SCS ENGINEERS

Report

Hidden Valley Landfill
Annual Report for 2012

Presented to:

Pierce County Recycling, Composting & Disposal, LLC dba LRI
17925 Meridian Street East
Puyallup, Washington 98375

Presented by:

SCS ENGINEERS
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Bellevue, Washington 98005
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March 26, 2013
File No. 04213004.03

Offices Nationwide
www.scsengineers.com

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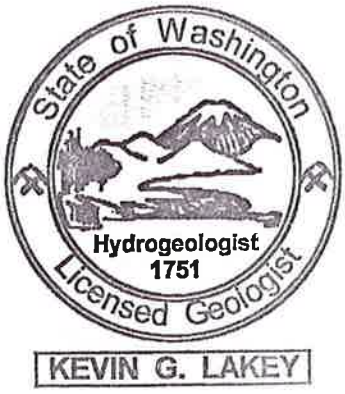

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1.0 INTRODUCTION

This document is the 2012 annual report for the Hidden Valley Landfill prepared on behalf of Pierce County Recycling, Composting and Disposal LLC, dba LRI (LRI). The facility is a closed municipal solid waste landfill that stopped accepting waste on December 31, 1998. Post-closure activities are performed consistent with Post-Closure Care Permit No. 27 016 issued by the Tacoma-Pierce County Health Department (TPCHD), and Consent Decree No. 032146876 between the Washington Department of Ecology (Ecology), Pierce County (County) and LRI. The Hidden Valley Landfill is located at 17925 Meridian Street East, Puyallup, Washington (Figure 1).

1.1 FACILITY CONTACT INFORMATION

Hidden Valley Landfill
17925 Meridian Street East
Puyallup, Washington 98375
Facility Contact: Greg Burrington (253) 377-2957

1.2 FACILITY DESCRIPTION

The landfill property is approximately 92 acres in size and is located in the north half of the northwest quarter of Section 34, Township 19N, Range 4E. The landfill includes approximately 56 acres of unlined closed fill and a closed 30-acre lined cell. Also present at the site are a leachate pre-treatment facility, a transfer station, and a recycling center.

Hidden Valley Landfill began operation in the mid-1960s and accepted waste until December 31, 1998. Waste disposed of at the landfill included municipal solid waste, demolition wastes, commercial waste, industrial wastes, and small quantities of bulk liquids and sludge.

1.3 PROJECT HISTORY

The U.S. Environmental Protection Agency (EPA) conducted an environmental assessment of the Hidden Valley Landfill between 1981 and 1985 and prepared a preliminary assessment (PA) and a hazard ranking scoring (HRS) of the site. As a result of the HRS, Hidden Valley Landfill was placed on the National Priority List (NPL) in April 1989.

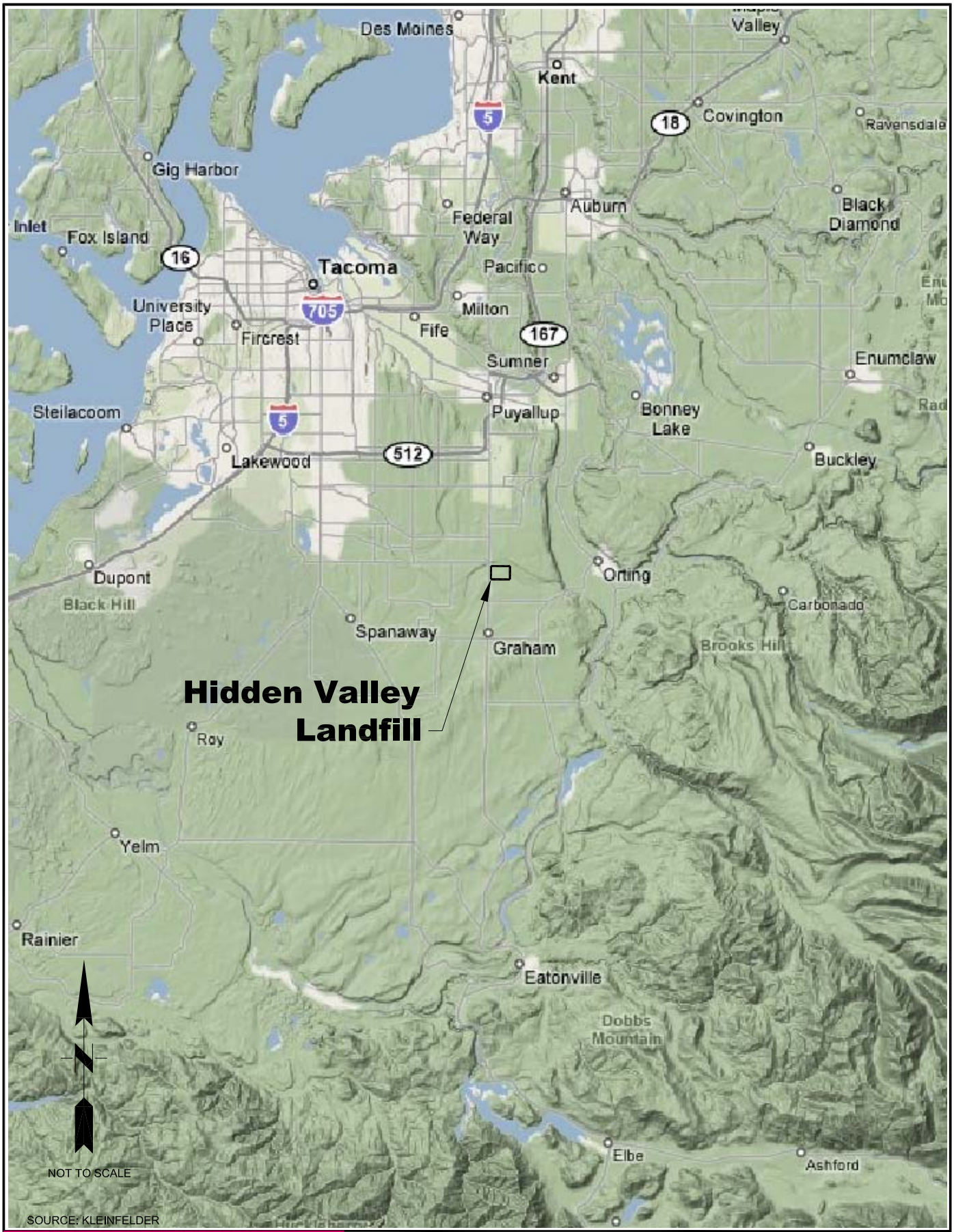
A Remedial Investigation (RI) was conducted under Ecology Consent Order DE 86 S173. The final RI report was submitted to Ecology in March 1992. The RI found groundwater impacts downgradient of the landfill. Groundwater contaminants have included dissolved iron and manganese, chloride, ammonia, nitrate, sulfate, specific conductance, total dissolved solids and low levels of volatile organic compounds (VOCs), including benzene, chlorobenzene, tetrachloroethene, 1,1-dichloroethane, and 1,4-dichlorobenzene.

In January 2004, Consent Decree No. 032146876 was finalized and signed. The consent decree and associated cleanup action plan address long-term maintenance and monitoring activities at the landfill and establish groundwater cleanup levels.

1.4 2012 MONITORING ACTIVITIES

Landfill gas monitoring was conducted on a monthly basis during 2012. Groundwater monitoring was performed quarterly in January, April, July, and October. Leachate monitoring was performed in January.

Monitoring results for the first three quarters of 2012 were previously submitted to the TPCHD and Ecology in quarterly reports. Fourth Quarter 2012 groundwater data were previously submitted to the TPCHD in a data transmittal. Fourth Quarter 2012 landfill gas monitoring data were previously submitted to the TPCHD via email. This report includes summary tables for all four quarters. The groundwater database was provided to the TPCHD as a Microsoft Access file in electronic format (on compact disk) as a separate submittal. In addition, groundwater data generated from the Hidden Valley Landfill during 2012 were validated and input into the Ecology Environmental Information Management (EIM) system.



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PROJECT NO.	DES BY
04213004.03	LEL
SCALE	CHK BY
NOT TO SCALE	EMS
CAD FILE	APP BY
FIGURE 1	KGL

SITE LOCATION MAP

HIDDEN VALLEY LANDFILL
PIERCE COUNTY, WASHINGTON

DATE: MARCH 2013

FIGURE: 1

2.0 LANDFILL GAS MONITORING

Landfill gas probes were monitored monthly during 2012. Gas probe locations are shown on Figure 2. Parameters measured at the gas probes included carbon dioxide, oxygen, and combustible gas (measured as methane). As described in Section 7, a portion of the gas extraction system on the south slope of the landfill was shut down in September 2009 in response to a suspected area of subsurface oxidation. This area of the gas extraction system remained off-line throughout 2010, 2011, and 2012 (gas wells N42, N43, N60, N61, N62, and N54).

Perimeter gas probe readings were less than 5 percent methane by volume except as noted in Table 1. After obtaining any reading greater that 5 percent methane by volume, the TPCHD was notified and the vacuum on the adjacent well field was adjusted by LRI staff to recapture the landfill gas. Additional monitoring was subsequently performed by LRI staff until methane concentrations decreased to less than 5 percent by volume. Monthly gas probe monitoring results are included in Appendix A.

Gas monitoring of building interiors was performed on February 24, May 24, September 21, and December 20. The main office, maintenance building, scale house/pay booth, leachate treatment building, recycling building, security building, cogeneration building, and transfer station were monitored. No detectable concentrations of combustible gas were found in any structure. Copies of the building survey reports are included in Appendix A.

Table 1. 2012 Landfill Gas Data

2012 Landfill Gas Data Perimeter Probe Readings Greater than 5 Percent Methane by Volume Hidden Valley Landfill, Pierce County, Washington		
Month	**Gas Probe**	**Methane Reading (%)**
February	GP-13A	10.8
March	GP-13A	8.5
May 11	GP-13A	11.3
May 22	GP-13A	8.3
June	GP-13A	12.0
July	GP-13A	5.1
December	GP-13A	5.6

E 52,500 E 53,000 E 53,500 E 54,000 E 54,500

N 26,000

N 25,500

N 25,000

SR-161 (MEDIDIAN STREET)

GP-22 LOCATED IN RIFLE RANGE

MAINTENANCE BUILDING

OFFICE BUILDING

FLARE NO.1

FLARE STATION

FLARE NO.2

GP-1 GP-2 GP-3 GP-4 GP-5 GP-6 GP-7 GP-8 GP-9 GP-10 GP-11 GP-12 GP-13 GP-14 GP-15 GP-16 GP-17 GP-18 GP-19

CS-1 CS-2 CS-3 CS-4 CS-5 CS-6 CS-7 CS-8 CS-9 CS-10

N1 N2 N3 N4 N5 N6 N7 N8 N9 N10 N11 N12 N13 N14 N15 N16 N17 N18 N19 N19A N20 N21 N23 N24 N25 N26 N27 N28 N29 N30 N31 N32 N33 N34 N35 N36 N36A N37 N37A N38 N39 N41 N42 N43 N44 N45 N46 N47 N48 N49 N50 N51 N52 N53 N54 N55 N55A N56 N57 N58 N59 N60 N60A N61 N62 N63 N64 N64A N64B,C N65 N66 N67 N68 N69 N70 N71 N72 N73 N75

H1 H2

CO

12"ø SCH 40 PVC

12"x10" REDUCER

12"ø TEE

10"x8" REDUCER

8"x6" REDUCER

10"x6" REDUCER

3"ø SCH 40 PVC LATERAL (TYP.)

10"ø SCH 40 PVC

E-32 E-36 E-37 E-40 E2 E2A E3A E5 E6B E7 E8A E9 E10 E11 E12 E13 E14 E15 E16 E17 E18 E19 E20 E21 E22 E23 E24 E25 E25A E26 E27 E28 E29 E31 E33 E34 E34A E38 E39 E41 E42 E43

LEACHATE COLLECTION PIPE CLEANOUT

CONDENSATE DISPOSAL TRENCH

VERTICAL EXTRACTION WELLS AND HORIZONTAL COLLECTORS UNDER EAST LINED AREA SIDESLOPE LINER

LFG-1 LFG-2 LFG-3

LIMIT OF REFUSE

RECYCLING CENTER

LEACHATE PRETREATMENT FACILITY

GAS TO ENERGY FACILITY

TRANSFER STATION

PROPERTY LINE

UNDERGROUND AIR SUPPLY & CONDENSATE DISCHARGE PIPE

LEGEND:

- GP-1 Gas Probe
- Vertical Extraction Well Buried Under Liner
- Vertical Extraction Well
- CO Leachate Cleanout Riser
- Condensate Sump
- Control Valve
- Reducer
- Condensate Recirculation Lines
- Header Pipes
- 12"ø Header Pipe
- 10"ø PVC
- 8"ø PVC
- 6"ø PVC
- 4"ø PVC
- Underground Header Pipe

N

0 200

Scale in Feet

NOTE: GAS PIPING SHOWN IN RED IS ROUTED TO THE GAS ENERGY FACILITY

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Bellevue, Washington 98005
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PROJECT NO. 04213004.03	DES BY KGL	GAS SYSTEM HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE MARCH 2013
SCALE AS SHOWN	CHK BY EMS		FIGURE 2
CAD FILE FIGURE 2	APP BY KGL		

3.0 LEAK DETECTION MONITORING

3.1 LEAK DETECTION SYSTEM

The East Lined Area at the Hidden Valley Landfill includes a leak detection system between the primary geosynthetic liner and the secondary composite liner in that portion of the cell that was constructed over refuse (side slope liner area). Pursuant to Section II C of the Stipulation and Agreed Order of Dismissal (Order), LRI was required to implement the March 1994 Leak Detection Response Action Plan (RAP) once refuse was placed onto the side slope liner. The RAP provides a mechanism for evaluating the performance of the side slope liner. Major components of the plan include routine monitoring of leachate quantities and fluid in the leak detection system, data analysis, record keeping, delineation of acceptable liner performance levels, response actions, and an outline of how groundwater impacts would be evaluated in the event that excessive leakage is observed in the leak detection system.

3.2 LINER PERFORMANCE STANDARD

The RAP defines an acceptable performance standard of 300 gallons/acre/day for the primary side slope liner in the Cell 2 East Lined Area. The side slope liner covers approximately 13.5 acres of refuse, and therefore, the corresponding liner performance standard is 4,050 gallons per day.

3.3 SUMMARY OF PERFORMANCE DATA

Table 2 summarizes 2012 performance monitoring data for the side slope liner area, including leachate flow from Cell 2, fluid pumped from the leak detection sump (leakage flow), and rainfall totals. Leachate volumes as well as leakage pumped from the leak detection sump are recorded on a daily basis using a programmable logic controller (PLC) and verified by on-site personnel. Leakage from the side slope liner in Cell 2 was well below the performance standard defined in the RAP. Rainfall totals are recorded by LRI personnel using an on-site rain gauge. Copies of the Hidden Valley Leachate Treatment System monthly PLC reports are included in Appendix B.

3.4 SUMMARY OF LEAK DETECTION MONITORING DATA

Fluids in the leak detection system for the side-slope liner were sampled on January 24. Collected samples were submitted to TestAmerica, Arvada, Colorado, and tested for the parameters listed in Appendix IV of WAC 173-351. Laboratory test results for leak detection monitoring are shown in Appendix D on Table 9 with the leachate test results. The chemistry of these samples is similar to that of collected leachate.

Table 2. 2012 Side Slope Liner Performance Data

2012 Side Slope Liner Performance Data Hidden Valley Landfill, Pierce County, Washington				
Month	Cell 1 Monthly Leachate Volume[b] (gallons)	Cell 2 Monthly Leachate Volume (gallons)	Cell 2 Monthly Leakage Flow[a] (gallons)	Monthly Rainfall (inches)
January	29,840	0	994	4.80
February	9,834	—	0	3.70
March	8,799	—	630	5.80
April	16,540	5,441	418	4.00
May	42,960	6,983	0	3.80
June	6,528	0	267	2.60
July	25,769	9,938	1,529	1.10
August	0	1	0	0.00
September	15,052	8,095	0	0.00
October	20,385	0	2,189	6.95
November	11	5,745	0	9.10
December	12,882	6,172	0	6.70
Totals	**188,600**	**42,375**	**6,027**	**48.6**

[a] Leakage is based on the volume of fluid pumped from the leak detection sump as recorded using a programmable logic controller (PLC) and confirmed by LRI staff.

[b] Cell 1 monthly volumes for February and march are from combined site and PLC data

(—) Leachate volume was unavailable due to PLC error

3.5 HYDRAULIC GRADIENT CONTROL SYSTEM MONITORING

In addition to the leak detection system, a hydraulic gradient control system is present beneath the main leachate collection sump for the East Lined Area. This system is routinely checked for the presence of liquid. Each quarter in which liquid is removed, the volume removed is recorded and a representative sample is collected and tested for leachate constituents (see TPCHD correspondence letter dated April 21, 2003). In 2012, the hydraulic gradient control system beneath the main leachate collection sump did not accumulate fluids and require pumping, therefore, fluids from this system were not sampled.

4.0 GROUNDWATER LEVELS AND FLOW DIRECTIONS

4.1 LOCAL HYDROGEOLOGY

Hidden Valley Landfill is located within a Vashon age glacial melt-water channel that trends in an east-west direction and is approximately 50 to 100 feet deep and several hundred feet wide. The northern boundary of the channel lies just north of the landfill. The landfill is underlain by glacial outwash deposits consisting of coarse sand and gravel to a depth of about 55 feet below grade. North of the landfill (and the outwash channel), the outwash deposits are overlain by Vashon till (upper till unit). The outwash deposits are underlain by successive layers of Vashon till (lower till unit). Vashon advance outwash, Salmon Springs till and interglacial deposits, and Salmon Springs advance outwash.

Three aquifers underlie the Hidden Valley Landfill. The aquifers are referred to as the shallow perched aquifer, the upper regional aquifer, and the lower regional aquifer. An intermittent aquitard, referred to as the Vashon till aquitard, is present between the shallow perched aquifer and the upper regional aquifer. A thick section of low permeability deposits referred to as the Salmon Springs aquitard separates the upper regional aquifer and the lower regional aquifer.

The shallow perched aquifer is an unconfined (water table) aquifer that occurs within the Vashon recessional outwash deposit. The shallow perched aquifer is the uppermost-saturated unit at the site. Depth to groundwater at the landfill ranges from about 11 to 15 feet below ground surface (bgs) in winter and spring months to about 25 feet bgs in late fall. Groundwater flow in the shallow perched aquifer at the site is to the northwest with local components to the north and west. The down gradient extent of the shallow perched aquifer appears to be limited. Northwest of the landfill, the recessional outwash is either not saturated, or saturated to only a few feet. In areas where the recessional outwash is unsaturated, the uppermost zone of groundwater saturation occurs within the lower Vashon till unit.

The upper regional aquifer is present within Vashon advance outwash deposits. This aquifer is confined beneath the Vashon till aquitard and appears to be of regional extent. Groundwater flow, water level gradients, and seasonal water level fluctuations in the upper regional aquifer are similar to the shallow perched aquifer.

The lower regional aquifer is present within the Salmon Springs advance outwash deposits. The aquifer is confined and is interpreted to be of regional extent. Monitoring wells BC-4D, MW-14R, and MW-20R are completed at similar depth elevations and display similar water levels. Monitoring well MW-26R is completed approximately 80 feet higher in elevation and may be installed within a water-bearing zone in the Salmon Springs aquitard.

Detailed descriptions of the hydrogeologic units, as well as geologic cross-sections and boring logs/monitoring well details are included in the Hidden Valley Landfill Remedial Investigation Report (EMCON, 1991) and Hidden Valley Landfill Hydrogeologic Report Addendum (EMCON, 1998).

4.2 WATER LEVEL MEASUREMENTS

Static water levels were measured on January 26, April 27, July 19, and October 11, 2012. The water level database and water level contour maps are presented in Appendix C.

Groundwater flow in both the shallow perched aquifer and the upper regional aquifer was generally to the northwest during all monitoring events. Horizontal hydraulic gradients for both the shallow perched aquifer and the upper regional aquifer were less than 0.005 ft/ft in the central part of the site and approximately 0.025 ft/ft northwest of the landfill. This flow pattern remains consistent with previous data reported for the site. Water level gradients were similar to previous measurements, indicating that the previously reported flow rates of 3.2 ft/day to 6.5 ft/day for the shallow perched aquifer and 0.5 to 13 ft/day for the upper regional aquifer have not changed significantly. Water level data for wells MW-14R, MW-20R, and BC-4D indicate that the groundwater flow direction in the lower regional aquifer is to the northeast.

5.0 GROUNDWATER QUALITY

Groundwater monitoring has been conducted at the Hidden Valley Landfill on at least a quarterly basis since mid-1985. In 2012, groundwater samples were collected from 23 wells in January (annual monitoring), 12 wells in April (quarterly monitoring), 20 wells in July (semi-annual monitoring), and 11 wells in October (quarterly monitoring). Monitoring well MW-28S was not sampled during the October monitoring event due to insufficient water. Groundwater samples from water supply wells located at Corliss Sand and Gravel and Paul Bunyan Rifle Range were collected in January, April, July, and October 2012. Groundwater sampling locations are shown on Figure 3.

Copies of data summary tables for each quarter are provided in Appendix D. Data provided in the tables include field parameters, laboratory parameters, and quality control samples. Time series plots for selected water quality parameters, are included in Appendix E. Statistical calculations performed on groundwater data are presented in Appendix F. The groundwater database was provided to the TPCHD as a Microsoft Access file in electronic format (on compact disk). In addition, groundwater data generated from the Hidden Valley Landfill during 2012 were validated and input into the EIM data system.

5.1 WATER SUPPLY WELL DATA

Water quality samples were collected from two water supply wells, designated as Corliss and Paul Bunyan (see Figure 4) in January, April, July and October 2012. Water quality results for the two water supply wells in 2012 were generally typical of previous results. Low concentrations of total metals and inorganic parameters were reported. In the First Quarter of 2012, detections of acetone (46 µg/L) and 2-butanone (110 µg/L) were reported in the sample from the Paul Bunyan water supply well. The Tacoma-Pierce County Health Department was notified. This sampling point was altered between the Fourth Quarter 2011 sampling event and the First Quarter 2012 sampling event. Previously, the sample port was a faucet at ground level. During the First Quarter event, it was found to have been extended up several feet. The VOC detections are likely due to construction activities at the faucet. In the Second Quarter of 2012, methylene chloride was detected in the samples from the water supply wells. These detections are likely due to a laboratory artifact, and are not interpreted to be reflective of water quality. All remaining VOC concentrations were below the laboratory method reporting limit (MRL) in samples from the water supply wells. The 2012 water quality test results for the Corliss and Paul Bunyan water supply wells do not indicate impacts from the Hidden Valley Landfill. A summary of the laboratory test results for the water supply wells is provided in Table 3.

5.2 BACKGROUND WATER QUALITY

Background water quality at the Hidden Valley Landfill is monitored using wells MW-l0S (shallow perched aquifer) and MW-10D (upper regional aquifer). These wells have been monitored on a quarterly basis since 1985.

In 2012, concentrations of inorganic parameters in samples from the background wells were low and consistent with previous results. Dissolved iron was detected in the sample from background

well MW-10S in the First Quarter at a concentration of 0.006 mg/L. Dissolved manganese was detected in the sample from background well MW-10D in the Fourth Quarter at a concentration of 0.002 mg/L. No other detections of dissolved iron, manganese, or arsenic were reported above the laboratory MRL in 2012. No VOCs were reported present in samples collected from the background wells in 2012.

5.3 DOWNGRADIENT WATER QUALITY

Phased closure of the unlined portion of the landfill, which began in 1989 and was completed in 1993, included capping the waste with a low permeability composite cover and installing a landfill gas extraction/destruction system. Closure actions were designed to minimize the infiltration of precipitation through the refuse and remove landfill gas. These actions have resulted in improvement of groundwater quality in the shallow perched aquifer and the upper regional aquifer.

In general, water quality testing results from monitoring wells located downgradient of the landfill continue to display consistent trends of decreasing concentrations of parameters such as conductivity, ammonia, manganese, and iron. Time series plots for specific conductance, dissolved iron, dissolved manganese, ammonia and nitrate were prepared for wells located close to and downgradient of the landfill (MW 11S&D(2), MW 13S&D, MW 14S&D, and MW 17S, see Appendix E). Simple linear regressions through these data provide evidence of decreasing concentrations of these constituents.

The Hidden Valley Landfill Consent Decree established site groundwater cleanup levels and the groundwater point of compliance. Table 4 provides a summary of the site groundwater cleanup levels and indicates the wells where 2012 water quality results were greater than cleanup levels. Shallow perched aquifer water quality results that exceeded cleanup levels on one or more occasions in 2012 include nitrate (MW-12S, MW-17S, MW-18S, and FM-2), dissolved manganese (MW-12S, MW-14S, MW-15S, MW-17S, and FM-2) and dissolved iron (MW-28S). Upper regional aquifer water quality results that exceeded cleanup levels on one or more occasions in 2012 include dissolved iron (MW-14D) and dissolved manganese (MW-13D, MW-14D, and MW-15D). Lower regional aquifer water quality results that exceeded cleanup levels in 2012 are dissolved iron (MW-26R) and dissolved manganese (MW-14R and MW-26R); however, these results are interpreted to result from background water quality. As discussed previously, the presence of dissolved iron and manganese in the lower regional aquifer does not appear to be related to the Hidden Valley Landfill. This interpretation is based on an overall assessment of the groundwater quality data, which include low concentrations of inorganic parameters and an absence of VOCs (see letter to TPCHD dated August 12, 2002).

5.4 STATISTICAL ANALYSES

Groundwater quality data for the five-year period of January 2008 through October 2012 were evaluated for all monitoring wells in the groundwater-monitoring network. The data distributions for inorganic compounds and dissolved metals at each well were evaluated to determine if the data show a normal, lognormal, or non-parametric distribution. The Consent Decree established a cleanup level for 1,4-dichlorobenzene at 1.82 micrograms per liter (µg/L). No other VOCs have Consent Decree cleanup levels for the Hidden Valley Landfill. However, data distributions

are also determined for chlorobenzene and tetrachloroethene for tracking purposes. If the distribution was either normal or lognormal, the upper confidence limits on the mean (UCL 95) were calculated for each data set using MTCAStat, version 3.0 obtained from Ecology. The MTCAStat program was used to evaluate data distributions (i.e., normal, lognormal, or neither) for constituents that were detected in at least 50 percent of the sampling events.

One-half the MRL values were used when a parameter was not detected. If the distribution was neither normal nor lognormal, the UCL 95 was determined using the method of Van der Parren (1970) as described in the Statistical Guidance for Ecology Site Managers (Ecology 1992). For the data evaluated, this procedure defaults to the highest reported value. In addition, the highest reported value was used if either lognormal or normal distributions had the UCL 95 value outside of the data sample range. The UCL 95 was not calculated (NC) when any of the evaluated parameters were either not detected for 50 percent of the sampling events, or had less than five data entries.

Table 5 provides a summary of UCL 95 values. Shallow perched aquifer UCL 95 values that exceed cleanup levels include nitrate (MW-11S, MW-12S, MW-15S, MW 17S, MW-18S, FM-1, and FM-2), specific conductance (MW-17S and FM-2), and dissolved manganese (MW-12S, MW-13S, MW-14S, MW-15S, MW-17S, MW-23S, and FM-2). Upper regional aquifer UCL 95 values that exceed cleanup levels include dissolved iron (MW-14D) and dissolved manganese (MW-13D, MW-14D, and MW-15D). Lower regional aquifer UCL 95 values that exceed cleanup levels include dissolved iron (MW-26R) and dissolved manganese (MW-14R and MW-26R). Statistical calculations are provided in Appendix F.

Table 3. Water Supply Well Data Summary

	MRL	Corliss				Paul Bunyan			
		January-12	April-12	July-12	October-12	January-12	April-12	July-12	October-12
Volatile Organics (µg/L)									
Acetone	6	*	*	*	*	46	*	*	*
2-Butanone	10	*	*	*	*	110	*	*	*
Methylene Chloride	2.0	*	3.7 B	*	*	*	3.1 B	*	*
Total Metals (mg/L)									
Arsenic	0.005	*	*	*	*	*	*	*	*
Iron	0.200	*	*	0.490	*	*	*	*	0.44
Manganese	0.001	0.003	0.003	0.028	0.010	0.019	0.002	0.006	0.002
Zinc	0.010	0.013	0.023	0.056	0.026	0.020	0.027	0.120	0.066
Inorganic Parameters (mg/L)									
Chloride	0.2-4.0	8.0	5.6	5.5	5.6	4.4	4.4	4.3	4.6
Ammonia as Nitrogen	0.10	*	*	*	*	*	*	*	*
Nitrate as Nitrogen	0.50	1.8	1.3	1.1	1.2 H	1.8	1.8	1.9	1.8 H
Nitrite as Nitrogen	0.50	*	*	*	*	*	*	*	*
Sulfate	0.5	12.4	9.4	9.6	9.4	9.3	9.7	9.9	9.6
Chemical Oxygen Demand	5.0	6.3	*	*	*	24.0	5.1	*	*
Total Organic Carbon	1.0	*	*	*	*	3.4	1.3	*	*
Color	5.0	*	*	*	*	*	*	*	*
Field Parameters									
pH		7.17	5.93	6.12	6.91	7.26	6.85	6.52	6.79
Conductance (µS)		222	185	231	179	245	242	255	301
Temperature (^{0}C)		7.0	12.8	25.0	14.0	6.4	12.3	17.5	11.8

Notes:

Analyses performed by TestAmerica, Arvada, Colorado

VOCs not listed if concentrations in all samples were less than the method reporting limit

µg/L = micrograms per liter

mg/L = milligrams per liter

(*) = not reported at or above the MRL

(-) = analysis not performed

Table 4. Summary of 2012 Groundwater Quality Data versus Cleanup Levels

Shallow Perched Aquifer

	Cleanup Level	MW-10S Background	MW-11S	MW-12S	MW-13S	MW-14S	MW-15S	MW-17S	MW-18S	MW-23S	MW-25S	MW-28S	FM-1	FM-2
Inorganics (mg/L)														
Chloride	250	—	—	—	—	—	—	—	—	—	—	—	—	—
Sulfate	250	—	—	—	—	—	—	—	—	—	—	—	—	—
Nitrate	10	—	—	**Q1**	—	—	—	**Q1,2**	**Q1**	—	—	—	—	**Q1,2**
Specific Conductance	700	—	—	—	—	—	—	—	—	—	—	—	—	—
TDS	500	—	—	—	—	—	—	—	—	—	—	—	—	—
Metals (mg/L)														
Iron	0.30	—	—	—	—	—	—	—	—	—	—	**Q2**	—	—
Manganese	0.05	—	—	**Q1,3**	—	**Q2,4**	**Q1,3**	**Q1,2,3, 4**	—	—	—	—	—	**Q1,2,3, 4**
VOCs (µg/L)														
1,4-Dichlorobenzene	1.8	—	—	—	—	—	—	—	—	—	—	—	—	—

Upper Regional Aquifer **Lower Regional Aquifer**

	Cleanup Level	MW-10D Background	MW-11D(2)	MW-12D	MW-13D	MW-14D	MW-15D	MW-18D	MW-14R	MW-20R	MW-26R
Inorganics (mg/L)											
Chloride	250	—	—	—	—	—	—	—	—	—	—
Sulfate	250	—	—	—	—	—	—	—	—	—	—
Nitrate	10	—	—	—	—	—	—	—	—	—	—
Specific Conductance	700	—	—	—	—	—	—	—	—	—	—
TDS	500	—	—	—	—	—	—	—	—	—	—
Metals (mg/L)											
Iron	0.30	—	—	—	**Q3**	**Q1,2,3,4**	—	—	—	—	**Q1**
Manganese	0.05	—	—	—	**Q4**	**Q1,2,3,4**	**Q1**	—	**Q1**	—	**Q1**
VOCs (g/L)											
1,4-Dichlorobenzene	1.8	—	—	—	—	—	—	—	—	—	—

Notes:

Evaluated data are from 2012
(—) indicates results were less than cleanup level
(Q) indicates results were greater than cleanup level
(1, 2, 3, 4) indicates quarter in which results were greater than cleanup levels

Table 5. Summary of Groundwater Statistics

Shallow Perched Aquifer

	Cleanup Level	MCL / SMCL	MW-10S	MW-11S	MW-12S	MW-13S	MW-14S	MW-15S	MW-17S	MW-18S	MW-23S	MW-25S	MW-28S	FM-1	FM-2
Inorganics (mg/L)															
Chloride	250	250	21.1 (M)	33.4 (M)	17.6	18.1	12.3	18.3	20.0	20.0 (M)	13.9	10.7	12.5	17.3	17.7
Sulfate	250	250	9.9	19.1	14.7	19.6	12.6 (M)	11.9	8.5	11.7	18 (M)	7.4 (M)	14.4	18.7 (M)	13.3
Nitrate	10	10	1.2	**20.6**	**43.0 (M)**	6.0 (M)	2.5 (M)	**22.2 (M)**	**56.7 (M)**	**20.7 (M)**	1.4 (M)	3.1 (M)	4.6	**20.0 (M)**	**15.9**
Specific Conductance	700	700	148	656.2 (M)	466 (M)	349	165	527 (M)	**1329 (M)**	381	231	301 (M)	209	554 (M)	**951 (M)**
TDS	500	500	99	190	292	221	111	202	329	276 (M)	142	177	143	340 (M)	273
Alkalinity	–	–	57	71	160 (M)	132	55	100 (M)	193	143	74	135 (M)	142 (M)	447 (M)	150
Ammonia	–	–	NC	NC	1.27	0.24 (M)	1.08	3.3	5.6	NC	NC	NC	NC	NC	NC
TOC	–	–	1.2	1.4	3.3	1.5	1.9	2.4	3.2	2.4 (M)	1.0 (M)	6.9 (M)	1.2 (M)	1.8 (M)	2.2
Metals (mg/L)															
Iron	0.30	0.30	NC	NC	NC	NC	NC	NC	NC	NC	0.282 (M)	NC	NC	NC	NC
Manganese	0.05	0.05	NC	NC	**0.45**	**0.495 (M)**	**1.18 (M)**	**0.82**	**1.1**	NC	**0.06**	NC	NC	NC	**0.986 (M)**
VOCs (ug/L)															
1,4-Dichlorobenzene	1.8	75	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

Upper Regional Aquifer **Lower Regional Aquifer**

	Cleanup Level	MCL / SMCL	MW-10D	MW-11D(2)	MW-12D	MW-13D	MW-14D	MW-15D	MW-18D	MW-14R	MW-20R	MW-26R
Inorganics (mg/L)												
Chloride	250	250	11.7(M)	10.1 (M)	16.1	17.8	14.6 (M)	16.1	14.9 (M)	1.8	2.6	3.7
Sulfate	250	250	9	6.5 (M)	5.4 (M)	18.2	11.1	10.4 (M)	8.3 (M)	3.8 (M)	4.1	8 (M)
Nitrate	10	10	1.1	2.1 (M)	1.2	1.9	NC	0.61 (M)	1.7	NC	NC	NC
Specific Conductance	700	700	196	447.9 (M)	392 (M)	336	207	653 (M)	340 (M)	130	259 (M)	163
TDS	500	500	131	158	248 (M)	231	190 (M)	218	208	112	94	112 (M)
Alkalinity	–	–	94	110 (M)	176	146	81	187 (M)	147 (M)	49 (M)	53	62 (M)
Ammonia	–	–	NC	NC	NC	NC	4.2	NC	NC	NC	NC	NC
TOC	–	–	NC	NC	1.6 (M)	1.6	2.2	2.4	NC	NC	NC	NC
Metals (mg/L)												
Iron	0.30	0.30	NC	NC	NC	NC	**3.98 (M)**	NC	NC	NC	NC	**0.72**
Manganese	0.05	0.05	NC	NC	NC	**0.653 (M)**	**0.9**	**0.43 (M)**	NC	**0.13**	NC	**0.29**
VOCs (ug/L)												
1,4-Dichlorobenzene	1.8	75	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

Notes:

Evaluated data are from January 2008 through October 2012.

Values shown are the upper confidence limit on the mean (UCL 95)

Bold indicates greater than Cleanup Levels

(NC) indicates not calculated (see Section 5.4) due to less than 50 percent detection frequency or historically no detections.

(M) indicates default to maximum value for UCL 95

MCL = Maximum contaminant level

SMCL = secondary MCL

LEGEND:

MW-11(S) Monitoring Well Location

MW-25(S)
MW-25(D)

BC-4(R)
BC-4(S)

FMMW-2

MW-27(S)
MW-27(D)

N 27,000

N 26,500

FMMW-1

MW-18(S)
MW-18(D)

MW-11(D2)

MW-11(S)
MW-11(D)

176TH STREET

176TH STREET

MAINTENANCE BUILDING

OFFICE BUILDING

MW-17(S)

MW-15(S)
MW-15(D)

MW-14(S)
MW-14(D)
MW-14(R)

STORMWATER BASIN AREA

MW-26(R)

N 26,000

MW-12(S)
MW-12(D)

MERIDIAN AVENUE

MW-28(S)

N 25,500

LIMIT OF REFUSE

MW-13(S)
MW-13(D)

LANDFILL

MW-10(S)
MW-10(D)

MW-23(S)
MW-23(D)

N 25,000

0 300 600

SCALE: 1" = 300'

CONTOUR INTERVAL = 5 FEET

RECYCLE CENTER

MW-19(S)
MW-19(D)

MW-20(R)

PROPERTY BOUNDARY

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04213004.03	DES BY KGL	GROUNDWATER MONITORING WELL LOCATIONS HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE MARCH 2013
SCALE AS SHOWN	CHK BY EMS		FIGURE 3
CAD FILE FIGURE 3	APP BY KGL		

0 400 800

APPROX SCALE IN FEET

LEGEND

WATER SUPPLY WELL LOCATION

SOURCE: KLEINFELDER

SCS ENGINEERS
Environmental Consultants and Contractors
2405 140th Avenue NE, Suite 107
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO.	DES BY
04213004.03	LEL
SCALE	CHK BY
NOT TO SCALE	EMS
CAD FILE	APP BY
FIGURE 4	KGL

WATER SUPPLY WELL LOCATION

HIDDEN VALLEY LANDFILL
PIERCE COUNTY, WASHINGTON

DATE
MARCH 2013

FIGURE
4

6.0 LEACHATE QUALITY

Leachate quality is monitored on an annual basis. A sample of untreated leachate was obtained from the East Lined Area leachate collection system on January 24, 2012. The sample was analyzed for the parameters specified in WAC 173-351, Appendix IV. Leachate quality for 2012 is typical of previous results. A summary of the analytical data for the leachate samples are provided in Table 6.

Table 6. Leachate, and Side Slope Leak Detection Data Summary

	Leachate- Main Sump	Leak Detection-Side Slope
Volatile Organics (µg/L)		
Acetone	18	13
Benzene	1.4	1.5
Carbon disulfide	2.60	*
1,4-Dichlorobenzene	*	1.0
cis-1,2-Dichloroethene	1.2	0.73
ethylbenzene	0.69	0.52
m,p-Xylenes	2.9	3.8
o-Xylenes	18	13
Toluene	1.4	1.5
Total Metals (mg/L)		
Antimony	0.15	0.08
Arsenic	0.20	0.12
Barium	0.48	0.57
Calcium	12.0	16.0
Chromium	0.08	0.08
Cobalt	0.04	0.02
Copper	0.06	0.10
Iron	3.0	4.4
Lead	0.01	0.01
Magnesium	21.0	19.0
Manganese	0.18	0.27
Nickel	0.50	0.46
Potassium	450	440
Sodium	6000	5800
Vanadium	*	0.14
Zinc	0.15	0.08
Inorganic Parameters (mg/L)		
Alkalinity	7800	7800
Bicarbonate Alkalinity	6400	7800
Chloride	4030	3830
Ammonia as Nitrogen	620	590
Nitrate as Nitrogen	*	*
Nitrite as Nitrogen	*	*
Sulfate	82.6	*
Chemical Oxygen Demand	2900	3000
Total Dissolved Solids	13000	15000
Total Organic Carbon	1100	980
Biochemical Oxygen Demand	99	52
Cyanide, total	*	*
Coliform, total	5000	4
Field Parameters		
pH	7.65	7.62
Conductance (µS)	17,000	15,000
Temperature (°C)	18.0	15.5

Notes:
Analyses performed by TestAmerica, Arvada, CO.
Volatile organic compounds not listed were not present at concentrations exceeding the MR.L
MRL varies due to required dilutions; see laboratory reports.
(µg/L) = micrograms per liter
(mg/L) = milligrams per liter
(µS) = micro Siemens
(°C) = degrees centigrade
(*) = not reported at or above the MRL (Method Reporting Limit)
(–) = not applicable or not analyzed
(>) = greater than

7.0 POST-CLOSURE MAINTENANCE

7.1 COVER SYSTEM MAINTENANCE

Maintenance inspections of the landfill cover system and the landfill gas condensate recirculation system were performed on a quarterly basis in 2012. Maintenance inspections are also performed on an ongoing basis by LRI staff, as well as during monthly and quarterly monitoring events. With the exception of the former sinkhole area on the south slope of the landfill (described below), the inspections found minor areas for maintenance on the cover system, and no significant issues with the condensate recirculation system. Copies of the inspection reports, including site photographs, are included in Appendix G.

A sinkhole, indicative of subsurface combustion due to the presence of oxygen, began forming on the south slope of the landfill during the summer of 2008. The sinkhole was located near the south perimeter of the landfill in an area that does not include a bottom liner. This area has been repaired to correct differential settlement on two previous occasions; the last time in September 2006. The appearance of the sinkhole in 2008 coincided with off-site excavation which exposed the slope just south of the property boundary at the Corliss Resources Puyallup Plant. The oxidation may have been ongoing for a number of years; however, excavation activity south of the property boundary in 2008 appears to have allowed additional oxygen intrusion which accelerated the subsurface activity.

In September 2009, several gas extraction wells near the sinkhole were shut down as a precaution to limit the vacuum which may draw oxygen in from the south slope. These wells include N-42, N-43, N-54, N-60, N-61, and N-62. Also in September 2009, three temporary monitoring probes (LFG-1, LFG-2, and LFG-3) were installed to investigate subsurface conditions and to serve as additional monitoring locations. Summary plots, and a summary table of the gas quality data obtained from the temporary probes are included in Appendix G.

In 2009 and during the First Quarter of 2010, the sinkhole was observed to slowly increase in size. On March 30, 2010 a second sinkhole rapidly formed on the south slope of the landfill. Both sinkholes were filled with soil and covered with plastic sheeting. The temporary repairs were conducted between March 31 and April 3, 2010. A summary memorandum describing the repair activities was provided to the TPCHD on April 7, 2010.

During the first week of July 2010, the exposed soil slope south of the landfill was repaired by Corliss Resources, Inc. The repair activity consisted of removing approximately 2 feet of soil from the bank and replacing it with approximately 2 feet of silty clay soil. The soil was placed in lifts using an excavator and a bulldozer. The finished grade was track-walked parallel to the slope with a bulldozer. The landfill perimeter fence was temporarily removed to allow soil placement at the top of the slope. The slope was hydroseeded with a mulch/grass seed mixture in September 2010.

LRI and SCS are continuing to monitor the sinkhole repair area and south slope for stabilization, slope erosion, and odors. These inspections include weekly visual surveys by LRI personnel and monthly inspections by SCS personnel. In July 2011, additional measurements were performed

in order to assess subsurface conditions in the sinkholes. These measurements were detailed in the 2011 Annual Monitoring Report. In addition, three additional rounds of measurements were collected during the Second Quarter 2012. On May 8, 2012 methane measurements were collected from the three temporary gas probes, GP-14, and adjacent gas extraction wells using a GEM 2000. The maximum measurement was recorded. Carbon monoxide (CO) measurements were collected using Drager Gas Monitoring Tubes. Down-hole temperatures were measured using an Oakton Temp JKT connected to a type K thermocouple. Down-hole temperature was measured at one location only during this event due to a meter malfunction. A maximum temperature of 101.4°F at 15' bgs was measured at gas well N-60.

On May 22, 2012, methane, carbon dioxide (CO_2), and oxygen (O_2) were measured using a GEM 2000. Carbon monoxide measurements were taken using Drager tubes and down-hole temperatures were recorded using an Oakton Temp JKT connected to a type K thermocouple. A summary of carbon monoxide measurements and maximum down-hole temperature readings is included on a table in Appendix A. The results are also displayed on a series of figures in the Appendix A. The highest down-hole temperature measured during this event was 78.2°F at LFG-1 at a depth of 20 feet bgs. The maximum carbon monoxide concentration measured during this event was 1,000 parts per million (ppm), also at LFG-1. This elevated level of carbon monoxide is indicative of a continuing subsurface fire. However, the carbon monoxide may simply be trapped in the refuse since the gas extraction system is not operating in this area of the landfill. Therefore, on June 27, 2012, a vacuum pump was connected to LFG-1 in an attempt to remove trapped gasses in the area surrounding the probe. A Robinair 15100 pump was used to pull a vacuum on the probe for 3 hours at 1.2 cubic feet per minute (cfm) and 0.8 inches of water column. Periodic readings were taken to monitor changes in the gas content extracted from the probe. Only a minor decrease in carbon monoxide was observed. In addition, a minor decrease in carbon dioxide and a minor increase in oxygen were observed during the purge. A plot of the vacuum pump readings is included in Appendix A.

Results of the LFG monitoring conducted at the subsurface fire are inconclusive with regards to whether or not the oxidation event is ongoing. Surface settlement appears stable and down-hole temperature measurements are normal for municipal solid waste facilities. However, the elevated carbon monoxide reading at LFG-1 indicates subsurface oxidation may be continuing. Therefore, continued observation is recommended prior to repairing the cover liner system. Final repair of the composite geomembrane cover will occur after site inspection and monitoring data suggest the subsurface fire is extinguished. These criteria include increasing concentrations of methane and carbon dioxide in landfill gas probes and extraction wells, decreasing carbon monoxide concentrations, stabilization of the sinkhole area and south slope, and an absence of burning odors.

7.2 GROUNDWATER WELL MAINTENANCE

No significant well maintenance activities were performed in 2012.

Appendix A
Landfill Gas Monitoring Data

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

January 23, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	23-Jan	11:27	-0.04	0.0	4.9	2.3			
GP-1B	23-Jan	11:31	-0.02	0.0	9.1	11.8			
GP-1C	23-Jan	11:37	-0.13	0.0	10.2	9.8			
GP-2A	23-Jan	11:50	-0.07	0.7	16.5	1.1			
GP-2B	23-Jan	11:55	0.09	0.0	0.5	21.1			
GP-3S	23-Jan	12:05	0.00	0.0	4.2	14.6			
GP-3M	23-Jan	12:09	0.00	0.0	2.5	13.2			
GP-3D	23-Jan	12:13	-0.01	0.0	9.5	9.9			
GP-4A	23-Jan	12:22	0.00	0.0	0.2	21.2			
GP-4B	23-Jan	12:25	0.05	0.0	0.5	20.6			
GP-5A	23-Jan	12:34	0.00	0.0	0.1	21.4			
GP-5B	23-Jan	12:37	0.00	0.0	0.1	21.3			
GP-6	23-Jan	12:44	0.01	0.0	0.1	21.4			
GP-7S	23-Jan	12:51	0.18	0.0	0.2	20.6			
GP-7D	23-Jan	12:54	0.00	0.0	0.2	20.6			
GP-8A	23-Jan	13:07	0.00	0.0	0.3	20.5			
GP-8B	23-Jan	13:12	0.00	0.0	0.1	20.7			
GP-9	23-Jan	13:19	0.00	0.0	1.6	17.8			
GP-10	23-Jan	13:29	0.02	0.0	0.1	20.8			
GP-11	23-Jan	13:40	0.01	0.0	0.6	20.5			
GP-12	23-Jan	13:58	-6.13	0.0	0.4	20.4			
GP-13A	23-Jan	14:12	0.17	2.4	12.0	0.1			
GP-13B	23-Jan	14:18	0.11	0.0	0.3	20.4			
GP-14S	23-Jan	14:39	0.13	0.0	8.1	14.6			
GP-14D	23-Jan	14:43	0.01	0.0	16.1	2.6			
GP-15A	23-Jan	15:06	0.00	0.0	3.0	13.4			
GP-15B	23-Jan	15:09	0.00	0.0	10.1	4.4			
GP-16A	23-Jan	15:21	0.04	0.0	1.1	20.0			
GP-16B	23-Jan	15:23	0.10	0.0	0.8	20.1			
GP-17	23-Jan	15:34	-0.19	0.0	3.3	17.9			
GP-18	23-Jan	15:38	-0.01	0.0	1.5	20.4			
GP-19	23-Jan	15:44	0.00	0.0	0.3	20.8			
LFG-1	23-Jan	14:51	0.00	0.0	15.1	2.7			
LFG-2	23-Jan	14:54	0.05	3.2	19.8	0.0	35.6		
LFG-3	23-Jan	14:58	0.00	0.2	17.3	0.2			

General Data

		Weather Conditions	
Monitored by:	WC	Sky Cover:	Overcast
Instruments:	GEM 2000	Wind / Rain / Snow:	Rain
Calibration Date:	23-Jan-12	Temperature (^{o}F):	40

Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling
2. Local barometric pressure information was not available from January 19th through January 31st.

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

February 24, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	24-Feb	8:15	0.18	0.0	4.7	2.6			
GP-1B	24-Feb	8:19	0.15	0.0	7.9	13.4			
GP-1C	24-Feb	8:23	0.16	0.0	7.1	13.7			
GP-2A	24-Feb	8:31	0.18	2.1	16.4	1.2			
GP-2B	24-Feb	8:35	0.03	0.0	0.5	21.3			
GP-3S	24-Feb	8:40	0.07	0.0	3.8	13.8			
GP-3M	24-Feb	8:43	0.07	0.0	2.6	11.7			
GP-3D	24-Feb	8:46	0.05	0.0	10.1	3.0			
GP-4A	24-Feb	8:52	0.00	0.0	0.3	21.6			
GP-4B	24-Feb	8:55	0.05	0.0	0.2	21.6			
GP-5A	24-Feb	9:00	-0.01	0.0	0.2	21.6			
GP-5B	24-Feb	9:02	-0.01	0.0	0.1	21.7			
GP-6	24-Feb	9:08	-0.04	0.0	0.2	21.7			
GP-7S	24-Feb	9:14	0.00	0.0	0.3	21.6	0.4		
GP-7D	24-Feb	9:17	0.00	0.0	0.3	21.4			
GP-8A	24-Feb	9:26	0.27	0.0	0.3	21.7			
GP-8B	24-Feb	9:28	0.25	0.0	0.2	21.7			
GP-9	24-Feb	9:33	0.17	0.0	1.5	19.1			
GP-10	24-Feb	9:38	0.00	0.0	0.2	21.7			
GP-11	24-Feb	9:43	0.00	0.0	1.3	20.2			
GP-12	24-Feb	9:48	-0.02	0.0	2.9	12.5			
GP-13A	24-Feb	9:57	0.30	10.8	12.9	0.0	11.3		
GP-13B	24-Feb	10:01	0.01	0.0	0.5	21.7	0.4		
GP-14S	24-Feb	10:07	0.01	0.0	18.7	5.2			
GP-14D	24-Feb	10:09	0.00	0.0	17.6	0.4			
GP-15A	24-Feb	10:30	-0.06	0.0	2.5	17.4			
GP-15B	24-Feb	10:32	-0.04	0.0	10.6	4.0			
GP-16A	24-Feb	10:38	-0.01	0.0	2.7	18.7			
GP-16B	24-Feb	10:41	0.07	0.0	3.2	18.4			
GP-17	24-Feb	10:47	0.22	0.0	2.6	18.5			
GP-18	24-Feb	10:51	0.00	0.0	0.9	20.8			
GP-19	24-Feb	10:56	0.20	0.0	2.6	19.2			
LFG-1	24-Feb	10:15	0.00	0.0	13.1	6.0			
LFG-2	24-Feb	10:21	0.08	24.3	25.1	0.0	17.9		
LFG-3	24-Feb	10:25	0.00	0.4	16.6	0.7			

General Data

Weather Conditions

Monitored by:	S. Adlington	Sky Cover:	Overcast
Instruments:	GEM 2000	Wind / Rain / Snow:	None
Calibration Date:	24-Feb-12	Temperature (^{o}F):	45

Notes

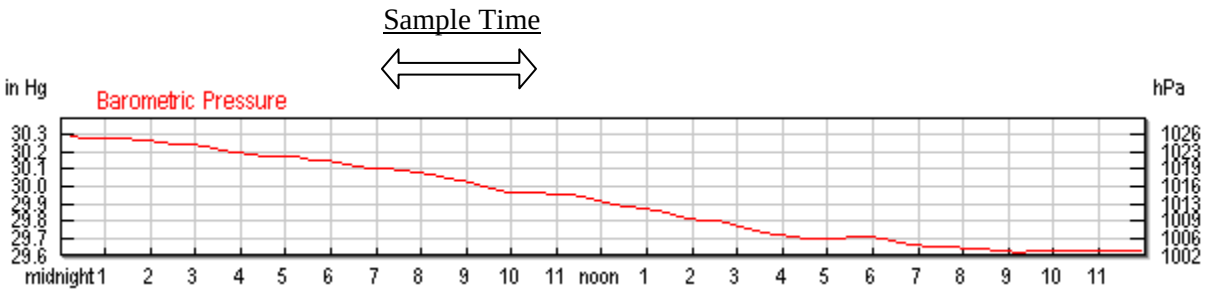
1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
Hidden Valley Landfill
February 2012

Barometric Pressure Trend for February 2012

Barometric Pressure Trend for February 24, 2012



Source: KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

March 16, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	16-Mar	14:35	0.30	0.0	4.5	3.6			
GP-1B	16-Mar	14:37	0.17	0.0	7.8	13.1			
GP-1C	16-Mar	14:40	0.00	0.0	8.8	12.0			
GP-2A	16-Mar	14:47	0.00	1.7	16.6	1.2	1.8		
GP-2B	16-Mar	14:50	0.03	0.0	0.6	20.8			
GP-3S	16-Mar	12:07	0.20	0.0	5.1	10.6			
GP-3M	16-Mar	12:10	0.00	0.0	2.8	9.5			
GP-3D	16-Mar	12:14	0.01	1.8	12.9	1.4	1.8		
GP-4A	16-Mar	12:21	-0.01	0.0	0.3	20.4			
GP-4B	16-Mar	12:23	0.11	0.0	0.3	20.4			
GP-5A	16-Mar	12:29	0.01	0.0	0.1	20.5			
GP-5B	16-Mar	12:32	0.00	0.0	0.1	20.6			
GP-6	16-Mar	12:36	0.02	0.0	0.1	20.6			
GP-7S	16-Mar	12:41	0.03	0.0	0.6	20.0			
GP-7D	16-Mar	12:44	0.02	0.0	0.4	20.3			
GP-8A	16-Mar	12:58	0.03	0.0	0.3	20.3			
GP-8B	16-Mar	13:00	0.04	0.0	0.1	20.4			
GP-9	16-Mar	13:06	0.01	0.0	1.5	17.9			
GP-10	16-Mar	13:11	0.01	0.0	0.2	20.4			
GP-11	16-Mar	13:16	0.00	0.0	1.4	18.0			
GP-12	16-Mar	13:26	0.01	0.0	1.1	17.7			
GP-13A	16-Mar	13:35	0.17	8.5	11.3	0.1	8.7		
GP-13B	16-Mar	11:18	0.01	0.0	0.4	20.3			
GP-14S	16-Mar	13:54	0.00	0.0	18.7	4.9			
GP-14D	16-Mar	13:56	0.00	0.0	17.4	0.5			
GP-15A	16-Mar	14:00	0.00	0.0	1.8	16.8			
GP-15B	16-Mar	14:02	0.00	0.0	10.2	4.5			
GP-16A	16-Mar	14:07	0.00	0.0	1.9	18.8			
GP-16B	16-Mar	14:10	0.44	0.0	1.8	18.7			
GP-17	16-Mar	14:17	0.00	0.0	1.8	19.3			
GP-18	16-Mar	14:21	0.00	0.0	0.9	20.0			
GP-19	16-Mar	14:25	0.00	0.0	2.2	18.7			
LFG-1	16-Mar	13:42	0.02	0.0	13.2	3.6			
LFG-2	16-Mar	13:47	0.09	15.7	22.6	0.0	16.3		
LFG-3	16-Mar	13:50	0.04	0.5	13.4	4.4	0.5		

General Data

		Weather Conditions	
Monitored by:	W. Chang	Sky Cover:	Overcast
Instruments:	GEM 2000	Wind / Rain / Snow:	None
Calibration Date:	16-Mar-12	Temperature (^{o}F):	47

Notes

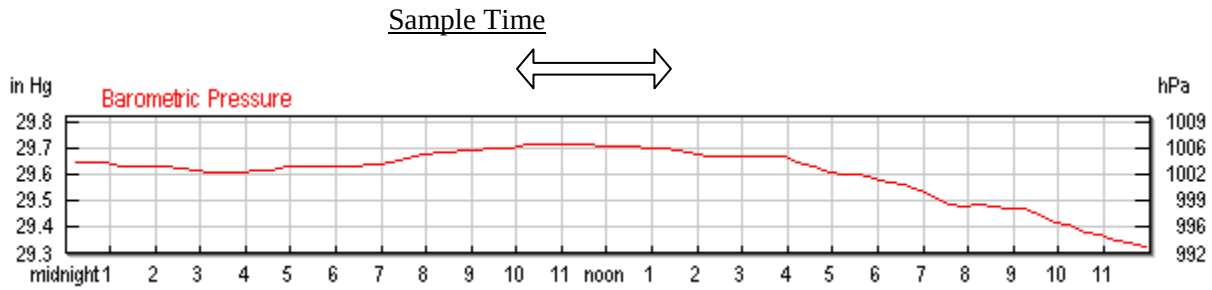
1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
Hidden Valley Landfill
March 2012

Barometric Pressure Trend for March 2012

Barometric Pressure Trend for March 16, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

April 27, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	27-Apr	10:12	0.00	0.0	4.2	3.5			
GP-1B	27-Apr	10:15	0.00	0.0	7.7	12.3			
GP-1C	27-Apr	10:18	-0.01	0.0	1.1	19.2			
GP-2A	27-Apr	10:21	-0.01	0.0	0.4	20.4			
GP-2B	27-Apr	10:23	0.01	0.0	0.2	20.7			
GP-3S	27-Apr	8:51	-0.06	0.0	5.3	9.0			
GP-3M	27-Apr	8:54	-0.94	0.0	2.5	9.8			
GP-3D	27-Apr	8:58	-0.06	0.0	10.6	5.3			
GP-4A	27-Apr	9:06	-0.02	0.0	0.5	20.5			
GP-4B	27-Apr	9:08	0.01	0.0	0.3	20.3			
GP-5A	27-Apr	9:13	-0.02	0.0	0.2	20.7			
GP-5B	27-Apr	9:15	-0.02	0.0	0.1	20.5			
GP-6	27-Apr	9:20	-0.01	0.0	0.1	20.4			
GP-7S	27-Apr	9:28	0.01	0.0	0.9	19.8			
GP-7D	27-Apr	9:25	0.00	0.0	0.2	20.3			
GP-8A	27-Apr	9:42	0.00	0.0	0.4	19.7			
GP-8B	27-Apr	9:45	0.02	0.0	0.2	20.5			
GP-9	27-Apr	9:51	0.18	0.0	1.4	18.6			
GP-10	27-Apr	9:57	0.02	0.0	0.5	20.6			
GP-11	27-Apr	10:03	0.02	0.0	1.6	19.5			
GP-12	27-Apr	8:38	-0.02	0.0	0.4	20.6			
GP-13A	27-Apr	8:28	0.35	8.3	10.6	0.3	8.4		
GP-13B	27-Apr	8:31	0.00	0.0	0.5	21.5			
GP-14S	27-Apr	8:03	0.00	0.0	17.5	6.5			
GP-14D	27-Apr	8:06	-0.02	0.0	16.4	1.2			
GP-15A	27-Apr	7:57	-4.13	0.0	3.0	16.1			
GP-15B	27-Apr	7:59	0.00	0.0	8.8	5.6			
GP-16A	27-Apr	10:31	0.02	0.0	0.5	20.3			
GP-16B	27-Apr	10:32	0.20	0.0	0.5	20.3			
GP-17	27-Apr	10:39	0.02	0.0	0.2	20.7			
GP-18	27-Apr	10:42	0.02	0.0	0.9	19.9			
GP-19	27-Apr	10:46	0.00	0.0	0.2	20.9			
LFG-1	27-Apr	8:11	0.00	0.1	13.5	1.5	0.2		
LFG-2	27-Apr	8:15	0.03	23.1	24.5	0.0	24		
LFG-3	27-Apr	8:18	-0.01	0.7	13.1	3.9	0.8		

General Data

		Weather Conditions	
Monitored by:	W. Chang	Sky Cover:	Overcast
Instruments:	GEM 2000	Wind / Rain / Snow:	None
Calibration Date:	27-Apr-12	Temperature (^{o}F):	51

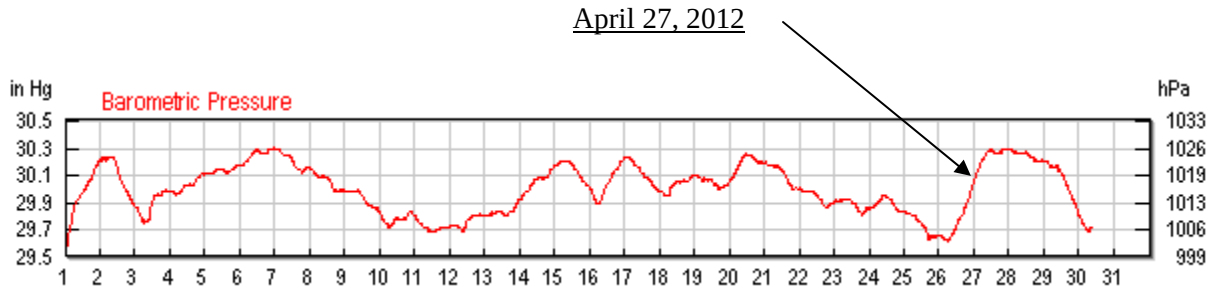
Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

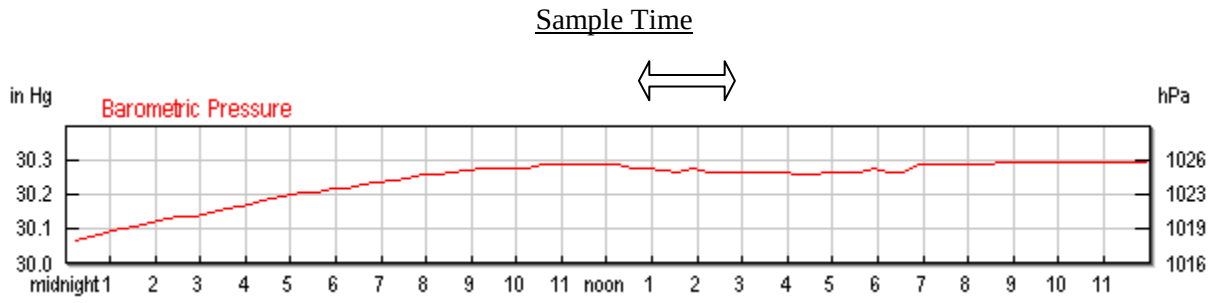
GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
HVL Landfill
April 2012

Barometric Pressure Trend for April 2012



Barometric Pressure Trend for April 27, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

May 11, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	11-May	9:58	-0.02	0.2	3.6	19.7			
GP-1B	11-May	10:04	0.00	0.0	8.4	11.3			
GP-1C	11-May	10:07	0.00	0.0	0.1	21.1			
GP-2A	11-May	10:11	0.12	0.2	2.5	17.7			
GP-2B	11-May	10:13	0.02	0.0	0.4	21.2			
GP-3S	11-May	10:19	0.01	0.0	2.3	15.0			
GP-3M	11-May	10:23	0.03	0.0	2.5	10.1			
GP-3D	11-May	10:26	0.03	0.3	12.5	1.8			
GP-4A	11-May	10:33	0.03	0.0	0.5	20.5			
GP-4B	11-May	10:35	0.13	0.0	0.3	20.5			
GP-5A	11-May	10:39	0.02	0.0	0.3	20.5			
GP-5B	11-May	10:42	0.02	0.0	0.2	20.6			
GP-6	11-May	10:45	0.02	0.0	0.2	20.5			
GP-7S	11-May	10:51	0.01	0.0	0.5	20.3			
GP-7D	11-May	10:53	0.00	0.0	0.3	20.3			
GP-8A	11-May	11:01	0.00	0.0	0.4	19.5			
GP-8B	11-May	11:03	0.01	0.0	0.2	20.5			
GP-9	11-May	11:09	0.23	0.0	0.8	19.1			
GP-10	11-May	11:13	0.09	0.0	0.3	20.6			
GP-11	11-May	11:19	0.03	0.0	1.2	19.6			
GP-12	11-May	11:23	0.02	0.0	0.4	20.0			
GP-13A	11-May	11:32	0.19	11.3	10.8	0.4	8.6		
GP-13B	11-May	11:35	0.12	0.0	0.5	20.4			
GP-14S	11-May	11:42	0.05	0.0	14.7	8.1			
GP-14D	11-May	11:44	0.05	0.0	14.2	2.4			
GP-15A	11-May	12:02	0.07	0.0	3.2	13.5			
GP-15B	11-May	12:04	0.04	0.0	8.2	6.0			
GP-16A	11-May	12:14	0.05	0.0	0.6	21.0			
GP-16B	11-May	12:16	0.06	0.0	0.1	21.1			
GP-17	11-May	12:23	0.00	0.0	0.8	19.3			
GP-18	11-May	12:27	0.00	0.0	0.3	20.8			
GP-19	11-May	12:31	0.00	0.0	2.1	18.9			
LFG-1	11-May	11:49	0.05	0.0	11.0	6.0			
LFG-2	11-May	11:53	0.05	7.0	17.9	0.0	8.7		
LFG-3	11-May	11:56	0.07	0.4	13.8	0.5			

General Data

Monitored by: W. Chang

Instruments: GEM 2000

Calibration Date: 11-May-12

Weather Conditions

Sky Cover: Clear

Wind / Rain / Snow: 0-Jan-00

Temperature (^{o}F): 48

Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

GP = Gas Probe

NM = Not measured - equipment malfunction

CH_4 = Methane

CO_2 = Carbon Dioxide

O_2 = Oxygen

S = shallow

M = medium

D = deep

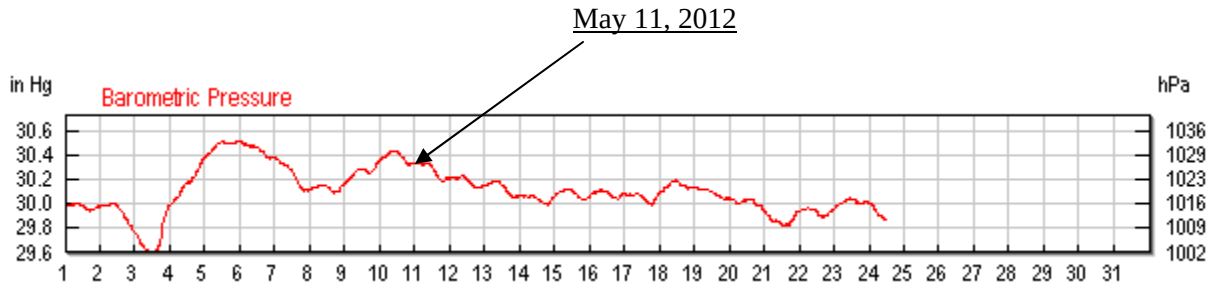
A= shallow

B = medium

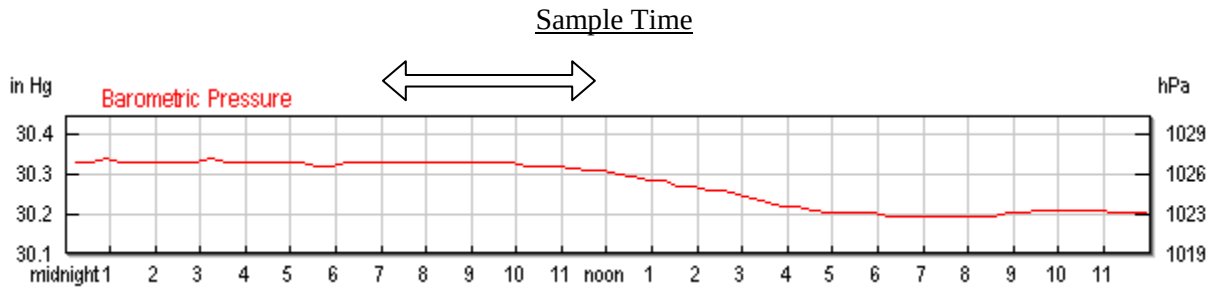
C = deep

Barometric Pressure Trend
HVL Landfill
May 2012

Barometric Pressure Trend for May 2012



Barometric Pressure Trend for May 11, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

May 22, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	22-May	7:43	-0.13	0.0	4.3	2.8			
GP-1B	22-May	7:46	0.01	0.0	9.4	10.3			
GP-1C	22-May	7:50	0.00	0.0	3.1	17.5			
GP-2A	22-May	8:02	0.00	1.2	15.8	2.3			
GP-2B	22-May	8:06	0.01	0.0	0.4	21.2			
GP-3S	22-May	8:15	-0.01	0.0	2.3	15.5			
GP-3M	22-May	8:18	0.00	0.0	2.6	10.7			
GP-3D	22-May	8:21	-0.01	0.0	11.6	3.3			
GP-4A	22-May	8:27	-0.01	0.0	0.8	20.1			
GP-4B	22-May	8:29	0.00	0.0	0.4	19.9			
GP-5A	22-May	8:34	-0.01	0.0	0.2	20.7			
GP-5B	22-May	8:36	0.00	0.0	0.3	20.6			
GP-6	22-May	8:41	-0.01	0.0	0.4	20.5			
GP-7S	22-May	8:47	0.00	0.0	0.5	20.1			
GP-7D	22-May	8:48	0.00	0.0	0.3	20.4			
GP-8A	22-May	8:58	0.00	0.0	0.9	18.1			
GP-8B	22-May	9:00	0.00	0.0	0.6	19.6			
GP-9	22-May	9:05	0.00	0.0	1.5	18.6			
GP-10	22-May	9:09	0.00	0.0	0.5	20.7			
GP-11	22-May	9:14	0.00	0.0	1.7	18.7			
GP-12	22-May	9:21	0.00	0.0	0.7	19.1			
GP-13A	22-May	9:30	0.00	8.3	11.2	0.7	8.4		
GP-13B	22-May	9:35	0.06	0.0	0.4	20.4			
GP-14S	22-May	10:15	-0.01	0.0	12.2	12.0			
GP-14D	22-May	10:17	0.00	0.0	14.5	3.3			
GP-15A	22-May	10:21	0.00	0.0	3.5	13.4			
GP-15B	22-May	10:23	-0.01	0.0	7.8	8.0			
GP-16A	22-May	10:31	-0.01	0.0	0.7	20.4			
GP-16B	22-May	10:33	0.13	0.0	0.5	20.6			
GP-17	22-May	10:43	0.00	0.0	3.7	15.9			
GP-18	22-May	10:56	0.00	0.0	3.7	16.7			
GP-19	22-May	11:01	0.00	0.0	2.3	19.1			
LFG-1	22-May	9:55	0.01	0.0	14.0	1.2			
LFG-2	22-May	9:51	0.00	7.8	18.9	0.1	8.5		
LFG-3	22-May	9:47	0.01	0.9	15.1	0.5	1.0		

General Data

		Weather Conditions	
Monitored by:	W. Chang	Sky Cover:	Overcast
Instruments:	GEM 2000	Wind / Rain / Snow:	Light Rain
Calibration Date:	22-May-12	Temperature (^{o}F):	49

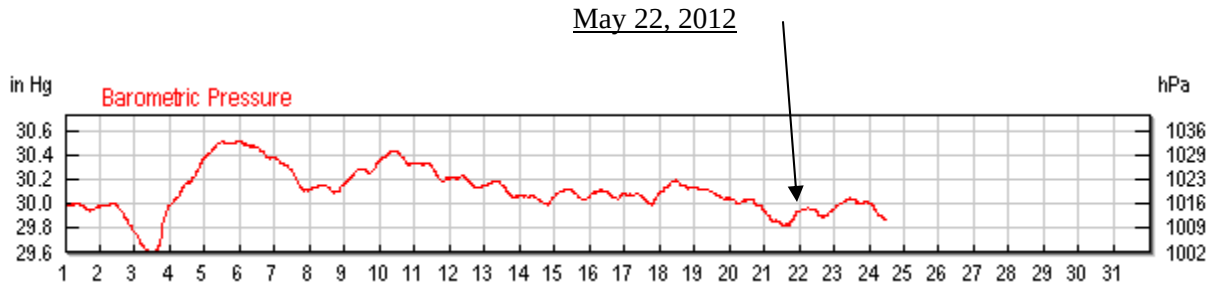
Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

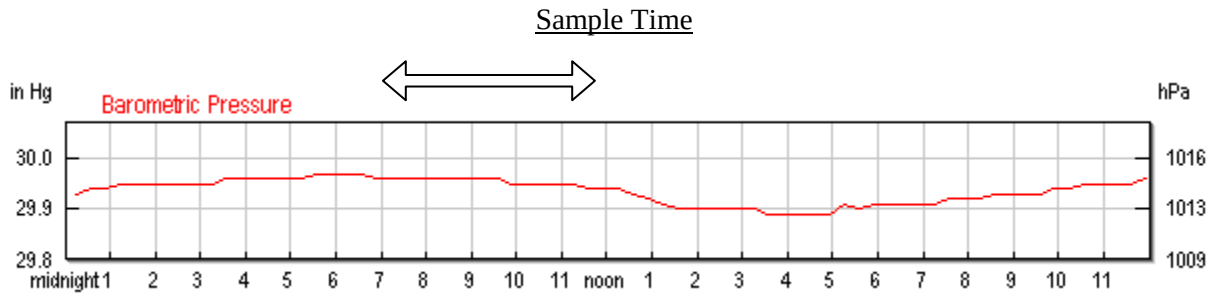
GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
HVL Landfill
May 2012

Barometric Pressure Trend for May 2012



Barometric Pressure Trend for May 22, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

June 15, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	15-Jun	8:20	0.00	0.0	4.5	1.9			
GP-1B	15-Jun	8:24	-0.04	0.0	9.7	9.6			
GP-1C	15-Jun	8:28	-0.03	0.0	3.0	17.5			
GP-2A	15-Jun	8:40	-0.03	1.7	15.9	1.0	2.4		
GP-2B	15-Jun	8:44	0.03	0.0	0.4	20.8			
GP-3S	15-Jun	8:53	-0.04	0.0	2.6	15.3			
GP-3M	15-Jun	8:56	-0.02	0.0	2.5	11.2			
GP-3D	15-Jun	9:00	-0.02	0.2	12.3	1.4	0.3		
GP-4A	15-Jun	9:07	0.00	0.0	0.4	20.4			
GP-4B	15-Jun	9:11	0.05	0.0	0.3	20.3			
GP-5A	15-Jun	9:17	-0.01	0.0	0.4	20.3			
GP-5B	15-Jun	9:21	0.00	0.0	0.2	20.6			
GP-6	15-Jun	9:26	0.00	0.0	0.4	20.5			
GP-7S	15-Jun	9:34	0.00	0.0	0.7	20.2			
GP-7D	15-Jun	9:36	0.00	0.0	0.3	20.3			
GP-8A	15-Jun	9:46	0.00	0.0	1.1	19.6			
GP-8B	15-Jun	9:49	0.00	0.0	0.3	20.7			
GP-9	15-Jun	9:55	0.00	0.0	1.3	18.8			
GP-10	15-Jun	10:00	0.01	0.0	0.1	20.9			
GP-11	15-Jun	10:06	0.00	0.0	1.7	19.4			
GP-12	15-Jun	10:12	0.00	0.0	0.3	20.8			
GP-13A	15-Jun	10:21	0.08	12.0	9.6	0.5	12.1		Spike just short of 2 min into monitoring
GP-13B	15-Jun	10:25	0.01	0.0	0.2	21.2			(Cap was not on 13A)
GP-14S	15-Jun	10:39	0.01	0.0	3.9	18.1		16.0	
GP-14D	15-Jun	10:42	0.00	0.0	14.7	1.1			
GP-15A	15-Jun	11:03	0.00	0.0	3.7	15.8			
GP-15B	15-Jun	11:05	0.01	0.0	4.9	12.8			
GP-16A	15-Jun	11:12	0.00	0.0	0.3	20.5			
GP-16B	15-Jun	11:15	0.16	0.0	0.3	20.6			
GP-17	15-Jun	11:22	-0.10	0.0	3.7	16.5			
GP-18	15-Jun	11:27	0.00	0.0	3.9	17.5			
GP-19	15-Jun	11:32	-0.01	0.0	0.1	21.4			
LFG-1	15-Jun	10:48	0.00	0.0	12.8	3.2			
LFG-2	15-Jun	10:52	0.04	6.8	18.2	0.2	12.0		
LFG-3	15-Jun	10:58	0.03	0.1	14.4	0.3	0.2		

General Data

		Weather Conditions	
Monitored by:	W. Chang	Sky Cover:	Clear
Instruments:	GEM 2000	Wind / Rain / Snow:	0-Jan-00
Calibration Date:	15-Jun-12	Temperature (^{o}F):	63

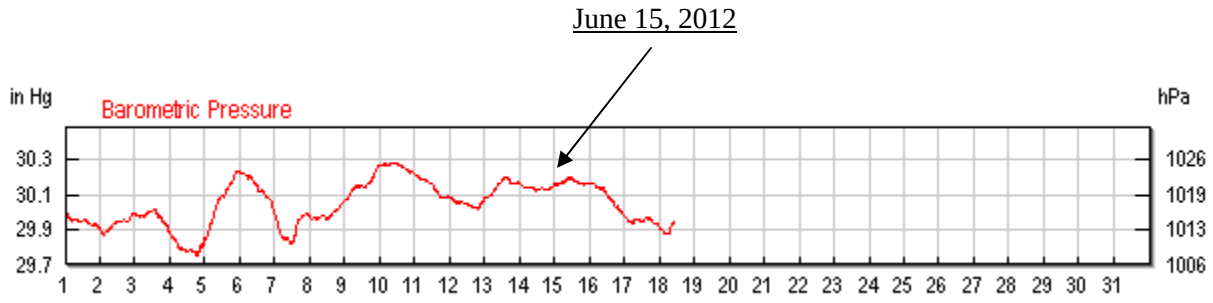
Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

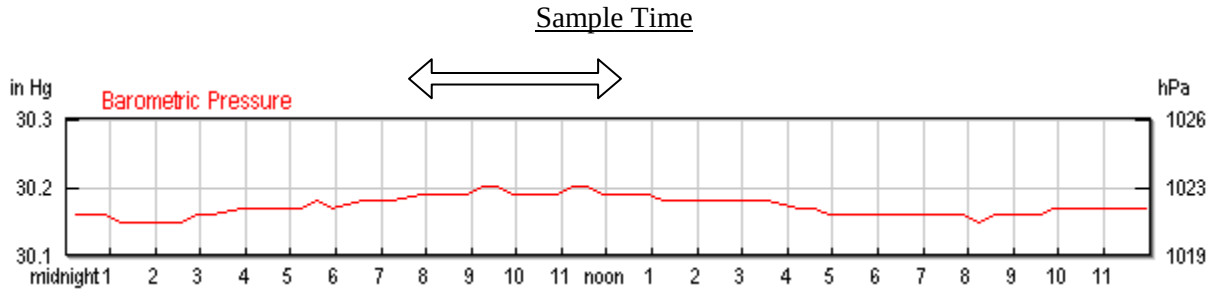
GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
HVL Landfill
June 2012

Barometric Pressure Trend for June 2012



Barometric Pressure Trend for June 15, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

July 27, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	27-Jul	8:07	-0.21	0.0	4.5	1.5			
GP-1B	27-Jul	8:12	-0.24	0.0	10.9	7.5			
GP-1C	27-Jul	8:17	-0.21	0.0	1.9	18.9			
GP-2A	27-Jul	8:30	-0.21	1.4	15.8	1.9			
GP-2B	27-Jul	8:35	-0.17	0.0	0.3	21.1			
GP-3S	27-Jul	9:11	-2.80	0.0	6.4	16.4			
GP-3M	27-Jul	9:15	-0.21	0.0	2.5	14.1			
GP-3D	27-Jul	9:19	-0.21	0.0	6.7	16.2			
GP-4A	27-Jul	9:32	-0.17	0.0	0.1	21.3			
GP-4B	27-Jul	9:38	-0.17	0.0	0.1	21.2			
GP-5A	27-Jul	9:55	0.00	0.0	0.6	19.7			
GP-5B	27-Jul	9:59	0.00	0.0	0.4	20.3			
GP-6	27-Jul	10:06	0.00	0.0	0.8	20.5			
GP-7S	27-Jul	10:15	0.00	0.0	0.8	19.7			
GP-7D	27-Jul	10:19	0.00	0.0	0.5	20.0			
GP-8A	27-Jul	10:32	0.01	0.0	2.5	17.5			
GP-8B	27-Jul	10:36	0.00	0.0	1.8	18.8			
GP-9	27-Jul	10:43	0.01	0.0	1.4	18.7			
GP-10	27-Jul	10:56	0.02	0.0	0.2	20.8			
GP-11	27-Jul	11:23	0.01	0.0	1.5	19.8			
GP-12	27-Jul	11:32	0.02	0.0	4.0	14.5			
GP-13A	27-Jul	11:45	0.07	5.1	14.4	0.5			
GP-13B	27-Jul	11:49	0.08	0.0	0.3	21.0			
GP-14S	27-Jul	12:10	0.03	0.0	4.2	18.1			
GP-14D	27-Jul	12:20	0.03	0.0	9.4	9.9			
GP-15A	27-Jul	12:25	0.05	0.0	0.2	21.1			
GP-15B	27-Jul	12:29	0.06	0.0	3.4	17.8			
GP-16A	27-Jul	12:43	0.06	0.0	0.3	20.8			
GP-16B	27-Jul	12:47	0.19	0.0	0.3	20.9			
GP-17	27-Jul	12:54	0.06	0.0	5.3	14.4			
GP-18	27-Jul	13:05	0.07	0.0	8.2	13.1			
GP-19	27-Jul	13:12	0.04	0.0	1.2	20.0			
LFG-1	27-Jul	13:59	0.06	0.3	17.4	0.1			
LFG-2	27-Jul	14:05	0.05	0.1	15.8	0.8			
LFG-3	27-Jul	14:10	0.08	3.3	19.1	0.0			

General Data

		Weather Conditions	
Monitored by:	E. Smart	Sky Cover:	Overcast
Instruments:	GEM 2000	Wind / Rain / Snow:	0.00
Calibration Date:	27-Jul-12	Temperature (^{o}F):	63

Notes

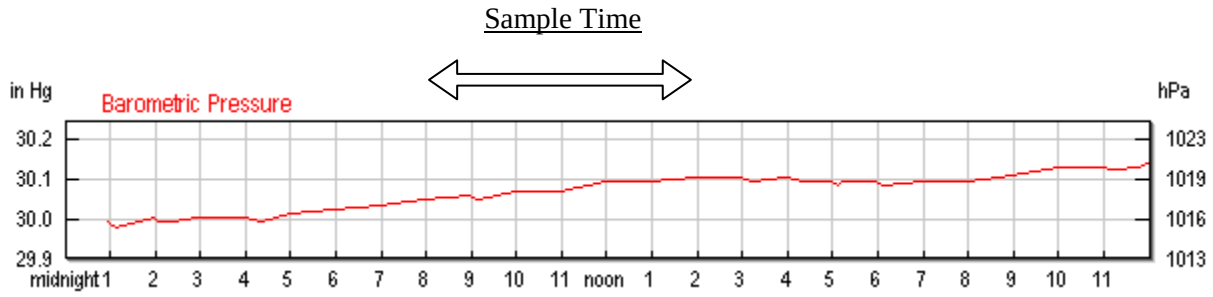
1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
HVL Landfill
July 2012

Barometric Pressure Trend for July 2012

Barometric Pressure Trend for July 27, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

August 28, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	28-Aug	8:29	0.00	0.0	4.6	0.5			
GP-1B	28-Aug	8:32	-0.04	0.0	12.3	5.0			
GP-1C	28-Aug	8:34	0.11	0.0	1.4	19.1			
GP-2A	28-Aug	8:39	0.12	0.1	1.2	19.0			
GP-2B	28-Aug	8:43	0.00	0.0	0.3	20.7			
GP-3S	28-Aug	8:48	0.10	0.0	0.6	20.4			
GP-3M	28-Aug	8:50	0.02	0.0	2.2	16.4			
GP-3D	28-Aug	8:53	-0.01	0.0	5.7	15.1			
GP-4A	28-Aug	9:00	0.00	0.0	0.3	20.7			
GP-4B	28-Aug	9:03	0.19	0.0	0.5	20.3			
GP-5A	28-Aug	9:08	0.00	0.0	0.9	19.6			
GP-5B	28-Aug	9:10	0.00	0.0	0.5	19.8			
GP-6	28-Aug	9:15	-0.01	0.0	0.8	20.2			
GP-7S	28-Aug	9:21	0.02	0.0	1.3	19.5			
GP-7D	28-Aug	9:24	0.00	0.0	0.6	19.8			
GP-8A	28-Aug	9:33	0.09	0.0	4.1	16.3			
GP-8B	28-Aug	9:36	0.01	0.0	2.0	18.5			
GP-9	28-Aug	9:41	0.00	0.0	1.9	17.8			
GP-10	28-Aug	9:47	0.29	0.0	0.4	20.1			
GP-11	28-Aug	9:52	0.14	0.0	1.3	19.4			
GP-12	28-Aug	9:57	0.01	0.0	6.9	11.2			
GP-13A	28-Aug	10:02	0.43	0.0	13.4	0.2			
GP-13B	28-Aug	10:05	0.05	0.0	0.4	20.3			
GP-14S	28-Aug	10:09	0.03	0.0	17.6	6.2			
GP-14D	28-Aug	10:12	0.00	0.0	16.2	0.5			
GP-15A	28-Aug	10:33	0.01	0.0	4.1	15.8			
GP-15B	28-Aug	10:35	0.02	0.0	3.8	17.3			
GP-16A	28-Aug	10:40	0.01	0.0	0.8	19.8			
GP-16B	28-Aug	10:42	0.07	0.0	0.5	20.0			
GP-17	28-Aug	10:49	0.04	0.0	6.0	13.7			
GP-18	28-Aug	10:53	0.02	0.0	9.1	12.2			
GP-19	28-Aug	10:58	0.01	0.0	0.3	20.9			
LFG-1	28-Aug	10:16	0.30	0.7	13.6	3.2	1.0		
LFG-2	28-Aug	10:21	0.10	0.0	14.0	2.4			
LFG-3	28-Aug	10:27	0.05	10.5	21.2	0.0			

General Data

		Weather Conditions	
Monitored by:	S. Adlington	Sky Cover:	Light Clouds
Instruments:	GEM 2000	Wind / Rain / Snow:	0.00
Calibration Date:	28-Aug-12	Temperature (^{o}F):	64

Notes

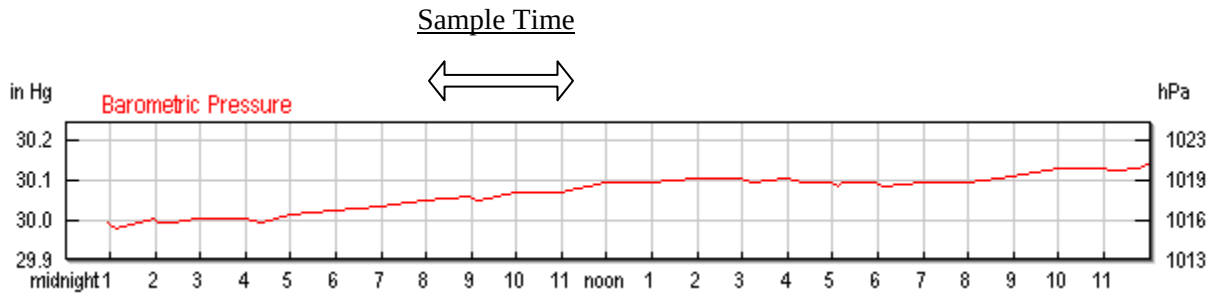
1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
HVL Landfill
August 2012

Barometric Pressure Trend for August 2012

Barometric Pressure Trend for August 28, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

September 21, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	21-Sep	8:03	0.02	0.0	4.7	0.2			
GP-1B	21-Sep	8:08	-0.02	0.0	13.8	2.8			
GP-1C	21-Sep	8:12	0.00	0.0	2.7	17.9			
GP-2A	21-Sep	8:24	0.00	1.8	15.9	1.5	2.6		
GP-2B	21-Sep	8:28	0.00	0.0	0.5	21.3			
GP-3S	21-Sep	8:37	-0.01	0.0	0.7	20.9			
GP-3M	21-Sep	8:40	-0.03	0.0	2.1	18.0			
GP-3D	21-Sep	8:44	-0.02	0.0	5.3	14.4			
GP-4A	21-Sep	8:54	-0.01	0.0	1.1	19.5			
GP-4B	21-Sep	8:56	0.00	0.0	0.7	20.6			
GP-5A	21-Sep	9:04	-0.01	0.0	0.9	20.2			
GP-5B	21-Sep	9:06	-0.01	0.0	0.5	20.6			
GP-6	21-Sep	9:11	-0.02	0.0	0.6	20.9			
GP-7S	21-Sep	9:19	0.15	0.0	1.1	20.6			
GP-7D	21-Sep	9:22	-0.01	0.0	0.8	20.2			
GP-8A	21-Sep	9:34	-0.01	0.0	6.9	4.2			
GP-8B	21-Sep	9:37	-0.01	0.0	1.5	19.7			
GP-9	21-Sep	9:43	0.01	0.0	2.5	18.7			
GP-10	21-Sep	9:48	-0.01	0.0	0.5	20.7			
GP-11	21-Sep	9:54	-0.01	0.0	1.1	20.0			
GP-12	21-Sep	10:05	0.00	0.0	6.8	11.9			
GP-13A	21-Sep	10:14	0.06	0.0	11.6	5.1			
GP-13B	21-Sep	10:21	0.09	0.0	0.4	21.1			
GP-14S	21-Sep	10:35	0.00	0.0	9.1	14.4			
GP-14D	21-Sep	10:37	0.00	0.0	16.9	0.1			
GP-15A	21-Sep	10:42	0.02	0.0	4.2	16.6			
GP-15B	21-Sep	10:44	0.01	0.0	4.3	14.9			
GP-16A	21-Sep	10:50	0.00	0.0	0.9	19.9			
GP-16B	21-Sep	10:52	0.10	0.0	0.7	20.1			
GP-17	21-Sep	10:59	0.01	0.0	6.0	14.1			
GP-18	21-Sep	11:05	0.01	0.0	6.4	15.9			
GP-19	21-Sep	11:11	0.02	0.0	0.3	21.3			
LFG-1	21-Sep	14:26	0.00	0.0	13.9	1.7			
LFG-2	21-Sep	14:32	0.01	0.6	13.2	4.8			
LFG-3	21-Sep	14:29	0.02	21.0	25.4	0.0			

General Data

		Weather Conditions	
Monitored by:	W. Chang	Sky Cover:	Clear
Instruments:	GEM 2000	Wind / Rain / Snow:	None
Calibration Date:	21-Sep-12	Temperature (^{o}F):	59

Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

GP = Gas Probe
NM = Not measured - equipment malfunction

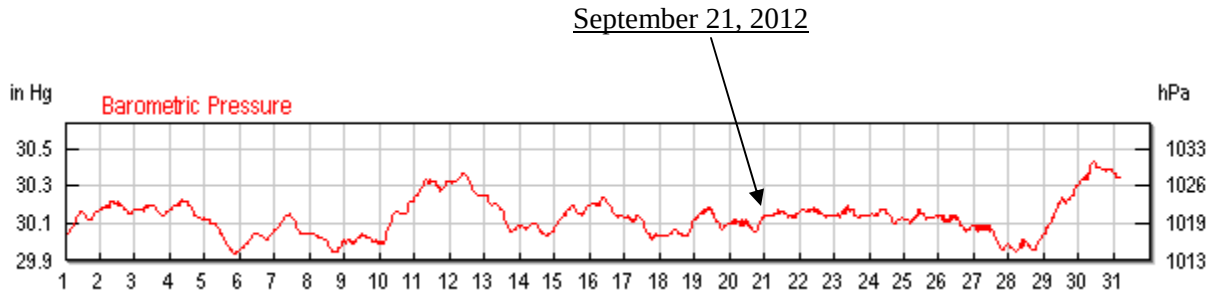
CH_4 = Methane
CO_2 = Carbon Dioxide
O_2 = Oxygen

S = shallow
M = medium
D = deep

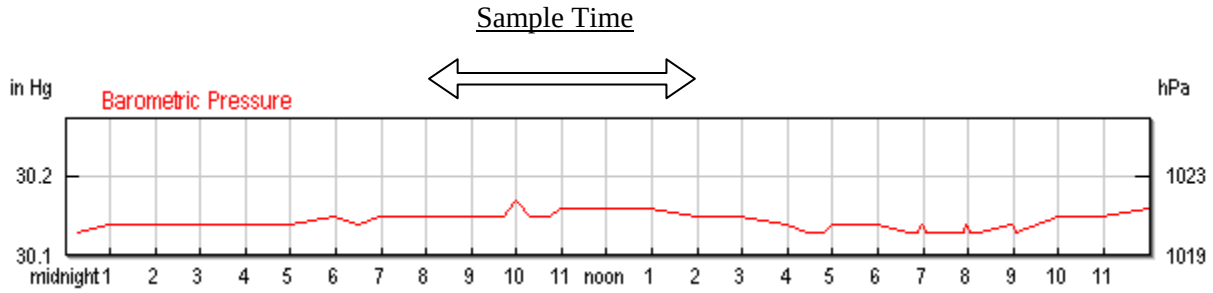
A= shallow
B = medium
C = deep

Barometric Pressure Trend
HVL Landfill
September 2012

Barometric Pressure Trend for September 2012



Barometric Pressure Trend for September 21, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

October 25, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	25-Oct	7:30	0.09	0.2	5.2	0.0			
GP-1B	25-Oct	7:37	-0.08	0.5	13.9	3.5			
GP-1C	25-Oct	7:42	0.07	0.0	6.3	13.7			
GP-2A	25-Oct	7:53	-0.09	2.4	16.6	0.4			
GP-2B	25-Oct	7:56	0.26	0.0	0.6	21.7			
GP-3S	25-Oct	8:09	0.07	0.0	1.0	20.1			
GP-3M	25-Oct	8:12	0.19	0.0	2.2	15.8			
GP-3D	25-Oct	8:14	-0.06	0.0	8.4	7.0			
GP-4A	25-Oct	8:20	-0.03	0.0	0.5	21.6			
GP-4B	25-Oct	8:23	0.02	0.0	0.4	21.8			
GP-5A	25-Oct	8:28	-0.04	0.0	0.1	22.0			
GP-5B	25-Oct	8:31	-0.04	0.0	0.2	21.7			
GP-6	25-Oct	8:36	0.00	0.0	0.2	22.0			
GP-7S	25-Oct	8:41	0.14	0.0	0.4	21.7			
GP-7D	25-Oct	8:43	0.00	0.0	0.6	21.4			
GP-8A	25-Oct	8:53	0.00	0.0	3.6	19.3			
GP-8B	25-Oct	8:56	0.25	0.0	0.4	21.8			
GP-9	25-Oct	9:01	0.13	0.0	1.8	18.4			
GP-10	25-Oct	9:06	0.00	0.0	0.3	22.0			
GP-11	25-Oct	9:11	0.00	0.0	1.2	20.8			
GP-12	25-Oct	9:16	0.00	0.0	1.4	21.7			
GP-13A	25-Oct	9:29	0.40	0.0	11.7	0.8			
GP-13B	25-Oct	9:32	0.02	0.0	1.0	21.8			
GP-14S	25-Oct	9:54	0.00	0.0	17.5	5.9			
GP-14D	25-Oct	9:56	0.00	0.0	17.2	1.2			
GP-15A	25-Oct	10:01	-0.01	0.0	2.7	19.5			
GP-15B	25-Oct	10:03	0.00	0.0	5.7	12.5			
GP-16A	25-Oct	10:13	0.00	0.0	1.3	21.4			
GP-16B	25-Oct	10:15	0.12	0.0	1.1	21.3			
GP-17	25-Oct	10:22	0.19	0.0	4.8	16.6			
GP-18	25-Oct	10:28	-0.01	0.0	0.9	21.4			
GP-19	25-Oct	10:33	-0.02	0.0	0.2	22.0			
LFG-1	25-Oct	9:50	0.00	0.8	16.6	1.3			
LFG-2	25-Oct	9:38	0.01	0.0	12.3	5.0			
LFG-3	25-Oct	9:45	0.03	3.8	19.5	0.0	16.3		

General Data

Monitored by: S. Adlington

Instruments: GEM 2000

Calibration Date: 25-Oct-12

Weather Conditions

Sky Cover: Lt. Clouds

Wind / Rain / Snow: None

Temperature (^{o}F): 47

Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

GP = Gas Probe

NM = Not measured - equipment malfunction

CH_4 = Methane

CO_2 = Carbon Dioxide

O_2 = Oxygen

S = shallow

M = medium

D = deep

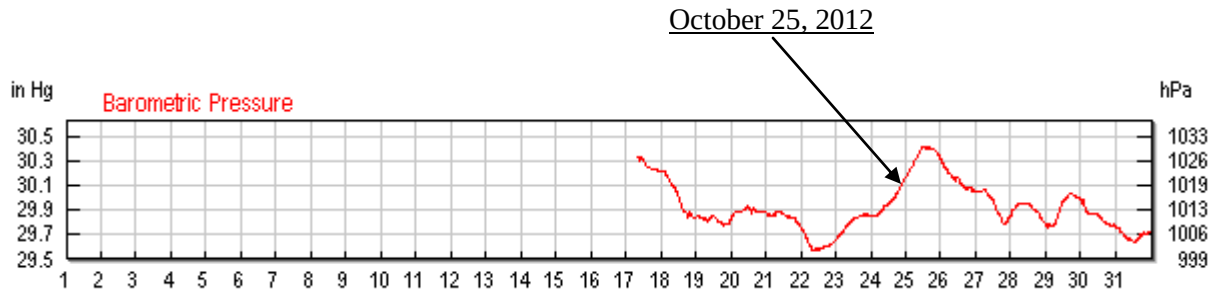
A= shallow

B = medium

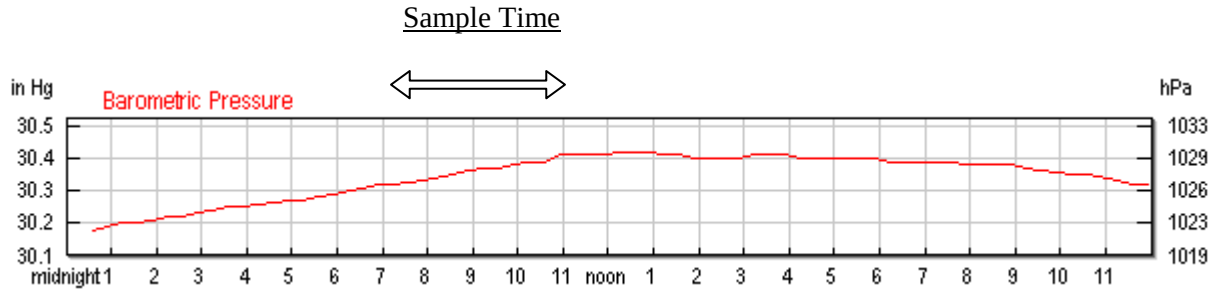
C = deep

Barometric Pressure Trend
HVL Landfill
October 2012

Barometric Pressure Trend for October 2012



Barometric Pressure Trend for October 25, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

November 19, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	19-Nov	9:33	0.18	0.1	5.5	0.0			
GP-1B	19-Nov	9:37	0.06	0.5	16.0	0.8			
GP-1C	19-Nov	9:41	0.08	0.0	10.7	7.0			
GP-2A	19-Nov	9:49	0.10	3.7	17.3	0.6			
GP-2B	19-Nov	9:52	0.03	0.0	0.3	20.4			
GP-3S	19-Nov	9:57	0.17	0.0	3.4	15.0			
GP-3M	19-Nov	10:00	0.24	0.0	2.8	12.9			
GP-3D	19-Nov	10:03	0.06	0.0	11.2	3.9	1.9		
GP-4A	19-Nov	10:10	0.02	0.0	1.6	17.8			
GP-4B	19-Nov	10:12	0.05	0.0	0.5	19.9			
GP-5A	19-Nov	10:17	0.00	0.0	0.8	19.6			
GP-5B	19-Nov	10:20	0.00	0.0	0.6	19.0			
GP-6	19-Nov	10:25	0.00	0.0	0.6	19.8			
GP-7S	19-Nov	10:32	0.45	0.0	0.4	20.3			
GP-7D	19-Nov	10:35	0.04	0.0	0.8	19.7			
GP-8A	19-Nov	10:45	0.13	0.0	5.5	9.8			
GP-8B	19-Nov	10:48	0.23	0.0	2.0	18.2			
GP-9	19-Nov	10:54	0.33	0.0	2.0	15.8			
GP-10	19-Nov	10:59	-0.01	0.0	0.3	20.2			
GP-11	19-Nov	11:04	0.29	0.0	3.0	14.0			
GP-12	19-Nov	11:16	0.00	0.0	4.3	9.8			
GP-13A	19-Nov	11:22	-0.02	3.1	13.1	0.0	4.4		
GP-13B	19-Nov	11:26	-0.01	0.0	0.4	19.9			
GP-14S	19-Nov	11:32	0.50	0.0	16.8	4.8			
GP-14D	19-Nov	11:34	-3.36	0.0	18.4	0.0			
GP-15A	19-Nov	11:39	-0.03	0.0	4.1	10.8			
GP-15B	19-Nov	11:42	0.08	0.0	10.5	4.0			
GP-16A	19-Nov	12:06	0.00	0.0	5.4	14.0			
GP-16B	19-Nov	12:09	0.03	0.0	5.1	14.0			
GP-17	19-Nov	12:15	0.17	0.0	6.3	12.7			
GP-18	19-Nov	12:20	0.00	0.0	1.9	18.5			
GP-19	19-Nov	12:25	0.05	0.0	4.0	14.3			
LFG-1	19-Nov	11:49	0.18	1.9	17.1	0.0			
LFG-2	19-Nov	11:53	0.13	0.0	12.3	3.8			
LFG-3	19-Nov	11:58	0.17	47.9	33.0	0.0			

General Data

		Weather Conditions	
Monitored by:	S. Adlington	Sky Cover:	Lt. Clouds
Instruments:	GEM 2000	Wind / Rain / Snow:	None
Calibration Date:	19-Nov-12	Temperature (^{o}F):	49

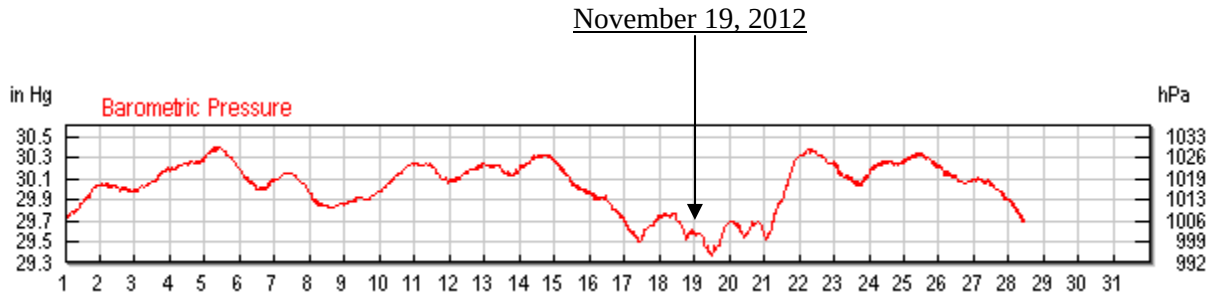
Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling

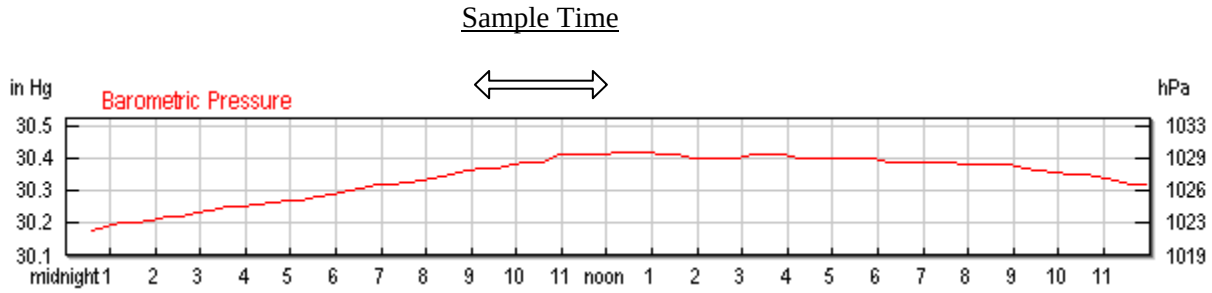
GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
HVL Landfill
November 2012

Barometric Pressure Trend for November 2012



Barometric Pressure Trend for November 19, 2012



Source : KPLU Airport

Landfill Gas Probe Monitoring

SCS Engineers

Hidden Valley Landfill

04212004.02

PCRCD dba LRI

December 20, 2012

Location Reference Designation	Date	Time	Pressure (in. H_2O)	CH_4 (% vol.)	CO_2 (% vol.)	O_2 (% vol.)	Comments: Spike CH4 *Note 1* (% vol.)	Comments: Spike CO2 *Note 1* (% vol.)	Comments: Other
Gas Probes									
GP-1A	20-Dec	8:49	1.26	0.0	5.4	0.0			
GP-1B	20-Dec	8:54	-8.02	0.0	14.6	3.2			
GP-1C	20-Dec	8:59	-7.89	0.0	14.2	3.1			
GP-2A	20-Dec	9:56	0.33	0.7	15.4	0.1			
GP-2B	20-Dec	10:01	-2.01	0.0	0.2	22.3			
GP-3S	20-Dec	10:07	-7.50	0.0	5.4	14.7			
GP-3M	20-Dec	10:09	0.36	0.0	3.1	10.9			
GP-3D	20-Dec	10:11	0.30	3.7	14.0	1.4			
GP-4A	20-Dec	10:16	-0.01	0.0	0.2	22.1			
GP-4B	20-Dec	10:19	-0.01	0.0	0.1	22.1			
GP-5A	20-Dec	10:23	-0.02	0.0	0.1	22.2			
GP-5B	20-Dec	10:26	-0.02	0.0	0.1	22.1			
GP-6	20-Dec	10:39	-0.02	0.0	0.2	21.9			
GP-7S	20-Dec	10:45	0.54	0.0	0.3	21.7			
GP-7D	NM	NM	NM	NM	NM	NM			
GP-8A	20-Dec	11:10	0.28	0.0	1.8	19.2			
GP-8B	20-Dec	11:12	0.54	0.0	0.3	20.8			
GP-9	20-Dec	11:16	0.36	0.0	2.1	15.6			
GP-10	20-Dec	11:21	-0.10	0.0	0.2	20.9			
GP-11	20-Dec	11:24	0.27	0.0	3.5	16.3			
GP-12	20-Dec	11:35	-0.03	0.0	2.6	16.7			
GP-13A	20-Dec	11:52	-0.02	5.6	12.1	0.0			
GP-13B	20-Dec	11:55	-0.79	0.0	0.5	20.5			
GP-14S	NM	NM	NM	NM	NM	NM			
GP-14D	NM	NM	NM	NM	NM	NM			
GP-15A	20-Dec	12:07	-0.01	0.0	4.4	11.9			
GP-15B	20-Dec	12:09	-0.01	0.0	11.0	3.0			
GP-16A	20-Dec	12:32	0.21	0.0	1.9	20.5			
GP-16B	20-Dec	12:34	-0.03	0.0	0.3	20.6			
GP-17	20-Dec	12:42	0.51	0.0	4.8	15.7			
GP-18	20-Dec	12:53	-0.03	0.0	0.2	20.7			
GP-19	20-Dec	12:48	-0.04	0.0	0.2	20.7			
LFG-1	20-Dec	11:58	-0.02	0.2	17.3	0.0			
LFG-2	20-Dec	12:00	-1.05	1.0	17.2	0.0			
LFG-3	20-Dec	12:03	-3.40	6.8	20.3	0.0			

General Data

		Weather Conditions	
Monitored by:	M. O'hare	Sky Cover:	Fog with Lt. Clouds
Instruments:	GEM 2000	Wind / Rain / Snow:	Lt. Rain
Calibration Date:	20-Dec-12	Temperature (^{o}F):	40

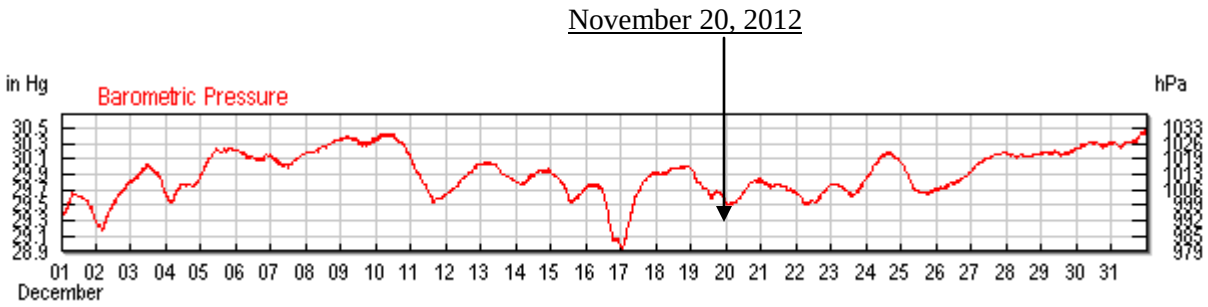
Notes

1. Measurement for spike concentrations of CH4 and CO2 are recorded if observed during sampling
2. NM indicates not measured

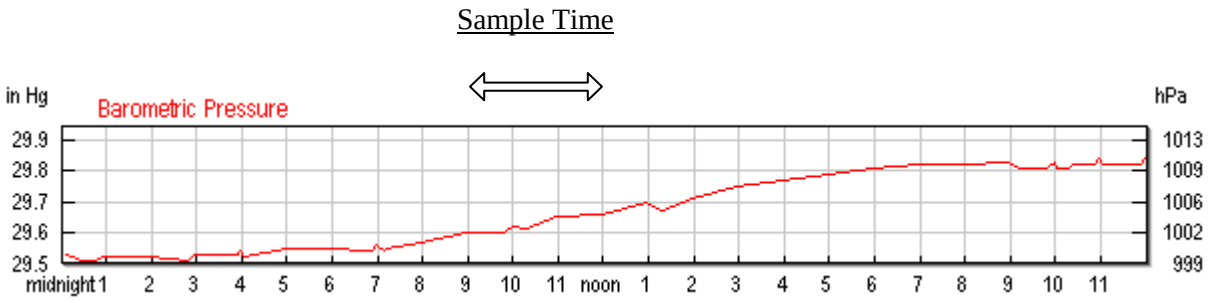
GP = Gas Probe	CH_4 = Methane	S = shallow	A= shallow
NM = Not measured -	CO_2 = Carbon Dioxide	M = medium	B = medium
equipment malfunction	O_2 = Oxygen	D = deep	C = deep

Barometric Pressure Trend
HVL Landfill
December 2012

Barometric Pressure Trend for December 2012



Barometric Pressure Trend for December 20, 2012

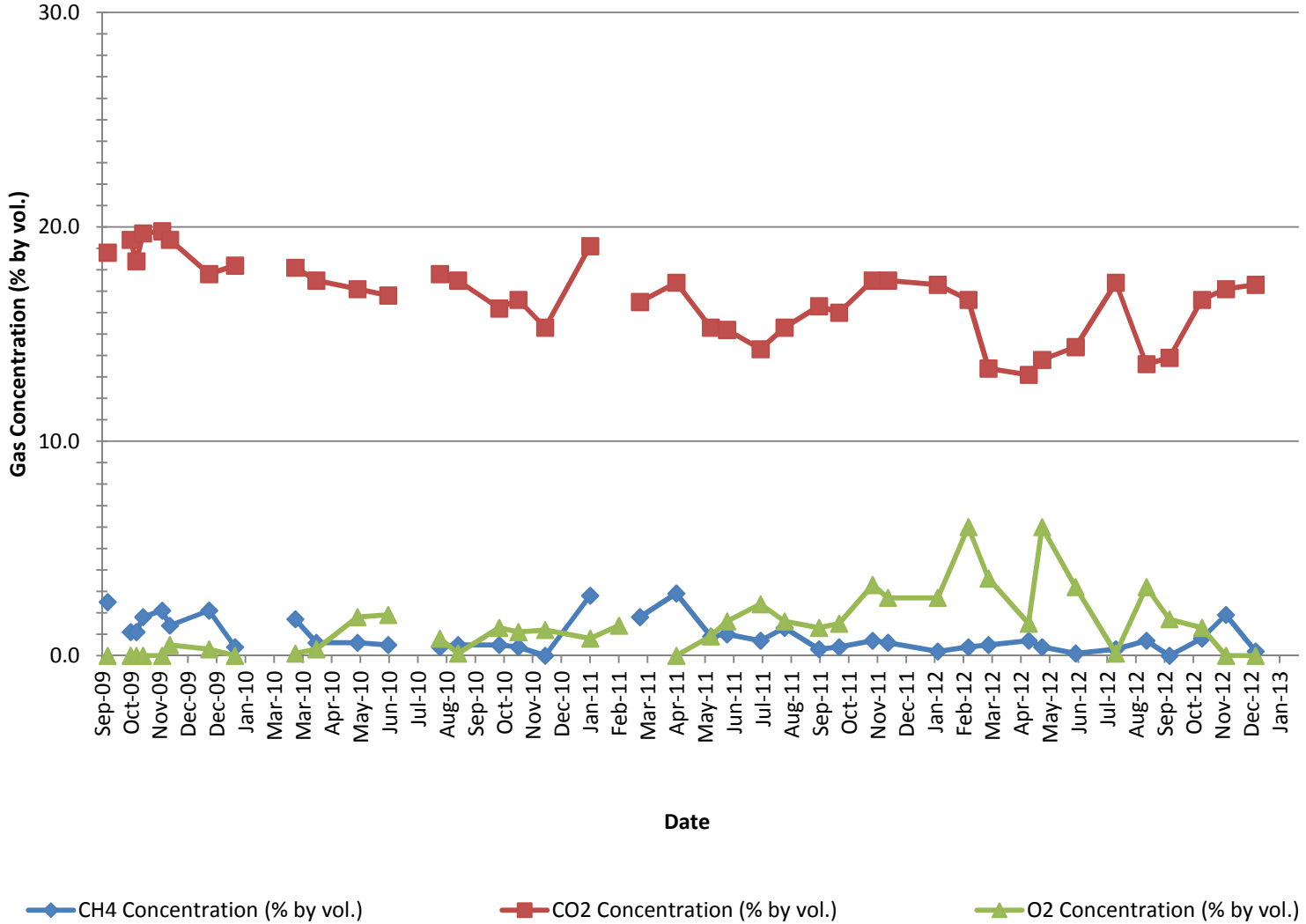


Source : KTCM Airport

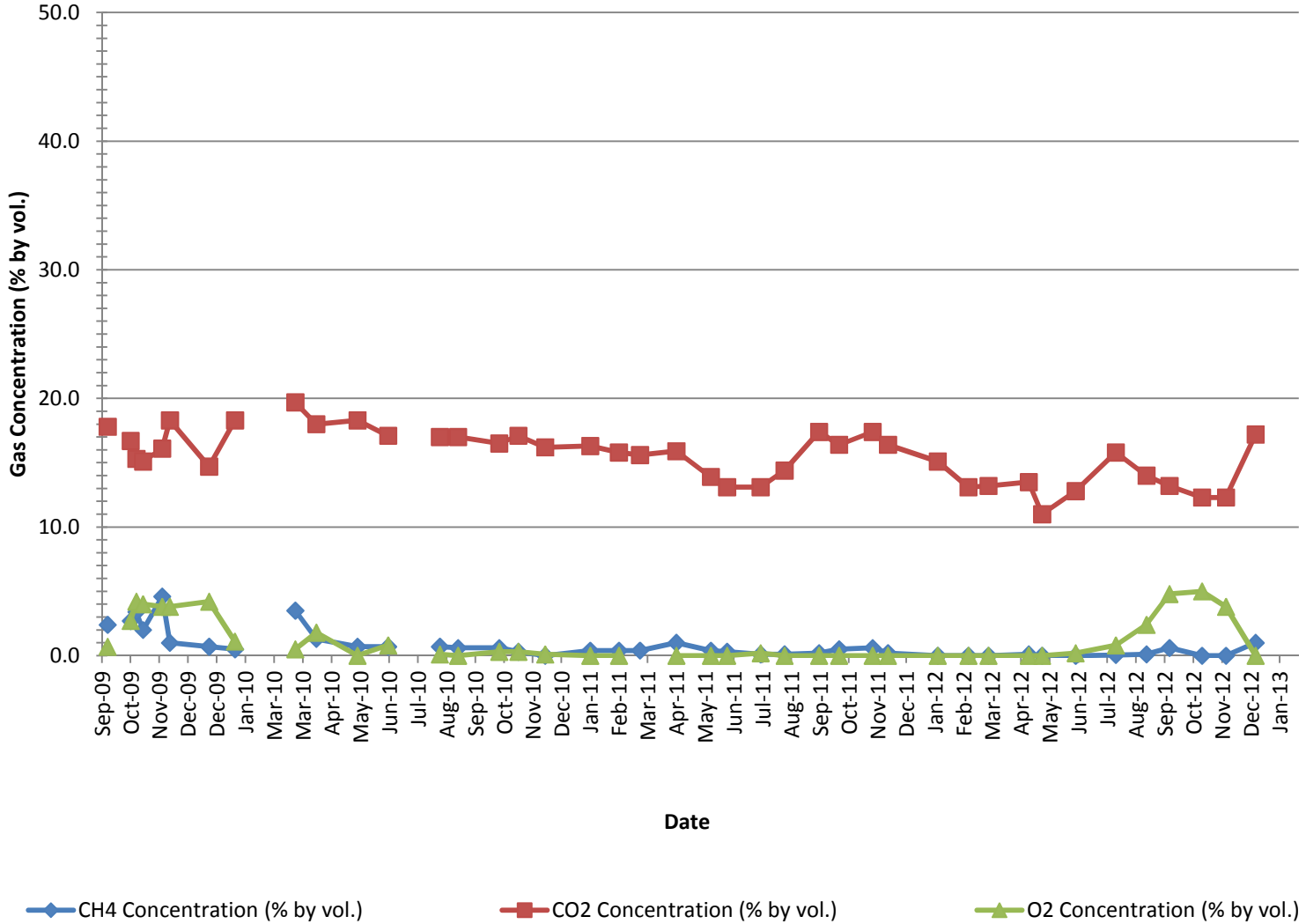
LFG-1, LFG-2, and LFG-3 Monitoring Results

	CH4 Concentration (% by vol.)			CO2 Concentration (% by vol.)			O2 Concentration (% by vol.)		
Date	**LFG-1**	**LFG-2**	**LFG-3**	**LFG-1**	**LFG-2**	**LFG-3**	**LFG-1**	**LFG-2**	**LFG-3**
8-Sep-09	2.5	2.4	28.4	18.8	17.8	26.3	0.0	0.7	4.3
22-Sep-09									
2-Oct-09	1.1	2.7	22.3	19.4	16.7	25.6	0.0	2.7	0.0
8-Oct-09	1.1	3.4	42.2	18.4	15.3	32.7	0.0	4.2	0.0
15-Oct-09	1.8	2.0	26.6	19.7	15.1	27.0	0.0	4.0	0.0
4-Nov-09	2.1	4.6	43.4	19.8	16.1	33.9	0.0	3.8	0.0
12-Nov-09	1.4	1.0	18.2	19.4	18.3	30.7	0.5	3.8	0.7
23-Dec-09	2.1	0.7	37.7	17.8	14.7	28.4	0.3	4.2	0.3
19-Jan-10	0.4	0.5	6.7	18.2	18.3	23.4	0.0	1.1	0.0
18-Feb-10									
23-Mar-10	1.7	3.5	38.8	18.1	19.7	30.3	0.1	0.5	0.0
14-Apr-10	0.6	1.3	28.2	17.5	18.0	27.4	0.3	1.8	0.0
27-May-10	0.6	0.7	7.4	17.1	18.3	22.5	1.8	0.0	0.0
28-Jun-10	0.5	0.7	7.2	16.8	17.1	20.2	1.9	0.8	0.5
27-Jul-10									
21-Aug-10	0.4	0.7	3.5	17.8	17.0	19.8	0.8	0.1	0.1
9-Sep-10	0.5	0.6	2.4	17.5	17.0	19.5	0.1	0.0	0.0
22-Oct-10	0.5	0.6	16.5	16.2	16.5	21.4	1.3	0.3	0.1
11-Nov-10	0.4	0.3	3.0	16.6	17.1	19.5	1.1	0.3	0.0
9-Dec-10	0.0	0.0	0.6	15.3	16.2	18.9	1.2	0.1	0.0
25-Jan-11	2.8	0.4	0.7	19.1	16.3	17.5	0.8	0.0	0.0
24-Feb-11		0.4	2.8		15.8	19.3	1.4	0.0	
18-Mar-11	1.8	0.4	10.5	16.5	15.6	20.4			
25-Apr-11	2.9	1.0	15.6	17.4	15.9	21.7	0.0	0.0	0.0
31-May-11	0.9	0.4	19.0	15.3	13.9	21.7	0.9	0.0	0.6
17-Jun-11	1.0	0.3	15.9	15.2	13.1	20.5	1.6	0.0	0.1
22-Jul-11	0.7	0.1	7.2	14.3	13.1	18.3	2.4	0.2	0.9
16-Aug-11	1.3	0.1	47.4	15.3	14.4	29.1	1.6	0.0	0.3
21-Sep-11	0.3	0.2	4.6	16.3	17.4	19.5	1.3	0.0	0.0
12-Oct-11	0.4	0.5	2.7	16.0	16.4	18.8	1.5	0.0	0.6
16-Nov-11	0.7	0.6	30.0	17.5	17.4	27.7	3.3	0.0	0.0
2-Dec-11	0.6	0.2	4.4	17.5	16.4	20.0	2.7	0.0	0.0
23-Jan-12	0.2	0.0	3.2	17.3	15.1	19.8	2.7	0.0	0.2
24-Feb-12	0.4	0.0	24.3	16.6	13.1	25.1	6.0	0.0	0.7
16-Mar-12	0.5	0.0	15.7	13.4	13.2	22.6	3.6	0.0	4.4
27-Apr-12	0.7	0.1	23.1	13.1	13.5	24.5	1.5	0.0	3.9
11-May-12	0.4	0.0	7.0	13.8	11.0	17.9	6.0	0.0	0.5
15-Jun-12	0.1	0.0	6.8	14.4	12.8	18.2	3.2	0.2	0.3
27-Jul-12	0.3	0.1	3.3	17.4	15.8	19.1	0.1	0.8	0.0
28-Aug-12	0.7	0.1	10.5	13.6	14.0	21.2	3.2	2.4	0.0
21-Sep-12	0	0.6	21.0	13.9	13.2	25.4	1.7	4.8	0.0
25-Oct-12	0.8	0.0	3.8	16.6	12.3	19.5	1.3	5.0	0.0
19-Nov-12	1.9	0.0	47.9	17.1	12.3	33.0	0.0	3.8	0.0
20-Dec-12	0.2	1.0	6.8	17.3	17.2	20.3	0.0	0.0	0.0

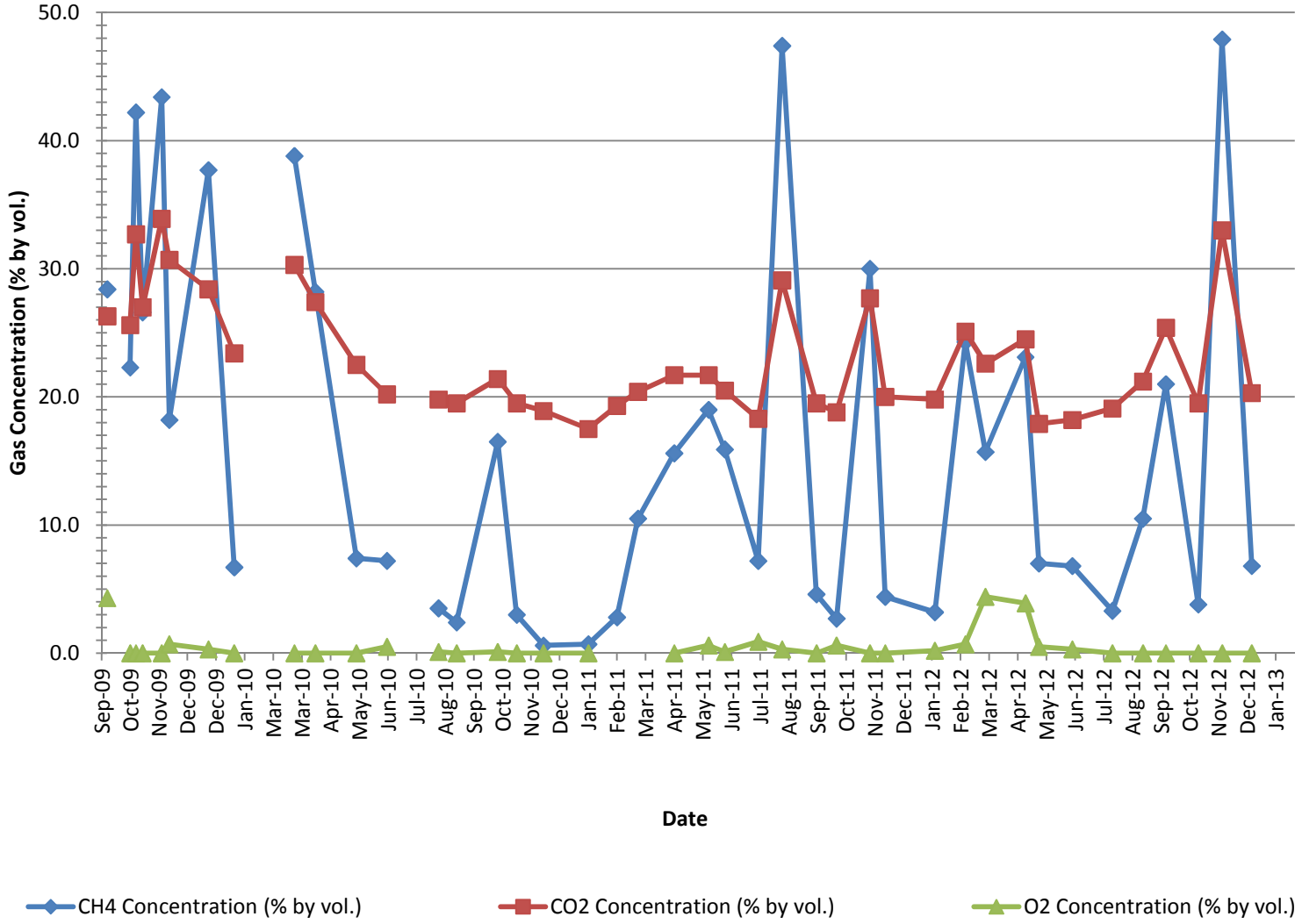
Monitoring Results LFG-1

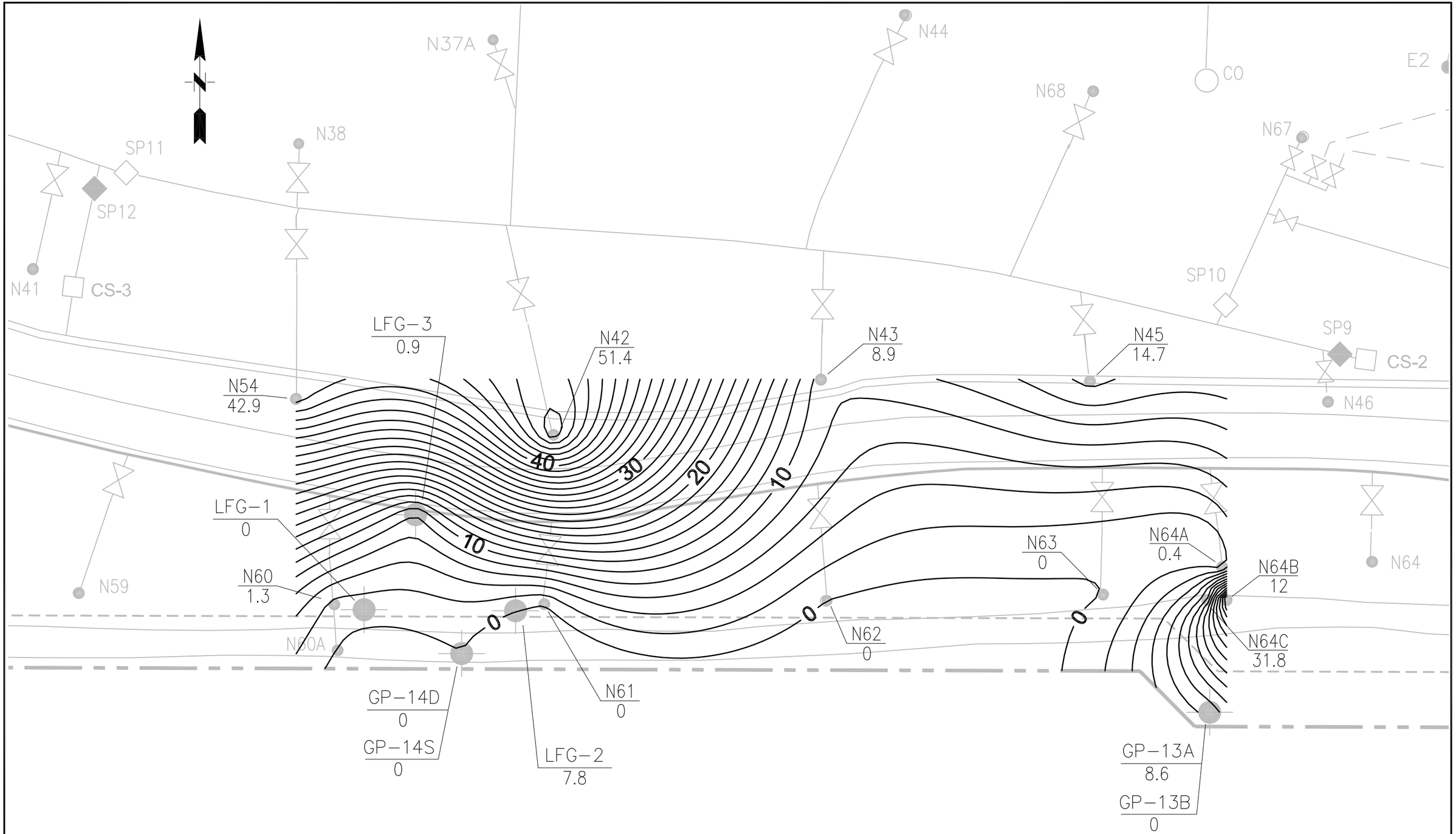


Monitoring Results LFG-2



Monitoring Results LFG-3





SCS ENGINEERS
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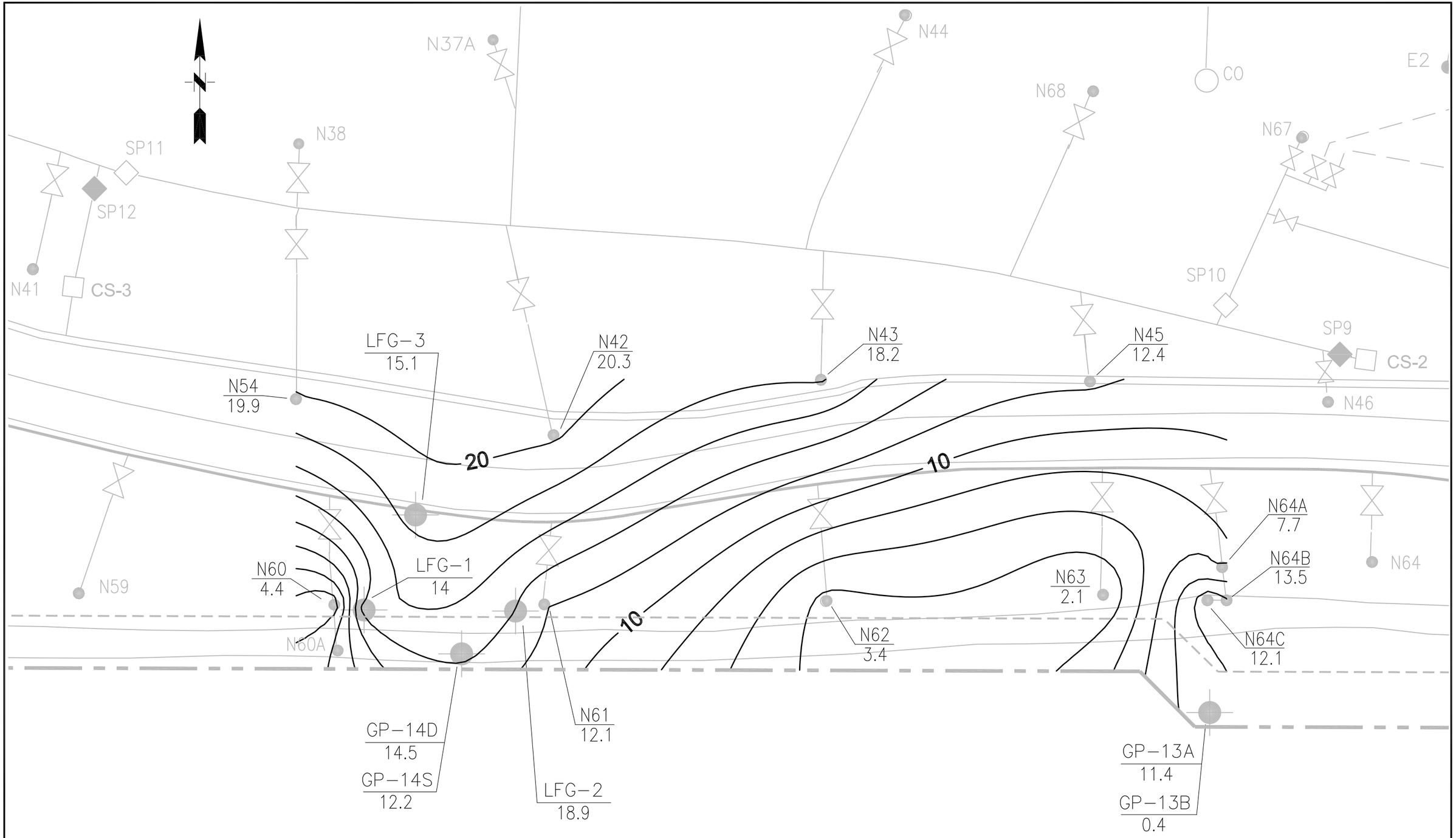
Bellevue, Washington 98005
(425) 746-4600 FAX: (425) 746-6747

0 50
Scale in Feet

PROJECT NO. 04212004.04	DES BY S.A.	LANDFILL FIRE AREA CH4 - METHANE (% BY VOL.) MAY 22, 2012 HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE JUNE 2012
SCALE AS SHOWN	CHK BY S.A.		FIGURE 1
CAD FILE FIGURE A	APP BY K.L.		



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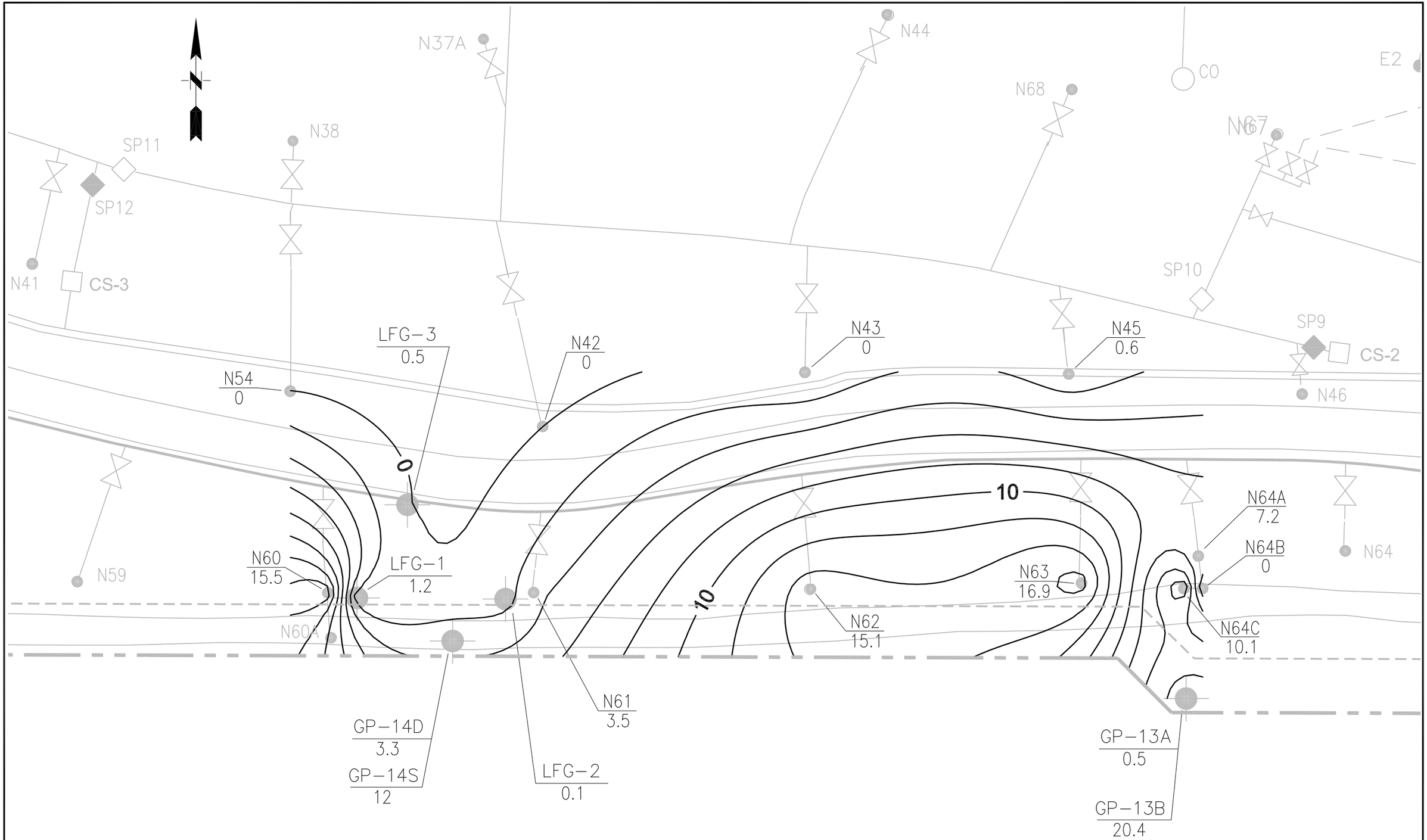
0 50
Scale in Feet

PROJECT NO. 04212004.00	DES BY S.A.	LANDFILL FIRE AREA CO2 - CARBON DIOXIDE (% BY VOL.) MAY 22, 2012 HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE JUNE 2012
SCALE AS SHOWN	CHK BY S.A.		FIGURE 2
CAD FILE FIGURE B	APP BY K.L.		



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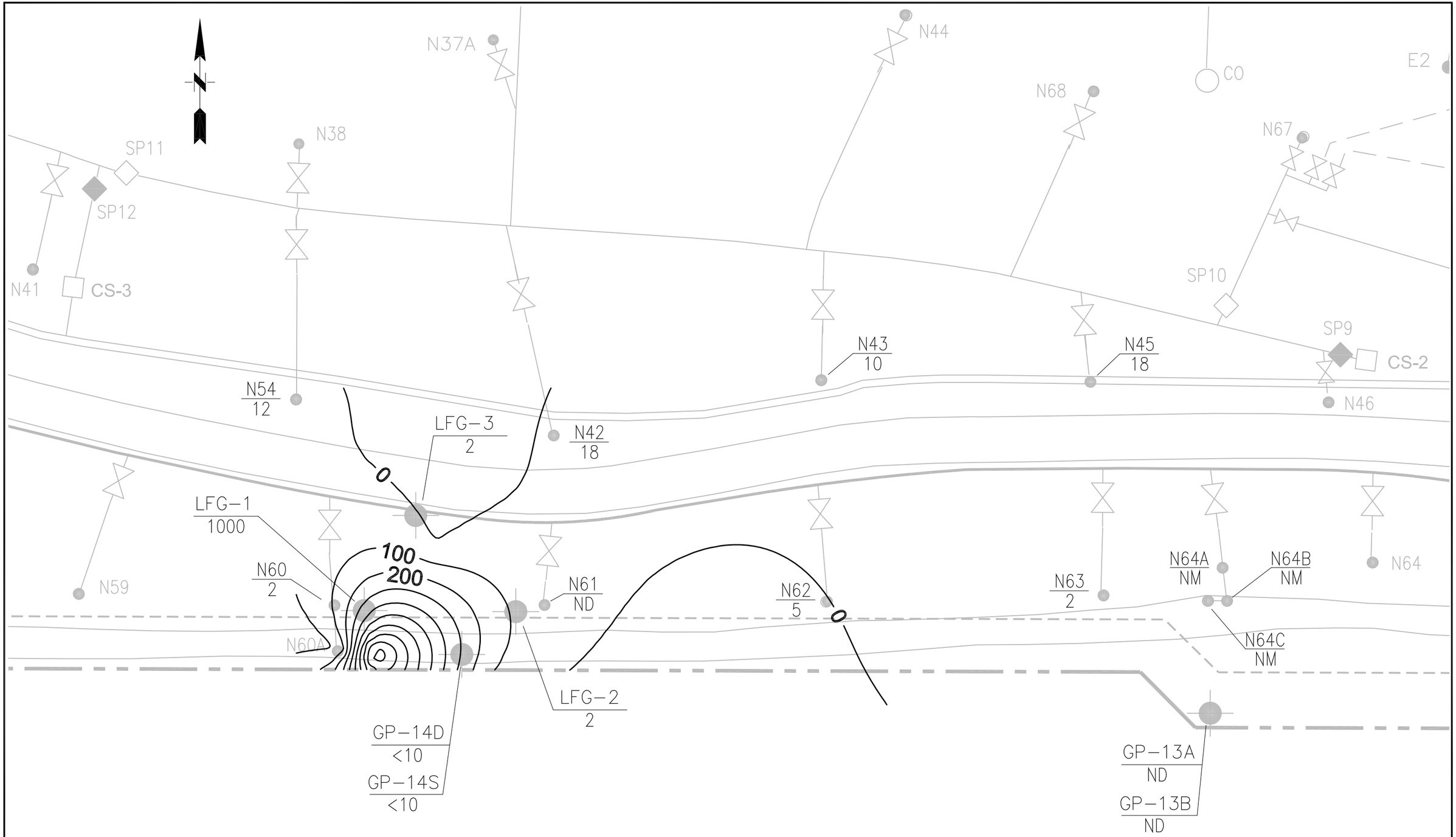
0 100
Scale in Feet

PROJECT NO. 04212004.04	DES BY S.A.	LANDFILL FIRE AREA O2 - OXYGEN (% BY VOL.) MAY 22, 2012 HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE JUNE 2012
SCALE AS SHOWN	CHK BY S.A.		FIGURE 3
CAD FILE FIGURE C	APP BY K.L.		



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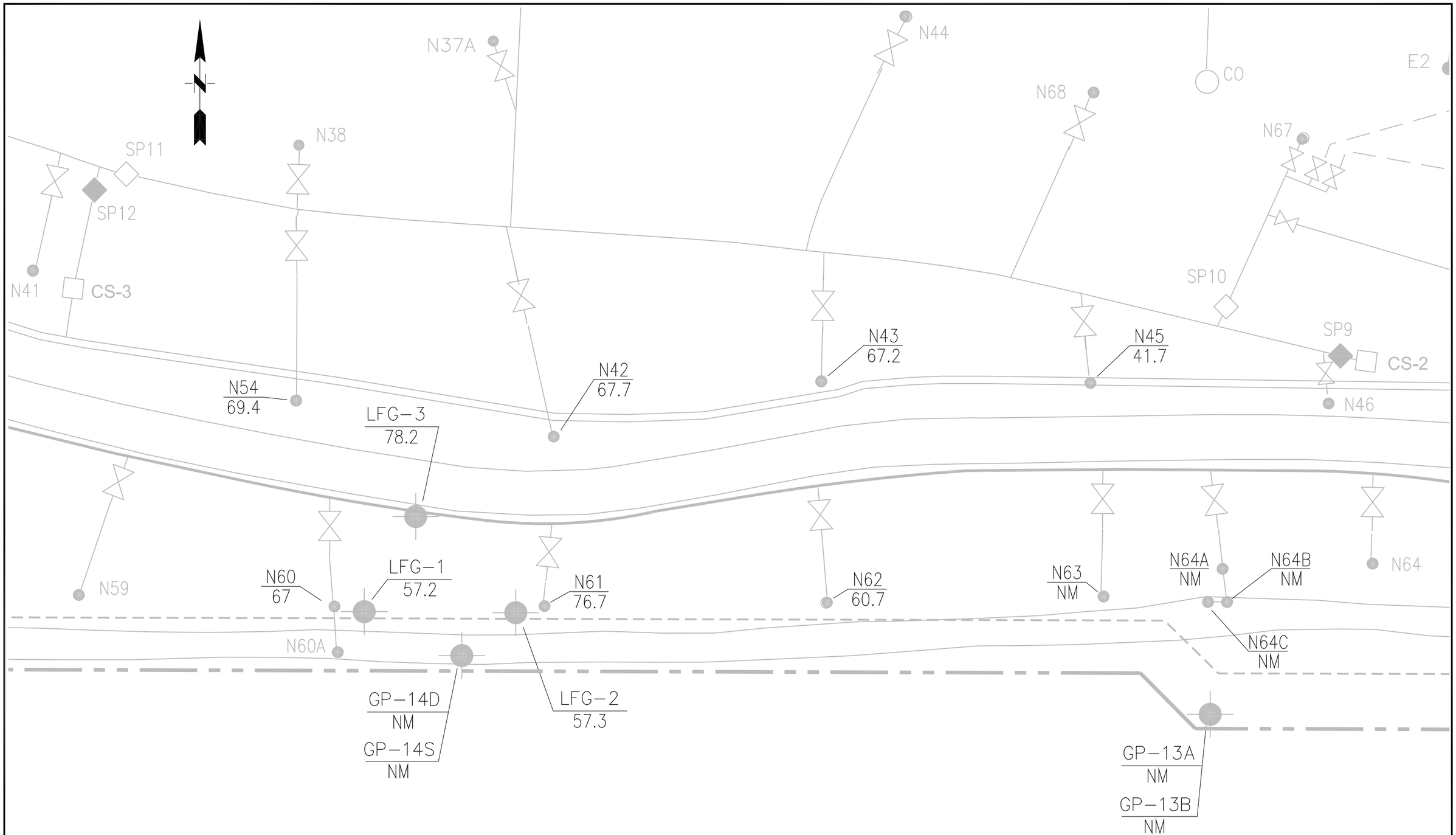
0 50
Scale in Feet

PROJECT NO. 04212004.04	DES BY S.A.	LANDFILL FIRE AREA CO - CARBON MONOXIDE (ppm) MAY 22, 2012 HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE JUNE 2012
SCALE AS SHOWN	CHK BY S.A.		FIGURE 4
CAD FILE FIGURE D	APP BY K.L.		



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0 50
Scale in Feet

PROJECT NO. 04212004.04	DES BY S.A.	LANDFILL FIRE AREA MAXIMUM TEMPERATURE (deg F) MAY 22, 2012 HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE JUNE 2012
SCALE AS SHOWN	CHK BY S.A.		FIGURE 5
CAD FILE FIGURE E	APP BY K.L.		

Figure 6 - Well Evacuation Time Trend

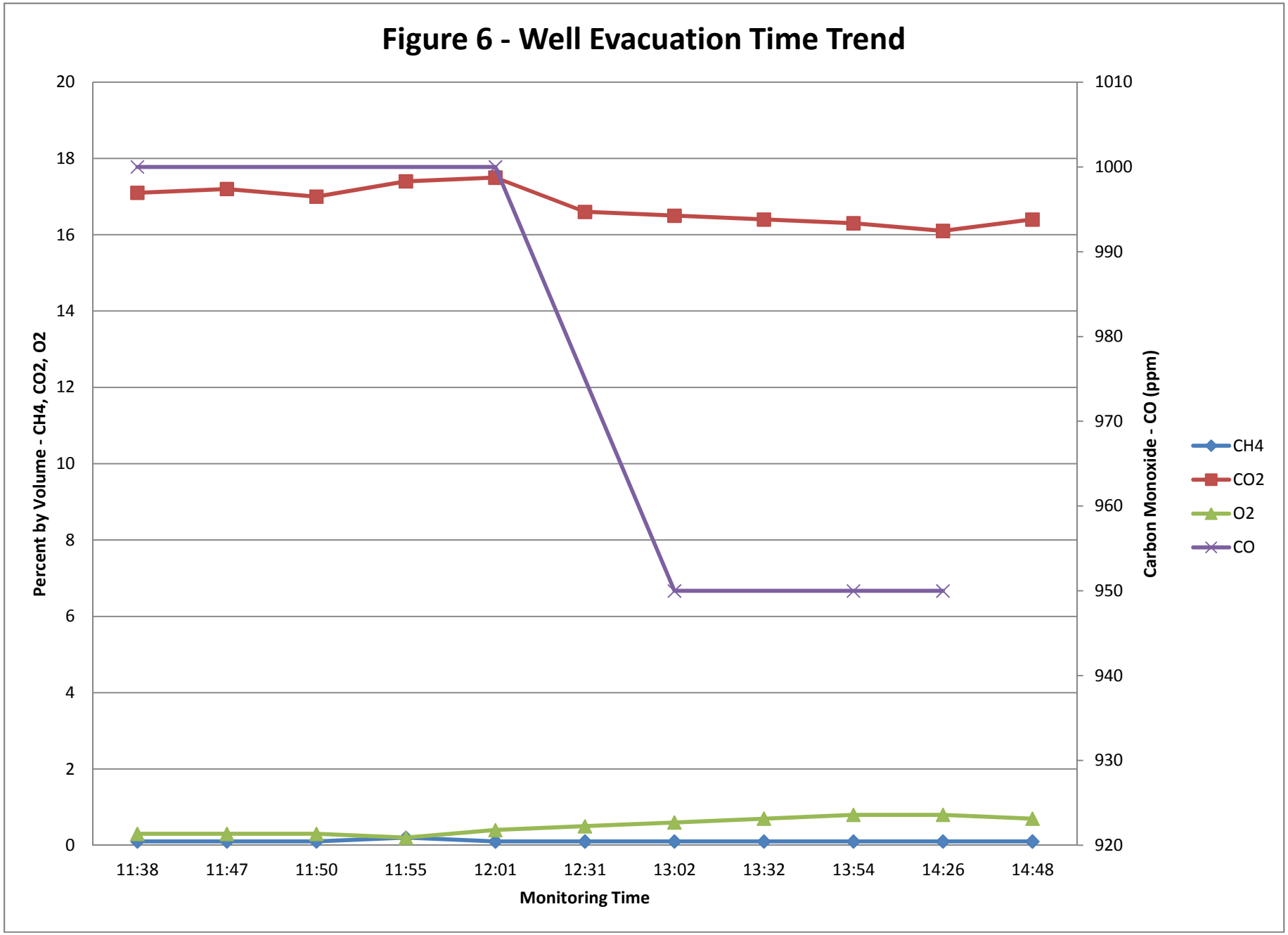

Table 1 – CO and Temperature Summary

Location	July 15, 2011 CO (ppm)	May 8, 2012 CO (ppm)	May 22, 2012 CO (ppm)	May 22, 2012 Max Observed Temperature (°F)
LFG-1	ND	300	900 - 1000	78.2 - 20 feet bgs
LFG-2	10 - 12	12	2	57.3 - 0 feet bgs
LFG-3	5	2	NM	57.2 - 0 feet bgs
N-42	20	18	NM	67.7 - 20 feet bgs
N-43	35	10	NM	67.2 - 20 feet bgs
N-45	NM	18	NM	41.7- 25 feet bgs
N-54	10	12	NM	69.4 - 20 feet bgs
N-60	NM	2	2	67.0 - 15 feet bgs
N-61	NM	NM	NM	76.7 - 5 feet bgs
N-62	NM	5	NM	60.7 - 20 feet bgs
N-63	NM	2	NM	NM
GP-14S	0 - 2	1	< 10	NM
GP-14D	0 - 2	2	< 10	NM

Notes:
Ranges for readings are given where multiple tests were taken at same time with varying results or where the reading of the Drager tube was unclear.
NM = Not measured
ND = Not detected
ppm = Parts per million
bgs = Below ground surface
< = Less than

Appendix B
Side Slope Liner System Monitoring Data

Hidden Valley Landfill
Month of Jan-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD
31	11.95	11.47	0	0	0	0	5,599	38.64	23,496
1	12.38	12.29	0	0	0	0	5,319	37.80	22,456
2	12.12	12.38	0	1070	0	0	5,685	37.88	24,015
3	12.81	12.86	0	0	0	0	5,320	38.04	22,522
4	12.73	13.16	0	0	12	0	4,655	37.66	19,734
5	13.20	13.12	0	0	0	0	5,379	36.42	22,871
6	13.29	13.42	0	0	4,183	0	8,304	36.12	22,215
7	13.55	13.77	0	0	2,236	0	5,292	34.44	22,555
8	13.81	13.86	0	0	535	0	5,016	31.62	21,726
9	13.86	13.86	0	0	0	0	5,707	29.60	22,144
10	14.16	13.94	0	0	1,573	0	4,801	30.61	19,836
11	14.33	14.42	0	0	0	0	5,351	30.61	22,379
12	14.38	14.59	0	0	0	0	5,201	30.27	21,674
13	14.86	14.94	0	0	1,863	0	5,399	30.72	22,550
14	14.94	14.81	0	0	2,456	0	5,631	29.48	23,468
15	14.86	14.99	0	0	1,367	0	5,632	31.66	23,837
16	15.42	15.42	0	0	1,569	0	4,891	33.52	20,649
17	15.42	15.55	0	0	0	0	4,490	32.94	18,939
18	15.81	15.99	0	0	1,399	0	2,340	31.36	9,910
20	16.33	16.16	0	0	0	0	3,461	28.21	13,285
21	15.94	16.29	0	0	0	0	5,387	31.83	23,142
22	16.07	16.33	0	0	0	0	4,686	30.26	19,460
23	16.64	16.38	0	0	0	0	5,142	29.17	21,235
24	16.20	16.85	0	583	555	0	4,537	29.01	18,622
25	17.24	16.90	0	0	0	0	4,809	28.36	20,134
26	16.85	17.55	0	0	12,092	0	4,989	29.60	21,577
27	17.33	17.24	0	0	0	0	5,924	28.77	24,801
28	17.68	17.20	0	0	0	0	5,332	28.30	22,386
29	17.64	18.03	0	0	0	0	5,159	29.02	21,533
30	17.90	5.30	0	0	0	0	5,545	30.29	23,203
31	18.20	5.56	0	0	0	0	5,213	30.48	22,005
			Total Gallons:	**1,653**	**29,840**	**0**	**154,598**		**634,863**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge

Hidden Valley Landfill Hour Meters Totalizers

Jan-12

Day	Discharge Pump 12 (hr)	(min)	Cell 2 Influent Pump (hr)	(min)	Cell 2 Daily Hours	Pump 12 Daily Hours	Cell 1 Leachate Total Gals.	Cell 2 Leachate Total Gals.	Cell 2 Leak Total Gals.	304th Influent Total Gals.	Treatment Discharge Total Gals.
31	39,305	30	2943	60	0.00	10.13	6222885	3,996,495	103482	92,841,654	84,927,668
1	39,315	24	2943	60	0.00	9.90	6222885	3,996,495	103482	92,846,973	84,950,124
2	39,325	58	2944	22	0.37	10.57	6222885	3,996,495	104552	92,852,658	84,974,139
3	39,335	50	2944	22	0.00	9.87	6222885	3,996,495	104552	92,857,978	84,996,661
4	39,344	34	2944	22	0.00	8.73	6222898	3,996,495	104552	92,862,633	85,016,395
5	39,355	2	2944	22	0.00	10.47	6222898	3,996,495	104552	92,868,012	85,039,265
6	39,365	17	2944	22	0.00	10.25	6227081	3,996,495	104552	92,876,316	85,061,480
7	39,376	12	2944	22	0.00	10.92	6229316	3,996,495	104552	92,881,608	85,084,035
8	39,387	39	2944	22	0.00	11.45	6229851	3,996,495	104552	92,886,624	85,105,761
9	39,400	7	2944	22	0.00	12.47	6229851	3,996,495	104552	92,892,330	85,127,905
10	39,410	55	2944	22	0.00	10.80	6231424	3,996,495	104552	92,897,131	85,147,741
11	39,423	6	2944	22	0.00	12.18	6231424	3,996,495	104552	92,902,482	85,170,120
12	39,435	2	2944	22	0.00	11.93	6231424	3,996,495	104552	92,907,683	85,191,794
13	39,447	16	2944	22	0.00	12.23	6233288	3,996,495	104552	92,913,082	85,214,344
14	39,460	32	2944	22	0.00	13.27	6235744	3,996,495	104552	92,918,713	85,237,811
15	39,473	5	2944	22	0.00	12.55	6237110	3,996,495	104552	92,924,346	85,261,648
16	39,483	21	2944	22	0.00	10.27	6238679	3,996,495	104552	92,929,237	85,282,297
17	39,492	56	2944	22	0.00	9.58	6238679	3,996,495	104552	92,933,726	85,301,236
18	39,498	12	2944	22	0.00	5.27	6240078	3,996,495	104552	92,936,067	85,311,146
20	39,506	3	2944	22	0.00	7.85	6240078	3,996,495	104552	92,939,528	85,324,432
21	39,518	10	2944	22	0.00	12.12	6240078	3,996,495	104552	92,944,915	85,347,574
22	39,528	53	2944	22	0.00	10.72	6240078	3,996,495	104552	92,949,601	85,367,034
23	39,541	1	2944	22	0.00	12.13	6240078	3,996,495	104552	92,954,743	85,388,269
24	39,551	43	2944	36	0.23	10.70	6240633	3,996,496	105135	92,959,280	85,406,891
25	39,563	33	2944	36	0.00	11.83	6240633	3,996,496	105135	92,964,089	85,427,025
26	39,575	42	2944	36	0.00	12.15	6252725	3,996,496	105135	92,969,078	85,448,602
27	39,590	4	2944	36	0.00	14.37	6252725	3,996,496	105135	92,975,003	85,473,403
28	39,603	15	2944	36	0.00	13.18	6252725	3,996,496	105135	92,980,335	85,495,790
29	39,615	37	2944	36	0.00	12.37	6252725	3,996,496	105135	92,985,494	85,517,323
30	39,628	23	2944	36	0.00	12.77	6252725	3,996,496	105135	92,991,038	85,540,525
31	39,640	25	2944	36	0.00	12.03	6252725	3,996,496	105135	92,996,252	85,562,531
					Total	**Gallons**	**29,840**	**0**	**1,653**	**154,598**	**634,863**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Hidden Valley Landfill
Month of Feb-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD
31	18.20	5.56	0	0	0	0	5,213	30.48	22,005
1	17.94	5.73	0	0	0	0	5,057	30.82	21,325
2	18.29	5.69	18	85	1,096	72	4,999	31.61	21,274
3	18.42	6.34	0	0	0	0	5,349	30.90	22,402
4	18.59	6.69	0	0	0	0	5,257	30.08	22,051
5	18.85	7.12	0	0	0	0	5,368	29.08	22,187
6	18.98	7.56	0	0	0	0	4,901	28.78	20,174
7	18.98	7.60	0	0	0	0	5,273	28.41	22,220
8	6.95	17.56	—	—	—	—	—	—	—
9	7.15	17.71	—	—	—	—	—	—	—
10	7.43	17.90	—	—	—	—	—	—	—
11	7.56	18.05	—	—	—	—	—	—	—
12	7.76	11.90	—	—	—	—	—	—	—
13	7.91	12.45	—	—	—	—	—	—	—
14	8.23	13.10	—	—	—	—	—	—	—
15	8.40	13.70	—	—	—	—	—	—	—
16	8.51	14.90	—	—	—	—	—	—	—
17	8.70	17.50	—	—	—	—	—	—	—
18	8.95	16.10	—	—	—	—	—	—	—
19	8.97	16.15	—	—	—	—	—	—	—
20	9.10	16.25	—	—	—	—	—	—	—
21	9.14	16.43	—	—	—	—	—	—	—
22	9.29	16.53	—	—	—	—	—	—	—
23	9.34	16.80	—	—	—	—	—	—	—
24	9.58	16.97	—	—	—	—	—	—	—
25	9.95	17.05	—	—	—	—	—	—	—
26	10.51	17.43	—	—	—	—	—	—	—
27	10.56	17.43	—	—	—	—	—	—	—
28	10.56	17.43	—	—	—	—	—	—	—
29	10.56	17.43	—	—	—	—	—	—	—
		Total Gallons:	—	—	—	—			—
			Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent			Treatment Discharge

Notes

PLC malfunction between Feb 8 and March 19, 2012. Data recorded during this period by site personell are presented for Leachte Level, Cell 2 Leak Level, and Cell 1 Leachate.

Hidden Valley Landfill Hour Meters Totalizers

Feb-12

Day	Discharge Pump 12 (hr)	(min)	Cell 2 Influent Pump (hr)	(min)	Cell 2 Daily Hours	Pump 12 Daily Hours	Cell 1 Leachate Total Gals.	Cell 2 Leachate Total Gals.	Cell 2 Leak Total Gals.	304th Influent Total Gals.	Treatment Discharge Total Gals.
31	39,640	25	2944	36	0.00	12.03	861700	3,996,496	105135	92,996,252	85,562,531
1	39,651	57	2944	36	0.00	11.53	861700	3,996,496	105135	93,001,309	85,583,856
2	39,663	10	2944	40	0.07	11.22	861700	3,996,567	105221	93,006,308	85,605,130
3	39,675	15	2944	40	0.00	12.08	862797	3,996,567	105221	93,011,657	85,627,531
4	39,687	28	2944	40	0.00	12.22	862797	3,996,567	105221	93,016,914	85,649,582
5	39,700	11	2944	40	0.00	12.72	862797	3,996,567	105221	93,022,282	85,671,770
6	39,711	52	2944	40	0.00	11.68	862797	3,996,567	105221	93,027,184	85,691,943
7	39,724	54	2944	40	0.00	13.03	862797	3,996,567	105221	93,032,457	85,714,163
8	—	—	—	—	—	—	862797	—	—	—	—
9	—	—	—	—	—	—	862797	—	—	—	—
10	—	—	—	—	—	—	862797	—	—	—	—
11	—	—	—	—	—	—	865276	—	—	—	—
12	—	—	—	—	—	—	865276	—	—	—	—
13	—	—	—	—	—	—	865278	—	—	—	—
14	—	—	—	—	—	—	865278	—	—	—	—
15	—	—	—	—	—	—	865278	—	—	—	—
16	—	—	—	—	—	—	865278	—	—	—	—
17	—	—	—	—	—	—	867313	—	—	—	—
18	—	—	—	—	—	—	868255	—	—	—	—
19	—	—	—	—	—	—	868588	—	—	—	—
20	—	—	—	—	—	—	868748	—	—	—	—
21	—	—	—	—	—	—	869059	—	—	—	—
22	—	—	—	—	—	—	869059	—	—	—	—
23	—	—	—	—	—	—	869059	—	—	—	—
24	—	—	—	—	—	—	869059	—	—	—	—
25	—	—	—	—	—	—	869059	—	—	—	—
26	—	—	—	—	—	—	869059	—	—	—	—
27	—	—	—	—	—	—	871534	—	—	—	—
28	—	—	—	—	—	—	871534	—	—	—	—
29	—	—	—	—	—	—	871534	—	—	—	—
					Total	**Gallons**	**9,834**	—	—	—	—
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Notes

PLC malfunction between Feb 8 and March 19, 2012. Data recorded during this period by site personell are presented for Leachte Level, Cell 2 Leak Level, and Cell 1 Leachate.

Hidden Valley Landfill

Month of **Mar-12**

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD
1	10.56	17.66	—	—	—	—	—	—	—
2	10.71	17.78	—	—	—	—	—	—	—
3	10.85	18.01	—	—	—	—	—	—	—
4	10.93	18.45	—	—	—	—	—	—	—
5	5.56	18.25	—	—	—	—	—	—	—
6	5.61	16.5	—	—	—	—	—	—	—
7	5.75	16.65	—	—	—	—	—	—	—
8	6.1	10.11	—	—	—	—	—	—	—
9	6.43	9.66	—	—	—	—	—	—	—
10	6.96	9.75	—	—	—	—	—	—	—
11	7.05	9.99	—	—	—	—	—	—	—
12	7.47	10.19	—	—	—	—	—	—	—
13	7.9	5.4	—	—	—	—	—	—	—
14	8.15	5.75	—	—	—	—	—	—	—
15	8.46	5.89	—	—	—	—	—	—	—
16	8.74	6.1	—	—	—	—	—	—	—
17	9.1	6.50	—	—	—	—	—	—	—
18	9.35	6.99	—	—	—	—	—	—	—
19	9.80	7.15	—	—	—	—	—	—	—
20	17.51	10.38	23	NA	NA	NA	NA	35.86	NA
21	17.98	10.95	0	0	0	0	5,732	28.48	24,831
22	18.11	11.51	0	0	0	0	5,580	27.63	24,259
23	18.29	11.90	0	0	0	0	5,269	27.11	22,937
24	18.50	12.55	0	0	0	0	4,890	27.51	21,373
25	18.50	13.12	0	0	0	0	5,944	27.43	25,974
26	18.81	13.73	0	0	0	0	5,843	26.77	25,137
27	18.77	14.51	0	0	0	0	5,723	26.10	24,871
28	19.20	15.16	0	0	0	0	5,355	24.89	23,399
29	19.20	15.99	0	0	0	0	5,203	23.93	23,044
30	19.42	16.68	0	0	0	0	5,172	23.21	23,135
31	19.33	17.77	0	0	0	0	5,085	22.83	23,151
		Total Gallons:		—	—	—	—		—
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge

Notes

PLC malfunction between Feb 8 and March 19, 2012. Data recorded during this period by site personell are presented for Leachte Level, Cell 2 Leak Level, and Cell 1 Leachate.

Hidden Valley Landfill Hour Meters Totalizers

Mar-12

Day	Discharge Pump 12 (hr)	Discharge Pump 12 (min)	Cell 2 Influent Pump (hr)	Cell 2 Influent Pump (min)	Cell 2 Daily Hours	Pump 12 Daily Hours	Cell 1 Leachate Total Gals.	Cell 2 Leachate Total Gals.	Cell 2 Leak Total Gals.	304th Influent Total Gals.	Treatment Discharge Total Gals.
1	—	—	—	—	—	—	871534	—	—	—	—
2	—	—	—	—	—	—	871534	—	—	—	—
3	—	—	—	—	—	—	871534	—	—	—	—
4	—	—	—	—	—	—	871534	—	—	—	—
5	—	—	—	—	—	—	871534	—	—	—	—
6	—	—	—	—	—	—	871534	—	—	—	—
7	—	—	—	—	—	—	871534	—	—	—	—
8	—	—	—	—	—	—	876123	—	—	—	—
9	—	—	—	—	—	—	878218	—	—	—	—
10	—	—	—	—	—	—	878536	—	—	—	—
11	—	—	—	—	—	—	878536	—	—	—	—
12	—	—	—	—	—	—	878536	—	—	—	—
13	—	—	—	—	—	—	878536	—	—	—	—
14	—	—	—	—	—	—	880333	—	—	—	—
15	—	—	—	—	—	—	880333	—	—	—	—
16	—	—	—	—	—	—	880333	—	—	—	—
17	—	—	—	—	—	—	880333	—	—	—	—
18	—	—	—	—	—	—	880333	—	—	—	—
19	—	—	—	—	—	—	880333	—	—	—	—
20	40,256	10	2948	2	NA	NA	880333	4,004,435	106385	93,243,187	86,622,620
21	40,270	42	2948	2	0.00	14.53	880333	4,004,435	106385	93,248,919	86,647,451
22	40,285	20	2948	2	0.00	14.63	880333	4,004,435	106385	93,254,500	86,671,710
23	40,299	26	2948	2	0.00	14.10	880333	4,004,435	106385	93,259,768	86,694,648
24	40,312	23	2948	2	0.00	12.95	880333	4,004,435	106385	93,264,658	86,716,021
25	40,328	10	2948	2	0.00	15.78	880333	4,004,435	106385	93,270,602	86,741,994
26	40,343	49	2948	2	0.00	15.65	880333	4,004,435	106385	93,276,445	86,767,131
27	40,359	42	2948	2	0.00	15.88	880333	4,004,435	106385	93,282,168	86,792,002
28	40,375	22	2948	2	0.00	15.67	880333	4,004,435	106385	93,287,523	86,815,401
29	40,391	25	2948	2	0.00	16.05	880333	4,004,435	106385	93,292,726	86,838,446
30	40,408	2	2948	2	0.00	16.62	880333	4,004,435	106385	93,297,898	86,861,581
31	40,424	56	2948	2	0.00	16.90	880333	4,004,435	106385	93,302,983	86,884,732
					Total	**Gallons**	**8,799**	—	—	—	—
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Notes

PLC malfunction between Feb 8 and March 19, 2012. Data recorded during this period by site personell are presented for Leachte Level, Cell 2 Leak Level, and Cell 1 Leachate.

Hidden Valley Landfill

Month of Apr-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD	SITE Treatment Discharge GPD
31	19.33	17.77	0	0	0	0	5,085	22.83	23,151	
1	19.29	18.20	0	0	2,167	0	4,674	22.44	20,870	26,500
2	19.94	19.98	0	0	0	0	5,191	21.91	23,163	28,609
3	19.81	21.24	0	0	0	0	5,068	21.70	22,593	25,607
4		22.24	0	0	0	0	4,795	21.54	21,027	25,050
5		23.24	0	0	0	0	4,591	21.82	20,358	25,210
6		24.28	0	0	0	0	4,655	21.42	20,439	24,440
7	20.37	25.45	0	0	0	0	4,630	20.93	20,533	26,992
8	20.50	0.52	0	1761	0	0	4,811	20.65	21,492	25,907
9	20.63	0.52	0	0	0	0	5,089	22.95	22,632	27,673
10	20.76	0.39	0	0	0	0	5,935	27.49	26,418	33,936
11	20.81	0.52	0	0	0	0	6,251	26.62	27,743	34,182
12	20.94	0.52	25	11	0	25	6,034	25.73	26,657	33,426
13	20.89	0.78	0	0	0	0	5,631	25.39	24,656	31,522
14	21.02	1.09	0	0	0	0	6,234	25.05	26,977	36,084
15	21.37	1.30	0	0	577	0	6,273	24.82	27,107	32,437
16	21.28	1.65	0	0	0	0	5,944	24.51	25,291	31,269
17	21.63	2.00	0	0	0	0	6,350	24.12	26,962	31,095
18	21.59	2.35	0	0	0	0	5,413	23.66	23,164	29,894
19	21.68	2.69	0	0	0	0	5,830	23.55	24,912	31,624
20	21.94	3.00	0	0	0	0	5,842	23.47	25,046	21,547
21	22.07	3.52	0	0	0	0	5,937	23.13	25,743	34,677
22	22.11	3.87	0	0	0	0	6,634	23.59	28,516	33,978
23	22.28	4.21	0	0	983	0	5,938	23.57	25,223	29,955
24	16.98	4.47	44	0	0	5,408	5,957	23.25	25,575	32,494
25	17.29	5.04	9	3	0	9	6,079	23.87	25,850	32,970
26	16.90	5.04	0	0	0	0	6,534	23.69	27,455	34,346
27	17.51	5.39	0	0	5,408	0	5,983	23.44	25,266	30,247
28	17.77	5.78	0	0	3,852	0	5,764	23.34	24,529	31,757
29	18.20	6.17	0	0	3,553	0	5,468	23.12	23,421	30,941
30	17.85	6.30	0	0	0	0	5,672	22.74	24,060	26,216
			Total Gallons:	**1,775**	**16,540**	**5,441**	**169,210**		**733,679**	**900,585**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

Apr-12

	Discharge Pump 12		Cell 2 Influent Pump		Cell 2 Daily	Pump 12 Daily	Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge
Day	(hr)	(min)	(hr)	(min)	Hours	Hours	Total Gals.	Total Gals.	Total Gals.	Total Gals.	Total Gals.
31	40,424	56	2948	2	0.00	16.90	6271382	4,004,435	106385	93,302,983	86,884,732
1	40,440	26	2948	2	0.00	15.50	6273548	4,004,435	106385	93,307,657	86,905,603
2	40,458	3	2948	2	0.00	17.62	6273548	4,004,435	106385	93,312,848	86,928,766
3	40,475	24	2948	2	0.00	17.35	6273548	4,004,435	106385	93,317,916	86,951,358
4	40,491	40	2948	2	0.00	16.27	6273548	4,004,435	106385	93,322,711	86,972,386
5	40,507	13	2948	2	0.00	15.55	6273548	4,004,435	106385	93,327,302	86,992,744
6	40,523	7	2948	2	0.00	15.90	6273548	4,004,435	106385	93,331,957	87,013,182
7	40,539	28	2948	2	0.00	16.35	6273548	4,004,435	106385	93,336,587	87,033,715
8	40,556	49	2948	37	0.58	17.35	6273548	4,004,435	108145	93,341,398	87,055,208
9	40,573	15	2948	37	0.00	16.43	6273548	4,004,435	108145	93,346,487	87,077,839
10	40,589	16	2948	37	0.00	16.02	6273548	4,004,435	108145	93,352,422	87,104,257
11	40,606	38	2948	37	0.00	17.37	6273548	4,004,435	108145	93,358,674	87,132,000
12	40,623	54	2948	38	0.02	17.27	6273548	4,004,459	108157	93,364,708	87,158,657
13	40,640	5	2948	38	0.00	16.18	6273548	4,004,459	108157	93,370,339	87,183,313
14	40,658	2	2948	38	0.00	17.95	6273548	4,004,459	108157	93,376,573	87,210,291
15	40,676	14	2948	38	0.00	18.20	6274125	4,004,459	108157	93,382,845	87,237,398
16	40,693	26	2948	38	0.00	17.20	6274125	4,004,459	108157	93,388,789	87,262,689
17	40,712	4	2948	38	0.00	18.63	6274125	4,004,459	108157	93,395,140	87,289,651
18	40,728	23	2948	38	0.00	16.32	6274125	4,004,459	108157	93,400,553	87,312,815
19	40,746	1	2948	38	0.00	17.63	6274125	4,004,459	108157	93,406,383	87,337,728
20	40,763	48	2948	38	0.00	17.78	6274125	4,004,459	108157	93,412,225	87,362,773
21	40,782	21	2948	38	0.00	18.55	6274125	4,004,459	108157	93,418,163	87,388,516
22	40,802	30	2948	38	0.00	20.15	6274125	4,004,459	108157	93,424,797	87,417,032
23	40,820	20	2948	38	0.00	17.83	6275108	4,004,459	108157	93,430,735	87,442,255
24	40,838	40	2950	40	2.03	18.33	6275108	4,009,867	108157	93,436,693	87,467,830
25	40,856	43	2950	41	0.02	18.05	6275109	4,009,876	108159	93,442,772	87,493,680
26	40,876	2	2950	41	0.00	19.32	6275109	4,009,876	108159	93,449,306	87,521,135
27	40,893	60	2950	41	0.00	17.97	6280517	4,009,876	108159	93,455,289	87,546,401
28	40,911	31	2950	41	0.00	17.52	6284369	4,009,876	108159	93,461,053	87,570,930
29	40,928	24	2950	41	0.00	16.88	6287922	4,009,876	108159	93,466,521	87,594,351
30	40,946	2	2950	41	0.00	17.63	6287922	4,009,876	108159	93,472,193	87,618,411
					Total	**Gallons**	**16,540**	**5,441**	**1,775**	**169,210**	**733,679**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Hidden Valley Landfill

Month of May-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	PLC Treatment Discharge GPD	SITE Treatment Discharge GPD
30	17.85	6.30	0	0	0	0	5,672	22.74	24,060	
1	18.20	6.65	0	0	0	0	4,942	22.76	20,989	26,664
2	18.55	6.99	0	0	0	0	4,750	23.41	20,251	27,452
3	18.20	7.04	0	0	3,495	0	6,617	24.73	28,339	36,843
4	18.42	7.34	0	0	5,784	0	6,463	24.47	27,671	33,477
5	18.81	7.91	0	0	7,237	0	6,727	24.05	29,323	38,860
6	18.98	8.25	0	0	0	0	6,522	23.26	28,516	33,575
7	19.16	8.69	0	0	4,145	0	6,133	22.98	26,705	31,585
8	18.68	6.30	25	288	23	374	5,260	32.69	22,423	27,667
9	18.85	6.30	0	0	1,652	0	6,704	44.05	28,239	35,310
10	19.24	6.65	0	0	0	0	6,881	42.96	28,997	36,812
11	19.42	7.12	0	0	0	0	6,738	41.24	28,413	34,949
12	19.55	7.56	0	0	4,042	0	7,139	38.13	30,350	37,580
13	19.72	7.95	0	0	2,290	0	6,960	39.49	29,502	43,600
14	19.72	8.30	0	0	0	0	6,586	42.48	27,524	22,919
15	19.89	8.60	0	0	0	0	6,456	42.56	26,940	36,185
16	20.11	8.77	0	0	0	0	6,266	204.51	126,184	33,418
17	20.07	9.03	0	0	0	0	6,125	42.62	25,784	32,765
18	20.37	9.38	0	0	0	0	6,693	-107.49	-71,697	34,900
19	20.46	9.64	0	0	1,077	0	6,421	196.35	127,236	36,310
20	20.72	9.82	0	0	2,074	0	7,518	40.82	32,082	39,558
21	20.63	10.16	0	0	0	0	6,587	41.44	27,808	34,445
22	20.76	10.29	0	0	3,556	0	6,386	-111.37	-72,945	30,355
23	13.73	10.60	44	0	2,700	6,608	6,336	196.58	126,797	33,444
24	13.81	11.12	0	0	0	0	5,807	41.49	24,519	30,498
25	14.12	11.47	0	0	928	0	5,683	-132.39	-75,993	30,558
26	14.16	11.68	0	0	2,118	0	6,753	41.73	28,629	37,926
27	14.55	12.16	0	0	0	0	6,661	42.04	28,333	33,800
28	14.68	12.55	0	0	0	0	6,361	197.44	126,954	28,769
29	14.90	13.16	0	0	0	0	5,821	0.00	0	32,028
30	15.20	13.47	0	0	0	0	5,366	42.00	22,678	29,577
31	15.46	14.38	0	0	1,838	0	6,528	41.02	27,481	32,682
			Total Gallons:	**288**	**42,960**	**6,983**	**196,190**		**908,032**	**1,034,511**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

May-12

Day	Discharge Pump 12 (hr)	Discharge Pump 12 (min)	Cell 2 Influent Pump (hr)	Cell 2 Influent Pump (min)	Cell 2 Daily Hours	Pump 12 Daily Hours	Cell 1 Leachate Total Gals.	Cell 2 Leachate Total Gals.	Cell 2 Leak Total Gals.	304th Influent Total Gals.	Treatment Discharge Total Gals.
30	40,946	2	2950	41	0.00	17.63	6287922	4,009,876	108159	93,472,193	87,618,411
1	40,961	24	2950	41	0.00	15.37	6287922	4,009,876	108159	93,477,135	87,639,400
2	40,975	49	2950	41	0.00	14.42	6287922	4,009,876	108159	93,481,886	87,659,651
3	40,994	55	2950	41	0.00	19.10	6291417	4,009,876	108159	93,488,503	87,687,990
4	41,013	46	2950	41	0.00	18.85	6297200	4,009,876	108159	93,494,966	87,715,661
5	41,034	5	2950	41	0.00	20.32	6304438	4,009,876	108159	93,501,693	87,744,984
6	41,054	31	2950	41	0.00	20.43	6304438	4,009,876	108159	93,508,215	87,773,499
7	41,073	53	2950	41	0.00	19.37	6308583	4,009,876	108159	93,514,349	87,800,205
8	41,085	19	2950	56	0.25	11.43	6308606	4,010,251	108448	93,519,609	87,822,628
9	41,095	60	2950	56	0.00	10.68	6310258	4,010,251	108448	93,526,312	87,850,867
10	41,107	15	2950	56	0.00	11.25	6310258	4,010,251	108448	93,533,194	87,879,864
11	41,118	44	2950	56	0.00	11.48	6310258	4,010,251	108448	93,539,931	87,908,277
12	41,131	60	2950	56	0.00	13.27	6314300	4,010,251	108448	93,547,071	87,938,627
13	41,144	27	2950	56	0.00	12.45	6316590	4,010,251	108448	93,554,030	87,968,129
14	41,155	15	2950	56	0.00	10.80	6316590	4,010,251	108448	93,560,617	87,995,653
15	41,165	48	2950	56	0.00	10.55	6316590	4,010,251	108448	93,567,072	88,022,592
16	41,176	5	2950	56	0.00	10.28	6316590	4,010,251	108448	93,573,338	88,148,776
17	41,186	10	2950	56	0.00	10.08	6316590	4,010,251	108448	93,579,463	88,174,560
18	41,197	17	2950	56	0.00	11.12	6316590	4,010,251	108448	93,586,157	88,102,863
19	41,208	5	2950	56	0.00	10.80	6317667	4,010,251	108448	93,592,577	88,230,099
20	41,221	11	2950	56	0.00	13.10	6319741	4,010,251	108448	93,600,095	88,262,181
21	41,232	22	2950	56	0.00	11.18	6319741	4,010,251	108448	93,606,682	88,289,989
22	41,243	17	2950	56	0.00	10.92	6323297	4,010,251	108448	93,613,068	88,217,044
23	41,254	2	2953	25	2.48	10.75	6325997	4,016,859	108448	93,619,403	88,343,841
24	41,263	53	2953	25	0.00	9.85	6325997	4,016,859	108448	93,625,211	88,368,361
25	41,273	27	2953	25	0.00	9.57	6326925	4,016,859	108448	93,630,893	88,292,368
26	41,284	53	2953	25	0.00	11.43	6329043	4,016,859	108448	93,637,646	88,320,997
27	41,296	7	2953	25	0.00	11.23	6329043	4,016,859	108448	93,644,307	88,349,329
28	41,306	50	2953	25	0.00	10.72	6329043	4,016,859	108448	93,650,669	88,476,284
29	41,316	35	2953	25	0.00	9.75	6329043	4,016,859	108448	93,656,490	918
30	41,325	35	2953	25	0.00	9.00	6329043	4,016,859	108448	93,661,855	23,596
31	41,336	45	2953	25	0.00	11.17	6330881	4,016,859	108448	93,668,384	51,078
					Total	**Gallons**	**42,960**	**6,983**	**288**	**196,190**	**908,950**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Hidden Valley Landfill

Month of Jun-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD	SITE Treatment Discharge GPD
31	15.46	14.38	0	0	1,838	0	6,528	41.02	27,481	32,682
1	15.59	14.99	0	0	0	0	6,014	N/A	N/A	31,460
2	15.68	15.81	0	0	0	0	5,678	38.92	24,015	33,600
3	16.07	16.42	0	0	0	0	5,792	37.30	24,658	30,944
4	15.85	17.07	0	0	0	0	5,690	35.74	24,017	27,015
5	16.29	17.90	0	0	0	0	5,019	32.72	21,008	26,797
6	16.81	18.68	0	0	0	0	4,745	30.28	20,164	26,318
7	16.77	19.76	0	0	0	0	4,634	29.65	19,895	24,784
8	16.90	20.46	0	0	0	0	4,577	28.42	19,038	24,504
9	17.03	21.07	0	0	0	0	4,504	28.02	19,108	25,858
10	17.42	21.85	0	0	0	0	4,606	28.04	19,488	25,942
11	17.64	22.76	0	0	0	0	4,355	27.60	18,189	20,456
12	17.72	23.72	0	0	0	0	4,153	28.11	17,481	22,190
13	17.98	24.63	0	0	0	0	4,125	28.84	17,739	22,119
14	18.16	25.85	0	0	0	0	4,082	28.88	17,672	22,014
15	18.42	26.24	0	0	0	0	2,259	28.86	9,669	12,991
16	18.72	26.84	0	0	0	0	4,789	29.62	20,732	15,543
17	18.90	27.76	0	0	0	0	4,729	29.09	20,389	24,870
18	18.90	28.28	0	0	0	0	4,689	28.48	20,133	26,040
19	19.11	28.97	0	0	0	0	4,569	28.51	19,613	23,724
20	19.33	29.54	0	0	0	0	4,605	28.21	19,635	25,378
21	19.55	14.25	0	481	0	0	4,867	28.60	20,674	25,219
22	19.68	15.25	0	0	0	0	4,706	28.38	19,924	25,853
23	19.76	15.85	0	0	0	0	4,291	2.85	18,296	25,106
24	20.07	16.72	0	0	3,121	0	4,824	-0.01	20,885	25,480
25	20.20	17.64	0	0	0	0	3,869	26.76	16,512	19,413
26	20.29	18.46	0	0	0	0	4,495	-25.17	19,077	24,440
27	20.46	19.42	0	0	0	0	4,599	28.10	18,910	25,132
28	20.55	20.07	0	0	0	0	4,872	-29.69	20,754	26,545
29	20.68	20.98	0	0	0	0	4,574	27.28	19,536	24,132
30	20.76	21.72	0	0	3,407	0	4,851	0.01	20,667	29,242
			Total Gallons:	**481**	**6,528**	**0**	**139,558**		**567,879**	**743,109**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

Jun-12

	Discharge Pump 12		Cell 2 Influent Pump		Cell 2 Daily	Pump 12 Daily	Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge
Day	(hr)	(min)	(hr)	(min)	Hours	Hours	Total Gals.	Total Gals.	Total Gals.	Total Gals.	Total Gals.
31	41,336	45	2953	25	0.00	11.17	6330881	4,016,859	108448	93,668,384	51,078
1	41,347	15	2953	25	0.00	10.50	6330881	4,016,859	108448	93,674,397	88,476,332
2	41,357	32	2953	25	0.00	10.28	6330881	4,016,859	108448	93,680,075	88,500,347
3	41,368	33	2953	25	0.00	11.02	6330881	4,016,859	108448	93,685,867	88,525,005
4	41,379	45	2953	25	0.00	11.20	6330881	4,016,859	108448	93,691,557	88,549,022
5	41,390	27	2953	25	0.00	10.70	6330881	4,016,859	108448	93,696,576	88,570,030
6	41,401	33	2953	25	0.00	11.10	6330881	4,016,859	108448	93,701,321	88,590,194
7	41,412	44	2953	25	0.00	11.18	6330881	4,016,859	108448	93,705,954	88,610,089
8	41,423	54	2953	25	0.00	11.17	6330881	4,016,859	108448	93,710,531	88,629,127
9	41,435	16	2953	25	0.00	11.37	6330881	4,016,859	108448	93,715,035	88,648,235
10	41,446	51	2953	25	0.00	11.58	6330881	4,016,859	108448	93,719,640	88,667,723
11	41,457	50	2953	25	0.00	10.98	6330881	4,016,859	108448	93,723,995	88,685,912
12	41,468	12	2953	25	0.00	10.37	6330881	4,016,859	108448	93,728,148	88,703,393
13	41,478	27	2953	25	0.00	10.25	6330881	4,016,859	108448	93,732,273	88,721,132
14	41,488	39	2953	25	0.00	10.20	6330881	4,016,859	108448	93,736,355	88,738,804
15	41,494	14	2953	25	0.00	5.58	6330881	4,016,859	108448	93,738,614	88,748,473
16	41,505	54	2953	25	0.00	11.67	6330881	4,016,859	108448	93,743,403	88,769,205
17	41,517	35	2953	25	0.00	11.68	6330881	4,016,859	108448	93,748,132	88,789,594
18	41,529	22	2953	25	0.00	11.78	6330881	4,016,859	108448	93,752,822	88,809,727
19	41,540	50	2953	25	0.00	11.47	6330881	4,016,859	108448	93,757,391	88,829,340
20	41,552	26	2953	25	0.00	11.60	6330881	4,016,859	108448	93,761,996	88,848,975
21	41,564	29	2953	35	0.17	12.05	6330881	4,016,859	108928	93,766,862	88,869,649
22	41,576	11	2953	35	0.00	11.70	6330881	4,016,859	108928	93,771,568	88,889,573
23	41,683	12	2953	35	0.00	107.02	6330881	4,016,859	108928	93,775,859	88,907,870
24	7	59	2953	35	0.00	-41675.22	6334002	4,016,859	108928	93,780,683	88,928,754
25	18	16	2953	35	0.00	10.28	6334002	4,016,859	108928	93,784,552	88,945,266
26	5	38	2953	35	0.00	-12.63	6334002	4,016,859	108928	93,789,047	88,964,344
27	16	51	2953	35	0.00	11.22	6334002	4,016,859	108928	93,793,646	88,983,254
28	5	12	2953	35	0.00	-11.65	6334002	4,016,859	108928	93,798,518	89,004,008
29	17	8	2953	35	0.00	11.93	6334002	4,016,859	108928	93,803,091	89,023,544
30	41,669	49	2953	35	0.00	41652.68	6337409	4,016,859	108928	93,807,942	89,044,211
					Total	**Gallons**	**6,528**	**0**	**481**	**139,558**	**567,879**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Hidden Valley Landfill

Month of Jul-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	PLC Treatment Discharge GPD	SITE Treatment Discharge GPD
30	20.76	21.72	0	0	3,407	0	4,851	0.01	20,667	
1	20.94	22.63	0	0	5,998	0	5,045	26.37	21,622	27,156
2	21.11	23.24	0	0	3,331	0	4,881	25.54	20,740	25,254
3	21.15	23.89	0	0	0	0	4,651	24.77	19,789	22,815
4	21.63	24.85	0	0	0	0	3,893	19.76	16,772	20,756
5	21.59	25.76	0	0	34	0	3,612	27.62	15,438	20,580
6	18.68	1.00	0	2841	4,918	0	4,656	28.60	20,105	25,833
7	21.63	0.87	0	0	0	0	4,756	28.64	20,792	26,261
8	21.59	0.91	0	0	0	0	4,507	28.26	19,528	23,479
9	18.68	0.87	31	0	2,430	2,993	4,294	27.81	18,689	22,225
10	15.20	0.52	20	0	4,975	3,504	4,141	28.41	18,099	21,929
11	15.59	0.69	0	0	0	0	4,235	28.86	17,978	21,235
12	11.16	0.83	44	0	959	3,441	4,173	30.54	17,772	25,253
13	11.51	0.61	0	0	3,123	0	5,842	41.08	25,511	29,397
14	23.76	0.74	0	0	0	0	5,261	41.12	22,824	27,840
15	11.95	0.48	0	0	0	0	5,450	41.34	23,811	32,100
16	15.46	0.35	0	0	0	0	5,304	41.38	23,051	25,927
17	12.94	0.69	0	0	0	0	3,659	41.27	15,681	19,349
18	12.47	0.61	0	0	0	0	5,629	40.88	24,199	31,962
19	12.68	0.30	0	0	0	0	6,285	40.06	27,120	33,965
20	12.90	0.35	0	0	0	0	6,588	39.48	28,819	33,641
21	13.16	0.48	0	0	0	0	6,540	40.45	28,438	36,769
22	13.25	0.69	0	0	0	0	6,751	40.60	29,597	35,161
23	13.55	0.65	0	0	0	0	6,595	39.35	28,761	35,687
24	13.77	0.39	0	0	0	0	6,614	38.60	28,528	34,921
25	13.90	0.48	0	0	0	0	6,626	39.14	28,217	35,184
26	14.03	0.35	0	0	0	0	6,669	39.46	28,493	34,617
27	14.20	0.43	0	0	0	0	6,585	40.22	28,392	33,380
28	14.51	0.30	0	0	0	0	6,648	40.44	28,874	36,714
29	14.59	0.74	0	0	0	0	6,557	39.73	28,488	33,865
30	14.86	0.35	0	0	0	0	6,194	40.04	26,946	33,242
31	14.94	0.56	0	0	0	0	5,361	39.79	23,397	28,498
			Total Gallons:	**2,841**	**25,769**	**9,938**	**168,003**		**726,472**	**894,995**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

Jul-12

	Discharge Pump 12		Cell 2 Influent Pump		Cell 2 Daily	Pump 12 Daily	Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge
Day	(hr)	(min)	(hr)	(min)	Hours	Hours	Total Gals.	Total Gals.	Total Gals.	Total Gals.	Total Gals.
30	41,669	49	2953	35	0.00	41652.68	6337409	4,016,859	108928	93,807,942	89,044,211
1	41,683	29	2953	35	0.00	13.67	6343407	4,016,859	108928	93,812,987	89,065,833
2	41,697	1	2953	35	0.00	13.53	6346739	4,016,859	108928	93,817,869	89,086,573
3	41,710	20	2953	35	0.00	13.32	6346739	4,016,859	108928	93,822,520	89,106,362
4	41,724	29	2953	35	0.00	14.15	6346739	4,016,859	108928	93,826,413	89,123,134
5	41,733	48	2953	35	0.00	9.32	6346773	4,016,859	108928	93,830,025	89,138,572
6	41,745	31	2954	32	0.95	11.72	6351691	4,016,859	111769	93,834,681	89,158,677
7	41,757	37	2954	32	0.00	12.10	6351691	4,016,859	111769	93,839,438	89,179,469
8	41,769	8	2954	32	0.00	11.52	6351691	4,016,859	111769	93,843,944	89,198,997
9	41,780	20	2956	9	1.62	11.20	6354121	4,019,852	111769	93,848,239	89,217,686
10	41,790	57	2959	1	2.87	10.62	6359097	4,023,356	111769	93,852,380	89,235,785
11	41,801	20	2959	1	0.00	10.38	6359097	4,023,356	111769	93,856,614	89,253,763
12	41,811	2	2960	20	1.32	9.70	6360056	4,026,797	111769	93,860,788	89,271,536
13	41,821	23	2960	20	0.00	10.35	6363179	4,026,797	111769	93,866,629	89,297,046
14	41,830	38	2960	20	0.00	9.25	6363179	4,026,797	111769	93,871,890	89,319,870
15	41,840	14	2960	20	0.00	9.60	6363179	4,026,797	111769	93,877,340	89,343,681
16	41,849	31	2960	20	0.00	9.28	6363179	4,026,797	111769	93,882,644	89,366,732
17	41,855	51	2960	20	0.00	6.33	6363179	4,026,797	111769	93,886,303	89,382,413
18	41,865	43	2960	20	0.00	9.87	6363179	4,026,797	111769	93,891,933	89,406,613
19	41,876	60	2960	20	0.00	11.28	6363179	4,026,797	111769	93,898,217	89,433,733
20	41,889	10	2960	20	0.00	12.17	6363179	4,026,797	111769	93,904,805	89,462,552
21	41,900	53	2960	20	0.00	11.72	6363179	4,026,797	111769	93,911,345	89,490,990
22	41,913	2	2960	20	0.00	12.15	6363179	4,026,797	111769	93,918,096	89,520,587
23	41,925	13	2960	20	0.00	12.18	6363179	4,026,797	111769	93,924,691	89,549,348
24	41,937	32	2960	20	0.00	12.32	6363179	4,026,797	111769	93,931,304	89,577,876
25	41,949	33	2960	20	0.00	12.02	6363179	4,026,797	111769	93,937,931	89,606,093
26	41,961	35	2960	20	0.00	12.03	6363179	4,026,797	111769	93,944,600	89,634,585
27	41,973	21	2960	20	0.00	11.77	6363179	4,026,797	111769	93,951,185	89,662,977
28	41,985	15	2960	20	0.00	11.90	6363179	4,026,797	111769	93,957,833	89,691,852
29	41,997	12	2960	20	0.00	11.95	6363179	4,026,797	111769	93,964,390	89,720,339
30	42,008	25	2960	20	0.00	11.22	6363179	4,026,797	111769	93,970,584	89,747,286
31	42,018	13	2960	20	0.00	9.80	6363179	4,026,797	111769	93,975,945	89,770,683
					Total	**Gallons**	**25,769**	**9,938**	**2,841**	**168,003**	**726,472**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Hidden Valley Landfill

Month of Aug-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD	SITE Treatment Discharge GPD
31	14.94	0.56	0	0	0	0	5,361	39.79	23,397	
1	15.12	0.56	0	0	0	0	5,070	40.04	22,061	28,515
2	15.33	0.52	0	0	0	0	6,955	39.79	30,281	36,054
3	15.55	0.30	0	0	0	0	6,705	40.16	28,876	35,720
4	15.68	0.39	0	0	0	0	6,259	39.68	26,743	32,930
5	15.68	0.61	0	0	0	0	6,136	38.79	25,909	32,423
6	15.94	0.52	0	0	0	0	6,475	39.00	27,262	37,183
7	16.07	0.30	0	0	0	0	5,349	39.58	22,679	27,330
8	16.29	0.35	0	0	0	0	6,733	39.13	28,565	35,648
9	16.46	0.52	0	0	0	0	5,858	39.03	24,824	30,555
10	16.64	0.48	0	0	0	0	2,906	38.70	12,460	16,840
11	16.81	0.13	0	0	0	0	5,582	39.27	23,837	27,915
12	16.94	0.56	0	0	0	0	5,525	39.00	23,594	30,581
13	17.11	0.43	0	0	0	0	6,309	39.47	26,842	32,711
14	17.24	0.22	0	0	0	0	6,192	40.78	26,384	32,265
15	17.38	0.30	0	0	0	0	5,881	40.45	24,998	30,671
16	17.55	0.56	0	0	0	0	6,163	39.96	25,817	31,848
17	17.68	0.26	0	0	0	0	6,199	39.65	25,696	30,295
18	17.81	0.17	0	0	0	0	6,116	39.71	25,771	32,859
19	17.94	0.39	0	0	0	0	6,305	39.53	26,880	34,425
20	18.16	0.00	0	0	0	0	6,618	39.17	28,003	33,908
21	18.29	0.39	0	0	0	0	6,262	38.85	26,771	33,101
22	18.50	0.09	0	0	0	0	5,546	38.50	23,600	29,780
23	18.55	0.48	0	0	0	0	6,462	38.16	27,744	34,820
24	18.94	0.00	0	0	0	0	6,295	37.87	26,928	32,641
25	18.98	0.26	0	0	0	0	5,790	37.47	24,693	30,240
26	18.90	0.30	0	0	0	0	5,574	36.96	23,837	28,188
27	19.20	0.39	0	0	0	0	6,253	36.73	26,626	35,217
28	19.24	0.22	1	8	0	1	6,325	36.44	26,932	33,925
29	19.50	0.00	0	0	0	0	6,612	36.07	28,239	35,019
30	19.59	0.22	0	0	0	0	6,702	35.75	28,675	35,706
31	19.63	0.22	0	0	0	0	6,232	35.33	26,640	32,328
			Total Gallons:	**8**	**0**	**1**	**187,385**		**798,165**	**991,641**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

Aug-12

	Discharge Pump 12		Cell 2 Influent Pump		Cell 2 Daily	Pump 12 Daily	Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge
Day	(hr)	(min)	(hr)	(min)	Hours	Hours	Total Gals.	Total Gals.	Total Gals.	Total Gals.	Total Gals.
31	42,018	13	2960	20	0.00	9.80	6363179	4,026,797	111769	93,975,945	89,770,683
1	42,027	24	2960	20	0.00	9.18	6363179	4,026,797	111769	93,981,015	89,792,744
2	42,040	5	2960	20	0.00	12.68	6363179	4,026,797	111769	93,987,970	89,823,025
3	42,052	4	2960	20	0.00	11.98	6363179	4,026,797	111769	93,994,675	89,851,901
4	42,063	18	2960	20	0.00	11.23	6363179	4,026,797	111769	94,000,934	89,878,644
5	42,074	26	2960	20	0.00	11.13	6363179	4,026,797	111769	94,007,070	89,904,553
6	42,086	5	2960	20	0.00	11.65	6363179	4,026,797	111769	94,013,545	89,931,815
7	42,095	38	2960	20	0.00	9.55	6363179	4,026,797	111769	94,018,893	89,954,494
8	42,107	48	2960	20	0.00	12.17	6363179	4,026,797	111769	94,025,626	89,983,059
9	42,118	24	2960	20	0.00	10.60	6363179	4,026,797	111769	94,031,483	90,007,883
10	42,123	46	2960	20	0.00	5.37	6363179	4,026,797	111769	94,034,390	90,020,344
11	42,133	53	2960	20	0.00	10.12	6363179	4,026,797	111769	94,039,971	90,044,180
12	42,143	58	2960	20	0.00	10.08	6363179	4,026,797	111769	94,045,496	90,067,774
13	42,155	18	2960	20	0.00	11.33	6363179	4,026,797	111769	94,051,805	90,094,615
14	42,166	5	2960	20	0.00	10.78	6363179	4,026,797	111769	94,057,997	90,120,999
15	42,176	23	2960	20	0.00	10.30	6363179	4,026,797	111769	94,063,878	90,145,997
16	42,187	9	2960	20	0.00	10.77	6363179	4,026,797	111769	94,070,041	90,171,814
17	42,197	57	2960	20	0.00	10.80	6363179	4,026,797	111769	94,076,239	90,197,509
18	42,208	46	2960	20	0.00	10.82	6363179	4,026,797	111769	94,082,355	90,223,280
19	42,220	6	2960	20	0.00	11.33	6363179	4,026,797	111769	94,088,660	90,250,160
20	42,232	1	2960	20	0.00	11.92	6363179	4,026,797	111769	94,095,278	90,278,163
21	42,243	30	2960	20	0.00	11.48	6363179	4,026,797	111769	94,101,540	90,304,934
22	42,253	43	2960	20	0.00	10.22	6363179	4,026,797	111769	94,107,085	90,328,534
23	42,265	50	2960	20	0.00	12.12	6363179	4,026,797	111769	94,113,547	90,356,278
24	42,277	41	2960	20	0.00	11.85	6363179	4,026,797	111769	94,119,843	90,383,205
25	42,288	40	2960	20	0.00	10.98	6363179	4,026,797	111769	94,125,633	90,407,899
26	42,299	25	2960	20	0.00	10.75	6363179	4,026,797	111769	94,131,207	90,431,736
27	42,311	30	2960	20	0.00	12.08	6363179	4,026,797	111769	94,137,459	90,458,362
28	42,323	49	2960	21	0.02	12.32	6363179	4,026,798	111777	94,143,784	90,485,294
29	42,336	52	2960	21	0.00	13.05	6363179	4,026,798	111777	94,150,396	90,513,533
30	42,350	14	2960	21	0.00	13.37	6363179	4,026,798	111777	94,157,098	90,542,208
31	42,362	48	2960	21	0.00	12.57	6363179	4,026,798	111777	94,163,330	90,568,848
					Total	**Gallons**	**0**	**1**	**8**	**187,385**	**798,165**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Hidden Valley Landfill

Month of Sep-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD	SITE Treatment Discharge GPD
31	19.63	0.22	0	0	0	0	6,232	35.33	26,640	
1	19.94	0.09	0	0	0	0	6,512	34.55	27,747	33,940
2	20.02	0.22	0	0	0	0	5,424	34.20	23,085	29,597
3	20.11	0.17	0	0	0	0	5,852	34.30	24,899	30,580
4	20.33	0.00	0	0	0	0	5,951	33.97	25,271	62,002
5	20.42	0.13	0	0	0	0	5,696	33.78	24,149	32,289
6	27.02	0.56	0	0	0	0	6,100	33.30	25,878	28,666
7	20.68	0.65	0	0	648	0	5,544	33.07	23,380	33,680
8	20.76	0.78	0	0	5,393	0	6,112	32.52	25,790	31,363
9	20.94	1.22	0	0	1,420	0	6,202	31.92	26,401	16,143
10	20.98	1.22	0	0	0	0	5,938	31.83	25,144	15,909
11	44.00	1.74	0	0	0	0	6,160	33.23	26,188	33,275
12	21.33	1.82	0	0	2	3	4,477	34.33	19,156	16,219
13	20.85	2.09	46	0	113	548	6	0.00	0	11,412
14	12.34	2.56	44	0	3,717	7,544	7,210	34.07	30,803	36,232
15	12.64	2.65	0	0	0	0	7,272	33.50	30,992	37,346
16	12.94	2.39	0	0	0	0	7,005	32.78	29,929	36,492
17	13.16	2.95	0	0	0	0	6,264	32.36	26,635	29,678
18	13.16	3.34	0	0	0	0	4,603	32.33	19,527	28,239
19	13.51	3.95	0	0	635	0	5,735	32.32	24,433	30,086
20	13.64	5.13	0	0	78	0	5,556	32.77	23,991	27,857
21	13.90	7.04	0	0	2,225	0	5,206	33.92	22,186	29,639
22	14.07	9.73	0	0	0	0	6,552	34.52	27,929	35,688
23	14.33	4.34	0	0	0	0	6,870	34.67	29,293	34,475
24	14.55	8.43	0	0	0	0	6,514	34.70	27,654	33,582
25	14.94	4.69	0	0	0	0	6,211	34.15	26,362	33,335
26	16.59	4.87	0	0	0	0	6,364	33.69	27,051	32,221
27	19.42	4.65	0	0	0	0	6,235	33.09	26,436	34,162
28	27.32	5.30	0	0	0	0	6,685	32.38	28,369	34,009
29	43.87	5.39	0	0	0	0	6,287	32.11	26,816	33,458
30	97.86	5.56	0	0	822	0	6,176	31.92	26,401	33,244
			Total Gallons:	**0**	**15,052**	**8,095**	**176,721**		**751,895**	**934,818**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

Sep-12

	Discharge Pump 12		Cell 2 Influent Pump		Cell 2 Daily	Pump 12 Daily	Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge
Day	(hr)	(min)	(hr)	(min)	Hours	Hours	Total Gals.	Total Gals.	Total Gals.	Total Gals.	Total Gals.
31	42,362	48	2960	21	0.00	12.57	6363179	4,026,798	111777	94,163,330	90,568,848
1	42,376	11	2960	21	0.00	13.38	6363179	4,026,798	111777	94,169,842	90,596,595
2	42,387	26	2960	21	0.00	11.25	6363179	4,026,798	111777	94,175,267	90,619,680
3	42,399	32	2960	21	0.00	12.10	6363179	4,026,798	111777	94,181,118	90,644,580
4	42,411	56	2960	21	0.00	12.40	6363179	4,026,798	111777	94,187,069	90,669,851
5	42,423	51	2960	21	0.00	11.92	6363179	4,026,798	111777	94,192,765	90,694,001
6	42,436	48	2960	21	0.00	12.95	6363179	4,026,798	111777	94,198,865	90,719,878
7	42,448	35	2960	21	0.00	11.78	6363826	4,026,798	111777	94,204,409	90,743,258
8	42,461	48	2960	21	0.00	13.22	6369219	4,026,798	111777	94,210,521	90,769,047
9	42,475	35	2960	21	0.00	13.78	6370639	4,026,798	111777	94,216,723	90,795,448
10	42,488	45	2960	21	0.00	13.17	6370639	4,026,798	111777	94,222,661	90,820,592
11	42,501	53	2960	21	0.00	13.13	6370639	4,026,798	111777	94,228,822	90,846,780
12	42,511	11	2960	21	0.00	9.30	6370641	4,026,801	111777	94,233,299	90,865,936
13	42,511	11	2960	33	0.20	0.00	6370754	4,027,349	111777	94,233,305	90,865,936
14	42,526	15	2963	25	2.87	15.07	6374471	4,034,894	111777	94,240,516	90,896,740
15	42,541	40	2963	25	0.00	15.42	6374471	4,034,894	111777	94,247,788	90,927,731
16	42,556	53	2963	25	0.00	15.22	6374471	4,034,894	111777	94,254,793	90,957,660
17	42,570	36	2963	25	0.00	13.72	6374471	4,034,894	111777	94,261,056	90,984,295
18	42,580	40	2963	25	0.00	10.07	6374471	4,034,894	111777	94,265,660	91,003,822
19	42,593	16	2963	25	0.00	12.60	6375106	4,034,894	111777	94,271,395	91,028,255
20	42,605	28	2963	25	0.00	12.20	6375183	4,034,894	111777	94,276,951	91,052,246
21	42,616	22	2963	25	0.00	10.90	6377409	4,034,894	111777	94,282,157	91,074,432
22	42,629	51	2963	25	0.00	13.48	6377409	4,034,894	111777	94,288,709	91,102,360
23	42,643	56	2963	25	0.00	14.08	6377409	4,034,894	111777	94,295,579	91,131,654
24	42,657	13	2963	25	0.00	13.28	6377409	4,034,894	111777	94,302,093	91,159,308
25	42,670	5	2963	25	0.00	12.87	6377409	4,034,894	111777	94,308,304	91,185,670
26	42,683	28	2963	25	0.00	13.38	6377409	4,034,894	111777	94,314,668	91,212,721
27	42,696	47	2963	25	0.00	13.32	6377409	4,034,894	111777	94,320,903	91,239,158
28	42,711	23	2963	25	0.00	14.60	6377409	4,034,894	111777	94,327,588	91,267,527
29	42,725	18	2963	25	0.00	13.92	6377409	4,034,894	111777	94,333,875	91,294,342
30	42,739	5	2963	25	0.00	13.78	6378231	4,034,894	111777	94,340,051	91,320,744
					Total	**Gallons**	**15,052**	**8,095**	**0**	**176,721**	**751,895**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Hidden Valley Landfill

Month of **Oct-12**

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD	SITE Treatment Discharge GPD
30	97.86	5.56	0	0	822	0	6,176	31.92	26,401	
1	34.40	5.73	0	0	2,934	0	4,831	31.56	20,608	23,967
2	47.95	6.04	0	0	0	0	5,887	31.54	25,454	31,221
3	16.03	6.65	0	0	0	0	6,038	31.33	25,691	33,194
4	16.25	6.39	0	47	0	0	5,305	30.95	22,193	29,219
5	16.59	6.82	0	0	0	0	5,257	30.65	22,131	21,585
6	17.07	139.00	0	0	0	0	5,181	30.49	22,102	33,528
7	16.68	124.49	0	0	0	0	6,312	30.15	27,493	32,087
8	17.94	120.54	0	0	0	0	104,639	29.61	19,809	27,566
9	18.16	113.33	0	0	0	0	6,449	29.16	27,410	32,450
10	17.11	106.94	0	0	0	0	5,895	28.70	24,744	32,037
11	17.29	66.55	0	0	0	0	-94,147	28.19	24,946	30,603
12	17.33	29.67	0	0	0	0	5,622	27.89	24,157	30,921
13	17.51	21.68	0	4660	0	0	5,332	27.27	22,964	26,846
14	17.64	22.15	0	1	0	0	5,579	27.11	23,962	29,017
15	17.81	19.16	0	0	0	0	5,770	26.89	24,712	29,053
16	17.98	18.20	0	0	0	0	4,743	26.55	19,962	25,573
17	18.16	89.18	0	0	0	0	5,601	26.89	23,687	30,712
18	18.16	57.99	0	0	0	0	6,102	30.18	25,951	31,729
19	18.59	20.11	0	5	0	0	4,943	30.13	21,064	25,670
20	18.59	139.00	0	0	1,132	0	4,025	30.50	17,295	23,381
21	18.77	109.81	0	0	4,586	0	6,477	30.42	27,952	32,385
22	18.81	137.22	0	0	2,626	0	6,174	30.24	26,428	31,876
23	18.98	0.00	0	0	0	0	6,098	30.02	25,785	32,256
24	18.85	0.00	0	0	0	0	5,716	30.02	23,806	29,200
25	19.42	0.00	0	0	1,805	0	5,287	29.83	22,047	29,577
26	19.46	0.00	0	0	3,168	0	6,317	29.40	26,342	31,409
27	19.81	0.00	0	0	1,292	0	6,020	29.18	25,037	32,480
28	19.89	0.00	0	0	2,842	0	6,542	28.74	27,330	33,822
29	19.94	0.00	0	0	0	0	5,930	28.34	24,654	29,329
30	20.02	0.00	0	0	0	0	5,754	28.08	24,235	29,787
31	20.11	0.00	0	0	0	0	5,457	27.99	23,261	26,761
			Total Gallons:	**4,713**	**20,385**	**0**	**175,139**		**743,211**	**919,241**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

Oct-12

	Discharge Pump 12		Cell 2 Influent Pump		Cell 2 Daily	Pump 12 Daily	Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge
Day	(hr)	(min)	(hr)	(min)	Hours	Hours	Total Gals.	Total Gals.	Total Gals.	Total Gals.	Total Gals.
30	42,739	5	2963	25	0.00	13.78	6378231	4,034,894	111777	94,340,051	91,320,744
1	42,749	58	2963	25	0.00	10.88	6381165	4,034,894	111777	94,344,882	91,341,351
2	42,763	25	2963	25	0.00	13.45	6381165	4,034,894	111777	94,350,769	91,366,805
3	42,777	5	2963	25	0.00	13.67	6381165	4,034,894	111777	94,356,807	91,392,496
4	42,789	2	2963	25	0.00	11.95	6381165	4,034,894	111824	94,362,113	91,414,690
5	42,801	4	2963	25	0.00	12.03	6381165	4,034,894	111824	94,367,370	91,436,821
6	42,813	9	2963	26	0.02	12.08	6381165	4,034,894	111824	94,372,552	91,458,922
7	42,828	21	2963	26	0.00	15.20	6381165	4,034,894	111824	94,378,864	91,486,415
8	42,839	30	2963	26	0.00	11.15	6381165	4,034,894	111824	94,483,502	91,506,224
9	42,855	10	2963	26	0.00	15.67	6381165	4,034,894	111824	94,489,952	91,533,634
10	42,869	32	2963	26	0.00	14.37	6381165	4,034,894	111824	94,495,847	91,558,378
11	42,884	17	2963	26	0.00	14.75	6381165	4,034,894	111824	94,401,700	91,583,324
12	42,898	43	2963	26	0.00	14.43	6381165	4,034,894	111824	94,407,322	91,607,481
13	42,912	45	2966	46	3.33	14.03	6381165	4,034,894	116484	94,412,654	91,630,445
14	42,927	29	2966	46	0.00	14.73	6381165	4,034,894	116485	94,418,234	91,654,407
15	42,942	48	2966	46	0.00	15.32	6381165	4,034,894	116485	94,424,004	91,679,119
16	42,955	20	2966	46	0.00	12.53	6381165	4,034,894	116485	94,428,747	91,699,081
17	42,970	1	2966	46	0.00	14.68	6381165	4,034,894	116485	94,434,348	91,722,768
18	42,984	21	2966	46	0.00	14.33	6381165	4,034,894	116485	94,440,450	91,748,719
19	42,995	60	2966	48	0.03	11.65	6381165	4,034,894	116489	94,445,393	91,769,783
20	43,005	27	2966	48	0.00	9.45	6382297	4,034,894	116489	94,449,418	91,787,078
21	43,020	46	2966	48	0.00	15.32	6386883	4,034,894	116490	94,455,895	91,815,030
22	43,035	20	2966	48	0.00	14.57	6389509	4,034,894	116490	94,462,068	91,841,458
23	43,049	39	2966	48	0.00	14.32	6389509	4,034,894	116490	94,468,167	91,867,243
24	43,062	52	2966	48	0.00	13.22	6389509	4,034,894	116490	94,473,883	91,891,049
25	43,075	11	2966	48	0.00	12.32	6391315	4,034,894	116490	94,479,170	91,913,095
26	43,090	7	2966	48	0.00	14.93	6394482	4,034,894	116490	94,485,487	91,939,437
27	43,104	25	2966	48	0.00	14.30	6395774	4,034,894	116490	94,491,507	91,964,474
28	43,120	16	2966	48	0.00	15.85	6398616	4,034,894	116490	94,498,049	91,991,805
29	43,134	46	2966	48	0.00	14.50	6398616	4,034,894	116490	94,503,979	92,016,458
30	43,149	9	2966	48	0.00	14.38	6398616	4,034,894	116490	94,509,733	92,040,694
31	43,162	60	2966	48	0.00	13.85	6398616	4,034,894	116490	94,515,190	92,063,954
					Total	**Gallons**	**20,385**	**0**	**4,713**	**175,139**	**743,211**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Hidden Valley Landfill

Month of Nov-12

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD	SITE Treatment Discharge GPD
31	20.11	0.00	0	0	0	0	5,457	27.99	23,261	
1	20.15	0.00	0	0	0	0	5,229	28.39	22,200	29,881
2	20.50	0.00	0	0	0	0	6,154	28.74	25,669	31,633
3	20.46	0.00	0	0	0	0	5,979	30.54	25,135	33,943
4	20.81	0.00	0	0	0	0	5,328	31.97	22,893	27,680
5	21.20	0.00	0	0	0	0	5,829	32.01	24,871	30,279
6	26.32	0.00	0	0	0	0	5,977	32.04	25,505	30,275
7	29.62	0.00	0	0	0	0	3,573	32.06	15,293	18,909
8	21.37	0.00	0	0	0	0	6,492	31.86	27,560	34,558
9	21.41	0.00	0	0	0	0	6,200	31.47	26,312	31,443
10	21.55	0.00	0	0	0	0	6,055	31.03	25,723	30,839
11	15.64	0.00	44	0	0	5,744	5,909	30.81	24,770	30,866
12	15.72	0.00	0	0	0	0	5,545	30.76	23,036	28,470
13	15.94	0.00	0	0	0	0	5,768	30.82	24,101	29,869
14	16.29	0.00	0	0	0	0	5,433	30.86	22,712	29,425
15	20.63	0.00	0	0	0	0	5,949	30.79	24,815	28,449
16	34.32	0.00	0	0	0	0	4,868	30.70	20,689	28,492
17	41.14	0.00	0	0	0	0	5,967	30.44	25,542	29,018
18	36.49	0.00	0	0	0	0	6,794	30.47	28,853	39,938
19	23.11	0.00	0	0	0	0	6,418	30.54	27,118	37,949
20	19.72	0.00	0	0	0	0	6,282	30.58	26,450	26,470
21	18.20	0.00	0	0	0	0	5,626	30.46	23,390	28,195
22	17.81	0.00	0	0	0	0	1,639	30.45	6,911	
23	18.33	0.00	0	0	0	0	3,850	30.31	16,062	20,570
24	19.03	0.00	0	0	0	0	4,253	30.36	17,761	31,670
25	18.46	0.00	0	0	0	0	7,017	30.33	29,818	36,778
26	18.37	0.00	0	0	11	0	7,006	29.87	29,029	36,934
27	18.77	0.00	0	0	0	0	7,073	29.68	29,323	35,827
28	18.72	0.00	0	0	0	0	7,310	29.80	30,282	37,106
29	19.33	0.00	0	0	0	0	5,786	29.61	23,921	30,904
30	19.24	0.00	0	0	0	0	5,097	29.69	21,080	27,003
			Total Gallons:	**0**	**11**	**5,745**	**170,406**		**716,822**	**893,373**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

Nov-12

Day	Discharge Pump 12 (hr)	(min)	Cell 2 Influent Pump (hr)	(min)	Cell 2 Daily Hours	Pump 12 Daily Hours	Cell 1 Leachate Total Gals.	Cell 2 Leachate Total Gals.	Cell 2 Leak Total Gals.	304th Influent Total Gals.	Treatment Discharge Total Gals.
31	43,162	60	2966	48	0.00	13.85	6398616	4,034,894	116490	94,515,190	92,063,954
1	43,176	2	2966	48	0.00	13.03	6398616	4,034,894	116490	94,520,419	92,086,155
2	43,190	55	2966	48	0.00	14.88	6398616	4,034,894	116490	94,526,573	92,111,824
3	43,204	38	2966	48	0.00	13.72	6398616	4,034,894	116490	94,532,552	92,136,959
4	43,216	34	2966	48	0.00	11.93	6398616	4,034,894	116490	94,537,880	92,159,851
5	43,229	31	2966	48	0.00	12.95	6398616	4,034,894	116490	94,543,709	92,184,722
6	43,242	47	2966	48	0.00	13.27	6398616	4,034,894	116490	94,549,686	92,210,228
7	43,250	44	2966	48	0.00	7.95	6398616	4,034,894	116490	94,553,259	92,225,521
8	43,265	9	2966	48	0.00	14.42	6398616	4,034,894	116490	94,559,751	92,253,081
9	43,279	5	2966	48	0.00	13.93	6398616	4,034,894	116490	94,565,951	92,279,393
10	43,292	54	2966	48	0.00	13.82	6398616	4,034,894	116490	94,572,006	92,305,115
11	43,306	18	2968	58	2.17	13.40	6398616	4,040,638	116490	94,577,915	92,329,886
12	43,318	47	2968	58	0.00	12.48	6398616	4,040,638	116490	94,583,461	92,352,922
13	43,331	49	2968	58	0.00	13.03	6398616	4,040,638	116490	94,589,229	92,377,023
14	43,344	5	2968	58	0.00	12.27	6398616	4,040,638	116490	94,594,662	92,399,735
15	43,357	31	2968	58	0.00	13.43	6398616	4,040,638	116490	94,600,611	92,424,549
16	43,368	45	2968	58	0.00	11.23	6398616	4,040,638	116490	94,605,479	92,445,238
17	43,382	44	2968	58	0.00	13.98	6398616	4,040,638	116490	94,611,446	92,470,780
18	43,398	31	2968	58	0.00	15.78	6398616	4,040,638	116490	94,618,240	92,499,633
19	43,413	19	2968	58	0.00	14.80	6398616	4,040,638	116490	94,624,658	92,526,750
20	43,427	44	2968	58	0.00	14.42	6398616	4,040,638	116490	94,630,939	92,553,200
21	43,440	32	2968	58	0.00	12.80	6398616	4,040,638	116490	94,636,565	92,576,590
22	43,444	19	2968	58	0.00	3.78	6398616	4,040,638	116490	94,638,204	92,583,501
23	43,453	9	2968	58	0.00	8.83	6398616	4,040,638	116490	94,642,054	92,599,563
24	43,462	54	2968	58	0.00	9.75	6398616	4,040,638	116490	94,646,307	92,617,324
25	43,479	17	2968	58	0.00	16.38	6398616	4,040,638	116490	94,653,324	92,647,142
26	43,495	29	2968	59	0.02	16.20	6398628	4,040,638	116490	94,660,330	92,676,171
27	43,511	57	2968	59	0.00	16.47	6398628	4,040,638	116490	94,667,403	92,705,494
28	43,528	53	2968	59	0.00	16.93	6398628	4,040,638	116490	94,674,713	92,735,775
29	43,542	21	2968	59	0.00	13.47	6398628	4,040,638	116490	94,680,499	92,759,697
30	43,554	11	2968	59	0.00	11.83	6398628	4,040,638	116490	94,685,595	92,780,777
)4 entered twice?					**Total**	**Gallons**	**11** Cell 1 Leachate	**5,745** Cell 2 Leachate	**0** Cell 2 Leak	**170,406** 304th Influent	**716,822** Treatment Discharge

Hidden Valley Landfill

Month of **Dec-12**

Day	Leachate Level	Cell 2 Leak Level	Cell 2 Daily Avg. GPM	Cell 2 Leak GPD	Cell 1 Influent GPD	Cell 2 Influent GPD	304th Influent GPD	Treatment Discharge Avg GPM	Treatment Discharge GPD	SITE Treatment Discharge GPD
30	19.24	0.00	0	0	0	0	5,097	29.69	21,080	
1	20.07	0.13	0	0	0	0	6,596	29.20	27,306	33,789
2	19.37	0.00	0	0	0	0	6,420	28.78	27,139	31,668
3	20.24	0.04	0	0	870	0	5,575	27.59	23,781	28,791
4	20.46	0.00	0	0	0	0	5,977	28.02	25,248	32,407
5	20.11	0.00	0	0	0	0	5,797	27.67	24,794	28,604
6	21.41	0.00	0	0	1,912	0	5,100	28.00	21,753	27,859
7	24.54	0.00	0	0	0	0	4,700	28.25	20,000	26,380
8	29.49	0.00	0	0	0	0	6,056	27.58	25,869	35,171
9	33.97	0.00	0	0	0	0	5,895	27.90	25,247	28,489
10	41.22	0.00	46	0	0	417	6,280	27.41	26,696	30,950
11	37.44	0.00	0	0	0	0	5,065	27.35	21,630	25,919
12	21.07	0.00	0	0	0	0	5,665	27.36	24,191	30,524
13	20.94	0.00	0	0	0	0	5,260	27.16	22,433	28,098
14	21.11	0.00	0	0	0	0	5,609	27.14	23,860	29,413
15	21.02	0.00	0	0	3,300	0	5,346	27.79	22,928	28,790
16	23.28	0.00	0	0	2,921	0	6,770	27.08	28,892	35,497
17	25.54	0.00	0	0	4	0	5,620	26.24	23,902	29,877
18	21.59	0.00	0	0	0	0	5,201	26.39	22,751	24,335
19	21.98	0.00	0	0	0	0	6,140	26.35	26,742	35,639
20	21.76	0.00	0	0	0	0	5,038	25.89	21,852	27,144
21	22.67	0.00	11	0	3	11	5,113	26.11	22,062	27,404
22	21.89	0.00	0	0	1,440	0	6,608	26.86	28,662	33,912
23	15.68	0.00	44	0	2,321	5,743	6,310	26.74	27,065	34,135
24	16.55	0.00	0	0	0	0	5,306	26.24	22,806	25,179
25	16.55	0.00	0	0	0	0	887	25.86	3,827	26,551
26	30.36	0.00	0	0	0	0	3,696	26.32	15,900	28,595
27	20.24	0.00	0	0	0	0	5,031	26.44	21,681	29,079
28	24.80	0.00	0	0	0	0	5,432	36.90	22,433	29,089
29	17.46	0.00	0	0	0	0	6,627	73.03	26,144	17,934
30	17.85	0.00	0	0	111	0	3,740	72.80	14,779	10,156
31	17.68	0.00	0	0	0	0	2,895	75.16	11,274	
			Total Gallons:	**0**	**12,882**	**6,172**	**165,757**		**703,649**	**861,378**
				Cell 2 Leak	Cell 1 Leachate	Cell 2 Leachate	304th Influent		Treatment Discharge	

Hidden Valley Landfill Hour Meters Totalizers

Dec-12

	Discharge Pump 12		Cell 2 Influent Pump		Cell 2 Daily	Pump 12 Daily	Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge
Day	(hr)	(min)	(hr)	(min)	Hours	Hours	Total Gals.	Total Gals.	Total Gals.	Total Gals.	Total Gals.
30	43,554	11	2968	59	0.00	11.83	6398628	4,040,638	116490	94,685,595	92,780,777
1	43,569	46	2968	59	0.00	15.58	6398628	4,040,638	116490	94,692,192	92,808,082
2	43,585	29	2968	59	0.00	15.72	6398628	4,040,638	116490	94,698,612	92,835,222
3	43,599	51	2968	59	0.00	14.37	6399498	4,040,638	116490	94,704,187	92,859,003
4	43,614	52	2968	59	0.00	15.02	6399498	4,040,638	116490	94,710,164	92,884,251
5	43,629	48	2968	59	0.00	14.93	6399498	4,040,638	116490	94,715,961	92,909,045
6	43,642	45	2968	59	0.00	12.95	6401410	4,040,638	116490	94,721,061	92,930,798
7	43,654	33	2968	59	0.00	11.80	6401410	4,040,638	116490	94,725,761	92,950,798
8	43,670	11	2968	59	0.00	15.63	6401410	4,040,638	116490	94,731,817	92,976,667
9	43,685	16	2968	59	0.00	15.08	6401410	4,040,638	116490	94,737,712	93,001,914
10	43,701	30	2969	8	0.15	16.23	6401410	4,041,055	116490	94,743,991	93,028,611
11	43,714	41	2969	8	0.00	13.18	6401410	4,041,055	116490	94,749,057	93,050,241
12	43,729	25	2969	8	0.00	14.73	6401410	4,041,055	116490	94,754,721	93,074,431
13	43,743	11	2969	8	0.00	13.77	6401410	4,041,055	116490	94,759,981	93,096,865
14	43,757	50	2969	8	0.00	14.65	6401410	4,041,055	116490	94,765,591	93,120,725
15	43,771	35	2969	8	0.00	13.75	6404710	4,041,055	116490	94,770,936	93,143,653
16	43,789	22	2969	8	0.00	17.78	6407630	4,041,055	116490	94,777,707	93,172,545
17	43,804	33	2969	8	0.00	15.18	6407635	4,041,055	116490	94,783,327	93,196,447
18	43,818	55	2969	8	0.00	14.37	6407635	4,041,055	116490	94,788,528	93,219,198
19	43,835	50	2969	8	0.00	16.92	6407635	4,041,055	116490	94,794,669	93,245,940
20	43,849	54	2969	8	0.00	14.07	6407635	4,041,055	116490	94,799,707	93,267,792
21	43,863	59	2969	9	0.02	14.08	6407638	4,041,067	116490	94,804,820	93,289,854
22	43,881	46	2969	9	0.00	17.78	6409077	4,041,067	116490	94,811,427	93,318,516
23	43,898	38	2971	19	2.17	16.87	6411399	4,046,810	116490	94,817,737	93,345,581
24	43,913	7	2971	19	0.00	14.48	6411399	4,046,810	116490	94,823,043	93,368,386
25	43,915	35	2971	19	0.00	2.47	6411399	4,046,810	116490	94,823,931	93,372,213
26	43,925	39	2971	19	0.00	10.07	6411399	4,046,810	116490	94,827,627	93,388,113
27	43,939	19	2971	19	0.00	13.67	6411399	4,046,810	116490	94,832,658	93,409,794
28	43,949	27	2971	19	0.00	10.13	6411399	4,046,810	116490	94,838,091	93,432,227
29	43,955	25	2971	19	0.00	5.97	6411399	4,046,810	116490	94,844,718	93,458,372
30	43,958	48	2971	19	0.00	3.38	6411510	4,046,810	116490	94,848,458	93,473,151
31	43,961	18	2971	19	0.00	2.50	6411510	4,046,810	116490	94,851,353	93,484,425
					Total	**Gallons**	**12,882**	**6,172**	**0**	**165,757**	**703,649**
							Cell 1 Leachate	Cell 2 Leachate	Cell 2 Leak	304th Influent	Treatment Discharge

Appendix C
Water Level Data

Hidden Valley Landfill
Water Level Measurements

WELL	TOC ELEV	01/15/88	02/23/88	02/24/88	04/26/88	05/24/88	06/24/88	07/18/88	07/19/88	07/20/88	07/21/88	08/30/88	08/31/88	09/15/88	09/16/88	10/25/88	12/01/88	12/02/88
MW-10S	460.17	424.51	424.01		432.03	432.97	432.63		431.58			428.77		427.30		424.60	430.21	
MW-10D	460.69		421.96		428.06	428.55	389.19		363.77			373.41		423.54		398.74	351.73	
MW-11S	516.44			DRY	422.20	422.59	422.18				420.95					DRY		420.70
MW-11D	516.56			417.65	422.07	422.43					420.79		418.18	417.20		416.27		
MW-11D(2)	515.53																	
MW-12S	489.94		DRY		427.23	DRY				423.27						DRY		
MW-12D	489.97	415.92	416.57		420.16	421.39	421.65			419.80			417.59	416.82		415.66		418.69
MW-13S	448.81			422.29	424.75	425.23	424.71			422.90			420.86		420.33	419.52	422.41	
MW-13D	448.94	418.89		418.12	422.54	422.91				421.28						417.59		
MW-14S	477.95		DRY		427.06	427.33	426.95	425.55					423.05	422.39		DRY	425.35	
MW-14D	477.98	418.33	419.33		424.34	423.65	423.90	422.78					420.45	419.83		418.30	421.39	
MW-14R	476.84				363.04	363.31		362.42								360.31		
MW-15S	498.76				426.86			425.43								421.83		
MW-15D	498.52				423.32			421.73								417.40		
MW-16S	480.27				427.52				425.92							421.67		
MW-16D	480.73				425.67				423.45							419.52		
MW-17S	552.44				422.10					421.14						416.31		
MW-18S	538.40				405.27						404.36	402.61			402.03	401.68		403.28
MW-18D	539.00				406.43						405.61					402.91		
MW-19S	485.71				430.35				429.41							427.19		
MW-19D	485.82				422.65				419.88							416.22		
MW-20R	469.43				361.05				371.54							368.72		
MW-22U	545.92																	
MW-22L	546.07																	
MW-23S	448.34																	
MW-23D	448.25																	
MW-25S	527.80																	
MW-25D	527.52																	
MW-26R	481.81																	
MW-27S	531.81																	
MW-27D	531.92																	
MW-28S	466.87																	
BC-4S	526.68			399.00	401.24								399.08			397.82		
BC-4D	526.94			366.39	369.12							367.19				366.16		
FM-1	542.59																	
FM-2	536.40																	

Before June 1996 well elevations were: MW-11s 501.48; MW-11d 501.45; MW-15s 490.53; MW-15d 490.61
Between June 1996 and March 2001 well elevations were: MW-11s 512.13; MW-11d 512.06
Before October 30, 1999 well elevations were: MW-27s 531.81; MW-27d 531.92
Before January 21, 2000 well elevations were: MW-10s 455.45; MW-10d 456.19
Before May 18, 2001 well elevations were: MW-23s 449.92; MW-23d 449.96
Before September 2000, well elevations were: BC-4S 524.35; BC-4D 524.46
Before November 19, 2004 well elevations were: MW-25S 526.54; MW-25D 526.66
Before August 2005 well elevations were: MW-18S 546.88; MW-18D 546.01, new elevations are field measurements, not survey results

Hidden Valley Landfill
Water Level Measurements

WELL	12/22/88	01/24/89	03/02/89	03/04/89	03/15/89	03/16/89	04/25/89	05/25/89	06/29/89	06/30/89	07/17/89	07/18/89	07/19/89	09/05/89	10/04/89	10/25/89	10/26/89	10/27/89
MW-10S	429.60	432.60	434.17			436.30	441.21	439.43	435.95		434.50			430.93	428.49	426.70		
MW-10D	398.87	408.23	429.90			432.07	436.45	434.36	374.97		430.18			426.24	424.33	423.15		
MW-11S		422.63		424.13	425.88		430.40	429.02	426.38			425.10		420.67	DRY		DRY	
MW-11D	420.40	422.47					429.35					424.90			418.55		417.12	
MW-11D(2)																		
MW-12S		425.65			428.93		432.23			423.02			427.23	DRY	DRY		DRY	
MW-12D	419.12	421.29	422.67		424.63		428.79	427.21					423.07	419.27	417.66		416.67	
MW-13S	421.86	423.34	424.15		426.35		430.41	428.80		426.41		425.48		422.40	421.35		420.52	
MW-13D		422.76					430.10					424.49						418.22
MW-14S	425.17	427.42		429.20		431.77	437.32	435.15	424.33		429.96			424.96	423.11	DRY		
MW-14D	421.96	424.47		425.58		428.09	432.40	430.60			426.31					419.47		
MW-14R		362.86					368.74					361.22				361.30		
MW-15S		427.43			431.53		436.43			430.68	425.18			424.68	422.97		421.85	
MW-15D		423.45					431.47				429.71						418.47	
MW-16S		427.90					439.37					431.22				422.35		
MW-16D		425.63					433.43					427.26				420.66		
MW-17S		423.04			426.88		430.72			426.88		424.79		420.99	419.02		417.57	
MW-18S	404.51	406.58	407.63		408.64		412.41	411.88		409.73			408.62	406.68	404.41			403.69
MW-18D		406.66					412.61						408.48					403.73
MW-19S		432.97					437.37					432.38						426.78
MW-19D		421.87					428.59					423.90						417.94
MW-20R		371.50					377.61						365.39				369.50	
MW-22U																		
MW-22L																		
MW-23S																		
MW-23D																		
MW-25S																		
MW-25D																		
MW-26R																		
MW-27S																		
MW-27D																		
MW-28S																		
BC-4S		401.83					406.95						403.42					399.12
BC-4D		369.06					374.72						370.05					367.40
FM-1																		
FM-2																		

Hidden Valley Landfill
Water Level Measurements

WELL	11/15/89	12/18/89	01/03/90	01/15/90	01/24/90	01/29/90	02/12/90	02/27/90	03/12/90	03/26/90	04/09/90	04/25/90	05/07/90	05/21/90	06/04/90	06/18/90	07/02/90	07/24/90
MW-10S	427.78	429.68	428.78	435.27		438.49	441.52	442.60	442.83	442.22	441.27	440.44	439.68	438.34	438.12	425.45	436.65	435.11
MW-10D						434.58				437.30		435.54		433.69		433.14		431.02
MW-11S	DRY	420.88	420.15	426.26		427.82	430.91	431.60	431.25	430.89	430.10	429.34	428.78	427.82	427.27	427.53	426.82	425.44
MW-11D						427.58						429.20						425.17
MW-11D(2)																		
MW-12S	DRY	DRY	DRY	428.56	429.00	430.59	433.16	433.09	433.02	432.74	431.96	431.22	430.90	429.95	429.69	429.79	428.89	426.32
MW-12D						426.75						428.24						423.97
MW-13S	421.39	422.37	421.75	427.85	427.90	429.29	432.16	432.60	432.43	431.81	431.07	430.51	429.68	429.34	429.21	429.07	428.27	426.86
MW-13D						428.30						430.42						425.44
MW-14S	423.25	425.29	424.95	432.01	434.11	434.81	438.30	439.52	439.50	438.70	437.47	436.42	435.51	434.01	433.00	433.54	432.42	430.71
MW-14D						430.95						431.68						427.17
MW-14R						366.27						367.42						355.95
MW-15S	422.85	425.50	424.90	431.31		433.53	436.97	438.07	437.73	437.27	436.25	435.32	432.65	433.38	432.76	433.05	432.04	430.29
MW-15D						429.11						430.56						425.99
MW-16S						436.38						433.05						427.06
MW-16D						431.37						432.43						428.09
MW-17S	417.35	420.19	420.58	432.44	427.10	428.38	431.34	431.71	431.47	431.09	430.39	429.67	429.34	428.46	427.90	428.15	427.42	426.04
MW-18S	403.17	405.25	405.18	407.10	408.05	410.02	412.32		414.05	412.96	412.37	411.90	411.73	412.20	410.48	DRY	409.86	408.55
MW-18D	403.79	405.27	405.01	409.03		410.72	413.08	414.39	413.66	413.85	413.31	412.48	412.13	411.36	410.59	410.70	410.21	408.81
MW-19S						436.74						436.71						433.11
MW-19D						428.38						428.57						424.70
MW-20R						374.60						375.22						360.41
MW-22U	DRY	DRY	DRY	DRY		DRY	409.70	410.55	410.23	410.39	410.04	409.47	408.97	408.75	408.72	DRY	408.72	408.47
MW-22L	400.83	402.38	412.21	405.19	406.07	407.12	409.53	410.84	410.65	410.60	409.98	409.25	408.75	408.01	407.21		406.95	405.43
MW-23S						432.63						432.47						429.61
MW-23D						427.92						428.61						424.96
MW-25S						404.32						407.69						402.12
MW-25D						407.37						410.27						405.81
MW-26R																		
MW-27S																		
MW-27D																		
MW-28S																		
BC-4S						404.52						406.70						403.62
BC-4D						372.03						374.99						368.69
FM-1																		
FM-2																		

Hidden Valley Landfill
Water Level Measurements

WELL	09/04/90	10/01/90	10/22/90	11/26/90	12/17/90	01/29/91	02/25/91	03/26/91	04/29/91	06/28/91	07/29/91	01/20/92	04/14/92	07/14/92	10/19/92	03/22/93	06/02/93	09/07/93
MW-10S	432.69	425.32	430.05		435.69	436.67	441.32	433.22	444.30	443.36	435.20	429.35	433.49	430.31	DRY	427.37	433.05	429.61
MW-10D	427.99	431.62				433.89			439.41	433.96	431.16	424.29	428.87	425.25	420.98	423.64	428.63	425.74
MW-11S	422.41	420.58	418.67	427.55	426.78	426.58	430.09	431.22	432.12	428.19	425.83	419.28	422.73	419.60	DRY	420.13	417.27	413.06
MW-11D		420.38				427.61			432.05		425.60	418.97	422.63	419.60	414.86	420.10	417.13	413.00
MW-11D(2)																		
MW-12S				426.09	429.24	429.03	430.76	432.81	430.35	430.08	428.04	DRY	424.73	DRY	416.73	DRY	425.34	
MW-12D	421.01		418.31			427.02			431.85		424.23	417.46	421.17	418.17	414.37	417.47	420.84	418.33
MW-13S	424.68	423.66	423.45	429.03	428.13	430.33	432.43	423.59	434.54	430.83	428.63	419.23	422.47	419.20	415.91	417.76	422.08	419.65
MW-13D		421.13				426.64			433.29		426.07	418.79	422.40	419.15	415.78	417.56	422.02	419.58
MW-14S	427.07	425.03	424.47		432.45	420.35	447.30	438.95	440.39	434.42	431.01	424.05	428.57	424.27	DRY	423.43	428.37	424.16
MW-14D		422.14				433.28			435.84	430.25	427.33	420.45	424.73	420.89	417.55	419.77	424.55	421.64
MW-14R		359.66				367.49			370.24		358.20	361.18	361.44	355.42	356.74	359.29	358.88	355.18
MW-15S	426.96					433.07			438.36		430.88	423.88	427.90	424.26	420.15	423.16	427.81	
MW-15D						429.29			434.82		426.37	419.11	423.59	419.70	416.43	418.66	423.40	420.59
MW-16S						434.89												
MW-16D				405.49		431.36												
MW-17S	422.86	420.92				428.25			431.88		426.56	419.34	423.07	410.72	414.86	418.76	423.44	420.18
MW-18S	406.71	405.51	404.46		409.38		411.88	403.76	413.42	411.32	409.46	DRY	DRY	DRY	402.62	404.70	407.14	404.83
MW-18D	406.71	405.41							415.38	411.78	409.59	404.61	406.61		402.31	403.76	406.46	404.57
MW-19S									437.67		436.20	427.29	429.69	425.96	423.42	426.81	429.59	426.05
MW-19D									431.53		424.40	416.28	420.71	416.74	413.53	415.55	419.27	421.38
MW-20R		365.62				375.93			376.74		362.13	372.01	367.38	359.15	363.22	365.37	365.90	361.92
MW-22U	403.32								401.78		408.83	408.68	408.66	408.68	408.63	408.59	408.58	408.89
MW-22L	403.47					DRY			411.12		406.33	401.89	403.50	401.71	399.72	401.02	403.34	401.49
MW-23S		426.73				431.73			429.94		430.28	426.11	427.38	425.59	422.09	426.54	427.46	425.22
MW-23D						428.00			431.86		425.43	419.36	422.39	419.50	416.24	419.16	422.21	419.55
MW-25S		399.24				404.54			412.34		403.25	399.17	399.99	398.66	397.72	398.29	400.04	398.53
MW-25D						406.91			414.08		406.76	401.69	403.37	401.33	399.65	400.76	403.36	401.38
MW-26R												418.41	422.24	418.64	415.27	417.27	419.19	418.28
MW-27S												418.61	423.23	418.89	416.24	417.80	423.19	418.84
MW-27D												419.12	423.47	419.53	416.07	418.44	423.34	419.84
MW-28S																		
BC-4S									409.35			400.69	402.05		397.85	399.65	401.91	399.98
BC-4D									366.55			367.82	369.21		364.26	366.06	367.48	364.51
FM-1																		
FM-2																		

Hidden Valley Landfill
Water Level Measurements

WELL	12/07/93	03/14/94	06/07/94	09/19/94	12/05/94	03/18/95	06/19/95	09/19/95	12/13/95	03/19/96	06/12/96	09/03/96	12/10/96	12/11/96	03/25/97	06/09/97	09/08/97	12/15/97
MW-10S	424.88	427.86	427.72	DRY	425.98	438.16	434.82	428.32	433.15	444.11	440.80	433.97		436.16	445.61	439.49	433.31	432.19
MW-10D	422.47	424.73	424.07	419.79	422.56	435.70	431.53	424.59	430.60	440.31	437.51	430.54		434.00	442.38	436.18	429.66	427.41
MW-11S	410.27	414.64	412.38	407.22	414.56	421.87	418.51	413.36	419.71	421.50	429.48	414.41	417.75		423.39	418.63	412.39	412.87
MW-11D	410.19	414.50	412.28	407.18	414.34	421.77	418.43	413.26	419.50	421.45	429.42	414.32	416.59		423.34	418.51	413.28	412.78
MW-11D(2)																		
MW-12S						430.21					431.24	426.37			433.87			
MW-12D	415.55	418.14	416.80	413.23	416.49	428.03					429.82	422.98			433.87			
MW-13S		419.49	418.12	414.48	417.91	429.13	425.05	418.71	425.06	433.50	431.04	424.23	427.59		434.98	429.54	423.56	422.52
MW-13D	416.81	419.38	418.04	414.42	417.86	429.06	424.98	418.58	424.90	433.35	430.96	424.12	427.49		434.90	429.43	423.42	422.39
MW-14S	422.73	425.00	423.78	DRY	424.23	434.94	430.66	423.86	429.78	440.34	437.20	429.49	432.92		441.55	435.71	428.32	427.05
MW-14D	418.74	421.42	420.20	416.51	419.40	432.14	427.68	420.79	427.28	436.82	434.40	426.88	430.49		438.83	432.64	425.79	424.31
MW-14R	358.09	358.96	357.64	354.24	356.62	365.61				369.81					372.37	369.35		
MW-15S	421.51	424.97	423.51	419.66	423.86	433.81					427.78	429.11			435.18			
MW-15D	417.67	420.36	419.13	415.39	418.49	431.00					425.25	425.50			427.38			
MW-16S																		
MW-16D																		
MW-17S	416.45	421.45	419.24	413.79	420.11	428.54	425.98	420.54	426.26	431.64	429.74	425.04	427.53		432.24	428.74	424.01	439.79
MW-18S	403.39	406.60	405.20	403.10	405.74	411.72					DRY	408.31			414.02		Dry	Dry
MW-18D	402.82	404.78	403.96	401.86	403.78	412.14	408.71	404.27	408.24	416.00	414.02	408.47		410.41	417.25	412.99	407.54	416.88
MW-19S	423.79	427.18	425.62	422.10	427.13	434.65					435.56	430.05			438.73			
MW-19D	417.80	418.42	423.53	412.11	415.87	430.29					430.78	422.34			434.56			
MW-20R	364.98	365.22	364.22	359.17	363.85	373.56				377.05					374.66			
MW-22U	408.63	408.64	408.63	408.57	408.54	409.08					410.29	405.03			411.65			
MW-22L	400.09	401.97	401.20	399.45	401.09	408.62					409.88	408.78			413.61		404.22	
MW-23S	423.01	426.11	424.79	420.91	426.02	430.94	427.78	424.75	429.37	433.76	431.80	427.50		427.10	434.60	431.35	427.15	427.01
MW-23D	417.14	419.74	418.50	414.73	418.86	427.76					429.71	423.78			433.41		423.11	422.29
MW-25S	397.87	399.47	397.06	397.58	399.71	407.39			401.96		410.74	402.43			415.13		401.39	
MW-25D	399.88	401.89	400.91	399.23	401.32	409.70	405.91	401.29	405.30		412.72	404.96			416.69	411.61	404.92	403.70
MW-26R	415.67	418.73	417.29	413.53	416.61	428.77				434.35					436.69			
MW-27S	416.44	419.39	417.93	415.62	417.69	430.84					433.34	426.05			436.35			
MW-27D	416.84	419.92	418.69	415.20	417.89	430.78					433.07	425.86			437.98			
MW-28S																		
BC-4S	398.21	400.45	399.62	397.63	399.46	406.34					407.84	402.93			410.54			
BC-4D	359.84	366.08	365.16	362.99	364.10	373.21					376.22	368.33			380.40			
FM-1																		
FM-2																		

Hidden Valley Landfill
Water Level Measurements

WELL	03/16/98	06/24/98	09/16/98	12/21/98	04/09/99	06/07/99	09/13/99	12/13/99	03/15/00	06/09/00	09/12/00	01/18/01	03/22/01	04/19/01	07/12/01	10/23/01	01/18/02	04/25/02
MW-10S	437.30	433.77	428.00	433.79	442.47	436.83	431.71	430.83		436.94	432.19	428.97	427.53	421.97	428.15	420.04	435.69	438.75
MW-10D	434.53	429.96	423.75	431.90	438.93	433.70	426.89	431.44	436.77	433.55	427.03	424.19	424.34	425.08	423.72	419.61	433.32	435.80
MW-11S	417.79	414.02	408.99	415.83	420.90	416.45	412.06	415.73	423.34	426.51	421.59	419.72	418.59	420.17	418.34	413.80	426.51	428.58
MW-11D	417.61	413.91	408.90	415.74	420.83	416.35	411.36	414.93	423.39	426.35	421.50		418.50	420.07	418.27	413.73	426.55	428.29
MW-11D(2)										425.56	419.62	416.78	416.74	417.20	415.95	412.88	425.34	427.79
MW-12S		425.82			431.86	427.97		427.32	430.54	427.78	423.13	421.56	419.49	421.98	419.94	416.82	428.12	429.76
MW-12D		422.07			430.90	426.27	419.38	423.50	428.36	425.58	419.44	417.88	417.07	417.34	416.12	412.92	425.48	427.70
MW-13S	428.26	423.57	418.03	426.12	432.13	427.19	421.46	425.30	429.86	427.12	421.34	421.16	419.02	419.17	417.86	414.65	427.30	429.86
MW-13D	428.09	423.70	417.90	425.97	432.01	427.04	421.08	425.06	430.60	427.02	421.03	419.24	418.65	418.89	417.62	414.36	426.99	429.28
MW-14S	433.69	428.75	422.95	430.34	438.56	432.56	425.72	430.83	436.56	432.40	425.90	424.15	423.07	424.36	422.73	418.24	431.60	434.77
MW-14D	430.99	426.18	419.88	428.76	435.53	430.66	421.99	427.70	432.97	429.91	423.00	420.48	420.38	420.88	419.58	416.36	429.53	432.06
MW-14R	368.84	365.64		364.34	373.99	367.36	356.76	363.30	369.84	366.37	359.91	360.24	351.60	351.25	344.49	345.94	352.63	357.03
MW-15S		424.03			432.64		421.22		430.58	427.04	421.28	419.49	418.65	419.71	418.49	414.65	426.65	429.36
MW-15D		514.69			424.18		411.73		421.54									
MW-16S																		
MW-16D																		
MW-17S	427.79	424.56	419.45	425.71	430.27	426.52	421.82	425.80	427.62	426.16	421.84	419.87	418.51	419.89	418.49	413.12	426.54	428.14
MW-18S	410.57	407.51		408.63	412.72	Dry	Dry	408.54	411.43	408.98	405.65	404.28	403.78	404.29	403.73	402.93	409.63	412.72
MW-18D	411.08	407.44	403.67	408.40	415.00	410.69	405.37	407.87	412.18	409.91	399.71	403.71	403.36	403.75	403.09	401.44	409.31	410.30
MW-19S		429.57			436.29		427.23		435.42	432.31	427.38	426.66	425.04	426.53	425.59	422.06	432.98	434.46
MW-19D		420.63			430.58		418.87		428.76	426.35	418.67		419.13	416.48	418.04	412.43	427.77	427.43
MW-20R	375.28	369.21			377.97				377.63	372.31	366.82	366.18	359.06	357.77	348.98	353.10	360.85	363.44
MW-22U		408.60		408.55	410.21	408.62	408.74	408.52	408.87	408.49	408.65		415.11		408.52	408.51	408.58	408.71
MW-22L		404.12		404.66	411.54	407.15	402.27	404.35	408.62	406.42	402.24		400.35	402.85	400.12	398.94	405.67	408.34
MW-23S	430.92	427.28	424.07	428.77	432.50	427.83	426.17	429.15	431.62	428.74	426.10	425.11	424.28	424.38	424.02	420.01	429.36	430.66
MW-23D	427.46	423.22		425.09		425.35			428.71	426.04	420.98		418.31	418.24	417.24	414.80	425.84	428.05
MW-25S		401.46		403.13	412.72	406.26	399.65	402.07	408.62	405.62	399.66	399.04	398.49	399.12	398.45	397.69	403.93	408.25
MW-25D	408.83	404.80	401.02	405.80	414.14	408.78	402.74	405.09	410.31	408.06	402.82		399.04	401.61	400.66	399.30	406.84	410.29
MW-26R	428.69			426.31	433.49				430.47	427.51	420.53	417.96	418.40	419.10	417.36	414.16	426.39	429.08
MW-27S		425.22			435.18				431.83	429.31	421.77		417.86	418.95	417.81	415.59	427.92	431.41
MW-27D		425.02			434.74				431.95	428.99	422.76		418.61	419.53	418.49	415.18	428.07	431.16
MW-28S										427.07	423.74						427.42	428.56
BC-4S		401.92		402.72							400.12		397.88	398.36	397.90	396.63	403.56	405.74
BC-4D		371.40		369.96							367.67		364.58	364.70	361.47	360.01	366.94	371.19
FM-1									404.48	401.66	397.12	395.29	395.11	395.14	395.03	394.20	400.29	404.03
FM-2									405.20	402.76	398.67	396.75	396.35	396.50	397.80	395.30	400.88	404.80

Hidden Valley Landfill
Water Level Measurements

WELL	07/25/02	10/24/02	01/30/03	04/24/03	07/24/03	10/30/03	01/22/04	04/15/04	06/29/04	10/21/04	01/27/05	02/23/05	04/21/05	07/22/05	10/17/05	01/18/06	04/14/06	08/08/06
MW-10S	432.88	425.14	430.66	433.54	428.64	426.52	432.67	432.97	423.80	426.31	431.62		432.98	430.84	425.93	440.79	438.37	431.52
MW-10D	428.84	422.88	427.50	430.82	424.40	423.28	429.32	430.20	421.95	423.54	427.69		429.57	426.49	422.63	437.31	435.68	426.74
MW-11S	423.19	416.94	425.25	424.44	418.96	418.20	423.74	423.49	417.12	417.45	421.87		422.93	421.08	416.47	430.09	433.19	420.89
MW-11D	423.10	416.88	424.98	424.33	418.88	418.11	423.67	423.42			421.76		422.85	420.98	416.40	429.95	428.09	420.77
MW-11D(2)	421.18	414.99	420.21	422.49	416.52	415.89	421.73	422.53	414.92	415.64	419.73		421.50	419.03	414.94	428.78	427.98	419.00
MW-12S	424.84	418.13	423.57	425.56	420.23	418.73	425.10	427.12	418.39	418.79				422.63			429.50	422.32
MW-12D	421.22	415.87	420.27	422.59	416.69	416.13	421.69	422.66	415.12	415.71	420.12		421.66	419.09	415.19	428.69	427.81	418.97
MW-13S	423.87	418.02	422.46	424.50	418.68	418.22	423.64	424.45	416.60	417.58	421.86		423.36	420.64	416.81	430.15	429.04	420.11
MW-13D	423.06	417.18	423.58	425.19	418.12	417.81	423.27	424.20	416.29	417.31	421.64		423.20	420.49	416.65	430.04	428.97	419.92
MW-14S	427.58	421.26	426.91	429.14	422.85	422.70	427.86	428.02	421.45	422.76	425.78		427.26	425.00	421.19	436.81	435.05	424.99
MW-14D	424.95	418.65	423.28	426.58	420.23	419.66	425.59	423.17	418.46	419.77	423.61		425.37	422.64	418.65	432.93	432.11	422.65
MW-14R	348.54	350.49	352.16	356.12	347.33	351.66	355.57	358.31	348.28	352.96	355.64		359.64	354.42	354.06	360.01	365.51	350.93
MW-15S	423.02	416.69	421.63	423.99	418.43	418.04	423.14	423.40	416.59	417.34	421.18		422.66	420.53	416.50	430.91	429.01	420.43
MW-15D						411.39	417.25	425.34	417.27	418.73	415.41		417.13	414.42	417.49	424.63	423.80	414.42
MW-16S																		
MW-16D																		
MW-17S	423.46	417.19	422.29	424.13	419.13	417.88	423.59	423.63	417.01	416.56	421.87		422.78	421.20	416.32	429.49	427.73	420.97
MW-18S	406.88	403.06	405.43	407.56	403.93	403.45	407.29	407.34	403.52	403.27		405.68	406.27	405.74		403.62	410.66	405.63
MW-18D	406.80	402.61	405.07	407.43	403.58	402.96	406.68	407.33	402.80	402.86		404.87	406.10	404.95		405.80	412.59	405.57
MW-19S	428.75	423.15	428.49	430.11	424.68	425.14	429.91	429.94	422.85	423.99			429.68	427.13	423.14	436.89	433.99	426.70
MW-19D	420.61	417.61	423.12	422.82	416.52	415.85	421.87	425.71	417.37	416.98	423.55		424.87	419.51	416.31	431.44	429.22	418.33
MW-20R	352.90	356.14	357.16	361.74	351.00	356.61	361.66	364.08	351.66	359.30	361.23		367.10	365.10	359.88	364.98	371.55	353.35
MW-22U	408.63	408.60	408.58	408.58	408.58	408.54	408.55	408.55	408.51	408.53			408.48	408.45	408.42	409.31	408.68	408.66
MW-22L	403.40	399.76	401.60	403.97	400.42	400.03	403.19	398.80	399.89	399.84			402.44	401.68	399.67	408.36	408.67	401.95
MW-23S	426.72	421.88	426.86	427.36	423.52	423.38	427.33	426.98	421.90	423.12	426.42		427.22	426.81		434.54	431.58	426.99
MW-23D	422.13	417.02	421.05	423.50	418.02	417.75	422.92	423.21	416.77	417.47	420.82		422.38	421.50		431.53	429.77	421.75
MW-25S	401.21	397.96	400.43	401.87	398.56	398.62	401.25	401.40			400.23		400.86	398.32	396.69	407.84	407.33	398.24
MW-25D	404.55	400.28	402.89	405.11	401.15	400.71	404.54	404.80			401.62		402.57	400.62	398.08	408.45	408.77	400.76
MW-26R	421.86	415.99	420.47	423.51	417.02	416.39	422.04	422.59	414.50	415.49	419.60		420.93	418.16	414.26	427.64	427.15	417.51
MW-27S	424.01	416.90	421.45	425.44	418.43	417.81	424.31	424.72	416.86	417.50	421.54		423.09	421.01	416.89	431.74	431.41	421.17
MW-27D	424.05	417.41	421.92	425.55	419.02	418.27	424.47	425.08	417.15	418.02	422.11		423.70	421.51	417.15	431.58	431.22	421.57
MW-28S	424.95	422.18		425.82	422.21		424.25	425.50			421.63		423.30			430.34	428.30	423.12
BC-4S	401.04	397.08	399.11	401.71	397.90	397.53	400.87	400.42	397.20	397.06	399.05		399.65	399.63	397.03	405.98	406.21	399.62
BC-4D	365.29	363.26	364.35	367.83	362.29	362.80	366.45	368.67	361.83	362.51	365.58		367.62	366.14	363.33	370.34	374.62	364.84
FM-1	398.34	394.69	395.29	398.80	395.20	394.49	397.28	398.92	394.84	395.27	398.88		395.77	396.29	394.54	402.96	404.72	396.37
FM-2	399.46	395.89	396.75	400.20	396.65	395.70	398.82	400.29	396.07	395.61	396.69		397.47	398.29	395.79	404.02	405.29	398.29

Hidden Valley Landfill
Water Level Measurements

WELL	10/26/06	01/18/07	04/26/07	07/19/07	10/11/07	01/24/08	04/17/08	07/10/08	10/23/08	01/12/09	04/16/09	07/09/09	10/29/09	01/28/10	04/08/10	07/15/10	10/14/10	01/06/11
MW-10S	427.17	442.36	438.36	432.94	430.61	435.04	435.58	431.82	423.99	435.75	435.81	432.63	428.51	436.03	436.53	434.81		
MW-10D	423.53	439.31	436.82	428.95	425.67	431.93	432.69	427.35	421.94	432.42	433.37	428.97	424.31	433.40	435.08	431.80	431.80	433.13
MW-11S	416.76	430.96	428.60	422.56	419.23	425.37	425.56	421.17	416.01	427.07	425.90	422.45	418.70	421.84	426.40	424.64	420.33	425.99
MW-11D	416.72	431.28	428.63	422.47	419.15	425.58	425.45	421.10	415.93	426.96	425.83	422.37	418.63	425.89	426.29	424.98	420.24	425.57
MW-11D(2)	415.75	431.30	429.01	421.14	417.51	424.15	424.91	419.73	414.67	424.94	425.62	421.34	416.91	425.12	425.91	423.95	418.26	425.12
MW-12S	417.51	432.11	429.76	424.03		426.45	426.78	421.84		428.32	427.09			426.12	427.57	447.94		426.83
MW-12D	415.93	430.87	428.67	421.10	417.45	423.68	424.52	419.37	414.83	424.81	425.39	421.36	416.99	425.05	426.23	423.77	418.34	424.98
MW-13S	417.49	432.11	429.85	422.44	419.00	424.94	425.80	420.50	416.34	426.40	426.75	422.59	418.68	426.92	427.13	425.06	420.00	426.07
MW-13D	417.35	432.02	429.77	422.27	418.93	424.96	425.58	420.39	416.19	426.24	426.58	422.47	418.50	426.73	426.92	424.88	419.73	426.21
MW-14S	421.40	438.52	435.52	426.92	424.48	430.14	430.98	425.26		431.42	431.29	426.75	423.62	431.34	432.26	429.93	424.64	431.29
MW-14D	419.35	435.41	433.26	424.94	421.12	427.89	428.77	423.10	418.21	428.23	429.45	424.96	420.31	429.20	429.85	427.91	422.51	428.70
MW-14R	354.43	365.69	364.03	352.31	355.75	359.78	362.63	356.22	353.58	358.61	364.57	355.98	354.34	359.90	362.73	356.73	358.48	359.76
MW-15S	416.74	432.43	429.92	422.23	418.84	425.20	425.92	420.69	415.96	426.49	426.16	422.11	418.51	426.24	426.91	424.79	420.05	426.08
MW-15D	411.10	427.02	424.90	416.71	412.77	419.63	420.02	414.79	409.93	420.11	421.20	416.80	412.07	420.91	421.50	419.47	414.28	420.71
MW-16S																		
MW-16D																		
MW-17S	414.66	430.35	428.03	422.45	417.86	424.52	425.14	421.19		426.49	425.30	422.33	418.25	425.41	425.64	424.14	420.28	425.15
MW-18S	403.63	404.80	402.66	398.23	395.80	408.59	408.98	405.77	403.16	409.61	409.13	406.63	403.75	409.42	409.53	408.14	405.00	409.08
MW-18D	403.23	408.12	406.42	400.03	397.25	408.89	409.69	405.62	402.77	409.36	409.93	406.99	403.83	409.87	410.50	409.13	404.88	409.62
MW-19S	423.21	437.47	434.32	427.92	425.69	431.40	431.34	426.83	422.49	434.55	432.12	428.13	425.61	432.46	432.53	430.20	426.67	432.10
MW-19D	416.38	431.65	430.83	420.54	418.63	425.59	422.96	419.45	416.83	426.70	427.71	424.29	419.98	430.51	431.67	425.29	414.40	426.03
MW-20R	360.35	372.19	369.70	354.75	359.85	363.34	366.95	360.29	357.26	363.90	372.20	360.80	358.55	364.03	367.05	359.84	365.51	365.03
MW-22U	408.67	410.75	409.12	403.21	408.66	408.63	408.68	408.64	408.65	408.63	408.61	408.63	408.62	408.49	408.46	408.55	408.47	408.52
MW-22L	399.93	411.13	409.53	408.84	400.70	404.84	405.84	402.06	399.66	405.39	405.97	403.27	400.42	405.88	406.56	405.19	401.33	405.71
MW-23S	423.52	434.74	432.07	428.03	426.22	428.13	427.94	425.67	421.36	432.59	430.26	427.99	424.66	430.57	427.64	429.01	426.85	428.60
MW-23D	418.56	432.41	430.17	423.10	420.33	424.12	425.12	419.94	415.95	427.22	427.34	423.39	418.20	427.19	430.65	425.72	421.05	425.28
MW-25S	396.69	410.92	408.72	399.75	397.52	402.59	404.10	399.63	397.85	403.98	402.73	399.34	398.60	402.62	403.99	402.02	398.86	403.64
MW-25D	398.27	411.43	409.96	402.42	399.38	404.63	406.01	401.67	398.85	405.31	405.16	402.10	399.77	404.93	406.04	404.43	399.05	400.66
MW-26R	416.03	431.96	429.28	420.27	420.27	422.65	423.93	417.77	412.87	421.81	423.97	418.88	413.99	422.47	423.20		416.44	421.15
MW-27S	417.03	434.62	432.82	423.82	419.02	426.60	428.13	421.57	416.64	426.62	427.87	423.46	418.19	427.68	428.89	426.90	420.24	427.77
MW-27D	417.67	434.38	432.58	424.02	419.79	426.33	427.98	422.01	416.76	426.75	428.09	423.75	418.77	427.73	428.97	426.83	420.75	427.81
MW-28S		430.59	428.57	423.37	422.21	426.60	426.59	422.20		428.75	426.91	423.73		427.12	427.21	426.05	422.12	426.83
BC-4S	397.42	408.86	405.70	401.11	398.20	402.59	403.49	399.51	396.97	402.94	402.94	400.94	397.50	403.68	404.21	402.97	399.19	403.27
BC-4D	364.03	375.24	375.48	366.10	365.42	369.13	370.84	366.13	362.86	367.21	371.11	366.80	363.75			368.16		
FM-1	394.77	407.49	407.03	398.64	395.16	399.50	401.03	396.45	394.63	397.95	400.76	398.56	395.01	408.44	401.49	400.27	395.53	400.45
FM-2	395.96	408.00	406.24	399.82	396.59	401.02	402.38	398.39	395.85	399.52	402.25	399.71	396.36	394.49	402.89	401.76	397.37	401.98

Hidden Valley Landfill
Water Level Measurements

WELL	04/21/11	07/07/11	10/27/11	01/26/12	04/27/12	07/19/12	10/11/12
MW-10S				NM			
MW-10D	438.59	434.89	427.08	429.64	435.29	431.89	425.34
MW-11S	439.94	426.99	420.44	424.08	427.21	424.31	419.24
MW-11D		426.87	420.36	423.92	427.06	424.16	419.16
MW-11D(2)	430.73	427.83	419.03	422.03	427.27	453.77	417.64
MW-12S	430.74	428.05		425.27	428.27	425.87	424.39
MW-12D	430.97	426.80	419.51	422.20	427.19	424.05	417.36
MW-13S	431.11	427.91	421.27	423.90	428.38	425.74	418.78
MW-13D	430.92	427.65	421.07	423.69	428.79	425.44	418.59
MW-14S	437.49	433.33	424.75	428.94	433.25	429.47	423.21
MW-14D	435.03	431.36	422.72	425.72	431.43	428.18	420.98
MW-14R	362.68	362.71	356.39	357.34	362.73	355.53	351.39
MW-15S	431.56	427.99	420.24	423.86	427.88	424.57	418.77
MW-15D	426.63	423.43		417.12	423.17	420.02	412.56
MW-16S							480.27
MW-16D							480.73
MW-17S	428.94	426.19	420.39	423.30	426.41	423.99	419.44
MW-18S	412.37	409.96	405.09	406.83	410.15	407.87	404.69
MW-18D	414.67	412.11	405.15	407.34	411.34	408.97	404.59
MW-19S	435.63	432.64	426.96	431.25	433.59	429.13	425.31
MW-19D	434.34	423.97	424.97	426.29	432.47	428.82	413.1
MW-20R	364.26	366.50	360.18	360.47	365.47	360.16	353.18
MW-22U		408.59	408.58	408.55	408.53	408.59	410.72
MW-22L		408.30	401.69	403.42	407.40	405.2	401.18
MW-23S	433.36	430.65	427.04	428.54	429.91	427.39	424.23
MW-23D	431.53	431.51	421.34	423.14	426.84	423.84	419.35
MW-25S	410.32	406.94	397.98	401.60	406.43	403.1	398.56
MW-25D	411.06	408.46	400.34	403.42	407.77	405.22	400.45
MW-26R		423.31	414.36	416.29	422.11	418.41	411.81
MW-27S	434.21	430.81	420.43	424.02	430.11	426.56	418.93
MW-27D	433.82	430.84	421.07	424.15	430.02	426.79	419.64
MW-28S	429.44	427.4	422.19	424.67	427.77	NM	422.07
BC-4S	408.19	405.68	399.08	400.62	404.73	402.68	398.69
BC-4D				367.04	371.79	383.51	382.23
FM-1	407.24	404.19	395.63	404.79	402.84	400.23	395.59
FM-2	408.19	404.75	397.45	390.61	403.65	401.73	397.31

LEGEND:

MW-11(S) Monitoring Well Location

(424.08) Groundwater Elevation (in Feet Above MSL)

Inferred Groundwater Flow Direction

MW-25(S) (401.60)

BC-4(S) (400.62)

FMMW-2 (390.61)

MW-27(S) (424.02)

FMMW-1 (404.79)

MW-18(S) (406.83)

MW-11(S) (424.08)

MW-15(S) (423.86)

MW-17(S) (423.30)

MW-14(S) (428.94)

MW-12(S) (425.27)

MW-28(S) (424.67)

MW-13(S) (423.90)

MW-10(S) (NM)

MW-23(S) (428.54)

MW-19(S) (431.25)

400 405 410 415 420 425 430

GP-1 GP-2 GP-3 GP-4 GP-5 GP-6 GP-7 GP-8 GP-9 GP-10 GP-11 GP-12 GP-13 GP-14 GP-15 GP-16 GP-17 GP-18 GP-19 GP-20 GP-21 GP-22

OFFICE BUILDING

MAINTENANCE BUILDING

LIMIT OF REFUSE

LOCATED IN RIFLE RANGE

0 300 600

SCALE: 1" = 300'

CONTOUR INTERVAL = 5 FEET

SCS ENGINEERS

Environmental Consultants and Contractors

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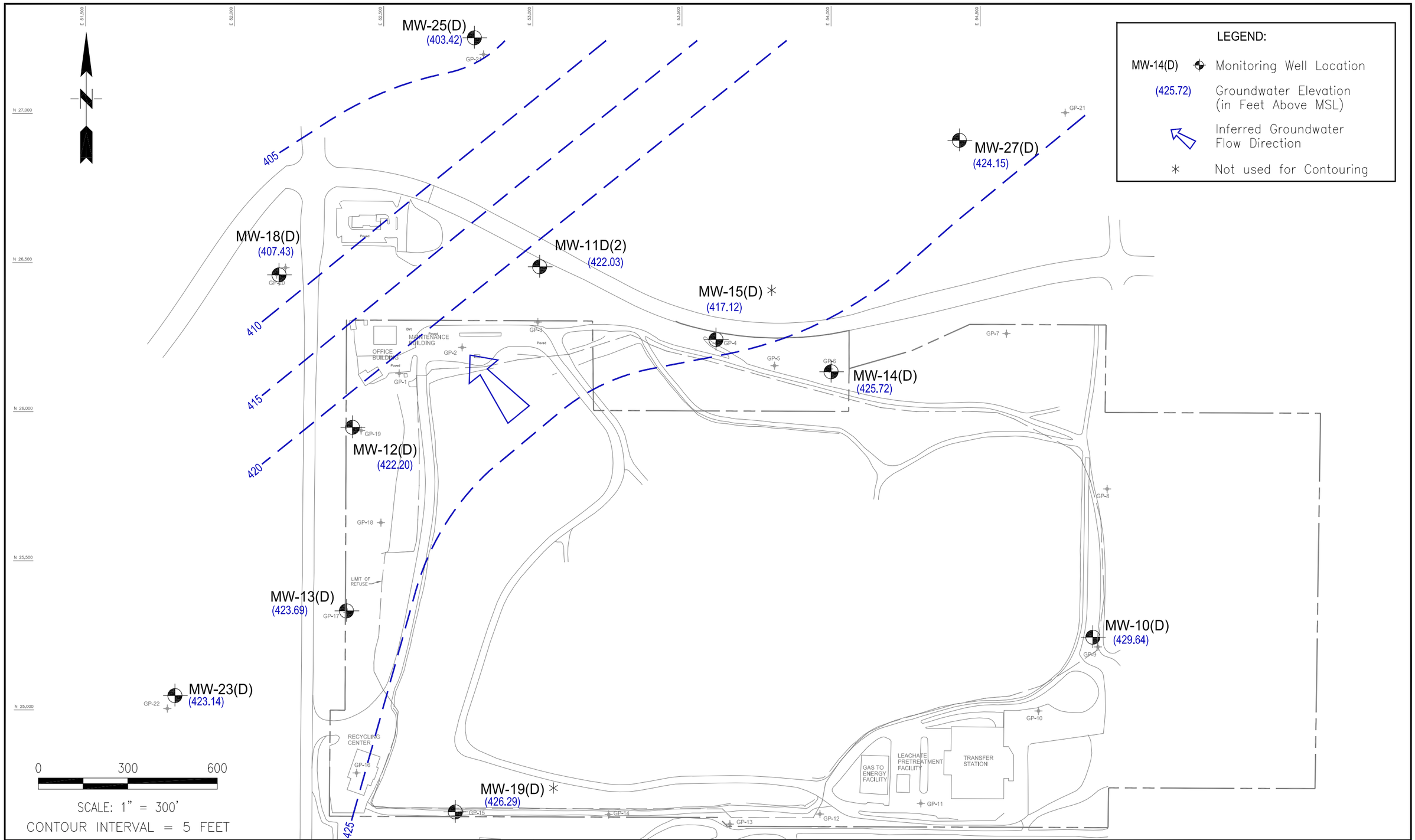
(425) 746-4600 FAX: (425) 746-6747

PROJECT NO. 04212004.03	DES BY SA	SHALLOW PERCHED AQUIFER WATER LEVEL MAP JANUARY 26, 2012	DATE APRIL 2012
SCALE AS SHOWN	CHK BY ES		FIGURE 1
CAD FILE FIGURE 1	APP BY KGL	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	



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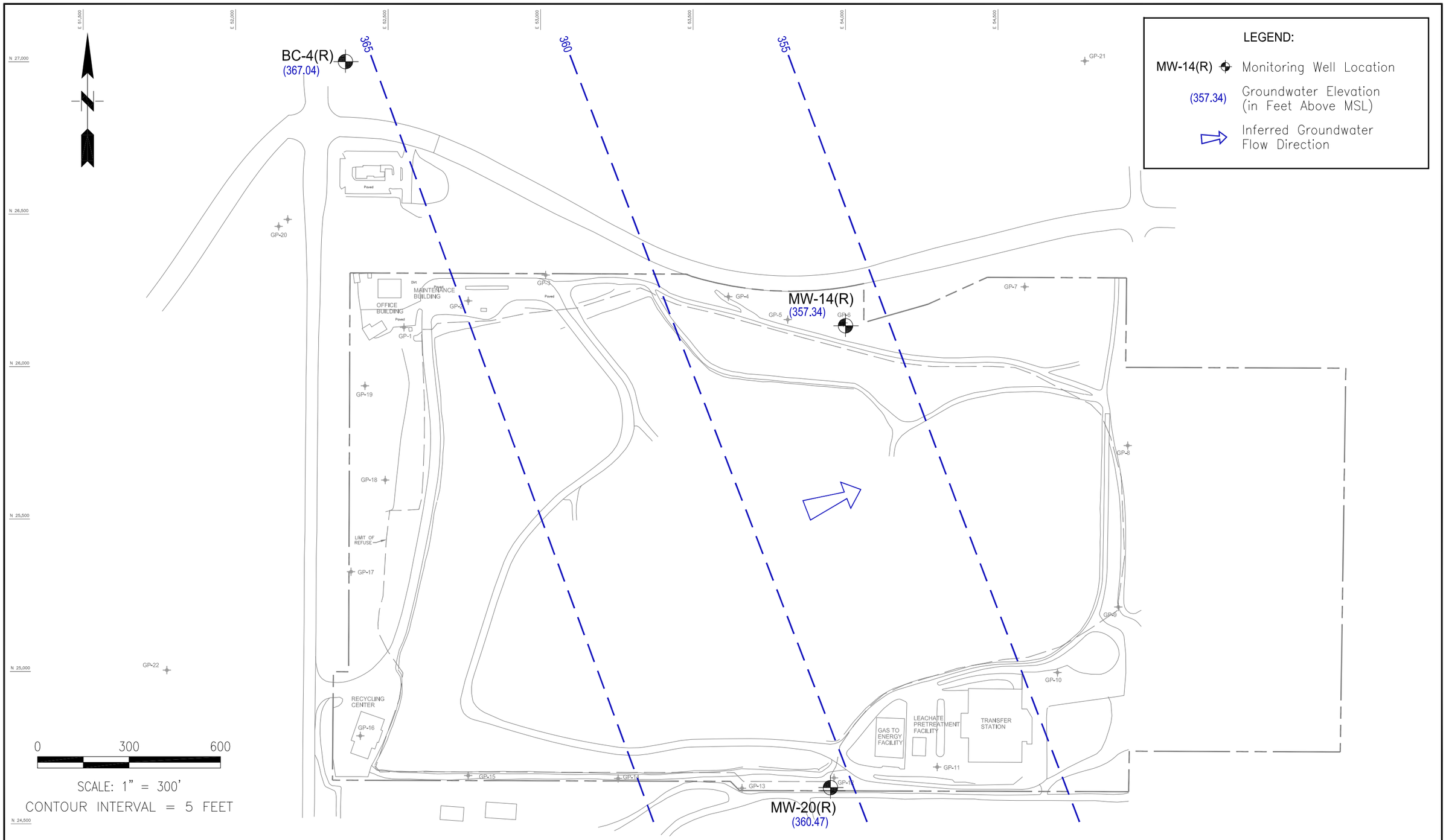
PROJECT NO. 04212004.03	DES BY SA	UPPER REGIONAL AQUIFER WATER LEVEL MAP JANUARY 26, 2012	DATE APRIL 2012
SCALE AS SHOWN	CHK BY ES	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 2
CAD FILE FIGURE 2	APP BY KGL		



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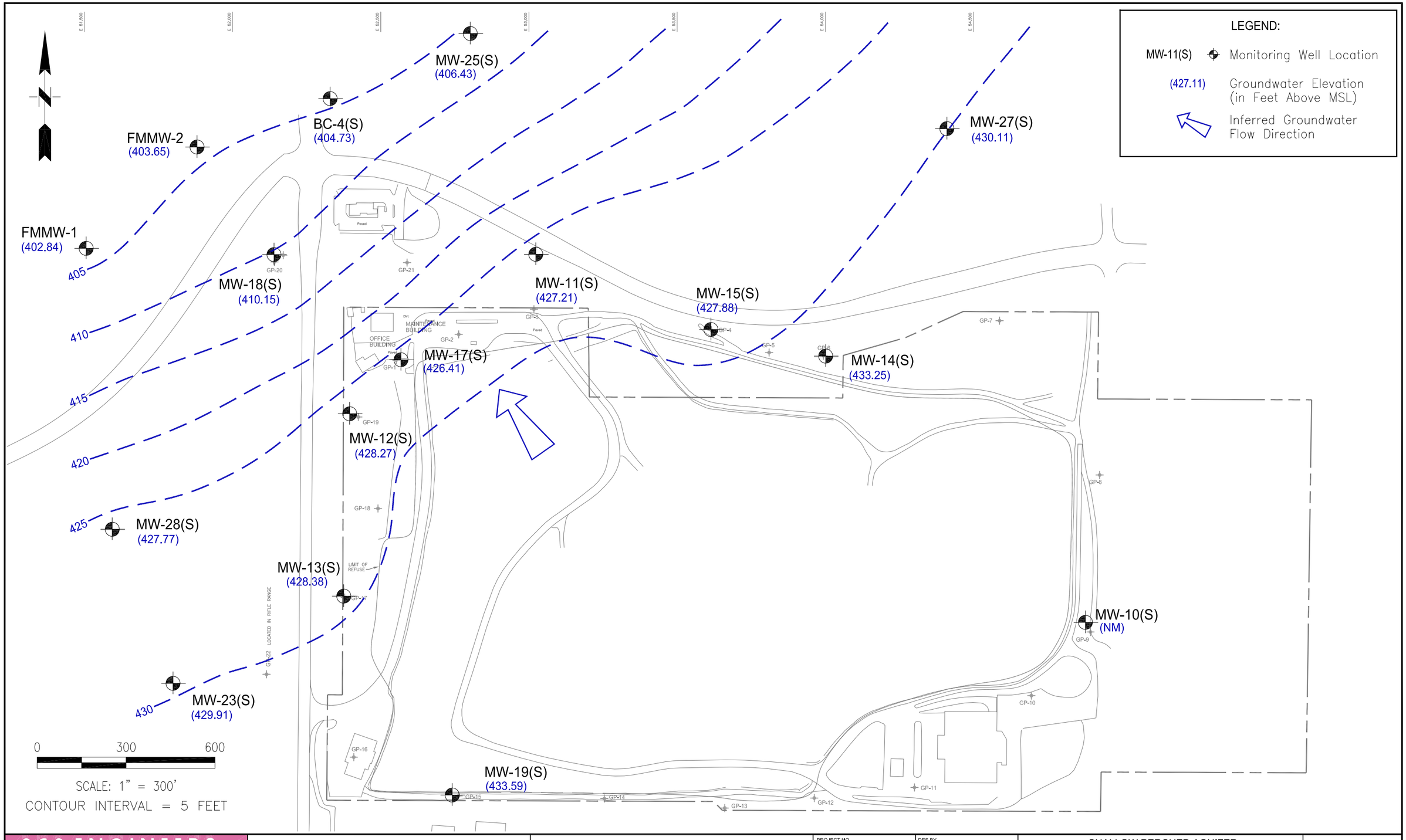
SCALE AS SHOWN	CHK BY KGL	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 3
CAD FILE FIGURE 3	APP BY KGL		



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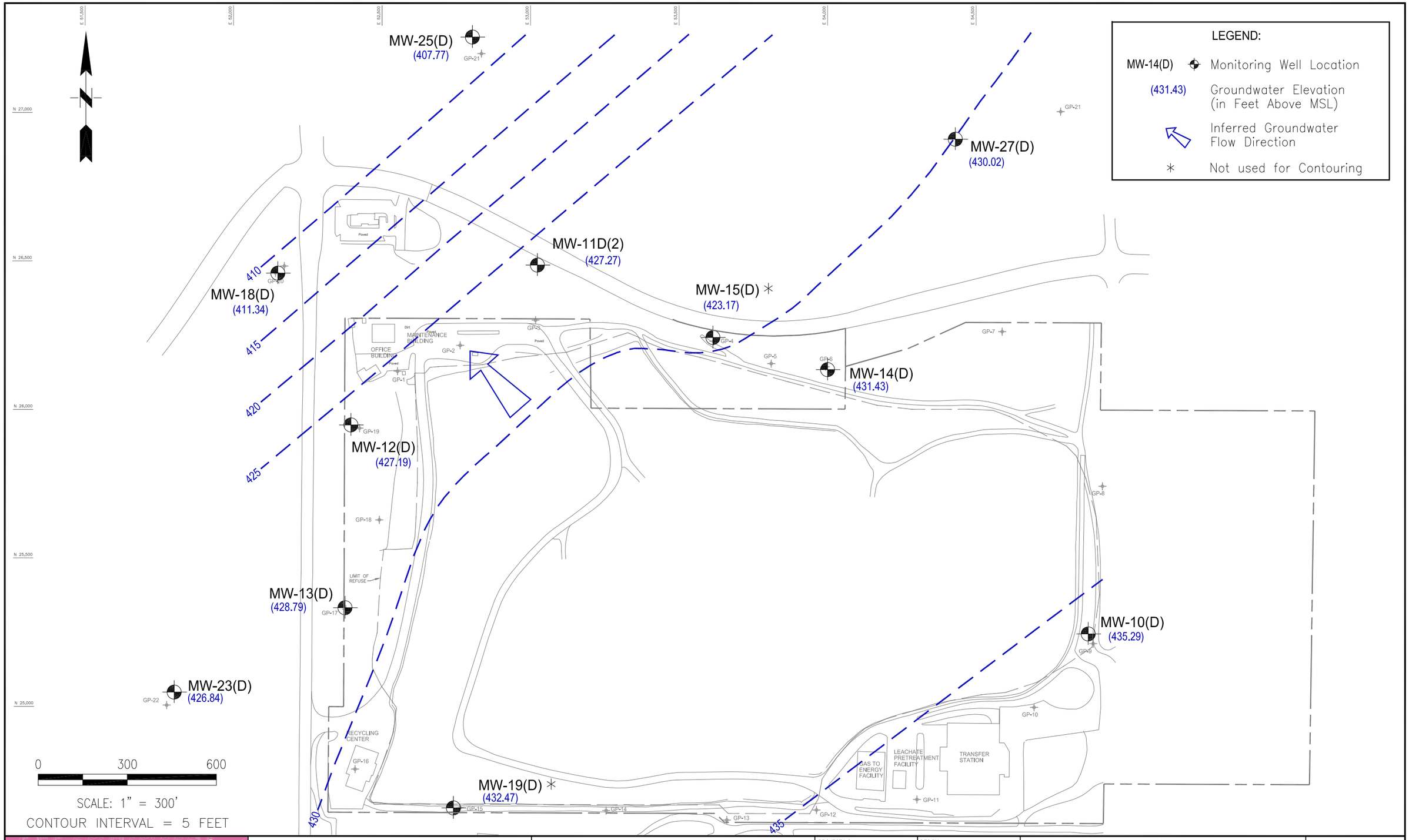
PROJECT NO. 04212004.03	DES BY SA	SHALLOW PERCHED AQUIFER WATER LEVEL MAP APRIL 26, 2012	DATE JUNE 2012
SCALE AS SHOWN	CHK BY ES	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 1
CAD FILE FIGURE 1	APP BY KGL		



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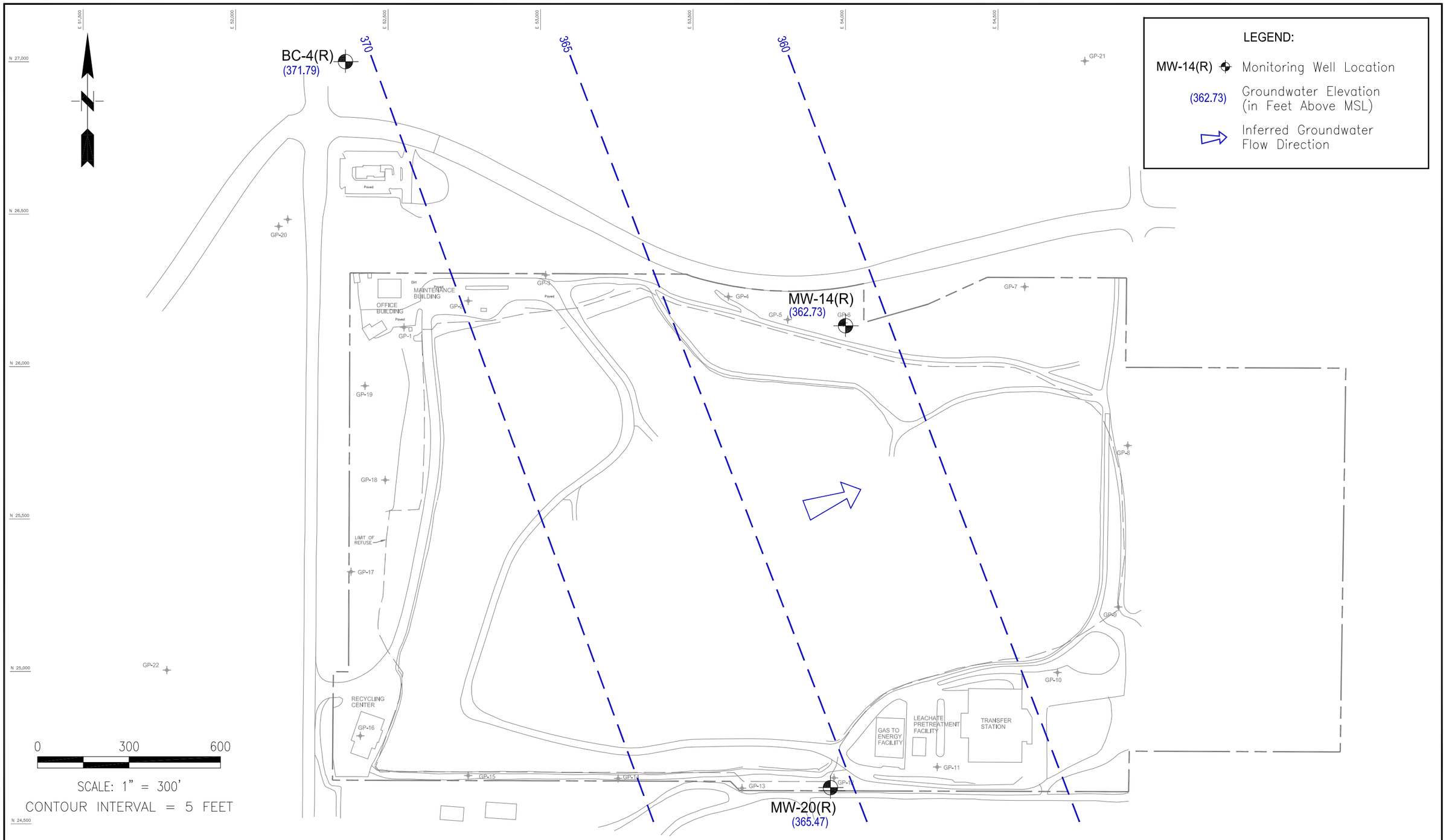
PROJECT NO. 04212004.03	DES BY SA	UPPER REGIONAL AQUIFER WATER LEVEL MAP APRIL 26, 2012	DATE JUNE 2012
SCALE AS SHOWN	CHK BY ES	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 2
CAD FILE FIGURE 2	APP BY KGL		



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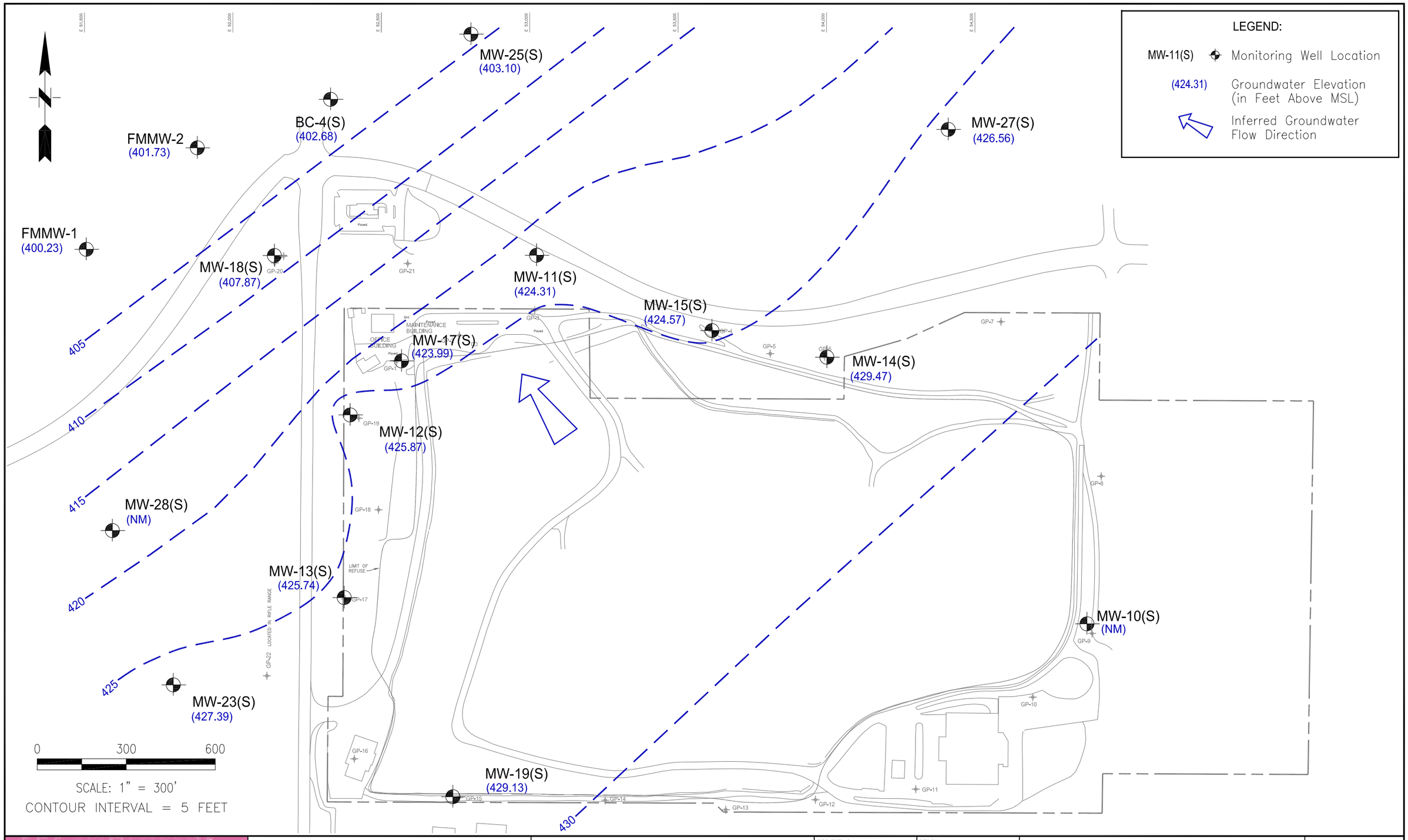
PROJECT NO. 04212004.00	DES BY KGL	LOWER REGIONAL AQUIFER WATER LEVEL MAP APRIL 26, 2012	DATE JUNE 2012
SCALE AS SHOWN	CHK BY KGL	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 3
CAD FILE FIGURE 3	APP BY KGL		



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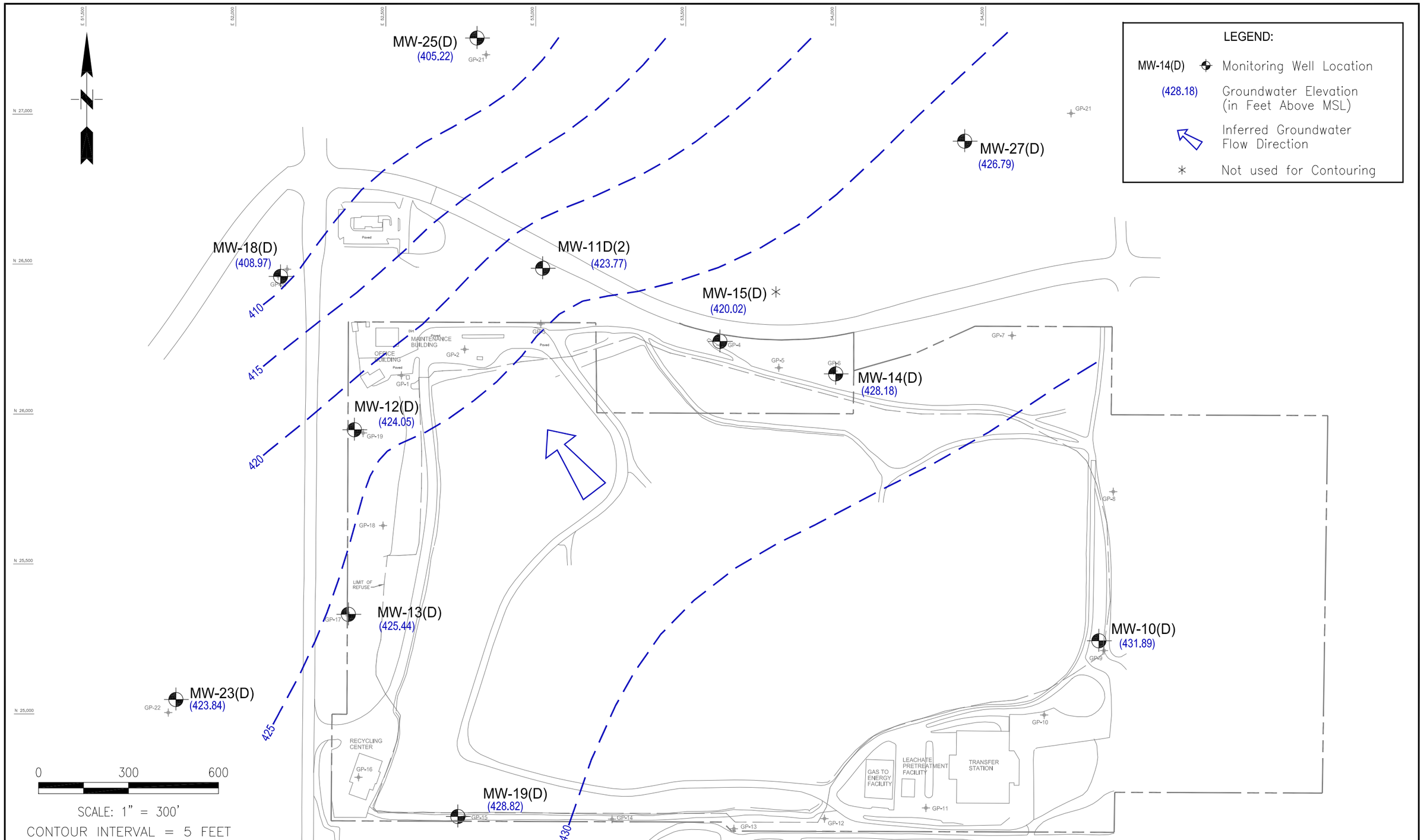
PROJECT NO. 04212004.03	DES BY MO	SHALLOW PERCHED AQUIFER WATER LEVEL MAP JULY 19, 2012 HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE OCTOBER 2012
SCALE AS SHOWN	CHK BY ES		FIGURE 1
CAD FILE FIGURE 1	APP BY KGL		



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PROJECT NO. 04212004.03	DES BY MO	UPPER REGIONAL AQUIFER WATER LEVEL MAP JULY 19, 2012	DATE OCTOBER 2012
SCALE AS SHOWN	CHK BY ES	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 2
CAD FILE FIGURE 2	APP BY KGL		

E 51,500 E 52,000 E 52,500 E 53,000 E 53,500 E 54,000 E 54,500

N 27,000 N 26,500 N 26,000 N 25,500 N 25,000 N 24,500

BC-4(D)
(NM)

360

355

GP-21

GP-20

Paved

Dirt

MAINTENANCE BUILDING

OFFICE BUILDING

GP-1 GP-2 GP-3 GP-4 GP-5 GP-6 GP-7 GP-8 GP-9 GP-10 GP-11 GP-12 GP-13 GP-14 GP-15 GP-16 GP-17 GP-18 GP-19 GP-22

MW-14(R)
(355.53)

LIMIT OF REFUSE

RECYCLING CENTER

GAS TO ENERGY FACILITY

LEACHATE PRETREATMENT FACILITY

TRANSFER STATION

MW-20(R)
(360.16)

LEGEND:

MW-14(R) Monitoring Well Location

(355.53) Groundwater Elevation (in Feet Above MSL)

Inferred Groundwater Flow Direction

0 300 600

SCALE: 1" = 300'

CONTOUR INTERVAL = 5 FEET

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PROJECT NO. 04212004.03	DES BY MO	LOWER REGIONAL AQUIFER WATER LEVEL MAP JULY 19, 2012 HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	DATE OCTOBER 2012
SCALE AS SHOWN	CHK BY EM		FIGURE 3
CAD FILE FIGURE 3	APP BY KGL		

LEGEND:

MW-11(S) — Monitoring Well Location

(419.24) — Groundwater Elevation (in Feet Above MSL)

Inferred Groundwater Flow Direction

MW-25(S) (398.56)

BC-4(S) (398.69)

FMMW-2 (397.31)

MW-27(S) (418.93)

FMMW-1 (395.59)

MW-18(S) (404.69)

MW-11(S) (419.24)

MW-15(S) (418.77)

MW-14(S) (423.21)

MW-17(S) (419.44)

MW-12(S) (424.39)

MW-28(S) (422.07)

MW-13(S) (418.78)

MW-10(S) (NM)

MW-23(S) (424.23)

MW-19(S) (425.31)

400 405 410 415 420 425

GP-1 GP-2 GP-3 GP-4 GP-5 GP-6 GP-7 GP-8 GP-9 GP-10 GP-11 GP-12 GP-13 GP-14 GP-15 GP-16 GP-17 GP-18 GP-19 GP-20 GP-21 GP-22

OFFICE BUILDING

MAINTENANCE BUILDING

LIMIT OF REFUSE

GP-22 LOCATED IN RIFLE RANGE

0 300 600

SCALE: 1" = 300'

CONTOUR INTERVAL = 5 FEET

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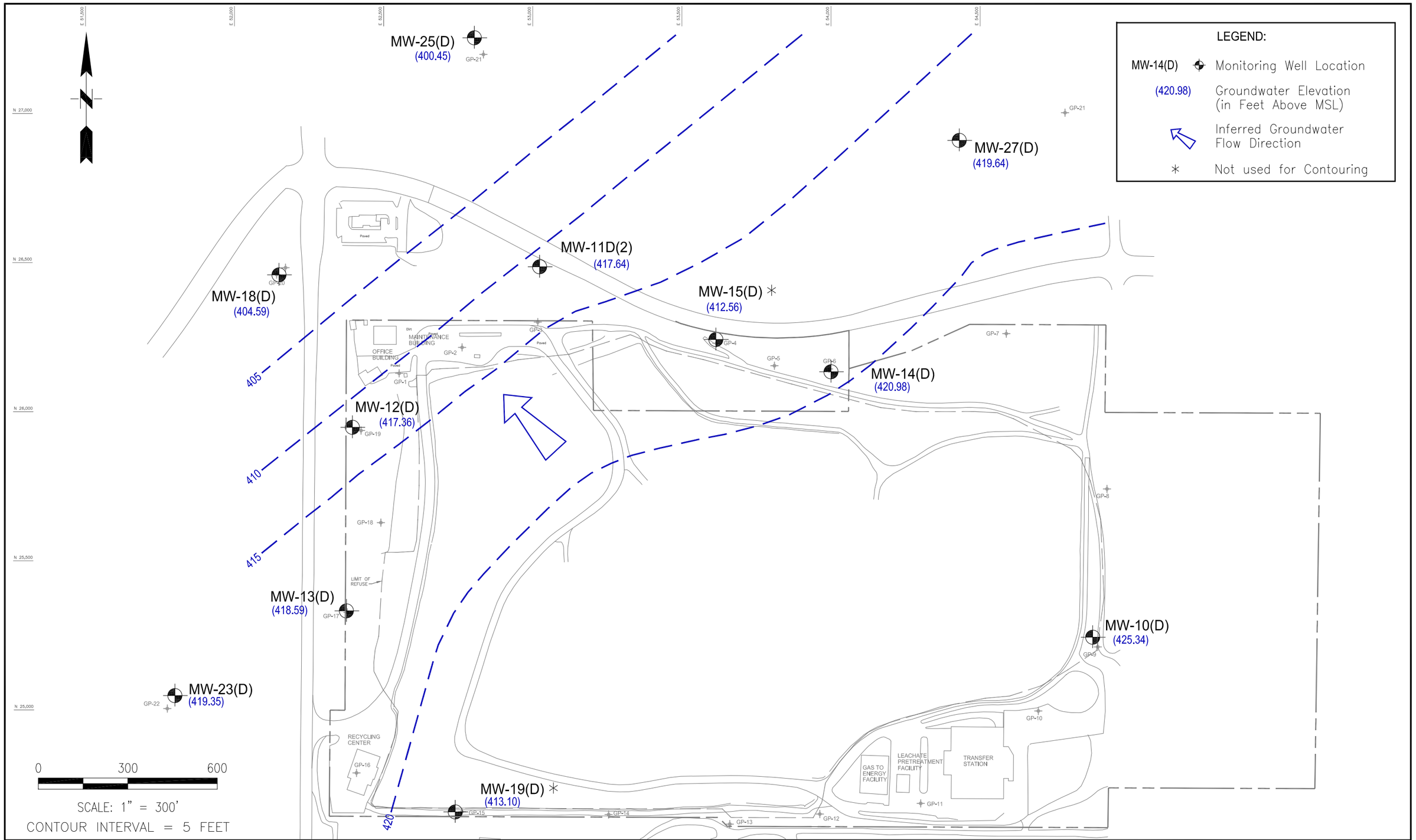
PROJECT NO. 04212004.03	DES BY MO	SHALLOW PERCHED AQUIFER WATER LEVEL MAP OCTOBER 11, 2012	DATE OCTOBER 2012
SCALE AS SHOWN	CHK BY ES	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 1
CAD FILE FIGURE 1	APP BY KGL		



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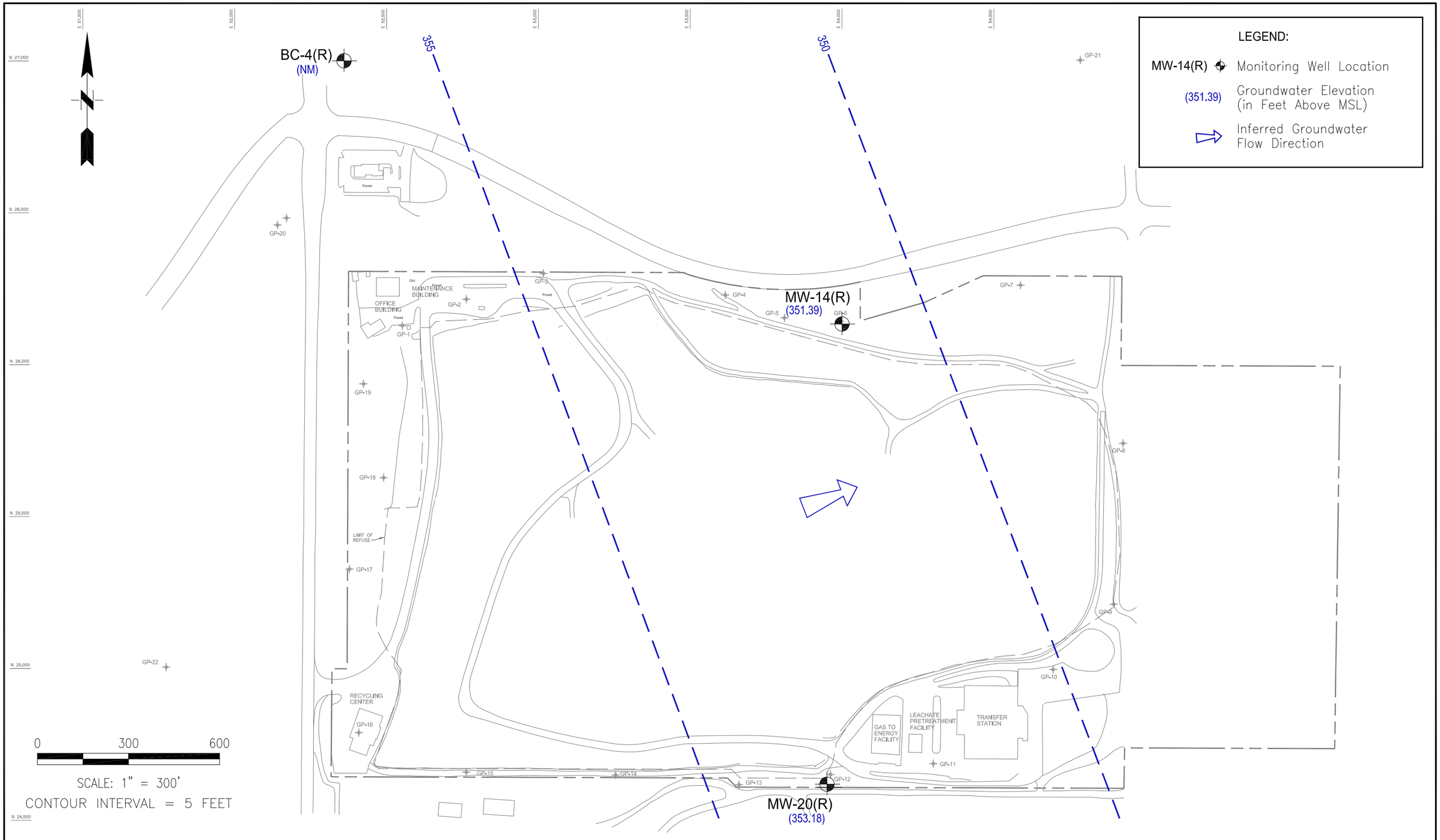
PROJECT NO. 04212004.03	DES BY MO	UPPER REGIONAL AQUIFER WATER LEVEL MAP OCTOBER 11, 2012	DATE OCTOBER 2012
SCALE AS SHOWN	CHK BY ES	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 2
CAD FILE FIGURE 2	APP BY KGL		



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PROJECT NO. 04212004.03	DES BY KGL	LOWER REGIONAL AQUIFER WATER LEVEL MAP OCTOBER 11, 2012	DATE JUNE 2012
SCALE AS SHOWN	CHK BY KGL	HIDDEN VALLEY LANDFILL PIERCE COUNTY, WASHINGTON	FIGURE 3
CAD FILE FIGURE 3	APP BY KGL		

Appendix D
Groundwater Monitoring Data for 2012

First Quarter 2012

Table 1
2012 Performance Monitoring Data
Main Sump and Side Slope Liner Areas
Hidden Valley Landfill, Pierce County, Washington

Month	Cell 1 Monthly Leachate Volume (b) (gallons)	Cell 2 Monthly Leachate Volume (gallons)	Cell 2 Monthly Leakage Flow (a) (gallons/month)	Monthly Rainfall (inches)
January	29840	0	994	4.80
February	9834	—	0	3.70
March	8799	—	630	5.80

Notes:

(—) Leachate volume was unavailable due to PLC error

(a) Leakage is based on the volume of fluid pumped from the leak detection sump as recorded by LRI staff.

(b) Cell 1 monthly volumes for Februrary and March are from comibed site and PLC data

Table 2
Water Level Elevations
January 26, 2012
Hidden Valley Landfill, Pierce County, Washington

Well Number	Well Casing Elevation	Depth to Water	Water Level Elevation
MW-10S	460.17	NM	NM
MW-10D	460.69	31.05	429.64
MW-11S	516.44	92.36	424.08
MW-11D	516.56	92.64	423.92
MW-11D(2)	515.53	93.50	422.03
MW-12S	489.94	64.67	425.27
MW-12D	489.97	67.77	422.20
MW-13S	448.81	24.91	423.90
MW-13D	448.94	25.25	423.69
MW-14S	477.95	49.01	428.94
MW-14D	477.98	52.26	425.72
MW-14R	476.84	119.50	357.34
MW-15S	498.76	74.90	423.86
MW-15D	498.52	81.40	417.12
MW-17S	552.44	129.14	423.30
MW-18S	538.40	131.57	406.83
MW-18D	539.00	131.66	407.34
MW-19S	485.71	54.46	431.25
MW-19D	485.82	59.53	426.29
MW-20R	469.43	108.96	360.47
MW-22U	545.92	137.37	408.55
MW-22L	546.07	142.65	403.42
MW-23S	448.34	19.80	428.54
MW-23D	448.25	25.11	423.14
MW-25S	527.80	126.20	401.60
MW-25D	527.52	124.10	403.42
MW-26R	481.81	65.52	416.29
MW-27S	531.81	107.79	424.02
MW-27D	531.92	107.77	424.15
MW-28S	466.87	42.20	424.67
FMW-01	542.59	137.80	404.79
FMW-02	536.40	145.79	390.61
BC-4S	526.68	126.06	400.62
BC-4D	526.94	159.90	367.04

Notes:
(NM) = not measured

Table 3
Field Parameters
January 2012 (First Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

Sample ID	Sample Number	Sample Date	Method	pH	Conductance (µS)	Temperature (° C)
MW-10S	HVL-012412-04	01/24/12	DP	6.49	155	12.5
MW-10D	HVL-012412-03	01/24/12	DP	6.49	130	12.1
MW-11S	HVL-012512-12	01/25/12	SP	5.92	206	14.5
MW-11D(2)	HVL-012512-13	01/25/12	SP	6.81	224	14.0
MW-12S	HVL-013012-28	01/30/12	DP	5.76	466	19.1
MW-12D	HVL-013012-27	01/30/12	DP	6.70	329	17.0
MW-13S	HVL-012712-22	01/27/12	SP	6.29	255	17.2
MW-13D	HVL-013012-29	01/30/12	DP	6.65	270	17.0
MW-14S	HVL-012412-02	01/24/12	SP	6.16	67	10.3
MW-14D	HVL-012412-01	01/24/12	SP	6.33	185	11.4
MW-14R	HVL-012712-21	01/27/12	SP	6.82	128	6.0
MW-15S	HVL-012512-14	01/25/12	SP	5.95	299	14.7
MW-15D	HVL-012612-16	01/26/12	SP	6.67	318	12.7
MW-17S	HVL-012512-11	01/25/12	SP	6.28	424	18.8
MW-18S	HVL-012512-09	01/25/12	SP	6.38	369	15.2
MW-18D	HVL-012512-10	01/25/12	SP	6.81	280	14.6
MW-20R	HVL-012412-05	01/24/12	SP	6.90	259	9.8
MW-23S	HVL-012612-19	01/26/12	SP	6.17	209	11.2
MW-25S	HVL-012512-08	01/25/12	SP	6.77	74	8.8
MW-26R	HVL-013012-26	01/30/12	DP	6.38	69	10.0
MW-28S	HVL-012612-20	01/26/12	SP	6.39	233	10.5
FMW-01	HVL-012712-24	01/27/12	SP	6.33	342	12.9
FMW-02	HVL-012712-25	01/27/12	SP	6.06	408	15.4
Water Supply Well, P. Bunyan	HVL-012612-18	01/26/12	Grab	7.26	245	6.4
Water Supply Well, Corliss	HVL-012612-17	01/26/12	Grab	7.17	222	7.0
Leak Detection, Side Slope	HVL-012412-07	01/24/12	Grab	7.65	17,000	18.0
Leachate, East Area	HVL-012412-06	01/24/12	Grab	7.62	15,000	15.5

Notes:
The groundwater cleanup level for specific conductance is 700 (µS).
(µS) = microsiemens
(°C) = degrees Celcius
(Grab) = collected from sampling point
(SP) = submersible bladder-pump (non-dedicated)
(DP) = dedicated bladder-pump

Table 4
Inorganic Parameters (mg/L)
January 2012 (First Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D	MW-10S	MW-11D(2)	MW-11S	MW-12D	MW-12S	MW-13D	MW-13S	MW-14D	MW-14R	MW-14S	MW-15D	MW-15S	MW-17S	MW-18D	MW-18S	MW-20R	MW-23S	MW-25S	MW-26R	MW-28S	FMW-01	FMW-02
			Background																						
Alkalinity	5	—	66	72	100	48	160	30	120	87	80	49	25	160	78	150	130	120	48	78	120	42	14	120	110
Bicarbonate Alkalinity	5	—	66	72	100	48	160	30	120	87	80	49	25	160	78	150	130	120	48	78	120	42	14	120	110
Chloride	0.2-4.0	250[(b)]	11.7	10.6	5.7	16.7	9.8	10.9	10.1	13.0	10.2	1.7	2.1	12.7	18.0	14.5	10.0	14.9	1.6	11.9	8.2	2.3	15.4	19.4	17.0
Ammonia as Nitrogen	0.10	—	*	*	*	*	*	0.76	*	*	3.70	*	*	*	3.20	4.50	*	*	*	*	*	0.30	*	*	0.28
Nitrate as Nitrogen	0.50	10[(a)]	0.57	0.80	1.8	4.4	1.1	**43.0**	0.73	0.65	*	*	1.1	0.59	9.8	**11.0**	1.7	**11.0**	*	0.93	1.8	*	3.0	1.4	**13.0**
Sulfate	0.5-10.0	250[(b)]	9.9	9.0	5.5	11.6	5.1	5.9	12.6	11.2	10.5	3.8	4.6	8.2	11.3	4.8	5.0	6.2	2.9	16.7	6.4	*	17.2	15.8	8.9
Total Dissolved Solids	10	500[(b)]	96	110	140	130	190	350	170	140	120	98	56	200	210	260	180	240	85	150	170	52	160	190	250
Total Organic Carbon	1.0	—	1.4	1.5	*	*	*	1.5	*	1.1	1.7	*	2.1	1.0	1.7	1.9	*	1.3	*	*	*	1.0	*	*	1.5

Notes:
Parameter concentrations that are greater than cleanup levels are shown in **bold**
Analyses performed by TestAmerica, Arvada, Colorado
(mg/L) = milligrams per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(—) indicates not analyzed or not applicable
(a) indicates Primary Drinking Water Standard
(b) indicates Secondary Drinking Water Standard

Table 5
Dissolved Metals (mg/L)
January 2012 (First Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D Background	MW-10S Background	MW-11D(2)	MW-11S	MW-12D	MW-12S	MW-13D	MW-13S	MW-14D	MW-14R	MW-14S	MW-15D	MW-15S	MW-17S	MW-18D	MW-18S	MW-20R	MW-23S	MW-25S	MW-26R	MW-28S	FMW-01	FMW-02
Arsenic	0.015	—	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Iron	0.200	0.30[(b)]	*	*	*	*	*	*	*	*	**2.50**	*	*	*	*	*	*	*	*	*	*	**0.75**	*	*	*
Manganese	0.001	0.05[(b)]	*	0.006	*	*	*	**0.440**	*	0.002	**0.920**	*	0.003	**0.079**	**0.910**	**0.920**	*	*	*	0.023	*	**0.260**	*	*	**0.110**

Notes:
Parameter concentrations that are greater than cleanup levels are shown in **bold**
(b) indicates Secondary Drinking Water Standard
Analyses performed by TestAmerica, Arvada, Colorado
Metals not listed were not present at concentrations exeeding the MRL
(mg/L) = milligrams per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(—) indicates not analyzed or not applicable

Table 6
Volatile Organic Compounds (µg/L)
January 2012 (First Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D	MW-10S	MW-11D(2)	MW-11S	MW-12D	MW-12S	MW-13D	MW-13S	MW-14D	MW-14R	MW-14S	MW-15D	MW-15S	MW-17S	MW-18D	MW-18S	MW-20R	MW-23S	MW-25S	MW-26R	MW-28S	FMW-01	FMW-02
			Background																						
m,p-Xylenes	0.5	—	*	*	*	*	*	*	*	*	*	0.75	*	*	*	*	*	*	*	*	*	*	*	0.50	0.52
Tetrachloroethene	0.5	5.0[(a)]	*	*	*	*	*	*	*	*	*	*	*	0.64	*	*	*	*	*	*	*	*	*	*	*
Toluene	0.5	—	*	*	*	*	*	*	*	*	*	0.76	*	*	*	*	*	*	*	*	*	*	*	*	*
Trichloroethene	0.5	—	*	*	0.96	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Volatile organic compounds not listed were not present at concentrations exeeding the MRL
(a) indicates Primary Drinking Water Standard
(µg/L) = micrograms per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(—) indicates not analyzed or not applicable

Table 7
Duplicate Samples
January 2012 (First Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	MW-15S	DUP (MW-15S)	RPD (%)
Volatile Organics (µg/L)				
No Detections	—	*	*	—
Dissolved Metals (mg/L)				
Arsenic	0.015	*	*	—
Iron	0.20	*	*	—
Manganese	0.001	0.910	0.860	6
Inorganic Parameters (mg/L)				
Alkalinity	5	78	78	0
Bicarbonate Alkalinity	5	78	78	0
Ammonia as Nitrogen	0.10	3.2	3.1	3
Total Organic Carbon	1.0	1.7	1.6	6
Chloride	4.0	18.0	18.2	1
Nitrate as Nitrogen	2.5	*	*	—
Total Dissolved Solids	10	210	190	10
Sulfate	0.5	11.3	11.3	0

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Analytes not listed were not present at concentrations exceeding the MRL
RPD = relative percent difference
µg/L = micrograms per liter
mg/L = milligrams per liter
(*) = not reported at or above the MRL (Method Reporting Limit)
(—) = not applicable

Table 8
Water Supply Wells
January 2012 (First Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Paul Bunyan	Corliss
Volatile Organics (µg/L)			
Acetone	6	46	*
2-Butanone	10	110	*
Total Metals (mg/L)			
Arsenic	0.005	*	*
Iron	0.200	*	*
Manganese	0.001	0.019	0.003
Zinc	0.010	0.020	0.013
Inorganic Parameters (mg/L)			
Chloride	0.2 - 4.0	4.4	8.0
Ammonia as Nitrogen	0.1	*	*
Nitrate as Nitrogen	0.5	1.8	1.8
Nitrite as Nitrogen	0.5	*	*
Sulfate	0.5	9.3	12.4
Chemical Oxygen Demand (COD)	5.0	24.0	6.3
Total Organic Carbon (TOC)	1.0	3.4	*
Color	5.0	*	*

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Volatile organic compounds not listed were not present at concentrations exceeding the MRL
Color reported in color units
µg/L = micrograms per liter
mg/L = milligrams per liter
(—) = not applicable or not analyzed
(*) = not reported at or above the MRL (Method Reporting Limit)

Table 9
Side Slope Liner Monitoring
January 2012 (First Quarter)
Hidden Valley Landfill, Pierce County, Washington

	MRL	Leak Detection-Side Slope	Leachate-East Area
Volatile Organics (µg/L)			
Acetone	10	18	13
Benzene	0.5	1.4	1.5
Carbon Disulfide	0.5	0.63	*
1,4-Dichlorobenzene	0.5	0.63	*
cis-1,2-dichloroethene	0.5	2.60	*
Ethylbenzene	1.0	*	1.0
m,p-Xylenes	0.5	1.2	0.73
o-Xylenes	0.5	0.69	0.52
Toluene	0.5	2.9	3.8
Total Metals (mg/L)			
Antimony	0.010	0.15	0.08
Arsenic	0.025	0.20	0.12
Barium	0.005	0.48	0.57
Calcium	0.200	12.0	16.0
Chromium	0.010	0.08	0.08
Cobalt	0.010	0.04	0.02
Copper	0.010	0.06	0.10
Iron	0.200	3.0	4.4
Lead	0.005	0.01	0.01
Magnesium	0.200	21.0	19.0
Manganese	0.005	0.18	0.27
Nickel	0.010	0.50	0.46
Potassium	30	450	440
Sodium	1.0	6000	5800
Vanadium	0.010	0.15	0.18
Zinc	0.050	*	0.14
Inorganic Parameters (mg/L)			
Alkalinity	10	7800	7800
Bicarbonate Alkalinity	10	6400	7800
Chloride	200	4030	3830
Ammonia as Nitrogen	10.0	620	590
Sulfate	5.0	82.6	*
Chemical Oxygen Demand	100	2900	3000
Total Dissolved Solids	200	13000	15000
Total Organic Carbon	50	1100	980
Biochemical Oxygen Demand	50	99	52
Cyanide, total	0.01	*	*
Coliform, total**	2	5000	4
Field Parameters			
pH	–	7.65	7.62
Conductance (µS)	–	17,000	15,000
Temperature (°C)	–	18.0	15.5

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Volatile organic compounds not listed were not present at concentrations exceeding the MRL
(mg/L) = micrograms per liter
(mg/L) = milligrams per liter
(µS) = microsiemens
(°C) = degrees celcius
(–) = not applicable or not analyzed
(*) = not reported at or above the MRL (Method Reporting Limit)
(**) = total coliform results are from samples taken on May 8, 2012.

Second Quarter 2012

Table 1
2012 Performance Monitoring Data
Main Sump and Side Slope Liner Areas
Hidden Valley Landfill, Pierce County, Washington

Month	Cell 1 Monthly Leachate Volume (b) (gallons)	Cell 2 Monthly Leachate Volume (gallons)	Cell 2 Monthly Leakage Flow (a) (gallons/month)	Monthly Rainfall (inches)
January	29840	0	994	4.80
February	9834	—	0	3.70
March	8799	—	630	5.80
April	16540	5441	418	4.00
May	42960	6983	0	3.80
June	6528	0	267	2.60

Notes:

(—) Leachate volume was unavailable due to PLC error

(a) Leakage is based on the volume of fluid pumped from the leak detection sump as recorded by LRI staff.

(b) Cell 1 monthly volumes for Februrary and March are from comibed site and PLC data

Table 2
Water Level Elevations
April 26, 2012
Hidden Valley Landfill, Pierce County, Washington

Well Number	Well Casing Elevation	Depth to Water	Water Level Elevation
MW-10S	460.17	NM	NM
MW-10D	460.69	25.40	435.29
MW-11S	516.44	89.23	427.21
MW-11D	516.56	89.50	427.06
MW-11D(2)	515.53	88.26	427.27
MW-12S	489.94	61.67	428.27
MW-12D	489.97	62.78	427.19
MW-13S	448.81	20.43	428.38
MW-13D	448.94	20.15	428.79
MW-14S	477.95	44.70	433.25
MW-14D	477.98	46.55	431.43
MW-14R	476.84	114.11	362.73
MW-15S	498.76	70.88	427.88
MW-15D	498.52	75.35	423.17
MW-17S	552.44	126.03	426.41
MW-18S	538.40	128.25	410.15
MW-18D	539.00	127.66	411.34
MW-19S	485.71	52.12	433.59
MW-19D	485.82	53.35	432.47
MW-20R	469.43	103.96	365.47
MW-22U	545.92	137.39	408.53
MW-22L	546.07	138.67	407.40
MW-23S	448.34	18.43	429.91
MW-23D	448.25	21.41	426.84
MW-25S	527.80	121.37	406.43
MW-25D	527.52	119.75	407.77
MW-26R	481.81	59.70	422.11
MW-27S	531.81	101.70	430.11
MW-27D	531.92	101.90	430.02
MW-28S	466.87	39.10	427.77
FMW-01	542.59	139.75	402.84
FMW-02	536.40	132.75	403.65
BC-4S	526.68	121.95	404.73
BC-4D	526.94	155.15	371.79

Notes:
(NM) = not measured

Table 3
Field Parameters
April 2012 (Second Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

Sample ID	Sample Number	Sample Date	Method	pH	Conductance (µS)	Temperature (° C)
MW-10S	HVL-042412-03	04/24/12	DP	6.41	133	13.0
MW-10D	HVL-042412-04	04/24/12	DP	6.49	199	12.4
MW-11S	HVL-042512-10	04/25/12	SP	5.89	285	15.9
MW-11D(2)	HVL-042512-09	04/25/12	SP	6.68	209	14.8
MW-13S	HVL-042412-06	04/24/12	DP	6.57	300	15.9
MW-13D	HVL-042512-13	04/25/12	SP	6.21	247	16.0
MW-14S	HVL-042412-02	04/24/12	DP	5.91	109	10.6
MW-14D	HVL-042412-01	04/24/12	DP	6.12	177	11.3
MW-17S	HVL-042512-12	04/25/12	SP	6.12	449	20.8
MW-28S	HVL-042612-16	04/26/12	SP	6.34	116	11.5
FMW-01	HVL-042512-07	04/25/12	DP	6.28	259	14.2
FMW-02	HVL-042512-08	04/25/12	SP	6.28	259	14.2
Water Supply Well, P. Bunyan	HVL-042612-15	04/26/12	Grab	6.85	242	12.3
Water Supply Well, Corliss	HVL-042612-14	04/26/12	Grab	5.93	185	12.8

Notes:
The groundwater cleanup level for specific conductance is 700 (µS).
(µS) = microsiemens
(°C) = degrees Celcius
(Grab) = collected from sampling point
(SP) = submersible bladder-pump (non-dedicated)
(DP) = dedicated bladder-pump

Table 4
Inorganic Parameters (mg/L)
April 2012 (Second Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D	MW-10S	MW-11D(2)	MW-11S	MW-13D	MW-13S	MW-14D	MW-14S	MW-17S	MW-28S	FMW-01	FMW-02
			Background											
Alkalinity	5		87	53	100	68	94	140	67	40	160	57	95	100
Bicarbonate Alkalinity	5	—	87	53	150	68	94	140	67	40	160	57	95	100
Chloride	0.2-4.0	250[(b)]	4.4	5.4	5.7	16.2	12.8	11.5	6.6	*	18.8	3.6	15.8	14.3
Ammonia as Nitrogen	0.10	—	*	0.04	*	*	*	*	*	0.34	6.70	*	*	*
Nitrate as Nitrogen	0.50	10[(a)]	1.70	0.93	1.8	9.3	1.30	0.86	*	1.0	**13.0**	*	2.5	**13.0**
Sulfate	0.5-10.0	250[(b)]	10.2	6.5	6.5	22.5	19.8	12.2	10.6	*	6.9	5.6	15.6	10.8
Total Dissolved Solids	10	500[(b)]	140	85	150	210	190	190	110	69	300	90	180	260
Total Organic Carbon	1.0	—	*	*	*	1.5	1.5	*	1.6	1.4	2.5	*	1.5	1.9

Notes:
Parameter concentrations that are greater than cleanup levels are shown in **bold**
Analyses performed by TestAmerica, Arvada, Colorado
(mg/L) = milligrams per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(—) indicates not analyzed or not applicable
(a) indicates Primary Drinking Water Standard
(b) indicates Secondary Drinking Water Standard

Table 5
Dissolved Metals (mg/L)
April 2012 (Second Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D Background	MW-10S Background	MW-11D(2)	MW-11S	MW-13D	MW-13S	MW-14D	MW-14S	MW-17S	MW-28S	FMW-01	FMW-02
Arsenic	0.015	—	*	*	*	*	*	*	*	*	*	*	*	*
Iron	0.200	0.30[(b)]	*	*	*	*	*	*	**2.00**	*	*	**0.490**	*	*
Manganese	0.001	0.05[(b)]	*	*	*	0.001	0.002	*	**0.770**	**0.150**	**1.400**	*	*	**0.100**

Notes:
Parameter concentrations that are greater than cleanup levels are shown in **bold**
(b) indicates Secondary Drinking Water Standard
Analyses performed by TestAmerica, Arvada, Colorado
Metals not listed were not present at concentrations exeeding the MRL
(mg/L) = milligrams per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(—) indicates not analyzed or not applicable

Table 6
Volatile Organic Compounds (μg/L)
April 2012 (Second Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D	MW-10S	MW-11D(2)	MW-11S	MW-13D	MW-13S	MW-14D	MW-14S	MW-17S	MW-28S	FMW-01	FMW-02
			Background											
Tetrachloroethene	0.5	5.0[(a)]	*	*	0.9	*	*	*	*	*	*	*	*	*

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Volatile organic compounds not listed were not present at concentrations exeeding the MRL
(μg/L) = micrograms per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(a) indicates Primary Drinking Water standard

Table 7
Duplicate Samples
April 2012 (Second Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	MW-10D	DUP (MW-10D)	RPD (%)
Volatile Organics (µg/L)				
No Detections	—	*	*	—
Dissolved Metals (mg/L)				
Arsenic	0.015	*	*	—
Iron	0.20	*	*	—
Manganese	0.001	*	*	—
Inorganic Parameters (mg/L)				
Alkalinity	5	87	87	0
Bicarbonate Alkalinity	5	87	87	0
Ammonia as Nitrogen	0.10	*	*	—
Total Organic Carbon	1.0	*	*	—
Chloride	4.0	4.4	4.7	7
Nitrate as Nitrogen	2.5	1.7	1.8	6
Total Dissolved Solids	10	140	130	7
Sulfate	0.5	10.2	10.1	1

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Analytes not listed were not present at concentrations exceeding the MRL
RPD = relative percent difference
µg/L = micrograms per liter
mg/L = milligrams per liter
(*) = not reported at or above the MRL (Method Reporting Limit)
(—) = not applicable

Table 8
Water Supply Wells
April 2012 (Second Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Paul Bunyan	Corliss
Volatile Organics (µg/L)			
Methylene Chloride	2.0	3.1 B	3.7 B
Total Metals (mg/L)			
Arsenic	0.005	*	*
Iron	0.200	*	*
Manganese	0.001	0.002	0.003
Zinc	0.010	0.027	0.023
Inorganic Parameters (mg/L)			
Chloride	0.2 - 4.0	4.4	5.6
Ammonia as Nitrogen	0.1	*	*
Nitrate as Nitrogen	0.5	1.8	1.3
Nitrite as Nitrogen	0.5	*	*
Sulfate	0.5	9.7	9.4
Chemical Oxygen Demand (COD)	5.0	5.1	*
Total Organic Carbon (TOC)	1.0	1.3	*
Color	5.0	*	*

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Volatile organic compounds not listed were not present at concentrations exceeding the MRL
Color reported in color units
µg/L = micrograms per liter
mg/L = milligrams per liter
(B) = blank contamination
(—) = not applicable or not analyzed
(*) = not reported at or above the MRL (Method Reporting Limit)

Third Quarter 2012

Table 1
2012 Performance Monitoring Data
Main Sump and Side Slope Liner Areas
Hidden Valley Landfill, Pierce County, Washington

Month	Cell 1 Monthly Leachate Volume (b) (gallons)	Cell 2 Monthly Leachate Volume (gallons)	Cell 2 Monthly Leakage Flow (a) (gallons/month)	Monthly Rainfall (inches)
January	29840	0	994	4.80
February	9834	—	0	3.70
March	8799	—	630	5.80
April	16540	5441	418	4.00
May	42960	6983	0	3.80
June	6528	0	267	2.60
July	25769	9938	1529	1.10
August	0	1	0	0.00
September	15052	8095	0	0.00

Notes:

(—) Leachate volume was unavailable due to PLC error

(a) Leakage is based on the volume of fluid pumped from the leak detection sump as recorded by LRI staff.

(b) Cell 1 monthly volumes for Februrary and March are from comibed site and PLC data

Table 2
Water Level Elevations
July 19, 2012
Hidden Valley Landfill, Pierce County, Washington

Well Number	Well Casing Elevation	Depth to Water	Water Level Elevation
MW-10S	460.17	NM	NM
MW-10D	460.69	28.80	431.89
MW-11S	516.44	92.13	424.31
MW-11D	516.56	92.40	424.16
MW-11D(2)	515.53	91.76	423.77
MW-12S	489.94	64.07	425.87
MW-12D	489.97	65.92	424.05
MW-13S	448.81	23.07	425.74
MW-13D	448.94	23.50	425.44
MW-14S	477.95	48.48	429.47
MW-14D	477.98	49.80	428.18
MW-14R	476.84	121.31	355.53
MW-15S	498.76	74.19	424.57
MW-15D	498.52	78.50	420.02
MW-17S	552.44	128.45	423.99
MW-18S	538.40	130.53	407.87
MW-18D	539.00	130.03	408.97
MW-19S	485.71	56.58	429.13
MW-19D	485.82	57.00	428.82
MW-20R	469.43	109.27	360.16
MW-22U	545.92	137.33	408.59
MW-22L	546.07	140.87	405.20
MW-23S	448.34	20.95	427.39
MW-23D	448.25	24.41	423.84
MW-25S	527.80	124.70	403.10
MW-25D	527.52	122.30	405.22
MW-26R	481.81	63.40	418.41
MW-27S	531.81	105.25	426.56
MW-27D	531.92	105.13	426.79
MW-28S	466.87	NM	NM
FMW-01	542.59	142.36	400.23
FMW-02	536.40	134.67	401.73
BC-4S	526.68	124.00	402.68
BC-4D	526.94	NM	NM

Notes:
(NM) = not measured

Table 3
Field Parameters
July 2012 (Third Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

Sample ID	Sample Number	Sample Date	Method	pH	Conductance (µS)	Temperature (° C)
MW-10S	HVL-071612-04	07/16/12	DP	6.35	133	11.7
MW-10D	HVL-071612-03	07/16/12	DP	6.30	173	11.8
MW-11S	HVL-071712-09	07/17/12	SP	5.66	227	16.8
MW-11D(2)	HVL-071712-10	07/17/12	SP	6.45	207	15.2
MW-12S	HVL-071612-07	07/16/12	DP	6.03	324	19.5
MW-12D	HVL-071612-08	07/16/12	DP	6.53	310	18.5
MW-13S	HVL-071712-16	07/17/12	SP	6.16	318	19.8
MW-13D	HVL-071612-06	07/16/12	DP	6.40	361	18.7
MW-14S	HVL-071612-01	07/16/12	DP	5.61	130	13.5
MW-14D	HVL-071612-02	07/16/12	DP	6.02	198	12.6
MW-15S	HVL-071712-13	07/17/12	SP	6.04	217	16.4
MW-15D	HVL-071712-15	07/17/12	SP	6.57	282	15.2
MW-17S	HVL-071712-12	07/17/12	SP	5.99	375	21.3
MW-18S	HVL-071812-19	07/18/12	SP	6.03	306	17.0
MW-18D	HVL-071812-20	07/18/12	SP	6.52	270	16.3
MW-23S	HVL-071912-24	07/19/12	SP	6.44	287	12.6
MW-25S	HVL-071712-11	07/17/12	SP	6.44	252	13.5
MW-28S	HVL-071712-23	07/19/12	SP	5.96	127	14.2
FMW-01	HVL-071812-18	07/18/12	SP	6.12	259	15.3
FMW-02	HVL-071812-17	07/18/12	SP	5.75	315	17.3
Water Supply Well, P. Bunyan	HVL-071912-22	07/19/12	Grab	6.52	255	17.5
Water Supply Well, Corliss	HVL-071912-21	07/19/12	Grab	6.12	231	25.0

Notes:
The groundwater cleanup level for specific conductance is 700 (µS).
(µS) = microsiemens
(°C) = degrees Celcius
(Grab) = collected from sampling point
(SP) = submersible bladder-pump (non-dedicated)
(DP) = dedicated bladder-pump

Table 4
Inorganic Parameters (mg/L)
July 2012 (Third Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D	MW-10S	MW-11D(2)	MW-11S	MW-12D	MW-12S	MW-13D	MW-13S	MW-14D	MW-14S	MW-15D	MW-15S	MW-17S	MW-18D	MW-18S	MW-23S	MW-25S	MW-28S	FMW-01	FMW-02
			Background																			
Alkalinity	5		69	53	100	100	150	140	150	150	72	43	140	88	160	130	130	130	120	55	98	140
Bicarbonate Alkalinity	5	—	69	53	100	100	150	140	150	150	72	43	140	88	160	130	130	130	120	55	98	140
Chloride	0.2-4.0	250[(b)]	5.0	5.3	5.7	12.0	10.0	13.0	13.0	13.0	6.4	6.1	9.9	10.0	17.0	8.5	13.0	13.0	8.8	5.6	13.0	14.0
Ammonia as Nitrogen	0.10	—	*	*	*	0.14	*	0.86	*	*	2.10	*	*	1.90	1.60	*	*	*	*	*	*	0.11
Nitrate as Nitrogen	0.50	10[(a)]	1.1	*	1.8	2.6	1.3	1.1	0.53	*	*	0.64	0.61	*	3.3	1.8	2.6	2.60	1.7	0.8	1.6	1.7
Sulfate	0.2	250[(b)]	7.5	4.7	6.1	17.0	5.4	1.3	15.0	19.0	12.0	9.2	9.3	12.0	7.3	5.3	7.3	7.3	6.4	4.9	15.0	8.5
Total Dissolved Solids	10	500[(b)]	110	80	150	170	200	200	220	220	120	86	190	130	240	200	220	220	180	84	180	220
Total Organic Carbon	1.0	—	*	*	*	1.5	*	2.9	1.2	1.4	1.5	1.1	1.1	1.6	2.0	*	1.3	1.3	*	*	*	1.5

Notes:
Parameter concentrations that are greater than cleanup levels are shown in **bold**
Analyses performed by TestAmerica, Arvada, Colorado
(mg/L) = milligrams per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(—) indicates not analyzed or not applicable
(a) indicates Primary Drinking Water Standard
(b) indicates Secondary Drinking Water Standard

Table 5
Dissolved Metals (mg/L)
July 2012 (Third Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D (Background)	MW-10S (Background)	MW-11D(2)	MW-11S	MW-12D	MW-12S	MW-13D	MW-13S	MW-14D	MW-14S	MW-15S	MW-17S	MW-18D	MW-18S	MW-23S	MW-25S	MW-28S	FMW-01	FMW-02
Arsenic	0.015	—	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Iron	0.200	0.30[(b)]	*	*	*	*	*	*	**0.380**	*	**2.20**	*	*	*	*	*	*	*	*	*	*
Manganese	0.001	0.05[(b)]	*	*	*	0.012	*	**0.400**	*	0.020	**0.740**	0.004	**0.630**	**0.760**	*	*	0.011	*	*	*	**0.096**

Notes:
Parameter concentrations that are greater than cleanup levels are shown in **bold**
(b) indicates Secondary Drinking Water Standard
Analyses performed by TestAmerica, Arvada, Colorado
Metals not listed were not present at concentrations exeeding the MRL
(mg/L) = milligrams per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(—) indicates not analyzed or not applicable

Table 6
Volatile Organic Compounds (µg/L)
July 2012 (Third Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D	MW-10S	MW-11D(2)	MW-11S	MW-12D	MW-12S	MW-13D	MW-13S	MW-14D	MW-14S	MW-15D	MW-15S	MW-17S	MW-18D	MW-18S	MW-23S	MW-25S	MW-28S	FMW-01	FMW-02
			Background																			
1,4-Dichlorobenzene	0.5	1.82	*	*	*	*	*	0.63	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	0.5	5.0[(a)]	*	*	1.1	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Notes:

Analyses performed by TestAmerica, Arvada, Colorado

Volatile organic compounds not listed were not present at concentrations exeeding the MRL

(µg/L) = micrograms per liter

(*) indicates not reported at or above the MRL (Method Reporting Limit)

(a) indicates Primary Drinking Water standard

Table 7
Duplicate Samples
July 2012 (Third Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	MW-15S	DUP (MW-15S)	RPD (%)
Volatile Organics (µg/L)				
No Detections	—	*	*	—
Dissolved Metals (mg/L)				
Arsenic	0.015	*	*	—
Iron	0.20	*	*	—
Manganese	0.001	0.630	0.640	2
Inorganic Parameters (mg/L)				
Alkalinity	5	88	89	1
Bicarbonate Alkalinity	5	88	89	1
Ammonia as Nitrogen	0.10	1.9	1.9	0
Total Organic Carbon	1.0	1.6	1.5	6
Chloride	0.20-4.0	10.0	9.9	1
Nitrate as Nitrogen	0.5	*	*	—
Total Dissolved Solids	10	130	140	7
Sulfate	0.2	12.0	12.0	0

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Analytes not listed were not present at concentrations exceeding the MRL
RPD = relative percent difference
µg/L = micrograms per liter
mg/L = milligrams per liter
(*) = not reported at or above the MRL (Method Reporting Limit)
(—) = not applicable

Table 8
Water Supply Wells
July 2012 (Third Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Paul Bunyan	Corliss
Volatile Organics (µg/L)			
No Detections	2.0	*	*
Total Metals (mg/L)			
Arsenic	0.005	*	*
Iron	0.200	*	0.490
Manganese	0.001	0.006	0.028
Zinc	0.010	0.120	0.056
Inorganic Parameters (mg/L)			
Chloride	0.2 - 4.0	4.3	5.5
Ammonia as Nitrogen	0.1	*	*
Nitrate as Nitrogen	0.5	1.9	1.1
Nitrite as Nitrogen	0.5	*	*
Sulfate	0.5	9.9	9.6
Chemical Oxygen Demand (COD)	5.0	*	*
Total Organic Carbon (TOC)	1.0	*	*
Color	5.0	*	*

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Volatile organic compounds not listed were not present at concentrations exceeding the MRL
Color reported in color units
µg/L = micrograms per liter
mg/L = milligrams per liter
(B) = blank contamination
(—) = not applicable or not analyzed
(*) = not reported at or above the MRL (Method Reporting Limit)

Fourth Quarter 2012

Groundwater Data Validation Report
Fourth Quarter 2012
Hidden Valley Landfill

Holding Times. All analyses were performed within quality control (QC) holding times with the following exceptions:

- The 48 hour hold time for nitrate in lot numbers 280-34593-1 and 280-34590-1 expired in transit. The laboratory performed this analysis outside of the holding time.

- The 48 hour hold time for nitrite and color in lot number 280-34593-1 expired in transit. The laboratory performed these analyses outside of the holding time.

Surrogate Recovery. Surrogate recoveries were within USEPA guidelines.

Laboratory Control Samples (LCS). All Laboratory Control Samples were within established control limits.

Matrix Spike and Matrix Spike Duplicate (MS/MSD). Matrix spike recoveries were within USEPA guidelines, with the following exceptions:

- Ammonia in lot number 280-34445-1 was reported outside the acceptable recovery percentage, this indicates the possibility of matrix interference. No further action was taken.

- Total manganese and total zinc during Method 6020 in lot 280-34593-1 was reported outside the control limits for the RPD. Because the concentration was greater than 4 times the spike amount, no further action was taken

Blanks. One field blank was included this quarter. Laboratory grade de-ionized water from TestAmerica Laboratory, in Tacoma, Washington, was used to prepare the field blank by pumping the water through an unused bladder in the submersible bladder-pump. No VOCs, dissolved metals, or inorganic compounds were reported in the field blank, trip blank or laboratory method blanks, with the following exception:

- 2-Hexanone Method 8260B in lot number 280-34593-1 was detected in the trip blank sample at a level above the requested reporting limit. Because 2-Hexanone was not detected in any other sample no corrective action was taken.

Duplicate Samples. A field duplicate sample was collected from well MW-14D. All test results greater than five times the method reporting limit (MRL) were within 10 percent RPD.

Quantitation Limits. The reporting limits for all analyses were within the limits specified in the 2001 Groundwater Compliance Monitoring Plan.

Completeness. Samples were analyzed as requested.

Data Assessment. The data are considered acceptable for entry into the database.

Table 1
2012 Performance Monitoring Data
Main Sump and Side Slope Liner Areas
Hidden Valley Landfill, Pierce County, Washington

Month	Cell 1 Monthly Leachate Volume (b) (gallons)	Cell 2 Monthly Leachate Volume (gallons)	Cell 2 Monthly Leakage Flow (a) (gallons/month)	Monthly Rainfall (inches)
January	29840	0	994	4.80
February	9834	—	0	3.70
March	8799	—	630	5.80
April	16540	5441	418	4.00
May	42960	6983	0	3.80
June	6528	0	267	2.60
July	25769	9938	1529	1.10
August	0	1	0	0.00
September	15052	8095	0	0.00
October	20385	0	2189	6.95
November	11	5745	0	9.10
December	12882	6172	0	6.70

Notes:

(—) Leachate volume was unavailable due to PLC error

(a) Leakage is based on the volume of fluid pumped from the leak detection sump as recorded by LRI staff.

(b) Cell 1 monthly volumes for Februrary and March are from comibed site and PLC data

Table 2
Water Level Elevations
October 11, 2012
Hidden Valley Landfill, Pierce County, Washington

Well Number	Well Casing Elevation	Depth to Water	Water Level Elevation
MW-10S	460.17	NM	NM
MW-10D	460.69	35.35	425.34
MW-11S	516.44	97.20	419.24
MW-11D	516.56	97.40	419.16
MW-11D(2)	515.53	97.89	417.64
MW-12S	489.94	65.55	424.39
MW-12D	489.97	72.61	417.36
MW-13S	448.81	30.03	418.78
MW-13D	448.94	30.35	418.59
MW-14S	477.95	54.74	423.21
MW-14D	477.98	57.00	420.98
MW-14R	476.84	125.45	351.39
MW-15S	498.76	79.99	418.77
MW-15D	498.52	85.96	412.56
MW-17S	552.44	133.00	419.44
MW-18S	538.40	133.71	404.69
MW-18D	539.00	134.41	404.59
MW-19S	485.71	60.40	425.31
MW-19D	485.82	72.72	413.10
MW-20R	469.43	116.25	353.18
MW-22U	545.92	135.20	410.72
MW-22L	546.07	144.89	401.18
MW-23S	448.34	24.11	424.23
MW-23D	448.25	28.90	419.35
MW-25S	527.80	129.24	398.56
MW-25D	527.52	127.07	400.45
MW-26R	481.81	70.00	411.81
MW-27S	531.81	112.88	418.93
MW-27D	531.92	112.28	419.64
MW-28S	466.87	44.80	422.07
FMW-01	542.59	147.00	395.59
FMW-02	536.40	139.09	397.31
BC-4S	526.68	128.25	398.43
BC-4D	526.94	NM	NM

Notes:
(NM) = not measured

Table 3
Field Parameters
October 2012 (Fourth Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

Sample ID	Sample Number	Sample Date	Method	pH	Conductance (µS)	Temperature (° C)
MW-10S	HVL-101112-14	10/11/12	DP	6.62	116	12.6
MW-10D	HVL-101112-13	10/11/12	DP	6.63	113	12.5
MW-11S	HVL-101012-07	10/10/12	SP	6.01	207	16.0
MW-11D(2)	HVL-101012-06	10/10/12	SP	6.72	199	14.7
MW-13S	HVL-101012-05	10/10/12	DP	6.49	309	18.1
MW-13D	HVL-101012-04	10/10/12	SP	6.27	313	18.8
MW-14S	HVL-101112-09	10/11/12	DP	6.08	175	13.2
MW-14D	HVL-101112-10	10/11/12	DP	6.36	180	12.6
MW-17S	HVL-101012-03	10/10/12	SP	6.25	368	20.4
FMW-01	HVL-101012-01	10/10/12	SP	6.34	244	13.7
FMW-02	HVL-101012-02	10/10/12	SP	6.12	309	16.4
Water Supply Well, P. Bunyan	HVL-101112-08	10/11/12	Grab	6.79	301	11.8
Water Supply Well, Corliss	HVL-101112-15	10/11/12	Grab	6.91	179	14.0

Notes:
The groundwater cleanup level for specific conductance is 700 (µS).
(µS) = microsiemens
(°C) = degrees Celcius
(Grab) = collected from sampling point
(SP) = submersible bladder-pump (non-dedicated)
(DP) = dedicated bladder-pump

Table 4
Inorganic Parameters (mg/L)
October 2012 (Fourth Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D	MW-10S	MW-11D(2)	MW-11S	MW-13D	MW-13S	MW-14D	MW-14S	MW-17S	FMW-01	FMW-02
			Background										
Alkalinity	5		66	55	100	80	140	140	74	78	190	89	140
Bicarbonate Alkalinity	5	—	66	55	100	80	140	140	74	78	190	89	140
Chloride	0.2-4.0	250[(b)]	4.9	5.1	5.2	11.0	13.0	13.0	8.7	16.0	12.0	13.0	13.0
Ammonia as Nitrogen	0.10	—	*	*	0.13	*	0.33	*	4.30	0.33	4.90	*	0.22
Nitrate as Nitrogen	0.50	10[(a)]	*	*	1.8	0.7	*	*	*	*	*	1.2	2.6
Sulfate	0.2	250[(b)]	4.6	4.7	6.0	14.0	20.0	17.0	11.0	8.7	3.7	15.0	5.3
Total Dissolved Solids	10	500[(b)]	83	83	150	150	230	210	130	120	250	180	230
Total Organic Carbon	1.0	—	*	1.0	*	1.3	1.5	1.2	1.6	1.8	2.3	1.1	1.9

Notes:
Parameter concentrations that are greater than cleanup levels are shown in **bold**
Analyses performed by TestAmerica, Arvada, Colorado
(mg/L) = milligrams per liter
(*) indicates not reported at or above the MRL (Method Reporting Limit)
(—) indicates not analyzed or not applicable
(a) indicates Primary Drinking Water Standard
(b) indicates Secondary Drinking Water Standard

Table 5
Dissolved Metals (mg/L)
October 2012 (Fourth Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D (Background)	MW-10S (Background)	MW-11D(2)	MW-11S	MW-13D	MW-13S	MW-14D	MW-14S	MW-17S	FMW-01	FMW-02
Arsenic	0.015	—	*	*	*	*	*	*	*	*	*	*	*
Iron	0.200	0.30[(b)]	*	*	*	*	*****	*	**2.80**	*	*	*	*****
Manganese	0.001	0.05[(b)]	0.002	*	*	0.016	**0.180**	0.047	**0.920**	**0.270**	**0.780**	*	**0.093**

Notes:

Parameter concentrations that are greater than cleanup levels are shown in **bold**

(b) indicates Secondary Drinking Water Standard

Analyses performed by TestAmerica, Arvada, Colorado

Metals not listed were not present at concentrations exeeding the MRL

(mg/L) = milligrams per liter

(*) indicates not reported at or above the MRL (Method Reporting Limit)

(—) indicates not analyzed or not applicable

Table 6
Volatile Organic Compounds (μg/L)
October 2012 (Fourth Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Cleanup Levels	MW-10D	MW-10S	MW-11D(2)	MW-11S	MW-13D	MW-13S	MW-14D	MW-14S	MW-17S	FMW-01	FMW-02
			Background										
1,4-Dichlorobenzene	0.5	1.82	*	*	*	*	*	*	*	*	*	*	*
Tetrachloroethene	0.5	5.0[(a)]	*	*	0.80	*	*	*	*	*	*	*	*

Notes:

Analyses performed by TestAmerica, Arvada, Colorado

Volatile organic compounds not listed were not present at concentrations exeeding the MRL

(a) indicates Primary Drinking Water Standard
(μg/L) = micrograms per liter

Table 7
Duplicate Samples
October 2012 (Fourth Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	MW-14D	DUP (MW-14D)	RPD (%)
Volatile Organics (µg/L)				
No Detections	—	*	*	—
Dissolved Metals (mg/L)				
Arsenic	0.005	*	*	—
Iron	0.20	2.8	2.9	4
Manganese	0.001	0.92	0.92	0
Inorganic Parameters (mg/L)				
Alkalinity	5	74	75	1
Bicarbonate Alkalinity	5	74	75	1
Ammonia as Nitrogen	0.10	4.3	4.3	0
Total Organic Carbon	1.0	1.6	1.6	0
Chloride	0.2	8.7	8.8	1
Nitrate as Nitrogen	0.5	*	*	—
Total Dissolved Solids	10	130	120	8
Sulfate	0.2	11.0	12.0	9

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Analytes not listed were not present at concentrations exceeding the MRL
RPD = relative percent difference
µg/L = micrograms per liter
mg/L = milligrams per liter
(*) = not reported at or above the MRL (Method Reporting Limit)
(—) = not applicable

Table 8
Water Supply Wells
October 2012 (Fourth Quarter) Groundwater Monitoring
Hidden Valley Landfill, Pierce County, Washington

	MRL	Paul Bunyan	Corliss
Volatile Organics (µg/L)			
No Detections	---	*	*
Total Metals (mg/L)			
Arsenic	0.005	*	*
Iron	0.200	0.44	*
Manganese	0.001	0.002	0.010
Zinc	0.010	0.066	0.026
Inorganic Parameters (mg/L)			
Chloride	0.2 - 4.0	4.6	5.6
Ammonia as Nitrogen	0.1	*	*
Nitrate as Nitrogen	0.5	1.8 H	1.2 H
Nitrite as Nitrogen	0.5	*	*
Sulfate	0.5	9.6	9.4
Chemical Oxygen Demand (COD)	5.0	*	*
Total Organic Carbon (TOC)	1.0	*	*
Color	5.0	*	*

Notes:
Analyses performed by TestAmerica, Arvada, Colorado
Volatile organic compounds not listed were not present at concentrations exceeding the MRL
Color reported in color units
µg/L = micrograms per liter
mg/L = milligrams per liter
(B) = blank contamination
(—) = not applicable or not analyzed
(*) = not reported at or above the MRL (Method Reporting Limit)

Hidden Valley Landfill
Groundwater Chemistry
Field Parameters

WELL Sample Number	Date	Notes	Well Casing Elevation	Depth to Water	Water Level Elevation	Field pH	Field Conductiviy (umho/cm)	Temp. (deg-C)	Dissolved Oxygen (mg/l)	Pore Volume	Volume Removed (gal)
FMW-01											
HVL-012712-24	1/27/2012		542.59	145.57	397.02	6.33	342	12.9	4.57	3	
HVL-042512-07	4/25/2012		542.59	139.62	402.97	6.28	259	14.2	3.94	3	
HVL-071812-18	7/18/2012		542.59	142.30	400.29	6.12	259	15.3	5.09	3	
HVL-101012-01	10/10/2012		542.59	147.00	395.59	6.34	244	13.7	4.86	3	
FMW-02											
HVL-012712-25	1/27/2012		536.4	137.61	398.79	6.06	408	15.4	0.43	3	
HVL-042512-08	4/25/2012		536.4	132.78	403.62	6.28	259	14.2	0.26	3	
HVL-071812-17	7/18/2012		536.4	134.65	401.75	5.75	315	17.3	0.35	3	
HVL-101012-02	10/10/2012		536.4	139.13	397.27	6.12	309	16.4	0.53	3	
LDCS											
HVL-012412-07	1/24/2012					7.65	17000	18.0		3	
Leachate, East Area											
HVL-012412-06	1/24/2012					7.62	15000	15.5		3	
MW-10D											
HVL-012412-03	1/24/2012		460.69	31.28	429.41	6.49	130	12.1		3	
HVL-042412-04	4/24/2012		460.69	25.62	435.07	6.49	199	12.4	3.58	3	
HVL-071612-03	7/16/2012		460.69	29.12	431.57	6.30	173	11.8	4.79	3	
HVL-101112-13	10/11/2012		460.69	35.35	425.34	6.63	113	12.4	3.36	3	
MW-10S											
HVL-012412-04	1/24/2012		460.17			6.49	155	12.5		3	
HVL-042412-03	4/24/2012		460.17			6.41	133	13.0	5.84	3	
HVL-071612-04	7/16/2012		460.17	11.72	448.45	6.35	133	11.7	4.55	3	
HVL-101112-14	10/11/2012		460.17			6.62	116	12.6	2.37	3	
MW-11D(2)											
HVL-012512-13	1/25/2012		515.53	94.40	421.13	6.81	224	14.0	4.20	3	
HVL-042512-09	4/25/2012		515.53	88.30	427.23	6.68	209	14.8	3.77	3	
HVL-071712-10	7/17/2012		515.53	91.76	423.77	6.45	207	15.2	5.38	3	
HVL-101012-06	10/10/2012		515.53	98.23	417.30	6.72	199	14.6	4.76	3	
MW-11S											
HVL-012512-12	1/25/2012		516.44	92.52	423.92	5.92	206	14.5	3.20	3	
HVL-042512-10	4/25/2012		516.44	89.30	427.14	5.89	285	15.9	0.18	3	
HVL-071712-09	7/17/2012		516.44	92.00	424.44	5.66	227	16.8	0.26	3	
HVL-101012-07	10/10/2012		516.44	97.10	419.34	6.01	207	16.0	0.31	3	

Hidden Valley Landfill
Groundwater Chemistry
Field Parameters

WELL Sample Number	Date	Notes	Well Casing Elevation	Depth to Water	Water Level Elevation	Field pH	Field Conductiviy (umho/cm)	Temp. (deg-C)	Dissolved Oxygen (mg/l)	Pore Volume	Volume Removed (gal)
MW-12D											
HVL-013012-27	1/30/2012		489.97	66.98	422.99	6.70	329	17.0	1.42	3	
HVL-071612-08	7/16/2012		489.97	66.30	423.67	6.53	310	18.5	1.88	3	
MW-12S											
HVL-013012-28	1/30/2012		489.94	64.28	425.66	5.76	466	19.1	0.74	3	
HVL-071612-07	7/16/2012		489.94	63.90	426.04	6.03	324	19.5	1.05	3	
MW-13D											
HVL-013012-29	1/30/2012		448.94	24.28	424.66	6.65	270	17.0	1.61	3	
HVL-042512-13	4/25/2012		448.94	20.75	428.19	6.21	247	16.0	2.41	3	
HVL-071612-06	7/16/2012		448.94	23.85	425.09	6.40	361	18.7	0.72	3	
HVL-101012-04	10/10/2012		448.94	30.23	418.71	6.27	313	18.8	0.25	3	
MW-13S											
HVL-012712-22	1/27/2012		448.81	24.70	424.11	6.29	255	17.2	2.84	3	
HVL-042412-06	4/24/2012		448.81	20.66	428.15	6.57	300	15.9	1.08	3	
HVL-071712-16	7/17/2012		448.81	24.30	424.51	6.16	318	19.8	0.17	3	
HVL-101012-05	10/10/2012		448.81	30.65	418.16	6.49	309	18.1	1.49	3	
MW-14D											
HVL-012412-01	1/24/2012		477.98	52.50	425.48	6.33	185	11.4		3	
HVL-042412-01	4/24/2012		477.98	46.60	431.38	6.12	177	11.3	0.37	3	
HVL-071612-02	7/16/2012		477.98	50.17	427.81	6.02	198	12.6	0.31	3	
HVL-101112-10	10/11/2012		477.98	57.00	420.98	6.36	180	12.6	0.67	3	
MW-14R											
HVL-012712-21	1/27/2012		476.84	119.97	356.87	6.82	128	6.0	1.88	3	
MW-14S											
HVL-012412-02	1/24/2012		477.95	49.47	428.48	6.16	67	10.3		3	
HVL-042412-02	4/24/2012		477.95	45.01	432.94	5.91	109	10.6	0.67	3	
HVL-071612-01	7/16/2012		477.95	48.12	429.83	5.61	130	13.5	0.40	3	
HVL-101112-09	10/11/2012		477.95	54.74	423.21	6.08	175	13.2	0.86	3	
MW-15D											
HVL-012612-16	1/26/2012		498.52	81.40	417.12	6.67	318	12.7	0.32	3	
HVL-071712-15	7/17/2012		498.52	120.32	378.20	6.57	282	15.1	0.16	3	
MW-15S											
HVL-012512-14	1/25/2012		498.52	74.90	423.62	5.95	299	14.6	2.88	3	
HVL-071712-13	7/17/2012		498.52	74.01	424.51	6.04	217	16.4	0.24	3	

Hidden Valley Landfill
Groundwater Chemistry
Field Parameters

WELL Sample Number	Date	Notes	Well Casing Elevation	Depth to Water	Water Level Elevation	Field pH	Field Conductiviy (umho/cm)	Temp. (deg-C)	Dissolved Oxygen (mg/l)	Pore Volume	Volume Removed (gal)
MW-17S											
HVL-012512-11	1/25/2012		552.44	129.14	423.30	6.28	424	18.8	0.50	3	
HVL-042512-12	4/25/2012		552.44	126.03	426.41	6.12	449	20.8	0.41	3	
HVL-071712-12	7/17/2012		552.44	128.34	424.10	5.99	375	21.3	0.30	3	
HVL-101012-03	10/10/2012		552.44	132.93	419.51	6.25	368	20.4	0.34	3	
MW-18D											
HVL-012512-10	1/25/2012		546.01	132.83	413.18	6.81	280	14.6	1.95	3	
HVL-071812-20	7/17/2012		546.01	130.10	415.91	6.52	3	16.3	2.48	3	
MW-18S											
HVL-012512-09	1/25/2012		546.98	131.70	415.28	6.38	369	15.2	2.36	3	
HVL-071812-19	7/18/2012		546.98	130.48	416.50	6.03	306	17.0	2.14	3	
MW-20R											
HVL-012412-05	1/24/2012		465.68	107.48	358.20	6.90	259	9.8		3	
MW-23S											
HVL-012612-19	1/26/2012		448.34	19.80	428.54	6.17	209	11.2	0.52	3	
HVL-071912-24	7/19/2012		448.34	24.57	423.77	6.44	287	12.6	0.28	3	
MW-25S											
HVL-012512-08	1/25/2012		526.54	146.32	380.22	6.77	74	8.8	2.76	3	
HVL-071712-11	7/17/2012		526.54	124.51	402.03	6.44	252	13.5	3.01	3	
MW-26R											
HVL-013012-26	1/30/2012		481.81	63.88	417.93	6.38	69	10.0	1.53	3	
MW-28S											
HVL-012612-20	1/26/2012		466.87	42.20	424.67	6.39	233	10.5	7.96	3	
HVL-042612-16	4/26/2012		466.87	39.10	427.77	6.34	116	11.5	6.01	3	
HVL-071912-23	7/19/2012		466.87	41.15	425.72	5.96	127	14.2	8.24	3	
QC, F-BLANK											
HVL-012712-23	1/27/2012					7.76	4	16.3	2.69	3	
HVL-042512-11	4/25/2012					7.19	5	13.9	5.41	3	
HVL-071812-21	7/18/2012					6.99	5	20.1	3.97	3	
HVL-101112-12	10/11/2012					7.19	5	13.9	5.41	3	
Water Supply Well, Corliss											
HVL-012612-17	1/26/2012					7.17	222	6.9	7.07	3	
HVL-042612-14	4/26/2012					5.93	185	12.8	4.26	3	

Hidden Valley Landfill
Groundwater Chemistry
Field Parameters

WELL Sample Number	Date	Notes	Well Casing Elevation	Depth to Water	Water Level Elevation	Field pH	Field Conductiviy (umho/cm)	Temp. (deg-C)	Dissolved Oxygen (mg/l)	Pore Volume	Volume Removed (gal)
Water Supply Well, Corliss											
HVL-071912-21	7/19/2012					6.12	231	25.0	2.68	3	
HVL-101112-15	10/11/2012					6.91	179	14.0	6.01	3	
Water Supply Well, P. Bunyan											
HVL-012612-18	1/26/2012					7.26	245	6.3	5.43	3	
HVL-042612-15	4/26/2012					6.85	242	12.3	3.31	3	
HVL-071912-22	7/19/2012					6.52	255	17.5	5.84	3	
HVL-101112-08	10/11/2012					6.79	301	11.8	4.83	3	

Hidden Valley Landfill
Groundwater Chemistry
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Part 1 of 2

WELL / Sample Number	Date	Note	Lab pH	Lab Cond. (umho/cm)	Total Alkalinity (mg/L as CaCO3)	Bicarbonate Alkalinity (mg/L as CaCO3)	Chloride (mg/L)	Sulfate (mg/L)	Ammonia as N (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	TKN as N (mg/L)
FMW-01												
HVL-012712-24	1/27/2012				120.0	120.0	19.4	15.8	0.10 L	1.40		
HVL-042512-07	4/25/2012				95.0	95.0	15.8	15.6	0.10 L	2.50		
HVL-071812-18	7/18/2012				98.0	98.0	13.0	15.0	0.10 L	1.60		
HVL-101012-01	10/10/2012				89.0	89.0	13.0	15.0	0.10 L	1.20		
FMW-02												
HVL-012712-25	1/27/2012				110.0	110.0	17.0	8.9	0.28	13.00		
HVL-042512-08	4/25/2012				100.0	100.0	14.3	10.8	0.10 L	13.00		
HVL-071812-17	7/18/2012				140.0	140.0	14.0	8.5	0.11	1.70		
HVL-101012-02	10/10/2012				140.0	140.0	13.0	5.3	0.22	2.60		
LDCS												
HVL-012412-07	1/24/2012				7800.0	6400.0	4030.0	82.6	620.00	5.00 L	5.00 L	
Leachate, East Area												
HVL-012412-06	1/24/2012				7800.0	7800.0	3830.0	5.0 L	590.00	5.00 L	0.50 L	
MW-10D												
HVL-012412-03	1/24/2012				66.0	66.0	11.7	9.9	0.10 L	0.57		
HVL-042412-04	4/24/2012				87.0	87.0	4.4	10.2	0.10 L	1.70		
HVL-071612-03	7/16/2012				69.0	69.0	5.0	7.5	0.10 L	1.10		
HVL-101112-13	10/11/2012				66.0	66.0	4.9	4.6	0.10 L	0.50 L		
MW-10S												
HVL-012412-04	1/24/2012				72.0	72.0	10.6	9.0	0.10 L	0.80		
HVL-042412-03	4/24/2012				53.0	53.0	5.4	6.5	0.04	0.93		
HVL-071612-04	7/16/2012				53.0	53.0	5.3	4.7	0.10 L	0.50 L		
HVL-101112-14	10/11/2012				55.0	55.0	5.1	4.7	0.10 L	0.50 L		
MW-11D(2)												
HVL-012512-13	1/25/2012				100.0	100.0	5.7	5.5	0.10 L	1.80		
HVL-042512-09	4/25/2012				100.0	150.0	5.7	6.5	0.10 L	1.80		
HVL-071712-10	7/17/2012				100.0	100.0	5.7	6.1	0.10 L	1.80		
HVL-101012-06	10/10/2012				100.0	100.0	5.2	6.0	0.13	1.80		
MW-11S												
HVL-012512-12	1/25/2012				48.0	48.0	16.7	11.6	0.10 L	4.40		
HVL-042512-10	4/25/2012				68.0	68.0	16.2	22.5	0.10 L	9.30		
HVL-071712-09	7/17/2012				100.0	100.0	12.0	17.0	0.14	2.60		
HVL-101012-07	10/10/2012				80.0	80.0	11.0	14.0	0.10 L	0.73		

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WELL Sample Number	Date	Note	Lab pH	Lab Cond. (umho/cm)	Total Alkalinity (mg/L as CaCO3)	Bicarbonate Alkalinity (mg/L as CaCO3)	Chloride (mg/L)	Sulfate (mg/L)	Ammonia as N (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	TKN as N (mg/L)
MW-12D												
HVL-013012-27	1/30/2012				160.0	160.0	9.8	5.1	0.10 L	1.10		
HVL-071612-08	7/16/2012				150.0	150.0	10.0	5.4	0.10 L	1.30		
MW-12S												
HVL-013012-28	1/30/2012				30.0	30.0	10.9	5.9	0.76	43.00		
HVL-071612-07	7/16/2012				140.0	140.0	13.0	1.3	0.86	1.10		
MW-13D												
HVL-013012-29	1/30/2012				120.0	120.0	10.1	12.6	0.10 L	0.73		
HVL-042512-13	4/25/2012				94.0	94.0	12.8	19.8	0.10 L	1.30		
HVL-071612-06	7/16/2012				150.0	150.0	13.0	15.0	0.10 L	0.53		
HVL-101012-04	10/10/2012				140.0	140.0	13.0	20.0	0.33	0.50 L		
MW-13S												
HVL-012712-22	1/27/2012				87.0	87.0	13.0	11.2	0.10 L	0.65		
HVL-042412-06	4/24/2012				140.0	140.0	11.5	12.2	0.10 L	0.86		
HVL-071712-16	7/17/2012				150.0	150.0	13.0	19.0	0.10 L	0.50 L		
HVL-101012-05	10/10/2012				140.0	140.0	13.0	17.0	0.10 L	0.50 L		
MW-14D												
HVL-012412-01	1/24/2012				80.0	80.0	10.2	10.5	3.70	0.50 L		
HVL-042412-01	4/24/2012				67.0	67.0	6.6	10.6	0.10 L	0.50 L		
HVL-071612-02	7/16/2012				72.0	72.0	6.4	12.0	2.10	0.50 L		
HVL-101112-10	10/11/2012				74.0	74.0	8.7	11.0	4.30	0.50 L		
MW-14R												
HVL-012712-21	1/27/2012				49.0	49.0	1.7	3.8	0.10 L	0.50 L		
MW-14S												
HVL-012412-02	1/24/2012				25.0	25.0	2.1	4.6	0.10 L	1.10		
HVL-042412-02	4/24/2012				40.0	40.0	0.2 L	0.5 L	0.34	0.96		
HVL-071612-01	7/16/2012				43.0	43.0	6.1	9.2	0.10 L	0.64		
HVL-101112-09	10/11/2012				78.0	78.0	16.0	8.7	0.33	0.50 L		
MW-15D												
HVL-012612-16	1/26/2012				160.0	160.0	12.7	8.2	0.10 L	0.59		
HVL-071712-15	7/17/2012				140.0	140.0	9.9	9.3	0.10 L	0.61		
MW-15S												
HVL-012512-14	1/25/2012				78.0	78.0	18.0	11.3	3.20	9.80		
HVL-071712-13	7/17/2012				88.0	88.0	10.0	12.0	1.90	0.50 L		

WELL Sample Number	Date	Note	Lab pH	Lab Cond. (umho/cm)	Total Alkalinity (mg/L as CaCO3)	Bicarbonate Alkalinity (mg/L as CaCO3)	Chloride (mg/L)	Sulfate (mg/L)	Ammonia as N (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	TKN as N (mg/L)
MW-17S												
HVL-012512-11	1/25/2012				150.0	150.0	14.5	4.8	4.50	11.00		
HVL-042512-12	4/25/2012				160.0	160.0	18.8	6.9	6.70	13.00		
HVL-071712-12	7/17/2012				160.0	160.0	17.0	7.3	1.60	3.30		
HVL-101012-03	10/10/2012				190.0	190.0	12.0	3.7	4.90	0.50 L		
MW-18D												
HVL-012512-10	1/25/2012				130.0	130.0	10.0	5.0	0.10 L	1.70		
HVL-071812-20	7/17/2012				130.0	130.0	8.5	5.3	0.10 L	1.80		
MW-18S												
HVL-012512-09	1/25/2012				120.0	120.0	14.9	6.2	0.10 L	11.00		
HVL-071812-19	7/18/2012				130.0	130.0	13.0	7.3	0.10 L	2.60		
MW-20R												
HVL-012412-05	1/24/2012				48.0	48.0	1.6	2.9	0.10 L	0.50 L		
MW-23S												
HVL-012612-19	1/26/2012				78.0	78.0	11.9	16.7	0.10 L	0.93		
HVL-071912-24	7/19/2012				55.0	55.0	5.6	4.9	0.10 L	0.78		
MW-25S												
HVL-012512-08	1/25/2012				120.0	120.0	8.2	6.4	0.10 L	1.80		
HVL-071712-11	7/17/2012				120.0	120.0	8.8	6.4	0.10 L	1.70		
MW-26R												
HVL-013012-26	1/30/2012				42.0	42.0	2.3	0.5 L	0.30	0.50 L		
MW-28S												
HVL-012612-20	1/26/2012				14.0	14.0	15.4	17.2	0.10 L	3.00		
HVL-042612-16	4/26/2012				57.0	57.0	3.6	5.6	0.10 L	0.50 L		
HVL-071912-23	7/19/2012				55.0	55.0	5.6	4.9	0.10 L	0.78		
QC, F-BLANK												
HVL-012712-23	1/27/2012				5.0 L	5.0 L	0.2 L	0.5 L	0.10 L	0.50 L		
HVL-071812-21	7/18/2012				5.0 L	5.0 L	0.2 L	0.5 L	0.10 L	0.50 L		
HVL-101112-12	10/11/2012				5.0 L	5.0 L	0.2 L	0.5 L	0.10 L	0.50 L		
Water Supply Well, Corliss												
HVL-012612-17	1/26/2012						8.0	12.4	0.10 L	1.80	0.50 L	
HVL-042612-14	4/26/2012						5.6	9.4	0.10 L	1.30	0.50 L	
HVL-071912-21	7/19/2012						5.5	9.6	0.10 L	1.10	0.50 L	

Hidden Valley Landfill
Groundwater Chemistry
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WELL Sample Number	Date	Note	Lab pH	Lab Cond. (umho/cm)	Total Alkalinity (mg/L as CaCO3)	Bicarbonate Alkalinity (mg/L as CaCO3)	Chloride (mg/L)	Sulfate (mg/L)	Ammonia as N (mg/L)	Nitrate as N (mg/L)	Nitrite as N (mg/L)	TKN as N (mg/L)
Water Supply Well, Corliss												
HVL-101112-15	10/11/2012						5.6	9.4	0.10 L	1.20	0.50 L	
Water Supply Well, P. Bunyan												
HVL-012612-18	1/26/2012						4.4	9.3	0.10 L	1.80	0.50 L	
HVL-042612-15	4/26/2012						4.4	9.7	0.10 L	1.80	0.50 L	
HVL-071912-22	7/19/2012						4.3	9.9	0.10 L	1.90	0.50 L	
HVL-101112-08	10/11/2012						4.6	9.6	0.10 L	1.80	0.50 L	

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WELL / Sample Number	Date	Fluoride (mg/L)	COD (mg/L)	Cyanide (mg/L)	TDS (mg/L)	TOC (mg/L)	TOX (mg/L)	Total Phenols (mg/L)	MBAS (mg/L)
FMW-01									
HVL-012712-24	1/27/2012				190	1.0 L			
HVL-042512-07	4/25/2012				180	1.5			
HVL-071812-18	7/18/2012				180	1.0 L			
HVL-101012-01	10/10/2012				180	1.1			
FMW-02									
HVL-012712-25	1/27/2012				250	1.5			
HVL-042512-08	4/25/2012				260	1.9			
HVL-071812-17	7/18/2012				220	1.5			
HVL-101012-02	10/10/2012				230	1.9			
LDCS									
HVL-012412-07	1/24/2012		2900	0.01 L	13000	1100.0			
Leachate, East Area									
HVL-012412-06	1/24/2012		3000	0.01 L	15000	980.0			
MW-10D									
HVL-012412-03	1/24/2012				96	1.4			
HVL-042412-04	4/24/2012				140	1.0 L			
HVL-071612-03	7/16/2012				110	1.0 L			
HVL-101112-13	10/11/2012				83	1.0 L			
MW-10S									
HVL-012412-04	1/24/2012				110	1.5			
HVL-042412-03	4/24/2012				85	1.0 L			
HVL-071612-04	7/16/2012				80	1.0 L			
HVL-101112-14	10/11/2012				83	1.0			
MW-11D(2)									
HVL-012512-13	1/25/2012				140	1.0 L			
HVL-042512-09	4/25/2012				150	1.0 L			
HVL-071712-10	7/17/2012				150	1.0 L			
HVL-101012-06	10/10/2012				150	1.0 L			
MW-11S									
HVL-012512-12	1/25/2012				130	1.0 L			
HVL-042512-10	4/25/2012				210	1.5			
HVL-071712-09	7/17/2012				170	1.5			
HVL-101012-07	10/10/2012				150	1.3			

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WELL Sample Number	Date	Fluoride (mg/L)	COD (mg/L)	Cyanide (mg/L)	TDS (mg/L)	TOC (mg/L)	TOX (mg/L)	Total Phenols (mg/L)	MBAS (mg/L)
MW-12D									
HVL-013012-27	1/30/2012				190	1.0 L			
HVL-071612-08	7/16/2012				200	1.0 L			
MW-12S									
HVL-013012-28	1/30/2012				350	1.5			
HVL-071612-07	7/16/2012				200	2.9			
MW-13D									
HVL-013012-29	1/30/2012				170	1.0 L			
HVL-042512-13	4/25/2012				190	1.5			
HVL-071612-06	7/16/2012				220	1.2			
HVL-101012-04	10/10/2012				230	1.5			
MW-13S									
HVL-012712-22	1/27/2012				140	1.1			
HVL-042412-06	4/24/2012				190	1.0 L			
HVL-071712-16	7/17/2012				220	1.4			
HVL-101012-05	10/10/2012				210	1.2			
MW-14D									
HVL-012412-01	1/24/2012				120	1.7			
HVL-042412-01	4/24/2012				110	1.6			
HVL-071612-02	7/16/2012				120	1.5			
HVL-101112-10	10/11/2012				130	1.6			
MW-14R									
HVL-012712-21	1/27/2012				98	1.0 L			
MW-14S									
HVL-012412-02	1/24/2012				56	2.1			
HVL-042412-02	4/24/2012				69	1.4			
HVL-071612-01	7/16/2012				86	1.1			
HVL-101112-09	10/11/2012				120	1.8			
MW-15D									
HVL-012612-16	1/26/2012				200	1.0			
HVL-071712-15	7/17/2012				190	1.1			
MW-15S									
HVL-012512-14	1/25/2012				210	1.7			
HVL-071712-13	7/17/2012				130	1.6			

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WELL Sample Number	Date	Fluoride (mg/L)	COD (mg/L)	Cyanide (mg/L)	TDS (mg/L)	TOC (mg/L)	TOX (mg/L)	Total Phenols (mg/L)	MBAS (mg/L)
MW-17S									
HVL-012512-11	1/25/2012				260	1.9			
HVL-042512-12	4/25/2012				300	2.5			
HVL-071712-12	7/17/2012				240	2.0			
HVL-101012-03	10/10/2012				250	2.3			
MW-18D									
HVL-012512-10	1/25/2012				180	1.0 L			
HVL-071812-20	7/17/2012				200	1.0 L			
MW-18S									
HVL-012512-09	1/25/2012				240	1.3			
HVL-071812-19	7/18/2012				220	1.3			
MW-20R									
HVL-012412-05	1/24/2012				85	1.0 L			
MW-23S									
HVL-012612-19	1/26/2012				150	1.0 L			
HVL-071912-24	7/19/2012				84	1.0 L			
MW-25S									
HVL-012512-08	1/25/2012				170	1.0 L			
HVL-071712-11	7/17/2012				180	1.0 L			
MW-26R									
HVL-013012-26	1/30/2012				52	1.0			
MW-28S									
HVL-012612-20	1/26/2012				160	1.0 L			
HVL-042612-16	4/26/2012				90	1.0 L			
HVL-071912-23	7/19/2012				84	1.0 L			
QC, F-BLANK									
HVL-012712-23	1/27/2012				10 L	1.0 L			
HVL-071812-21	7/18/2012				10 L	1.0 L			
HVL-101112-12	10/11/2012				10 L	1.0 L			
Water Supply Well, Corliss									
HVL-012612-17	1/26/2012		6			1.0 L			
HVL-042612-14	4/26/2012		5 L			1.0 L			
HVL-071912-21	7/19/2012		5 L			1.0 L			

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WELL Sample Number	Date	Fluoride (mg/L)	COD (mg/L)	Cyanide (mg/L)	TDS (mg/L)	TOC (mg/L)	TOX (mg/L)	Total Phenols (mg/L)	MBAS (mg/L)
Water Supply Well, Corliss									
HVL-101112-15	10/11/2012		5 L			1.0 L			
Water Supply Well, P. Bunyan									
HVL-012612-18	1/26/2012		24			3.4			
HVL-042612-15	4/26/2012		5			1.3			
HVL-071912-22	7/19/2012		5 L			1.0 L			
HVL-101112-08	10/11/2012		5 L			1.0 L			

Hidden Valley Landfill
Groundwater Chemistry
Dissolved Metals

WELL Sample Number	Date	Note	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Copper	Iron	Lead
FMW-01													
HVL-012712-24	1/27/2012				0.015 L							0.200 L	
HVL-042512-07	4/25/2012				0.015 L							0.200 L	
HVL-071812-18	7/18/2012				0.015 L							0.200 L	
HVL-101012-01	10/10/2012				0.015 L							0.200 L	
FMW-02													
HVL-012712-25	1/27/2012				0.015 L							0.200 L	
HVL-042512-08	4/25/2012				0.015 L							0.200 L	
HVL-071812-17	7/18/2012				0.015 L							0.200 L	
HVL-101012-02	10/10/2012				0.015 L							0.200 L	
MW-10D													
HVL-012412-03	1/24/2012				0.015 L							0.200 L	
HVL-042412-04	4/24/2012				0.015 L							0.200 L	
HVL-071612-03	7/16/2012				0.015 L							0.200 L	
HVL-101112-13	10/11/2012				0.015 L							0.200 L	
MW-10S													
HVL-012412-04	1/24/2012				0.015 L							0.200 L	
HVL-042412-03	4/24/2012				0.015 L							0.200 L	
HVL-071612-04	7/16/2012				0.015 L							0.200 L	
HVL-101112-14	10/11/2012				0.015 L							0.200 L	
MW-11D(2)													
HVL-012512-13	1/25/2012				0.015 L							0.200 L	
HVL-042512-09	4/25/2012				0.015 L							0.200 L	
HVL-071712-10	7/17/2012				0.015 L							0.200 L	
HVL-101012-06	10/10/2012				0.015 L							0.200 L	
MW-11S													
HVL-012512-12	1/25/2012				0.015 L							0.200 L	
HVL-042512-10	4/25/2012				0.015 L							0.200 L	
HVL-071712-09	7/17/2012				0.015 L							0.200 L	
HVL-101012-07	10/10/2012				0.015 L							0.200 L	
MW-12D													
HVL-013012-27	1/30/2012				0.015 L							0.200 L	
HVL-071612-08	7/16/2012				0.015 L							0.200 L	
MW-12S													
HVL-013012-28	1/30/2012				0.015 L							0.200 L	

Hidden Valley Landfill
Groundwater Chemistry
Dissolved Metals

WELL Sample Number	Date	Note	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Copper	Iron	Lead
MW-12S													
HVL-071612-07	7/16/2012				0.015 L							0.200 L	
MW-13D													
HVL-013012-29	1/30/2012				0.015 L							0.200 L	
HVL-042512-13	4/25/2012				0.015 L							0.200 L	
HVL-071612-06	7/16/2012				0.015 L							0.380	
HVL-101012-04	10/10/2012				0.015 L							0.200 L	
MW-13S													
HVL-012712-22	1/27/2012				0.015 L							0.200 L	
HVL-042412-06	4/24/2012				0.015 L							0.200 L	
HVL-071712-16	7/17/2012				0.015 L							0.200 L	
HVL-101012-05	10/10/2012				0.015 L							0.200 L	
MW-14D													
HVL-012412-01	1/24/2012				0.015 L							2.500	
HVL-042412-01	4/24/2012				0.015 L							2.000	
HVL-071612-02	7/16/2012				0.015 L							2.200	
HVL-101112-10	10/11/2012				0.015 L							2.800	
MW-14R													
HVL-012712-21	1/27/2012				0.015 L							0.200 L	
MW-14S													
HVL-012412-02	1/24/2012				0.015 L							0.200 L	
HVL-042412-02	4/24/2012				0.015 L							0.200 L	
HVL-071612-01	7/16/2012				0.015 L							0.200 L	
HVL-101112-09	10/11/2012				0.015 L							0.200 L	
MW-15D													
HVL-012612-16	1/26/2012				0.015 L							0.200 L	
HVL-071712-15	7/17/2012				0.015 L							0.200 L	
MW-15S													
HVL-012512-14	1/25/2012				0.015 L							0.200 L	
HVL-071712-13	7/17/2012				0.015 L							0.200 L	
MW-17S													
HVL-012512-11	1/25/2012				0.015 L							0.200 L	
HVL-042512-12	4/25/2012				0.015 L							0.200 L	
HVL-071712-12	7/17/2012				0.015 L							0.200 L	

Hidden Valley Landfill
Groundwater Chemistry
Dissolved Metals

Part 1 of 2

WELL Sample Number	Date	Note	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Copper	Iron	Lead
MW-17S													
HVL-101012-03	10/10/2012				0.015 L							0.200 L	
MW-18D													
HVL-012512-10	1/25/2012				0.015 L							0.200 L	
HVL-071812-20	7/17/2012				0.015 L							0.200 L	
MW-18S													
HVL-012512-09	1/25/2012				0.015 L							0.200 L	
HVL-071812-19	7/18/2012				0.015 L							0.200 L	
MW-20R													
HVL-012412-05	1/24/2012				0.015 L							0.200 L	
MW-23S													
HVL-012612-19	1/26/2012				0.015 L							0.200 L	
HVL-071912-24	7/19/2012				0.015 L							0.200 L	
MW-25S													
HVL-012512-08	1/25/2012				0.015 L							0.200 L	
HVL-071712-11	7/17/2012				0.015 L							0.200 L	
MW-26R													
HVL-013012-26	1/30/2012				0.015 L							0.750	
MW-28S													
HVL-012612-20	1/26/2012				0.015 L							0.200 L	
HVL-042612-16	4/26/2012				0.015 L							0.490	
HVL-071912-23	7/19/2012				0.015 L							0.200 L	
QC, F-BLANK													
HVL-012712-23	1/27/2012				0.015 L							0.200 L	
HVL-071812-21	7/18/2012				0.015 L							0.200 L	
HVL-101112-12	10/11/2012				0.015 L							0.200 L	
Water Supply Well, Corliss													
HVL-101112-15	10/11/2012				0.015 L							0.200 L	
Water Supply Well, P. Bunyan													
HVL-101112-08	10/11/2012				0.015 L							0.200 L	

Hidden Valley Landfill
Groundwater Chemistry
Dissolved Metals

Part 2 of 2

WELL Sample Number	Date	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cobalt
FMW-01													
HVL-012712-24	1/27/2012		0.001 L										
HVL-042512-07	4/25/2012		0.001 L										
HVL-071812-18	7/18/2012		0.001 L										
HVL-101012-01	10/10/2012		0.001 L										
FMW-02													
HVL-012712-25	1/27/2012		0.110										
HVL-042512-08	4/25/2012		0.100										
HVL-071812-17	7/18/2012		0.096										
HVL-101012-02	10/10/2012		0.093										
MW-10D													
HVL-012412-03	1/24/2012		0.001 L										
HVL-042412-04	4/24/2012		0.001 L										
HVL-071612-03	7/16/2012		0.001 L										
HVL-101112-13	10/11/2012		0.002										
MW-10S													
HVL-012412-04	1/24/2012		0.006										
HVL-042412-03	4/24/2012		0.001 L										
HVL-071612-04	7/16/2012		0.001 L										
HVL-101112-14	10/11/2012		0.001 L										
MW-11D(2)													
HVL-012512-13	1/25/2012		0.001 L										
HVL-042512-09	4/25/2012		0.001 L										
HVL-071712-10	7/17/2012		0.001 L										
HVL-101012-06	10/10/2012		0.001 L										
MW-11S													
HVL-012512-12	1/25/2012		0.001 L										
HVL-042512-10	4/25/2012		0.001										
HVL-071712-09	7/17/2012		0.012										
HVL-101012-07	10/10/2012		0.016										
MW-12D													
HVL-013012-27	1/30/2012		0.001 L										
HVL-071612-08	7/16/2012		0.001 L										
MW-12S													
HVL-013012-28	1/30/2012		0.440										

Hidden Valley Landfill
Groundwater Chemistry
Dissolved Metals

WELL Sample Number	Date	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cobalt
MW-12S													
HVL-071612-07	7/16/2012		0.400										
MW-13D													
HVL-013012-29	1/30/2012		0.001 L										
HVL-042512-13	4/25/2012		0.002										
HVL-071612-06	7/16/2012		0.001 L										
HVL-101012-04	10/10/2012		0.180										
MW-13S													
HVL-012712-22	1/27/2012		0.002										
HVL-042412-06	4/24/2012		0.001 L										
HVL-071712-16	7/17/2012		0.020										
HVL-101012-05	10/10/2012		0.047										
MW-14D													
HVL-012412-01	1/24/2012		0.920										
HVL-042412-01	4/24/2012		0.770										
HVL-071612-02	7/16/2012		0.740										
HVL-101112-10	10/11/2012		0.920										
MW-14R													
HVL-012712-21	1/27/2012		0.001 L										
MW-14S													
HVL-012412-02	1/24/2012		0.002										
HVL-042412-02	4/24/2012		0.150										
HVL-071612-01	7/16/2012		0.004										
HVL-101112-09	10/11/2012		0.270										
MW-15D													
HVL-012612-16	1/26/2012		0.079										
HVL-071712-15	7/17/2012		0.001 L										
MW-15S													
HVL-012512-14	1/25/2012		0.910										
HVL-071712-13	7/17/2012		0.630										
MW-17S													
HVL-012512-11	1/25/2012		0.920										
HVL-042512-12	4/25/2012		1.400										
HVL-071712-12	7/17/2012		0.760										

Hidden Valley Landfill
Groundwater Chemistry
Dissolved Metals

WELL Sample Number	Date	Magnesium	Manganese	Mercury	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cobalt
MW-17S													
HVL-101012-03	10/10/2012		0.780										
MW-18D													
HVL-012512-10	1/25/2012		0.001 L										
HVL-071812-20	7/17/2012		0.001 L										
MW-18S													
HVL-012512-09	1/25/2012		0.001 L										
HVL-071812-19	7/18/2012		0.001 L										
MW-20R													
HVL-012412-05	1/24/2012		0.001 L										
MW-23S													
HVL-012612-19	1/26/2012		0.023										
HVL-071912-24	7/19/2012		0.001 L										
MW-25S													
HVL-012512-08	1/25/2012		0.001 L										
HVL-071712-11	7/17/2012		0.001 L										
MW-26R													
HVL-013012-26	1/30/2012		0.260										
MW-28S													
HVL-012612-20	1/26/2012		0.001 L										
HVL-042612-16	4/26/2012		0.001 L										
HVL-071912-23	7/19/2012		0.001 L										
QC, F-BLANK													
HVL-012712-23	1/27/2012		0.001 L										
HVL-071812-21	7/18/2012		0.001 L										
HVL-101112-12	10/11/2012		0.003										
Water Supply Well, Corliss													
HVL-101112-15	10/11/2012		0.001 L										
Water Supply Well, P. Bunyan													
HVL-101112-08	10/11/2012		0.001 L										

Hidden Valley Landfill
Groundwater Chemistry
Total Metals

WELL Sample Number	Date	Note	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Copper	Iron	Lead
LDCS												
HVL-012412-07	1/24/2012		0.1500	0.200	0.480	0.001 L	0.005 L	12.0	0.075	0.062	3.000	0.008
Leachate, East Area												
HVL-012412-06	1/24/2012		0.0800 L	0.120	0.570	0.001 L	0.005 L	16.0	0.079	0.096	4.400	0.009
Water Supply Well, Corliss												
HVL-012612-17	1/26/2012			0.005 L							0.020 L	
HVL-042612-14	4/26/2012			0.005 L							0.020 L	
HVL-071912-21	7/19/2012			0.005 L							0.490	
HVL-101112-15	10/11/2012			0.005 L							0.020 L	
Water Supply Well, P. Bunyan												
HVL-012612-18	1/26/2012			0.005 L							0.020 L	
HVL-042612-15	4/26/2012			0.005 L							0.020 L	
HVL-071912-22	7/19/2012			0.005 L							0.020 L	
HVL-101112-08	10/11/2012			0.005 L							0.440	

Hidden Valley Landfill
Groundwater Chemistry
Total Metals

Part 2 of 2

WELL Sample Number	Date	Magnesium	Manganese	Nickel	Potassium	Selenium	Silver	Sodium	Thallium	Vanadium	Zinc	Cobalt
LDCS												
HVL-012412-07	1/24/2012	21.00	0.180	0.50	450.0	0.005 L	0.01 L	6000.0	0.001 L	0.150	0.010 L	0.040
Leachate, East Area												
HVL-012412-06	1/24/2012	19.00	0.270	0.46	440.0	0.005 L	0.01 L	5800.0	0.001 L	0.180 L	0.140	0.020 L
Water Supply Well, Corliss												
HVL-012612-17	1/26/2012		0.003								0.013	
HVL-042612-14	4/26/2012		0.003								0.023	
HVL-071912-21	7/19/2012		0.028								0.056	
HVL-101112-15	10/11/2012		0.010								0.026	
Water Supply Well, P. Bunyan												
HVL-012612-18	1/26/2012		0.019								0.020	
HVL-042612-15	4/26/2012		0.002								0.027	
HVL-071912-22	7/19/2012		0.006								0.120	
HVL-101112-08	10/11/2012		0.002								0.066	

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Note	Dichloro-difluoro-methane (Freon 12)	Chloro-methane	Vinyl Chloride	Bromo-methane	Chloro-ethane	Trichloro-fluoro-methane (Freon 11)	Freon 113	Acetone	1,1-Di-chloro-ethene	Carbon Disulfide	Methylene Chloride
FMW-01													
HVL-012712-24	1/27/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042512-07	4/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071812-18	7/18/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101012-01	10/10/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
FMW-02													
HVL-012712-25	1/27/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042512-08	4/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071812-17	7/18/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101012-02	10/10/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
LDCS													
HVL-012412-07	1/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		18.0	0.5 L	0.6	2.0 L
Leachate, East Area													
HVL-012412-06	1/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		13.0	0.5 L	0.5 L	2.0 L
MW-10D													
HVL-012412-03	1/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042412-04	4/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071612-03	7/16/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101112-13	10/11/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-10S													
HVL-012412-04	1/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042412-03	4/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071612-04	7/16/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101112-14	10/11/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-11D(2)													
HVL-012512-13	1/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042512-09	4/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071712-10	7/17/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101012-06	10/10/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-11S													
HVL-012512-12	1/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042512-10	4/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071712-09	7/17/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101012-07	10/10/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Note	Dichloro-difluoro-methane (Freon 12)	Chloro-methane	Vinyl Chloride	Bromo-methane	Chloro-ethane	Trichloro-fluoro-methane (Freon 11)	Freon 113	Acetone	1,1-Di-chloro-ethene	Carbon Disulfide	Methylene Chloride
MW-12D													
HVL-013012-27	1/30/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071612-08	7/16/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-12S													
HVL-013012-28	1/30/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071612-07	7/16/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-13D													
HVL-013012-29	1/30/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042512-13	4/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071612-06	7/16/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101012-04	10/10/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-13S													
HVL-012712-22	1/27/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042412-06	4/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071712-16	7/17/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101012-05	10/10/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-14D													
HVL-012412-01	1/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042412-01	4/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071612-02	7/16/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101112-10	10/11/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-14R													
HVL-012712-21	1/27/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-14S													
HVL-012412-02	1/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042412-02	4/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071612-01	7/16/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101112-09	10/11/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-15D													
HVL-012612-16	1/26/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071712-15	7/17/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-15S													
HVL-012512-14	1/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071712-13	7/17/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Note	Dichloro-difluoro-methane (Freon 12)	Chloro-methane	Vinyl Chloride	Bromo-methane	Chloro-ethane	Trichloro-fluoro-methane (Freon 11)	Freon 113	Acetone	1,1-Di-chloro-ethene	Carbon Disulfide	Methylene Chloride
MW-17S													
HVL-012512-11	1/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042512-12	4/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071712-12	7/17/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101012-03	10/10/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-18D													
HVL-012512-10	1/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071812-20	7/17/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-18S													
HVL-012512-09	1/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071812-19	7/18/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-20R													
HVL-012412-05	1/24/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-23S													
HVL-012612-19	1/26/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071912-24	7/19/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-25S													
HVL-012512-08	1/25/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071712-11	7/17/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-26R													
HVL-013012-26	1/30/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
MW-28S													
HVL-012612-20	1/26/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042612-16	4/26/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071912-23	7/19/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
QC, F-BLANK													
HVL-012712-23	1/27/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071812-21	7/18/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101112-12	10/11/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
Water Supply Well, Corliss													
HVL-012612-17	1/26/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-042612-14	4/26/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071912-21	7/19/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Note	Dichloro-difluoro-methane (Freon 12)	Chloro-methane	Vinyl Chloride	Bromo-methane	Chloro-ethane	Trichloro-fluoro-methane (Freon 11)	Freon 113	Acetone	1,1-Di-chloro-ethene	Carbon Disulfide	Methylene Chloride
Water Supply Well, Corliss													
HVL-101112-15	10/11/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
Water Supply Well, P. Bunyan													
HVL-012612-18	1/26/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		46.0	0.5 L	0.5 L	2.0 L
HVL-042612-15	4/26/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-071912-22	7/19/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L
HVL-101112-08	10/11/2012		2.0 L	0.5 L	0.5 L	0.5 L	0.5 L	0.5 L		10.0 L	0.5 L	0.5 L	2.0 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,1-Di-chloro-ethane	trans 1,2-Dichloro-ethene	2-Butanone (MEK)	2,2-Di chloro-propane	cis 1,2-Dichloro ethene	Chloro-form	Bromo-chloro-methane	1,1,1 Tri-chloro-ethane (TCA)	1,1-Di-chloro-propene	Carbon Tetra-chloride	1,2-Di-chloro-ethane
FMW-01												
HVL-012712-24	1/27/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042512-07	4/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071812-18	7/18/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101012-01	10/10/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
FMW-02												
HVL-012712-25	1/27/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042512-08	4/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071812-17	7/18/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101012-02	10/10/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
LDCS												
HVL-012412-07	1/24/2012	0.5 L	0.5 L	6.0 L		2.6	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
Leachate, East Area												
HVL-012412-06	1/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-10D												
HVL-012412-03	1/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042412-04	4/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071612-03	7/16/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101112-13	10/11/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-10S												
HVL-012412-04	1/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042412-03	4/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071612-04	7/16/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101112-14	10/11/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-11D(2)												
HVL-012512-13	1/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042512-09	4/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071712-10	7/17/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101012-06	10/10/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-11S												
HVL-012512-12	1/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042512-10	4/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071712-09	7/17/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101012-07	10/10/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,1-Di-chloro-ethane	trans 1,2-Dichloro-ethene	2-Butanone (MEK)	2,2-Di chloro-propane	cis 1,2-Dichloro ethene	Chloro-form	Bromo-chloro-methane	1,1,1 Tri-chloro-ethane (TCA)	1,1-Di-chloro-propene	Carbon Tetra-chloride	1,2-Di-chloro-ethane
MW-12D												
HVL-013012-27	1/30/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071612-08	7/16/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-12S												
HVL-013012-28	1/30/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071612-07	7/16/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-13D												
HVL-013012-29	1/30/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042512-13	4/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071612-06	7/16/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101012-04	10/10/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-13S												
HVL-012712-22	1/27/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042412-06	4/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071712-16	7/17/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101012-05	10/10/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-14D												
HVL-012412-01	1/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042412-01	4/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071612-02	7/16/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101112-10	10/11/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-14R												
HVL-012712-21	1/27/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-14S												
HVL-012412-02	1/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042412-02	4/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071612-01	7/16/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101112-09	10/11/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-15D												
HVL-012612-16	1/26/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071712-15	7/17/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-15S												
HVL-012512-14	1/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071712-13	7/17/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,1-Di-chloro-ethane	trans 1,2-Dichloro-ethene	2-Butanone (MEK)	2,2-Di chloro-propane	cis 1,2-Dichloro ethene	Chloro-form	Bromo-chloro-methane	1,1,1 Tri-chloro-ethane (TCA)	1,1-Di-chloro-propene	Carbon Tetra-chloride	1,2-Di-chloro-ethane
MW-17S												
HVL-012512-11	1/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042512-12	4/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071712-12	7/17/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101012-03	10/10/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-18D												
HVL-012512-10	1/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071812-20	7/17/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-18S												
HVL-012512-09	1/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071812-19	7/18/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-20R												
HVL-012412-05	1/24/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-23S												
HVL-012612-19	1/26/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071912-24	7/19/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-25S												
HVL-012512-08	1/25/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071712-11	7/17/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-26R												
HVL-013012-26	1/30/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
MW-28S												
HVL-012612-20	1/26/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042612-16	4/26/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071912-23	7/19/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
QC, F-BLANK												
HVL-012712-23	1/27/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071812-21	7/18/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101112-12	10/11/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
Water Supply Well, Corliss												
HVL-012612-17	1/26/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042612-14	4/26/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071912-21	7/19/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,1-Di-chloro-ethane	trans 1,2-Dichloro-ethene	2-Butanone (MEK)	2,2-Di chloro-propane	cis 1,2-Dichloro ethene	Chloro-form	Bromo-chloro-methane	1,1,1 Tri-chloro-ethane (TCA)	1,1-Di-chloro-propene	Carbon Tetra-chloride	1,2-Di-chloro-ethane
Water Supply Well, Corliss												
HVL-101112-15	10/11/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
Water Supply Well, P. Bunyan												
HVL-012612-18	1/26/2012	0.5 L	0.5 L	110.0		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-042612-15	4/26/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-071912-22	7/19/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L
HVL-101112-08	10/11/2012	0.5 L	0.5 L	6.0 L		0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Vinyl Acetate	Benzene	Trichloro-ethene (TCE)	1,2-Di-chloro-propane	Bromo-dichloro-methane	2-Chloro-ethyl Vinyl Ether	Dibromo-methane	2-Hexanone	cis-1,3-Dichloro propene	Toluene	trans 1,3-Dichloro-propene
FMW-01												
HVL-012712-24	1/27/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042512-07	4/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071812-18	7/18/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101012-01	10/10/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
FMW-02												
HVL-012712-25	1/27/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042512-08	4/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071812-17	7/18/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101012-02	10/10/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
LDCS												
HVL-012412-07	1/24/2012	3.0 L	1.4	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	2.9	0.5 L
Leachate, East Area												
HVL-012412-06	1/24/2012	3.0 L	1.5	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	3.8	0.5 L
MW-10D												
HVL-012412-03	1/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042412-04	4/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071612-03	7/16/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101112-13	10/11/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-10S												
HVL-012412-04	1/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042412-03	4/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071612-04	7/16/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101112-14	10/11/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-11D(2)												
HVL-012512-13	1/25/2012	3.0 L	0.5 L	1.0	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042512-09	4/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071712-10	7/17/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101012-06	10/10/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-11S												
HVL-012512-12	1/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042512-10	4/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071712-09	7/17/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101012-07	10/10/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Vinyl Acetate	Benzene	Trichloro-ethene (TCE)	1,2-Di-chloro-propane	Bromo-dichloro-methane	2-Chloro-ethyl Vinyl Ether	Dibromo-methane	2-Hexanone	cis-1,3-Dichloro propene	Toluene	trans 1,3-Dichloro-propene
MW-12D												
HVL-013012-27	1/30/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071612-08	7/16/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-12S												
HVL-013012-28	1/30/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071612-07	7/16/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-13D												
HVL-013012-29	1/30/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042512-13	4/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071612-06	7/16/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101012-04	10/10/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-13S												
HVL-012712-22	1/27/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042412-06	4/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071712-16	7/17/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101012-05	10/10/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-14D												
HVL-012412-01	1/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042412-01	4/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071612-02	7/16/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101112-10	10/11/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-14R												
HVL-012712-21	1/27/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.8	0.5 L
MW-14S												
HVL-012412-02	1/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042412-02	4/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071612-01	7/16/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101112-09	10/11/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-15D												
HVL-012612-16	1/26/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071712-15	7/17/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-15S												
HVL-012512-14	1/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071712-13	7/17/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Vinyl Acetate	Benzene	Trichloro-ethene (TCE)	1,2-Di-chloro-propane	Bromo-dichloro-methane	2-Chloro-ethyl Vinyl Ether	Dibromo-methane	2-Hexanone	cis-1,3-Dichloro propene	Toluene	trans 1,3-Dichloro-propene
MW-17S												
HVL-012512-11	1/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042512-12	4/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071712-12	7/17/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101012-03	10/10/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-18D												
HVL-012512-10	1/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071812-20	7/17/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-18S												
HVL-012512-09	1/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071812-19	7/18/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-20R												
HVL-012412-05	1/24/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-23S												
HVL-012612-19	1/26/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071912-24	7/19/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-25S												
HVL-012512-08	1/25/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071712-11	7/17/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-26R												
HVL-013012-26	1/30/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
MW-28S												
HVL-012612-20	1/26/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042612-16	4/26/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071912-23	7/19/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
QC, F-BLANK												
HVL-012712-23	1/27/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071812-21	7/18/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101112-12	10/11/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
Water Supply Well, Corliss												
HVL-012612-17	1/26/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042612-14	4/26/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071912-21	7/19/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Vinyl Acetate	Benzene	Trichloro-ethene (TCE)	1,2-Di-chloro-propane	Bromo-dichloro-methane	2-Chloro-ethyl Vinyl Ether	Dibromo-methane	2-Hexanone	cis-1,3-Dichloro propene	Toluene	trans 1,3-Dichloro-propene
Water Supply Well, Corliss												
HVL-101112-15	10/11/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
Water Supply Well, P. Bunyan												
HVL-012612-18	1/26/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-042612-15	4/26/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-071912-22	7/19/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L
HVL-101112-08	10/11/2012	3.0 L	0.5 L	0.5 L	0.5 L	0.5 L		0.5 L	5.0 L	0.5 L	0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,3-Di chloro- propane	1,1,2-Tri chloro ethane	4-Methyl- 2-penta- none (MIBK)	Tetra- chloro ethene (PCE)	Dibromo- chloro- methane	1,2-Di- bromo- ethane (EDB)	Chloro- benzene	1,1,1,2- Tetrachlo- roethane	Ethyl- benzene	Xylenes, total	Styrene	Bromo- form
FMW-01													
HVL-012712-24	1/27/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042512-07	4/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071812-18	7/18/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101012-01	10/10/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
FMW-02													
HVL-012712-25	1/27/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042512-08	4/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071812-17	7/18/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101012-02	10/10/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
LDCS													
HVL-012412-07	1/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
Leachate, East Area													
HVL-012412-06	1/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0		0.5 L	0.5 L
MW-10D													
HVL-012412-03	1/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042412-04	4/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071612-03	7/16/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101112-13	10/11/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-10S													
HVL-012412-04	1/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042412-03	4/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071612-04	7/16/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101112-14	10/11/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-11D(2)													
HVL-012512-13	1/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042512-09	4/25/2012		0.5 L	5.0 L	0.9	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071712-10	7/17/2012		0.5 L	5.0 L	1.1	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101012-06	10/10/2012		0.5 L	5.0 L	0.8	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-11S													
HVL-012512-12	1/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042512-10	4/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071712-09	7/17/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101012-07	10/10/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
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(ug/L)

WELL Sample Number	Date	1,3-Dichloropropane	1,1,2-Trichloroethane	4-Methyl-2-pentanone (MIBK)	Tetrachloroethene (PCE)	Dibromochloromethane	1,2-Dibromoethane (EDB)	Chlorobenzene	1,1,1,2-Tetrachloroethane	Ethylbenzene	Xylenes, total	Styrene	Bromoform
MW-12D													
HVL-013012-27	1/30/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071612-08	7/16/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-12S													
HVL-013012-28	1/30/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071612-07	7/16/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-13D													
HVL-013012-29	1/30/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042512-13	4/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071612-06	7/16/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101012-04	10/10/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-13S													
HVL-012712-22	1/27/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042412-06	4/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071712-16	7/17/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101012-05	10/10/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-14D													
HVL-012412-01	1/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042412-01	4/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071612-02	7/16/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101112-10	10/11/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-14R													
HVL-012712-21	1/27/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-14S													
HVL-012412-02	1/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042412-02	4/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071612-01	7/16/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101112-09	10/11/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-15D													
HVL-012612-16	1/26/2012		0.5 L	5.0 L	0.6	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071712-15	7/17/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-15S													
HVL-012512-14	1/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071712-13	7/17/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,3-Di chloro- propane	1,1,2-Tri chloro ethane	4-Methyl- 2-penta- none (MIBK)	Tetra- chloro ethene (PCE)	Dibromo- chloro- methane	1,2-Di- bromo- ethane (EDB)	Chloro- benzene	1,1,1,2- Tetrachlo- roethane	Ethyl- benzene	Xylenes, total	Styrene	Bromo- form
MW-17S													
HVL-012512-11	1/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042512-12	4/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071712-12	7/17/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101012-03	10/10/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-18D													
HVL-012512-10	1/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071812-20	7/17/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-18S													
HVL-012512-09	1/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071812-19	7/18/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-20R													
HVL-012412-05	1/24/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-23S													
HVL-012612-19	1/26/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071912-24	7/19/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-25S													
HVL-012512-08	1/25/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071712-11	7/17/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-26R													
HVL-013012-26	1/30/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
MW-28S													
HVL-012612-20	1/26/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042612-16	4/26/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071912-23	7/19/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
QC, F-BLANK													
HVL-012712-23	1/27/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071812-21	7/18/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101112-12	10/11/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
Water Supply Well, Corliss													
HVL-012612-17	1/26/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042612-14	4/26/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071912-21	7/19/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,3-Di chloro- propane	1,1,2-Tri chloro ethane	4-Methyl- 2-penta- none (MIBK)	Tetra- chloro ethene (PCE)	Dibromo- chloro- methane	1,2-Di- bromo- ethane (EDB)	Chloro- benzene	1,1,1,2- Tetrachlo- roethane	Ethyl- benzene	Xylenes, total	Styrene	Bromo- form
Water Supply Well, Corliss													
HVL-101112-15	10/11/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
Water Supply Well, P. Bunyan													
HVL-012612-18	1/26/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-042612-15	4/26/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-071912-22	7/19/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L
HVL-101112-08	10/11/2012		0.5 L	5.0 L	0.5 L	0.5 L	1.0 L	0.5 L	0.5 L	1.0 L		0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Iso-propyl-benzene	1,1,2,2-Tetra-chloro-ethane	1,2,3-Tri-chloro-propane	Bromo-benzene	n-Propyl benzene	2-Chloro toluene	4-Chloro toluene	1,3,5-Tri methyl benzene	tert-Butyl benzene	1,2,4-Tri methyl benzene	sec-Butyl benzene
FMW-01												
HVL-012712-24	1/27/2012		0.5 L	1.0 L								
HVL-042512-07	4/25/2012		0.5 L	1.0 L								
HVL-071812-18	7/18/2012		0.5 L	1.0 L								
HVL-101012-01	10/10/2012		0.5 L	1.0 L								
FMW-02												
HVL-012712-25	1/27/2012		0.5 L	1.0 L								
HVL-042512-08	4/25/2012		0.5 L	1.0 L								
HVL-071812-17	7/18/2012		0.5 L	1.0 L								
HVL-101012-02	10/10/2012		0.5 L	1.0 L								
LDCS												
HVL-012412-07	1/24/2012		0.5 L	1.0 L								
Leachate, East Area												
HVL-012412-06	1/24/2012		0.5 L	1.0 L								
MW-10D												
HVL-012412-03	1/24/2012		0.5 L	1.0 L								
HVL-042412-04	4/24/2012		0.5 L	1.0 L								
HVL-071612-03	7/16/2012		0.5 L	1.0 L								
HVL-101112-13	10/11/2012		0.5 L	1.0 L								
MW-10S												
HVL-012412-04	1/24/2012		0.5 L	1.0 L								
HVL-042412-03	4/24/2012		0.5 L	1.0 L								
HVL-071612-04	7/16/2012		0.5 L	1.0 L								
HVL-101112-14	10/11/2012		0.5 L	1.0 L								
MW-11D(2)												
HVL-012512-13	1/25/2012		0.5 L	1.0 L								
HVL-042512-09	4/25/2012		0.5 L	1.0 L								
HVL-071712-10	7/17/2012		0.5 L	1.0 L								
HVL-101012-06	10/10/2012		0.5 L	1.0 L								
MW-11S												
HVL-012512-12	1/25/2012		0.5 L	1.0 L								
HVL-042512-10	4/25/2012		0.5 L	1.0 L								
HVL-071712-09	7/17/2012		0.5 L	1.0 L								
HVL-101012-07	10/10/2012		0.5 L	1.0 L								

WELL Sample Number	Date	Iso-propyl-benzene	1,1,2,2-Tetra-chloro-ethane	1,2,3-Tri-chloro-propane	Bromo-benzene	n-Propyl benzene	2-Chloro toluene	4-Chloro toluene	1,3,5-Tri methyl benzene	tert-Butyl benzene	1,2,4-Tri methyl benzene	sec-Butyl benzene
MW-12D												
HVL-013012-27	1/30/2012		0.5 L	1.0 L								
HVL-071612-08	7/16/2012		0.5 L	1.0 L								
MW-12S												
HVL-013012-28	1/30/2012		0.5 L	1.0 L								
HVL-071612-07	7/16/2012		0.5 L	1.0 L								
MW-13D												
HVL-013012-29	1/30/2012		0.5 L	1.0 L								
HVL-042512-13	4/25/2012		0.5 L	1.0 L								
HVL-071612-06	7/16/2012		0.5 L	1.0 L								
HVL-101012-04	10/10/2012		0.5 L	1.0 L								
MW-13S												
HVL-012712-22	1/27/2012		0.5 L	1.0 L								
HVL-042412-06	4/24/2012		0.5 L	1.0 L								
HVL-071712-16	7/17/2012		0.5 L	1.0 L								
HVL-101012-05	10/10/2012		0.5 L	1.0 L								
MW-14D												
HVL-012412-01	1/24/2012		0.5 L	1.0 L								
HVL-042412-01	4/24/2012		0.5 L	1.0 L								
HVL-071612-02	7/16/2012		0.5 L	1.0 L								
HVL-101112-10	10/11/2012		0.5 L	1.0 L								
MW-14R												
HVL-012712-21	1/27/2012		0.5 L	1.0 L								
MW-14S												
HVL-012412-02	1/24/2012		0.5 L	1.0 L								
HVL-042412-02	4/24/2012		0.5 L	1.0 L								
HVL-071612-01	7/16/2012		0.5 L	1.0 L								
HVL-101112-09	10/11/2012		0.5 L	1.0 L								
MW-15D												
HVL-012612-16	1/26/2012		0.5 L	1.0 L								
HVL-071712-15	7/17/2012		0.5 L	1.0 L								
MW-15S												
HVL-012512-14	1/25/2012		0.5 L	1.0 L								
HVL-071712-13	7/17/2012		0.5 L	1.0 L								

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Iso-propyl-benzene	1,1,2,2-Tetra-chloro-ethane	1,2,3-Tri-chloro-propane	Bromo-benzene	n-Propyl benzene	2-Chloro toluene	4-Chloro toluene	1,3,5-Tri methyl benzene	tert-Butyl benzene	1,2,4-Tri methyl benzene	sec-Butyl benzene
MW-17S												
HVL-012512-11	1/25/2012		0.5 L	1.0 L								
HVL-042512-12	4/25/2012		0.5 L	1.0 L								
HVL-071712-12	7/17/2012		0.5 L	1.0 L								
HVL-101012-03	10/10/2012		0.5 L	1.0 L								
MW-18D												
HVL-012512-10	1/25/2012		0.5 L	1.0 L								
HVL-071812-20	7/17/2012		0.5 L	1.0 L								
MW-18S												
HVL-012512-09	1/25/2012		0.5 L	1.0 L								
HVL-071812-19	7/18/2012		0.5 L	1.0 L								
MW-20R												
HVL-012412-05	1/24/2012		0.5 L	1.0 L								
MW-23S												
HVL-012612-19	1/26/2012		0.5 L	1.0 L								
HVL-071912-24	7/19/2012		0.5 L	1.0 L								
MW-25S												
HVL-012512-08	1/25/2012		0.5 L	1.0 L								
HVL-071712-11	7/17/2012		0.5 L	1.0 L								
MW-26R												
HVL-013012-26	1/30/2012		0.5 L	1.0 L								
MW-28S												
HVL-012612-20	1/26/2012		0.5 L	1.0 L								
HVL-042612-16	4/26/2012		0.5 L	1.0 L								
HVL-071912-23	7/19/2012		0.5 L	1.0 L								
QC, F-BLANK												
HVL-012712-23	1/27/2012		0.5 L	1.0 L								
HVL-071812-21	7/18/2012		0.5 L	1.0 L								
HVL-101112-12	10/11/2012		0.5 L	1.0 L								
Water Supply Well, Corliss												
HVL-012612-17	1/26/2012		0.5 L	1.0 L								
HVL-042612-14	4/26/2012		0.5 L	1.0 L								
HVL-071912-21	7/19/2012		0.5 L	1.0 L								

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Iso-propyl-benzene	1,1,2,2-Tetra-chloro-ethane	1,2,3-Tri-chloro-propane	Bromo-benzene	n-Propyl benzene	2-Chloro toluene	4-Chloro toluene	1,3,5-Tri methyl benzene	tert-Butyl benzene	1,2,4-Tri methyl benzene	sec-Butyl benzene
Water Supply Well, Corliss												
HVL-101112-15	10/11/2012		0.5 L	1.0 L								
Water Supply Well, P. Bunyan												
HVL-012612-18	1/26/2012		0.5 L	1.0 L								
HVL-042612-15	4/26/2012		0.5 L	1.0 L								
HVL-071912-22	7/19/2012		0.5 L	1.0 L								
HVL-101112-08	10/11/2012		0.5 L	1.0 L								

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,2-Di-chloro-benzene	n-Butyl benzene	4-Iso-propyl-toluene	1,3-Di-chloro-benzene	1,4-Di-chloro-benzene	Total-Di-chloro benzene	1,2-Dibromo-3-chloro propane (DBCP)	1,2,4-Tri chloro benzene	1,2,3-Tri chloro benzene	Naptha-lene
FMW-01											
HVL-012712-24	1/27/2012	0.5 L				0.5 L		2.0 L			
HVL-042512-07	4/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071812-18	7/18/2012	0.5 L				0.5 L		2.0 L			
HVL-101012-01	10/10/2012	0.5 L				0.5 L		2.0 L			
FMW-02											
HVL-012712-25	1/27/2012	0.5 L				0.5 L		2.0 L			
HVL-042512-08	4/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071812-17	7/18/2012	0.5 L				0.5 L		2.0 L			
HVL-101012-02	10/10/2012	0.5 L				0.5 L		2.0 L			
LDCS											
HVL-012412-07	1/24/2012	0.5 L				0.6		2.0 L			
Leachate, East Area											
HVL-012412-06	1/24/2012	0.5 L				0.5 L		2.0 L			
MW-10D											
HVL-012412-03	1/24/2012	0.5 L				0.5 L		2.0 L			
HVL-042412-04	4/24/2012	0.5 L				0.5 L		2.0 L			
HVL-071612-03	7/16/2012	0.5 L				0.5 L		2.0 L			
HVL-101112-13	10/11/2012	0.5 L				0.5 L		2.0 L			
MW-10S											
HVL-012412-04	1/24/2012	0.5 L				0.5 L		2.0 L			
HVL-042412-03	4/24/2012	0.5 L				0.5 L		2.0 L			
HVL-071612-04	7/16/2012	0.5 L				0.5 L		2.0 L			
HVL-101112-14	10/11/2012	0.5 L				0.5 L		2.0 L			
MW-11D(2)											
HVL-012512-13	1/25/2012	0.5 L				0.5 L		2.0 L			
HVL-042512-09	4/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071712-10	7/17/2012	0.5 L				0.5 L		2.0 L			
HVL-101012-06	10/10/2012	0.5 L				0.5 L		2.0 L			
MW-11S											
HVL-012512-12	1/25/2012	0.5 L				0.5 L		2.0 L			
HVL-042512-10	4/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071712-09	7/17/2012	0.5 L				0.5 L		2.0 L			
HVL-101012-07	10/10/2012	0.5 L				0.5 L		2.0 L			

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,2-Di-chloro-benzene	n-Butyl benzene	4-Iso-propyl-toluene	1,3-Di-chloro-benzene	1,4-Di-chloro-benzene	Total-Di-chloro benzene	1,2-Dibromo-3-chloro propane (DBCP)	1,2,4-Tri chloro benzene	1,2,3-Tri chloro benzene	Naptha-lene
MW-12D											
HVL-013012-27	1/30/2012	0.5 L				0.5 L		2.0 L			
HVL-071612-08	7/16/2012	0.5 L				0.5 L		2.0 L			
MW-12S											
HVL-013012-28	1/30/2012	0.5 L				0.5 L		2.0 L			
HVL-071612-07	7/16/2012	0.5 L				0.6		2.0 L			
MW-13D											
HVL-013012-29	1/30/2012	0.5 L				0.5 L		2.0 L			
HVL-042512-13	4/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071612-06	7/16/2012	0.5 L				0.5 L		2.0 L			
HVL-101012-04	10/10/2012	0.5 L				0.5 L		2.0 L			
MW-13S											
HVL-012712-22	1/27/2012	0.5 L				0.5 L		2.0 L			
HVL-042412-06	4/24/2012	0.5 L				0.5 L		2.0 L			
HVL-071712-16	7/17/2012	0.5 L				0.5 L		2.0 L			
HVL-101012-05	10/10/2012	0.5 L				0.5 L		2.0 L			
MW-14D											
HVL-012412-01	1/24/2012	0.5 L				0.5 L		2.0 L			
HVL-042412-01	4/24/2012	0.5 L				0.5 L		2.0 L			
HVL-071612-02	7/16/2012	0.5 L				0.5 L		2.0 L			
HVL-101112-10	10/11/2012	0.5 L				0.5 L		2.0 L			
MW-14R											
HVL-012712-21	1/27/2012	0.5 L				0.5 L		2.0 L			
MW-14S											
HVL-012412-02	1/24/2012	0.5 L				0.5 L		2.0 L			
HVL-042412-02	4/24/2012	0.5 L				0.5 L		2.0 L			
HVL-071612-01	7/16/2012	0.5 L				0.5 L		2.0 L			
HVL-101112-09	10/11/2012	0.5 L				0.5 L		2.0 L			
MW-15D											
HVL-012612-16	1/26/2012	0.5 L				0.5 L		2.0 L			
HVL-071712-15	7/17/2012	0.5 L				0.5 L		2.0 L			
MW-15S											
HVL-012512-14	1/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071712-13	7/17/2012	0.5 L				0.5 L		2.0 L			

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,2-Di-chloro-benzene	n-Butyl benzene	4-Iso-propyl-toluene	1,3-Di-chloro-benzene	1,4-Di-chloro-benzene	Total-Di-chloro benzene	1,2-Dibromo-3-chloro propane (DBCP)	1,2,4-Tri chloro benzene	1,2,3-Tri chloro benzene	Naptha-lene
MW-17S											
HVL-012512-11	1/25/2012	0.5 L				0.5 L		2.0 L			
HVL-042512-12	4/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071712-12	7/17/2012	0.5 L				0.5 L		2.0 L			
HVL-101012-03	10/10/2012	0.5 L				0.5 L		2.0 L			
MW-18D											
HVL-012512-10	1/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071812-20	7/17/2012	0.5 L				0.5 L		2.0 L			
MW-18S											
HVL-012512-09	1/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071812-19	7/18/2012	0.5 L				0.5 L		2.0 L			
MW-20R											
HVL-012412-05	1/24/2012	0.5 L				0.5 L		2.0 L			
MW-23S											
HVL-012612-19	1/26/2012	0.5 L				0.5 L		2.0 L			
HVL-071912-24	7/19/2012	0.5 L				0.5 L		2.0 L			
MW-25S											
HVL-012512-08	1/25/2012	0.5 L				0.5 L		2.0 L			
HVL-071712-11	7/17/2012	0.5 L				0.5 L		2.0 L			
MW-26R											
HVL-013012-26	1/30/2012	0.5 L				0.5 L		2.0 L			
MW-28S											
HVL-012612-20	1/26/2012	0.5 L				0.5 L		2.0 L			
HVL-042612-16	4/26/2012	0.5 L				0.5 L		2.0 L			
HVL-071912-23	7/19/2012	0.5 L				0.5 L		2.0 L			
QC, F-BLANK											
HVL-012712-23	1/27/2012	0.5 L				0.5 L		2.0 L			
HVL-071812-21	7/18/2012	0.5 L				0.5 L		2.0 L			
HVL-101112-12	10/11/2012	0.5 L				0.5 L		2.0 L			
Water Supply Well, Corliss											
HVL-012612-17	1/26/2012	0.5 L				0.5 L		2.0 L			
HVL-042612-14	4/26/2012	0.5 L				0.5 L		2.0 L			
HVL-071912-21	7/19/2012	0.5 L				0.5 L		2.0 L			

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	1,2-Di-chloro-benzene	n-Butyl benzene	4-Iso-propyl-toluene	1,3-Di-chloro-benzene	1,4-Di-chloro-benzene	Total-Di-chloro benzene	1,2-Dibromo-3-chloro propane (DBCP)	1,2,4-Tri chloro benzene	1,2,3-Tri chloro benzene	Naptha-lene
Water Supply Well, Corliss											
HVL-101112-15	10/11/2012	0.5 L				0.5 L		2.0 L			
Water Supply Well, P. Bunyan											
HVL-012612-18	1/26/2012	0.5 L				0.5 L		2.0 L			
HVL-042612-15	4/26/2012	0.5 L				0.5 L		2.0 L			
HVL-071912-22	7/19/2012	0.5 L				0.5 L		2.0 L			
HVL-101112-08	10/11/2012	0.5 L				0.5 L		2.0 L			

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Hexachlor-butadiene	Acrylo-nitrile	trans + cis-1,4-Dichloro-2-butene	Iodo-methane	O-Xylene	m,p-Xylene
FMW-01							
HVL-012712-24	1/27/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5
HVL-042512-07	4/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071812-18	7/18/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101012-01	10/10/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
FMW-02							
HVL-012712-25	1/27/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5
HVL-042512-08	4/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071812-17	7/18/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101012-02	10/10/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
LDCS							
HVL-012412-07	1/24/2012		5.0 L	3.0 L	1.0 L	0.7	1.2
Leachate, Ea							
HVL-012412-06	1/24/2012		5.0 L	3.0 L	1.0 L	0.5	0.7
MW-10D							
HVL-012412-03	1/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042412-04	4/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071612-03	7/16/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101112-13	10/11/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-10S							
HVL-012412-04	1/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042412-03	4/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071612-04	7/16/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101112-14	10/11/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-11D(2)							
HVL-012512-13	1/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042512-09	4/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071712-10	7/17/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101012-06	10/10/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-11S							
HVL-012512-12	1/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042512-10	4/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071712-09	7/17/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101012-07	10/10/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Hexachlor-butadiene	Acrylo-nitrile	trans + cis-1,4-Dichloro-2-butene	Iodo-methane	O-Xylene	m,p-Xylene
MW-12D							
HVL-013012-27	1/30/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071612-08	7/16/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-12S							
HVL-013012-28	1/30/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071612-07	7/16/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-13D							
HVL-013012-29	1/30/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042512-13	4/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071612-06	7/16/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101012-04	10/10/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-13S							
HVL-012712-22	1/27/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042412-06	4/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071712-16	7/17/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101012-05	10/10/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-14D							
HVL-012412-01	1/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042412-01	4/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071612-02	7/16/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101112-10	10/11/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-14R							
HVL-012712-21	1/27/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.8
MW-14S							
HVL-012412-02	1/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042412-02	4/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071612-01	7/16/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101112-09	10/11/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-15D							
HVL-012612-16	1/26/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071712-15	7/17/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-15S							
HVL-012512-14	1/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071712-13	7/17/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Hexachlor-butadiene	Acrylo-nitrile	trans + cis-1,4-Dichloro-2-butene	Iodo-methane	O-Xylene	m,p-Xylene
MW-17S							
HVL-012512-11	1/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042512-12	4/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071712-12	7/17/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101012-03	10/10/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-18D							
HVL-012512-10	1/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071812-20	7/17/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-18S							
HVL-012512-09	1/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071812-19	7/18/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-20R							
HVL-012412-05	1/24/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-23S							
HVL-012612-19	1/26/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071912-24	7/19/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-25S							
HVL-012512-08	1/25/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071712-11	7/17/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-26R							
HVL-013012-26	1/30/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
MW-28S							
HVL-012612-20	1/26/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042612-16	4/26/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071912-23	7/19/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
QC, F-BLANK							
HVL-012712-23	1/27/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071812-21	7/18/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101112-12	10/11/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
Water Supply							
HVL-012612-17	1/26/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042612-14	4/26/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071912-21	7/19/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L

Hidden Valley Landfill
Groundwater Chemistry
Volatile Organics
(ug/L)

WELL Sample Number	Date	Hexachlor-butadiene	Acrylo-nitrile	trans + cis-1,4-Dichloro-2-butene	Iodo-methane	O-Xylene	m,p-Xylene
Water Supply							
HVL-101112-15	10/11/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
Water Supply							
HVL-012612-18	1/26/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-042612-15	4/26/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-071912-22	7/19/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L
HVL-101112-08	10/11/2012		5.0 L	3.0 L	1.0 L	0.5 L	0.5 L

Appendix E
Time Series Plots

Figure E-1

Specific Conductance

Shallow Perched Aquifer, Hidden Valley Landfill
Wells MW-11S, MW-13S, MW-14S, and MW-17S

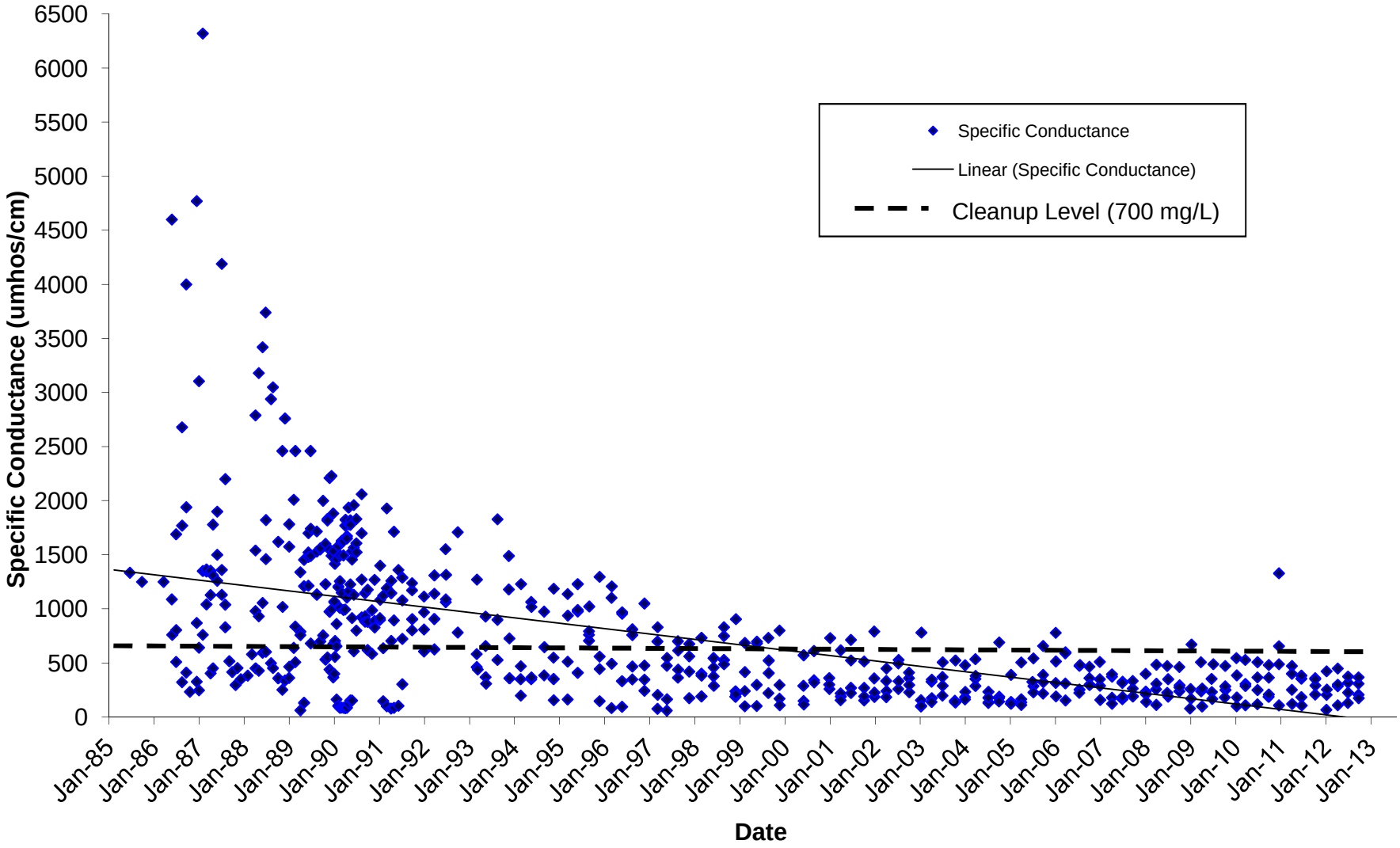


Figure E-2

Ammonia

Shallow Perched Aquifer, Hidden Valey Landfill
Wells MW-11S, MW-13S, MW-14S, and MW-17S

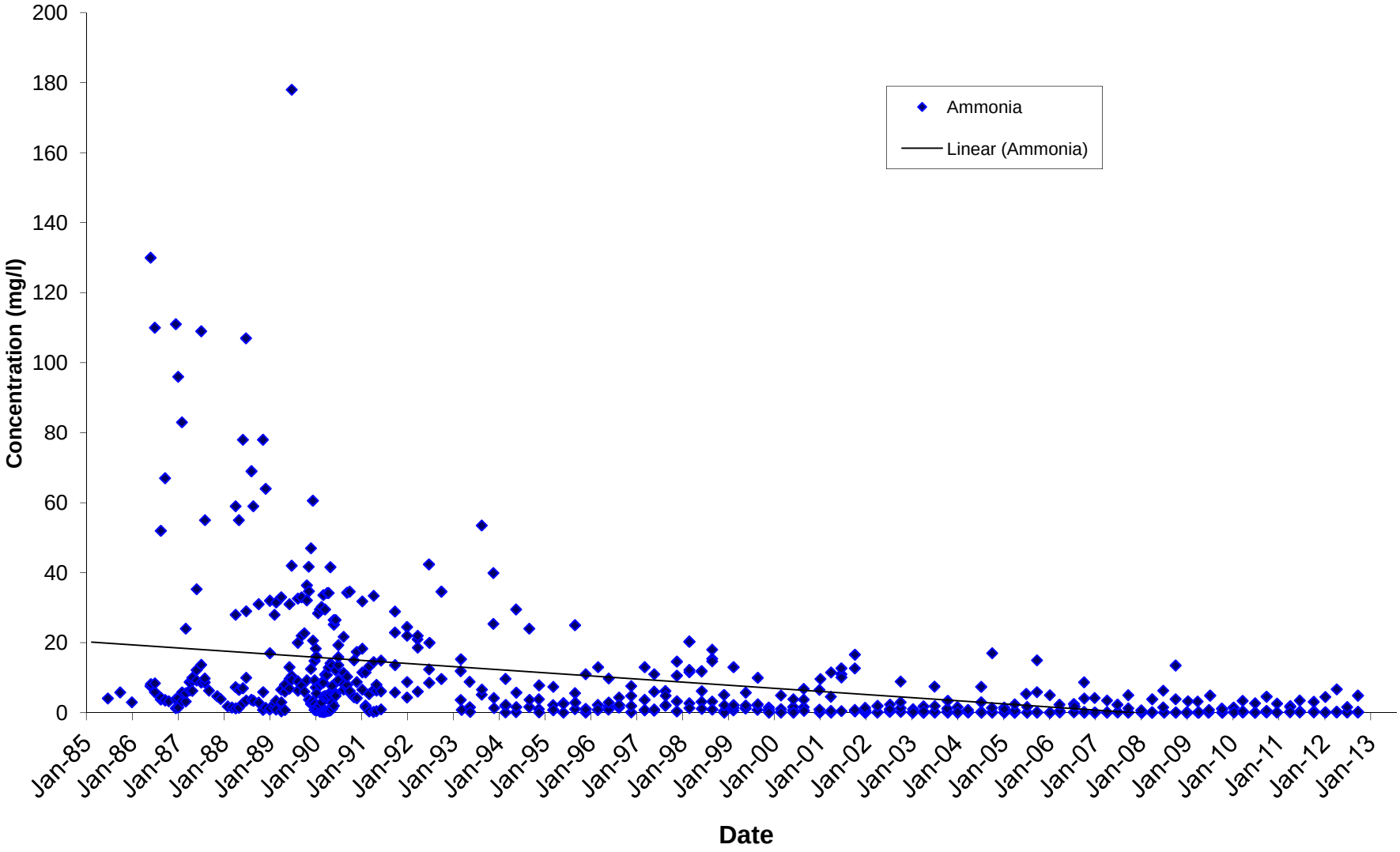


Figure E-3

Nitrate

Shallow Perched Aquifer, Hidden Valley Landfill
Wells MW-11S, MW-13S, MW-14S, and MW-17S

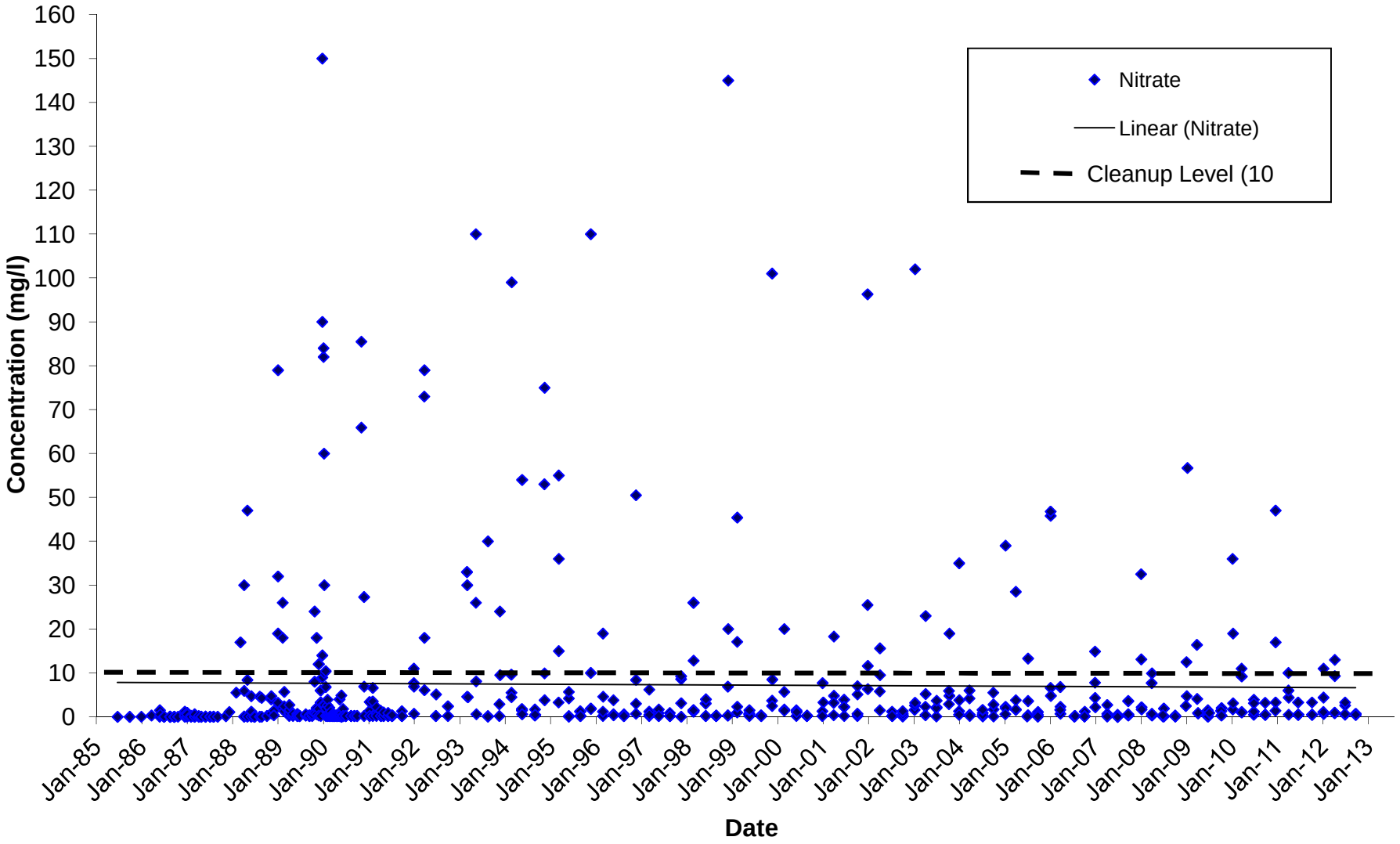


Figure E-4

Dissolved Iron

Shallow Perched Aquifer, Hidden Valley Landfill
Wells MW-11D(2), MW-13D, MW-14D

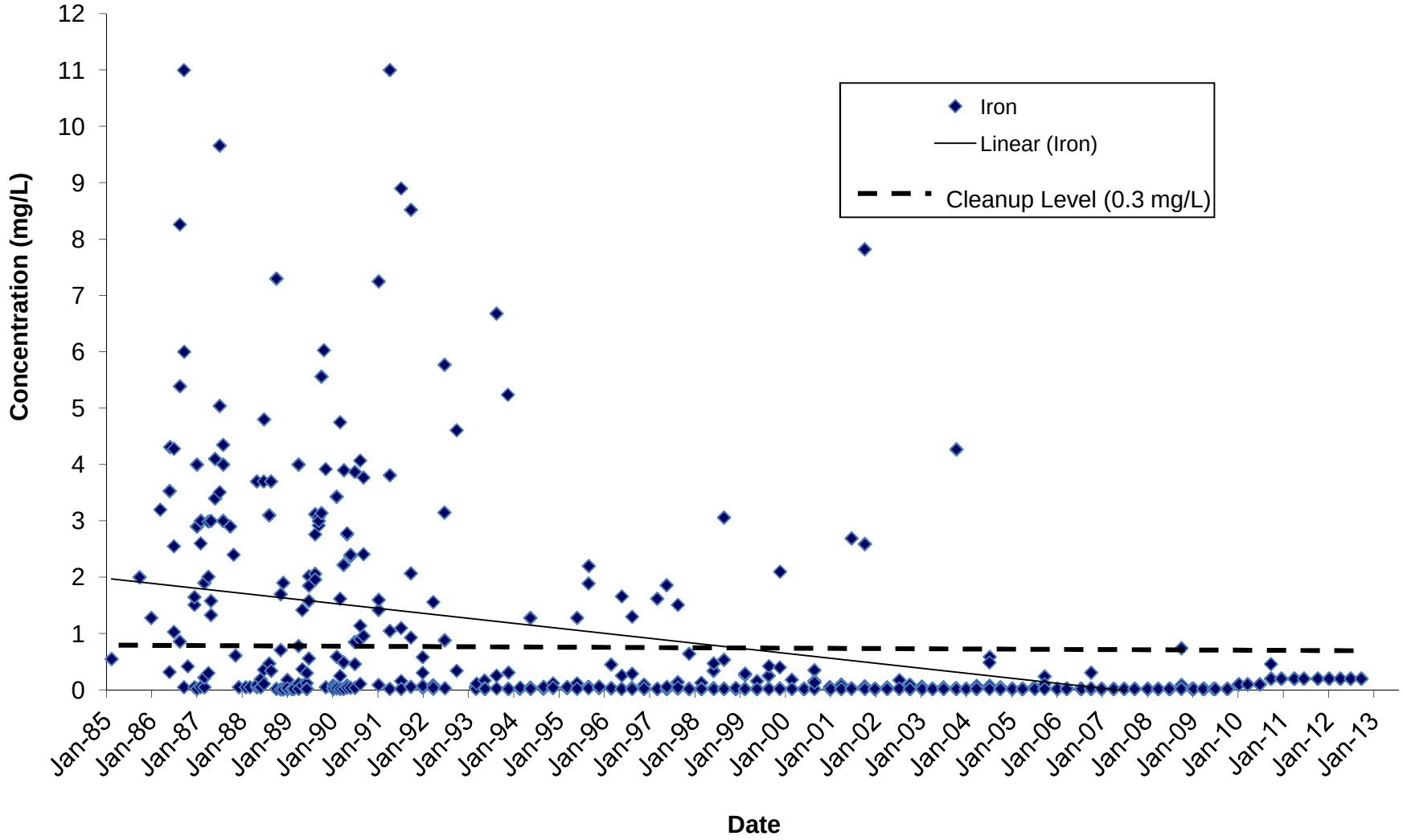


Figure E-5

Dissolved Manganese

Shallow Perched Aquifer, Hidden Valley Landfill
Wells MW-11D(2), MW-13D, MW-14D

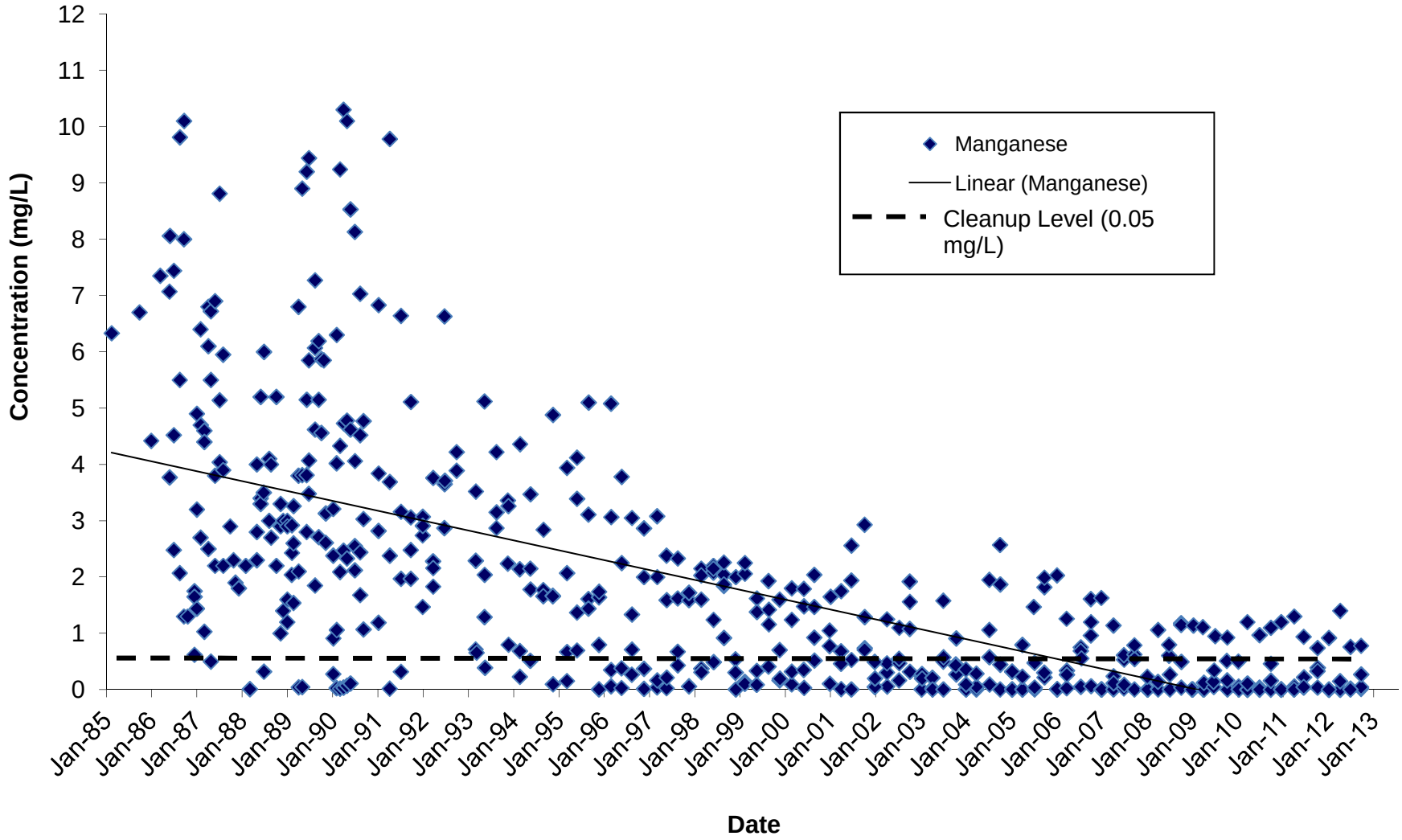


Figure E-6

Specific Conductance

Upper Regional Aquifer, Hidden Valley Landfill
Wells MW-11D(2), MW-13D and MW-14D

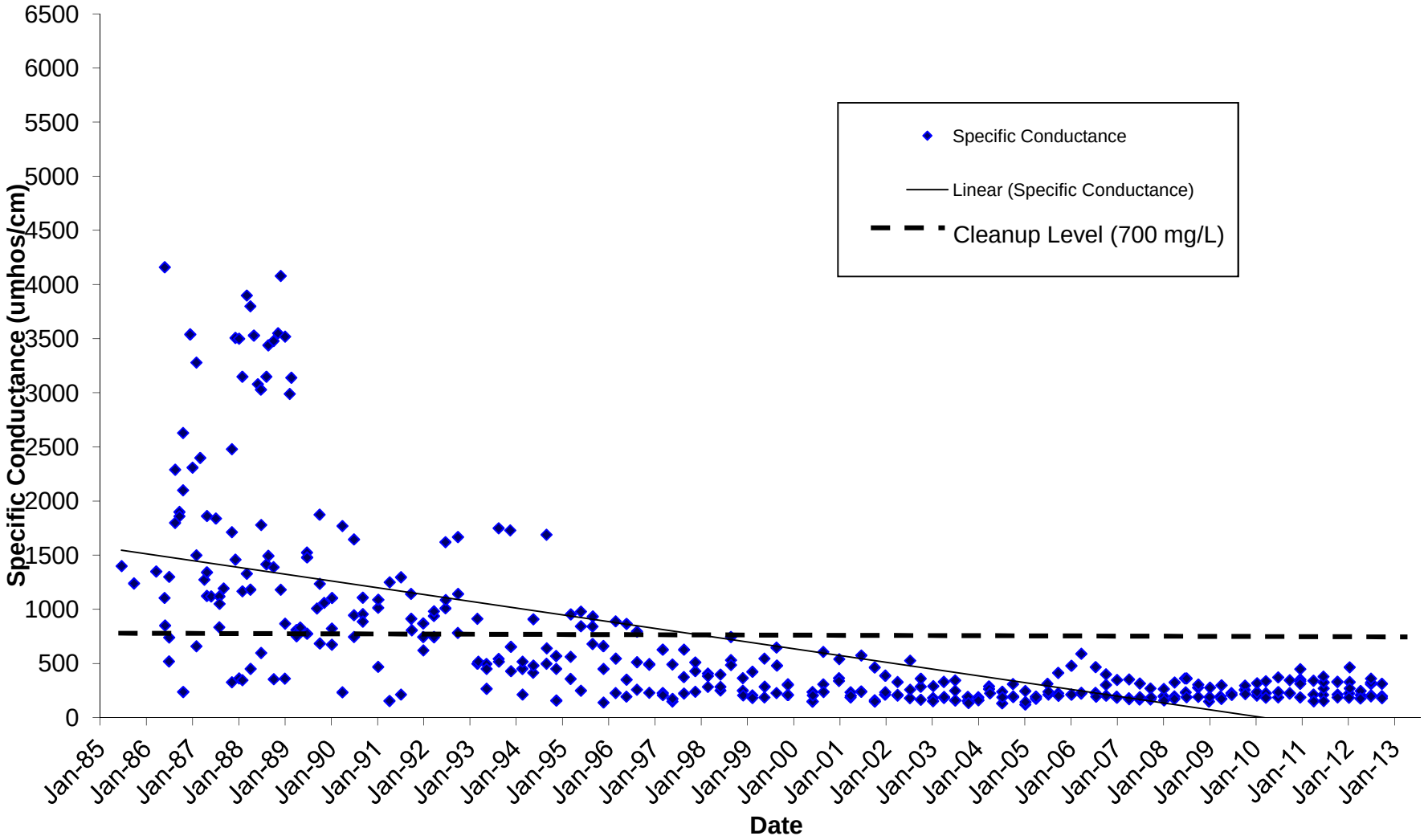


Figure E-7

Ammonia

Upper Regional Aquifer, Hidden Valley Landfill
Wells MW-11D(2), MW-13D and MW-14D

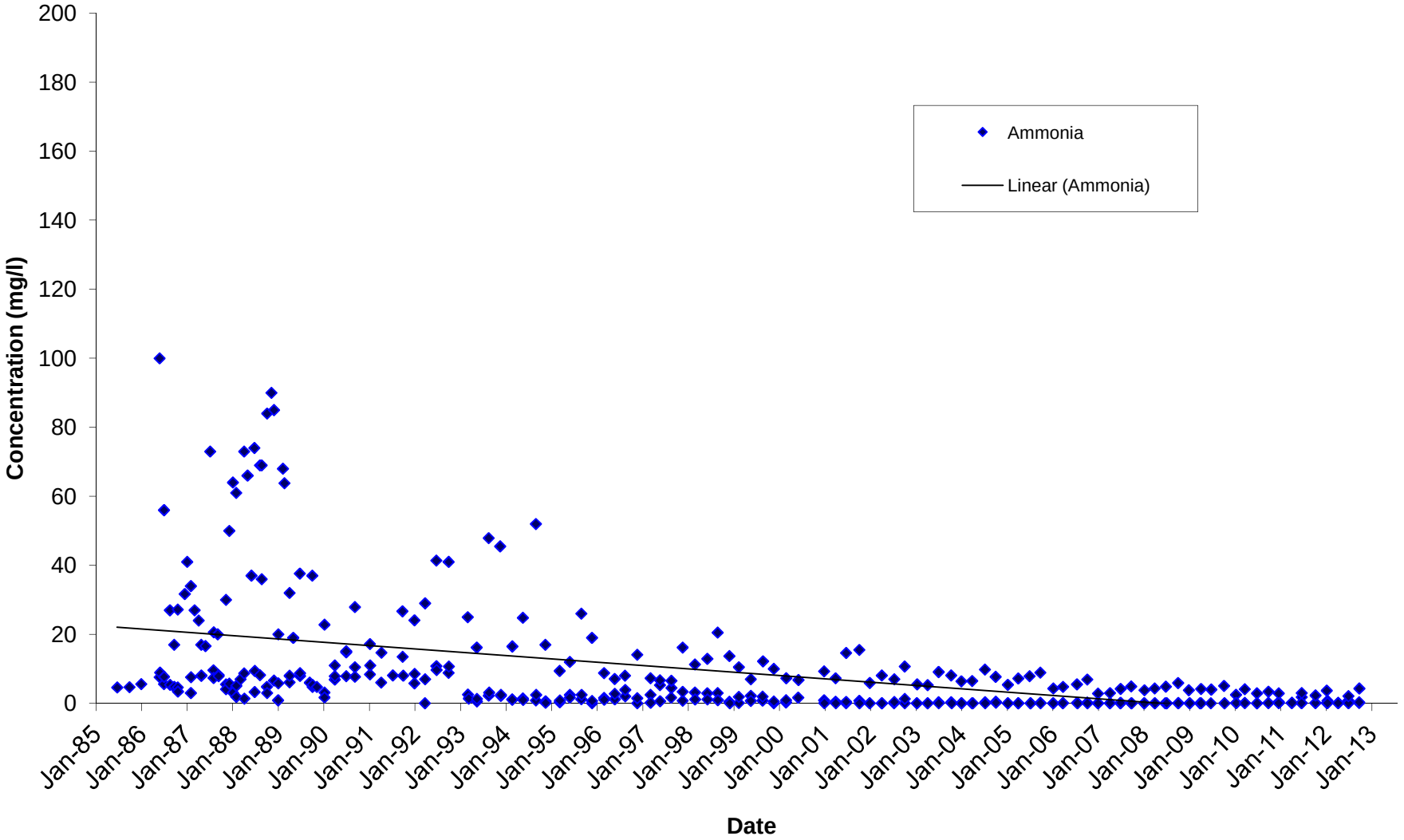


Figure E-8

Nitrate

Upper Regional Aquifer, Hidden Valley Landfill
Wells MW-11D(2), MW-13D and MW-14D

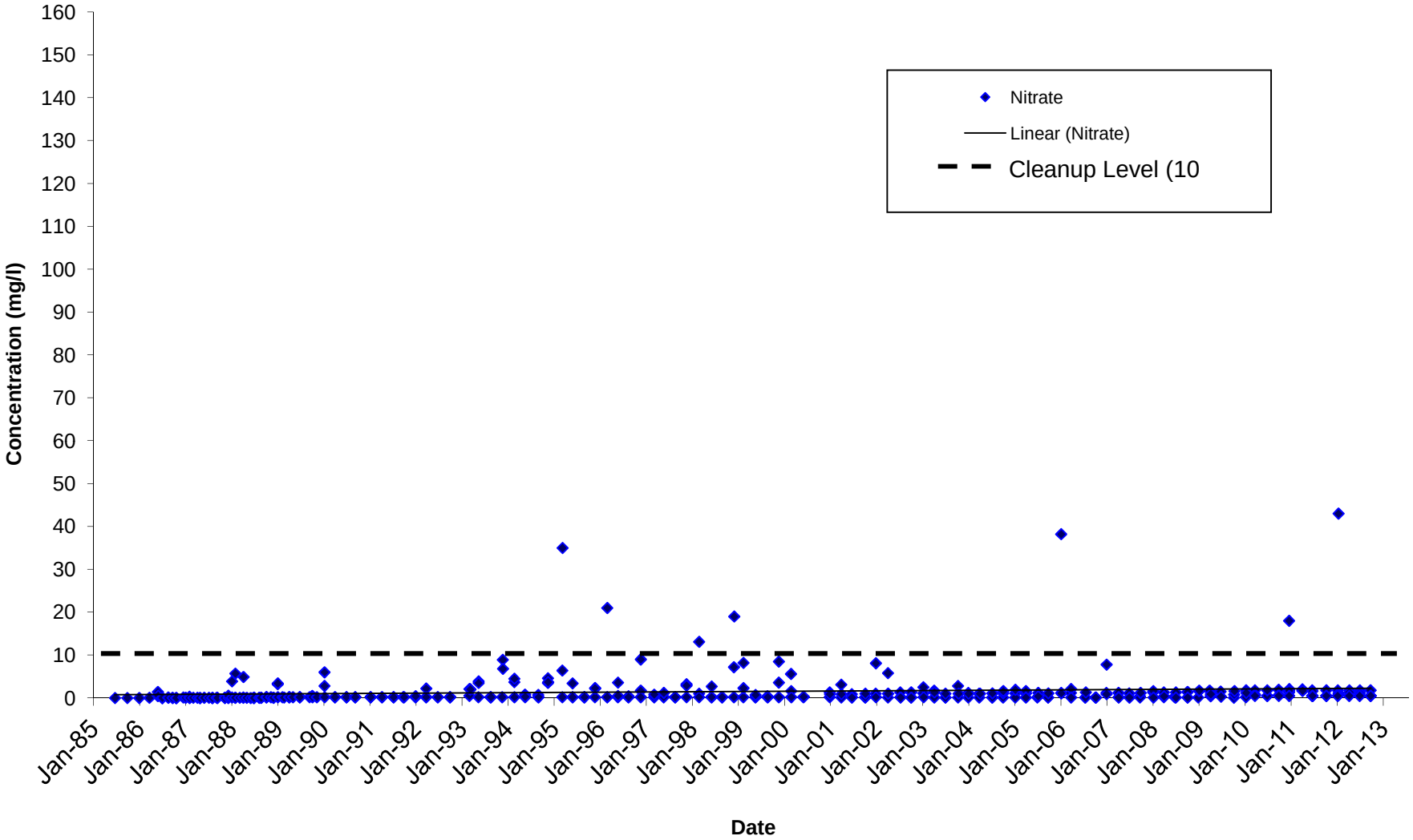


Figure E-9

Dissolved Iron

Upper Regional Aquifer, Hidden Valley Landfill
Wells MW-11D(2), MW-13D, MW-14D

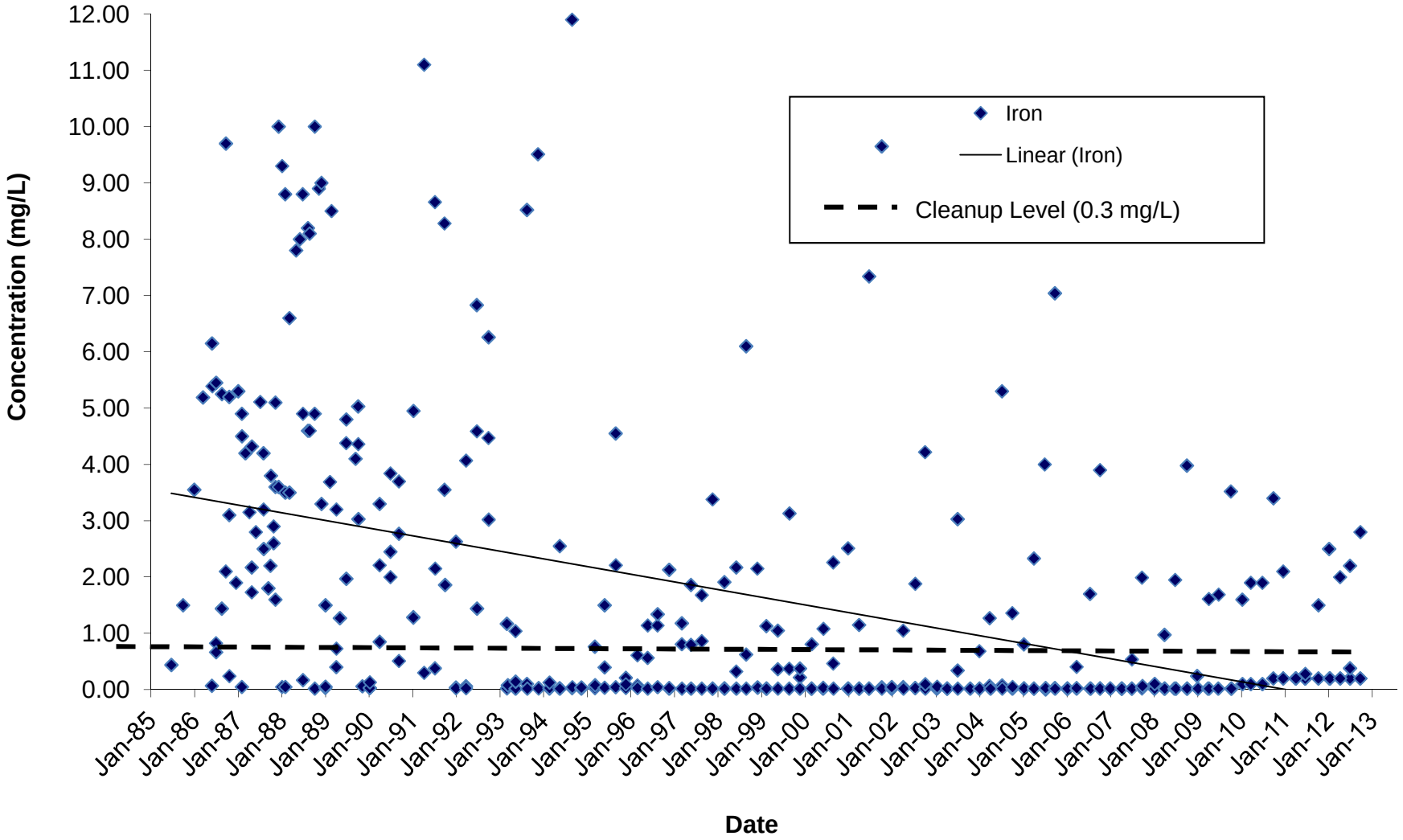
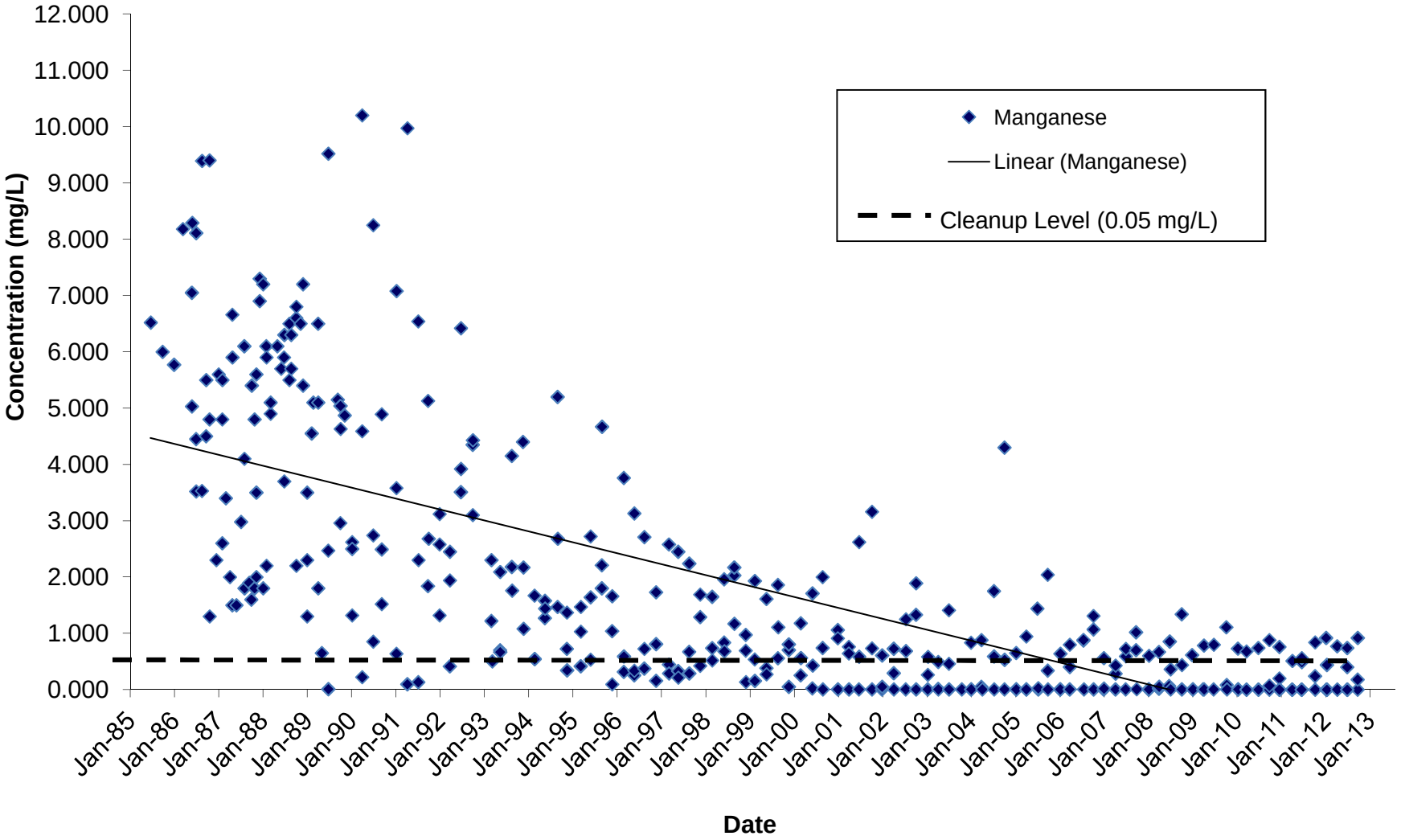


Figure E-10

Dissolved Manganese

Upper Regional Aquifer, Hidden Valley Landfill
Wells MW-11D(2), MW-13D, MW-14D



Appendix F
Statistical Calculations

Inorganics
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-10D																	
MW-10D	01/23/08	167	167	75	75	4.3	4.3	0.05	0.05	1.2	1.2	8.8	8.8	125	125	0.9	0.9
MW-10D	04/14/08	223	223	115	115	3.8	3.8	0.05 L	0.03	1.0	1.0	4.6	4.6	117	117	0.5	0.5
MW-10D	07/16/08	153	153	28	28	4.0	4.0	0.05 L	0.03	0.60	0.6	6.0	6.0	91	91	0.9	0.9
MW-10D	10/22/08	147	147	75	75	4.5	4.5	0.05 L	0.03	0.90	0.9	5.6	5.6	103	103	0.5	0.5
MW-10D	01/20/09	233	233	110	110	3.8	3.8	0.05 L	0.03	1.3	1.3	3.8	3.8	160	160	0.5 L	0.3
MW-10D	04/21/09	231	231	114	114	4.0	4.0	0.05 L	0.03	1.6	1.6	3.9	3.9	160	160	0.5 L	0.3
MW-10D	07/24/09	120	120	44	44	4.9	4.9	0.05 L	0.03	0.50	0.5	8.7	8.7	84	84	0.7	0.7
MW-10D	10/30/09	135	135	51	51	4.1	4.1	0.05 L	0.03	0.88	0.9	8.2	8.2	94	94	1.1	1.1
MW-10D	01/27/10	223	223	96	96	4.5	4.5	0.11	0.11	1.70	1.7	5.0	5.0	150	150	1.0 L	0.5
MW-10D	04/07/10	230	230	110	110	4.5	4.5	0.10 L	0.05	1.70	1.7	5.0 L	2.5	140	140	1.2	1.2
MW-10D	07/14/10	187	187	79	79	4.4	4.4	0.05 L	0.03	1.20	1.2	5.8	5.8	130	130	1.0 L	0.5
MW-10D	10/14/10	151	151	53	53	6.8	6.8	0.10 L	0.05	0.50 L	0.3	10.4	10.4	100	100	1.1	1.1
MW-10D	01/04/11	241	241	140	140	5.1	5.1	0.10 L	0.05	1.70	1.7	7.8	7.8	160	160	1.0 L	0.5
MW-10D	04/20/11	151	151	54	54	6.0	6.0	0.10 L	0.05	1.10	1.1	9.9	9.9	99	99	1.0 L	0.5
MW-10D	07/06/11	201	201	81	81	6.2	6.2	0.10 L	0.05	1.40	1.4	16.5	16.5	150	150	1.0 L	0.5
MW-10D	10/25/11	131	131	57	57	4.9	4.9	0.10 L	0.05	0.50 L	0.3	7.9	7.9	91	91	1.0 L	0.5
MW-10D	01/24/12	130	130	66	66	11.7	11.7	0.10 L	0.05	0.57	0.6	9.9	9.9	96	96	1.4	1.4
MW-10D	04/24/12	199	199	87	87	4.4	4.4	0.10 L	0.05	1.70	1.7	10.2	10.2	140	140	1.0 L	0.5
MW-10D	07/16/12	173	173	69	69	5.0	5.0	0.10 L	0.05	1.10	1.1	7.5	7.5	110	110	1.0 L	0.5
MW-10D	10/11/12	113	113	66	66	4.9	4.9	0.10 L	0.05	0.50 L	0.3	4.6	4.6	83	83	1.0 L	0.5
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20.0		2.000		17.0		19.0		20		9.0	
Minimum conc.			113		28		3.8		0.03		0.3		2.5		83		0.3
Maximum conc.			241		140		11.7		0.11		1.7		16.5		160		1.4
Average conc.			177		79		5.1		0.04		1.0		7.4		119		0.7
Distribution			Lognormal		Lognormal		Neither		NC		Normal		Lognormal		Lognormal		NC
UCL 95			196		94		11.7 (M)		NC		1.1		9.0		131		NC

Inorganics
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-10S																	
MW-10S	01/23/08	199	199	63	63	4.6	4.6	0.05	0.05	1.40	1.4	10.5	10.5	120	120	0.9	0.9
MW-10S	04/14/08	128	128	56	56	3.9	3.9	0.05 L	0.03	0.80	0.8	7.0	7.0	69	69	1.0	1.0
MW-10S	07/16/08	149	149	50	50	4.0	4.0	0.05 L	0.03	0.60	0.6	5.8	5.8	78	78	0.9	0.9
MW-10S	10/22/08	124	124	60	60	4.5	4.5	0.05 L	0.03	1.00	1.0	6.2	6.2	85	85	0.9	0.9
MW-10S	01/20/09	150	150	65	65	4.5	4.5	0.05 L	0.03	2.90	2.9	7.5	7.5	116	116	0.8	0.8
MW-10S	04/22/09	101	101	39	39	5.0	5.0	0.05 L	0.03	0.90	0.9	8.6	8.6	83	83	0.9	0.9
MW-10S	07/24/09	119	119	44	44	4.5	4.5	0.05 L	0.03	0.50	0.5	8.5	8.5	73	73	0.6	0.6
MW-10S	10/30/09	135	135	50	50	3.6	3.6	0.05 L	0.03	1.22	1.2	7.0	7.0	111	111	1.0	1.0
MW-10S	01/27/10	165	165	53	53	4.6	4.6	0.10 L	0.05	2.10	2.1	9.3	9.3	100	100	1.0 L	0.5
MW-10S	04/07/10	129	129	50	50	3.9	3.9	0.10 L	0.05	0.93	0.9	7.4	7.4	90	90	1.7	1.7
MW-10S	07/14/10	135	135	53	53	4.3	4.3	0.05 L	0.03	0.54	0.5	7.1	7.1	98	98	1.0 L	0.5
MW-10S	10/14/10	152	152	50	50	7.1	7.1	0.10 L	0.05	0.50 L	0.3	11.0	11.0	100	100	1.2	1.2
MW-10S	01/04/11	164	164	49	49	6.4	6.4	0.10 L	0.05	1.90	1.9	14.8	14.8	110	110	1.0 L	0.5
MW-10S	04/20/11	134	134	47	47	5.6	5.6	0.10 L	0.05	0.96	1.0	8.6	8.6	88	88	1.0 L	0.5
MW-10S	07/06/11	127	127	53	53	21.1	21.1	0.10 L	0.05	0.50 L	0.3	17.5	17.5	84	84	1.0	1.0
MW-10S	10/25/11	139	139	58	58	5.3	5.3	0.10 L	0.05	0.67	0.7	9.6	9.6	99	99	1.0 L	0.5
MW-10S	01/24/12	155	155	72	72	10.6	10.6	0.10 L	0.05	0.80	0.8	9.0	9.0	110	110	1.5	1.5
MW-10S	04/24/12	133	133	53	53	5.4	5.4	0.04	0.04	0.93	0.9	6.5	6.5	85	85	1.0 L	0.5
MW-10S	07/16/12	133	133	53	53	5.3	5.3	0.10 L	0.05	0.50 L	0.3	4.7	4.7	80	80	1.0 L	0.5
MW-10S	10/11/12	116	116	55	55	5.1	5.1	0.10 L	0.05	0.50 L	0.3	4.7	4.7	83	83	1.0	1.0
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20.0		2.000		16.00		20.0		20		13.0	
Minimum conc.			101		39		3.6		0.03		0.3		4.7		69		0.5
Maximum conc.			199		72		21.1		0.05		2.9		17.5		120		1.7
Average conc.			139		54		6.0		0.04		1.0		8.6		93		0.8
Distribution			Lognormal		Lognormal		Neither		NC		Lognormal		Lognormal		Lognormal		Lognormal
UCL 95			148		57		21.1 (M)		NC		1.2		9.9		99		1.2

Inorganics
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-11D(2)																	
MW-11D(2)	01/22/08	198	198	99	99	5.9	5.9	0.05 L	0.03	1.3	1.3	4.7	4.7	167	167	0.5	0.5
MW-11D(2)	04/16/08	198	198	101	101	6.0	6.0	0.06	0.06	1.3	1.3	5.6	5.6	135	135	1.3	1.3
MW-11D(2)	07/21/08	190	190	107	107	5.2	5.2	0.05 L	0.03	1.3	1.3	4.7	4.7	180	180	0.5	0.5
MW-11D(2)	10/21/08	192	192	106	106	6.4	6.4	0.05 L	0.03	1.4	1.4	5.0	5.0	168	168	0.5 L	0.3
MW-11D(2)	01/19/09	191	191	104	104	6.2	6.2	0.05 L	0.03	1.6	1.6	4.7	4.7	164	164	0.5 L	0.3
MW-11D(2)	04/14/09	196	196	102	102	6.0	6.0	0.05 L	0.03	1.7	1.7	4.9	4.9	161	161	0.5 L	0.3
MW-11D(2)	07/10/09	228	228	102	102	5.9	5.9	0.05 L	0.03	1.5	1.5	5.0	5.0	146	146	0.6	0.6
MW-11D(2)	10/28/09	218	218	99	99	6.2	6.2	0.05 L	0.03	1.6	1.6	4.8	4.8	158	158	0.6	0.6
MW-11D(2)	01/28/10	237	237	100	100	6.0	6.0	0.11	0.11	1.8	1.8	5.0 L	2.5	140	140	1.0 L	0.5
MW-11D(2)	04/08/10	227	227	98	98	5.8	5.8	0.10 L	0.05	1.8	1.8	5.0 L	2.5	150	150	1.0 L	0.5
MW-11D(2)	07/15/10	236	236	100	100	5.8	5.8	0.05 L	0.03	1.8	1.8	5.0 L	2.5	150	150	1.0 L	0.5
MW-11D(2)	10/13/10	223	223	100	100	6.7	6.7	0.10 L	0.05	1.9	1.9	5.2	5.2	160	160	1.0 L	0.5
MW-11D(2)	01/05/11	448	448	100	100	10.1	10.1	0.10 L	0.05	2.1	2.1	5.1	5.1	150	150	1.0 L	0.5
MW-11D(2)	04/19/11	214	214	110	110	5.9	5.9	0.12	0.12	2.0	2.0	5.4	5.4	140	140	1.0 L	0.5
MW-11D(2)	07/05/11	211	211	100	100	5.5	5.5	0.10 L	0.05	1.8	1.8	5.0	5.0	160	160	1.0 L	0.5
MW-11D(2)	10/26/11	213	213	110	110	5.5	5.5	0.10 L	0.05	1.8	1.8	5.8	5.8	150	150	1.0 L	0.5
MW-11D(2)	01/25/12	224	224	100	100	5.7	5.7	0.10 L	0.05	1.8	1.8	5.5	5.5	140	140	1.0 L	0.5
MW-11D(2)	04/25/12	209	209	100	100	5.7	5.7	0.10 L	0.05	1.8	1.8	6.5	6.5	150	150	1.0 L	0.5
MW-11D(2)	07/17/12	207	207	100	100	5.7	5.7	0.10 L	0.05	1.8	1.8	6.1	6.1	150	150	1.0 L	0.5
MW-11D(2)	10/10/12	199	199	100	100	5.2	5.2	0.13	0.13	1.8	1.8	6.0	6.0	150	150	1.0 L	0.5
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20		4		20		17		20		5	
Minimum conc.			190		98		5.2		0.03		1.3		2.5		135		0.3
Maximum conc.			448		110		10.1		0.13		2.1		6.5		180		1.3
Average conc.			223		102		6.1		0.05		1.7		4.9		153		0.5
Distribution			Neither		Neither		Neither		NC		Neither		Neither		Lognormal		NC
UCL 95			447.9 (M)		110 (M)		10.1 (M)		NC		2.1 (M)		6.5 (M)		158		NC

Inorganics
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-11S																	
MW-11S	01/22/08	235	235	50	50	10.1	10.1	0.05	0.05	13.1	13.1	15.4	15.4	181	181	1.3	1.3
MW-11S	04/16/08	257	257	46	46	3.4	3.4	0.20	0.20	0.7	0.7	8.4	8.4	111	111	1.8	1.8
MW-11S	07/21/08	190	190	77	77	9.7	9.7	0.05 L	0.03	1.9	1.9	13.1	13.1	196	196	1.5	1.5
MW-11S	10/21/08	238	238	100	100	14.7	14.7	0.05 L	0.03	0.2	0.2	11.4	11.4	174	174	2.0	2.0
MW-11S	01/19/09	260	260	42	42	12.2	12.2	0.05 L	0.03	12.5	12.5	19.8	19.8	194	194	0.9	0.9
MW-11S	04/15/09	238	238	54	54	25.4	25.4	0.05 L	0.03	4.1	4.1	12.9	12.9	166	166	3.0	3.0
MW-11S	07/10/09	232	232	84	84	13.2	13.2	0.05 L	0.03	1.5	1.5	13.6	13.6	172	172	1.6	1.6
MW-11S	10/28/09	251	251	59	59	33.4	33.4	0.05 L	0.03	2.0	2.0	9.2	9.2	183	183	1.4	1.4
MW-11S	01/28/10	386	386	53	53	15.0	15.0	0.12	0.12	19.0	19.0	27.0	27.0	250	250	1.0	1.0
MW-11S	04/08/10	306	306	66	66	14.0	14.0	0.10 L	0.05	9.2	9.2	24.0	24.0	220	220	1.9	1.9
MW-11S	07/15/10	250	250	72	72	9.5	9.5	0.50 L	0.25	3.9	3.9	18.0	18.0	160	160	1.0 L	0.5
MW-11S	10/13/10	188	188	61	61	9.9	9.9	0.10 L	0.05	3.2	3.2	11.4	11.4	140	140	1.1	1.1
MW-11S	01/05/11	656	656	54	54	14.4	14.4	0.10 L	0.05	17.0	17.0	24.4	24.4	220	220	1.0 L	0.5
MW-11S	04/19/11	252	252	45	45	13.2	13.2	0.17	0.17	10.0	10.0	23.3	23.3	180	180	1.2	1.2
MW-11S	07/05/11	184	184	51	51	10.0	10.0	0.22	0.22	3.3	3.3	19.0	19.0	160	160	1.1	1.1
MW-11S	10/25/11	209	209	59	59	18.7	18.7	0.16	0.16	0.5 L	0.3	11.8	11.8	150	150	1.1	1.1
MW-11S	01/25/12	206	206	48	48	16.7	16.7	0.10 L	0.05	4.4	4.4	11.6	11.6	130	130	1.0 L	0.5
MW-11S	04/25/12	285	285	68	68	16.2	16.2	0.10 L	0.05	9.3	9.3	22.5	22.5	210	210	1.5	1.5
MW-11S	07/17/12	227	227	100	100	12.0	12.0	0.14	0.14	2.6	2.6	17.0	17.0	170	170	1.5	1.5
MW-11S	10/10/12	207	207	80	80	11.0	11.0	0.10 L	0.05	0.7	0.7	14.0	14.0	150	150	1.3	1.3
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20.0		7.00		19.0		20.0		20		17.0	
Minimum conc.			184		42		3.4		0.03		0.2		8.4		111		0.5
Maximum conc.			656		100		33.4		0.25		19.0		27.0		250		3.0
Average conc.			263		63		14.1		0.09		5.9		16.4		176		1.3
Distribution			Neither		Lognormal		Neither		NC		Lognormal		Lognormal		Lognormal		Normal
UCL 95			656.2 (M)		71		33.4 (M)		NC		20.6		19.1		190		1.4

Inorganics
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-12S																	
MW-12S	01/30/08	288	288	27	27	15.7	15.7	0.43	0.43	24.3	24.3	8.4	8.4	284	284	3.2	3.2
MW-12S	07/22/08	370	370	160	160	10.4	10.4	1.91	1.91	0.4	0.4	2.1	2.1	218	218	3.3	3.3
MW-12S	01/21/09	360	360	17	17	14.2	14.2	0.05 L	0.03	34.8	34.8	6.6	6.6	315	315	1.9	1.9
MW-12S	1/29/2010	334	334	48	48	18.0	18.0	0.10 L	0.05	17.0	17.0	11.0	11.0	240	240	1.6	1.6
MW-12S	7/14/2010	362	362	160	160	15.0	15.0	1.30	1.30	0.5 L	0.3	5.0 L	2.5	240	240	2.7	2.7
MW-12S	1/4/2011	337	337	57	57	18.5	18.5	0.44	0.44	18.0	18.0	9.5	9.5	250	250	1.7	1.7
MW-12S	7/8/2011	326	326	160	160	19.4	19.4	1.80	1.80	0.5 L	0.3	1.2	1.2	230	230	3.9	3.9
MW-12S	01/30/12	466	466	30	30	10.9	10.9	0.76	0.76	43.0	43.0	5.9	5.9	350	350	1.5	1.5
MW-12S	07/16/12	324	324	140	140	13.0	13.0	0.86	0.86	1.1	1.1	1.3	1.3	200	200	2.9	2.9
No. Analyzed		9		9		9		9		9		9		9		9	
No. Detect		9		9		9.0		7.00		7.0		8.0		9		9.0	
Minimum conc.			288		17		10.4		0.03		0.3		1.2		200		1.5
Maximum conc.			466		160		19.4		1.91		43.0		11.0		350		3.9
Average conc.			352		89		15.0		0.84		15.5		5.4		259		2.5
Distribution			Neither		Neither		Lognormal		Normal		Neither		Lognormal		Lognormal		Lognormal
UCL 95			466 (M)		160 (M)		17.6		1.27		43.0 (M)		14.7		292		3.3
MW-12D																	
MW-12D	01/23/07	343	343	169	169	17.2	17.2	0.05 L	0.03	0.8	0.8	4.7	4.7	222	222	1.3	1.3
MW-12D	01/23/07	263	263			15.6	15.6	0.05 L	0.03	0.8	0.8	4.6	4.6	219	219	1.2	1.2
MW-12D	01/30/08	335	335	174	174	17.9	17.9	0.05 L	0.03	0.7	0.7	4.7	4.7	224	224	1.6	1.6
MW-12D	07/22/08	385	385	177	177	13.6	13.6	0.05 L	0.03	0.8	0.8	4.7	4.7	234	234	1.2	1.2
MW-12D	01/21/09	392	392	192	192	16.9	16.9	0.05 L	0.03	0.7	0.7	4.8	4.8	248	248	1.2	1.2
MW-12D	07/14/09	337	337	158	158	13.4	13.4	0.05 L	0.03	1.0	1.0	5.0	5.0	209	209	1.0	1.0
MW-12D	01/29/10	380	380	170	170	14	14.0	0.1 L	0.05	1.1	1.1	5.0 L	2.5	220	220	1.0 L	0.5
MW-12D	07/14/10	334	334	160	160	12	12.0	0.05 L	0.03	1.3	1.3	5.4	5.4	220	220	1.0 L	0.5
MW-12D	01/04/11	353	353	160	160	11.7	11.7	0.1 L	0.05	1.3	1.3	5.3	5.3	220	220	1.0 L	0.5
MW-12D	07/08/11	270	270	130	130	9.5	9.5	0.1 L	0.05	1.6	1.6	5.1	5.1	190	190	1.0 L	0.5
MW-12D	01/30/12	329	329	160	160	9.8	9.8	0.1 L	0.05	1.1	1.1	5.1	5.1	190	190	1.0 L	0.5
MW-12D	07/16/12	310	310	150	150	10	10.0	0.1 L	0.05	1.3	1.3	5.4	5.4	200	200	1.0 L	0.5
No. Analyzed		10		10		10		10		10		10		10		10	
No. Detect		10		10		10		0		10		9		10		4	
Minimum conc.			270		130		9.5		0.03		0.7		2.5		190		0.5
Maximum conc.			392		192		17.9		0.05		1.6		5.4		248		1.6
Average conc.			342		163		12.9		0.04		1.1		4.8		216		0.8
Distribution			Neither		Normal		Lognormal		NC		Lognormal		Neither		Neither		Neither
UCL 95			392 (M)		176		16.1		NC		1.2		5.4 (M)		248 (M)		1.6 (M)

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Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-13D																	
MW-13D	01/19/07	348	348	103	103	26.7	26.7	0.05 L	0.03	7.8	7.8	27.3	27.3	257	257	1.8	1.8
MW-13D	04/24/07	354	354	165	165	29.3	29.3	0.10	0.10	0.2	0.2	18.7	18.7	256	256	2.5	2.5
MW-13D	07/18/07	315	315	176	176	26.0	26.0	0.15	0.15	0.1 L	0.1	17.2	17.2	267	267	2.9	2.9
MW-13D	10/10/07	271	271	138	138	17.9	17.9	0.07	0.07	0.4	0.4	21.8	21.8	244	244	1.8	1.8
MW-13D	01/24/08	265	265	110	110	13.0	13.0	0.05 L	0.03	1.6	1.6	16.9	16.9	188	188	1.4	1.4
MW-13D	04/18/08	326	326	146	146	17.8	17.8	0.05 L	0.03	0.4	0.4	18.8	18.8	217	217	1.6	1.6
MW-13D	07/21/08	362	362	146	146	14.4	14.4	0.07	0.07	0.1	0.1	18.9	18.9	276	276	1.8	1.8
MW-13D	10/22/08	305	305	130	130	15.4	15.4	0.08	0.08	0.1	0.1	20.2	20.2	203	203	1.5	1.5
MW-13D	01/22/09	277	277	118	118	11.0	11.0	0.05 L	0.03	1.7	1.7	11.4	11.4	164	164	1.0	1.0
MW-13D	04/23/09	299	299	136	136	13.2	13.2	0.05 L	0.03	0.9	0.9	11.9	11.9	224	224	0.9	0.9
MW-13D	07/08/09	363	363	152	152	16.4	16.4	0.05 L	0.03	0.3	0.3	16.0	16.0	234	234	1.5	1.5
MW-13D	10/26/09	296	296	125	125	14.4	14.4	0.05 L	0.03	0.8	0.8	15.3	15.3	195	195	1.5	1.5
MW-13D	01/29/10	319	319	130	130	12.0	12.0	0.10 L	0.05	1.2	1.2	11.0	11.0	190	190	1.0 L	0.5
MW-13D	04/08/10	338	338	140	140	14.0	14.0	0.10 L	0.05	0.8	0.8	12.0	12.0	220	220	1.5	1.5
MW-13D	07/14/10	372	372	160	160	15.0	15.0	0.05 L	0.03	0.5 L	0.3	15.0	15.0	230	230	1.0 L	0.5
MW-13D	10/14/10	346	346	140	140	13.7	13.7	0.10 L	0.05	0.7	0.7	15.1	15.1	210	210	1.2	1.2
MW-13D	01/04/11	313	313	130	130	13.1	13.1	0.10 L	0.05	1.7	1.7	14.1	14.1	200	200	1.0 L	0.5
MW-13D	04/19/11	342	342	150	150	17.4	17.4	0.10 L	0.05	1.7	1.7	15.4	15.4	210	210	1.0	1.0
MW-13D	07/06/11	380	380	170	170	21.1	21.1	0.10 L	0.05	0.5 L	0.3	17.5	17.5	260	260	1.8	1.8
MW-13D	10/25/11	331	331	150	150	15.9	15.9	0.12	0.12	0.5 L	0.3	19.4	19.4	220	220	1.4	1.4
MW-13D	01/30/12	270	270	120	120	10.1	10.1	0.10 L	0.05	0.7	0.7	12.6	12.6	170	170	1.0 L	0.5
MW-13D	04/25/12	247	247	94	94	12.8	12.8	0.10 L	0.05	1.3	1.3	19.8	19.8	190	190	1.5	1.5
MW-13D	07/16/12	361	361	150	150	13.0	13.0	0.10 L	0.05	0.5	0.5	15.0	15.0	220	220	1.2	1.2
MW-13D	10/10/12	313	313	140	140	13.0	13.0	0.33	0.33	0.5 L	0.3	20.0	20.0	230	230	1.5	1.5
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20.0		4.00		16.00		20.00		20		16.00	
Minimum conc.			247		94		10.1		0.03		0.1		11.0		164		0.5
Maximum conc.			380		170		21.1		0.33		1.7		20.2		276		1.8
Average conc.			321		137		14.3		0.06		0.8		15.8		213		1.2
Distribution			Lognormal		Lognormal		Lognormal		NC		Lognormal		Lognormal		Lognormal		Normal
UCL 95			336		146		17.8		NC		1.9		18.2		231		1.6

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Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-13S																	
MW-13S	01/24/08	210	210	90	90	11.1	11.1	0.05 L	0.03	2.2	2.2	18.8	18.8	174	174	1.70	1.7
MW-13S	04/17/08	309	309	138	138	16.8	16.8	0.05 L	0.03	0.3	0.3	20.0	20.0	208	208	2.20	2.2
MW-13S	07/21/08	350	350	142	142	13.6	13.6	0.07	0.07	0.1 L	0.1	19.9	19.9	239	239	2.30	2.3
MW-13S	10/22/08	294	294	119	119	15.3	15.3	0.13	0.13	0.1 L	0.1	23.0	23.0	175	175	1.80	1.8
MW-13S	01/22/09	171	171	62	62	6.4	6.4	0.05 L	0.03	4.7	4.7	10.3	10.3	136	136	1.20	1.2
MW-13S	04/23/09	265	265	110	110	12.7	12.7	0.05 L	0.03	0.8	0.8	19.2	19.2	212	212	1.30	1.3
MW-13S	07/08/09	354	354	151	151	15.4	15.4	0.06	0.06	0.1 L	0.1	18.6	18.6	214	214	1.90	1.9
MW-13S	10/26/09	284	284	104	104	17.8	17.8	0.05 L	0.03	1.3	1.3	18.8	18.8	202	202	1.00	1.0
MW-13S	01/28/10	182	182	61	61	5.0	5.0	0.11	0.11	3.1	3.1	10.0	10.0	130	130	1.00 L	0.5
MW-13S	04/08/10	287	287	110	110	13.0	13.0	0.10 L	0.05	1.1	1.1	19.0	19.0	210	210	1.80	1.8
MW-13S	07/14/41	367	367	150	150	15.0	15.0	0.12	0.12	0.5 L	0.3	18.0	18.0	230	230	1.10	1.1
MW-13S	10/14/10	365	365	130	130	17.4	17.4	0.10 L	0.05	0.5 L	0.3	21.7	21.7	210	210	1.60	1.6
MW-13S	01/05/11	489	489	86	86	11.1	11.1	0.10 L	0.05	3.3	3.3	17.5	17.5	160	160	1.00 L	0.5
MW-13S	04/19/11	401	401	120	120	31.4	31.4	0.24	0.24	6.0	6.0	25.7	25.7	270	270	1.60	1.6
MW-13S	07/05/11	383	383	160	160	26.3	26.3	0.11	0.11	0.5 L	0.3	17.7	17.7	270	270	2.10	2.1
MW-13S	10/25/11	351	351	150	150	20.0	20.0	0.15	0.15	0.5 L	0.3	21.8	21.8	240	240	1.90	1.9
MW-13S	01/27/12	255	255	87	87	13.0	13.0	0.10 L	0.05	0.7	0.7	11.2	11.2	140	140	1.10	1.1
MW-13S	04/24/12	300	300	140	140	11.5	11.5	0.10 L	0.05	0.9	0.9	12.2	12.2	190	190	1.00 L	0.5
MW-13S	07/17/12	318	318	150	150	13.0	13.0	0.10 L	0.05	0.5 L	0.3	19.0	19.0	220	220	1.40	1.4
MW-13S	10/10/12	309	309	140	140	13.0	13.0	0.10 L	0.05	0.5 L	0.3	17.0	17.0	210	210	1.20	1.2
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20		8		11		20		20		17	
Minimum conc.			171		61		5		0.03		0.1		10		130		1
Maximum conc.			489		160		31		0.24		6.0		26		270		2
Average conc.			312		120		15		0.07		1.3		18		202		1
Distribution			Lognormal		Normal		Lognormal		Neither		Lognormal		Sulfate		Lognormal		Normal
UCL 95			349		132		18.1		0.24 (M)		6.0 (M)		19.6		221		1.5

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Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-14D																	
MW-14D	01/25/08	159	159	67	67	7.2	7.2	3.83	3.83	0.1 L	0.1	9.2	9.2	125	125	3.8	3.8
MW-14D	04/16/08	174	174	78	78	5.7	5.7	4.32	4.32	0.2	0.2	9.0	9.0	95	95	2.0	2.0
MW-14D	07/14/08	234	234	95	95	6.3	6.3	4.86	4.86	0.1 L	0.1	10.6	10.6	141	141	2.0	2.0
MW-14D	10/20/08	278	278	115	115	14.6	14.6	5.91	5.91	0.1 L	0.1	8.8	8.8	190	190	2.3	2.3
MW-14D	01/14/09	150	150	68	68	6.8	6.8	3.82	3.82	0.1 L	0.1	8.1	8.1	115	115	2.4	2.4
MW-14D	04/22/09	174	174	75	75	5.8	5.8	4.19	4.19	0.4	0.4	10.3	10.3	126	126	2.0	2.0
MW-14D	07/13/09	211	211	82	82	5.8	5.8	4.04	4.04	0.3	0.3	12.6	12.6	135	135	1.5	1.5
MW-14D	10/23/09	257	257	93	93	14.3	14.3	5.07	5.07	0.1 L	0.1	11.7	11.7	173	173	2.4	2.4
MW-14D	01/27/10	205	205	71	71	7.8	7.8	2.50	2.50	0.2 L	0.1	11.0	11.0	110	110	2.3	2.3
MW-14D	04/08/10	184	184	68	68	6.0	6.0	4.10	4.10	0.5 L	0.3	11.0	11.0	120	120	2.8	2.8
MW-14D	07/14/10	188	188	68	68	5.2	5.2	2.90	2.90	0.5 L	0.3	11.0	11.0	120	120	1.1	1.1
MW-14D	10/14/10	228	228	82	82	10.1	10.1	3.40	3.40	0.5 L	0.3	11.5	11.5	130	130	1.9	1.9
MW-14D	01/04/11	188	188	71	71	6.0	6.0	2.90	2.90	0.5 L	0.3	10.1	10.1	120	120	1.9	1.9
MW-14D	04/21/11	153	153	56	56	6.4	6.4	1.60	1.60	0.5 L	0.3	9.4	9.4	99	99	1.4	1.4
MW-14D	07/08/11	154	154	64	64	5.5	5.5	3.00	3.00	0.5 L	0.3	11.1	11.1	110	110	1.7	1.7
MW-14D	10/26/11	187	187	71	71	9.5	9.5	2.30	2.30	0.5 L	0.3	12.6	12.6	120	120	1.4	1.4
MW-14D	01/24/12	185	185	80	80	10.2	10.2	3.70	3.70	0.5 L	0.3	10.5	10.5	120	120	1.7	1.7
MW-14D	04/24/12	177	177	67	67	6.6	6.6	*	*	0.5 L	0.3	10.6	10.6	110	110	1.6	1.6
MW-14D	07/16/12	198	198	72	72	6.4	6.4	2.10	2.10	0.5 L	0.3	12.0	12.0	120	120	1.5	1.5
MW-14D	10/11/12	180	180	74	74	8.7	8.7	4.30	4.30	0.5 L	0.3	11.0	11.0	130	130	1.6	1.6
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20		20		3		20		20		20	
Minimum conc.			150		56		5.2		1.6		0.05		8.1		95		1.1
Maximum conc.			278		115		14.6		5.91		0.4		12.6		190		3.8
Average conc.			193		76		8		4		0		11		125		2
Distribution			Lognormal		Lognormal		Neither		Lognormal		NC		Lognormal		Neither		Lognormal
UCL 95			207		81		14.6 (M)		4.22		NC		11.1		190 (M)		2.2
MW-14R																	
MW-14R	01/30/08	124	124	44	44	1.5	1.5	0.05 L	0.03	0.1	0.1	3.6	3.6	113	113	2.5	2.5
MW-14R	01/15/09	87	87	48	48	1.6	1.6	0.05 L	0.03	0.3	0.3	3.3	3.3	102	102	0.6	0.6
MW-14R	01/26/10	96	96	48	48	3.0 L	1.5	0.15	0.15	0.2 L	0.1	5.0 L	2.5	92	92	1.0 L	0.5
MW-14R	01/06/11	108	108	48	48	1.8	1.8	0.10 L	0.05	0.5 L	0.3	3.8	3.8	110	110	1.0 L	0.5
MW-14R	01/27/12	128	128	49	49	1.7	1.7	0.10 L	0.05	0.5 L	0.3	3.8	3.8	98	98	1.0 L	0.5
No. Analyzed		5		5		5		5		5		5		5		5	
No. Detect		5		5		4		1		2		4		5		2	
Minimum conc.			87		44		1.5		0.03		0.1		2.5		92		0.5
Maximum conc.			128		49		1.8		0.15		0.3		3.8		113		2.5
Average conc.			109		47		1.6		0.06		0.2		3.4		103		0.9
Distribution			Lognormal		Neither		Lognormal		NC		NC		Neither		Normal		NC
UCL 95			130		49 (M)		1.8		NC		NC		3.8 (M)		112		NC

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Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-14S																	
MW-14S	01/25/08	141	141	39	39	3.5	3.5	0.05 L	0.03	1.7	1.7	8.1	8.1	111	111	2.1	2.1
MW-14S	04/16/08	113	113	46	46	3.4	3.4	0.20	0.20	0.7	0.7	8.4	8.4	111	111	1.8	1.8
MW-14S	07/14/08	225	225	78	78	14.5	14.5	1.53	1.53	0.1 L	0.1	9.7	9.7	150	150	2.1	2.1
MW-14S	01/14/09	79	79	23	23	2.4	2.4	0.05 L	0.03	2.5	2.5	5.1	5.1	77	77	2.3	2.3
MW-14S	04/22/09	99	99	40	40	4.3	4.3	0.16	0.16	0.9	0.9	9.1	9.1	86	86	1.8	1.8
MW-14S	07/13/09	168	168	58	58	11.5	11.5	0.81	0.81	0.1 L	0.1	12.6	12.6	132	132	1.8	1.8
MW-14S	10/23/09	182	182	60	60	12.7	12.7	1.20	1.20	1.4	1.4	9.8	9.8	108	108	2.3	2.3
MW-14S	01/27/10	101	101	29	29	3.5	3.5	0.22	0.22	1.7	1.7	6.6	6.6	72	72	1.9	1.9
MW-14S	04/08/10	110	110	37	37	3.3	3.3	0.44	0.44	1.0	1.0	8.2	8.2	86	86	2.6	2.6
MW-14S	07/14/10	119	119	38	38	4.3	4.3	0.05 L	0.03	1.2	1.2	8.6	8.6	92	92	1.0 L	0.5
MW-14S	10/14/10	209	209	69	69	16.3	16.3	0.56	0.56	0.5 L	0.3	9.4	9.4	130	130	1.9	1.9
MW-14S	01/04/11	108	108	36	36	4.0	4.0	0.10 L	0.05	1.4	1.4	6.5	6.5	86	86	1.6	1.6
MW-14S	04/21/11	122	122	37	37	6.6	6.6	0.18	0.18	1.7	1.7	8.4	8.4	85	85	1.2	1.2
MW-14S	07/08/11	107	107	38	38	4.9	4.9	0.39	0.39	0.5	0.5	9.9	9.9	81	81	1.1	1.1
MW-14S	10/26/11	292	292	69	69	21.5	21.5	0.44	0.44	0.5 L	0.3	10.0	10.0	140	140	1.6	1.6
MW-14S	01/24/12	67	67	25	25	2.1	2.1	0.10 L	0.05	1.1	1.1	4.6	4.6	56	56	2.1	2.1
MW-14S	04/24/12	109	109	40	40	2.0 L	1.0	0.34	0.34	1.0	1.0	0.2 L	0.2	69	69	1.4	1.4
MW-14S	07/16/12	130	130	43	43	6.1	6.1	0.10 L	0.05	0.6	0.6	9.2	9.2	86	86	1.1	1.1
MW-14S	10/11/12	175	175	78	78	16.0	16.0	0.33	0.33	0.5 L	0.3	8.7	8.7	120	120	1.8	1.8
No. Analyzed		19		19		19		19		19		19		19		19	
No. Detect		19		19		18		13		14		18		19		18	
Minimum conc.			67		23		1		0.025		0.05		0.2		56		0.5
Maximum conc.			292		78		21.5		1.53		2.5		12.6		150		2.6
Average conc.			140		46		7		0.370		1		8		99		1.7
Distribution			Lognormal		Lognormal		Lognormal		Lognormal		Lognormal		Neither		Lognormal		Normal
UCL 95			165		55		12.3		1.08		2.5 (M)		12.6 (M)		111		1.9
MW-15D																	
MW-15D	01/21/08	302	302	151	151	17.0	17.0	0.05 L	0.03	0.30	0.3	8.3	8.3	226	226	2.0	2.0
MW-15D	07/16/08	341	341	146	146	14.5	14.5	0.05 L	0.03	0.30	0.3	8.4	8.4	226	226	3.8	3.8
MW-15D	01/13/09	369	369	187	187	18.5	18.5	0.05 L	0.03	0.30	0.3	8.0	8.0	227	227	1.8	1.8
MW-15D	07/22/09	335	335	155	155	14.4	14.4	0.05 L	0.03	0.30	0.3	8.7	8.7	218	218	1.8	1.8
MW-15D	01/26/10	338	338	170	170	16.0	16.0	0.12	0.12	0.35	0.4	8.5	8.5	210	210	1.3	1.3
MW-15D	07/15/10	334	334	140	140	12.0	12.0	0.05 L	0.03	0.51	0.5	8.6	8.6	190	190	1.0 L	0.5
MW-15D	01/05/11	653	653	150	150	15.7	15.7	0.10 L	0.05	0.50 L	0.3	10.4	10.4	200	200	1.3	1.3
MW-15D	07/06/11	280	280	140	140	10.4	10.4	1.90	1.90	0.57	0.6	8.6	8.6	200	200	1.6	1.6
MW-15D	01/26/12	318	318	160	160	12.7	12.7	0.10 L	0.05	0.59	0.6	8.2	8.2	200	200	1.0	1.0
MW-15D	07/17/12	282	282	140	140	9.9	9.9	0.10 L	0.05	0.61	0.6	9.3	9.3	190	190	1.1	1.1
No. Analyzed		10		10		10		10		10		10		10		10	
No. Detect		10		10		10		2		9		10		10		9	
Minimum conc.			280		140		9.9		0.03		0.25		8.0		190		0.5
Maximum conc.			653		187		18.5		1.90		0.61		10.4		227		3.8
Average conc.			355		154		14.1		0.23		0.41		8.7		209		1.6
Distribution			Neither		Neither		Lognormal		NC		Neither		Neither		Lognormal		Lognormal
UCL 95			653 (M)		187 (M)		16.1		NC		0.61 (M)		10.4 (M)		218		2.4

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Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-15S																	
MW-15S	01/21/08	297	297	77	77	20.8	20.8	2.95	2.95	10	10.0	11.8	11.8	237	237	2.9	2.9
MW-15S	07/14/08	241	241	100	100	9.9	9.9	3.68	3.68	0.1 L	0.1	11.1	11.1	155	155	3.2	3.2
MW-15S	01/13/09	294	294	26	26	11.5	11.5	2.13	2.13	22.2	22.2	11.4	11.4	226	226	2.0	2.0
MW-15S	07/24/09	212	212	83	83	9.8	9.8	3.35	3.35	0.1 L	0.1	13.0	13.0	149	149	1.9	1.9
MW-15S	01/26/10	288	288	79	79	21	21.0	2	2.00	6.6	6.6	11.0	11.0	190	190	2.2	2.2
MW-15S	07/15/10	271	271	100	100	13	13.0	3	3.00	0.5 L	0.3	10.0	10.0	150	150	1.9	1.9
MW-15S	01/05/11	527	527	83	83	18.3	18.3	2.9	2.90	3.6	3.6	10.8	10.8	160	160	2.0	2.0
MW-15S	07/06/11	154	154	60	60	6.8	6.8	1.4	1.40	0.5 L	0.3	11.6	11.6	110	110	1.5	1.5
MW-15S	01/25/12	299	299	78	78	18	18.0	3.2	3.20	9.8	9.8	11.3	11.3	210	210	1.7	1.7
MW-15S	07/17/12	217	217	88	88	10	10.0	1.9	1.90	0.5 L	0.3	12	12.0	130	130	1.6	1.6
No. Analyzed		10		10		10		10		10		10		10		10	
No. Detect		10		10		10		10		5		10		10		10	
Minimum conc.			154		26		6.8		1.40		0.1		10		110		1.5
Maximum conc.			527		100		21.0		3.68		22.2		13		237		3.2
Average conc.			280		77		13.9		2.65		5.3		11		172		2.1
Distribution			Neither		Neither		Lognormal		Lognormal		Neither		Lognormal		Lognormal		Lognormal
UCL 95			527 (M)		100 (M)		18.3		3.28		22.2 (M)		11.9		202		2.4
MW-17S																	
MW-17S	01/21/08	399	399	67	67	15.1	15.1	0.69	0.69	32.5	32.5	5.7	5.7	333	333	2.5	2.5
MW-17S	04/17/08	488	488	192	192	20.0	20.0	3.86	3.86	9.9	9.9	6.9	6.9	281	281	3.5	3.5
MW-17S	07/14/08	473	473	226	226	14.7	14.7	6.31	6.31	0.4	0.4	3.7	3.7	287	287	5.6	5.6
MW-17S	10/20/08	463	463	242	242	14.5	14.5	13.50	13.50	0.1 L	0.1	2.0	2.0	278	278	4.1	4.1
MW-17S	01/27/09	671	671	93	93	20.5	20.5	3.34	3.34	56.7	56.7	8.1	8.1	482	482	2.5	2.5
MW-17S	04/13/09	508	508	165	165	25.3	25.3	3.20	3.20	16.4	16.4	10.5	10.5	356	356	2.8	2.8
MW-17S	07/22/09	212	212	230	230	19.0	19.0	4.93	4.93	0.9	0.9	13.0	13.0	297	297	3.1	3.1
MW-17S	10/27/09	472	472	238	238	15.9	15.9	0.96	0.96	0.3	0.3	2.4	2.4	266	266	3.8	3.8
MW-17S	01/25/10	546	546	84	84	18.0	18.0	1.50	1.50	36.0	36.0	8.3	8.3	370	370	1.6	1.6
MW-17S	04/07/10	528	528	200	200	26.0	26.0	3.40	3.40	11.0	11.0	9.4	9.4	330	330	3.2	3.2
MW-17S	07/15/10	508	508	210	210	20.0	20.0	2.70	2.70	3.1	3.1	6.7	6.7	290	290	2	2.0
MW-17S	10/14/10	481	481	220	220	15.4	15.4	4.60	4.60	0.5 L	0.3	3.7	3.7	260	260	2.7	2.7
MW-17S	01/05/11	1329	1329	110	110	20.8	20.8	2.60	2.60	47.0	47.0	9.8	9.8	440	440	1.7	1.7
MW-17S	04/20/11	473	473	180	180	25.1	25.1	1.90	1.90	4.4	4.4	9.0	9.0	280	280	2.8	2.8
MW-17S	07/05/11	356	356	170	170	18.9	18.9	3.50	3.50	0.5 L	0.3	6.8	6.8	260	260	2.6	2.6
MW-17S	10/25/11	360	360	180	180	16.2	16.2	3.10	3.10	0.5 L	0.3	4.9	4.9	220	220	2.6	2.6
MW-17S	01/25/12	424	424	150	150	14.5	14.5	4.50	4.50	11.0	11.0	4.8	4.8	260	260	1.9	1.9
MW-17S	04/25/12	449	449	160	160	18.8	18.8	6.70	6.70	13.0	13.0	6.9	6.9	300	300	2.5	2.5
MW-17S	07/17/12	375	375	160	160	17.0	17.0	1.60	1.60	3.3	3.3	7.3	7.3	240	240	2	2.0
MW-17S	10/10/12	368	368	190	190	12.0	12.0	4.90	4.90	0.5 L	0.3	3.7	3.7	250	250	2.3	2.3
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20		20		15		20		20		20	
Minimum conc.			212		67		12		0.69		0.1		2.0		220		1.6
Maximum conc.			1329		242		26		13.50		56.7		13.0		482		5.6
Average conc.			494		173		18		3.89		12.3		6.7		304		2.8
Distribution			Neither		Normal		Lognormal		Lognormal		Neither		Lognormal		Lognormal		Lognormal
UCL 95			1329 (M)		193		20.0		5.63		56.7 (M)		8.5		329		3.2

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Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-18D																	
MW-18D	01/22/08	289	289	147	147	14.9	14.9	0.05 L	0.03	1.10	1.1	4.3	4.3	187	187	0.9	0.9
MW-18D	07/22/08	340	340	142	142	11.8	11.8	0.05 L	0.03	1.20	1.2	4.2	4.2	216	216	0.8	0.8
MW-18D	01/20/09	304	304	140	140	12.4	12.4	0.05 L	0.03	1.30	1.3	4.9	4.9	206	206	0.8	0.8
MW-18D	07/17/09	306	306	142	142	11.7	11.7	0.05 L	0.03	1.40	1.4	4.6	4.6	198	198	0.7	0.7
MW-18D	01/29/10	313	313	130	130	11.0	11.0	0.10 L	0.05	1.80	1.8	5.0 L	2.5	190	190	1.0 L	0.5
MW-18D	07/13/10	273	273	140	140	11.0	11.0	0.50 L	0.25	1.70	1.7	5.0	5.0	210	210	1.0 L	0.5
MW-18D	01/07/11	308	308	130	130	11.1	11.1	0.10 L	0.05	1.60	1.6	5.1	5.1	190	190	1.0 L	0.5
MW-18D	07/06/11	275	275	130	130	5.4	5.4	0.10 L	0.05	1.60	1.6	8.3	8.3	220	220	1.0 L	0.5
MW-18D	01/25/12	280	280	130	130	10	10.0	0.10 L	0.05	1.70	1.7	5	5.0	180	180	1.0 L	0.5
MW-18D	07/17/12	3	3	130	130	8.5	8.5	0.10 L	0.05	1.80	1.8	5.3	5.3	200	200	1.0 L	0.5
No. Analyzed		10		10		10		10		10		10		10		10	
No. Detect		10		10		10		0		10		9		10		4	
Minimum conc.			3		130		5.4		0.03		1.1		2.5		180		0.5
Maximum conc.			340		147		14.9		0.25		1.8		8.3		220		0.9
Average conc.			269		136		10.8		0.06		1.5		4.9		200		0.6
Distribution			Neither		Neither		Neither		NC		Lognormal		Neither		Lognormal		NC
UCL 95			340 (M)		147 (M)		14.9 (M)		NC		1.7		8.3 (M)		208		NC
MW-18S																	
MW-18S	01/22/08	401	401	125	125	14.8	14.8	0.05 L	0.03	20.70	20.7	10.8	10.8	276	276	2.3	2.3
MW-18S	07/21/08	351	351	143	143	13.3	13.3	0.05 L	0.03	1.10	1.1	6.0	6.0	232	232	2.1	2.1
MW-18S	01/22/09	364	364	134	134	13.0	13.0	0.05 L	0.03	8.70	8.7	15.5	15.5	248	248	2.3	2.3
MW-18S	07/17/09	326	326	138	138	15.6	15.6	0.05 L	0.03	1.10	1.1	9.1	9.1	219	219	1.8	1.8
MW-18S	01/29/10	404	404	150	150	14.0	14.0	0.10 L	0.05	8.10	8.1	13.0	13.0	240	240	1.4	1.4
MW-18S	07/13/10	310	310	140	140	15.0	15.0	0.05 L	0.03	1.70	1.7	8.6	8.6	230	230	1.5	1.5
MW-18S	01/07/11	409	409	140	140	13.4	13.4	0.10 L	0.05	9.50	9.5	10.1	10.1	240	240	1.5	1.5
MW-18S	07/06/11	312	312	150	150	20.0	20.0	0.10 L	0.05	0.50 L	0.3	5.1	5.1	240	240	2.4	2.4
MW-18S	01/25/12	369	369	120	120	14.9	14.9	0.10 L	0.05	11.00	11.0	6.2	6.2	240	240	1.3	1.3
MW-18S	07/18/12	306	306	130	130	13	13.0	0.10 L	0.05	2.60	2.6	7.3	7.3	220	220	1.3	1.3
No. Analyzed		10		10		10		10		10		10		10		10	
No. Detect		10		10		10		0		9		10		10		10	
Minimum conc.			306		120		13.0		0.03		0.3		5.1		219		1.3
Maximum conc.			409		150		20.0		0.05		20.7		15.5		276		2.4
Average conc.			355		137		14.7		0.04		6.5		9.2		239		1.8
Distribution			Lognormal		Lognormal		Neither		NC		Lognormal		Lognormal		Neither		Neither
UCL 95			381		143		20.0 (M)		NC		20.7 (M)		11.7		276 (M)		2.4 (M)
MW-20R																	
MW-20R	01/30/08	134	134	39	39	1.3	1.3	0.05 L	0.03	0.1 L	0.1	2.9	2.9	91	91	0.5	0.5
MW-20R	01/22/09	83	83	54	54	1.2	1.2	0.07	0.07	0.1 L	0.1	2.8	2.8	92	92	0.5 L	0.3
MW-20R	01/27/10	104	104	45	45	3.0 L	1.5	0.11	0.11	0.2 L	0.1	5.0 L	2.5	95	95	1.0 L	0.5
MW-20R	01/07/11	99	99	47	47	1.8	1.8	0.1 L	0.05	0.5 L	0.3	3.2	3.2	90	90	1.0 L	0.5
MW-20R	01/24/12	259	259	48	48	1.6	1.6	0.1 L	0.05	0.5 L	0.3	2.9	2.9	85	85	1.0 L	0.5
No. Analyzed		5		5		5		5		5		5		5		5	
No. Detect		5		5		4		2		0		4		5		1	
Minimum conc.			83		39		1.2		0.03		0.1		2.5		85		0.3
Maximum conc.			259		54		1.8		0.11		0.3		3.2		95		0.5
Average conc.			136		47		1.5		0.06		0.1		2.9		91		0.5
Distribution			Neither		Lognormal		Lognormal		NC		NC		Normal		Lognormal		NC
UCL 95			259 (M)		53		2.6		NC		NC		4.1		94		NC

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Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-23S																	
MW-23S	01/24/08	180	180	62	62	14.9	14.9	0.05 L	0.03	0.4	0.4	18.4	18.4	149	149	0.9	0.9
MW-23S	07/17/08	181	181	43	43	12.6	12.6	0.05 L	0.03	1.4	1.4	17.9	17.9	118	118	0.8	0.8
MW-23S	01/15/09	132	132	50	50	11.3	11.3	0.05 L	0.03	1.3	1.3	8.8	8.8	110	110	0.5 L	0.3
MW-23S	07/09/09	229	229	62	62	18.4	18.4	0.05 L	0.03	0.1	0.1	14.8	14.8			0.9	0.9
MW-23S	01/28/10	185	185	58	58	13.0	13.0	0.11	0.11	0.39	0.4	13.0	13.0	120	120	1.0 L	0.5
MW-23S	07/15/10	220	220	78	78	11.0	11.0	0.50 L	0.25	0.05 L	0.0	14.0	14.0	140	140	1.0 L	0.5
MW-23S	01/06/11	209	209	74	74	8.8	8.8	0.10 L	0.05	0.5 L	0.3	14.6	14.6	130	130	1.0 L	0.5
MW-23S	07/07/11	204	204	82	82	12.1	12.1	0.10 L	0.05	0.5 L	0.3	13.5	13.5	150	150	1.0 L	0.5
MW-23S	01/26/12	209	209	78	78	11.9	11.9	0.10 L	0.05	0.93	0.9	16.7	16.7	150	150	1.0 L	0.5
MW-23S	07/19/12	287	287	55	55	5.6	5.6	0.10 L	0.05	0.78	0.8	4.9	4.9	84	84	1.0 L	0.5
No. Analyzed		10		10		10		10		10		10		9		10	
No. Detect		10		10		10		1		7		10		9		3	
Minimum conc.			132		43		6		0		0.03		5		84		0
Maximum conc.			287		82		18		0		1.40		18		150		1
Average conc.			204		64		12		0		0.58		14		128		1
Distribution			Normal		Lognormal		Normal		NC		Lognormal		Neither		Normal		Neither
UCL 95			231		74		13.9		NC		1.4 (M)		18 (M)		142		1.0 (M)
MW-25S																	
MW-25S	01/22/08	256	256	124	124	12.2	12.2	0.05 L	0.03	1.3	1.3	5.6	5.6	176	176	1.0	1.0
MW-25S	07/21/08	295	295	135	135	10.0	10.0	0.05 L	0.03	1.2	1.2	6.0	6.0	188	188	1.0	1.0
MW-25S	01/21/09	193	193	87	87	6.9	6.9	0.05 L	0.03	3.1	3.1	7.1	7.1	159	159	6.9	6.9
MW-25S	07/17/09	278	278	126	126	11.0	11.0	0.05 L	0.03	1.2	1.2	6.1	6.1	163	163	0.6	0.6
MW-25S	01/26/10	269	269	120	120	11.0	11.0	0.10 L	0.05	1.5	1.5	6.1	6.1	170	170	1.0 L	0.5
MW-25S	07/15/10	296	296	120	120	10.0	10.0	0.05 L	0.03	1.5	1.5	5.9	5.9	180	180	1.0 L	0.5
MW-25S	01/06/11	301	301	120	120	9.8	9.8	0.10 L	0.05	1.7	1.7	7.4	7.4	170	170	1.0 L	0.5
MW-25S	07/06/11	196	196	88	88	7.4	7.4	0.10 L	0.05	1.5	1.5	6.1	6.1	160	160	1.0 L	0.5
MW-25S	01/25/12	74	74	120	120	8.2	8.2	0.10 L	0.05	1.8	1.8	6.4	6.4	170	170	1.0 L	0.5
MW-25S	07/17/12	252	252	120	120	8.8	8.8	0.10 L	0.05	1.7	1.7	6.4	6.4	180	180	1.0 L	0.5
No. Analyzed		10		10		10		10		10		10		10		10	
No. Detect		10		10		10		0		10		10		10		4	
Minimum conc.			74		87		7		0.03		1.2		5.6		159		0.5
Maximum conc.			301		135		12		0.05		3.1		7.4		188		6.9
Average conc.			241		116		10		0.04		1.7		6.3		172		1.3
Distribution			Neither		Neither		Lognormal		NC		Neither		Neither		Lognormal		Neither
UCL 95			301 (M)		135 (M)		10.7		NC		3.1 (M)		7.4 (M)		177		6.9 (M)
MW-26R																	
MW-26R	01/30/08	168	168	60	60	2.8	2.8	0.05 L	0.03	0.1 L	0.1	7.2	7.2	112	112	0.5	0.5
MW-26R	01/23/09	123	123	62	62	2.9	2.9	0.05 L	0.03	0.1 L	0.1	8.0	8.0	107	107	0.5 L	0.3
MW-26R	01/27/10	146	146	61	61	3.3	3.3	0.14	0.14	0.2 L	0.1	7.0	7.0	100	100	1.0 L	0.5
MW-26R	01/07/11	135	135	61	61	3.8	3.8	0.10 L	0.05	0.5 L	0.3	7.3	7.3	110	110	1.0 L	0.5
MW-26R	01/30/12	69	69	42	42	2.3	2.3	0.30	0.30	0.5 L	0.3	5 L	5.0	52	52	1	1.0
No. Analyzed		5		5		5		5		5		5		5		5	
No. Detect		5		5		5		2		0		4		5		2	
Minimum conc.			69		42		2.3		0		0		5.0		52		0.3
Maximum conc.			168		62		3.8		0		0		8.0		112		1.0
Average conc.			128		57		3.0		0		0		6.9		96		0.6
Distribution			Lognormal		Neither		Lognormal		NC		NC		Neither		Neither		NC
UCL 95			163		62 (M)		3.7		NC		NC		8 (M)		112 (M)		NC

Inorganics
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Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
MW-28S																	
MW-28S	01/24/08	258	258	70	70	20.5	20.5	0.05	0.05	4.2	4.2	28.2	28.2	188	188	1.2	1.2
MW-28S	04/17/08	152	152	68	68	5.4	5.4	0.05 L	0.03	1.0	1.0	10.9	10.9	127	127	0.9	0.9
MW-28S	01/15/09	155	155	72	72	9.4	9.4	0.05 L	0.03	0.8	0.8	9.4	9.4	134	134	0.8	0.8
MW-28S	04/16/09	140	140	142	142	4.0	4.0	0.05 L	0.03	1.2	1.2	7.0	7.0	123	123	0.9	0.9
MW-28S	07/09/09	278	278	82	82	10.5	10.5	0.05 L	0.03	3.5	3.5	9.8	9.8			0.9	0.9
MW-28S	01/28/10	205	205	69	69	9.1	9.1	0.11	0.11	1.3	1.3	15.0	15.0	130	130	1.0 L	0.5
MW-28S	04/08/10	156	156	68	68	3.6	3.6	0.10 L	0.05	0.1 L	0.1	6.2	6.2	110	110	1.0 L	0.5
MW-28S	07/15/10	150	150	80	80	4.2	4.2	0.05 L	0.03	0.5 L	0.3	5.0 L	2.5	110	110	1.0 L	0.5
MW-28S	01/06/11	194	194	74	74	6.3	6.3	0.10 L	0.05	0.6	0.6	8.4	8.4	120	120	1.0 L	0.5
MW-28S	04/21/11	161	161	65	65	7.6	7.6	0.10	0.10	1.0	1.0	3.8	3.8	110	110	1.0 L	0.5
MW-28S	07/07/11	212	212	64	64	16.6	16.6	0.10 L	0.05	4.0	4.0	9.2	9.2	160	160	1.0 L	0.5
MW-28S	01/26/12	233	233	14	14	15.4	15.4	0.10 L	0.05	3.0	3.0	17.2	17.2	160	160	1.0 L	0.5
MW-28S	04/26/12	116	116	57	57	3.6	3.6	0.10 L	0.05	0.5 L	0.3	5.6	5.6	90	90	1.0 L	0.5
MW-28S	07/19/12	127	127	55	55	5.6	5.6	0.10 L	0.05	0.8	0.8	4.9	4.9	84	84	1.0 L	0.5
No. Analyzed		14		14		14		14		14		14		13		14	
No. Detect		14		14		14		3		11		13		13		5	
Minimum conc.			116		14		3.6		0.03		0.1		3		84		0.5
Maximum conc.			278		142		20.5		0.11		4.2		28		188		1.2
Average conc.			181		70		8.7		0.05		1.6		10		127		0.7
Distribution			Lognormal		Neither		Lognormal		NC		Lognormal		Lognormal		Lognormal		Neither
UCL 95			209		142 (M)		12.5		NC		4.6		14.4		143		1.2 (M)

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Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
FMMW-1																	
FMMW-1	01/24/08	284	284	116	116	19.8	19.8	0.05	0.05	2.3	2.3	17.8	17.8	206	206	1.8	1.8
FMMW-1	04/15/08	288	288	106	106	15.7	15.7	0.05 L	0.03	2.5	2.5	18.7	18.7	184	184	1.8	1.8
FMMW-1	07/15/08	309	309	101	101	15.5	15.5	0.05 L	0.03	2.4	2.4	5.6	5.6	220	220	1.6	1.6
FMMW-1	10/21/08	299	299	115	115	19.3	19.3	0.05 L	0.03	0.9	0.9	17.9	17.9	204	204	1.5	1.5
FMMW-1	01/14/09	288	288	447	447	16.7	16.7	0.05 L	0.03	1.0	1.0	17.2	17.2	202	202	1.4	1.4
FMMW-1	04/14/09	256	256	95	95	14.2	14.2	0.08	0.08	2.1	2.1	17.2	17.2	192	192	1.2	1.2
FMMW-1	07/10/09	280	280	104	104	15.3	15.3	0.06	0.06	1.1	1.1	18.3	18.3	181	181	1.4	1.4
FMMW-1	10/27/09	286	286	109	109	17.0	17.0	0.05 L	0.03	0.8	0.8	17.7	17.7	188	188	1.6	1.6
FMMW-1	01/26/10	487	487	150	150	15.0	15.0	0.11	0.11	20.0	20.0	17.0	17.0	340	340	1.3	1.3
FMMW-1	04/07/10	242	242	94	94	12.0	12.0	0.10 L	0.05	2.0	2.0	17.0	17.0	160	160	1.7	1.7
FMMW-1	07/13/10	250	250	110	110	12.0	12.0	0.05 L	0.03	1.0	1.0	15.0	15.0	190	190	1.1	1.1
FMMW-1	10/13/10	275	275	110	110	13.6	13.6	0.21	0.21	0.8	0.8	15.7	15.7	180	180	1.0 L	0.5
FMW-01	01/05/11	554	554	110	110	13.9	13.9	0.10 L	0.05	1.7	1.7	15.8	15.8	180	180	1.2	1.2
FMW-01	04/19/11	282	282	100	100	19.1	19.1	0.13	0.13	3.4	3.4	17.9	17.9	180	180	1.2	1.2
FMW-01	07/05/11	302	302	120	120	20.2	20.2	0.10 L	0.05	2.1	2.1	12.8	12.8	210	210	1.4	1.4
FMW-01	10/25/11	305	305	120	120	21.2	21.2	0.10 L	0.05	1.5	1.5	16.3	16.3	190	190	1.2	1.2
FMW-01	01/27/12	342	342	120	120	19.4	19.4	0.10 L	0.05	1.4	1.4	15.8	15.8	190	190	1.0 L	0.5
FMW-01	04/25/12	259	259	95	95	15.8	15.8	0.10 L	0.05	2.5	2.5	15.6	15.6	180	180	1.5	1.5
FMW-01	07/18/12	259	259	98	98	13.0	13.0	0.10 L	0.05	1.6	1.6	15.0	15.0	180	180	1.0 L	0.5
FMW-01	10/10/12	244	244	89	89	13.0	13.0	0.10 L	0.05	1.2	1.2	15.0	15.0	180	180	1.1	1.1
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20		6		20		20		20		17	
Minimum conc.			242		89		12.0		0.03		0.8		5.6		160		0.5
Maximum conc.			554		447		21.2		0.21		20.0		18.7		340		1.8
Average conc.			305		125		16.1		0.06		2.6		16.0		197		1.3
Distribution			Neither		Neither		Lognormal		NC		Neither		Neither		Neither		Neither
UCL 95			554 (M)		447 (M)		17.3		NC		20.0 (M)		18.7 (M)		340 (M)		1.8 (M)

Inorganics
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Specific Conductance		Alkalinity		Chloride		Ammonia		Nitrate		Sulfate		TDS		TOC	
		Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.	Result	Conc.
FMMW-2																	
FMMW-2	01/24/08	421	421	110	110	17.7	17.7	0.34	0.34	28.0	28.0	8.7	8.7	379	379	2.5	2.5
FMMW-2	04/15/08	370	370	135	135	17.9	17.9	0.14	0.14	7.6	7.6	8.9	8.9	257	257	2.7	2.7
FMMW-2	07/15/08	410	410	169	169	15.5	15.5	0.25	0.25	1.1	1.1	19.3	19.3	274	274	2.9	2.9
FMMW-2	10/21/08	374	374	156	156	17.5	17.5	0.37	0.37	5.0	5.0	6.5	6.5	237	237	2.2	2.2
FMMW-2	01/19/09	460	460	125	125	14.5	14.5	0.05 L	0.03	20.7	20.7	18.1	18.1	229	229	1.8	1.8
FMMW-2	04/15/09	360	360	138	138	16.7	16.7	0.07	0.07	8.3	8.3	11.3	11.3	245	245	2.2	2.2
FMMW-2	07/13/09	389	389	170	170	18.7	18.7	0.20	0.20	1.3	1.3	7.1	7.1	252	252	3.1	3.1
FMMW-2	10/27/09	379	379	154	154	18.7	18.7	0.17	0.17	4.3	4.3	7.3	7.3	260	260	2.5	2.5
FMMW-2	01/26/10	263	263	100	100	13.0	13.0	0.10 L	0.05	1.8	1.8	16.0	16.0	170	170	1.1	1.1
FMMW-2	04/07/10	377	377	140	140	19.0	19.0	0.10 L	0.05	6.7	6.7	12.0	12.0	250	250	1.6	1.6
FMMW-2	07/13/10	344	344	160	160	16.0	16.0	0.05 L	0.03	2.6	2.6	10.0	10.0	270	270	1.8	1.8
FMMW-2	10/13/10	395	395	170	170	16.7	16.7	0.25	0.25	5.6	5.6	6.5	6.5	260	260	2	2.0
FMW-02	01/05/11	951	951	130	130	15.0	15.0	0.23	0.23	24.0	24.0	16.5	16.5	320	320	1.4	1.4
FMW-02	04/20/11	478	478	160	160	23.1	23.1	0.11	0.11	9.2	9.2	19.1	19.1	300	300	1.7	1.7
FMW-02	07/05/11	286	286	120	120	17.6	17.6	0.11	0.11	1.0	1.0	14.6	14.6	230	230	1.7	1.7
FMW-02	10/25/11	330	330	140	140	18.3	18.3	0.23	0.23	3.1	3.1	7.3	7.3	220	220	2.1	2.1
FMW-02	01/27/12	408	408	110	140	17.0	17.0	0.28	0.28	13.0	13.0	8.9	8.9	250	250	1.5	1.5
FMW-02	04/25/12	259	259	100	140	14.3	14.3	0.05 L	0.03	13.0	13.0	10.8	10.8	260	260	1.9	1.9
FMW-02	07/18/12	315	315	140	140	14.0	14.0	0.11	0.11	1.7	1.7	8.5	8.5	220	220	1.5	1.5
FMW-02	10/10/12	309	309	140	140	13.0	13.0	0.22	0.22	2.6	2.6	5.3	5.3	230	230	1.9	1.9
No. Analyzed		20		20		20		20		20		20		20		20	
No. Detect		20		20		20		15		20		20		20		20	
Minimum conc.			259		100		13.0		0.03		1.0		5.3		170		1.1
Maximum conc.			951		170		23.1		0.37		28.0		19.3		379		3.1
Average conc.			394		142		16.7		0.16		8.0		11.1		256		2.0
Distribution			Neither		Lognormal		Lognormal		Lognormal		Lognormal		Lognormal		Lognormal		Lognormal
UCL 95			951 (M)		150		17.7		NC		15.9		13.3		273		2.2

Notes:
(L) indicates below the given method reporting limit (MRL)
(ND) indicates not detected
(NC) indicates not calculated due to less than 50 percent detection frequency or historically no detections
Calculations use half the MRL for non-detected parameters

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-10D					
MW-10D	01/23/08	0.020 L	0.010	0.005 L	0.0025
MW-10D	04/14/08	0.020 L	0.010	0.005 L	0.0025
MW-10D	07/16/08	0.020 L	0.010	0.005 L	0.0025
MW-10D	10/22/08	0.020 L	0.010	0.005 L	0.0025
MW-10D	01/20/09	0.020 L	0.010	0.005 L	0.0025
MW-10D	04/21/09	0.020 L	0.010	0.005 L	0.0025
MW-10D	07/24/09	0.020 L	0.010	0.005 L	0.0025
MW-10D	10/30/09	0.020 L	0.010	0.005 L	0.0025
MW-10D	01/27/10	0.100 L	0.050	0.005 L	0.0025
MW-10D	04/07/10	0.100 L	0.050	0.001 L	0.0005
MW-10D	07/14/10	0.100 L	0.050	0.002 L	0.0010
MW-10D	10/14/10	0.200 L	0.100	0.001 L	0.0005
MW-10D	01/04/11	0.200 L	0.100	0.001 L	0.0005
MW-10D	04/20/11	0.200 L	0.100	0.001 L	0.0005
MW-10D	07/06/11	0.200 L	0.100	0.001 L	0.0005
MW-10D	10/25/11	0.200 L	0.100	0.001 L	0.0005
MW-10D	01/24/12	0.200 L	0.100	0.001 L	0.0005
MW-10D	04/24/12	0.200 L	0.100	0.001 L	0.0005
MW-10D	07/16/12	0.200 L	0.100	0.001 L	0.0005
MW-10D	10/11/12	0.200 L	0.100	0.002	0.0019
No. Analyzed		20		20	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			NC		NC
Distribution			NC		NC
UCL 95			NC		NC

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-10S					
MW-10S	01/23/08	0.020 L	0.010	0.005 L	0.0025
MW-10S	04/14/08	0.020 L	0.010	0.005 L	0.0025
MW-10S	07/16/08	0.020 L	0.010	0.005 L	0.0025
MW-10S	10/22/08	0.020 L	0.010	0.005 L	0.0025
MW-10S	01/20/09	0.020 L	0.010	0.005 L	0.0025
MW-10S	04/22/09	0.020 L	0.010	0.005 L	0.0025
MW-10S	07/24/09	0.020 L	0.010	0.005 L	0.0025
MW-10S	10/30/09	0.020 L	0.010	0.005 L	0.0025
MW-10S	01/27/10	0.100 L	0.050	0.005 L	0.0025
MW-10S	04/07/10	0.100 L	0.050	0.001 L	0.0005
MW-10S	07/14/10	0.100 L	0.050	0.002 L	0.0010
MW-10S	10/14/10	0.200 L	0.100	0.001 L	0.0005
MW-10S	01/04/11	0.200 L	0.100	0.001 L	0.0005
MW-10S	04/20/11	0.200 L	0.100	0.001 L	0.0005
MW-10S	07/06/11	0.200 L	0.100	0.001 L	0.0005
MW-10S	10/25/11	0.200 L	0.100	0.001 L	0.0005
MW-10S	01/24/12	0.200 L	0.100	0.006	0.0063
MW-10S	04/24/12	0.200 L	0.100	0.001 L	0.0005
MW-10S	07/16/12	0.200 L	0.100	0.001 L	0.0005
MW-10S	10/11/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		20		20	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			NC		NC
Distribution			NC		NC
UCL 95			NC		NC

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-11D(2)					
MW-11D(2)	01/22/08	0.020 L	0.010	0.005 L	0.0025
MW-11D(2)	04/16/08	0.020 L	0.010	0.019	0.0187
MW-11D(2)	07/21/08	0.020 L	0.010	0.005 L	0.0025
MW-11D(2)	10/21/08	0.020 L	0.010	0.005 L	0.0025
MW-11D(2)	01/19/09	0.020 L	0.010	0.005 L	0.0025
MW-11D(2)	04/14/09	0.020 L	0.010	0.005 L	0.0025
MW-11D(2)	07/10/09	0.020 L	0.010	0.005 L	0.0025
MW-11D(2)	10/28/09	0.020 L	0.010	0.005 L	0.0025
MW-11D(2)	01/28/10	0.100 L	0.050	0.005 L	0.0025
MW-11D(2)	04/08/10	0.100 L	0.050	0.001 L	0.0005
MW-11D(2)	07/15/10	0.100 L	0.050	0.001 L	0.0005
MW-11D(2)	10/13/10	0.200 L	0.100	0.001 L	0.0005
MW-11D(2)	01/05/11	0.200 L	0.100	0.001 L	0.0005
MW-11D(2)	04/19/11	0.200 L	0.100	0.001 L	0.0005
MW-11D(2)	07/05/11	0.200 L	0.100	0.001 L	0.0005
MW-11D(2)	10/26/11	0.200 L	0.100	0.001 L	0.0005
MW-11D(2)	01/25/12	0.200 L	0.100	0.001 L	0.0005
MW-11D(2)	04/25/12	0.200 L	0.100	0.001 L	0.0005
MW-11D(2)	07/17/12	0.200 L	0.100	0.001 L	0.0005
MW-11D(2)	10/10/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		20		20	
No. Detect		0		1	
Minimum conc.			0.010		0.001
Maximum conc.			0.100		0.019
Average conc.			0.051		0.002
Distribution			NC		NC
UCL 95			NC		NC

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-11S					
MW-11S	01/22/08	0.020 L	0.010	0.005 L	0.0025
MW-11S	04/16/08	0.020 L	0.010	0.012	0.0120
MW-11S	07/21/08	0.020 L	0.010	0.005 L	0.0025
MW-11S	10/21/08	0.741	0.741	0.037	0.0367
MW-11S	01/19/09	0.020 L	0.010	0.005 L	0.0025
MW-11S	04/15/09	0.020 L	0.010	0.005 L	0.0025
MW-11S	07/10/09	0.020 L	0.010	0.005 L	0.0025
MW-11S	10/28/09	0.020 L	0.010	0.005 L	0.0025
MW-11S	01/28/10	0.100 L	0.050	0.005 L	0.0025
MW-11S	04/08/10	0.100 L	0.050	0.001	0.0010
MW-11S	07/15/10	0.100 L	0.050	0.002	0.0020
MW-11S	10/13/10	0.460	0.460	0.001 L	0.0005
MW-11S	01/05/11	0.200 L	0.100	0.001 L	0.0005
MW-11S	04/19/11	0.200 L	0.100	0.007	0.0066
MW-11S	07/05/11	0.200 L	0.100	0.038	0.0380
MW-11S	10/25/11	0.200 L	0.100	0.038	0.0380
MW-11S	01/25/12	0.200 L	0.100	0.001 L	0.0005
MW-11S	04/25/12	0.200 L	0.100	0.001	0.0014
MW-11S	07/17/12	0.200 L	0.100	0.012	0.0120
MW-11S	10/10/12	0.200 L	0.100	0.016	0.0160
No. Analyzed		20		20	
No. Detect		2		7	
Minimum conc.			0.010		0.001
Maximum conc.			0.741		0.038
Average conc.			0.094		0.009
Distribution			NC		NC
UCL 95			NC		NC
MW-12D					
MW-12D	01/30/08	0.020 L	0.010	0.085	0.0850
MW-12D	07/22/08	0.020 L	0.010	0.005 L	0.0025
MW-12D	01/21/09	0.020 L	0.010	0.021	0.0208
MW-12D	07/14/09	0.020 L	0.010	0.005 L	0.0025
MW-12D	01/29/10	0.100 L	0.050	0.005 L	0.0025
MW-12D	07/14/10	0.100 L	0.050	0.002 L	0.0010
MW-12D	01/04/11	0.200 L	0.100	0.001 L	0.0005
MW-12D	07/08/11	0.200 L	0.100	0.001 L	0.0005
MW-12D	01/30/12	0.200 L	0.100	0.001 L	0.0005
MW-12D	07/16/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		10		10	
No. Detect		0		2	
Minimum conc.			ALL ND		0.0005
Maximum conc.			ALL ND		0.2660
Average conc.			NC		0.0321
Distribution			NC		NC
UCL 95			NC		NC

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-12S					
MW-12S	01/30/08	0.020 L	0.010	0.395	0.3950
MW-12S	07/22/08	0.020 L	0.010	0.678	0.6780
MW-12S	01/21/09	0.020 L	0.010	0.023	0.0226
MW-12S	01/29/10	0.100 L	0.050	0.031	0.0310
MW-12S	07/14/10	0.100 L	0.050	0.032	0.0320
MW-12S	01/04/11	0.200 L	0.100	0.200	0.2000
MW-12S	07/08/11	0.200 L	0.100	0.490	0.4900
MW-12S	01/30/12	0.200 L	0.100	0.440	0.4400
MW-12S	07/16/12	0.200 L	0.100	0.400	0.4000
No. Analyzed		9		9	
No. Detect		0		7	
Minimum conc.			0.0100		0.0226
Maximum conc.			0.1000		0.6780
Average conc.			0.059		0.299
Distribution			NC		Normal
UCL 95			NC		0.45
MW-13D					
MW-13D	01/24/08	0.020 L	0.010	0.005 L	0.0025
MW-13D	04/18/08	0.020 L	0.010	0.050	0.0504
MW-13D	07/21/08	0.020 L	0.010	0.362	0.3620
MW-13D	10/22/08	0.020 L	0.010	0.436	0.4360
MW-13D	01/22/09	0.020 L	0.010	0.005 L	0.0025
MW-13D	04/23/09	0.020 L	0.010	0.005 L	0.0025
MW-13D	07/08/09	0.020 L	0.010	0.653	0.6530
MW-13D	10/26/09	0.020 L	0.010	0.083	0.0830
MW-13D	01/29/10	0.100 L	0.050	0.005 L	0.0025
MW-13D	04/08/10	0.100 L	0.050	0.001 L	0.0005
MW-13D	07/14/10	0.100 L	0.050	0.002 L	0.0010
MW-13D	10/14/10	0.200 L	0.100	0.072	0.0720
MW-13D	01/04/11	0.200 L	0.100	0.001 L	0.0005
MW-13D	04/19/11	0.200 L	0.100	0.001 L	0.0005
MW-13D	07/06/11	0.200 L	0.100	0.001 L	0.0005
MW-13D	10/25/11	0.200 L	0.100	0.240	0.2400
MW-13D	01/30/12	0.200 L	0.100	0.001 L	0.0005
MW-13D	04/25/12	0.200 L	0.100	0.002	0.0019
MW-13D	07/16/12	0.380	0.380	0.001 L	0.0005
MW-13D	10/10/12	0.200 L	0.100	0.180	0.1800
No. Analyzed		20		20	
No. Detect		-2		7	
Minimum conc.			0.010		0.0005
Maximum conc.			0.380		0.6530
Average conc.			0.071		0.1046
Distribution			NC		Neither
UCL 95			NC		0.6530 (M)

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-13S					
MW-13S	01/24/08	0.020 L	0.010	0.005 L	0.0025
MW-13S	04/17/08	0.020 L	0.010	0.005 L	0.0025
MW-13S	07/21/08	0.020 L	0.010	0.269	0.2690
MW-13S	10/22/08	0.090	0.090	0.495	0.4950
MW-13S	01/22/09	0.020 L	0.010	0.005 L	0.0025
MW-13S	04/23/09	0.020 L	0.010	0.005 L	0.0025
MW-13S	07/08/09	0.020 L	0.010	0.142	0.1420
MW-13S	10/26/09	0.021	0.021	0.164	0.1640
MW-13S	01/28/10	0.100 L	0.050	0.005 L	0.0025
MW-13S	04/08/10	0.100 L	0.050	0.001 L	0.0005
MW-13S	07/14/10	0.100 L	0.050	0.036	0.0360
MW-13S	10/14/10	0.200 L	0.100	0.160	0.1600
MW-13S	01/05/11	0.200 L	0.100	0.003	0.0032
MW-13S	04/19/11	0.200 L	0.100	0.003	0.0033
MW-13S	07/05/11	0.200 L	0.100	0.047	0.0470
MW-13S	10/25/11	0.200 L	0.100	0.330	0.3300
MW-13S	01/27/12	0.200 L	0.100	0.002	0.0020
MW-13S	04/24/12	0.200 L	0.100	0.001 L	0.0005
MW-13S	07/17/12	0.200 L	0.100	0.020	0.0200
MW-13S	10/10/12	0.200 L	0.100	0.047	0.0470
No. Analyzed		20		20	
No. Detect		2		10	
Minimum conc.			0.010		0.001
Maximum conc.			0.100		0.495
Average conc.			0.061		0.087
Distribution			NC		Neither
UCL 95			NC		0.495 (M)

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-14D					
MW-14D	01/25/08	0.104	0.104	0.602	0.6020
MW-14D	04/16/08	0.974	0.974	0.670	0.6700
MW-14D	07/14/08	1.950	1.950	0.855	0.8550
MW-14D	10/20/08	3.980	3.980	1.340	1.3400
MW-14D	01/14/09	0.243	0.243	0.614	0.6140
MW-14D	04/22/09	1.610	1.610	0.785	0.7850
MW-14D	07/13/09	1.690	1.690	0.798	0.7980
MW-14D	10/23/09	3.520	3.520	1.110	1.1100
MW-14D	01/27/10	1.600	1.600	0.730	0.7300
MW-14D	04/08/10	1.900	1.900	0.680	0.6800
MW-14D	07/14/10	1.900	1.900	0.740	0.7400
MW-14D	10/14/10	3.400	3.400	0.880	0.8800
MW-14D	01/04/11	2.100	2.100	0.760	0.7600
MW-14D	04/21/11	0.200 L	0.100	0.510	0.5100
MW-14D	07/08/11	0.280	0.280	0.560	0.5600
MW-14D	10/26/11	1.500	1.500	0.840	0.8400
MW-14D	01/24/12	2.500	2.500	0.920	0.9200
MW-14D	04/24/12	2.000	2.000	0.770	0.7700
MW-14D	07/16/12	2.200	2.200	0.740	0.7400
MW-14D	10/11/12	2.800	2.800	0.920	0.9200
No. Analyzed		20		20	
No. Detect		16		17	
Minimum conc.			0.100		0.510
Maximum conc.			3.980		1.340
Average conc.			1.818		0.791
Distribution			Neither		Lognormal
UCL 95			3.980 (M)		0.9

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-14S					
MW-14S	01/25/08	0.020 L	0.010	0.005 L	0.0025
MW-14S	04/16/08	0.020 L	0.010	0.140	0.1400
MW-14S	07/14/08	0.020 L	0.010	0.605	0.6050
MW-14S	10/20/08	0.031	0.031	1.180	1.1800
MW-14S	01/14/09	0.020 L	0.010	0.005 L	0.0025
MW-14S	04/22/09	0.020 L	0.010	0.124	0.1240
MW-14S	07/13/09	0.020 L	0.010	0.340	0.3400
MW-14S	10/23/09	0.020 L	0.010	0.511	0.5110
MW-14S	01/27/10	0.100 L	0.050	0.056	0.0560
MW-14S	04/08/10	0.100 L	0.050	0.110	0.1100
MW-14S	07/14/10	0.100 L	0.050	0.008	0.0080
MW-14S	10/14/10	0.200 L	0.100	0.460	0.4600
MW-14S	01/04/11	0.200 L	0.100	0.012	0.0120
MW-14S	04/21/11	0.200 L	0.100	0.056	0.0560
MW-14S	07/08/11	0.200 L	0.100	0.220	0.2200
MW-14S	10/26/11	0.200 L	0.100	0.390	0.3900
MW-14S	01/24/12	0.200 L	0.100	0.003	0.0025
MW-14S	04/24/12	0.200 L	0.100	0.150	0.1500
MW-14S	07/16/12	0.200 L	0.100	0.004	0.0040
MW-14S	10/11/12	0.200 L	0.100	0.270	0.2700
No. Analyzed		20		20	
No. Detect		1		18	
Minimum conc.			0.010		0.003
Maximum conc.			0.100		1.180
Average conc.			0.058		0.232
Distribution			NC		Neither
UCL 95			NC		1.180 (M)
MW-14R					
MW-14R	01/30/08	0.020 L	0.010	0.010	0.0101
MW-14R	01/15/09	0.028	0.028	0.030	0.0301
MW-14R	01/26/10	0.100 L	0.050	0.190	0.1900
MW-14R	01/05/11	0.200 L	0.100	0.130	0.1300
MW-14R	01/27/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		5		5	
No. Detect		1		4	
Minimum conc.			0.010		0.001
Maximum conc.			0.100		0.190
Average conc.			0.058		0.072
Distribution			NC		Normal
UCL 95			NC		0.1265

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-15D					
MW-15D	01/21/08	0.020 L	0.010	0.428	0.4280
MW-15D	07/16/08	0.020 L	0.010	0.379	0.3790
MW-15D	01/13/09	0.150	0.150	0.298	0.2980
MW-15D	07/22/09	0.020 L	0.010	0.374	0.3740
MW-15D	01/26/10	0.100 L	0.050	0.360	0.3600
MW-15D	07/15/10	0.100 L	0.050	0.400	0.4000
MW-15D	01/05/11	0.200 L	0.100	0.340	0.3400
MW-15D	07/06/11	0.200 L	0.100	0.430	0.4300
MW-15D	01/26/12	0.200 L	0.100	0.079	0.0790
No. Analyzed		9		9	
No. Detect		1		8	
Minimum conc.			0.010		0.079
Maximum conc.			0.150		0.430
Average conc.			0.064		0.343
Distribution			NC		Neither
UCL 95			NC		0.430 (M)
MW-15S					
MW-15S	01/21/08	0.020 L	0.010	0.743	0.7430
MW-15S	07/14/08	0.020 L	0.010	0.517	0.5170
MW-15S	01/13/09	0.020 L	0.010	0.717	0.7170
MW-15S	07/24/09	0.020 L	0.010	0.472	0.4720
MW-15S	01/26/10	0.100 L	0.050	0.830	0.8300
MW-15S	07/15/10	0.200	0.200	0.700	0.7000
MW-15S	01/05/11	0.200 L	0.100	0.840	0.8400
MW-15S	07/06/11	0.200 L	0.100	0.380	0.3800
MW-15S	01/25/12	0.200 L	0.100	0.910	0.9100
MW-15S	07/17/12	0.200 L	0.100	0.630	0.6300
No. Analyzed		10		10	
No. Detect		1		8	
Minimum conc.			0.010		0.380
Maximum conc.			0.200		0.910
Average conc.			0.069		0.674
Distribution			NC		Lognormal
UCL 95			NC		0.8153

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-17S					
MW-17S	01/21/08	0.020 L	0.010	0.230	0.2300
MW-17S	04/17/08	0.020 L	0.010	1.060	1.0600
MW-17S	07/14/08	0.021	0.021	0.797	0.7970
MW-17S	10/20/08	0.020 L	0.010	1.150	1.1500
MW-17S	01/27/09	0.020 L	0.010	1.140	1.1400
MW-17S	04/13/09	0.020 L	0.010	1.110	1.1100
MW-17S	07/22/09	0.020 L	0.010	0.950	0.9500
MW-17S	10/27/09	0.020 L	0.010	0.926	0.9260
MW-17S	01/25/10	0.100 L	0.050	0.500	0.5000
MW-17S	04/07/10	0.100 L	0.050	1.200	1.2000
MW-17S	07/15/10	0.100 L	0.050	0.970	0.9700
MW-17S	10/14/10	0.200 L	0.100	1.100	1.1000
MW-17S	01/05/11	0.200 L	0.100	1.200	1.2000
MW-17S	04/20/11	0.200 L	0.100	1.300	1.3000
MW-17S	07/05/11	0.200 L	0.100	0.940	0.9400
MW-17S	10/25/11	0.200 L	0.100	0.740	0.7400
MW-17S	01/25/12	0.200 L	0.100	0.920	0.9200
MW-17S	04/25/12	0.200 L	0.100	1.400	1.4000
MW-17S	07/17/12	0.200 L	0.100	0.760	0.7600
No. Analyzed		19		19	
No. Detect		1		16	
Minimum conc.			0.010		0.230
Maximum conc.			0.100		1.400
Average conc.			0.055		0.968
Distribution			NC		Normal
UCL 95			NC		1.0793

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-18D					
MW-18D	01/22/08	0.020 L	0.010	0.005 L	0.0025
MW-18D	07/22/08	0.028	0.028	0.005 L	0.0025
MW-18D	01/20/09	0.020 L	0.010	0.005 L	0.0025
MW-18D	07/17/09	0.020 L	0.010	0.005 L	0.0025
MW-18D	01/29/10	0.100 L	0.050	0.005 L	0.0025
MW-18D	07/13/10	0.100 L	0.050	0.002 L	0.0010
MW-18D	01/07/11	0.200 L	0.100	0.001 L	0.0005
MW-18D	07/06/11	0.200 L	0.100	0.001	0.0013
MW-18D	01/25/12	0.200 L	0.100	0.001 L	0.0005
MW-18D	07/17/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		10		10	
No. Detect		1		1	
Minimum conc.			0.0100		0.0005
Maximum conc.			0.1000		0.0025
Average conc.			0.0558		0.0016
Distribution			NC		NC
UCL 95			NC		NC
MW-18S					
MW-18S	01/22/08	0.031	0.031	0.005 L	0.0025
MW-18S	07/21/08	0.020 L	0.010	0.005 L	0.0025
MW-18S	01/22/09	0.020 L	0.010	0.005 L	0.0025
MW-18S	07/17/09	0.020 L	0.010	0.005 L	0.0025
MW-18S	01/29/10	0.100 L	0.050	0.005 L	0.0025
MW-18S	07/13/10	0.100 L	0.050	0.002 L	0.0010
MW-18S	01/07/11	0.200 L	0.100	0.001 L	0.0005
MW-18S	07/06/11	0.200 L	0.100	0.001 L	0.0005
MW-18S	01/25/12	0.200 L	0.100	0.001 L	0.0005
MW-18S	07/18/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		10		10	
No. Detect		1		0	
Minimum conc.			0.0100		0.0005
Maximum conc.			0.1000		0.0025
Average conc.			0.0561		0.0016
Distribution			NC		NC
UCL 95			NC		NC

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-20R					
MW-20R	01/30/08	0.020 L	0.010	0.005 L	0.0025
MW-20R	01/22/09	0.042	0.042	0.096	0.0957
MW-20R	01/27/10	0.100 L	0.050	0.005 L	0.0025
MW-20R	01/07/11	0.200 L	0.100	0.001 L	0.0005
MW-20R	01/24/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		5		5	
No. Detect		1		1	
Minimum conc.			0.010		0.001
Maximum conc.			0.100		0.096
Average conc.			0.060		0.020
Distribution			NC		NC
UCL 95			NC		NC
MW-23S					
MW-23S	01/24/08	0.282	0.282	0.049	0.0493
MW-23S	07/17/08	0.209	0.209	0.113	0.1130
MW-23S	01/15/09	0.052	0.052	0.011	0.0106
MW-23S	07/09/09	0.107	0.107	0.058	0.0580
MW-23S	01/28/10	0.103	0.103	0.043	0.0430
MW-23S	07/15/10	0.100 L	0.050	0.041	0.0410
MW-23S	01/06/11	0.200 L	0.100	0.010	0.0100
MW-23S	07/07/11	0.200 L	0.100	0.068	0.0680
MW-23S	01/26/12	0.200 L	0.100	0.023	0.0230
MW-23S	07/19/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		10		10	
No. Detect		5		8	
Minimum conc.			0.050		0.001
Maximum conc.			0.282		0.113
Average conc.			0.120		0.042
Distribution			Neither		Normal
UCL 95			0.282 (M)		0.0564

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-25S					
MW-25S	01/22/08	0.020 L	0.010	0.005 L	0.0025
MW-25S	07/21/08	0.020 L	0.010	0.005 L	0.0025
MW-25S	01/21/09	0.039	0.039	0.005 L	0.0025
MW-25S	07/17/09	0.045	0.045	0.005	0.0051
MW-25S	01/26/10	0.100 L	0.050	0.005 L	0.0025
MW-25S	07/15/10	0.100 L	0.050	0.002 L	0.0010
MW-25S	01/06/11	0.200 L	0.100	0.001 L	0.0005
MW-25S	07/06/11	0.200 L	0.100	0.002	0.0020
MW-25S	01/25/12	0.200 L	0.100	0.001 L	0.0005
MW-25S	07/17/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		10		10	
No. Detect		2		2	
Minimum conc.			0.010		0.001
Maximum conc.			0.100		0.005
Average conc.			0.060		0.002
Distribution			NC		NC
UCL 95			NC		NC
MW-26R					
MW-26R	01/30/08	0.500	0.500	0.292	0.2920
MW-26R	01/23/09	0.441	0.441	0.272	0.2720
MW-26R	01/27/10	0.480	0.480	0.260	0.2600
MW-26R	01/07/11	0.630	0.630	0.280	0.2800
MW-26R	01/30/12	0.750	0.750	0.260	0.2600
No. Analyzed		5		5	
No. Detect		4		4	
Minimum conc.			0.441		0.260
Maximum conc.			0.750		0.292
Average conc.			0.560		0.273
Distribution			Lognormal		Lognormal
UCL 95			0.718		0.286

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
MW-28S					
MW-28S	01/18/07	0.020 L	0.010	0.005 L	0.0025
MW-28S	04/26/07	0.020 L	0.010	0.005 L	0.0025
MW-28S	01/24/08	0.942	0.942	0.028	0.0275
MW-28S	04/17/08	0.592	0.592	0.020	0.0201
MW-28S	01/15/09	0.600	0.600	0.022	0.0215
MW-28S	04/16/09	4.290	4.290	0.115	0.1150
MW-28S	07/09/09	0.020 L	0.010	0.005 L	0.0025
MW-28S	01/28/10	0.100 L	0.050	0.005 L	0.0025
MW-28S	04/08/10	0.100 L	0.050	0.001 L	0.0005
MW-28S	07/15/10	0.100 L	0.050	0.001 L	0.0005
MW-28S	01/06/11	0.200 L	0.100	0.010	0.0096
MW-28S	04/21/11	0.200 L	0.100	0.001 L	0.0005
MW-28S	07/07/11	0.200 L	0.100	0.001 L	0.0005
MW-28S	01/26/12	0.200 L	0.100	0.001 L	0.0005
MW-28S	04/26/12	0.490	0.490	0.001 L	0.0005
MW-28S	07/19/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		14		14	
No. Detect		4		5	
Minimum conc.			0.010		0.001
Maximum conc.			4.290		0.115
Average conc.			0.541		0.014
Distribution			NC		NC
UCL 95			NC		NC

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
FMMW-1					
FMMW-1	01/24/08	3.180	3.180	0.143	0.1430
FMMW-1	04/15/08	0.020 L	0.010	0.005 L	0.0025
FMMW-1	07/15/08	0.021	0.021	0.005 L	0.0025
FMMW-1	10/21/08	0.174	0.174	0.010	0.0102
FMMW-1	01/14/09	0.068	0.068	0.005 L	0.0025
FMMW-1	04/14/09	0.022	0.022	0.005 L	0.0025
FMMW-1	07/10/09	0.620	0.620	0.030	0.0300
FMMW-1	10/27/09	0.620	0.620	0.005 L	0.0025
FMMW-1	01/26/10	0.100 L	0.050	0.081	0.0810
FMMW-1	04/07/10	0.100 L	0.050	0.001 L	0.0005
FMMW-1	07/13/10	0.100 L	0.050	0.002 L	0.0010
FMMW-1	10/13/10	0.200 L	0.100	0.001 L	0.0005
FMMW-1	01/05/11	0.200 L	0.100	0.001 L	0.0005
FMMW-1	04/19/11	0.200 L	0.100	0.001 L	0.0005
FMMW-1	07/05/11	0.200 L	0.100	0.003	0.0029
FMMW-1	10/25/11	0.200 L	0.100	0.001 L	0.0005
FMW-01	01/27/12	0.200 L	0.100	0.001 L	0.0005
FMW-01	04/25/12	0.200 L	0.100	0.001 L	0.0005
FMW-01	07/18/12	0.200 L	0.100	0.001 L	0.0005
FMW-01	10/10/12	0.200 L	0.100	0.001 L	0.0005
No. Analyzed		20		20	
No. Detect		7		5	
Minimum conc.			0.010		0.001
Maximum conc.			3.180		0.143
Average conc.			0.288		0.014
Distribution			NC		NC
UCL 95			NC		NC

Dissolved Metals
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	Iron		Manganese	
		Result	Conc.	Result	Conc.
FMMW-2					
FMMW-2	01/24/08	16.900	16.900	0.986	0.9860
FMMW-2	04/15/08	0.020 L	0.010	0.091	0.0914
FMMW-2	07/15/08	0.020 L	0.010	0.130	0.1300
FMMW-2	10/21/08	0.025	0.025	0.137	0.1370
FMMW-2	01/19/09	0.021	0.021	0.064	0.0635
FMMW-2	04/15/09	0.037	0.037	0.075	0.0754
FMMW-2	07/13/09	0.024	0.024	0.095	0.0948
FMMW-2	10/27/09	0.024	0.024	0.103	0.1030
FMMW-2	01/26/10	0.100 L	0.050	0.005 L	0.0025
FMMW-2	04/07/10	0.100 L	0.050	0.750	0.7500
FMMW-2	07/13/10	0.100 L	0.050	0.091	0.0910
FMMW-2	10/13/10	0.200 L	0.100	0.120	0.1200
FMMW-2	01/05/11	0.430	0.430	0.120	0.1200
FMMW-2	04/20/11	0.200 L	0.100	0.084	0.0840
FMMW-2	07/05/11	0.200 L	0.100	0.091	0.0910
FMMW-2	10/25/11	0.200 L	0.100	0.090	0.0900
FMW-02	01/27/12	0.200 L	0.100	0.110	0.1100
FMW-02	04/25/12	0.200 L	0.100	0.100	0.1000
FMW-02	07/18/12	0.200 L	0.100	0.096	0.0960
FMW-02	10/10/12	0.200 L	0.100	0.093	0.0930
No. Analyzed		20		20	
No. Detect		7		17	
Minimum conc.			0.010		0.003
Maximum conc.			16.900		0.986
Average conc.			0.922		0.171
Distribution			NC		Neither
UCL 95			NC		0.986 (M)

Notes:
(L) indicates below the given method reporting limit (MRL)
(ND) indicates not detected
(NC) indicates not calculated due to less than 50 percent detection frequency or historically no detections
Calculations use half the MRL for non-detected parameters

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene	
		Result	Conc.	Result	Conc.
MW-11S					
MW-11S	01/22/08	0.5 L	0.25	0.5 L	0.25
MW-11S	04/16/08	0.5 L	0.25	0.5 L	0.25
MW-11S	07/21/08	0.5 L	0.25	0.5 L	0.25
MW-11S	10/21/08	0.5 L	0.25	0.5 L	0.25
MW-11S	01/19/09	0.5 L	0.25	0.5 L	0.25
MW-11S	04/15/09	0.5 L	0.25	0.5 L	0.25
MW-11S	07/10/09	0.5 L	0.25	0.5 L	0.25
MW-11S	10/28/09	0.5 L	0.25	0.5 L	0.25
MW-11S	01/28/10	0.5 L	0.25	0.5 L	0.25
MW-11S	04/08/10	0.5 L	0.25	0.5 L	0.25
MW-11S	07/15/10	0.5 L	0.25	0.5 L	0.25
MW-11S	10/13/10	0.5 L	0.25	0.5 L	0.25
MW-11S	01/05/11	0.5 L	0.25	0.5 L	0.25
MW-11S	04/19/11	0.5 L	0.25	0.5 L	0.25
MW-11S	07/05/11	0.5 L	0.25	0.5 L	0.25
MW-11S	10/25/11	0.5 L	0.25	0.5 L	0.25
MW-11S	01/25/12	0.5 L	0.25	0.5 L	0.25
MW-11S	04/25/12	0.5 L	0.25	0.5 L	0.25
MW-11S	07/17/12	0.5 L	0.25	0.5 L	0.25
MW-11S	10/10/12	0.5 L	0.25	0.5 L	0.25
No. Analyzed		20		20	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			ALL ND		ALL ND
Distribution			NC		NC
UCL 95			NC		NC

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene	
		Result	Conc.	Result	Conc.
MW-12S					
MW-12S	01/30/08	0.6	0.62	0.5 L	0.25
MW-12S	07/22/08	0.8	0.83	0.5 L	0.25
MW-12S	01/21/09	0.5 L	0.25	0.5 L	0.25
MW-12S	01/29/10	0.5 L	0.25	0.5 L	0.25
MW-12S	07/14/10	0.9	0.90	0.5 L	0.25
MW-12S	01/04/11	0.5 L	0.25	0.5 L	0.25
MW-12S	07/08/11	1.2	1.20	0.5 L	0.25
MW-12S	01/30/12	0.5 L	0.25	0.5 L	0.25
MW-12S	07/16/12	0.6	0.63	0.5 L	0.25
No. Analyzed		9		11	
No. Detect		4		0	
Minimum conc.			0.25		ALL ND
Maximum conc.			1.20		ALL ND
Average conc.			0.58		ALL ND
Distribution			Normal		NC
UCL 95			NC		NC
MW-12D					
MW-12D	01/30/08	0.5 L	0.25	0.5 L	0.25
MW-12D	07/22/08	0.5 L	0.25	0.5 L	0.25
MW-12D	01/21/09	0.5 L	0.25	0.5 L	0.25
MW-12D	07/14/09	0.5 L	0.25	0.5 L	0.25
MW-12D	01/29/10	0.5 L	0.25	0.5 L	0.25
MW-12D	07/14/10	0.5 L	0.25	0.5 L	0.25
MW-12D	01/04/11	0.5 L	0.25	0.5 L	0.25
MW-12D	07/08/11	0.5 L	0.25	0.5 L	0.25
MW-12D	01/30/12	0.5 L	0.25	0.5 L	0.25
MW-12D	07/16/12	0.5 L	0.25	0.5 L	0.25
No. Analyzed		10		10	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			ALL ND		ALL ND
Distribution			NC		NC
UCL 95			NC		NC

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene	
		Result	Conc.	Result	Conc.
MW-13D					
MW-13D	01/24/08	0.5 L	0.25	0.5 L	0.25
MW-13D	04/18/08	0.5 L	0.25	0.5 L	0.25
MW-13D	07/21/08	0.5 L	0.25	0.5 L	0.25
MW-13D	10/22/08	0.5 L	0.25	0.5 L	0.25
MW-13D	01/22/09	0.5 L	0.25	0.5 L	0.25
MW-13D	04/23/09	0.5 L	0.25	0.5 L	0.25
MW-13D	07/08/09	0.5 L	0.25	0.5 L	0.25
MW-13D	10/26/09	0.5 L	0.25	0.5 L	0.25
MW-13D	01/29/10	0.5 L	0.25	0.5 L	0.25
MW-13D	04/08/10	0.5 L	0.25	0.5 L	0.25
MW-13D	07/14/10	0.5 L	0.25	0.5 L	0.25
MW-13D	10/14/10	0.5 L	0.25	0.5 L	0.25
MW-13D	01/04/11	0.5 L	0.25	0.5 L	0.25
MW-13D	04/19/11	0.5 L	0.25	0.5 L	0.25
MW-13D	07/06/11	0.5 L	0.25	0.5 L	0.25
MW-13D	10/25/11	0.5 L	0.25	0.5 L	0.25
MW-13D	01/30/12	0.5 L	0.25	0.5 L	0.25
MW-13D	04/25/12	0.5 L	0.25	0.5 L	0.25
MW-13D	07/16/12	0.5 L	0.25	0.5 L	0.25
MW-13D	10/10/12	0.5 L	0.25	0.5 L	0.25
No. Analyzed		20		20	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			ALL ND		ALL ND
Distribution			NC		NC
UCL 95			NC		NC

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene	
		Result	Conc.	Result	Conc.
MW-13S					
MW-13S	01/24/08	0.5 L	0.25	0.5 L	0.25
MW-13S	04/17/08	0.5 L	0.25	0.5 L	0.25
MW-13S	07/21/08	0.5 L	0.25	0.5 L	0.25
MW-13S	10/22/08	0.5 L	0.25	0.5 L	0.25
MW-13S	01/22/09	0.5 L	0.25	0.5 L	0.25
MW-13S	04/23/09	0.5 L	0.25	0.5 L	0.25
MW-13S	07/08/09	0.5 L	0.25	0.5 L	0.25
MW-13S	10/26/09	0.5 L	0.25	0.5 L	0.25
MW-13S	01/28/10	0.5 L	0.25	0.5 L	0.25
MW-13S	04/08/10	0.5 L	0.25	0.5 L	0.25
MW-13S	07/14/10	0.5 L	0.25	0.5 L	0.25
MW-13S	10/14/10	0.5 L	0.25	0.5 L	0.25
MW-13S	01/05/11	0.5 L	0.25	0.5 L	0.25
MW-13S	04/19/11	0.5 L	0.25	0.5 L	0.25
MW-13S	07/05/11	0.5 L	0.25	0.5 L	0.25
MW-13S	10/25/11	0.5 L	0.25	0.5 L	0.25
MW-13S	01/27/12	0.5 L	0.25	0.5 L	0.25
MW-13S	04/24/12	0.5 L	0.25	0.5 L	0.25
MW-13S	07/17/12	0.5 L	0.25	0.5 L	0.25
MW-13S	10/10/12	0.5 L	0.25	0.5 L	0.25
No. Analyzed		20		20	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			ALL ND		ALL ND
Distribution			NC		NC
UCL 95			NC		NC

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene	
		Result	Conc.	Result	Conc.
MW-15S					
MW-15S	01/21/08	0.5 L	0.25	0.5 L	0.25
MW-15S	07/14/08	0.5 L	0.25	0.5 L	0.25
MW-15S	01/13/09	0.5 L	0.25	0.5 L	0.25
MW-15S	01/26/10	0.5 L	0.25	0.5 L	0.25
MW-15S	07/15/10	0.5 L	0.25	0.5 L	0.25
MW-15S	01/05/11	0.5 L	0.25	0.5 L	0.25
MW-15S	07/06/11	0.5 L	0.25	0.5 L	0.25
MW-15S	01/25/12	0.5 L	0.25	0.5 L	0.25
MW-15S	07/17/12	0.5 L	0.25	0.5 L	0.25
No. Analyzed		9		9	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			ALL ND		ALL ND
Distribution			NC		NC
UCL 95			NC		NC

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene	
		Result	Conc.	Result	Conc.
MW-17S					
MW-17S	01/21/08	0.5 L	0.25	0.5 L	0.25
MW-17S	04/17/08	0.5 L	0.25	0.5 L	0.25
MW-17S	07/14/08	0.5 L	0.25	0.5 L	0.25
MW-17S	10/20/08	0.7	0.68	0.5 L	0.25
MW-17S	01/27/09	0.5 L	0.25	0.5 L	0.25
MW-17S	04/13/09	0.5 L	0.25	0.5 L	0.25
MW-17S	10/27/09	0.5 L	0.25	0.5 L	0.25
MW-17S	01/25/10	0.5 L	0.25	0.5 L	0.25
MW-17S	04/07/10	0.5 L	0.25	0.5 L	0.25
MW-17S	07/15/10	0.5 L	0.25	0.5 L	0.25
MW-17S	10/14/10	0.5 L	0.25	0.5 L	0.25
MW-17S	01/05/11	0.5 L	0.25	0.5 L	0.25
MW-17S	04/20/11	0.5 L	0.25	0.5 L	0.25
MW-17S	07/05/11	0.5 L	0.25	0.5 L	0.25
MW-17S	10/25/11	0.5 L	0.25	0.5 L	0.25
MW-17S	01/25/12	0.5 L	0.25	0.5 L	0.25
MW-17S	04/25/12	0.5 L	0.25	0.5 L	0.25
MW-17S	07/17/12	0.5 L	0.25	0.5 L	0.25
MW-17S	10/10/12	0.5 L	0.25	0.5 L	0.25
No. Analyzed		19		19	
No. Detect		1		0	
Minimum conc.			0.25		0.25
Maximum conc.			0.68		0.25
Average conc.			0.27		0.25
Distribution			NC		NC
UCL 95			NC		NC

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene	
		Result	Conc.	Result	Conc.
MW-18S					
MW-18S	01/22/08	0.5 L	0.25	0.5 L	0.25
MW-18S	07/21/08	0.5 L	0.25	0.5 L	0.25
MW-18S	01/22/09	0.5 L	0.25	0.5 L	0.25
MW-18S	07/17/09	0.5 L	0.25	0.5 L	0.25
MW-18S	01/29/10	0.5 L	0.25	0.5 L	0.25
MW-18S	07/13/10	0.5 L	0.25	0.5 L	0.25
MW-18S	01/07/11	0.5 L	0.25	0.5 L	0.25
MW-18S	07/06/11	0.5 L	0.25	0.5 L	0.25
MW-18S	01/25/12	0.5 L	0.25	0.5 L	0.25
MW-18S	07/18/12	0.5 L	0.25	0.5 L	0.25
No. Analyzed		10		10	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			ALL ND		ALL ND
Distribution			NC		NC
UCL 95			NC		NC

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene	
		Result	Conc.	Result	Conc.
FMMW-2					
FMMW-2	01/24/08	0.5 L	0.25	0.5 L	0.25
FMMW-2	04/15/08	0.5 L	0.25	0.5 L	0.25
FMMW-2	07/15/08	0.5 L	0.25	0.5 L	0.25
FMMW-2	10/21/08	0.5 L	0.25	0.5 L	0.25
FMMW-2	01/19/09	0.5 L	0.25	0.5 L	0.25
FMMW-2	04/15/09	0.5 L	0.25	0.5 L	0.25
FMMW-2	07/13/09	0.5 L	0.25	0.5 L	0.25
FMMW-2	10/27/09	0.5 L	0.25	0.5 L	0.25
FMMW-2	01/26/10	0.5 L	0.25	0.5 L	0.25
FMMW-2	04/07/10	0.5 L	0.25	0.5 L	0.25
FMMW-2	07/13/10	0.5 L	0.25	0.5 L	0.25
FMMW-2	10/13/10	0.5 L	0.25	0.5 L	0.25
FMW-02	01/05/11	0.5 L	0.25	0.5 L	0.25
FMW-02	04/20/11	0.5 L	0.25	0.5 L	0.25
FMW-02	07/05/11	0.5 L	0.25	0.5 L	0.25
FMW-02	10/25/11	0.5 L	0.25	0.5 L	0.25
FMW-02	01/27/12	0.5 L	0.25	0.5 L	0.25
FMW-02	04/25/12	0.5 L	0.25	0.5 L	0.25
FMW-02	07/18/12	0.5 L	0.25	0.5 L	0.25
FMW-02	10/10/12	0.5 L	0.25	0.5 L	0.25
No. Analyzed		20		20	
No. Detect		0		0	
Minimum conc.			ALL ND		ALL ND
Maximum conc.			ALL ND		ALL ND
Average conc.			ALL ND		ALL ND
Distribution			NC		NC
UCL 95			NC		NC

Notes:
(L) indicates below the given method reporting limit (MRL)
(ND) indicates not detected
(NC) indicates not calculated due to less than 50 percent detection frequency or historically no detect
Calculations use half the MRL for non-detected parameters

Volatile Organic Compounds
Statistical Summary of Groundwater Data
Hidden Valley Landfill, Pierce County, Washington

Monitoring Well	Date	1,4-Dichlorobenzene		Chlorobenzene		Tetrachloroethene (PCE)	
		Result	Conc.	Result	Conc.	Result	Conc.
MW-11D(2)							
MW-11D(2)	01/22/08	0.5 L	0.25	0.5 L	0.25	1.9	1.90
MW-11D(2)	04/16/08	0.5 L	0.25	0.5 L	0.25	1.7	1.70
MW-11D(2)	07/21/08	0.5 L	0.25	0.5 L	0.25	1.8	1.80
MW-11D(2)	10/21/08	0.5 L	0.25	0.5 L	0.25	2.3	2.30
MW-11D(2)	01/19/09	0.5 L	0.25	0.5 L	0.25	2.0	2.00
MW-11D(2)	04/14/09	0.5 L	0.25	0.5 L	0.25	2.1	2.10
MW-11D(2)	07/10/09	0.5 L	0.25	0.5	0.50	1.8	1.80
MW-11D(2)	10/28/09	0.5 L	0.25	0.5 L	0.25	2.5	2.50
MW-11D(2)	01/28/10	0.5 L	0.25	0.5 L	0.25	1.0	1.00
MW-11D(2)	04/08/10	0.5 L	0.25	0.5 L	0.25	0.7	0.70
MW-11D(2)	07/15/10	0.5 L	0.25	0.5 L	0.25	0.9	0.90
MW-11D(2)	10/13/10	0.5 L	0.25	0.5 L	0.25	1.3	1.30
MW-11D(2)	01/05/11	0.5 L	0.25	0.5 L	0.25	0.9	0.91
MW-11D(2)	04/19/11	0.5 L	0.25	0.5 L	0.25	0.5	0.53
MW-11D(2)	07/05/11	0.5 L	0.25	0.5 L	0.25	0.9	0.91
MW-11D(2)	10/26/11	0.5 L	0.25	0.5 L	0.25	0.8	0.79
MW-11D(2)	01/25/12	0.5 L	0.25	0.5 L	0.25	0.5 L	0.25
MW-11D(2)	04/25/12	0.5 L	0.25	0.5 L	0.25	0.9	0.85
MW-11D(2)	07/17/12	0.5 L	0.25	0.5 L	0.25	1.1	1.10
MW-11D(2)	10/10/12	0.5 L	0.25	0.5 L	0.25	0.8	0.80
No. Analyzed		20		20		20	
No. Detect		0		1		16	
Minimum conc.			ALL ND		0.25		0.25
Maximum conc.			ALL ND		0.50		2.50
Average conc.			ALL ND		0.26		1.31
Distribution			NC		NC		Normal
UCL 95			NC		NC		1.51

Notes:
(L) indicates below the given method reporting limit (MRL)
(ND) indicates not detected
(NC) indicates not calculated due to less than 50 percent detection frequency or historically no detections
Calculations use half the MRL for non-detected parameters

Appendix G
Quarterly Inspection Reports

Facility Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: Wayne Chang

Date: 02/24/12

Signature: Wayne Chang

Weather: Overcast 46° F

Items	Yes	No	Comments
Cover System			
Settlement Depressions	X		
Cracking of Cover Soils		X	
Inadequate Cover Soil or Rock		X	
Standing Water		X	
Vegetation			
Bare or Sparsely Vegetated Areas		X	
Areas of Dying Vegetation		X	
Large Root Vegetation (ex. Bushes)	X		Scotch Broom bushes located in various locations on landfill. Also a few blackberry bushes.
Stormwater Conveyance System			
Ditch Obstructions or Flat Areas		X	
Culvert Obstructions		X	
Catch Basin Debris or Silt Accumulation	X		
Stormwater Basin Debris or Silt		X	
Cover Erosion			
Gullies and/or Erosion Scars		X	
Presence of Seeps		X	
Vector Control			
Evidence of Ground Burrows		X	
Leachate Collection & Leak Detection Systems			
Piping or Valve Issues		X	
Pump or Meter Issues		X	
Foaming at Pump		X	

Condensate Recirculation Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: Wayne Chang

Date: 02/23/12

Signature:

Weather: Overcast 46°F

Instructions: Inspect each sump for pump operation and condensate fluid level, which should be below the overflow drainage pipe. Note any unusual observations such as soil staining or air leaks in the comments section.

Sump	Operation per Design (Y or N)	Comments
Sump No. 1	Y	
Sump No. 2	Y	
Sump No. 3	Y	
Sump No. 4	Y	
Sump No. 5	Y	
Sump No. 6	Y	
Sump No. 7	Y	
Sump No. 8	Y	
Sump No. 9	–	Could not open sump due to vacuum on lid.
Sump No. 10	Y	

Other Remarks: none

Hidden Valley Landfill
Landfill Gas Monitoring of On-site Buildings

Project Number: 04211003.02

Date: 2/24/2012
Weather Conditions:
Instrument: GAS TEC PID
Measured By: SAM ADLINGTON

The atmosphere inside buildings at the landfill were monitored for possible intrusion of methane gas. Per WAC 173-351, concentrations of methane in on-site structures must not exceed 25% of the lower explosive limit (LEL). If off-site gas migration is suspected, concentrations of methane in off-site structures must not exceed 100 ppm methane.

The areas monitored included:
- The general overall work area
- Floor drains
- Underground conduit protrusions
- Closed areas where landfill gas could collect, such as under cupboards and inside closets

The gas detection instrument must be calibrated using calibration gas containing methane equal to 50 % LEL. Calibration must be performed before and after the survey is completed.

Checked boxes indicate that the survey revealed **no detectable methane**.

- [x] Main Office - individual office spaces, storage areas and within open crawl-space area.
- [x] Repair Shop – survey atmosphere conditions throughout (lower height levels).
- [x] Pay/Scale Booth – interior of building.
- [x] Recycle Building – throughout facility and water drainage areas.
- [x] Leachate Treatment Building – all lower level office spaces, restrooms, water drainage system and storage/equipment areas.
- [x] Gas to Energy Building – central monitoring/control room, engine room and storage cabinets.
- [x] Transfer Station Building – throughout entire building and lower levels.

Signature

Condensate Recirculation Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: Wayne Chang

Signature: [signature]

Date: 4/27/12

Weather: clear/partly cloudy

Instructions: Inspect each sump for pump operation and condensate fluid level, which should be below the overflow drainage pipe. Note any unusual observations such as soil staining or air leaks in the comments section.

Sump	Operation per Design (Y or N)	Comments
Sump No. 1	Y	See photos
Sump No. 2	Y	
Sump No. 3	Y	
Sump No. 4	Y	
Sump No. 5	Y	
Sump No. 6	Y	
Sump No. 7	Y	
Sump No. 8	Y	
Sump No. 9	Y	
Sump No. 10	Y	

Other Remarks:

Facility Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: Wayne Chang

Signature: Wayne Chang

Date: 4/27/12

Weather: clear / partly cloudy

Items	Yes	No	Comments
Cover System			
Settlement Depressions (sinkholes)		X	
Cracking of Cover Soils		X	
Inadequate Cover Soil or Rock		X	
Standing Water		X	
Vegetation			
Bare or Sparsely Vegetated Areas		X	
Areas of Dying Vegetation		X	
Large Root Vegetation (ex. Bushes)		X	Some root vegetation, mostly clear
Stormwater Conveyance System			
Ditch Obstructions or Flat Areas		X	
Culvert Obstructions		X	
Catch Basin Debris or Silt Accumulation		X	Some trash, standing water
Stormwater Basin Debris or Silt		X	
Cover Erosion			
Gullies and/or Erosion Scars		X	
Presence of Seeps		X	
Vector Control			
Evidence of Ground Burrows		X	
Leachate Collection & Leak Detection Systems			
Piping or Valve Issues	X		Numerous broken pipping (see photos)
Pump or Meter Issues		X	
Foaming at Pump		X	

Other Remarks:

Hidden Valley Landfill
Landfill Gas Monitoring of On-site Buildings

Project Number: 04212004.02

Date: 5/24/12
Weather Conditions: CLOUDY
Instrument: PHOTOVAC MICRO FID
Measured By: SAM ADLINGTON

The atmosphere inside buildings at the landfill were monitored for possible intrusion of methane gas. Per WAC 173-351, concentrations of methane in on-site structures must not exceed 25% of the lower explosive limit (LEL). If off-site gas migration is suspected, concentrations of methane in off-site structures must not exceed 100 ppm methane.

The areas monitored included:
- The general overall work area
- Floor drains
- Underground conduit protrusions
- Closed areas where landfill gas could collect, such as under cupboards and inside closets

The gas detection instrument must be calibrated using calibration gas containing methane equal to 50 % LEL. Calibration must be performed before and after the survey is completed.

Checked boxes indicate that the survey revealed **no detectable methane**.

- ☒ Main Office - individual office spaces, storage areas and within open crawl-space area.
- ☒ Repair Shop – survey atmosphere conditions throughout (lower height levels).
- ☒ Pay/Scale Booth – interior of building.
- ☒ Recycle Building – throughout facility and water drainage areas.
- ☒ Leachate Treatment Building – all lower level office spaces, restrooms, water drainage system and storage/equipment areas.
- ☒ Gas to Energy Building – central monitoring/control room, engine room and storage cabinets.
- ☒ Transfer Station Building – throughout entire building and lower levels.

Signature

Facility Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: Wayne Chang

Signature: [signature]

Date: 9/21/12

Weather: overcast

Items	Yes	No	Comments
Cover System			
Settlement Depressions (sinkholes)		X	
Cracking of Cover Soils		X	
Inadequate Cover Soil or Rock		X	
Standing Water		X	
Vegetation			
Bare or Sparsely Vegetated Areas		X	
Areas of Dying Vegetation		X	
Large Root Vegetation (ex. Bushes)	X		Some growth
Stormwater Conveyance System			
Ditch Obstructions or Flat Areas		X	
Culvert Obstructions		X	
Catch Basin Debris or Silt Accumulation		X	
Stormwater Basin Debris or Silt	X		Some windblown debris in basin near transfer station
Cover Erosion			
Gullies and/or Erosion Scars		X	
Presence of Seeps		X	
Vector Control			
Evidence of Ground Burrows		X	
Leachate Collection & Leak Detection Systems			
Piping or Valve Issues		X	
Pump or Meter Issues		X	
Foaming at Pump		X	

Other Remarks:

Condensate Recirculation Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: Wayne Chang

Signature: Wayne Chang

Date: 9/21/12

Weather: Overcast

Instructions: Inspect each sump for pump operation and condensate fluid level, which should be below the overflow drainage pipe. Note any unusual observations such as soil staining or air leaks in the comments section.

Sump	Operation per Design (Y or N)	Comments
Sump No. 1	Y	
Sump No. 2	Y	
Sump No. 3	Y	
Sump No. 4	Y	
Sump No. 5	Y	
Sump No. 6	Y	
Sump No. 7	Y	
Sump No. 8	Y	
Sump No. 9	Y	High Vacuum on lid
Sump No. 10	N	Pump pulled

Other Remarks:

Hidden Valley Landfill
Landfill Gas Monitoring of On-site Buildings

Project Number: 04212004.02

Date: 9/21/12
Weather Conditions: Overcast
Instrument:
Measured By: Wayne Chang

The atmosphere inside buildings at the landfill were monitored for possible intrusion of methane gas. Per WAC 173-351, concentrations of methane in on-site structures must not exceed 25% of the lower explosive limit (LEL). If off-site gas migration is suspected, concentrations of methane in off-site structures must not exceed 100 ppm methane.

The areas monitored included:

The general overall work area
Floor drains
Underground conduit protrusions
Closed areas where landfill gas could collect, such as under cupboards and inside closets

The gas detection instrument must be calibrated using calibration gas containing methane equal to 50 % LEL. Calibration must be performed before and after the survey is completed.

Checked boxes indicate that the survey revealed **no detectable methane**.

- [x] Main Office - individual office spaces, storage areas and within open crawl-space area.
- [x] Repair Shop – survey atmosphere conditions throughout (lower height levels).
- [x] Pay/Scale Booth – interior of building.
- [x] Recycle Building – throughout facility and water drainage areas.
- [x] Leachate Treatment Building – all lower level office spaces, restrooms, water drainage system and storage/equipment areas.
- [x] Gas to Energy Building – central monitoring/control room, engine room and storage cabinets.
- [x] Transfer Station Building – throughout entire building and lower levels.

Wayne Chang
Signature

Hidden Valley Landfill
Landfill Gas Monitoring of On-site Buildings

Project Number: 04212004.02

Date: 12/20/12
Weather Conditions: Rain
Instrument: GEM 2000
Measured By: Matt Aftan

The atmosphere inside buildings at the landfill were monitored for possible intrusion of methane gas. Per WAC 173-351, concentrations of methane in on-site structures must not exceed 25% of the lower explosive limit (LEL). If off-site gas migration is suspected, concentrations of methane in off-site structures must not exceed 100 ppm methane.

The areas monitored included:

- The general overall work area
- Floor drains
- Underground conduit protrusions
- Closed areas where landfill gas could collect, such as under cupboards and inside closets

The gas detection instrument must be calibrated using calibration gas containing methane equal to 50 % LEL. Calibration must be performed before and after the survey is completed.

Checked boxes indicate that the survey revealed **no detectable methane**.

- [x] Main Office - individual office spaces, storage areas and within open crawl-space area.
- [x] Repair Shop – survey atmosphere conditions throughout (lower height levels).
- [x] Pay/Scale Booth – interior of building.
- [x] Recycle Building – throughout facility and water drainage areas.
- [x] Leachate Treatment Building – all lower level office spaces, restrooms, water drainage system and storage/equipment areas.
- [x] Gas to Energy Building – central monitoring/control room, engine room and storage cabinets.
- [x] Transfer Station Building – throughout entire building and lower levels.

Signature

Condensate Recirculation Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: Matt Ontko

Signature: [signature]

Date: 12/20/12

Weather: Rain

Instructions: Inspect each sump for pump operation and condensate fluid level, which should be below the overflow drainage pipe. Note any unusual observations such as soil staining or air leaks in the comments section.

Sump	Operation per Design (Y or N)	Comments
Sump No. 1	Y	
Sump No. 2	Y	
Sump No. 3	Y	
Sump No. 4	Y	
Sump No. 5	Y	
Sump No. 6	Y	
Sump No. 7	Y	
Sump No. 8	Y	
Sump No. 9	Y	
Sump No. 10	N	Pump Rusted

Other Remarks:

Facility Inspection Checklist

Hidden Valley Landfill, Pierce County, Washington

Name: Matt O'Hare Date: 12/20/12

Signature: Weather: Rain

Items	Yes	No	Comments
Cover System			
Settlement Depressions (sinkholes)		X	
Cracking of Cover Soils		X	
Inadequate Cover Soil or Rock		X	
Standing Water		X	
Vegetation			
Bare or Sparsely Vegetated Areas		X	
Areas of Dying Vegetation		X	
Large Root Vegetation (ex. Bushes)	X		Slight growth
Stormwater Conveyance System			
Ditch Obstructions or Flat Areas		X	
Culvert Obstructions		X	
Catch Basin Debris or Silt Accumulation		X	
Stormwater Basin Debris or Silt		X	
Cover Erosion			
Gullies and/or Erosion Scars		X	
Presence of Seeps		X	
Vector Control			
Evidence of Ground Burrows		X	
Leachate Collection & Leak Detection Systems			
Piping or Valve Issues		X	
Pump or Meter Issues		X	
Foaming at Pump		X	

Other Remarks:

Photo 1. Condensate sump CS-1. Photograph taken on 9/21/12.

Photo 2. Condensate sump CS-2. Photograph taken on 9/21/12.

Photo 3. Condensate sump CS-3. Photograph taken on 4/27/12.

Photo 4. Condensate sump CS-4. Photograph taken on 4/27/12.

Photo 5. Condensate sump CS-5. Photograph taken on 9/21/12.

Photo 6. Condensate sump CS-6. Photograph taken on 9/21/12.

Photo 7. Condensate sump CS-7. Photograph taken on 9/21/12.

Photo 8. Condensate sump CS-8. Photograph taken on 9/21/12.

Photo 9. Condensate sump CS-9. Photograph taken on 9/21/12.

Photo 10. Condensate sump CS-10. Photograph taken on 9/21/12.

Photo 11. View of south slope of landfill, facing the leachate treatment plant and transfer station. Photograph taken on 5/23/12.

Photo 12. View of south slope of landfill, facing northwest. Photograph taken on 5/23/12.

Photo 13. View of east slope of landfill, facing towards the compost facility. Photograph taken on 4/27/12.

Photo 14. View of north slope of landfill facing the main office. Photograph taken on 9/21/12.