	344.88	344.22			

Note: All Water Level in mASL

(9a Rpt 2-I to 12-III WL/EastvwEAC1/60339708/Apr-15)

A2: Groundwater Elevations - - Closed Eastview Road Landfill Site

Monitor	16-VII	16-VIII	17-I	17-II	17-III	17-IV	18-I	18-II	18-III	18-IV	19-I	19-II	19-III	19-IV	20-IR	20-IIR	21-IR	21-IIR	21-IIIR	
Geologic Unit	Bedrock	Lower Bedrock	Bedrock	Lower Till	Upper Till	Outwash	Upper Till	Outwash	Outwash	Fill/ Outwash	Bedrock	Lower Till	Upper Till	Upper Till	Bedrock	Upper Till	Upper Till	Upper Till	Upper Till	
Date																				
28-Apr-1992			340.94	342.78	342.98	343.40	342.06	341.99	341.87	341.92	342.10	342.22	345.54	347.36	341.99	341.64	344.23	344.52	344.19	
14-Aug-1992			340.89	342.75	342.83	343.17	342.36	342.28	342.01	342.04	342.40	342.41	345.28	346.64	342.73	344.35	345.86	346.15	347.31	
10-Nov-1992			341.07	342.96	343.23	343.83	342.22	342.12	341.99	342.02	342.68	342.73	346.13	348.11	343.11	345.12	346.51	346.97	347.91	
22-Mar-1993					343.60								344.67				345.41	344.82		
22-Apr-1993			341.27	343.04	343.32	344.13	342.16	342.13	342.11	342.13	342.62	342.61	346.11	348.53	342.89	344.63	346.52	347.10	347.75	
25-May-1993																				
08-Jun-1993			340.89	342.62	342.97	343.07	341.67	341.50	341.46	341.45	342.30	341.50	344.99	346.46	342.16	344.46	345.92	346.42	347.20	
23-Aug-1993			340.37	342.09	342.21	342.50	341.27	341.21	341.03	340.50	341.42	341.50	343.91	344.83	341.99	341.80	345.18	345.30	344.89	
26-Oct-1993			340.47	342.26	342.23		341.57	341.50	341.35	341.62	341.72	341.84	343.83	344.61	342.30	344.93	345.01	345.50	346.21	
16-Mar-1994																				
20-Apr-1994			340.85	342.99	343.28	344.06	342.28	342.17	342.04	342.06	342.46	342.51	345.98	348.19	342.84	344.95	346.81	346.96	347.67	
18-Jun-1994			340.69	342.55	342.76	343.16	341.65	341.56	341.36	DRY	341.88	341.89	344.67	346.16	342.17	344.33	345.74	346.36	346.79	
24-Aug-1994			340.18	342.05	342.18	DRY	341.25	341.18	341.18	DRY	341.31	341.33	343.74	344.64	341.69	340.81	344.52	345.08	346.06	
26-Oct-1994			339.90	341.75	341.81	DRY	341.27	341.20	341.17	DRY	340.75	340.76	342.65	343.14	340.91	DRY	343.76	344.25	344.54	
18-Apr-1995			340.80	342.70	342.93	343.40	341.84	341.76	341.75	341.76	342.12	342.14	345.40	347.44	342.36	344.50	345.43	346.08	346.70	
16-Jun-1995			340.69	342.62	343.91	343.39	341.70	341.62	341.33	DRY	341.99	342.06	344.98	346.70	342.46	343.94	345.65	346.38	347.43	
21-Aug-1995			340.66	342.52	342.64	342.94	341.71	341.60	341.48	341.64	341.86	341.86	344.51	345.64	342.27	344.19	345.01	345.65	345.72	
13-Nov-1995			341.07	342.73	342.81	344.05	342.32	342.25	342.04	341.62	342.07	342.06	345.15	347.00	342.32	345.04	344.93	345.55	346.53	
15-Apr-1996			340.96	342.97	343.30	344.06	342.15	342.08	342.02	342.05	342.30	342.37	344.88	347.85	342.63	344.99	346.31	347.16	347.57	
13-Jun-1996			341.03	342.89	343.08	343.43	342.18	342.16	342.02	342.08	342.47	342.45	345.54	347.49	342.82	344.99	346.44	347.33	347.76	
15-Aug-1996			340.46	342.60	342.58	342.83	341.80	341.75	341.55	DRY	341.96	342.05	344.60	345.82	342.41	343.77	345.37	346.30	346.20	
12-Nov-1996			340.96	342.77	342.88	343.13	342.13	342.05	341.98	342.02	340.40	341.22	345.48	347.39	342.42	344.91	345.52	346.28	347.01	
21-Apr-1997			341.07	342.92	343.20	343.64	342.30	342.20	342.16	341.90	340.90	341.64	345.74	347.91	342.86	344.89	346.78	348.12	347.68	
09-Jun-1997			340.83	342.63	342.89	343.31	341.87	341.76	341.51	341.72	340.53	341.15	344.91	346.90	342.37	343.80	345.98	347.70	347.37	
18-Aug-1997			340.11	341.98	342.12	342.35	341.44	341.29	341.10	DRY	339.69	340.23	343.23	344.16	341.21	342.87	343.92	344.37	344.04	
10-Nov-1997			340.49	342.25	342.15	Dry	341.97	341.90	341.91	341.97	340.26	340.73	343.23	343.76	341.65	343.56	343.78	344.98	344.23	
14-Apr-1998			340.84	342.79	343.10	343.63	342.15	342.04	341.91	341.98	341.01	341.69	345.50	347.57	342.60	344.86	346.27	347.73	347.49	
10-Jun-1998			340.39	342.15	342.43	342.79	341.54	342.03	341.23	342.05	339.98	340.67	344.07	345.28	341.74	342.91	344.65	345.82	345.36	
10-Aug-1998			340.12	341.97	342.12	342.38	341.32	341.23	341.12	Dry	339.30	340.08	343.08	343.88	341.16	341.60	343.61	344.26	343.77	
09-Nov-1998			339.48	341.29	341.51	Dry	340.98	340.97	340.90	Dry	338.72	339.26	341.40	341.76	340.21	Dry	342.50	Dry	Dry	
16-Apr-1999			340.69	342.75	343.04	343.53	341.97	341.90	341.70	341.80	340.33	341.00	344.36	345.34	341.89	344.56	344.66	346.73	346.27	
23-Jun-1999			340.45	342.27	342.57	342.95	341.54	341.45	341.16	Dry	339.83	340.65	343.90	344.87	341.70	344.04	345.03	345.52	345.24	
16-Aug-1999			340.30	342.07	342.27	342.61	341.41	341.35	342.16	341.60	339.80	340.35	343.29	344.09	341.26	342.95	344.36	344.36	344.23	
16-Nov-1999			340.72	342.73	342.84	343.18	341.92	341.88	341.66	341.72	340.69	341.10	344.08	344.90	341.96	345.31	344.96	346.59	346.31	
12-Apr-2000			340.70	342.86	343.11	343.53	342.05	341.99	342.01	341.98	340.87	341.48	345.65	347.80	342.33	345.39	346.30	347.83	347.69	
19-Jun-2000			340.98	343.07	343.46	344.18	342.65	342.57	342.09	342.07	341.20	341.85	345.96	348.14	342.68	345.39	347.08	347.87	347.80	
14-Aug-2000			340.91	342.82	343.02	343.35	342.10	342.00	341.86	341.89	340.97	341.67	345.20	346.72	342.64	344.94	346.27	347.23	347.02	
06-Nov-2000			340.33	342.10	342.16	342.41	341.54	341.50	341.40	341.59	340.12	340.69	343.49	344.28	341.49	342.51	344.49	344.51	344.37	
02-Apr-2001			340.95	343.07	343.45	344.24	342.73	342.68	342.10	342.10	341.28	341.88	346.08	348.39	342.72	Frozen	347.35	347.90	347.83	
25-Jun-2001			340.48	342.35	342.63	343.00	341.70	341.64	341.38	341.66	340.67	341.25	344.46	345.63	342.11	344.15	345.59	346.24	345.98	
13-Aug-2001			339.84	341.88	342.13	342.46	341.22	341.20	341.03	N/A	339.54	340.21	343.05	343.86	341.15	341.91	344.06	N/A	343.87	
05-Nov-2001			340.47	342.51	342.52	342.72	341.78	341.70	341.67	341.70	340.71	341.11	343.74	344.34	341.82	345.31	344.86	347.44	346.74	
22-Apr-2002			341.02	343.07	343.44	344.09	342.49	342.35	342.03	342.04	341.46	341.99	345.77	347.89	342.79	345.05	347.31	347.73	347.74	
17-Jun-2002			341.02	342.80	342.98	343.33	342.15	342.15	342.00	342.00	341.38	341.84	345.14	346.70	342.62	345.33	346.55	347.72	347.55	
12-Aug-2002			340.16	341.89	342.20	342.57	341.26	341.24	341.06	N/A	340.29	340.76	343.51	344.36	341.59	342.74	344.59	344.78	344.50	
04-Nov-2002			340.58	341.69	342.24	Dry	341.86	341.95	341.87	341.99	339.98	341.24	342.48	342.91	341.07	345.26	343.96	344.40	343.91	

Note: All Water Level in mASL

Location 20 was decommissioned in 2009. 20-I was replaced by 20-IR and 20-IV was replaced by 20-IIR. Location 21 was decommissioned in 2009 and replaced by 21-IR,21-IIR and 21-IIIR.

A2: Groundwater Elevations - - Closed Eastview Road Landfill Site

Monitor	16-VII	16-VIII	17-I	17-II	17-III	17-IV	18-I	18-II	18-III	18-IV	19-I	19-II	19-III	19-IV	20-IR	20-IIR	21-IR	21-IIR	21-IIIR	
Geologic Unit	Bedrock	Lower Bedrock	Bedrock	Lower Till	Upper Till	Outwash	Upper Till	Outwash	Outwash	Fill/ Outwash	Bedrock	Lower Till	Upper Till	Upper Till	Bedrock	Upper Till	Upper Till	Upper Till	Upper Till	
Date																				
22-Apr-2003			340.90	342.96	343.37	344.07	342.30	342.24	342.01	342.04	341.20	341.61	344.48	345.40	342.30	345.13	346.24	346.54	346.35	
23-Jun-2003	338.63		340.75	342.66	343.20	343.49	341.90	341.81	341.48	341.59	340.74	341.42	344.60	345.87	342.20	344.30	345.80	346.32	346.02	
02-Sep-2003	337.42	313.51	340.08	341.81	342.06	342.40	341.32	341.32	341.17	Dry	340.31	340.72	343.36	344.14	341.46	Dry	344.33	344.68	344.29	
03-Nov-2003	339.45	316.43	340.58	342.37	342.24	Dry	341.86	341.95	341.87	341.99	340.92	341.24	344.52	344.46	341.85	345.27	344.68	347.33	345.48	
19-Apr-2004	339.66	317.47	341.04	343.02	343.28	343.77	342.35	342.35	342.06	342.07	341.68	342.08	345.93	348.09	342.74	345.23	347.06	347.23	346.99	
07-Jun-2004	339.60	317.81	340.68	342.46	342.71	343.03	341.81	341.79	341.54	Dry	341.21	341.56	344.55	345.75	342.23	343.89	345.72	345.85	345.70	
23-Aug-2004	339.65	317.95	340.41	342.11	342.19	342.52	341.52	341.49	341.27	341.58	340.80	341.12	343.71	344.48	341.88	343.39	344.72	344.97	344.75	
01-Nov-2004	339.23	316.18	340.47	342.15	342.07	Dry	341.69	341.73	341.61	341.60	340.66	340.97	343.24	343.83	341.58	345.22	344.45	344.55	344.61	
11-Apr-2005	339.17	317.05	341.11	343.18	343.50	344.17	342.49	342.42	342.07	342.09	341.67	342.08	345.98	347.25	342.69	345.03	347.17	346.96	346.77	
21-Jun-2005	339.58	317.05	340.60	342.41	342.63	342.98	341.85	341.81	341.54	341.59	341.25	341.54	344.45	345.57	342.21	344.48	345.63	345.61	345.45	
31-Aug-2005	338.99	314.96	340.34	341.88	342.00	Dry	341.39	341.35	341.18	341.70	340.51	340.73	342.93	343.46	341.38	345.31	344.19	N/A	343.95	
15-Nov-2005	339.37	314.57	340.45	342.15	341.95	Dry	341.76	341.71	341.61	Dry	340.86	341.13	343.27	343.74	341.48	345.12	344.40	344.65	344.40	
24-Apr-2006	339.95	316.81	340.85	342.87	343.18	343.70	341.99	342.03	342.02	342.02	341.84	342.11	345.97	348.24	342.75	345.13	346.85	347.57	347.25	
07-Jun-2006	340.07	316.98	340.86	342.79	343.05	343.50	341.90	341.85	341.67	341.74	341.56	341.99	345.33	346.88	342.71	345.13	346.46	346.52	346.36	
30-Aug-2006	339.70	316.39	340.47	342.31	342.43	342.66	341.59	341.54	341.37	341.62	340.96	341.24	343.73	344.42	N/A	343.58	345.02	N/A	344.98	
24-Nov-2006	340.13	317.13	340.81	343.10	343.46	344.19	342.17	342.10	342.06	342.09	341.93	342.23	345.77	347.58	342.84	345.28	346.52	347.11	346.86	
10-Apr-2007	340.28	317.49	340.98	343.10	343.44	344.17	342.07	342.03	342.02	342.04	341.96	342.27	346.00	348.24	342.95	345.25	347.27	347.10	346.95	
18-Jun-2007	340.10	316.81	340.54	342.40	342.63	343.09	341.56	341.47	341.23	341.62	341.11	341.50	344.46	345.70	342.25	345.27	345.57	346.51	345.31	
13-Aug-2007	339.67	315.81	340.93	341.76	341.97	Dry	340.93	340.87	Dry	Dry	340.01	340.44	342.78	343.39	341.18	345.14	343.94	Dry	Dry	
15-Nov-2007	339.69	316.47	340.22	341.48	341.54	342.45	340.99	340.98	340.90	Dry	340.06	340.23	341.97	342.28	340.91	345.21	343.63	Dry	Dry	
29-Apr-2008	340.26	317.58	340.90	342.97	343.22	343.71	341.99	341.94	341.95	341.96	341.90	342.16	345.57	347.45	342.77	344.64	347.11	346.90	346.75	
18-Jun-2008	340.24	317.21	340.47	342.66	342.84	343.18	341.76	341.75	341.61	Dry	341.54	341.99	344.66	346.91	342.39	343.09	345.91	345.91	345.69	
11-Sep-2008	339.80	316.08	340.69	342.54	342.70	342.99	341.82	341.79	341.60	341.59	341.38	341.53	344.22	345.22	342.16	345.12	345.21	345.29	345.03	
20-Nov-2008	340.02	316.84									341.86				342.23					
24-Nov-2008			340.90	342.87	343.02	343.71	342.00	341.94	341.94	341.96		342.11	345.00	346.27		345.04	345.78	346.44	345.18	
27-Apr-2009	340.37	316.90	341.11	343.25	343.56	344.25	342.17	342.13	342.08	342.11	342.01	342.51	346.26	348.50	342.99	345.45	347.27	347.52	347.35	
22-Jun-2009	339.99	314.58	342.37	341.02	343.25	343.16	341.76	341.55	341.55	341.64	341.53	342.29	344.73	345.90	Decom	N/A	N/A	N/A	N/A	
20-Aug-2009			340.45	342.47	342.37	342.59	341.61	341.52	341.31	341.59		341.35	343.78	344.50		N/A	N/A	N/A	N/A	
24-Aug-2009	337.98	314.26									340.70				Decom					
10-Nov-2009	339.64	313.67	340.48	340.74	342.27	342.19	341.78	341.78	341.66	341.67	341.06	341.31	343.49	344.54	N/A	N/A	N/A	N/A	N/A	
20-May-2010	340.04	314.25	340.73	341.22	343.06	343.35	341.96	341.90	341.88	341.15	341.89	341.98	345.06	346.61	345.53	347.48	345.72	346.53	346.67	
20-Oct-2010	339.65	316.20	339.97	342.57	342.52	342.53	341.96	341.30	342.01	341.98	341.45	341.60	343.93	344.52	345.13	347.90	344.73	345.55	345.59	
18-Apr-2011	339.73	317.93	342.84	341.47	343.60	344.26	342.25	342.21	342.18	342.23	342.20	342.40	345.81	348.05	345.59	347.23	346.22	346.59	346.98	
01-Nov-2011		316.29	341.56	340.43	342.41	342.76	341.48	341.85	341.73	341.99	341.46	341.71	344.87	346.75	344.96	N/A	344.38	345.44	344.71	
07-May-2012	339.71	316.80	340.94	342.69	342.91	343.20	341.98	341.92	341.82	341.95	341.94	342.13	345.01	346.92	345.76	347.04	346.37	346.68	347.03	
21-Nov-2012	339.65	316.52	341.40	340.56	342.31	dry	341.50	341.93	341.82	341.95	341.46			342.79	342.79	347.04	344.87	345.57	344.86	
21-May-2013			340.98	342.77	343.05	343.34	342.23	342.19	342.07	342.14	341.98	342.19	345.03	346.81	342.96	343.72	346.10	347.11	347.09	
13-Nov-2013	340.07	316.42	341.21	342.25	342.95	342.43	341.89	341.82	341.98	342.01	341.55	341.94	344.57	346.11	342.64	343.57	345.97	346.99	347.02	
10-May-2014			341.16	343.07	343.39	343.93	342.14	342.15	342.04	342.72	342.34	342.47	345.83	348.27	343.16	343.95	343.31	345.24	345.29	
20-Nov-2014			341.03	342.81	343.01	344.28	341.97	341.94	342.14	342.40	342.04	342.15	345.64	347.62	342.49	343.63	345.51	345.28	345.45	

Note: All Water Level in mASL

Location 20 was decommissioned in 2009. 20-I was replaced by 20-IR and 20-IV was replaced by 20-IIR. Location 21 was decommissioned in 2009 and replaced by 21-IR,21-IIR and 21-IIIR.

A2: Groundwater Elevations - - Closed Eastview Road Landfill Site

Monitor	26-I	26-II	27-I	27-II	28-I	28-II	30-I	31-I	32-I	33-I	34-I	35-I	35-II	36-I	37-I	37-IR	37-IIR	50-I	53-I	53-II/IIR
Geologic Unit	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Lower Till
Date																				
28-Apr-1992	342.63	343.06	343.09	343.40	342.04	343.51	344.94	343.63	343.53	343.59	342.06	342.19	342.99	342.41	338.80			340.77		
14-Aug-1992	342.64	343.12	343.27	343.52	342.22	343.02	345.05	343.61	343.71	343.62	342.22	342.15	343.02	342.44	341.69			340.27		
10-Nov-1992	342.62	343.15	343.24	343.54	342.07	342.99	345.09	343.69	343.58	343.70	342.71	342.20	342.85	342.62	341.99			341.39		
22-Mar-1993	342.38		342.91		341.81						342.00	341.85								
22-Apr-1993	342.69	343.02	343.27	343.54	341.85	343.09	345.20	343.67	343.61	343.57	342.11	342.29	343.15	342.70	342.30			341.74	342.26	
25-May-1993																			342.20	
08-Jun-1993	342.54	343.05	343.12	343.36	341.96	342.40	345.02	343.64	343.58	343.55	342.04	342.14	342.92	342.40	342.01			341.72	341.73	
23-Aug-1993	341.72	DRY	342.37	dry	341.65	342.39	344.61	343.22	343.23	343.17	341.70	341.87	342.56	341.72	340.88			340.45	341.22	
26-Oct-1993	342.08	DRY	342.85	dry	341.69	dry	344.82	343.45	343.38	343.34	341.80	342.10	342.68	342.02	341.11			340.66	341.46	329.60
16-Mar-1994																				
20-Apr-1994	342.73	343.27	343.33	343.62	342.26	343.14	345.15	343.68	343.78	343.71	342.41	342.22	343.03	342.60	341.68			341.36	341.97	340.37
18-Jun-1994	342.63	342.96	343.26	343.28	341.98	342.62	344.91	343.53	343.56	343.39	342.35	342.29	342.93	342.26	341.47			341.09	341.66	341.46
24-Aug-1994	341.85	342.37	341.53	343.71	341.84	342.45	344.66	343.17	343.17	343.22	341.74	341.86	342.50	341.77	340.92			340.52	341.19	341.26
26-Oct-1994	342.04	342.34	342.41	342.56	341.79	342.46	344.45	342.98	342.94	343.02	341.59	341.36	342.25	341.46	340.53			340.10	340.84	340.81
18-Apr-1995	342.67	343.07	343.13	343.41	342.09	342.95	344.91	343.67	343.61	343.60	342.10	342.33	342.97	342.42	341.38			340.99	341.69	341.80
16-Jun-1995	342.47	342.92	342.96	343.24	342.06	342.88	344.89	343.52	343.53	343.40	342.04	342.11	342.78	342.25	341.25			340.85	341.70	341.37
21-Aug-1995	342.49	342.91	342.97	343.48	342.12	342.84	344.80	343.38	343.41	343.48	342.06	342.17	342.79	342.20	341.15			340.87	341.47	341.39
13-Nov-1995	342.78	343.15	343.37	343.59	342.42	343.09	344.92	343.62	343.66	342.13	342.26	342.26	343.55	342.47	341.36			341.64	341.73	341.50
15-Apr-1996	342.60	343.15	343.62	343.35	342.15	343.22	344.93	343.70	343.91	343.65	342.02	342.17	342.92	342.54	341.59			341.27	341.79	341.76
13-Jun-1996	342.78	342.85	343.18	343.40	342.14	343.11	345.22	343.73	343.34	343.35	342.13	342.39	343.07	342.60	342.04			341.65	342.13	340.99
15-Aug-1996	342.18	343.16	342.83	343.17	341.73		344.86	343.35	343.30	343.16	341.97	342.15	342.77	342.09	341.59			341.27	341.72	340.84
12-Nov-1996	342.76		343.25	343.56	341.95	343.02	345.12	343.45	343.66	343.64	341.97	342.32	342.88	342.46	341.79			341.46	341.90	341.43
21-Apr-1997	342.69	343.35	343.26	343.56	341.83	343.06	345.16	343.52	343.58	343.71	342.19	342.67	342.82	342.66	342.29			341.97	342.06	342.06
09-Jun-1997	342.63	342.85	343.09	343.36	341.78	342.94	345.07	343.52	343.25	343.14	342.01	342.25	342.92	342.37	341.86			341.51	341.84	340.11
18-Aug-1997	DRY	342.75	342.33	342.92	341.61	342.47	344.64	343.01	342.51	342.49	342.44	341.56	342.38	341.66	341.51			340.71	341.20	340.67
10-Nov-1997	342.35	342.75	342.88	343.16	342.18	342.52	344.86	343.43	343.21	343.34	341.81	341.82	342.54	341.95	341.24			340.91	341.50	341.04
14-Apr-1998	342.68	343.13	343.12	343.45	341.78	343.01	344.99	343.65	343.55	343.66	341.84	342.28	342.88	342.38	342.29			341.61	342.03	341.91
10-Jun-1998	342.11	342.59	342.40	343.12	341.67	342.57	344.36	343.34	343.05	342.79	341.67	341.60	342.52	341.86	341.59			340.89	341.45	340.83
10-Aug-1998	342.09	342.94	342.66	342.85	341.85	342.49	344.70	343.12	343.28	342.63	342.77	341.49	342.33	341.66	341.20			340.54	341.05	340.62
09-Nov-1998	341.83	342.17	342.15	Dry	342.10	Dry	342.64	342.71	342.80	342.31	342.52	341.58	341.69	341.13	340.60			339.91	340.43	340.85
16-Apr-1999	343.08	343.15	343.34	343.36	342.38	343.06	343.71	343.68	343.35	343.69	341.79	342.91	342.81	342.24	341.19			340.64	341.25	341.59
23-Jun-1999	Damaged	342.66	342.97	343.46	342.25	342.68	343.45	342.95	342.74	342.46	342.49	342.36	342.47	341.98	340.91			340.34	341.01	341.01
16-Aug-1999	Damage	343.16	342.50	Dry	341.99	342.58	342.86	Dry	342.62	342.79	341.60	342.16	342.05	341.86	340.70			340.16	340.76	340.46
16-Nov-1999	Dry	342.68	343.01	Dry	342.15	342.78	343.32	343.41	343.07	343.11	341.85	342.53	342.42	342.30	342.11			340.56	341.33	341.17
12-Apr-2000	343.16	Dry	343.61	Dry	343.00	343.04	343.86	343.64	343.67	343.79	341.93	342.89	342.83	342.33	341.11			340.56	340.75	341.63
19-Jun-2000	343.20	N/A	343.63	343.63	342.99	343.19	343.96	343.73	343.80	343.68	341.92	N/A	342.75	342.57	341.71			341.12	341.60	341.18
14-Aug-2000	Damaged		343.42	343.67	342.85	343.03	343.87	343.63Dry	343.67	343.65	342.04	342.83	342.81	342.46	341.91			341.31	341.76	340.94
06-Nov-2000	Dry	Dry	342.41	Dry	342.23	Dry	343.39	343.24	343.13	343.24	341.58	342.25	342.26	341.91	341.11			340.56	341.00	341.20
02-Apr-2001	N/A	Dry	343.60	343.23	343.10	343.15	343.96	343.68	343.74	343.63	N/A	342.84	342.89	342.52	341.71			341.18	341.52	341.75
25-Jun-2001	N/A	N/A	343.06	343.54	342.08	342.64	343.63	343.19	343.48	343.52	341.80	342.36	342.47	342.11	341.27			340.67	341.26	341.41
13-Aug-2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	342.14	341.53	N/A			339.96	340.47	340.20
05-Nov-2001	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	342.78	342.77	341.91	N/A			340.58	341.22	341.19
22-Apr-2002	343.06	N/A	343.48	343.66	342.97	343.00	343.85	343.64	N/A	N/A	N/A	342.86	342.91	342.78	341.96			341.41	341.68	341.78
17-Jun-2002	343.15	N/A	343.57	343.69	343.03	343.04	343.91	343.54	343.72	343.67	341.90	342.86	342.86	342.17	341.99			341.39	341.75	341.05
12-Aug-2002	Dry	Dry	Dry	343.65	Dry	Dry	Dry	Dry	Dry	343.07	Dry	341.98	342.12	341.68	341.11			340.48	340.92	340.68
04-Nov-2002	Dry	Dry	Dry	343.66	Dry	Dry	343.55	N/R	N/R	343.27	N/R	341.65	342.68	341.58	340.57			340.06	340.57	340.93

Note: All Water Level in mASL

A2: Groundwater Elevations - - Closed Eastview Road Landfill Site

Monitor	26-I	26-II	27-I	27-II	28-I	28-II	30-I	31-I	32-I	33-I	34-I	35-I	35-II	36-I	37-I	37-IR	37-IIR	50-I	53-I	53-II/IIR
Geologic Unit	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Outwash	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Lower Till
Date																				
22-Apr-2003	N/A	N/A	343.34	343.68	343.01	343.01	343.72	343.58	343.63	343.57	N/A	342.84	342.84	342.43	341.24			340.64	341.35	341.48
23-Jun-2003	Dry	Dry	342.75	343.13	341.90	342.70	343.19	342.83	343.07	342.95	342.46	342.73	342.67	342.28	341.12			340.56	341.21	341.05
02-Sep-2003	Dry	Dry	Dry	Dry	Dry	Dry	Dry	342.69	342.42	342.45	341.50	N/A	342.13	341.63	340.52			339.98	340.60	340.88
03-Nov-2003	342.98	N/R	343.03	Dry	Dry	342.57	343.55	343.51	342.77	343.27	342.23	342.76	342.68	342.13	340.81			340.31	340.88	341.14
19-Apr-2004	343.14	N/A	343.60	N/A	342.99	343.08	343.86	343.60	343.76	343.64	342.70	342.88	342.88	342.53	341.92			341.38	341.69	342.16
07-Jun-2004	341.21	Dry	342.65	343.04	342.23	342.76	343.26	343.14	343.08	342.94	342.19	342.45	342.33	342.23	341.78			341.21	341.55	342.50
23-Aug-2004	Dry	Dry	342.79	342.95	343.10	N/A	343.47	343.12	342.94	342.88	341.95	342.34	342.55	342.01	341.44			340.84	341.38	342.11
01-Nov-2004	343.01	N/R	342.71	Dry	342.39	342.61	343.18	343.20	342.85	342.77	342.28	342.39	342.32	342.03	341.17			340.57	341.09	342.44
11-Apr-2005	N/A	N/A	N/A	N/A	343.01	343.18	343.83	N/A	N/A	N/A	N/A	342.94	342.96	342.62	342.09			341.52	341.82	342.12
21-Jun-2005	Dry	Dry	342.81	342.96	342.43	342.63	343.59	343.17	342.86	342.80	341.91	342.38	342.68	342.18	341.55			341.00	341.47	341.32
31-Aug-2005	Dry	Dry	342.52	Dry	342.05	342.64	342.89	342.72	342.50	342.27	341.82	342.06	342.14	341.82	340.91			340.33	340.92	341.51
15-Nov-2005	Dry	N/R	343.18	Dry	342.47	342.57	343.15	343.55	343.04	343.10	342.44	342.38	342.46	341.87	340.84			340.35	341.04	342.29
24-Apr-2006	343.17	N/A	343.54	N/A	343.03	343.14	343.87	343.32	343.54	343.57	342.98	342.80	342.86	342.44	341.91			341.48	341.74	342.43
07-Jun-2006	342.95	N/A	343.34	N/A	342.82	343.02	343.78	343.70	343.61	343.57	342.49	342.87	342.86	342.42	341.89			341.33	341.76	342.13
30-Aug-2006	Dry	N/A	342.60	342.89	342.32	342.65	343.46	343.23	342.80	342.61	342.06	342.38	342.25	342.13	341.40			340.81	341.25	342.09
24-Nov-2006	343.17	N/R	343.56	343.46	343.03	343.09	343.91	343.77	343.77	343.70	343.02	342.88	343.02	342.67	342.02			341.50	341.91	342.84
10-Apr-2007	343.13	N/A	343.19	343.47	342.59	343.14	343.89	343.56	343.21	343.11	343.03	Frozen	Frozen	342.59	342.18			341.69	341.97	342.65
18-Jun-2007	343.01	N/A	342.90	343.09N/A	342.33	342.71	342.54	343.21	343.26	343.39	342.49	342.98	342.52	342.19	341.57			341.11	341.50	339.49
13-Aug-2007	Dry	N/A	342.22	342.85	342.17	Dry	342.69	342.56	342.24	342.15	341.48	Dry	342.07	341.57	340.96			340.41	340.88	341.23
15-Nov-2007	Dry	N/R	342.09	342.81	342.05	342.57	342.48	342.22	343.00	342.81	342.89	341.78	341.90	341.60	340.61			340.14	340.70	341.27
29-Apr-2008	343.09	N/A	343.43	343.37	343.13	343.20	343.78	343.64	343.73	343.66	342.94	342.84	342.88	342.54	342.09			341.48	341.85	341.94
18-Jun-2008	N/A	N/A	342.77	343.05	342.33	342.71	343.18	342.25	342.51	342.60	342.32	343.02	342.58	342.32	341.85			341.31	341.63	341.64
11-Sep-2008	Dry	N/A	343.00	343.03	342.75	342.78	343.51	343.33	343.39	343.29	Dry	342.84Dry	342.75	342.27	341.50			341.02	341.45	341.81
20-Nov-2008															341.66			341.32	341.75	341.79
24-Nov-2008	342.93	N/R	342.95	342.47	342.45	342.96	343.30	342.02			343.14	342.73	341.35	342.45						
27-Apr-2009	343.02	N/A	343.43	343.35	342.88	343.24	343.82	343.59	344.48	343.59	343.02	343.31	342.69	342.76				341.91	342.07	339.57
22-Jun-2009	343.10	N/A	342.95	342.58	342.36	342.87	343.21	343.22	343.70	343.63	342.87	342.83	342.88	342.30	341.82			341.41	341.52	341.72
20-Aug-2009	342.93	N/A	342.84	342.91	342.28	342.59	343.02	343.17	343.33	343.20	341.38	342.67	342.68	342.05						
24-Aug-2009															341.18			339.02	341.19	341.61
10-Nov-2009	342.93	342.58	342.56	342.90	342.28	342.57	343.10	343.32	342.76	342.98	342.40	342.58	342.45	342.07	340.85			340.49	340.92	341.57
20-May-2010	343.16	342.79	343.05	342.78	342.38	342.91	343.23	343.16	343.61	343.54	342.81	342.71	342.81	342.32	341.34			338.97	341.54	341.36
20-Oct-2010	342.93	342.58	341.96	342.61	343.48	343.27	344.59	342.76	343.26	343.45	342.59	342.93	342.42	342.33	340.95			339.31	341.37	341.48
18-Apr-2011	343.05	342.73	342.97	342.73	342.64	342.75	342.93	342.97	343.66	343.60	343.01	342.82	342.95	342.72	341.95			341.39	342.07	341.78
01-Nov-2011	dry	342.64			342.19	342.61	342.24	N/A	343.11	343.06	N/A	342.02	342.23		341.34			340.98	341.52	341.64
07-May-2012	dry	N/A	343.06	342.80	342.43	N/A	343.31	N/A	343.69	343.58		343.20	342.84	342.64		342.21	339.08	341.24	341.81	341.76
21-Nov-2012	dry	342.68	342.80	343.00	342.23	342.66	343.45	343.17	342.84	343.15		NA	NA	NA		341.32	341.25	340.96	341.64	341.89
21-May-2013			343.24	342.88	342.78		343.26		343.77	343.54	343.39			342.93		341.70	341.61	341.33	341.80	341.80
13-Nov-2013	342.95				341.88		342.51									341.93	341.70	341.62	342.06	341.86
10-May-2014	343.10		343.74	343.31	343.21		343.73		343.76	343.61	343.49	343.33	343.07	344.98		342.21	342.19	342.25	342.41	341.94
20-Nov-2014	frozen				frozen		frozen							342.82		341.50	341.58	341.42	341.78	341.45

Note: All Water Level in mASL

A2: Groundwater Elevations - - Closed Eastview Road Landfill Site

Monitor	54-I	60-I	60-II	60-III	90-I	90-II	91-I	92-I	93-I	94-I	95-I	96-I	96-II	86-2
Geologic Unit	Bedrock	Upper Till	Upper Till	Lower Till	Lower Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Upper Till
Date														
28-Apr-1992														341.18
14-Aug-1992														343.15
10-Nov-1992														343.68
22-Mar-1993														340.60
22-Apr-1993	343.66													340.69
25-May-1993	345.33													
08-Jun-1993	345.69													342.44
23-Aug-1993	344.33	341.93	339.78	341.75										341.41
26-Oct-1993		342.42	343.56	343.74										343.72
16-Mar-1994														
20-Apr-1994	345.31	342.90	344.36	344.97										343.85
18-Jun-1994	344.68	342.30	343.53	344.52										343.09
24-Aug-1994	343.91	341.74	342.73	343.71										341.65
26-Oct-1994	343.16	341.16	341.63	342.29										340.85
18-Apr-1995	344.68	342.48	344.07	344.84										343.46
16-Jun-1995	344.78	342.50	344.14	345.02										342.94
21-Aug-1995	344.26	342.36	343.89	344.88										
13-Nov-1995	344.26	342.35	344.03	345.49										344.17
15-Apr-1996	345.27	342.73	344.47	345.43										344.11
13-Jun-1996	345.31	342.90	344.42	345.89										344.13
15-Aug-1996	344.75	342.49	344.05	345.03										342.62
12-Nov-1996	345.01	342.64	344.58	345.78										344.12
21-Apr-1997	345.48	342.98	344.85	345.91										343.96
09-Jun-1997	344.98	342.51	344.35	345.53										343.23
18-Aug-1997	343.80	341.36	342.43	343.93										341.01
10-Nov-1997	343.54	341.77	344.05	344.92										343.81
14-Apr-1998	345.32	342.74	344.58	345.74										
10-Jun-1998	344.21	341.86	343.48	344.86										342.36
10-Aug-1998	343.51	341.28	342.76	344.16										340.85
09-Nov-1998	342.22	340.35	340.89	341.77										340.85
16-Apr-1999	344.26	342.02	344.04	345.10										343.87
23-Jun-1999	344.06	341.77	343.56	344.69										343.14
16-Aug-1999	343.52	341.35	343.04	344.23										342.65
16-Nov-1999	343.90	342.06	344.30	345.31										
12-Apr-2000	344.86	341.18	344.14	345.45										344.77
19-Jun-2000	345.48	342.73	344.64	345.93										344.73
14-Aug-2000	345.19	342.68	344.60	345.53										344.36
06-Nov-2000	343.91	341.61	343.22	344.30										342.76
02-Apr-2001	345.42	342.78	344.65	346.11										344.74
25-Jun-2001	344.59	342.19	344.21	345.35										343.80
13-Aug-2001	343.66	341.23	342.84	344.43										341.72
05-Nov-2001	344.10	341.94	344.02	345.67										344.73
22-Apr-2002	345.52	342.87	344.74	345.77										344.63
17-Jun-2002	345.19	342.67	344.64	345.84										344.66
12-Aug-2002	343.92	341.70	343.70	344.79										342.66
04-Nov-2002	343.05	341.28	344.17	346.23										N/A

Note: All Water Level in mASL

A2: Groundwater Elevations - - Closed Eastview Road Landfill Site

Monitor	54-I	60-I	60-II	60-III	90-I	90-II	91-I	92-I	93-I	94-I	95-I	96-I	96-II	86-2
Geologic Unit	Bedrock	Upper Till	Upper Till	Lower Till	Lower Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Bedrock	Upper Till
Date														
22-Apr-2003	344.99	342.37	344.26	345.55										344.60
23-Jun-2003	344.72	342.46	344.25	345.26		342.03	342.70	340.54						N/A
02-Sep-2003	343.75	341.58	343.72	344.64		341.30	341.83	339.94						342.65
03-Nov-2003	343.93	341.84	344.17	346.23	316.76	341.82	342.23	340.27						344.65
19-Apr-2004	345.41	342.75	344.63	346.12	317.89	342.48	343.22	341.55						344.57
07-Jun-2004	344.85	342.32	344.21	345.16	317.94	342.12	342.67	341.32						N/A
23-Aug-2004	344.36	341.94	343.75	344.74	318.00	341.79	342.23	340.92						342.76
01-Nov-2004	343.25	341.73	343.92	345.80	316.63	341.63	341.95	340.64						344.31
11-Apr-2005	345.47	342.75	344.47	345.57	317.27	342.57	343.19	341.69						344.36
21-Jun-2005	344.73	342.28	344.19	345.08	317.55	342.14	342.62	341.00						343.49
31-Aug-2005	343.68	341.47	343.09	344.31	315.32	342.72	341.77	340.44						341.68
15-Nov-2005	343.63	341.64	343.88	345.74	314.99	341.75	342.08	340.21						344.42
24-Apr-2006	345.42	342.79	344.61	345.97	317.68	342.71	343.22	341.81						344.35
07-Jun-2006	345.41	342.76	344.75	345.68	317.29	342.62	339.60	341.45						344.28
30-Aug-2006	344.43	342.05	343.78	344.86	316.66	341.97	342.34	340.98						342.99
24-Nov-2006	345.39	342.89	344.76	345.94	317.50	342.73	343.29	341.60						344.50
10-Apr-2007	345.56	343.02	344.88	346.02	317.91	342.84	343.42	341.85						342.99
18-Jun-2007	344.86	342.28	344.15	345.63	317.19	342.18	342.63	341.25						Dry
13-Aug-2007	343.85	341.21	342.52	344.11	316.14	341.34	341.52	340.49						342.44
15-Nov-2007	343.08	341.08	343.25	345.80	316.96	341.08	341.13	340.23	340.10	340.45	340.18			342.44
29-Apr-2008	345.25	342.85	344.68	345.75	317.91	342.82	343.23	341.73	340.94	341.80	341.68			344.39
18-Jun-2008	344.95	342.46	344.34	345.65	317.62	342.36	342.83	341.44	340.55	341.54	341.44			343.24
11-Sep-2008	344.59	342.26	344.10	345.09	316.54	342.19	342.55	341.10	340.52	341.30	341.10			344.57
20-Nov-2008	348.11	342.74			317.43	342.69	343.18	341.35	340.73	341.55	341.49			
24-Nov-2008			344.72	345.79										342.64
27-Apr-2009	345.53	343.03	345.91	346.26	318.13	342.56	343.59	342.08	340.61	342.00	342.28			344.38
22-Jun-2009	345.06	342.64	344.69	345.60	318.11	341.87	342.26	341.52	340.86	341.63	341.51			343.81
20-Aug-2009			344.11	344.93										343.18
24-Aug-2009	344.28	342.25			314.50	341.96	342.47	340.87	340.44	340.85	340.63			
10-Nov-2009	343.90	341.97	344.30	345.11	313.40	341.90	342.24	340.56	340.29	340.79	340.61			343.18
20-May-2010	344.89	342.66	344.81	345.87	312.17	342.56	343.05	341.06	340.70	341.77	341.17			343.92
20-Oct-2010	344.24	342.44	344.46	345.95	316.77	341.57	342.71		340.50	340.72	340.79			
18-Apr-2011	345.39	343.06	346.25	346.24	317.61	342.94	343.33	Decom	340.91	341.78	341.56			343.92
01-Nov-2011	343.34	342.26	344.46	345.68	315.65	342.21	342.58	Decom	340.73	341.22	341.02			
07-May-2012	344.98	342.84	344.95	345.28	316.55	342.70	343.32		340.90	341.52	341.60	335.76	339.32	
21-Nov-2012	344.85	342.46	344.46	345.69	316.61	342.65	342.75		340.78	341.29	341.20	334.85	338.33	
21-May-2013	345.11	342.90	345.33	346.98	317.46	342.62	343.15		340.94	341.54	341.57	336.17	339.52	343.08
13-Nov-2013	345.14	343.12	345.56	346.89	317.78	342.98	343.43		341.00	341.82	341.86	336.90	339.46	
10-May-2014		343.17	346.51	347.33		343.16	343.52		341.35	342.10	342.15	337.43	340.15	342.86
20-Nov-2014	344.91	342.81	346.58	346.66		343.06	343.35		341.03	341.55	341.50	336.60	339.54	343.04

Note: All Water Level in mASL

A3 : Performance Monitors Groundwater Elevations - Eastview Road Landfill



Date Monitor	04-Apr-14	14-Jul-14	23-Sept-14	11-Nov-14
C1-I	341.97	341.94	341.83	341.86
C1-II	342.19	342.09	342.03	341.94
C2-I	341.99	341.98	341.93	341.90
C2-II	342.42	342.33	342.25	342.02
C3-I	342.67	342.69	342.54	342.58
C5-I	342.92	342.44	342.15	342.23
C6-I	342.20	342.12	341.98	342.05
C6-II	342.30	342.18	341.96	342.10
C7-I	342.07	342.05	341.91	341.99
C8-I	342.38	342.37	342.18	342.27
C9-I	342.51	342.57	342.37	342.52
C9-II	342.61	342.63	342.44	342.65
C10-I	342.56	342.54	342.32	342.53
C10-II	342.65	342.49	342.41	342.57
C11-I	342.77	342.75	342.55	342.74
C11-II	342.83	342.80	342.60	342.79
C12-I	343.07	342.69	342.35	342.52
C13-I	343.08	342.75	342.35	342.49
C14-I	344.60	344.27	343.91	344.10
D1-I	341.99	341.58	341.49	341.40
D2-I	341.10	341.15	340.91	340.97
D3-I	341.35	340.60	340.28	340.35
D4-I	341.27	341.29	341.17	341.27
D5-I	342.14	342.18	342.02	342.14

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Bedrock Locations																						
	5-III	13-I	14-IV	15-I	16-VII	16-VIII	19-I	20-I /IR	37-I	37-IR	50-I	53-I	54-I	90-I	90-II	91-I	92-I	93-I	94-I	95-I	94-I	95-I	
1/13/1994							341.79					341.49	344.30										
1/20/1994	341.13	341.91		338.17			341.70	342.16	341.02		340.65	341.41	344.24										
2/17/1994	341.19	341.92		337.91			341.76	342.23	341.02		340.66	341.48	344.22										
3/16/1994	341.32	342.12		338.05			341.88	342.25	341.02		340.85	341.54	344.48										
4/12/1994	341.78	342.43		338.59			342.30	342.77	341.61		341.28	341.95	345.21										
4/20/1994	341.83	342.42		338.69			342.46	342.84	341.68		341.36	341.97	345.31										
5/16/1994	342.05	342.52		338.90			342.57	342.86	341.87		341.52	342.08	345.44										
6/18/1994	341.38	342.12		338.21			341.88	342.17	341.47		341.09	341.66	344.68										
6/21/1994	341.37	342.13		338.24			341.96	342.25	341.47		341.08	341.69	344.77										
7/18/1994	341.24	342.42		338.06			341.78	342.80	341.34		340.92	341.58	345.08										
8/15/1994	340.88	341.64		337.70			341.45	341.81	341.06		340.67	341.30	344.08										
8/24/1994	340.63	341.51		337.60			341.31	341.69	340.92		340.52	341.19	343.91										
9/23/1994	340.36	341.54		337.63			340.75	341.78	340.93		341.10	339.97	344.33										
10/19/1994	340.31	341.42		337.53			340.74	341.74	340.87		340.93	340.80	343.16										
10/26/1994	340.57	341.16		337.56			340.75	340.91	340.53		340.10	340.84	343.16										
11/16/1994	340.47	341.30		337.66			340.94	341.45	340.57		340.16	340.16	343.16										
12/19/1994	340.69	341.38		337.60			341.26	341.68	340.73		340.33	341.12	343.25										
1/18/1995	341.42	341.62		338.22			342.00	342.29	341.29		340.95	341.55	344.29										
2/15/1995	341.37	341.44		338.13			341.91	342.19	340.78		340.68	341.56	344.65										
3/13/1995	341.46	341.49		338.21			341.92	342.15	340.95		340.88	341.66	344.58										
4/11/1995	341.56	342.24		338.04			342.08	342.35	341.40		341.03	341.70	344.67										
4/18/1995	341.58	342.21		338.31			342.12	342.36	341.38		340.99	341.69	344.68										
5/11/1995	341.67	342.04		338.55			342.33	342.68	341.58		341.23	341.80	345.22										
6/16/1995	341.46	342.06		338.03			341.99	342.46	341.25		340.85	341.70	344.78										
6/21/1995	341.46	342.06		338.03			341.99	342.46	341.25		340.85	341.70	344.78										
7/17/1995	341.27	341.90		338.08			341.74	342.12	341.18		340.82	340.54	344.41										
8/15/1995	341.38	342.02		338.25			341.84	342.16	341.30		340.95	341.36	344.22										
8/21/1995	341.17	341.97		337.73			341.86	342.27	341.15		340.87	341.47	344.26										
9/23/1995	340.75	341.60		337.81			341.21	341.83	340.87		341.05	340.44	343.72										
9/28/1995																							
10/18/1995																							
10/19/1995	340.77	341.63		337.84			341.24	341.86	340.89		340.99	340.52	343.78										
11/11/1995																							
11/13/1995	341.59	342.15		338.34			342.07	342.32	341.36		341.64	341.73	344.26										
11/22/1995	341.96	342.32		338.67			342.25	342.58	341.64		341.34	341.99	344.82										
12/18/1995	341.68	342.25		338.26			342.21	342.46	341.50		341.17	341.87	344.84										

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Bedrock Locations																						
	5-III	13-I	14-IV	15-I	16-VII	16-VIII	19-I	20-I /IR	37-I	37-IR	50-I	53-I	54-I	90-I	90-II	91-I	92-I	93-I	94-I	95-I	94-I	95-I	
1/16/1996	341.12	341.91		337.83			341.72	342.08	341.13		340.78	341.43	344.39										
2/14/1996	341.33	342.15		337.93			342.06	342.43	341.39		341.03	341.63	344.87										
3/13/1996	341.28	342.14		337.94			342.03	342.39	341.37		341.02	341.62	344.86										
4/9/1996	341.62	342.28		338.34			342.30	342.63	341.59		341.27	341.79	345.27										
4/15/1996	341.62	342.28		338.34			342.30	342.63	341.59		341.27	341.79	345.27										
5/6/1996	342.00	342.57		339.00			342.58	343.01	341.97		341.59	342.08	345.57										
6/10/1996	342.05	342.44		339.00			342.47	342.82	342.04		341.65	342.13	345.31										
6/13/1996	342.05	342.44		339.00			342.47	342.82	342.04		341.65	342.13	345.31										
7/16/1996	341.77	342.35		338.87			342.22	342.64	341.94		341.52	341.96	345.07										
8/12/1996	341.40	342.09		338.51			341.96	342.41	341.59		341.27	341.72	344.75										
8/15/1996	341.40	342.09		338.51			341.96	342.41	341.59		341.27	341.72	344.75										
9/17/1996	341.80	342.32		338.67			342.12	342.49	341.75		341.34	341.92	344.79										
10/16/1996	341.80	342.39		338.66			342.24	342.63	341.78		341.39	341.91	344.91										
11/12/1996	341.82	342.45		338.75			340.40	342.42	341.79		341.46	341.90	345.01										
11/13/1996	341.82	342.45		338.75			340.40	342.42	341.79		341.46	341.90	345.01										
12/12/1996	341.75	342.41		338.49			340.26	342.41	341.71		341.45	341.85	344.92										
1/20/1997	341.78	342.45		338.56			340.26	342.55	341.88		341.61	341.92	345.01										
2/18/1997	341.67	342.32		338.32			340.17	342.42	341.76		341.48	341.83	344.80										
3/21/1997	342.09	342.64		338.94			340.62	342.83	342.20		341.92	342.12	345.44										
4/21/1997	342.07	342.66		339.04			340.90	342.86	342.29		341.97	342.06	345.48										
5/14/1997	342.03	342.64		339.04			340.97	342.80	342.28		341.88	342.16	345.41										
6/9/1997	341.66	342.43		338.74			340.53	342.37	341.86		341.51	341.84	344.98										
7/15/1997	341.33	342.06		338.52			340.17	341.90	341.61		341.26	341.63	344.47										
8/18/1997	340.87	341.47		337.72			339.69	341.21	341.51		340.71	341.20	343.80										
9/29/1997	341.00	341.71		338.25			340.08	341.57	341.21		340.88	341.33	343.64										
10/20/1997	340.75	341.44		337.91			339.91	341.35	340.99		340.66	341.15	343.21										
11/10/1997	341.20	341.89		338.25			340.26	341.65	341.24		340.91	341.50	343.54										
12/15/1997	341.36	341.96		338.08			340.57	342.01	341.26		340.99	341.59	343.88										
1/20/1998	341.78	342.33		338.37			340.94	342.49	342.03		341.40	341.91	344.87										
2/23/1998	341.77	342.37		338.45			340.98	342.54	342.04		341.42	341.67	344.98										
3/19/1998	341.81	342.47		338.50			341.10	342.68	342.18		341.52	341.89	345.34										
4/14/1998	341.89	342.50		338.72			341.01	342.60	342.29		341.61	342.03	345.32										
5/14/1998	341.69	342.33		338.51			340.73	342.31	342.05		341.37	341.82	344.91										
6/10/1998	341.04	341.91		337.81			339.98	341.74	341.59		340.89	341.45	344.21										
7/15/1998	341.06	342.03		338.22			340.03	341.82	341.52		340.83	341.47	344.14										
8/10/1998	340.58	341.42		337.36			339.30	341.16	341.20		340.54	341.05	343.51										

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Bedrock Locations																						
	5-III	13-I	14-IV	15-I	16-VII	16-VIII	19-I	20-I /IR	37-I	37-IR	50-I	53-I	54-I	90-I	90-II	91-I	92-I	93-I	94-I	95-I	94-I	95-I	
9/23/1998	340.07	340.80		337.10			338.77	340.48	340.74		340.03	340.63	342.62										
10/16/1998	340.08	340.80		337.35			338.73	340.32	340.70		340.02	340.61	342.47										
11/9/1998	340.00	340.69		337.31			338.72	340.21	340.60		339.91	340.43	342.22										
12/15/1998	340.04	341.20		337.32			339.07	340.45	340.62		339.97	340.62	342.34										
1/26/1999	339.98	341.01		336.99			339.03	340.42	340.45		339.82	340.58	342.33										
2/15/1999	340.44	341.61		337.29			339.59	341.32	343.04		340.28	340.90	343.22										
3/16/1999	340.71	341.79		337.73			340.17	341.70	341.10		340.48	341.13	343.88										
4/16/1999	340.82	341.98		337.83			340.33	341.89	341.19		340.64	341.25	344.26										
5/20/1999	340.57	341.83		337.68			339.75	341.69	341.02		340.48	341.06	344.20										
6/23/1999	340.52	341.71		337.98			339.83	341.70	340.91		340.34	341.01	344.06										
7/16/1999	340.40	341.78		337.99			339.76	341.68	340.89		340.33	341.00	344.03										
9/16/1999	340.03	341.37		337.52			339.75	341.10	340.56		339.98	340.66	343.23										
10/18/1999	340.42	341.65		337.95			340.13	341.50	340.77		340.23	340.92	343.34										
12/16/1999	341.00	341.93		337.95			339.81	342.19	341.18		340.67	341.33	344.20										
1/27/2000	340.59	341.78		337.68			340.47	341.97	341.01		340.49	341.13	344.23										
2/15/2000	340.25	341.54		337.28			340.26	341.73	340.92		340.27	340.81	343.99										
3/21/2000	340.70	341.95		337.84			340.80	342.27	341.11		340.57	341.08	344.81										
5/25/2000	341.07	342.30		338.35			341.21	342.65	341.55		340.98	341.52	345.40										
7/27/2000	341.31	342.26		338.74			340.98	342.52	341.76		341.18	341.69	345.08										
9/21/2000	340.81	341.86		338.03			340.46	341.77	341.37		340.78	341.18	344.31										
10/17/2000	340.80	341.81		338.02			340.44	341.75	341.35		340.75	341.18	344.12										
12/18/2000	340.64	341.85		337.77			340.56	341.95	341.22		340.57	341.13	344.22										
1/16/2001	340.58	341.84		337.56			340.50	342.09	341.14		340.50	341.08	344.27										
2/14/2001	340.96	342.12		337.99			341.06	342.53	341.44		340.91	341.51	345.13										
3/12/2001	340.93	342.10		337.93			341.00	342.58	341.47		340.94	341.41	345.04										
4/2/2001	341.10	342.15		338.16			341.28	342.72	341.71		341.18	341.52	345.42										
5/14/2001	340.87	342.05		338.05			340.96	342.36	341.53		340.92	341.36	345.01										
6/25/2001	340.54	341.95		337.69			340.67	342.11	341.27		340.67	341.26	344.59										
7/26/2001	340.14	341.40		337.36			340.06	341.54	340.90		340.31	340.78	344.07										
8/13/2001	339.79	341.11		337.07			339.54	341.15	N/A		339.96	340.47	343.66										
9/19/2001	339.96	341.24		337.54			339.69	340.83	N/A		340.03	340.59	343.19										
10/29/2001	340.71	341.81		337.98			340.58	341.67	N/A		340.52	341.13	343.85										
11/5/2001	340.83	341.83		338.02			340.71	341.82	N/A		340.58	341.22	344.10										
12/21/2001	341.24	342.24		338.39			341.28	342.46	N/A		341.03	341.54	345.07										
1/29/2002	341.13	342.16		338.17			341.19	342.44	N/A		340.94	341.46	345.02										
2/22/2002	341.26	342.28		338.32			341.42	342.67	N/A		341.11	341.60	345.38										

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Bedrock Locations																						
	5-III	13-I	14-IV	15-I	16-VII	16-VIII	19-I	20-I /IR	37-I	37-IR	50-I	53-I	54-I	90-I	90-II	91-I	92-I	93-I	94-I	95-I	94-I	95-I	
3/26/2002	341.13	342.22		338.31			341.25	342.63	341.64		341.08	341.52	345.36										
4/22/2002	341.37	342.38		338.60			341.46	342.79	341.96		341.41	341.68	345.52										
5/9/2002	341.62	342.46		338.88			341.58	342.78	342.09		341.48	341.82	345.51										
6/17/2002	341.47	342.34		338.67			341.38	342.62	341.99		341.39	341.75	345.19										
7/23/2002	340.62	341.65		337.78			340.51	341.79	341.30		340.69	341.07	344.36										
8/12/2002	340.43	341.49		337.68			340.29	341.59	341.11		340.48	340.92	343.92										
9/13/2002	339.93	340.93		337.27			339.70	340.96	340.69		340.06	340.53	343.33										
10/22/2002	339.88	341.00		337.20			339.92	340.97	340.59		340.01	340.50	343.07										
11/4/2002	339.99	341.10		337.36			339.98	341.07	340.57		340.06	340.57	343.05										
12/18/2002	340.11	341.31		337.41			340.06	341.23	340.77		340.08	340.61	343.12										
1/28/2003	340.19	341.39		337.45			340.26	341.32	340.72		340.05	340.64	343.37										
2/27/2003	340.08	341.31		337.33			340.23	341.27	340.68		339.93	340.55	343.36										
3/24/2003	340.61	341.75		337.64			340.74	341.70	340.87		340.35	341.07	344.08										
4/22/2003	341.06	342.09		338.34			341.20	342.30	341.24		340.64	341.35	344.99										
5/29/2003	341.22	342.36	339.28	338.52	338.81		341.33	342.50	341.41		340.90	341.49	345.11			343.04	340.92						
6/23/2003	340.87	342.16	339.32	338.16	338.63		340.74	342.20	341.12		340.56	341.21	344.72		342.03	342.70	340.54						
7/23/2003	340.56	341.66	336.71	337.67	338.64	314.51	340.73	341.91	340.85		340.33	340.94	344.32		341.71	342.31	340.31						
8/26/2003	340.13	341.29	336.09	337.15	337.51	313.52	340.36	341.47	340.53		339.99	340.64	343.75		341.34	341.87	339.96						
9/2/2003	340.11	341.24	336.07	337.11	337.42	313.51	340.31	341.46	340.52		339.98	340.60	343.75		341.30	341.83	339.94						
10/15/2003	340.15	341.44	336.17	337.36	339.01	313.74	340.49	341.49	340.52		339.99	340.66	343.58	314.01	341.37	341.83	339.93						
11/3/2003	340.60	341.65	336.59	337.79	339.45	316.43	340.92	341.85	340.81		340.31	340.88	343.93	316.76	341.82	342.23	340.27						
12/23/2003	341.44	343.23	337.79	338.53	340.10	318.60	341.55	342.52	341.53		341.03	341.61	345.11	318.98	342.38	342.97	341.00						
1/30/2004	341.08	341.94	337.10	338.08	339.62	316.07	341.12	342.19	341.37		340.84	341.49	344.65	316.40	342.19	342.53	340.75						
2/24/2004	340.90	341.70	336.38	337.57	339.20	313.58	341.21	342.21	341.29		340.63	341.22	344.53	313.83	342.12	342.65	340.66						
3/31/2004	341.53	342.29	337.53	338.56	339.84	317.15	341.83	342.79	341.92		341.38	341.78	345.61	317.50	342.59	343.28	341.51						
4/19/2004	341.44	342.27	337.56	338.47	339.66	317.47	341.68	342.74	341.92		341.38	341.69	345.41	317.89	342.48	343.22	341.55						
5/17/2004	341.60	342.40	338.19	338.91	340.27	318.77	341.64	342.75	342.07		341.50	341.79	345.43	319.28	342.53	343.22	341.64						
6/7/2004	341.17	342.12	337.66	338.45	339.60	317.81	341.21	342.23	341.78		341.21	341.55	344.85	317.94	342.12	342.67	341.32						
6/18/2004	341.30	342.27	337.77	338.63	339.72	318.10	341.33	342.31	341.90		341.30	341.68	345.03	318.14	342.25	342.87	341.40						
7/6/2004	341.17	342.12	337.66	338.45	339.60	317.81	341.21	342.23	341.78		341.21	341.55	344.85	317.94	342.12	342.67	341.32						
8/23/2004	340.87	341.84	337.91	338.23	339.65	317.95	340.80	341.88	341.44		340.84	341.38	344.36	318.00	341.79	342.23	340.92						
9/27/2004	340.53	341.78	337.97	338.12	339.61	317.45	340.35	341.66	341.19		340.68	341.17	344.15	317.96	341.30	342.06	340.78						
10/15/2004	340.43	341.78	337.91	337.99	339.37	316.99	340.48	341.64	341.19		340.63	341.13	343.52	317.11	341.47	341.99	340.69						
11/1/2004	340.41	341.73	337.74	337.84	339.23	316.18	340.66	341.58	341.17		340.57	341.09	343.25	316.63	341.63	341.95	340.64						
12/21/2004	341.41	342.21	338.36	338.45	339.80	318.35	341.36	342.38	341.67		341.15	341.63	344.82	318.94	342.35	342.80	341.20						
1/13/2005	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A						

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Bedrock Locations																					
	5-III	13-I	14-IV	15-I	16-VII	16-VIII	19-I	20-I /IR	37-I	37-IR	50-I	53-I	54-I	90-I	90-II	91-I	92-I	93-I	94-I	95-I	95-I	
2/24/2005	341.63	342.36	338.49	338.59	339.39	318.76	341.59	342.52	341.58		341.48	341.82	345.17	319.31	342.51	343.01	341.56					
3/21/2005	341.61	341.79	338.42	338.58	339.23	317.27	341.64	342.73	341.80		341.52	341.82	345.35	317.93	342.54	343.12	341.65					
4/11/2005	341.55	341.27	338.36	338.56	339.17	317.05	341.67	342.69	342.09		341.52	341.82	345.47	317.27	342.57	343.19	341.69					
5/18/2005	341.44	342.22	338.39	338.36	339.99	316.83	341.64	342.61	341.92		341.37	341.73	345.27	317.18	342.48	343.08	341.46					
6/21/2005	341.15	342.04	338.16	337.73	339.58	317.05	341.25	342.21	341.55		341.00	341.47	344.73	317.55	342.14	342.62	341.00					
7/28/2005	340.64	341.56	337.72	337.66	339.25	315.47	340.67	341.64	341.15		340.60	341.13	344.09	315.78	341.71	342.06	340.63					
8/31/2005	340.63	341.49	337.65	337.51	338.99	314.96	340.51	341.38	340.91		340.33	340.92	343.68	315.32	342.72	341.77	340.44					
9/21/2005	340.15	341.33	337.57	337.62	339.34	314.96	340.42	341.26	340.74		340.19	340.75	343.42	315.34	341.29	341.60	340.16					
10/28/2005	340.30	341.54	337.55	337.49	339.38	314.63	340.63	341.55	340.78		340.25	340.85	343.42	315.03	341.54	341.86	340.22					
11/15/2005	340.51	341.65	337.50	337.48	339.37	314.57	340.86	341.48	340.84		340.35	341.04	343.63	314.99	341.75	342.08	340.21					
12/20/2005	340.99	341.87	338.16	337.87	339.42	314.51	341.21	342.18	341.16		340.61	341.35	344.63	314.88	342.20	342.60	340.62					
1/23/2006	341.06	342.17	338.40	338.14	339.77	315.34	341.33	342.41	341.40		340.95	341.34	345.21	315.66	342.10	342.86	341.02					
2/20/2006	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete		t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	t Complete	
3/21/2006	341.51	342.35	338.60	338.53	339.98	317.11	341.79	342.77	341.98		341.40	341.81	345.54	317.42	342.62	343.27	341.52					
4/24/2006	341.48	342.31	338.49	338.53	339.95	316.81	341.84	342.75	341.91		341.48	341.74	345.42	317.68	342.71	343.22	341.81					
5/26/2006	341.44	342.27	338.72	338.61	340.13	317.14	341.74	342.70	341.90		341.34	341.76	345.28	317.50	342.53	343.14	341.44					
6/7/2006	341.43	342.24	338.95	338.58	340.07	316.98	341.56	342.71	341.89		341.33	341.76	345.41	317.29	342.62	339.60	341.45					
7/28/2006	341.18	342.13	338.54	338.35	339.92	317.11	341.25	342.34	341.61		341.05	341.53	344.89	317.49	342.26	342.75	341.14					
8/30/2006	340.81	341.88	338.46	338.16	339.70	316.39	340.96	N/A	341.40		340.81	341.25	344.43	316.66	341.97	342.34	340.98					
9/26/2006	340.96	341.97	338.30	338.24	339.93	316.06	341.11	341.99	341.36		340.82	341.34	344.35	316.45	342.04	342.37	340.90					
10/31/2006	341.62	342.36	338.59	338.40	340.16	316.91	341.86	342.76	341.95		341.45	341.86	345.34	317.27	342.71	343.21	341.58					
11/24/2006	341.63	342.37	338.61	338.41	340.13	317.13	341.93	342.84	342.02		341.50	341.91	345.39	317.50	342.73	343.29	341.60					
12/18/2006	341.71	342.38	338.87	338.63	340.46	317.67	341.97	342.94	342.16		341.63	341.95	345.47	318.08	342.81	343.40	341.77					
1/22/2007	341.54	342.34	338.76	338.52	340.32	317.44	341.58	342.81	342.10		341.62	341.79	345.32	317.82	342.44	343.28	341.74					
2/27/2007	341.35	342.06	338.36	338.28	340.02	317.06	341.36	342.44	341.88		341.25	341.74	344.74	317.49	342.38	343.13	341.37					
3/26/2007	341.74	342.39	338.44	338.47	340.21	317.06	341.93	342.84	342.16		341.62	342.00	345.46	317.45	342.82	343.34	341.77					
4/10/2007	341.72	342.42	338.60	338.51	340.28	317.49	341.96	342.95	342.18		341.69	341.97	345.56	317.91	342.84	343.42	341.85					
5/22/2007	341.62	342.34	338.63	338.62	340.41	317.38	341.72	342.74	342.07		341.52	341.87	345.33	317.76	342.66	343.20	341.63					
6/18/2007	341.14	342.16	338.24	338.20	340.10	316.81	341.11	342.25	341.57		341.11	341.50	344.86	317.19	342.18	342.63	341.25					
7/26/2007	340.59	341.52	337.82	337.75	339.86	316.12	340.50	341.49	341.16		340.60	341.05	344.15	316.49	341.67	341.87	340.72					
8/13/2007	340.33	341.35	337.63	337.59	339.67	315.81	340.01	341.18	340.96		340.41	340.88	343.85	316.14	341.34	341.52	340.49					
9/27/2007	339.93	340.99	337.30	337.23	339.35	315.04	339.78	340.62	340.55		340.05	340.52	343.09	315.43	340.98	340.92	340.09	339.91	340.33	340.08	340.33	340.08
10/22/2007	340.02	341.25	337.59	337.52	339.55	316.38	339.84	340.66	340.56		340.10	340.60	343.06	316.83	341.00	340.96	340.07	340.02	340.38	340.11	340.38	340.11
11/15/2007	340.12	341.29	337.63	337.62	339.69	316.47	340.06	340.91	340.61		340.14	340.70	343.08	316.96	341.08	341.13	340.23	340.10	340.45	340.18	340.45	340.18
12/14/2007	340.64	341.71	337.45	337.78	339.87	314.82	340.69	341.51	340.88		340.45	341.03	343.55	315.14	341.76	341.79	340.44	340.33	340.74	340.45	340.74	340.45
1/29/2008	341.21	342.08	337.73	338.18	340.09	315.03	341.48	342.39	341.50		341.06	341.50	344.81	315.32	342.40	342.82	341.13	340.75	341.30	341.09	341.30	341.09

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Bedrock Locations																					
	5-III	13-I	14-IV	15-I	16-VII	16-VIII	19-I	20-I /IR	37-I	37-IR	50-I	53-I	54-I	90-I	90-II	91-I	92-I	93-I	94-I	95-I		
2/25/2008	341.42	342.13	337.55	338.20	340.16	314.75	341.87	342.69	341.72		341.23	341.72	345.03	312.24	339.94	343.14	341.31	340.84	341.50	341.29	341.50	341.29
3/31/2008	341.43	342.12	337.30	338.15	340.12	315.20	341.92	342.81	341.84		341.35	341.76	345.16	315.47	342.74	343.26	341.48	340.84	341.58	341.41	341.58	341.41
4/29/2008	341.47	342.25	338.39	338.63	340.26	317.58	341.90	342.77	342.09		341.48	341.85	345.25	317.91	342.82	343.23	341.73	340.94	341.80	341.68	341.80	341.68
5/22/2008	341.54	342.32	338.45	338.84	340.43	317.70	341.91	342.84	342.08		341.58	341.85	345.27	318.07	342.67	343.27	341.67	340.75	341.80	341.62	341.80	341.62
6/18/2008	341.27	342.14	338.13	338.49	340.24	317.21	341.54	342.39	341.85		341.31	341.63	344.95	317.62	342.36	342.83	341.44	340.55	341.54	341.44	341.54	341.44
7/24/2008	341.42	342.10	337.99	338.23	340.18	314.90	341.61	342.45	341.88		341.41	341.82	344.86	315.22	342.62	342.83	341.41	340.72	341.57	341.42	341.57	341.42
8/20/2008	341.34	342.14	338.18	338.40	340.04	316.47	341.69	342.60	341.78		341.30	341.67	345.00	316.87	342.53	343.04	341.42	340.70	341.52	341.40	341.52	341.40
9/11/2008	341.13	341.94	338.16	338.21	339.80	316.08	341.38	342.16	341.50		341.02	341.45	344.59	316.54	342.19	342.55	341.10	340.52	341.30	341.10	341.30	341.10
10/30/2008	341.21	341.96	337.96	338.14	339.92	315.96	341.49	342.36	341.49		341.02	341.50	344.53	316.42	342.34	342.77	341.10	340.53	341.29	341.12	341.29	341.12
11/20/2008	341.57	342.05	338.23	338.32	340.02	316.84	341.86	342.23	341.66		341.32	341.75	348.11	317.43	342.69	343.18	341.35	340.73	341.55	341.49	341.55	341.49
12/27/2008	341.74	342.43	338.48	338.51	340.30	317.30	342.25	342.70	341.85		341.69	341.84	345.55	317.31	342.80	343.53	342.02	341.02	341.94	341.81	341.94	341.81
1/26/2009	341.56	342.15	338.11	338.46	340.19	316.90	341.83	342.75	341.96		341.45	341.81	344.94	317.39	342.69	342.20	341.59	340.47	341.69	341.59	341.69	341.59
2/25/2009	341.71	342.26	338.14	338.60	340.20	317.14	341.98	342.87	342.17		341.66	341.94	345.13	317.60	342.84	343.33	341.86	340.58	341.87	341.82	341.87	341.82
3/31/2009	341.76	342.33	338.18	338.73	340.02	317.57	342.03	342.91	342.34		341.77	341.95	345.31	317.52	342.89	343.34	341.99	340.62	341.95	341.92	341.95	341.92
4/27/2009	341.85	342.40	338.16	338.67	340.37	316.90	342.01	342.99			341.91	342.07	345.53	318.13	342.56	343.59	342.08	340.61	342.00	342.28	342.00	342.28
5/31/2009	341.72	342.38	338.69	338.86	340.34	318.04	341.86	Decom	342.59		341.79	341.93	345.19	318.53	342.74	343.32	341.89	341.05	341.97	341.93	341.97	341.93
6/22/2009	341.24	342.24	338.10	338.35	339.99	314.58	341.53	Decom	341.82		341.41	341.52	345.06	318.11	341.87	342.26	341.52	340.86	341.63	341.51	341.63	341.51
7/31/2009	341.08	341.95	338.12	338.02	339.83	314.40	341.18	Decom	341.48		341.11	341.43	344.43	316.52	342.18	342.46	341.23	340.72	341.35	341.26	341.35	341.26
8/24/2009	340.67	341.85	337.66	337.90	337.98	314.26	340.70	Decom	341.18		339.02	341.19	344.28	314.50	341.96	342.47	340.87	340.44	340.85	340.63	340.85	340.63
9/29/2009	340.34	341.55	336.77	337.73	339.42	313.56	340.78	Decom	341.02		340.54	340.90	343.93	313.87	341.64	341.96	340.61	340.25	340.76	340.64	340.76	340.64
10/27/2009	340.57	341.69	336.85	337.78	339.38	313.87	341.02	Decom	341.06		340.58	341.09	343.94	314.22	341.91	342.24	340.62	340.35	340.86	340.70	340.86	340.70
11/10/2009	340.51	341.55	336.66	337.64	339.64	313.67	341.06	N/A	340.85		340.49	340.92	343.90	313.40	341.90	342.24	340.56	340.29	340.79	340.61	340.79	340.61
12/8/2009	340.72	341.62	336.70	337.61	339.68	313.79	341.20		341.03		340.55	341.12	344.07	313.81	342.14	342.42	340.85	340.35	340.89	340.64	340.89	340.64
1/25/2010	340.75	341.62	336.67	337.62	339.67	313.81	341.18	345.78	341.03		340.58	341.13	344.08	313.82	342.14	342.41	340.84	340.35	340.90	340.65	340.90	340.65
2/26/2010	340.63	341.51	336.55	337.63	339.39	313.96	341.19	345.14	340.99		340.42	341.01	343.94	314.37	342.06	342.45	340.47	340.26	340.79	340.55	340.79	340.55
3/24/2010	340.80	341.66	336.66	337.78	339.54	314.18	341.34	345.76	340.99		340.23	341.11	344.06	314.59	342.20	342.55	340.59	340.32	340.88	340.63	340.88	340.63
4/18/2010	341.11	341.99	338.09	338.40	339.89	316.62	341.66	345.59	340.94		340.99	341.50	344.89	317.03	342.43	343.08	341.07	340.71	341.29	341.12	341.29	341.12
5/3/2010	341.23	341.97	336.88	338.25	340.04	314.25	341.71	345.53	341.34		340.97	341.54	344.89	312.17	342.56	343.05	341.06	340.70	341.77	341.17	341.77	341.17
6/1/2010	341.21	342.08	338.07	338.09	340.04	314.25	341.30	345.65	340.39		340.97	341.49	344.55	316.03	342.27	342.60	341.28	340.74	341.29	341.60	341.29	341.60
7/1/2010	341.19	342.01	338.05	338.06	340.01	314.31	341.31	345.62	341.34		341.00	341.51	344.52	316.04	342.25	342.56	341.30	340.75	341.26	341.56	341.26	341.56
8/1/2010	341.10	342.09	337.95	337.72	339.92	314.27	341.38	345.57	341.29		340.84	341.49	344.56	316.19	342.19	342.58	341.25	340.73	341.18	341.30	341.18	341.30
9/1/2010	341.04	342.07	337.99	338.08	339.91	314.24	341.39	345.42	341.13		340.10	341.46	344.44	316.39	342.05	342.66	341.19	340.68	341.09	341.14	341.09	341.14
10/1/2010	340.88	341.78	338.08	338.17	339.86	314.15	341.45	345.13	340.95		340.31	341.37	344.24	316.73	341.57	342.71	removed	340.50	340.72	340.79	340.72	340.79
11/10/2010	340.74	341.70	337.70	337.88	339.75	313.92	341.24	344.99	340.92		339.37	341.26	344.09	316.48	341.53	342.39	removed	340.37	340.76	340.72	340.76	340.72
12/16/2010	340.84	341.76	337.33	337.71	339.79	314.01	341.30	345.08	340.99		339.82	341.19	344.20	315.15	341.83	342.51	removed	340.40	340.82	340.74	340.82	340.74
1/24/2011	341.04	341.97	337.55	337.92	340.03	314.41	341.36	345.21	341.42		340.10	341.27	344.43	315.21	342.00	342.58	Decom	340.48	340.98	340.88	340.98	340.88

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Bedrock Locations																							
	5-III	13-I	14-IV	15-I	16-VII	16-VIII	19-I	20-I /IR	37-I	37-IR	50-I	53-I	54-I	90-I	90-II	91-I	92-I	93-I	94-I	95-I	94-I	95-I		
2/22/2011	341.23	342.10	337.61	338.10	340.14	314.60	341.59	345.44	341.68		340.24	341.49	344.64	315.69	342.21	342.81	Decom	340.56	341.19	341.04	341.19	341.04		
3/14/2011	341.62	342.29	337.92	338.49	339.97	316.74	341.97	345.17	341.79		340.37	341.87	345.23	315.85	342.62	343.20	Decom	340.83	341.61	341.33	341.61	341.33		
4/18/2011	341.81	342.36	338.30	338.82	339.73	317.93	342.20	345.63	341.95		341.39	342.07	345.39	317.61	342.94	343.33	Decom	340.91	341.78	341.56	341.78	341.56		
5/23/2011	341.81	342.34	338.31	338.68	339.83	318.00	342.28	345.86	342.09		341.85	342.00	345.18	317.85	342.60	343.37	Decom	342.73	341.79	351.83	341.79	351.83		
6/21/2011	341.59	342.28	338.22	338.37	339.96	317.97	342.02	345.77	342.14		341.97	341.78	344.99	317.64	342.14	343.53	Decom	341.13	341.81	341.76	341.81	341.76		
7/18/2011	341.29	342.01	338.04	338.18	339.88	317.95	341.67	345.70	342.24		341.23	341.53	344.52	316.15	341.60	349.13	Decom	340.78	341.38	341.25	341.38	341.25		
8/17/2011	340.87	341.76	337.77	338.02	339.03	317.92	341.10	345.53	341.34		340.86	341.42	344.15	315.91	341.13	343.18	Decom	340.43	341.08	340.96	341.08	340.96		
9/13/2011	340.65	341.64	337.72	337.81	338.85	316.87	341.27	345.39	341.03		340.83	341.36	343.61	315.70	341.41	343.03	Decom	340.39	341.07	340.79	341.07	340.79		
10/10/2011	340.89	341.67	337.94	337.90	339.01	316.45	341.39	345.06	341.13		340.89	341.40	343.55	315.57	341.57	342.89	Decom	340.46	341.11	340.85	341.11	340.85		
11/1/2011	341.20	341.72	338.07	337.76		316.29	341.46	344.96	341.34		340.98	341.52	343.34	315.65	342.21	342.58	Decom	340.73	341.22	341.02	341.22	341.02		
12/2/2011	341.32	341.83	338.24	337.69	339.51	316.39	341.49	344.99	341.48		341.24	341.74	343.52	315.81	342.14	342.77	Decom	340.86	341.33	341.27	341.33	341.27		
1/16/2012	341.64	341.95	338.07	338.21	339.86	316.63	341.70	345.09			341.32	341.76	345.13	315.91	342.76	342.92		340.90	341.42	341.42	341.42	341.42		
2/9/2012	341.66	342.01	337.93	338.09	339.67	316.70	341.84	345.25			342.38	341.17	341.73	344.77	315.83	342.58	343.01		340.74	341.38	341.54	341.38	341.54	
3/19/2012	341.71	342.10	338.02	338.19	339.61	316.85	341.89	345.39			342.43	341.26	341.79	344.94	316.55	342.67	342.97		340.92	341.45	341.62	341.45	341.62	
4/17/2012	341.64	342.17	338.42	338.40	340.13	317.19	341.91	345.52			342.37	341.54	341.91	345.15	317.01	342.77	343.30		340.84	341.63	341.77	341.63	341.77	
5/7/2012	341.56	342.23	338.10	337.90	339.71	316.80	341.94	345.76			342.21	341.24	341.81	344.98	316.55	342.70	343.32		340.90	341.52	341.60	341.52	341.60	
6/8/2012	341.24	342.11	337.97	338.14	338.25	316.23	341.79	345.80			341.97	341.08	341.54	344.57	316.94	342.32	342.95		340.52	341.40	341.38	341.40	341.38	
7/12/2012	341.04	341.98	337.90	338.12	339.80	315.80	341.42	343.30			341.86	341.01	341.32	344.49	316.45	342.16	342.79		340.30	341.28	341.14	341.28	341.14	
8/14/2012	340.90	341.89	337.71	338.50	339.53	315.56	341.52	343.32			341.73	340.63	341.30	344.56	315.99	342.44	342.91		340.21	341.18	340.88	341.18	340.88	
9/17/2012	340.82	341.97	338.02	338.36	339.57	315.80	341.31	343.11			341.50	341.12	341.33	344.51	315.95	342.35	342.97		340.17	341.06	340.86	341.06	340.86	
10/3/2012	340.71	342.00	337.75	338.19	339.62	316.41	341.34	342.98			340.89	341.37	341.17	344.69	316.19	342.75	342.86		340.47	340.78	340.82	340.78	340.82	
11/21/2012	341.38	342.03	337.81	338.04	339.65	316.52		342.79			341.32	340.96	341.64	344.85	316.61	342.65	342.75		340.78	341.29	341.20	341.29	341.20	
12/19/2012	341.51	342.09	337.94	337.87	339.67	316.61	341.38	342.70			341.39	340.84	341.69	344.70	316.39	342.50	342.55		340.69	341.20	341.11	341.20	341.11	
1/15/2013	341.39	342.04	337.84	337.94	339.60	316.33	341.46	342.65			341.47	341.03	341.64	344.75	316.23	342.44	342.51		340.66	341.24	341.16	341.24	341.16	
2/11/2013	341.36	342.08	337.70	337.88	339.34	316.04	341.53	342.70			341.53	341.21	341.59	344.72	316.41	342.33	342.56		340.58	341.36	341.12	341.36	341.12	
3/11/2013	341.41	342.15	337.67	337.99	339.26	315.97	341.65	342.81			341.50	341.28	341.67	344.84	316.62	342.42	342.63		340.70	341.50	341.29	341.50	341.29	
4/17/2013	341.45	342.18	337.88	338.22	339.29	316.30	341.77	342.88			340.62	341.31	341.75	344.93	316.95	342.50	342.87		340.76	341.52	341.43	341.52	341.43	
5/25/2013	341.48	342.26	338.09	338.60	339.31	316.30	341.98	342.96			341.70	341.33	341.80	345.11	317.46	342.62	343.15		340.94	341.54	341.67	341.54	341.67	
6/25/2013	341.61	342.31	338.27	339.13	339.39	316.84	341.94	342.99			341.72	341.28	341.78	345.15	317.38	342.66	343.18		340.91	341.61	341.65	341.61	341.65	
7/9/2013	341.70	342.27	338.23	338.54	339.47	316.72	341.80	342.94			341.62	341.21	341.74	345.18	317.32	342.62	343.15		340.88	341.59	341.70	341.59	341.70	
7/30/2013	341.50										341.73	341.47	341.81							341.08	341.60	341.78	341.60	341.78
8/20/2013	341.63	342.12	338.16	338.45	339.80	316.61	341.84	342.89			341.51	341.22	341.71	345.21	317.25	342.59	343.09		340.84	341.65	341.75	341.65	341.75	
9/11/2013	341.72	342.08	338.10	338.52	339.76	316.63	341.73	342.81			340.66	341.31	341.75	345.17	317.41	342.69	343.03		340.88	341.71	341.72	341.71	341.72	
9/26/2013	341.67										341.74	341.35								341.01	341.59	341.68	341.59	341.68
10/16/2013	341.77	341.99	338.21	338.34	339.92	316.56	341.70	342.68			340.75	341.43	341.84	345.07	317.46	342.77	343.15		340.94	341.76	341.78	341.76	341.78	
11/18/2013	341.83	341.82	338.34	338.43	340.07	316.42	341.55	342.64			341.93	341.62	342.06	345.14	317.78	342.98	343.43		341.00	341.82	341.86	341.82	341.86	

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Bedrock Locations																					
	5-III	13-I	14-IV	15-I	16-VII	16-VIII	19-I	20-I /IR	37-I	37-IR	50-I	53-I	54-I	90-I	90-II	91-I	92-I	93-I	94-I	95-I	94-I	95-I
12/23/2013	341.62	341.87	338.05	338.16	339.96	316.31	341.49	342.48		341.78	341.47	341.99	344.99	317.31	342.82	343.17		340.86	341.72	341.69	341.72	341.69
1/9/2014	341.55	341.92	337.97	338.09	339.81	316.27	341.31	342.43		341.67	341.35	341.68	344.89	317.15	342.36	342.65		340.76	341.21	341.39	341.21	341.39
2/10/2014	341.52	342.17	338.20	338.04	339.59	316.23	341.46	342.50		341.84	341.40	341.81	344.82	317.12	342.48	342.84		340.84	341.35	341.61	341.35	341.61
3/14/2014	341.69	342.36	338.39	338.22	339.66	316.39	341.77	342.74		342.09	341.22	342.09	344.93	317.27	337.64	343.07		340.99	341.71	341.78	341.71	341.78
4/8/2014	341.85	342.39	338.46	338.49	339.45	316.42	341.90	343.03		342.30	341.31	342.24	345.25	317.41	343.00	343.35		341.05	341.83	341.90	341.83	341.90
5/2/2014	342.11	342.57	338.68	339.21	339.28	316.51	342.34	343.16		342.71	341.25	342.41	345.60	317.70	343.16	343.52		341.35	342.10	342.15	342.10	342.15
6/13/2014	341.98	342.48	338.57	339.12	339.52	316.67	342.17	343.20		342.52	341.30	342.31	345.70	317.73	343.31	343.56		341.32	342.03	342.24	342.03	342.24
7/15/2014	341.80	342.36	338.55	339.04	339.59	316.71	342.09	343.12		342.27	341.38	342.20	345.65	317.60	343.13	343.49		341.23	341.73	342.00	341.73	342.00
8/8/2014	341.49	342.19	338.32	338.90	339.47	316.59	342.04	343.01		341.71	341.46	342.00	345.38	317.36	343.20	343.36		341.01	341.65	341.64	341.65	341.64
9/3/2014	341.53	342.21	338.30	338.85	339.45	316.50	341.85	342.98		341.79	341.42	341.76	345.25	317.42	343.25	343.34		340.97	341.57	341.59	341.57	341.59
10/6/2014	341.49	342.13	338.22	338.88	339.54	316.42	341.72	342.82		341.76	341.46	341.85	345.17	317.31	343.17	343.15		341.05	341.69	341.42	341.69	341.42
11/12/2014	341.54	342.08	338.05	338.79	339.67	316.48	341.64	342.67		341.50	341.42	341.78	344.91	317.20	343.06	343.35		341.03	341.55	341.50	341.55	341.50
12/4/2014	341.47	342.05	337.94	338.57	339.60	316.40	341.52	342.69		341.57	341.37	341.66	345.03	317.09	342.85	343.20		340.94	341.41	341.59	341.41	341.59

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Lower Till Locations			
	11-III	16-VI	53-II /IIR	60-I
1/13/1994	343.28	341.93	340.53	342.50
1/20/1994				
2/17/1994				
3/16/1994	343.40	342.03	337.28	342.36
4/12/1994	343.77	342.26	340.02	342.77
4/20/1994	343.85	342.37	340.37	342.90
5/16/1994	343.96	342.13	339.46	343.02
6/18/1994	343.52	341.73	341.46	342.30
6/21/1994	343.60	341.77	341.35	342.42
7/18/1994	343.48	341.61	340.37	342.24
8/15/1994	343.28	341.43	341.15	341.86
8/24/1994	343.20	341.33	341.26	341.74
9/23/1994	343.39	341.39	340.76	341.25
10/19/1994	342.82	341.20	340.72	341.15
10/26/1994	343.49	341.25	340.81	341.16
11/16/1994	342.92	341.39	340.85	341.45
12/19/1994	343.05	341.54	341.06	341.78
1/18/1995	343.42	342.32	341.50	342.35
2/15/1995	343.47	341.81	341.68	342.30
3/13/1995	343.54	342.11	341.74	342.22
4/11/1995	343.54	341.87	341.74	342.45
4/18/1995	343.49	341.86	341.80	342.48
5/11/1995	343.76	341.93	341.73	342.75
6/16/1995	343.37	341.73	341.37	342.50
6/21/1995	343.37	341.73	341.37	342.50
7/17/1995	343.45	341.74	341.36	342.17
8/15/1995	343.48	342.05	341.51	342.26
8/21/1995	343.66	341.75	341.39	342.36
9/23/1995				
9/28/1995	343.41	341.55	341.01	341.51
10/18/1995	343.42	341.56	341.03	341.53
10/19/1995				
11/11/1995	343.61	342.15	341.16	342.34
11/13/1995	343.56	342.21	341.50	342.35
11/22/1995				
12/18/1995	343.66	341.87	338.56	342.76
1/16/1996	343.36	341.70	340.83	342.31
2/14/1996	343.75	342.06	341.56	342.54
3/13/1996	343.64	341.96	341.76	342.47
4/9/1996	343.81	342.13	341.76	342.73
4/15/1996	343.81	342.13	341.76	342.73
5/6/1996	344.18	342.23	337.11	343.08
6/10/1996	344.02	342.21	340.99	342.90
6/13/1996	344.02	342.21	340.99	342.90
7/16/1996	343.89	342.01	338.83	342.70
8/12/1996	343.96	341.78	340.84	342.49
8/15/1996	343.96	341.78	340.84	342.49
9/17/1996	343.80	342.06	338.35	342.57
10/16/1996	343.74	342.02	340.87	342.65
11/12/1996	343.84	342.06	341.43	342.64
11/13/1996	343.84	342.06	341.43	342.64
12/12/1996	343.70	342.05	339.31	342.58

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Lower Till Locations			
	11-III	16-VI	53-II /IIR	60-I
1/20/1997	343.90	342.04	341.52	342.83
2/18/1997	343.79	341.98	341.80	342.59
3/21/1997	344.12	342.19	341.98	342.95
4/21/1997	344.29	342.16	342.06	342.98
5/14/1997	344.25	342.19	335.48	342.92
6/9/1997	343.98	341.91	340.11	342.51
7/15/1997	343.63	341.58	338.50	342.01
8/18/1997	343.22	341.50	340.67	341.36
9/29/1997	343.24	341.49	339.43	341.74
10/20/1997	343.08	341.42	340.62	341.53
11/10/1997	343.38	341.78	341.04	341.77
12/15/1997	343.38	341.79	339.57	342.17
1/20/1998	343.81	342.02	341.43	342.53
2/23/1998	343.69	342.18	341.77	342.61
3/19/1998	343.85	342.13	341.85	342.77
4/14/1998	343.89	341.98	341.91	342.74
5/14/1998	343.67	341.86	339.18	342.40
6/10/1998	343.41	341.88	340.83	341.86
7/15/1998	343.50	341.59	339.20	341.97
8/10/1998	343.15	341.31	340.62	341.28
9/23/1998	342.78	340.91	339.67	340.58
10/16/1998	342.71	340.90	340.51	340.41
11/9/1998	342.64	340.89	340.85	340.35
12/15/1998	342.78	341.44	339.04	340.56
1/26/1999	342.75	341.35	340.90	342.78
2/15/1999	343.09	341.82	341.22	343.10
3/16/1999	343.33	341.79	341.48	341.81
4/16/1999	343.42	341.87	341.59	342.02
5/20/1999	342.80	341.69	339.71	341.77
6/23/1999	342.67	341.50	341.01	341.77
7/16/1999	342.75	341.52	338.10	341.79
9/16/1999	342.42	341.42	338.60	341.21
10/18/1999	342.63	341.59	340.65	341.64
12/16/1999	342.88	341.87	339.23	342.27
1/27/2000	342.79	341.70	341.27	342.05
2/15/2000	342.59	341.60	341.41	341.82
3/21/2000	343.03	341.92	341.61	342.35
5/25/2000	343.36	342.05	340.35	342.71
7/27/2000	343.34	341.83	339.97	342.58
9/21/2000	342.93	341.52	339.90	341.84
10/17/2000	342.81	341.50	340.99	341.82
12/18/2000	342.76	341.72	340.15	342.06
1/16/2001	342.72	341.70	341.21	342.20
2/14/2001	343.22	342.02	341.73	342.03
3/12/2001	343.09	342.02	341.75	342.65
4/2/2001	343.51	342.15	341.75	342.78
5/14/2001	343.26	341.85	340.39	342.42
6/25/2001	343.22	341.69	341.41	342.19
7/26/2001	342.79	341.41	339.24	341.63
8/13/2001	342.61	341.28	340.20	341.23
9/19/2001	342.54	341.46	339.99	340.91
10/29/2001	343.08	341.74	341.16	341.77

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Lower Till Locations			
	11-III	16-VI	53-II /IIR	60-I
11/5/2001	343.07	341.79	341.19	341.94
12/21/2001	343.32	342.01	340.61	342.53
1/29/2002	343.13	341.94	341.54	342.50
2/22/2002	343.40	342.08	341.71	342.72
3/26/2002	343.45	341.97	341.76	342.68
4/22/2002	343.58	342.12	341.78	342.87
5/9/2002	343.69	342.02	337.69	342.84
6/17/2002	343.54	341.99	341.05	342.67
7/23/2002	342.99	341.46	340.08	341.88
8/12/2002	342.87	341.31	340.68	341.70
9/13/2002	342.50	340.92	339.00	341.06
10/22/2002	342.45	341.20	340.84	341.16
11/4/2002	342.48	341.20	340.93	341.28
12/18/2002	342.50	341.38	340.03	341.44
1/28/2003	342.46	341.46	341.06	341.52
2/27/2003	342.42	341.43	341.19	341.43
3/24/2003	342.87	341.97	341.28	341.81
4/22/2003	343.18	342.02	341.48	342.37
5/29/2003	343.28	341.97	339.97	342.57
6/23/2003	343.14	341.77	341.05	342.46
7/23/2003	342.74	341.51	339.09	342.01
8/26/2003	342.55	341.31	340.81	341.61
9/2/2003	342.52	341.30	340.88	341.58
10/15/2003	342.47	341.55	340.43	341.64
11/3/2003	342.54	341.77	341.14	341.84
12/23/2003	343.21	341.95	342.34	342.58
1/30/2004	343.09	341.76	342.04	342.31
2/24/2004	342.93	341.71	341.83	342.30
3/31/2004	343.62	342.27	342.54	342.82
4/19/2004	343.64	342.03	342.16	342.75
5/17/2004	343.71	342.00	342.21	342.80
6/7/2004	343.35	341.77	342.50	342.32
6/18/2004	343.47	341.83	342.33	342.40
7/6/2004	343.35	341.77	342.50	342.32
8/23/2004	343.16	341.64	342.11	341.94
9/27/2004	343.00	341.56	342.10	341.79
10/15/2004	342.94	341.59	342.24	341.77
11/1/2004	342.85	341.62	342.44	341.73
12/21/2004	343.26	341.92	342.45	342.34
1/13/2005	N/A	N/A	N/A	N/A
2/24/2005	343.51	342.11	342.16	342.70
3/21/2005	343.51	342.11	342.16	342.70
4/11/2005	343.89	342.19	342.12	342.75
5/18/2005	343.56	341.96	339.99	342.67
6/21/2005	343.26	341.70	341.32	342.28
7/28/2005	342.85	341.43	339.76	341.77
8/31/2005	342.76	341.47	341.51	341.47
9/21/2005	342.58	341.23	337.29	341.39
10/28/2005	342.66	341.55	341.59	341.70
11/15/2005	342.77	341.64	342.29	341.64
12/20/2005	343.03	341.82	342.42	342.27
1/23/2006	343.41	342.09	342.54	342.45

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Lower Till Locations			
	11-III	16-VI	53-II /IIR	60-I
2/20/2006	Not Completed	Not Completed	Not Completed	Not Completed
3/21/2006	343.82	342.07	342.50	342.83
4/24/2006	343.61	341.97	342.43	342.79
5/26/2006	343.64	341.99	342.22	342.75
6/7/2006	343.56	341.98	342.13	342.76
7/28/2006	343.37	341.87	342.20	342.43
8/30/2006	343.13	342.10	342.09	342.05
9/26/2006	343.03	341.73	342.46	342.09
10/31/2006	343.70	342.12	342.63	342.80
11/24/2006	343.61	342.12	342.84	342.89
12/18/2006	343.80	342.06	342.55	342.99
1/22/2007	343.75	341.99	342.28	342.91
2/27/2007	343.37	341.80	342.02	342.51
3/26/2007	343.85	342.14	342.63	342.91
4/10/2007	343.94	342.07	342.65	343.02
5/22/2007	343.74	341.96	342.40	342.81
6/18/2007	343.31	341.61	339.49	342.28
7/26/2007	342.79	341.22	341.42	341.57
8/13/2007	342.63	341.08	341.23	341.21
9/27/2007	342.27	340.82	341.24	340.70
10/22/2007	342.29	340.98	341.32	340.75
11/15/2007	342.29	341.12	341.27	341.08
12/14/2007	342.69	341.64	341.53	341.67
1/29/2008	343.33	341.92	341.87	342.46
2/25/2008	343.65	341.99	341.87	342.77
3/31/2008	343.70	342.02	341.88	342.87
4/29/2008	343.98	341.97	341.94	342.85
5/22/2008	343.76	341.93	341.71	342.92
6/18/2008	343.54	341.83	341.64	342.46
7/24/2008	343.46	342.14	341.73	342.57
8/20/2008	343.48	341.87	341.87	342.68
9/11/2008	343.15	341.77	341.81	342.26
10/30/2008	343.06	341.77	341.74	342.45
11/20/2008	343.45	341.87	341.79	342.74
12/27/2008	343.81	342.08	341.91	343.11
1/26/2009	343.50	341.84	341.86	342.82
2/25/2009	343.78	341.93	341.89	342.93
3/31/2009	343.78	341.98	341.88	342.98
4/27/2009	343.85	342.06	339.57	343.03
5/31/2009	343.72	341.93	341.83	342.87
6/22/2009	343.91	341.80	341.72	342.64
7/31/2009	343.15	341.62	341.67	342.21
8/24/2009	343.03	341.53	341.61	342.25
9/29/2009	342.75	341.30	341.34	341.72
10/27/2009	342.82	341.66	341.55	342.02
11/10/2009	342.81	341.67	341.57	341.97
12/8/2009	342.95	341.68	341.45	342.24
1/25/2010	342.86	341.60	341.66	342.28
2/26/2010	342.85	341.70	341.62	342.27
3/24/2010	342.92	341.86	341.64	342.30
4/18/2010	343.94	341.85	341.79	342.64
5/3/2010	343.38	341.63	341.36	342.66

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

Monitor Date	Lower Till Locations			
	11-III	16-VI	53-II /IIR	60-I
6/1/2010	343.10	341.79	341.79	342.23
7/1/2010	343.11	341.76	341.77	342.22
8/1/2010	343.08	341.78	341.73	342.25
9/1/2010	343.05	341.80	341.65	342.34
10/1/2010	342.99	341.82	341.48	342.44
11/10/2010	342.91	341.72	341.49	342.35
12/16/2010	342.97	341.74	341.54	342.37
1/24/2011	343.06	341.79	341.65	342.42
2/22/2011	343.30	341.86	341.63	342.51
3/14/2011	343.61	341.91	341.59	342.75
4/18/2011	343.75	342.00	341.78	343.06
5/23/2011	343.64	341.97	341.76	343.08
6/21/2011	343.58	341.84	341.75	343.01
7/18/2011	343.52	341.64	341.73	342.93
8/17/2011	342.87	341.38	341.61	342.50
9/13/2011	342.81	341.31	341.57	342.05
10/10/2011	342.91	341.51	341.59	342.23
11/1/2011	343.14	341.63	341.64	342.26
12/2/2011	343.33	341.71	341.73	342.49
1/16/2012	343.39	341.97	341.89	342.63
2/9/2012	343.46	342.05	341.89	342.71
3/19/2012	343.64	342.03	341.94	342.79
4/17/2012	343.88	342.00	341.85	342.87
5/7/2012	343.51	341.91	341.76	342.84
6/8/2012	343.34	341.75	341.61	342.01
7/12/2012	343.26	341.69	341.65	341.90
8/14/2012	343.15	341.81	341.54	342.05
9/17/2012	343.24	341.75	341.70	342.00
10/3/2012	343.18	341.77	341.77	342.07
11/21/2012	343.35	341.82	341.89	342.46
12/19/2012	343.31	341.91	341.78	342.38
1/15/2013	343.35	341.85	341.74	342.42
2/11/2013	343.27	341.85	341.74	342.42
3/11/2013	343.32	341.87	341.69	342.65
4/17/2013	343.35	341.75	341.71	342.79
5/25/2013	343.43	341.94	341.80	342.90
6/25/2013	343.45	341.90	341.74	342.96
7/9/2013	343.48	341.93	341.76	342.95
7/30/2013				
8/20/2013	343.55	341.96	341.81	342.92
9/11/2013	343.51	342.01	341.79	342.89
9/26/2013				
10/16/2013	343.62	341.98	341.89	342.97
11/18/2013	343.72	342.05	341.86	343.12
12/23/2013	343.60	341.93	341.67	342.99
1/9/2014	343.39	341.71	341.64	342.57
2/10/2014	343.36	341.76	341.69	342.75
3/14/2014	343.56	341.81	341.73	342.82
4/8/2014	343.67	341.89	341.78	343.00
5/2/2014	343.99	342.04	341.94	343.17
6/13/2014	343.95	342.11	342.02	343.20
7/15/2014	343.83	342.25	341.98	343.23

Note: All Water Level in mASL

A4 : Selected Bedrock and Lower Till Groundwater Elevations - Eastview Road Landfill Site

	Lower Till Locations			
Monitor Date	11-III	16-VI	53-II /IIR	60-I
8/8/2014	343.78	342.08	342.05	343.19
9/3/2014	343.84	341.93	341.94	343.03
10/6/2014	343.68	341.91	341.70	342.96
11/12/2014	343.52	341.72	341.45	342.81
12/4/2014	343.56	341.70	341.57	342.84

Note: All Water Level in mASL

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site

Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I
Geologic Unit	Waste				Fill/ Waste	Outwash										
Date																
21-Jun-1993	342.73	346.81					341.89									
22-Jun-1993	342.80	346.83					341.97									
23-Jun-1993	342.77	346.83					341.95									
24-Jun-1993	342.65	346.78					341.73									
25-Jun-1993	342.78	346.80					341.82									
28-Jun-1993	342.72	346.81					341.80									
29-Jun-1993	342.73	346.81					341.78									
30-Jun-1993	342.44	346.78					342.09									
02-Jul-1993	342.45	346.79					341.72									
08-Jul-1993	342.36	345.76					341.72									
16-Jul-1993	342.35	345.74					341.71									
22-Jul-1993	342.37	345.89					341.72									
08-Aug-1993	342.44	346.44					341.75									
18-Aug-1993	342.30	346.62					341.82									
24-Aug-1993			345.38					342.34	340.71	341.90	341.87					
25-Aug-1993	342.22	346.28	343.70				341.85	342.28	341.73	341.92	341.85					
27-Aug-1993			343.68					342.31	341.81	342.04	341.99					
30-Aug-1993	342.33	346.39	343.69				341.87	342.40	341.91	342.19	342.20					
31-Aug-1993	342.37	346.67	343.73				341.87	342.42	341.93	342.23	342.26					
01-Sep-1993	342.33	345.94	343.69				341.87	342.38	341.91	342.22	342.26					
02-Sep-1993	342.34	346.27	343.70				341.93	342.41	341.96	342.26	342.30					
03-Sep-1993	342.38	346.37	343.76				341.97	342.45	341.99	342.32	342.36					
07-Sep-1993	342.50	346.49	343.71				342.08	342.60	342.05	342.44	342.44					
08-Sep-1993	342.56	346.52	343.75				342.12	342.64	342.10	342.45	342.50					
09-Sep-1993	342.59	347.14	343.75				342.14	342.67	342.06	342.43	342.41					
10-Sep-1993	342.55	347.13	343.77				342.08	342.60	341.93	342.30	342.24					
13-Sep-1993	342.48	347.09	343.75				341.93	342.54	341.85	342.03	341.92					
14-Sep-1993	342.40	347.14	343.80			341.49	341.87	342.54	341.85	342.00	341.90	341.70				
15-Sep-1993	342.42	346.97	343.80			342.06	341.87	342.44	341.78	342.04	341.99	341.90				
16-Sep-1993	342.47	347.18	343.81			342.23	341.86	342.46	341.80	342.12	342.07	342.01				
17-Sep-1993	342.46	347.18	343.87			342.16	341.86	342.46	341.80	341.97	341.89	342.09				
20-Sep-1993	342.39	347.27	343.89			342.19	341.85	342.40	341.78	341.89	341.82	342.18				
21-Sep-1993	342.35	347.33	343.95			342.09	341.85	342.38	341.76	341.88	341.82	342.18				
22-Sep-1993	342.33	347.34	343.92			342.09	341.87	342.34	341.75	341.86	341.79	342.20				
23-Sep-1993	342.31	347.32	344.00			342.05	341.86	342.35	341.75	341.87	341.82	340.20				
24-Sep-1993	342.27	347.38	343.92			341.88	341.86	342.34	341.72	341.73	341.78	340.49				
27-Sep-1993	342.26	347.43	343.95			341.96	341.92	342.28	341.74	341.85	341.78	341.30				
28-Sep-1993	342.20	347.47	344.02			342.05	341.85	342.23	341.70	341.80	341.77	341.49				
29-Sep-1993	342.26	347.43	344.01			342.11	341.86	342.19	341.68	341.78	341.76	341.67				
30-Sep-1993	342.23	347.39	343.96			342.08	341.83	342.20	341.69	341.78	341.75	341.78				
01-Oct-1993	342.32	347.42	344.02			342.02	341.78	342.18	341.73	341.83	341.77	341.83				
04-Oct-1993	342.23	347.49	344.35			342.02	341.75	342.25	341.68	341.82	341.76	341.98				
05-Oct-1993	342.12	347.49	344.52			342.13	341.83	342.17	341.63	341.74	341.75	342.03				
06-Oct-1993	342.17	347.45	344.17			342.13	341.79	342.19	341.67	341.77	341.75	342.03				
07-Oct-1993	342.18	347.46	344.11			341.99	341.73	342.22	341.70	341.81	341.76	342.02				
08-Oct-1993	342.16	347.51	344.13			342.03	341.76	342.22	341.70	341.82	341.78	342.05				
12-Oct-1993	342.24	347.55	344.22			342.10	341.73	342.24	341.68	341.82	341.77	342.07				

Note: All Water Level in mASL
Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007
Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site

Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I
Geologic Unit	Waste				Fill/ Waste	Outwash										
Date																
13-Oct-1993	342.14	347.58	344.29			342.14	341.80	342.15	341.63	341.73	341.78	342.08				
14-Oct-1993	342.13	347.52	344.77			342.05	341.80	342.17	341.65	341.75	341.76	342.07				
15-Oct-1993	342.18	347.59	344.57			342.02	341.76	342.20	341.65	341.77	341.77	342.07				
18-Oct-1993	342.27	347.57	344.26			341.90	341.76	342.42	341.63	341.77	341.82	342.05				
19-Oct-1993	342.31	347.52	344.16			342.03	341.81	342.54	341.66	341.82	341.84	342.08				
20-Oct-1993	342.39	347.52	344.23			342.04	341.75	342.59	341.69	341.85	341.85	342.09				
21-Oct-1993	342.51	347.69	344.47			341.33	341.72	342.65	341.68	341.88	341.87	340.55				
25-Oct-1993	342.42	347.69	344.37			341.70	341.78	342.57	341.65	341.82	341.87	341.27				
26-Oct-1993	342.50	347.71	344.39			341.88	341.75	342.62		341.84	341.86	341.45				
27-Oct-1993	342.39	347.77	344.98			342.02	341.79	342.59		341.88	341.87	341.64				
28-Oct-1993	342.46	347.81	344.49			341.99	341.80	342.59		341.89	341.89	341.81				
29-Oct-1993	342.48	347.88	344.68			341.72	341.79	342.55		341.87	341.91	341.95				
01-Nov-1993	342.16	347.83	344.02			341.73	341.81	342.45	341.64	342.01	341.88	342.08				
03-Nov-1993	342.38	347.90	344.45			341.84	341.71	342.48	341.70	341.87	341.91	342.01				
04-Nov-1993	342.30	347.92	344.48			342.00	341.70	342.44	341.68	341.85	341.91	341.99				
05-Nov-1993	342.26	348.00	345.07			341.95	341.73	342.48	341.72	341.89	341.92	340.92				
08-Nov-1993	342.30	347.65	344.39			341.96	341.74	342.37	341.65	341.80	341.89	341.19				
09-Nov-1993	342.29	347.74	344.76			341.98	341.73	342.36	341.67	341.83	341.90	341.37				
10-Nov-1993	342.27	347.75	344.84			342.05	341.73	342.34	341.66	341.82	341.90	341.51				
15-Nov-1993	342.27	347.75	344.92			341.82	341.75	342.35	341.68	341.83	341.91	341.43				
16-Nov-1993	342.27	347.76	344.93			341.71	341.76	342.34	341.69	341.84	341.93	341.34				
17-Nov-1993	342.27	347.77	344.95			341.47	341.78	342.35	341.70	341.86	341.94	341.32				
18-Nov-1993	342.18	347.70	345.09			341.97	341.79	342.26	341.64	341.80	341.89	341.51				
19-Nov-1993	342.26	347.81	345.16			341.97	341.80	342.37	341.73	341.91	341.94	342.26				
23-Nov-1993	342.18	347.62	345.13			341.95	341.75	342.32	341.66	341.81	341.91	341.81				
24-Nov-1993	342.16	347.66	345.17			341.99	341.78	342.33	341.65	341.84	341.94	341.86				
25-Nov-1993	342.14	347.58	345.13			342.10	341.79	342.31	341.66	341.80	341.93	341.91				
26-Nov-1993	342.22	347.67	345.14			342.04	341.82	342.32	341.68	341.81	341.94	341.94				
29-Nov-1993	342.26	347.74	345.22			341.88	341.79	342.52	341.66	341.86	342.00	341.91				
30-Nov-1993	342.19	347.63	345.17			342.17	341.80	342.50	341.62	342.35	341.97	341.98				
01-Dec-1993	342.30	347.58	345.21			342.13	341.79	342.63	341.65	342.30	341.99	341.98				
02-Dec-1993	342.41	347.75	345.25			342.09	341.76	342.57	341.74	342.07	342.02	342.00				
03-Dec-1993	342.34	347.65	345.24			342.20	341.82	342.65	341.69	341.89	342.03	342.03				
06-Dec-1993	342.45	347.76	345.29			342.35	341.73	342.76	341.76	341.96	342.14	342.00				
07-Dec-1993	342.37	347.74	345.25			342.25	341.74	342.67	341.68	341.88	341.96	342.03				
10-Dec-1993	342.53	347.78	345.37			341.95	341.78	342.75	341.79	341.96	342.02	342.04				
13-Dec-1993	342.39	347.65	345.31			342.18	341.78	342.70	341.70	341.90	342.02	342.09				
14-Dec-1993	342.41	347.84	345.30			342.20	341.80	342.74	341.73	341.93	342.03	342.09				
15-Dec-1993	342.39	347.84	345.29			342.28	341.76	342.73	341.70	341.91	342.03	342.10				
16-Dec-1993	342.32	347.77	345.24			342.21	341.77	342.64	341.67	341.86	342.02	342.12				
17-Dec-1993	342.34	347.76	345.30			342.15	341.78	342.69	341.71	341.90	342.00	342.12				
20-Dec-1993	342.34	347.80	345.29			342.18	341.78	342.71	341.70	341.88	342.01	342.11				
21-Dec-1993	342.39	347.90	345.29			341.79	341.78	342.68	341.74	341.95	342.04	342.02				
22-Dec-1993	342.35	347.84	345.36			342.11	341.80	342.59	341.70	341.93	342.02	342.03				
23-Dec-1993	342.36	347.79	345.28			342.20	341.79	342.55	341.66	341.90	341.98	342.06				
20-Jan-1994	342.49	347.88	345.27			342.08	341.73	342.19	341.63	341.75	341.87	341.39				
17-Feb-1994	342.57	347.93	345.61			342.81	341.82	342.27	341.73	341.97	341.99	341.65				

Note: All Water Level in mASL

Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007

Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site

Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I
Geologic Unit	Waste				Fill/ Waste	Outwash										
Date																
22-Feb-1994								342.48	341.75							
01-Mar-1994	341.59							342.05	341.70							
08-Mar-1994	341.52							341.53	341.64							
16-Mar-1994	341.02	348.05	345.61			341.84	341.93	341.48	341.61	341.79	341.92	341.08				
23-Mar-1994	340.90							341.38	341.55							
05-Apr-1994	341.28							341.80	341.58							
11-Apr-1994	341.84	347.93	345.67			341.62	341.45	341.84	341.54	341.86	342.09	341.53				
19-Apr-1994	342.11							342.37	341.97							
27-Apr-1994	343.11							342.38	342.14							
05-May-1994	342.11							341.85	341.68							
10-May-1994	341.89							341.65	341.26							
16-May-1994	341.75	347.63	345.64			342.18	341.56	341.56	341.05	341.83	342.10	341.92				
25-May-1994	341.68							341.45	340.90							
02-Jun-1994	341.75							341.70	341.51							
07-Jun-1994	341.72							341.60	341.20							
16-Jun-1994	341.60							341.40	340.97							
21-Jun-1994	341.52	347.87	345.64			341.69	341.60	341.30	340.84	342.06	342.14	341.50				
28-Jun-1994	341.47							341.23	340.88							
07-Jul-1994	341.42							341.24	340.76							
13-Jul-1994	341.37							341.16	340.70							
18-Jul-1994	341.93	347.87	345.66			342.21	341.44	341.11	340.69	341.96	342.18	341.66				
27-Jul-1994	341.40							341.03	340.70							
03-Aug-1994	341.42							341.02	340.64							
11-Aug-1994	341.31							340.96	340.61							
15-Aug-1994	341.23	347.82	345.64			341.97	341.27	340.93	340.61	341.92	341.82	341.53				
26-Aug-1994	341.22							340.93	340.61							
08-Sep-1994	341.08							340.82	340.53							
15-Sep-1994	341.09							340.79	340.54							
23-Sep-1994	341.10	347.81	345.62			341.87	341.39	340.78	340.59	341.94	341.80	341.50				
30-Sep-1994	340.99							340.67	340.59							
06-Oct-1994	341.01							340.74	340.62							
13-Oct-1994	341.05							340.75	340.63							
19-Oct-1994	341.09	347.94	345.64			341.64	341.32	340.75	340.64	341.89	341.65	341.52				
26-Oct-1994	341.28							340.76	340.64							
03-Nov-1994	341.62							340.77	340.65							
11-Nov-1994	341.23							340.97	340.94							
16-Nov-1994	341.16	347.62	345.62			341.59	341.17	341.00	340.67	341.62	341.70	341.30				
25-Nov-1994	341.09							340.94	340.56							
30-Nov-1994	341.09							340.91	340.55							
07-Dec-1994	341.13							340.92	340.50							
16-Dec-1994	341.13							340.79	340.51							
20-Dec-1994	341.22	347.56	345.68			341.89	341.22	340.80	340.43	341.52	341.82	341.39				
28-Dec-1994	341.13							340.77	340.44							
05-Jan-1995	341.09							340.76	340.45							
12-Jan-1995	341.11							340.74	340.52							
18-Jan-1995	341.62	347.39	345.70			342.09	341.21	341.62	341.51	341.62	342.04	340.80				
25-Jan-1995	341.55							341.37	341.27							

Note: All Water Level in mASL

Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007

Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site

Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I
Geologic Unit	Waste				Fill/ Waste	Outwash										
Date																
02-Feb-1995	341.07							341.14	340.71							
09-Feb-1995	340.71							341.04	340.65							
15-Feb-1995	340.72	347.56	345.85			342.22	341.26	340.99	340.56	341.65	341.90	341.55				
23-Feb-1995	340.89							340.88	340.57							
28-Feb-1995	341.15		345.76					340.81	340.53				342.90			
08-Mar-1995	341.06		345.77					340.89	340.50				342.89			
13-Mar-1995	341.00	347.36	345.78			342.07	341.18	340.75	340.38	341.58	342.00	341.50	342.88			
21-Mar-1995	341.02		345.79					340.78	340.40				342.88			
29-Mar-1995	341.23		345.84					340.99	340.58				342.90			
06-Apr-1995	341.17		345.84					340.90	340.56				342.89			
11-Apr-1995	341.05	347.39	345.83			342.07	341.19	340.87	340.56	341.64	342.02	341.08	342.88			
18-Apr-1995	341.15		345.85					340.79	340.52				342.87			
05-May-1995	341.31		345.77					340.99	340.53				342.87			
11-May-1995	341.33	347.59	345.81			342.13	341.18	340.98	340.51	341.66	342.02	341.52	342.89			
15-May-1995	341.32		345.79					341.06	340.71				342.89			
26-May-1995	341.27		345.79					340.87	340.52				342.87			
01-Jun-1995	341.27		345.83					340.97	340.70				342.87			
07-Jun-1995	341.14		345.84					340.86	340.53				342.86			
14-Jun-1995	341.10		345.84					340.85	340.50				342.86			
21-Jun-1995	341.21	347.43	345.82			342.05	341.17	340.84	340.56	341.59	342.04	341.41	342.86			
29-Jun-1995	341.04		345.90					340.75	340.50				342.85			
05-Jul-1995	341.02		345.92					340.72	340.47				342.85			
11-Jul-1995	341.08		345.87					340.70	340.50				342.83			
17-Jul-1995	341.18	347.49	345.91	344.23	342.60	342.05	341.07	340.87	340.67	341.53	341.92	341.13	342.81	342.87		
26-Jul-1995	341.15		345.88	342.73	342.92			340.85	340.57				342.82	342.88		
02-Aug-1995	341.07		345.85	342.69	343.13			340.75	340.47				342.80	342.85		
10-Aug-1995	341.06		345.77	342.53	343.32			340.78	340.52				342.80	342.70		
15-Aug-1995	341.19	347.30	345.93	342.67	343.39	342.03	341.09	341.05	341.07	341.70	342.13	341.35	342.78	342.85		
17-Aug-1995	341.28		345.79	342.53	343.26			341.09	341.09				342.79	342.69		
30-Aug-1995	341.14		345.96	342.66	343.30			340.87	340.57				342.78	342.83		
06-Sep-1995	340.93		345.90	342.51	343.39			340.80	340.40				342.77	342.68		
13-Sep-1995	340.94		345.88	342.50	343.44			340.76	340.40				342.77	342.82		
28-Sep-1995	340.95	347.23	345.89	342.46	343.47	341.58	341.12	340.75	340.43	341.68	341.90	341.37	342.73	342.63		
04-Oct-1995	340.95		345.87	342.46	343.44			340.77	340.42				342.75	342.65		
11-Oct-1995	340.96		345.89	342.48	343.47			340.78	340.43				342.74	342.68		
18-Oct-1995	341.07	347.24	345.89	342.50	343.47	341.57	341.10	340.80	340.44	341.68	341.92	341.36	342.77	342.70		
25-Oct-1995	340.80		345.95	342.54	343.29			340.53	340.33				342.96	342.61		
01-Nov-1995	340.80		345.96	342.58	343.45			340.53	340.53				342.71	342.76		
08-Nov-1995	341.15		345.96	342.62	343.45			340.95	340.84				342.73	342.77		
15-Nov-1995	341.33		345.99	342.62	343.45			341.26	341.30				342.72	342.77		
22-Nov-1995	341.43	347.57	345.68	342.66	343.43	342.29	341.29	341.27	341.24	341.93	342.36	341.71	342.74	342.83		
29-Nov-1995	341.50		345.75	342.65	343.04			341.33	341.27				342.75	342.83		
06-Dec-1995	341.88		345.79	342.68	343.17			341.45	341.40				342.81	342.84		
18-Dec-1995	341.09		345.83	342.72	343.28			341.30	341.17				342.83	342.89		
20-Dec-1995	341.33	347.50	345.75	342.73	343.31	342.53	341.63	341.18	341.06	342.13	342.57	341.85	342.79	342.89		
27-Dec-1995	340.93		345.71	342.74	343.36			341.08	340.94				342.79	342.89		
16-Jan-1996	340.75	347.40	345.51	342.64	343.36	341.98	341.29	340.90	340.62	341.65	341.89	341.52	342.71	342.81		

Note: All Water Level in mASL
Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007
Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site

Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I
Geologic Unit	Waste					Fill/ Waste	Outwash									
Date																
14-Feb-1996	340.96	347.26	345.87	342.71	343.35	342.07	341.44	341.24	341.14	341.73	341.98	341.69	342.99	342.85		
13-Mar-1996	340.88	347.40	345.76	342.75	343.33	342.07	341.43	341.25	341.11	341.75	341.94	341.68	342.79	342.81		
11-Apr-1996	340.86	347.29	347.76	342.64	343.28	342.09	341.42	341.19	341.09	341.73	342.02	341.65	342.78	342.78		
06-May-1996	341.19	347.41	345.76	342.75	343.16	342.23	341.60	341.55	341.55	341.96	342.20	341.85	342.86	342.85		
10-Jun-1996	341.76	347.26	345.67	342.90	343.26	342.29	341.64	341.58	341.67	342.05	342.21	341.94	342.92	342.89		
16-Jul-1996	340.98	347.34	345.70	342.85	343.24	342.06	341.59	341.52	341.49	341.77	341.98	341.82	342.88	342.88		
12-Aug-1996	341.59	347.52	345.68	342.80	343.29	341.99	341.51	341.45	341.35	341.67	341.89	341.77	342.86	342.82		
17-Sep-1996	341.40	347.54	345.68	342.71	343.25	342.07	341.41	341.28	341.28	341.76	342.03	341.66	342.76	342.76		
16-Oct-1996	341.43	347.63	345.74	342.65	343.27	342.05	341.44	341.24	341.03	341.72	341.98	341.67	342.78	342.76		
13-Nov-1996	341.36	347.49	345.89	342.63	343.27	342.21	341.41	341.19	341.11	341.69	342.06	341.75	342.78	342.75		
12-Dec-1996	341.26	347.39	345.84	342.55	343.17	342.14	341.40	341.06	340.88	341.81	342.07	341.66	342.73	342.75		
20-Jan-1997	341.03	347.29	345.74	342.69	343.45	342.08	341.58	341.41	341.28	341.76	341.91	341.77	342.79	342.78		
18-Feb-1997	341.34	347.32	346.01	342.64	343.51	342.13	341.47	341.29	341.12	341.80	342.01	341.69	342.78	342.75		
21-Mar-1997	341.27	347.44	345.90	342.76	343.55	342.25	341.69	341.74	341.69	341.88	342.12	341.93	342.89	342.81		
21-Apr-1997	341.80	347.48	345.80	342.79	343.57	342.14	341.80	341.71	341.63	341.89	342.06	341.98	342.92	342.84		
14-May-1997	341.63	347.63	346.02	342.74	343.77	342.17	341.59	341.58	341.53	341.85	342.07	341.82	342.90	342.79		
09-Jun-1997	341.54	347.34	346.04	342.80	344.05	342.02	341.42	341.39	341.21	341.75	341.94	341.83	342.85	342.36		
15-Jul-1997	341.22	347.42	345.90	342.62	344.27	341.94	341.28	341.05	340.79	341.59	341.85	341.58	342.73	342.71		
18-Aug-1997	341.12	348.09	346.00	342.56	344.29	341.92	341.08	340.94	340.78	341.58	342.01	341.49	342.67	342.67		
29-Sep-1997	341.16	347.88	345.96	342.56	343.54	341.93	341.15	340.94	340.69	341.62	341.69	341.52	342.63	342.68		
20-Oct-1997	341.06	347.71	346.07	342.46	343.41	341.74	341.13	340.79	340.55	341.43	341.61	341.41	342.57	342.59		
10-Nov-1997		348.09	346.09	342.37	343.03	341.90	Dry	341.00	340.77	341.57	341.84	341.32	Dry	342.55		
15-Dec-1997		347.24	346.04	342.41	343.05	341.96	341.24	341.01	340.87	341.36	341.90	341.48	342.57	342.55		
20-Jan-1998		347.29	346.06	342.47	343.18	342.17	341.47	341.16	341.02	341.87	342.16	341.65	342.56	342.60		
23-Feb-1998		347.20	346.17	342.48	343.18	342.06	341.37	341.26	341.45	341.69	342.01	341.55	342.56	342.62		
19-Mar-1998		347.23	346.25	342.49	343.66	342.07	341.35	341.24	340.87	341.67	342.00	341.54	342.57	342.62		
14-Apr-1998		347.30	346.23	342.45	344.82	342.03	341.10	340.99	340.68	341.66	341.96	341.54	342.56	342.61		
14-May-1998		345.67	346.17	342.40	344.36	341.96	340.52	340.86	340.59	341.57	342.13	341.41	342.56	342.57		
10-Jun-1998		346.42	346.20	342.38	343.64	341.86	340.52	340.77	340.52	341.51	341.80	341.37	342.44	342.55		
15-Jul-1998		345.16	345.32	342.35	343.27	341.87	341.11	340.74	340.53	341.48	341.84	341.34	342.56	342.51		
10-Aug-1998		346.19	345.27	342.04	343.17	341.76	340.52	340.67	340.46	341.39	341.68	341.28	342.44	342.47		
23-Sep-1998		345.41	345.51	342.23	343.06	341.73	341.11	340.57	340.41	341.23	341.53	341.17	342.56	342.42		
16-Oct-1998		345.50	345.56	342.19	343.02	341.63	341.11	340.53	340.38	341.23	341.56	341.14	342.56	342.37		
27-Oct-1998															340.60	
09-Nov-1998		346.08	345.64	342.16	343.01	341.61	341.11	340.49	340.40	341.35	341.53	341.15	342.56	342.34		
23-Nov-1998															340.55	340.90
15-Dec-1998		345.78	346.23	342.12	342.97	341.90	341.11	340.53	340.42	341.30	341.62	341.14	342.56	342.29		
26-Jan-1999		346.10	346.37	342.09	342.94	341.80	341.11	340.65	340.84	341.35	341.76	341.10	342.56	342.25	340.72	341.52
15-Feb-1999		346.41	346.68	342.09	344.65	341.78	341.11	340.74	340.58	341.43	341.84	341.17	342.56	342.25	340.78	341.52
16-Mar-1999		346.49	346.59	342.13	344.60	341.82	341.11	340.76	340.48	341.46	341.91	341.27	342.56	342.28	340.91	341.52
16-Apr-1999		346.35	346.47	342.15	343.63	341.92	341.11	340.76	340.49	341.47	341.95	341.26	342.56	342.30	340.82	340.98
20-May-1999		345.06	346.39	341.98	344.05	341.89	340.87	340.64	340.30	341.20	341.65	341.21	342.43	343.16		
23-Jun-1999		345.33	346.47	341.96	343.59	341.74	340.87	340.62	340.40	341.20	341.57	341.22	342.43	343.13	341.66	341.24
16-Jul-1999		345.31	346.22	341.95	343.15	341.68	340.87	340.63	340.16	341.16	341.62	341.22	342.43	343.12	341.69	341.43
16-Aug-1999		345.73	345.79	341.92	342.90	341.60	340.87	340.55	340.14	341.09	341.44	341.17	342.43	343.09		341.41
16-Sep-1999		345.27	345.37	341.89	342.72	341.60	340.87	340.54	340.14	341.09	341.44	341.16	342.43	343.10		
18-Oct-1999		345.61	345.56	341.88	342.68	341.64	340.87	340.60	340.15	341.10	341.52	341.14	342.43	343.04		

Note: All Water Level in mASL

Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007

Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site



Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I
Geologic Unit	Waste				Fill/ Waste	Outwash										
Date																
16-Nov-1999		344.85	345.97	341.91	342.67	341.68	340.87	340.69	340.23	341.21	341.71	341.27	342.43	343.06		
16-Dec-1999		345.80	346.32	341.95	342.65	341.71	340.87	340.84	340.43	341.25	341.72	341.33	342.43	343.08	341.87	341.64
27-Jan-2000		345.83	Frozen	341.94	343.00	341.81	340.87	340.79	340.42	341.13	341.59	341.20	342.43	343.10	N/A	N/A
15-Feb-2000		349.23	Frozen	341.93	343.05	341.65	340.87	340.73	340.41	341.11	341.53	341.22	342.43	343.09	341.90	341.49
21-Mar-2000		Broken	347.36	341.95	343.32	341.79	340.87	340.83	340.53	341.24	341.72	341.28	342.43	343.10	341.89	341.65
12-Apr-2000		Broken	346.78	341.96	344.97	341.78	340.87	340.79	340.49	341.21	341.71	341.31	342.43	343.11	341.90	341.64
25-May-2000		Broken	346.40	342.00	344.93	341.53	340.87	340.89	340.60	341.31	341.80	341.37	342.43	343.19	341.86	341.64
19-Jun-2000		Broken	346.69	341.90	344.48	342.00	340.87	341.01	340.68	341.47	342.13	341.41	342.43	343.15	341.88	341.64
27-Jul-2000		Broken	345.94	342.07	344.39	341.79	340.87	340.94	340.65	341.39	341.75	341.48	342.43	343.23	341.86	341.59
14-Aug-2000		Broken	346.04	342.08	344.00	341.86	340.87	340.92	340.64	341.35	341.77	341.43	342.43	343.23	341.87	341.60
21-Sep-2000		Broken	345.73	342.03	343.40	341.60	340.87	340.84	340.59	341.16	341.55	341.23	342.43	343.18	341.86	341.40
17-Oct-2000		Broken	346.00	341.99	343.02	341.66	340.87	Broken	340.61	341.19	341.56	341.28	342.43	343.15	341.86	341.35
06-Nov-2000		Broken	345.53	341.97	342.92	341.65	340.87	Broken	340.62	341.17	341.54	341.26	342.43	343.13	341.87	341.35
18-Dec-2000		Broken	345.42	341.94	342.93	341.75	340.87	Broken	340.61	341.21	341.70	341.24	342.43	343.10	341.88	341.34
16-Jan-2001		Broken	346.26	341.94	342.92	341.80	340.87	Broken	340.79	341.26	341.76	341.32	342.43	343.11	341.89	341.34
14-Feb-2001		Broken	346.11	341.97	342.76	341.93	340.87	Broken	340.92	341.38	341.86	341.34	342.43	343.14	341.92	341.65
12-Mar-2001		Broken	345.85	342.00	343.61	341.82	340.87	Broken	340.84	341.30	341.72	341.34	342.43	343.12	341.89	341.41
02-Apr-2001		Broken	346.69	342.01	344.45	341.85	340.87	Broken	341.08	341.34	341.77	341.41	342.43	343.17	341.89	341.42
14-May-2001		Broken	346.14	342.05	344.56	341.53	340.87	Broken	340.82	341.34	341.72	341.41	342.43	343.19	341.93	341.58
25-Jun-2001		Broken	346.53	342.03	344.39	341.79	340.87	Broken	340.88	341.29	341.72	341.41	342.43	343.18	341.95	341.57
26-Jul-2001		Broken	345.82	341.98	343.63	341.62	340.87	Decom	340.77	341.17	341.48	341.25	342.43	343.12	341.93	341.51
13-Aug-2001		Broken	346.13	341.97	343.47	341.55	340.87	Decom	340.85	341.16	341.45	341.30	342.43	343.09	341.91	341.45
19-Sep-2001		Broken	346.46	341.88	342.88	341.54	340.87	Decom	N/A	341.12	341.47	341.16	342.43	343.02	341.96	341.46
29-Oct-2001		Broken	346.59	341.89	342.83	341.71	340.87	340.97	Broken	341.22	341.64	341.21	342.43	343.05	341.93	341.58
05-Nov-2001		Broken	346.81	341.96	342.82	341.74	340.87	340.95	Broken	341.28	341.69	341.29	342.43	343.05	341.95	341.56
21-Dec-2001		Broken	346.34	341.94	342.70	341.50	340.87	340.98	Broken	341.21	341.73	341.24	342.43	343.08	341.94	341.63
29-Jan-2002			346.58	342.03	342.77	341.78	340.87	340.96	Broken	341.21	341.73	341.27	342.43	343.12	341.95	341.62
22-Feb-2002			346.95	342.10	343.59	341.92	340.87	340.96	Broken	341.33	341.83	341.36	342.43	343.13	341.94	341.60
26-Mar-2002			346.85	342.09	343.91	341.83	340.87	340.97	Broken	341.24	341.74	341.33	342.43	343.14	341.95	341.61
22-Apr-2002			346.21	342.14	343.68	341.83	340.87	341.03	Broken	341.30	341.82	341.35	342.43	343.15	341.95	341.62
09-May-2002			346.09	342.01	344.51	341.86	340.87	340.98	Broken	341.28	341.77	341.29	342.43	343.16	341.95	341.62
17-Jun-2002			346.50	342.05	344.23	341.84	340.87	341.00	Broken	341.28	341.81	341.45	342.43	343.19	341.96	341.62
23-Jul-2002			345.81	342.00	343.67	341.66	340.87	340.83	Broken	341.19	341.52	341.26	342.43	343.14	341.95	341.62
12-Aug-2002			346.14	341.98	343.48	341.61	340.87	340.86	Broken	341.17	341.44	341.25	342.43	343.11	341.94	341.62
13-Sep-2002			346.51	341.91	343.07	341.45	340.87	340.78	Broken	341.03	341.30	340.47	342.43	343.04	341.94	341.62
22-Oct-2002			346.23	341.86	342.81	341.46	340.87	340.71	Broken	341.02	341.36	341.06	342.43	343.00	341.91	341.13
04-Nov-2002			347.02	341.86	342.79	341.46	340.87	340.72	Broken	341.07	341.44	341.14	342.43	343.00	341.92	341.14
18-Dec-2002			346.52	341.84	342.46	341.37	340.87	340.75	Broken	340.98	341.33	341.02	342.43	342.97	341.93	341.14
28-Jan-2003			N/A	341.86	342.67	341.62	340.87	N/A	Broken	341.09	341.41	341.15	342.43	N/A	341.94	341.15
27-Feb-2003			N/A	341.83	342.66	341.60	340.87	340.75	Broken	341.06	341.39	341.15	342.43	N/A	341.96	341.16
24-Mar-2003			347.73	341.84	342.56	341.68	340.87	341.07	Broken	341.15	341.64	341.15	342.43	342.99	341.90	341.60
22-Apr-2003			347.76	341.87	342.56	341.76	340.87	341.05		341.19	341.70	341.17	342.43	342.98	341.93	341.44
29-May-2003		344.42	346.86	341.92	344.89	341.87	340.87	341.56	340.62	341.29	341.77	341.33	342.43	broke	341.90	341.61
23-Jun-2003		344.38	347.86	341.93	344.64	341.76	340.87	341.60	340.64	341.25	341.71	341.24	342.43	broke	341.89	341.45
23-Jul-2003		344.27	346.00	341.91	344.41	341.53	340.87	340.87	340.61	341.16	341.56	341.18	342.43	broke	341.87	341.41
26-Aug-2003			346.68	341.97	343.90			340.91	340.64	341.10	341.47	341.18	342.43	broken	341.88	341.41
02-Sep-2003		344.18	346.73	341.96	343.86	341.52	340.87	340.90	340.64	341.08	341.47	341.18	342.43	broken	341.88	341.41

Note: All Water Level in mASL
Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007
Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site

Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I	
Geologic Unit	Waste				Fill/ Waste	Outwash											
Date																	
15-Oct-2003		344.17	347.64	341.94	343.20	341.56	340.87	340.85		341.12	341.49	341.14	342.43	broken	341.88	341.44	
03-Nov-2003		344.27	348.45	342.02	343.46	341.20	340.87	341.00	340.64	341.24	341.58	341.25	342.43	broken	341.89	341.45	
23-Dec-2003		344.26	346.79	342.10	344.51	341.95	340.87	341.00	340.61	341.50	342.02	341.35	342.43	broken	341.90	341.44	
30-Jan-2004		344.19	frozen	342.06	frozen	341.82	340.87	340.88	340.59	341.29	341.74	341.20	342.43	broken	341.88	341.44	
24-Feb-2004		344.23	Frozen	342.10	Frozen	341.88	340.87	340.85	340.58	341.30	341.80	341.29	342.43	Broken	341.88	341.44	
31-Mar-2004		344.25	348.48	342.17	344.73	342.00	340.87	341.76	340.87	341.47	341.92	341.48	342.43	broken	341.88	341.44	
19-Apr-2004		344.23	348.10	342.16	344.74	341.84	340.87	341.69	340.63	341.29	341.92	341.51	342.43	broken	341.88	341.45	
17-May-2004		344.27	346.95	342.18	344.93	341.92	340.87	342.05	340.65	341.33	341.83	341.40	342.43	broken	341.87	341.43	
07-Jun-2004		344.39	347.00	342.21	344.50	342.58	Dry	341.80	340.03	341.30	341.76	341.34		broken			
18-Jun-2004		344.30	346.97	342.19	344.67	341.91	340.87	341.89	340.26	341.32	341.79	341.37	342.43	broken	341.87	341.44	
06-Jul-2004		344.31	347.00	342.21	344.50	342.58	340.87	341.80	340.03	341.30	341.76	341.34	342.43	broken	341.88	341.45	
23-Aug-2004		344.32	346.52	342.20	343.64	341.85	340.87	339.39	340.87	341.33	341.72	341.45	342.43	broken	341.86	341.42	
27-Sep-2004		344.31	347.18	342.17	343.69	341.80	340.87	339.62	340.83	341.25	341.55	341.42	342.43	broken	341.87	341.45	
15-Oct-2004		344.29	347.22	342.16	343.66	341.81	340.87	339.62	340.83	341.25	341.61	341.45	342.43	broken	341.87	341.44	
01-Nov-2004		344.26	347.32	342.13	343.56	341.82	340.87	339.64	340.82	341.24	341.67	341.49	342.43	broken	341.86	341.44	
21-Dec-2004		344.34	347.00	342.15	343.41	341.95	340.87	341.81	340.85	341.36	341.80	341.58	342.43	broken	341.88	341.44	
13-Jan-2005		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
24-Feb-2005	340.98	344.40	348.35	342.21	344.68	342.04	340.87	341.92	340.86	341.41	341.86	frozen	342.43	broken	341.87	341.45	
21-Mar-2005	340.96	344.38	348.09	342.21	344.70	342.02	340.87	341.90	340.84	341.37	341.85	341.53	342.43	broken	341.87	341.45	
11-Apr-2005	340.92	344.33	347.68	342.23	344.70	341.96	340.87	341.85	340.78	341.32	341.85	341.46	342.43	broken	341.88	341.44	
18-May-2005	340.91	344.38	346.88	342.26	345.20	342.00	340.87	340.04	340.80	341.33	341.86	341.46	342.43	broken	341.88	341.44	
21-Jun-2005	340.91	344.37	347.54	342.26	345.13	341.95	340.87	341.81	340.79	341.29	341.81	341.42	342.43	broken	341.87	341.44	
28-Jul-2005	340.95	344.38	346.56	342.24	344.68	341.95	340.87	339.44	340.93	341.44	341.76	342.45	342.43	broken	341.86	341.44	
31-Aug-2005	340.95	344.49	347.15	342.20	344.20	342.38	340.87	339.61	340.84	341.23	340.57	342.28	342.43	broken	341.86	341.44	
21-Sep-2005	340.87	344.45	346.75	342.17	343.87	341.72	340.87	341.72	340.84	341.18	341.47	342.81	342.43	broken	341.86	341.44	
28-Oct-2005	340.91	344.39	346.86	341.96	343.62	341.63	340.87	341.72	340.84	341.23	341.60	343.92		Dry	broken	341.87	341.44
15-Nov-2005	340.80	344.31	346.93	342.13	343.78	341.83	340.87	341.52	340.58	341.04	341.56	343.69		Dry	broken	341.86	341.44
20-Dec-2005	341.00	344.39	346.85	342.20	343.80	342.17	340.87	341.78	340.83	341.59	342.08	345.11		Dry	broken	341.87	341.45
23-Jan-2006	340.95	344.44	347.19	342.28	344.29	342.08	340.87	341.83	340.78	341.45	341.90	343.91	342.43	broken	341.86	341.44	
20-Feb-2006	#####	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	Not Completed	
21-Mar-2006	340.90	344.47	347.20	342.36	345.87	342.09	340.87	341.78	340.86	341.40	341.88	342.75	342.43	broken	341.87	341.44	
24-Apr-2006	340.84	344.43	347.41	342.30	346.16	341.97	340.87	341.62	340.68	341.22	341.95	342.90	342.38	broken	341.86	341.44	
26-May-2006	340.75	343.87	346.80	341.82	345.59	341.51	340.87	341.18	340.75	341.27	341.78	342.26	342.43	broken	341.87	341.45	
07-Jun-2006	340.90	344.60	346.96	342.54	346.11	342.23	340.87	341.87	340.92	341.46	341.80	342.25	342.65	broken	341.86	341.44	
28-Jul-2006	340.83	344.69	350.34	342.55	345.52	342.17	340.87	341.75	340.92	341.41	341.86			Dry	broken	341.86	341.47
30-Aug-2006	340.85	344.66	350.61	342.55	345.40	342.04	340.87	341.76	340.96	341.35	341.81			Dry	broken	341.86	341.48
26-Sep-2006	340.70	344.64	347.58	342.54	345.13	342.09	340.87	341.40	340.87	341.33	341.81			Dry	broken	341.86	341.54
31-Oct-2006	340.77	344.72	347.07	342.59	345.57	342.33	340.87	341.57	340.84	341.48	342.07	347.09	342.65	broken	341.86	341.51	
24-Nov-2006	340.76	344.62	348.53	342.61	345.64	342.24	340.87	341.69	340.92	341.65	342.16	347.08	342.64	broken	341.86	341.51	
18-Dec-2006	340.75	344.70	347.38	342.65	345.53	342.22	340.87	341.44	340.76	341.40	341.94	347.16	342.64	broken	341.86	341.51	
22-Jan-2007	340.81	344.83	347.70	342.75	346.12	342.34	340.87	341.56	340.84	341.49	342.00	347.10	342.64	broken	341.87	341.49	
27-Feb-2007	340.80	344.83	347.81	342.81	345.51	342.26	340.87	341.45	340.83	341.38	341.89	347.21	342.93	broken	341.86	341.47	
26-Mar-2007	340.76	344.86	348.43	342.85	345.29	342.44	341.01	341.53	341.15	341.53	342.08	348.11	342.95	broken	341.88	341.58	
10-Apr-2007	340.75	344.92	348.43	342.87	345.29	342.45	341.01	341.53	341.15	341.53	342.08	348.11	342.95	broken	341.86	341.61	
22-May-2007	340.75	344.83	347.20	342.88	346.14	342.31	340.87	340.63	340.59	341.39	341.97	341.55	342.93	343.31	341.88	341.55	
18-Jun-2007	340.90	344.89	347.56	342.74	346.14	342.31	340.87	340.62	340.60	341.40	341.92	341.57	342.98	343.38	341.86	341.54	
26-Jul-2007	340.75	344.85	347.63	342.84	346.17	342.04	340.87	340.53	340.57	341.21	341.59	341.47	342.90	343.26	341.93	341.10	

Note: All Water Level in mASL

Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007

Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site

Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I
Geologic Unit	Waste				Fill/ Waste	Outwash										
Date																
13-Aug-2007	340.75	344.83	348.12	342.82	345.65	341.98	340.87	340.51	340.55	341.19	341.61	341.47	342.88	343.23	341.92	341.10
27-Sep-2007	340.73	344.76	348.32	342.63	345.31	341.87	340.87	340.41	340.51	341.11	341.46	341.36	342.70	343.00	341.91	341.10
22-Oct-2007	340.69	344.73	347.14	342.57	344.95	341.85	340.87	340.39	340.51	341.10	341.49	341.30	342.63	342.92	341.84	341.12
15-Nov-2007	340.71	344.80	347.78	342.53	344.66	341.89	340.87	340.39	340.51	341.16	341.46	341.30	342.58	342.86	341.81	341.12
14-Dec-2007	340.76	344.71	347.76	342.50	345.02	342.02	340.87	340.44	340.45	341.23	341.73	341.34	342.52	342.79	341.81	341.47
29-Jan-2008	341.25	344.96	348.73	342.59	345.65	342.29	340.87	340.87	340.97	341.50	341.96	341.68	342.68	342.97	341.84	341.57
25-Feb-2008	341.03	344.87	347.58	342.70	346.14	342.31	340.87	340.72	340.71	341.45	341.98	341.58	342.78	343.01	341.83	341.53
31-Mar-2008	341.03	344.95	347.25	342.75	346.18	342.42	340.87	340.70	340.67	341.48	342.05	341.63	342.94	343.21	341.86	341.62
29-Apr-2008	341.05	345.02	347.67	342.87	346.22	342.45	340.87	340.88	340.87	341.49	342.00	341.68	343.09	343.33	341.84	341.56
22-May-2008	340.92	345.01	348.18	343.03	346.18	342.37	340.87	340.73	340.71	341.40	341.99	341.63	343.22	343.45	341.91	341.55
18-Jun-2008	340.89	344.89	348.28	343.07	346.18	342.35	340.87	340.68	340.70	341.38	341.95	341.61	343.20	343.47	341.90	341.47
24-Jul-2008	340.86	344.99	347.86	343.07	346.10	342.62	340.69	340.65	340.68	341.88	342.54	344.75	343.18	343.71	341.99	341.57
20-Aug-2008	340.80	344.96	348.24	343.10	345.56	342.38	341.10	340.63	340.62	341.38	341.93	341.61	343.10	343.52	341.88	341.52
11-Sep-2008	340.87	344.89	348.63	343.10	345.28	342.35	341.06	340.63	340.62	341.34	341.87	341.54	343.11	343.53	341.88	341.58
30-Oct-2008	340.71	344.85	349.14	342.98	345.03	342.17	341.11	340.51	340.48	341.21	341.78	341.42	342.94	343.33	341.90	341.46
20-Nov-2008	342.70	344.66	348.61	342.97	345.24	342.54	Dry	340.52	340.47	341.30	340.25	341.46	342.93	343.33	341.82	341.12
27-Dec-2008	340.91	345.01	348.61	342.93	346.19	342.61	n/r	340.70	340.53	341.57	341.92	341.59	343.01	343.50	342.03	341.61
26-Jan-2009	340.82	345.09	347.72	342.96	346.14	342.29	341.11	340.54	340.46	341.30	341.89	341.49	343.08	343.37	341.89	341.49
25-Feb-2009	340.90	345.27	347.37	343.01	346.12	342.35	341.11	340.59	340.52	341.37	341.93	341.58	343.12	343.44	341.90	341.52
31-Mar-2009	340.82	345.19	348.53	343.01	345.49	342.33	340.89	340.57	340.47	341.33	341.95	341.49	343.09	343.39	341.96	341.55
27-Apr-2009	340.73	345.08	348.56	343.11	346.06	342.36	dry	340.61	340.52	341.36	342.02	347.58	343.14	343.50	341.91	341.58
31-May-2009	340.87	345.05	352.20	343.08	346.13	342.37	Dry	340.58	340.53	341.34	342.03	341.56	343.22	343.52	341.91	341.53
22-Jun-2009	341.09	345.19	349.37	343.15	346.14	342.33	dry	340.52	340.52	341.30	341.94	341.59	343.26	343.56	341.79	341.50
31-Jul-2009	340.72	345.17	349.61	342.87	345.94	342.25	dry	340.39	340.50	341.23	341.78	341.53	343.22	343.49	341.78	341.50
24-Aug-2009	N/A	345.02	349.18	343.05	345.41	342.16	dry	340.50	340.46	341.64	341.74	341.55	343.11	343.51	341.90	N/A
29-Sep-2009	340.73	345.09	348.79	342.96	345.24	342.01	dry	340.39	340.43	341.14	341.55	341.46	342.98	343.26	341.88	341.26
27-Oct-2009	340.54	345.13	348.49	342.89	344.83	342.12	dry	340.45	340.49	341.22	341.72	341.45	342.90	343.30	341.84	341.43
10-Nov-2009	340.70	345.04	348.51	342.85	344.54	342.11	Dry	340.49	340.44	341.23	341.73	341.41	342.80	343.25	341.85	341.43
08-Dec-2009	340.75	345.07	349.30	342.85	344.60	342.14	N/A	340.44	340.41	341.23	341.78	341.40	342.84	343.18	341.86	341.52
25-Jan-2010	340.70	343.89	350.14	342.71	344.59	342.11		340.44	340.41	341.23	341.60	341.24	342.82	343.03	341.93	341.50
26-Feb-2010	Dry	344.86	349.17	342.70	346.10	342.05	Dry	340.38	340.37	341.28	341.73	341.30	342.63	343.05	341.89	341.43
24-Mar-2010	Dry	344.89	348.72	342.71	345.45		dry	340.45	340.42	341.18	341.79	341.44	342.63	343.19	341.83	341.50
18-Apr-2010	340.71	345.10	349.15	342.76	346.10	342.32	dry	340.99	340.75	341.39	341.97	341.63	342.86	343.19	341.87	341.52
03-May-2010	340.94	345.04	349.65	342.75	346.09	342.40	dry	340.61	340.64	341.29	341.98	341.57	342.87	343.17	341.84	339.46
20-May-2010	340.94	345.04	349.65	342.75	346.09	342.40	dry	340.61	340.64	341.29	341.98	341.57	342.87	343.17	341.84	339.46
01-Jun-2010	340.80	345.13	349.72	341.98	345.83	342.75	dry	340.45	340.47	341.29	341.81	341.46	343.23	343.54	341.94	341.54
01-Jul-2010	340.77	345.12	349.64	342.94	345.79	342.23	dry	340.43	340.47	341.25	341.80	341.51	343.14	343.50	341.89	341.53
01-Aug-2010	340.71	345.08	349.75	342.91	345.70	342.26	dry	340.45	340.46	341.30	341.82	341.47	343.11	343.60	341.91	341.51
01-Sep-2010	340.51	344.90	349.82	342.94	345.71	342.22	dry	340.47	340.39	341.29	341.81	341.41	343.06	343.48	341.93	341.49
01-Oct-2010	340.49	344.39	349.74	342.79	345.73	342.14	dry	340.50	340.48	341.18	341.75	341.30	342.81	343.25	341.88	341.46
20-Oct-2010	339.49	344.39	350.84	342.79	345.81	342.14		340.50	340.48	341.18	341.75	341.30	342.76	343.15	342.08	341.46
10-Nov-2010	339.73	344.33	349.65	342.74	345.50	342.01	dry	340.42	340.43	341.10	341.73	341.21	342.75	343.17	341.77	341.27
16-Dec-2010	340.29	344.70	349.19	342.76	345.42	342.09		340.59	340.50	341.15	341.75	341.44	342.83	343.26	341.81	341.32
24-Jan-2011	340.48	344.85	349.05	342.84	345.56	342.14		340.66	340.61	341.29	341.88	341.51	342.72	343.30	341.86	341.40
22-Feb-2011	340.55	344.90	349.26	342.82	345.64	342.28		340.65	340.58	341.36	341.90	341.44	342.68	343.26	341.83	341.42
14-Mar-2011	340.66	345.16	349.98	342.84	345.99	342.35		340.64	340.55	341.37	341.93	341.53	342.73	343.30	341.85	341.44
18-Apr-2011	340.76	345.30	351.13	342.87	346.14	342.46		340.62	340.49	341.40	341.94	341.59	342.96	343.32	341.86	341.45

Note: All Water Level in mASL

Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007

Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

A5 : Routine Leachate Groundwater Elevations - Eastview Road Landfill Site

Monitor	1-I/1-IR	51-I/51-IR	59-I	67-I	65-I	51-II	52-I	55-I/55-IR	56-I/56-IR	57-I	58-I	61-I/IR	63-I	66-I/IR	68-I	69-I
Geologic Unit	Waste					Fill/ Waste	Outwash									
Date																
23-May-2011	340.81	345.24	350.44	343.07	346.20	342.43	340.96	340.53	340.52	341.38	341.97	341.71	343.37	343.53	341.90	341.60
21-Jun-2011	340.74	345.18	350.07	343.14	346.18	342.36	Dry	340.48	340.40	341.35	341.94	341.69	343.36	343.59	341.73	341.56
18-Jul-2011	340.67	345.22	349.55	343.13	346.13	342.32	Dry	340.34	340.25	341.26	341.89	341.65	343.33	343.57	341.60	341.49
17-Aug-2011	340.71	345.28	349.39	343.09	345.66	342.05	Dry	340.38	340.22	341.29	341.52	341.59	343.16	343.54	341.66	341.46
13-Sep-2011	340.83	345.23	349.25	343.05	345.52	341.97	Dry	340.33	340.26	341.26	341.44	341.53	343.12	343.45	341.70	341.40
10-Oct-2011	340.77	345.20	349.70	343.01	345.78	342.09	Dry	340.39	340.31	341.23	341.55	341.51	343.10	343.43	341.67	341.47
01-Nov-2011	340.66	345.09	352.00	342.88	345.95	342.22	dry	340.50	340.47	341.22	341.67	341.47	342.99	343.38	341.76	341.56
02-Dec-2011	340.76	345.16	349.76	342.93	345.83	342.34	Dry	340.47	340.49	341.28	341.70	341.51	343.05	343.42	341.79	341.59
16-Jan-2012	341.19	345.22	347.95	342.85	345.90	342.41	dry	340.63	340.86	341.39	341.98	341.62	343.14	343.50	341.90	341.71
09-Feb-2012	341.22	345.10	347.43	342.88	345.99	342.50	340.80	340.53	340.63	341.49	342.05	341.53	343.02	343.41	341.77	341.55
19-Mar-2012	341.11	345.07	348.40	343.03	345.85	342.36	340.83	340.62	340.36	341.43	342.19	341.61	343.06	343.54	341.79	341.64
17-Apr-2012			348.68	343.14	346.09	342.29	340.92	340.57	340.61	341.47	342.16	341.87	343.25	343.61	341.87	341.65
07-May-2012	341.02	345.34	349.46	343.36	346.20	342.38	341.00	340.68	340.71	341.48	342.04	341.69	343.43	343.58	341.87	341.68
08-Jun-2012	340.83	345.13	349.30	343.12	346.02	342.23	340.99	340.60	340.46	341.33	341.99	341.61	343.24	343.46	341.82	341.52
12-Jul-2012	340.88	344.92	349.36	342.93	345.90	342.30	341.08	340.48	340.55	341.31	341.97	341.57	342.98	343.36	341.74	341.47
14-Aug-2012	340.83	344.88	349.24	342.99	345.69	342.47	341.00	340.69	340.61	341.44	342.13	341.67	343.13	343.30	341.85	341.68
17-Sep-2012	341.07	344.98	349.52	343.03	345.56	342.42	340.98	340.88	340.58	341.58	342.20	341.82	343.23	343.36	341.83	341.75
03-Oct-2012	341.19	345.27	349.48	342.95	345.96	342.38	dry	340.81	340.80	341.31	342.23	341.80	343.19	343.27	341.75	341.82
21-Nov-2012	340.99	345.09	352.39	343.17	346.03	342.27	dry	340.63	340.68	341.45	342.33	341.72	343.07	343.40	341.78	341.76
19-Dec-2012	340.92	345.12	349.34	343.11	346.09	342.24	dry	340.57	340.64	341.38	342.24	341.57	343.02	343.36	341.74	341.72
15-Jan-2013	341.02	345.16	349.21	342.85	345.72	342.21	340.86	340.52	340.60	341.56	342.17	341.59	342.73	343.09	341.70	341.42
11-Feb-2013	341.10	345.25	349.28	342.83	345.74	342.17	340.88	340.47	340.62	341.30	342.15	341.56	342.86	343.07	341.71	341.45
11-Mar-2013	341.09	345.29	349.44	342.97	345.81	342.25	340.82	340.51	340.68	341.38	342.04	341.62	342.99	343.28	341.76	341.48
17-Apr-2013	341.16	345.48	349.71	343.18	345.92	342.34	340.84	340.55	340.70	341.44	342.00	341.64	343.22	343.48	341.78	341.50
25-May-2013	341.28	345.75	352.35	343.53	346.28	342.44	340.88	340.58	340.71	341.39	342.05	341.69	343.54	343.74	341.79	341.53
25-Jun-2013	341.20	345.79	349.92	343.50	346.27	342.51	340.91	340.61	340.74	341.41	342.03	341.61	343.48	343.79	341.81	341.56
09-Jul-2013	341.23	345.75	349.96	343.44	346.30	342.50	340.93	340.63	340.72	341.43	342.01	341.64	343.43	343.82	341.76	341.58
20-Aug-2013	341.12	345.78	350.01	343.39	346.26	342.54	340.94	340.70	340.77	341.47	342.07	341.56	343.32	343.91		
11-Sep-2013	341.02	345.69	349.93	343.35	346.31	342.51	340.67	340.73	341.43	342.11	341.50	343.24	343.97		341.91	341.64
16-Oct-2013	341.04		349.86	343.32	346.32	342.48		340.71	340.67	341.44	342.07	341.41	343.20	343.99	341.96	341.66
13-Nov-2013			349.82		346.37								343.00	344.09		
18-Nov-2013	340.82	345.50		343.24		342.44		340.62	340.75	341.41	342.00	341.19			341.99	341.66
23-Dec-2013	340.79	345.30	349.64	343.05	346.20	342.32		340.56	340.62	341.48	342.07	341.22	342.92	343.91	341.83	341.57
09-Jan-2014	340.75	344.83	349.91	342.92	345.67	342.68	340.77	340.46	340.54	341.45	342.14	341.55	342.75	343.28	341.61	341.34
10-Feb-2014	340.79	344.99	350.37	343.03	345.76	342.34	340.70	340.49	340.51	341.38	342.09	341.58	342.93	343.46	341.53	341.47
14-Mar-2014	340.82	345.12	351.08	343.32	346.05	342.22	340.60	340.54	340.57	341.35	341.92	341.53	343.11	343.79	341.59	341.60
08-Apr-2014	340.97	345.26	351.31	343.43	346.28	343.00	340.47	340.59	340.64	341.37	341.94	341.61	343.26	343.82	341.85	341.75
02-May-2014	341.02	345.37	352.77	343.94	346.54	342.46	340.44	340.63	340.70	341.46	342.00	341.73	343.61	344.13	342.03	342.02
13-Jun-2014	341.10	345.42	352.87	344.00	346.61	342.50	340.49	340.79	340.78	341.50	342.04	341.84	343.62	344.19	341.95	342.04
15-Jul-2014	341.05	345.28	353.02	343.95	346.50	342.51	340.53	340.85	340.78	341.54	342.13	341.91	343.11	344.26	341.99	342.09
08-Aug-2014	341.11	345.16	353.05	343.98	346.42	342.44	340.50	340.83	340.71	341.49	342.20	341.79	343.26	344.28	342.00	342.03
03-Sep-2014	341.10	345.08	352.96	343.85	346.46	342.36	340.36	340.74	340.61	341.52	342.22	341.71	343.11	344.20	341.92	341.97
06-Oct-2014	341.05	344.83	352.86	343.80	346.44	342.38	340.27	340.62	340.60	341.48	342.11	341.76	343.20	344.17	341.80	341.76
12-Nov-2014	340.82	344.67	352.93	343.84	346.35	342.46	340.29	340.59	340.68	341.34	341.96	341.69	343.57	344.02	341.86	341.69
04-Dec-2014	340.78	344.58	352.73	343.58	346.18	342.39	340.32	340.65	340.66	341.27	341.88	341.53	342.92	343.74	341.75	341.60

Note: All Water Level in mASL

Monitor 55-I was replaced by Monitor 55-IR in September 2001. 55-IR was replaced in April 2007

Monitor 61-I and 66-I were replaced by Monitors 61-IR and 66-IR in April 2007.

Table A6. Water Temperatures Taken at Time of Sampling From Groundwater Monitors in 2014



Monitor	Date	Temperature (C°)	Comments	Geological Unit
2-I	21-Nov-14	8	MAXXUM	Outwash
2-I	07-May-14	8.2	MAXXUM	Outwash
2-II	07-May-14	5.7	MAXXUM	Outwash
4-IR	02-Oct-14	10	MAXXUM	Bedrock
4-IR	18-Nov-14	8.2	MAXXUM	Bedrock
4-IR	01-Aug-14	9.7	MAXXUM	Bedrock
4-IR	06-May-14	8.6	MAXXUM	Bedrock
4-IIR	18-Nov-14	7.9	MAXXUM	Lower Till
4-IIR	06-May-14	8.4	MAXXUM	Lower Till
4-IIIR	06-May-14	5.9	MAXXUM	Upper Till
4-IIIR	24-Nov-14	10	MAXXUM	Upper Till
5-II	07-May-14	6.4	MAXXUM	Upper Till
5-II	24-Nov-14	10	MAXXUM	Upper Till
9A-I	13-May-14	10.3	MAXXUM	Bedrock
9-I	13-May-14	10.4	MAXXUM	Outwash
10-II	12-May-14	7.7	MAXXUM	Outwash
10-II	24-Nov-14	8.9	MAXXUM	Outwash
10-III	24-Nov-14	8.9	MAXXUM	Outwash/Peat
10-III	12-May-14	15.2	MAXXUM	Outwash/Peat
11-I	25-Nov-14	8.2	MAXXUM	Upper Till
11-I	08-May-14	8.8	MAXXUM	Upper Till
11-II	08-May-14	6.5	MAXXUM	Outwash
11-III	08-May-14	9.3	MAXXUM	Lower Till
13-I	13-May-14	9.8	MAXXUM	Bedrock
13-II	13-May-14	10.6	MAXXUM	Lower Till
13-III	13-May-14	9.9	MAXXUM	Upper Till
13-III	27-Nov-14	9.7	MAXXUM	Upper Till
13-IV	13-May-14	10.1	MAXXUM	Outwash
13-IV	27-Nov-14	10.2	MAXXUM	Outwash
13-V	13-May-14	9.1	MAXXUM	Outwash
13-V	27-Nov-14	6.7	MAXXUM	Outwash
14-II	21-Nov-14	8.7	MAXXUM	Outwash
14-II	15-May-14	8.6	MAXXUM	Outwash
14-III	15-May-14	9.2	MAXXUM	Outwash
14-IV	21-Nov-14	9	MAXXUM	Bedrock
14-IV	15-May-14	9.4	MAXXUM	Bedrock
15-I	08-May-14	9	MAXXUM	Bedrock
15-II	08-May-14	8.6	MAXXUM	Lower Till
15-III	08-May-14	8.7	MAXXUM	Upper Till
15-III	21-Nov-14	7.8	MAXXUM	Upper Till
15-IV	08-May-14	7.9	MAXXUM	Outwash
15-IV	21-Nov-14	7.7	MAXXUM	Outwash
15-V	08-May-14	5.9	MAXXUM	Fill
15-V	21-Nov-14	5.2	MAXXUM	Fill
16-I	07-May-14	8.4	MAXXUM	Lower Till
16-III	21-Nov-14	8.5	MAXXUM	Outwash
16-IV	21-Nov-14	8.6	MAXXUM	Upper Till
16-IV	07-May-14	7.2	MAXXUM	Upper Till
16-V	07-May-14	6.2	MAXXUM	Fill
16-VI	07-May-14	8.3	MAXXUM	Lower Till
16-VII	07-May-14	8.6	MAXXUM	Bedrock
16-VII	19-Nov-14	7.8	MAXXUM	Bedrock
17-I	13-May-14	10.8	MAXXUM	Bedrock
17-II	13-May-14	11.7	MAXXUM	Lower Till

Table A6. Water Temperatures Taken at Time of Sampling From Groundwater Monitors in 2014

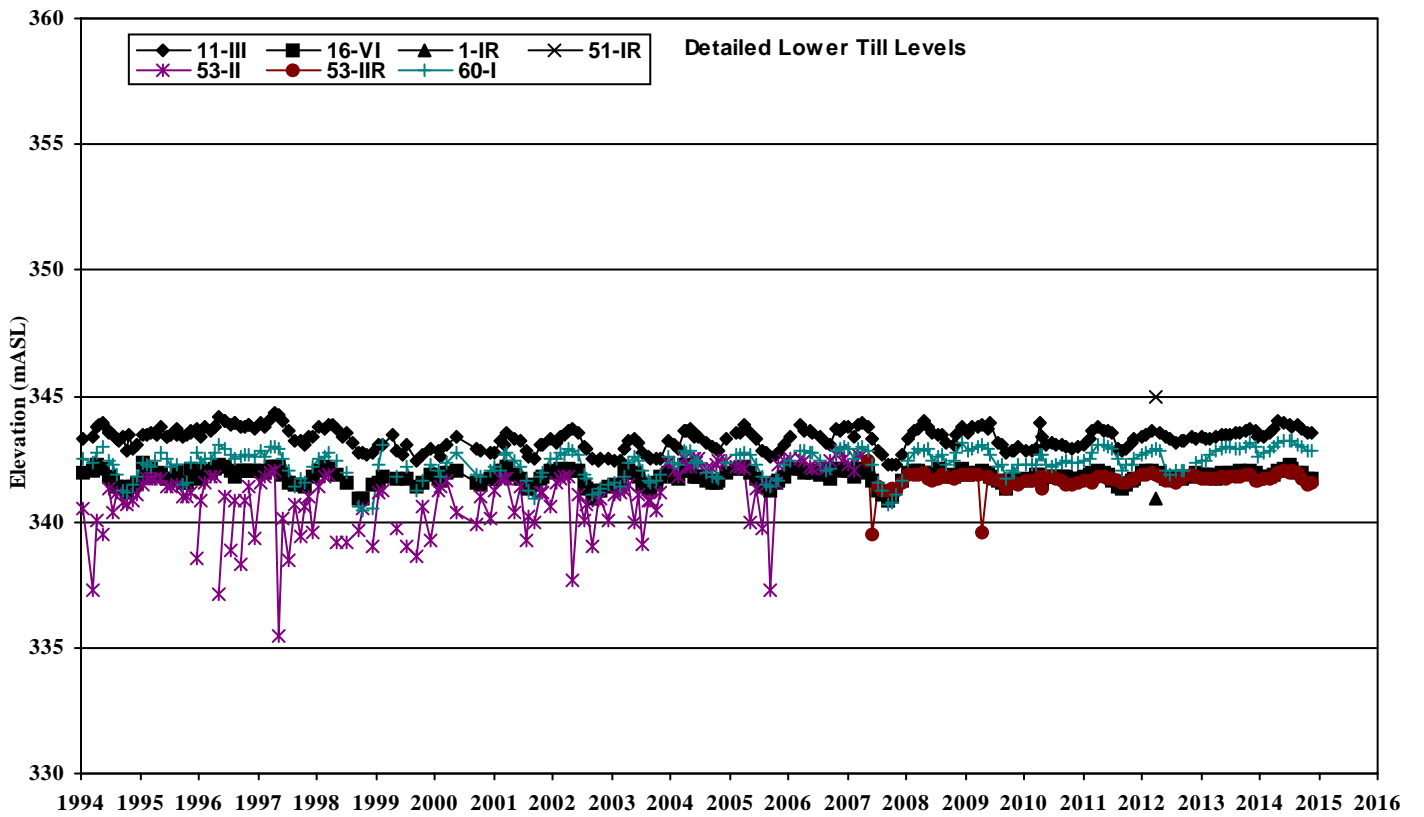
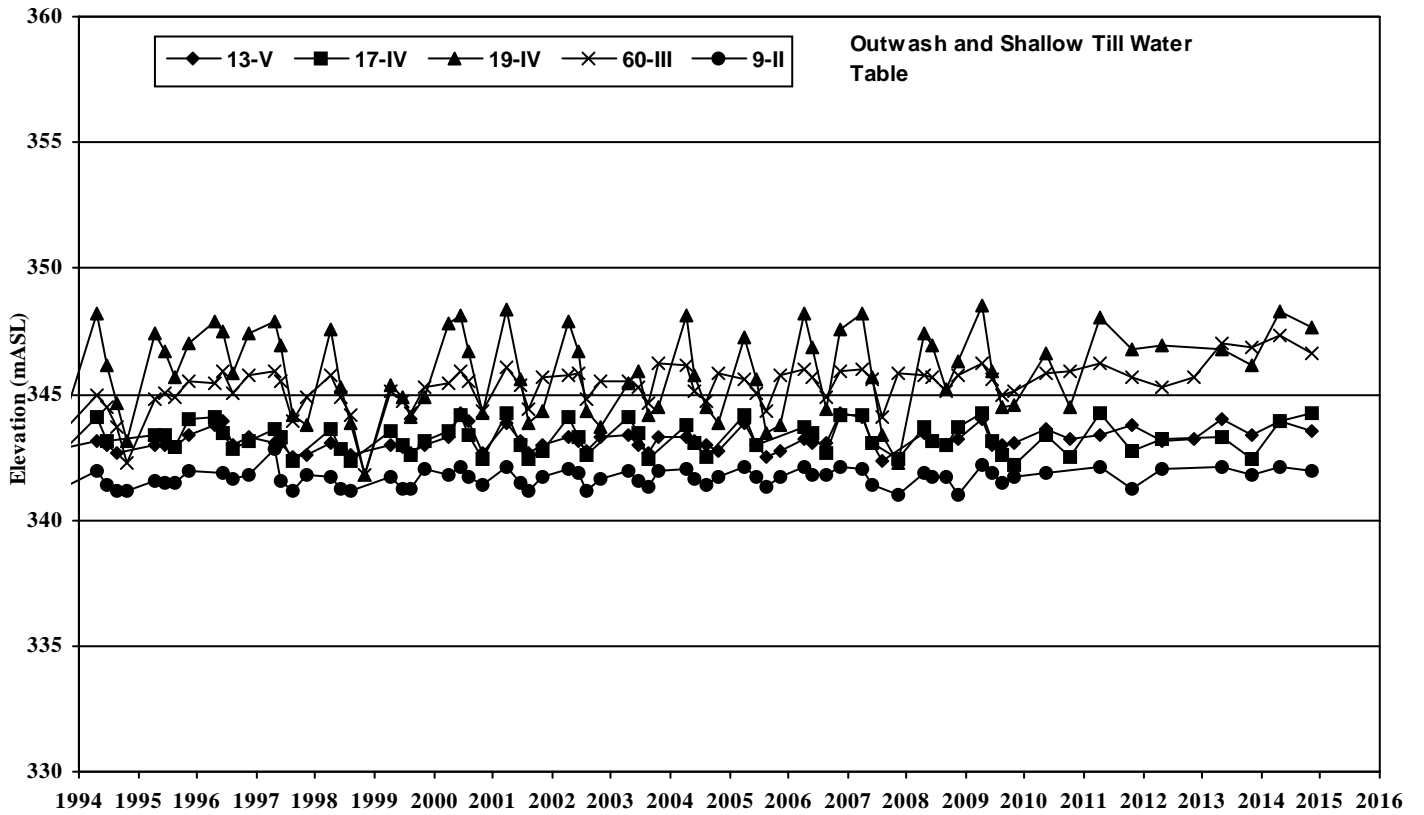


17-III	13-May-14	12.1	MAXXUM	Upper Till
17-IV	13-May-14	10.1	MAXXUM	Outwash
17-IV	25-Nov-14	9.6	MAXXUM	Outwash
18-III	25-Nov-14	9.1	MAXXUM	Outwash
18-III	13-May-14	9.2	MAXXUM	Outwash
19-I	06-May-14	9.5	MAXXUM	Bedrock
19-II	06-May-14	9.3	MAXXUM	Lower Till
19-IV	06-May-14	8.4	MAXXUM	Upper Till
20-IR	08-May-14	8.8	MAXXUM	Bedrock
21-IR	24-Nov-14	10.6	MAXXUM	Upper Till
21-IR	14-May-14	10.5	MAXXUM	Upper Till
26-I	20-Nov-14		frozen	Outwash
26-I	14-May-14	7.6	MAXXUM	Outwash
28-I	20-Nov-14		frozen	Outwash
28-I	14-May-14	6.4	MAXXUM	Outwash
30-I	20-Nov-14		frozen	Outwash
30-I	14-May-14	12.3	MAXXUM	Outwash
35-I	14-May-14	9.9	MAXXUM	Outwash
37-IR	01-Oct-14	9.3	MAXXUM	Bedrock
37-IR	02-Aug-14	10.7	MAXXUM	Bedrock
37-IR	20-Nov-14	8.9	MAXXUM	Bedrock
37-IR	07-May-14	9.3	MAXXUM	Bedrock
37-IIR	14-May-14	10.8	MAXXUM	Bedrock
37-IIR	02-Aug-14	10.5	MAXXUM	Bedrock
37-IIR	01-Oct-14	10.1	MAXXUM	Bedrock
37-IIR	20-Nov-14	7.3	MAXXUM	Bedrock
50-I	05-May-14	9.5	MAXXUM	Bedrock
50-I	01-Oct-14	9.7	MAXXUM	Bedrock
50-I	01-Aug-14	10.2	MAXXUM	Bedrock
50-I	17-Nov-14	8.6	MAXXUM	Bedrock
53-I	20-Nov-14	8.1	MAXXUM	Bedrock
53-I	06-May-14	10.7	MAXXUM	Bedrock
53-I	02-Oct-14	9.4	MAXXUM	Bedrock
53-I	01-Aug-14	9.4	MAXXUM	Bedrock
53-IIR	20-Nov-14	7.7	MAXXUM	Lower Till
53-IIR	06-May-14	10.3	MAXXUM	Lower Till
54-I	24-Nov-14	9.6	MAXXUM	Bedrock
60-I	20-Nov-14	7.6	MAXXUM	Lower Till
60-I	05-May-14	9.8	MAXXUM	Lower Till
60-II	20-Nov-14	8.5	MAXXUM	Upper Till
60-II	05-May-14	8.8	MAXXUM	Upper Till
60-III	05-May-14	7.3	MAXXUM	Upper Till
60-III	20-Nov-14	8.7	MAXXUM	Upper Till
90-II	19-Nov-14	8	MAXXUM	bedrock
90-II	05-May-14	9.4	MAXXUM	bedrock
91-I	01-Aug-14	10.8	MAXXUM	Bedrock
91-I	02-Oct-14	9.6	MAXXUM	Bedrock
91-I	24-Nov-14	9.1	MAXXUM	Bedrock
91-I	15-May-14	9.7	MAXXUM	Bedrock
93-I	01-Oct-14	9.8	MAXXUM	Bedrock
93-I	31-Jul-14	11.2	MAXXUM	Bedrock
93-I	17-Nov-14	9	MAXXUM	Bedrock
93-I	05-May-14	9	MAXXUM	Bedrock
94-I	02-Oct-14	9.3	MAXXUM	Bedrock
94-I	01-Aug-14	10.8	MAXXUM	Bedrock
94-I	06-May-14	9.3	MAXXUM	Bedrock
94-I	19-Nov-14	7.8	MAXXUM	Bedrock

Table A6. Water Temperatures Taken at Time of Sampling From Groundwater Monitors in 2014



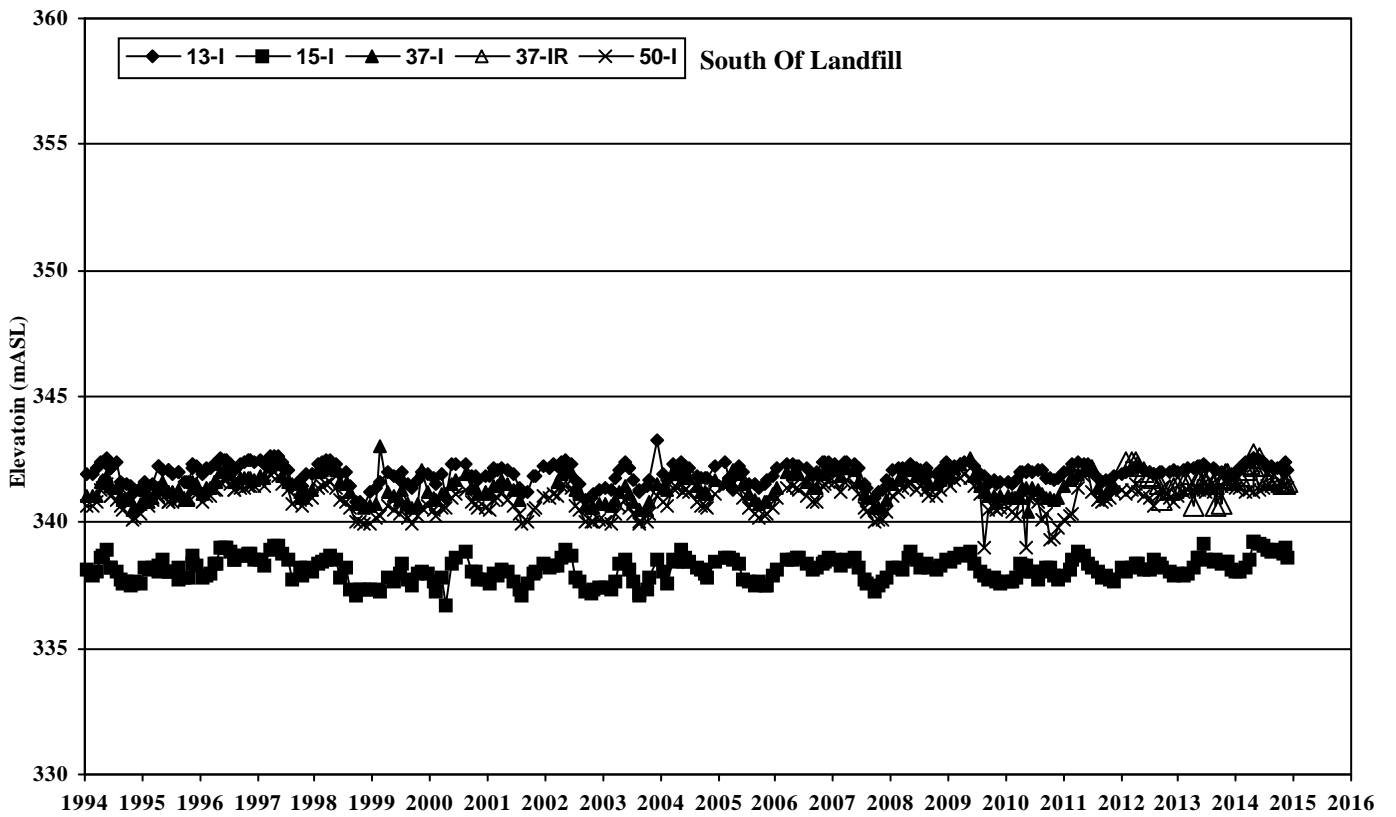
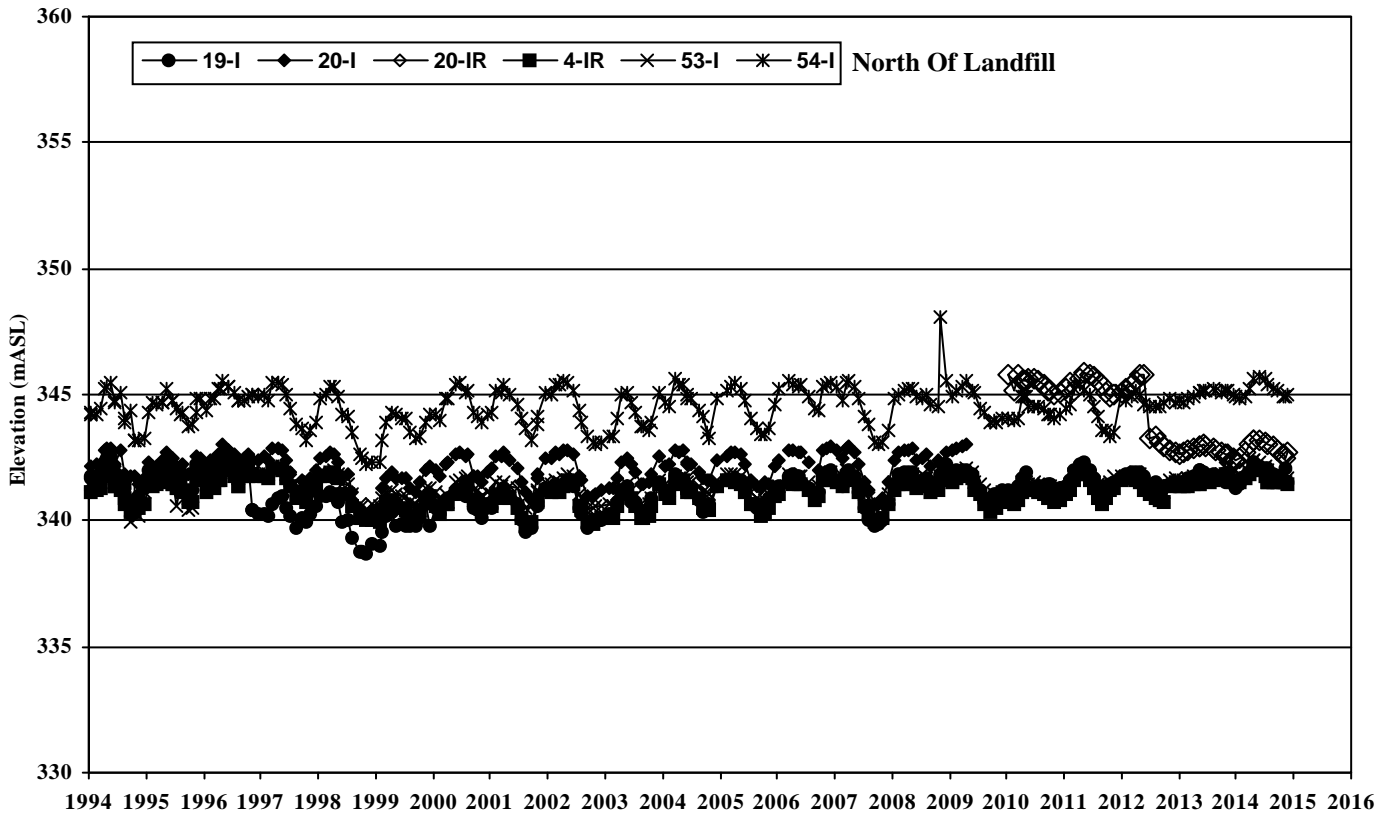
95-I	01-Oct-14	10.8	MAXXUM	Bedrock
95-I	05-May-14	9.3	MAXXUM	Bedrock
95-I	31-Jul-14	11.6	MAXXUM	Bedrock
95-I	19-Nov-14	8.8	MAXXUM	Bedrock
96-I	02-Oct-14	10	MAXXUM	Bedrock
96-I	01-Aug-14	11.9	MAXXUM	Bedrock
96-I	20-Nov-14	9.1	MAXXUM	Bedrock
96-I	15-May-14	9.6	MAXXUM	Bedrock
96-II	02-Oct-14	10.1	MAXXUM	Bedrock
96-II	01-Aug-14	10.6	MAXXUM	Bedrock
96-II	20-Nov-14	9.3	MAXXUM	Bedrock
96-II	15-May-14	9.4	MAXXUM	Bedrock
C2-I	06-May-14	9.9	MAXXUM	Outwash
C2-I	19-Nov-14	8.1	MAXXUM	Outwash
C6-I	05-May-14	9.4	MAXXUM	Outwash
C6-I	17-Nov-14	8.8	MAXXUM	Outwash
C9-I	05-May-14	8	MAXXUM	Outwash
C9-I	19-Nov-14	8	MAXXUM	Outwash
C10-I	05-May-14	7.9	MAXXUM	Outwash
C10-I	19-Nov-14	7.7	MAXXUM	Outwash
C11-I	05-May-14	7.9	MAXXUM	Outwash
C11-I	19-Nov-14	7.9	MAXXUM	Outwash
51-IR	14-May-14	17.4	MAXXUM	Waste
51-IR	26-Nov-14	10.5	MAXXUM	Waste
51-II	26-Nov-14	10.5	MAXXUM	Outwash
51-II	14-May-14	15.2	MAXXUM	Outwash
55-IR	12-May-14	22.2	MAXXUM	Outwash
55-IR	27-Nov-14	6.5	MAXXUM	Outwash
56-IR	27-Nov-14	12.8	MAXXUM	Outwash
56-IR	12-May-14	17.9	MAXXUM	Outwash
57-I	12-May-14	12.3	MAXXUM	Outwash
57-I	26-Nov-14	10.6	MAXXUM	Outwash
58-I	26-Nov-14	10.1	MAXXUM	Outwash
58-I	12-May-14	12.1	MAXXUM	Outwash
59-I	12-May-14	15.1	MAXXUM	Waste
59-I	27-Nov-14	13.1	MAXXUM	Waste
61-IR	26-Nov-14	12.1	MAXXUM	Outwash
61-IR	12-May-14	18	MAXXUM	Outwash
63-I	12-May-14	12.6	MAXXUM	Outwash
63-I	26-Nov-14	10.1	MAXXUM	Outwash
65-I	12-May-14	9.2	MAXXUM	Waste/Fill
65-I	27-Nov-14	9.1	MAXXUM	Waste/Fill
66-IR	27-Nov-14	10.6	MAXXUM	Outwash
66-IR	12-May-14	14.9	MAXXUM	Outwash
67-I	12-May-14	17.2	MAXXUM	Waste
67-I	27-Nov-14	13.6	MAXXUM	Waste



Closed Eastview Road Landfill Site
Groundwater Elevation Trends
Outwash/Shallow Till and Detailed Lower Till
Levels Around the Landfill

FIGURE
A1

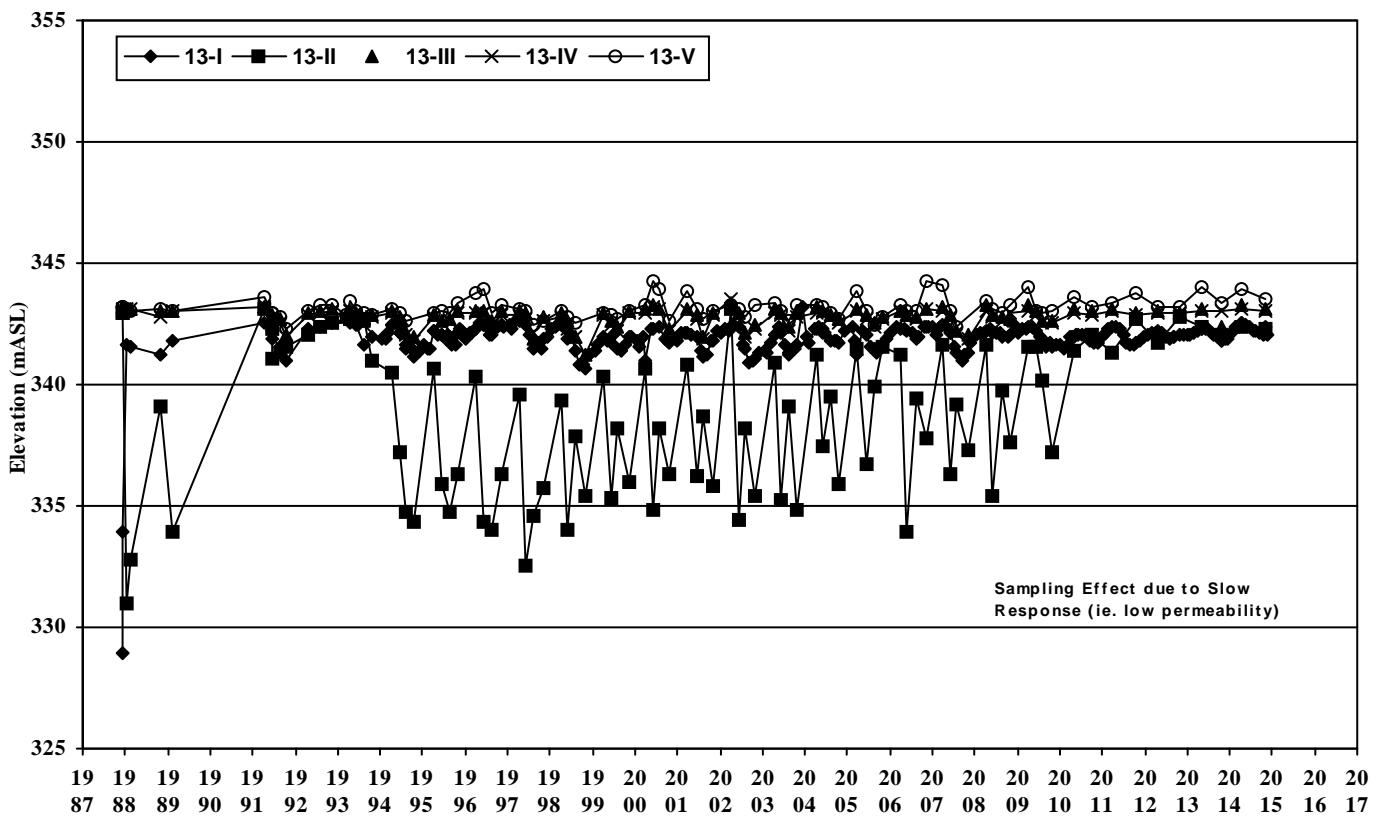
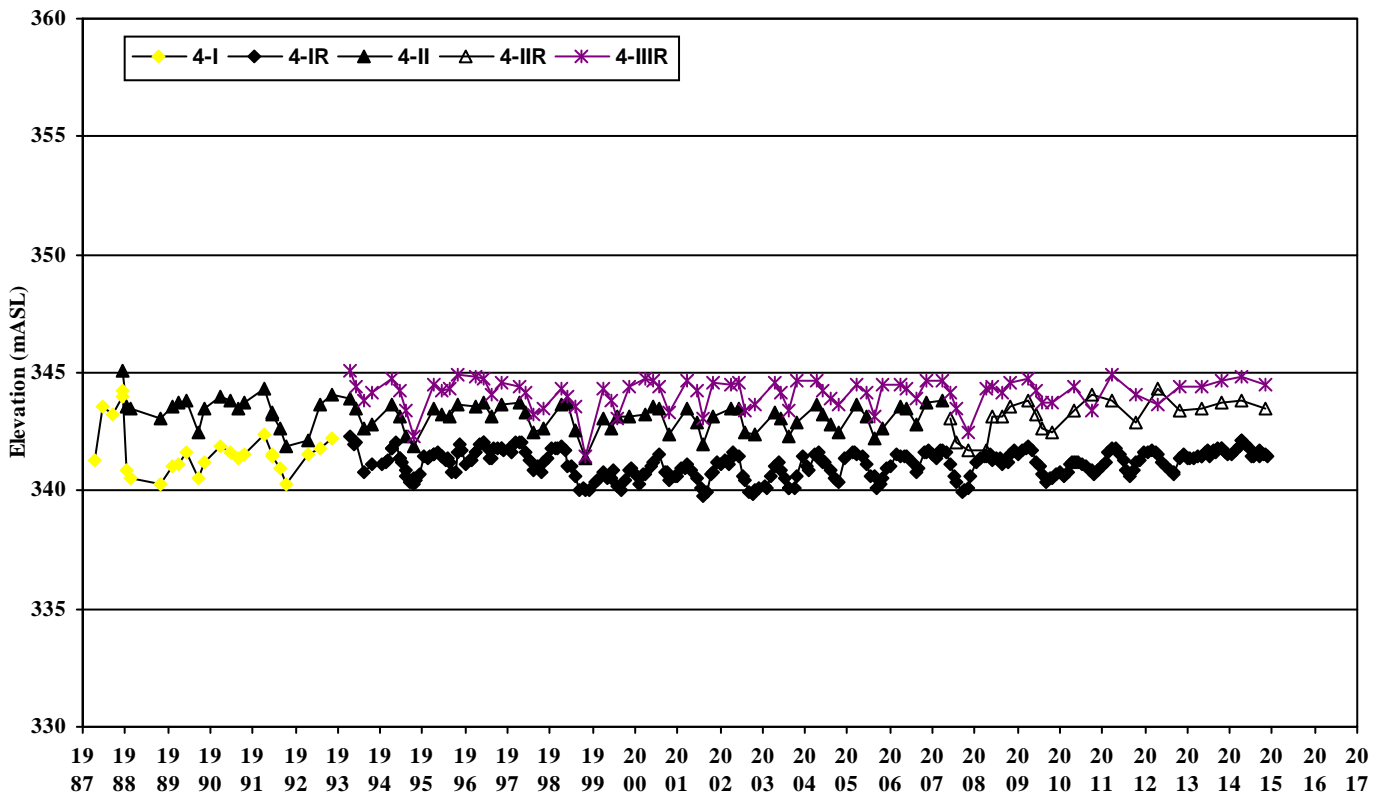
60339708
 10a Shallow and Detailed Till GW



Closed Eastview Road Landfill Site
Groundwater Elevation Trends
Detailed Bedrock Levels North and South of the
Landfill

FIGURE
A2

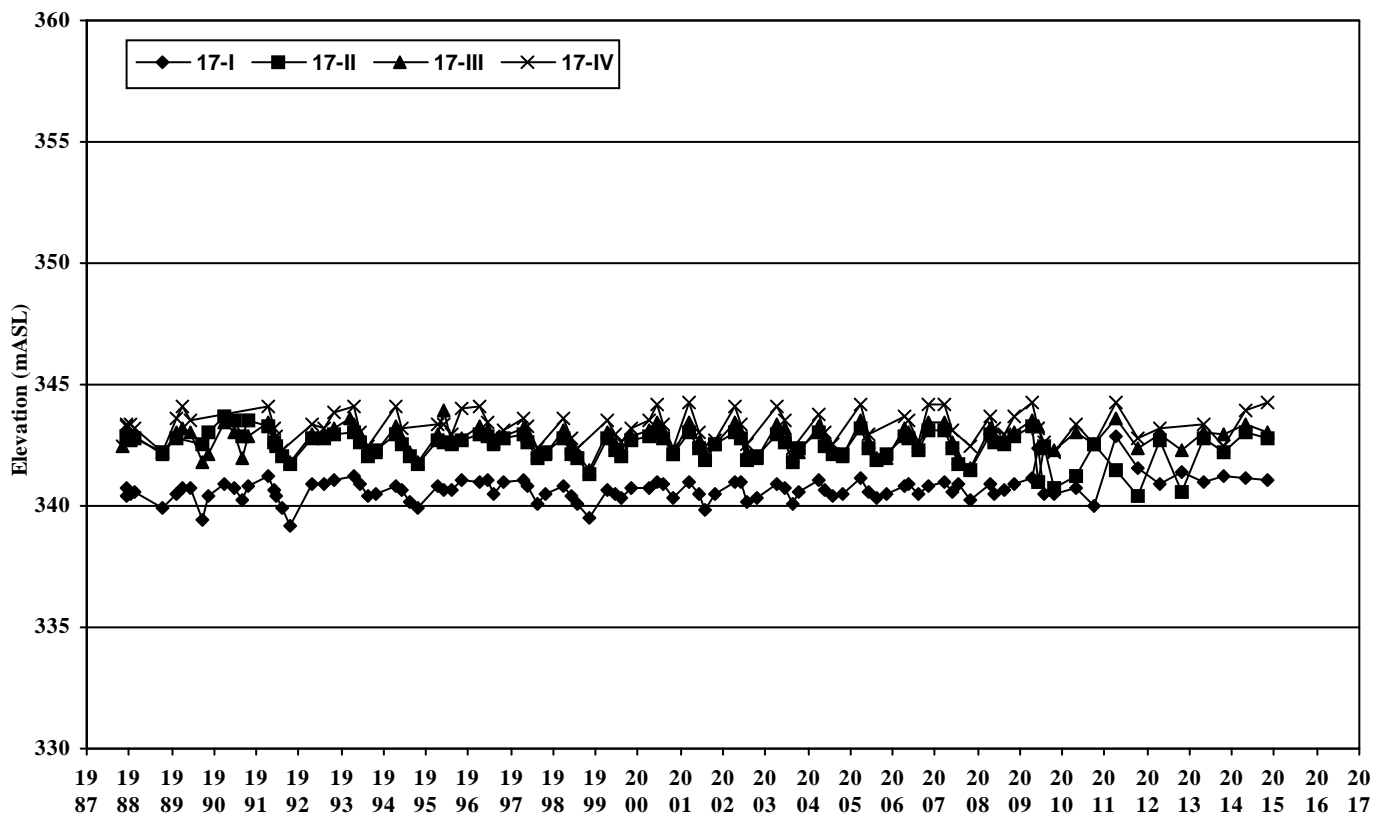
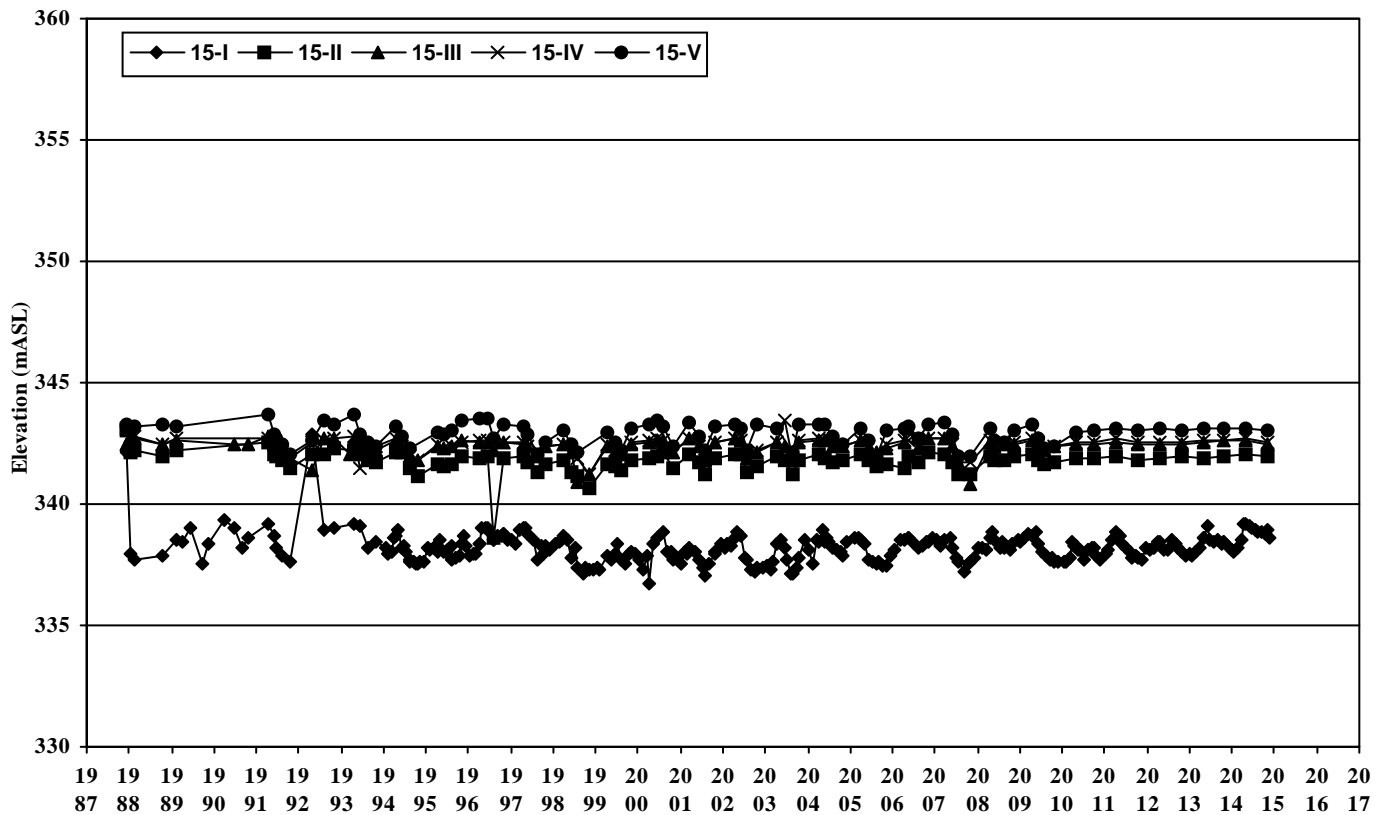
60339708
 10a Detailed Bedrock WL



Closed Eastview Road Landfill Site
 Groundwater Elevation Trends
 Vertical Profiles at Locations 4 and 13

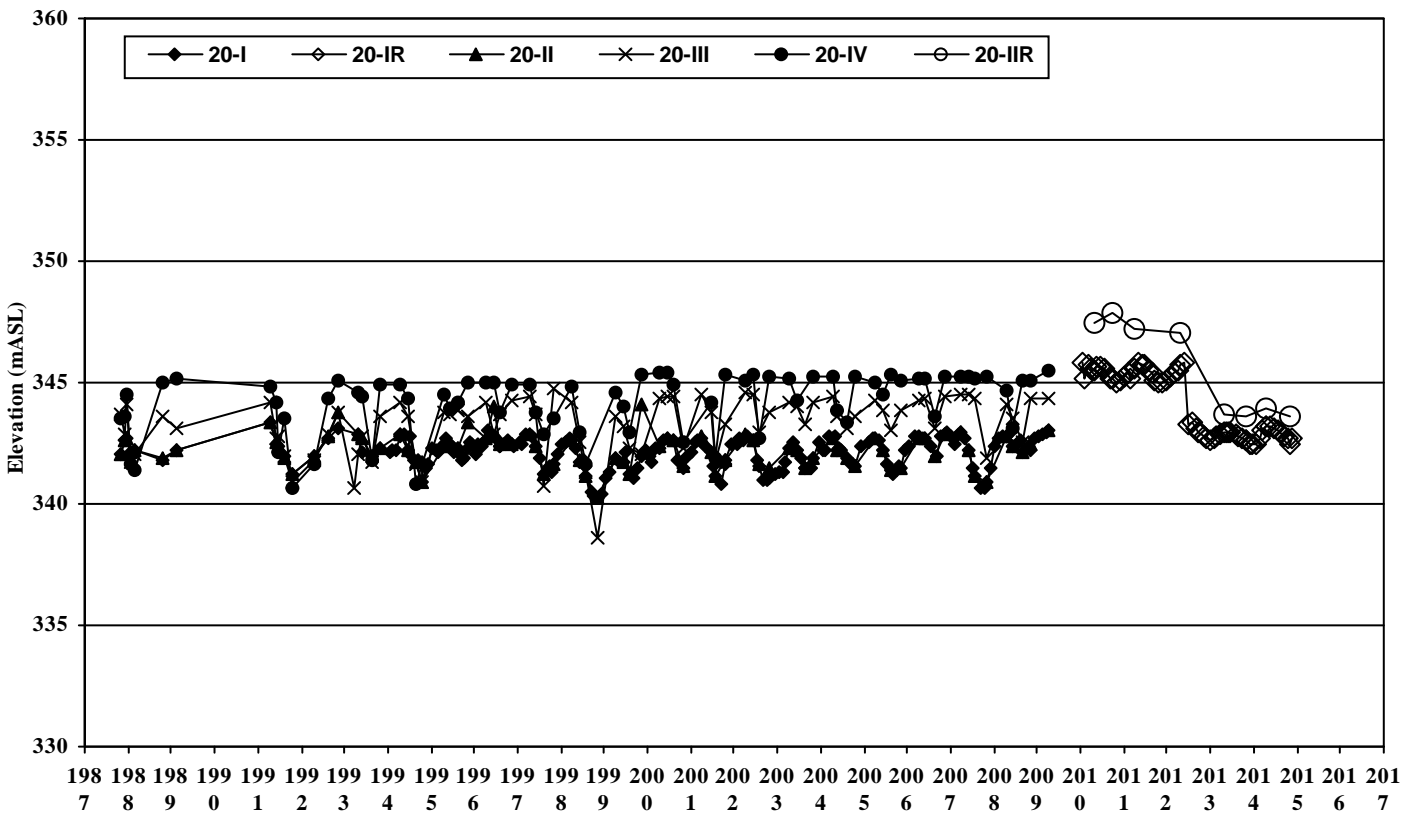
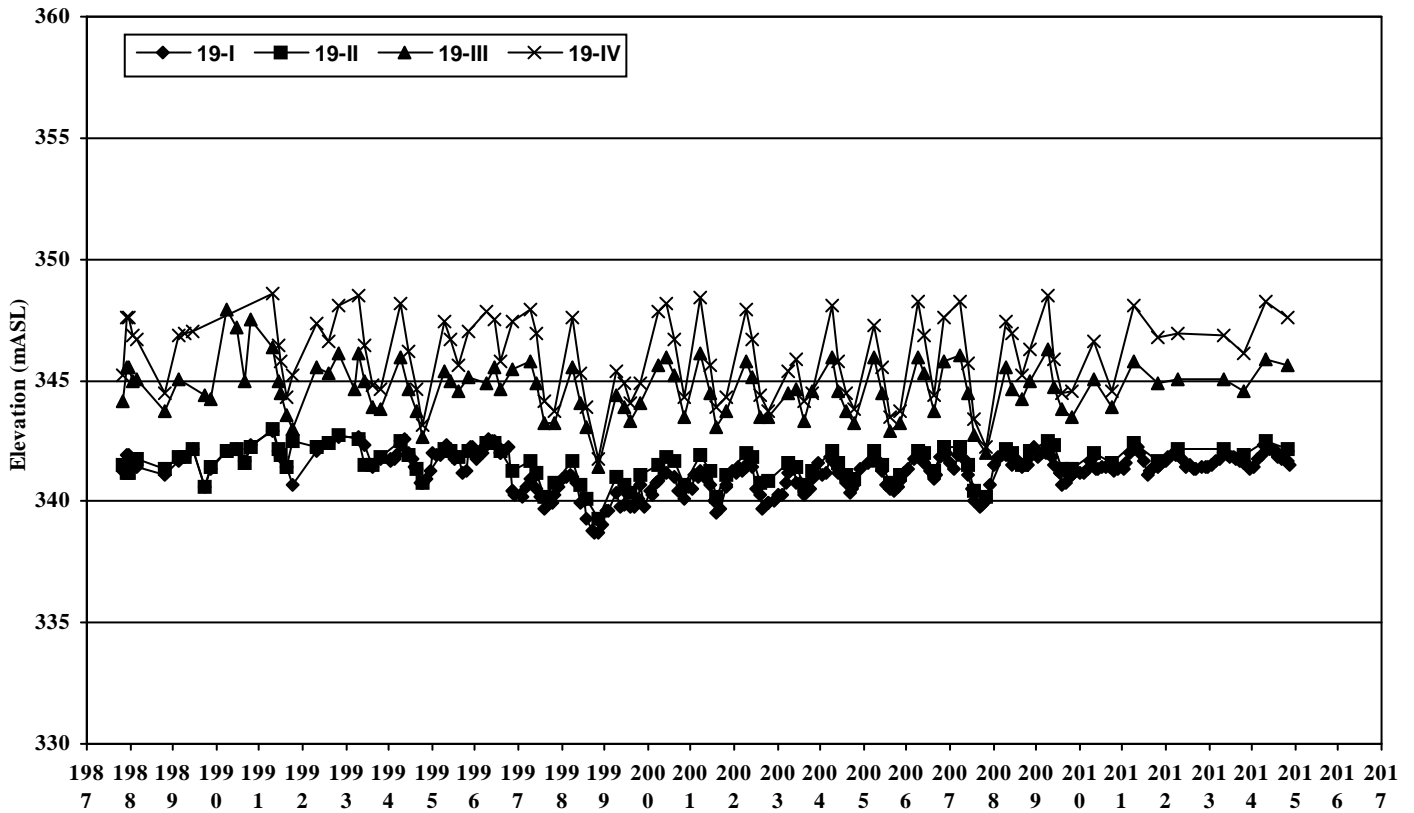
FIGURE
 A3

60339708
 10b Profile 4-13



Closed Eastview Road Landfill Site
Groundwater Elevation Trends
Vertical Profiles at Locations 15 and 17

FIGURE
A4
 60339708
 10b Profile 15-17

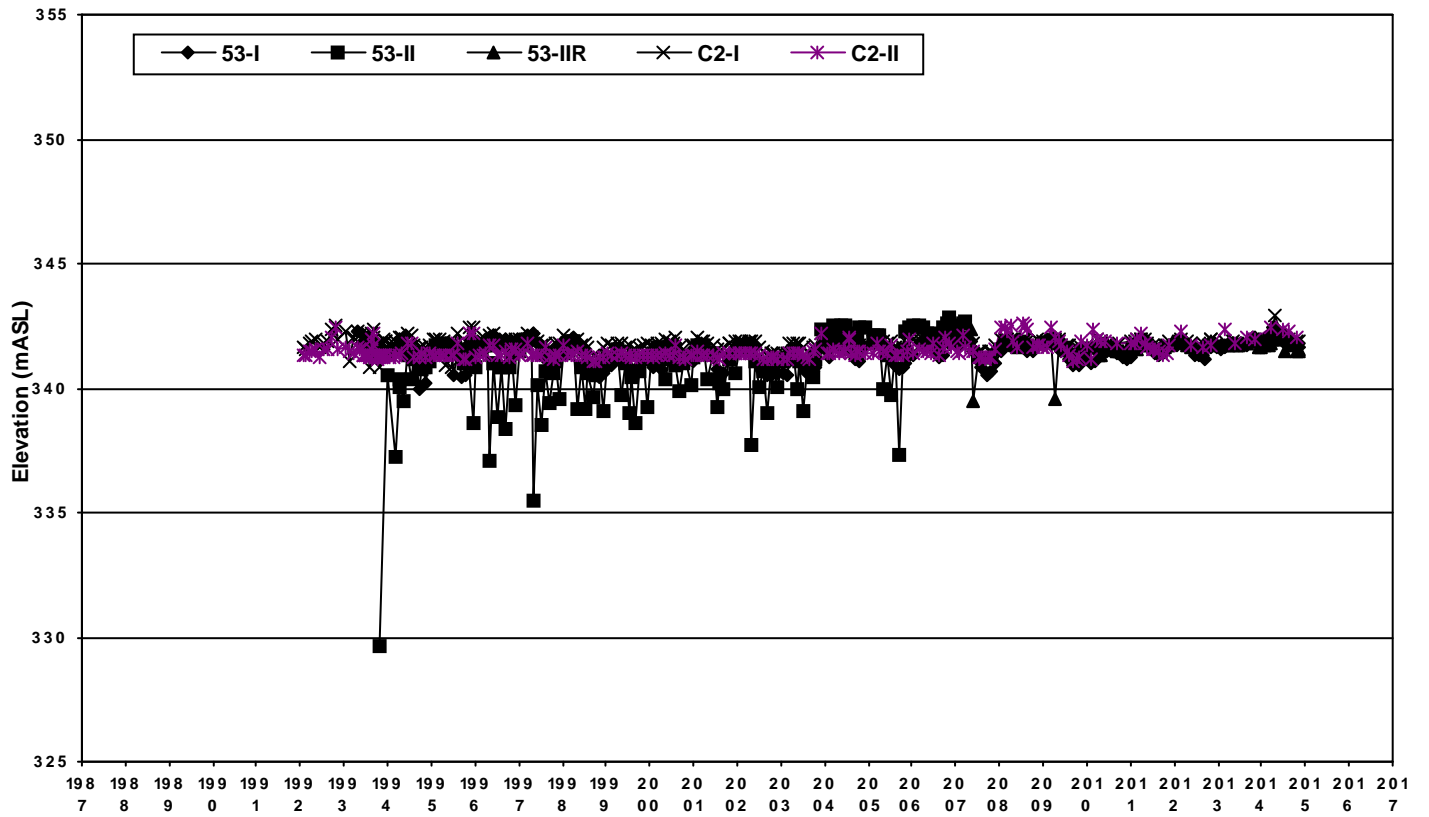


Closed Eastview Road Landfill Site

Groundwater Elevation Trends
Vertical Profiles at Locations 19 and 20

FIGURE
A5

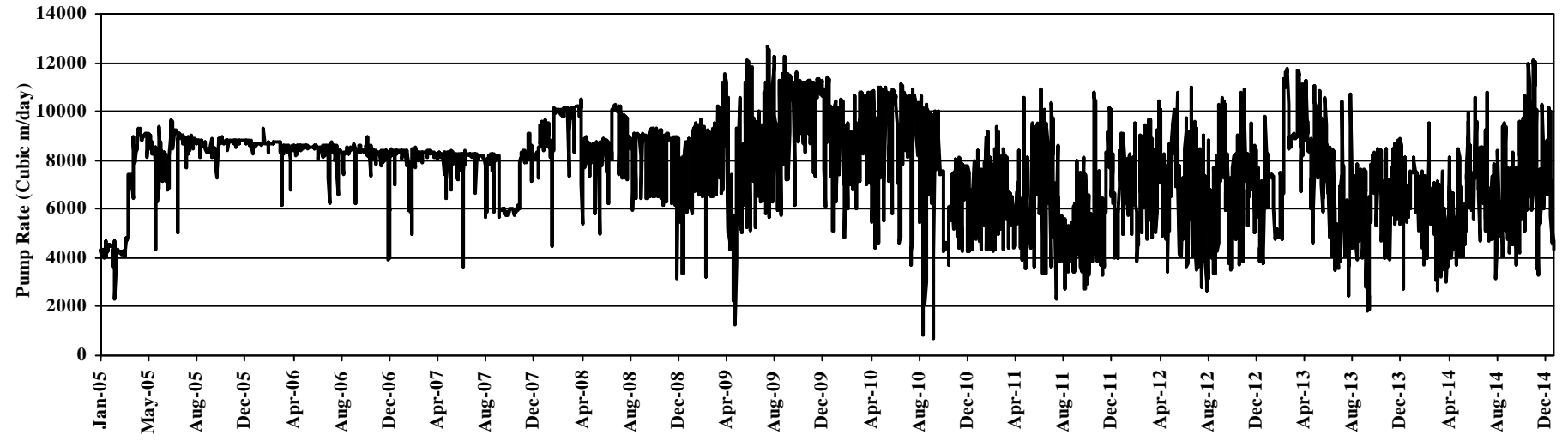
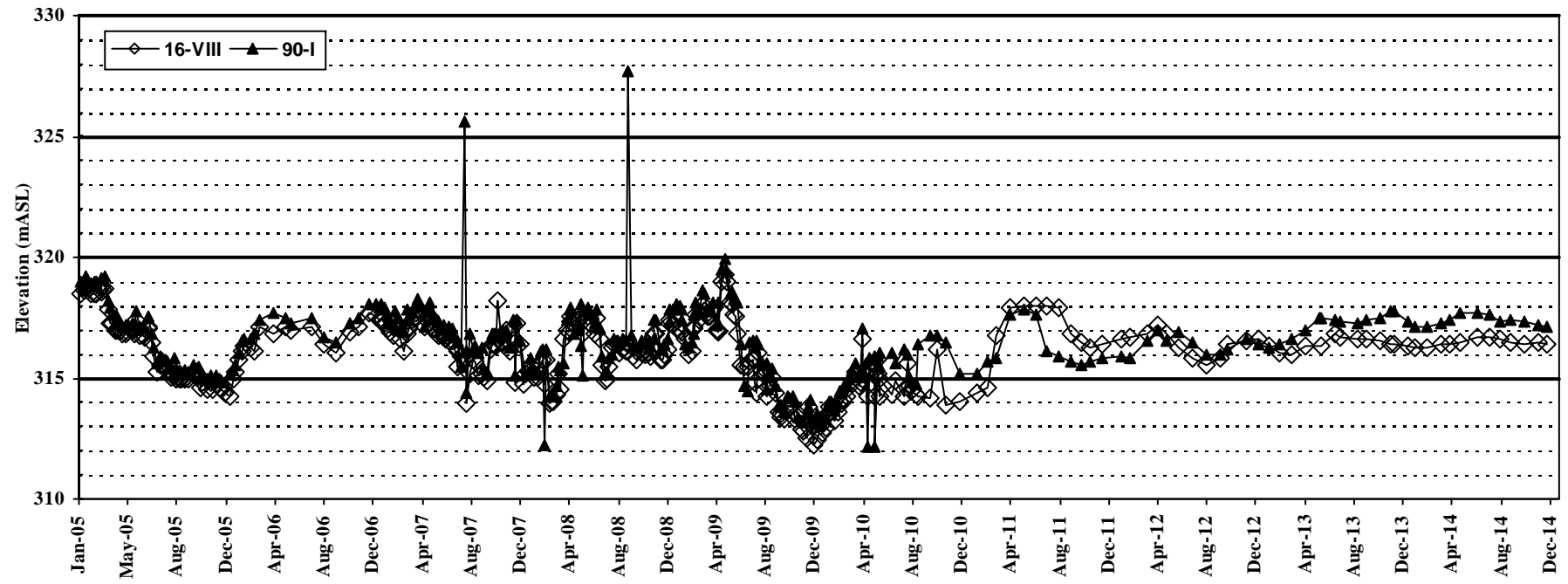
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10b Profile 19-20



Closed Eastview Road Landfill Site
 Groundwater Elevation Trends
 Vertical Profiles at Locations C2/53

FIGURE
 A6

60339708
 10b Profile C2/53



Closed Eastview Road Landfill Site
Bedrock Groundwater Elevations Trends
In Deep Bedrock Aquifer

FIGURE
A7

60339708

12f Rpt DeepBedrockGWTrends-16/90

Appendix B

Leachate Collection and Containment System Operating Results

- B1. Flow Meter Readings and Summary of Leachate Discharge from the Main Pump Station During 2014
- B2. South and West Pump Stations, Hour Meter Readings and Monthly Leachate Flows During 2014
- B3. Monthly Leachate Quantities and Average Daily Flow Rates for All Pump Stations During 2014
- B4. Manhole Leachate Elevations, South Collection System – 2014
- B5. Manhole Leachate Elevations, West Collection System – 2014

Table B1. Summary of Leachate Discharged from Main Pump Station during 2014

Reading Date	Flow Meter Reading (m ³)	Volume Pumped Off Site This Period (m ³)	Main Pump No. 1 Hr Meter Reading (hours)	Main Pump No. 2 Hr Meter Reading (hours)	Main Pump Station Total Pump Time (hours)	Main Pumps Average Pumping Rate (m ³ /hr)	Main Station Cumulative Volume This Year (m ³)	Remarks
28-Dec-14	351700		657.7	1099.4				
10-Jan-14	354631		682.2	1121.5				
17-Jan-14	357817.8		709.5	1146.1				
24-Jan-14	360333		730.6	1165.6				
31-Jan-14	363038	11,338	753.1	1187.2				
Jan-14								
TOTAL			95	88	183	61.89	11,338	
7-Feb-14			753.1	1187.2				
14-Feb-14	367594		791.9	1223.1				
21-Feb-14	370202		812.2	1244.5				
28-Feb-14	373565	10,527	838.6	1272.2				
Feb-14								
TOTAL			86	85	171	61.74	21,865	
7-Mar-14	376658		862.8	1296.7				
18-Mar-14	380317		894.1	1323.1				
21-Mar-14			894.1	1323.1				
28-Mar-14	385864	12,299	938.7	1368.4				
Mar-14								
TOTAL			100	96	196	62.65	34,164	
4-Apr-14	388884		962.8	1391.6				new SCADA system for pumping stations/ flare online
13-Apr-14	3853.6		29.9	30.6				
20-Apr-14	3409		25.1	28.2				
27-Apr-14	4705	14,968	41.6	36.4				
Apr-14								
TOTAL			121	118	239	62.60	49,132	
4-May-14	3419		25.6	28.7				
11-May-14	4244		35.4	33.2				
18-May-14	3483		28.3	27.6				
25-May-14	3305	14,451	28.3	24.9				
May-14								
TOTAL			118	114	232	62.29	63,583	
1-Jun-14	2886		23.7	22.6				
8-Jun-14	2722		24.5	19.8				
15-Jun-14	2913		23.3	24.5				
22-Jun-14	2549		21.3	20.3				
29-Jun-14	2720	13,790	23.8	20.7				
Jun-14								
TOTAL			117	108	225	61.43	77,373	

Table B1. Summary of Leachate Discharged from Main Pump Station during 2014

Reading Date	Flow Meter Reading (m ³)	Volume Pumped Off Site This Period (m ³)	Main Pump No. 1 Hr Meter Reading (hours)	Main Pump No. 2 Hr Meter Reading (hours)	Main Pump Station Total Pump Time (hours)	Main Pumps Average Pumping Rate (m ³ /hr)	Main Station Cumulative Volume This Year (m ³)	Remarks
6-Jul-14	2547		21.3	20.3				
13-Jul-14	2452		20.7	19.2				
20-Jul-14	2295		18.8	18.7				
27-Jul-14	2582	9,876	22.8	19.2				
Jul-14 TOTAL			84	77	161	61.34	87,249	
3-Aug-14	2588		20.9	21.4				
10-Aug-14	2365		17.4	20.4				
17-Aug-14	2181		19.6	15.3				
24-Aug-14	1951		17.6	13.8				
31-Aug-14	2164	11,249	18.9	16.1				
Aug-14 TOTAL			94	87	181	62.01	98,498	
7-Sep-14	3179		29.6	22.9				
14-Sep-14	2531		21.8	19.3				
21-Sep-14	3121		28.4	23				
28-Sep-14	2588	11,419	21.5	20.4				
Sep-14 TOTAL			101	86	187	61.10	109,917	
5-Oct-14	2900		23.5	23.4				
12-Oct-14	2900		23.4	23.7				
19-Oct-14	3049		25.8	23.5				
26-Oct-14	2590	11,439	21.4	20.1				
Oct-14 TOTAL			94	91	185	61.90	121,356	
2-Nov-14	2726		22.3	21.5				
9-Nov-14	4380		30.7	36.5				
16-Nov-14	3777		28.2	30.8				
23-Nov-14	5488		47.6	52.6				
30-Nov-14	3517	19,888	29.5	26.4				
Nov-14 TOTAL			158	168	326	60.99	141,244	
7-Dec-14	3260		23.8	28.4				
14-Dec-14	3364		27.6	27.7				
21-Dec-14	3852		33.4	30.7				
28-Dec-09	1933	12,409	14.6	17.4				
Dec-14 TOTAL			99	104	204	60.95	153,653	
YEAR 2014 TOTAL			1,267	1,222	2,489		153,653	

Table B2. South and West Pump Station Pump Operating Hours and Estimated Monthly Leachate Flows for 2014

Date	South Sta Pump #1 (hours)	South Sta Pump #2 (hours)	South Sta Total (hours)	South Sta (1) (Monthly vol) (cu m)	West Sta Pump #1 (hours)	West Sta. Pump #2 (hours)	West Sta Total (hours)	West Sta (1) (Monthly vol) (cu m)	TOTAL Hours Pumped (hours)	Average pump rate (all 4 pumps) (m3/hr)	Total flow (1) this period (cu m)
Jan-14	68.4	66.4	134.8	4,750.9	88.7	98.2	186.9	6,587.1	321.7	35.2	11,338.0
Feb-14	70.8	70.1	140.9	4,284.4	104	101.3	205.3	6,242.6	346.2	30.4	10,527.0
Mar-14	117.7	96.4	214.1	6,003.7	107	117.5	224.5	6,295.3	438.6	28.0	12,299.0
Apr-14	105.1	91.4	196.5	6,946.5	110.9	116	226.9	8,021.1	423.4	35.4	14,967.6
May-14	109.3	98.1	207.4	6,352.6	130.9	133.5	264.4	8,098.4	471.8	30.6	14,451.0
Jun-14	91.1	89.4	180.5	5,431.1	133.3	144.5	277.8	8,358.9	458.3	30.1	13,790.0
Jul-14	68.3	65.3	133.6	4,046.1	93	99.5	192.5	5,829.9	326.1	30.3	9,876.0
Aug-14	82.8	73.8	156.6	4,863.6	101.6	104	205.6	6,385.4	362.2	31.1	11,249.0
Sep-14	94.5	70.9	165.4	4,907.0	105.6	113.9	219.5	6,512.0	384.9	29.7	11,419.0
Oct-14	98.6	79.4	178.0	5,264.1	100	108.8	208.8	6,174.9	386.8	29.6	11,439.0
Nov-14	130.4	108.3	238.7	6,329.7	250.5	260.8	511.3	13,558.3	750.0	26.5	19,888.0
Dec-14	99.6	85.4	185.0	4,821.8	140.7	150.4	291.1	7,587.2	476.1	26.1	12,409.0
Total 13	1,136.6	994.9	2,131.5	64,001.4	1,466.2	1,548.4	3,014.6	89,651.2	5,146.1	29.9	153,652.6

Note 1: Total volume pumped from each station based on monthly hour meter readings and flow from the Main Pump Station. For example, in January the total number of hours pumped from both the west and south stations were 431.2 hours. The total volume pumped from the Main PS was 14,328 m³.

Table B3. Monthly Leachate Quantities and Average Daily Flow Rates from All Pump Stations during 2014

Date	Main Sta Volume This period (m³)	Main Sta Avg Daily Flow Rate for the month (m³/day)	South Sta Total (m³)	South Sta Avg Daily Flow Rate for the month (m³/day)	West Sta Total (m³)	West Sta Avg Daily Flow Rate for the month (m³/day)	South+West Total (m³)	Remarks
Jan-14	11,338.0	365.7	4,750.9	153.3	6,587.1	212.5	11,338.0	
Feb-14	10,527.0	376.0	4,284.4	153.0	6,242.6	223.0	10,527.0	
Mar-14	12,299.0	396.7	6,003.7	193.7	6,295.3	203.1	12,299.0	
Apr-14	14,967.6	498.9	6,946.5	231.5	8,021.1	267.4	14,967.6	
May-14	14,451.0	466.2	6,352.6	204.9	8,098.4	261.2	14,451.0	
Jun-14	13,790.0	459.7	5,431.1	181.0	8,358.9	278.6	13,790.0	
Jul-14	9,876.0	318.6	4,046.1	130.5	5,829.9	188.1	9,876.0	
Aug-14	11,249.0	362.9	4,863.6	156.9	6,385.4	206.0	11,249.0	
Sep-14	11,419.0	380.6	4,907.0	163.6	6,512.0	217.1	11,419.0	
Oct-14	11,439.0	369.0	5,264.1	169.8	6,174.9	199.2	11,439.0	
Nov-14	19,888.0	662.9	6,329.7	211.0	13,558.3	437.4	19,888.0	
Dec-14	12,409.0	400.3	4,821.8	155.5	7,587.2	244.7	12,409.0	
Total 2013	153,652.6	N/A	64,001.4	N/A	89,651.2	N/A	153,652.6	
Monthly Avg	12,804.4	421.5	5,333.4	175.4	7,470.9	244.8	12,804.4	

TABLE : B4 MANHOLE LEACHATE ELEVATIONS, SOUTH COLLECTION SYSTEM - 2014



DATE	MANHOLE LOCATIONS											
Elevation	AS (mASL)	BS (mASL)	1S (mASL)	2S (mASL)	3S (mASL)	4S (mASL)	5S (mASL)	5AS (mASL)	South Pump Station	6S (mASL)	7S (mASL)	8S (mASL)
14-Jan-2014	342.24	342.30	342.25	342.04	341.34	341.18	341.19	339.74	339.76	339.82	339.98	339.82
20-Feb-2014	342.27	342.33	342.29	342.09	341.33	341.15	341.20	339.82	340.17	339.74	340.01	339.91
10-Mar-2014	342.22	342.27	342.22	342.03	341.22	341.10	341.11	340.55	339.63	339.56	340.10	339.78
16-Apr-2014	342.31	342.34	342.31	342.13	341.40	341.22	341.22	339.92	340.33	340.09	340.14	340.21
12-May-2014	342.26	342.30	342.26	342.07	341.28	341.12	341.17	339.94	339.53	339.57	340.09	340.11
26-Jun-2014	342.30	342.32	342.29	342.09	341.34	341.18	341.20	339.97	340.08	339.60	340.05	339.97
14-Jul-2014	342.27	342.29	342.26	342.06	341.30	341.14	341.17	340.04	339.83	339.56	340.10	339.92
11-Aug-2014	342.29	342.33	342.30	342.10	341.33	341.15	341.17	340.16	340.27	339.93	340.25	340.02
23-Sep-2014	342.32	342.34	342.25	342.09	341.31	341.18	341.22	339.83	340.05	339.95	340.03	340.04
09-Oct-2014	342.26	342.32	342.22	342.07	341.28	341.13	341.13	339.85	340.17	339.98	340.00	339.99
11-Nov-2014	342.14	342.32	342.18	342.10	341.33	341.14	341.16	339.90	339.95	339.87	339.89	340.05
29-Dec-2014	342.25	342.35	342.25	342.14	341.35	341.18	341.20	339.83	340.02	339.81	339.80	339.90
Elevations of:												
Pipe Invert	342.30	342.30	342.30	342.30	341.40	341.20	341.00	341.00 E 339.50 W	339.50	339.50	339.60	339.70
Top of Sheet Pile Wall	-----	344.00	343.90	344.00	343.40	343.20	343.50	343.50	343.30	343.20	344.00	344.70

TABLE : B5 MANHOLE LEACHATE ELEVATIONS, WEST COLLECTION SYSTEM - 2014



DATE	MANHOLE LOCATIONS									
Elevation	1W (mASL)	2W (mASL)	3W (mASL)	4W (mASL)	5W (mASL)	West Pump Station	6W (mASL)	7W (mASL)	8W (mASL)	9W (mASL)
14-Jan-2014	341.36	341.22	341.38	341.13	340.91	340.36	340.80	340.89	340.97	341.91
20-Feb-2014	341.38	341.29	341.40	341.19	341.01	340.66	340.85	340.93	341.01	341.88
10-Mar-2014	341.25	341.19	341.26	341.00	340.84	339.60	340.69	340.82	340.89	341.72
16-Apr-2014	341.39	341.41	341.39	341.17	340.93	340.91	340.87	340.97	341.00	341.87
12-May-2014	341.26	341.17	341.28	341.01	340.87	340.36	340.71	340.83	340.88	341.85
26-Jun-2014	341.32	341.29	341.36	341.11	340.92	340.14	340.75	340.88	340.95	341.86
14-Jul-2014	341.29	341.22	341.29	341.04	340.90	339.67	340.74	341.86	340.91	341.87
11-Aug-2014	341.39	341.37	341.39	341.10	340.96	340.66	340.85	340.97	341.00	341.88
23-Sep-2014	341.36	341.33	341.37	341.09	340.99	340.81	340.90	341.02	340.98	341.87
09-Oct-2014	341.33	341.29	341.33	341.10	341.01	340.87	340.93	340.97	341.03	341.88
11-Nov-2014	341.35	341.36	341.40	341.14	340.94	340.79	340.89	340.94	340.96	341.87
29-Dec-2014	341.38	341.38	341.38	341.11	340.93	340.64	340.85	340.91	340.97	341.87
Elevations of:										
Pipe Invert	341.20	341.10	340.95	340.85	340.75	340.70	340.75	340.85	340.95	342.00
Top of Sheet Pile Wall	-----	-----	-----	-----	343.50	343.60	343.50	344.50	345.20	345.90

Appendix C

Groundwater, Surface Water and Leachate Quality and Chemistry Trends

- C1. Groundwater Routine Landfill Leachate Analysis
- C2. Groundwater Routine Monitoring Analyses
- C3. Surface Water Routine Monitoring Analyses
- C4. Surface Water Field Observations
- C5. Leachate MISA Monitoring Analyses
- C6. Organics Analysis – Landfill Leachate
- C7. Comparison of Downgradient Monitors in Buffer Land Boundary to Guideline B7 Criteria for 2014
- C8. Comparison of Downgradient Bedrock Boundary Monitors in Buffer Land to Guideline B7 Criteria for 2014
Groundwater Chemistry Trends
(Figures C1 – C18)

C1: Routine Leachate Quality - General Analysis - - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents				
Date	Lab	pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	BOD mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS		6.5-8.5 a		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a			500 a	1.0 ht	10.0 h	
Monitor 1-IR Outwash	5/1/2009	MAX																		
	6/26/2009	INV																		
	8/31/2009	INSV																		
	11/19/2009	INSV																		
	5/20/2010	INSV																		
	4/19/2011	INSV																		
5/7/2012	INSV																			
11/21/2012	INSV																			
Monitor 51-IR Waste 7.3 - 22.6 m	5/4/2009	Maxx	7.8	11500	4330	2300	1450	11	54	140	1100	460	410	13	0.11	250		12	0.02	< 0.1
	6/26/2009	Maxx	7.9	12800	5180	2300	1660	17	62	130	1500	470	620	6.3	0.063	570		12	< 0.1	< 1
	8/31/2009	Maxx	7.7	17600	6860	1500	2080	24	30	64	1700	330	850	3.2	0.028	980		10	0.02	< 0.1
	11/19/2009	Maxx	7.6	17600	6800	1600	2130	23	56	63	1700	340	860	3.4	0.027	1200		12	< 0.1	< 1
	5/20/2010	Maxx	7.8	17000	6510	1700	2170	20	70	72	1600	360	790	11	0.026	1000		22	< 0.25	< 2.5
	11/2/2010	Maxx	7.8	18000	6660	1500	2120	22	76	59	1800	330	830	9.8	0.034	880		10	< 0.1	< 1
	5/12/2011	Maxx	7.69	15800	5690	1800	2010	18	104	99	1600	370	710	16	0.075	940		4	< 0.1	< 1
	11/7/2011	Maxx	7.63	15700	5670	1900	1980	14	100	120	1200	400	500	10	0.11	890		16	< 0.1	< 1
	5/14/2012	Maxx	7.68	13000	5100	2000	1600	14	220	150	1100	410	450	4.4	0.13	920		20	< 0.01	< 0.1
	11/26/2012	Maxx	7.46	16000	6200	1600	2100	21	40	91	1400	340	630	5.7	0.078	920		10	< 0.1	< 1
	5/31/2013	MAX	7.87	15000	5300	1800	1900	16	47	120	1200	370	540	6	0.11	960		5.6	< 0.1	< 1
	11/20/2013	MAX	7.75	16000	5600	1400	2400	21	94	69	1400	290	660	21	0.061	890		5	< 0.1	< 1
	5/14/2014	MAX	7.52	16000	5900	1500	2200	23	110	67	1500	310	680	5.8	0.031	980		50	0.11	< 1
	11/26/2014	MAX	7.67	14000	4900	1400	1900	20	180	60	1500	310	690	14	0.047	770		18	< 0.1	< 1
Monitor 51-II Outwash 23.6 - 26.7 m	5/4/2009	Maxx	7.7	6510	2490	2100	932	5.7	18	140	700	430	100	9.3	< 0.02	76		1	< 0.01	< 0.1
	6/26/2009	Maxx	7.7	6510	2520	2100	935	5.9	< 1	140	660	430	110	8.3	0.006	72		3	< 0.01	< 0.1
	8/31/2009	Maxx	7.4	6470	2510	2200	878	6.7	6	150	660	430	110	0.81	0.004	70		1	< 0.01	< 0.1
	11/19/2009	Maxx	7.6	6530	2600	2000	890	6.1	6	150	710	400	110	8.3	0.005	68		1	< 0.01	< 0.1
	5/20/2010	Maxx	7.6	6640	2350	2000	919	5.8	2	130	640	390	96	8.8	< 0.02	83		3	< 0.01	< 0.1
	11/2/2010	Maxx	7.96	6450	2560	2000	873	6	36	130	650	400	100	< 1	< 0.02	69		10	< 0.01	4.7
	5/12/2011	Maxx	7.69	6650	2570	2000	997	6.3	7	140	670	390	100	8.5	< 0.002	77		1	0.01	< 0.1
	11/7/2011	Maxx	7.35	6620	2620	2100	887	5.9	57	150	690	420	110	8.6	0.015	79		10	< 0.01	< 0.1
	5/14/2012	Maxx	7.63	6700	2700	2100	940	6.2	180	150	700	420	120	6.2	0.015	77		10	0.019	< 0.1
	11/26/2012	Maxx	7.38	6700	2800	2100	930	6.8	8.2	150	680	410	110	7.4	0.015	74		1.7	0.025	< 0.1
	5/31/2013	MAX	7.82	6700	2700	2200	900	6	< 5	150	720	440	110	5.4	0.015	83		8.1	< 0.01	< 0.1
	11/20/2013	MAX	7.71	6700	2700	2200	910	5.3	23	150	700	440	110	9.1	0.019	75		10	0.16	1.1
	5/14/2014	MAX	7.41	6700	2700	2100	950	6.2	98	160	690	420	110	8.7	0.018	76		12	< 0.01	< 0.1
	11/26/2014	MAX	7.48	6900	2700	2200	960	7	140	160	710	440	110	10	0.017	68		8.7	0.011	< 0.1

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Releataed Objective, h - Heath Related Objective

C1: Routine Leachate Quality - General Analysis - - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents					
Date	Lab	pH	Conductivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	BOD mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L		
ODWS		6.5-8.5 a		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a			500 a	1.0 ht	10.0 h		
Monitor 55-IR Outwash 11.2 - 15.8 m	5/1/2009	Maxx	7.7	3340	1260	1200	393	4.2	5	270	250	130	56	0.32	0.43	62		13	< 0.01	< 0.1	
	6/26/2009	INV																			
	8/31/2009	INSV																			
	11/19/2009	Maxx	7.5	3260	1240	1200	389	3.9	6	260	250	130	51	2.9	0.12	48		3	< 0.01	< 0.1	
	5/20/2010	INSV																			
	11/2/2010	INSV																			
	5/13/2011	INSV																			
	11/7/2011	INSV																			
	5/15/2012	Maxx	7.29	3500	1300	1100	460	4.1	28	260	230	120	41	8.9	0.077	52		10	< 0.01	< 0.1	
	11/29/2012	Maxx	7.13	3600	1300	1200	480	4.1	12	270	240	120	43	4.6	0.078	51		10	< 0.01	< 0.1	
	6/4/2013	MAX	7.39	3600	1200	1300	500	4.1	8	290	260	130	45	0.53	0.075	56		1.4	< 0.01	< 0.1	
	11/25/2013	MAX	7.21	3600	1300	1200	510	4.1	16	270	260	120	45	0.37	0.07	51		10	< 0.01	< 0.1	
	5/12/2014	MAX	7.17	3100	1100	1100	430	3.3	13	240	230	110	34	0.14	0.11	47		5	< 0.01	< 0.1	
	11/27/2014	MAX	7.47	3600	1200	1300	510	4.4	22	290	280	130	48	0.49	0.13	48		5	0.022	< 0.1	
Monitor 56-IR Outwash 12.0 - 18.1 m	5/1/2009	Plugg																			
	6/26/2009	Maxx	7.6	5400	888	1400	1660	6.8	12	290	600	170	18	37	0.5	23		13	0.02	< 0.1	
	8/31/2009	INSV																			
	11/19/2009	Maxx	7.4	5760	935	1400	1390	7	1	280	650	180	20	43	0.44	18		1	< 0.01	0.4	
	5/20/2010	INSV																			
	11/2/2010	Maxx	7.39	6180	1020	1400	1520	8	13	280	710	180	19	45	0.54	18		10	< 0.01	< 0.1	
	5/5/2011	INSV																			
	11/7/2011	Maxx	7.23	4650	792	1200	1080	4.7	12	260	550	130	17	12	0.47	0.93		10	0.58	2.4	
	5/15/2012	Maxx	7.35	6400	1000	1500	1600	7.9	34	290	830	190	27	37	0.44	27		10	0.015	< 0.1	
	11/29/2012	Maxx	7.31	6400	1000	1500	1600	8	5.3	290	830	190	26	40	0.43	30		1.7	< 0.01	< 0.1	
	6/4/2013	MAX	7.48	6700	1000	1500	1800	7.3	1.3	280	830	190	30	36	0.38	38		1.3	< 0.01	< 0.1	
	11/25/2013	MAX	7.13	6300	1000	1500	1600	6.4	6.1	290	800	200	35	0.31	0.43	28		10	0.014	0.68	
	5/12/2014	MAX	7.17	5500	910	1000	1400	4.7	7.1	220	520	120	22	71	0.41	29		10	< 0.01	< 0.1	
	11/27/2014	MAX	7.31	6900	1000	1400	1700	6.6	20	250	820	190	32	37	0.31	39		10	0.011	< 0.1	

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Releataed Objective, h - Heath Related Objective

C1: Routine Leachate Quality - General Analysis - - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents				
Date	Lab	pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	BOD mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS		6.5-8.5 a		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a			500 a	1.0 ht	10.0 h	
Monitor 57-I Outwash 18.5 - 26.1 m	5/4/2009	Maxx	7.8	1790	676	820	221	0.47	< 1	170	110	95	1.7	5.6	0.072	1.6		1	< 0.01	< 0.1
	6/26/2009	Maxx	7.9	1830	689	860	237	0.51	23	180	110	100	1.8	5.9	0.069	1.6		1	< 0.01	< 0.1
	8/31/2009	Maxx	7.5	2040	630	880	271	0.97	< 1	170	130	110	2.2	3.3	0.081	1.8		1	< 0.01	< 0.1
	11/19/2009	Maxx	7.8	1940	737	900	229	0.48	< 1	190	100	100	1.9	6.4	0.074	1.6		1	< 0.01	< 0.1
	5/20/2010	Maxx	7.7	1870	690	800	230	0.49	< 1	160	100	95	1.7	5.5	0.064	1.5		1	< 0.01	< 0.1
	11/2/2010	Maxx	7.81	1970	699	750	254	0.61	3	160	110	89	1.7	3.7	0.063	1.5		1	< 0.01	< 0.1
	5/12/2011	Maxx	7.87	1830	646	770	262	0.57	< 1	160	100	89	1.6	4.9	0.057	1.6		2	< 0.01	< 0.1
	11/7/2011	Maxx	7.65	2140	735	850	274	0.62	11	170	120	100	1.8	5.7	0.062	1.7		5	< 0.01	< 0.1
	5/14/2012	Maxx	7.79	2400	810	990	340	0.94	23	180	170	130	2.1	6.5	0.072	1.7		5	< 0.01	< 0.1
	11/27/2012	Maxx	7.48	2400	830	1000	340	0.88	< 1	200	160	130	2.2	8	0.081	2		10	< 0.01	< 0.1
	6/3/2013	MAX	7.47	2500	840	1000	360	0.87	< 1	200	160	130	2	8	0.085	2.1		3.8	< 0.01	< 0.1
	11/21/2013	MAX	7.57	2600	900	960	370	0.76	8	190	150	120	2	8.1	0.084	2		5	< 0.01	< 0.1
	5/12/2014	MAX	7.47	2800	920	1100	420	1.2	6.5	200	190	140	2.2	8.8	0.087	2.2		5.3	< 0.01	< 0.1
11/26/2014	MAX	7.59	2700	920	1100	380	0.99	14	230	170	140	2.3	11	0.096	2.3		1	< 0.01	< 0.1	
Monitor 58-I Outwash 18.9 - 20.4 m	5/4/2009	Maxx	7.8	1250	541	640	108	0.15	< 1	130	31	79	1.4	< 0.1	0.19	1.4		1	< 0.01	< 0.1
	6/26/2009	Maxx	7.9	1260	537	640	115	0.2	< 1	130	39	79	2.5	< 0.1	0.094	1.9		1	< 0.01	< 0.1
	8/31/2009	Maxx	7.7	1270	538	620	111	0.25	< 1	120	30	75	1.4	< 0.1	0.095	1.3		1	< 0.01	< 0.1
	11/19/2009	Maxx	7.8	1280	534	650	108	0.19	< 1	130	32	81	1.6	4.3	0.094	1.6		2	< 0.01	< 0.1
	5/20/2010	Maxx	7.7	1250	507	620	119	0.1	< 1	120	28	77	1.6	1	0.1	1.3		3	0.07	0.3
	11/2/2010	Maxx	7.9	1400	571	600	137	0.28	< 1	110	37	76	1.4	< 0.1	0.1	1.2		1	< 0.01	< 0.1
	5/11/2011	Maxx	7.82	1310	518	740	136	0.7	< 1	130	77	98	1.8	3.9	0.076	1.7		1	< 0.01	< 0.1
	11/7/2011	Maxx	7.56	1380	530	670	132	0.16	8	130	32	83	1.6	4	0.081	1.7		2	< 0.01	< 0.1
	5/10/2012	Maxx	8.04	1400	520	670	150	0.28	< 1	130	39	86	1.5	4.4	0.09	1.4		1.4	< 0.01	0.25
	11/27/2012	Maxx	7.67	1600	610	770	170	0.59	< 1	140	58	99	1.8	3.7	0.092	1.4		1	< 0.01	0.53
	6/4/2013	MAX	7.78	1500	570	750	170	0.31	< 1	150	42	91	2.1	5.2	0.09	2		2.1	< 0.01	0.13
	11/21/2013	MAX	7.64	1500	590	710	170	0.43	< 1	130	53	92	1.6	5.8	0.077	1.9		1.3	0.015	< 0.1
	5/12/2014	MAX	7.6	1600	590	750	190	0.22	< 1	140	39	94	1.6	5.3	0.089	2.1		1	< 0.01	< 0.1
11/26/2014	MAX	7.69	2000	720	890	240	0.83	17	160	87	120	2.1	7.1	0.072	1.9		1	< 0.01	< 0.1	

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C1: Routine Leachate Quality - General Analysis - - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents					
Date	Lab	pH	Cond-uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	BOD mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L		
ODWS		6.5-8.5 a		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a			500 a	1.0 ht	10.0 h		
Monitor 59-I Waste 10.8 - 20.0 m	5/1/2009	Maxx	7.8	19000	7570	2800	2500	34	92	52	2300	650	1300	8.8	0.054	910		1	< 0.1	< 1	
	6/26/2009	Maxx	7.8	18800	7570	2500	2460	36	39	43	2100	570	1200	23	0.061	860		10	< 0.1	< 1	
	8/31/2009	Maxx	7.9	19400	7900	2500	2410	40	90	44	2000	590	1200	2.4	0.048	930		26	< 0.1	< 0.1	
	11/19/2009	Maxx	7.8	18900	7610	2600	2340	33	82	44	2100	600	1300	3.9	0.047	710		44	< 0.1	< 1	
	5/20/2010	Maxx	7.7	19100	7570	2200	2430	30	102	39	1800	500	1100	2.3	0.043	910		10	< 0.25	< 2.5	
	11/2/2010	Maxx	7.85	19700	7890	2300	2610	34	140	33	1900	550	1200	5.2	< 0.002	860		22	< 0.1	< 1	
	5/11/2011	Maxx	7.8	18100	6680	2000	2700	33	54	53	1900	460	1100	5.9	0.047	830		13	< 0.1	< 1	
	11/7/2011	Maxx	7.77	19600	7640	2400	2400	45	230	38	2000	550	1100	6.9	0.052	960		50	< 0.1	< 1	
	5/15/2012	Maxx	7.76	19000	7400	2400	2500	41	420	59	2200	560	1200	8.6	0.086	870		20	< 0.01	< 0.1	
	11/28/2012	Maxx	7.73	19000	7000	2200	2400	33	83	52	1900	490	1100	9.8	0.086	810		56	< 0.1	< 1	
	6/4/2013	MAX	7.67	18000	6900	2100	2300	30	98	49	1900	490	1200	8.6	0.083	930		41	< 0.2	< 2	
	11/21/2013	N/A																			
	5/12/2014	MAX	7.5	19000	7700	2500	2500	44	310	49	2200	580	1300	7.8	0.074	930		50	< 0.1	< 1	
	11/27/2014	MAX	7.62	19000	7000	2200	2400	34	260	52	1900	510	1200	9.1	0.096	920		20	< 0.2	< 2	
Monitor 61-IR Outwash 24.7 -26.7 m	5/1/2009	INSV																			
	6/26/2009	INV																			
	8/31/2009	INSV																			
	11/19/2009	INSV																			
	5/20/2010	INSV																			
	11/2/2010	INSV																			
	5/12/2011	Maxx	7.33	3930	1110	1300	700	2.1	< 1	290	360	140	3.6	19	0.13	7.6		5	< 0.01	< 0.1	
	11/7/2011	INSV																			
	5/14/2012	Maxx	7.57	4400	1200	1300	840	2.6	45	310	370	140	3.4	19	0.14	7.5		10	< 0.01	< 0.1	
	11/28/2012	Maxx	7.7	4200	1200	1400	770	3.6	< 1	310	450	170	4.2	20	0.13	4.6		10	< 0.01	< 0.1	
	6/3/2013	MAX	7.26	4600	1200	1500	840	3.2	1.7	320	460	160	3.9	21	0.14	7.2		10	< 0.01	< 0.1	
	11/21/2013	MAX	7.54	4900	1300	1300	990	3.5	16	250	520	170	4.2	< 0.1	0.087	5.5		10	< 0.01	< 0.1	
5/12/2014	MAX	7.38	4900	1300	1400	1000	4.2	32	270	530	180	4.3	11	0.091	8.1		10	< 0.01	< 0.1		
11/26/2014	MAX	7.62	4900	1300	1500	920	4.4	29	320	530	180	4.6	37	0.1	7.8		10	0.014	< 0.1		

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C1: Routine Leachate Quality - General Analysis - - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents				
Date	Lab	pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	BOD mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS		6.5-8.5 a		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a			500 a	1.0 ht	10.0 h	
Monitor 63-I Outwash 15.1 - 16.6 m	5/1/2009	Maxx	7.5	2100	832	740	220	0.27	1	150	160	89	1.2	16	0.38	1.1		8	< 0.01	< 0.1
	6/26/2009	Maxx	7.6	2090	828	730	249	0.26	< 1	150	170	88	1.4	14	0.3	1.5		1	< 0.01	< 0.1
	8/31/2009	Maxx	7.6	2080	820	780	232	0.3	3	160	160	91	1.4	14	0.39	1.4		1	< 0.01	< 0.1
	11/19/2009	Maxx	7.7	2100	816	830	241	0.34	11	170	180	100	1.4	13	0.36	1.4		7	0.02	< 0.1
	5/20/2010	INSV																		
	11/2/2010	INSV																		
	5/11/2011	Maxx	7.71	2170	785	790	237	0.48	< 1	170	160	90	1.2	11	0.33	0.69		34	0.02	< 0.1
	11/7/2011	Maxx	7.35	2180	823	840	242	0.58	23	170	180	100	1.3	14	0.38	0.98		33	< 0.01	< 0.1
	5/15/2012	Maxx	7.7	2200	860	900	250	0.63	4.1	190	190	110	1.3	22	0.44	0.78		15	0.012	< 0.1
	11/27/2012	Maxx	7.32	2200	860	850	260	0.73	< 1	180	180	100	1.1	20	0.35	1.1		10	< 0.01	< 0.1
	5/31/2013	MAX	7.75	2300	890	910	260	0.81	< 1	190	190	110	1.1	20	0.37	1.7		13	< 0.01	< 0.1
	11/21/2013	MAX	7.5	2600	1000	850	310	1.2	14	160	200	110	2.3	16	0.38	3.9		5	< 0.01	< 0.1
	5/12/2014	MAX	7.59	2500	970	960	310	1.3	6.9	180	220	120	1.9	15	0.42	2.4		5	< 0.01	< 0.1
	11/26/2014	MAX	7.53	2500	950	990	310	1.3	11	190	210	120	1.7	14	0.42	1.8		5	< 0.01	< 0.1
Monitor 65-I Waste/Fill 5.7 - 10.3 m	5/1/2009	Maxx	7.5	2360	994	1000	137	0.36	3	230	190	100	23	24	1.2	12		155	< 0.01	< 0.1
	6/26/2009	Maxx	7.6	3370	1420	1400	244	0.9	3	260	300	170	59	37	0.98	22		262	< 0.01	0.2
	8/31/2009	Maxx	7.6	3330	1320	1200	248	0.79	2	250	300	140	49	36	0.8	20		216	< 0.01	< 0.1
	11/19/2009	Maxx	8	2400	756	910	262	0.63	1	160	320	120	44	13	0.45	6.1		117	0.05	13
	5/20/2010	Maxx	7.6	2720	1000	1000	194	0.5	2	230	230	110	29	18	1.2	9.3		310	< 0.01	< 0.1
	11/2/2010	Maxx	7.62	3260	1280	1100	244	0.66	4	240	320	130	52	0.61	0.77	8.2		255	< 0.01	0.8
	5/12/2011	Maxx	7.69	2410	874	920	174	0.4	4	210	210	97	22	14	1	8		296	0.04	< 0.1
	11/7/2011	Maxx	7.49	3290	1290	1100	239	0.64	8	220	340	130	51	16	0.81	11		240	0.07	< 0.1
	5/15/2012	Maxx	7.66	2500	1100	980	120	0.45	2	220	180	110	28	17	1.4	6.4		210	0.2	0.4
	11/27/2012	Maxx	7.37	2600	1200	1000	150	0.53	< 1	220	250	110	42	13	0.8	9.3		110	< 0.01	< 0.1
	6/3/2013	MAX	7.45	2200	970		110	0.34	< 1	200	160	93	23	15	1.2	6.8		160	< 0.01	< 0.1
	11/21/2013	MAX	7.47	2300	1000	840	110	0.44	3.6	190	150	87	21	14	1.3	4.9		160	0.015	< 0.1
	5/12/2014	MAX	7.4	2100	990	930	79	0.3	3	220	140	90	18	25	1.7	3.9		130	< 0.01	< 0.1
	11/27/2014	MAX	7.37	2100	1100	960	78	0.47	3.7	230	110	92	28	37	1.3	7.6		48	0.031	< 0.1

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C1: Routine Leachate Quality - General Analysis - - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date	Lab	pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	BOD mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L
ODWS		6.5-8.5 a		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a			500 a	1.0 ht	10.0 h
Monitor																			
66-IR																			
Outwash																			
18.4 - 20.6 m																			
5/1/2009	INSV																		
6/26/2009	INV																		
8/31/2009	INSV																		
11/19/2009	Maxx	7.4	4700	763	1500	1010	0.27	2	310	500	170	16	42	1.2	2.7		263	< 0.01	< 0.1
5/20/2010	Maxx	7.3	4900	783	1500	1090	0.36	2	300	430	180	8.9	34	0.64	2		264	< 0.01	< 0.1
11/2/2010	Maxx	7.58	5560	851	1700	1280	0.5	6	350	560	200	6.7	< 0.1	0.73	0.88		244	< 0.01	< 0.1
5/12/2011	Maxx	7.4	6510	938	1800	1600	0.75	< 1	350	690	220	4.6	49	0.47	1		213	0.02	< 0.1
11/7/2011	Maxx	7.13	7280	1040	1900	1860	0.68	18	360	780	250	6.7	53	0.6	2.5		222	< 0.01	< 0.1
5/14/2012	Maxx	7.37	8500	1300	2000	2200	0.78	48	340	1100	270	13	48	0.61	10		230	< 0.01	< 0.1
11/27/2012	Maxx	7.02	7500	1200	2000	1900	0.72	< 1	360	890	280	13	46	0.54	7.8		170	< 0.01	< 0.1
6/4/2013	MAX	7.29	7100	1100	1900	1800	0.67	3.7	330	860	270	13	45	0.41	11		150	< 0.01	< 0.1
11/25/2013	MAX	7.02	6000	1900	2200	1100	3.6	11	240	670	390	5.1	25	0.15	1.5		51	0.025	1.3
5/12/2014	MAX	7.39	6500	2700	2300	960	6.1	44	180	660	450	46	11	0.058	39		14	0.29	0.46
11/27/2014	MAX	7.61	7300	2900	2700	1100	6.3	63	160	730	570	72	8.6	0.04	60		10	0.054	< 0.5
Monitor																			
67-I																			
Waste																			
16.2 - 20.7 m																			
5/1/2009	Maxx	7.7	2310	817	920	287	0.94	4	180	160	110	15	4.4	0.24	11		21	< 0.01	< 0.1
6/26/2009	Maxx	7.6	2430	782	960	369	0.9	< 1	170	190	130	15	< 0.1	0.27	9.7		23	0.04	< 0.1
8/31/2009	Maxx	7.4	2560	737	960	438	0.83	< 1	190	170	120	9.8	38	0.21	3.9		15	< 0.01	< 0.1
11/19/2009	Maxx	7.5	2740	755	1100	483	0.79	6	210	200	130	8	40	0.25	3.1		4	< 0.01	0.2
5/20/2010	Maxx	7.5	2940	799	1000	520	1.3	1	200	230	130	7.3	0.11	0.28	2.9		13	0.07	< 0.1
11/2/2010	Maxx	7.76	2990	788	1100	524	1.6	3	220	290	130	7.2	< 0.1	0.35	1.5		4	0.02	0.2
5/11/2011	Maxx	7.59	3170	817	980	598	1.8	< 1	200	280	120	6.9	32	0.3	2.5		48	< 0.01	< 0.1
11/7/2011	Maxx	7.33	3400	850	1100	587	2.1	31	210	280	130	13	< 0.1	0.25	2.5		73	< 0.01	< 0.1
5/14/2012	Maxx	7.38	3600	890	1200	690	1.8	47	240	360	140	8.1	37	0.34	1.9		10	< 0.01	< 0.1
11/21/2012	INSV																		
6/4/2013	MAX	7.33	2700	860	1000	390	2.7	< 1	210	320	130	20	28	0.53	2.7		36	< 0.01	< 0.1
11/25/2013	MAX	7.3	4600	1400	1300	700	5.9	59	170	560	200	140	11	1.1	72		110	< 0.01	< 0.1
5/12/2014	MAX	7.57	12000	2200	2700	2000	15	61	270	1500	480	410	13	0.34	160		1600	< 0.05	< 0.5
11/27/2014	MAX	7.68	9000	2000	1900	1700	12	59	120	1200	370	300	5.6	0.19	160		460	0.425	0.6

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C1: Routine Leachate Quality - Trace Metals Analysis - - Closed Eastview Road Landfill Site



		Trace Elements					
Date	Lab	I mg/L	Br mg/L	Cr mg/L 0.05 h	Ni mg/L	Zn mg/L 5.0 a	
Monitor 1-IR Outwash	5/1/2009	MAX					
	6/26/2009	INV					
	8/31/2009	INSV					
	11/19/2009	INSV					
	5/20/2010	INSV					
	4/19/2011	INSV					
	5/7/2012	INSV					
11/21/2012	INSV						
Monitor 51-IR Waste 7.3 - 22.6 m	5/4/2009	Maxx	< 1	5	< 0.05	0.12	< 0.05
	6/26/2009	Maxx	1.9	< 10	< 0.05	0.22	< 0.05
	8/31/2009	Maxx	1.7	< 10	< 0.03	0.28	0.049
	11/19/2009	Maxx	2.1	8	0.05	0.29	0.05
	5/20/2010	Maxx	2.2	9	< 0.05	0.26	< 0.05
	11/2/2010	Maxx	2.2	< 10	< 0.05	0.3	< 0.05
	5/12/2011	Maxx	1.7	10	< 0.05	0.26	< 0.05
	11/7/2011	Maxx	1.9	< 10	0.032	0.17	< 0.03
	5/14/2012	Maxx	1.7	< 20		0.15	0.01
	11/26/2012	Maxx	2	< 10	0.05	0.23	< 0.025
	5/31/2013	MAX	2.5	< 2	0.045	0.2	< 0.025
	11/20/2013	MAX	1.7	< 50	< 0.05	0.24	< 0.05
	5/14/2014	MAX	2.4	< 50	0.042	0.29	0.022
11/26/2014	MAX	1.9	< 10	0.062	0.27	< 0.05	
Monitor 51-II Outwash 23.6 - 26.7 m	5/4/2009	Maxx	1.3	3	< 0.05	0.076	< 0.05
	6/26/2009	Maxx	1.4	4	< 0.03	0.068	0.074
	8/31/2009	Maxx	1.2	3	< 0.005	0.076	0.048
	11/19/2009	Maxx	1.2	4	< 0.001	0.07	0.049
	5/20/2010	Maxx	1.3	5	< 0.05	0.07	0.067
	11/2/2010	Maxx	1.2	< 10	< 0.05	0.083	0.19
	5/12/2011	Maxx	1.1	4	0.01	0.079	0.045
	11/7/2011	Maxx	1.2	< 10	< 0.03	0.074	0.077
	5/14/2012	Maxx	1.1	< 10	< 0.005	0.079	0.036
	11/26/2012	Maxx	1.3	3.7	0.011	0.073	0.034
	5/31/2013	MAX	1.5	4.3	< 0.025	0.087	0.046
	11/20/2013	MAX	1.2	< 10	< 0.025	0.079	0.064
	5/14/2014	MAX	1.5	< 10	< 0.01	0.069	0.055
11/26/2014	MAX	1.1	< 10	0.0071	0.067	0.035	
Monitor 55-IR Outwash 11.2 - 15.8 m	5/1/2009	Maxx	0.6	1	< 0.005	0.028	0.062
	6/26/2009	INV					
	8/31/2009	INSV					
	11/19/2009	Maxx	0.6	1	< 0.005	0.022	0.031
	5/20/2010	INSV					
	11/2/2010	INSV					
	5/13/2011	INSV					
	11/7/2011	INSV					
	5/15/2012	Maxx	0.55	< 10	< 0.005	0.018	0.0074
	11/29/2012	Maxx	0.69	< 10	< 0.005	0.024	0.006
	6/4/2013	MAX	0.68	1.9	0.013	0.021	0.011
	11/25/2013	MAX	0.6	< 10	< 0.005	0.021	0.012
	5/12/2014	MAX	0.54	< 5	< 0.005	0.016	0.015
11/27/2014	MAX	0.46	< 5	< 0.005	0.019	0.01	

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C1: Routine Leachate Quality - Trace Metals Analysis - - Closed Eastview Road Landfill Site



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS	Lab	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
				0.05 h			5.0 a
Monitor	5/1/2009	Plug					
56-IR Outwash 12.0 - 18.1 m	6/26/2009	Maxx	0.7	< 10	< 0.03	0.13	0.008
	8/31/2009	INSV					
	11/19/2009	Maxx	0.7	4	< 0.005	0.14	0.009
	5/20/2010	INSV					
	11/2/2010	Maxx	0.7	< 10	< 0.005	0.15	0.006
	5/5/2011	INSV					
	11/7/2011	Maxx	< 0.1	< 10	< 0.01	0.084	0.026
	5/15/2012	Maxx		< 10	< 0.025	0.17	0.029
	11/29/2012	Maxx	0.77	3.8	< 0.01	0.17	0.01
	6/4/2013	MAX	0.79	4.7	< 0.025	0.15	< 0.025
	11/25/2013	MAX	0.72	< 10	< 0.025	0.14	0.037
	5/12/2014	MAX	0.74	< 10	< 0.005	0.079	0.02
	11/27/2014	MAX	0.48	< 10	< -0.001	0.14	0.012
Monitor	5/4/2009	Maxx	0.2	< 1	< 0.005	0.007	< 0.005
57-I Outwash 18.5 - 26.1 m	6/26/2009	Maxx	0.3	< 1	< 0.005	0.007	< 0.005
	8/31/2009	Maxx	0.2	< 1	< 0.005	0.013	0.008
	11/19/2009	Maxx	0.2	< 1	< 0.005	0.008	< 0.005
	5/20/2010	Maxx	0.2	< 1	< 0.005	0.007	0.007
	11/2/2010	Maxx	0.4	< 1	< 0.005	0.01	0.006
	5/12/2011	Maxx	0.3	< 1	< 0.005	0.009	0.008
	11/7/2011	Maxx	0.2	< 5	< 0.005	0.01	0.01
	5/14/2012	Maxx	0.36	< 5	< 0.005	0.015	0.0068
	11/27/2012	Maxx	0.46	< 10	< 0.005	0.016	< 0.005
	6/3/2013	MAX	0.45	1.5	< 0.005	0.016	< 0.005
	11/21/2013	MAX	0.43	< 5	< 0.005	0.017	0.0075
	5/12/2014	MAX	0.66	< 5	< 0.005	0.022	0.041
	11/26/2014	MAX	0.42	1.4	< 0.005	0.017	< 0.005
Monitor	5/4/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
58-I Outwash 18.9 - 20.4 m	6/26/2009	Maxx	< 0.1	< 1	< 0.005	0.003	0.005
	8/31/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	11/19/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/20/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.008
	11/2/2010	Maxx	< 0.1	< 1	< 0.005	0.002	0.01
	5/11/2011	Maxx	< 0.1	< 1	< 0.005	0.003	0.008
	11/7/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	5/10/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/27/2012	Maxx	0.17	< 1	< 0.005	0.002	< 0.005
	6/4/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/21/2013	MAX	< 0.1	< 1	< 0.005	0.0018	< 0.005
	5/12/2014	MAX	0.2	< 1	< 0.005	0.001	0.006
	11/26/2014	MAX	0.21	< 1	< 0.005	0.0039	0.0057
Monitor	5/1/2009	Maxx	2	7	< -0.001	0.35	< 0.05
59-I Waste 10.8 - 20.0 m	6/26/2009	Maxx	2.3	< 10	0.12	0.34	< 0.05
	8/31/2009	Maxx	2.2	< 10	0.12	0.33	< 0.03
	11/19/2009	Maxx	2.1	< 10	0.14	0.33	< 0.05
	5/20/2010	Maxx	2.3	9	0.094	0.29	< 0.05
	11/2/2010	Maxx	2.1	< 10	0.059	0.35	0.038
	5/11/2011	Maxx	1.6	12	0.067	0.26	< 0.05
	11/7/2011	Maxx	2	< 50	0.099	0.27	< 0.05
	5/15/2012	Maxx	1.7	< 20	0.12	0.3	< 0.1
	11/28/2012	Maxx	2.1	< 10	0.17	0.28	< 0.05
	6/4/2013	MAX	2.5	< 20	0.12	0.31	< 0.05
	11/21/2013	N/A					
	5/12/2014	MAX	12	< 50	0.12	0.32	< 0.05
	11/27/2014	MAX	1.4	< 20	0.097	0.3	< 0.05

NOTE: ODWS - Ontario Drinking Water Standards
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C1: Routine Leachate Quality - Trace Metals Analysis - - Closed Eastview Road Landfill Site



		Trace Elements				
Date	Lab	I mg/L	Br mg/L	Cr mg/L 0.05 h	Ni mg/L	Zn mg/L 5.0 a
Monitor						
61-IR						
Outwash						
24.7 - 26.7 m						
5/1/2009	INSV					
6/26/2009	INV					
8/31/2009	INSV					
11/19/2009	INSV					
5/20/2010	INSV					
11/2/2010	INSV					
5/12/2011	Maxx	0.6	4	< 0.005	0.04	< 0.005
11/7/2011	INSV					
5/14/2012	Maxx	0.6	< 10	< 0.005	0.045	0.012
11/28/2012	Maxx	0.89	< 10	< 0.005	0.064	0.18
6/3/2013	MAX	< 10	< 10	< 0.01	0.054	< 0.005
11/21/2013	MAX	0.84	< 10	< 0.005	0.071	0.18
5/12/2014	MAX	1.1	< 10	< 0.025	0.068	0.083
11/26/2014	MAX	0.73	< 10	< 0.005	0.065	0.024
Monitor						
63-I						
Outwash						
15.1 - 16.6 m						
5/1/2009	Maxx	1.5	2	< 0.005	0.018	< 0.005
6/26/2009	Maxx	1.7	2	< 0.005	0.018	0.006
8/31/2009	Maxx	1.6	1	< 0.005	0.019	< 0.005
11/19/2009	Maxx	1.3	2	< 0.005	0.021	< 0.005
5/20/2010	INSV					
11/2/2010	INSV					
5/11/2011	Maxx	0.4	2	< 0.005	0.023	0.01
11/7/2011	Maxx	< 0.1	< 5	< 0.005	0.018	0.016
5/15/2012	Maxx	0.61	< 5	< 0.005	0.019	0.0064
11/27/2012	Maxx	1.5	< 10	< 0.005	0.019	< 0.005
5/31/2013	MAX	1.2	1.7	< 0.005	0.018	< 0.005
11/21/2013	MAX	1.1	< 5	< 0.005	0.022	0.01
5/12/2014	MAX	0.96	< 5	< 0.005	0.018	0.01
11/26/2014	MAX	0.94	< 5	< 0.005	0.018	0.008
Monitor						
65-I						
Waste/Fill						
5.7 - 10.3 m						
5/1/2009	Maxx	0.3	< 1	< 0.005	0.004	0.006
6/26/2009	Maxx	0.5	< 1	< 0.005	0.008	< 0.005
8/31/2009	Maxx	0.7	< 1	< 0.005	0.005	0.009
11/19/2009	Maxx	0.5	1	< 0.005	0.006	< 0.005
5/20/2010	Maxx	0.4	< 1	< 0.005	0.007	0.014
11/2/2010	Maxx	0.4	< 5	< 0.005	0.006	< 0.005
5/12/2011	Maxx	0.2	< 1	< 0.005	0.004	0.008
11/7/2011	Maxx	< 0.1	< 5	< 0.01	0.006	< 0.005
5/15/2012	Maxx	< 1	< 1	< 0.005	0.0035	< 0.005
11/27/2012	Maxx	0.37	< 1	< 0.005	0.0037	< 0.005
6/3/2013	MAX	0.23	< 1	< 0.005	0.0021	0.0083
11/21/2013	MAX	0.23	< 1	< 0.005	0.0032	0.007
5/12/2014	MAX	0.15	< 1	< 0.005	0.0036	< 0.005
11/27/2014	MAX	0.14	< 1	< 0.005	0.0051	0.0086
Monitor						
66-IR						
Outwash						
18.4 - 20.6 m						
5/1/2009	INSV					
6/26/2009	INV					
8/31/2009	INSV					
11/19/2009	Maxx	2.6	5	< 0.005	0.018	0.007
5/20/2010	Maxx	2.6	5	< 0.005	0.029	0.01
11/2/2010	Maxx	0.2	6	< 0.005	0.037	0.032
5/12/2011	Maxx	2	7	< 0.005	0.038	0.01
11/7/2011	Maxx	1.3	< 10	< 0.001	0.042	0.018
5/14/2012	Maxx	1.7	< 20	< 0.025	0.059	< 0.025
11/27/2012	Maxx	2.5	< 10	< 0.02	0.056	0.014
6/4/2013	MAX	2.8	7	< 0.025	0.057	< 0.025
11/25/2013	MAX	1.6	< 10	0.0057	0.085	0.0099
5/12/2014	MAX	1.4	< 10	< 0.01	0.085	0.0088
11/27/2014	MAX	1.1	< 10	< 0.025	0.097	< 0.025

NOTE: ODWS - Ontario Drinking Water Standards
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C1: Routine Leachate Quality - Trace Metals Analysis - - Closed Eastview Road Landfill Site



Monitor
67-I
Waste
16.2 - 20.7 m

		Trace Elements				
Date		I	Br	Cr	Ni	Zn
ODWS	Lab	mg/L	mg/L	mg/L	mg/L	mg/L
				0.05 h		5.0 a
5/1/2009	Maxx	1.4	2	< 0.005	0.025	0.012
6/26/2009	Maxx	1.3	3	< 0.005	0.025	0.016
8/31/2009	Maxx	1.8	1	< 0.005	0.024	0.01
11/19/2009	Maxx	1.8	3	< 0.005	0.027	< 0.005
5/20/2010	Maxx	1.5	3	< 0.005	0.042	0.019
11/2/2010	Maxx	0.1	3	< 0.005	0.049	0.019
5/11/2011	Maxx	1	3	< 0.005	0.045	0.03
11/7/2011	Maxx	< 0.1	< 10	< 0.03	0.046	0.023
5/14/2012	Maxx	0.33	< 10	< 0.1	0.052	0.015
11/21/2012	INSV					
6/4/2013	MAX	0.8	< 5	< 0.005	0.044	< 0.005
11/25/2013	MAX	0.61	< 10	0.012	0.052	< 0.005
5/12/2014	MAX	1.2	< 20	0.032	0.13	0.035
11/27/2014	MAX	0.88	< 10	< 0.025	0.099	0.028

NOTE: ODWS - Ontario Drinking Water Standards
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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 2-I Outwash 9.8 - 10.4 m	4/28/2009	Maxx	8	885	313	450	42	0.2	< 1	110	28	46	6	0.77	0.042	0.53	100	< 0.01	2
	6/22/2009	Maxx	8.1	866	323	440	38	0.2	< 1	100	26	44	5.5	1.9	0.092	2.1	97	< 0.01	0.2
	8/25/2009	Maxx	7.6	844	341	400	24	0.17	< 1	95	17	40	4.9	3.2	0.063	1.9	107	< 0.01	0.2
	11/16/2009	Maxx	7.7	855	334	450	17	0.17	< 1	110	16	46	5.4	2.4	0.076	2.3	106	< 0.01	0.2
	5/18/2010	Maxx	7.9	833	329	450	17	0.18	< 1	110	15	46	5.3	2.9	0.047	1.1	111	0.01	0.7
	10/21/2010	Maxx	7.75	840	350	450	12	0.17	< 1	110	11	44	5	5.5	0.072	2.1	102	< 0.01	< 0.1
	4/19/2011	Maxx	8.03	838	352	450	12	0.15	< 1	110	8.9	43	4.7	5.2	0.068	2.1	102	0.02	< 0.1
	11/2/2011	Maxx	8.04	866	360	450	15	0.17	< 1	110	10	44	4.7	5.9	0.073	2.5	92	0.05	< 0.1
	5/7/2012	Maxx	7.97	880	370	460	21	0.14	< 1	110	11	46	4.7	5.6	0.073	1.5	89	0.013	0.11
	11/27/2012	Maxx	7.73	880	360	500	24	0.18	< 1	120	12	49	5	5.6	0.081	1.2	90	0.064	0.94
	5/23/2013	MAX	7.98	950	390	500	25	0.13	< 1	120	13	48	4.5	6.5	0.083	1.9	85	< 0.01	< 0.1
	11/14/2013	MAX	7.57	940	410	500	24	0.15	< 1	120	12	48	4.8	6.2	0.085	1.8	82	0.013	< 0.1
	5/7/2014	MAX	7.81	980	440	530	18	0.14	< 1	130	13	52	4.4	6.9	0.082	1.9	74	< 0.01	< 0.1
11/21/2014	MAX	7.79	950	420	540	23	0.12	< 1	130	10	51	4.7	5.7	0.072	0.76	78	0.045	1.89	
Monitor 2-II Outwash 0.2 - 4.6 m	4/28/2009	Maxx	8.3	684	344	360	6	0.054	< 1	120	8.7	16	1.4	< 0.1	< 0.002	< 0.05	27	< 0.01	2.7
	8/25/2009	Maxx	7.5	731	373	370	6	0.092	< 1	130	5.1	14	1.1	< 0.1	0.02	< 0.05	35	< 0.01	1.6
	10/21/2010	Maxx	7.65	829	399	470	5	0.073	< 1	150	5.5	20	2.6	< 0.1	0.048	0.11	45	< 0.01	1.6
	4/19/2011	Maxx	7.88	832	417	460	5	0.057	< 1	150	5.6	20	1.5	< 0.1	0.074	0.07	33	0.01	2.8
	5/7/2012	Maxx	7.8	870	430	530	4	0.066	4	170	4	23	2.4	4.7	0.62	0.85	41	0.018	0.47
	5/23/2013	MAX	7.86	720	350	440	3.3	0.044	< 1	150	3.4	18	1.6	0.13	0.058	0.073	26	< 0.01	0.63
	5/7/2014	MAX	7.68	640	310	330	4.1	0.036	< 1	110	2.8	13	1.7	< 0.1	< 0.002	0.057	11	< 0.01	3.2

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor																			
4-IR																			
Bedrock																			
19.4 - 20.9 m																			
4/30/2009	Maxx	7.6	663	259	360	41	0.035	< 1	73	12	43	1	0.55	0.011	0.15	54	< 0.01	< 0.1	
6/24/2009	Maxx	8	670	244	340	44	0.026	< 1	69	11	41	0.9	0.53	0.01	0.2	57	< 0.01	< 0.1	
8/26/2009	Maxx	8	665	249	330	39	0.031	< 1	68	10	38	0.96	0.47	0.01	0.18	54	< 0.01	< 0.1	
11/16/2009	Maxx	8	680	243	350	42	0.027	< 1	72	11	41	0.97	0.4	0.01	0.16	53	< 0.01	< 0.1	
5/18/2010	Maxx	8	680	242	320	49	0.033	< 1	68	10	37	1	0.5	0.018	0.28	60	< 0.01	< 0.1	
7/27/2010	Maxx	8	680	244	340	42	0.03	< 1	72	11	40	0.94	0.26	0.011	0.06	60	< 0.01	< 0.1	
10/26/2010	Maxx	8.13	658	246	340	33	0.022	< 1	71	9.7	38	0.91	< 0.1	0.002	< 0.05	55	< 0.01	< 0.1	
12/6/2010	Maxx	7.97	677	240	340	42	0.027	< 1	70	11	40	0.92	0.54	0.01	0.14	55	< 0.01	< 0.1	
4/27/2011	Maxx	8.04	695	243	380	43	0.034	< 1	75	13	46	1.1	0.46	0.01	0.18	57	0.05	< 0.1	
7/20/2011	Maxx	8.03	703	234	340	45	0.03	< 1	70	12	40	0.97	0.48	0.01	0.2	57	0.02	< 0.1	
9/30/2011	Maxx	8.1	689	247	330	43	0.027	< 1	70	11	38	1	0.51	0.01	0.24	59	< 0.01	< 0.1	
11/1/2011	Maxx	8.09	689	240	330	41	0.029	< 1	71	11	37	1	0.53	0.011	0.2	56	0.04	< 0.1	
5/8/2012	Maxx	8.07	690	250	330	47	0.032	< 1	70	11	37	0.96	0.44	0.011	0.11	60	< 0.01	< 0.1	
8/15/2012	Maxx	8.03	690	240	350	43	0.03	< 1	73	12	41	1	0.54	0.01	0.17	56	< 0.01	< 0.1	
10/3/2012	Maxx	8.1	690	250	330	46	0.023	< 1	68	12	39	0.98	0.5	0.01	0.25	57	< 0.01	< 0.1	
11/21/2012	Maxx	8.08	690	250	340	45	0.028	< 1	71	12	41	0.96	0.5	0.011	0.18	55	< 0.01	< 0.1	
5/24/2013	MAX	8.07	700	240	350	46	0.039	< 1	75	12	41	0.96	0.42	0.012	0.26	58	< 0.01	< 0.1	
7/30/2013	MAX	7.99	690	240	350	48	0.027	< 1	75	12	39	0.95	0.49	0.011	0.19	60	< 0.01	< 0.1	
9/27/2013	MAX	8.21	690	240	360	45	0.03	< 1	75	12	41	1	0.52	0.011	0.18	57	< 0.01	< 0.1	
11/13/2013	MAX	8.09	700	240	340	45	0.023	< 1	72	12	40	0.95	0.5	0.011	0.17	57	< 0.01	< 0.1	
5/6/2014	MAX	8.14	700	240	350	46	0.032	< 1	73	12	40	0.97	0.46	0.012	0.22	57	< 0.01	< 0.1	
8/1/2014	MAX	8.04	690	240	340	45	0.028	< 1	69	12	40	0.89	0.46	0.011	0.23	60	< 0.01	< 0.1	
10/2/2014	MAX	8.02	690	250	340	44	0.03	< 1	71	12	40	0.95	0.5	0.011	0.22	57	< 0.01	< 0.1	
11/18/2014	MAX	8.04	720	240	360	46	0.034	< 1	75	13	41	1	0.56	0.011	0.17	58	< 0.01	< 0.1	
Monitor																			
4-IR																			
Lower Till																			
11.9 - 13.7 m																			
4/30/2009	Maxx	7.6	833	271	420	80	0.03	< 1	86	20	50	1.5	1.1	0.023	0.22	68	< 0.01	< 0.1	
6/24/2009	Maxx	7.9	838	260	410	77	0.021	< 1	85	15	49	1.5	0.87	0.025	0.23	77	< 0.01	< 0.1	
8/26/2009	Maxx	7.8	915	271	570	98	0.025	< 1	140	18	58	1.9	2.9	0.17	0.24	74	< 0.01	< 0.1	
5/17/2010	Maxx	8.1	886	255	470	92	0.024	< 1	97	18	55	1.6	1.1	0.027	0.25	84	< 0.01	< 0.1	
10/26/2010	Maxx	8.09	893	254	440	88	0.026	< 1	94	16	50	1.5	< 0.1	< 0.002	< 0.05	74	< 0.01	0.2	
4/27/2011	Maxx	8.05	871	257	420	79	0.024	< 1	86	15	49	1.2	0.85	0.023	0.24	76	0.09	< 0.1	
11/1/2011	Maxx	7.94	1130	259	510	156	0.026	< 1	110	24	59	1.5	1.3	0.041	0.3	84	0.02	< 0.1	
5/8/2012	Maxx	8.02	960	260	420	110	0.027	< 1	90	17	47	1.2	0.99	0.027	0.15	83	0.043	< 0.1	
11/21/2012	Maxx	7.79	960	270	450	110	0.023	< 1	94	19	53	1.3	1.1	0.032	0.23	78	0.012	< 0.1	
5/24/2013	MAX	8.02	880	250	440	90	0.028	< 1	94	18	50	1.3	0.91	0.028	0.57	75	< 0.01	< 0.1	
11/13/2013	MAX	8.01	900	250	430	91	0.021	< 1	92	17	49	1.2	0.35	0.016	0.15	78	0.017	0.15	
5/6/2014	MAX	8.1	860	250	430	89	0.027	< 1	91	22	48	1.2	0.78	0.027	0.24	70	0.012	< 0.1	
11/18/2014	MAX	7.97	890	250	430	91	0.029	< 1	90	19	49	1.2	1.1	0.023	0.22	74	0.011	< 0.1	

NOTE: ODWS - Ontario Drinking Water Standards
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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 4-III Upper Till 1.1 - 4.1 m	4/30/2009	Maxx	7.7	5790	383	720	1670	0.058	< 5	200	970	53	1.8	< 0.1	< 0.002	< 0.05	66	< 0.01	4.7
	6/24/2009	Maxx	7.7	5000	386	530	1440	0.018	< 1	140	820	41	1.4	< 0.1	< 0.002	< 0.05	78	< 0.01	5.7
	8/26/2009	Maxx	7.8	4020	414	360	1050	0.086	< 1	100	700	25	1.4	< 0.1	0.009	< 0.05	61	< 0.01	5.5
	11/16/2009	Maxx	7.8	4290	401	410	1070	0.016	< 1	110	790	31	1.4	< 0.1	< 0.002	< 0.05	60	< 0.01	5.3
	5/17/2010	Maxx	8.1	4940	387	500	1340	0.026	< 1	140	910	38	1.4	< 0.1	< 0.002	< 0.05	66	< 0.01	5.1
	10/26/2010	Maxx	7.94	4170	374	360	1060	0.019	< 1	100	750	27	1.4	< 0.1	0.002	< 0.05	56	< 0.01	6
	4/27/2011	Maxx	7.95	3930	349	410	956	0.024	< 1	120	720	29	1	< 0.1	< 0.002	< 0.05	45	< 0.01	4.1
	11/1/2011	Maxx	8.04	2720	396	200	564	0.015	< 1	57	560	15	1	< 0.1	0.003	0.08	39	0.01	5.9
	5/8/2012	Maxx	8.02	2800	360	250	700	0.019	< 1	70	480	18	0.85	< 0.1	< 0.002	< 0.05	43	< 0.01	6.2
	11/21/2012	Maxx	7.85	2700	350	270	650	0.014	< 1	76	500	20	0.96	< 0.1	0.004	0.061	33	< 0.01	6
	5/24/2013	MAX	7.87	3000	320	410	790	0.015	< 1	110	510	30	1.1	< 0.1	< 0.002	0.15	33	< 0.01	4.7
	11/13/2013	MAX	7.83	3100	300	460	820	0.012	< 1	130	490	33	1.1	< 0.1	0.0026	< 0.05	39	0.014	4.9
	5/6/2014	MAX	7.92	2900	330	450	730	0.021	< 1	130	480	32	0.91	< 0.1	< 0.002	< 0.05	42	< 0.01	3.68
	11/24/2014	MAX	7.88	2500	350	350	560	0.02	< 1	98	400	26	0.93	< 0.1	< 0.002	< 0.05	35	< 0.01	6.03
Monitor 5-II Upper Till 1.7 - 7.8 m	5/1/2009	Maxx	8	1530	413	210	232	0.012	< 1	55	280	18	0.55	< 0.1	< 0.002	< 0.05	22	< 0.01	0.1
	6/22/2009	Maxx	8.3	1510	385	240	255	0.014	< 1	64	270	20	0.72	< 0.1	< 0.002	< 0.05	18	< 0.01	0.2
	8/26/2009	Maxx	7.8	1890	371	260	371	0.013	< 1	69	300	21	0.77	< 0.1	< 0.002	< 0.05	18	< 0.01	1
	11/16/2009	Maxx	7.9	1950	345	320	376	0.012	< 1	84	330	26	0.86	< 0.1	0.016	0.1	18	< 0.01	2
	5/17/2010	Maxx	8.1	1770	345	430	348	< 0.01	< 1	110	210	39	0.66	< 0.1	< 0.002	0.18	20	< 0.01	0.6
	10/26/2010	Maxx	8.04	1920	416	370	345	0.02	< 1	97	290	30	0.84	< 0.1	< 0.002	< 0.05	20	< 0.01	0.7
	5/3/2011	Maxx	7.96	1960	357	330	399	0.021	< 1	89	280	26	0.72	< 0.1	< 0.002	< 0.05	22	< 0.01	0.4
	11/1/2011	Maxx	7.99	2000	386	330	371	0.015	< 1	89	300	25	0.78	< 0.1	< 0.002	0.05	23	< 0.01	3.6
	5/8/2012	Maxx	7.93	2500	320	470	640	0.018	< 1	120	330	39	0.83	< 0.1	< 0.002	< 0.05	21	< 0.01	0.68
	11/28/2012	Maxx	7.84	2300	340	450	520	0.015	< 1	120	280	35	0.82	< 0.1	< 0.002	< 0.05	17	< 0.01	0.36
	5/24/2013	MAX	7.81	4000	270	840	1100	0.014	< 1	230	510	66	1.2	< 0.1	< 0.002	0.076	25	< 0.01	0.83
	11/19/2013	MAX	7.53	4700	390	820	1300	0.013	< 1	230	590	62	1.5	< 0.1	< 0.002	< 0.05	35	< 0.01	1.4
	5/7/2014	MAX	7.77	4300	360	680	1200	0.018	< 1	190	630	51	1.1	< 0.1	< 0.002	0.12	31	< 0.01	0.81
	11/24/2014	MAX	7.73	2900	360	550	720	< 0.01	< 1	150	350	42	0.82	< 0.1	0.0058	< 0.05	18	< 0.01	0.39
Monitor 9A-1 Bedrock 25.1 - 25.9 m	4/30/2009	Maxx	7.8	355	183	110	12	0.13	< 1	22	43	13	0.83	0.22	0.01	0.36	5	< 0.01	< 0.1
	8/27/2009	Maxx	8.2	355	167	98	11	0.13	< 1	22	39	11	0.64	0.36	0.016	0.35	6	< 0.01	< 0.1
	10/27/2010	Maxx	8.3	329	153	80	10	0.11	< 1	15	44	10	0.99	0.13	0.02	0.18	2	< 0.01	< 0.1
	4/28/2011	Maxx	8.21	366	169	100	10	0.12	< 1	22	39	11	0.81	0.22	0.01	0.41	10	< 0.01	< 0.1
	5/10/2012	Maxx	8.37	350	170	94	9.7	0.12	< 1	19	40	11	0.79	0.2	0.0096	0.27	8.5	< 0.01	< 0.1
	5/30/2013	MAX	8.29	360	160	97	9.5	0.12	< 1	21	40	11	0.95	0.19	0.0087	0.54	8.1	< 0.01	< 0.1
	5/13/2014	MAX	8.24	360	170	94	9.2	0.13	< 1	19	39	11	0.88	0.19	0.0089	0.51	9.9	< 0.01	< 0.1

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Releated Objective, h - Heath Related Objective

C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L		
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h		
Monitor 9-I Outwash 5.5 - 6.8 m	4/30/2009	Maxx	7.5	826	318	410	31	0.29	< 1	110	27	35	2.2	< 0.1	0.13	< 0.05	103	< 0.01	< 0.1	
	8/27/2009	Maxx	7.8	883	301	410	38	0.29	< 1	110	26	34	1.5	2	0.55	0.25	126	< 0.01	< 0.1	
	10/27/2010	Maxx	7.78	1080	308	490	74	0.33	4	120	37	46	2	0.36	0.26	0.14	168	< 0.01	< 0.1	
	4/28/2011	Maxx	7.89	1080	313	500	67	0.3	< 1	120	33	46	2	0.15	0.18	0.12	157	0.01	< 0.1	
	5/10/2012	Maxx	8.18	1200	320	520	97	0.29	< 1	130	41	49	2.3	0.11	0.25	0.15	180	< 0.01	< 0.1	
	5/31/2013	MAX	8.09	1100	350	510	83	0.27	< 1	130	44	46	2.7	< 0.1	0.22	0.41	130	0.013	< 0.1	
	5/13/2014	MAX	7.87	960	380	490	42	0.23	< 1	120	29	46	3.4	0.19	0.2	0.46	86	< 0.01	0.15	
Monitor 10-II Outwash 3.0 - 3.6 m	4/28/2009	Maxx	7.8	3310	292	990	924	0.03	< 1	230	340	98	2.4	1.3	0.39	1.7	27	< 0.01	0.3	
	6/26/2009	Maxx	7.9	3320	290	990	1010	0.028	< 1	240	320	96	2.3	1	0.32	1.9	30	< 0.01	< 0.1	
	8/28/2009	Maxx	7.6	3330	313	950	890	0.035	5	230	300	89	4.5	23	0.27	7.4	21	< 0.01	< 0.1	
	11/18/2009	Maxx	7.8	3350	305	920	893	0.032	< 1	220	300	87	3.1	2.5	0.23	3.8	16	< 0.01	< 0.1	
	5/19/2010	Maxx	7.8	3360	286	880	918	0.029	< 1	210	270	85	2.1	3.1	0.36	1.8	28	0.01	< 0.1	
	10/27/2010	Maxx	7.53	3470	309	910	957	0.027	< 1	230	320	84	2.5	8.6	0.27	3.3	19	< 0.01	0.2	
	4/27/2011	Maxx	7.79	3400	286	980	943	0.03	< 1	240	330	91	2	4.6	0.35	2	36	0.12	0.2	
	11/4/2011	Maxx	7.17	3370	285	910	877	0.029	1	220	320	87	2.4	2.9	0.25	2	27	0.06	1	
	5/10/2012	Maxx	8	3400	290	940	980	0.031	< 1	230	350	89	2.2	0.71	0.34	1.7	32	0.45	0.45	
	11/26/2012	Maxx	7.69	3500	290	910	990	0.03	< 1	220	350	84	2.3	0.17	0.058	0.48	32	0.044	1.9	
	5/30/2013	MAX	7.9	3500	280	900	970	0.03	< 1	230	370	82	2.3	3.8	0.23	1	34	0.04	2.2	
	11/19/2013	MAX	7.82	3500	290	910	960	0.024	< 1	220	340	87	2.2	< 0.1	0.2	1.1	42	0.19	1.6	
	5/12/2014	MAX	7.7	3400	290	900	950	0.033	< 1	220	330	85	1.9	1.1	0.41	1.6	36	0.113	0.71	
11/24/2014	MAX	7.8	3400	280	870	940	0.016	< 5	210	320	82	1.8	0.7	0.25	0.77	31	0.061	1.8		
Monitor 10-III Outwash/Peat 0.3 - 1.5 m	4/28/2009	Maxx	7.8	5540	327	780	1630	0.02	< 1	240	1100	42	2.8	7.3	1.2	0.72	16	< 0.01	< 0.1	
	6/26/2009	Maxx	7.7	5220	412	750	1600	0.026	5	230	840	39	2.7	11	1.2	0.91	7	0.02	< 0.1	
	8/28/2009	Maxx	7.7	5600	426	610	1570	0.034	10	200	880	29	3.2	8.3	1.1	3.5	8	< 0.01	< 0.1	
	11/19/2009	Maxx	7.7	4870	419	620	1330	0.065	39	200	750	31	2.4	4.3	0.84	4	19	0.01	< 0.1	
	5/19/2010	Maxx	7.6	3760	388	500	1040	0.033	< 1	160	690	27	1.9	7.5	0.78	1.3	17	< 0.01	< 0.1	
	10/27/2010	Maxx	7.95	3820	487	460	965	0.046	40	150	720	24	2.1	9.1	0.81	2.7	10	< 0.01	< 0.1	
	4/26/2011	Maxx	7.8	3410	292	910	878	0.029	< 1	220	250	86	1.7	5.1	0.3	2.5	29	0.05	< 0.1	
	11/4/2011	Maxx	7.72	4770	339	650	1300	0.051	20	210	580	32	1.1	5.4	0.64	2.5	55	< 0.01	< 0.1	
	5/10/2012	Maxx	8.07	4300	370	510	1200	0.03	1.5	160	590	25	1.5	5.8	0.69	1.5	30	< 0.01	< 0.1	
	11/21/2012	INSV																		
	5/30/2013	MAX	7.71	4200	360	570	1200	< 0.05	48	180	760	27	1.9	6.2	0.9	2.5	20	0.043	< 0.1	
	11/19/2013	MAX	7.62	4000	610	620	990	0.021	3.4	200	740	31	2.1	13	0.98	1.5	10	0.026	< 0.1	
	5/12/2014	MAX	7.68	5700	390	780	1700	0.064	14	250	1000	40	2.4	12	1.4	1.7	10	< 0.01	< 0.1	
11/24/2014	MAX	7.72	1800	280	260	400	< 0.01	< 2	84	200	13	0.73	4.2	0.3	0.86	3.7	< 0.01	< 0.1		

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Related Objective, h - Health Related Objective

C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 11-I Upper Till 4.6 - 5.8 m	4/30/2009	Maxx	7.8	1160	374	240	132	0.045	< 1	48	170	28	1.3	< 0.1	< 0.002	< 0.05	48	< 0.01	0.2
	6/22/2009	Maxx	8.2	1220	365	250	148	0.042	< 1	47	190	32	1.2	< 0.1	0.008	< 0.05	49	< 0.01	0.1
	8/27/2009	Maxx	8	1310	374	260	179	0.039	< 1	49	200	34	1.4	0.45	0.049	0.46	52	< 0.01	0.1
	11/17/2009	Maxx	8	1350	359	280	185	0.039	< 1	51	210	36	1.4	< 0.1	0.019	< 0.05	50	< 0.01	0.2
	5/18/2010	Maxx	8.1	1230	364	230	159	0.038	< 1	43	170	29	1.2	< 0.1	< 0.002	< 0.05	57	< 0.01	< 0.1
	10/26/2010	Maxx	7.84	863	380	350	32	0.064	< 1	100	76	22	1.6	< 0.1	0.054	< 0.05	24	< 0.01	1.9
	4/27/2011	Maxx	8.12	1140	366	240	110	0.038	< 1	45	180	30	1.2	< 0.1	< 0.002	< 0.05	52	< 0.01	0.2
	10/31/2011	Maxx	8.23	1140	372	230	109	0.041	< 1	43	190	30	1.4	< 0.1	0.007	< 0.05	47	< 0.01	< 0.1
	5/9/2012	Maxx	8.2	1100	380	200	100	0.043	< 1	37	170	25	1.1	< 0.1	0.018	< 0.05	48	< 0.01	< 0.1
	11/22/2012	Maxx	8.09	1100	380	210	100	0.041	< 1	41	170	26	1.3	< 0.1	< 0.002	< 0.05	46	< 0.01	0.16
	5/23/2013	MAX	8.27	950	360	220	66	0.046	< 1	45	170	27	1.2	< 0.1	0.0043	< 0.05	39	< 0.01	0.1
	11/14/2013	MAX	8.07	880	370	190	51	0.047	< 1	39	130	21	1.1	< 0.1	< 0.002	< 0.05	35	0.015	< 0.1
5/8/2014	MAX	8.03	880	360	180	54	0.04	< 1	39	130	21	0.93	< 0.1	< 0.002	0.056	35	< 0.01	< 0.1	
11/25/2014	MAX	8.13	890	370	180	52	0.025	< 1	39	130	21	1	< 0.1	< 0.002	< 0.05	36	< 0.01	< 0.1	
Monitor 11-II Outwash 0.2 - 2.9 m	4/30/2009	Maxx	7.6	638	312	300	9	0.064	< 1	95	13	15	0.27	< 0.1	< 0.002	< 0.05	13	< 0.01	6.4
	8/27/2009	Maxx	7.9	812	346	290	42	0.04	< 1	88	62	18	1.8	< 0.1	0.021	< 0.05	19	< 0.01	1.8
	10/26/2010	Maxx	8.14	1230	366	250	147	0.044	< 1	46	190	32	1.4	< 0.1	0.026	0.07	53	< 0.01	0.1
	4/27/2011	Maxx	7.95	640	288	320	12	0.06	< 1	100	14	16	0.43	< 0.1	0.055	0.07	17	0.01	3.1
	5/9/2012	Maxx	7.87	610	260	240	24	0.042	< 1	72	34	15	1	< 0.1	0.04	< 0.05	22	< 0.01	0.62
	5/23/2013	MAX	8.07	680	280	350	31	0.047	< 1	110	32	21	1.2	< 0.1	0.047	0.063	22	< 0.01	0.41
	5/8/2014	MAX	7.58	880	330	400	75	0.06	< 1	120	34	22	0.72	< 0.1	0.0023	< 0.05	20	< 0.01	0.49
Monitor 11-III Lower Till 18.5 - 17.0 m	4/30/2009	Maxx	7.7	274	145	66	4	0.25	< 1	17	42	6.1	0.74	< 0.1	< 0.002	< 0.05	4	0.01	0.1
	8/27/2009	Maxx	8.2	264	135	55	4	0.24	< 1	14	38	4.9	0.57	< 0.1	0.012	< 0.05	4	< 0.01	< 0.1
	10/26/2010	Maxx	8.21	289	138	55	4	0.36	< 1	13	49	5.2	0.77	< 0.1	0.021	0.19	5	< 0.01	< 0.1
	4/27/2011	Maxx	8.14	274	138	58	3	0.3	< 1	14	45	5.6	0.77	< 0.1	0.007	0.07	5	0.02	< 0.1
	5/9/2012	Maxx	8.15	280	140	51	3.4	0.29	< 1	12	43	4.9	0.68	< 0.1	0.0031	< 0.05	4.2	< 0.01	0.13
	5/23/2013	MAX	8.26	270	140	62	2.9	0.3	< 1	15	48	5.7	0.78	< 0.1	0.006	0.071	4.1	< 0.01	0.13
	5/8/2014	MAX	8.12	270	140	50	2.6	0.3	< 1	12	42	4.6	0.62	< 0.1	0.0052	< 0.05	3.8	< 0.01	0.11
Monitor 13-I Bedrock 24.4 - 25.6 m	4/28/2009	Maxx	8.2	282	154	80	< 1	0.1	< 1	18	41	8.7	0.85	0.14	0.007	0.34	1	< 0.01	< 0.1
	8/28/2009	Maxx	8	281	158	72	1	0.093	< 1	16	36	7.5	0.76	0.16	0.006	0.32	1	< 0.01	< 0.1
	10/27/2010	Maxx	8.14	284	147	77	< 1	0.11	< 1	17	33	8.5	0.75	< 0.1	0.008	0.3	1	< 0.01	< 0.1
	4/26/2011	Maxx	8.21	283	150	79	1	0.11	< 1	18	35	8.4	0.76	0.14	0.007	0.36	1	< 0.01	< 0.1
	5/14/2012	Maxx	7.99	280	150	81	< 1	0.11	< 1	18	37	8.6	0.82	0.11	0.0075	0.21	1	< 0.01	< 0.1
	5/29/2013	MAX	8.25	280	150	77	< 1	0.1	< 1	17	36	8.2	0.75	< 0.1	0.0079	0.4	1	< 0.01	< 0.1
	5/13/2014	MAX	8.18	280	150	71	< 1	0.12	< 1	16	36	7.6	0.78	0.2	0.0079	0.44	1	< 0.01	< 0.1

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Related Objective, h - Health Related Objective

C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 13-II Lower Till 19.5 - 20.1 m	4/28/2009	Maxx	8.1	291	145	45	4	0.11	< 1	13	61	2.9	0.93	0.14	0.05	0.16	4	< 0.01	< 0.1
	8/28/2009	Maxx	8.2	327	159	54	7	0.092	< 1	17	56	2.7	0.7	< 0.1	0.069	< 0.05	5	< 0.01	< 0.1
	10/27/2010	Maxx	8.29	296	145	41	4	0.099	< 1	12	56	2.6	0.55	0.32	0.032	0.26	3	< 0.01	< 0.1
	4/26/2011	Maxx	7.77	6700	414	880	1820	0.04	< 1	230	1200	74	2.8	9.2	0.26	4.5	42	0.02	< 0.1
	11/2/2011	MAX																	
	5/14/2012	Maxx	7.93	300	150	39	3.5	0.085	2	11	53	2.6	0.55	0.24	0.027	0.078	4	< 0.01	< 0.1
	5/29/2013	MAX	8.07	300	150	44	5.7	0.097	< 1	13	57	2.8	0.55	0.27	0.029	0.25	5.1	< 0.01	< 0.1
	5/13/2014	MAX	8.09	310	160	41	3.6	0.1	< 1	12	55	2.7	0.72	1.4	0.081	0.48	3	< 0.01	< 0.1
Monitor 13-III Upper Till 7.6 - 8.8 m	4/28/2009	Maxx	8.4	317	167	130	2	0.089	< 1	23	28	17	1.3	< 0.1	< 0.002	< 0.05	5	< 0.01	0.2
	6/26/2009	Maxx	8.1	319	166	120	2	0.083	< 1	22	27	16	1	< 0.1	< 0.002	< 0.05	4	< 0.01	0.2
	8/28/2009	Maxx	7.9	320	175	120	2	0.08	< 1	22	24	15	0.81	< 0.1	0.002	< 0.05	3	< 0.01	0.3
	11/18/2009	Maxx	8.1	329	174	120	3	0.079	< 1	23	24	16	0.93	< 0.1	0.051	0.12	3	< 0.01	< 0.1
	5/19/2010	Maxx	8.2	325	166	130	2	0.087	< 1	24	23	17	0.91	< 0.1	< 0.002	< 0.05	5	< 0.01	0.1
	10/27/2010	Maxx	8.26	322	166	120	2	0.076	< 1	24	23	15	0.91	< 0.1	< 0.002	< 0.05	3	< 0.01	0.3
	4/20/2011	Maxx	8.26	333	171	120	3	0.08	< 1	23	24	16	0.98	< 0.1	0.007	< 0.05	12	< 0.01	< 0.1
	11/2/2011	Maxx	8.24	337	174	110	2	0.084	< 1	21	23	14	0.82	< 0.1	0.015	0.27	76	< 0.01	0.2
	5/10/2012	Maxx	8.38	320	170	120	2.1	0.087	< 1	22	24	16	0.79	< 0.1	0.0031	< 0.05	7.7	< 0.01	0.2
	11/26/2012	Maxx	7.89	320	180	120	4.1	0.082	< 1	22	25	15	0.92	< 0.1	0.014	0.087	3.8	< 0.01	0.31
	5/29/2013	MAX	8.24	330	160	130	2	0.096	< 1	24	25	16	0.86	< 0.1	0.0022	0.14	6.4	< 0.01	0.11
	11/19/2013	MAX	8.09	320	170	120	2	0.087	< 1	23	24	16	0.93	< 0.1	0.01	0.095	5.3	< 0.01	0.2
	5/13/2014	MAX	8.22	320	170	120	1.9	0.1	< 1	22	23	16	0.83	< 0.1	0.0046	0.17	6.6	< 0.01	0.17
11/27/2014	MAX	8.03	320	170	130	2.4	0.087	< 1	25	25	16	0.92	< 0.1	0.011	0.12	3.3	< 0.01	0.44	
Monitor 13-IV Outwash 4.1 - 5.3 m	4/28/2009	Maxx	7.7	9430	447	1300	2800	0.032	< 1	350	1800	98	4.5	16	0.42	9.6	110	< 0.01	< 0.1
	6/26/2009	Maxx	7.9	7620	459	880	2390	< 0.05	< 1	240	1400	70	3.4	10	0.29	5.8	84	0.04	1.4
	8/28/2009	Maxx	7.6	6970	489	720	1990	0.034	< 1	200	1100	51	2.6	7.8	0.24	4.6	64	< 0.01	< 0.1
	11/18/2009	Maxx	7.7	6630	440	710	1860	0.034	< 1	190	1200	55	3.3	3.2	0.21	2.8	73	0.03	0.5
	5/19/2010	Maxx	7.7	6340	440	660	1830	0.079	< 1	170	1000	55	2.4	1.9	0.23	3.1	68	< 0.01	< 0.1
	10/27/2010	Maxx	7.64	4660	426	470	1280	0.037	< 1	120	840	39	2.3	3	0.15	3	31	< 0.01	< 0.1
	4/20/2011	Maxx	7.83	6570	402	850	1900	0.036	< 1	220	1000	71	2.7	8.8	0.26	2.6	41	0.14	1.2
	11/2/2011	Maxx	7.92	5980	443	750	1650	0.045	< 1	190	1100	64	2.7	9.5	0.22	4.3	34	< 0.01	< 0.1
	5/10/2012	Maxx	7.82	5900	440	700	1700	0.034	< 1	180	870	59	2.3	8.7	0.21	2.9	24	0.48	1.1
	11/26/2012	Maxx	7.49	5500	440	740	1600	0.043	< 1	190	870	64	2.8	6.7	0.22	3.4	11	0.019	< 0.1
	5/29/2013	MAX	7.78	4700	460	640	1300	0.042	< 1	170	690	54	2	6.2	0.19	2.6	11	< 0.01	< 0.1
	11/19/2013	MAX	7.59	4600	460	580	1300	0.036	< 1	150	550	48	1.8	7.4	0.16	1.9	17	0.6	1.7
	5/13/2014	MAX	7.79	6100	480	750	1800	0.078	1	190	1100	67	2.5	6.9	0.2	2.3	10	0.063	0.97
	11/27/2014	MAX	7.76	5500	510	590	1500	0.043	< 2	150	950	55	2.6	5.5	0.17	2.9	10	0.368	0.41

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 13-V Outwash 0.1 - 2.2 m	4/28/2009	Maxx	8	1420	416	450	162	0.037	< 1	150	180	21	2	< 0.1	< 0.002	< 0.05	86	< 0.01	0.1
	6/26/2009	Maxx	7.7	1660	601	560	184	0.053	1	180	190	29	1.3	0.74	0.13	< 0.05	45	< 0.01	< 0.1
	8/28/2009	Maxx	7.6	1890	664	600	207	0.055	< 1	190	200	28	1.6	2.9	0.13	0.1	69	< 0.01	< 0.1
	11/18/2009	Maxx	7.8	2090	539	680	238	0.024	< 1	220	220	35	0.51	< 0.1	< 0.002	0.43	245	< 0.01	0.3
	5/19/2010	Maxx	7.8	1630	554	520	139	0.036	< 1	170	150	26	0.68	< 0.1	< 0.002	< 0.05	145	< 0.01	< 0.1
	10/27/2010	Maxx	7.56	1150	407	470	76	0.037	< 1	150	78	24	0.8	< 0.1	< 0.002	0.3	96	< 0.01	< 0.1
	4/20/2011	Maxx	8.02	791	309	330	50	0.012	< 1	110	44	16	0.41	< 0.1	< 0.002	< 0.05	39	< 0.01	< 0.1
	11/2/2011	Maxx	7.99	1330	429	540	93	0.03	< 1	170	98	29	0.47	0.18	0.045	0.31	139	< 0.01	< 0.1
	5/10/2012	Maxx	8.21	980	420	400	44	0.023	< 1	120	85	21	< 0.2	< 0.1	< 0.002	< 0.05	70	< 0.01	< 0.1
	11/26/2012	Maxx	7.56	1100	470	470	41	0.021	2.3	150	83	25	0.27	0.64	0.053	0.12	60	< 0.01	< 0.1
	5/29/2013	MAX	7.81	980	460	440	24	0.037	< 1	140	57	21	< 0.2	< 0.1	0.0099	0.096	26	< 0.01	< 0.1
	11/19/2013	MAX	7.77	870	430	390	17	0.015	1.8	120	38	19	< 0.2	< 0.1	0.0044	0.21	35	< 0.01	0.19
	5/13/2014	MAX	7.87	750	360	340	21	0.025	5	110	32	17	< 0.2	< 0.1	0.015	0.26	23	< 0.01	< 0.1
	11/27/2014	MAX	7.81	890	460	420	15	< 0.01	8.4	140	30	20	< 0.2	0.11	0.014	0.18	24	< 0.01	< 0.1
Monitor 14-II Outwash 4.5 - 5.1 m	4/28/2009	Maxx	7.9	3100	475	1000	709	0.23	< 1	230	210	110	3.7	< 0.1	0.075	0.34	93	< 0.01	0.3
	6/26/2009	Maxx	7.7	2430	504	1200	497	0.21	2	280	310	120	3.8	1.4	0.25	1.6	91	0.07	1.1
	8/28/2009	Maxx	7.6	2420	541	920	440	0.27	< 1	230	140	85	3.1	1.5	0.28	2	96	< 0.01	< 0.1
	11/18/2009	Maxx	7.7	3450	462	1100	819	0.25	< 1	260	250	100	3.8	1.9	0.19	1.1	88	0.02	0.4
	5/19/2010	Maxx	7.6	4060	406	1200	1100	0.22	< 1	290	250	120	3.5	0.13	0.043	0.39	90	< 0.01	0.3
	11/2/2010	Maxx	7.77	3800	418	1100	919	0.17	< 1	270	270	100	3.5	0.71	0.35	1.6	125	0.08	< 0.1
	4/26/2011	Maxx	7.85	3160	407	860	681	0.13	< 1	210	240	81	2.8	< 0.1	0.24	1.1	122	0.07	< 0.1
	11/3/2011	Maxx	7.98	2060	415	650	349	0.13	< 1	160	230	63	2.7	2.7	0.22	1.4	85	0.04	0.2
	5/14/2012	Maxx	8.07	1900	400	520	360	0.092	1.6	130	190	50	2.1	< 0.1	0.058	< 0.05	60	0.023	0.73
	11/26/2012	Maxx	7.74	1600	390	410	270	0.097	7.6	100	170	38	2.5	2.8	0.08	0.76	17	0.024	0.65
	6/3/2013	MAX	7.87	1800	370	410	330	0.079	< 1	99	180	39	1.8	0.31	0.038	0.32	20	0.018	0.46
	11/20/2013	MAX	8.07	1400	390	380	240	0.08	< 1	93	160	35	1.9	1.5	0.12	< 0.05	6.9	< 0.01	1
	5/15/2014	MAX	7.96	1700	360	420	320	0.068	< 1	100	160	40	1.8	0.59	0.053	0.13	11	< 0.01	0.67
	11/21/2014	MAX	7.93	1600	380	390	270	0.095	< 1	95	150	37	2	0.88	0.072	0.23	5.7	0.029	0.92

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 14-III Outwash 0.2 - 2.3 m	4/28/2009	Maxx	7.8	887	472	540	18	0.1	< 1	140	25	47	3.2	15	0.5	< 0.05	5	< 0.01	< 0.1
	6/26/2009	Maxx	7.7	1380	741	770	37	0.11	< 1	190	40	69	3.2	30	1.1	0.08	2	< 0.01	< 0.1
	8/28/2009	Maxx	7.7	1290	733	670	29	0.16	< 1	170	33	61	2.6	24	0.51	0.1	5	< 0.01	< 0.1
	11/18/2009	Maxx	7.7	1290	678	700	40	0.15	< 1	180	30	61	2.4	5.9	0.24	0.33	14	< 0.01	< 0.1
	5/19/2010	Maxx	7.5	1060	559	530	21	0.11	3	140	20	47	2.2	23	0.65	< 0.05	6	< 0.01	< 0.1
	11/2/2010	Maxx	7.61	1160	603	530	27	0.17	< 1	140	20	41	3.7	9.1	0.35	< 0.05	19	< 0.01	< 0.1
	4/26/2011	Maxx	7.85	625	312	320	10	0.077	< 1	92	6.8	22	1.4	1.9	0.1	< 0.05	8	< 0.01	< 0.1
	11/3/2011	Maxx	7.96	1050	484	560	26	0.15	< 1	150	24	45	3.5	2.8	0.28	< 0.05	53	< 0.01	< 0.1
	5/14/2012	Maxx	7.73	1200	640	630	26	0.095	2.5	160	27	54	3	9.2	1.4	< 0.05	11	< 0.01	< 0.1
	11/26/2012	Maxx	7.41	980	500	530	26	0.12	< 1	140	22	43	2.3	4.4	0.76	< 0.05	15	< 0.01	< 0.1
	6/3/2013	MAX	7.62	800	410	420	12	0.11	< 1	120	12	30	1.9	5.8	0.43	< 0.05	6.4	< 0.01	< 0.1
	11/20/2013	MAX	7.75	1000	560	490	19	0.11	< 1	130	17	39	1.5	14	0.84	< 0.05	2.8	< 0.01	< 0.1
	5/15/2014	MAX	7.75	790	420	350	13	0.081	< 1	99	9.3	25	2	3.2	0.21	0.069	4.3	< 0.01	0.1
11/25/2014	MAX	7.77	640	320	280	15	0.073	< 1	87	6.5	15	5.9	2.6	0.12	< 0.05	5.5	< 0.01	< 0.1	
Monitor 14-IV Bedrock 25.6 - 27.1 m	4/30/2009	Maxx	7.8	304	169	82	1	0.1	< 1	20	48	7.7	1.7	< 0.1	< 0.002	0.12	1	< 0.01	< 0.1
	6/26/2009	Maxx	8	303	159	82	1	0.094	< 1	19	43	8.2	1.2	< 0.1	< 0.002	0.17	1	< 0.01	< 0.1
	8/28/2009	Maxx	8.2	296	159	77	1	0.09	< 1	18	39	7.5	1.1	< 0.1	< 0.002	0.14	1	< 0.01	< 0.1
	11/18/2009	Maxx	8.1	302	158	76	3	0.085	< 1	18	39	7.3	1.2	< 0.1	< 0.002	0.21	2	< 0.01	< 0.1
	5/19/2010	Maxx	8.2	302	156	76	< 1	0.094	< 1	18	39	7.7	1.2	< 0.1	< 0.002	0.14	2	< 0.01	< 0.1
	11/2/2010	Maxx	8.23	300	158	83	1	0.085	< 1	20	40	7.8	1.2	< 0.1	0.003	< 0.05	1	< 0.01	< 0.1
	5/3/2011	Maxx	8	302	158	78	< 1	0.096	< 1	19	40	7.7	1.2	< 0.1	< 0.002	0.16	1	< 0.01	< 0.1
	11/3/2011	Maxx	8.33	308	159	83	< 1	0.099	< 1	20	44	8.3	1.3	< 0.1	< 0.002	0.18	1	< 0.01	< 0.1
	5/14/2012	Maxx	8.11	300	160	75	1.4	0.089	< 1	18	40	7.3	1.1	< 0.1	0.003	0.063	1	< 0.01	< 0.1
	11/26/2012	Maxx	7.91	300	160	77	1.2	0.093	< 1	19	41	7.5	1.3	< 0.1	< 0.002	0.21	1	< 0.01	< 0.1
	6/3/2013	MAX	8.13	300	160	73	1.1	0.098	< 1	18	41	7	1.1	< 0.1	< 0.002	0.24	1	< 0.01	< 0.1
	11/20/2013	MAX	8.05	300	160	71	1.4	0.093	< 1	17	38	6.9	1.1	< 0.1	0.0022	0.18	1	< 0.01	< 0.1
	5/15/2014	MAX	8.19	300	160	79	< 1	0.089	< 1	19	40	7.4	1.1	< 0.1	0.0034	0.23	1	< 0.01	< 0.1
11/21/2014	MAX	8.2	300	160	75	1.2	0.11	< 1	18	43	7.2	1.3	< 0.1	< 0.002	0.21	1	< 0.01	< 0.1	
Monitor 15-I Bedrock 25.9 - 27.1 m	4/29/2009	Maxx	7.8	313	182	92	1	0.09	< 1	20	39	9.9	1.2	< 0.1	< 0.002	0.26	1	< 0.01	< 0.1
	8/25/2009	Maxx	8.2	304	170	79	1	0.094	< 1	19	36	7.7	0.9	< 0.1	< 0.002	0.25	1	< 0.01	< 0.1
	10/25/2010	Maxx	8.25	303	161	73	2	0.095	< 1	17	44	7.2	1.1	< 0.1	< 0.002	0.19	1	< 0.01	< 0.1
	4/19/2011	Maxx	8.17	306	161	78	2	0.091	< 1	18	40	7.9	1.1	< 0.1	< 0.002	0.25	1	< 0.01	< 0.1
	5/7/2012	Maxx	8.19	310	160	78	1.3	0.09	< 1	18	41	7.9	1.1	< 0.1	< 0.002	0.12	1	< 0.01	< 0.1
	5/27/2013	MAX	8.21	320	160	85		0.081		19	40	8.8	1.1	< 0.1	< 0.002	0.33			
	5/8/2014	MAX	8.12	310	160	79	1.3	0.096	< 1	19	41	7.9	1.1	< 0.1	< 0.002	0.26	1	< 0.01	< 0.1

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 15-II Lower Till 19.8 - 21.0 m	4/29/2009	Maxx	7.6	298	167	50	2	0.12	< 1	13	54	4.2	0.57	< 0.1	0.014	0.05	3	< 0.01	< 0.1
	8/25/2009	Maxx	8.3	292	157	42	3	0.12	< 1	11	43	3.3	0.38	< 0.1	0.017	0.35	3	< 0.01	< 0.1
	10/25/2010	Maxx	8.25	300	153	50	2	0.12	< 1	13	51	4.1	0.57	< 0.1	0.023	0.15	5	< 0.01	< 0.1
	4/19/2011	Maxx	8.41	301	197	48	3	0.11	< 1	13	52	3.9	0.56	< 0.1	0.018	0.44	5	< 0.01	< 0.1
	5/7/2012	Maxx	8.17	310	170	51	1.9	0.11	< 1	14	52	3.9	0.54	< 0.1	0.017	0.12	5.4	< 0.01	< 0.1
	5/27/2013	MAX	8.22	320	170	56		0.092		15	54	4.1	0.54	< 0.1	0.015	0.3			
	5/8/2014	MAX	8.27	310	170	49	2.7	0.087	< 1	14	51	3.5	0.5	< 0.1	0.019	0.17	11	< 0.01	< 0.1
Monitor 15-III Upper Till 9.0 - 10.2 m	4/29/2009	Maxx	7.8	420	202	120	15	0.11	< 1	21	51	17	1.8	< 0.1	0.007	0.19	12	< 0.01	0.4
	8/25/2009	Maxx	8.2	426	199	110	15	0.1	< 1	23	41	14	1.5	0.33	0.022	0.35	13	< 0.01	0.6
	5/18/2010	Maxx	8.2	436	193	120	15	0.1	< 1	21	46	16	1.7	< 0.1	0.005	< 0.05	17	< 0.01	0.5
	10/25/2010	Maxx	8.16	470	209	130	16	0.11	< 1	23	49	19	2	0.32	0.033	2.1	14	< 0.01	< 0.1
	4/19/2011	Maxx	8.25	454	201	130	15	0.098	< 1	22	49	18	1.8	< 0.1	0.01	0.38	19	0.05	0.5
	11/3/2011	Maxx	8.29	463	198	130	14	0.1	< 1	23	50	19	1.9	< 0.1	0.013	0.33	16	0.02	0.5
	5/7/2012	Maxx	8.15	460	200	130	15	0.1	< 1	22	49	18	1.6	< 0.1	0.0029	< 0.05	17	0.016	0.59
	11/23/2012	Maxx	7.99	460	210	140	16	0.1	< 1	24	49	19	1.8	< 0.1	0.013	0.14	19	0.085	0.63
	5/27/2013	MAX	8.16	470	200	140		0.098		24	49	19	1.7	< 0.1	0.015	0.23			
	11/19/2013	MAX	8	460	200	140	16	0.099	< 1	23	46	19	1.6	< 0.1	0.01	0.3	17	< 0.01	0.49
	5/8/2014	MAX	8.16	460	200	130	16	0.11	< 1	24	48	18	1.6	< 0.1	0.0047	0.19	19	0.043	0.49
11/21/2014	MAX	8.15	470	200	140	18	0.099	< 1	25	48	19	2.1	0.25	0.015	0.22	20	0.117	0.41	
Monitor 15-IV Outwash 5.6 - 6.8 m	4/29/2009	Maxx	7.9	763	335	390	31	0.33	< 1	94	17	39	1.3	< 0.1	0.038	0.1	47	< 0.01	0.5
	8/25/2009	Maxx	8	927	354	450	54	0.63	< 1	110	27	43	1.4	2.2	0.17	1.2	83	< 0.01	< 0.1
	11/16/2009	Maxx	7.9	852	326	440	45	0.57	< 1	100	26	43	2	1.3	0.089	1	61	< 0.01	0.8
	5/18/2010	Maxx	8.1	641	286	310	17	0.27	< 1	75	13	31	1.1	0.34	0.042	0.1	33	< 0.01	0.6
	10/25/2010	Maxx	8.04	666	324	340	12	0.17	< 1	81	10	34	1.1	1.2	0.18	0.92	26	< 0.01	< 0.1
	4/19/2011	Maxx	8.08	702	346	390	10	0.095	< 1	92	8.5	39	1.2	0.36	0.13	0.66	27	0.07	0.6
	11/3/2011	Maxx	8.12	726	363	380	8	0.091	< 1	87	8.6	40	1.4	1.3	0.14	0.53	24	0.02	0.5
	5/7/2012	Maxx	8.1	740	380	420	8.7	0.066	< 1	97	8.3	43	1.8	0.55	0.14	0.18	24	0.025	0.67
	11/23/2012	Maxx	7.87	760	390	420	8.1	0.069	< 1	96	8	43	1.3	2.9	0.11	0.35	21	0.069	0.88
	5/27/2013	MAX	7.98	740	340	380		0.057		89	11	39	1.1	0.42	0.14	0.53			
	11/19/2013	MAX	7.82	720	340	380	19	0.076	< 1	88	11	39	1.3	0.67	0.13	0.18	29	< 0.01	0.98
	5/8/2014	MAX	7.98	770	370	410	18	0.07	< 1	95	11	42	1.1	0.15	0.037	0.14	26	< 0.01	0.68
11/21/2014	MAX	7.99	800	380	430	31	0.068	< 1	100	14	44	1.2	0.37	0.16	0.35	28	0.041	0.39	

NOTE: ODWS - Ontario Drinking Water Standards
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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L		
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h		
Monitor 15-V Fill 0.1 - 2.3 m	4/29/2009	Maxx	7.8	549	293	320	4	0.14	2	97	5.2	20	1.4	< 0.1	0.003	< 0.05	14	< 0.01	0.8	
	8/25/2009	Maxx	7.7	1060	587	530	17	0.15	27	160	14	30	5.9	15	1.3	4.6	2	< 0.01	0.1	
	5/18/2010	Maxx	8	717	362	400	8	0.15	< 1	120	6.9	24	2.1	0.15	0.3	0.18	17	< 0.01	0.3	
	10/25/2010	Maxx	7.57	1170	580	720	18	0.54	< 1	220	13	44	2.7	2.6	1.2	1	61	0.03	0.7	
	4/19/2011	Maxx	7.81	896	364	420	13	0.11	< 1	130	8.8	24	3.6	< 0.1	0.15	4.8	44	0.3	14	
	11/3/2011	Maxx	6.95	976	404	520	17	0.45	< 1	160	10	32	1.7	0.13	0.37	0.13	105	< 0.01	0.6	
	5/7/2012	Maxx	7.85	810	430	430	9.6	0.14	7.5	130	7.2	26	1.6	4.6	1	0.52	4.4	< 0.01	< 0.1	
	11/23/2012	Maxx	7.4	1100	530	560	29	0.31	4.9	170	10	34	1.6	24	1.7	0.52	23	< 0.01	< 0.1	
	5/27/2013	MAX	7.54	820	410	440		0.17	15	130	8.6	27	1.6	34	1.3	0.44				
	11/19/2013	MAX	7.25	840	450	420	10	0.19	1	120	7.1	27	1.5	18	0.84	0.9	10	0.024	< 0.1	
	5/8/2014	MAX	7.27	940	490	380	14	0.14	< 1	110	6.9	24	1.8	15	1.3	3	1.1	< 0.01	< 0.1	
11/21/2014	MAX	7.41	870	480	510	19	0.24	1.3	140	13	39	2.4	20	1.9	1.1	4.1	< 0.01	< 0.1		
Monitor 16-I Lower Till 13.0 - 15.1 m	4/29/2009	Maxx	7.7	332	175	120	3	0.099	< 1	21	33	18	1.4	< 0.1	0.002	< 0.05	9	< 0.01	0.2	
	8/25/2009	Maxx	8.1	336	173	110	4	0.094	< 1	19	31	16	1.2	< 0.1	0.006	0.06	11	< 0.01	0.2	
	10/21/2010	Maxx	8.07	340	167	120	3	0.1	< 1	20	30	16	1.3	< 0.1	0.003	< 0.05	11	< 0.01	0.2	
	4/19/2011	Maxx	8.27	342	170	120	4	0.095	< 1	20	30	16	1.2	< 0.1	0.006	0.32	12	0.06	< 0.1	
	5/7/2012	Maxx	8.21	340	170	120	4.2	0.097	< 1	21	30	16	1.2	< 0.1	0.0042	< 0.05	11	< 0.01	0.24	
	5/22/2013	MAX	8.28	350	170	140	3.5	0.11	< 1	26	33	19	1.5	< 0.1	0.012	0.082	12	< 0.01	0.22	
	5/7/2014	MAX	8.23	350	170	120	3.8	0.1	< 1	22	30	16	1.2	< 0.1	0.0021	< 0.05	12	< 0.01	0.23	
Monitor 16-IV Upper Till 3.8 - 4.4 m	4/29/2009	Maxx	7.8	1370	517	750	37	1.6	< 1	190	43	70	5.5	1.8	0.15	3.8	210	< 0.01	1.1	
	6/22/2009	Maxx	8.1	896	339	450	53	0.51	< 1	110	24	44	1.5	0.61	0.25	1	71	0.01	0.2	
	8/25/2009	Maxx	7.8	1370	523	650	36	1.5	< 1	170	34	56	4.4	2.9	0.14	7	216	0.03	1	
	5/18/2010	Maxx	7.9	1340	480	670	43	1.5	< 1	160	40	63	4.3	0.46	0.11	0.79	232	< 0.01	2.9	
	10/21/2010	Maxx	7.63	1360	504	710	34	1.4	< 1	180	40	66	5.5	4.6	0.17	6.2	221	< 0.01	0.6	
	4/19/2011	Maxx	7.8	1340	490	660	30	1.3	< 1	170	33	60	5.4	0.57	0.18	6.1	227	0.61	1.6	
	11/2/2011	Maxx	7.99	1330	479	720	27	1.4	< 1	180	40	68	6.2	0.92	0.18	4.1	217	0.17	1.4	
	5/7/2012	Maxx	7.9	1300	480	680	27	1.3	< 1	170	34	63	5.5	1.1	0.15	4	220	0.4	1.6	
	11/21/2012	Maxx	7.84	1300	500	680	26	1.3	< 1	170	35	60	5.4	2.3	0.2	5.9	210	0.085	0.5	
	5/23/2013	MAX	7.75	1300	460	680	35	1.3	< 1	170	39	61	5.2	0.32	0.19	4.2	210	0.098	1.5	
	11/14/2013	MAX	7.6	1300	480	640	38	1.3	1.2	160	37	57	5.5	2	0.27	2.1	220	0.32	2.4	
	5/7/2014	MAX	7.71	1300	450	660	44	1.2	< 1	170	39	61	5	1.2	0.16	1.9	200	0.442	1.72	
11/21/2014	MAX	7.62	1300	470	650	43	1.1	1.3	160	40	58	5.2	1.3	0.23	4.5	210	0.323	0.51		

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 16-V Fill 0.3 - 2.4 m	4/29/2009	Maxx	7.3	694	351	420	5	0.31	< 1	120	5	27	3.7	< 0.1	< 0.002	< 0.05	22	< 0.01	1.8
	6/22/2009	Maxx	7.9	893	495	480	8	0.17	< 1	150	8.9	28	4.1	6	0.81	1.7	2	< 0.01	< 0.1
	8/25/2009	Maxx	7.8	896	430	510	7	0.77	< 1	150	7.2	30	4.4	< 0.1	0.051	< 0.05	92	< 0.01	< 0.1
	5/18/2010	INSV																	
	10/21/2010	INSV																	
	4/19/2011	Maxx	7.58	640	305	350	4	0.31	< 1	100	4.3	23	3.2	< 0.1	0.061	< 0.05	29	< 0.01	0.3
	5/7/2012	Maxx	7.69	790	350	430	3.7	0.52	< 1	130	5.7	29	4	< 0.1	0.053	< 0.05	79	< 0.01	0.5
	5/22/2013	MAX	7.75	750	320	490	3.3	0.5	< 1	150	5.3	30	3.7	< 0.1	0.013	0.051	83	< 0.01	0.21
5/7/2014	MAX	7.55	640	300	340	9.3	0.21	< 1	100	4.4	19	3.8	< 0.1	0.0098	0.054	20	< 0.01	0.5	
Monitor 16-VI Lower Till 19.2 - 17.6 m	4/29/2009	Maxx	7.7	307	179	100	1	0.11	< 1	20	37	12	0.82	0.12	0.012	0.41	1	< 0.01	< 0.1
	8/25/2009	Maxx	8.2	308	173	88	1	0.094	< 1	18	34	10	0.79	0.11	0.012	0.45	1	< 0.01	< 0.1
	10/21/2010	Maxx	8.17	307	163	95	< 1	0.098	< 1	19	36	11	0.87	< 0.1	0.016	0.3	1	< 0.01	< 0.1
	4/19/2011	Maxx	8.29	304	171	94	< 1	0.096	< 1	19	35	11	0.89	< 0.1	0.016	0.51	1	0.04	< 0.1
	5/7/2012	Maxx	8.19	310	160	93	< 1	0.095	< 1	19	35	11	0.83	< 0.1	0.013	0.29	1	< 0.01	< 0.1
	5/22/2013	MAX	8.29	310	160	110	< 1	0.11	< 1	22	39	12	0.92	< 0.1	0.017	0.47	1	< 0.01	< 0.1
	5/7/2014	MAX	8.2	310	170	88	< 1	0.11	< 1	19	35	9.9	0.81	< 0.1	0.011	0.26	1	< 0.01	0.21
Monitor 16-VII Bedrock 25.5 - 27.0 m	4/29/2009	Maxx	7.5	308	177	89	< 1	0.11	< 1	21	42	8.9	1.7	< 0.1	0.002	0.29	1	< 0.01	< 0.1
	6/22/2009	Maxx	8.2	310	167	85	2	0.11	< 1	20	38	8.4	1.3	< 0.1	0.003	0.4	1	< 0.01	< 0.1
	8/25/2009	Maxx	8.2	311	172	79	1	0.11	< 1	19	38	7.9	1.5	< 0.1	0.002	0.38	1	< 0.01	< 0.1
	11/16/2009	Maxx	8.2	308	166	89	1	0.1	< 1	21	40	8.9	1.6	< 0.1	0.003	0.39	1	< 0.01	< 0.1
	5/18/2010	Maxx	8.3	306	162	78	< 1	0.098	< 1	19	36	7.7	1.6	< 0.1	0.003	0.38	1	< 0.01	< 0.1
	10/25/2010	Maxx	8.13	306	164	85	< 1	0.11	< 1	20	39	8.3	1.7	0.13	0.004	0.33	1	< 0.01	< 0.1
	4/19/2011	Maxx	8.2	307	163	85	1	0.1	< 1	20	38	8.3	1.4	< 0.1	0.003	0.37	1	< 0.01	< 0.1
	11/2/2011	Maxx	8.3	313	164	86	< 1	0.11	< 1	20	42	8.9	1.6	0.12	0.004	0.49	1	< 0.01	< 0.1
	5/14/2012	Maxx	7.98	310	170	80	1.2	0.09	< 1	19	38	8	1.5	< 0.1	0.0037	0.25	5	< 0.01	< 0.1
	11/21/2012	Maxx	7.94	310	180	84	< 1	0.1	< 1	20	39	8.3	1.7	0.15	0.0041	0.35	1	< 0.01	< 0.1
	5/22/2013	MAX	8.24	310	160	99	< 1	0.12	< 1	24	45	9.5	1.8	< 0.1	0.0038	0.39	1.5	< 0.01	< 0.1
	11/14/2013	MAX	8.01	300	170	82	1	0.12	< 1	19	38	8.1	1.5	< 0.1	0.0037	0.38	1	0.014	< 0.1
	5/7/2014	MAX	8.24	310	170	82	< 1	0.11	< 1	20	39	7.9	1.6	< 0.1	0.0038	0.5	1	< 0.01	< 0.1
11/19/2014	MAX	8.17	310	170	84	1.6	0.11	< 1	20	40	8.4	1.6	0.17	0.005	0.39	1	< 0.01	< 0.1	
Monitor 17-I Bedrock 24.4 - 25.6 m	4/30/2009	Maxx	7.5	299	175	93	< 1	0.089	< 1	22	35	9.1	0.81	0.6	0.006	0.41	1	< 0.01	< 0.1
	8/27/2009	Maxx	8.2	294	161	90	1	0.17	< 1	21	35	9.3	0.87	0.51	0.005	0.42	1	< 0.01	< 0.1
	10/27/2010	Maxx	8.21	302	160	88	< 1	0.088	< 1	20	35	9.3	0.74	0.49	0.006	0.39	1	< 0.01	< 0.1
	4/28/2011	Maxx	8.01	300	156	84	1	0.08	< 1	20	32	8.5	0.72	0.51	0.005	0.42	2	< 0.01	< 0.1
	5/10/2012	Maxx	8.4	290	160	84	< 1	0.089	< 1	19	32	9.1	0.65	0.5	0.0061	0.35	1.1	< 0.01	< 0.1
	5/29/2013	MAX	8.19	300	160	94	< 1	0.087	< 1	22	35	9.6	0.75	0.46	0.0057	0.48	1	< 0.01	< 0.1
	5/13/2014	MAX	8.17	300	160	95	1	0.078	< 1	22	36	9.8	0.77	0.52	0.0083	0.55	1	< 0.01	< 0.1

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 17-II Lower Till 18.6 - 19.2 m	4/30/2009	Maxx	7.6	321	171	110	2	0.089	< 1	25	29	12	0.77	0.14	0.026	0.37	12	< 0.01	< 0.1
	8/27/2009	Maxx	8.2	315	156	100	2	0.081	< 1	24	27	11	0.56	0.1	0.024	0.33	11	< 0.01	< 0.1
	10/27/2010	Maxx	8.13	320	151	110	1	0.08	< 1	23	30	12	0.76	< 0.1	< 0.002	< 0.05	15	< 0.01	0.2
	4/28/2011	Maxx	8.14	319	153	100	1	0.075	< 1	23	27	11	0.76	< 0.1	0.013	0.19	13	0.05	0.3
	5/10/2012	Maxx	8.36	320	160	100	1.5	0.073	< 1	22	27	12	0.69	< 0.1	0.016	0.13	13	0.031	0.16
	5/29/2013	MAX	8.23	320	150	120	1.5	0.084	< 1	25	30	13	0.74	< 0.1	0.019	0.4	14	< 0.01	< 0.1
	5/13/2014	MAX	8.27	330	160	120	1.4	0.073	< 1	25	29	13	0.75	0.11	0.029	0.43	14	< 0.01	< 0.1
Monitor 17-III Upper Till 5.9 - 7.1 m	4/30/2009	Maxx	7.9	557	283	320	3	0.016	< 1	69	4.3	36	1.2	< 0.1	< 0.002	< 0.05	34	< 0.01	< 0.1
	8/27/2009	Maxx	8	556	287	290	4	< 0.01	< 1	68	3.4	30	0.78	< 0.1	< 0.002	< 0.05	32	< 0.01	< 0.1
	10/27/2010	Maxx	7.89	564	268	300	3	0.013	< 1	66	4.2	33	1.1	0.22	0.027	< 0.05	33	< 0.01	< 0.1
	4/28/2011	Maxx	8.1	562	264	300	3	< 0.01	< 1	66	3.7	32	1.1	< 0.1	< 0.002	< 0.05	38	< 0.01	< 0.1
	5/10/2012	Maxx	8.06	510	260	300	4.6	< 0.01	< 1	64	3.4	34	0.99	< 0.1	< 0.002	< 0.05	29	< 0.01	< 0.1
	5/29/2013	MAX	8	560	270	330	3.8	0.011	< 1	72	3.6	36	1	< 0.1	< 0.002	< 0.05	29	< 0.01	< 0.1
	5/13/2014	MAX	8.06	580	290	330	3.4	< 0.01	< 1	72	3.6	36	1.1	< 0.1	0.0021	< 0.05	27	< 0.01	< 0.1
Monitor 17-IV Outwash 0.5 - 4.2 m	4/30/2009	Maxx	7.7	501	296	290	< 1	< 0.01	< 1	67	1.5	31	< 0.2	< 0.1	< 0.002	< 0.05	2	< 0.01	0.1
	6/26/2009	Maxx	7.9	552	305	310	1	< 0.01	< 1	71	1.6	32	< 0.2	< 0.1	0.004	< 0.05	3	< 0.01	0.2
	8/27/2009	INSV																	
	5/20/2010	Maxx	7.9	662	329	340	20	0.011	< 1	78	2.3	36	0.33	< 0.1	< 0.002	< 0.05	7	< 0.01	0.2
	10/27/2010	INVS																	
	4/28/2011	Maxx	8.05	552	273	300	8	< 0.01	< 1	71	1.6	29	< 0.2	< 0.1	< 0.002	< 0.05	6	< 0.01	1.6
	11/4/2011	INSV																	
	5/10/2012	Maxx	8.18	550	310	350	3.4	< 0.01	< 1	81	2.2	37	< 0.2	0.47	0.33	< 0.05	2.9	< 0.01	0.14
	11/21/2012	Dry																	
	5/29/2013	MAX	7.97	570	310	320	1.5	< 0.01	< 1	75	1.9	31	0.21	< 0.1	0.089	0.057	3.7	< 0.01	< 0.1
5/13/2014	MAX	8	550	300	300	1.6	< 0.01	< 1	73	1.5	30	< 0.2	0.39	0.025	< 0.05	4	< 0.01	0.45	
11/25/2014	MAX	7.84	670	370	360	1	< 0.01	< 1	90	2.1	33	0.22	2.4	0.038	< 0.05	5.6	< 0.01	0.17	
Monitor 18-III Outwash 0.1 - 2.9 m	4/30/2009	Maxx	7.4	1050	252	640	5	0.1	< 1	200	3.6	33	0.33	0.15	< 0.002	< 0.05	315	0.02	5.5
	6/26/2009	Maxx	7.7	1690	278	840	5	0.099	< 1	270	4.4	43	0.36	< 0.1	0.035	0.06	794	< 0.01	0.7
	8/27/2009	Maxx	7.7	816	272	580	5	0.059	< 1	180	3.5	30	0.3	0.3	0.29	< 0.05	174	0.03	0.4
	11/18/2009	Maxx	7.7	762	324	420	7	0.046	< 1	130	3.8	25	0.4	0.43	2	0.2	94	< 0.01	< 0.1
	5/20/2010	Maxx	7.5	2390	307	1500	8	0.1	2	440	7.4	88	< 0.2	< 0.1	0.063	0.11	1310	< 0.01	0.5
	10/27/2010	Maxx	7.53	2200	360	1400	15	0.073	< 1	410	11	85	0.23	< 0.1	0.13	< 0.05	963	< 0.01	1
	4/28/2011	Maxx	7.57	1060	234	590	6	0.072	< 1	190	3.1	29	< 0.2	< 0.1	0.004	0.1	370	< 0.01	4.4
	11/4/2011	Maxx	7.53	3270	399	2300	27	0.14	5	650	23	160	0.23	0.13	0.48	0.11	1860	< 0.01	< 0.1
	5/10/2012	Maxx	8.02	2200	310	1500	7.1	0.082	< 1	470	6.4	69	< 0.2	< 0.1	0.025	< 0.05	1300	< 0.01	0.89
	11/28/2012	Maxx	7.45	3200	450	2100	25	0.11	< 1	590	22	150	< 0.2	0.79	0.61	0.16	1700	< 0.01	< 0.1
	5/30/2013	MAX	7.58	1900	320	1300	6.3	0.07	< 1	420	5.1	56	0.2	0.16	0.083	0.15	870	< 0.01	0.1
	11/25/2013	MAX	7.26	1600	400	1100	6.8	0.13	2.8	340	6.5	50	< 0.2	0.14	0.31	0.089	570	0.01	< 0.1
	5/13/2014	MAX	7.59	1100	310	660	5.9	0.063	< 1	210	3.9	33	< 0.2	< 0.1	0.037	0.13	300	< 0.05	1.67
	11/25/2014	MAX	7.33	2000	360	1300	10	0.069	4.8	410	8.1	64	0.22	2	0.89	0.12	840	< 0.01	3.08

NOTE: ODWS - Ontario Drinking Water Standards
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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 19-I Bedrock 24.6 - 25.8 m	5/1/2009	Maxx	8	432	229	220	4	0.035	< 1	38	11	31	0.99	0.17	0.005	0.2	16	< 0.01	< 0.1
	8/26/2009	Maxx	7.9	393	202	170	7	0.057	< 1	28	15	24	0.72	< 0.1	0.003	0.21	12	< 0.01	< 0.1
	10/26/2010	Maxx	8.21	441	217	230	4	0.035	< 1	38	12	32	0.98	0.12	0.005	0.19	17	< 0.01	< 0.1
	5/5/2011	Maxx	8.11	437	217	210	3	0.031	< 1	36	11	30	0.97	0.1	0.005	0.21	18	0.01	< 0.1
	5/9/2012	Maxx	8.19	440	220	210	3.3	0.033	< 1	34	11	29	0.92	0.16	0.0053	0.13	18	< 0.01	< 0.1
	5/24/2013	MAX	8.14	440	210	220	4.4	0.033	< 1	37	11	31	0.91	< 0.1	0.0065	0.28	19	< 0.01	< 0.1
	5/6/2014	MAX	8.27	440	220	220	2.8	0.036	< 1	37	11	30	0.93	0.13	0.0059	0.25	16	< 0.01	< 0.1
Monitor 19-II Lower Till 19.8 - 21.0 m	5/1/2009	Maxx	8	386	210	190	2	0.05	< 1	31	17	28	0.99	0.11	0.019	0.23	9	< 0.01	< 0.1
	8/26/2009	Maxx	8	389	209	170	2	0.049	< 1	28	16	25	0.91	< 0.1	0.013	0.15	10	< 0.01	0.2
	10/26/2010	Maxx	8.18	382	195	190	2	0.052	< 1	30	18	27	0.97	< 0.1	0.011	0.14	10	< 0.01	0.1
	5/5/2011	Maxx	8.21	392	201	180	1	0.046	< 1	29	16	25	0.97	< 0.1	0.012	0.48	12	0.03	0.2
	5/9/2012	Maxx	8.21	390	200	170	2.3	0.048	< 1	28	17	25	0.9	< 0.1	0.0083	0.12	13	0.015	0.21
	5/24/2013	MAX	8.21	390	200	180	2	0.05	< 1	31	17	26	0.91	< 0.1	0.0065	0.22	11	< 0.01	0.22
	5/6/2014	MAX	8.27	390	200	180	2.8	0.051	< 1	30	16	25	0.9	< 0.1	0.0088	0.25	11	0.024	0.18
Monitor 19-IV Upper Till 6.1 - 8.9 m	5/1/2009	Maxx	7.9	716	371	410	13	< 0.01	< 1	100	11	39	0.37	< 0.1	< 0.002	< 0.05	19	< 0.01	< 0.1
	8/26/2009	Maxx	8	758	392	400	14	0.032	< 1	99	8.8	38	0.54	< 0.1	0.033	< 0.05	29	< 0.01	< 0.1
	10/26/2010	Maxx	7.81	791	383	440	16	< 0.01	< 1	110	9.6	42	0.76	< 0.1	0.006	< 0.05	30	< 0.01	< 0.1
	5/5/2011	Maxx	7.91	796	349	410	39	< 0.01	< 1	100	13	38	0.45	< 0.1	< 0.002	0.06	22	< 0.01	< 0.1
	5/9/2012	Maxx	7.84	840	410	440	26	< 0.01	< 1	110	8.9	43	0.32	< 0.1	< 0.002	< 0.05	23	< 0.01	< 0.1
	5/24/2013	MAX	7.92	830	390	460	29	< 0.01	< 1	110	11	44	0.38	< 0.1	0.0021	0.1	22	< 0.01	< 0.1
	5/6/2014	MAX	7.94	750	350	390	27	< 0.01	< 1	97	13	37	0.35	< 0.1	< 0.002	< 0.05	18	< 0.01	< 0.1
Monitor 20-I Bedrock 17.6 - 18.8 m	5/1/2009	Maxx	7.6	389	217	200	2	0.033	< 1	30	13	29	0.92	0.11	0.002	0.18	12	< 0.01	< 0.1
	5/19/2009	Maxx	7.9	392	209	200	< 1	0.035	< 1	30	12	29	0.92	0.12	0.002	0.21	11	< 0.01	< 0.1
	8/26/2009	N/A																	
	1/21/2010	Maxx	8.1	480	219	210	11	0.66	< 1	33	20	31	2.2	< 0.1	0.01	0.16	24	< 0.01	< 0.1
	5/17/2010	Maxx	8.3	423	212	210	2	0.17	< 1	32	13	32	1.4	< 0.1	0.004	0.16	16	< 0.01	< 0.1
	10/28/2010	Maxx	8.05	416	210	200	2	0.11	< 1	31	12	31	1.1	0.17	0.007	0.16	13	< 0.01	< 0.1
	5/2/2011	Maxx	8.18	420	213	190	< 1	0.13	< 1	30	11	29	0.99	0.26	0.004	0.26	14	0.01	< 0.1
Monitor 20-IR Bedrock 17.6 - 18.8 m	5/15/2012	Maxx	8.06	680	230	300	62	0.03	< 1	59	22	37	1.3	< 0.1	0.019	0.062	34	< 0.01	0.16
	5/22/2013	N/A																	
	5/8/2014	MAX	7.91	720	230	300	79	0.075	< 1	60	26	36	1.2	< 0.1	0.023	0.13	33	< 0.01	< 0.1
Monitor 21-I Upper Till 11.0 - 12.5 m	4/29/2009	Maxx	7.8	2110	323	720	475	0.012	< 1	170	160	75	2	< 0.1	0.02	< 0.05	56	< 0.01	0.2
	5/19/2009	Maxx	7.9	1810	295	640	387	0.011	< 1	150	110	68	1.7	< 0.1	0.052	< 0.05	53	< 0.01	< 0.1
	6/22/2009	N/A																	
	8/26/2009	N/A																	
	11/18/2009	N/A																	

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 21-IR Upper Till 11.0 - 12.5 m	1/21/2010	Maxx					0.19		66	61	37	4.5	< 0.1	0.02					
	5/17/2010	Maxx	8.2	703	224	330	60	< 1	63	28	42	2.5	< 0.1	0.054	< 0.05	66	< 0.01	0.1	
	10/28/2010	Maxx	7.92	644	221	290	46	0.074	< 1	55	18	36	1.7	0.2	0.043	0.14	37	< 0.01	< 0.1
	5/3/2011	Maxx	8.06	699	227	280	62	0.054	< 1	55	29	34	1.5	< 0.1	0.014	0.18	50	< 0.01	0.1
	11/8/2011	Maxx	8.09	658	228	290	52	0.037	< 1	57	16	37	1.4	< 0.1	0.032	0.2	34	0.02	< 0.1
	5/16/2012	Maxx	8.03	420	220	200	1.4	0.15	< 1	31	11	30	0.92	0.23	0.0062	< 0.05	9.9	< 0.01	< 0.1
	11/28/2012	Maxx	7.81	670	220	350	62	0.015	< 1	96	22	27	1.7	< 0.1	< 0.002	0.11	33	< 0.01	0.12
	5/29/2013	MAX	8.11	720	220	320	73	0.045	< 1	62	26	39	1.3	< 0.1	0.029	0.18	35	0.015	< 0.1
	11/19/2013	MAX	7.96	680	230	290	67	0.037	< 1	57	18	37	1.2	< 0.1	0.021	0.13	31	< 0.01	< 0.1
	5/14/2014	MAX	8.16	470	220	230	6.3	0.11	< 1	44	11	30	0.97	0.32	0.057	0.22	13	0.045	2.74
11/24/2014	MAX	8.1	710	230	310	77	0.043	< 1	61	22	39	1.1	< 0.1	0.012	0.099	32	0.014	< 0.1	
Monitor 26-I Outwash 0.8 - 2.3 m	6/23/2009	INV																	
	8/26/2009	INSV																	
	11/18/2009	INSV																	
	6/3/2013	N/A																	
	5/14/2014	MAX	8.14	1100	260	430	190	0.014	77	100	87	41	0.89	0.2	0.03	0.36	39	< 0.01	< 0.1
11/20/2014	froze																		
Monitor 28-I Outwash 0.8 - 2.3 m	4/29/2009	Maxx	7.4	768	212	290	102	0.043	< 1	77	58	23	0.36	0.29	0.048	< 0.05	30	< 0.01	< 0.1
	6/23/2009	Maxx	8.1	820	229	280	110	0.017	< 1	71	63	24	0.3	0.41	0.044	0.08	28	< 0.01	< 0.1
	8/28/2009	Maxx	8.2	929	309	360	106	0.016	< 1	96	71	29	0.37	0.66	0.074	0.1	25	< 0.01	< 0.1
	11/18/2009	Maxx	7.9	1060	393	410	98	0.014	4	110	81	35	0.31	1.4	0.074	0.16	38	< 0.01	< 0.1
	5/20/2010	INSV																	
	10/28/2010	Maxx	7.31	1160	203	400	175	0.02	< 1	110	83	32	< 0.2	0.14	0.012	< 0.05	100	0.01	1.5
	5/9/2011	Maxx	7.78	535	184	180	46	0.015	< 1	50	44	14	0.51	0.21	0.012	0.17	21	< 0.01	< 0.1
	5/17/2012	Maxx	7.69	440	200	170	12	0.018	< 1	46	28	13	0.51	0.3	0.022	0.11	13	< 0.01	0.23
	6/3/2013	MAX	7.59	430	170	200	22	0.036	< 1	58	18	14	0.95	0.3	0.034	0.26	20	< 0.1	< 1
	5/14/2014	MAX	7.45	520	160	180	62	0.012	< 1	49	32	14	1.4	0.14	0.0087	0.14	10	< 0.02	< 0.2
11/20/2014	froze																		

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L		
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h		
Monitor																				
30-I Outwash 0.6 - 2.3 m		4/29/2009	Maxx	7.3	1150	286	480	170	0.019	6	120	62	44	0.99	5.9	0.11	0.37	36	< 0.01	< 0.1
		6/23/2009	Maxx	8.1	1430	315	510	262	< 0.01	23	130	75	47	1.3	1.5	0.06	0.16	57	< 0.01	< 0.1
		8/28/2009	Maxx	8	1400	313	540	238	< 0.01	13	140	75	48	1.1	1	0.057	0.17	56	< 0.01	< 0.1
		11/18/2009	Maxx	8	1020	319	460	108	0.011	17	120	50	41	0.88	1.6	0.072	0.48	68	< 0.01	< 0.1
		5/20/2010	Maxx	8	875	241	350	134	0.014	6	74	40	39	0.86	2.3	0.037	0.61	12	< 0.01	< 0.1
		10/28/2010	Maxx	8.09	876	291	370	104	0.011	67	80	46	41	0.87	0.19	0.015	0.67	6	< 0.01	< 0.1
		5/9/2011	Maxx	8.05	1240	290	420	195	< 0.01	75	110	67	39	1	5.7	0.088	0.42	58	0.02	< 0.1
		5/17/2012	Maxx	7.65	1100	250	410	150	0.017	34	95	72	43	0.95	1.6	0.034	0.63	75	0.021	< 0.1
		11/29/2012	Maxx	7.39	1000	200	390	140	0.023	17	99	52	36	0.58	4.2	0.097	1	88	0.01	< 0.1
		6/3/2013	MAX	7.94	1100	240	390	180	0.019	160	89	69	40	0.8	1	0.058	1.1	47	< 0.01	< 0.1
		11/14/2013	N/A																	
		5/14/2014	MAX	7.95	710	350	180	22	< 0.01	3.2	57	5.4	10	0.72	11	0.41	0.1	9.4	< 0.01	< 0.1
		11/20/2014	froze																	
Monitor																				
35-I Outwash 0.2 - 1.9 m		5/1/2009	Maxx	7.7	585	319	280	5	0.024	13	47	3.7	40	1.9	< 0.1	0.015	< 0.05	15	< 0.01	0.2
		6/26/2009	Maxx	8.3	523	279	300	5	0.029	16	45	3.7	45	2	0.13	0.02	< 0.05	10	< 0.01	< 0.1
		8/27/2009	Maxx	8.2	521	285	270	5	0.024	17	47	3.2	37	1.6	0.41	0.019	< 0.05	3	< 0.01	< 0.1
		11/18/2009	Maxx	8.2	527	286	280	4	0.023	6	47	3.6	39	2.1	< 0.1	0.011	0.24	5	< 0.01	< 0.1
		5/20/2010	N/A																	
		10/28/2010	Maxx	7.83	508	254	300	4	0.022	< 1	78	3.4	26	1.9	0.27	0.04	< 0.05	10	< 0.01	0.2
		5/9/2011	Maxx	8.13	583	295	300	7	0.02	17	61	3.8	36	1.9	0.12	0.014	< 0.05	18	< 0.01	0.4
		5/15/2012	Maxx	8.05	540	280	280	7.9	0.024	7.8	49	5	37	1.9	< 0.1	0.01	< 0.05	6.1	< 0.01	0.1
		5/22/2013	N/A																	
		5/14/2014	MAX	8.16	330	170	180	4		19							0.1	5.5	< 0.01	< 0.1
Monitor																				
37-I Bedrock 23.0 - 27.5 m		4/29/2009	Maxx	7.5	1170	129	390	282	0.061	< 1	64	65	57	1.2	0.34	0.007	0.45	15	< 0.01	< 0.1
		6/23/2009	Maxx	8	1210	123	400	309	0.066	< 1	65	65	58	1.2	1.4	0.017	0.49	17	< 0.01	< 0.1
		8/28/2009	Maxx	8	1220	118	400	297	0.064	< 1	65	68	58	1.1	0.3	0.007	0.45	15	< 0.01	< 0.1
		11/18/2009	Maxx	8	1240	113	410	305	0.057	1	67	69	58	1.2	0.29	0.007	0.43	15	< 0.01	< 0.1
		5/19/2010	Maxx	8.1	1300	99	400	359	0.066	< 1	60	72	62	1.2	0.28	0.008	0.41	13	< 0.01	< 0.1
		7/27/2010	Maxx	7.7	1260	81	400	329	0.065	< 1	49	78	67	1.3	< 0.1	0.004	0.47	8	< 0.01	< 0.1
		10/28/2010	Maxx	8.79	470	28	93	121	0.03	2	9.6	45	17	1.9	0.13	0.032	0.98	1	< 0.01	< 0.1
		12/6/2010	Maxx	7.63	1020	348	520	97	< 0.01	< 1	130	20	48	1.1	< 0.1	0.005	< 0.05	45	< 0.01	< 0.1
		5/9/2011	Maxx	7.83	491	32	100	127	0.029	< 1	11	44	18	1.9	< 0.1	0.045	0.9	1	< 0.01	< 0.1
		7/20/2011	Maxx	7.62	591	25	130	152	0.035	1	14	49	23	1.8	< 0.1	0.046	0.78	4	< 0.01	< 0.1
		9/30/2011	Maxx	7.56	573	26	130	149	0.032	1	14	53	23	1.7	0.23	0.071	0.76	1	< 0.01	< 0.1
		11/8/2011	Maxx	8.15	574	24	130	148	0.027	3	14	48	22	1.8	< 0.1	0.045	0.74	1	< 0.01	< 0.1

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 37-IR Bedrock 23.7- 27.3 m	2/14/2012	Maxx	7.99	625	248	290	24	0.025	< 1	65	28	31	3	< 0.1	0.035	0.39	61	0.02	0.1
	5/9/2012	Maxx	8.1	510	230	250	13	0.028	< 1	54	15	27	1.4	< 0.1	0.015	0.14	34	< 0.01	< 0.1
	8/15/2012	Maxx	8.04	510	220	250	16	0.028	< 1	55	13	28	1.1	0.15	0.01	0.17	30	< 0.01	< 0.1
	10/4/2012	Maxx	8.06	520	220	250	17	0.022	< 1	54	13	29	1.1	0.16	0.011	0.21	28	< 0.01	< 0.1
	11/22/2012	Maxx	7.85	750	290	260	31	0.041	< 1	60	55	26	4.6	< 0.1	0.013	0.11	56	< 0.01	0.32
	5/23/2013	MAX	7.97	610	240	290	29	0.038	< 1	71	18	28	1.6	< 0.1	0.023	0.12	33	< 0.01	< 0.1
	7/30/2013	MAX	7.97	570	230	270	29	0.034	< 1	63	18	28	1.3	< 0.1	0.018	0.11	31	0.017	< 0.1
	9/26/2013	MAX	8.2	560	220	280	29	0.031	< 1	62	16	30	1.3	< 0.1	0.017	0.14	29	< 0.01	< 0.1
	11/13/2013	MAX	8.05	560	230	270	29	0.027	< 1	59	16	29	1.2	< 0.1	0.015	0.12	29	< 0.01	< 0.1
	5/7/2014	MAX	8.03	600	240	270	28	0.033	< 1	66	18	27	1.5	< 0.1	0.015	0.16	29	< 0.01	< 0.1
	8/2/2014	MAX	7.98	580	230	260	32	0.03	< 1	57	17	28	1.1	< 0.1	0.02	0.18	26	0.013	< 0.1
	10/1/2014	MAX	7.87	590	240	270	32	0.043	< 1	62	20	28	1.4	0.21	0.025	0.25	26	0.028	< 0.1
	11/20/2014	MAX	8.06	580	240	250	31	0.031	< 1	56	16	26	1.1	0.18	0.019	0.17	28	0.03	< 0.1
Monitor 37-IR Bedrock 24.4 - 33.7 m	2/14/2012	Maxx	7.93	796	259	350	48	0.018	< 1	92	41	30	2.1	< 0.1	0.095	0.05	93	< 0.01	1.5
	5/7/2012	NA																	
	8/15/2012	Maxx	8.04	700	240	280	32	0.02	< 1	69	40	25	2.1	< 0.1	0.069	0.061	75	< 0.01	0.66
	10/4/2012	Maxx	8.03	630	230	250	24	0.013	< 1	60	37	26	1.6	< 0.1	0.05	0.17	61	0.068	0.18
	11/22/2012	Maxx	7.92	580	230	230	18	0.02	< 1	56	35	23	1.4	0.33	0.063	0.12	35	0.033	< 0.1
	5/23/2013	MAX	8.07	520	220	240	13	0.022	< 1	56	22	24	1.2	0.21	0.029	0.23	30	< 0.01	< 0.1
	7/30/2013	MAX	8.03	510	220	240	14	0.019	< 1	55	24	24	1.3	< 0.1	0.011	< 0.05	30	< 0.01	0.12
	9/26/2013	MAX	8.23	520	220	240	15	0.017	< 1	55	22	25	1.4	< 0.1	0.02	< 0.05	27	< 0.01	< 0.1
	11/13/2013	MAX	8.09	530	230	220	22	0.019	< 1	50	29	23	1.4	0.21	0.034	< 0.05	27	< 0.05	< 0.5
	5/14/2014	MAX	8.08	580	210	240	42	< 0.01	< 1	55	23	26	1.5	0.48	0.029	0.23	22	0.03	< 0.1
	8/2/2014	MAX	8.02	550	220	230	32	0.019	< 1	52	24	25	1.5	0.39	0.029	0.25	23	0.012	< 0.1
	10/1/2014	MAX	7.96	540	230	240	26	0.023	< 1	54	23	25	1.6	0.43	0.032	0.22	24	< 0.01	< 0.1
	11/20/2014	MAX	8.11	550	220	230	31	0.016	< 1	55	21	23	1.4	0.4	0.03	0.17	26	< 0.01	< 0.1

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Reletaed Objective, h - Heath Related Objective

C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



Monitor
50-I
Bedrock
39.8 - 41.2 m

		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents		
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h
5/1/2009	Maxx	7.8	625	213	300	61	0.042	< 1	65	17	33	1.1	0.46	0.04	0.26	25	< 0.01	< 0.1
6/22/2009	Maxx	8	646	208	290	71	0.045	< 1	61	17	34	1.1	0.44	0.035	0.31	28	< 0.01	< 0.1
8/27/2009	Maxx	7.9	627	211	270	63	0.048	< 1	59	17	30	0.76	0.43	0.029	0.28	24	< 0.01	< 0.1
11/16/2009	Maxx	7.9	616	199	290	59	0.045	< 1	59	20	35	1.1	0.49	0.034	0.35	25	< 0.01	< 0.1
5/19/2010	Maxx	8.1	645	198	270	76	0.047	< 1	55	18	33	1	0.47	0.032	0.33	27	< 0.01	< 0.1
7/27/2010	Maxx	8	575	190	220	58	0.061	< 1	47	26	26	0.88	0.34	0.033	0.19	21	< 0.01	< 0.1
10/21/2010	Maxx	7.96	601	195	250	61	0.06	< 1	53	22	30	0.99	0.4	0.037	0.3	22	< 0.01	< 0.1
12/6/2010	Maxx	7.99	655	198	290	74	0.046	< 1	60	21	35	1	0.51	0.036	0.32	24	< 0.01	< 0.1
4/27/2011	Maxx	8.04	672	193	290	78	0.051	< 1	59	20	34	0.96	0.51	0.042	0.31	26	0.06	< 0.1
7/20/2011	Maxx	8.06	674	192	280	81	0.057	< 1	57	23	32	0.98	0.5	0.037	0.3	20	0.05	< 0.1
9/30/2011	Maxx	8.11	563	189	220	55	0.064	< 1	46	29	25	0.96	0.42	0.034	0.3	18	< 0.01	< 0.1
10/31/2011	Maxx	8.15	668	194	290	76	0.053	< 1	59	23	36	1.1	0.49	0.036	0.41	24	< 0.01	< 0.1
5/7/2012	Maxx	8.07	690	200	300	84	0.051	< 1	61	23	35	1.1	0.55	0.037	0.26	23	< 0.01	< 0.1
8/15/2012	Maxx	8.03	620	190	270	68	0.054	< 1	54	22	32	1	0.51	0.031	0.35	22	< 0.01	< 0.1
10/3/2012	Maxx	8.06	590	200	250	61	0.052	1	50	24	30	0.99	0.45	0.031	0.4	19	< 0.01	< 0.1
11/20/2012	Maxx	8.03	640	200	280	73	0.055	< 1	57	23	33	1.1	0.52	0.033	0.42	20	< 0.01	< 0.1
5/21/2013	MAX	8.01	750	190	320	100	0.057	< 1	66	24	37	1.1	0.56	0.04	0.43	27	< 0.01	< 0.1
7/30/2013	MAX	8.07	740	190	330	110	0.053	< 1	69	24	38	1.1	0.57	0.041	0.43	25	< 0.01	< 0.1
9/26/2013	MAX	8.31	750	190	320	100	0.052	< 1	66	24	38	1.1	0.55	0.04	0.39	24	< 0.01	< 0.1
11/13/2013	MAX	8.06	780	200	330	110	0.047	< 1	69	23	39	1.1	0.53	0.042	0.37	24	< 0.01	< 0.1
5/5/2014	MAX	7.96	750	190	320	100	0.047	< 1	66	23	37	1.1	0.58	0.039	0.35	24	< 0.01	< 0.1
8/1/2014	MAX	7.96	800	200	330	120	0.042	< 1	67	23	40	1	0.53	0.037	0.43	24	0.012	< 0.1
10/1/2014	MAX	8	780	200	340	120	0.058	< 1	68	24	40	1.1	0.56	0.039	0.43	23	< 0.01	< 0.1
11/17/2014	MAX	7.98	800	190	340	120	0.061	< 1	71	25	40	1.2	0.58	0.038	0.4	24	< 0.01	< 0.1

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Releataed Objective, h - Heath Related Objective

C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents		
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h
Monitor																		
53-I Bedrock 21.0 - 22.6 m																		
4/30/2009	Maxx	7.9	424	228	220	6	0.044	< 1	41	14	28	1	0.48	0.005	0.41	7	< 0.01	< 0.1
6/24/2009	Maxx	8	432	221	210	6	0.035	< 1	39	14	27	0.94	0.48	0.004	0.44	9	< 0.01	< 0.1
8/27/2009	Maxx	8	421	228	200	5	0.038	< 1	39	12	24	0.74	0.55	0.004	0.43	9	< 0.01	< 0.1
11/17/2009	Maxx	8	421	216	210	4	0.037	< 1	39	12	26	0.96	0.54	0.003	0.45	8	< 0.01	< 0.1
5/17/2010	Maxx	8.2	421	216	220	3	0.039	< 1	40	13	28	1	0.55	0.003	0.41	9	< 0.01	< 0.1
7/27/2010	Maxx	8	421	217	200	3	0.041	< 1	38	12	26	0.91	0.46	0.002	0.45	8	< 0.01	< 0.1
10/26/2010	Maxx	8.09	422	214	210	3	0.044	< 1	39	12	27	0.98	0.56	0.003	0.43	8	< 0.01	< 0.1
12/6/2010	Maxx	8.02	420	214	210	3	0.039	< 1	39	13	26	0.96	0.53	0.003	0.42	8	< 0.01	< 0.1
4/26/2011	Maxx	8.17	419	214	210	4	0.043	< 1	40	13	27	0.98	0.52	0.003	0.47	8	< 0.01	< 0.1
7/20/2011	Maxx	8.04	427	209	200	3	0.044	< 1	37	13	26	0.96	0.4	0.002	0.4	7	0.04	< 0.1
9/30/2011	Maxx	8.15	419	223	200	3	0.041	< 1	37	13	26	1	0.51	0.003	0.47	8	< 0.01	< 0.1
10/31/2011	Maxx	8.21	418	212	200	3	0.044	< 1	38	13	26	1	0.55	0.003	0.53	8	0.06	< 0.1
5/9/2012	Maxx	8.11	420	220	190	2.9	0.044	< 1	36	14	25	0.95	0.48	0.004	0.36	7.2	< 0.01	< 0.1
8/16/2012	Maxx	8.01	410	210	200	2.7	0.047	< 1	37	14	26	1	0.52	0.0035	0.45	7.6	< 0.01	< 0.1
10/4/2012	Maxx	8.1	410	210	190	2.8	0.042	< 1	35	14	26	0.97	0.46	0.0039	0.51	6.6	< 0.01	< 0.1
11/23/2012	Maxx	7.88	410	210	190	2.5	0.046	< 1	36	14	24	0.95	0.47	0.0039	0.51	6.3	< 0.01	< 0.1
5/27/2013	MAX	8.12	420	210	200		0.042	< 1	37	14	26	0.99	0.54	0.0036	0.58			
7/30/2013	MAX	8.11	410	210	200	3	0.047	< 1	37	14	25	0.96	0.54	0.0033	0.51	7.3	< 0.01	< 0.1
9/26/2013	MAX	8.3	410	210	200	3.6	0.045	< 1	37	14	26	1	0.54	0.0034	0.51	7	< 0.01	< 0.1
11/18/2013	MAX	8	410	210	190	2.7	0.045	< 1	35	14	24	0.94	0.49	0.0038	0.49	5.5	< 0.01	< 0.1
5/6/2014	MAX	8.25	410	210	190	3	0.051	< 1	36	15	25	0.96	0.46	0.004	0.47	6.4	< 0.01	< 0.1
8/1/2014	MAX	8.1	410	210	190	2.9	0.044	< 1	34	14	25	0.87	0.46	0.0033	0.51	6.2	0.011	< 0.1
10/2/2014	MAX	8.05	400	210	190	2.6	0.05	< 1	34	14	24	0.98	0.48	0.0031	0.51	6.1	< 0.01	< 0.1
11/20/2014	MAX	8.15	410	210	180	4.1	0.046	< 1	33	14	23	0.84	0.44	0.0034	0.47	6	< 0.01	< 0.1
Monitor																		
53-III Lower Till 13.4 - 15.2 m																		
4/30/2009	Maxx	7.6	460	186	150	31	0.11	< 1	38	45	14	1.3	< 0.1	< 0.002	< 0.05	15	< 0.01	0.5
6/24/2009	Maxx	7.9	447	175	130	28	0.1	< 1	33	46	12	1.2	0.19	0.1	0.46	16	< 0.01	< 0.1
8/27/2009	Maxx	8.1	437	171	120	26	0.11	< 1	31	43	11	1.3	< 0.1	0.086	0.42	16	< 0.01	< 0.1
11/17/2009	Maxx	8	436	168	130	32	0.11	< 1	33	44	12	1.3	< 0.1	0.005	0.16	18	0.01	0.2
5/17/2010	Maxx	8.1	455	171	140	35	0.11	< 1	36	45	12	1.4	0.13	0.024	0.11	15	< 0.01	< 0.1
10/26/2010	Maxx	8.05	453	180	140	23	0.12	< 1	36	46	12	1.3	0.15	0.081	0.41	15	< 0.01	< 0.1
5/2/2011	Maxx	8.07	439	174	130	23	0.11	< 1	34	46	12	1.2	0.17	0.032	0.13	16	< 0.01	< 0.1
10/31/2011	Maxx	8.07	439	174	130	23	0.11	< 1	33	47	13	1.2	0.66	0.067	0.49	14	0.01	< 0.1
5/9/2012	Maxx	8.06	430	170	130	23	0.11	< 1	32	44	11	1.1	< 0.1	0.019	< 0.05	14	< 0.01	0.21
11/23/2012	Maxx	7.83	410	170	120	23	0.1	< 1	31	42	11	1.1	0.57	0.068	0.47	9.8	0.012	< 0.1
5/27/2013	MAX	8.08	420	160	120		0.1	< 1	31	42	11	1.1	< 0.1	0.021	0.16			
11/18/2013	MAX	8.01	410	170	120	23	0.11	< 1	29	41	11	1	0.69	0.058	0.54	8.1	< 0.01	< 0.1
5/6/2014	MAX	8.18	400	170	120	22	0.12	< 1	30	42	11	1.1	0.34	0.072	0.31	9.9	< 0.01	< 0.1
11/20/2014	MAX	8.17	410	170	110	22	0.12	< 1	28	41	11	0.94	0.65	0.047	0.41	9.8	< 0.01	< 0.1

NOTE: ODWS - Ontario Drinking Water Standards
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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents					
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L		
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h		
Monitor 54-I Bedrock 25.9 - 27.4 m	5/1/2009	Maxx	7.6	561	245	280	25	0.11	< 1	57	17	35	1.7	0.12	0.016	0.09	35	< 0.01	< 0.1	
	6/22/2009	Maxx	8.1	588	240	250	27	0.12	< 1	53	28	29	2.6	< 0.1	0.011	0.11	35	< 0.01	0.2	
	8/26/2009	Maxx	8	472	223	230	11	0.078	< 1	46	11	27	1.1	< 0.1	0.01	0.13	23	< 0.01	< 0.1	
	11/16/2009	Maxx	8.1	459	216	230	8	0.062	< 1	43	11	30	1.2	< 0.1	0.009	0.14	21	< 0.01	< 0.1	
	5/17/2010	Maxx	8.2	452	214	240	8	0.067	< 1	43	12	31	1.3	< 0.1	0.01	0.11	21	< 0.01	< 0.1	
	10/25/2010	Maxx	8.03	448	211	220	8	0.06	< 1	40	11	28	1.1	< 0.1	0.007	0.1	20	< 0.01	< 0.1	
	5/5/2011	Maxx	8.11	435	211	220	5	0.06	< 1	40	10	28	1.1	< 0.1	0.008	0.16	19	0.04	< 0.1	
	11/8/2011	Maxx	8.11	445	212	220	6	0.066	1	40	10	30	1.1	< 0.1	0.008	0.12	20	< 0.01	< 0.1	
	5/8/2012	Maxx	8.13	440	210	200	6.8	0.056	< 1	37	9	26	1	< 0.1	0.0076	0.093	20	< 0.01	< 0.1	
	11/29/2012	Maxx	7.97	460	220	230	13	0.059	< 1	41	12	32	1.1	< 0.1	0.0097	0.29	20	< 0.01	< 0.1	
	5/27/2013	MAX	8.05	590	220	270		0.074		51	14	34	1.2	< 0.1	0.011	0.25				
	11/19/2013	MAX	7.95	450	220	210	7.8	0.045	< 1	37	9.8	28	0.97	< 0.1	0.0061	0.14	18	0.067	< 0.1	
	5/7/2014	MAX	8.11	610	230	270	42	0.08	< 1	52	17	33	1.2	< 0.1	0.011	0.21	30	< 0.01	< 0.1	
11/24/2014	MAX	8.07	510	220	230	23	0.033	< 1	45	13	29	0.98	< 0.1	0.0087	0.19	22	< 0.01	< 0.1		
Monitor 60-I Lower Till 13.3 - 14.8 m	4/29/2009	Maxx	8	389	208	170	1	0.048	< 1	20	24	30	0.92	< 0.1	0.008	0.25	12	< 0.01	< 0.1	
	6/22/2009	Maxx	8.2	394	203	190	1	0.049	< 1	23	22	33	1	< 0.1	< 0.002	< 0.05	15	< 0.01	0.2	
	8/27/2009	Maxx	8.2	390	202	150	< 1	0.042	< 1	18	23	26	0.77	< 0.1	0.006	0.22	13	< 0.01	< 0.1	
	11/17/2009	Maxx	8.1	397	200	180	2	0.039	< 1	21	21	30	0.91	< 0.1	0.003	0.1	15	< 0.01	< 0.1	
	5/17/2010	Maxx	8.2	397	200	180	< 1	0.042	< 1	22	23	32	1	< 0.1	< 0.002	< 0.05	14	< 0.01	0.1	
	10/27/2010	Maxx	8.17	396	197	170	1	0.038	< 1	20	20	28	0.87	< 0.1	0.002	< 0.05	15	< 0.01	0.1	
	5/2/2011	Maxx	8.32	397	199	170	2	0.043	< 1	20	20	28	0.9	< 0.1	0.006	< 0.05	13	0.02	0.1	
	11/8/2011	Maxx	7.89	304	104	120	11	0.037	4	39	8.9	6.3	2.2	< 0.1	0.21	0.1	22	0.02	0.5	
	5/7/2012	N/A																		
	10/4/2012	Maxx	7.72	440	190	200	8.9	0.022	13	56	7.6	15	2.7	3.8	0.66	2	30	< 0.01	< 0.1	
	11/22/2012	Maxx	7.65	510	230	210	10	0.035	3.3	52	18	20	2.5	3.2	0.94	3.2	26	< 0.01	< 0.1	
	5/22/2013	MAX	7.99	520	240	200	12	0.054	< 1	46	29	22	2	1.6	0.61	3.1	25	0.018	< 0.1	
	11/18/2013	MAX	7.87	500	230	180	8.3	0.062	< 1	36	30	23	1.6	0.58	0.32	1.7	28	0.034	< 0.1	
5/5/2014	MAX	7.99	460	220	180	6.9	0.068	< 1	32	31	23	1.5	0.3	0.094	0.63	19	< 0.01	0.19		
11/20/2014	MAX	8.09	440	220	170	7.7	0.084	< 1	31	35	22	1.5	0.4	0.17	0.75	9.9	0.02	< 0.1		

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 60-II Upper Till 10.7 - 12.2 m	4/29/2009	Maxx	7.9	461	238	190	7	0.07	< 1	29	36	28	1.4	< 0.1	0.007	< 0.05	20	< 0.01	< 0.1
	6/22/2009	Maxx	8.2	473	228	180	7	0.086	< 1	27	40	26	1.3	< 0.1	< 0.002	< 0.05	23	< 0.01	< 0.1
	8/27/2009	Maxx	8.2	475	228	160	8	0.095	< 1	28	37	23	0.97	< 0.1	< 0.002	< 0.05	23	< 0.01	< 0.1
	11/17/2009	Maxx	8.1	470	221	170	7	0.093	< 1	28	39	25	1.3	< 0.1	< 0.002	< 0.05	22	< 0.01	0.1
	5/17/2010	Maxx	8.3	460	221	170	6	0.072	< 1	27	33	26	1.3	< 0.1	< 0.002	< 0.05	21	< 0.01	< 0.1
	10/27/2010	Maxx	8.1	458	217	170	7	0.08	< 1	28	33	25	1.2	< 0.1	< 0.002	< 0.05	16	< 0.01	< 0.1
	5/2/2011	Maxx	8.16	474	222	150	8	0.17	< 1	23	49	21	1.2	< 0.1	< 0.002	0.21	18	< 0.01	< 0.1
	11/8/2011	Maxx	8.08	258	84	92	11	0.024	4	27	10	6.1	1.6	< 0.1	0.006	< 0.05	21	< 0.01	0.6
	5/16/2012	Maxx	7.84	270	120	110	5.6	0.021	< 1	33	7.3	7.8	1.4	< 0.1	0.023	0.11	14	< 0.01	0.27
	11/22/2012	Maxx	7.93	800	260	340	19	0.19	< 1	70	49	40	1.8	< 0.1	< 0.002	< 0.05	140	< 0.01	0.39
	5/22/2013	MAX	8.15	660	270	260	11	0.27	< 1	52	52	31	1.6	0.2	0.091	< 0.05	63	< 0.01	< 0.1
	11/18/2013	MAX	7.99	790	360	350	11	0.22	< 1	76	42	40	1.6	< 0.1	0.0041	< 0.05	61	< 0.01	0.15
	5/5/2014	MAX	7.89	800	360	380	12	0.2	< 1	86	37	42	1.6	< 0.1	0.16	0.061	61	< 0.01	0.19
11/20/2014	MAX	8	810	390	400	10	0.18	< 1	90	32	43	1.6	< 0.1	0.003	< 0.05	59	< 0.01	0.19	
Monitor 60-III Upper Till 0.6 - 5.2	4/29/2009	Maxx	7.8	1220	476	600	103	0.047	< 1	140	46	57	2.4	0.37	0.56	0.44	50	< 0.01	< 0.1
	6/22/2009	Maxx	7.9	1630	587	770	192	0.13	< 1	150	64	97	4.7	2	0.34	1.7	34	< 0.01	< 0.1
	8/27/2009	Maxx	7.8	1690	594	760	204	0.15	< 1	150	62	93	4.7	1.8	0.29	1.4	39	< 0.01	< 0.1
	11/17/2009	Maxx	7.7	1700	561	790	190	0.14	< 1	160	64	95	4.1	0.18	0.15	0.43	68	< 0.01	< 0.1
	5/17/2010	Maxx	7.8	1150	436	580	98	0.041	< 1	140	41	54	2.4	0.11	0.14	0.13	57	< 0.01	< 0.1
	10/27/2010	Maxx	7.54	1240	424	620	104	0.084	< 1	140	51	67	3.6	2.8	0.18	0.73	87	< 0.01	0.1
	5/2/2011	Maxx	7.88	1330	468	620	130	0.059	< 1	140	46	66	2.9	1.9	0.16	1.1	49	0.05	< 0.1
	5/16/2012	Maxx	7.77	1200	460	560	84	0.043	19	140	43	55	2.9	4.5	0.77	0.52	51	0.019	< 0.1
	11/22/2012	Maxx	7.57	1400	610	710	55	0.049	2.2	170	45	68	2.8	6.4	1.3	0.41	81	< 0.01	< 0.1
	5/22/2013	MAX	7.6	1800	820	1000	88	0.053	1.5	270	35	78	3.9	23	6.3	2.9	85	< 0.01	< 0.1
	11/18/2013	MAX	7.38	1700	910	930	59	0.036	2.7	250	28	75	2.7	23	2.8	3.2	24	< 0.01	< 0.1
	5/5/2014	MAX	7.28	1600	810	880	53	0.028	< 1	230	27	76	2.2	22	2.1	2.7	28	< 0.01	< 0.1
	11/20/2014	MAX	7.39	1500	780	840	47	0.035	< 2	220	27	72	2.6	20	1.4	2.8	20	< 0.01	< 0.1

NOTE: ODWS - Ontario Drinking Water Standards
 a - Aesthetic Releataed Objective, h - Heath Related Objective

C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor																			
90-II bedrock 31.4 - 32.9 m																			
5/1/2009	Maxx	7.8	735	354	400	16	0.014	< 1	110	12	31	0.58	< 0.1	0.01	< 0.05	39	< 0.01	< 0.1	
6/24/2009	Maxx	7.7	750	351	400	17	< 0.01	< 1	110	13	33	0.56	< 0.1	0.01	< 0.05	40	< 0.01	< 0.1	
8/26/2009	Maxx	7.9	685	331	350	15	0.026	1	92	9.8	29	0.61	< 0.1	0.011	< 0.05	36	< 0.01	< 0.1	
11/16/2009	Maxx	7.9	604	284	320	9	0.016	< 1	78	10	32	0.76	0.11	0.01	0.24	32	< 0.01	< 0.1	
5/17/2010	Maxx	8.1	772	362	420	21	< 0.01	< 1	110	11	33	0.6	< 0.1	0.005	0.07	42	< 0.01	< 0.1	
7/27/2010	NA																		
10/25/2010	Maxx	7.85	763	332	410	31	0.013	< 1	110	12	34	0.83	< 0.1	0.011	< 0.05	39	< 0.01	< 0.1	
12/6/2010	NA																		
5/5/2011	Maxx	7.89	746	344	370	17	0.01	< 1	100	11	28	0.62	< 0.1	0.005	< 0.05	35	< 0.01	< 0.1	
11/1/2011	Maxx	7.92	622	286	310	11	0.015	< 1	77	10	28	0.67	0.12	0.01	0.15	31	< 0.01	< 0.1	
5/8/2012	Maxx	7.89	690	320	320	16	0.017	< 1	84	10	27	0.6	< 0.1	0.0075	< 0.05	30	< 0.01	< 0.1	
11/23/2012	Maxx	7.83	610	270	300	17	0.018	< 1	70	10	30	0.77	< 0.1	0.0095	0.055	29	< 0.01	< 0.1	
5/24/2013	MAX	7.97	640	290	340	15	0.037	< 1	86	12	30	0.67	< 0.1	0.0082	0.11	30	< 0.01	< 0.1	
11/14/2013	MAX	7.73	640	300	310	13	0.018	< 1	78	9.9	29	0.7	< 0.1	0.0065	< 0.05	26	< 0.01	< 0.1	
5/5/2014	MAX	7.73	790	370	420	17	< 0.01	< 1	120	13	32	0.59	< 0.1	0.0079	< 0.05	28	< 0.01	< 0.1	
11/19/2014	MAX	7.92	590	280	300	10	0.02	< 1	71	9.7	30	0.78	0.14	0.0078	0.054	27	< 0.01	< 0.1	
Monitor																			
91-I Bedrock 25.5 - 27.0 m																			
5/1/2009	Maxx	7.6	414	213	180	13	0.045	< 1	31	21	26	0.84	< 0.1	0.004	0.19	12	< 0.01	< 0.1	
6/22/2009	Maxx	8.2	407	198	190	10	0.046	< 1	30	21	27	0.88	< 0.1	0.004	0.23	12	< 0.01	< 0.1	
8/26/2009	Maxx	8.1	434	224	220	3	0.037	< 1	35	11	31	0.93	0.12	0.005	0.21	17	< 0.01	< 0.1	
11/16/2009	Maxx	8.1	400	187	190	9	0.039	< 1	29	20	27	0.83	< 0.1	0.003	0.21	12	< 0.01	< 0.1	
5/17/2010	Maxx	8.1	437	194	190	18	0.037	< 1	32	23	28	0.85	< 0.1	0.003	0.16	16	< 0.01	< 0.1	
7/27/2010	Maxx	8.1	543	204	210	40	0.043	< 1	36	39	28	0.82	< 0.1	0.004	< 0.05	15	< 0.01	0.2	
10/25/2010	Maxx	8.18	439	195	190	17	0.04	< 1	32	23	27	0.82	< 0.1	0.004	0.15	14	< 0.01	< 0.1	
12/6/2010	Maxx	8.07	415	191	180	11	0.038	< 1	29	21	27	0.76	< 0.1	0.004	0.17	13	< 0.01	< 0.1	
5/5/2011	Maxx	8.14	403	192	190	8	0.038	< 1	30	20	27	0.81	< 0.1	0.006	0.21	13	0.02	< 0.1	
7/20/2011	Maxx	8.1	414	189	180	7	0.045	1	28	18	26	0.81	< 0.1	0.004	0.32	11	0.02	< 0.1	
9/30/2011	Maxx	8.17	395	197	180	7	0.036	< 1	27	19	27	0.79	< 0.1	0.005	0.27	12	< 0.01	< 0.1	
11/1/2011	Maxx	8.16	404	190	180	8	0.041	< 1	29	19	26	0.86	< 0.1	0.005	0.38	12	0.07	< 0.1	
5/8/2012	NA																		
5/14/2012	Maxx	8.09	470	200	170	27	0.039	< 1	30	26	24	0.73	< 0.1	0.0047	0.096	13	< 0.01	< 0.1	
11/29/2012	Maxx	8.21	420	200	180	12	0.044	< 1	28	21	26	0.78	< 0.1	0.0047	0.29	12	< 0.01	< 0.1	
5/27/2013	MAX	8.14	480	190	190		0.034		32	28	26	0.81	< 0.1	0.0052	0.36				
11/19/2013	MAX	7.96	410	200	180	8.5	0.039	< 1	28	17	26	0.72	< 0.1	0.0059	0.22	13	0.075	< 0.1	
5/15/2014	MAX	8.17	400	190	170	7.5	0.046	< 1	28	18	25	0.73	< 0.1	0.0049	0.26	12	< 0.01	< 0.1	
8/1/2014	MAX	8.14	400	190	170	7.9	0.041	< 1	26	18	26	0.69	< 0.1	0.0052	0.27	11	0.013	< 0.1	
10/2/2014	MAX	8.11	390	190	170	7.5	0.045	< 1	27	18	25	0.78	< 0.1	0.0048	0.26	11	< 0.01	< 0.1	
11/24/2014	MAX	8.08	400	190	170	7.3	0.027	< 1	28	18	25	0.71	< 0.1	0.0057	0.24	12	< 0.01	< 0.1	

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents					
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L		
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h		
Monitor																				
92-I Bedrock 32.0 - 33.5 m		4/29/2009	Maxx	7.7	443	243	220	2	0.03	< 1	49	14	23	1.1	< 0.1	0.011	0.09	12	< 0.01	< 0.1
		6/23/2009	Maxx	8.1	423	219	200	2	0.025	< 1	43	15	21	0.67	< 0.1	0.01	0.13	12	< 0.01	< 0.1
		8/28/2009	Maxx	7.9	423	229	200	3	0.022	< 1	47	12	19	0.67	< 0.1	0.009	0.05	10	< 0.01	< 0.1
		11/18/2009	Maxx	7.9	412	210	200	2	0.021	< 1	46	10	21	0.87	< 0.1	0.01	0.1	9	< 0.01	< 0.1
		5/19/2010	Maxx	8.2	406	207	200	1	0.023	< 1	45	8.6	21	0.83	< 0.1	0.011	0.07	10	< 0.01	< 0.1
		10/20/2010	Dec																	
		12/6/2010	Dec																	
		4/19/2011	Dec																	
		7/20/2011	Dec																	
		9/30/2011	Dec																	
		11/1/2011	Dec																	
Monitor																				
93-I Bedrock 24.6 - 28.7 m		4/28/2009	Maxx	7.8	346	186	140	3	0.059	< 1	29	30	16	0.91	< 0.1	0.005	0.29	4	< 0.01	< 0.1
		6/22/2009	Maxx	7.9	347	182	140	3	0.067	< 1	30	30	15	1	0.11	0.004	0.32	3	< 0.01	< 0.1
		8/25/2009	Maxx	8.1	351	188	120	4	0.065	< 1	28	26	13	0.73	< 0.1	0.005	0.28	4	< 0.01	< 0.1
		11/16/2009	Maxx	8	351	180	140	3	0.059	< 1	30	30	15	0.95	< 0.1	0.004	0.29	4	< 0.01	< 0.1
		5/18/2010	Maxx	8.1	346	181	120	3	0.062	< 1	27	26	13	0.83	< 0.1	0.004	0.29	4	< 0.01	< 0.1
		7/27/2010	Maxx	8	348	179	120	3	0.059	< 1	26	30	14	0.83	< 0.1	0.005	0.32	3	< 0.01	< 0.1
		10/20/2010	Maxx	8.1	347	179	130	3	0.067	< 1	28	30	14	0.84	< 0.1	0.005	0.26	3	< 0.01	< 0.1
		12/6/2010	Maxx	8.07	342	179	130	3	0.059	< 1	27	29	14	0.84	< 0.1	0.005	0.25	2	< 0.01	< 0.1
		4/19/2011	Maxx	8.21	346	180	130	5	0.063	< 1	30	30	14	1	< 0.1	0.006	0.3	4	0.02	< 0.1
		7/20/2011	Maxx	8.18	349	176	120	2	0.066	< 1	27	28	13	0.83	< 0.1	0.004	0.33	3	0.07	< 0.1
		9/30/2011	Maxx	8.16	355	184	130	4	0.06	< 1	29	29	14	0.91	< 0.1	0.005	0.31	4	< 0.01	< 0.1
		11/1/2011	Maxx	8.21	353	179	130	4	0.066	< 1	28	29	14	0.9	< 0.1	0.004	0.38	3	< 0.01	< 0.1
		5/7/2012	Maxx	8.2	340	180	120	2.4	0.062	< 1	27	30	13	0.83	< 0.1	0.0045	0.19	2.7	< 0.01	< 0.1
		8/15/2012	Maxx	8.12	340	180	130	3.1	0.065	< 1	28	31	14	0.94	0.11	0.0046	0.3	2.5	< 0.01	< 0.1
		10/3/2012	Maxx	8.1	340	180	120	3.6	0.062	< 1	26	30	14	0.85	< 0.1	0.0051	0.34	1.5	< 0.01	< 0.1
		11/20/2012	Maxx	8.03	350	190	130	3.9	0.06	< 1	28	29	14	0.9	< 0.1	0.0047	0.35	2.8	< 0.01	< 0.1
		5/21/2013	MAX	8.19	350	180	130	2.7	0.072	< 1	28	29	14	0.89	0.11	0.0046	0.34	3.8	< 0.01	< 0.1
		7/30/2013	MAX	8.13	350	180	130	3.2	0.066	< 1	29	30	15	0.88	< 0.1	0.005	0.34	4.2	< 0.01	< 0.1
		9/26/2013	MAX	8.3	350	180	140	3.9	0.065	< 1	30	29	15	0.91	< 0.1	0.0047	0.31	3.8	< 0.01	< 0.1
		11/13/2013	MAX	8.13	350	180	130	3	0.058	< 1	27	29	14	0.84	< 0.1	0.0047	0.29	3.1	< 0.01	< 0.1
		5/5/2014	MAX	8.05	340	180	130	2	0.062	< 1	27	28	14	0.9	0.12	0.0047	0.32	3.1	< 0.01	< 0.1
		7/31/2014	MAX	8.12	350	180	120	3.1	0.061	< 1	27	29	14	0.79	< 0.1	0.0046	0.35	4.2	< 0.01	< 0.1
		10/1/2014	MAX	8.13	350	190	130	3.5	0.072	< 1	27	29	14	0.9	0.1	0.005	0.37	2.9	0.012	< 0.1
		11/17/2014	MAX	7.91	360	170	200	4	0.065	< 1	47	29	19	1.2	0.88	0.049	0.3	12	< 0.01	< 0.1

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



Monitor
94-I
Bedrock
20.6 - 25.2 m

		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents		
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h
4/30/2009	Maxx	8	320	172	110	2	0.067	< 1	23	31	12	0.84	0.15	0.006	0.17	5	< 0.01	< 0.1
6/22/2009	Maxx	8.2	318	168	120	< 1	0.071	< 1	24	33	14	0.87	0.14	0.006	0.18	4	< 0.01	< 0.1
8/27/2009	Maxx	8	317	175	100	< 1	0.051	< 1	22	29	12	0.77	0.14	0.007	0.19	4	< 0.01	< 0.1
11/17/2009	Maxx	8.1	316	164	100	1	0.062	< 1	20	32	12	0.73	0.12	0.006	0.19	5	< 0.01	< 0.1
5/18/2010	Maxx	8.2	309	156	83	< 1	0.076	< 1	17	35	9.8	0.72	< 0.1	0.004	0.05	7	< 0.01	< 0.1
7/27/2010	Maxx	8.1	307	157	83	1	0.075	< 1	17	37	9.8	0.71	< 0.1	0.005	< 0.05	6	< 0.01	< 0.1
10/20/2010	Maxx	8.11	310	161	97	< 1	0.072	< 1	20	34	12	0.66	< 0.1	0.007	0.12	5	< 0.01	< 0.1
12/6/2010	Maxx	8.11	311	164	100	< 1	0.064	< 1	21	33	13	0.74	0.11	0.007	0.14	4	< 0.01	< 0.1
4/27/2011	Maxx	8.12	309	159	100	< 1	0.078	< 1	20	37	12	0.8	< 0.1	0.004	0.11	5	< 0.01	< 0.1
7/20/2011	Maxx	8.17	311	159	94	< 1	0.072	< 1	19	32	11	0.71	0.11	0.005	0.13	3	0.08	< 0.1
9/30/2011	Maxx	8.16	312	167	100	< 1	0.075	< 1	21	33	12	0.82	0.13	< 0.002	0.17	4	< 0.01	< 0.1
10/31/2011	Maxx	8.27	311	162	110	< 1	0.07	< 1	21	35	13	0.8	0.13	0.007	0.28	4	0.03	< 0.1
5/9/2012	Maxx	8.17	300	160	86	< 1	0.078	< 1	17	36	10	0.7	< 0.1	0.004	< 0.05	4.8	0.023	< 0.1
8/15/2012	Maxx	8.07	310	160	96	< 1	0.07	< 1	20	34	11	0.78	0.14	0.005	0.12	4.2	< 0.01	< 0.1
10/3/2012	Maxx	7.95	310	170	100	< 1	0.068	< 1	20	34	12	0.77	0.12	0.0074	0.21	3.6	0.011	< 0.1
11/22/2012	Maxx	7.87	310	170	96	1.3	0.075	< 1	19	35	12	0.72	< 0.1	0.0078	0.12	4.5	< 0.01	< 0.1
5/27/2013	MAX	8.2	310	160	98		0.058		20	34	12	0.73	0.1	0.0047	0.2			
7/30/2013	MAX	8.19	300	160	98	< 1	0.069	< 1	20	33	12	0.72	0.13	0.0051	0.28	3.9	< 0.01	< 0.1
9/26/2013	MAX	8.3	310	160	110	1	0.072	< 1	21	34	13	0.79	0.15	0.0065	0.14	3.5	< 0.01	< 0.1
11/13/2013	MAX	8.18	310	170	100	< 1	0.062	< 1	20	31	12	0.7	0.11	0.0068	0.15	2.7	< 0.01	< 0.1
5/6/2014	MAX	8.27	300	160	100	< 1	0.071	< 1	21	32	12	0.84	0.12	0.0049	0.19	3	< 0.01	< 0.1
8/1/2014	MAX	8.13	310	160	90	1.1	0.066	< 1	18	33	11	0.63	< 0.1	0.0046	0.16	3	0.021	< 0.1
10/2/2014	MAX	8.11	300	160	99	1.3	0.075	< 1	20	31	12	0.76	0.14	0.007	0.19	2.6	< 0.01	< 0.1
11/19/2014	MAX	8.17	310	160	94	< 1	0.076	< 1	19	30	11	0.67	0.16	0.0077	0.21	1.9	< 0.01	< 0.1

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents				
Date		pH	Cond- uctivity	Alk. as CaCO3	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor 95-I Bedrock 36.2 - 41.0 m	5/1/2009	Maxx	7.6	772	243	370	88	0.026	< 1	81	17	41	1.4	0.25	0.022	0.17	40	< 0.01	< 0.1
	6/22/2009	Maxx	8	765	233	360	88	0.02	< 1	78	16	39	1.3	0.23	0.022	0.17	41	< 0.01	< 0.1
	8/27/2009	Maxx	8	733	229	330	76	0.017	< 1	78	14	34	0.96	0.23	0.02	0.16	40	< 0.01	< 0.1
	11/17/2009	Maxx	7.9	741	231	350	74	0.015	< 1	78	15	38	1.4	0.24	0.021	0.21	38	< 0.01	< 0.1
	5/18/2010	Maxx	8.1	790	226	360	102	0.02	< 1	79	14	39	1.2	0.28	0.025	0.12	44	< 0.01	< 0.1
	7/27/2010	Maxx	7.9	791	226	360	90	0.02	< 1	79	15	41	1.1	0.21	0.026	0.12	39	< 0.01	< 0.1
	10/21/2010	Maxx	7.92	760	230	350	82	0.017	< 1	77	14	39	1.2	0.14	0.022	0.11	39	< 0.01	< 0.1
	12/6/2010	Maxx	7.89	784	229	370	100	0.018	< 1	82	15	40	1.2	0.22	0.024	0.12	44	< 0.01	< 0.1
	4/20/2011	Maxx	8.09	803	226	380	100	0.017	< 1	84	15	41	1.2	0.19	0.022	0.18	40	< 0.01	< 0.1
	7/20/2011	Maxx	8	807	225	370	98	0.019	< 1	80	15	41	1.2	0.22	0.025	0.16	38	< 0.01	< 0.1
	9/30/2011	Maxx	8.07	779	235	360	84	0.013	< 1	77	15	41	1.2	0.18	0.023	0.16	39	< 0.01	< 0.1
	10/31/2011	Maxx	7.99	772	228	360	79	0.018	< 1	81	14	40	1.2	0.22	0.023	0.17	37	< 0.01	< 0.1
	5/16/2012	Maxx	8.01	570	240	280	22	0.022	< 1	60	14	33	1.5	< 0.1	0.0069	0.16	33	< 0.01	< 0.1
	8/15/2012	Maxx	8.03	570	230	290	25	0.025	< 1	61	9.4	34	1.1	0.11	0.0056	0.18	35	< 0.01	< 0.1
	10/3/2012	Maxx	8.1	580	230	300	28	0.017	< 1	63	9	35	1	0.62	0.03	0.23	33	< 0.01	< 0.1
	11/20/2012	Maxx	8.05	580	230	290	30	0.023	< 1	62	9.4	34	1.1	0.11	0.0049	0.2	33	< 0.01	< 0.1
	5/21/2013	MAX	8.07	600	230	300	35	0.03	< 1	63	9.5	34	1	0.1	0.0039	0.24	35	< 0.01	< 0.1
	7/30/2013	MAX	8.07	600	220	310	38	0.023	< 1	65	9.6	35	0.99	< 0.1	0.0043	0.21	35	< 0.01	< 0.1
	9/26/2013	MAX	8.23	600	230	320	38	0.023	< 1	67	9.7	36	1.1	< 0.1	0.004	0.18	34	< 0.01	< 0.1
	11/13/2013	MAX	8.12	610	230	300	38	0.024	< 1	63	10	34	0.96	< 0.1	0.0074	0.16	35	< 0.01	< 0.1
5/5/2014	MAX	7.96	610	230	300	38	0.022	< 1	63	9.4	35	1.1	< 0.1	0.004	0.23	33	< 0.01	< 0.1	
7/31/2014	MAX	8.05	610	220	290	40	0.022	< 1	59	9.4	34	0.9	0.12	0.0071	0.25	34	0.017	< 0.1	
10/1/2014	MAX	8.03	600	230	300	39	0.028	< 1	62	8.8	34	1	< 0.1	0.0036	0.21	33	< 0.01	< 0.1	
11/19/2014	MAX	8.06	610	230	300	41	0.028	< 1	63	9.5	35	1	< 0.1	0.0038	0.18	36	0.01	< 0.1	
Monitor 96-I Bedrock 36.6 - 38.1 m	5/16/2012	MAX						<					<				<	<	
	5/16/2012	MAX																	
	5/16/2012	Maxx	8.01	430	220	210	2.9	0.043	< 1	47	12	21	1.5	< 0.1	0.0037	0.17	15	< 0.01	< 0.1
	5/16/2012	Maxx	8.01	430	220	210	2.9	0.043	1	47	12	21	1.5	0.1	0.0037	0.17	15	0.01	0.1
	10/4/2012	Maxx	8.02	460	220	220	4.2	0.035	< 1	51	11	23	1.5	< 0.1	0.0044	0.35	17	< 0.01	< 0.1
	11/29/2012	Maxx	7.74	460	220	230	5.6	0.042	< 1	54	15	23	1.8	< 0.1	0.006	0.25	18	0.034	0.21
	6/3/2013	MAX	7.92	460	220	220	4.3	0.046	< 1	51	11	23	1.4	< 0.1	0.0038	0.41	18	< 0.01	< 0.1
	7/31/2013	MAX	8.04	450	220	230	3.3	0.04	< 1	54	10	23	1.5	< 0.1	0.0028	0.33	19	< 0.01	< 0.1
	9/26/2013	MAX	8.24	460	220	240	4	0.035	< 1	55	10	25	1.5	< 0.1	0.0028	0.31	17	< 0.01	< 0.1
	9/27/2013	MAX																	
	11/20/2013	MAX	8.09	460	230	220	4.6	0.034	< 1	50	9	22	1.3	< 0.1	0.0033	0.29	19	< 0.01	< 0.1
	5/15/2014	MAX	8.08	460	220	230	3.4	0.038	1.1	53	9.4	23	1.3	< 0.1	0.0035	0.35	18	< 0.01	< 0.1
	8/1/2014	MAX	8.04	440	220	220	4.2	0.034	1.1	49	9.7	23	1.3	< 0.1	0.0026	0.34	18	< 0.01	< 0.1
10/2/2014	MAX	7.99	450	220	220	3.4	0.039	< 1	51	9.2	23	1.4	< 0.1	0.0022	0.33	18	< 0.01	< 0.1	
11/20/2014	MAX	8.11	460	220	230	5.3	0.042	< 1	53	10	24	1.5	< 0.1	0.0027	0.34	17	< 0.01	< 0.1	

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters						Other Constituents									
Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L						
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h						
Monitor																								
96-II Bedrock		5/16/2012	MAX					<					<											
		5/16/2012	MAX																					
		5/16/2012	Maxx	7.79	1100	280	390	100	0.022	1	98	81	37	2.1	<	0.1	0.053	0.073	110	0.024	0.63			
		5/16/2012	Maxx	7.79	1100	280	390	100	0.022	<	1	98	81	37	2.1	<	0.1	0.053	0.073	110	0.024	0.63		
		10/4/2012	Maxx	7.9	1100	280	400	140	0.013	<	1	95	71	39	1.5	<	0.1	0.038	0.12	67	0.012	0.35		
		11/29/2012	Maxx	7.72	1000	270	380	130	0.021	<	1	93	59	36	1.4	<	0.1	0.028	0.17	65	0.026	0.19		
		6/3/2013	MAX	7.86	1000	260	395	130	0.022	<	1	94	67	36	1.3	<	0.1	0.028	0.1	63	<	0.01	0.16	
		7/31/2013	MAX	7.86	1000	270	380	130	0.02	<	1	94	62	35	1.4	<	0.1	0.038	0.085	65	<	0.01	0.15	
		9/26/2013	MAX	8.12	1000	270	400	130	0.02	<	1	97	64	38	1.4	<	0.1	0.036	0.22	62	<	0.01	0.14	
		9/27/2013	MAX																					
		11/20/2013	MAX	7.96	990	270	350	120	0.018	<	1	85	55	33	1.3	<	0.1	0.025	<	0.05	59	<	0.01	0.11
		5/15/2014	MAX	7.86	960	260	360	120	0.024	<	1	90	56	34	1.2	<	0.1	0.024	0.078	58	<	0.01	<	0.1
		8/1/2014	MAX	7.92	910	260	330	99	0.019	<	1	79	50	32	1.2	<	0.1	0.031	0.1	55	<	0.011	<	0.1
		10/2/2014	MAX	7.84	830	260	330	86	0.023	<	1	79	43	32	1.3	<	0.1	0.022	0.12	51	<	0.01	<	0.1
		11/20/2014	MAX	7.99	830	250	340	82	0.025	<	1	81	44	33	1.4	<	0.1	0.02	0.22	50	<	0.01	<	0.1
Monitor																								
C2-I Outwash 7.5 - 9.0 m		4/30/2009	Maxx	7.5	1130	297	470	143	0.023	<	1	120	57	43	1.3	2.2	0.039	0.3	93	<	0.01	<	0.1	
		6/24/2009	Maxx	7.8	1150	280	470	147	0.014	<	1	110	60	45	1.2	2.3	0.038	0.36	104	<	0.01	<	0.1	
		8/27/2009	Maxx	7.8	1150	291	450	153	0.017	<	1	110	55	41	1.3	2.3	0.037	0.36	108	<	0.01	<	0.1	
		11/17/2009	Maxx	7.9	1130	274	460	128	0.018	<	1	120	56	42	1.4	2.5	0.035	0.37	111	<	0.01	<	0.1	
		5/17/2010	Maxx	8.3	1090	276	460	142	0.018	<	1	110	61	42	1.4	1.9	0.035	0.35	105	<	0.01	<	0.1	
		10/20/2010	Maxx	7.97	1030	277	410	112	0.023	<	2	110	52	37	1.2	2.2	0.035	0.32	83	<	0.01	<	0.1	
		4/26/2011	Maxx	8.03	1100	280	440	136	0.025	<	1	110	60	40	1.3	1.8	0.035	0.34	73	<	0.01	<	0.1	
		10/31/2011	Maxx	7.91	1090	279	440	131	0.021	<	1	110	58	39	1.4	2.7	0.037	0.69	74	<	0.01	<	0.1	
		5/9/2012	Maxx	7.97	1100	290	430	160	0.022	<	1	110	60	40	1.3	1.8	0.036	0.29	69	<	0.01	<	0.1	
		11/23/2012	Maxx	7.72	1100	290	440	150	0.023	<	1	110	57	38	1.4	2.3	0.039	0.47	58	<	0.01	<	0.1	
		5/27/2013	MAX	7.9	1200	300	460		0.015			120	63	40	1.4	2.1	0.039	0.48						
		11/18/2013	MAX	7.81	1200	300	450	150	0.02	<	1	120	62	38	1.4	2.3	0.04	0.45	67	<	0.01	<	0.1	
		5/6/2014	MAX	8	1200	290	470	150	0.024	<	1	120	67	40	1.5	2.1	0.043	0.47	78	<	0.01	<	0.1	
		11/19/2014	MAX	7.94	1200	290	440	160	0.024	<	1	110	66	39	1.3	2.5	0.043	0.47	82	<	0.01	<	0.1	

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C2: Routine Groundwater Quality - General Analysis - Closed Eastview Road Landfill Site



		General Parameters				Critical Leachate Indicator			Leachate Indicator Parameters							Other Constituents			
Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor C6-I Outwash 10.0 - 11.5 m	4/29/2009	Maxx	7.7	3160	413	580	754	0.26	< 1	150	430	49	2.4	0.46	0.87	0.15	36	< 0.01	0.2
	6/24/2009	Maxx	7.9	3570	348	530	976	0.067	< 1	140	490	42	2.2	0.16	0.82	0.06	44	< 0.01	0.4
	8/25/2009	Maxx	7.9	3570	357	500	982	0.078	< 1	140	540	38	2.2	< 0.1	0.82	< 0.05	43	< 0.01	0.3
	11/16/2009	Maxx	7.9	3620	343	550	920	0.051	< 1	150	570	43	2.3	< 0.1	0.83	< 0.05	41	< 0.01	0.2
	5/18/2010	Maxx	7.7	3510	366	580	919	0.15	< 1	160	540	46	2.3	0.5	0.82	< 0.05	44	0.01	0.1
	10/20/2010	Maxx	7.9	3720	357	640	912	0.14	1	180	580	50	2.5	0.24	0.96	< 0.05	41	< 0.01	0.1
	4/19/2011	Maxx	7.83	2730	483	710	598	0.52	< 1	180	260	62	2.6	0.68	0.9	0.41	35	0.02	< 0.1
	11/1/2011	Maxx	7.77	3840	370	550	990	0.1	< 1	150	580	43	2.2	0.6	0.82	0.14	41	< 0.01	< 0.1
	5/7/2012	Maxx	7.92	3700	380	550	1000	0.14	< 1	150	590	44	2.2	0.44	0.73	< 0.05	39	< 0.01	< 0.1
	11/21/2012	Maxx	7.9	3800	380	590	1000	0.14	< 1	160	600	47	2.4	0.71	0.8	0.18	37	< 0.01	< 0.1
	5/21/2013	MAX	7.87	4000	380	560	1000	0.14	< 1	150	560	43	2.1	0.53	0.75	0.16	42	< 0.01	< 0.1
	11/14/2013	MAX	7.58	3400	420	570	830	0.26	< 1	150	480	47	2.1	0.79	0.81	0.18	34	< 0.01	< 0.1
	5/5/2014	MAX	7.59	3200	450	600	780	0.29	< 1	160	470	49	2.4	0.98	0.81	0.29	33	< 0.01	< 0.1
	11/17/2014	MAX	7.78	4400	380	610	1200	0.097	< 1	170	700	46	2.3	< 0.1	0.76	0.061	44	< 0.01	< 0.1
Monitor C9-I Outwash 5.8 - 7.3 m	4/29/2009	Maxx	7.8	976	403	520	34	0.83	< 1	150	30	37	1.3	1.8	0.1	2.2	96	< 0.01	0.1
	6/23/2009	Maxx	8	989	414	490	35	0.72	< 1	140	27	35	1.2	5	0.098	2.4	94	< 0.01	< 0.1
	8/25/2009	Maxx	7.9	964	418	470	33	0.72	< 1	130	25	33	1.2	4.2	0.091	2	90	< 0.01	0.3
	11/16/2009	Maxx	7.8	988	389	510	42	0.75	< 1	140	27	36	1.3	1.8	0.074	1.5	85	< 0.01	0.5
	5/18/2010	Maxx	7.7	1030	422	480	52	0.77	< 1	130	29	36	1.2	4.3	0.096	2.1	85	< 0.01	< 0.1
	10/20/2010	Maxx	7.91	1040	441	500	46	0.8	< 1	140	29	38	1.1	5.1	0.1	2.3	64	< 0.01	< 0.1
	4/19/2011	Maxx	8.11	1030	449	540	40	0.7	< 1	150	28	40	1.3	2	0.1	2.6	67	0.12	0.2
	11/3/2011	Maxx	7.96	1180	447	550	77	0.72	< 1	150	38	41	1.3	5.6	0.1	2.7	70	< 0.01	< 0.1
	5/8/2012	Maxx	7.77	1100	490	540	58	0.67	3	150	38	41	1.2	5.2	0.11	2.5	69	0.028	< 0.1
	11/21/2012	Maxx	7.94	1100	470	580	62	0.68	< 1	160	35	43	1.4	4.1	0.084	2	64	0.015	0.61
	5/21/2013	MAX	7.86	1100	500	580	34	0.67	< 1	160	26	42	1.3	5.3	0.11	3	84	0.05	< 0.1
	11/18/2013	MAX	7.7	1100	500	570	38	0.58	< 1	160	26	40	1.4	4.7	0.099	2.8	87	0.089	0.25
	5/5/2014	MAX	7.61	1100	480	610	32	0.58	< 1	170	25	43	1.5	6.1	0.12	3	92	< 0.01	< 0.1
	11/19/2014	MAX	7.8	1100	470	580	36	0.57	1.8	170	26	40	1.8	5.4	0.1	3.2	94	0.013	< 0.1

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Date		pH	Cond- uctivity	Alk. as CaCO3 mg/L	Hard. mg/L	Cl mg/L	B mg/L	Phenol ug/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	Fe mg/L	Mn mg/L	NH3-N mg/L	SO4 mg/L	NO2-N mg/L	NO3-N mg/L	
ODWS	Lab	6.5- 8.5(a)		30-500 a	80-100 a	250 a	5.0 h			200 a			0.30 a	0.05 a		500 a	1.0 h	10 h	
Monitor C10-I Outwash 6.9 - 8.5 m	4/29/2009	Maxx	7.8	1090	326	540	88	0.7	< 1	130	44	52	1.4	3.1	0.07	1.3	128	< 0.01	< 0.1
	6/23/2009	Maxx	8	1090	320	500	96	0.67	< 1	120	41	49	1.3	3.2	0.065	1.4	138	< 0.01	< 0.1
	8/25/2009	Maxx	7.8	899	428	490	97	0.67	< 1	120	38	44	1.1	3.3	0.067	1.4	132	< 0.01	< 0.1
	11/16/2009	Maxx	7.7	1170	327	540	109	0.63	< 1	130	48	53	1.5	3.3	0.07	1.5	125	< 0.01	< 0.1
	5/18/2010	Maxx	8	1190	324	500	126	0.59	< 1	120	47	48	1.3	2.8	0.071	1.4	133	< 0.01	< 0.1
	10/20/2010	Maxx	7.98	1190	335	510	115	0.61	< 1	120	51	49	1.3	3.1	0.07	1.5	130	< 0.01	< 0.1
	4/20/2011	Maxx	8	1200	330	510	120	0.58	< 1	120	52	49	1.4	2.5	0.07	1.7	130	< 0.01	< 0.1
	11/3/2011	Maxx	8.01	1160	326	510	101	0.59	< 1	120	49	49	1.4	3.3	0.075	1.7	126	< 0.01	< 0.1
	5/8/2012	Maxx	7.81	1200	340	510	130	0.5	< 1	120	61	49	1.3	2.8	0.073	1.5	120	0.01	< 0.1
	11/21/2012	Maxx	7.93	1100	340	520	110	0.56	< 1	130	49	48	1.5	3.3	0.073	1.7	110	< 0.01	< 0.1
	5/21/2013	MAX	7.88	1200	340	510	120	0.55	< 1	130	55	48	1.4	2.9	0.075	1.7	110	< 0.01	< 0.1
	11/18/2013	MAX	7.72	1100	350	490	110	0.5	< 1	120	50	46	1.4	2.9	0.07	1.7	97	< 0.01	< 0.1
	5/5/2014	MAX	7.74	1100	350	500	100	0.47	< 1	120	51	47	1.5	2.7	0.072	1.6	91	< 0.01	< 0.1
	11/19/2014	MAX	7.83	1100	360	510	110	0.49	1.4	120	54	49	1.5	3.1	0.071	1.7	93	< 0.01	< 0.1
Monitor C11-I Outwash 5.9 - 7.4 m	4/29/2009	Maxx	7.6	1360	359	640	151	0.057	< 1	190	49	42	1.4	4	0.45	0.62	144	< 0.01	< 0.1
	6/23/2009	Maxx	7.8	1180	349	540	102	0.053	< 1	160	39	36	1.4	3.6	0.38	0.55	148	< 0.01	< 0.1
	8/25/2009	Maxx	7.7	1460	372	580	205	0.054	< 1	160	79	45	1.4	1.8	0.5	0.91	108	< 0.01	< 0.1
	11/16/2009	Maxx	7.6	1120	350	530	82	0.059	< 1	140	46	42	1.1	1.6	0.45	0.85	121	< 0.01	< 0.1
	5/18/2010	Maxx	7.6	1410	319	580	195	0.052	< 1	170	55	38	1.3	3.5	0.48	0.65	163	< 0.01	< 0.1
	10/20/2010	Maxx	7.87	1260	317	540	152	0.07	< 1	160	47	37	1.2	3.1	0.47	0.71	124	< 0.01	< 0.1
	4/20/2011	Maxx	7.78	1860	343	700	331	0.044	< 1	210	120	45	1.8	4.4	0.46	0.74	104	0.01	< 0.1
	11/4/2011	Maxx	7.9	1340	347	550	157	0.065	< 1	150	59	41	1.3	2.5	0.45	0.85	85	< 0.01	< 0.1
	5/8/2012	Maxx	7.68	1900	330	600	390	0.048	1.6	180	130	38	1.5	4	0.41	0.55	120	< 0.01	< 0.1
	11/21/2012	Maxx	7.77	1800	350	630	340	0.061	< 1	180	150	42	1.8	3.8	0.42	0.74	80	< 0.01	< 0.1
	5/21/2013	MAX	7.7	2200	360	660	410	0.047	< 1	190	200	43	1.8	4.2	0.41	0.63	110	< 0.01	< 0.1
	11/18/2013	MAX	7.52	2200	430	610	420	0.044	1	180	210	40	1.8	3.9	0.34	0.56	58	< 0.01	< 0.1
	5/5/2014	MAX	7.42	2400	560	650	440	0.039	< 1	190	240	43	1.9	4.6	0.29	0.58	35	< 0.01	< 0.1
	11/19/2014	MAX	7.58	2100	530	630	350	0.048	2.2	180	220	42	1.9	4.7	0.25	0.55	33	< 0.01	< 0.1

NOTE: ODWS - Ontario Drinking Water Standards
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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
		mg/L	mg/L	mg/L	mg/L	mg/L	
ODWS	Lab			0.05 h		5.0 a	
Monitor 2-I Outwash 9.8 - 10.4 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	0.004	0.026
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	0.003	0.015
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.007
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.009
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	0.002	0.008
	10/21/2010	Maxx	< 0.1	< 1	< 0.005	0.002	0.007
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	11/2/2011	Maxx	< 0.1	< 1	< 0.005	0.002	0.023
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	0.0021	0.029
	11/27/2012	Maxx	< 0.1	< 1	< 0.005	0.0028	0.011
	5/23/2013	MAX	< 0.1	< 1	< 0.005	0.0027	0.023
	11/14/2013	MAX	< 0.1	< 1	< 0.005	0.0017	0.013
	5/7/2014	MAX	< 0.1	< 1	< 0.005	0.0031	0.024
	11/21/2014	MAX	< 0.1	< 1	< 0.005	0.0027	0.019
Monitor 2-II Outwash 0.2 - 4.6 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.091
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.13
	10/21/2010	Maxx	< 0.1	< 1	< 0.005	0.002	0.17
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	0.003	0.18
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	0.001	0.048
	5/23/2013	MAX	0.15	< 1	< 0.005	0.0016	0.18
	5/7/2014	MAX	< 0.1	< 1	< 0.005	0.0023	0.073
Monitor 4-IR Bedrock 19.4 - 20.9 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/24/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	7/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	12/6/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/27/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/20/2011	Maxx	0.2	< 1	< 0.005	< 0.001	< 0.005
	9/30/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	11/1/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	5/8/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.016
	8/15/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/3/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/21/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/24/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/30/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	9/27/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/13/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0063
5/6/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
8/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0095	
10/2/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
11/18/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
Monitor 4-IR Lower Till 11.9 - 13.7 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/24/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	0.001	0.011
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/27/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/1/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	5/8/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0099
	11/21/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/24/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0067
	11/13/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0055
	5/6/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.013
	11/18/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS Lab		mg/L	mg/L	mg/L	mg/L	mg/L	
				0.05 h		5.0 a	
Monitor 4-III Upper Till 1.1 - 4.1 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/24/2009	Maxx	< 0.1	< 10	< 0.005	< 0.001	< 0.005
	8/26/2009	Maxx	< 0.1	2	< 0.005	< 0.001	0.012
	11/16/2009	Maxx	< 0.1	1	< 0.005	< 0.001	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	10/26/2010	Maxx	< 0.1	< 5	< 0.005	< 0.001	< 0.005
	4/27/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/1/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	5/8/2012	Maxx	< 0.1	< 10	< 0.005	< 0.001	0.0086
	11/21/2012	Maxx	< 0.1	< 10	< 0.005	< 0.001	0.0058
	5/24/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/13/2013	MAX	< 0.1	1.1	< 0.005	< 0.001	0.0068
	5/6/2014	MAX	< 0.1	< 5	< 0.005	< 0.001	< 0.005
	11/24/2014	MAX	< 0.1	< 5	< 0.005	< 0.001	0.0079
Monitor 5-II Upper Till 1.7 - 7.8 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	5/3/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	11/1/2011	Maxx	< 0.1	< 5	< 0.005	< 0.001	0.012
	5/8/2012	Maxx	< 0.1	< 10	< 0.005	< 0.001	0.014
	11/28/2012	Maxx	< 0.1	< 5	< 0.005	< 0.001	0.0071
	5/24/2013	MAX	< 0.1	< 5	< 0.005	< 0.001	0.013
	11/19/2013	MAX	< 0.1	< 10	< 0.005	< 0.001	0.014
	5/7/2014	MAX	< 0.1	< 10	< 0.005	< 0.001	0.016
	11/24/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0099
Monitor 9A-I Bedrock 25.1 - 25.9 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/28/2011	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	5/10/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/30/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/13/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
Monitor 9-I Outwash 5.5 - 6.8 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	0.005	0.4
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	0.006	0.21
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	0.006	0.093
	4/28/2011	Maxx	< 0.1	< 1	< 0.005	0.006	0.45
	5/10/2012	Maxx	< 0.1	< 1	< 0.005	0.0059	0.44
	5/31/2013	MAX	< 0.1	< 1	< 0.005	0.006	0.45
	5/13/2014	MAX	< 0.1	< 1	< 0.005	0.0043	0.23
Monitor 10-II Outwash 3.0 - 3.6 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.014
	6/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/19/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	10/27/2010	Maxx	< 0.1	< 10	< 0.005	< 0.001	< 0.005
	4/27/2011	Maxx	< 0.1	< 5	< 0.005	< 0.001	0.01
	11/4/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	5/10/2012	Maxx	< 0.1	< 10	< 0.005	< 0.001	0.011
	11/26/2012	Maxx	< 0.1	< 1	< 0.01	0.0013	0.0078
	5/30/2013	MAX	< 0.1	< 5	< 0.005	< 0.001	0.0081
	11/19/2013	MAX	< 0.1	< 10	< 0.005	< 0.001	0.012
	5/12/2014	MAX	< 0.1	< 5	< 0.005	< 0.001	0.02
	11/24/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.011

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS	Lab	mg/L	mg/L	mg/L	mg/L	mg/L	
				0.05 h		5.0 a	
Monitor 10-III Outwash/Peat 0.3 - 1.5 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	6/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	11/19/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/19/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	10/27/2010	Maxx	< 0.1	< 10	< 0.005	< 0.001	< 0.005
	4/26/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	11/4/2011	Maxx	< 0.1	< 10	< 0.005	< 0.001	0.019
	5/10/2012	Maxx	< 0.1	< 10	< 0.005	< 0.001	0.0052
	11/21/2012	INSV					
	5/30/2013	MAX	< 0.1	< 10	< 0.025	< 0.005	< 0.025
	11/19/2013	MAX	< 0.5	< 10	< 0.005	< 0.001	0.0097
	5/12/2014	MAX	< 0.1	< 10	< 0.025	< 0.005	< 0.025
	11/24/2014	MAX	< 0.1	< 1	< 0.005	0.0013	0.01
Monitor 11-I Upper Till 4.6 - 5.8 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	0.001	0.006
	11/17/2009	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.01
	4/27/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	10/31/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.016
	5/9/2012	Maxx	< 0.2	< 1	< 0.005	< 0.001	0.0059
	11/22/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/23/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0089
	11/14/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/8/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/25/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0053
Monitor 11-II Outwash 0.2 - 2.9 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.016
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/27/2011	Maxx	0.1	< 1	< 0.005	< 0.001	0.011
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0084
	5/23/2013	MAX	< 0.1	< 1	< 0.005	0.0022	0.018
	5/8/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.028
Monitor 11-III Lower Till 18.5 - 17.0 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/27/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/23/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/8/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.017
Monitor 13-I Bedrock 24.4 - 25.6 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/26/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/14/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/29/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/13/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
Monitor 13-II Lower Till 19.5 - 20.1 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/26/2011	Maxx	0.2	< 10	< 0.005	< 0.001	0.007
	11/2/2011	MAX					
	5/14/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0069
	5/29/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/13/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
		mg/L	mg/L	mg/L	mg/L	mg/L	
ODWS	Lab			0.05 h		5.0 a	
Monitor 13-III Upper Till 7.6 - 8.8 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.01
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/19/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	4/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/2/2011	Maxx	< 0.1	< 1	< 0.005	0.001	0.006
	5/10/2012	Maxx	< 0.1	< 1	< 0.005	0.0014	0.011
	11/26/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/29/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/19/2013	MAX	< 0.1	< 1	< 0.005	0.0012	0.007
	5/13/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/27/2014	MAX	< 0.1	< 1	< 0.005	0.0012	0.0059
Monitor 13-IV Outwash 4.1 - 5.3 m	4/28/2009	Maxx	< 0.1	2	< 0.005	< -0.001	< 0.005
	6/26/2009	Maxx	< 0.1	2	< 0.03	< 0.005	< 0.03
	8/28/2009	Maxx	< 0.1	5	< 0.005	< 0.001	< 0.005
	11/18/2009	Maxx	< 0.1	1	< 0.005	< 0.001	0.006
	5/19/2010	Maxx	< 0.1	1	< 0.03	< 0.005	< 0.03
	10/27/2010	Maxx	< 0.1	10	< 0.005	< 0.001	0.005
	4/20/2011	Maxx	0.2	10	< 0.005	< 0.001	0.007
	11/2/2011	Maxx	0.3	10	< 0.005	< 0.001	0.011
	5/10/2012	Maxx		10	< 0.005	< 0.001	0.015
	11/26/2012	Maxx	0.42	1	< 0.01	< 0.001	< 0.005
	5/29/2013	MAX	0.39	1	< 0.005	< 0.001	< 0.005
	11/19/2013	MAX	0.36	10	< 0.005	< 0.001	0.021
	5/13/2014	MAX	0.36	10	< 0.025	< 0.005	< 0.025
	11/27/2014	MAX	0.31	10	< -0.001	< 0.001	0.0066
Monitor 13-V Outwash 0.1 - 2.2 m	4/28/2009	Maxx	< 0.1	1	< 0.005	< 0.001	0.077
	6/26/2009	Maxx	0.6	1	< 0.005	< 0.001	0.022
	8/28/2009	Maxx	< 0.1	1	< 0.005	< 0.001	0.013
	11/18/2009	Maxx	< 0.1	1	< 0.005	< 0.001	0.049
	5/19/2010	Maxx	< 0.1	1	< 0.005	< 0.001	0.048
	10/27/2010	Maxx	< 0.1	1	< 0.005	< 0.001	0.13
	4/20/2011	Maxx	< 0.1	1	< 0.005	< 0.001	0.077
	11/2/2011	Maxx	< 0.1	1	< 0.005	< 0.001	0.084
	5/10/2012	Maxx	< 0.1	1	< 0.005	< 0.001	0.028
	11/26/2012	Maxx	< 0.1	1	0.0095	< 0.001	0.014
	5/29/2013	MAX	< 0.1	1	< 0.005	< 0.001	0.029
	11/19/2013	MAX	< 0.1	1	< 0.005	< 0.001	0.04
	5/13/2014	MAX	< 0.1	1	< 0.005	< 0.001	0.049
	11/27/2014	MAX	< 0.1	1	0.0059	< 0.001	0.063
Monitor 14-II Outwash 4.5 - 5.1 m	4/28/2009	Maxx	< 0.1	1	< 0.005	0.002	0.025
	6/26/2009	Maxx	< 0.1	1	< 0.005	0.001	0.022
	8/28/2009	Maxx	< 0.1	1	< 0.005	0.001	0.031
	11/18/2009	Maxx	< 0.1	1	< 0.005	0.001	0.02
	5/19/2010	Maxx	< 0.1	1	< 0.005	0.002	0.028
	11/2/2010	Maxx	< 0.1	1	< 0.001	0.002	0.027
	4/26/2011	Maxx	< 0.1	1	< 0.005	0.001	0.032
	11/3/2011	Maxx	< 0.1	2	< 0.005	< 0.001	0.02
	5/14/2012	Maxx	< 0.1	5	< 0.005	0.001	0.012
	11/26/2012	Maxx	< 0.1	1	0.0085	0.0012	0.0061
	6/3/2013	MAX	< 0.1	2	< 0.005	< 0.001	0.0093
	11/20/2013	MAX	< 0.1	1	< 0.005	< 0.001	0.0074
	5/15/2014	MAX	< 0.1	1	< 0.005	0.0011	0.012
	11/21/2014	MAX	< 0.1	1	< 0.005	0.0012	0.0081

NOTE: ODWS - Ontario Drinking Water Standards
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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS Lab		mg/L	mg/L	mg/L	mg/L	mg/L	
				0.05 h		5.0 a	
Monitor 14-III Outwash 0.2 - 2.3 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	0.003	0.007
	6/26/2009	Maxx	< 0.1	< 1	< 0.005	0.003	< 0.005
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.008
	5/19/2010	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	11/2/2010	Maxx	< 0.1	< 1	< 0.005	0.002	0.015
	4/26/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	11/3/2011	Maxx	< 0.1	< 1	< 0.005	0.001	0.029
	5/14/2012	Maxx	< 0.1	< 1	< 0.005	0.0025	0.0089
	11/26/2012	Maxx	< 0.1	< 1	0.0073	0.002	0.013
	6/3/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0086
	11/20/2013	MAX	< 0.1	< 1	< 0.005	0.0012	0.0087
	5/15/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.014
11/25/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.018	
Monitor 14-IV Bedrock 25.6 - 27.1 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/19/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/2/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/3/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/3/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.011
	5/14/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/26/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/3/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/20/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/15/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0098
11/21/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
Monitor 15-I Bedrock 25.9 - 27.1 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.011
	5/27/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/8/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
Monitor 15-II Lower Till 19.8 - 21.0 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/27/2013	MAX	< 0.1	< 1	< 0.005	0.0012	< 0.005
	5/8/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
Monitor 15-III Upper Till 9.0 - 10.2 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.006
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	11/3/2011	Maxx	< 0.1	< 1	< 0.005	0.001	0.018
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	0.0015	0.011
	11/23/2012	Maxx	< 0.1	< 1	< 0.005	0.0011	< 0.005
	5/27/2013	MAX	< 0.1	< 1	< 0.005	0.0013	< 0.005
	11/19/2013	MAX	< 0.1	< 1	< 0.005	0.0012	0.0056
	5/8/2014	MAX	< 0.1	< 1	< 0.005	0.0014	< 0.005
11/21/2014	MAX	< 0.1	< 1	< 0.005	0.0013	0.0058	

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
		mg/L	mg/L	mg/L	mg/L	mg/L	
ODWS	Lab			0.05 h		5.0 a	
Monitor 15-IV Outwash 5.6 - 6.8 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.012
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	11/3/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	5/7/2012	Maxx		< 1	< 0.005	0.0013	0.016
	11/23/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0083
	5/27/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0073
	11/19/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/8/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.013
	11/21/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.023
Monitor 15-V Fill 0.1 - 2.3 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	0.001	0.016
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.023
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	11/3/2011	Maxx	< 0.1	< 1	< 0.005	0.001	0.023
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	0.0012	0.018
	11/23/2012	Maxx	< 0.1	< 1	< 0.005	0.0014	0.02
	5/27/2013	MAX	< 0.1	< 1	< 0.005	0.0024	0.0059
	11/19/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/8/2014	MAX	< 0.1	< 1	< 0.005	0.0036	0.0073
	11/21/2014	MAX	< 0.1	< 1	< 0.005	0.0028	0.018
	Monitor 16-I Lower Till 13.0 - 15.1 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001
8/25/2009		Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
10/21/2010		Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
4/19/2011		Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
5/7/2012		Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0089
5/22/2013		MAX	< 0.1	< 1	< 0.005	0.0014	< 0.005
5/7/2014		MAX	< 0.1	< 1	< 0.005	< 0.001	0.0097
Monitor 16-IV Upper Till 3.8 - 4.4 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.012
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.016
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	0.003	0.019
	10/21/2010	Maxx	< 0.1	< 1	< 0.005	0.003	0.019
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	0.002	0.017
	11/2/2011	Maxx	< 0.1	< 1	< 0.005	0.002	0.023
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	0.0019	0.026
	11/21/2012	Maxx	< 0.1	< 1	< 0.005	0.0028	0.015
	5/23/2013	MAX	< 0.1	< 1	< 0.005	0.002	0.015
	11/14/2013	MAX	< 0.1	< 1	< 0.005	0.002	0.013
	5/7/2014	MAX	< 0.1	< 1	< 0.005	0.0028	0.021
	11/21/2014	MAX	< 0.1	< 1	< 0.005	0.0034	0.025
Monitor 16-V Fill 0.3 - 2.4 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.021
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	0.001	0.025
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.023
	5/18/2010	INSV					
	10/21/2010	INSV					
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.02
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.031
	5/22/2013	MAX	< 0.1	< 1	< 0.005	0.0013	0.025
	5/7/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.02

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS Lab		mg/L	mg/L	mg/L	mg/L	mg/L	
				0.05 h		5.0 a	
Monitor 16-VI Lower Till 19.2 - 17.6 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/21/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.011
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0068
	5/22/2013	MAX	< 0.1	< 1	< 0.005	0.0072	0.0061
	5/7/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
Monitor 16-VII Bedrock 25.5 - 27.0 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	0.013	< 0.005
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/2/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	5/14/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0057
	11/21/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/22/2013	MAX	< 0.1	< 1	< 0.005	0.0047	0.005
	11/14/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/7/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
11/19/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
Monitor 17-I Bedrock 24.4 - 25.6 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.01
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.017
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.013
	4/28/2011	Maxx	< 0.1	< 1	< 0.005	0.001	0.011
	5/10/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.012
	5/29/2013	MAX	< 0.1	< 1	< 0.005	0.0011	0.014
	5/13/2014	MAX	< 0.1	< 1	< 0.005	0.001	0.018
Monitor 17-II Lower Till 18.6 - 19.2 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/28/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	5/10/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/29/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.013
	5/13/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0064
Monitor 17-III Upper Till 5.9 - 7.1 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.007
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/28/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	5/10/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0066
	5/29/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0062
	5/13/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.015
Monitor 17-IV Outwash 0.5 - 4.2 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.016
	6/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.024
	8/27/2009	INSV					
	5/20/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.037
	10/27/2010	INVS					
	4/28/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.02
	11/4/2011	INSV					
	5/10/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.045
	11/21/2012	Dry					
	5/29/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.027
	5/13/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.032
11/25/2014	MAX	< 0.1	< 1	< 0.005	0.0023	0.026	

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS Lab		mg/L	mg/L	mg/L	mg/L	mg/L	
				0.05 h		5.0 a	
Monitor 18-III Outwash 0.1 - 2.9 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	0.003	0.087
	6/26/2009	Maxx	< 0.1	< 1	< 0.005	0.003	0.12
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	0.003	0.086
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	0.006	0.16
	5/20/2010	Maxx	< 0.1	< 1	< 0.005	0.005	0.11
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.12
	4/28/2011	Maxx	< 0.1	< 1	< 0.005	0.002	0.083
	11/4/2011	Maxx	< 0.1	< 1	< 0.005	0.008	0.17
	5/10/2012	Maxx	< 0.1	< 5	< 0.005	0.0038	0.089
	11/28/2012	Maxx	< 0.1	< 10	< 0.005	0.0094	0.14
	5/30/2013	MAX	< 0.1	< 2	< 0.005	0.0052	0.11
	11/25/2013	MAX	< 0.5	< 1	< 0.005	0.0055	0.15
	5/13/2014	MAX	< 0.1	< 1	< 0.005	0.0045	0.09
11/25/2014	MAX	< 1	< 1	< 0.005	0.0051	0.082	
Monitor 19-I Bedrock 24.6 - 25.8 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/5/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/24/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0095
	5/6/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
Monitor 19-II Lower Till 19.8 - 21.0 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/5/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/24/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/6/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0053
Monitor 19-IV Upper Till 6.1 - 8.9 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	0.002	0.007
	5/5/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/24/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0058
	5/6/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
Monitor 20-I Bedrock 17.6 - 18.8 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.02
	5/19/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.021
	8/26/2009	N/A					
	1/21/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/28/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
Monitor 20-IR Bedrock 17.6 - 18.8 m	5/2/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	5/15/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0068
	5/22/2013	N/A					
	5/8/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
Monitor 21-I Upper Till 11.0 - 12.5 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.016
	5/19/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.016
	6/22/2009	N/A					
	8/26/2009	N/A					
	11/18/2009	N/A					

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**

		Trace Elements				
Date		I	Br	Cr	Ni	Zn
ODWS Lab		mg/L	mg/L	mg/L	mg/L	mg/L
				0.05 h		5.0 a
Monitor 21-IR Upper Till 11.0 - 12.5 m	1/21/2010	Maxx		< 0.005	< 0.001	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001
	10/28/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001
	5/3/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001
	11/8/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001
	5/16/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001
	11/28/2012	Maxx	< 0.1	< 1	< 0.005	0.0028
	5/29/2013	MAX	< 0.1	< 1	< 0.005	0.022
	11/19/2013	MAX	< 0.1	< 1	< 0.005	< 0.001
	5/14/2014	MAX	< 0.1	< 1	< 0.005	< 0.001
	11/24/2014	MAX	< 0.1	< 1	< 0.005	< 0.001
Monitor 26-I Outwash 0.8 - 2.3 m	6/23/2009	INV				
	8/26/2009	INSV				
	11/18/2009	INSV				
	6/3/2013	N/A				
	5/14/2014	MAX	< 0.1	< 1	< 0.005	< 0.001
11/20/2014	froze					
Monitor 28-I Outwash 0.8 - 2.3 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	0.003
	6/23/2009	Maxx	< 0.1	< 1	< 0.005	0.002
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	0.002
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	0.003
	5/20/2010	INSV				
	10/28/2010	Maxx	< 0.1	< 1	< 0.005	0.001
	5/9/2011	Maxx	< 0.1	< 1	< 0.005	0.002
	5/17/2012	Maxx	< 0.1	< 1	< 0.005	0.0021
	6/3/2013	MAX	< 0.1	< 1	< 0.005	0.0013
	5/14/2014	MAX	< 0.1	< 1	< 0.005	0.0014
	11/20/2014	froze				
Monitor 30-I Outwash 0.6 - 2.3 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	0.005
	6/23/2009	Maxx	< 0.1	< 1	< 0.005	0.002
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	0.001
	5/20/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001
	10/28/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001
	5/9/2011	Maxx	< 0.1	< 1	< 0.005	0.001
	5/17/2012	Maxx	< 0.1	< 1	< 0.005	0.0014
	11/29/2012	Maxx	< 0.1	< 1	< 0.005	0.0018
	6/3/2013	MAX	< 0.1	< 1	< 0.005	< 0.001
	11/14/2013	N/A				
	5/14/2014	MAX	< 0.1	< 1	< 0.005	0.0084
	11/20/2014	froze				
Monitor 35-I Outwash 0.2 - 1.9 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001
	6/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001
	5/20/2010	N/A				
	10/28/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001
	5/9/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001
	5/15/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001
	5/22/2013	N/A				
	5/14/2014	MAX	< 0.1	< 1		

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
		mg/L	mg/L	mg/L	mg/L	mg/L	
ODWS	Lab			0.05 h		5.0 a	
Monitor 37-I Bedrock 23.0 - 27.5 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	6/23/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.036
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.018
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	5/19/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	7/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/28/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	12/6/2010	Maxx	< 0.1	< 1	< 0.005	0.003	0.12
	5/9/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	9/30/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	11/8/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
Monitor 37-IR Bedrock 23.7- 27.3 m	2/14/2012	Maxx	< 5	< 1	< 0.005	0.0029	0.025
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.022
	8/15/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0081
	10/4/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	11/22/2012	Maxx	< 0.1	< 1	< 0.005	0.0015	0.026
	5/23/2013	MAX	< 0.1	< 1	< 0.005	0.0012	0.061
	7/30/2013	MAX	< 0.1	< 1	< 0.005	0.001	0.036
	9/26/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.037
	11/13/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.028
	5/7/2014	MAX	< 0.1	< 1	< 0.005	0.0014	0.04
	8/2/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.025
	10/1/2014	MAX	< 0.1	< 1	< 0.005	0.0014	0.015
11/20/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.019	
Monitor 37-IIR Bedrock 24.4 - 33.7 m	2/14/2012	Maxx	< 5	< 1	< 0.005	0.0032	0.078
	5/7/2012	NA					
	8/15/2012	Maxx	< 0.1	< 1	< 0.005	0.0015	0.033
	10/4/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.017
	11/22/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0074
	5/23/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/30/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	9/26/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0082
	11/13/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/14/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0097
	8/2/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0057
	10/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.011
11/20/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
		mg/L	mg/L	mg/L	mg/L	mg/L	
ODWS	Lab			0.05 h		5.0 a	
Monitor 50-I Bedrock 39.8 - 41.2 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/19/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	10/21/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	12/6/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/27/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	9/30/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	10/31/2011	Maxx	0.3	< 1	< 0.005	< 0.001	0.013
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/15/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/3/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/20/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0096
	5/21/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/30/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	9/26/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/13/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
5/5/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
8/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
10/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
11/17/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
Monitor 53-I Bedrock 21.0 - 22.6 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/24/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/17/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	12/6/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/26/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/20/2011	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	9/30/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/31/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0054
	8/16/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/4/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0054
	11/23/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/27/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/30/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	9/26/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/18/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
5/6/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
8/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
10/2/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
11/20/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
		mg/L	mg/L	mg/L	mg/L	mg/L	
ODWS	Lab			0.05 h		5.0 a	
Monitor 53-III Lower Till 13.4 - 15.2 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	6/24/2009	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.013
	11/17/2009	Maxx	< 0.1	< 1	< 0.005	0.001	0.006
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.008
	10/26/2010	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	5/2/2011	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	10/31/2011	Maxx	< 0.1	< 1	< 0.005	0.001	0.012
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	0.0016	0.0063
	11/23/2012	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	5/27/2013	MAX	< 0.1	< 1	< 0.005	0.001	< 0.005
	11/18/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/6/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/20/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0063
Monitor 54-I Bedrock 25.9 - 27.4 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.071
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.05
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.063
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.055
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.06
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.055
	5/5/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.05
	11/8/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.046
	5/8/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.074
	11/29/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.05
	5/27/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.059
	11/19/2013	MAX	< 0.1	< 10	< 0.005	< 0.001	0.047
	5/7/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.066
	11/24/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.051
Monitor 60-I Lower Till 13.3 - 14.8 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.01
	11/17/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/2/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.01
	11/8/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	5/7/2012	N/A					
	10/4/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/22/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/22/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/18/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/5/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
11/20/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
Monitor 60-II Upper Till 10.7 - 12.2 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/17/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/2/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/8/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.01
	5/16/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/22/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/22/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/18/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0051
	5/5/2014	MAX	< 0.1	< 1	< 0.005	0.0011	< 0.005
	11/20/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.019

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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS Lab		mg/L	mg/L	mg/L	mg/L	mg/L	
				0.05 h		5.0 a	
Monitor 60-III Upper Till 0.6 - 5.2	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	6/22/2009	Maxx	0.3	< 1	< 0.005	0.002	0.005
	8/27/2009	Maxx	0.3	< 1	< 0.005	0.003	< 0.005
	11/17/2009	Maxx	0.3	< 1	< 0.005	0.003	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	0.002	< 0.005
	10/27/2010	Maxx	< 0.1	< 1	< 0.005	0.002	0.007
	5/2/2011	Maxx	< 0.1	< 1	< 0.005	0.002	0.011
	5/16/2012	Maxx	0.11	< 1	< 0.005	0.0013	0.0082
	11/22/2012	Maxx	< 0.1	1.7	< 0.005	< 0.001	< 0.005
	5/22/2013	MAX	1.1	1.4	< 0.005	0.0039	< 0.005
	11/18/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0064
	5/5/2014	MAX	0.61	< 1	< 0.005	0.0036	< 0.005
	11/20/2014	MAX	0.27	< 1	< 0.005	0.0038	< 0.005
Monitor 90-II bedrock 31.4 - 32.9 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	0.01	0.4
	6/24/2009	Maxx	< 0.1	< 1	< 0.005	0.009	0.36
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	0.007	0.29
	11/16/2009	Maxx	< 0.2	< 1	< 0.005	0.005	0.16
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	0.005	0.17
	7/27/2010	NA					
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	0.003	0.14
	12/6/2010	NA					
	5/5/2011	Maxx	< 0.1	< 1	< 0.005	0.004	0.18
	11/1/2011	Maxx	< 0.1	< 1	< 0.005	0.004	0.11
	5/8/2012	Maxx	< 0.1	< 1	< 0.005	0.0034	0.14
	11/23/2012	Maxx	< 0.1	< 1	< 0.005	0.003	0.095
	5/24/2013	MAX	< 0.1	< 1	< 0.005	0.0027	0.12
	11/14/2013	MAX	< 0.1	< 1	< 0.005	0.0021	0.11
5/5/2014	MAX	< 0.1	< 1	< 0.005	0.0036	0.15	
11/19/2014	MAX	< 0.1	< 1	< 0.005	0.0026	0.096	
Monitor 91-I Bedrock 25.5 - 27.0 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	8/26/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.012
	7/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	10/25/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	12/6/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	5/5/2011	Maxx	< 1	< 1	< 0.005	< 0.001	0.009
	7/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	9/30/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	11/1/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	5/8/2012	NA					
	5/14/2012	Maxx		< 1	< 0.005	< 0.001	< 0.005
	11/29/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0088
	5/27/2013	MAX			< 0.005	< 0.001	0.012
	11/19/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/15/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/2/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
11/24/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Related Objective, h - Health Related Objective

**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
		mg/L	mg/L	mg/L	mg/L	mg/L	
ODWS	Lab			0.05 h		5.0 a	
Monitor 92-I Bedrock 32.0 - 33.5 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.14
	6/23/2009	Maxx	< 0.1	< 1	< 0.005	0.001	0.08
	8/28/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.092
	11/18/2009	Maxx	< 0.1	< 1	< 0.005	0.001	0.095
	5/19/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.081
	10/20/2010	Deco					
	12/6/2010	Deco					
	4/19/2011	Deco					
	7/20/2011	Deco					
	9/30/2011	Deco					
11/1/2011	Deco						
Monitor 93-I Bedrock 24.6 - 28.7 m	4/28/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.011
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	7/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.012
	10/20/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	12/6/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	0.001	0.014
	7/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	9/30/2011	Maxx	< 0.1	< 1	< 0.005	0.001	0.018
	11/1/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.012
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0081
	8/15/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0095
	10/3/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0073
	11/20/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0096
	5/21/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0092
	7/30/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0092
	9/26/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.011
	11/13/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.046
5/5/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0089	
7/31/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0082	
10/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0094	
11/17/2014	MAX	< 0.1	< 1	< 0.005	0.0013	0.042	
Monitor 94-I Bedrock 20.6 - 25.2 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	11/17/2009	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.009
	7/27/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.007
	10/20/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	12/6/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.006
	4/27/2011	Maxx	< 0.1	< 1	< 0.005	0.001	< 0.005
	7/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	9/30/2011	Maxx	< 0.1	< 1	< 0.005	0.003	0.014
	10/31/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/15/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/3/2012	Maxx	< 0.1	< 1	< 0.005	0.0011	< 0.005
	11/22/2012	Maxx	< 0.1	< 1	< 0.005	0.0011	0.0077
	5/27/2013	MAX	< 0.1	< 1	< 0.005	0.001	0.0072
	7/30/2013	MAX	< 0.1	< 1	< 0.005	0.001	0.0067
	9/26/2013	MAX	< 0.1	< 1	< 0.005	0.001	0.008
	11/13/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
5/6/2014	MAX	< 0.1	< 1	< 0.005	0.0023	0.015	
8/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.014	
10/2/2014	MAX	< 0.1	< 1	< 0.005	0.0011	0.011	
11/19/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.01	

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Related Objective, h - Health Related Objective

**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS Lab		mg/L	mg/L	mg/L	mg/L	mg/L	
				0.05 h		5.0 a	
Monitor 95-I Bedrock 36.2 - 41.0 m	5/1/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.021
	6/22/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.022
	11/17/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.018
	7/27/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	10/21/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.01
	12/6/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	4/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.008
	7/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	9/30/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.011
	10/31/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.01
	5/16/2012	Maxx	< 0.1	< 1	< 0.005	0.0014	0.049
	8/15/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.048
	10/3/2012	Maxx	< 0.1	< 1	< 0.005	0.0017	0.11
	11/20/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.058
	5/21/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.062
	7/30/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.06
	9/26/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.064
	11/13/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.058
5/5/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.062	
7/31/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.044	
10/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.059	
11/19/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.058	
Monitor 96-I Bedrock 36.6 - 38.1 m	5/16/2012	MAX	<	<	<	<	<
	5/16/2012	MAX	<	<	<	<	<
	5/16/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/16/2012	Maxx	0.1	1	0.005	0.001	0.005
	10/4/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/29/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0054
	6/3/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	7/31/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	9/26/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	9/27/2013	MAX	<	<	<	<	<
	11/20/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/15/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/1/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	10/2/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
11/20/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
Monitor 96-II Bedrock	5/16/2012	MAX	<	<	<	<	<
	5/16/2012	MAX	<	<	<	<	<
	5/16/2012	Maxx	0.1	1	0.005	0.0087	0.47
	5/16/2012	Maxx	< 0.1	< 1	< 0.005	0.0087	0.47
	10/4/2012	Maxx	< 0.1	< 1	< 0.005	0.014	0.9
	11/29/2012	Maxx	< 0.1	< 1	< 0.005	0.014	0.9
	6/3/2013	MAX	< 0.1	< 1	< 0.005	0.021	1.2
	7/31/2013	MAX	< 0.1	< 1	< 0.005	0.018	1.1
	9/26/2013	MAX	< 0.1	< 1	< 0.005	0.02	1.2
	9/27/2013	MAX	<	<	<	<	<
	11/20/2013	MAX	< 0.1	< 1	< 0.005	0.018	1.1
	5/15/2014	MAX	< 0.1	< 1	< 0.005	0.018	1.1
	8/1/2014	MAX	< 0.1	< 1	< 0.005	0.015	0.89
	10/2/2014	MAX	< 0.1	< 1	< 0.005	0.013	0.77
11/20/2014	MAX	< 0.1	< 1	< 0.005	0.014	0.76	

NOTE: ODWS - Ontario Drinking Water Standards
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**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



		Trace Elements					
Date		I	Br	Cr	Ni	Zn	
ODWS Lab		mg/L	mg/L	mg/L	mg/L	mg/L	
				0.05 h		5.0 a	
Monitor C2-I Outwash 7.5 - 9.0 m	4/30/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/24/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/27/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/17/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/17/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	10/20/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/26/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	10/31/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.013
	5/9/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0067
	11/23/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0058
	5/27/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/18/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/6/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0084
11/19/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
Monitor C6-I Outwash 10.0 - 11.5 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	0.028	0.053
	6/24/2009	Maxx	< 0.1	< 1	< 0.005	0.004	0.039
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	0.003	0.037
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.043
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	0.011	0.053
	10/20/2010	Maxx	< 0.1	< 1	< 0.005	0.009	0.042
	4/19/2011	Maxx	< 0.1	< 5	< 0.005	0.044	0.043
	11/1/2011	Maxx	< 0.1	< 1	< 0.005	0.007	0.041
	5/7/2012	Maxx	< 0.1	< 1	< 0.005	0.0095	0.039
	11/21/2012	Maxx	< 0.1	< 1	< 0.01	0.0089	0.038
	5/21/2013	MAX	< 0.1	< 1	< 0.005	0.0064	0.045
	11/14/2013	MAX	< 0.1	< 5	< 0.01	0.018	0.045
	5/5/2014	MAX	< 0.1	< 1	< 0.005	0.017	0.043
11/17/2014	MAX	< 0.1	< 10	< 0.005	0.0043	0.033	
Monitor C9-I Outwash 5.8 - 7.3 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/23/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.005
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.006
	10/20/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/19/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/3/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.018
	5/8/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0054
	11/21/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.0058
	5/21/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/18/2013	MAX	< 0.1	< 2	< 0.005	< 0.001	0.014
	5/5/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
11/19/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	
Monitor C10-I Outwash 6.9 - 8.5 m	4/29/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	6/23/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	8/25/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/16/2009	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.007
	5/18/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.009
	10/20/2010	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	4/20/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/3/2011	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.012
	5/8/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	0.015
	11/21/2012	Maxx	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	5/21/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
	11/18/2013	MAX	< 0.1	< 1	< 0.005	< 0.001	0.0051
	5/5/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005
11/19/2014	MAX	< 0.1	< 1	< 0.005	< 0.001	< 0.005	

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Related Objective, h - Health Related Objective

**C2: Routine Groundwater Quality - Trace Metals Analysis -Closed
Eastview Road Landfill Site**



Monitor
C11-I
Outwash
5.9 - 7.4 m

		Trace Elements					
Date		I mg/L	Br mg/L	Cr mg/L	Ni mg/L	Zn mg/L	
ODWS	Lab			0.05 h		5.0 a	
4/29/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.097	
6/23/2009	Maxx	< 0.1	< 1	< 0.005	0.003	0.081	
8/25/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.058	
11/16/2009	Maxx	< 0.1	< 1	< 0.005	0.002	0.05	
5/18/2010	Maxx	< 0.1	< 1	< 0.005	0.003	0.096	
10/20/2010	Maxx	< 0.1	< 1	< 0.005	0.001	0.073	
4/20/2011	Maxx	< 0.1	< 2	< 0.005	0.002	0.097	
11/4/2011	Maxx	< 0.1	< 1	< 0.005	0.002	0.075	
5/8/2012	Maxx	< 0.1	< 5	< 0.005	0.0026	0.11	
11/21/2012	Maxx	< 0.1	< 1	< 0.005	0.0026	0.094	
5/21/2013	MAX	< 0.1	< 1	< 0.005	0.0012	0.1	
11/18/2013	MAX	< 0.1	< 2	< 0.005	< 0.001	0.099	
5/5/2014	MAX	< 0.1	< 1	< 0.005	0.0023	0.1	
11/19/2014	MAX	< 0.1	< 1	< 0.005	0.003	0.099	

NOTE: ODWS - Ontario Drinking Water Standards
a - Aesthetic Related Objective, h - Health Related Objective

C3: Routine Surface Water Quality - General Analysis - Closed Eastview Road Landfill Site



SW 1 Drainage Discharge																				
Date	Lab.	Field pH	Cond-uctivity	Alk. CaCO3	Chloride mg/L	Boron mg/L	Phenol mg/L	NH3-N mg/L	Iron mg/L	Manganese mg/L	Chromium mg/L	Nickel mg/L	Zinc mg/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	TSS mg/L	Hard. CaCO3	Un-ion. NH3-N
PWQO		6.5-8.5				0.2	0.001		0.30		0.1	0.025	0.02							0.02
5/28/2009	Maxx	7.50	831	242	120	< 0.02	< 0.001	0.10	0.75	0.14	< 0.01	< 0.05	0.05	74	62	18	1	5	270	0.0008
7/27/2009	Maxx	7.60	841	288	89	< 0.02	< 0.001	0.16	0.51	0.2	< 0.01	< 0.05	0.1	90	40	24	1	4	350	0.0023
10/14/2009	Maxx	7.50	912	254	120	< 0.02	< 0.001	0.08	0.7	0.13	< 0.01	< 0.05	0.14	94	51	25	1	16	340	0.0004
11/5/2009	Maxx	7.40	997	275	130	0.02	< 0.001	0.06	0.44	0.14	< 0.01	< 0.05	0.14	100	57	27	< 1	4	370	0.0002
11/26/2009	Maxx	7.60	1020	280	130	< 0.02	< 0.001	0.07	0.37	0.13	< 0.01	< 0.05	0.16	110	63	29	< 1	2	380	0.0004
12/16/2009	Maxx	7.60	801	228	86	< 0.02	< 0.001	0.08	0.58	0.05	< 0.01	< 0.05	0.08	84	41	21	2	17	300	0.0003
3/25/2010	Maxx	7.70	793	194	100	< 0.02	< 0.001	< 0.05	0.43	0.04	< 0.01	< 0.05	0.07	86	65	21	< 1	14	270	0.0004
8/20/2010	Maxx	7.80	888	284	100	< 0.02	< 0.001	< 0.05	0.6	0.15	< 0.01	< 0.05	0.14	97	49	27	< 1	23	350	0.0013
10/4/2010	Maxx	6.90	932	292	110	0.03	< 0.001	< 0.05	0.25	0.1	< 0.01	< 0.05	0.2	100	60	30	< 1	4	370	0.0001
11/29/2010	Maxx	6.60	914	266	110	< 0.02	< 0.001	< 0.05	0.34	0.05	< 0.01	< 0.05	0.09	97	59	24	1	11	310	0.0000
3/15/2011	Maxx	7.61	699	201	86	0.02	< 0.001	< 0.05	0.2	0.017	< 0.005	< 0.001	0.041	82	57	21	0.9	4	260	0.0002
7/7/2011	Maxx	7.71	790	286	77	0.02	< 0.001	0.13	0.7	0.11	< 0.005	0.002	0.085	98	49	26	1.1	6	350	0.0027
9/30/2011	Maxx	7.26	873	277	100	0.02	0.005	0.14	0.4	0.14	< 0.005	0.003	0.084	95	54	27	1.6	14	330	0.0006
10/19/2011	Maxx	8.86	950	284	110	0.012	< 0.001	< 0.05	0.24	0.033	< 0.005	0.0015	0.074	81	60	21	0.8	14	350	0.0056
12/13/2011	Maxx	8.16	851	196	110	0.012	< 0.001	< 0.05	0.24	0.033	< 0.005	0.0015	0.074	81	60	21	0.8	8	300	0.0007
5/4/2012	Maxx	7.78	830	200	120	0.017	< 0.001	< 0.05	0.39	0.048	< 0.005	< 0.001	0.05	82	70	20	1.4	6	260	0.0007
6/6/2012	Maxx	6.97	840	250	88	< 0.01	< 0.001	< 0.05	0.19	0.1	< 0.005	0.0015	0.13	95	46	26	0.83	4	350	0.0001
8/13/2012	Maxx	7.30	670	190	67	0.021	< 0.001	< 0.05	0.34	0.051	< 0.005	0.0013	0.04	79	37	18	2.2	6	260	0.0005
9/25/2012	Maxx	7.40	790	240	85	0.02	< 0.001	0.12	0.24	0.095	< 0.005	0.0013	0.11	92	46	24	1.3	7	310	0.0006
12/4/2012	Maxx	7.24	790	200	89	0.032	< 0.001	< 0.05	0.1	0.019	< 0.005	< 0.001	0.044	89	60	22	1.9	< 1	290	0.0001
4/5/2013	MAX	7.61	760	190	110	0.013	< 0.001	< 0.05	< 0.1	0.016	< 0.005	< 0.001	0.036	71	53	18	0.58	2	280	0.0002
7/17/2013	MAX	7.58	850	290	89	0.021	< 0.001	0.17	0.59	0.14	< 0.005	0.0016	0.061	96	57	24	1	5	350	0.0022
9/12/2013	MAX	7.61	690	230	77	0.025	< 0.001	0.11	0.72	0.15	< 0.005	0.0015	0.081	78	50	18	1.9	21	260	0.0016
12/2/2013	MAX	7.71	890	310	100	0.022	0.003	0.13	0.53	0.36	< 0.005	0.0012	0.11	110	68	28	1.4	6	330	0.0008
3/31/2014	MAX	7.28	800	230	110	< 0.01	< 0.001	0.15	0.13	0.04	< 0.005	< 0.001	0.031	82	54	22	2.2	2	280	0.0003
7/16/2014	MAX	7.64	910	330	97	0.013	0.003	0.17	1.5	0.33	< 0.005	< 0.001	0.036	110	64	27	1.9	2	370	0.0024
8/6/2014	MAX	8.02	870	320	94	0.014	0.002	0.16	1.6	0.37	< 0.005	0.0011	0.032	100	60	23	1.8	3	330	0.0046
9/22/2014	MAX	7.53	680	250	68	0.02	0.005	0.31	0.42	0.043	< 0.005	< 0.001	0.021	76	47	18	1.8	< 1	280	0.0024
12/1/2014	MAX	7.94	790	280	87	0.02	0.001	0.12	0.43	0.081	< 0.005	0.0014	0.048	87	57	23	1.6	1	300	0.0013

C3: Routine Surface Water Quality - General Analysis - Closed Eastview Road Landfill Site



SW 2 Ditch																					
Date	Lab.	Field pH	Cond-uctivity	Alk. CaCO3	Chloride mg/L	Boron mg/L	Phenol mg/L	NH3-N mg/L	Iron mg/L	Manganese mg/L	Chromium mg/L	Nickel mg/L	Zinc mg/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	TSS mg/L	Hard. CaCO3	Un-ion. NH3-N	
PWQO		6.5-8.5				0.2	0.001		0.30		0.1	0.025	0.02							0.02	
5/28/2009	Maxx	7.40	614	150	84	0.02	< 0.001	0.09	1.1	0.09	< 0.01	< 0.05	0.03	46	50	15	3	5	170	0.0006	
7/27/2009	Maxx	8.10	364	92	40	< 0.02	< 0.001	< 0.05	0.85	0.08	< 0.01	< 0.05	0.01	25	23	13	2	11	110	0.0025	
10/14/2009	Maxx	7.60	595	173	63	0.03	< 0.001	0.11	1.9	0.17	< 0.01	< 0.05	0.03	66	40	11	2	12	210	0.0006	
11/5/2009	Maxx	7.50	734	178	100	0.04	< 0.001	0.14	1.9	0.37	< 0.01	< 0.05	0.01	66	59	12	3	7	220	0.0006	
11/26/2009	Maxx	7.80	517	140	57	0.02	< 0.001	0.10	0.87	0.1	< 0.01	< 0.05	0.01	52	38	11	2	10	170	0.0012	
12/16/2009	Maxx	7.80	650	181	59	< 0.02	< 0.001	0.07	0.37	0.07	< 0.01	< 0.05	0.02	68	32	14	1	1	240	0.0006	
3/25/2010	Maxx	7.90	996	229	150	0.05	< 0.001	0.07	0.83	0.15	< 0.01	< 0.05	0.13	90	84	19	2	5	300	0.0008	
8/20/2010	Maxx	8.00	903	292	99	0.05	< 0.001	0.09	1.2	0.08	< 0.01	< 0.05	0.09	100	53	28	<	1	22	360	0.0033
10/4/2010	Maxx	7.10	1030	256	170	0.05	< 0.001	0.13	1.4	0.39	< 0.01	< 0.05	0.02	87	110	18	3	6	280	0.0003	
11/29/2010	Maxx	7.00	791	249	83	0.05	< 0.001	0.17	1.3	0.17	< 0.01	< 0.05	0.06	89	52	20	3	7	260	0.0002	
3/15/2011	Maxx	7.99	763	190	110	0.05	< 0.001	0.11	0.8	0.1	< 0.005	0.002	0.1	84	68	18	3.8	3	250	0.0013	
7/7/2011	Maxx	7.48	1180	302	200	0.08	< 0.001	0.77	4.7	1.6	< 0.005	0.002	0.023	99	130	24	1.9	33	350	0.0074	
9/30/2011	Maxx	7.59	723	180	96	0.05	0.003	0.06	1.3	0.062	< 0.005	0.001	0.042	69	65	14	5.9	6	220	0.0006	
10/19/2011	Maxx	9.08	891	231	120	0.052	0.001	< 0.05	1.1	0.25	< 0.005	0.004	0.16	97	66	22	3.4	3	270	0.0084	
12/13/2011	Maxx	7.84	871	243	95	0.052	< 0.001	0.17	1.1	0.25	< 0.005	0.004	0.16	97	66	22	3.4	4	300	0.0012	
5/4/2012	Maxx	7.68	690	160	100	0.033	0.001	< 0.05	1.2	0.075	< 0.005	0.0012	0.032	57	61	18	3.7	16	200	0.0007	
6/6/2012	Maxx	7.21	1500	330	230	0.067	0.001	0.10	2.5	2.1	< 0.005	0.0026	0.018	120	160	27	1.4	11	410	0.0005	
8/13/2012	Maxx	7.65	540	140	42	0.042	< 0.001	< 0.05	0.95	0.033	< 0.005	0.0012	0.031	65	30	12	3.2	8	210	0.0010	
9/25/2012	Maxx	7.90	540	200	35	0.04	< 0.001	0.07	0.21	0.018	< 0.005	< 0.001	0.0081	69	27	15	2.6	<	1	230	0.0011
12/4/2012	Maxx	7.44	580	190	42	0.038	< 0.001	0.09	0.55	0.048	< 0.005	0.0011	0.027	73	30	20	3.5	5	240	0.0003	
4/5/2013	MAX	7.88	870	210	120	0.033	< 0.001	0.07	0.47	0.077	0.0075	0.0023	0.074	76	65	18	2.3	2	300	0.0005	
7/17/2013	MAX	7.38	1100	290	130	0.069	< 0.001	0.29	1.8	2.1	< 0.005	0.0045	0.057	100	110	23	2.5	5	340	0.0025	
9/12/2013	MAX	7.83	300	99	23	0.033	< 0.001	0.05	1.8	0.067	< 0.005	0.002	0.05	38	15	7.8	3.5	17	120	0.0014	
12/2/2013	MAX	7.39	970	290	120	0.06	0.002	0.43	1.5	0.24	< 0.005	0.0026	0.1	100	82	27	3.6	2	360	0.0011	
3/31/2014	MAX	7.64	650	180	88	< 0.01	< 0.001	0.39	0.75	0.17	< 0.005	< 0.001	0.03	64	48	14	3.9	5	210	0.0018	
7/16/2014	MAX	7.73	600	180	76	0.026	0.002	0.05	1.2	0.12	< 0.005	0.0011	0.014	57	48	14	2.7	3	200	0.0009	
8/6/2014	MAX	#####	590	170	79	0.035	0.001	0.11	1.3	0.17	< 0.005	< 0.001	0.021	59	47	12	2.9	3	190	0.1100	
9/22/2014	MAX	7.74	360	120	28	0.023	< 0.001	0.08	1.4	0.087	< 0.005	0.0014	0.031	45	18	9.4	4.6	17	160	0.0010	
12/1/2014	MAX	7.78	930	330	99	0.023	< 0.001	0.07	0.28	0.093	< 0.005	< 0.001	0.0095	110	65	27	2.5	4	360	0.0005	

C3: Routine Surface Water Quality - General Analysis - Closed Eastview Road Landfill Site



SW 3A Hadati Creek																				
Date	Lab.	Field pH	Conductivity	Alk. CaCO3	Chloride mg/L	Boron mg/L	Phenol mg/L	NH3-N mg/L	Iron mg/L	Manganese mg/L	Chromium mg/L	Nickel mg/L	Zinc mg/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	TSS mg/L	Hard. CaCO3	Un-ion. NH3-N
PWQO		6.5-8.5				0.2	0.001		0.30		0.1	0.025	0.02							0.02
5/28/2009	Maxx	7.50	826	214	130	< 0.02	< 0.001	0.11	0.76	0.12	< 0.01	< 0.05	0.04	65	68	18	2	4	250	0.0008
7/27/2009	Maxx	7.90	483	135	44	< 0.02	< 0.001	0.07	0.72	0.05	< 0.01	< 0.05	0.02	39	30	15	2	10	170	0.0021
10/14/2009	Maxx	7.60	884	252	110	0.03	< 0.001	0.06	0.79	0.1	< 0.01	< 0.05	0.05	85	53	21	2	10	310	0.0004
11/5/2009	Maxx	7.80	994	272	140	0.04	< 0.001	0.11	0.58	0.12	< 0.01	< 0.05	0.06	100	70	24	2	11	340	0.0010
11/26/2009	Maxx	8.00	775	215	94	0.02	< 0.001	0.07	0.68	0.11	< 0.01	< 0.05	0.05	78	52	19	2	3	270	0.0012
12/16/2009	Maxx	8.00	762	214	80	< 0.02	< 0.001	0.09	1	0.1	< 0.01	< 0.05	0.06	81	41	19	1	25	280	0.0012
3/25/2010	Maxx	7.80	861	210	120	< 0.02	< 0.001	< 0.05	0.38	0.07	< 0.01	< 0.05	0.07	88	69	21	< 1	7	280	0.0005
8/20/2010	Maxx	8.20	900	291	100	0.04	< 0.001	< 0.05	1.4	0.09	< 0.01	< 0.05	0.06	100	54	29	< 1	120	350	0.0034
10/4/2010	Maxx	7.60	989	291	130	0.05	< 0.001	< 0.05	0.57	0.12	< 0.01	< 0.05	0.09	99	74	28	2	5	360	0.0004
11/29/2010	Maxx	7.00	917	269	110	0.02	< 0.001	0.06	0.47	0.1	< 0.01	< 0.05	0.07	97	62	24	2	2	310	0.0001
3/15/2011	Maxx	7.90	721	201	90	0.02	< 0.001	< 0.05	0.3	0.038	< 0.005	0.001	0.05	79	58	20	1.4	4	250	0.0004
7/7/2011	Maxx	7.91	918	301	110	0.04	< 0.001	0.19	1.1	0.31	< 0.005	0.002	0.064	110	75	27	1.5	24	360	0.0052
9/30/2011	Maxx	7.74	1050	301	130	0.06	0.003	0.09	1.5	0.14	< 0.005	0.002	0.044	110	86	28	3.4	19	360	0.0012
10/19/2011	Maxx	9.01	1030	307	120	0.027	0.002	< 0.05	0.43	0.1	< 0.005	0.0024	0.095	91	68	23	1.4	17	380	0.0076
12/13/2011	Maxx	8.04	872	215	110	0.027	< 0.001	< 0.05	0.43	0.1	< 0.005	0.0024	0.095	91	68	23	1.4	2	300	0.0006
5/4/2012	Maxx	7.89	820	200	130	0.026	0.001	< 0.05	0.69	0.083	< 0.005	0.0013	0.038	78	77	21	2.3	7	260	0.0011
6/6/2012	Maxx	7.61	960	270	110	0.029	< 0.001	< 0.05	1.4	0.21	< 0.005	0.0021	0.089	100	65	27	1.3	33	360	0.0005
8/13/2012	Maxx	7.80	630	180	56	0.041	< 0.001	0.07	0.69	0.064	< 0.005	0.0013	0.033	75	35	16	2.8	8	240	0.0016
9/25/2012	Maxx	7.97	660	220	49	0.043	< 0.001	0.09	0.41	0.058	< 0.005	0.0011	0.031	80	39	19	2.3	3	260	0.0018
12/4/2012	Maxx	7.39	710	200	66	0.032	< 0.001	0.09	0.32	0.044	< 0.005	< 0.001	0.038	82	46	21	2.6	3	270	0.0002
4/5/2013	MAX	7.76	800	200	110	0.021	< 0.001	< 0.05	0.26	0.045	< 0.005	0.0012	0.056	80	60	20	1	4	290	0.0003
7/17/2013	MAX	7.83	900	290	100	0.037	< 0.001	0.19	1.3	0.46	< 0.005	0.0023	0.064	100	70	25	1.5	7	360	0.0044
9/12/2013	MAX	7.75	530	170	48	0.033	< 0.001	0.05	1.3	0.085	< 0.005	0.0015	0.044	64	39	15	2.9	11	210	0.0010
12/2/2013	MAX	7.58	950	320	110	0.039	0.002	0.23	0.73	0.37	< 0.005	0.0015	0.092	110	77	29	2	4	360	0.0010
3/31/2014	MAX	7.32	750	210	100	< 0.01	< 0.001	0.26	0.41	0.1	< 0.005	0.0015	0.033	73	51	18	2.9	4	250	0.0006
7/16/2014	MAX	7.75	800	270	91	0.02	0.002	0.13	1.2	0.21	< 0.005	< 0.001	0.042	92	60	23	2.1	2	320	0.0021
8/6/2014	MAX	7.80	360	110	34	0.025	0.002	0.15	1.4	0.27	< 0.005	0.0013	0.05	95	59	21	2.1	7	140	0.0026
9/22/2014	MAX	7.22	540	190	44	0.025	< 0.001	0.09	1.5	0.1	< 0.005	0.0016	0.045	67	33	15	3.4	11	230	0.0003
12/1/2014	MAX	7.81	830	280	95	0.027	0.002	0.13	0.64	0.13	< 0.005	0.0017	0.052	89	62	23	2.4	4	310	0.0009

C3: Routine Surface Water Quality - General Analysis - Closed Eastview Road Landfill Site



SW 4 Wetland Discharge																				
Date	Lab.	Field pH	Conductivity	Alk. CaCO3	Chloride mg/L	Boron mg/L	Phenol mg/L	NH3-N mg/L	Iron mg/L	Manganese mg/L	Chromium mg/L	Nickel mg/L	Zinc mg/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	TSS mg/L	Hard. CaCO3	Un-ion. NH3-N
PWQO		6.5-8.5				0.2	0.001		0.30		0.1	0.025	0.02							0.02
5/28/2009	Maxx	8.40	378	92	45	< 0.02	< 0.001	0.09	1.4	0.07	< 0.01	< 0.05	0.04	27	25	13	3	30	110	0.0065
7/27/2009	Maxx	8.90	266	69	26	< 0.02	< 0.001	0.07	1	0.07	< 0.01	< 0.05	0.03	22	13	12	2	28	100	
10/14/2009	Maxx																			
11/5/2009	Maxx	8.10	331	105	26	< 0.02	< 0.001	0.07	0.4	0.04	< 0.01	< 0.05	0.01	35	16	7.9	2	8	120	
11/26/2009	Maxx	8.50	317	105	18	< 0.02	< 0.001	< 0.05	0.25	0.02	< 0.01	< 0.05	0.01	37	10	9.5	2	8	130	
12/16/2009	Maxx	8.50	566	166	42	< 0.02	< 0.001	< 0.05	0.11	0.03	< 0.01	< 0.05	<0.01	66	23	14	1	2	230	
3/25/2010	Maxx	7.50	811	168	140	0.03	< 0.001	< 0.05	0.17	0.07	< 0.01	< 0.05	0.01	68	65	15	4	4	220	0.0002
8/20/2010	Maxx	9.40	378	94	48	0.03	< 0.001	< 0.05	1.6	0.14	< 0.01	< 0.05	0.03	32	34	9.6	2	57	100	0.0271
10/4/2010	Maxx	7.60	289	103	21	< 0.02	< 0.001	< 0.05	1.1	0.05	< 0.01	< 0.05	0.03	35	13	7.5	2	34	110	0.0004
11/29/2010	Maxx	7.20	510	192	33	0.02	< 0.001	0.11	0.8	0.09	< 0.01	< 0.05	0.02	64	20	15	4	16	200	0.0002
3/15/2011	Maxx	7.87	710	165	110	0.03	< 0.001	< 0.05	0.4	0.035	< 0.005	0.001	0.014	68	69	14	3.9	5	200	0.0004
7/7/2011	No flo																			
9/30/2011	dry																			
10/19/2011	Maxx	8.68	381	115	32	0.02	0.001	< 0.05	1	0.082	< 0.005	0.0023	0.032	59	23	16	4.8	8	130	0.0041
12/13/2011	Maxx	8.26	471	151	32	0.02	< 0.001	0.13	1	0.082	< 0.005	0.0023	0.032	59	23	16	4.8	14	180	0.0022
5/4/2012	Maxx	8.35	510	130	61	0.022	< 0.001	< 0.05	2.1	0.11	< 0.005	0.0023	0.048	45	37	18	4.2	50	160	0.0040
6/6/2012	No flo																			
8/13/2012	No flo																			
9/25/2012	No flo																			
12/4/2012	Maxx	7.90	610	180	44	0.029	< 0.001	0.09	0.55	0.033	< 0.005	0.0012	0.036	69	30	22	3.2	8	250	0.0009
4/5/2013	MAX	7.91	570	180	61	0.019	< 0.001	< 0.05	0.45	0.21	< 0.005	0.0012	0.0089	62	22	13	2.4	3	220	0.0004
7/17/2013	No flo																			
9/12/2013	MAX	8.41	240	83	17	0.033	< 0.001	0.17	3.5	0.16	< 0.005	0.0036	0.091	37	10	8.3	4.1	47	100	0.0160
12/2/2013	MAX	8.23	670	230	57	0.039	0.002	0.06	0.25	0.03	< 0.005	< 0.002	0.0083	77	39	22	4.5	5	270	0.0010
3/31/2014	MAX	7.23	630	170	86	< 0.01	< 0.001	0.55	0.83	0.2	< 0.005	< 0.001	0.015	63	48	14	4.2	6	200	0.0010
7/16/2014	MAX	8.10	430	110	48	0.023	0.002	< 0.05	1.1	0.11	< 0.005	0.0013	0.028	43	40	9.7	2.7	11	130	0.0024
8/6/2014	MAX	8.05	800	270	92	0.028	0.001	0.08	0.89	0.078	< 0.005	< 0.001	0.018	41	20	8.4	2.5	9	300	0.0037
9/22/2014	MAX	7.22	330	120	23	0.021	< 0.001	0.10	1.4	0.092	< 0.005	0.0014	0.03	43	13	9.4	5.1	20	150	0.0004
12/1/2014	MAX	7.65	690	220	77	0.029	0.002	0.19	1.3	0.2	< 0.005	0.0012	0.019	68	50	18	4.8	11	250	0.0008

C3: Routine Surface Water Quality - General Analysis - Closed Eastview Road Landfill Site



SW 5 Discharge to Site																					
Date	Lab.	Field pH	Conductivity	Alk. CaCO3	Chloride mg/L	Boron mg/L	Phenol mg/L	NH3-N mg/L	Iron mg/L	Manganese mg/L	Chromium mg/L	Nickel mg/L	Zinc mg/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	TSS mg/L	Hard. CaCO3	Un-ion. NH3-N	
PWQO		6.5-8.5				0.2	0.001		0.30		0.1	0.025	0.02							0.02	
5/28/2009	Maxx	7.60	756	204	110	< 0.02	< 0.001	0.09	0.62	0.05	< 0.01	< 0.05	0.03	56	73	12	3	11	190	0.0010	
7/27/2009	Maxx	7.60	1470	315	270	0.03	< 0.001	0.34	1.1	0.17	< 0.01	< 0.05	0.04	110	150	23	2	9	340	0.0048	
10/14/2009	Maxx	7.60	2090	337	430	0.03	< 0.001	0.70	1.1	0.25	< 0.01	< 0.05	0.03	94	280	17	2	15	320	0.0040	
11/5/2009	Maxx	8.00	233	67	30	< 0.02	0.004	0.68	0.51	0.06	< 0.01	< 0.05	0.06	21	21	3.1	4	13	61	0.0097	
11/26/2009	Maxx	8.00	146	39	15	< 0.02	< 0.001	0.33	0.4	0.02	< 0.01	< 0.05	0.05	16	17	2.4	<	1	5	40	0.0057
12/16/2009	Maxx	8.00	519	182	21	< 0.02	< 0.001	< 0.05	0.12	<	0.01	< 0.01	< 0.05	<0.01	70	8.7	17	4	2	240	0.0007
3/25/2010	Maxx	7.30	1510	335	250	0.03	< 0.001	0.11	0.81	0.09	< 0.01	< 0.05	0.06	120	170	27	2	6	360	0.0003	
8/20/2010	Maxx	8.40	859	270	77	0.03	< 0.001	< 0.05	0.51	0.04	< 0.01	< 0.05	0.07	100	44	29	3	26	360	0.0046	
10/4/2010	Maxx	7.00	930	306	110	0.02	< 0.001	< 0.05	4.6	0.67	< 0.01	< 0.05	0.02	100	78	21	4	13	330	0.0001	
11/29/2010	Maxx	7.10	603	213	38	< 0.02	< 0.001	< 0.05	1.7	0.07	< 0.01	< 0.05	0.03	84	20	19	3	12	240	0.0001	
3/15/2011	Maxx	7.91	813	194	120	0.02	< 0.001	< 0.05	0.3	0.041	< 0.005	< 0.001	0.021	77	73	18	2.6	9	250	0.0004	
7/7/2011	Maxx	7.83	1280	325	190	0.03	< 0.001	0.07	1.4	0.12	< 0.005	0.001	0.015	110	160	29	2.3	47	360	0.0017	
9/30/2011	dry																				
10/19/2011	Maxx	8.90	484	131	24	0.017	0.002	< 0.05	0.6	0.085	< 0.005	0.0017	0.023	110	76	25	2.5	2	210	0.0060	
12/13/2011	Maxx	8.10	986	268	120	0.017	0.001	< 0.05	0.6	0.085	< 0.005	0.0017	0.023	110	76	25	2.5	5	330	0.0007	
5/4/2012	Maxx	7.72	930	230	140	0.027	< 0.001	< 0.05	0.67	0.071	< 0.005	< 0.001	0.011	93	76	26	2.5	9	300	0.0006	
6/6/2012	No flo																				
8/13/2012	No flo																				
9/25/2012	No flo																				
12/4/2012	Maxx	7.50	560	200	36	0.024	< 0.001	< 0.05	0.35	0.028	< 0.005	< 0.001	1.1	78	25	19	3	6	250	0.0002	
4/5/2013	MAX	7.96	1000	270	140	0.016	< 0.001	< 0.05	0.21	0.022	< 0.005	< 0.001	0.012	96	85	22	1.7	2	360	0.0005	
7/17/2013	No flo																				
9/12/2013	MAX	7.88	440	160	33	0.031	< 0.001	< 0.05	0.46	0.07	< 0.005	< 0.001	0.0091	55	25	11	3	21	190	0.0015	
12/2/2013	MAX	7.13	1000	370	110	0.02	0.003	0.06	0.37	0.15	< 0.005	< 0.002	0.0088	120	76	30	2.3	40	400	0.0001	
3/31/2014	MAX	7.52	330	140	18	< 0.01	< 0.001	0.15	0.16	0.018	< 0.005	< 0.001	0.011	45	9.2	11	3.1	4	160	0.0005	
7/16/2014	MAX	7.83	1300	340	190	0.024	0.001	0.15	2	0.31	< 0.005	< 0.001	0.015	110	150	27	1.4	5	380	0.0032	
8/6/2014	MAX	7.73	1100	320	150	0.026	0.001	0.13	2	0.31	< 0.005	< 0.001	0.022	120	97	25	1.8	9	360	0.0020	
9/22/2014	MAX	7.77	430	160	31	0.019	< 0.001	0.07	0.45	0.046	< 0.005	< 0.001	0.01	56	20	12	3.4	8	200	0.0010	
12/1/2014	MAX	7.95	820	250	100	0.041	0.002	0.23	1	0.2	< 0.005	0.002	0.064	82	63	21	4.4	5	280	0.0021	

C3: Routine Surface Water Quality - General Analysis - Closed Eastview Road Landfill Site



SW 7 Background																				
Date	Lab.	Field pH	Conductivity	Alk. CaCO3	Chloride mg/L	Boron mg/L	Phenol mg/L	NH3-N mg/L	Iron mg/L	Manganese mg/L	Chromium mg/L	Nickel mg/L	Zinc mg/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	TSS mg/L	Hard. CaCO3	Un-ion. NH3-N
PWQO		6.5-8.5				0.2	0.001		0.30		0.1	0.025	0.02							0.02
5/28/2009	Maxx	7.40	706	167	100	0.03	< 0.001	0.26	0.9	0.14	< 0.01	< 0.05	0.03	50	51	21	3	13	200	0.0016
7/27/2009	Maxx	8.00	442	100	60	0.04	< 0.001	0.11	1.2	0.09	< 0.01	< 0.05	0.04	35	29	15	2	23	140	0.0039
10/14/2009	Maxx	7.40	638	193	78	0.04	< 0.001	0.12	1.1	0.23	< 0.01	< 0.05	0.03	59	40	16	4	7	220	0.0005
11/5/2009	Maxx	7.40	785	211	110	0.03	< 0.001	0.26	4.7	0.45	< 0.01	< 0.05	0.03	67	58	20	4	30	250	0.0008
11/26/2009	Maxx	9.80	562	169	56	0.03	< 0.001	0.27	0.76	0.25	< 0.01	< 0.05	0.03	56	26	17	4	18	220	0.1415
12/16/2009	Maxx	9.80	834	186	130	0.02	< 0.001	0.36	0.83	0.16	< 0.01	< 0.05	0.04	59	68	17	3	13	220	0.1563
3/25/2010	Maxx	7.10	689	166	110	0.02	< 0.001	< 0.05	0.46	0.05	< 0.01	< 0.05	0.04	60	58	15	2	7	200	0.0001
8/20/2010	Maxx	7.70	752	161	130	0.05	< 0.001	0.08	1.4	0.31	< 0.01	< 0.05	0.11	56	66	19	2	66	220	0.0019
10/4/2010	Maxx	7.40	546	159	64	0.04	< 0.001	< 0.05	0.69	0.17	< 0.01	< 0.05	0.04	52	34	14	4	7	200	0.0002
11/29/2010	Maxx	7.40	613	182	73	0.03	0.001	0.07	0.72	0.07	< 0.01	< 0.05	0.03	61	39	17	5	13	200	0.0002
3/15/2011	Maxx	7.73	921	217	150	0.02	< 0.001	0.30	1.5	0.71	< 0.005	0.001	0.033	81	110	21	3.1	6	250	0.0016
7/7/2011	Maxx	7.83	537	134	75	0.03	< 0.001	0.09	1.2	0.15	< 0.005	0.001	0.024	43	45	16	3	10	180	0.0028
9/30/2011	Maxx	8.39	480	93	76	0.05	0.003	0.08	0.5	0.1	< 0.005	0.003	0.013	31	45	15	3.6	13	130	0.0055
10/19/2011	Maxx	8.56	507	141	53	0.031	0.002	< 0.05	0.37	0.074	< 0.005	< 0.001	0.028	67	62	19	3.4	8	170	0.0030
12/13/2011	Maxx	8.01	760	196	100	0.031	< 0.001	0.24	0.37	0.074	< 0.005	< 0.001	0.028	67	62	19	3.4	2	230	0.0025
5/4/2012	Maxx	8.16	650	140	99	0.027	< 0.001	< 0.05	0.51	0.057	< 0.005	< 0.001	0.016	50	63	18	2.9	9	180	0.0024
6/6/2012	Maxx	7.50	580	120	88	0.018	0.001	< 0.05	0.66	0.18	< 0.005	0.0011	0.024	38	54	16	1.8	5	160	0.0005
8/13/2012	Maxx	8.09	290	90	25	0.044	< 0.001	0.11	0.8	0.1	< 0.005	0.0015	0.019	40	18	9.1	4.4	15	110	0.0062
9/25/2012	Maxx	7.81	410	120	38	0.043	< 0.001	0.10	0.66	0.11	< 0.005	0.0011	0.026	43	29	12	3.4	12	140	0.0014
12/4/2012	Maxx	7.55	650	170	81	0.034	< 0.001	0.17	0.31	0.11	< 0.005	< 0.001	0.024	61	53	19	3	4	220	0.0007
4/5/2013	MAX	7.90	910	180	150	0.017	< 0.001	< 0.05	0.26	0.042	< 0.005	< 0.001	0.023	63	87	17	1.6	5	250	0.0005
7/17/2013	MAX	7.64	670	160	100	0.05	< 0.001	0.25	2	0.56	< 0.005	0.0014	0.032	53	65	18	3	18	200	0.0042
9/12/2013	MAX	8.02	330	96	34	0.029	< 0.001	0.11	0.8	0.096	< 0.005	< 0.001	0.021	34	21	9	2.8	17	120	0.0047
12/2/2013	MAX	7.67	850	270	100	0.042	0.003	0.06	0.4	0.76	< 0.005	< 0.002	0.025	93	69	27	3.7	2	310	0.0003
3/31/2014	MAX	7.11	900	210	130	< 0.01	0.004	0.92	2.2	0.64	< 0.005	< 0.001	0.033	68	87	18	3.9	12	220	0.0014
7/16/2014	MAX	7.90	480	140	58	0.023	0.001	< 0.05	0.74	0.16	< 0.005	< 0.001	0.017	44	37	13	1.7	4	160	0.0014
8/6/2014	MAX	7.97	570	160	76	0.037	0.002	0.16	2.7	0.55	< 0.005	< 0.001	0.078	72	57	19	2.4	32	190	0.0058
9/22/2014	MAX	7.84	440	130	57	0.014	< 0.001	< 0.05	0.35	0.035	< 0.005	< 0.001	0.014	42	37	11	2.1	7	150	0.0008
12/1/2014	MAX	7.87	1000	310	110	0.022	0.004	0.07	0.36	0.12	< 0.005	0.0011	0.016	61	69	17	3.2	2	210	0.0005

C3: Routine Surface Water Quality - General Analysis - Closed Eastview Road Landfill Site



SW 15 Adjacent Water Course																				
Date	Lab.	Field pH	Conductivity	Alk. CaCO3	Chloride mg/L	Boron mg/L	Phenol mg/L	NH3-N mg/L	Iron mg/L	Manganese mg/L	Chromium mg/L	Nickel mg/L	Zinc mg/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	TSS mg/L	Hard. CaCO3	Un-ion. NH3-N
PWQO		6.5-8.5				0.2	0.001		0.30		0.1	0.025	0.02							0.02
5/28/2009	Maxx	7.20	630	304	25	< 0.02	< 0.001	< 0.05	0.48	0.22	< 0.01	< 0.05	<0.01	82	13	24	1	2	300	0.0002
7/27/2009	Maxx	7.20	665	320	32	< 0.02	< 0.001	< 0.05	0.88	0.19	< 0.01	< 0.05	<0.01	91	15	27	2	3	350	0.0003
10/14/2009	Maxx	7.00	661	288	43	< 0.02	< 0.001	< 0.05	0.16	0.02	< 0.01	< 0.05	<0.01	83	18	27	2	< 1	310	0.0001
11/5/2009	Maxx	7.70	684	294	43	< 0.02	< 0.001	< 0.05	0.14	0.01	< 0.01	< 0.05	<0.01	84	17	26	3	2	320	0.0003
11/26/2009	Maxx	7.70	678	289	39	< 0.02	< 0.001	< 0.05	0.15	< 0.01	< 0.01	< 0.05	<0.01	89	16	28	3	< 1	330	0.0004
12/16/2009	Maxx	7.70	729	299	40	< 0.02	< 0.001	< 0.05	0.03	< 0.01	< 0.01	< 0.05	<0.01	88	17	28	< 1	< 1	350	0.0003
3/25/2010	Maxx	7.20	571	226	30	< 0.02	< 0.001	< 0.05	0.04	< 0.01	< 0.01	< 0.05	<0.01	76	14	22	2	1	270	0.0001
8/20/2010	Maxx	7.60	761	358	35	< 0.02	< 0.001	0.18	7.6	0.62	< 0.01	< 0.05	<0.01	110	19	31	< 1	22	390	0.0029
10/4/2010	Maxx	7.40	679	299	40	< 0.02	< 0.001	< 0.05	0.26	0.06	< 0.01	< 0.05	<0.01	84	19	28	2	2	350	0.0002
11/29/2010	Maxx	7.30	726	305	39	< 0.02	< 0.001	< 0.05	0.06	< 0.01	< 0.01	< 0.05	<0.01	95	18	30	2	4	320	0.0001
3/15/2011	Maxx	8.35	551	219	30	0.01	< 0.001	< 0.05	< 0.1	0.014	< 0.005	< 0.001	<0.005	75	15	23	2	< 1	260	0.0010
7/7/2011	Maxx	7.47	726	346	30	0.02	< 0.001	0.30	6.6	0.81	< 0.005	< 0.001	<0.005	120	16	33	0.6	16	400	0.0040
9/30/2011	Maxx	7.40	829	371	43	0.01	0.005	0.07	0.7	0.3	< 0.005	< 0.001	0.007	120	22	36	1.5	4	410	0.0004
10/19/2011	Maxx	8.36	775	326	44	0.035	0.003	< 0.05	0.58	0.15	< 0.005	0.0023	0.13	88	63	21	2	1	370	0.0019
12/13/2011	Maxx	8.21	758	279	40	< 0.01	< 0.001	< 0.05	< 0.1	0.022	< 0.005	< 0.001	<0.005	100	18	31	1.9	< 1	360	0.0007
5/4/2012	Maxx	7.83	610	270	31	0.011	0.002	< 0.05	0.11	0.017	< 0.005	< 0.001	<0.005	83	16	25	1.1	2	290	0.0011
6/6/2012	Maxx	7.22	710	330	34	< 0.01	0.001	< 0.05	2.9	0.6	< 0.005	< 0.001	<0.005	96	18	29	0.64	14	360	0.0002
8/13/2012	Maxx	7.51	970	180	110	0.036	< 0.001	0.29	2	0.15	< 0.005	< 0.001	0.015	97	98	22	2.5	5	300	0.0042
9/25/2012	Maxx	7.71	1300	120	46	0.067	< 0.001	0.07	0.12	0.21	< 0.005	< 0.001	0.031	210	29	58	0.74	1	670	0.0008
12/4/2012	Maxx	7.51	680	220	42	0.019	< 0.001	< 0.05	< 0.1	0.0054	< 0.005	< 0.001	<0.005	86	20	27	1.8	< 1	320	0.0002
4/5/2013	MAX	8.24	540	210	28	0.01	< 0.001	< 0.05	< 0.1	0.0066	< 0.005	< 0.001	<0.005	75	13	22	1.3	< 1	280	0.0008
7/17/2013	MAX	7.69	740	350	32	0.014	< 0.001	0.11	9	1.2	< 0.005	< 0.001	<0.005	110	17	30	0.85	14	410	0.0021
9/12/2013	MAX	7.84	630	280	35	0.022	< 0.001	< 0.05	0.63	0.16	< 0.005	< 0.001	<0.005	89	18	26	3.2	< 1	320	0.0013
12/2/2013	MAX	7.62	780	360	36	0.011	0.001	< 0.05	< 0.1	0.019	< 0.005	< 0.002	<0.005	120	19	35	1.8	4	400	0.0002
3/31/2014	MAX	7.31	550	240	28	< 0.01	< 0.001	0.13	0.11	0.023	< 0.005	< 0.001	0.0078	78	15	24	2	< 1	270	0.0003
7/16/2014	MAX	7.64	690	320	32	< 0.01	0.001	< 0.05	1.3	0.92	< 0.005	< 0.001	<0.005	93	18	29	0.48	3	350	0.0007
8/6/2014	MAX	7.61	650	300	32	0.012	0.001	0.07	2.5	0.82	< 0.005	< 0.001	0.005	94	18	27	1	6	320	0.0009
9/22/2014	MAX	7.23	560	260	25	0.012	< 0.001	0.10	0.27	0.014	< 0.005	< 0.001	<0.005	75	13	21	2.2	< 1	300	0.0004
12/1/2014	MAX	7.80	640	280	32	0.019	< 0.001	< 0.05	< 0.1	0.0042	< 0.005	< 0.001	<0.005	80	17	26	2.1	< 1	320	0.0003

C3: Routine Surface Water Quality - General Analysis - Closed Eastview Road Landfill Site



SW 16 Discharge to Hadati Creek																				
Date	Lab.	Field pH	Conductivity	Alk. CaCO3	Chloride mg/L	Boron mg/L	Phenol mg/L	NH3-N mg/L	Iron mg/L	Manganese mg/L	Chromium mg/L	Nickel mg/L	Zinc mg/L	Ca mg/L	Na mg/L	Mg mg/L	K mg/L	TSS mg/L	Hard. CaCO3	Un-ion. NH3-N
PWQO		6.5-8.5				0.2	0.001		0.30		0.1	0.025	0.02							0.02
5/28/2009	Maxx	7.60	891	230	130	< 0.02	< 0.001	0.13	0.71	0.14	< 0.01	< 0.05	0.05	75	70	19	2	3	270	0.0011
7/27/2009	Maxx	7.80	401	102	45	0.02	< 0.001	0.06	0.69	0.04	< 0.01	< 0.05	0.02	28	25	13	3	8	120	0.0018
10/14/2009	Maxx	7.70	922	263	120	0.03	< 0.001	0.12	0.55	0.07	< 0.01	< 0.05	0.1	90	52	24	1	6	330	0.0009
11/5/2009	Maxx	7.60	1020	288	140	0.03	< 0.001	0.14	0.43	0.1	< 0.01	< 0.05	0.12	100	64	27	1	3	370	0.0009
11/26/2009	Maxx	7.80	1030	298	130	0.03	< 0.001	0.09	0.87	0.15	< 0.01	< 0.05	0.11	100	69	25	1	8	370	0.0009
12/16/2009	Maxx	7.80	844	239	92	< 0.02	< 0.001	0.07	0.53	0.06	< 0.01	< 0.05	0.07	84	44	21	2	11	310	0.0004
3/25/2010	Maxx	7.50	814	203	110	< 0.02	< 0.001	< 0.05	0.41	0.04	< 0.01	< 0.05	0.07	85	63	21	1	12	270	0.0002
8/20/2010	Maxx	7.90	926	292	110	0.05	< 0.001	0.26	8.3	0.33	< 0.01	< 0.05	0.19	110	58	30	1	85	360	0.0078
10/4/2010	Maxx	7.40	953	290	120	0.04	< 0.001	< 0.05	0.5	0.11	< 0.01	< 0.05	0.17	100	63	30	< 1	4	380	0.0002
11/29/2010	Maxx	6.90	934	272	110	< 0.02	< 0.001	< 0.05	0.31	0.06	< 0.01	< 0.05	0.08	95	60	24	< 1	5	310	0.0000
3/15/2011	Maxx	7.49	697	201	86	0.02	< 0.001	< 0.05	0.3	0.022	< 0.005	0.002	0.048	76	54	20	0.9	7	250	0.0002
7/7/2011	Maxx	7.79	861	298	91	0.03	< 0.001	0.19	0.8	0.2	< 0.005	0.002	0.092	99	57	26	1.3	4	360	0.0041
9/30/2011	Maxx	7.53	796	202	110	0.05	0.003	0.13	1.1	0.072	< 0.005	< 0.001	0.02	76	67	16	6.6	9	240	0.0010
10/19/2011	Maxx	8.81	1010	308	120	< 0.01	< 0.001	0.08	< 0.1	0.022	< 0.005	< 0.001	<0.005	100	18	31	1.9	3	370	0.0086
12/13/2011	Maxx	7.91	854	204	110	0.035	< 0.001	0.10	0.58	0.15	< 0.005	0.0023	0.13	88	63	21	2	4	300	0.0008
5/4/2012	Maxx	7.57	910	210	140	0.022	0.003	< 0.05	0.5	0.06	< 0.005	0.001	0.047	81	78	20	1.8	6	270	0.0005
6/6/2012	Maxx	7.53	860	260	90	0.025	0.001	< 0.05	0.39	0.1	< 0.005	0.002	0.11	96	53	26	1.1	4	350	0.0004
8/13/2012	Maxx	7.64	620	170	57	0.046	< 0.001	< 0.05	0.8	0.053	< 0.005	0.0015	0.032	76	37	15	3	5	230	0.0008
9/25/2012	Maxx	7.91	820	260	87	0.043	< 0.001	0.13	0.33	0.067	< 0.005	0.0012	0.064	94	51	24	2	1	320	0.0022
12/4/2012	Maxx	7.29	800	210	89	0.024	< 0.001	0.09	0.18	0.029	< 0.005	0.0011	0.046	91	61	23	1.9	2	290	0.0002
4/5/2013	MAX	7.97	770	200	110	0.016	< 0.001	< 0.05	0.13	0.021	< 0.005	< 0.001	0.039	78	57	19	0.7	2	300	0.0004
7/17/2013	MAX	7.69	840	290	82	0.031	< 0.001	0.18	0.66	0.15	< 0.005	0.0016	0.072	99	57	25	1.2	3	350	0.0029
9/12/2013	MAX	7.73	650	210	71	0.03	< 0.001	0.06	0.9	0.064	< 0.005	0.0015	0.047	69	44	16	2.4	5	250	0.0010
12/2/2013	MAX	7.55	900	310	100	0.031	0.002	0.16	0.57	0.32	< 0.005	0.0013	0.18	110	72	30	1.5	1	360	0.0006
3/31/2014	MAX	7.32	800	230	110	< 0.01	< 0.001	0.15	0.22	0.044	< 0.005	< 0.001	0.034	83	56	22	2.2	4	290	0.0003
7/16/2014	MAX	7.59	610	180	80	0.027	0.002	0.09	1.1	0.12	< 0.005	0.0014	0.033	61	50	14	2.7	1	200	0.0012
8/6/2014	MAX	7.87	590	170	78	0.037	0.002	0.10	1.4	0.22	< 0.005	0.0013	0.022	60	50	13	3	8	190	0.0021
9/22/2014	MAX	7.46	590	220	59	0.02	< 0.001	0.10	0.47	0.05	< 0.005	0.0011	0.028	74	44	18	2.1	3	260	0.0007
12/1/2014	MAX	8.26	860	270	110	0.028	0.001	0.11	0.51	0.1	< 0.005	0.0015	0.054	91	61	24	1.9	1	310	0.0021

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 1							
	10-Apr-1992		N/A	N/A	10		clear, good flow
	11-Jun-1992		800	9.20	18		Numerous water insects, patchy scum on surface
	13-Aug-1992		1000	7.60	13		Yellowish, some sediment, creek bottom reddish
	10-Nov-1992		1000	7.60	7		Slight yellow colour, fast flow
	20-Apr-1993		700	9.10	5		Dirty brown, heavy sediment. silty bottom
	10-Jun-1993		800	9.20	14		Fairly clear, silty bottom
	02-Sep-1993		700	7.60	17	6.79	Clear, little flow, silty bottom, weeds
	05-Nov-1993		1100	7.90	8	11.62	Clear, little flow
	30-Nov-1993		800	8.00	2	10.9	Clear, silty bottom
	13-Apr-1994	Spring Freshet	800	7.40	5	5.62	Yellow/brown colour, weeds, some sediment
	04-May-1994	Spring Dry	800	8.20	14	5.51	Yellowish colour, very clear, reddish brown mud bottom
	26-May-1994	Spring Rain	700	8.10	11	10.17	Brown colour, silty, high level
	17-Jun-1994	June Dry	600	7.10	20	10.95	Clear yellow, biological growth on surface, slow flow
	04-Aug-1994	Summer Rain	800	8.00	15	10.85	Very weedy, silty bottom, 7 cm silt up staff gauge
	17-Aug-1994	August Dry	700	7.10	13	9.36	Silty/muddy/weedy bottom, algae growth in water
	14-Oct-1994	Fall Dry	800	7.90	8	11.35	Yellow coloured, flow through small channels
	21-Nov-1994	Fall Rain	700	8.00	8	10.87	Fairly clear, weedy
	13-Apr-1995	Spring Freshet	900	8.00	5	10.95	Muddy/weedy bottom, clear/yellow coloured, algae noted at banks
	28-Apr-1995	Spring Dry	700	8.10	10	10.15	Muddy/weedy bottom, clear, turtles and bugs present
	17-May-1995	Spring Rain	800	7.30	12	8.21	Weedy growth present, fairly clear, silty sandy bottom, good flow
	30-Jun-1995	June Dry	800	7.80	18	6.34	Clear yellowish colour
	23-Aug-1995	August Dry	800	7.30	17	6.33	Fairly clear, very weedy bottom, algae
	20-Oct-1995	Fall Dry	700	7.80	12	7.42	Clear yellowish colour, very weedy bottom, lots of bugs
	28-Nov-1995	Fall Rain	895	7.50	4.8	10	Fairly clear, some grass and reeds
	16-Apr-1996	Spring Freshet	664	8.10	5.1	5.6	Good Flow
	27-May-1996	Spring Dry	800	7.80	12	6.5	Some Flow, concentrated in centre, lots of weeds
	18-Jun-1996	Spring Rain	850	N/A	15	5.5	Some Flow, Lots of reeds
	06-Aug-1996	June Dry	900	N/A	12		Very little flow, lots of grass growing
	07-Oct-1996	August Dry	N/A	N/A	N/A	N/A	Little flow, Lots of reeds
	30-Oct-1996	Summer Rain	833	7.80	8.8	5.1	Good flow, some weeds
	06-Dec-1996	Fall Rain	991	7.60	4.1	3.9	Good flow
	16-Apr-1997	Spring Freshet	778	7.60	6.9	6.3	Good flow, some algae growing in creek
	23-May-1997	Spring Dry	775	7.30	10.2	6.7	Good flow
	07-Aug-1997	Summer Dry	720	6.60	11.4	3.7	Lots of Reeds, some flow
	18-Nov-1997	Fall Dry	720	7.50	5.8	4.9	Some flow, clear water
	26-Nov-1997	Fall Rain	768	7.40	8	3.2	Flowing, clear
	17-Jun-1998	Spring Rain	789	7.80	17.6	4.2	Water moving slowly
	07-Dec-1998	Fall Rain	576	6.80	9.1	5.3	Beaver dam in culvert, evidence of runoff (with sediments) from bush lot
	23-Apr-1999	Spring Freshet	556	7.70	8.3	5.2	Good flow, silt in bottom of creek
	30-Jun-1999	Summer Rain	N/A	N/A	N/A	N/A	
	06-Dec-1999	Fall Rain	411	7.10	9.2	6.2	Some flow, murky water
	15-Mar-2000	Spring Freshet	416	7.50	4.5	6.5	Some flow; Algae growing in bottom; Bushlot visibly discharging water
	20-Sep-2000	Fall Dry	260	7.90	15.3	3.2	Very little flow - almost still; some surface water sediment
	27-Nov-2000	Fall Rain	514	6.70	7.3	4.7	Very little flow; bits of silt present on bottom of creek bed
	20-Mar-2001	Spring Freshet	381	7.61	6.4	5.3	Visible TSS, Visible discharge from Bushlot, some flow
	10-Oct-2001	Fall Dry	675	7.70	9	1.9	No flow, Lots of suspended solids
	03-Dec-2001	Fall rain	670	7.90	7.9	3.5	
	18-Feb-2002	Spring Freshet					Not enough water to grab samples.
	17-Apr-2002	April Dry					Dry Conditions with warm temperatures - no flows observed
	15-May-2002	Spring Rain					No flow observed
	06-Jun-2002	Summer Rain	848	7.80	11.7	N/A	Very little flow, water is fairly clear

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 1							
	17-Jun-2002	June Dry					No dry conditions due to heavy rains, Dry event could not be completed
	12-Aug-2002	August Dry					No rain for 10 days, no surface water to sample
	25-Oct-2002	October Dry					No more than 2 dry days in a row, no samples taken
	23-Dec-2002	Fall Rain					Rains for 2 days, still not enough water to sample
	18-Mar-2003	Spring Freshet	306	7.40	5	8.49	Good flow, visible TSS
	28-Apr-2003	April Dry					No sample taken - Could not get 5 days of no rain
	26-May-2003	Spring Rain					No sample taken - Although there was rain, no water to sample
	18-Jun-2003	June Dry					No sample taken - Could not get 5 days of no rain
	06-Aug-2003	Summer Rain	649	7.90	15	7.09	Water but no flow, clear
	26-Aug-2003	August Dry					No sample taken - Could not get 5 days of no rain
	24-Oct-2003	October Dry					No sample taken - Could not get 5 days of no rain
	19-Nov-2003	Fall Rain	483	7.90	10.8	8.14	Good Flow
	10-Mar-2004	Spring Freshet	649	7.30	5.2	7.77	Low flow
	22-Apr-2004	Spring Rain					No sample taken - Although there was rain, no water to sample
	27-May-2004	April Dry	750	7.80	16.5	3.63	Grate blocked with plastic. Suspect beaver dam inside culvert. Some flow.
	28-Jun-2004	June Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	17-Aug-2004	August Dry	647	7.80	15.2	9.52	Some flow, algae observed on surface, some flooding due to gravel in culvert.
	19-Oct-2004	Summer Rain	981	8.20	6.3	8.83	Very little flow, algae growth, clear. Silt back up is around 0.6m deep.
	28-Oct-2004	October Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	08-Dec-2004	Fall Rain	540	7.85	8		Some flow, clear. Silt accumulation at bottom of culvert (~0.4m).
	04-Apr-2005	Spring Freshet	601	8.27	9.2	6.57	Some flow, Clear. Silt present at mouth of culvert.
	30-Apr-2005	April Dry					No sample taken due to rain
	16-May-2005	Spring Rain					No sample taken, not enough run-off after rain event on May 16. Very little rain during rest of month.
	30-Jun-2005	June Dry					No samples taken, dry
	25-Aug-2005	August Dry					No sample taken, not enough run-off even after rain event earlier in the week of Aug 25.
	28-Sep-2005	Summer Rain					No sample taken, not enough run-off
	14-Oct-2005	October Dry					No sample taken, Dry
	30-Nov-2005	Fall Rain					No sample taken, not enough run-off
	24-Apr-2006	Spring Freshet	553	7.70	8.1	8.74	Good flow, Clear
	30-Apr-2006	April Dry					No Dry Period During Month
	31-May-2006	Spring Rain					Rain event early in month, no run-off occurring later in month.
	09-Jun-2006	June Dry					Low Water
	09-Aug-2006	August Dry					Low Water
	14-Sep-2006	Summer Rain	760	7.50	17.1	4.11	Very low flow
	12-Oct-2006	October Dry	606	7.80	11.4	5.73	Good flow
	13-Dec-2006	Fall Rain	488	7.30	6.5	7.5	Good flow, Clear. Silt build up observed.
	23-Mar-2007	Spring Freshet	471	7.40	3.9	6.35	Good Flow, Clear
	26-Apr-2007	April Dry					Dry
	17-May-2007	Spring Rain	715	7.60	14.4	4.77	Good Flow, Clear
	19-Jun-2007	June Dry					Dry, No water next day after June 9 (9.8mm) and June 19 (22.4mm).
	10-Aug-2007	August Dry					Dry, No water next day after largest rain event on August 7 (18mm).
	26-Sep-2007	Summer Rain					Dry. No water next day after last rain event on Sept 26 (7.8mm).
	10-Oct-2007	Fall Rain					Low Water, 38 mm previous three days.
	31-Oct-2007	October Dry					Dry
	29-Nov-2007	Additional Fall	655	6.90	3.5	6.7	Low Flow, clear.
	09-Apr-2008	Spring Freshet	316	7.10	11.6	6.2	Clear. Good flow, some grass/weeds on grate
	20-Aug-2008	Summer Dry					Dry. Attempts made after 13.7 mm of rain in last 7 days
	16-Sep-2008	Summer Rain	655	7.40	16.2	3.92	Good Flow. Some rock/silt partially blocking creek
	18-Dec-2008	Fall Rain	597	8.10	4.6	6.2	Clear. Slow flow
	28-May-2009	Spring Freshet	643	7.50	14.8	5.19	Dark with sheen

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 1							
	27-Jul-2009	Summer Dry	667	7.60	19.1	7.93	Barely any flow/ lots of weeds
	14-Oct-2009		872	7.50	8.2	6.53	Barely any flow/ lots of weeds
	05-Nov-2009		898	7.40	6.2	6.98	
	26-Nov-2009		973	7.60	8.2	5.98	
	16-Dec-2009		973	7.60	2	8.44	
	25-Mar-2010		5.99	6.80	7.7	671	Brownish with good flow
	20-Aug-2010		7.26	20.90	7.8	699	Cloudy with floating aquatic vegetation
	04-Oct-2010		6.84	8.50	6.9	955	Murky with average flow
	29-Nov-2010		7.7	6.00	6.6	960	Slightly cloudy average flow
	15-Mar-2011		784	7.61	3.3	9.87	Yellowish colour, good flow
	07-Jul-2011		822	7.71		13.08	Low flow, yellowish colour with lots of floating aquatic vegetation
	30-Sep-2011		906	7.26	13.7	5.69	Brownish with very low flow
	19-Oct-2011		987	8.86	9.3	7.47	Lots of duckweed, low flow
	13-Dec-2011		917	8.16	2.8	10.19	Yellowish colour with decent flow
	04-May-2012	Spring Wet	886	7.78	12.1	10.43	Lots of Duckweed slightly yellow with decent flow
	06-Jun-2012	June Trigger	887	6.97	11.7	7.71	Lots of vegetation low flow
	13-Aug-2012	August Dry	693	7.30	22	8.76	Clear with very low flow
	25-Sep-2012	September Dry	831	7.40	11.1	9.76	Lots of duckweed low flow slightly cloudy
	04-Dec-2012	Fall Wet	916	7.24	5.4	8.11	Yellowish with decent flow
	05-Apr-2013	Spring Wet	838	7.61	3.1	9.79	Good flow yellowish colour
	17-Jul-2013	Summer Dry	862	7.58	18.3	6.32	Lots of aquatic veg yellowish low flow
	12-Sep-2013	Sept Wet	637	7.61	18.7	8.3	Low flow yellowish lots of duckweed
	02-Dec-2013	Dec Wet	941	7.71	4.7	8.06	Yellowish with low flow
	31-Mar-2014	Spring Freshet	855	7.28	4.3	6.07	Very slightly yellowish, good flow
	16-Jul-2014	July Dry	905	7.64	17.6	4.08	Brownish with low flow
	06-Aug-2014	August Trigger	853	8.02	15.4	5.65	Yellowish with low flow
	22-Sep-2014	Sept Wet	810	7.53	13	6.25	Yellowish with good flow
	01-Dec-2014	Fall Wet	796	7.94	4.8	7.44	Yellowish with good flow
SW 2							
	10-Apr-1992		900	8.40	10		Fairly clear, some red staining on creek bottom
	11-Jun-1992		900	7.60	22		Clear, some red staining on creek bottom
	13-Aug-1992		1200	7.80	17		Yellow sediment
	10-Nov-1992		N/A	N/A	8		Yellow, red stain/growth on weeds and grass
	01-Apr-1993		1000	9.30	1		Brown, heavy sediment, gravel bottom
	20-Apr-1993		1000	9.30	5		Clear, gravel bottom, weeds
	10-Jun-1993		N/A	N/A	15		Dry, not sampled
	05-Nov-1993		1100	8.00	7	10.71	Clear, some floating suspended particulate
	30-Nov-1993		1100	8.10	1	10.45	Yellow colour
	13-Apr-1994	Spring Freshet	1000	7.00	6	5.53	Cloudy, brown green colour, very quick flow
	26-Apr-1994	Spring Rain	1200	8.10	11	10.35	Light yellow, clear, good flow in narrow channel
	04-May-1994	Spring Dry	1000	7.90	16	5.44	Yellow reddish colour, fairly clear
	17-Jun-1994	June Dry	1700	7.50	27	5.8	Yellow colour, heavy growth, snails/minnows, slow flow
	04-Aug-1994	Summer Rain	1000	8.10	14	10.51	Ditch almost dry, trickle, 9 cm silt up staff gauge
	17-Aug-1994	August Dry					Dry, not sampled
	14-Oct-1994	Fall Dry					Dry, not sampled
	21-Nov-1994	Fall Rain	1400	8.10	9	10.6	Cloudy brown, ditch has been re-dug
	13-Apr-1995	Spring Freshet	1600	7.80	5	11.15	Clear/yellowish sample, heavy iron staining on north side of ditch
	28-Apr-1995	Spring Dry	1200	8.20	9	10.4	Weedy/silty bottom, good flow
	17-May-1995	Spring Rain	1300	7.10	11	7.1	Clear/yellowish colour, some silt, heavy weed growth in ditch
	30-Jun-1995	June Dry					Dry, not sampled
	23-Aug-1995	August Dry	1700	7.80	28	13.85	Fairly clear/yellowish, very weedy, lots of snails, some flow

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 2							
	20-Oct-1995	Fall Dry					Dry, not sampled
	28-Nov-1995	Fall Rain	1171	7.50	6.2	8	Some sediments, grass
	16-Apr-1996	Spring Freshet	680	8.40	5.9	8.6	Ditch fairly clear, some reeds
	27-May-1996	Spring Dry	1000	7.80	11	5	Reeds and grass, Some silt on bottom, water bugs, clear
	18-Jun-1996	Spring Rain	1350	N/A	15	7	Fairly clear, flow
	06-Aug-1996	June Dry	1400	N/A	18	N/A	Very little flow, grass and reeds
	07-Oct-1996	August Dry	N/A	N/A	N/A	N/A	Ditch clear, re-cut twoweeks ago, clear, water level high
	30-Oct-1996	Summer Rain	908	8.00	9.4	4.9	Some flow
	06-Dec-1996	Fall Rain	1015	7.60	4	5.2	Some flow
	16-Apr-1997	Spring Freshet	939	7.80	7.6	7.4	Lots of silt around staff gauge, some litter
	23-May-1997	Spring Dry	933	7.20	7.2	4.8	Lots of weeds, sticks and silt
	07-Aug-1997	Summer Dry	857	6.90	13.1	3.8	Water backed up; Beaver dam about 10 m downstream of SW 16.
	18-Nov-1997	Fall Dry	1249	7.40	4	5.4	Site is iced; sample taken at culvert 8 m downstream at open water
	26-Nov-1997	Fall Rain	973	7.40	5.9	3.7	very little flowing; cloudy
	17-Jun-1998	Spring Rain	2100	7.70	24.2	4.4	Water flowing well, clear
	07-Dec-1998	Fall Rain					No flow
	23-Apr-1999	Spring Freshet	1101	7.80	8.6	5.2	Clear, good flow
	30-Jun-1999	Summer Rain	N/A	N/A	N/A	N/A	
	06-Dec-1999	Fall Rain	672	6.90	7.3	5	Good flow, narrow channel, grass lining ditch bottom
	15-Mar-2000	Spring Freshet	585	7.30	4.3	4.9	Clear; good flow
	20-Sep-2000	Fall Dry					No sample - location was dry; ditch is overgrown with grass
	27-Nov-2000	Fall Rain					No Flow
	20-Mar-2001	Spring Freshet	400	7.40	5.1	4.6	some flow, occasional pieces of litter in ditch
	10-Oct-2001	Fall Dry					Dry
	03-Dec-2001	Fall rain	655	7.80	6	8.4	Flowing, clear
	18-Feb-2002	Spring Freshet					Not enough water to grab samples.
	17-Apr-2002	April Dry					Dry Conditions with warm temperatures - no flows observed
	15-May-2002	Spring Rain					No flow observed
	06-Jun-2002	Summer Rain					Dry
	17-Jun-2002	June Dry					No dry conditions due to heavy rains, Dry event could not be completed
	12-Aug-2002	August Dry					No rain for 10 days, no surface water to sample
	25-Oct-2002	October Dry					No more than 2 dry days in a row, no samples taken
	23-Dec-2002	Fall Rain					Rains for 2 days, still not enough water to sample
	18-Mar-2003	Spring Freshet	493	7.10	3.8	8.55	Good flow, ditch is lined with ice
	28-Apr-2003	April Dry					No sample taken - Could not get 5 days of no rain
	26-May-2003	Spring Rain					No sample taken - Although there was rain, no water to sample
	18-Jun-2003	June Dry					No sample taken - Could not get 5 days of no rain
	06-Aug-2003	Summer Rain					Dry
	26-Aug-2003	August Dry					No sample taken - Could not get 5 days of no rain
	24-Oct-2003	October Dry					No sample taken - Could not get 5 days of no rain
	19-Nov-2003	Fall Rain	844	7.50	10.5	5.94	Some Flow
	10-Mar-2004	Spring Freshet	570	7.40	5	5.87	Clear, some flow
	22-Apr-2004	Spring Rain					No sample taken - Although there was rain, no water to sample
	27-May-2004	April Dry	853	7.97	14.7	5.54	Clear, flowing well.
	28-Jun-2004	June Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	17-Aug-2004	August Dry					No sample collected, dry,
	19-Oct-2004	Summer Rain					Dry
	28-Oct-2004	October Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	08-Dec-2004	Fall Rain	657	7.90	8.2		Some flow, clear.
	04-Apr-2005	Spring Freshet	644	8.41	5	7.41	Good flow, clear
	30-Apr-2005	April Dry					No sample taken due to rain

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 2							
	16-May-2005	Spring Rain					No sample taken, not enough run-off after rain event on May 16. Very little rain during rest of month.
	30-Jun-2005	June Dry					No samples taken, dry
	25-Aug-2005	August Dry					No sample taken, not enough run-off even after rain event earlier in the week of Aug 25.
	28-Sep-2005	Summer Rain					No sample taken, not enough run-off
	14-Oct-2005	October Dry					No sample taken, Dry
	30-Nov-2005	Fall Rain					No sample taken, not enough run-off
	24-Apr-2006	Spring Freshet	741	7.70	8.5	8.03	Good flow
	30-Apr-2006	April Dry					No Dry Period During Month
	31-May-2006	Spring Rain					Rain event early in month, no run-off occurring later in month.
	09-Jun-2006	June Dry					Low Water
	09-Aug-2006	August Dry					Low Water
	14-Sep-2006	Summer Rain					Dry
	12-Oct-2006	October Dry	810	7.40	9.4	3.48	SW2 dry, sample taken 6m downstream. Minimal Flow.
	13-Dec-2006	Fall Rain	488	7.20	5.1	7.67	Clear. Lots of grass in ditch.
	23-Mar-2007	Spring Freshet	432	7.50	4.6	8.55	Slow Flow, Clear.
	26-Apr-2007	April Dry					Dry
	17-May-2007	Spring Rain	715	7.60	14.4	4.77	Slow Flow, Clear.
	19-Jun-2007	June Dry					Dry, No water next day after June 9 (9.8mm) and June 19 (22.4mm).
	10-Aug-2007	August Dry					Dry, No water next day after largest rain event on August 7 (18mm).
	26-Sep-2007	Summer Rain					Dry. No water next day after last rain event on Sept 26 (7.8mm).
	10-Oct-2007	Fall Rain					Dry, 38 mm previous three days.
	31-Oct-2007	October Dry					Dry
	29-Nov-2007	Additional Fall					No Water, ~15cm of snow in ditch.
	09-Apr-2008	Spring Freshet	412	7.10	10.6	8.39	Clear. Some flow
	20-Aug-2008	Summer Dry					Dry. Attempts made after 13.7 mm of rain in last 7 days
	16-Sep-2008	Summer Rain	497	7.40	16.3	4.36	Slow flow. Overgrown with grass
	18-Dec-2008	Fall Rain	574	7.60	6.8	6.4	Very little flow.
	28-May-2009	Spring Freshet	488	7.40	15.4	4.06	Slight sheen
	27-Jul-2009	Summer Dry	288	8.10	20.6	4.71	No flow/ weeds
	14-Oct-2009		567	7.60	6.6	5.82	Slow flow/ weeds/ Sample taken 3 meters from gauge
	05-Nov-2009		732	7.50	5.4	5.3	Slow flow/ weeds
	26-Nov-2009		488	7.80	10.4	7.6	Slow flow/ weeds
	16-Dec-2009		488	7.80	5.2	8.58	Broke ice
	25-Mar-2010		4.98	6.50	7.9	524	Murky with good flow
	20-Aug-2010		8.2	19.60	8	674	Brownish colour with lots of floating aquatic vegetation
	04-Oct-2010		5.85	8.50	7.1	932	Clear with some flow
	29-Nov-2010		8.94	3.30	7	732	Clear very low flow
	15-Mar-2011		835	7.99	4.6	8.5	Yellowish colour, good flow
	07-Jul-2011		1237	7.48	17.1	4.43	Low flow, clear
	30-Sep-2011		750	7.59	13.3	5.53	Low flow
	19-Oct-2011		914	9.08	8.7	7.75	Good flow
	13-Dec-2011		812	7.84	2.8	12.19	Clear decent flow
	04-May-2012	Spring Wet	716	7.68	16.8	7.46	Slightly cloudy good flow
	06-Jun-2012	June Trigger	1499	7.21	16.4	5.2	Low flow yellowish color
	13-Aug-2012	August Dry	565	7.65	21.8	5.69	Slightly cloudy low flow
	25-Sep-2012	September Dry	585	7.90	11.6	4.99	Clear low flow
	04-Dec-2012	Fall Wet	648	7.44	3.9	9.21	Good flow slightly cloudy
	05-Apr-2013	Spring Wet	953	7.88	2.5	6.29	Very slight yellow colour good flow
	17-Jul-2013	Summer Dry	1063	7.38	18.6	5.38	Very slight yellowish colour decent flow
	12-Sep-2013	Sept Wet	465	7.83	19.7	8.65	Low flow clear

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 2							
	02-Dec-2013	Dec Wet	1035	7.39	3	8.49	Very slight yellowish colour with good flow
	31-Mar-2014	Spring Freshet	699	7.64	2.8	9.76	Clear with good flow
	16-Jul-2014	July Dry	590	7.73	18.4	6.26	slightly cloudy with low flow
	06-Aug-2014	August Trigger	17.6	568.00	17.6	5.41	Slightly cloudy low flow
	22-Sep-2014	Sept Wet	582	7.74	13.1	7.01	Slightly cloudy good flow
	01-Dec-2014	Fall Wet	850	7.78	2.7	8.08	Very slightly cloudy with good flow
SW 3A							
	02-Sep-1993		1200	7.50	22	13.41	Fairly clear, good flow, silty bottom, bugs
	05-Nov-1993		1200	8.00	8	10.59	fairly clear, low flow
	30-Nov-1993		900	8.10	1	10.75	Fairly clear
	13-Apr-1994	Spring Freshet	800	7.30	6	5.55	Fairly clear, yellowish colour, weeds, some debris
	26-Apr-1994	Spring Rain	800	8.00	11	10.42	Yellow colour, clear, mud bottom/weeds, minnows/insects
	04-May-1994	Spring Dry	700	8.00	15	7.19	Silty yellowish brown, muddy bottom weeds/grass
	17-Jun-1994	June Dry	900	7.50	20	9.55	Heavy growth, grass/weeds/reeds, bio growth on surface
	04-Aug-1994	Summer Rain	900	8.20	12	10.73	Very weedy, meandering water course, silty sample
	17-Aug-1994	August Dry	900	7.70	15	9.45	Weedy muddy bottom, meandering water course
	14-Oct-1994	Fall Dry	900	8.00	8	10.63	Yellowish colour, main flow through weed channel
	21-Nov-1994	Fall Rain	700	8.20	9	10.72	Cloudy brown, good flow through channel
	13-Apr-1995	Spring Freshet	900	7.90	5	10.87	Fairly clear/yellowish, good flow, algae noted on banks
	28-Apr-1995	Spring Dry	700	8.10	10	10.52	Very clear sample, muddy/weedy bottom, lots of life, good flow
	17-May-1995	Spring Rain	1000	7.30	11	6.91	Clear/yellowish colour, heavy weed growth, flow is through weeds
	30-Jun-1995	June Dry	1000	7.80	18	7.6	Lots of weeds
	11-Aug-1995	Summer Rain	N/A	N/A	19	N/A	
	23-Aug-1995	August Dry	900	7.90	19	11.71	Brown/green scum, yellowish sample, lots of algae, very weedy
	20-Oct-1995	Fall Dry	800	7.90	12	10.59	Very weedy/grass, yellowish colour, flow through weeds
	28-Nov-1995	Fall Rain	952	7.60	5.9	10	Grass in bed of stream
	16-Apr-1996	Spring Freshet	715	8.60	4.5	8.5	Good flow, clear
	27-May-1996	Spring Dry	950	7.90	11	5.8	Lots of reeds in water, clear
	18-Jun-1996	Spring Rain	1000	N/A	15	6	Lots of weeds, good flow
	06-Aug-1996	June Dry	1050	N/A	17		Very little flow
	07-Oct-1996	August Dry	N/A	N/A	N/A	N/A	
	30-Oct-1996	Summer Rain	812	8.00	8.8	0	Reeds and grass, high water level, good flow
	06-Dec-1996	Fall Rain	1673	7.60	4.2	6.2	Good flow
	16-Apr-1997	Spring Freshet	936	8.00	7.5	7	Bags around staff gauge
	23-May-1997	Spring Dry	810	7.80	8.1	5.2	Some flow and flies; clear water
	07-Aug-1997	Summer Dry	804	7.70	14.2	4.3	
	18-Nov-1997	Fall Dry	1088	7.80	5.1	1.2	1" of ice on creek. Elevated water due to beaver dam downstream 25 m
	26-Nov-1997	Fall Rain	921	7.40	7.2	2.8	Ice on creek; had to break to get sample
	17-Jun-1998	Spring Rain	957	8.00	21.8	7	Brown and silty, flowing slowly, some floating debris
	07-Dec-1998	Fall Rain	771	9.00	9.7	5.4	Flow moderate to slow; slightly turbid
	23-Apr-1999	Spring Freshet	652	8.00	5.9	5.9	Clear, good flow
	30-Jun-1999	Summer Rain	N/A	N/A	N/A	N/A	
	06-Dec-1999	Fall Rain	672	6.70	6.7	7.2	Some flow, clear
	15-Mar-2000	Spring Freshet	463	7.40	5.3	6.7	Creek is clear of debris; good flow
	20-Sep-2000	Fall Dry	130	7.60	13.7	7.7	Very little flow - water level very low; creek bed is silty
	27-Nov-2000	Fall Rain	535	7.10	14.1	4.8	Some flow; clear; silty bottom
	20-Mar-2001	Spring Freshet	372	7.60	6.2	5.1	Some flow, Stream bed clear of debris, Very clear
	10-Oct-2001	Fall Dry	913	7.60	9.5	2.1	Very little flow, trickle
	03-Dec-2001	Fall rain	665	8.00	8.4	3.7	Flowing, clear
	18-Feb-2002	Spring Freshet					Not enough water to grab samples.
	17-Apr-2002	April Dry					Dry Conditions with warm temperatures - no flows observed

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 3A							
	15-May-2002	Spring Rain					No flow observed
	06-Jun-2002	Summer Rain	588	7.80	12.6	N/A	Good flow, clear
	17-Jun-2002	June Dry					No dry conditions due to heavy rains, Dry event could not be completed
	12-Aug-2002	August Dry					No rain for 10 days, no surface water to sample
	25-Oct-2002	October Dry					No more than 2 dry days in a row, no samples taken
	23-Dec-2002	Fall Rain					Rains for 2 days, still not enough water to sample
	18-Mar-2003	Spring Freshet	427	7.40	4.8	9.05	Good flow, creek is lined with ice
	28-Apr-2003	April Dry					No sample taken - Could not get 5 days of no rain
	26-May-2003	Spring Rain					No sample taken - Although there was rain, no water to sample
	18-Jun-2003	June Dry					No sample taken - Could not get 5 days of no rain
	06-Aug-2003	Summer Rain					Wet, no water
	26-Aug-2003	August Dry					No sample taken - Could not get 5 days of no rain
	24-Oct-2003	October Dry					No sample taken - Could not get 5 days of no rain
	19-Nov-2003	Fall Rain	587	7.70	11	7.6	Good flow, silty
	10-Mar-2004	Spring Freshet	650	7.50	1.6	8.87	Clear, some flow
	22-Apr-2004	Spring Rain					No sample taken - Although there was rain, no water to sample
	27-May-2004	April Dry	801	7.89	13.3	8.14	Water fairly clear, some flow.
	28-Jun-2004	June Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	17-Aug-2004	August Dry	830	8.02	14.5	8.35	Minor flow, clear.
	19-Oct-2004	Summer Rain	1124	8.30	8.4	8.3	Very little flow, clear.
	28-Oct-2004	October Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	08-Dec-2004	Fall Rain	574	7.89	4.9		Some flow, clear.
	04-Apr-2005	Spring Freshet	642	8.08	5.2	7.98	Moderate flow, clear
	30-Apr-2005	April Dry					No sample taken due to rain
	16-May-2005	Spring Rain					No sample taken, not enough run-off after rain event on May 16. Very little rain during rest of month.
	30-Jun-2005	June Dry					No samples taken, dry
	25-Aug-2005	August Dry					No sample taken, not enough run-off even after rain event earlier in the week of Aug 25.
	28-Sep-2005	Summer Rain					No sample taken, not enough run-off
	14-Oct-2005	October Dry					No sample taken, Dry
	30-Nov-2005	Fall Rain					No sample taken, not enough run-off
	24-Apr-2006	Spring Freshet	625	7.80	8.2	8.1	Good Flow. Garbage observed on east side of Access road.
	30-Apr-2006	April Dry					No Dry Period During Month
	31-May-2006	Spring Rain					Rain event early in month, no run-off occurring later in month.
	09-Jun-2006	June Dry					Low Water
	09-Aug-2006	August Dry					Low Water
	14-Sep-2006	Summer Rain					Dry
	12-Oct-2006	October Dry	705	7.60	8.6	6.27	Slow flow, good volume of water in creek.
	13-Dec-2006	Fall Rain	507	7.40	5.8	8.15	Slow flow, good volume of water in creek.
	23-Mar-2007	Spring Freshet	458	7.60	4.5	7.7	Slow Flow, Clear.
	26-Apr-2007	April Dry					Dry
	17-May-2007	Spring Rain	630	8.00	13.4	7.75	Slow Flow, Clear.
	19-Jun-2007	June Dry					Dry, No water next day after June 9 (9.8mm) and June 19 (22.4mm).
	10-Aug-2007	August Dry					Dry, No water next day after largest rain event on August 7 (18mm).
	26-Sep-2007	Summer Rain					Dry. No water next day after last rain event on Sept 26 (7.8mm).
	10-Oct-2007	Fall Rain					Dry, 38 mm previous three days.
	31-Oct-2007	October Dry					Dry
	29-Nov-2007	Additional Fall	700	7.00	3.8	9.89	Slow Flow, Clear. Leaves lining bottom of Creek.
	09-Apr-2008	Spring Freshet	522	7.10	11.2	7.71	Clear. Moderate flow
	20-Aug-2008	Summer Dry					Dry. Attempts made after 13.7 mm of rain in last 7 days
	16-Sep-2008	Summer Rain	584	7.50	15.3	6.21	Slow flow. TSS visible (possibly from development)

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 3A							
	18-Dec-2008	Fall Rain	642	7.90	3.2	8.05	Clear. Slow flow
	28-May-2009	Spring Freshet	676	7.50	13	5.6	Some sediment/ Good flow
	27-Jul-2009	Summer Dry	389	7.90	19.6	6.04	Slow flow/ Mucky
	14-Oct-2009		803	7.60	8	9.27	Slow flow/ Mucky
	05-Nov-2009		929	7.80	6.6	6.6	Slow flow/ weeds
	26-Nov-2009		705	8.00	9.3	8.6	Slow flow/ weeds
	16-Dec-2009		705	8.00	6.1	8.9	Broke ice
	25-Mar-2010		6.14	7.10	7.8	647	Slightly cloudy with goodflow
	20-Aug-2010		9.35	22.10	8.2	653	Clear, stream very shallow with staff gauge out of the water
	04-Oct-2010		7.55	9.50	7.6	878	Slightly cloudy, staff gauge out of water
	29-Nov-2010		9.46	4.40	7	932	Clear
	15-Mar-2011		795	7.90	3.9	9.95	Good flow, clear
	07-Jul-2011		962	7.91	18.2	8.42	Decent flow
	30-Sep-2011		1081	7.74	13.8	7.07	Very shallow with low flow
	19-Oct-2011		1075	9.01	9.2	10.31	Very low flow and very shallow
	13-Dec-2011		948	8.04	2.5	11.81	Clear with good flow
	04-May-2012	Spring Wet	880	7.89	15.4	8.84	Good flow
	06-Jun-2012	June Trigger	990	7.61	13.2	8.38	Very shallow and low flow yellowish color
	13-Aug-2012	August Dry	644	7.80	19.6	7.21	Clear, very shallow with low flow
	25-Sep-2012	September Dry	704	7.97	11.8	6.36	Clear low flow
	04-Dec-2012	Fall Wet	768	7.39	4.1	8.77	Good flow clear
	05-Apr-2013	Spring Wet	876	7.76	2.1	6.97	Good flow slightly yellow
	17-Jul-2013	Summer Dry	901	7.83	18.3	7.21	Low flow yellowish colour lots of aquatic veg
	12-Sep-2013	Sept Wet	529	7.75	18.6	9.16	Good flow cloudy
	02-Dec-2013	Dec Wet	1003	7.58	3.9	9.22	Slight yellow colour low flow
	31-Mar-2014	Spring Freshet	814	7.32	3.2	8.68	Slightly yellow good flow
	16-Jul-2014	July Dry	773	7.75	16.2	11.2	Yellowish with low flow
	06-Aug-2014	August Trigger	778	7.80	15.1	4.95	Yellowish with low flow
	22-Sep-2014	Sept Wet	393	7.22	12.6	5.65	Really good flow cloudy
	01-Dec-2014	Fall Wet	879	7.81	2.6	6.94	Yellowish with good flow
SW 4							
	10-Apr-1992		N/A	N/A	10		Clear, good flow out of culvert
	11-Jun-1992						Not sampled
	13-Aug-1992		1200	7.60	15		Fairly clear, biological build up on culvert
	10-Nov-1992		1000	8.00	7		Yellowish red, red staining on culvert and grass
	20-Apr-1993		600	9.30	5		Cloudy, discharge from wetland appears silty
	10-Jun-1993		600	9.20	14		Some silt, fast flow out of wetland
	29-Nov-1993	Spring Freshet	900	8.10	1	11.04	Yellow colour
	13-Apr-1994	Spring Rain	600	7.40	6	5.68	Cloudy brown, silty. Entering clear ditch water
	26-May-1994	Summer Rain	700	8.10	11	4.2	Light yellow colour, some visible particles
	04-Aug-1994	Fall Rain	900	8.10	14	11.31	Trickle from culvert, previously dry
	21-Nov-1994	Spring Freshet					Dry, not sampled although there has been substantial rain falls
	13-Apr-1995	Spring Rain	700	8.00	3	11.35	Debris in culvert (twigs etc.), fairly good flow
	17-May-1995	Summer Rain	700	6.90	12	4.38	Clear, good flow through culvert
	28-Nov-1995	Fall Rain	1615	7.60	5.7	11	Leaf accumulation in ditch, lots of growing, very little flow
	16-Apr-1996	Spring Freshet	734	8.20	5.1	10.8	Grass in ditch,
	18-Jun-1996	Spring Rain	1150	N/A	15	6	Very little flow, lots of grass in ditch
	30-Oct-1996	Summer Rain	675	8.10	9.2	4.5	Good flow
	06-Dec-1996	Fall Rain	720	7.40	2.5	2.4	Good flow
	16-Apr-1997	Spring Freshet	557	7.60	7.2	4.3	Good flow
	26-Nov-1997	Fall Rain	701	7.40	10.3	2.2	Sampled for TSS only; flow well clear

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 4							
	17-Jun-1998	Spring Rain					No flow
	07-Dec-1998	Fall Rain					No flow
	23-Apr-1999	Spring Freshet	479	8.30	8	2.1	Clear, good flow
	30-Jun-1999	Summer Rain	N/A	N/A	N/A	N/A	
	06-Dec-1999	Fall Rain	319	6.80	10.5	1.2	Good flow from pipe, foam present
	15-Mar-2000	Spring Freshet	315	7.00	4.2	3	Good flow; clear
	20-Sep-2000	Fall Dry					No sample - pipe is not discharging
	27-Nov-2000	Fall Rain					No Flow
	20-Mar-2001	Spring Freshet	288	7.10	3.8	2.1	Good flow from pipe
	10-Oct-2001	Fall Dry					Dry
	03-Dec-2001	Fall rain	355	7.60	7.7	1	Flowing, cloudy
	18-Feb-2002	Spring Freshet					Not enough water to grab samples.
	15-May-2002	Spring Rain					No flow observed
	06-Jun-2002	Summer Rain					Dry
	23-Dec-2002	Fall Rain					Rains for 2 days, still not enough water to sample
	18-Mar-2003	Spring Freshet					No Flow from culvert, frozen
	26-May-2003	Spring Rain					No sample taken - Although there was rain, no water to sample
	06-Aug-2003	Summer Rain					No flow
	19-Nov-2003	Fall Rain	513	7.60	11.9	2.52	Good flow, culvert half full
	10-Mar-2004	Spring Freshet	418	7.40	6.9	4.57	Clear, good flow
	22-Apr-2004	Spring Rain					No sample taken - Although there was rain, no water to sample
	27-May-2004	April Dry	444	7.82	15.1	2.88	Clear, some flow
	17-Aug-2004	August Dry					No sample collected, dry,
	19-Oct-2004	Summer Rain					No flow
	08-Dec-2004	Fall Rain	444	7.66	9.5		Good flow, culvert third full
	04-Apr-2005	Spring Freshet	404	7.94	6.1	4.47	Pipe is flowing half full, clear
	30-Apr-2005	April Dry					No sample taken due to rain
	16-May-2005	Spring Rain					No sample taken, not enough run-off after rain event on May 16. Very little rain during rest of month.
	25-Aug-2005	August Dry					No sample taken, not enough run-off even after rain event earlier in the week of Aug 25.
	28-Sep-2005	Summer Rain					No sample taken, not enough run-off
	30-Nov-2005	Fall Rain					No sample taken, not enough run-off
	24-Apr-2006	Spring Freshet	470	7.80	8.9	5.18	Culvert flowing (half full), clear.
	30-Apr-2006	April Dry					No Dry Period During Month
	31-May-2006	Spring Rain					Dry
	09-Aug-2006	August Dry					Dry
	14-Sep-2006	Summer Rain					Dry
	12-Oct-2006	October Dry	411	7.40	9.5	1.81	low flow. Water discoloured due to large amounts of leaves in bush.
	13-Dec-2006	Fall Rain	370	7.10	5	5.8	Some flow in culvert (about half full), clear.
	23-Mar-2007	Spring Freshet	277	7.80	3.9	8.39	Good Flow. Pipe 3/4 full. Ice cover in bused area.
	26-Apr-2007	April Dry					Dry
	17-May-2007	Spring Rain	245	7.60	13.3	2.71	Good Flow. Pipe 1/4 full.
	10-Aug-2007	August Dry					Dry, No water next day after largest rain event on August 7 (18mm).
	26-Sep-2007	Summer Rain					Dry. No water next day after last rain event on Sept 26 (7.8mm).
	10-Oct-2007	Fall Rain					Dry, 38 mm previous three days.
	31-Oct-2007	October Dry					Dry
	29-Nov-2007	Additional Fall					Dry
	09-Apr-2008	Spring Freshet	240	7.10	9	7.71	Good Flow. Pipe 1/2 full. Flooded in bush area.
	20-Aug-2008	Summer Dry					Dry. Attempts made after 13.7 mm of rain in last 7 days
	16-Sep-2008	Summer Rain	457	7.60	16.5	1.86	Clear. Good flow. Pipe 1/4 full
	18-Dec-2008	Fall Rain	527	7.60	3.6	3.11	Clear. Slow flow

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 4							
	28-May-2009	Spring Freshet	321	8.40	16.6	9.22	Silky
	27-Jul-2009	Summer Dry	219	8.90		5.88	Silky
	14-Oct-2009						No Discharge from location
	05-Nov-2009		350	8.10		6.3	No Discharge from location
	26-Nov-2009		324	8.50		9.58	
	16-Dec-2009		324	8.50		8.79	
	25-Mar-2010		7.21	6.90	7.5	409	clear
	20-Aug-2010		19.13	22.40	9.4	302	Last small pool of Water, very low flow, clear
	04-Oct-2010		7.27	10.40	7.6	298	Clear with very little flow
	29-Nov-2010		7.67	3.70	7.2	549	Slightly cloudy with very low flow
	15-Mar-2011		792	7.87	2.1	14.55	Good flow
	07-Jul-2011						No flow coming out of culvert and very low flow in ditch
	30-Sep-2011		dry	dry	dry	dry	No flow coming out of culvert
	19-Oct-2011		409	8.68	9.9	11.86	
	13-Dec-2011		532	8.26	1.8	13.62	Slightly cloudy with low flow
	04-May-2012	Spring Wet	531	8.35	19.7	9.56	Decent flow
	06-Jun-2012	June Trigger					No flow
	13-Aug-2012	August Dry	N/A	N/A	N/A	N/A	No flow
	25-Sep-2012	September Dry					No flow
	04-Dec-2012	Fall Wet	661	7.90	4.5	10.51	Low flow clear
	05-Apr-2013	Spring Wet	926	7.91	2.3	8.21	Clear with decent flow
	17-Jul-2013	Summer Dry					No flow
	12-Sep-2013	Sept Wet	306	8.41	20.3	7.74	Good flow slightly cloudy
	02-Dec-2013	Dec Wet	716	8.23	3.2	7.21	Clear low flow
	31-Mar-2014	Spring Freshet	685	7.23	2.9	8.13	Slightly cloudy good flow
	16-Jul-2014	July Dry	425	8.10	20	11.86	Slightly cloudy with low flow
	06-Aug-2014	August Trigger	360	8.05	20.6	6.68	Greyish low flow lots of aquatic vegetation
	22-Sep-2014	Sept Wet	393	7.22	12.3	5.65	Good flow cloudy
	01-Dec-2014	Fall Wet	725	7.65	1.6	6.91	Slightly cloudy with good flow
SW 5							
	10-Apr-1992		N/A	N/A	10		Clear
	11-Jun-1992		1600	7.40	15		Clear
	13-Aug-1992		1400	7.40	14		Clear, slow
	10-Nov-1992		1800	7.80	8		Clear, some sediment
	20-Apr-1993		1500	9.30	5		Fairly clear, yellow colour, some silt, silty bottom
	10-Jun-1993		1200	8.90	14		Some suspended silt, very silty bottom
	02-Sep-1993		400	7.70	17	6.3	Dark colour, lots of silt and weeds, slow
	05-Nov-1993		1000	8.00	7	11.87	Dirty brown colour, slow
	30-Nov-1993		1100	8.00	1	11.21	Dark colour, weed and algae growth
	13-Apr-1994	Spring Freshet	2400	7.20	6.5	5.66	Clear through weeds, some sediment load
	04-May-1994	Spring Dry	2100	7.60	12	5.43	Light yellow, clear, lot of weeds at culvert opening
	26-May-1994	Spring Rain	1000	8.00	11	10.53	Brown colour, very silty, mud bottom, weeds/grass
	17-Jun-1994	June Dry	1800	7.40	19	9.55	Clear yellow, heavy growth, little flow
	04-Aug-1994	Summer Rain	1200	8.00	19	11.23	Very weedy, sample appears silty
	17-Aug-1994	August Dry					Dry, not sampled, some small stagnant pools
	14-Oct-1994	Fall Dry					Dry, not sampled, some small stagnant pools
	21-Nov-1994	Fall Rain	600	8.00	9	11.2	Fairly clear, lots of reeds and grass
	13-Apr-1995	Spring Freshet	2200	7.80	5	11.05	Clear/yellow colour, lots of weeds/mud
	28-Apr-1995	Spring Dry	1600	8.00	10	10.05	Clear, silty/muddy/weedy botom, lots of reeds
	17-May-1995	Spring Rain	1000	7.40	13	10.7	Clear with some silt, growth around staff gauge
	30-Jun-1995	June Dry	2100	7.60	18	5.3	Very weedy

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 5							
	23-Aug-1995	August Dry	2000	7.50	18	6.89	Clear/yellow sample, very weedy, scum orange film, minimal flow
	20-Oct-1995	Fall Dry	2200	7.70	12	6.84	Very weedy/bull rushes, minimal flow
	28-Nov-1995	Fall Rain	4450	7.80	6	8	Lots of grass and reeds
	16-Apr-1996	Spring Freshet	1418	8.10	6.3	8.5	Some flow, lots of reeds
	27-May-1996	Spring Dry	1800	8.20	11	6.2	Some flow, weeds, some silt
	18-Jun-1996	Spring Rain	1200	N/A	16	6.3	Some flow, lots of reeds and grass
	06-Aug-1996	June Dry	2150	N/A	16	N/A	Very little flow, Lots of reeds
	07-Oct-1996	August Dry	N/A	N/A	N/A	N/A	Lots of reeds
	30-Oct-1996	Summer Rain	1244	8.00	10.2	5.4	Some flow, lots of reeds
	06-Dec-1996	Fall Rain	6260	7.80	6.5	5.4	Little flow, water cloudy, Gas Line work on Speedvale
	16-Apr-1997	Spring Freshet	1133	7.70	7.3	6.7	Some garbage around area. Very little flow coming from silt dams
	23-May-1997	Spring Dry	1597	7.30	9.6	6.9	No flow
	07-Aug-1997	Summer Dry					No flow - dry
	18-Nov-1997	Fall Dry	16370	7.50	3.8	3.5	Leaves lining bottom of creek, no flow, clear water
	26-Nov-1997	Fall Rain	2110	7.60	10.9	6.4	Cloudy, no flow
	17-Jun-1998	Spring Rain	486	7.80	20.8	3.3	Standing water
	07-Dec-1998	Fall Rain	1350	6.80	8.9	5.8	Very slight flow
	23-Apr-1999	Spring Freshet	964	7.70	8.6	5.7	Standing water, clear
	30-Jun-1999	Summer Rain	N/A	N/A	N/A	N/A	
	06-Dec-1999	Fall Rain	474	7.10	10.2	6.5	Very small flow through silt in culvert, very narrow
	15-Mar-2000	Spring Freshet	636	7.40	4.8	7.2	Trickling flow
	27-Mar-2000	MOEE Samples	431	7.40	7.7	7.3	Good flow; somewhat of a trickle
	20-Sep-2000	Fall Dry					No sample - location is dry; pile of silt has formed in creek 6 m downstream; removed silt
	27-Nov-2000	Fall Rain	1253	7.10	6.5	4.1	Very little flow / still; some silt in bottom
	20-Mar-2001	Spring Freshet	552	7.60	5.5	6	Very little flow, clear
	10-Oct-2001	Fall Dry					Dry
	03-Dec-2001	Fall rain	974	7.90	8.8	3.8	No real flow (trickle), clear
	18-Feb-2002	Spring Freshet					Not enough water to grab samples.
	17-Apr-2002	April Dry					Dry Conditions with warm temperatures - no flows observed
	15-May-2002	Spring Rain					No flow observed
	06-Jun-2002	Summer Rain	134	7.60	11.7		Some flow
	17-Jun-2002	June Dry					No dry conditions due to heavy rains, Dry event could not be completed
	12-Aug-2002	August Dry					No rain for 10 days, no surface water to sample
	25-Oct-2002	October Dry					No more than 2 dry days in a row, no samples taken
	23-Dec-2002	Fall Rain					Rains for 2 days, still not enough water to sample
	18-Mar-2003	Spring Freshet	744	7.50	3.4	9.8	Low flow, visible TSS
	28-Apr-2003	April Dry					No sample taken - Could not get 5 days of no rain
	26-May-2003	Spring Rain					No sample taken - Although there was rain, no water to sample
	18-Jun-2003	June Dry					No sample taken - Could not get 5 days of no rain
	06-Aug-2003	Summer Rain					Very little water
	26-Aug-2003	August Dry					No sample taken - Could not get 5 days of no rain
	24-Oct-2003	October Dry					No sample taken - Could not get 5 days of no rain
	19-Nov-2003	Fall Rain	657	7.70	11.2	8.3	Some flow, clear
	10-Mar-2004	Spring Freshet	1115	7.60	4.3	8.73	Clear, trickle flow
	22-Apr-2004	Spring Rain					No sample taken - Although there was rain, no water to sample
	27-May-2004	April Dry	944	8.09	15.6	6.9	Clear, trickle flow
	28-Jun-2004	June Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	17-Aug-2004	August Dry					No sample collected, dry,
	19-Oct-2004	Summer Rain					No flow
	28-Oct-2004	October Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	08-Dec-2004	Fall Rain	965	8.08	8.6		Very little flow, clear.

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 5							
	04-Apr-2005	Spring Freshet	960	8.51	6.5	9.68	Some flow, visible TSS
	30-Apr-2005	April Dry					No sample taken due to rain
	16-May-2005	Spring Rain					No sample taken, not enough run-off after rain event on May 16. Very little rain during rest of month.
	30-Jun-2005	June Dry					No samples taken, dry
	25-Aug-2005	August Dry					No sample taken, not enough run-off even after rain event earlier in the week of Aug 25.
	28-Sep-2005	Summer Rain					No sample taken, not enough run-off
	14-Oct-2005	October Dry					No sample taken, Dry
	30-Nov-2005	Fall Rain					No sample taken, not enough run-off
	24-Apr-2006	Spring Freshet	933	7.80	8	8.8	Slow flow, clear.
	30-Apr-2006	April Dry					No Dry Period During Month
	31-May-2006	Spring Rain					Rain event early in month, no run-off occurring later in month.
	09-Jun-2006	June Dry					Low Water
	09-Aug-2006	August Dry					Low Water
	14-Sep-2006	Summer Rain					Dry
	12-Oct-2006	October Dry	1063	7.70	10.8	7.8	No flow. Lots of leaves and grass.
	13-Dec-2006	Fall Rain	707	7.40	6.8	9.05	No flow.
	23-Mar-2007	Spring Freshet	825	8.00	5.6	8.88	Slow to No Flow. Ice/slush blockage upstream.
	26-Apr-2007	April Dry					Dry
	17-May-2007	Spring Rain	959	8.40	12.7	6.55	Slow Flow, Clear.
	19-Jun-2007	June Dry					Dry, No water next day after June 9 (9.8mm) and June 19 (22.4mm).
	10-Aug-2007	August Dry					Dry, No water next day after largest rain event on August 7 (18mm).
	26-Sep-2007	Summer Rain					Dry. No water next day after last rain event on Sept 26 (7.8mm).
	10-Oct-2007	Fall Rain					Dry, 38 mm previous three days.
	31-Oct-2007	October Dry					Dry
	29-Nov-2007	Additional Fall	1281	6.90	3.8	10	Slow to No Flow, Clear. Leaves/silt buildup in ditch..
	09-Apr-2008	Spring Freshet	806	7.10	9.7	8.62	Clear. Slow flow
	20-Aug-2008	Summer Dry					Dry. Attempts made after 13.7 mm of rain in last 7 days
	16-Sep-2008	Summer Rain	1422	7.20	16	4.97	Clear. Very low flow.
	18-Dec-2008	Fall Rain	826	7.90	3.5	10.18	Clear. Very little flow
	28-May-2009	Spring Freshet	589	7.60	15.1	7.86	Silky
	27-Jul-2009	Summer Dry	1333	7.60	18.7	3.58	No flow/ Clean
	14-Oct-2009		1934	7.60	6.8	1.86	Slow flow/ Clean
	05-Nov-2009		1734	8.00	6.8	8.86	Slow flow/ Clean
	26-Nov-2009		1944	8.00	9.2	8.8	Slow flow/ Clean
	16-Dec-2009		1944	8.00	6.2	7.78	Broke ice
	25-Mar-2010		6.67	7.10	7.3	573	Slightly cloudy with average flow
	20-Aug-2010		9.5	20.40	8.4	701	Brownish colour
	04-Oct-2010		4.48	8.50	7	904	Slightly murky with average flow
	29-Nov-2010		8.15	1.30	7.1	682	Clear, Ice on surface,
	15-Mar-2011		904	7.91	3.1	11.26	Very slight yellowish colour good flow
	07-Jul-2011		1307	7.83	19.1	6.84	Low flow
	30-Sep-2011		dry	dry	dry	dry	No flow and creek had dried up at this end
	19-Oct-2011		535	8.90	8.9	10.79	Clear with low flow and some aquatic vegetation
	13-Dec-2011		10.72	8.10	2.9	11.28	Good flow very slight yellowish colour
	04-May-2012	Spring Wet	973	7.72	13.7	9.32	Low flow clear
	06-Jun-2012	June Trigger					No flow
	13-Aug-2012	August Dry	N/A	N/A	N/A	N/A	No flow
	25-Sep-2012	September Dry					No flow
	04-Dec-2012	Fall Wet	617	7.50	4.4	9.99	Clear with decent flow
	05-Apr-2013	Spring Wet	1120	7.96	2.6	8.07	Clear with decent flow

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 5							
	17-Jul-2013	Summer Dry					No flow
	12-Sep-2013	Sept Wet	304	7.88	20	8.17	Low flow cloudy
	02-Dec-2013	Dec Wet	1106	7.13	1.4	9.55	Very low flow slight yellow colour
	31-Mar-2014	Spring Freshet	397	7.52	2.4	10.18	Clear with good flow
	16-Jul-2014	July Dry	1270	7.83	17.1	4.9	Clear with low flow
	06-Aug-2014	August Trigger	1047	7.73	15.8	4.58	Mostly clear with low flow
	22-Sep-2014	Sept Wet	986	7.77	14.3	6.67	Good flow clear
	01-Dec-2014	Fall Wet	966	7.95	2.6	7.65	Clear with low flow
SW 7							
	10-Apr-1992		N/A	N/A	10		Clear
	11-Jun-1992		800	7.40	14		Clear, red staining on creek bottom
	13-Aug-1992		1000	7.40	14		Slightly yellow, good flow
	10-Nov-1992		900	7.60	6		Reddish staining on creek bottom and grass
	20-Apr-1993		700	9.20	5		Clear, fast, gravel bottom, red staining on culvert
	10-Jun-1993		800	8.40	15		Clear
	01-Sep-1993				1		Dry, not sampled
	26-May-1994	Spring Rain	700	8.10	11	7.56	Light yellow colour, good flow
	17-Jun-1994	June Dry	1000	7.10	21	1.4	Yellow colour, some ponding and stagnant areas
	17-Aug-1994	August Dry					Dry, not sampled
	21-Nov-1994	Fall Rain	2000	8.10		11.15	Clear, gravelly bottom, weeds
	17-May-1995	Spring Rain	900	7.10	13	5.26	Clear sample, gravel bottom, little growth
	30-Jun-1995	June Dry					Dry, not sampled
	23-Aug-1995	August Dry					Dry, not sampled
	28-Nov-1995	Fall Rain	810	7.80	4.4	9	Some grass and leaves in creek
	18-Jun-1996	Spring Rain	800	N/A	16	5.7	Fairly good flow, some sticks in culvert
	06-Aug-1996	June Dry	1400	N/A	18	N/A	No flow
	07-Oct-1996	August Dry	N/A	N/A	N/A	N/A	Little flow, scum observed on water down stream
	06-Dec-1996	Fall Rain	819	7.60	2.3	5.2	Good flow
	26-Nov-1997	Fall Rain	1182	7.90	3.6	3.8	Water clear and running
	17-Jun-1998	Spring Rain					No flow
	07-Dec-1998	Fall Rain	781	7.60	10.1	4.2	Some flow; lots of woody debris
	23-Apr-1999	Spring Freshet					Not sampled
	30-Jun-1999	Summer Rain	N/A	N/A	N/A	N/A	
	06-Dec-1999	Fall Rain	447	6.80	9	5.2	Good flow
	15-Mar-2000	Spring Freshet	187	7.10	4	4.5	Some flow; clear
	20-Sep-2000	Fall Dry					No sample - flow path is dry; lined with old leaves
	27-Nov-2000	Fall Rain	672	6.70	7.1	4.3	Some flow; lots of leaves lining bottom
	20-Mar-2001	Spring Freshet	104	7.30	2.2	4.2	Water flowing, clear
	10-Oct-2001	Fall Dry					Dry
	03-Dec-2001	Fall rain	704	7.80	8	3	Slight flow, clear
	18-Feb-2002	Spring Freshet					Not enough water to grab samples.
	15-May-2002	Spring Rain					No flow observed
	06-Jun-2002	Summer Rain	924	7.50	13		Very little flow, almost still. A few sticks in culvert, clear.
	17-Jun-2002	June Dry					No dry conditions due to heavy rains, Dry event could not be completed
	12-Aug-2002	August Dry					No rain for 10 days, no surface water to sample
	25-Oct-2002	October Dry					No more than 2 dry days in a row, no samples taken
	23-Dec-2002	Fall Rain					Rains for 2 days, still not enough water to sample
	18-Mar-2003	Spring Freshet	592	7.60	2.2	6.84	Excellent flow, clear. Note construction on adjacent property
	26-May-2003	Spring Rain					No sample taken - Although there was rain, no water to sample
	18-Jun-2003	June Dry					No sample taken - Could not get 5 days of no rain
	06-Aug-2003	Summer Rain					Very little water, construction continues on adjacent property

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 7							
	26-Aug-2003	August Dry					No sample taken - Could not get 5 days of no rain
	24-Oct-2003	October Dry					No sample taken - Could not get 5 days of no rain
	19-Nov-2003	Fall Rain					No Access due to construction
	10-Mar-2004	Spring Freshet					No access due to construction on adjacent property along Watson Rd.
	22-Apr-2004	Spring Rain					No sample taken - Although there was rain, no water to sample
	27-May-2004	April Dry	468	7.83	16.1	6.81	Water has visible TSS. Note silt fence near construction has been breached by about 0.9m of water.
	28-Jun-2004	June Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	17-Aug-2004	August Dry					No flow, small puddle, not enough water to sample.
	19-Oct-2004	Summer Rain					No flow
	28-Oct-2004	October Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	08-Dec-2004	Fall Rain	406	7.98	9.3		Moderate flow, clear. Silt fence up stream is overflowing with water.
	04-Apr-2005	Spring Freshet	499	8.00	6.1	6.72	Good flow, Silt fence up-stream is being breached by water
	30-Apr-2005	April Dry					No sample taken due to rain
	16-May-2005	Spring Rain					No sample taken, not enough run-off after rain event on May 16. Very little rain during rest of month.
	30-Jun-2005	June Dry					No samples taken, dry
	25-Aug-2005	August Dry					No sample taken, not enough run-off even after rain event earlier in the week of Aug 25.
	28-Sep-2005	Summer Rain					No sample taken, not enough run-off
	14-Oct-2005	October Dry					No sample taken, Dry
	30-Nov-2005	Fall Rain					No sample taken, not enough run-off
	24-Apr-2006	Spring Freshet	459	7.80	9.2	8.23	Good flow. Visible silt.
	30-Apr-2006	April Dry					No Dry Period During Month
	31-May-2006	Spring Rain					Rain event early in month, no run-off occurring later in month.
	09-Jun-2006	June Dry					Low Water
	09-Aug-2006	August Dry					Low Water
	14-Sep-2006	Summer Rain	307	7.90	17.6	6.21	Good Flow. Lots of TSS (Silty).
	12-Oct-2006	October Dry	377	7.80	9.8	7.55	Good flow. Visible TSS.
	13-Dec-2006	Fall Rain	303	7.40	6.5	9.5	Good flow. Visible TSS.
	23-Mar-2007	Spring Freshet	539	7.00	5.1	8.14	Slow Flow, Visible TSS.
	26-Apr-2007	April Dry					Dry
	17-May-2007	Spring Rain	479	8.00	12.9	8.05	Good Flow, Lots of Visible TSS.
	19-Jun-2007	June Dry					Dry, No water next day after June 9 (9.8mm) and June 19 (22.4mm).
	10-Aug-2007	August Dry					Dry, No water next day after largest rain event on August 7 (18mm).
	26-Sep-2007	Summer Rain					Dry. No water next day after last rain event on Sept 26 (7.8mm).
	10-Oct-2007	Fall Rain	331	7.10	12.8	5.31	Very Slow Flow, Visible TSS.
	31-Oct-2007	October Dry					Dry
	29-Nov-2007	Additional Fall	950	7.00	4	10.2	Flowing, Visible TSS.
	09-Apr-2008	Spring Freshet	469	7.10	7.5	7.97	Good Flow. Visible TSS
	20-Aug-2008	Summer Dry					Dry. Attempts made after 13.7 mm of rain in last 7 days
	16-Sep-2008	Summer Rain	385	7.90	17.5	5.76	Low flow. Visible TSS.
	18-Dec-2008	Fall Rain	676	7.60	4.5	6.77	Low flow. Visible TSS.
	28-May-2009	Spring Freshet	586	7.40	13.6	15.5	Good flow
	27-Jul-2009	Summer Dry	365	8.00	18.9	6.26	Slow flow
	14-Oct-2009		620	7.40	9.2	7.92	Slow flow
	05-Nov-2009		840	7.40	4.2	4.92	Slow flow
	26-Nov-2009		517	9.80	9.2	4.92	Slow flow
	16-Dec-2009		517	9.80	4.7	8.73	Broke ice
	25-Mar-2010		9.87	6.90	7.1	556	Clear with good flow
	20-Aug-2010		6.61	22.50	7.7	587	Clear with low flow
	04-Oct-2010		6.86	10.40	7.4	516	Clear with good flow

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 7							
	29-Nov-2010		9.27	4.00	7.4	651	Clear with lower than average flow
	15-Mar-2011		1031	7.73	2.6	8.3	Mostly clear
	07-Jul-2011		563	7.83	22.7	6.54	Decent flow
	30-Sep-2011		509	8.39	16.3	7.74	Good flow
	19-Oct-2011		552	8.56	9.1	10.94	Clear with decent flow
	13-Dec-2011		821	8.01	2.8	12.41	Clear with good flow
	04-May-2012	Spring Wet	674	8.16	18.4	8.82	
	06-Jun-2012	June Trigger	611	7.50	16.1	7.35	Clear with decent flow
	13-Aug-2012	August Dry	N/A	N/A	N/A	N/A	cloudy
	25-Sep-2012	September Dry	4.38	7.81	12.1	7.89	Clear decent flow
	04-Dec-2012	Fall Wet	703	7.55	3.7	9.34	Good flow slight yellow color
	05-Apr-2013	Spring Wet	984	7.90	4.2	7.59	Very slight yellow colour very good flow
	17-Jul-2013	Summer Dry	686	7.64	19.8	9.76	Clear- very slightly cloudy good flow
	12-Sep-2013	Sept Wet	337	8.02	21.1	8.93	Good flow clear
	02-Dec-2013	Dec Wet	911	7.67	3.1	10.17	Good flow clear
	31-Mar-2014	Spring Freshet	978	7.11	4.5	7.29	Slightly cloudy good flow
	16-Jul-2014	July Dry	471	7.90	19.1	7.47	clear with flow lots of emergent vegetation
	06-Aug-2014	August Trigger	577	7.97	20.3	4.1	Clear with good flow
	22-Sep-2014	Sept Wet	525	7.84	13.8	6.59	Really good flow clear
	01-Dec-2014	Fall Wet	741	7.87	1.8	6.94	Clear with really good flow
SW 15							
	15-Apr-1992		N/A	N/A	N/A	N/A	Clear, some sediment
	11-Jun-1992		700	7.40	17		Oily film, some sediment, red stain along bank
	13-Aug-1992		700	7.40	15		Oily film, Heavy biological build up on weeds, creating excessive sediment
	10-Nov-1992		700	7.80	4		Clear, good volume
	20-Apr-1993		600	9.00	6		Very clear, rock/gravel bottom, high volume
	10-Jun-1993		700	9.00	13		Fairly clear, mud/rock bottom, weeds
	02-Sep-1993		500	7.80	23	5.14	Dark colour, lots of algal growth
	30-Nov-1993		1000	8.20	1	11.34	Clear, ice on edge
	26-May-1994	Spring Rain	700	8.30	14	3.7	Yellow colour, good volume, suspended particles visible
	17-Jun-1994	June Dry	700	7.20	26	5.3	Cloudy yellow, abundant invertebrates, little flow
	17-Aug-1994	August Dry	600	7.20	13	6.74	Lots of algae growth, oily film on surface, muddy bottom
	21-Nov-1994	Fall Rain	700	8.10	6	10.83	Murky dark colour, ditch has been reworked on right side
	17-May-1995	Spring Rain	600	7.30	15	5.25	Very clear, algae on top, some suspended sediments, good flow
	30-Jun-1995	June Dry	700	7.60	22	5.48	Faily clear, algae, slow flow
	23-Aug-1995	August Dry	700	7.00	23	6.7	Clear, lots of algae, lots of minnows
	28-Nov-1995	Fall Rain	810	7.60	2	9	Ice and snow but creek is clear
	18-Jun-1996	Spring Rain	700	N/A	17	3	Lots of suspended particulate, good flow
	06-Aug-1996	June Dry	700	N/A	19		Little flow
	07-Oct-1996	August Dry	N/A	N/A	N/A	N/A	Little flow, clear
	06-Dec-1996	Fall Rain	692	7.70	1.7	4.8	Some ice on creek, cold water
	07-Aug-1997	Summer Dry	708	8.20	13.3	1.7	No flow; algae plentiful
	26-Nov-1997	Fall Rain	603	7.60	4.1	4.2	Clear and running; looks like a trap is at fence
	17-Jun-1998	Spring Rain					No flow
	07-Dec-1998	Fall Rain	1118	7.00	8.9	3.3	Good flow, lots of vegetation in water
	23-Apr-1999	Spring Freshet					Not sampled
	30-Jun-1999	Summer Rain	N/A	N/A	N/A	N/A	
	06-Dec-1999	Fall Rain	175	6.50	7.5	4.1	Flowing well
	15-Mar-2000	Spring Freshet	151	6.90	2.3	5.2	Good flow; visible flow from ditch into creek
	20-Sep-2000	Fall Dry	241	8.00	16.1	2.3	Very little flow; film observed on water on downstream side; called B.Taylor @ Waste to look at water

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 15							
	27-Nov-2000	Fall Rain	569	7.60	4.7	4.1	Good flow; ice in creek
	20-Mar-2001	Spring Freshet	90	7.10	2.2	2.8	Good flow, visible run-off from ditch (west)
	10-Oct-2001	Fall Dry	644	7.80	7.9	2.1	Very little flow, clear
	03-Dec-2001	Fall rain	607	7.50	6	3.5	Good Flow, clear
	18-Feb-2002	Spring Freshet					Not enough water to grab samples.
	15-May-2002	Spring Rain					No flow observed
	06-Jun-2002	Summer Rain	636	7.80	14.2		Good flow, some visible TSS
	17-Jun-2002	June Dry					No dry conditions due to heavy rains, Dry event could not be completed
	12-Aug-2002	August Dry					No rain for 10 days, no surface water to sample
	25-Oct-2002	October Dry					No more than 2 dry days in a row, no samples taken
	23-Dec-2002	Fall Rain					Rains for 2 days, still not enough water to sample
	18-Mar-2003	Spring Freshet	319	7.60	3.6	5.95	Good flow, clear, snow and ice in culvert
	26-May-2003	Spring Rain					No sample taken - Although there was rain, no water to sample
	18-Jun-2003	June Dry					No sample taken - Could not get 5 days of no rain
	06-Aug-2003	Summer Rain	463	7.70	18.7	1.31	Some flow, clear, orange tinge to creek bottom and sides.
	26-Aug-2003	August Dry					No sample taken - Could not get 5 days of no rain
	24-Oct-2003	October Dry					No sample taken - Could not get 5 days of no rain
	19-Nov-2003	Fall Rain	348	7.60	15.4	4.74	Good flow, clear
	10-Mar-2004	Spring Freshet	368	7.30	12	5.27	Clear, good flow
	22-Apr-2004	Spring Rain					No sample taken - Although there was rain, no water to sample
	27-May-2004	April Dry	523	7.71	15.6	3.11	Clear, flowing well. Duck with duckling observed in creek.
	28-Jun-2004	June Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	17-Aug-2004	August Dry	540	7.38	14.7	1.59	Very little flow, reddish tinge on creek bed, some TSS.
	19-Oct-2004	Summer Rain	756	7.40	7.2	4.52	Some flow, clear.
	28-Oct-2004	October Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	08-Dec-2004	Fall Rain	533	7.66	13		Good flow, clear. Some patchy ice.
	04-Apr-2005	Spring Freshet	413	7.65	7.7	6.97	Fast flow
	30-Apr-2005	April Dry					No sample taken due to rain
	16-May-2005	Spring Rain					No sample taken, not enough run-off after rain event on May 16. Very little rain during rest of month.
	30-Jun-2005	June Dry					No samples taken, dry
	25-Aug-2005	August Dry					No sample taken, not enough run-off even after rain event earlier in the week of Aug 25.
	28-Sep-2005	Summer Rain					No sample taken, not enough run-off
	14-Oct-2005	October Dry					No sample taken, Dry
	30-Nov-2005	Fall Rain					No sample taken, not enough run-off
	24-Apr-2006	Spring Freshet	514	7.60	11.4	5.37	Good flow, clear.
	30-Apr-2006	April Dry					No Dry Period During Month
	31-May-2006	Spring Rain					Rain event early in month, no run-off occurring later in month.
	09-Jun-2006	June Dry					Low Water
	09-Aug-2006	August Dry					Low Water
	14-Sep-2006	Summer Rain	568	7.30	17.4	2.1	Very little flow. Dead shunk observed. Sample upstream of this point.
	12-Oct-2006	October Dry	580	7.70	10	3.66	Good flow, clear.
	13-Dec-2006	Fall Rain	364	7.30	8.6	7.56	Good flow, clear.
	23-Mar-2007	Spring Freshet	432	7.00	5.7	6.99	Fast Turbulent Flow, Clear
	26-Apr-2007	April Dry					Dry
	17-May-2007	Spring Rain	510	7.60	13.7	4.55	Good Flow, Clear
	19-Jun-2007	June Dry					Dry, No water next day after June 9 (9.8mm) and June 19 (22.4mm).
	10-Aug-2007	August Dry					Dry, No water next day after largest rain event on August 7 (18mm).
	26-Sep-2007	Summer Rain					Dry. No water next day after last rain event on Sept 26 (7.8mm).
	10-Oct-2007	Fall Rain	1105	7.10	14.9	2.45	Very Low Flow, clear.
	31-Oct-2007	October Dry					Dry

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 15							
	29-Nov-2007	Additional Fall	1124	6.90	7.4	5.35	Slow Flow, Ice covered.
	09-Apr-2008	Spring Freshet	329	7.00	8	5.15	Clear. Fast flow
	20-Aug-2008	Summer Dry					Dry. Attempts made after 13.7 mm of rain in last 7 days
	16-Sep-2008	Summer Rain	540	8.00	18.5	2.27	Clear. Good flow
	18-Dec-2008	Fall Rain	444	7.40	7.6	7.3	Clear. Good flow
	28-May-2009	Spring Freshet	517	7.20	15.2	0.99	Some sediment/ Good flow
	27-Jul-2009	Summer Dry	540	7.20	17.8	1.99	Slow flow/ Lots of vegetation
	14-Oct-2009		659	7.00	11	4.35	Slow flow/ Lots of vegetation
	05-Nov-2009		703	7.70	3	3.45	Slow flow/ Lots of vegetation
	26-Nov-2009		644	7.70	7	8.45	Slow flow/ Lots of vegetation
	16-Dec-2009		644	7.70	3.9	6.43	Broke ice
	25-Mar-2010		8.21	7.30	7.2	720	clear
	20-Aug-2010		3.52	20.40	7.6	608	Very clear with good flow, lots of aquatic vegetation
	04-Oct-2010		5.63	10.20	7.4	595	Very clear with good flow
	29-Nov-2010		9.1	1.60	7.3	688	Clear with average flow
	15-Mar-2011		637	8.35	1.6	11.35	Clear, really good flow
	07-Jul-2011		753	7.47	21.9	2.72	Decent flow
	30-Sep-2011		870	7.40	14.1	3.96	Slightly yellowish good flow
	19-Oct-2011		794	8.36	8.8	7.77	Clear good flow
	13-Dec-2011		816	8.21	0.8	7.7	Clear with strong flow, ice on top
	04-May-2012	Spring Wet	642	7.83	17.8	7.15	Good flow clear
	06-Jun-2012	June Trigger	727	7.22	15.7	4.5	Good flow
	13-Aug-2012	August Dry	968	7.51	22	5.4	Lower flow than normal with a pump in the creek someone is using for irrigation
	25-Sep-2012	September Dry	1338	7.71	11.3	6.67	Clear low flow, pump in creek
	04-Dec-2012	Fall Wet	744	7.51	3.1	8.12	Good flow clear
	05-Apr-2013	Spring Wet	610	8.24	1.5	7.04	Clear with very good flow
	17-Jul-2013	Summer Dry	764	7.69	20.1	8.76	Really good flow yellowish colour
	12-Sep-2013	Sept Wet	660	7.84	19.2	9.17	Slightly yellowish really good flow
	02-Dec-2013	Dec Wet	960	7.62	4.4	8.16	Yellowish low flow
	31-Mar-2014	Spring Freshet	632	7.31	2.6	7.02	Really good flow lots of ice and ponding water
	16-Jul-2014	July Dry	669	7.64	17	10.42	Clear with really good flow
	06-Aug-2014	August Trigger	635	7.61	17.5	3.2	Clear with really good flow
	22-Sep-2014	Sept Wet	7.46	7.23	12.6	4.99	really good flow clear
	01-Dec-2014	Fall Wet	688	7.80	1.4	8.11	Clear with really good flow
SW 16							
	02-Sep-1993		500	7.40	23	5.14	Fairly clear, numerous bugs
	05-Nov-1993		1200	8.00	8	10.61	Fairly clear
	30-Nov-1993		1000	8.10	2	10.72	Yellow colour
	13-Apr-1994	Spring Freshet	700	7.20	5.5	5.51	Reddish yellow colour, fairly clear
	26-Apr-1994	Spring Rain	750	8.00	11	10.54	Yellowish colour, very clear, reddish colouring on mud and culvert
	04-May-1994	Spring Dry	800	8.30	10	7.58	Brown colour, very silty, good flow
	17-Jun-1994	June Dry	800	7.20	16	9.75	Clear, red colouring on bottom, very slow flow
	04-Aug-1994	Summer Rain	1000	8.10	16	10.7	Note minnow creek at culvert, lots of traffic apparent
	17-Aug-1994	August Dry	1000	7.70	14	9.75	Culvert red stained, muddy bottom/ weeds, insect/frogs/minnows
	14-Oct-1994	Fall Dry	900	8.10	9	10.52	Yellowish colours, slightly silty due to activity in storm culvert(Oct 13)
	21-Nov-1994	Fall Rain	700	8.10	8	10.72	Very cloudy brown silty, good volume
	13-Apr-1995	Spring Freshet	900	8.00	4	10.95	New gate, some rust in water from gate, mud bottom, yellow sample
	28-Apr-1995	Spring Dry	700	8.10	10	10.13	Clear sample, muddy bottom, alga around gate, lots of bugs/shells
	17-May-1995	Spring Rain	1600	7.60	12	9.76	Very silty, cloudy sample, gravel/mud bottom
	30-Jun-1995	June Dry	700	7.80	17	8.1	Clear, minimal flow
	11-Aug-1995	Summer Rain	N/A	N/A	N/A	N/A	

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 16							
	23-Aug-1995	August Dry	800	7.30	15	8.11	Fairly clear/yellowish sample, gravel piled from ditching, algea present
	20-Oct-1995	Fall Dry	800	7.80	11	9.46	Clear/pale yellow sample, surface bugs, gravel washed in from west side.
	28-Nov-1995	Fall Rain	1177	7.60	5.4	10	Very little to no flow, water appears to be standing
	16-Apr-1996	Spring Freshet	687	8.10	4.8	6.4	Very little flow
	27-May-1996	Spring Dry	800	7.80	9	4.6	Some debris behide grate
	18-Jun-1996	Spring Rain	N/A800	N/A	15	5.5	Very murky, good flow
	06-Aug-1996	June Dry	N/A1100	N/A	17	N/A	Some sticks behide grate
	07-Oct-1996	August Dry	N/A	N/A	N/A	N/A	Lots of reeds, water level high
	30-Oct-1996	Summer Rain	798	8.00	8.9	5	Sticks behind grate
	06-Dec-1996	Fall Rain	1809	7.40	4	5	Little flow
	16-Apr-1997	Spring Freshet	890	7.80	6	7.2	Straw trapped behind grate should be cleaned
	23-May-1997	Spring Dry	803	7.40	7.2	4.4	
	07-Aug-1997	Summer Dry	843	7.20	13.4	4	Beaver dam downstream
	18-Nov-1997	Fall Dry	1089	7.60	6.4	5	Open water, very deep, clear
	26-Nov-1997	Fall Rain	1037	7.40	7.6	5.5	Water churned up, flow
	17-Jun-1998	Spring Rain	699	7.90	16.3	3.2	Some flow, lots of suspended particles, invertebrates present
	07-Dec-1998	Fall Rain	639	7.60	10.6	5.2	Murky, very little flow, can hear water trickling through beaver dam
	23-Apr-1999	Spring Freshet	555	7.90	8.9	6.1	Debris behind grate, some flow, grate cleaned, better flow
	30-Jun-1999	Summer Rain	N/A	N/A	N/A	N/A	
	06-Dec-1999	Fall Rain	398	6.90	6.2	6.9	Some flow, sticks behind culvert
	15-Mar-2000	Spring Freshet	428	7.20	4.1	5.4	Some flow; removed sticks behind grate
	27-Mar-2000	MOEE Samples	168.2	7.00	5.3	5	Cloudy; some TSS
	20-Sep-2000	Fall Dry	131	7.60	13.5	5.1	
	27-Nov-2000	Fall Rain	553	7.20	8.1	5	Very little flow; bags removed from behind grate
	20-Mar-2001	Spring Freshet	120	7.60	4.3	5.2	Some flow, weeds have accumulated behind grate on culvert
	10-Oct-2001	Fall Dry	878	7.50	9.9	3.4	Very little flow, trickle
	03-Dec-2001	Fall rain	407	7.80	7.8	2.7	
	18-Feb-2002	Spring Freshet					Not enough water to grab samples.
	17-Apr-2002	April Dry					Dry Conditions with warm temperatures - no flows observed
	15-May-2002	Spring Rain					No flow observed
	06-Jun-2002	Summer Rain	879	7.00	11.2		Some flow, tadpoles seen, clear
	17-Jun-2002	June Dry					No dry conditions due to heavy rains, Dry event could not be completed
	12-Aug-2002	August Dry					No rain for 10 days, no surface water to sample
	25-Oct-2002	October Dry					No more than 2 dry days in a row, no samples taken
	23-Dec-2002	Fall Rain					Rains for 2 days, still not enough water to sample
	18-Mar-2003	Spring Freshet	365	7.40	4.7	9.19	Good flow, visible TSS
	28-Apr-2003	April Dry					No sample taken - Could not get 5 days of no rain
	26-May-2003	Spring Rain					No sample taken - Although there was rain, no water to sample
	18-Jun-2003	June Dry					No sample taken - Could not get 5 days of no rain
	06-Aug-2003	Summer Rain	778	8.00	16.3	6.85	Very little flow, cloudy, some debri noted behind grate
	26-Aug-2003	August Dry					No sample taken - Could not get 5 days of no rain
	24-Oct-2003	October Dry					No sample taken - Could not get 5 days of no rain
	19-Nov-2003	Fall Rain	529	7.80	10.6	7.81	Good flow, debri noted behind grate
	10-Mar-2004	Spring Freshet	630	7.30	2.5	7.49	Murky/clear water churning, some flow. Grass observed behined grate.
	22-Apr-2004	Spring Rain					No sample taken - Although there was rain, no water to sample
	27-May-2004	April Dry	826	8.00	13.2	4.87	Lock missing from grate. Debri observed behind grate, which was removed.
	28-Jun-2004	June Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	17-Aug-2004	August Dry	821	8.27	13.9	8.32	Little flow, numerous water spiders observed.
	19-Oct-2004	Summer Rain	1006	8.60	8.9	9.73	Low flow, observe silt build up behide grate (~0.2m)
	28-Oct-2004	October Dry					No sample taken - Could not get 5 days of dry conditions due to significant rain all month
	08-Dec-2004	Fall Rain	575	7.95	5		Moderate flow, clear. Silt observed at culvert exit (from SW1).

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 16							
	04-Apr-2005	Spring Freshet	624	7.93	4.8	7.45	debris (sticks, weeds) behind grate
	30-Apr-2005	April Dry					No sample taken due to rain
	16-May-2005	Spring Rain					No sample taken, not enough run-off after rain event on May 16. Very little rain during rest of month.
	30-Jun-2005	June Dry					No samples taken, dry
	25-Aug-2005	August Dry					No sample taken, not enough run-off even after rain event earlier in the week of Aug 25.
	28-Sep-2005	Summer Rain					No sample taken, not enough run-off
	14-Oct-2005	October Dry					No sample taken, Dry
	30-Nov-2005	Fall Rain					No sample taken, not enough run-off
	24-Apr-2006	Spring Freshet	562	7.80	8.4	7.48	Good flow. Weeds behind grate.
	30-Apr-2006	April Dry					No Dry Period During Month
	31-May-2006	Spring Rain					Rain event early in month, no run-off occurring later in month.
	09-Jun-2006	June Dry					Low Water
	09-Aug-2006	August Dry					Low Water
	14-Sep-2006	Summer Rain	767	8.00	16.6	8.06	No flow, cloudy. Some TSS.
	12-Oct-2006	October Dry	624	7.70	8.6	6.86	Slow flow, clear.
	13-Dec-2006	Fall Rain	508	7.40	4.9	8.3	Good flow, clear. Some grass behind grate.
	23-Mar-2007	Spring Freshet	577	7.40	5.5	6.28	Good Flow, Some weed behind grate.
	26-Apr-2007	April Dry					Dry
	17-May-2007	Spring Rain	609	7.90	12.1	6.68	Good Flow, Clear
	19-Jun-2007	June Dry					Dry, No water next day after June 9 (9.8mm) and June 19 (22.4mm).
	10-Aug-2007	August Dry					Dry, No water next day after largest rain event on August 7 (18mm).
	26-Sep-2007	Summer Rain					Dry. No water next day after last rain event on Sept 26 (7.8mm).
	10-Oct-2007	Fall Rain	1678	7.00	12.8	7.42	No Flow, visible TSS. Slight buildup of mud ~2m downstream.
	31-Oct-2007	October Dry					Dry
	29-Nov-2007	Additional Fall	878	7.00	4.5	11.8	Flowing, Clear
	09-Apr-2008	Spring Freshet	574	7.00	10.5	6.27	Clear. Good flow. Some grass behind grate
	20-Aug-2008	Summer Dry					Dry
	16-Sep-2008	Summer Rain	659	7.40	16.2	4.64	Clear. Moderate flow. Silt blowing down and washing into creek.
	18-Dec-2008	Fall Rain	613	7.90	4	7.11	
	28-May-2009	Spring Freshet	759	7.60	12.4	4.62	Some sediment/ Good flow
	27-Jul-2009	Summer Dry	401	7.80	23	4.32	Slow flow/ Lots of vegetation/ Also two bags of garbage (yard waste)
	14-Oct-2009		883	7.70	7.8	9.81	no flow/ Lots of vegetation/ Also two bags of garbage (yard waste)
	05-Nov-2009		991	7.60	7.6	9.66	
	26-Nov-2009		999	7.80	8.3	12.33	
	16-Dec-2009		999	7.80	2.4	6.06	
	25-Mar-2010		7.76	6.50	7.5	769	clear
	20-Aug-2010		5.88	19.70	7.9	718	Brownish clour with lots of floating aquatic vegetation
	04-Oct-2010		7.03	9.40	7.4	867	Cloudy with floating aquatic vegetation
	29-Nov-2010		9.05	4.70	6.9	954	Slightly cloudy
	15-Mar-2011		756	7.49	4.7	8.09	
	07-Jul-2011		990	7.79	18.7	7.68	Good flow
	30-Sep-2011		835	7.53	13.3	5.57	
	19-Oct-2011		1050	8.81	10	11.78	Really good flow very clear with aquatic veg
	13-Dec-2011		928	7.91	2.9	11.81	Yellowish with decent flow
	04-May-2012	Spring Wet	923	7.57	14.2	7.83	Good flow, slightly yellowish
	06-Jun-2012	June Trigger	941	7.53	12.7	8.39	Yellowish with low flow
	13-Aug-2012	August Dry	640	7.64	19.6	5.7	Clear low flow
	25-Sep-2012	September Dry	7.74	7.91	11.6	6.97	Slightly yellow decent flow
	04-Dec-2012	Fall Wet	906	7.29	4.4	7.94	yellowish
	05-Apr-2013	Spring Wet	859	7.97	1.9	6.77	Yellowish with good flow

C4: Surface Water Field Measurements



Station	Date	Sample Event	Field Parameters				Comments
			Cond	pH	Temp	DO	
			uS		C	mg/L	
SW 16							
	17-Jul-2013	Summer Dry	851	7.69	17.6	7.91	Low flow yellowish colour
	12-Sep-2013	Sept Wet	5.86	7.73	18.1	7.44	Good flow slight yellowish colour
	02-Dec-2013	Dec Wet	857	7.55	2.4	10.36	Ice on creek really good flow clear
	31-Mar-2014	Spring Freshet	873	7.32	2.2	8.3	Very slightly yellow good flow
	16-Jul-2014	July Dry	594	7.59	18	5.92	Yellowish with low flow lots of aquatic vegetation
	06-Aug-2014	August Trigger	597	7.87	16	5.32	Cloudy with good flow
	22-Sep-2014	Sept Wet	590	7.46	12.7	6.1	Slightly yellow good flow
	01-Dec-2014	Fall Wet	859	8.26	3.1	8.21	Yellowish with good flow

**2014 Semi-Annual MISA Priority Pollutants Analysis from the Main Tank
Conventional Parameters**

Analytical Test Groups (ATG)	Semi-Annual Samples			
	July 11, 2014		November 26, 2014	
	MDL (mg/L)	Result (mg/L)	MDL (mg/L)	Result (mg/L)
Metals				
Ag	0.05	<0.05	0.05	<0.05
Al	0.05	<0.05	0.05	<0.05
As	0.05	<0.05	0.05	<0.05
Au	0.05	<0.05	0.05	<0.05
B	0.05	1.1	0.05	1.9
Ba	0.05	0.23	0.05	0.23
Be	0.05	<0.05	0.05	<0.05
Bi	0.05	<0.05	0.05	<0.05
Ca	0.05	150	0.05	160
Cd	0.05	<0.05	0.05	<0.05
Ce	0.05	<0.05	0.05	<0.05
Co	0.05	<0.05	0.05	<0.05
Cr	0.05	<0.05	0.05	<0.05
Cs	0.05	<0.05	0.05	<0.05
Cu	0.05	<0.05	0.05	<0.05
Dy	0.05	<0.05	0.05	<0.05
Er	0.05	<0.05	0.05	<0.05
Eu	0.05	<0.05	0.05	<0.05
F	0.1	0.13	0.1	0.35
Fe	0.05	3.4	0.05	2.1
Ga	0.05	<0.05	0.05	<0.05
Gd	0.05	<0.05	0.05	<0.05
Ge	0.05	<0.05	0.05	<0.05
Hf	0.05	<0.05	0.05	<0.05
Ho	0.05	<0.05	0.05	<0.05
In	0.05	<0.05	0.05	<0.05
K	0.05	20	0.05	41
La	0.05	<0.05	0.05	<0.05
Li	0.05	<0.05	0.05	<0.05
Lu	0.05	<0.05	0.05	<0.05
Mg	0.05	57	0.05	120
Mn	0.05	0.28	0.05	0.33
Mo	0.05	<0.05	0.05	<0.05
Na	0.05	170	0.05	200
Nb	0.05	<0.05	0.05	<0.05
Nd	0.05	<0.05	0.05	<0.05
Ni	0.05	<0.05	0.05	<0.05
Os	0.05	<0.05	0.05	<0.05
P	0.05	0.13	0.05	0.08
Pb	0.05	<0.05	0.05	<0.05
Pd	0.05	<0.05	0.05	<0.05
Pr	0.05	<0.05	0.05	<0.05
Pt	0.05	<0.05	0.05	<0.05
Re	0.05	<0.05	0.05	<0.05
Rh	0.05	<0.05	0.05	<0.05
Ru	0.05	<0.05	0.05	<0.05
Sb	0.05	<0.05	0.05	<0.05
Sc	0.05	<0.05	0.05	<0.05
Se	0.05	<0.05	0.05	<0.05
Si	0.05	9.2	0.05	11
Sm	0.05	<0.05	0.05	<0.05
Sn	0.05	<0.05	0.05	<0.05
Sr	0.05	0.38	0.05	0.77
Ta	0.05	<0.05	0.05	<0.05
Tb	0.05	<0.05	0.05	<0.05
Ti	0.05	<0.05	0.05	<0.05
Tl	0.05	<0.05	0.05	<0.05
Tm	0.05	<0.05	0.05	<0.05
U	0.05	<0.05	0.05	<0.05
V	0.05	<0.05	0.05	<0.05
W	0.05	<0.05	0.05	<0.05
Y	0.05	<0.05	0.05	<0.05
Yb	0.05	<0.05	0.05	<0.05
Zn	0.05	0.06	0.05	0.1
Zr	0.05	<0.05	0.05	<0.05

2014 Semi-Annual MISA Priority Pollutants Analysis from the Main Tank
Conventional Parameters

Analytical Test Groups (ATG)	Semi-Annual Samples			
	July 11, 2014		November 26, 2014	
	MDL (mg/L)	Result (mg/L)	MDL (mg/L)	Result (mg/L)
Conventional				
BOD (C)	2	4	2	5
Cl-	4	260	3	250
COD	4	61	4	110
Sp. Cond. (umhos/cm)	1	2000	1	2700
Cr VI	0.0005	<0.0005	0.0005	<0.0005
DOC	0.2	22	0.2	40
F-	0.1	0.13	0.1	0.35
Hg	0.0001	<0.0001	0.0001	<0.0001
NH ₃ -N	0.5	19	0.5	32
NO ₂ -N	0.01	0.023	0.01	0.025
NO ₃ -N	0.1	0.37	0.1	0.59
Oil & Grs(A)	0.5	2	0.5	<0.5
Oil & Grs(M)	0.5	<0.5	0.5	<0.5
Oil & Grs.	0.5	2	0.5	<0.5
pH		7.43		7.63
Phenols	0.001	0.0033	0.01	0.05
S=	0.02	<0.02	0.02	0.021
SO ₄ =	1	35	10	37
TDS	10	1040	10	1420
TOC	0.2	23	0.2	40
Total CN-	0.005	<0.005	0.005	<0.005
Total P	0.01	0.09	0.004	0.085
TSS	1	11	1	8

Samples collected from main pumping station
 MDL = method detection limit
 ug/L = micrograms per Litre = parts per billion
 mg/L = milligrams per Litre = parts per million

**2014 Semi-Annual MISA Priority Pollutants Analysis from the Main Tank
Organic Parameter Groups**

Analytical Test Groups (ATG)	Semi-Annual Samples			
	July 11, 2014		November 26, 2014	
	MDL	Result	MDL	Result
ATG 16 Volatiles, Halogenated				
1,1,1-Trichloroethane (ug/L)	0.1	<0.1	0.2	<0.2
1,1,1,2-Tetrachloroethane	0.2	<0.2	0.4	<0.4
1,1,2,2-Tetrachloroethane (ug/L)	0.2	<0.2	0.4	<0.4
1,1,2-Trichloroethane (ug/L)	0.2	<0.2	0.4	<0.4
1,1-Dichloroethane (ug/L)	0.1	<0.1	0.2	<0.2
1,1-Dichloroethylene (ug/L)	0.1	<0.1	0.2	<0.2
1,2-Dichlorobenzene (ug/L)	0.2	<0.2	0.4	<0.4
1,2-Dichloroethane (ug/L)	0.2	<0.2	0.4	<0.4
1,2,-Dichloropropane (ug/L)	0.1	<0.1	0.2	<0.2
1,3-Dichlorobenzene (ug/L)	0.2	<0.2	0.4	<0.4
1,4-Dichlorobenzene (ug/L)	0.2	<0.2	0.4	<0.4
Acetone (ug/L)	10	<10	20	<20
Bromodichloromethane	0.1	<0.1	0.2	<0.2
Bromoform (ug/L)	0.2	<0.2	0.4	<0.4
Bromomethane (ug/L)	0.5	<0.5	1	<1
Carbon tetrachloride (ug/L)	0.1	<0.1	0.2	<0.2
Chlorobenzene (ug/L)	0.1	0.72	0.2	0.28
Chloroform (ug/L)	0.1	<0.1	0.2	<0.2
Cis-1,2-Dichloroethane (ug/L)	0.1	0.15	0.2	1.7
Cis-1,3-Dichloropropylene (ug/L)	0.2	<0.2	0.4	<0.4
Dibromochloromethane (ug/L)	0.2	<0.2	0.4	<0.4
Ethylene dibromide (ug/L)	0.2	<0.2	0.4	<0.4
Methyl-t-Butyl Ether (ug/L)	0.2	<0.2	0.4	<0.4
Methyl Ethyl Ketone (MEK) (ug/L)	5	<5	10	<10
Methyl Isobutyl Ketone (MIBK) (ug/L)	5	<5	10	<10
Methylene chloride (ug/L)	0.5	<0.5	1	<1
Tetrachloroethylene (ug/L)	0.1	<0.1	0.2	<0.2
Trans-1,2-Dichloroethylene (ug/L)	0.1	<0.1	0.2	<0.2
Trans-1,3-Dichloropropylene (ug/L)	0.2	<0.2	0.4	<0.4
Trichloroethylene (ug/L)	0.1	<0.1	0.2	0.29
Trichlorofluoromethane (ug/L)	0.2	<0.2	0.4	<0.4
Vinyl chloride (ug/L)	0.2	<0.2	0.4	<0.4
ATG 17 Volatiles, Non-Halogenated				
Benzene (ug/L)	0.1	0.4	0.2	0.39
Ethylbenzene (ug/L)	0.1	<0.1	0.2	0.91
Styrene (ug/L)	0.2	<0.2	0.4	<0.4
Toluene (ug/L)	0.2	<0.2	0.4	<0.4
o-Xylene (ug/L)	0.1	0.15	0.2	2
m-Xylene and p-Xylene (ug/L)	0.1	0.24	0.2	12
ATG 18 Volatiles, Water Soluble				
Acrolein (ug/L)	10	<10	20	<20
Acrylonitrile (ug/L)	5	<5	10	<10

**2014 Semi-Annual MISA Priority Pollutants Analysis from the Main Tank
Organic Parameter Groups**

Analytical Test Groups (ATG)	Semi-Annual Samples			
	July 11, 2014		November 26, 2014	
	MDL	Result	MDL	Result
ATG 19 Extractables, Base Neutral				
Acenaphthene (ug/L)	0.2	<0.2	0.2	<0.2
5-nitro Acenaphthene (ug/L)	1	<1	1	<1
Acenaphthylene (ug/L)	0.2	<0.2	0.2	<0.2
Anthracene (ug/L)	0.2	<0.2	0.2	<0.2
Benzo (a) anthracene (ug/L)	0.2	<0.2	0.2	<0.2
Benzo (a) pyrene (ug/L)	0.2	<0.2	0.2	<0.2
Benzo (b) fluoroanthene (ug/L)	0.2	<0.2	0.2	<0.2
Benzo (g,h,i) perylene (ug/L)	0.2	<0.2	0.2	<0.2
Benzo (k) fluoranthene (ug/L)	0.2	<0.2	0.2	<0.2
Biphenyl (ug/L)	0.5	<0.5	0.5	<0.5
Camphene (ug/L)	1	<1	1	<1
1-Chloronaphthalene (ug/L)	1	<1	1	<1
2-Chloronaphthalene (ug/L)	0.5	<0.5	0.5	<0.5
Chrysene (ug/L)	0.2	<0.2	0.2	<0.2
Dibenzo (a,h) anthracene (ug/L)	0.2	<0.2	0.2	<0.2
Fluoranthene (ug/L)	0.2	<0.2	0.2	<0.2
Fluorene (ug/L)	0.2	<0.2	0.2	0.2
Indeno (1,2,3-cd) pyrene (ug/L)	0.2	<0.2	0.2	<0.2
Indole (ug/L)	1	<1	1	<1
1-Methylnaphthalene (ug/L)	0.2	<0.2	0.2	<0.2
2-Methylnaphthalene (ug/L)	0.2	<0.2	0.2	<0.2
Naphthalene (ug/L)	0.2	<0.2	0.2	0.21
Perylene (ug/L)	0.2	<0.2	0.2	<0.2
Phenanthrene (ug/L)	0.2	<0.2	0.2	<0.2
Pyrene (ug/L)	0.2	<0.2	0.2	<0.2
Benzylbutylphthalate (ug/L)	0.5	<0.5	0.5	<0.5
Bis (2-ethylhexyl) phthalate (ug/L)	2	<2	2	2.1
Di-n-Butyl Phthalate (ug/L)	2	<2	2	<2
Di-n-Octyl Phthalate (ug/L)	0.8	<0.8	0.8	<0.8
4-Bromophenyl phenyl ether (ug/L)	0.3	<0.3	0.3	<0.3
4-Chlorophenyl phenyl ether (ug/L)	0.5	<0.5	0.5	<0.5
Bis (2-chloroisopropyl) ether (ug/L)	0.5	<0.5	0.5	<0.5
Bis (2-chloroethyl) ether (ug/L)	0.5	<0.5	0.5	<0.5
Diphenyl ether (ug/L)	0.3	<0.3	0.3	<0.3
2,4-Dinitrotoluene (ug/L)	0.5	<0.5	0.5	<0.5
2,6-Dinitrotoluene (ug/L)	0.5	<0.5	0.5	<0.5
Bis (2-chloroethoxy) methane (ug/L)	0.5	<0.5	0.5	<0.5
N-Nitrosodi-n-propylamine (ug/L)	0.5	<0.5	0.5	<0.5
ATG 20 Extractables, Acid (Phenolics)				
2,3,4-Trichlorophenol (ug/L)	0.5	<0.5	0.5	<0.5
2,3,5-Trichlorophenol (ug/L)	0.5	<0.5	0.5	<0.5
2,4,5-Trichlorophenol (ug/L)	0.5	<0.5	0.5	<0.5
2,4,6-Trichlorophenol (ug/L)	0.5	<0.5	0.5	<0.5
2,4-Dimethylphenol (ug/L)	0.5	<0.5	0.5	<0.5
2,4-Dinitrophenol (ug/L)	0.3	<0.3	0.3	<0.3
2,4-Dichlorophenol (ug/L)	3	<3	2	<2
2,6-Dichlorophenol (ug/L)	0.5	<0.5	0.5	<0.5
2-Chlorophenol (ug/L)	0.3	<0.3	0.3	<0.3
4-Chloro-3-methylphenol (ug/L)	0.5	<0.5	0.5	<0.5
4-Nitrophenol (ug/L)	1	<1	1.4	<1.4
m-Cresol & p-Cresol (ug/L)	0.5	<0.5	0.5	<0.5
o-Cresol (ug/L)	0.5	<0.5	0.5	<0.5
Pentachlorophenol (ug/L)	1	<1	1	<1
Phenol (ug/L)	0.5	<0.5	0.5	<0.5

2014 Semi-Annual MISA Priority Pollutants Analysis from the Main Tank
Organic Parameter Groups

Analytical Test Groups (ATG)	Semi-Annual Samples			
	July 11, 2014		November 26, 2014	
	MDL	Result	MDL	Result
ATG 21 Extractables, Phenoxy Acid Herbicides				
2,4,5-T (ug/L)	1	<1	1	<1
Silvex (ug/L)	1	<1	1	<1
2,4-D (ug/L)	1	<1	1	<1
Dinoseb (ug/L)	2	<2	2	<2
2,4-DB (ug/L)	1	<1	1	<1
Dichlorprop (ug/L)	1	<1	1	<1
Dicamba (ug/L)	1	<1	1	<1
MCPP (ug/L)	2	<2	2	<2
MCPA (ug/L)	2	3	2	<2
Picloram (ug/L)	5	<5	5	<5
ATG 22 Extractables, Organochlorine Pesticides				
Aldrin (ug/L)	0.005	<0.005	0.005	<0.005
Alpha-BHC (ug/L)	0.005	<0.005	0.005	<0.005
Beta-BHC (ug/L)	0.005	<0.005	0.005	<0.005
Delta-BHC (ug/L)	0.005	<0.005	0.005	<0.005
Gamma-BHC (ug/L)	0.003	<0.003	0.003	<0.003
Alpha-Chlordane (ug/L)	0.005	<0.005	0.005	<0.005
Gamma-Chlordane (ug/L)	0.005	<0.005	0.005	<0.005
4,4'-DDD (ug/L)	0.005	<0.005	0.005	<0.005
4,4'-DDE (ug/L)	0.005	<0.005	0.005	<0.005
4,4'-DDT (ug/L)	0.005	<0.005	0.005	<0.005
2,4'-DDT (ug/L)	0.005	<0.005	0.005	<0.005
Dieldrin (ug/L)	0.005	<0.005	0.005	<0.005
Endosulfan I (ug/L)	0.005	<0.005	0.005	<0.005
Endosulfan II (ug/L)	0.005	<0.005	0.005	<0.005
Endosulfan Sulphate (ug/L)	0.005	<0.005	0.005	<0.005
Endrin (ug/L)	0.005	<0.005	0.005	<0.005
Endrin Aldehyde (ug/L)	0.005	<0.005	0.005	<0.005
Heptachlor (ug/L)	0.005	<0.005	0.005	<0.005
Heptachlor Epoxide (ug/L)	0.005	<0.005	0.005	<0.005
p,p Methoxychlor (ug/L)	0.01	<0.01	0.01	<0.01
Mirex (ug/L)	0.005	<0.005	0.005	<0.005
Endrin Ketone (ug/L)	0.005	<0.005	0.005	<0.005
Toxaphene (ug/L)	0.2	<0.2	0.2	<0.2
PCB's, Total (ug/L)	0.05	<0.05	0.1	<0.1
ATG 23 Extractables, Neutral - Chlorinated				
Hexachloroethane (ug/L)	0.01	<0.01	0.01	<0.01
1,2,4-Trichlorobenzene (ug/L)	0.01	<0.01	0.01	<0.01
1,2,3-Trichlorobenzene (ug/L)	0.01	<0.01	0.01	<0.01
Hexachlorobutadiene (ug/L)	0.009	<0.009	0.009	<0.009
2,4,5-Trichlorotoluene (ug/L)	0.01	<0.01	0.01	<0.01
1,2,3,5-Tetrachlorobenzene (ug/L)	0.01	<0.01	0.01	<0.01
1,2,4,5-Tetrachlorobenzene (ug/L)	0.01	<0.01	0.01	<0.01
Hexachlorocyclopentadiene (ug/L)	0.025	<0.025	0.025	<0.025
1,2,3,4-Tetrachlorobenzene (ug/L)	0.01	<0.01	0.01	<0.01
Pentachlorobenzene (ug/L)	0.005	<0.005	0.005	<0.005
Hexachlorobenzene (ug/L)	0.005	<0.005	0.005	<0.005
Octachlorostyrene (ug/L)	0.005	<0.005	0.005	<0.005

2014 Semi-Annual MISA Priority Pollutants Analysis from the Main Tank

Organic Parameter Groups

Analytical Test Groups (ATG)	Semi-Annual Samples			
	July 11, 2014		November 26, 2014	
	MDL	Result	MDL	Result
ATG 24 Chlorinated Dibenzo-p-dioxins and Dibenzofurans				
2,3,7,8-Tetrachlorodibenzo-p-dioxin (pg/L)		<2		<5.78
2,3,7,8-tetrachlorodibenzofuran		<1.26		<1.27
Octachlorodibenzo-p-dioxin (pg/L)		<2.43		7.42
Octachlorodibenzofuran (pg/L)		<1.87		<1.34
Total heptachlorinated dibenzo-p-dioxins (pg/L)		<1.57		<1.15
Total heptachlorinated dibenzofurans (pg/L)		<1.26		<1.11
Total hexachlorinated dibenzo-p-dioxins (pg/L)		<1.86		<2.27
Total hexachlorinated dibenzofurans (pg/L)		<1.39		<1.12
Total pentachlorinated dibenzo-p-dioxins (pg/L)		<1.99		<3.66
Total pentachlorinated dibenzofurans (pg/L)		<1.41		<1.35
Total tetrachlorinated dibenzo-p-dioxins (pg/L)		<2.08		<5.78
Total tetrachlorinated dibenzofurans (pg/L)		<1.26		<1.27
Total Toxic Equivalency		5.73		10.8
ATG 26 Fatty and Resin Acids				
Palmitoleic acid (ug/L)	0.003	<0.003	0.003	<0.003
Palmitic acid (ug/L)	0.03	<0.03	0.03	0.053
Linoleic acid (ug/L)	0.003	0.0046	0.003	<0.003
Linolenic acid (ug/L)	0.003	<0.003	0.003	<0.003
Oleic acid (ug/L)	0.003	<0.003	0.003	<0.003
Pimaric acid (ug/L)	0.0165	<0.03	0.0165	0.055
Sandracopimaric acid (ug/L)	0.003	<0.003	0.003	<0.003
Isopimaric acid (ug/L)	0.003	<0.003	0.003	<0.003
Dehydroabietic acid (ug/L)	0.005	<0.005	0.005	<0.005
Abietic acid (ug/L)	0.005	<0.005	0.005	<0.005
Neoabietic acid (ug/L)	0.003	<0.003	0.003	<0.003
9,10-Dichlorostearic acid (ug/L)	0.003	<0.003	0.003	<0.003
14-Chlorodehydroabietic acid (ug/L)	0.003	<0.003	0.003	<0.003
12-Chlorodehydroabietic acid (ug/L)	0.003	<0.003	0.003	<0.003
Dichlorodehydroabietic acid (ug/L)	0.003	<0.003	0.003	<0.003

Notes:

MDL = Method Detection Limit

ug/L = micrograms per Litre = parts per billion

mg/L = milligrams per Litre = parts per million

pg/L = picograms per litre = parts per trillion

C6: VOLATILE ORGANIC ANALYSIS - 2014 - EASTVIEW ROAD LANDFILL SITE



MONITOR DATE	51-II 26-Nov-2014	51-IR 26-Nov-2014	55-IR 27-Nov-2014	56-IR 27-Nov-2014	57-I 26-Nov-2014	58-I 26-Nov-2014	59-I 27-Nov-2014	61-IR 26-Nov-2014
1,1,1-Trichloroethane	<0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
1,1,2,2-Tetrachloroethyl	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
1,1,2-Trichloroethane	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
1,1-Dichloroethane	0.12	<10	<0.5	<0.25	<0.1	<0.1	<10	4.1
1,1-Dichloroethylene	<0.1	<10	<0.5	<0.25	0.95	<0.1	<10	<1
1,2-Dibromoethane	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
1,2-Dichlorobenzene	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
1,2-Dichloroethane	<0.2	<20	<1	<0.5	0.2	<0.2	<20	<2
1,2-Dichloropropane	<0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
1,3-Dichlorobenzene	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
1,4-Dichlorobenzene	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
2-Chloroethylvinyl ether	-	-	-	-	-	-	-	-
Acrolein	-	-	-	-	-	-	-	-
Acrylonitrile	-	-	-	-	-	-	-	-
Benzene	3.9	<10	2.7	1.9	<0.1	<0.1	12	<1
Bromodichloromethane	<0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
Bromoform	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
Bromomethane	<0.5	<50	<2.5	<1.3	<0.5	<0.5	<50	<5
Carbon Tetrachloride	<0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
Chlorobenzene	0.16	<10	4.7	<0.25	<0.1	<0.1	<10	<1
Chloroethane								
Chloroform	<0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
Chloromethane								
Cis-1,2-Dichloroethylen	0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
Cis-1,3-Dichloropropyle	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
Dibromochloromethane	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
Ethylbenzene	<0.1	54	<0.5	<0.25	<0.1	<0.1	240	<1
m-Xylene and p-Xylene	0.26	430	<0.5	0.43	<0.1	<0.1	850	<1
Mythlene Chloride	<0.5	<50	<2.5	<1.3	<0.5	<0.5	<50	<5
o-Xylene	0.16	230	<0.5	<0.25	<0.1	<0.1	340	<1
Styrene	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
Tetrachloroethylene	<0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
Toluene	<0.2	57	<1	<0.5	<0.2	<0.2	<20	<2
Trans-1,2-Dichloroethyl	<0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
Trans-1,3-Dichloroprop	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
Trichloroethylene	<0.1	<10	<0.5	<0.25	<0.1	<0.1	<10	<1
Trichlorofluoromethane	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2
Vinyl Chloride	<0.2	<20	<1	<0.5	<0.2	<0.2	<20	<2

C6: VOLATILE ORGANIC ANALYSIS - 2014 - EASTVIEW ROAD LANDFILL SITE

MONITOR	63-I	65-I	66-IR	67-I
DATE	27-Nov-2014	26-Nov-2014	27-Nov-2014	27-Nov-2014
1,1,1-Trichloroethane	<0.25	<0.1	<0.25	<0.5
1,1,2,2-Tetrachloroethyl	<0.5	<0.2	<0.5	<1
1,1,2-Trichloroethane	<0.5	<0.2	<0.5	<1
1,1-Dichloroethane	<0.25	0.19	<0.25	<0.5
1,1-Dichloroethylene	<0.25	<0.1	<0.25	<0.5
1,2-Dibromoethane	<0.5	<0.2	<0.5	<1
1,2-Dichlorobenzene	<0.5	<0.2	<0.5	<1
1,2-Dichloroethane	<0.5	<0.2	<0.5	<1
1,2-Dichloropropane	<0.25	<0.1	<0.25	<0.5
1,3-Dichlorobenzene	<0.5	<0.2	<0.5	<1
1,4-Dichlorobenzene	<0.5	<0.2	<0.5	<1
2-Chloroethylvinyl ether	-	-	-	-
Acrolein	-	-	-	-
Acrylonitrile	-	-	-	-
Benzene	2.7	2.1	4.7	2.1
Bromodichloromethane	<0.25	<0.1	<0.25	<0.5
Bromoform	<0.5	<0.2	<0.5	<1
Bromomethane	<1.3	<0.5	<1.3	<2.5
Carbon Tetrachloride	<0.25	<0.1	<0.25	<0.5
Chlorobenzene	<0.25	<0.1	<0.25	<0.5
Chloroethane				
Chloroform	<0.25	<0.1	<0.25	<0.5
Chloromethane				
Cis-1,2-Dichloroethylen	0.49	0.22	<0.25	<0.5
Cis-1,3-Dichloropropyle	<0.5	<0.2	<0.5	<1
Dibromochloromethane	<0.5	<0.2	<0.5	<1
Ethylbenzene	<0.25	<0.1	<0.25	2.1
m-Xylene and p-Xylene	<0.25	<0.1	0.26	6.7
Mythlene Chloride	<1.3	<0.5	<1.3	<2.5
o-Xylene	<0.25	<0.1	<0.25	2.6
Styrene	<0.5	<0.2	<0.5	<1
Tetrachloroethylene	<0.25	<0.1	<0.25	<0.5
Toluene	<0.5	<0.2	0.5	<1
Trans-1,2-Dichloroethyl	<0.25	<0.1	<0.25	<0.5
Trans-1,3-Dichloroprop	<0.5	<0.2	<0.5	<1
Trichloroethylene	<0.25	<0.1	<0.25	<0.5
Trichlorofluoromethane	<0.5	<0.2	<0.5	<1
Vinyl Chloride	<0.5	<0.2	<0.5	<1

Table C7: Comparison of Downgradient Monitors in Buffer Land Boundary to Guideline B7 Criteria for 2014



Parameter	Chloride	Sodium	Sulphate	Copper	Iron	Manganese	Zinc	Boron	Cadmium	Chromium	Lead	Nitrate	Nitrite
ODWS	250	200	500	1	0.30	0.05	5	5	0.005	0.05	0.01	10	1
Background	52.5	17.5	43.25		0.52	0.02	0.01	0.029		0.01		0.12	0.01
Guideline B7 Criteria	151	109	272		0.52	0.03	2.50	1.27		0.13		2.59	0.26
2-I	5/7/2014	18.0	13.0	74.0		<u>6.9</u>	<u>0.082</u>	0.02	0.140	< 0.01		< 0.10	< 0.01
	11/21/2014	23.0	10.0	78.0		<u>5.7</u>	<u>0.072</u>	0.02	0.120	< 0.01		1.89	0.05
2-II	5/7/2014	4.1	2.8	11.0	< 0.10	< 0.00	0.07	0.036		< 0.01		<u>3.2</u>	< 0.01
9-I	5/13/2014	42.0	29.0	86.0		<u>0.2</u>	0.23	0.230		< 0.01		0.15	< 0.01
10-II	5/12/2014	<u>950</u>	<u>330</u>	36.0		<u>1.1</u>	<u>0.41</u>	0.02	0.033	< 0.01		0.71	0.11
	11/24/2014	<u>940</u>	<u>320</u>	31.0		<u>0.7</u>	<u>0.25</u>	0.01	0.016	< 0.01		1.80	0.06
13-III	5/13/2014	1.9	23.0	6.6	< 0.10	0.00	< 0.01	0.100		< 0.01		0.17	< 0.01
	11/27/2014	2.4	25.0	3.3	< 0.10	0.01	0.01	0.087		< 0.01		0.44	< 0.01
13-IV	5/13/2014	<u>1800</u>	<u>1100</u>	< 10.0		<u>6.9</u>	<u>0.2</u>	< 0.03	0.078	< <u>0.025</u>		0.97	0.06
	11/27/2014	<u>1500</u>	<u>950</u>	< 10.0		<u>5.5</u>	<u>0.17</u>	0.01	0.043	< 0.00		0.41	<u>0.368</u>
13-V	5/13/2014	21.0	32.0	23.0	< 0.10	0.02	0.05	0.025		< 0.01		< 0.10	< 0.01
	11/27/2014	15.0	30.0	24.0		0.11	0.01	0.06	< 0.010	0.01		< 0.10	< 0.01
14-II	5/15/2014	<u>320</u>	<u>160</u>	11.0		<u>0.59</u>	<u>0.053</u>	0.01	0.068	< 0.01		0.67	< 0.01
	11/21/2014	<u>270</u>	<u>150</u>	5.7		<u>0.88</u>	<u>0.072</u>	0.01	0.095	< 0.01		0.92	0.03
14-III	5/15/2014	13.0	9.3	4.3		<u>3.2</u>	<u>0.21</u>	0.01	0.081	< 0.01		0.10	< 0.01
	11/25/2014	15.0	6.5	5.5		<u>2.6</u>	<u>0.12</u>	0.02	0.073	< 0.01		< 0.10	< 0.01
15-III	5/8/2014	16.0	48.0	19.0	< 0.10	0.00	< 0.01	0.110		< 0.01		0.49	0.04
	11/21/2014	18.0	48.0	20.0		0.25	0.02	0.01	0.099	< 0.01		0.41	0.12
15-IV	5/8/2014	18.0	11.0	26.0		0.15	<u>0.037</u>	0.01	0.070	< 0.01		0.68	< 0.01
	11/21/2014	31.0	14.0	28.0		0.37	<u>0.16</u>	0.02	0.068	< 0.01		0.39	0.04
15-V	5/8/2014	14.0	6.9	1.1		<u>15</u>	<u>1.3</u>	0.01	0.140	< 0.01		< 0.10	< 0.01
	11/21/2014	19.0	13.0	4.1		<u>20</u>	<u>1.9</u>	0.02	0.240	< 0.01		< 0.10	< 0.01
16-IV	5/7/2014	44.0	39.0	200.0		<u>1.2</u>	<u>0.16</u>	0.02	1.200	< 0.01		1.72	<u>0.442</u>
	11/21/2014	43.0	40.0	210.0		<u>1.3</u>	<u>0.23</u>	0.03	1.100	< 0.01		0.51	<u>0.323</u>
16-V	5/7/2014	9.3	4.4	20.0	< 0.10	0.01	0.02	0.210		< 0.01		0.50	< 0.01
17-III	5/13/2014	3.4	3.6	27.0	< 0.10	0.00	0.02	< 0.010		< 0.01		< 0.10	< 0.01
17-IV	5/13/2014	1.6	1.5	4.0		0.39	0.03	0.03	< 0.010	< 0.01		0.45	< 0.01
	11/25/2014	1.0	2.1	5.6		<u>2.4</u>	<u>0.038</u>	0.03	< 0.010	< 0.01		0.17	< 0.01
18-III	5/13/2014	5.9	3.9	<u>300</u>	< 0.10	<u>0.037</u>	0.09	0.063		< 0.01		1.67	< 0.05
	11/25/2014	10.0	8.1	<u>840</u>		<u>2</u>	<u>0.89</u>	0.08	0.069	< 0.01		<u>3.08</u>	< 0.01
35-I	5/14/2014	4.0		5.5								< 0.10	< 0.01

Average concentration in 2014 from monitors 4-II, 19-II and 19-IV used in comparison to Guideline B7 values
 Concentrations that exceed the RUG are denoted Bolding and Underlined
 All concentrations are in mg/L

Table C8: Comparison of Downgradient Bedrock Boundary Monitors to Guideline B7 Criteria for 2014



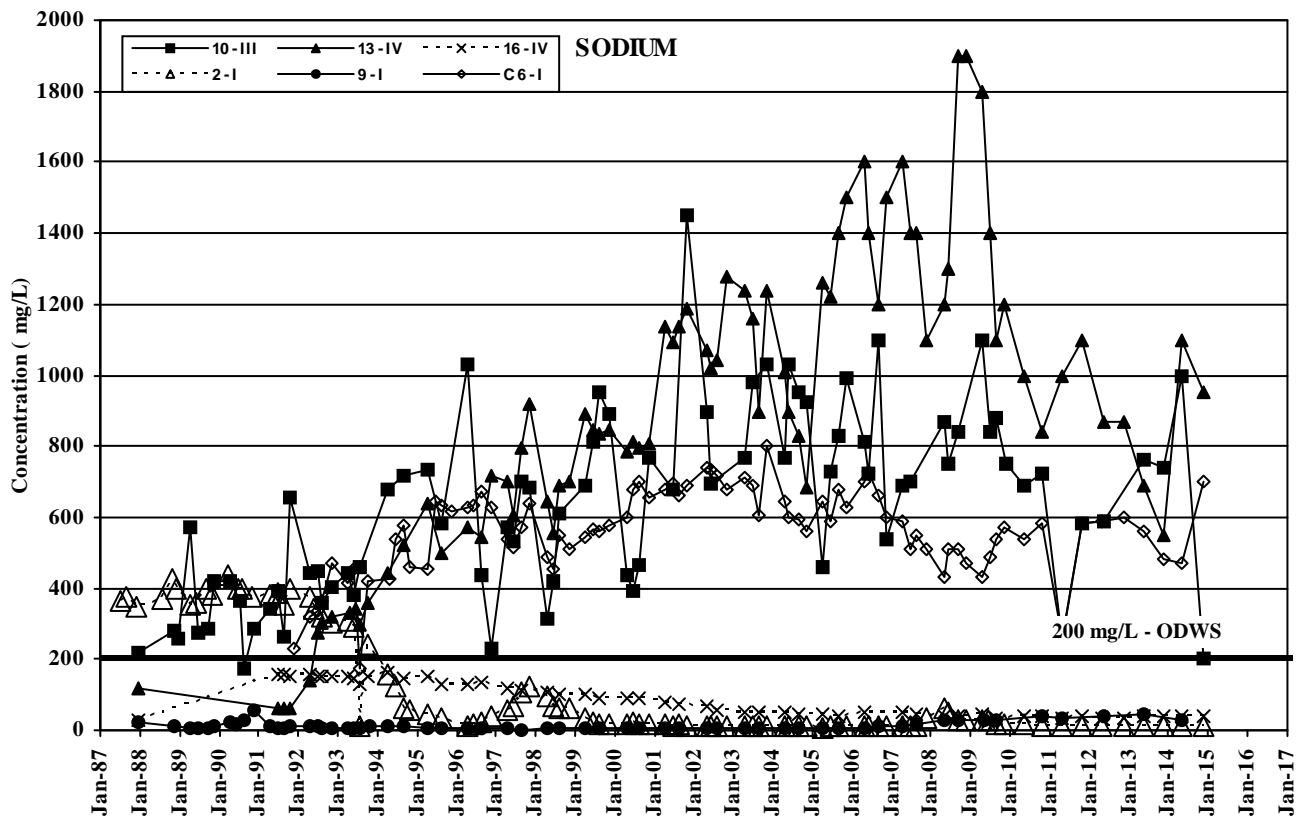
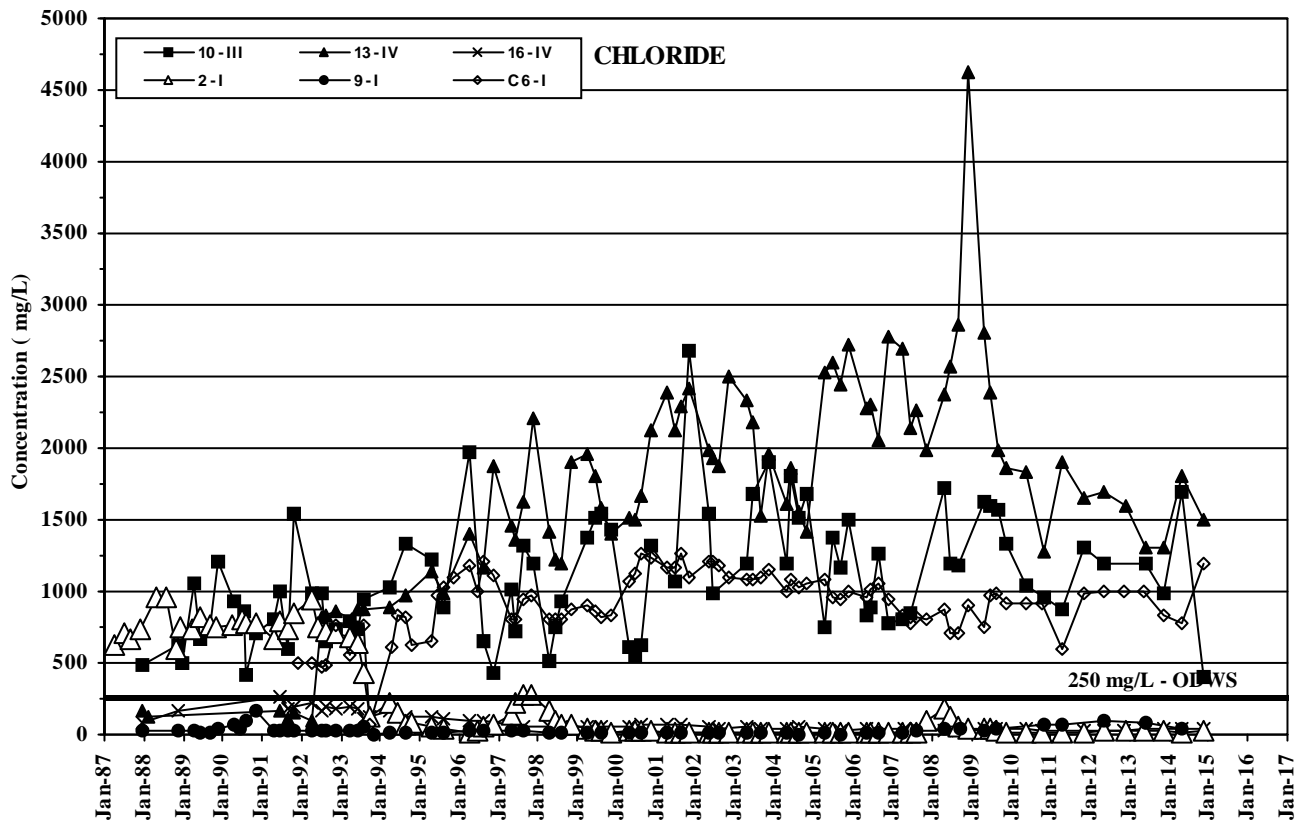
Parameter		Chloride	Sodium	Sulphate	Copper	Iron	Manganese	Zinc	Boron	Cadmium	Chromium	Lead	Nitrate	Nitrite
ODWS		250	200	500	1	0.30	0.05	5	5	0.005	0.05	0.01	10	1
Background		23.8	13.4	29.52		0.38	0.01	0.02	0.042		0.005		0.10	0.01
Guideline B7 Criteria		137	107	265		0.38	0.03	2.51	1.28		0.016		2.58	0.26
13-I	5/13/2014	< 1.0	36.0	< 1.0		0.20	0.01	< 0.01	0.120		< 0.01		< 0.10	< 0.01
14-IV	5/15/2014	< 1.0	40.0	< 1.0		< 0.10	0.00	0.01	0.089		< 0.01		< 0.10	< 0.01
	11/21/2014	1.2	43.0	< 1.0		< 0.10	< 0.00	< 0.01	0.110		< 0.01		< 0.10	< 0.01
15-I	5/8/2014	1.3	41.0	< 1.0		< 0.10	< 0.00	< 0.01	0.096		< 0.01		< 0.10	< 0.01
16-VII	5/7/2014	< 1.0	39.0	< 1.0		< 0.10	0.00	< 0.01	0.110		< 0.01		< 0.10	< 0.01
	11/19/2014	1.6	40.0	< 1.0		0.17	0.01	< 0.01	0.110		< 0.01		< 0.10	< 0.01
17-I	5/13/2014	1.0	36.0	< 1.0		<u>0.52</u>	0.01	0.02	0.078		< 0.01		< 0.10	< 0.01
9A-I	5/13/2014	9.2	39.0	9.9		0.19	0.01	< 0.01	0.130		< 0.01		< 0.10	< 0.01

Average concentration in 2014 from monitors 4-IR, 19-I, 53-I, 54-I used in comparison to Guideline B7 values

Concentrations that exceed the Guideline B7 criteria are marked are bolded and underlined

Exceedances observed for lead are due to the Laboratory Method Detection Limit

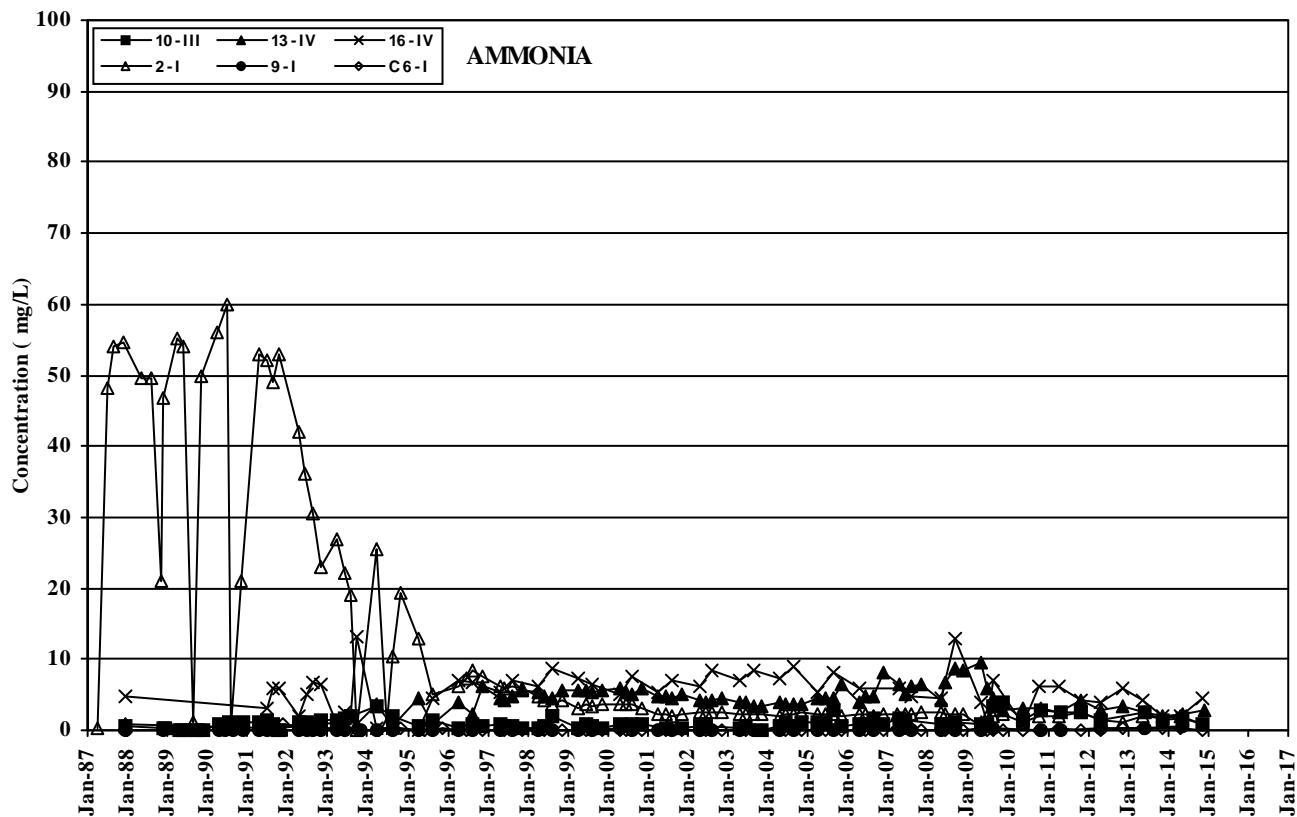
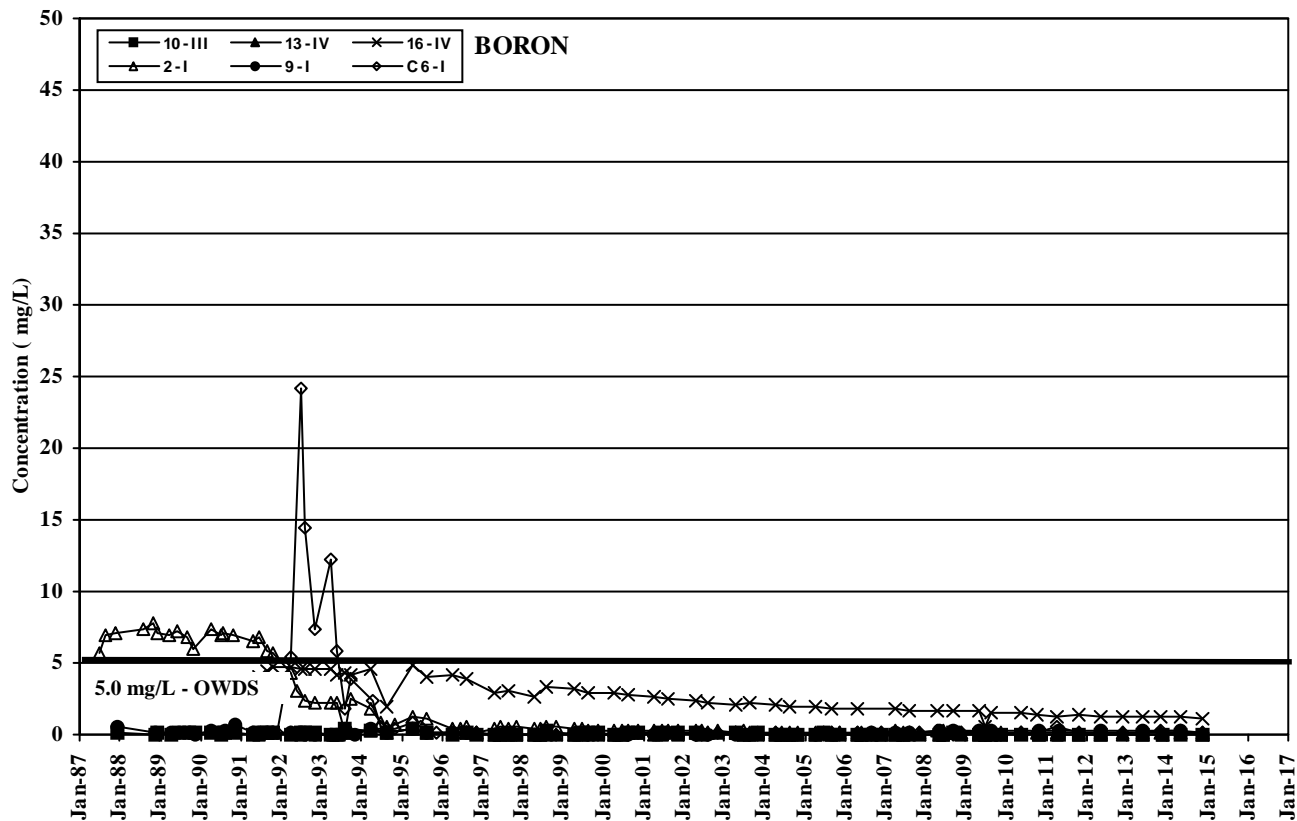
All concentrations are in mg/L



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Shallow Overburden South of Landfill

FIGURE
C1

60339708
 12b C1 GW Chem Cl and Na - South of Land



Closed Eastview Road Landfill Site

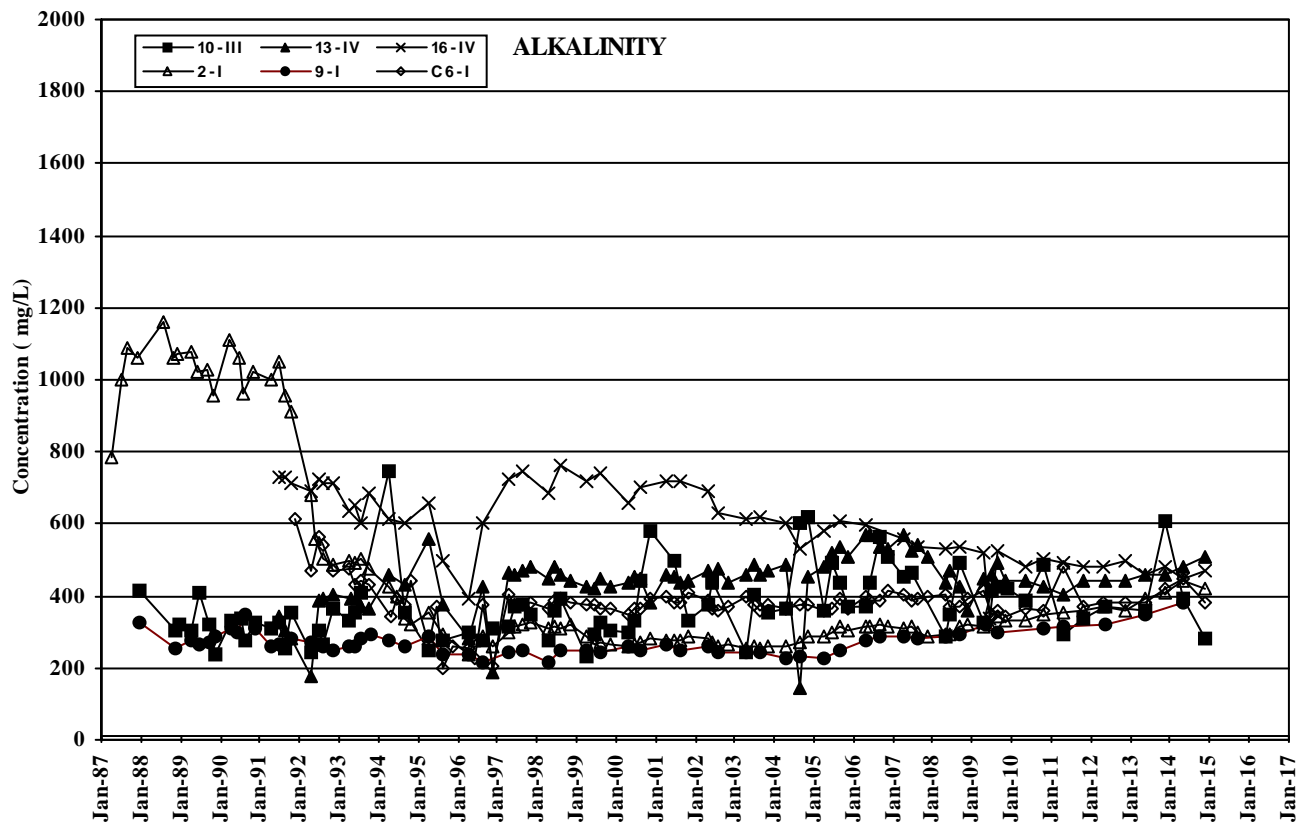
Ground Water Chemistry Trends

Shallow Overburden South of Landfill

FIGURE

C2

60339708
12b C2 GW Chem B and NH3 - South of Land

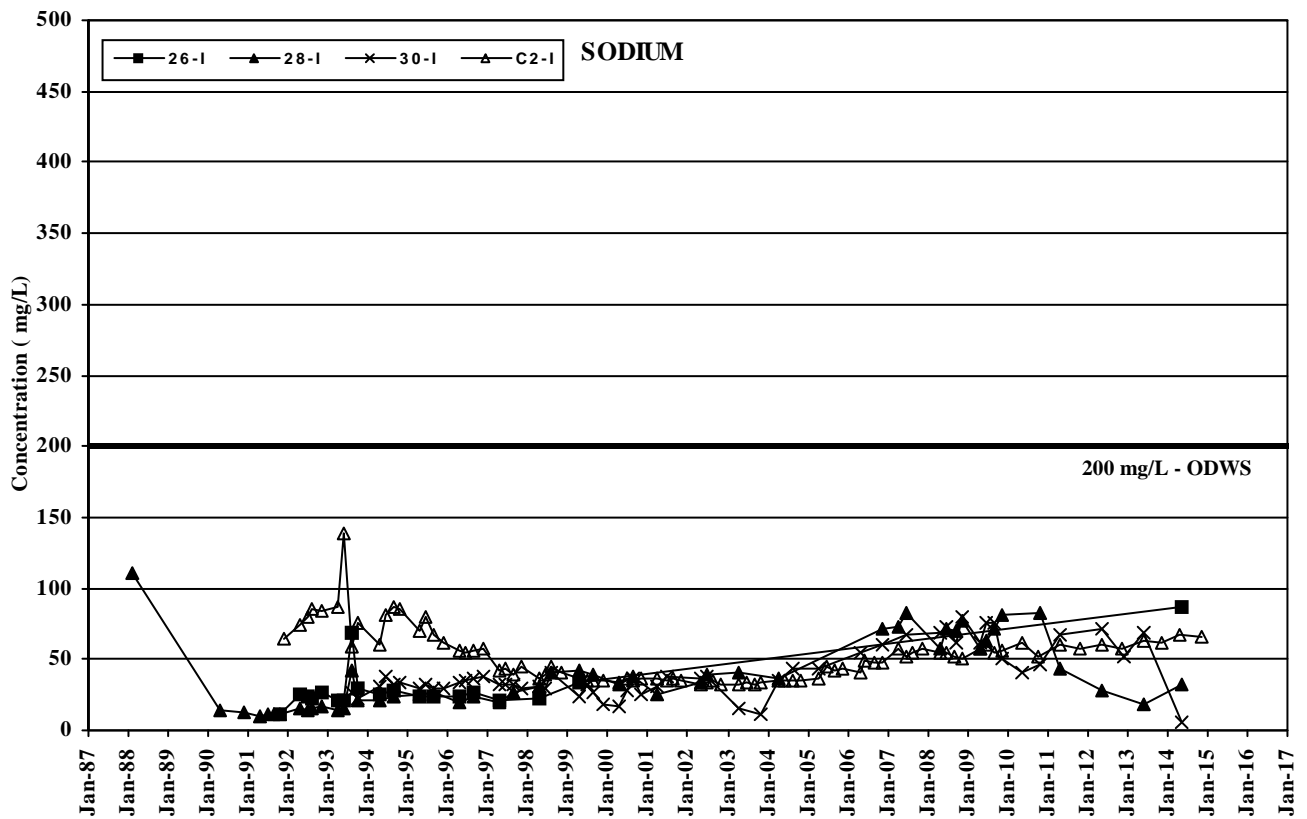
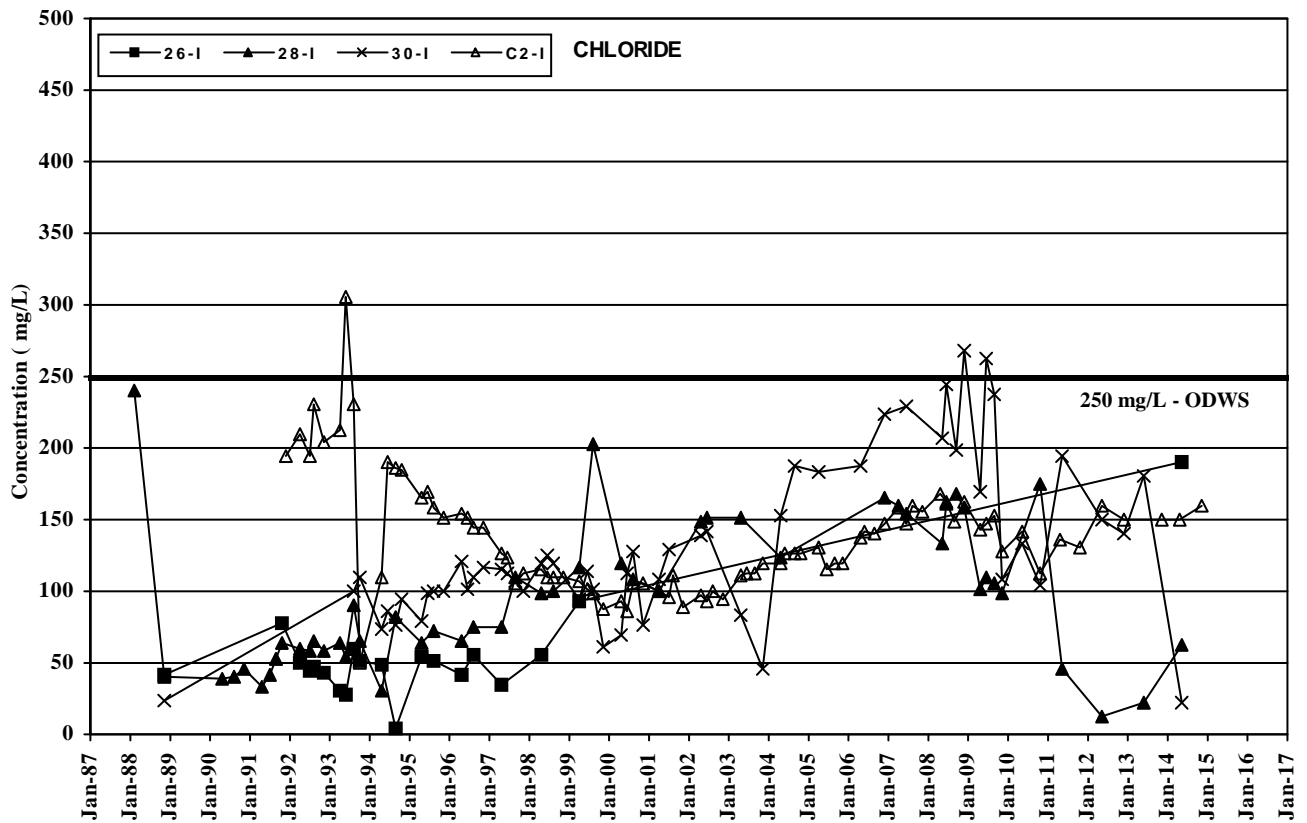


Closed Eastview Road Landfill Site

Ground Water Chemistry Trends
Shallow Overburden South of Landfill

FIGURE
C3

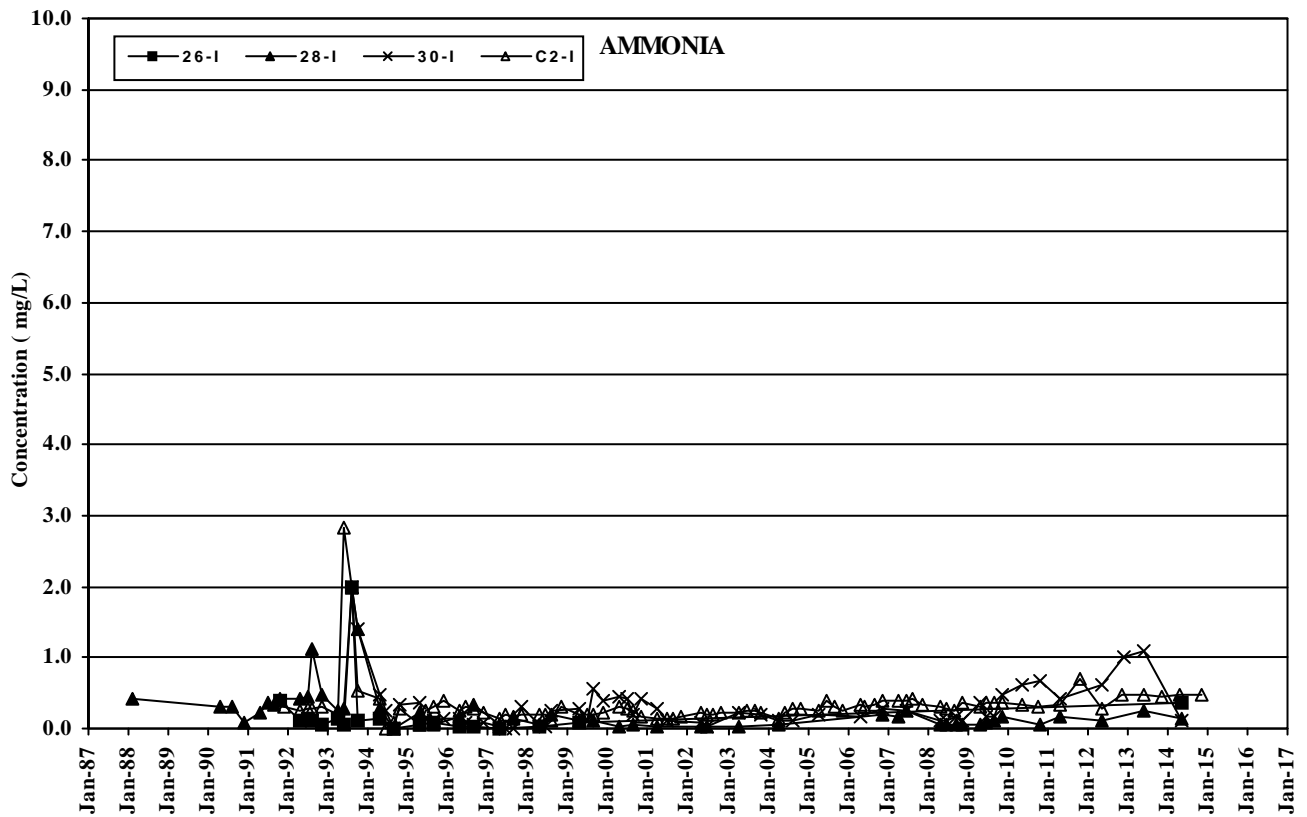
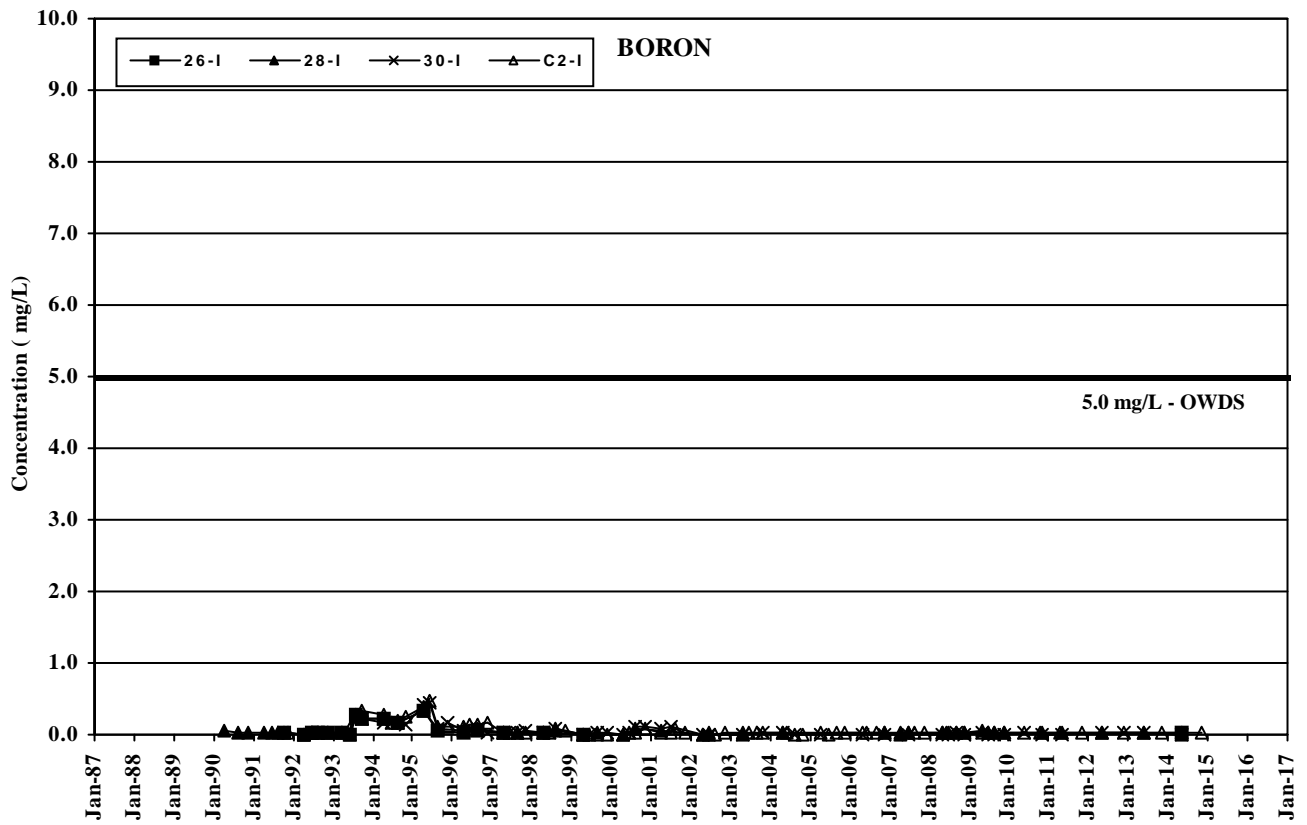
60339708
12b C3 GW Chem Alk - South of Landfill



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Shallow Overburden South of Landfill

FIGURE
C4

60339708
 12b C4 GW Chem Cl and Na - West of Landf



Closed Eastview Road Landfill Site

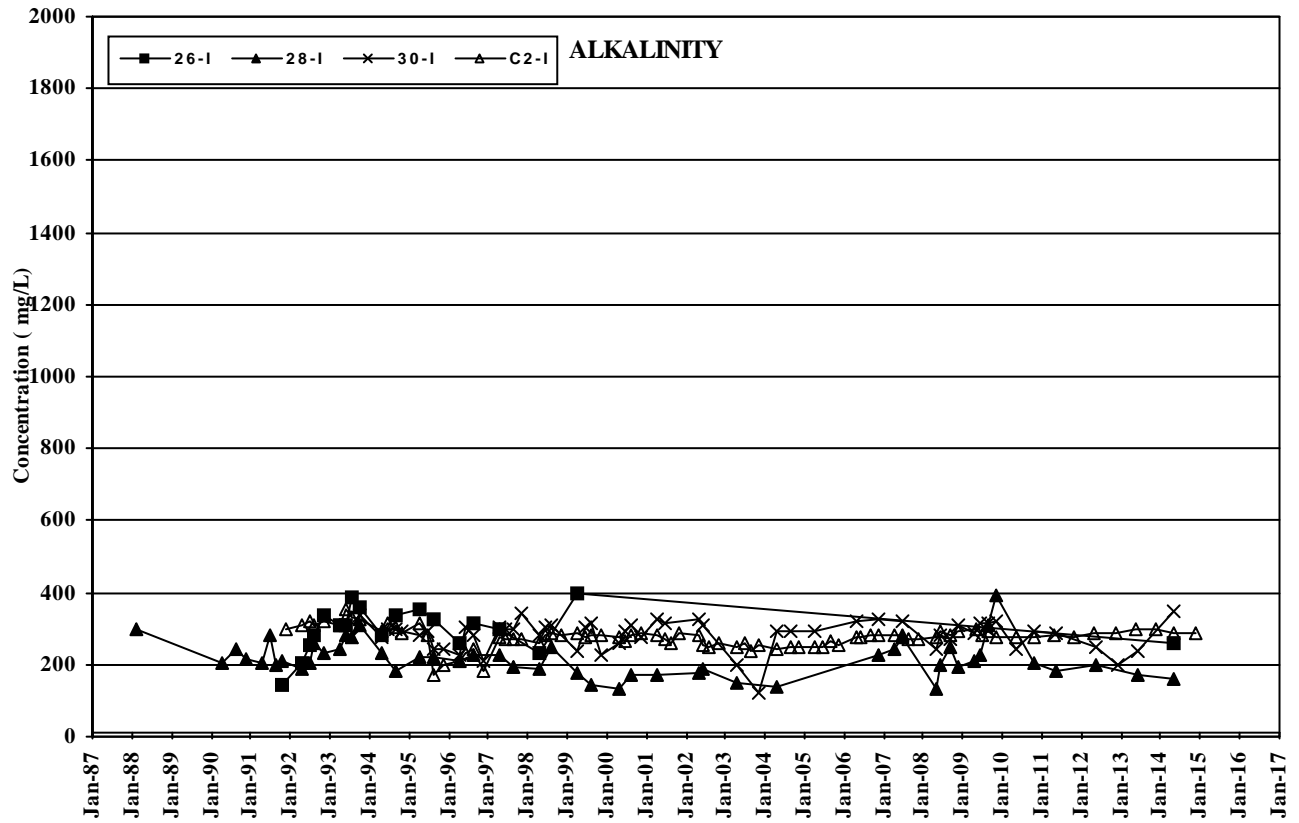
Ground Water Chemistry Trends

Shallow Overburden South of Landfill

FIGURE

C5

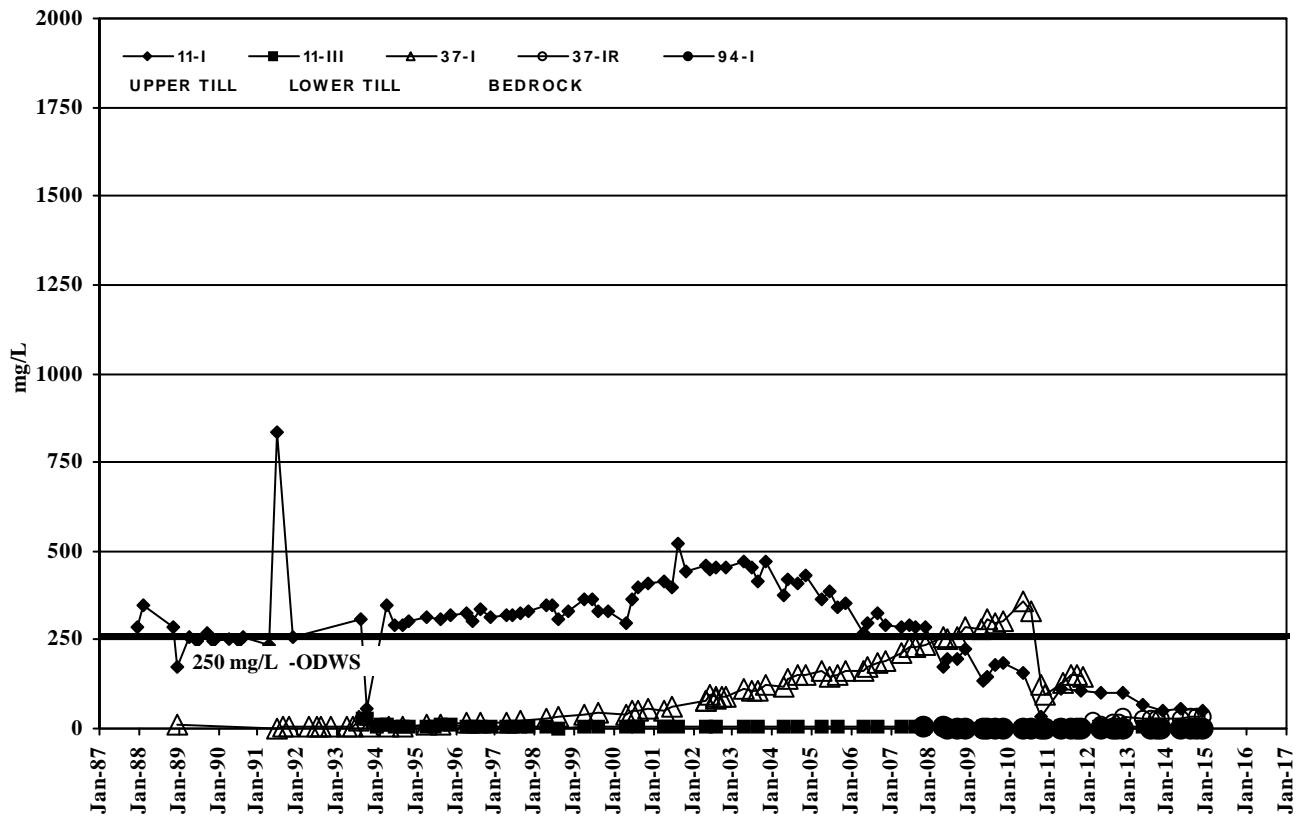
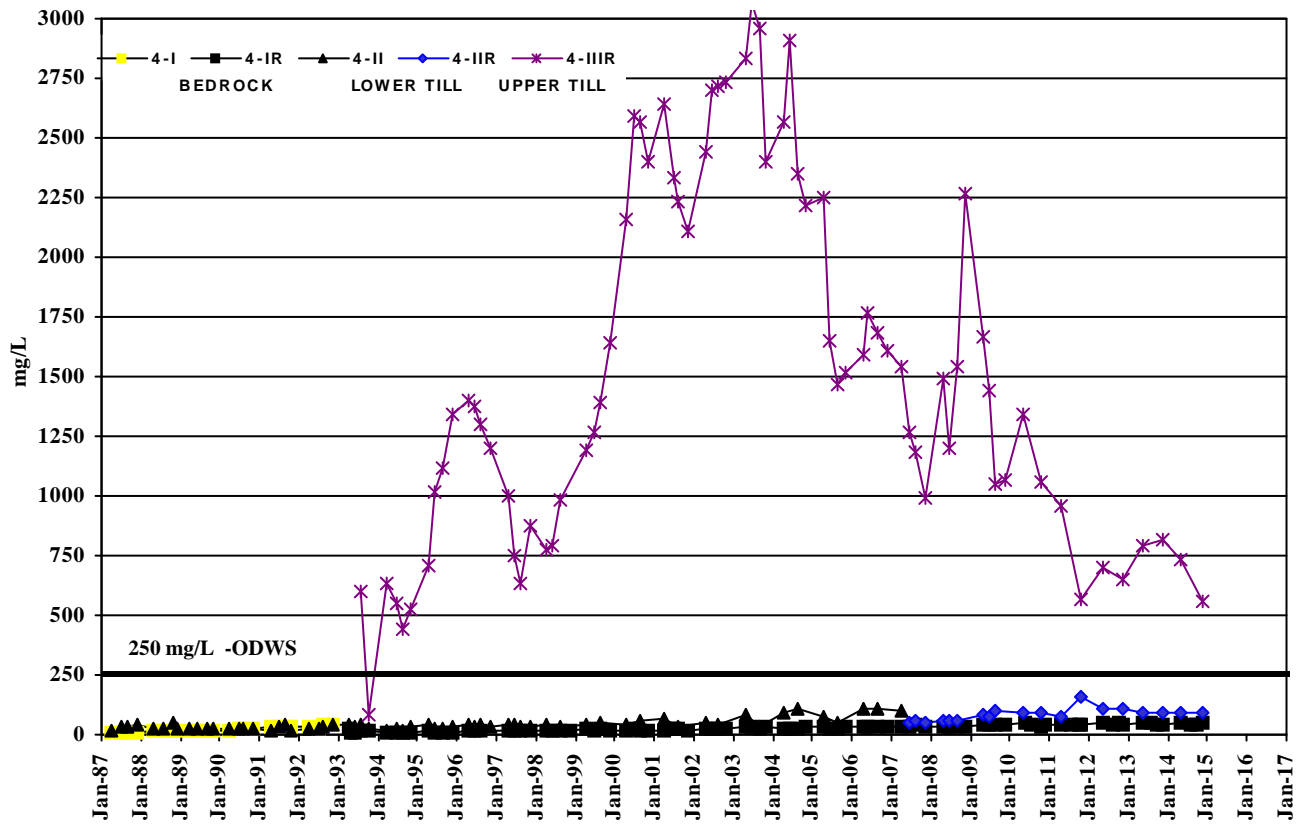
60339708
12b C5 GW Chem B and NH3 - West of Landf



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Shallow Overburden South of Landfill

FIGURE
C6

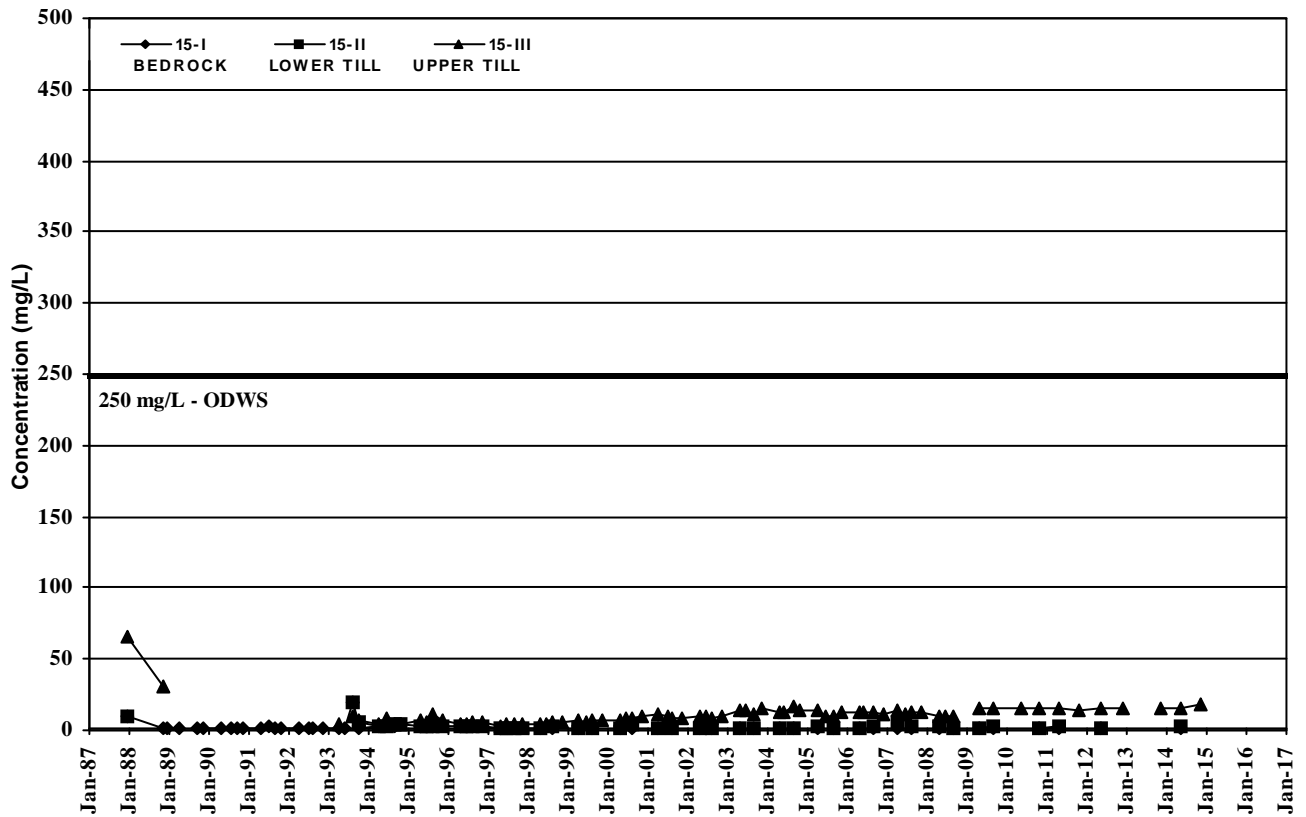
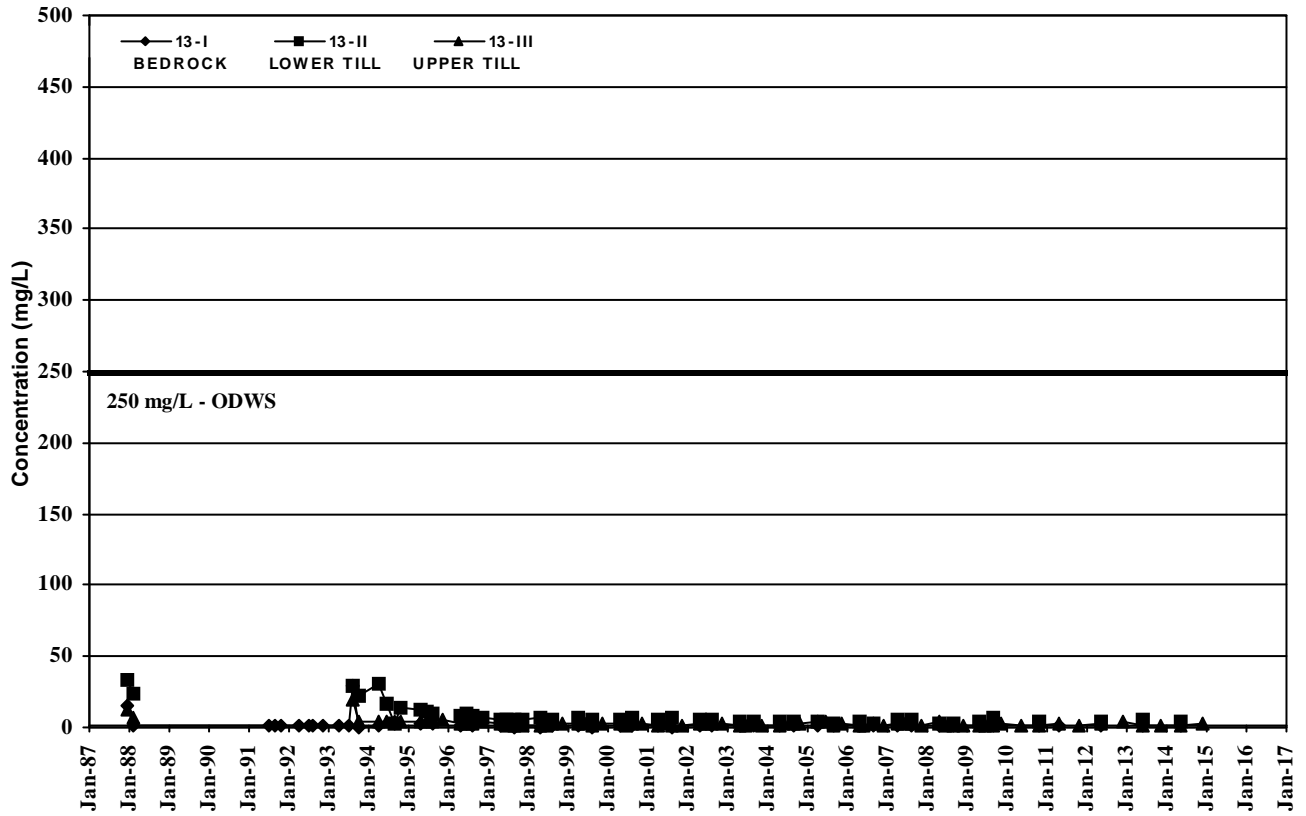
60339708
 12b C6 GW Chem Alk - West of Landfill



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Chloride Concentration Profile

FIGURE
C7

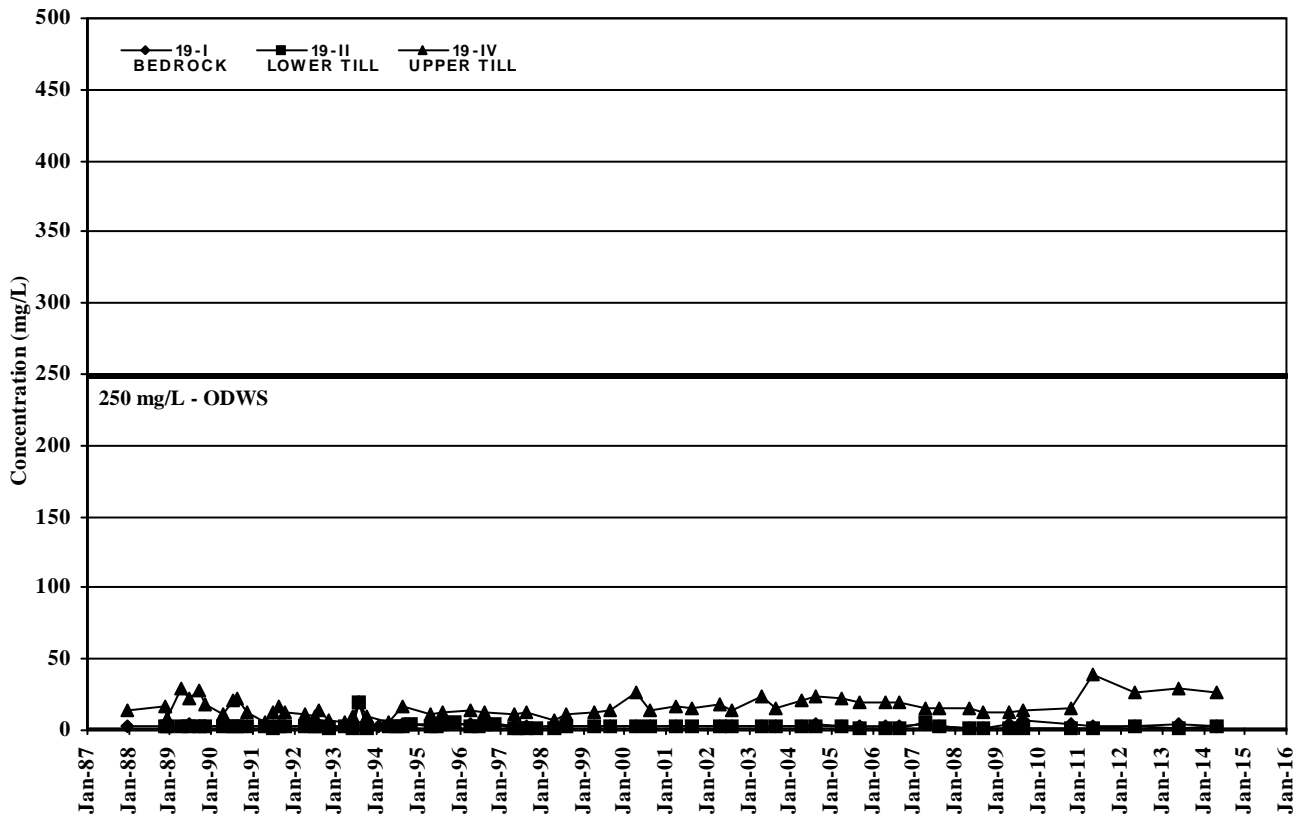
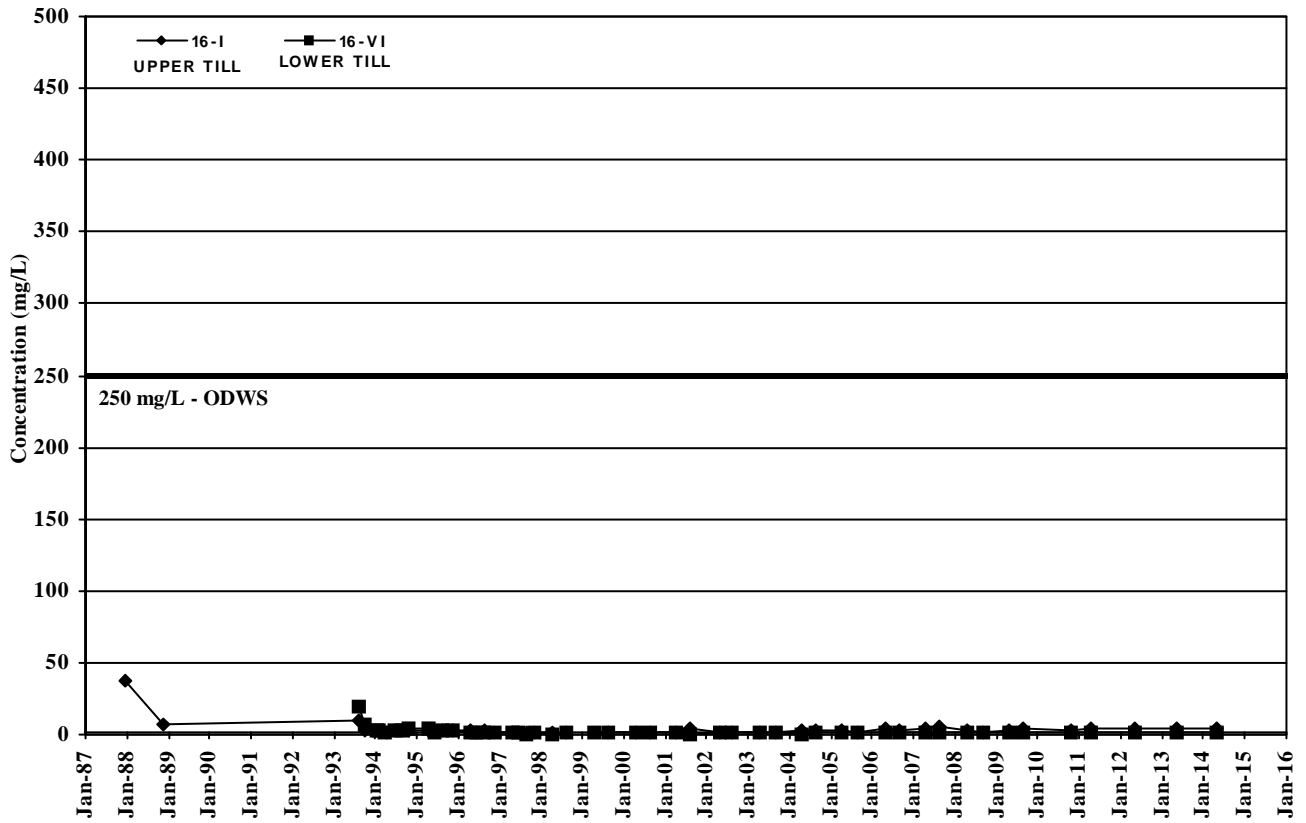
60339708
12b C7 GW Chem Cl Concentration 4 and 11



Closed Eastview Road Landfill Site
 Ground Water Chemistry Trends
 Chloride Concentration Profile

FIGURE
 C8

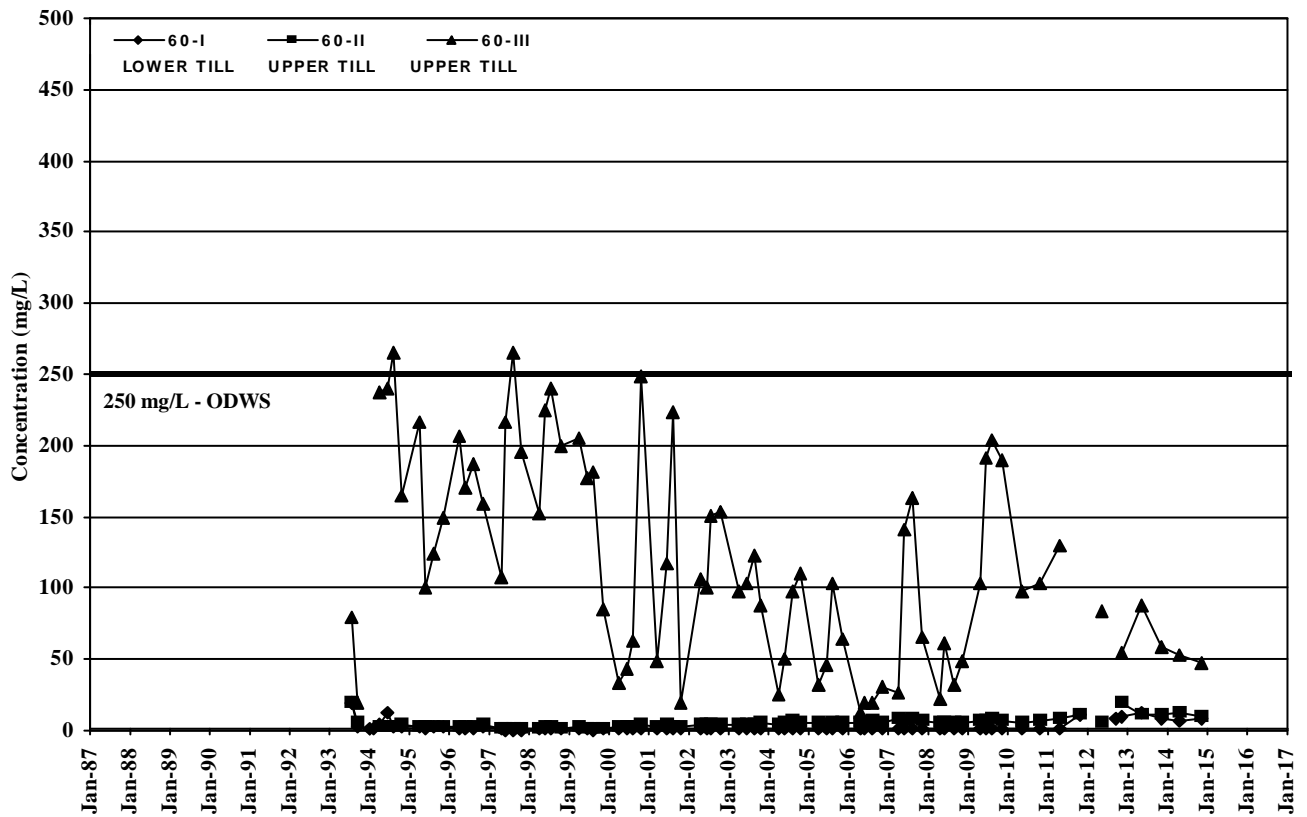
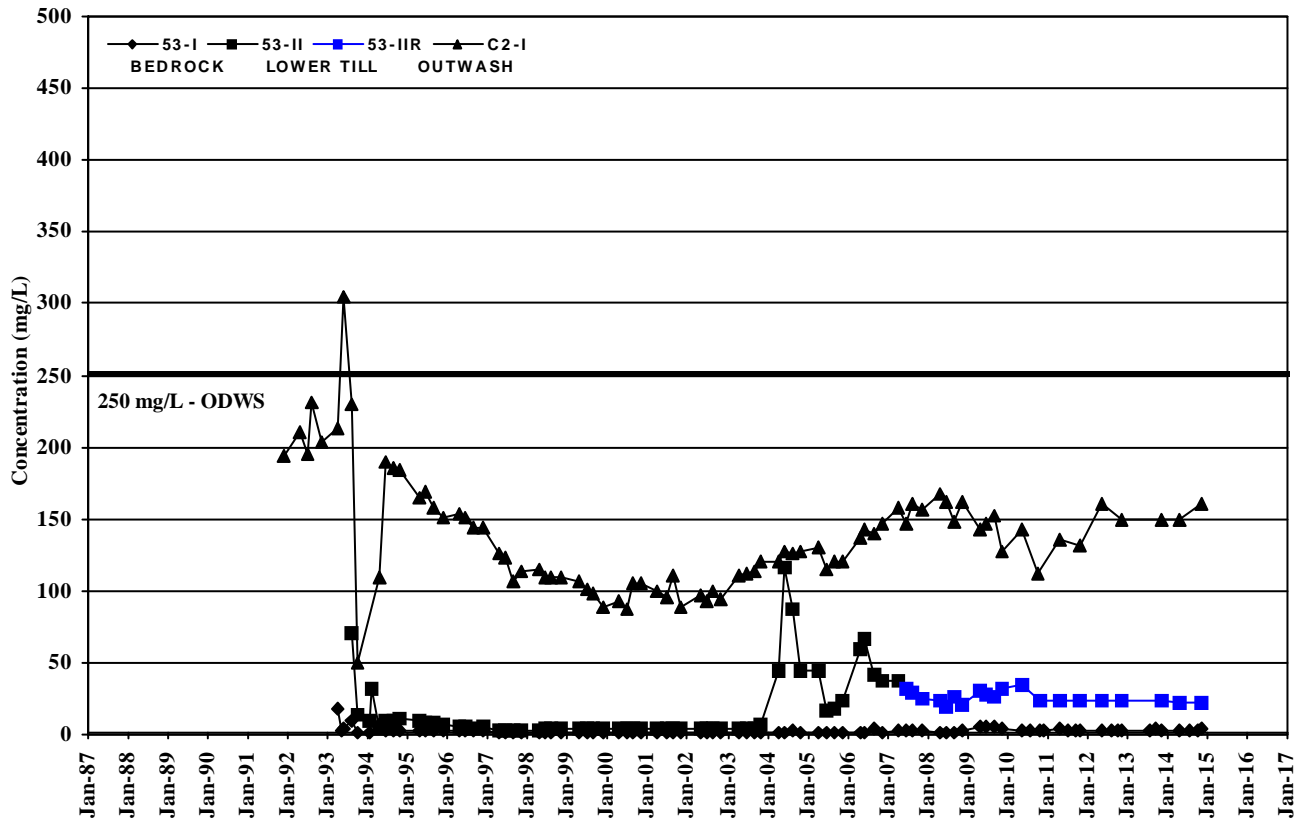
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Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Chloride Concentration Profile

FIGURE
C9

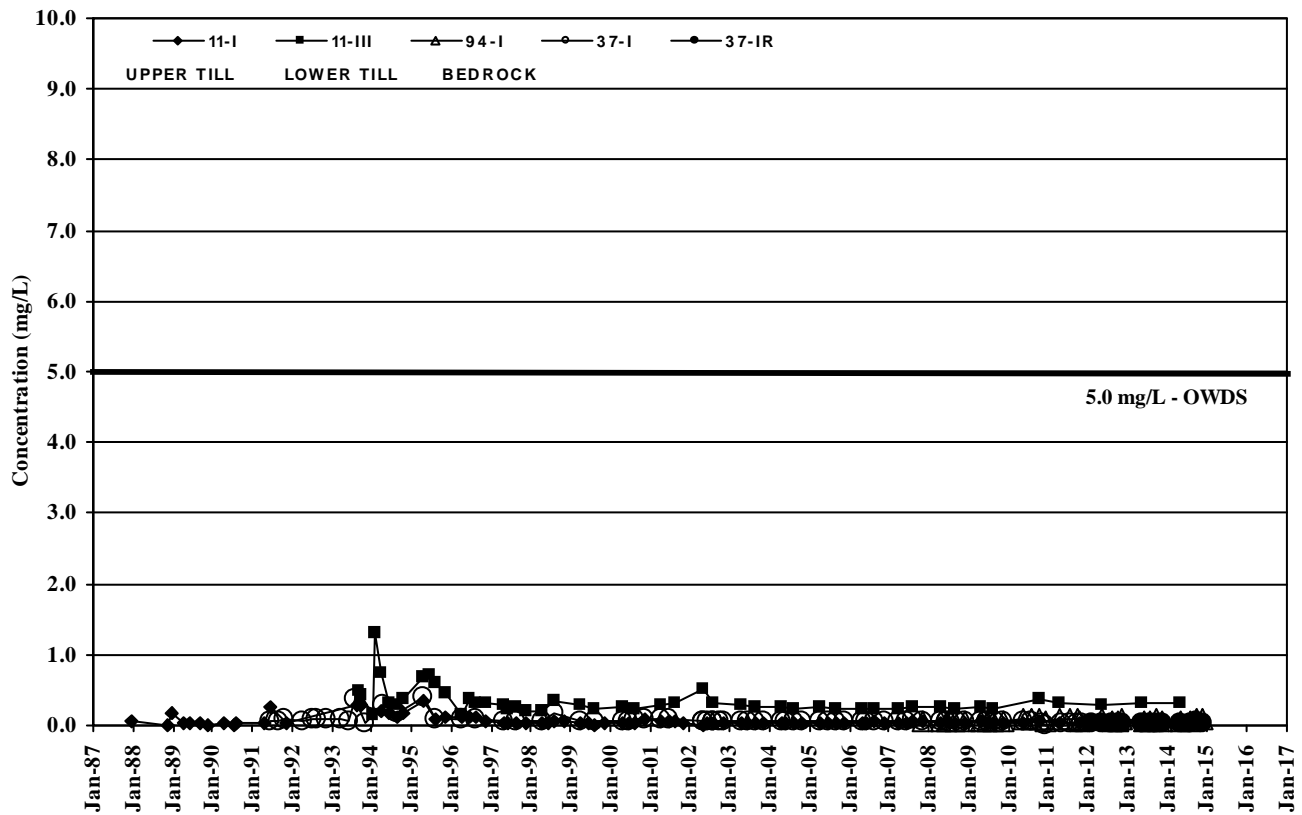
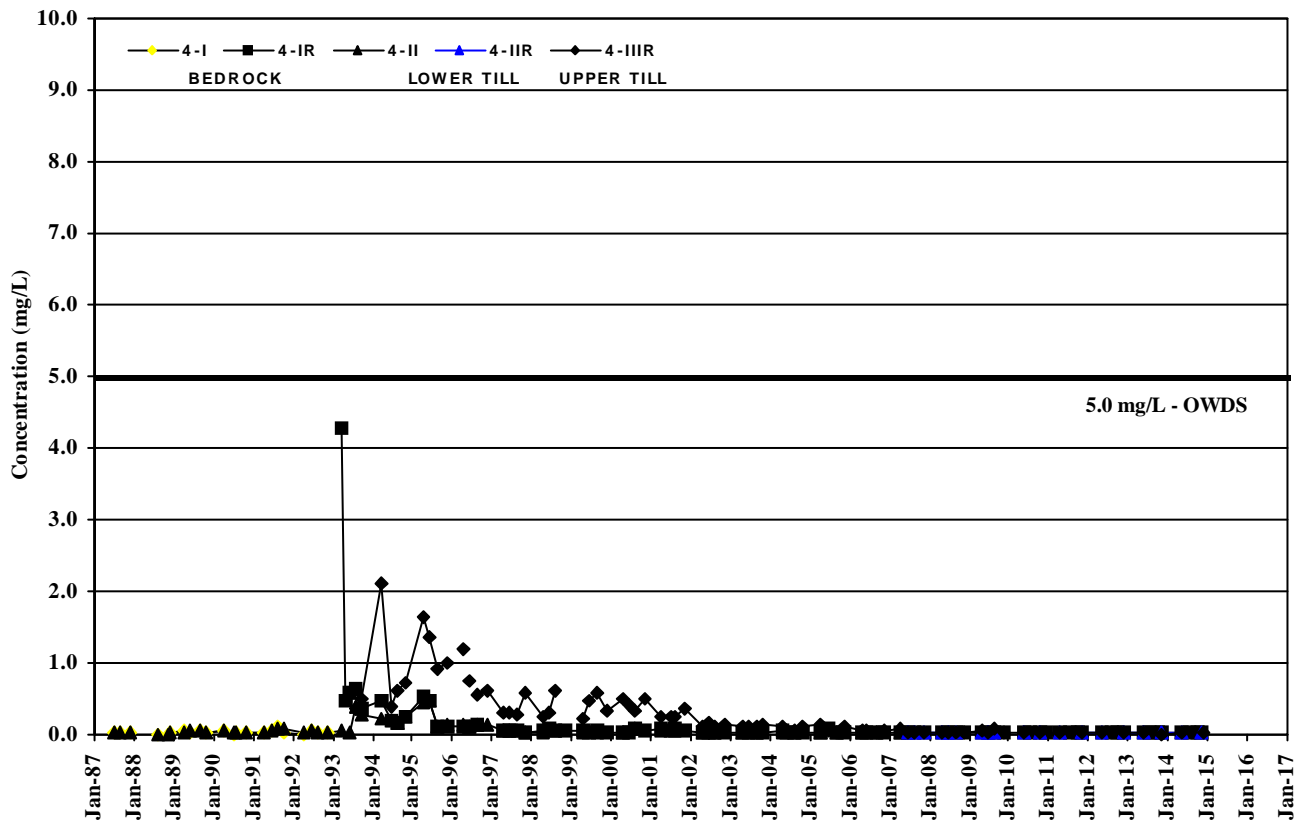
60339708
 12b C9 GW Chem Cl Concentration 16 and I



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Chloride Concentration Profile

FIGURE
C10

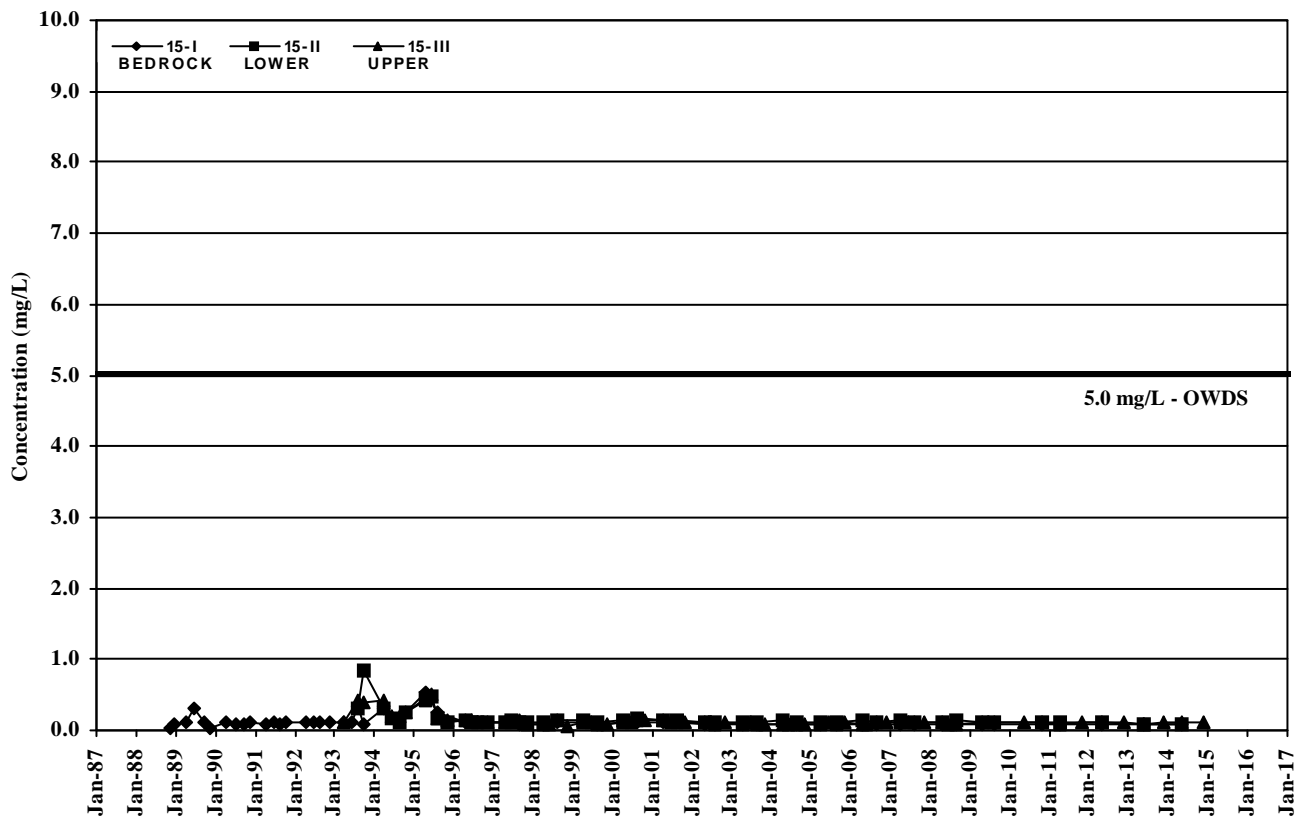
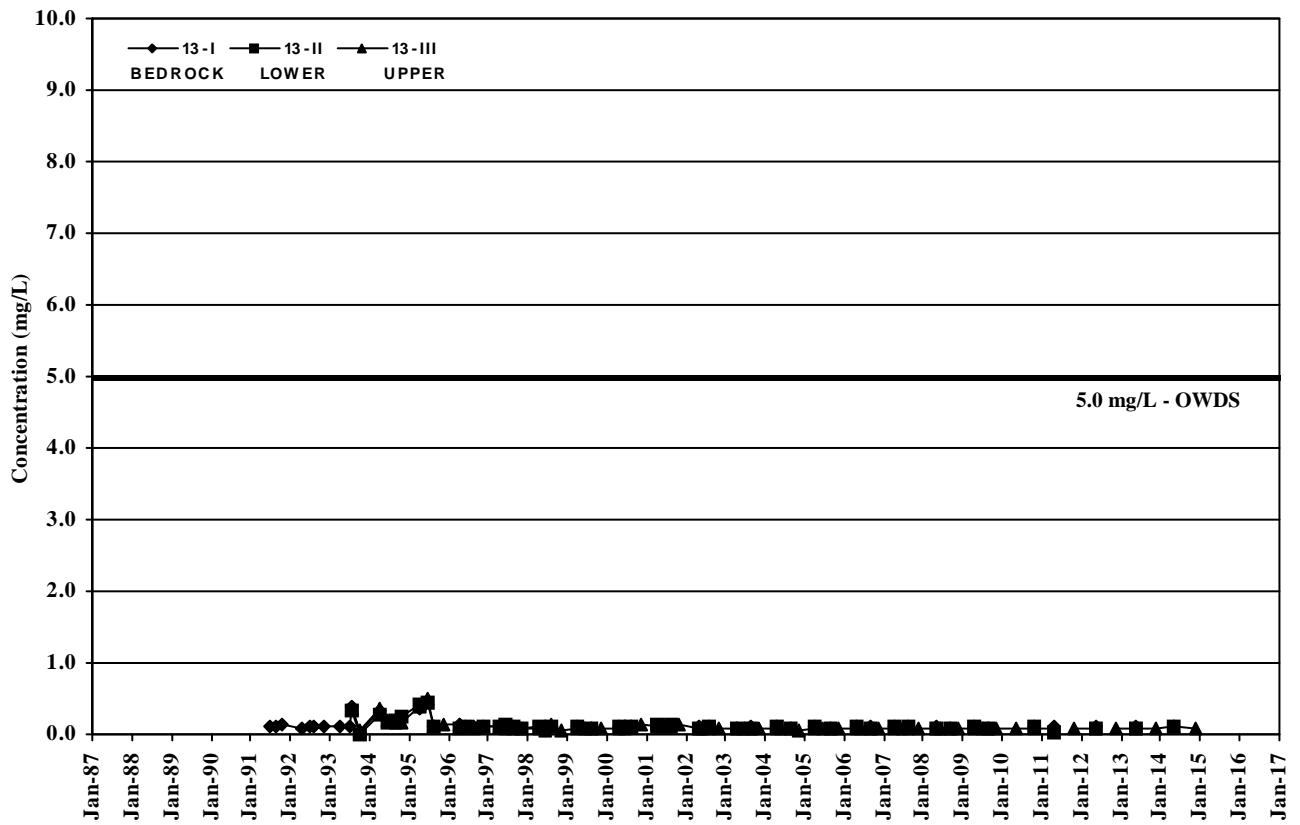
60339708
12c C10 GW Chem Cl Concentration 53 and



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Boron Concentration Profile

FIGURE
C11

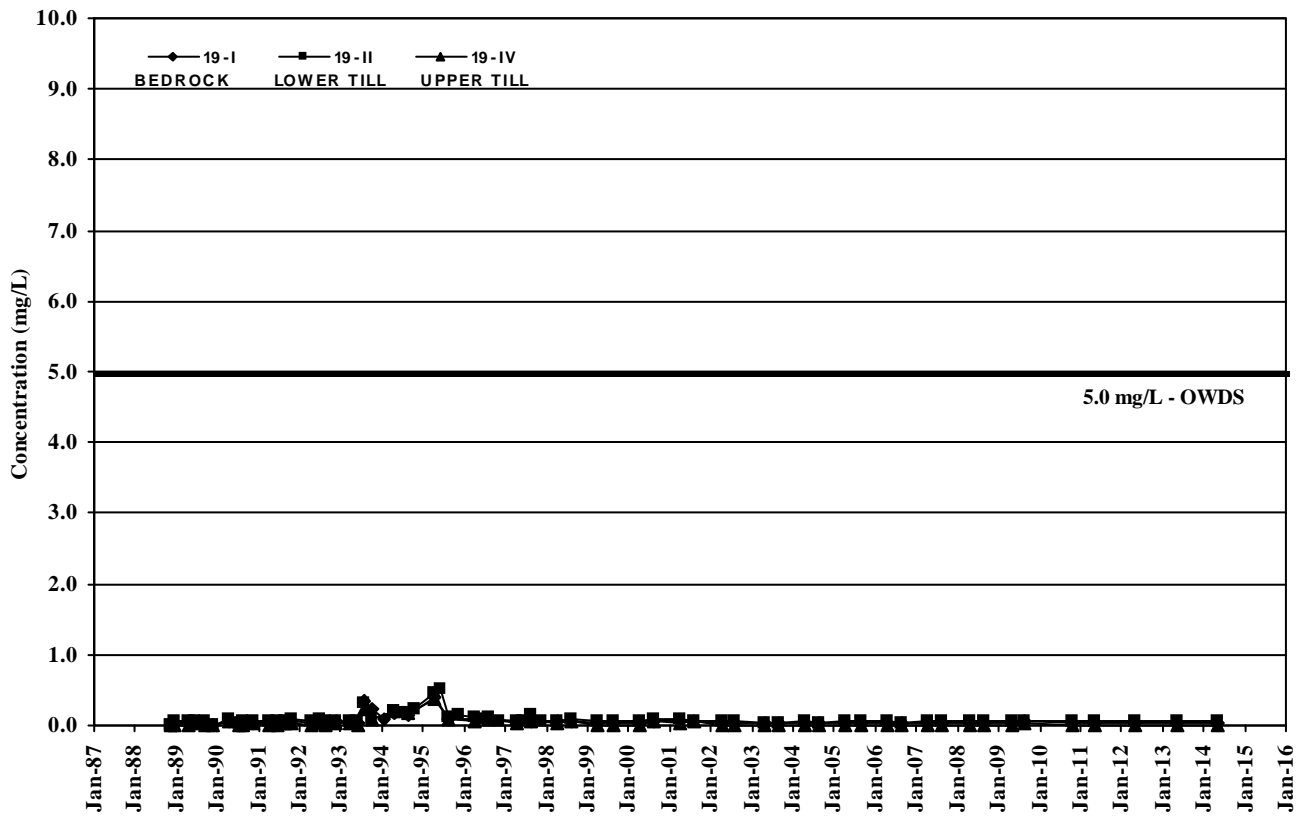
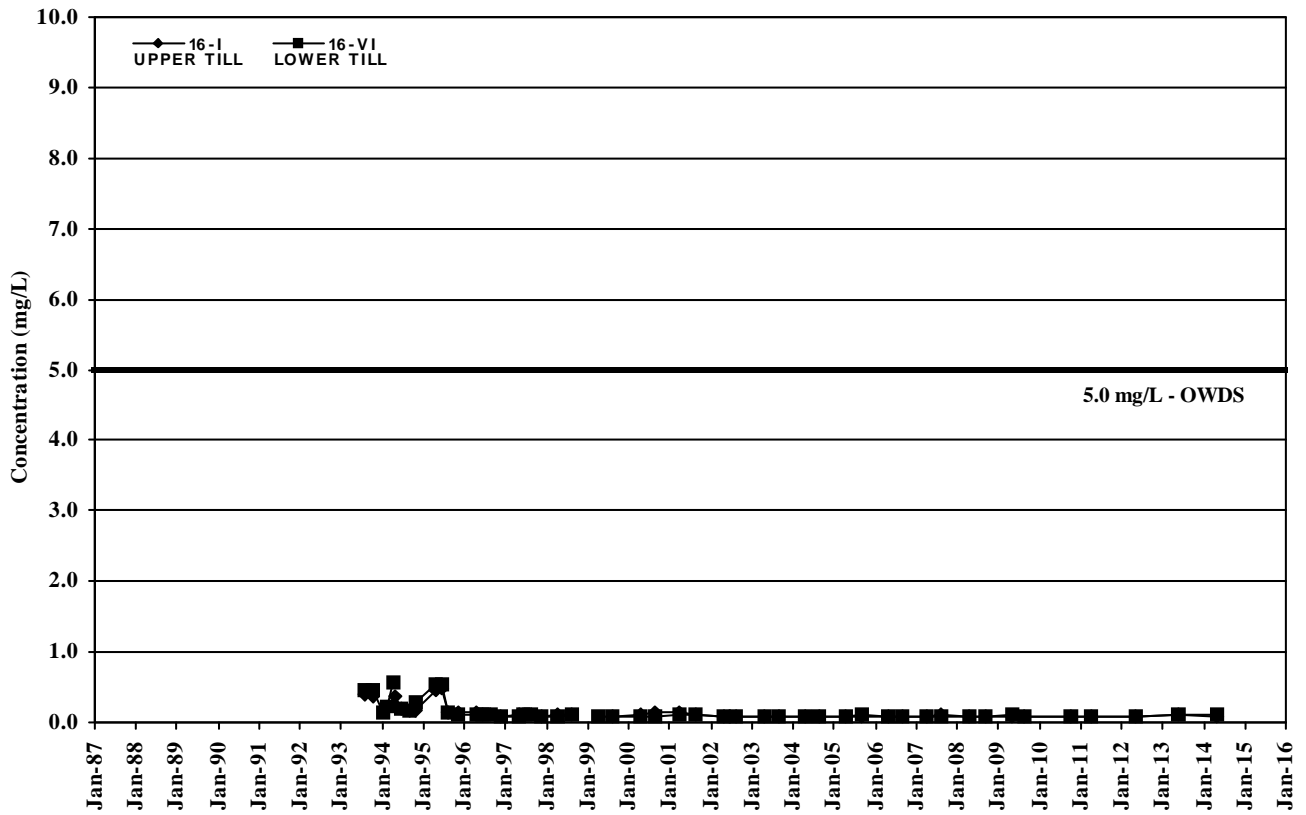
60339708
 12c C11 GW Chem B Concentration 4 and 11



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Boron Concentration Profile

FIGURE
C12

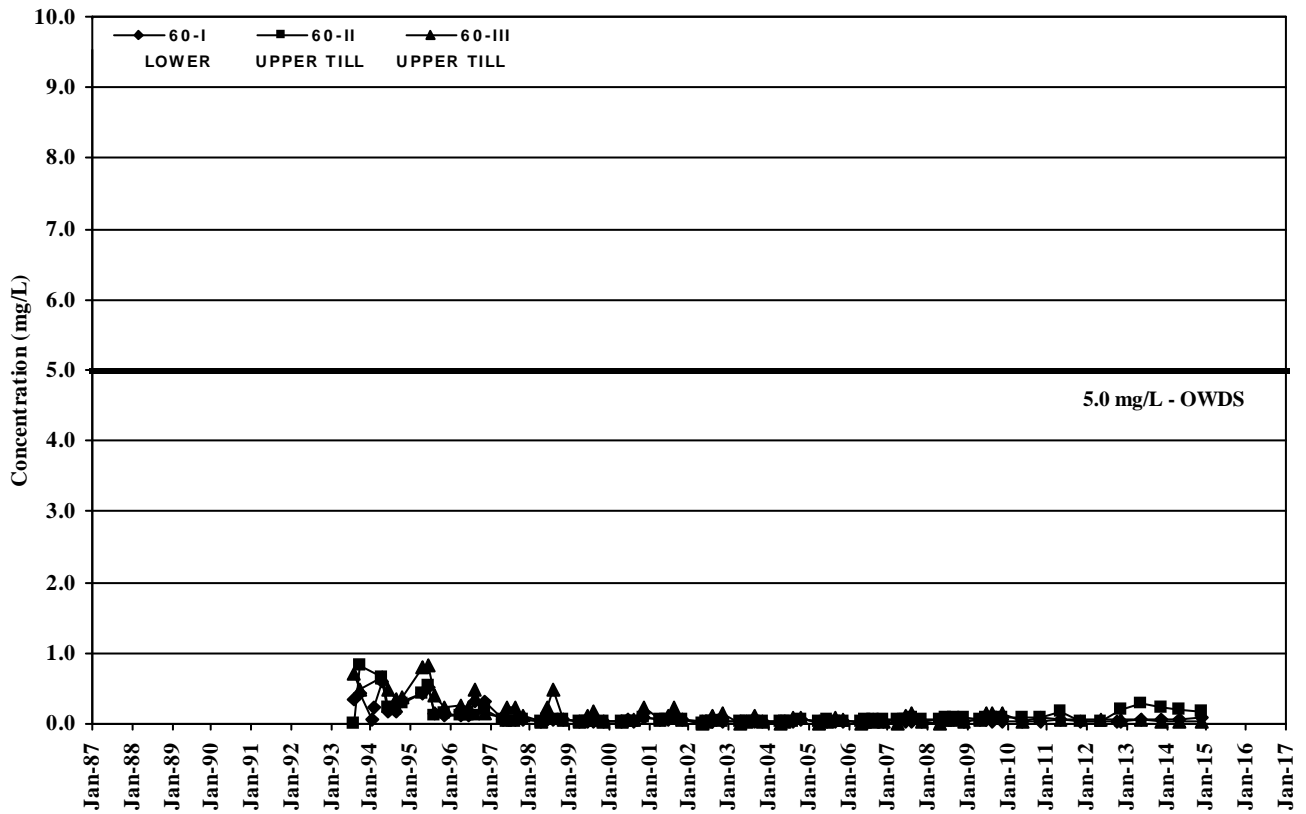
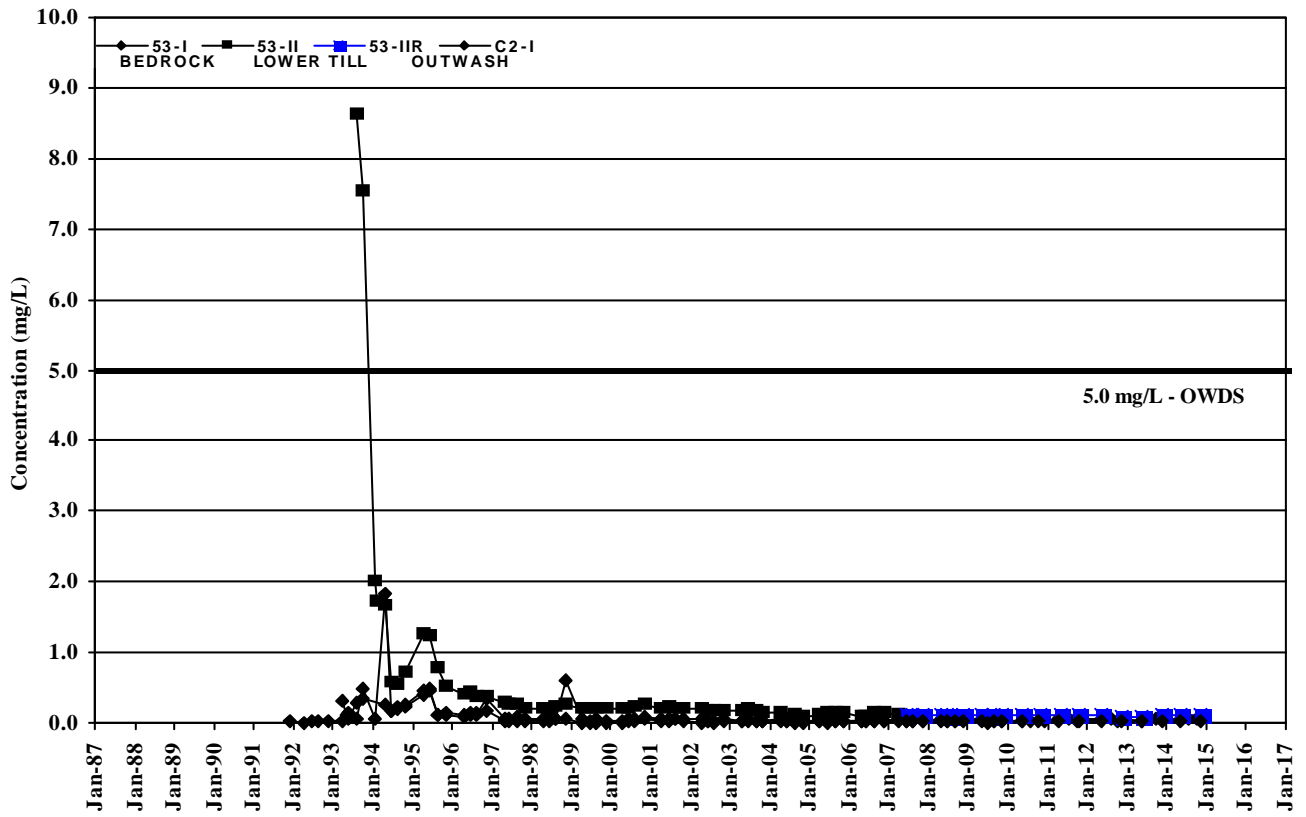
60339708
 12c C12 GW Chem B Concentration 13 and 1



Closed Eastview Road Landfill Site
 Ground Water Chemistry Trends
 Boron Concentration Profile

FIGURE
 C13

60339708
 12c C13 GW Chem B Concentration



Closed Eastview Road Landfill Site

Ground Water Chemistry Trends

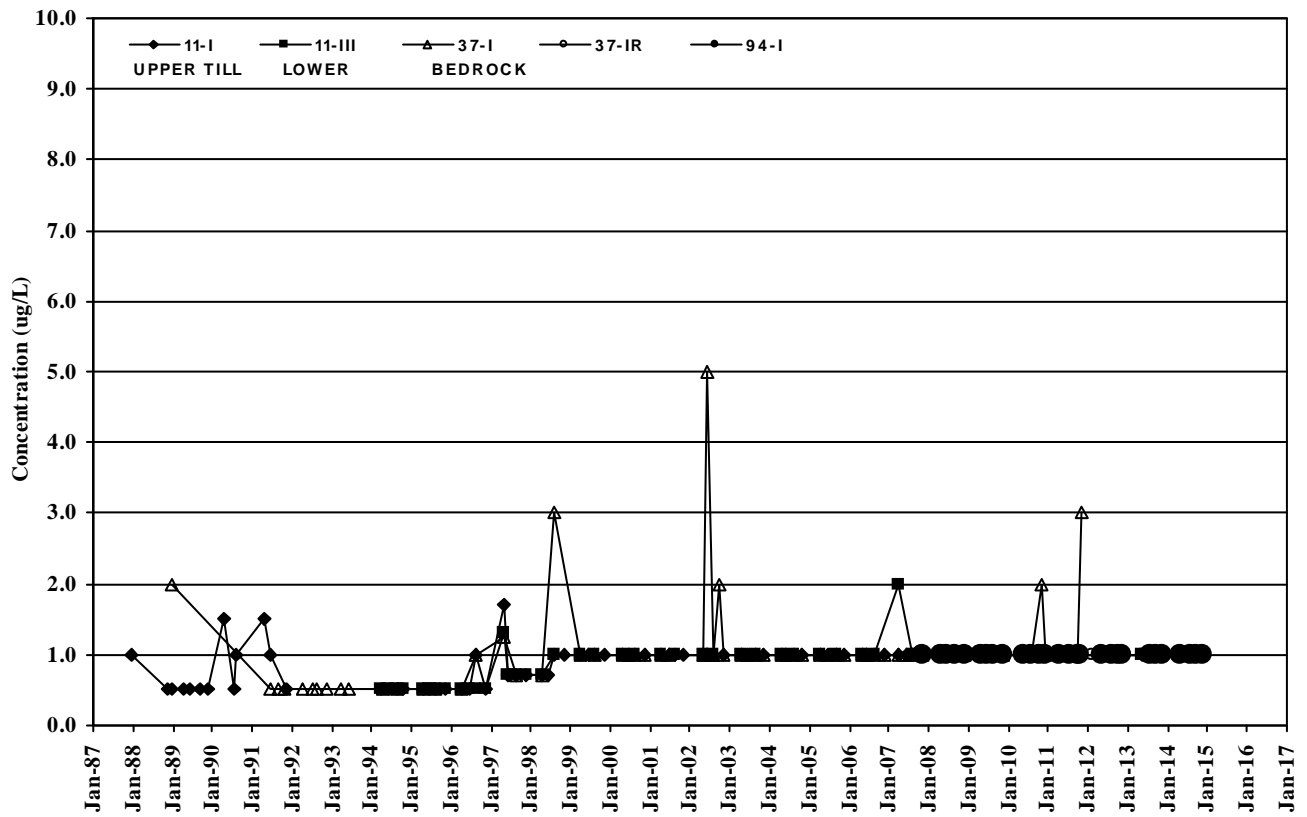
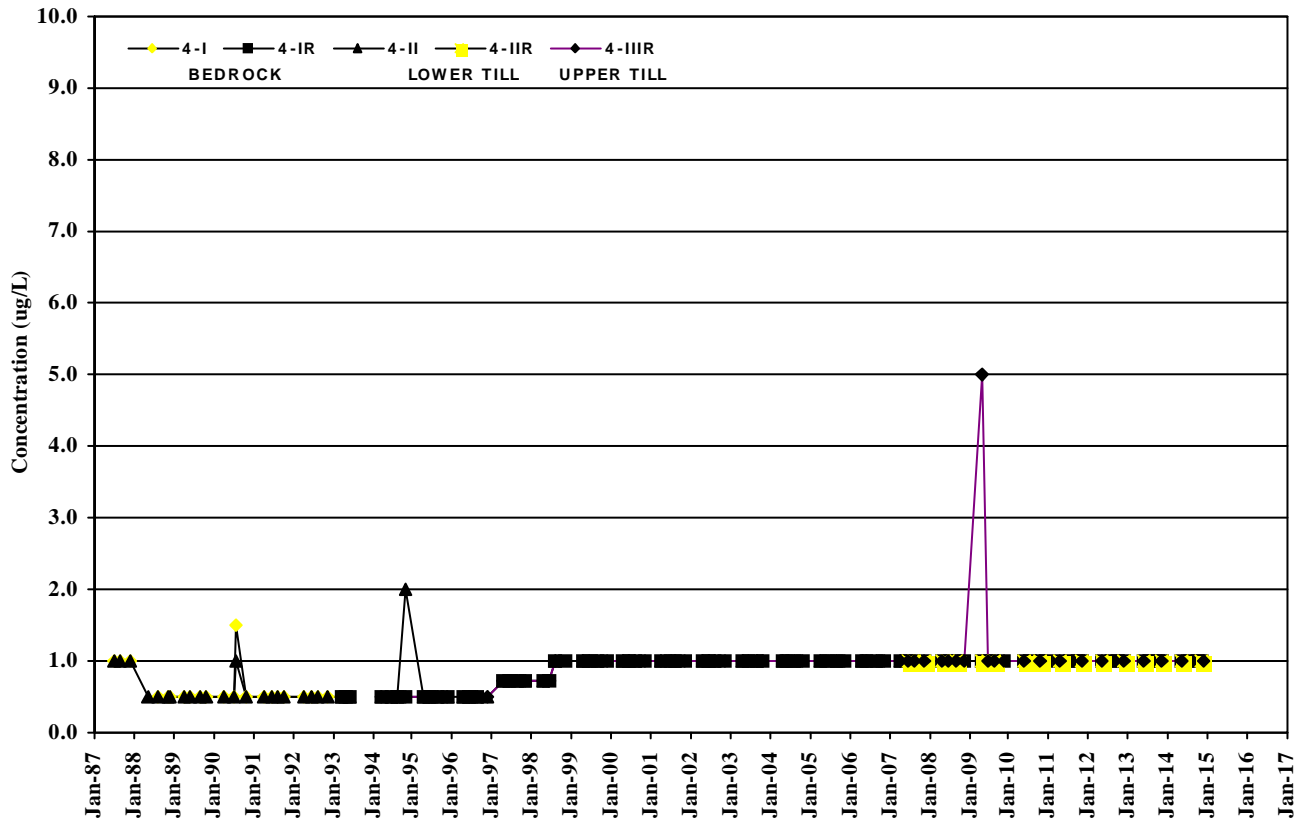
Boron Concentration Profile

FIGURE

C14

60339708

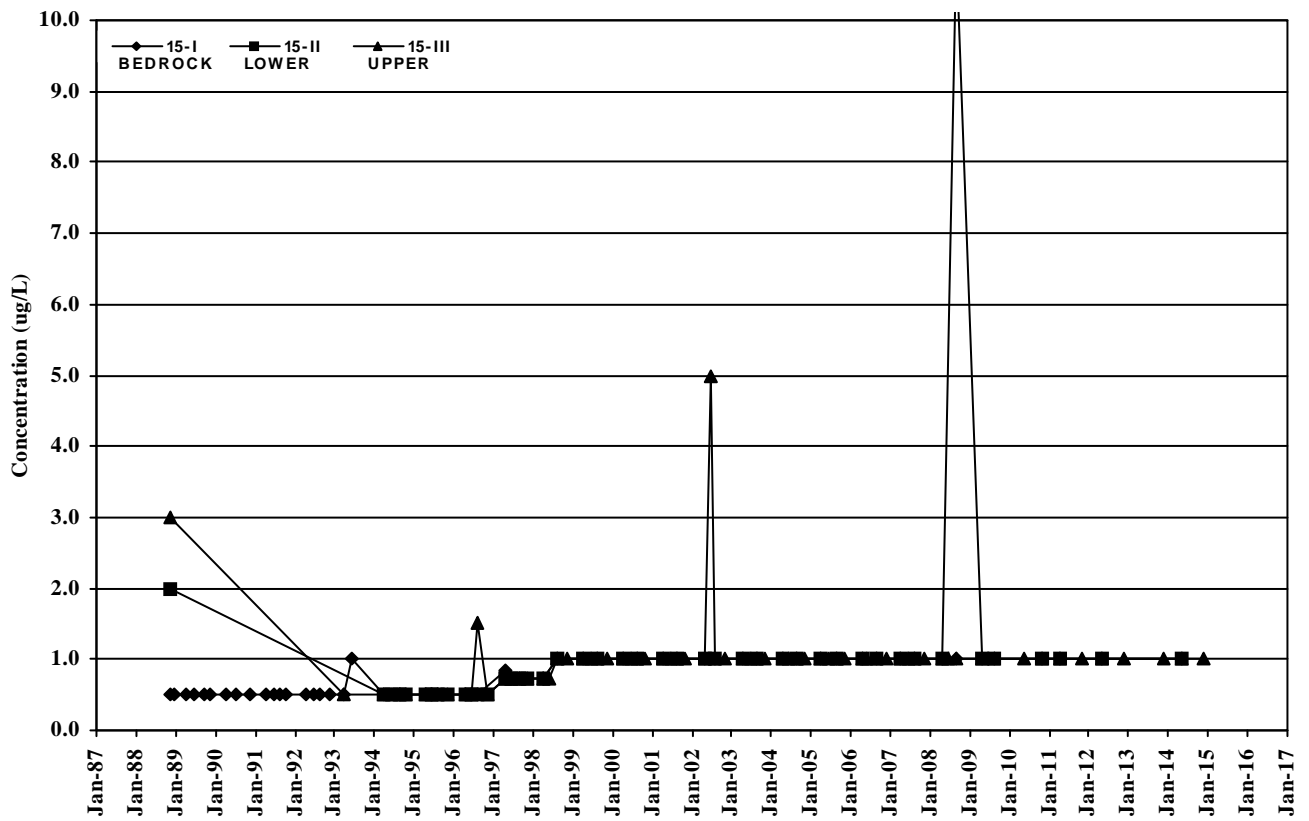
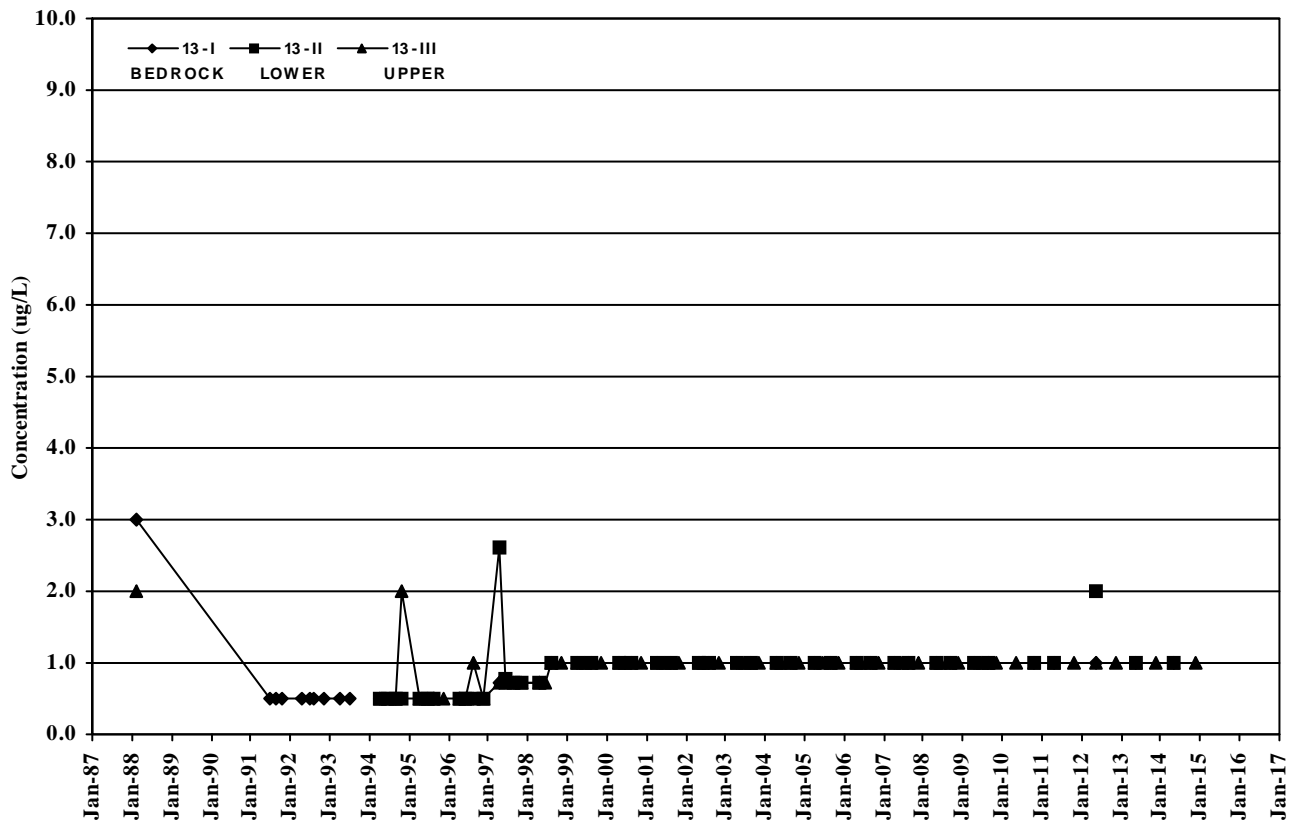
12c C14 GW Chem B Concentration



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Phenol Concentration Profile

FIGURE
C15

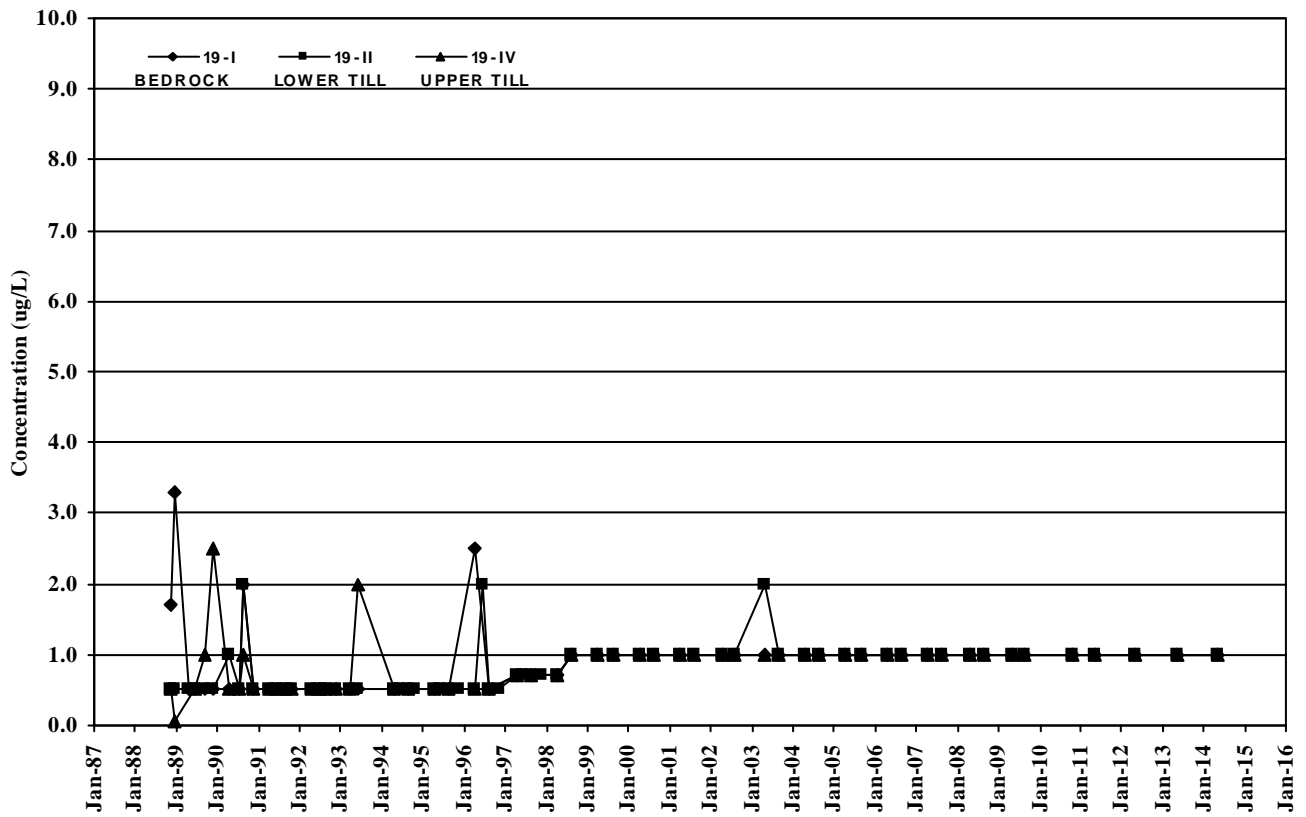
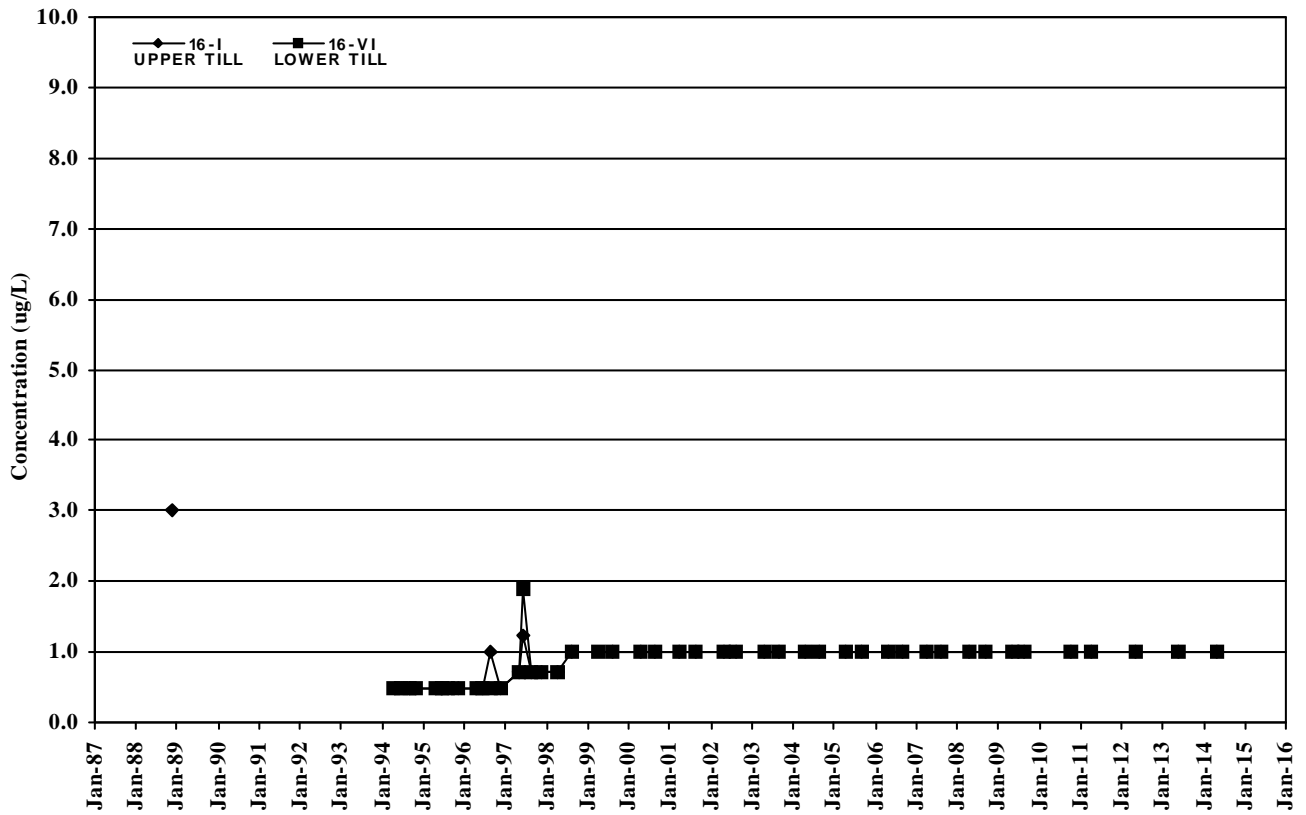
60339708
 12c C15 GW Chem Phenol Concentration 4 a



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Phenol Concentration Profile

FIGURE
C16

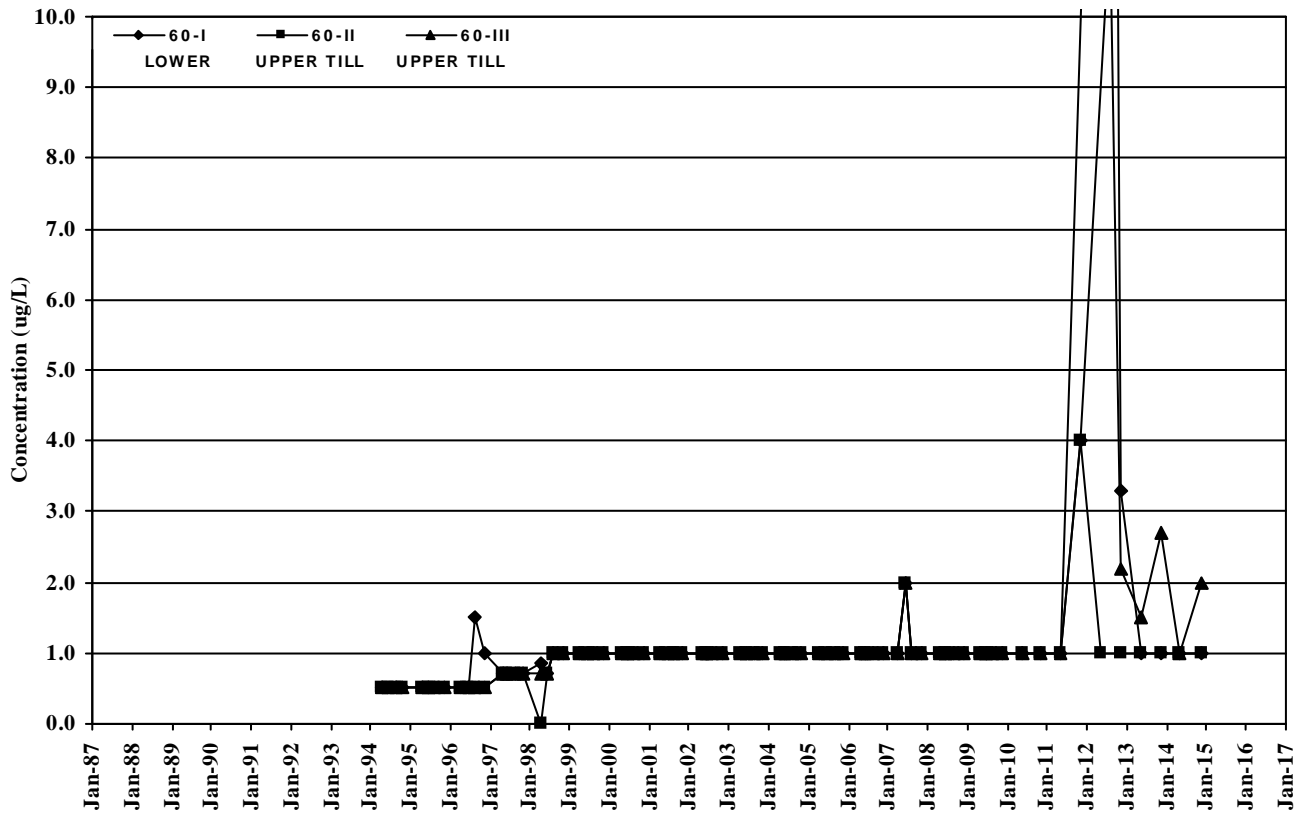
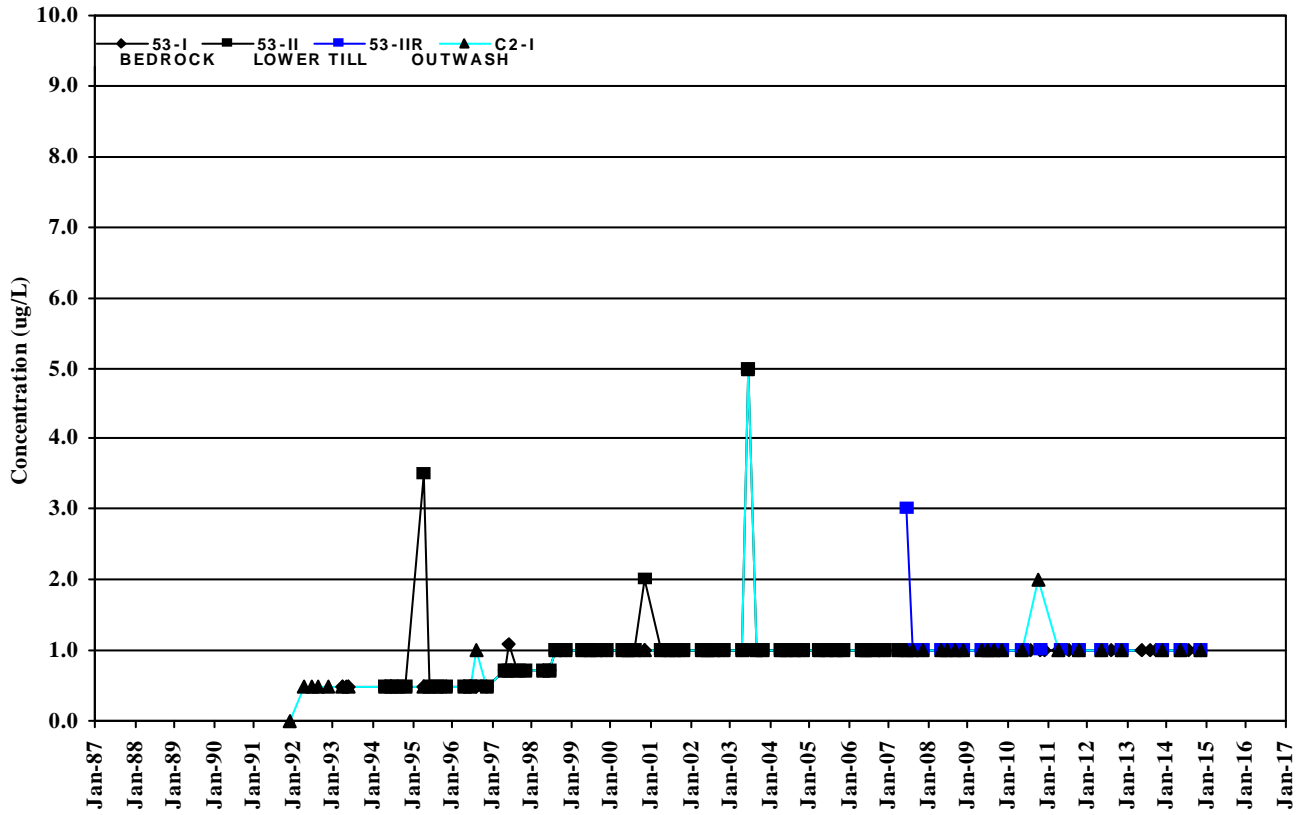
60339708
 12c C16 GW Chem Phenol Concentration 13



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Phenol Concentration Profile

FIGURE
C17

60339708
 12c: C17 GW Chem Phenol Concentr



Closed Eastview Road Landfill Site
Ground Water Chemistry Trends
Phenol Concentration Profile

FIGURE
C18

60339708
 12c C18 GW Chem Phenol Concentr

Appendix D

Combustible Gas Monitoring Results

TABLE D1 - GAS CONCENTRATIONS READINGS - LANDFILL MONITORS



DATE	1-I Waste % Vol	51-I Waste % Vol	51-II Outwash % Vol	52-I Outwash % Vol	55-I Outwash % Vol	56-I Outwash % Vol	57-I Outwash % Vol	58-I Outwash % Vol	59-I Waste % Vol	61-I Outwash % Vol	62-I Waste % Vol	63-I Outwash % Vol	64-I Waste % Vol	65-I Waste % Vol	66-I Outwash % Vol	67-I Waste % Vol
26-Mar-93	40	55	50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
29-Apr-93	40	55	55	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
21-May-93	40	55	55	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
21-Jun-93	40	55	55	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
16-Jul-93	45	55	55	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
10-Aug-93	45	55	55	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
16-Sep-93	43	48	55	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
13-Oct-93	38	50	50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
24-Nov-93	30	50	52	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
17-Dec-93	45	55	50	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
19-Jan-94	10	50	0	50	0	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a
11-Feb-94	5	5	0	5	0	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a
10-Mar-94	4	5	0	5	0	0	0	0	0	0	n/a	n/a	n/a	n/a	n/a	n/a
19-Apr-94	5	7	0.35	6	0.35	0.5	0.25	0.6	5	6	n/a	n/a	n/a	n/a	n/a	n/a
12-May-94	4	7	3.05	0.75	0.15	0.8	0.2	6	6	1.25	n/a	n/a	n/a	n/a	n/a	n/a
23-Jun-94	4	25	1.1	6	0.3	0.65	1.7	6	10	1.75	n/a	n/a	n/a	n/a	n/a	n/a
12-Jul-94	1	15	0.5	1.05	0.9	0.55	0.45	0.8	0	1.9	n/a	n/a	n/a	n/a	n/a	n/a
10-Aug-94	11	25	0.6	0.95	0.8	3.6	2.4	1.05	6	3.05	n/a	n/a	n/a	n/a	n/a	n/a
16-Sep-94	25	22	1	7	0.2	5	1.05	0.5	10	1.75	n/a	n/a	n/a	n/a	n/a	n/a
12-Oct-94	2	15	0.85	1.6	0.8	0.5	0.25	1.4	2.85	1.95	n/a	n/a	n/a	n/a	n/a	n/a
11-Nov-94	0	15	0.3	1.85	0.5	1.75	1.05	0.35	7	0.4	n/a	n/a	n/a	n/a	n/a	n/a
14-Dec-94	4	18	0.4	10	0.95	3.85	0.9	1.1	10	0.9	n/a	n/a	n/a	n/a	n/a	n/a
17-Jan-95	1	10	0.85	1	1.2	0.3	0.45	0.7	6	0.1	n/a	n/a	n/a	n/a	n/a	n/a
9-Feb-95	1	15	0.45	1.25	0.55	0.15	0.3	0.35	6	0.1	n/a	n/a	n/a	n/a	n/a	n/a
10-Mar-95	13	57	1.25	1.75	1.1	0.55	0.35	0.65	12	18	57	22	n/a	n/a	n/a	n/a
13-Apr-95	16	56	1.75	2.5	0.9	0.4	0.5	0.3	14	20	58	18	n/a	n/a	n/a	n/a
18-May-95	8	62	1.35	2.05	0.7	0.5	0.35	0.85	23	4.95	30	15	n/a	n/a	n/a	n/a
30-Jun-95	2	30	0.75	53	2.45	18	1.85	1.15	73	2.4	43	2.75	n/a	n/a	n/a	n/a
20-Jul-95	2	45	0.45	2.55	1.6	1	1.05	0.9	95	1.75	52	65	59	29	50	15
21-Sep-95	3	44	3.3	47	2.6	2.2	4.1	3.3	38	6	44	16	53	6	64	56
18-Oct-95	4	45	4.6	44	4	3.2	2.75	1.6	39	7	42	18	54	8	50	52
22-Nov-95	3	2.7	0	2.65	0.05	4	0.7	0	1.6	0.15	54	77	55	57	67	58
21-Dec-95	53	55	0.2	54	0.1	25	9	2	50	0.05	64	23	55	57	57	58
9-Jan-96	54	54	0.15	53	0.35	25	0.05	15	53	0.6	54	20	54	57	57	57
8-Feb-96	52	53	0	51	0.15	43	0.5	3.65	26	0.1	52	12	0	56	55	55
8-Mar-96	51	52	0.1	51	0	35	1.15	37	51	1.6	52	42	52	54	55	55
18-Apr-96	50	0.35	0.15	50	2	20	0.05	4.5	49	0.05	51	25	50	54	54	54
16-May-96	51	51	0.05	51	0.1	18	0.55	4	51	1.15	52	23	50	55	54	54

TABLE D1 - GAS CONCENTRATIONS READINGS - LANDFILL MONITORS



DATE	1-I Waste % Vol	51-I Waste % Vol	51-II Outwash % Vol	52-I Outwash % Vol	55-I Outwash % Vol	56-I Outwash % Vol	57-I Outwash % Vol	58-I Outwash % Vol	59-I Waste % Vol	61-I Outwash % Vol	62-I Waste % Vol	63-I Outwash % Vol	64-I Waste % Vol	65-I Waste % Vol	66-I Outwash % Vol	67-I Waste % Vol
16-Jul-96	14	47	0.1	48	0.05	0.2	0	2.35	48	0.05	50	2.3	48	49	52	51
26-Sep-96	48	49	0.05	49	0.1	0	0	1.05	48	0	49	1.3	49	50	52	52
1-Nov-96	48	50	0.15	49	0.7	23	0	0.05	49	0	50	39	49	51	52	53
28-Nov-96	13	58	1.8	2.5	0.9	0.4	0.5	0.3	14	20	58	18	0	0	0	0
13-Dec-96	49	51	0	49	0.9	18	0	0	49	0.05	50	22	50	54	53	52
27-Jan-97	57	53	0	61	28	19	0	0	51	0.1	45	27	55	51	59	62
11-Feb-97	27	52	0.15	51	0.65	29	0	0	51	0	52	27	52	61	55	55
13-Mar-97	35	53	0.05	45	0.45	22	0	0	62	0	45	22	45	65	33	61
30-Apr-97	46	50	0.05	50	0.05	0.15	0	0.05	50	0.2	52	30	51	61	54	54
27-May-97	2	49	0.05	50	0.2	0.15	0.05	0.05	50	0.15	52	17	50	60	54	54
14-Aug-97	10	51	0.1	51	4.9	33	0	0.1	51	0.05	53	0.9	52	63	55	55
30-Sep-97	19	52	0	52	4.1	0	0	0	52	0	52	0	52	14	41	46
18-Nov-97	n/a	41	0	62	4.95	0	0	0	59	0	57	0	50	19	49	44
26-Jan-98	n/a	50	0	51	0.95	0	0	0	51	0	52	1.65	52	60	55	55
20-Mar-98	n/a	51	0	51	1	12	0.15	0	50	0	53	3.85	51	63	54	54
27-May-98	n/a	45	0	41	0	2	0	0	32	0	23	2.3	41	39	51	44
16-Sep-98	n/a	55	0	57	0.05	1	0	0	27	0	47	0	47	41	31	53
21-Oct-98	n/a	65	0	62	0	3	0	0	46	0	49	0	41	39	29	55
10-Dec-98	n/a	66	0.05	55	0	0.05	0	0	39	0	50	0	55	37	25	49
12-Jan-99	n/a	35	0	22	3.75	0	0	0	45	0	39	0	38	25	41	37
16-Feb-99	n/a	36	0	25	2.65	0	0	0	33	0	44	0	34	15	27	32
18-Mar-99	n/a	49	0	51	25	0	0	0	0	0	34	0	49	34	32	51
13-Apr-99	n/a	63	0	98	1.65	0	0	0	0	0	23	0	57	55	29	32
20-May-99	n/a	55	0	88	1.45	0	0	0	32	0	19	0	45	32	28	31
16-Jun-99	n/a	51	0	61	0.75	0	0.05	0	29	0	18	0	29	59	37	29
24-Jul-99	n/a	65	0	74	8	0	0	0	19	0	17	0	24	36	28	34
18-Aug-99	n/a	62	0	88	0.2	0	0	0	15	0	21	0	21	29	29	27
21-Sep-99	n/a	51	0	65	0.2	0	0	0	21	0	32	0	14	27	37	41
14-Oct-99	n/a	56	0	62	0.1	0	0	0	19	0	41	0	12	24	41	37
23-Nov-99	n/a	45	0	51	0.1	0	0	0	15	0	37	0	11	19	20	47
27-Jan-00	n/a	47	0	55	0.05	0	0	0	12	0	26	0	9	12	15	34
16-Feb-00	n/a	41	0	59	0.05	0	0	0	15	0	19	0	7	15	14	24
22-Mar-00	n/a	47	0.05	31	14	24	0.05	17	46	1.65	62	19	47	59	59	47
18-Apr-00	n/a	42	0.05	34	17	30	0	14	32	1.7	39	23	54	51	49	62
21-Jun-00	n/a	32	0.2	55	21	13	0	24	59	2.15	48	17	39	41	56	58
18-Jul-00	n/a	59	0.1	47	13	14	0.6	19	43	3.55	43	27	54	45	39	42
24-Aug-00	n/a	55	0.05	62	19	24	0.45	27	47	23	59	22	61	54	55	47
19-Oct-00	n/a	31	0.1	41	4.45	4.9	0.05	16	61	3.05	47	20	43	47	49	61

TABLE D1 - GAS CONCENTRATIONS READINGS - LANDFILL MONITORS



DATE	1-I Waste % Vol	51-I Waste % Vol	51-II Outwash % Vol	52-I Outwash % Vol	55-I Outwash % Vol	56-I Outwash % Vol	57-I Outwash % Vol	58-I Outwash % Vol	59-I Waste % Vol	61-I Outwash % Vol	62-I Waste % Vol	63-I Outwash % Vol	64-I Waste % Vol	65-I Waste % Vol	66-I Outwash % Vol	67-I Waste % Vol
14-Nov-00	n/a	51	0.1	50	9	20	0.05	22	50	2.3	51	21	51	54	54	53
15-Dec-00	n/a	43	0.1	46	22	26	0	21	65	1.75	45	16	47	33	47	56
21-Feb-01	n/a	40	0.05	44	29	21	0	18	45	1.6	33	12	33	29	41	45
3-Aug-01	n/a	61	0.01	51	31	32	0.01	26	42	1.45	39	19	57	31	43	51
14-Jan-02	n/a	32	0.01	64	71	27	0.01	36	64	1.1	89	17	45	22	42	44
19-Mar-02	n/a	57	0.05	44	56	19	0.05	17	49	2.05	39	18	37	45	37	54
15-May-02	n/a	52	0.01	32	29	25	0.05	25	37	1.55	31	3	51	1.15	43	41
16-Jul-02	n/a	40	0	41	21	21	0	19	1.1	1.1	22	0	31	2.35	32	38
12-Sep-02	n/a	37	0.05	1.15	35	29	0.05	17	51	2.7	46	5	41	34	46	51
18-Nov-02	n/a	43	0	52	51	11	0	22	47	1.9	1.4	0.6	36	31	29	2.15
13-Feb-03	n/a	34	0.1	45	44	10	0.05	20	34	1.25	26	0.45	23	1.15	21	41
13-Aug-03	n/a	61	0.05	46	25	31	0.1	0.1	71	1.05	37	0.45	37	1.35	32	47
20-Jul-04	n/a	17.4	19.5	59.7	44.2	7.4	0.3	0.8	57.4	49.8	62.3	37.4	58.3	1	0.7	1.5
17-Sep-04	n/a	7.8	11.3	64.2	47.2	10	1.1	2.3	59.5	56.2	61.2	39.6	61.2	3.4	1.3	2.1
14-Dec-04	n/a	0	0	63.2	56.4	8	0	0	63.2	58.1	64.5	33.8	63	0	0.2	0
24-Feb-05	n/a	42.1	46.5	48.5	51.2	22	0	0	50.3	0	19.5	5.1	53	0	43.2	2
28-Jul-05	n/a	48.9	47.2	41.3	34.7	27.6	1.1	0.4	49.6	0.9	15.7	2.3	21.9	1.8	43.5	3.8
10-Feb-06	n/a	29.4	8.2	54.3	18.7	0.2	0	0.9	10.9	0.1	3.2	0	58.5	0	0.9	0.4
6-Sep-06	n/a	34.4	0	59.8	21.9	0	0	1.5	6.5	0.2	5.1	0	60.2	0	1.2	0
6-Feb-07	n/a	12.3	0	41.2	17.3	0.2	0	0.9	5.3	0.4	2.1	0	53.2	0	0.3	0.8
10-Aug-07	n/a	0	0	23.3	32.1	0	0	0	2.3	0	1.2	0	12.2	0	0	0.3
12-Mar-08	n/a	0.8	0	31.5	10.2	1.5	0	0	4.2	1.1	1.1	0	47.6	0	0.2	3.1
17-Sep-08	n/a	0.4	0	12.1	4.8	1.9	0	0	2.4	0.8	0.9	0	43.1	0	0	2.1
24-Dec-09	0	0.4	0	12.1	4.8	1.9	0	0	2.4	0.8	0.9	0	41	0	0	2.1
6-Mar-10	0	12.3	0	41.2	0	0	0	0.9	5.3	0.4	2.1	0	53.2	0	0.3	0.8
10-Aug-10	0	30.1	1	8.9	2.1	0.1	0	0.5	1.5	0	3.7	0	0.5	0	0.2	0
9-Mar-11	0	0	0	5.9	9.5	0.5	0	0.2	2.1	0	0.2	0	36.7	0	0	0.4
16-Jun-11	0	0	0	0.7	0.5	0	0	0	0.2	0	0.6	0	5.6	0	0	0
25-Aug-11	0	0	0	0.2	0.2	0	0	0	0.6	0	0	0	9.9	0	0	0
1-Nov-11	0	0	0	0	0.5	0.2	0	0	0.2	0	0	0	14.5	0	0.2	0
24-Apr-12	0	0	0	0.2	0.3	0	0	0	0.2	0	0.6	0	3.9	0	0	0
14-Sep-12	0	0	0	0	0.5	0.4	0	0	0	0	0	0	6.5	0	0.4	0
19-Mar-13	0	0	0	4.3	9.5	0.5	0	0.4	2.1	0	0.2	0	36.7	0	0	0.4
13-Aug-13	0	0	0	1.2	2.5	0.2	0	0	0	0	0	0	6.5	0	0.2	0
13-Mar-14	0	0	0	1.3	2.5	0.2	0	0.1	2.1	0	0	0	5.7	0	0	0.4
18-Aug-14	0	0.4	0.1	0	4.8	1.2	0	0	0	0	0	0.1	6.5	0	0.1	0.3

TABLE D2 - GAS CONCENTRATIONS IN C AND D SERIES MONITORS - WEST SIDE OF SITE



Date	C1-II % vol	C2-II % vol	C3-I % vol	D1-I % vol	D2-I % vol
10-Feb-93	0.25	17	0	18	18
26-Mar-93	0	1.9	0	5	9
29-Apr-93	0	0	0	2.25	8
21-May-93	0	0	0	1.6	2.7
21-Jun-93	0	0	0	3.45	2.65
16-Jul-93	0	0	0	16	6
10-Aug-93	0	0	0	16	8
16-Sep-93	0	0	0	15	14
13-Oct-93	0	0	0	18	10
24-Nov-93	0	0	0	13	10
17-Dec-93	0	0	0	20	3.6
19-Jan-94	0	0	0	6	3.25
11-Feb-94	0	6	0	12	6
10-Mar-94	0	0	0	0	0.6
19-Apr-94	0	0	0	0.8	0.25
12-May-94	0	0	0	1.25	1.2
23-Jun-94	0	0	5	1.5	1.05
12-Jul-94	0	0	0	1	0.5
10-Aug-94	0	0	0	2.6	1.1
16-Sep-94	0	0	0	2.25	0.9
12-Oct-94	0	0	0	0.85	0
11-Nov-94	0	0	0	0.8	0
14-Dec-94	0	0	0	1.4	0.8
17-Jan-95	0	0	0	0.2	0
9-Feb-95	0	0	0	0.3	0
10-Mar-95	0	0	0.6	11	18
13-Apr-95	0	0	0.9	12	15
18-May-95	0	0	0	15	12
30-Jun-95	0	0	0	0.9	1.65
20-Jul-95	0	0	0	0.55	1.05
21-Sep-95	0	0	0	0.4	0.25
18-Oct-95	0	0	0	0	0.75
22-Nov-95	0	0	0	4	0.85
21-Dec-95	0	0	0	3.3	31
9-Jan-96	0	0	0	12	33
8-Feb-96	3.3	0	0	22	35
8-Mar-96	0.15	19	0	16	18
18-Apr-96	0.1	2.4	0	17	1.6
16-May-96	0	0.05	0.05	9	32
16-Jul-96	0	0	0	25	30
26-Sep-96	0	0	0	16	37
1-Nov-96	0	0.05	0	16	30
28-Nov-96	0	0	0.85	14	17
13-Dec-96	0	0.05	0.05	4.25	22
27-Jan-97	0	0.05	0.1	4.15	18
11-Feb-97	0	0	0	29	12
13-Mar-97	0	0	0	15	6
30-Apr-97	0	0	0	1	29
27-May-97	0	0	0	3.8	4.2
14-Aug-97	0	0	0.05	11	29
30-Sep-97	0	0	0	0.25	0
18-Nov-97	0	0	0	0.15	0
26-Jan-98	0	0	0	31	25
20-Mar-98	0	0	0	16	19
27-May-98	0	0	0	8	0.85
16-Sep-98	0	0	0	9	0.85
21-Oct-98	0	0	0	15	1
10-Dec-98	0	0	0	6	0.1
12-Jan-99	0	0	0	0.05	0
16-Feb-99	0	0	0	0.1	0

TABLE D2 - GAS CONCENTRATIONS IN C AND D SERIES MONITORS - WEST SIDE OF SITE



Date	C1-II % vol	C2-II % vol	C3-I % vol	D1-I % vol	D2-I % vol
18-Mar-99	0	0	0	0.05	0
13-Apr-99	0	0	0	0.1	0
20-May-99	0	0	0	0.05	0.1
16-Jun-99	0	0	0	0	0
24-Jul-99	0	0	0	0	0
18-Aug-99	0	0	0	0	0
21-Sep-99	0	0	0	0	0
14-Oct-99	0	0	0	0	0
23-Nov-99	0	0	0	0	0
27-Jan-00	0	0	0	0	0
16-Feb-00	0	0	0	0	0
22-Mar-00	0	0	0	0.15	3
18-Apr-00	0	0	0	0.1	3
21-Jun-00	0	0	0	0.1	2.75
18-Jul-00	0	0	0	0.05	9
24-Aug-00	0	0	0	0.1	2.1
19-Oct-00	0	0	0	0.15	4.05
14-Nov-00	0	0	0	0.1	8
15-Dec-00	0	0	0	0.05	3.85
21-Feb-01	0	0	0	0.05	0
11-Apr-01	0	0	0	0	0.4
20-Jun-01	0	0	0	0	0.15
3-Aug-01	0	0	0	0	0.05
15-Oct-01	0	0	0	0	0.05
4-Dec-01	0	0	0	0	0.05
14-Jan-02	0	0	0	0	0.1
19-Mar-02	0	0	0	0	0
15-May-02	0	0	0	0	0.2
16-Jul-02	0	0	0	0	0.1
12-Sep-02	0	0	0	0.05	0.05
18-Nov-02	0	0	0	0	0.05
13-Feb-03	0	0	0	0.05	0.05
17-Apr-03	0	0	0	0	0.05
19-Jun-03	0	0	0	0.05	0.05
13-Aug-03	0	0	0	0	0.05
21-Oct-03	0	0	0	0.05	0.05
20-Jul-04	0	0	0	1.7	5.2
17-Sep-04	0	0	0	2.3	9.3
14-Dec-04	0	0	0	0	7.2
24-Feb-05	0	0	0	0	3.1
28-Jul-05	0	0	0	0.9	2.1
10-Feb-06	0	0	0	0	0.2
6-Sep-06	0	0	0	0	0
6-Feb-07	0	0	0	0	0
10-Aug-07	0	0	0	0	0
12-Mar-08	0	0	0	0	0
17-Sep-08	0	0	0	0	0
24-Dec-09	0	0	0	0	0
6-Mar-10	0	0	0	0	0
10-Aug-10	0	0	0	0.1	0
9-Mar-11	0	0	0	0	0
16-Jun-11	0	0	0	0	0
25-Aug-11	0	0	0	0	0
1-Nov-11	0	0	0	0	0
24-Apr-12	0	0	0	0	0
14-Sep-12	0	0	0	0	0
19-Mar-13	0	0	0	0	0
13-Aug-13	0	0	0	0	0
13-Mar-14	0	0	0	0	0
18-Aug-14	0	0	0	0	0

TABLE D3 - GAS CONCENTRATIONS IN C AND D SERIES MONITORS - SOUTH SIDE OF SITE



Date	C5-I % vol	C6-II % vol	C7-I % vol	C8-I % vol	C9-II % vol	C10-II % vol	C11-II % vol	C12-I % vol	C13-I % vol	C14-I % vol	D3-I % vol	D4-I % vol	D5-I % vol
10-Feb-93	4.45	0	0	0	0	0	0	0	13	n/a	13	0	n/a
26-Mar-93	16	0.4	0.8	0	0	0	2.9	0	1.95	n/a	5	0	n/a
29-Apr-93	6	0	2.6	0.5	0	0	0	0	0	n/a	5	0	n/a
21-May-93	6	0	2.6	0	0.15	0	0	0	0.2	n/a	4.1	0	n/a
21-Jun-93	6	0	0.3	0	0	0	0	0	0.25	n/a	5	0	n/a
16-Jul-93	40	25	20	5	15	0.05	0	0	15	n/a	20	0	n/a
10-Aug-93	35	10	40	3.45	6	0	0	0.25	6	n/a	30	0	n/a
16-Sep-93	30	4.25	25	2.45	4.05	0	0	0.15	3.15	n/a	35	0	n/a
13-Oct-93	25	3.6	30	1.6	6	0	0.05	0.25	0.65	n/a	20	0	n/a
24-Nov-93	20	2.9	22	2	8	0	0	0.6	0.1	n/a	15	0.7	n/a
17-Dec-93	13	3.25	18	1.9	6	0	0	0.2	0	n/a	20	0	n/a
19-Jan-94	13	2.6	15	0.85	5	0	0	0.1	0	n/a	14	0	n/a
11-Feb-94	8	1.15	0	0	0	0	0	0	0	n/a	3.2	0	n/a
10-Mar-94	0	0	0	0	0	0	0	0	0	n/a	4.15	0	n/a
19-Apr-94	0.25	0	0.1	0	0	0	0	0	0	n/a	1.9	0	n/a
12-May-94	0	0.6	6	0	0	0	0	0	0	n/a	0.85	0	n/a
23-Jun-94	0	0	2.15	0	0.55	0	0	0	0.1	n/a	0	0	n/a
12-Jul-94	0.3	0	2.4	0	0	0	0	0	0.05	n/a	0	0	n/a
10-Aug-94	0	0	2.45	0	0	0	0	0	0	n/a	2.05	0	n/a
16-Sep-94	0	0	0.25	0	0.05	0	0	0	0	n/a	0.05	0	n/a
12-Oct-94	0	0	0.85	0	0	0	0	0	0	n/a	3.15	0	n/a
11-Nov-94	0.05	0	0.75	0	0	0	0	0	0	n/a	1.9	0	n/a
14-Dec-94	0	0	1.2	0	0	0	0	0	0	n/a	1	0.25	n/a
17-Jan-95	0	0	0.55	0	0	0	0	0	0	n/a	0	0	n/a
9-Feb-95	0	0	0	0	0	0	0	0	0	n/a	0	0	n/a
10-Mar-95	0	0	1.5	12	0	0	0	0.1	0	n/a	0.05	0.15	n/a
13-Apr-95	0	0	1.6	11	0	0	0	0	0	n/a	0.8	0	n/a
18-May-95	1.15	0.1	18	0.65	0	0	0	0	0.2	n/a	18	0.15	n/a
30-Jun-95	0	0	0.65	0.25	0.3	0	0	0	0	n/a	2.45	1.6	n/a
20-Jul-95	0	0	0.4	0.15	0.1	0	0	0	0	0	1.55	0.55	0.75
21-Sep-95	0.5	0	1.1	0.85	0	0.9	0	0	0	0	39	1.05	0.5
18-Oct-95	0.8	0	1.5	0.75	0	1.2	0	0	0	0	34	1.75	2.2
22-Nov-95	2.75	2	1.4	0.05	0.15	0	0	0	0	0	1	0	1.45
21-Dec-95	4.25	0.05	27	0	8	0.15	0	0	0.75	0	36	0	0
9-Jan-96	3	0	20	1.65	0.05	0.05	0.1	0	0	0	46	0	1.6
8-Feb-96	8	32	34	1.35	6	0.05	0	0	0.05	0	37	0.25	3.85
8-Mar-96	0	0	39	0.1	0.75	0	0	0	0	0	20	0	2.6
18-Apr-96	0	0	28	0.05	0	0.05	0	0	0	0	4	0	5.3
16-May-96	0	0	38	0.05	2.35	0	0	0	0.05	0	22	0	0.7
16-Jul-96	2.8	0.45	1.65	4.95	20	0	3.15	0	0.45	0	8	0	23
26-Sep-96	11	2.3	39	2.85	10	0	0.75	0.05	2.2	0	44	0	38
1-Nov-96	15	3.55	29	0.3	11	0.15	0.05	0	2.5	0	33	0.05	25
28-Nov-96	0	0	1.75	14	0	0	0	0	0	0	0.8	0	0

TABLE D3 - GAS CONCENTRATIONS IN C AND D SERIES MONITORS - SOUTH SIDE OF SITE



Date	C5-I % vol	C6-II % vol	C7-I % vol	C8-I % vol	C9-II % vol	C10-II % vol	C11-II % vol	C12-I % vol	C13-I % vol	C14-I % vol	D3-I % vol	D4-I % vol	D5-I % vol
13-Dec-96	3.25	0.05	33	0.25	3.25	0	0.25	0	2.1	0	36	0	40
27-Jan-97	3.05	0.05	39	0.3	3.15	0	0.45	0	3.05	0	41	0.05	37
11-Feb-97	16	0.5	36	0.15	9	0	0.1	0	2.5	0	0.05	0.05	29
13-Mar-97	11	0.75	23	0.25	0	0	0.15	0	3.65	0	0.35	0.05	13
30-Apr-97	10	0	33	4.95	2.65	0	0	0	0	0	18	0	29
27-May-97	0	0	15	4.3	3.6	0	0	0	0	0	27	0	22
14-Aug-97	0.05	0	0.4	0	18	0	0	0	0	0.35	28	27	48
30-Sep-97	0	0	5.3	0	17	0	2.6	0	0	0.65	4.85	0	43
18-Nov-97	0	0	5.5	0	14	0	0.6	0	0	0.45	4.55	0	39
26-Jan-98	0	0	9	0.3	16	0	0.35	0	1.65	0	31	0	21
20-Mar-98	0	0	3.25	0	2.25	0	0	0	0	0	18	0	39
27-May-98	0	0	2.75	0	1.6	0	0	0	0	0	11	0	22
16-Sep-98	0.1	0	1.15	0	2.05	0	0	0	0	0	9	0	40
21-Oct-98	0	0	0.6	0	1.05	0	0	0	0	0	7	0	32
10-Dec-98	0	0	0.4	0	0.75	0	0	0	0	0	4	0	27
12-Jan-99	0	0	3	0	11	0	0.45	0	0	0.35	4	0	49
16-Feb-99	0	0	1.6	0	0.6	0	0.05	0	0	0.05	2.25	0	33
18-Mar-99	0	0	3.8	0	25	0	0	0	0	0.1	27	0	41
13-Apr-99	0	0	2.9	0	17	0	0.05	0	0	0.05	14	0	52
20-May-99	0	0	2.25	0	15	0	0.1	0	0	0	12	0	49
16-Jun-99	0	0	1.9	0	12	0	0.05	0	0	0	10	0	15
24-Jul-99	0	0	1.55	0	10	0	0.15	0	0	0	9	0	12
18-Aug-99	0	0	1.95	0	0.1	0	0.05	0	0	0	22	0	16
21-Sep-99	0	0	0	0	0	0	0	0	0	0	14	0	23
14-Oct-99	0	0	0.05	0	0	0	0.05	0	0	0	11	0	18
23-Nov-99	0	0	0	0	0	0	0.05	0	0	0	16	0	11
27-Jan-00	0	0	0.05	0	0	0	0	0	0	0	15	0	9
16-Feb-00	0	0	0.05	0	0	0	0	0	0	0	10	0	5
22-Mar-00	0	0	1.45	0	0	0	0	0	0	0.6	0.05	0	22
18-Apr-00	0	0	3.1	0	0	0	0	0	0	0.15	0.4	0	24
21-Jun-00	0.05	0	2.05	0	0	0	0	0	0	0	0.05	0	2.75
18-Jul-00	0.05	0	1	0	0	0	0	0	0	0.8	0.05	0.05	20
24-Aug-00	0	0	3.45	0	0	0	0	0	0	0.45	0	0.05	4
19-Oct-00	0	0	2.45	0	0	0	0	0	0	0.8	0	0	21
14-Nov-00	0.05	0	3	0	0	0	0	0	0	0.75	0	0	29
15-Dec-00	0.05	0	2.45	0	0	0	0	0	0	0.6	0	0	33
21-Feb-01	0	0	0	0	0	0	0	0	0	0.05	0	0	22
11-Apr-01	0.05	0	0	0.05	0	0	0	0	0.05	0.1	0	0	19
20-Jun-01	0	0	0	0	0	0	0	0	0	0	0	0	15
3-Aug-01	0	0	0.95	0	0	0	0	0	0	0.05	0	0	26
15-Oct-01	0	0	0	0	0	0	0	0	0	0.05	0.05	0.1	20
4-Dec-01	0.05	0	0.1	0	0	0	0	0	0	0	0	0.05	17
14-Jan-02	0	0	0.75	0	0	0	0	0	0.05	0.2	0.05	0	32

TABLE D3 - GAS CONCENTRATIONS IN C AND D SERIES MONITORS - SOUTH SIDE OF SITE



Date	C5-I % vol	C6-II % vol	C7-I % vol	C8-I % vol	C9-II % vol	C10-II % vol	C11-II % vol	C12-I % vol	C13-I % vol	C14-I % vol	D3-I % vol	D4-I % vol	D5-I % vol
19-Mar-02	0	0	0.05	0	0	0	0	0	0	0	0	0	12
15-May-02	0	0	0.9	0	0	0	0	0	0	0	0.05	0.05	14
16-Jul-02	0.05	0	0	0	0	0	0	0	0	0	0	0	27
12-Sep-02	0	0	0.05	0	0	0	0	0	0.05	0	0	0	19
18-Nov-02	0.05	0	0.1	0	0	0	0	0	0.05	0.1	0.05	0	22
13-Feb-03	0.05	0	0.05	0	0	0	0	0	0.05	0.05	0.05	0.05	10
17-Apr-03	0	0	0.05	0	0	0	0	0	0.05	0.1	0.05	0	23
19-Jun-03	0.05	0	0.05	0	0	0	0	0	0.05	0.15	0.05	0	18
13-Aug-03	0	0	0.05	0	0	0	0	0	0	0.1	0.05	0	9
21-Oct-03	0.05	0	0.05	0	0	0	0	0	0.05	0.05	0.05	0	22
20-Jul-04	0	0	0	0	0	0	0	0	0	0	18.4	0.8	2.8
17-Sep-04	0	0	0	0	0	0	0	0	0	0	23.4	1.1	2.1
14-Dec-04	0	0	0	0	0	0	0	0	0	0	27.8	1.6	3.2
24-Feb-05	0	0	0	0	0	0	0	0	0	0	2.4	1.1	1.5
28-Jul-05	0	0	0	0	0	0	0	0	0	0	1.9	0.8	1.3
10-Feb-06	0	0	0	0	0	0	0	0	0	0	12.3	0.1	0.6
6-Sep-06	0.5	0	0	0	0	0	0	0	0	0	15.1	0	0
6-Feb-07	0	0	0	0	0	0	0	0	0	0	11.2	0.2	0.4
10-Aug-07	0	0	0	0	0	0	0	0	0	0	0	0.6	0.8
12-Mar-08	0	0	0	0	0	0	0	0	0	0	2.1	0	0.9
17-Sep-08	0	0	0	0	0	0	0	0	0	0	1.7	0.2	0.7
24-Dec-09	0	0	0	0	0	0	0	0	0	0	1.7	0.2	0.7
6-Mar-10	0	0	0	0	0	0	0	0	0	0	11.2	0.2	0.4
10-Aug-10	0	0	0	0	0	0	0	0	0	0	0.6	0.2	0.6
9-Mar-11	0	0	0	0	0	0	0	0	0	0	0.3	0	0.2
16-Jun-11	0	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug-11	0	0	0	0	0	0	0	0	0	0	0.2	0	0
1-Nov-11	0	0	0	0	0	0	0	0	0	0	0	0.1	0
24-Apr-12	0	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep-12	0	0	0	0	0	0	0	0	0	0	0.1	0.1	0
19-Mar-13	0	0	0	0	0	0	0	0	0	0	0.7	0	0.3
13-Aug-13	0	0	0	0	0	0	0	0	0	0	0	0.1	0
13-Mar-14	0	0	0	0	0	0	0	0	0	0	0.2	0	0
18-Aug-14	0	0	0	0	0	0	0	0	0	0	0	0	0

TABLE D4 - GAS CONCENTRATION READINGS - PROPERTY BOUNDARY MONITORS



Date	2-II % vol	4-III % vol	5-II % vol	12-III % vol	14-III % vol	15-V % vol	16-IV % vol	16-V % vol	19-IV % vol	20-IV % vol
26-Jan-98	0	0	0	0	0	0	0	0	0	0
20-Mar-98	0	0	0	0	0	0	0	0	0	0
16-Sep-98	0	0	0	0	0	0	0	0	0	0
21-Oct-98	0	0	0	0	0	0	0	0	0	0
10-Dec-98	0	0	0	0	0	0	0	0	0	0
12-Jan-99	0	0	0	0	0	0	0	0	0	0
16-Feb-99	0	0	0	0	0	0	0	0	0	0
18-Mar-99	0	0	0	0	0	0	0	0	0	0
13-Apr-99	0	0	0	0	0	0	0	0	0	0
20-May-99	0	0	0	0	0	0	0	0	0	0
16-Jun-99	0	0	0	0	0	0	0	0	0	0
24-Jul-99	0	0	0	0	0	0	0	0	0	0
18-Aug-99	0	0	0	0	0	0	0	0	0	0
21-Sep-99	0	0	0	0	0	0	0	0	0	0
14-Oct-99	0	0	0	0	0	0	0	0	0	0
23-Nov-99	0	0	0	0	0	0	0	0	0	0
27-Jan-00	0	0	0	0	0	0	0	0	0	0
16-Feb-00	0	0	0	0	0	0	0	0	0	0
22-Mar-00	0	0	0	0	0	0	0	0	0	0
18-Apr-00	0	0	0	0	0	0	0	0	0	0
21-Jun-00	0	0	0	0	0	0	0	0	0	0
18-Jul-00	0	0	0	0	0	0	0	0	0	0
24-Aug-00	0	0	0	0	0	0	0	0	0	0
19-Oct-00	0	0	0	0	0	0	0	0	0	0
14-Nov-00	0	0	0	0	0	0	0	0	0	0
15-Dec-00	0	0	0	0	0	0	0	0	0	0
21-Feb-01	0	0	0	0	0	0	0	0	0	0
11-Apr-01	0	0	0	0	0	0	0	0	0	0
20-Jun-01	0	0	0	0	0	0	0	0	0	0
3-Aug-01	0	0	0	0	0	0	0	0	0	0
15-Oct-01	0	0	0	0	0	0	0	0	0	0
4-Dec-01	0	0	0	0	0	0	0	0	0	0
14-Jan-02	0	0	0	0	0	0	0	0	0	0
19-Mar-02	0	0	0	0	0	0	0	0	0	0
15-May-02	0	0	0	0	0	0	0	0	0	0
16-Jul-02	0	0	0	0	0	0	0	0	0	0
12-Sep-02	0	0	0	0	0	0	0	0	0	0
18-Nov-02	0	0	0	0	0	0	0	0	0	0
13-Feb-03	0	0	0	0	0	0	0	0	0	0
17-Apr-03	0	0	0	0	0	0	0	0	0	0
19-Jun-03	0	0	0	0	0	0	0	0	0	0
13-Aug-03	0	0	0	0	0	0	0	0	0	0
21-Oct-03	0	0	0	0	0	0	0	0	0	0
20-Jul-04	0	0	0	0	0	0	0	0	0	0
17-Sep-04	0	0	0	0	0	0	0	0	0	0
14-Dec-04	0	0	0	0	0	0	0	0	0	0
24-Feb-05	0	0	0	0	0	0	0	0	0	0
28-Jul-05	0	0	0	0	0	0	0	0	0	0
10-Feb-06	0	0	0	0	0	0	0	0	0	0
6-Sep-06	0	0	0	0	0	0	0	0	0	0
6-Feb-07	0	0	0	0	0	0	0	0	0	0
10-Aug-07	0	0	0	0	0	0	0	0	0	0
12-Mar-08	0	0	0	0	0	0	0	0	0	0
17-Sep-08	0	0	0	0	0	0	0	0	0	0
24-Dec-09	0	0	0	0	0	0	0	0	0	0
6-Mar-10	0	0	0	0	0	0	0	0	0	0
10-Aug-10	0	0	0.2	0	0	0.1	0	0	0	1.2
9-Mar-11	0	0	0	0	0	0	0	0	0	0
16-Jun-11	0	0	0	0	0	0	0	0	0	0
25-Aug-11	0	0	0	0	0	0	0	0	0	0
1-Nov-11	0	0	0	0	0	0	0	0	0	0
24-Apr-12	0	0	0	0	0	0	0	0	0	0
14-Sep-12	0	0	0	0	0	0	0	0	0	0
19-Mar-13	0	0	0	0	0	0	0	0	0	0
13-Aug-13	0	0	0	0	0	0	0	0	0	0
13-Mar-14	0	0	0	0	0	0	0	0	0	0
18-Aug-14	0	0	0	0	0	0	0	0	0	0

TABLE D5 - GAS CONCENTRATION AND PRESSURE MEASUREMENTS - GP SERIES PROBES 

Date	Probe 97-1	Probe 97-2	Probe 97-3	Probe 97-4	Probe 97-5	Probe 00-06	Probe 00-07
	(SW corner of Site)	(N of Main Pump)	(NE of Storage Bldg)	(NE of Main Office)	(N of maintenance)	adjacent to scale house)	(Near Main PS - replaces
	Methane (% in air)	Methane (% in air)	Methane (% in air)	Methane (% in air)	Methane (% in air)	Methane (% in air)	Methane (% in air)
6-Aug-97	0	56	12	45	0.03		
11-Aug-97	0.01	55	10	39	0.21		
21-Aug-97	0	54	21	43	0.7		
27-Aug-97	0.02	53	14	43	0.6		
3-Sep-97	0.015	54	15	43	0.7		
8-Sep-97	0.025	54	17	43	0.27		
15-Sep-97	0.03	51	14	44	2.6		
30-Sep-97	0.01	54	11	43	0.55		
26-Sep-97	0.01	52	13	36	1.45		
8-Oct-97	0	54	12	44	0.43		
21-Oct-97	0	55	14	45	0.23		
29-Oct-97	0	55	15	45	0.05		
4-Nov-97	0	54	11	45	0.1		
26-Jan-98	0.01	53	17	43	0		
20-Mar-98	0.05	53	12	42	0.23		
27-May-98	0	52	15	46	0.26		
16-Sep-98	0.05	55	20	48	0.2		
21-Oct-98	0.02	55	15	47	0.36		
10-Dec-98	0.01	59	20	49	0.46		
12-Jan-99	0	51	16	4.4	0.4		
16-Feb-99	0	54	14	3.6	0.65		
18-Mar-99	0.01	48	17	42	0.35		
13-Apr-99	0	49	18	31	0.5		
20-May-99	0	54	14	5	0.45		
16-Jun-99	0.02	51	13	22	0.55		
15-Jul-99	0	53	14	38	0.2		
24-Aug-99	0	54	13	3.6	0.45		
21-Sep-99	0	52	15	2.05	0.5		
14-Oct-99	0	53	17	24	0.4		
23-Nov-99	0	52	23	6	0.6		
27-Jan-00	0	0	20	5	0.4		
16-Feb-00	0	0.05	25	41	0.2		
22-Mar-00	0	0.05	35	46	0.1		
18-Apr-00	0	0	42	4.1	0.3		
21-Jun-00	0	0.05	52	34	0.2		
18-Jul-00	0	0	34	5.5	0.15		
24-Aug-00	0	probe decommis	20	42	0.45		
11-Oct-00	0	and replaced with	50	46	1.05	47	0
12-Oct-00	0		50	45	0.65	47	0
19-Oct-00	0		39	44	0.4	48	4.85
23-Oct-00	0		50	45	0.1	48	0.55
31-Oct-00	0		51	45	0.05	50	3.7
14-Nov-00	0		43	44	0.15	46	0.8
15-Dec-00	0		49	41	0.05	39	0.55
21-Feb-01	0		10	29	0	0.5	0.2
11-Apr-01	0		0	0.7	0	22	0
20-Jun-01	0		0	0.15	0	0.7	0.5
3-Aug-01	0.01		0	0.05	0	30	0.4
15-Oct-01	0		0.2	0.3	0	0	0.1
4-Dec-01	0.015		26	44	0	54	1.05
14-Jan-02	0		7	0.5	0	39	0.4

TABLE D5 - GAS CONCENTRATION AND PRESSURE MEASUREMENTS - GP SERIES PROBES 

Date	Probe 97-1	Probe 97-2	Probe 97-3	Probe 97-4	Probe 97-5	Probe 00-06	Probe 00-07
	(SW corner of Site)	(N of Main Pump)	(NE of Storage Bldg)	(NE of Main Office)	(N of maintenance)	adjacent to scale house)	(Near Main PS - replaces)
	Methane (% in air)	Methane (% in air)	Methane (% in air)	Methane (% in air)	Methane (% in air)	Methane (% in air)	Methane (% in air)
19-Mar-02	0.05		0	0.05	0	0.5	0.3
15-May-02	0		0.05	0.6	0	19	0
16-Jul-02	0.02		0	0.05	0	0.05	0.1
12-Sep-02	0.1		0.1	0.75	0	22	0.05
18-Nov-02	0		0	1.95	0	53	0
13-Feb-03	0		0.05	0.2	0	1.45	0
17-Apr-03	0		0	0.1	0	0.85	0
19-Jun-03	0.05		0.05	0.45	0	0.45	0
13-Aug-03	0		0.05	0.15	0	0	0
21-Oct-03	1		0	0.05	0	11	0
20-Jul-04	0		0	0	0	2.1	0
17-Sep-04	0		0	1	0	2.9	0
14-Dec-04	0		0	0	0	3.5	0
24-Feb-05	0		0	0	0	1	0
12-May-05	0		0	0	0	2.1	0
28-Jul-05	0		0	0	0	0.3	0
7-Nov-05	0		0	0	0	3.2	0
10-Feb-06	0		0.9	0	0	8.2	0.6
13-Apr-06	0		6.3	0	0	19.3	0.9
6-Sep-06	0		19.2	0	0	58.1	1.3
6-Dec-06	0		4.1	0	0	45.6	0
6-Feb-07	0		3.2	0	0	41.3	0.3
22-May-07	0		15.2	0.1	0	32.3	0
10-Aug-07	0		19.5	0.7	0	37.2	0
20-Nov-07	0		20.1	0	0	47.3	0
12-Mar-08	0		1.3	0	0	28.4	0
25-Jun-08	0		9.3	0	0	19.3	0
17-Sep-08	0		2.1	0	0	14.3	0
18-Dec-08	0		3.1	0	0	9.3	0
10-Sep-09	0		2.1	0	0	9.4	0
24-Dec-09	0		1.9	0	0	13.9	0
6-Mar-10	0		0	20.9	0	61.8	15
10-Aug-10	0.4		54.8	0	0	55.9	1.7
9-Mar-11	0		2.1	0	0	23.5	0.5
16-Jun-11	0		4.3	0	0	33.5	0
25-Aug-11	0		0.4	0	0	43.8	0.1
1-Nov-11	0		1.9	0	0	40.1	0
24-Apr-12	0		1.7	0	0	9.5	0
14-Sep-12	0		1.1	0	0	7.4	0
19-Mar-13	0		2.1	0	0.1	14.5	0.5
13-Aug-13	0.1		0.9	0	0	9.8	0
13-Mar-14	0.1		3.6	0.1	0	16.8	0.9
18-Aug-14	0.3		0.4	0	0	26.8	0

TABLE D6 - METHANE GAS CONCENTRATION READINGS - SOUTH LEACHATE COLLECTION SYSTEM



Date	MH AS	MH BS	MH 1S	MH 2S	MH 3S	MH 4S	MH 5S	MH 5SA	SPS	MH 6S	MH 7S	MH 8S
	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol
10-Feb-93	n/a	n/a	0	0	0.15	0.35	0.85	n/a	0.25	2.5	8	18
26-Mar-93	n/a	n/a	0	0	0	0	0.8	n/a	0	0	15	45
29-Apr-93	n/a	n/a	0	0	0	0	0.2	n/a	0	1.75	4.2	10
21-May-93	n/a	n/a	0	0	0	0	0.2	n/a	0	1.5	5	13
21-Jun-93	n/a	n/a	0	0	0	0	0.3	n/a	0.35	2.9	8	20
16-Jul-93	n/a	n/a	0	0	0	0	0	n/a	15	0.3	6	45
10-Aug-93	n/a	n/a	0	0	0	0	0	n/a	20	2.95	25	45
16-Sep-93	n/a	n/a	0	0	0	0	0	n/a	2.7	3.6	18	38
13-Oct-93	n/a	n/a	0	0	0	0	0	n/a	1.4	2.45	12	32
24-Nov-93	n/a	n/a	0	0	0	0	0	n/a	2.45	4.1	18	38
17-Dec-93	n/a	n/a	0	0	0	0	0	n/a	3.7	12	25	40
19-Jan-94	0	0	0	0	0	0	0	0	2.6	8	20	35
11-Feb-94	0	0	0	0	0	0	0	0	0	6	8	25
10-Mar-94	0	0	0	0	0	0	0	0	2.6	0.15	0.75	4.1
19-Apr-94	0	0	0	0	0	0	0	0	0	0	7	0
12-May-94	0.1	0	0	0	0	0	0	0	0	0	6	0
23-Jun-94	0	0	0	0	0	0	0	0	0	0	2.8	0
12-Jul-94	0	0	0	0	0	0	0	0	0	5	7	5
10-Aug-94	0	0	0	0	0	0	0	0	0.5	0	1.45	0.8
16-Sep-94	0	0.1	0	0.25	0.15	0.05	0	0.35	0.85	0.15	15	0.6
12-Oct-94	0	0	0	0	0	0.7	0	10	0	5	0.45	6
11-Nov-94	0.2	0	0	0	0	0.2	0.7	0.55	0.7	0.05	3.95	0.3
14-Dec-94	3.25	0.6	0	0	0	6	0.9	6	3.3	0.2	5	0.4
17-Jan-95	0	0	0	0	0	0	0	0	0.05	0	2.35	0.1
9-Feb-95	0	0	0	0	0	0	0	1.05	0.75	0	1.85	0.025
10-Mar-95	0.9	0	0.35	2.75	0.9	1.75	0.95	58	0.4	3.05	40	1.8
13-Apr-95	0.6	0	0.25	3.1	1.6	16	3.25	56	3.1	2.7	37	7
18-May-95	0	0.55	0.25	0.1	0.3	8	0.1	4.05	1.55	1	52	12
30-Jun-95	0	0	0	0	0.1	33	0.55	48	18	9	43	1.35
20-Jul-95	0	0	0	0	0	43	1.65	52	10	10	37	1.9
21-Sep-95	0	1.2	8	0.2	1	36	0	52	1	0	40	4.85
18-Oct-95	0	2.2	8	1.75	2.6	38	0	54	1.9	0	35	8
22-Nov-95	0.55	0.45	0	0	0.6	0.65	0	0.15	0	0.75	2.5	2.3
21-Dec-95	3.85	1.4	0	0	0	1.45	0	32	40	0.8	36	2.15
9-Jan-96	1.65	0	0	0	0	38	0.15	53	35	4.6	36	1.2
8-Feb-96	1.85	0	0	0	0.05	47	49	50	0.05	18	51	5.25
8-Mar-96	5	0	0	0.05	0	31	0	45	0	11	31	10
18-Apr-96	0.01	0	2.5	0.2	0	0.35	0.7	0.3	0.05	0.95	45	1.25
16-May-96	5.5	0	0	0	18	0.7	0.65	0.4	0.1	4.25	50	2
16-Jul-96	2.3	1	0	0	0	31	0.5	0.35	0	1.4	37	2.75
26-Sep-96	1	0.7	0.45	0	0	45	1.9	49	23	2.5	48	2.9
1-Nov-96	0.07	0.05	0	0	0	42	0.5	45	0.05	0.4	35	1.2
28-Nov-96	0.07	0	0.02	2.25	1.05	1.55	0.65	48	0.04	3.1	46	1.3
13-Dec-96	0.45	0.4	0.25	0	0	46	0.25	50	33	0.65	46	0.95
27-Jan-97	0.1	7	0.15	0	0.05	37	0.15	54	36	0.85	31	0.7
11-Feb-97	5	0.35	0	0	0	5.5	0	10	0.05	0.7	43	0.7
12-Mar-97	4	0.2	0	0	0	4.5	0	2	0	0.65	57	0.5
30-Apr-97	16	0.15	0	0	0	42	1	52	0	9	46	2.3
27-May-97	0	2.15	0.4	0.15	0	41	0.65	0.05	0.05	2.9	28	0.05
14-Aug-97	0	4.65	0	1.15	0	2	0	33	8	1.35	26	1.25
30-Sep-97	0	10	0.6	0.45	0.75	8	0	40	5.1	0	0.05	0
18-Nov-97	0	9	0.6	0.2	0.55	6	0	35	5.4	0	0.05	0

TABLE D6 - METHANE GAS CONCENTRATION READINGS - SOUTH LEACHATE COLLECTION SYSTEM



Date	MH AS	MH BS	MH 1S	MH 2S	MH 3S	MH 4S	MH 5S	MH 5SA	SPS	MH 6S	MH 7S	MH 8S
	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol
26-Jan-98	19	0	0.15	0	0	44	0.2	49	39	1.85	35	0.65
20-Mar-98	26	0.15	0	0	3.6	44	0.65	52	0	22	24	0.05
27-May-98	18	0.05	0	0	2.75	21	0.5	41	0	14	15	0.05
16-Sep-98	9	0	0	0	3.75	23	0.45	35	0	18	11	0
21-Oct-98	0	1.1	0	0.1	0.65	7	0.5	41	0.75	2.4	8	0
10-Dec-98	0.6	0	0	0.05	0	10	0.4	51	0.05	2.25	0.1	0
12-Jan-99	0	7	0.5	0.1	0.15	1	0	32	0	0	0.05	0
16-Feb-99	0	0	0.05	0	0.35	3	0	22	0	0	0.2	0
18-Mar-99	0	3	0	0	0.6	0.05	0	19	0	0	0.1	0
13-Apr-99	0	0.05	0	0	0.45	2	0	27	0	0	0.05	0
20-May-99	0	0	0	0	0.1	3	0	24	0	0	0.15	0
16-Jun-99	0	0	0	0	0.05	0.05	0	19	0	0	0.05	0
24-Jul-99	0	0	0	0	0	0	0	25	0	0	0.05	0
18-Aug-99	0	0	0	0	0	0	0	14	0	0	0	0
21-Sep-99	0	0	0	0	0	0	0	12	0	0	0	0
14-Oct-99	0	0	0	0	0	0	0	9	0	0	0	0
23-Nov-99	0	0	0	0	0	0	0	16	0	0	0	0
27-Jan-00	0	0	0	0	0	0	0	21	0	0	0	0
16-Feb-00	0	0	0	0	0	0	0	15	0	0	0	0
22-Mar-00	8	0.05	0	0.05	0	12	0.05	34	0.1	0.35	24	0.5
18-Apr-00	4.5	0.1	0	0	0	4.5	0.15	36	0.45	0.05	4	0.3
21-Jun-00	9	0.05	0	0	0.05	2.85	0.05	29	0.35	0.35	2	0
18-Jul-00	9	0.1	0	0	0	17	0.1	43	0.3	0.4	19	0.5
24-Aug-00	8	0	0.05	0	0	3.95	0.1	51	0	0.5	23	0.5
19-Oct-00	9	0.1	0	0.05	0.05	16	0.05	52	0.4	0.4	21	0.45
14-Nov-00	10	0.1	0.05	0.05	0.05	19	0.15	37	0.45	0.45	28	0.45
15-Dec-00	7	0	0	0	0	32	0.05	32	0.15	0.15	22	0.05
21-Feb-01	0	0.05	0	0.05	0	0.55	0.05	41	0.05	0.1	25	0.1
11-Apr-01	0.1	0	0	0	0.05	12	0.05	49	0	0.05	18	0.1
20-Jun-01	0.05	0	0	0	0.05	14	0.1	38	0.05	0.05	19	0.1
3-Aug-01	0.1	0	0	0.05	0.05	29	0.2	49	0	0.05	25	0.1
15-Oct-01	0.05	0.05	0	0	0.05	10	0.1	56	0	0.05	13	0.05
4-Dec-01	0	0	0	0	0	12	0.05	62	0	0.05	10	0.05
14-Jan-02	0.05	0	0	0	0.05	15	0.1	72	0.05	0.1	16	0.05
19-Mar-02	0.1	0	0	0	0	12	0.15	42	0.15	0.1	18	0.3
15-May-02	0.05	0	0	0	0	9	0.05	36	0.05	0.05	24	0.05
16-Jul-02	0.1	0	0	0	0	11	0.05	45	0.05	0.1	19	0.1
12-Sep-02	0	0	0	0	0	8	0.1	55	0	0.1	16	0.05
18-Nov-02	0.1	0.05	0	0	0	14	0.1	49	0	0.05	22	0.05
13-Feb-03	0.05	0	0	0	0	11	0.05	30	0	0.05	12	0.1
17-Apr-03	0.1	0	0	0	0	9	0.1	47	0	0.1	9	0.05
19-Jun-03	0.05	0	0	0	0	8	0	31	0.05	0.1	18	0.05
13-Aug-03	0.05	0	0	0	0	10	0.05	64	0	0.05	13	0.05
21-Oct-03	0.05	0	0	0	0	9	0.05	89	0	0.05	19	0
20-Jul-04	32.1	7.8	2.1	0.2	4.3	39.4	48.3	43.3	0.1	22.3	37.8	33.4
17-Sep-04	49.4	9.5	3.2	0	19.1	61.3	59.3	41.3	2.3	29.3	34.0	28.4
14-Dec-04	52.4	11.7	1.5	0	22.9	65.6	62.6	47.1	9.9	27.8	40.0	25.9
24-Feb-05	8.9	4.6	0	0	2.1	22.8	21.4	48.6	0	32.8	34.6	31.2
12-May-05	9.5	5.4	0.9	0	0	25.3	28.6	47.3	0	24.3	31.2	26.3
28-Jul-05	7.4	6.1	1.3	0.1	0.3	41	43	49.4	0	16.3	27.4	29.1
7-Nov-05	7.6	3.1	0.3	0.1	0	34.5	39.3	41.2	0.7	25.7	33.8	29.2
10-Feb-06	0	0	0	0	0.1	17.4	3	31.4	0	3.1	52.3	3.2

TABLE D6 - METHANE GAS CONCENTRATION READINGS - SOUTH LEACHATE COLLECTION SYSTEM



Date	MH AS	MH BS	MH 1S	MH 2S	MH 3S	MH 4S	MH 5S	MH 5SA	SPS	MH 6S	MH 7S	MH 8S
	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol	% vol
13-Apr-06	0	0.1	0	0	0.3	0.7	3.2	1.2	0	2.1	17.3	1.9
6-Sep-06	0	0	0	0	1.1	34.3	20.7	0	0	7.1	51.9	4.5
6-Dec-06	0	0	0	0	0.6	23.1	11.2	0	0	9.2	21.4	1.2
6-Feb-07	0	0	0	0	0	15.3	17.2	11.3	0	4.3	48.2	3.2
22-May-07	0	0	0	0	0	8.4	16.2	41.2	0	2.1	49.7	1.1
10-Aug-07	0	0	0	0	0	10.5	12.3	48.4	0	0.4	53.4	0.8
20-Nov-07	0	0	0	0	0	4.3	10.4	47.5	0	0.6	45.3	1
12-Mar-08	0	0	0	0	0	7.3	9.5	41.3	0	3.1	45.3	2.1
25-Jun-08	0	0	0	0	0	5.1	8.2	31.9	0	0	31.1	0
17-Sep-08	0	0	0	0	0	2.1	4.3	44.5	0	1.8	32.7	1.9
18-Dec-08	0	0	0	0	0	1.6	3.3	41.3	0	0	22.4	3.4
10-Sep-09	0	0	0	0	0	1.5	2.2	22.4	0	0	41.1	0
24-Dec-09	0	0	0	0	0	0	4.3	37.3	0	1.8	21.8	1.9
6-Mar-10	0	0	0	0	0	15.3	17.2	11.3	0	4.3	48.2	3.2
10-Aug-10	0	0.1	0	0	0.2	26.8	12.2	7.7	0	3.5	28.4	0.2
9-Mar-11	0	0	0	0	0	1.4	0.4	0	0	0	4.9	0.5
16-Jun-11	0	0	0	0	0	0	0.2	0	0	0	8.2	0.9
25-Aug-11	0	0	0	0	0	0	0	0.3	0	0	6.1	3.8
1-Nov-11	0	0	0	0	0	0	0	0	0	0	2.5	0
24-Apr-12	0	0	0	0	0	0	0.1	0	0	0	2.4	0.4
14-Sep-12	0	0	0	0	0	0	0	0	0	0	1.7	0.3
19-Mar-13	0	0	0	0	0	1.6	0.4	0	0	0	5.3	0.5
13-Aug-13	0	0	0	0	0	0	0	0	0	0	1.4	0.3
13-Mar-14	0	0	0	0.2	0	1.6	0.4	0	0	0	2.3	0.2
18-Aug-14	0	0.2	0	0	0	0	0	0	0.2	0	0.9	0.1

TABLE D7 - METHANE GAS READINGS - WEST COLLECTION SYSTEM AND MAIN STATION



Date	MPS % vol	OMPS % vol	MH 1W % vol	MH 2W % vol	MH 3W % vol	MH 4W % vol	MH 5W % vol	WPS % vol	MH 6W % vol	MH 7W % vol	MH 8W % vol	MH 9W % vol
10-Feb-93	0	0	0	0	0	0	0.25	0	0.6	0.2	0.35	50
26-Mar-93	0	0	0	0	0	0	0.7	0	0	0	16	45
29-Apr-93	0	0	0	0	0	0	0	0	0	0	48	55
21-May-93	0	0	0	0	0	0	0	0	0	0	48	55
21-Jun-93	0	0	0	0	0	0	0	0.3	0	0	25	55
16-Jul-93	0	0	0	0	0	0	0.35	0	10	35	50	55
10-Aug-93	0	0	0	0	0	0	1.95	5	10	35	55	55
16-Sep-93	0	0	0	0	0	0	0.9	2.2	2.8	4.45	45	55
13-Oct-93	0	0	0	0	0	0	0	0.65	2	18	35	55
24-Nov-93	0	0	0	0	0	0	0	0.35	1.6	12	50	50
17-Dec-93	0	0	0	0	0	0	0	0.8	18	25	50	50
19-Jan-94	0	0	0	0	0	0	0	0.4	15	17	50	48
11-Feb-94	0	0	0	0	3.9	0.8	0.65	0.45	15	5	50	55
10-Mar-94	0	0	0	0	0	0	0	0.85	0	3.6	6	6
19-Apr-94	0	0	0	0	0	0	0	0.8	0	17	8	25
12-May-94	0	0	0	0	0	0	0.75	2.75	0.05	2.95	5	25
23-Jun-94	0	0	0	0	0	0	0	0.5	0	0	0	13
12-Jul-94	0.85	0	0	0	0	0	0	0.1	0	0.05	0.2	8
10-Aug-94	0	0.1	0	0	0	0	0	0.1	0	0	8	15
16-Sep-94	0.05	0.2	0	0	0	0	0	0.55	0	0	2.45	5
12-Oct-94	0	0	0	0	0	0	0	0.45	0	0.2	3.15	10
11-Nov-94	0.15	0.05	0	0	0	0	0	0.05	0	0.1	3.75	5
14-Dec-94	0	0	0	0	0	0	0	0.85	0	0.9	4	18
17-Jan-95	0.4	0	0	0	0	0	0	0.95	0.65	0.15	0.85	5
9-Feb-95	0.2	0	0	0	0	0	0	0.85	0	0	1.05	5
10-Mar-95	0	0	0	0	0	0	0.65	1.25	2.1	0.6	25	52
13-Apr-95	0	0	0	0	0	0	2.55	1.1	4.4	9	22	57
18-May-95	0.35	0.45	0	0	0	0	0	1.4	0	0	1.4	60
30-Jun-95	0.15	0.1	0	0	0	0	0.5	1	0.15	0.3	1	1.9
20-Jul-95	1.8	0.35	0	0	0	0	0.35	1.45	0.45	0.35	1.45	2.85
21-Sep-95	0	0	0	0	0	0	0.4	0.3	1.1	0.6	0.3	50
18-Oct-95	0	0	0	0	0	0	0	0.4	1.5	2.3	0.4	54
22-Nov-95	0.1	0.45	0	0	0	0	0.9	0	0.4	0.6	0	0.9
21-Dec-95	0	0.65	0	0	0	0	1.2	0	3	0.2	0	0.85
9-Jan-96	0.2	2.75	0	0	0	0.55	2.45	4.95	5	1.1	4.95	1.6
8-Feb-96	0.55	0.6	0	0.4	1.25	2.25	12	0	5.3	10	0	20
8-Mar-96	0.05	3.95	0.05	0.05	0.4	3.55	2.55	0	0.55	0.6	0	19
18-Apr-96	0.35	0.05	0	0	0	0.35	0.55	0	0.1	0.35	0	0.05
16-May-96	0.15	0.65	0	0	0	0.05	0.35	0	0.15	0.1	0	49
16-Jul-96	0.2	0.2	0	0	0	0.05	1.25	1.05	4.45	0.4	1.05	40
26-Sep-96	0.85	1.45	0	0	0	0.15	1.1	1.1	0.55	0.25	1.1	50
1-Nov-96	0.35	4.45	0	0	0	0.4	1.1	3.35	0.15	0.15	0	49
28-Nov-96	0	0	0	0	0	0	0.6	1.4	2.35	0.9	28	51
13-Dec-96	1.2	0.1	0	0	0	0.4	0.35	0	0	0.05	0	50
27-Jan-97	0.95	0.05	0	0	0	0.45	0.3	0	0	0.1	0	52
11-Feb-97	0.1	2.3	0	0	0	0.3	1.55	0	0.45	0.25	0	2.25
12-Mar-97	0	1.5	0	0	0	0.1	0.75	0	0.1	0.1	0	2.55
30-Apr-97	0	0.35	0	0	0	0.2	3.05	0	0.7	1.35	0	51
27-May-97	0.2	1.9	0	0	0	0	0	0	0	0.05	0	50

TABLE D7 - METHANE GAS READINGS - WEST COLLECTION SYSTEM AND MAIN STATION



Date	MPS % vol	OMPS % vol	MH 1W % vol	MH 2W % vol	MH 3W % vol	MH 4W % vol	MH 5W % vol	WPS % vol	MH 6W % vol	MH 7W % vol	MH 8W % vol	MH 9W % vol
14-Aug-97	0	0.5	0	0	0	0	0	0	0	0.05	0	49
30-Sep-97	0	0.15	0	0	0	0	0	0	0	0	0	0
18-Nov-97	0	0.05	0	0	0	0	0	0	0	0	0	0
26-Jan-98	0	n/a	0	0	0	0	0	0	0	0.05	0	51
20-Mar-98	0.2	1.4	0	0	0	0	0	0.5	9	0.05	0.5	50
27-May-98	0.1	1.8	0	0	0	0	0	0.25	2	0	0.25	55
16-Sep-98	0	0.2	0	0	0	0	0	0.15	1	0	0.15	75
21-Oct-98	0	0.1	0	0	0	0	0	0	0.05	0	0	60
10-Dec-98	0	0.1	0	0	0	0	0	0.05	0	0	0.05	65
12-Jan-99	0	0	0	0	0	0	0	0	0	0	0	0
16-Feb-99	0	0	0	0	0	0	0	0.05	0	0	0.05	0
18-Mar-99	0	0	0	0	0	0	0	0	0	0	0	0.1
13-Apr-99	0	0	0	0	0	0	0	0	0	0	0	0.05
20-May-99	0	0	0	0	0	0	0	0	0	0	0	0.05
16-Jun-99	0	0	0	0	0	0	0	0	0	0	0	0.05
24-Jul-99	0	0	0	0	0	0	0	0	0	0	0	0
18-Aug-99	0	0	0	0	0	0	0	0	0	0	0	0.05
21-Sep-99	0	0	0	0	0	0	0	0	0	0	0	0
14-Oct-99	0	0	0	0	0	0	0	0	0	0	0	0
23-Nov-99	0	0	0	0	0	0	0	0	0	0	0	0
27-Jan-00	0	0	0	0	0	0	0	0	0	0	0	0
16-Feb-00	0	0	0	0	0	0	0	0	0	0	0	0
22-Mar-00	0	0	0	0	0	0	0	0	2	0.7	0	46
18-Apr-00	0	0	0	0	0	0	0	0	3.45	0.45	0	46
21-Jun-00	0	0	0	0	0	0	0	0	3.95	0.6	0	39
18-Jul-00	0	0	0	0	0	0	0	0	2.6	0.35	0	0.85
24-Aug-00	0	0	0	0	0	0	0	0	4.1	0.6	0	29
19-Oct-00	0	0	0	0	0	0	0	0	3.7	0.5	0	39
14-Nov-00	0	0	0	0	0	0	0.5	0	3.3	0.75	0	42
15-Dec-00	0	0	0	0	0	0	0.1	0	3.6	0.45	0	4
21-Feb-01	0	0	0	0	0	0	0	0	1.15	0.1	0	31
11-Apr-01	0	0	0	0	0	0	0.05	0	0.5	0	0	65
20-Jun-01	0	0	0	0	0	0	0.05	0	0.45	0.05	0	71
3-Aug-01	0	0	0	0	0	0	0	0	0.3	0.05	0	67
15-Oct-01	0	0	0	0	0	0	0.05	0	0.2	0.05	0	58
4-Dec-01	0	0	0	0	0	0	0	0	0.1	0	0	45
14-Jan-02	0	0	0	0	0	0	0	0	0.75	0.05	0	64
19-Mar-02	0	0	0	0	0	0	0.1	0	0.85	0.4	0	71
15-May-02	0	0	0	0	0	0	0	0	0.7	0	0	61
16-Jul-02	0	0	0	0	0	0	0	0	1.7	0.05	0	77
12-Sep-02	0	0	0	0	0	0	0	0	0.75	0.05	0	81
18-Nov-02	0	0	0	0	0	0	0	0	0.55	0	0	72
13-Feb-03	0	0	0	0	0	0	0	0	0.35	0	0	89
17-Apr-03	0	0	0	0	0	0	0	0	0.55	0	0	91
19-Jun-03	0	0	0	0	0	0	0	0	0.85	0	0	81
13-Aug-03	0	0	0	0	0	0	0	0	0.65	0	0	75
21-Oct-03	0	0	0	0	0	0	0	0	0.45	0	0	64
20-Jul-04	0	0	0	0	0	0	0	0	0	0	0	0
17-Sep-04	0	0	0.1	0	0	0	0	0	0	14.2	41.9	54.8

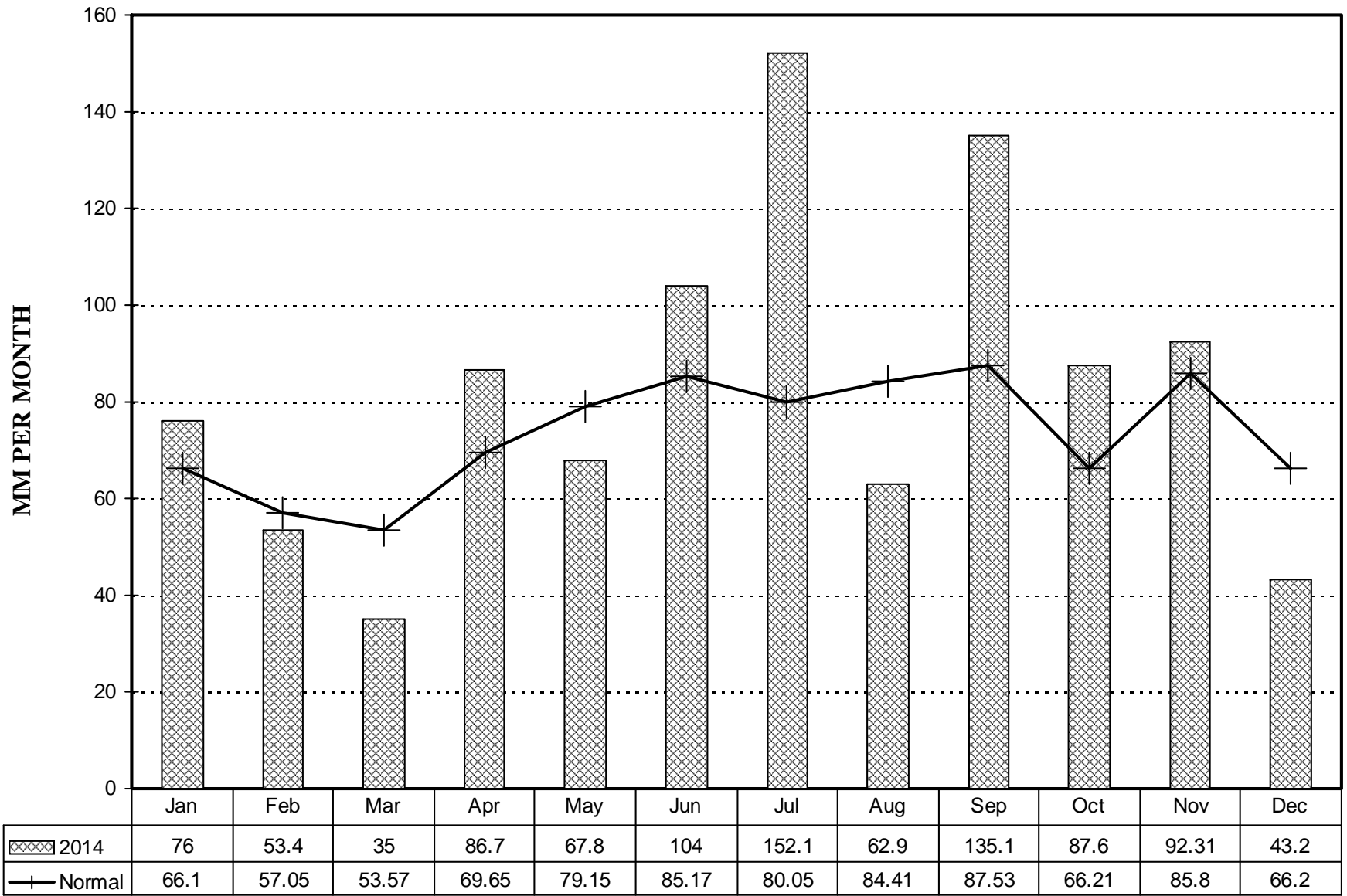
TABLE D7 - METHANE GAS READINGS - WEST COLLECTION SYSTEM AND MAIN STATION



Date	MPS % vol	OMPS % vol	MH 1W % vol	MH 2W % vol	MH 3W % vol	MH 4W % vol	MH 5W % vol	WPS % vol	MH 6W % vol	MH 7W % vol	MH 8W % vol	MH 9W % vol
14-Dec-04	0	0	0.6	0	0	0	0	0	0	16.7	42.7	51.6
24-Feb-05	0	0	0	0	0	0	0	0	0	0	37.2	53.4
12-May-05	0	0	0	0	0	0	0	0	0	2.1	32.4	48.7
28-Jul-05	0	0	0	0	0	0	0	0	0	0	29.4	47.8
7-Nov-05	0	0	0	0	0	0	0	0	0	3.3	25.7	51.1
10-Feb-06	0	0	0	0	0	0	0	0	0	0	0.3	5.2
13-Apr-06	0	0	0	0	0	0	0	0	0	0	0.9	3.9
6-Sep-06	0	0	0	0	0	0	0	0	0	0	1.8	2.7
6-Dec-06	0	0	0	0	0	0	0	0	0	0	1.7	1.2
6-Feb-07	0	0	0	0	0	0	0	0	0	0	0.6	2.3
22-May-07	0	0	0	0	0	0	0	0	0	0	0	4.7
10-Aug-07	0	0	0	0	0	0	0	0	0	0	0	5.9
20-Nov-07	0	0	0	0	0	0	0	0	0	0	0	5.2
12-Mar-08	0	0	0	0	0	0	0	0	0	0	0	31.2
25-Jun-08	0	0	0	0	0	0	0	0	0	0	0	8.1
17-Sep-08	0	0	0	0	0	0	0	0	0	0	0	5.4
18-Dec-08	0	0	0	0	0	0	0	0	0	0	0	11.2
10-Sep-09	0	0	0	0	0	0	0	0	0	0	0	1.2
24-Dec-09	0	0	0	0	0	0	0	0	0	0	0	3.1
6-Mar-10	0	0	0	0	0	0	0	0	0	0	0.6	2.3
10-Aug-10	0	0	0	0	0	0	0	0.2	0	0.4	0.4	0.1
9-Mar-11	0	0	0	0	0	0	0	0	0	0	0.1	0
16-Jun-11	0	0	0	0	0	0	0	0	0	0	0	0
25-Aug-11	0	0	0	0	0	0	0	0	0	0	0	0
1-Nov-11	0	0	0	0	0	0	0	0	0	0	0	0
24-Apr-12	0	0	0	0	0	0	0	0	0	0	0	0
14-Sep-12	0	0	0	0	0	0	0	0	0	0	0	0
19-Mar-13	0	0	0	0	0	0	0	0	0	0	0.1	0
13-Aug-13	0	0	0	0	0	0	0	0	0	0	0	0.1
13-Mar-14	0	0	0	0	0	0	0	0	0	0	0.4	1.2
18-Aug-14	0	0	0	0	0	0	0	0	0	0	0.1	0.6

Appendix E

Detailed Water Budget – 2014

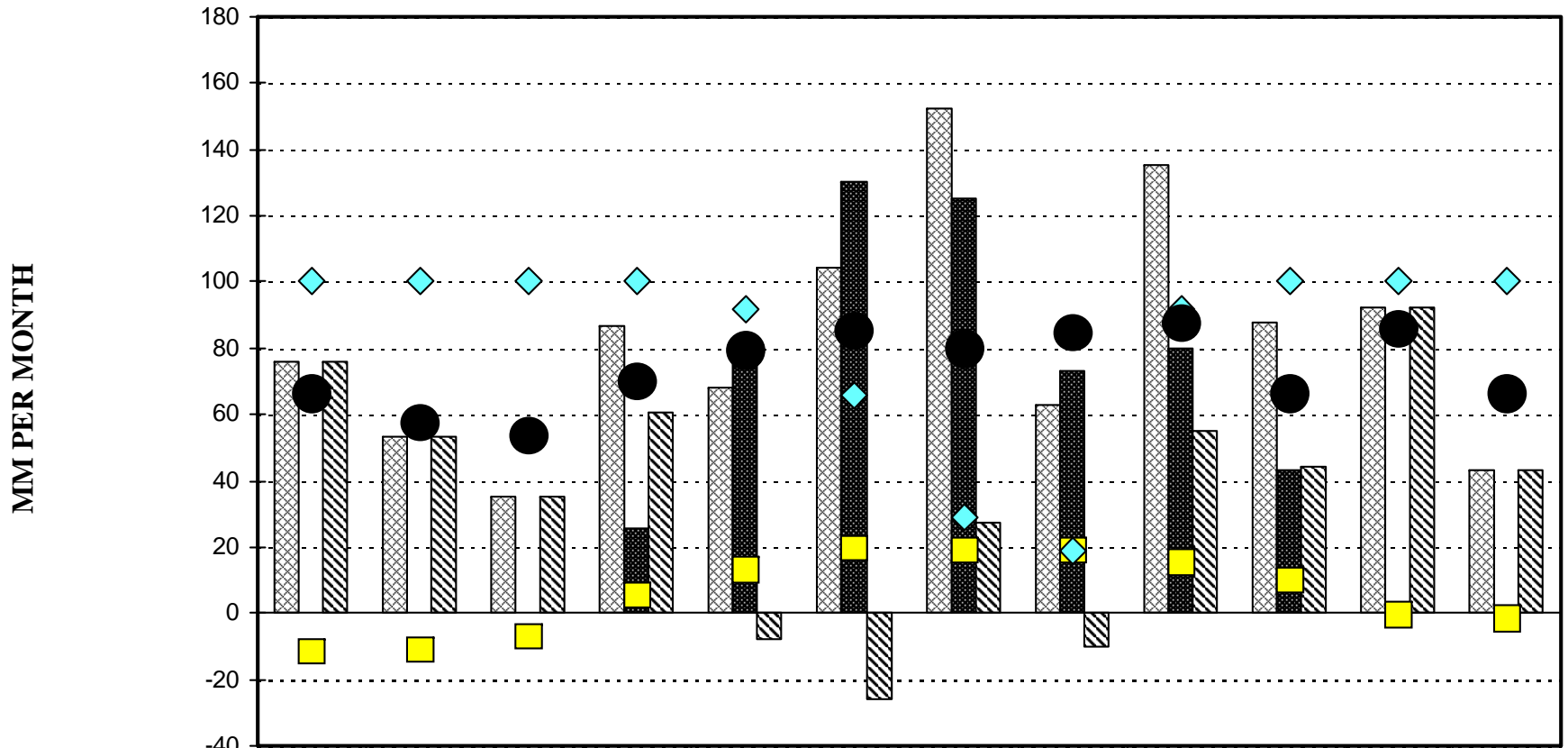


Closed Eastview Road Landfill Site

Precipitation Comparison, 2014

**FIGURE
E-1**

60339708
13 Precip Data



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
☒ Precipitation	76	53.4	35	86.7	67.8	104	152.1	62.9	135.1	87.6	92.31	43.2
■ Evapotranspiration	0	0	0	25.88	75.8	130	124.88	72.9	79.9	43.14	0	0
▨ Surplus Water	76	53.4	35	60.82	-8	-26	27.22	-10	55.2	44.46	92.31	43.2
■ Temperature	-11.77	-11.04	-7.4	5	12.97	19.37	18.98	18.77	15.48	9.55	-0.37	-1.39
◆ Soil Moisture	100	100	100	100	92	66	29	19	92	100	100	100
● Normal Precipitation	66.1	57.05	53.57	69.65	79.15	85.17	80.05	84.41	87.53	66.21	85.8	66.2



Closed Eastview Road Landfill Site

**Detailed Water Balance
Guelph Lakes Dam, 2014**

**FIGURE
E-2**

60339708
13 Precip Surplus Data