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TECHNICAL REPORT, TABLES, FIGURES

1997 FIRST QUARTER MONITORING REPORT

ORANGE COUNTY LANDFILL ENVIRONMENTAL MONITORING PROGRAM

ORANGE COUNTY DEPARTMENT OF
ENVIRONMENTAL FACILITIES & SERVICES
GOSHEN, NEW YORK

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Orange County Landfill
Environmental Monitoring Program
1997 First Quarter Monitoring Report
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1.0 INTRODUCTION

In accordance with 6 NYCRR Part 360 Solid Waste Management Facility regulations, environmental monitoring is completed on a quarterly basis at the Orange County Landfill. The Orange County Landfill is located off Route 17 in the Town of Goshen, Orange County, New York. The 1997 First Quarter Monitoring Report was prepared for the Orange County Department of Public Works by C&S Engineers, Inc. and documents the activities and results of the 1997 First Quarter monitoring event for the Orange County Landfill.

The 1997 First Quarter monitoring report is based upon the analytical results of groundwater and surface water samples collected proximate to the Existing Landfill and Landfill Expansion Areas during the week of March 24, 1997. Life Science Laboratories, Inc. (LSL), under contract to C&S, performed the actual collection and analysis of site groundwater and surface water samples. Interpretation and discussion of the analytical results relating to groundwater and surface water quality are presented in Sections 3 and 4. A summary of the results and interpretations of the 1997 First Quarter monitoring event is presented in Section 5.

2.0 METHODOLOGY

As part of the 1997 First Quarter monitoring event, groundwater samples were collected from monitoring wells and piezometers installed proximate to the Existing Landfill and the Phase 1 and Phase 2 Landfill Expansion Areas. Surface water samples were also collected as part of the 1997 First Quarter monitoring event from the Cheechunk Canal of the Wallkill River (hereafter referred to as the "Wallkill River"), from the Old Channel of the Wallkill River (hereafter referred to as the "Old Wallkill"), and from the sediment basin located south of the Landfill Expansion Area. The environmental monitoring locations for the Existing Landfill and the Phase 1 and Phase 2 Landfill Expansion Areas are presented on Figure 1.

2.1 SAMPLE COLLECTION AND ANALYSIS

In general, the Orange County Landfill environmental monitoring program incorporates the collection and analysis of groundwater and surface water samples in accordance with 6 NYCRR Part 360-2.11(c)(6), Water Quality Analysis Routine and Baseline Parameters (NYSDEC, 1990b). As part of the 1997 First Quarter monitoring event, the groundwater and surface water samples were collected and analyzed for baseline list parameters by Life Science Laboratories, Inc., (LSL), a NYSDOH certified lab (NYSDOH ELAP-11246). According to LSL, samples were collected and handled in accordance with New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH), or other applicable protocols.

Prior to commencing well evacuation activities, the exterior of each well was visually inspected for signs of damage, tampering, or other unusual conditions. After inspection, the well caps were opened and the static water level elevations were determined to the nearest 1/100th of a foot using an electronic water level indicator. A sample of the groundwater within each monitoring well was then analyzed in the field for pH, temperature, Eh, and conductivity. A volume of water equal to approximately three well volumes was subsequently purged from each well in order to replace the stagnant monitoring well water with fresh formation water. After evacuation, the well was allowed to recharge, the field parameters were then rechecked, and the appropriate sample volume was collected within 24 hours of well purging. Unfiltered samples were collected in appropriate containers, preserved according to method protocol, and placed in coolers for transport to the laboratory. Appropriate chain-of-custody for each sample was maintained throughout the sample handling and analysis period.

Groundwater samples were collected from the 46 groundwater monitoring wells and four piezometer installations located proximate to the Existing Landfill and the Phase 1/Phase 2 Landfill Expansion Areas. It should be noted that Existing Landfill monitoring wells MW-210S, MW-210D, MW-211S, MW-211D, and MW-211VS were removed prior to the 1994 Fourth Quarter monitoring program and were replaced by monitoring wells MW-303S, MW-303D, MW-304S, MW-304D, and MW-304VS, respectively. In addition, Landfill Expansion monitoring well MW-212SA was also removed prior to the 1994 Fourth Quarter monitoring program and replaced by monitoring well MW-312S. Monitoring wells PS-247-1, PS-247-2, PS-247-3, PS247-4 (dry), and PS-247-5 (dry), located within the berm surrounding Phase 1 Landfill Expansion Area, were added to the environmental monitoring program as outlined in the August 31, 1992 Permit To Operate, for the respective Landfill Expansion Area.

The following monitoring wells and piezometers were sampled as part of the 1997 First Quarter monitoring event:

Existing Landfill	Landfill Expansion Area
PZ-1A	MW-203/DA/VD/S
PZ-4	MW-208SA/VD
PZ-11	MW-212DA
PZ-12	MW-230S/D
MW-3B	MW-231S/D
MW-207SA/D	MW-232S
MW-220	MW-233S/D
MW-221S/D	MW-234S/D
MW-222	MW-235S/D
MW-223S/D	MW-236S/D
MW-301D/S	MW-244S/D
MW-302	MW-245S/D
MW-303S/D	MW-246S/D
MW-304D/S/VS	MW-312S
	PS247-1
	PS247-2
	PS247-3

Samples were not collected from sampling points PS247-4 and PS247-5 due to dry sampling conditions at these locations. Samples were also not collected from monitoring well MW-232D due to submergence of the well under ponded surface waters.

During the 1997 First Quarter monitoring event, surface water samples were collected from seven locations designated as SW-1, SW-2, SW-3, SW-4, SW-5, SW-6, and SW-7, as shown on Figure 1. Surface water sampling points SW-1 and SW-2 are located along the Old Wallkill, with the SW-1 location intended as the upstream sampling location and the SW-2 location intended as the downstream sampling location. The portion of the Old Wallkill, where SW-1 is located, is formed as part of a beaver impoundment with a beaver dam located near sampling point SW-2. The SW-2 sample is routinely collected from the effluent stream of the beaver dam which reportedly exhibits intermittent flow.

Surface water sampling points SW-3 and SW-4 have historically been located along the Wallkill River with the SW-3 location intended to be representative of upstream (background) water quality conditions, and the SW-4 location intended to be representative of downstream surface water quality conditions. These two sampling locations are separated by an approximate distance of 2,700 feet. Sampling point SW-3 was previously located at the confluence of the Old Wallkill and the Wallkill River. This location did not appear to be representative of upstream (background) water quality conditions of the Wallkill River since it is likely that the SW-3 sample may be impacted by the Old Wallkill. Therefore, the SW-3 sampling location was moved approximately 30 feet upstream from the confluence of the two streams, along the Wallkill River. An additional surface water sampling point (SW-5) was added to the environmental monitoring program, along the Old Wallkill approximately 50 feet upstream from the confluence of the two streams.

Surface water sampling points SW-6 and SW-7 are located within the sediment basins proximate to the Landfill Expansion Area. Surface water sampling point SW-6 is located within the sediment basin northeast of the Phase 2 Landfill Expansion Area, while the SW-7 sampling point is located within the sediment basin south of the Phase 1 Landfill Expansion Area. These sampling points were added to the program in anticipation of Phase 1 and Phase 2 Landfill Expansion Areas becoming operational.

2.2 Data Interpretive Methods

The analytical data generated from the analysis of the groundwater and surface water samples collected during the 1997 First Quarter monitoring event were compared to applicable New York State Department of Environmental Conservation (NYSDEC) Class GA Groundwater Quality Standards and Guidance Values and Class C Surface Water Quality Standards (NYSDEC, 1991a), respectively. The groundwater and surface water analytical data were entered into a computer spreadsheet as part of the historical record.

To assist in the interpretation of quarterly groundwater and surface water quality data, two statistical analysis programs have been incorporated into the environmental monitoring and reporting program. The first analysis compares background conditions (upgradient, upstream) to on-site conditions (downgradient, downstream) by examining changes in water quality between upgradient, upstream and downgradient, downstream locations. The second analysis uses a computer program to identify possible trends in water quality over time at each of the specific sampling locations.

2.3 Comparative Analysis

The upgradient groundwater monitoring locations used in the background water quality statistical analysis were selected based upon the general west-to-east shallow groundwater flow pattern as indicated within previous reports (Wehran, 1987). Groundwater monitoring wells were then segregated with respect to monitoring depth including those which are screened within the sand/gravel unit (shallow) and those monitoring wells which are screened within the bedrock (deep). The shallow groundwater monitoring wells selected as representative of on-site background conditions include MW-231S, MW-230S, MW-203DA, and MW-208SA. These well installations approximately border the Old Wallkill, west of the Existing Landfill mound. Bedrock groundwater monitoring wells MW-230D, MW-203VD, and MW-208VD, were selected as representative of on-site background bedrock water quality. The surface water qualities of both the Wallkill River and the Old Wallkill were examined for observable differences between the upstream and downstream monitoring locations. The upstream sampling point of the Old Wallkill is designated as SW-1 and the downstream sampling point as SW-2. It should be noted that the original natural flow of this channel was previously from south to north which would have made SW-2 the upstream and SW-1 the downstream sampling points. Since the new channel (Cheechunk Canal) was dredged, however, the flow appeared to have been reversed toward the Wallkill River. This flow should be minimal considering the volume of water contained within the beaver impoundment (Old Wallkill).

The upstream monitoring points of the Wallkill River are designated as SW-3 and SW-5, while the downstream monitoring point is designated as SW-4. These sampling points are approximately 2,700 feet apart and are sampled from the landfill side of the river. As previously stated, the SW-3 sample was historically collected at the confluence of the Old Wallkill and the Wallkill River and has since been moved approximately 30 feet upstream along the Wallkill River. Sampling point SW-5 was added to the environmental monitoring program in November of 1991 and represents upstream Old Wallkill River conditions prior to the confluence of the Wallkill and Old Wallkill rivers.

A statistical analysis of each set of upgradient/upstream conditions (shallow groundwater monitoring wells, bedrock groundwater monitoring wells, and Wallkill River) was performed on the historical analytical data for select parameters. The historical data used in this assessment was supplied to C&S by the Orange County Department of Public Works and was taken from the report entitled Water Quality Assessment for the Orange County Sanitary Landfill (Wehran, 1990) as well as the data generated during the quarterly monitoring events of 1990, 1991, 1992, 1993, 1994, 1995, 1996, and the 1997 First Quarter monitoring events.

The parameters used for the statistical analysis were selected on the basis of data useability, frequency of sampling, the ability to indicate representative concentrations, and the ability to indicate the presence of landfill leachate. More specifically, the parameters used for this statistical analysis include alkalinity, chloride, hardness, conductance, phenols, TDS, sulfate, TOC, calcium, iron, magnesium, manganese, potassium, and sodium, which are analyzed on a quarterly basis.

Due to extremely large data sets, the data from each upgradient (shallow/bedrock) monitoring well was individually (statistically) analyzed using the t-Test for the determination of the mean of a normal population using a small sample set (Devore, 1986). The separate analyses were completed using a 99% confidence interval which produced a range of data values which would be considered comparable with upgradient conditions. An average of the individual upgradient monitoring well t-Tests were then calculated and used for the identification of on-site (downgradient, downstream) data values which are above background (upgradient, upstream) conditions.

2.4 TREND ANALYSIS

The comparison of the 1997 First Quarter monitoring event water quality data with the historical water quality data was completed as a means to identify possible trends in the water quality at each sampling location. This analysis was performed as a two phased approach. The first phase of the trend analysis involved a review of the historical data for visually identifiable possible trends in the reported data values for all parameters. The second phase involved statistical analysis of the Phase 1 identified data for trends in water quality using the computer package WQStat II (Phillips, 1988). The statistical test used in this trend analysis was the Kendall-Tau test which incorporates de-seasonalized data. The identification of statistically significant trends in water quality of the tested parameters was assessed using a 95% confidence level.

The analysis of the trends in water quality parameter concentrations assists in the assessment of potential site groundwater and surface water contamination. In general, an identified increasing trend in parameter concentration(s) may be indicative of worsening water quality while an identified decreasing trend in parameter concentration(s) may be indicative of improving water quality. It should be noted that these identified trends are not, in themselves, conclusive evidence of improving or worsening water quality, but rather, should be used with other available information to form conclusions pertaining to the water quality proximate to the site.

3.0 1997 FIRST QUARTER ENVIRONMENTAL MONITORING RESULTS

3.1 EXISTING LANDFILL AREA

The environmental monitoring network for the Existing Landfill consists primarily of a series of groundwater monitoring wells installed proximate to the perimeter of the landfill mound, outside the limits of previous waste deposition. These monitoring wells were installed at various depths and are screened in either the sand/gravel unconsolidated deposits or the underlying bedrock. A brief description of the monitoring well construction data is presented in Table 1.

3.1.1 Groundwater Elevations

Groundwater elevation measurements were obtained from the monitoring wells installed proximate to the Existing Landfill prior to well evacuation and sampling activities. The groundwater elevations were determined by subtracting the depth to water measured from the top of the PVC riser, from the surveyed elevation of the top of PVC riser without cap. The calculated groundwater elevations are presented in Table 2. It should be noted that many of the surveyed well elevations are not based upon the top of PVC riser pipe and, as such, direct comparisons between monitoring wells is not accurate without the correct survey data. The groundwater elevation data is useful, however, for the assessment of well specific groundwater elevation trends, as compared to the respective groundwater quality.

3.1.2 Groundwater Monitoring Analytical Results

The analytical data results of the Existing Landfill groundwater monitoring well samples are summarized in Tables 3 and 4. The sample chain-of-custody documentation is presented within Appendix A, and the well specific analytical data sample sheets for the Existing Landfill are presented within Appendix B.1.

3.1.3 NYSDEC Groundwater Quality Standard Exceedences

The groundwater analytical data generated from the 1997 First Quarter Groundwater Monitoring Event was compared to NYSDEC Class GA ambient groundwater quality standards and guidance values (NYSDEC, 1991a) as shown in Tables 3 and 4. Those parameters with concentrations which exceeded ambient water quality standards or guidance values are indicated as such with a shaded box surrounding the data value.

It should be noted that historically, the groundwater samples collected from many of the groundwater monitoring wells located proximate to the Existing Landfill have exhibited elevated turbidities which may inherently cause elevated concentrations of metal parameters, particularly iron and manganese. It should also be noted, as reported in the published literature (Frimpter, 1970), that relatively elevated concentrations of naturally occurring iron and manganese exist within the soils, unconsolidated deposits, and groundwater of Orange and Ulster Counties.

As summarized in the following report Table, the majority of the groundwater samples collected, significantly (greater than 2 times) exceeded respective Class GA groundwater standards for iron and manganese. The occurrence of elevated concentrations of TDS, iron, sulfate, and manganese appears to be related to the natural presence of suspended solids within the collected samples as well as the native geologic conditions of the area.

Common Exceedences of Class GA Groundwater Quality Standards or Guidance Values

Monitoring Well	TDS (mg/l)	Iron (mg/l)	Manganese (mg/l)	Sodium (mg/l)	Sulfate (mg/l)
Class GA Standard or Guidance	**500**	**0.3**	**0.3**	**20**	**250**
PZ-1A		(1.7)	0.39		
PZ-4	780	(22)	(1.4)		480
PZ-11	660	(2.8)	(1.60)		
PZ-12		(1.1)	(0.53)		
MW-3B	530	(2.4)	0.61		
MW-207SA	780	(170.0)	(6.90)		
MW-207D	550	(12)	(1.80)		
MW-220	(1000)	(13)	(1.5)		400
MW-221S	(1100)	(91)	(10.0)	30	
MW-222	(1100)	(41.0)	(2.4)	42	
MW-223S	860	(11)	(2.4)		
MW-223D	520	(2.2)	(0.65)		
MW-301D	620	(2.8)		(55)	
MW-301S		(2.7)		22	
MW-302	580	(2.10)	0.54		
MW-303D	740	(0.71)		(92)	
MW-303S	790	(45)	(3.4)		
MW-304D	690	(6.1)	(0.69)	29	
MW-304S	860	(58)	(5.0)		
MW-304VS	1700	(47)	(2.9)	(100)	

In addition to the previously listed exceedences, the following less frequent Class GA groundwater quality standard exceedences were identified:

Less Frequent Exceedences of Class GA Groundwater Quality Standards or Guidance Values	
Monitoring Well	**Exceedences**
MW-302	Phenol (0.0027)
MW-207SA	Zinc (0.73), pH (6.2), Lead (0.14), Antimony (0.21 mg/l), Barium (1.3), Chromium (0.1 mg/l), Copper (0.42 mg/l)
MW-222	Lead (0.036 mg/l)
PZ-11	Phenol (0.0056 mg/l)
MW-220	Antimony (0.072 mg/l)
MW-221S	Lead (0.11 mg/l), Antimony (0.2 mg/l), Chromium (0.073 mg/l), Zinc (0.55 mg/l)
MW-223D	Lead (0.029 mg/l), Beryllium (0.019 mg/l)
MW-223S	pH (6.1 S.U.)
MW-303D	Selenium (0.13 mg/l)
MW-303S	pH (5.8 SU), Ammonia (5.7 mg/l), Lead (0.038 mg/l), Chromium (0.026 mg/l), Benzene (6.5 ug/l), Ethylbenzene (9.8 ug/l), 1,1-Dichloroethane (7.2 ug/l), cis-1,2-dichloroethene (8.6 ug/l), Toluene (13 ug/l), m/p-Xylene (9.8 ug/l)
MW-304S	Chromium (0.11 mg/l), Lead (0.052 mg/l), Zinc (0.33 mg/l)
MW-304VS	Chloride (600 mg/l), Lead (0.052 mg/l), Antimony (0.12 mg/l)

Consistent with the results of the most recent monitoring events, during the 1997 First Quarter monitoring event, the low-level presence of volatile organic compounds including benzene (6.5 ug/l), ethylbenzene (9.8 ug/l), 1,1-dichloroethane (7.2 ug/l), cis-1,2-dichloroethene (8.6 ug/l), toluene (13 ug/l), and m/p-xylene (9.8 ug/l) were identified within the groundwater samples collected from monitoring well MW-303S. It should be noted that the detectable presence of volatile organic compounds were not identified within any of the groundwater samples collected from the remaining Existing Landfill monitoring wells. As a continued contingency effort to monitor for the presence of volatile organic contaminants, well MW-303S will continue to be sampled for volatile organic compounds during the 1997 Second Quarter monitoring event.

3.1.4 Historical Groundwater Analytical Data

Tables 5 and 6 summarize the historical water quality and metal parameter analytical data for the groundwater samples historically collected from the monitoring wells proximate to the Existing Landfill.

3.1.5 Comparison of Upgradient/Downgradient Groundwater Quality

The historical water quality data of groundwater samples collected from monitoring wells MW-231S, MW-230S, MW-203DA, and MW-208SA was statistically analyzed individually to characterize the on-site upgradient shallow (background) groundwater quality. The results of the analysis of upgradient (background) sand/gravel groundwater quality are presented in Table 7. The historical water quality data of groundwater samples collected from monitoring wells MW-230D, MW-203VD, and MW-208VD were statistically analyzed individually to determine the on-site, upgradient (background) bedrock groundwater quality. The results of the analysis of upgradient (background) bedrock groundwater quality are presented in Table 8. The water quality data generated from the analysis of groundwater samples collected from monitoring wells installed proximate to the Existing Landfill, and within both the unconsolidated sand/gravel and bedrock, was compared to the statistically determined upgradient conditions to identify whether downgradient groundwater quality may have been adversely impacted by the Existing Landfill.

Results of the background vs. downgradient statistical water quality comparisons are shown in Tables 9 and 10. Tables 9 and 10 also include normalized values for easier result comparison. As shown in Table 9, the majority of the groundwater samples collected from shallow, downgradient groundwater monitoring wells exhibited concentrations of alkalinity, hardness, conductance, TDS, sulfate, calcium, iron, manganese, and potassium which exceeded upgradient conditions. Those well samples exhibiting concentrations which significantly (greater than 2 times) exceeded shallow background conditions are shown in the following report table.

Shallow Monitoring Wells Exhibiting Background Exceedences	
Monitoring Well	**Parameter**
PZ-1A	Sulfate (3x),
PZ-4	Hardness (3x), Conductance (3x), TDS (3x), Sulfate (8x), Calcium (3x), Manganese (3x)
PZ-11	Alkalinity (3x), Conductance (3x), Sulfate (3x), Manganese (3x), Calcium (3x)
MW-207SA	Alkalinity (6x), Hardness (4x), Conductance (3x), TDS (3x), Calcium (5x), Iron (15x), Manganese (14x), Potassium (7x)
MW-220	Alkalinity (3x), Hardness (3x), Conductance (4x), Sulfate (6x), TDS (4x), Calcium (4x), Manganese (3x)
MW-221S	Alkalinity (5x), Hardness (4x), Conductance (4x), TDS (4x), Sulfate (3x), Calcium (4x), Manganese (21x), Iron (8x), Potassium (6x), Sodium (3x)
MW-222	Chloride (5x), Hardness (4x), Conductance (5x), TDS (4x), Calcium (5x), Iron (4x), Manganese (5x), Sodium (4x), Potassium (3x)
MW-223S	Alkalinity (4x), Hardness (3x), Conductance (4x), TDS (3x), Calcium (3x), Manganese (5x)
MW-303S	Alkalinity (4x), Hardness (3x), Conductance (4x), TDS (3x), Calcium (4x), Iron (4x), Manganese (7x), Potassium (4x)
MW-304S	Alkalinity (5x), Hardness (3x), Conductance (4x), TDS (3x), Calcium (4x), Iron (5x), Manganese (10x), Potassium (4x)
MW-304VS	Chloride (22x), Hardness (3x), Conductance (7x), TDS (6x), Calcium (4x), Iron (4x), Manganese (6x), Potassium (5x), Sodium (9x)

In general, the most numerous and significant exceedences of background water quality were identified for those same shallow groundwater monitoring well samples (MW-207SA, MW-222, MW-303S, MW-304S, MW-304VS) which exhibited the most numerous and/or significant exceedences of NYSDEC Class GA Groundwater Quality Standards or Guidance Values.

As shown in Table 10, the majority of groundwater samples collected from the downgradient bedrock wells exhibited concentrations of chloride, hardness, conductance, TDS, sulfate, calcium, magnesium, potassium, and manganese which exceeded the statistically determined upgradient conditions. Those groundwater monitoring well samples exhibiting concentrations which significantly (greater than 2 times) exceeded background conditions are shown in the following report table.

Deep Monitoring Wells Exhibiting Background Exceedences	
Monitoring Well	**Parameter**
MW-207D	Alkalinity (3x), Hardness (4x), Conductance (4x), TDS (3x), Sulfate (3x), Calcium (4x), Magnesium (3x), Manganese(13x), Iron (7x), Potassium (4x)
MW-221D	Chloride (10x)
MW-223D	Chloride (3x), Hardness (3x), Conductance (3x), TDS (3x), Sulfate (3x), Calcium (4x), Magnesium (3x), Manganese (5x)
MW-301D	Chloride (26x), Conductance (5x), TDS (3x), Sulfate (4x), Calcium (3x), Potassium (6x), Sodium (3x), Magnesium (3x), Hardness (3x)
MW-303D	Chloride (5x), Conductance (5x), TDS (4x) Potassium (7x), Sodium (6x)
MW-304D	Alkalinity (4x), Chloride (10x), Hardness (4x), Conductance (5x), TDS (4x), Iron (3x), Manganese (5x), Potassium (4x), Magnesium (3x)

3.1.6 Historical Groundwater Quality Trends

The Existing Landfill monitoring well historical water quality data was reviewed and analyzed in order to determine increasing or decreasing trends in parameter concentrations which may indicate improving or worsening water quality, respectively, at each of the monitoring points. Those parameters identified in the Phase 2 (WQSTAT) trend analysis as exhibiting a statistically significant increasing or decreasing trend in water quality are listed in Table 11.

The following increasing trends were identified as part of the trend analysis during the 1997 First Quarter Monitoring Event:

Increasing Trends Identified	
Well Installation	**Parameter**
PZ-1	Alkalinity, Sulfate, Iron, Magnesium, Potassium, Sodium
PZ-4	Magnesium, Potassium, Sodium
PZ-11	TDS, Calcium, Magnesium, Potassium, Sodium
PZ-12	Sodium

Increasing Trends Identified	
Well Installation	**Parameter**
MW-3B	Conductance, Sodium
MW-207D	Alkalinity, Hardness, TDS, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium
MW-220	Alkalinity, Calcium, Potassium, Sodium
MW-221S	Manganese, Potassium
MW-221D	Calcium, Magnesium, Potassium, Sodium
MW-222	Calcium, Chloride, TDS, Magnesium, Alkalinity, Potassium, Sodium, Manganese
MW-223S	Alkalinity, Calcium, Magnesium, Manganese, Potassium, Sodium, Iron
MW-223D	Iron, Potassium, Sodium
MW-301D	Manganese
MW-301S	Sulfate, Sodium
MW-302	Sulfate
MW-303D	Alkalinity
MW-303S	Potassium
MW-304S	Conductance, Calcium, Manganese, Potassium
MW-304VS	Iron, Potassium

The following decreasing trends were identified as part of the trend analysis during the 1997 First Quarter Monitoring Event:

Decreasing Trends Identified	
Well Installation	**Parameter**
PZ-1	Chloride
PZ-4	Hardness
PZ-11	Chloride
PZ-12	Chloride, Sulfate, Manganese
MW-3B	TDS
MW-207SA	Chloride, Magnesium, Manganese

Decreasing Trends Identified	
Well Installation	**Parameter**
MW-220	Conductance
MW-222	Sulfate
MW-223S	Conductance, Sulfate
MW-223D	Conductance, Hardness
MW-301D	Magnesium, TDS
MW-302	Chloride, Magnesium
MW-303D	TDS, Potassium, Sodium
MW-303S	Magnesium
MW-304D	TDS
MW-304VS	Alkalinity, TDS, Magnesium

Due to the number of statistically significant trends which were identified as part of the 1997 First Quarter monitoring event, graphical analysis of the respective significant trends exhibited by groundwater samples collected from the monitoring wells located proximate to the Existing Landfill have not been included within the 1997 First Quarter monitoring report. Although the WQSTAT Trend Analysis will continue to be implemented as part of each quarterly monitoring report, in an effort to identify significant increasing or decreasing trends, graphical representation of the respective trends has become impractical as a result of the extensive volume of historical data for the groundwater monitoring wells and parameters which have been historically analyzed.

3.2 Landfill Expansion Area

The Landfill Expansion Area environmental monitoring network incorporates a series of groundwater monitoring wells installed proximate to the perimeter of the Phase 1 and Phase 2 Landfill Expansion cells. The Landfill Expansion monitoring wells are installed at various depths and are screened in either the sand/gravel unconsolidated deposits or the underlying bedrock. A brief description of the monitoring well construction data is presented in Table 1.

3.2.1 Groundwater Elevations

Groundwater elevation measurements were obtained from the monitoring wells installed proximate to the Landfill Expansion Area prior to well evacuation and sampling activities. The groundwater elevations were determined by subtracting the depth to water (as measured from the top of the PVC riser) from the surveyed elevation of the top of the PVC riser without cap. The calculated groundwater elevations are presented in Table 2. It should be noted, however, that many of the surveyed elevations are not based upon the top of PVC riser pipe or are not consistently accurate. The groundwater elevation data is useful for the assessment of general groundwater elevation trends, as compared to the respective groundwater quality.

3.2.2 Groundwater Monitoring Analytical Results

A summary of the analytical data for samples collected from the groundwater monitoring wells which are located proximate to the Phase 1 and Phase 2 Landfill Expansion Areas are presented in Tables 12 and 13. The sample chain-of-custody documentation is presented within Appendix A, and the well specific analytical data sample sheets are presented within Appendix B.2.

3.2.3 NYSDEC Groundwater Quality Standard Exceedences

The groundwater analytical data, generated from the 1997 First Quarter Monitoring Event, was compared to NYSDEC Class GA ambient groundwater quality standards and guidance values (NYSDEC, 1991a), as shown in Tables 12 and 13. Parameters which exhibited concentrations above ambient water quality standards or guidance values are indicated as such on Tables 12 and 13 by a shaded box surrounding the data value. As previously mentioned, elevated concentrations of iron and manganese may, in part, be attributed to the presence of suspended solids within the collected groundwater samples as related to the natural geologic and hydrogeochemical conditions at the site. The Class GA groundwater standards and guidance values which were exceeded in samples obtained from Landfill Expansion Area shallow and bedrock groundwater monitoring wells are shown in the following report tables. It should be noted that the majority of the groundwater samples significantly (greater than 2 times) exceeded respective Class GA groundwater standards or guidance values for iron and manganese.

Common Exceedences of Class GA Groundwater Quality Standards or Guidance Values					
Monitoring Well	**TDS**	**Iron**	**Phenol**	**Manganese**	**Sodium**
Class GA Standard or Guidance Values	**500 mg/l**	**0.3 mg/l**	**0.001 mg/l**	**0.3 mg/l**	**20 mg/l**
MW-203DA		(24)		(0.99)	
MW-203VD		0.45			
MW-203S		(78)		(3.4)	
MW-208VD					
MW-208SA		(55)		(0.85)	
MW-312S		(88)		(3.8)	
MW-212DA		(0.99)		0.32	
MW-230D		(4.0)			
MW-230S		(4.2)			
MW-231D	(1300)	0.49			(130)
MW-231S		(2.1)			
MW-232S	560	(18)		(1.7)	
MW-233S	670	(1.8)		(1.2)	
MW-233D	550		0.0027		
MW-234D		(1.2)			
MW-234S	570	(17)		1.0	
MW-235S		(9.3)		(1.1)	
MW-235D		(1.9)		(0.61)	
MW-236D		(0.83)			
MW-236S		(45)		(5.0)	
MW-244D		(1.8)			
MW-244S	640	(6.5)		(0.94)	
MW-245D	640	(22)			31
MW-245S	730	(41)		(2.5)	
MW-246D		(1.3)			
MW-246S	780	(2.9)		(1.0)	
PS-247-1	550	(1.9)		(4.0)	
PS-247-2	670	(0.62)		0.53	
PS-247-3	480	(6.5)		(10.0)	

Note (*) represents significant exceedence

In addition to the previously listed exceedences, the following less frequent Class GA groundwater quality standard exceedences were identified in groundwater monitoring wells located proximate to the Landfill Expansion Area:

Less Frequent Exceedences of Class GA Groundwater Quality Standards or Guidance Values	
Monitoring Well	**Exceedences**
MW-208VD	pH (5.7 S.U.)
MW-231D	Aluminum (0.1 mg/l), Chloride (520 mg/l), Bromide (5.4 mg/l)
MW-231S	pH (8.8 S.U.)
MW-203S	Lead (0.065 mg/l), Antimony (0.15 mg/l), Zinc (0.42 mg/l)
MW-245D	Lead (0.04 mg/l), Ammonia (6.0 mg/l)
MW-245S	Lead (0.032 mg/l)
MW-208SA	pH (6.2 S.U.)
MW-233D	Phenol (0.0027 mg/l)
PS247-3	Phenol (0.0041 mg/l)
MW-236S	Lead (0.041 mg/l)
MW-236D	pH (6.2 S.U.)
MW-234S	Lead (0.028 mg/l)

3.2.4 Historical Groundwater Analytical Data

Tables 14 and 15 summarize the historical water quality and metal parameter analytical data for the groundwater samples collected from monitoring wells proximate to the Landfill Expansion Area.

3.2.5 Comparison of Upgradient/Downgradient Groundwater Quality

The historical water quality data of groundwater samples collected from monitoring wells MW-231S, MW-230S, MW-203DA, and MW-208SA was statistically analyzed individually to determine the on-site upgradient (background) sand/gravel groundwater quality. The results of the analysis of upgradient (background) sand/gravel groundwater quality are presented in Table 7.

The historical water quality sample data of groundwater samples collected from monitoring wells MW-230D, MW-203VD, and MW-208VD was statistically analyzed individually to determine the on-site upgradient (background) bedrock groundwater quality. The results of the analysis of upgradient (background) bedrock groundwater quality are presented in Table 8.

The water quality data generated from the analysis of groundwater samples collected from monitoring wells installed within the unconsolidated sand/gravel and bedrock proximate to the Landfill Expansion Area, was compared to the statistically determined on-site upgradient conditions to determine potential groundwater quality impacts proximate to the Landfill Expansion Area. Comparison of the downgradient groundwater quality with statistically determined on-site upgradient groundwater quality is shown in Table 16 (shallow) and 17 (deep wells) for shallow and deep groundwater monitoring wells. As shown in Table 16, the majority of shallow downgradient groundwater samples exhibited concentrations of alkalinity, conductance, calcium, and manganese which exceeded on-site upgradient conditions. The following shallow well groundwater samples exhibited the respectively listed parameters which significantly (greater than 2 times) exceeded on-site upgradient conditions.

Shallow Monitoring Wells Exhibiting Background Exceedences

Monitoring Well	Parameter
MW-203S	Hardness (3x), Calcium (3x), Iron (7x), Manganese (7x), Potassium (3x)
MW-208SA	TOC (3x), Iron (5x)
MW-312S	Hardness (3x), Calcium (3x), Iron (8x), Manganese (8x), Potassium (6x)
MW-232S	Alkalinity (3x), Calcium (3x), Manganese (4x), Conductance (3x)
MW-233S	Calcium (3x), Alkalinity (4x), Conductance (3x)
MW-234S	Conductance (3x), Sulfate (3x)
MW-235S	Alkalinity (3x)
MW-236S	Iron (4x), Manganese (10x), Potassium (3x)
MW-244S	Conductance (3x), Sulfate (3x), Calcium (3x)
MW-245S	Hardness (3x), Conductance (3x), TDS (3x), Sulfate (4x), Calcium (3x), Iron (4x), Manganese (5x), Potassium (4x)
MW-246S	Conductance (3x), TDS (3x), Sulfate (5x), Calcium (3x), Alkalinity (3x)
MW-312S	Hardness (3x), Calcium (3x), Iron (8x), Manganese (8x), Potassium (6x)
PS-247-1	Alkalinity (4x), Manganese (8x)
PS-247-2	Hardness (3x), Conductance (3x), Calcium (3x)
PS-247-3	Alkalinity (3x), TOC (3x), Manganese (21x)

As shown in Table 17, the majority of groundwater samples collected from bedrock downgradient monitoring wells exhibited concentrations of chloride, hardness, and conductance which exceeded on-site background conditions. The following wells exhibited the respectively listed parameter which significantly (greater than 2 times) exceeded on-site upgradient bedrock conditions.

Deep Monitoring Wells Exhibiting Background Exceedences

Monitoring	Parameter
MW-212DA	Hardness (3x), Conductance (3x), TDS (3x), Sulfate (4x), Calcium (4x), Chloride (3x)
MW-231D	Chloride (90x), Hardness (3x), Conductance (8x), TDS (7x), Sulfate (3x), Calcium (3x), Magnesium (3x), Potassium (3x), Sodium (8x)
MW-233D	Chloride (23x), Conductance (4x), TDS (3x), Sodium (4x)
MW-234D	Chloride (5x), Potassium (7x)
MW-235D	Chloride (3x), Manganese (4x)
MW-236D	Chloride (11x)
MW-245D	Alkalinity (4x), Chloride (3x), Hardness (4x), Conductance (4x), TDS (4x), Sulfate (3x), Calcium (4x), Magnesium (3x), Iron (12x), Potassium (4x)
MW-203DA	Calcium (3x), Iron (13x), Manganese (7x), Potassium (3x)
MW-246D	Sulfate (3x), Chloride (4x), Conductance (4x)

3.2.6 Historical Groundwater Quality Trends

The Landfill Expansion Area monitoring well historical water quality data was reviewed and analyzed in an effort to determine increasing or decreasing trends in parameter concentrations which may reveal improving or worsening water quality at each of the monitoring points. Those parameters which were identified in the Phase 2 (WQSTAT) Trend Analysis as exhibiting a statistically significant increasing or decreasing trend in water quality are listed in Table 18.

Increasing trends in parameter concentrations were observed in the groundwater samples collected from the following monitoring wells.

Increasing Trends Identified	
Monitoring Well	**Parameter**
MW-203VD	Potassium
MW-203DA	Alkalinity
MW-208SA	Alkalinity, Sodium,
MW-212DA	Alkalinity, Potassium
MW-230D	Alkalinity, Conductance, Potassium
MW-231S	Alkalinity, Chloride, TDS, Hardness
MW-231D	Potassium
MW-232S	Alkalinity, Conductance, Hardness, TDS, Calcium, Magnesium, Manganese, Potassium
MW-234S	Alkalinity, Sulfate, TDS, Magnesium, Potassium, Conductance, Hardness
MW-234D	Alkalinity, Manganese, TDS
MW-235S	Alkalinity, TDS, Magnesium, Potassium
MW-235D	Chloride, Manganese, Potassium, Sodium
MW-236S	Alkalinity, Conductance, Hardness, Sulfate, Iron, Magnesium, Manganese, Potassium, Sodium
MW-244S	Alkalinity,
MW-245S	TDS, Sodium, Manganese, Potassium
MW-245D	Hardness, Sulfate, TDS, Calcium
MW-246S	Sodium
MW-246D	Alkalinity, Iron

Decreasing trends in parameter concentrations were observed in the groundwater samples collected from the following monitoring wells.

Decreasing Trends Identified	
Monitoring Well	**Parameter**
MW-212DA	Chloride
MW-230S	Chloride, TDS
MW-233S	Iron, Potassium, Sodium
MW-235S	Chloride
MW-236D	Chloride
MW-247-1	Chloride, Magnesium
MW-247-2	Magnesium
MW-247-3	TDS, Calcium, Iron, Magnesium
MW-244S	Conductance, Magnesium, Iron
MW-244D	Chloride
MW-245D	Iron, Sodium
MW-246S	Hardness, TDS, Sulfate
MW-246D	Chloride, TDS

Due to the number of statistically significant trends which were identified as part of the 1997 First Quarter monitoring event, graphical analysis of the respective significant trends exhibited by groundwater samples collected from the monitoring wells located proximate to the Landfill Expansion Area have not been included within the 1997 First Quarter monitoring report. Although the WQSTAT Trend Analysis will continue to be implemented as part of each quarterly monitoring report, in an effort to identify significant increasing or decreasing trends, graphical representation of the respective trends has become impractical due to the extensive volume of historical data for the groundwater monitoring wells and parameters which have been historically analyzed.

3.3 SITE SURFACE WATERS

As previously mentioned, during the 1997 First Quarter monitoring event, the surface waters of the Wallkill River, Old Wallkill, and the sediment basins were sampled as part of the environmental monitoring program for the Orange County Landfill. These waters were monitored to assess potential impacts on the surface water quality from the adjacent landfill facilities. Surface water monitoring was accomplished by sampling the waters of the adjacent surface water bodies, upstream and downstream of the facility, as well as the sediment basin.

3.3.1 Surface Water Monitoring Analytical Results

A summary of analytical data for the surface water samples collected are presented in Tables 19 and 20. The sample chain-of-custody documentation are presented within Appendix A, and the analytical data sample sheets are presented within Appendix B.3.

3.3.2 NYSDEC Surface Water Quality Standard Exceedences

The analytical data results for the site surface waters, as presented in Tables 19 and 20 were compared to NYSDEC Class C Ambient Surface Water Quality Standards and Guidance Values (NYSDEC, 1991a). Those parameter values which exceeded the Class C Standards or Guidance Values are indicated as such by a shaded box surrounding the data value. As shown in Table 19, the Class C standard for iron (0.3 mg/l) was exceeded in samples collected from surface water sampling locations SW-1, SW-2, SW-3, SW-4, SW-5, and SW-6, while the Class C standard for zinc (0.03 mg/l) was exceeded in samples collected from surface water sampling locations SW-1 (0.034 mg/l), SW-2 (0.032 mg/l), SW-3 (0.055 mg/l), SW-4 (0.048 mg/l), SW-5 (0.037 mg/l), SW-6 (0.033 mg/l), and SW-7 (0.054 mg/l). In addition, the Class C standard for selenium (0.001 mg/l) was exceeded in the samples collected from surface water sampling locations SW-1 (0.056 mg/l) and SW-2 (0.056 mg/l).

3.3.3 Historical Surface Water Analytical Data

Tables 21 and 22 summarize the historical water quality and metals analytical data for the surface water samples collected at upstream and downstream locations with respect to the landfill facilities.

3.3.4 Comparison of Upstream/Downstream Surface Water Quality

The historical water quality sample data from surface water monitoring location SW-3 was statistically analyzed to identify the relative background water quality of the upstream surface water. The results of the analysis of upstream (background) surface water quality are presented in Table 25.

The downstream surface water sample collected from sampling point SW-4 exceeded background conditions for DO, while background condition exceedences, for parameters including alkalinity, ammonia, hardness, chloride, conductance, TOC, turbidity, nitrate, phenols, sulfate, calcium, manganese, potassium, sodium, and magnesium, were not identified for any of the surface water samples collected during the 1997 First Quarter monitoring event.

3.3.5 Historical Surface Water Quality Trends

The historical surface water quality data was reviewed and analyzed in an effort to determine increasing or decreasing trends in parameter concentrations which may indicate improving or worsening water quality at each of the surface water monitoring points. Those parameters which were identified in the Phase 2 trend analysis as exhibiting a statistically significant increasing or decreasing trend in water quality are listed in Table 23. The surface water sample collected from location SW-1 exhibited significant increasing trends for TDS, calcium, magnesium, potassium, and sodium, while the surface water samples collected from locations SW-2, SW-3, and SW-4 exhibited significant increasing trends for calcium, magnesium, potassium, and sodium. The sample collected from SW-3 exhibited a significant decreasing trend for sulfate and the sample collected from SW-5 exhibited a significant decreasing trend for iron. The samples collected from basin location SW-6 exhibited a significant increasing trend for alkalinity, while the sample collected from basin location SW-7 exhibited significant increasing trends for manganese and potassium.

Due to the number of statistically significant trends which were identified as part of the 1997 First Quarter monitoring event, graphical analysis of the respective significant trends exhibited by surface water samples collected from the surface water monitoring locations have not been included within the 1997 First Quarter monitoring report. Although the WQSTAT Trend Analysis will continue to be implemented as part of each quarterly monitoring report, in an effort to identify significant increasing or decreasing trends, graphical representation of the respective trends has become impractical due to of the extensive volume of historical data for the surface water monitoring locations and parameters which have been historically analyzed.

3.4 QA/QC ANALYTICAL RESULTS

As part of the 1997 First Quarter monitoring event, a trip blank was analyzed in order to assess the reliability of the groundwater related sample collection method and laboratory analytical methodologies. The groundwater sampling event trip blank was prepared in the laboratory by pouring certified organic-free water into a new, certified clean VOC vial. The respective trip blank vial accompanied the sampling crew from the laboratory and was carried throughout the respective sampling events and was placed within the same cooler as the collected VOC samples. The respective VOC trip blank was not opened prior to analysis.

Analysis of the 1997 First Quarter monitoring event groundwater VOC trip blank did not reveal the presence of VOCs above respective VOC method detection limits. Results of the trip blank sample analysis are included in Table 24. The contracted analytical laboratory periodically performs a method detection limit (MDL) study as per standard laboratory practices. The MDLs pertinent to routine and baseline list specific parameter analyses are presented in Table 24.

4.0 INTERPRETATION AND ASSESSMENT

4.1 GROUNDWATER QUALITY INTERPRETATION AND ASSESSMENT

4.1.1 General

Consistent with the results of historical monitoring, the results of the 1997 First Quarter monitoring event indicate that the groundwater proximate to the Orange County Existing Landfill and Landfill Expansion Areas is characterized by significantly to moderately elevated concentrations of alkalinity, hardness, conductance, sulfate, calcium, TDS, iron, sodium, and manganese which typically exceeded the respective NYSDEC Class GA Standards and/or statistically calculated background conditions. The elevated presence of alkalinity, hardness, and calcium concentrations within the majority of groundwater proximate to the site appears to be partially related to the calcium carbonate dominated hydrogeochemistry of the local groundwater. Consistent with previous site investigations and historic groundwater monitoring events, it also appears that the presence of iron and manganese is partially related to the coincidental presence of suspended solids with which the iron and manganese are associated.

Although the elevated presence of specific inorganic parameters, including total iron, total manganese, and total sulfate, appears to partially occur naturally within the local groundwater as a direct result of the native geologic stratigraphy and is reflected by the presence of suspended solids within the groundwater, the relative number and degree of NYSDEC Class GA Standard and background condition exceedences which were exhibited during the 1997 First Quarter monitoring event appear to indicate that the groundwater proximate to a number of specific monitoring locations may be influenced by leachate originating from the Existing Landfill. The areas proximate to those groundwater monitoring wells which appear to be influenced by leachate originating from the Existing Landfill are shown on Figure 2. The following section includes a well specific assessment of groundwater conditions proximate to a number of monitoring well locations which appear to be influenced by leachate originating from the Existing Landfill.

The respective assessment and discussion is based upon a comparison of the analytical data generated during the 1997 First Quarter monitoring event, with Class GA Groundwater Quality Standards and Guidance Values, statistically calculated on-site background conditions, and the historical database.

4.1.2 Existing Landfill

Based on comparisons of the analytical data generated as part of the 1997 First Quarter monitoring event with Class GA groundwater standards and guidance values, statistical background conditions, and the statistical trend analysis, it appears that the groundwater proximate to the following Existing Landfill groundwater monitoring wells may be influenced by leachate originating from the Existing Landfill.

MW-207SA

Groundwater monitoring well MW-207SA is located directly north of the Existing Landfill. The groundwater samples collected from this well during the 1997 First Quarter Monitoring Event exhibited concentrations of iron, manganese, lead, antimony, barium, chromium, copper, zinc, TDS, color, and pH which significantly exceeded Class GA groundwater standards or guidance values. In addition, parameters including alkalinity, hardness, conductance, TDS, calcium, iron, manganese, and potassium were identified as significantly exceeding the statistically determined background conditions. Consistent with the results of previous monitoring events, the location of this well proximate to the Existing Landfill mound, and the elevated presence of the previously mentioned parameter concentrations, it appears that the groundwater proximate to this well is influenced by Existing Landfill leachate.

MW-222

Groundwater monitoring well MW-222 is located directly southeast of the Existing Landfill mound. During the 1997 First Quarter Monitoring Event, the groundwater samples collected from this well exhibited concentrations of TDS, iron, manganese, lead, color, and sodium which exceeded Class GA groundwater quality standards or guidance values. In addition, parameters including chloride, hardness, conductance, TDS, calcium, iron, manganese, potassium, and sodium were identified as significantly exceeding the statistically determined background conditions. Statistically determined increasing trends were identified for parameters including calcium, chloride, TDS, alkalinity, manganese, magnesium, sodium, and potassium. Consistent with the results of previous monitoring events, the location of this well proximate to the Existing Landfill mound, and the elevated presence of the previously mentioned parameters, it appears that the groundwater proximate to this well may be influenced by leachate originating from the Existing Landfill.

MW-303S

Groundwater monitoring well MW-303S is located immediately adjacent to the northeastern perimeter of the Existing Landfill. During the 1997 First Quarter Monitoring Event, the groundwater samples collected from this well exhibited concentrations of iron, manganese, lead, chromium, ammonia, TDS, color, pH, and low-level concentrations of 1,1-dichloroethane, cis-1,2-dichloroethene, benzene, ethylbenzene, m/p-xylene and toluene which exceeded Class GA groundwater standards or guidance values. In addition, parameters including alkalinity, hardness, conductance, TDS, calcium, iron, manganese, and potassium significantly exceeded the statistically determined background conditions. A statistically determined increasing trend was identified for potassium. Consistent with the results of previous monitoring events, the location of this well proximate to the Existing Landfill mound, and the elevated presence of the previously mentioned parameters, it appears that the groundwater proximate to this well is influenced by leachate originating from the Existing Landfill. As a contingency and confirmatory measure to continually assess the presence of volatile organic compounds within the groundwater proximate to this well, it is recommended that well MW-303S be monitored for volatile organic compounds during the 1997 Second Quarter monitoring event.

MW-304S

Groundwater monitoring well MW-304S is located immediately adjacent to the northeastern perimeter of the Existing Landfill. During the 1997 First Quarter Monitoring Event, the groundwater samples collected from this well exhibited concentrations of iron, manganese, lead, chromium, zinc, and TDS which exceeded Class GA groundwater standards or guidance values. In addition, parameters including alkalinity, hardness, conductance, TDS, calcium, iron, manganese, and potassium significantly exceeded the statistically determined background conditions. Statistically determined increasing trends were identified for parameters including conductance, calcium, manganese, and potassium. Consistent with the results of previous monitoring events, the location of this well proximate to the Existing Landfill mound, and the elevated presence of the previously mentioned parameters, it appears that the groundwater proximate to this well may be influenced by leachate originating from the Existing Landfill.

MW-304VS

Groundwater monitoring well MW-304VS is located immediately adjacent to the northeastern perimeter of Existing Landfill. During the 1997 First Quarter Monitoring Event, the groundwater samples collected from this well exhibited concentrations of sodium, iron, manganese, lead, antimony, TDS, and chloride which exceeded Class GA groundwater standards or guidance values. In addition, parameters including chloride, conductance, hardness, TDS, calcium, iron, manganese, potassium, and sodium significantly exceeded the statistically determined background conditions. Statistically determined increasing trends were identified for parameters including iron and potassium. Consistent with the results of previous monitoring events, the location of this well proximate to the Existing Landfill mound, and the elevated presence of the previously mentioned parameters, it appears that the groundwater proximate to this well may be influenced by leachate originating from the Existing Landfill.

4.1.3 Landfill Expansion Area

Based on comparisons of the analytical data generated as part of the 1997 First Quarter monitoring event with Class GA groundwater standards and guidance values, statistical background conditions, and the statistical trend analysis, it appears that the groundwater proximate to the following groundwater monitoring wells located adjacent to the Landfill Expansion area may be influenced by leachate originating from the Existing Landfill.

MW-245S

Groundwater monitoring well MW-245S is located downgradient of the Existing Landfill mound and immediately proximate to the Wallkill River. During the 1997 First Quarter Monitoring Event, the sample obtained from this well generally exhibited concentrations of TDS, iron, lead, and manganese which exceeded Class GA groundwater standards or guidance values. In addition, parameters including hardness, conductance, TDS, sulfate, calcium, iron, manganese, and potassium were identified at concentrations which generally exceeded the statistically determined background conditions, while statistically significant increasing trends were typically identified for TDS, manganese, potassium, and sodium. The downgradient location of this monitoring well, with respect to the Existing Landfill, and the presence of these elevated parameter concentrations appears to indicate that the groundwater proximate to this well may be slightly influenced by landfill leachate originating from the Existing Landfill.

MW-312S

Groundwater monitoring well MW-312S is located north of the Existing Landfill and adjacent to the Phase 2 Landfill Expansion Area. During the 1997 First Quarter monitoring event, the sample obtained from this well exhibited concentrations of iron and manganese which exceeded Class GA groundwater standards or guidance values. In addition parameters including hardness, calcium, iron, manganese, and potassium were identified at concentrations which significantly exceeded the statistically determined background conditions. The presence of these elevated parameter concentrations appears to indicate that the groundwater proximate to this well may be slightly influenced by landfill leachate originating for the Existing Landfill.

4.2 SURFACE WATER QUALITY INTERPRETATIONS AND ASSESSMENT

Comparison of the 1997 First Quarter analytical results for the surface water samples collected at the seven available surface water monitoring locations proximate to the Orange County Landfill, with NYSDEC ambient Class C surface water quality standards and guidance values, indicates that iron was identified above the Class C Standard at surface water monitoring locations SW-1, SW-2, SW-3, SW-4, SW-5, and SW-6, while zinc was identified above Class C Surface Water Standards for sample collected from locations SW-1 (0.034 mg/l), SW-2 (0.032 mg/l), SW-3 (0.055 mg/l), SW-4 (0.048 mg/l), SW-5 (0.037 mg/l), SW-6 (0.033 mg/l), and SW-7 (0.054 mg/l). In addition, selenium was identified above Class C Surface Water Standards for samples collected from locations SW-1 (0.056 mg/l) and SW-2 (0.056 mg/l).

In general, it appears that the elevated presence of various metals and inorganic parameters within the SW-1 surface water sample partially originated as a result of the elevated presence of suspended solids, which were collected as part of the original water sample. Increasing parameter concentration trends which were identified at surface water sampling locations SW-1, included TDS, calcium, magnesium, potassium, and sodium, while increasing parameter concentration trends which were identified at surface water sampling locations SW-2, SW-3, and SW-4 included calcium, magnesium, potassium, and sodium. An increasing parameter concentration trend which was identified at surface water sampling location SW-6 included alkalinity, while increasing parameter concentration trends were also identified at surface water sampling location SW-7 for manganese and potassium. Decreasing parameter concentrations were identified in the samples collected from surface water sampling locations SW-5 (iron) and SW-3 (sulfate).

The comparison of upstream and downstream water quality conditions revealed that only dissolved oxygen, sulfate, manganese, potassium and sodium significantly exceeded background surface water quality conditions. In general, the results of the 1997 First Quarter monitoring event do not directly indicate that the downstream surface water quality of the Wallkill River is significantly influenced by leachate from the Existing Landfill.

5.0 1997 FIRST QUARTER MONITORING EVENT SUMMARY

5.1 GENERAL

As shown in Tables 3, 11, and 17, the analytical data generated from the analysis of the groundwater and surface water samples, collected during the Orange County Landfill 1997 First Quarter monitoring event, was compared to applicable New York State Department of Environmental Conservation (NYSDEC) Class GA Groundwater Quality Standards and Guidance Values and Class C Surface Water Quality Standards (NYSDEC, 1991a), respectively. As shown in Tables 4, 5, 12, 13, 18, and 19, the respective groundwater and surface water analytical data were entered into a computer spreadsheet as part of the historical record. In addition to a comparison of the 1997 First Quarter Monitoring Event data with NYSDEC Water Quality Standards and Guidance Values, two statistical analysis programs have been incorporated into the environmental monitoring and reporting program. As shown in Tables 7, 9, 14, 15, and 20, the first analysis compares background conditions (upgradient, upstream) to on-site conditions (downgradient, downstream) by examining changes in water quality between upgradient, upstream and downgradient, downstream locations. As shown in Tables 10, 16, and 21, the second analysis uses a computer program to identify possible trends in water quality over time at each of the specific sampling locations.

5.2 COMPARISON OF WATER QUALITY RESULTS WITH NYSDEC WATER QUALITY STANDARDS

5.2.1 Existing Landfill

In general, the groundwater samples collected from monitoring wells located proximate to the Existing Landfill, exhibited TDS, sulfate, iron, and manganese concentrations which consistently exceeded NYSDEC Class GA Standards or Guidance Values during the 1997 First Quarter Monitoring Event. The occurrence of these parameters at concentrations above NYSDEC Standards or Guidance Values may be partially due to the presence of suspended solids within the water samples as related to the regional geologic setting. It should be noted, however, that parameters including iron, and manganese were generally identified within groundwater samples collected from wells MW-207SA, MW-222, MW-303S, MW-304S, and MW-304VS at significantly elevated concentrations which may be indicative of leachate influence from the Existing Landfill. As shown in Figure 2, consistent with the general direction of shallow groundwater flow, it appears that a limited degree of leachate migration is prevalent within the shallow groundwaters along the northeastern and eastern lowland perimeter of the Existing Landfill.

Consistent with the results of the 1996 Second and 1996 Third Quarter monitoring events, the detectable presence of volatile organic compounds including 1,1-dichloroethane, cis-1,2-dichloroethene, benzene, ethylbenzene, m/p-xylene and toluene were identified within the groundwater samples collected from well MW-303S during the 1997 First Quarter monitoring event. As previously mentioned, it is recommended that well MW-303S be additionally monitored for volatile organic compounds during the 1997 Second Quarter monitoring event as a contingency measure.

5.2.2 Landfill Expansion Area

In general, the groundwater samples collected from a limited number of monitoring wells located proximate to the Landfill Expansion Area exhibited iron and manganese which consistently exceeded respective NYSDEC Class GA standards or guidance values during the 1997 First Quarter monitoring event. Although parameters including sulfate, iron, magnesium, manganese, and sodium are typically identified within the local shallow groundwater, the groundwater samples collected from Landfill Expansion Area groundwater monitoring wells MW-245S and MW-312S exhibited significantly elevated concentrations of iron and manganese which may be indicative of leachate influences from the adjacent Existing Landfill.

5.2.3 Surface Water

The surface water samples collected immediately adjacent to the Existing Landfill and Landfill Expansion Area consistently exhibited iron concentrations which exceeded NYSDEC Class C standards. It should be noted, however, that elevated iron concentrations were generally identified within both the upstream as well as the downstream samples, which indicates that this condition is most likely indicative of the regional geologic/hydrologic setting. In general, the results of previous surface water monitoring and the 1997 First Quarter monitoring event, as compared to the Class C Standards and Guidance Values, do not directly indicate that the downstream surface water quality of the Wallkill River is significantly influenced by leachate from the Existing Landfill.

5.3 COMPARISON OF UPGRADIENT AND DOWNGRADIENT CONDITIONS

5.3.1 Existing Landfill

Parameters which were identified above the statistically calculated background conditions for both shallow and deep Existing Landfill groundwater monitoring wells are presented in Tables 7 and 9. In general, the groundwater samples collected from the majority of monitoring wells existing proximate to the Existing Landfill exhibited alkalinity, hardness, conductance, TDS, sulfate, calcium, and manganese concentrations above the respective upgradient background conditions. The groundwater samples collected from monitoring wells MW-207SA, MW-222, MW-303S, MW-304S, and MW-304VS located proximate to the Existing Landfill, as shown in Figure 2, however, exhibited statistically higher parameter concentrations than the groundwater samples collected from the remaining wells located proximate to the Existing Landfill. In general, the significantly elevated parameter concentrations identified (above background conditions) appear to indicate that the water quality existing within the low-land downgradient area proximate to these wells, has been influenced by leachate migrating from the Existing Landfill.

5.3.2 Landfill Expansion Area

Parameters exhibiting concentrations above the statistically calculated background conditions for both shallow and bedrock Landfill Expansion Area monitoring wells are presented in Tables 14 and 15. In general, the groundwater samples collected from monitoring wells located proximate to the Phase 1 and Phase 2 Landfill Expansion Area exhibited alkalinity, conductance, hardness, sulfate, calcium, and manganese concentrations above the respective upgradient background conditions. Specifically, groundwater samples collected from shallow monitoring wells MW-245S, MW-246S, and MW-312S, exhibited significantly higher parameter concentrations than the groundwater samples collected from the remaining wells located proximate to the Landfill Expansion Area. Based upon the groundwater flow contours of the water table and semi-confined sand-gravel unit (Wehran, 1987), it appears that the groundwater quality identified within the majority of the shallow monitoring wells previously listed, may be influenced by groundwater flow and subsequent leachate migration influences, from the Existing Landfill. It should also be noted that the deep groundwaters existing within the local bedrock may naturally exhibit parameter concentrations above background conditions due to the natural geologic setting of the site.

5.3.3 Surface Water

The downstream surface water quality of the Old Wallkill and the Wallkill River was compared to the respective upstream sampling locations. Observed differences in water quality between the upstream and downstream sampling points did not reveal a noticeable specific chemical pattern and many of the differences identified may be attributed to seasonality.

5.4 COMPARISON OF STATISTICAL TREND ANALYSES

5.4.1 Existing Landfill

As shown in Table 10 the historical water quality data from the monitoring wells installed proximate to the Existing Landfill was reviewed and analyzed in order to determine increasing or decreasing trends in parameter concentrations which may indicate improving or worsening water quality at each of the monitoring points. In general, the groundwater sample collected from the majority of the Existing Landfill monitoring wells exhibited statistically significant increasing trends for parameters including alkalinity and potassium while consistent decreasing trends were identified for chloride. The groundwater samples collected from monitoring wells MW-207D, MW-222, MW-223S, and MW-304S located proximate to the Existing Landfill exhibited the most numerous increasing parameter trends. The increasing parameter concentration trends for the previously listed well samples, appears to indicate that the groundwater quality proximate to a number of these wells may be influenced by Existing Landfill leachate.

5.4.2 Landfill Expansion Area

As shown in Table 16, the historical water quality data from the monitoring wells installed proximate to the Landfill Expansion Area was reviewed and analyzed in order to determine increasing or decreasing trends in parameter concentrations which may be indicative of improving or worsening water quality at each of the monitoring points. In general, the groundwater samples collected from a majority of the Landfill Expansion Area monitoring wells exhibited statistically significant increasing trends for parameters including alkalinity, magnesium, TDS, potassium and sodium. The groundwater samples collected from monitoring wells MW-232S, MW-234S, MW-236S, and MW-245S located proximate to the Landfill Expansion Area, exhibited the most numerous increasing trends.

The increasing parameter concentration trends appear to indicate that the water quality proximate to one or more of these Landfill Expansion Area monitoring wells has been influenced by leachate originating from the immediately adjacent Existing Landfill.

5.4.3 Surface Water

As shown in Table 21, the historical surface water quality data was reviewed and analyzed in an effort to determine increasing or decreasing trends in parameter concentrations which may indicate improving or worsening water quality at each of the surface water monitoring locations. In general, the surface water samples collected from sampling points SW-1, SW-2, SW-3, and SW-4 exhibited statistically significant increasing trends for typically native parameters including, calcium, magnesium, potassium, and sodium. Although the increasing parameter concentration trends previously listed could reveal a potential influence from the adjacent Existing Landfill, in general the results of the 1997 First Quarter Monitoring Event, and other subsequent data comparisons, do not directly indicate that the water quality of the adjacent surface waters is significantly influenced by the Existing Landfill.

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Table(s)

Table 1. Monitoring Well Construction Data.

Monitoring Well	Installation Date	Well Depth	Screen Length	Ground Elevation	Top of Casing	Top of PVC Riser	Unit Screened
Existing Landfill							
PZ-1A	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PZ-4	7/15/83	60	10	n/a	387.36	386.22 *	Sand/Gravel
PZ-11	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PZ-12	3/27/84	61	3	n/a	388.47	n/a	Sand/Gravel
MW-3B	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW-207 SA	n/a	n/a	n/a	n/a	389.49	389.13 *	Sand/Gravel
MW-207 D	8/21/87	59	10	n/a	385.45	390.44 *	Sand/Gravel
MW-210 S	9/9/87	23	5	n/a	384.12	383.66 *	Sand/Gravel
MW-210 D	8/14/87	54	10	n/a	384.38	384.14 *	Sand/Gravel
MW-211 VS	9/9/87	9	5	n/a	387.00	386.81 *	Sand/Gravel
MW-211 S	8/12/87	45	10	n/a	386.53	386.30 *	Sand/Gravel
MW-211 D	8/17/87	59.9	10	n/a	386.29	386.01 *	Bedrock
MW-220	8/6/87	30	10	n/a	378.90	378.16 *	Sand/Gravel
MW-221 S	7/10/87	25	10	378.03	381.11	380.74 *	Sand/Gravel
MW-221 D	8/4/87	54	10	378.25	380.87	380.47 *	Bedrock
MW-222	8/31/87	32	10	n/a	382.29	381.73 *	Sand/Gravel
MW-223 S	9/3/87	66.2	2	n/a	388.95	388.75 *	Sand/Gravel
MW-223 D	8/19/87	88.5	7	n/a	389.15	389.02 *	Sand/Gravel
Landfill Expansion Area							
MW-203 S	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW-203 DA	10/5/89	62	10	382.14	384.07	383.84	Sand/Gravel
MW-203 VD	8/15/89	125.4	5	382.06	384.13	384.07	Bedrock
MW-208 SA	2/23/90	73.4	10	382.00	384.34	384.23	Sand/Gravel
MW-208 VD	2/19/90	176.3	5	382.13	384.70	384.50	Bedrock
MW-212 SA	9/8/89	32	10	391.27	394.07	393.65	Sand/Gravel
MW-212 DA	9/6/89	65	5	391.20	393.59	393.37	Bedrock
MW-230 S	8/16/89	68.6	5	382.91	385.33	385.19	Sand/Gravel
MW-230 D	8/30/89	139.5	5	383.07	385.35	385.10	Bedrock
MW-231 S	8/25/89	49.9	10	385.11	388.28	388.16	Sand/Gravel
MW-231 D	7/24/89	93.7	5	385.68	387.56	387.43	Bedrock
MW-232 S	8/31/89	25.5	10	385.81	388.43	388.25	Sand/Gravel
MW-232 D	8/1/89	84.3	5	385.63	386.67	386.53	Bedrock
MW-233 S	10/18/90	19	10	387.34	389.15	388.94	Sand/Gravel
MW-233 D	10/18/90	100	5	387.21	389.82	389.75	Bedrock
MW-234 S	8/29/89	41.8	8	387.32	390.64	390.37	Sand/Gravel
MW-234 D	8/3/89	86	5	387.87	390.04	389.89	Bedrock
MW-235 S	9/11/89	44.5	10	385.54	388.00	387.86	Sand/Gravel
MW-235 D	9/1/89	83.6	5	385.40	387.37	387.17	Bedrock
MW-236 S	9/29/89	55	10	383.16	385.27	385.03	Sand/Gravel
MW-236 D	9/27/89	174.4	5	382.94	385.49	385.24	Bedrock
PS247-1	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PS247-2	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PS247-3	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PS247-4	n/a	n/a	n/a	n/a	n/a	n/a	n/a
PS247-5	n/a	n/a	n/a	n/a	n/a	n/a	n/a
MW-244 S	10/30/90	42.4	8	382.78	387.70	387.49	Sand/Gravel
MW-244 D	10/29/90	92.6	5	382.16	387.14	386.98	Bedrock
MW-245 S	10/26/89	47	10	388.16	390.95	390.74	Sand/Gravel
MW-245 D	10/25/89	81	5	388.08	390.99	390.76	Bedrock
MW-246 S	10/4/89	44.1	10	386.15	389.18	388.97	Sand/Gravel
MW-246 D	9/28/89	111.2	5	386.20	388.61	388.38	Bedrock

* - Estimated values

NOTE: Contains information obtained from previous reports prepared by Wehran-New York, Inc.

Existing Landfill (New Installations)							
MW-301D	n/a	105.09	n/a	n/a	n/a	n/a	n/a
MW-301S	n/a	57.54	n/a	n/a	n/a	n/a	n/a
MW-302	n/a	70.96	n/a	n/a	n/a	n/a	n/a
MW-303D	n/a	74.54	n/a	n/a	n/a	n/a	n/a
MW-303S	n/a	27.2	n/a	n/a	n/a	n/a	n/a
MW-304D	n/a	62.32	n/a	n/a	n/a	n/a	n/a
MW-304S	n/a	32.59	n/a	n/a	n/a	n/a	n/a
MW304VS	n/a	10.16	n/a	n/a	n/a	n/a	n/a
Expansion Landfill (New Installations)							
MW-312S	n/a	26.49	n/a	n/a	n/a	n/a	n/a

Table 2. Monitoring Well Water Elevations.

	Units	PZ 1A	PZ 4	PZ 11	PZ 12	MW 223S	MW 223D	MW 207SA	MW 207D	MW 303S	MW 303D	MW 304VS	MW 304S	MW 301S
Top of PVC	feet	n/a*	386.22	n/a*	n/a*	388.75	389.02	389.13	390.44	n/a*	n/a*	n/a*	n/a*	n/a*
Nov 1990	feet	n/a*	368.36	n/a*	n/a*	371.05	371.09	370.50	370.68					
Feb 1991	feet	n/a*	368.03	n/a*	n/a*	372.13	372.23	371.68	371.84					
May 1991	feet	n/a*	367.88	n/a*	n/a*	372.69	372.77	372.10	372.29					
Aug 1991	feet	n/a*	365.16	n/a*	n/a*	369.81	369.93	369.92	370.13					
Nov 1991	feet	n/a*	365.23	n/a*	n/a*	369.10	369.59	368.87	368.94					
Feb 1992	feet	n/a*	366.38	n/a*	n/a*	369.86	370.21	369.49	369.71					
May 1992	feet	n/a*	367.31	n/a*	n/a*	371.33	371.56	370.92	371.15					
Aug 1992	feet	n/a*	367.15	n/a*	n/a*	370.96	371.12	370.51	370.75					
Dec 1992	feet	n/a*	366.38	n/a*	n/a*	369.66	369.81	369.10	369.48					
Feb 1993	feet	n/a*	367.88	n/a*	n/a*	371.19	371.42	370.78	371.02					
May 1993	feet	n/a*	367.80	n/a*	n/a*	372.98	373.06	372.52	372.69					
Sep 1993	feet	n/a*	365.02	n/a*	n/a*	369.45	369.61	369.16	369.32					
Dec 1993	feet	n/a*	366.76	n/a*	n/a*	369.58	369.64	368.79	369.24					
Feb 1994	feet	n/a*	368.80	n/a*	n/a*	370.75	370.81	369.99	370.21					
May 1994	feet	n/a*	368.35	n/a*	n/a*	373.37	373.39	372.83	372.97					
Aug-94	feet	n/a*	367.29	n/a*	n/a*	370.74	370.88	370.33	370.52					
Nov-94	feet	n/a*	365.94	n/a*	n/a*	369.95	370.05	369.58	369.71	n/a*	n/a*	n/a*	n/a*	
March - 95	feet	n/a*	368.42	n/a*	n/a*	375.52	372.62	372.04	372.25	n/a*	n/a*	n/a*	n/a*	n/a*
June-95	Feet	n/a*	366.11	n/a*	n/a*	370.81	370.90	370.35	370.55	n/a*	n/a*	n/a*	n/a*	n/a*
Sept. - 95	Feet	n/a*	369.24	n/a*	n/a*	368.55	368.67	368.31	368.38	n/a*	n/a*	n/a*	n/a*	n/a*
Nov-95	Feet	n/a*	372.14	n/a*	n/a*	371.32	371.42	370.81	371.04	n/a*	n/a*	n/a*	n/a*	n/a*
April-96	Feet	n/a*	373.37	n/a*	n/a*	373.59	373.68	372.98	373.19	n/a*	n/a*	n/a*	n/a*	n/a*
June-96	Feet	n/a*	358.13	n/a*	n/a*	373.11	373.23	372.78	372.97	n/a*	n/a*	n/a*	n/a*	n/a*
Sept-96	Feet	n/a*	371.42	n/a*	n/a*	372.35	372.41	371.88	372.10	n/a*	n/a*	n/a*	n/a*	n/a*
Dec-96	Feet	n/a*	373.20	n/a*	n/a*	372.73	372.85	372.37	372.58	n/a*	n/a*	n/a*	n/a*	n/a*
May-97	Feet	n/a*	373.17	n/a*	n/a*	373.80	373.92	373.44	373.65	n/a*	n/a*	n/a*	n/a*	n/a*

	Units	MW 304D	MW 220	MW 221S	MW 221D	MW 222	MW 3B	MW 230S	MW 230D	MW 231S	MW 231D	MW 232S	MW 232D	MW 301D
Top of PVC	feet	n/a*	378.16	380.74	380.47	381.73	n/a*	385.19	385.10	388.16	387.43	388.25	386.53	n/a*
Nov 1990	feet		360.71	363.58	365.44	362.38	n/a*	372.34	372.63	371.36	371.37	374.39	371.21	
Feb 1991	feet		360.04	364.53	365.76	363.34	n/a*	373.81	374.01	372.54	372.47	370.85	386.53	
May 1991	feet		359.14	364.94	365.57	363.55	n/a*	374.27	374.54	372.99	373.03	374.92	372.84	
Aug 1991	feet		357.23	362.74	363.00	360.85	n/a*	370.90	371.22	370.22	370.14	373.49	369.91	
Nov 1991	feet		357.35	361.62	362.83	360.41	n/a*	370.20	370.42	369.51	369.42	372.90	369.29	
Feb 1992	feet		358.36	362.77	364.00	361.48	n/a*	371.54	371.77	370.27	370.52	372.96	370.00	
May 1992	feet		359.19	364.02	364.93	362.64	n/a*	373.18	373.62	371.91	372.06	373.92	371.69	
Aug 1992	feet		359.55	364.01	364.39	362.52	n/a*	372.41	372.71	371.38	371.62	373.96	371.26	
Dec 1992	feet		359.56	362.76	364.20	361.47	n/a*	370.90	371.12	370.05	370.17	372.90	369.59	
Feb 1993	feet		359.86	364.33	365.57	363.20	n/a*	372.88	373.27	371.66	371.82	374.26	371.55	
May 1993	feet		359.14	366.35	365.93	365.03	n/a*	374.53	374.75	373.40	373.34	376.37	373.26	
Sep 1993	feet		356.85	362.11	362.66	360.93	n/a*	370.35	370.52	369.89	369.82	373.97	369.78	
Dec 1993	feet		360.29	362.32	363.88	361.22	n/a*	370.75	370.82	369.58	369.60	372.92	370.03	
Feb 1994	feet		362.22	363.64	365.45	362.41	n/a*	372.25	372.51	370.94	370.94	373.10	370.51	
May 1994	feet		359.95	366.86	366.66	365.22	n/a*	374.84	375.20	373.69	373.63	375.64	373.54	
Aug-94	feet		358.11	363.39	364.09	362.13	n/a*	371.72	371.84	371.06	371.02	374.15	370.94	
Nov-94	feet	n/a*	358.03	362.78	363.62	361.60	n/a*	371.22	371.38	370.42	370.36	373.45	370.30	
March - 95	Feet	n/a*	360.89	365.46	366.32	365.10	n/a*	374.28	374.81	372.96	372.95	374.58	372.82	n/a*
June-95	Feet	n/a*	357.76	363.33	362.77	362.62	n/a*	372.18	372.35	371.24	371.22	374.15	371.09	n/a*
Sept. - 95	Feet	n/a*	356.81	361.38	362.01	360.45	n/a*	369.41	369.33	368.88	368.82	372.80	368.79	n/a*
Nov-95	Feet	n/a*	360.59	364.52	365.18	363.06	n/a*	372.94	373.27	371.70	371.70	373.71	371.04	n/a*
April-96	Feet	n/a*	361.57	366.94	364.96	365.17	n/a*	375.28	374.84	374.05	371.86	376.36		n/a*
June-96	Feet	n/a*	347.21	366.24	363.46	355.43	n/a*	374.57	372.20	373.57	369.61	376.10		n/a*
Sept-96	Feet	n/a*	360.60	364.97	363.25	363.14	n/a*	373.92	374.67	372.67	370.63	375.23		n/a*
Dec-96	Feet	n/a*	360.29	365.97	366.47	364.03	n/a*	374.38	374.64	373.11	373.13	375.67		n/a*
May-97	Feet	n/a*	360.14	365.74	366.32	364.06	n/a*	374.41	374.95	373.20	373.19	375.57		n/a*

Table 2. Monitoring Well Water Elevations.

	Units	MW 233S	MW 233D	MW 234S	MW 234D	MW 235S	MW 235D	MW 312S	MW 212DA	MW 236S	MW 236D	MW 208SA	MW 208VD	MW 302
Top of PVC	feet	388.94	389.75	390.37	389.89	387.86	387.17	n/a*	393.37	385.03	385.24	384.23	384.50	n/a*
Nov 1990	Feet	377.21	371.19	370.74	370.89	369.99	370.72		368.80	365.95	368.56	371.11	371.70	
Feb 1991	Feet	377.22	372.21	371.82	371.59	371.21	372.01		369.78	366.79	369.60	372.03	373.01	
May 1991	Feet	377.45	372.68	372.22	372.39	371.61	372.87		370.26	367.45	370.15	366.52	373.60	
Aug 1991	Feet	377.02	370.22	370.30	370.41	371.27	369.18		368.52	368.35	368.35	373.93	369.91	
Nov 1991	Feet	375.86	369.30	369.18	369.20	368.45	368.90		368.36	365.24	366.70	369.67	369.53	
Feb 1992	Feet	376.41	370.20	369.76	369.98	369.20	369.60		368.30	366.97	368.55	371.29	371.77	
May 1992	Feet	377.17	371.59	371.23	371.33	370.45	370.84		369.43	367.12	369.12	371.87	372.74	
Aug 1992	Feet	376.82	371.18	371.10	371.07	370.44	370.72		369.53	370.29	369.68	372.74	372.18	
Dec 1992	Feet	376.11	369.90	369.50	369.65	368.84	369.14		367.82	366.66	368.07	370.52	370.66	
Feb 1993	Feet	377.32	371.41	367.09	371.23	370.38	370.64		369.51	367.61	369.10	371.78	372.41	
May 1993	Feet	379.28	373.14	373.02	372.88	372.08	372.45		371.07	368.92	370.66	373.20	373.88	
Sep 1993	Feet	376.92	369.79	369.56	369.48	368.65	368.99		367.46	364.78	366.30	369.02	369.34	
Dec 1993	Feet	376.30	369.68	369.23	369.26	368.52	368.89		367.41	367.33	367.56	370.88	370.18	
Feb 1994	Feet	376.35	370.55	369.97	370.27	369.70	370.02		368.57	366.23	368.20	370.99	371.51	
May 1994	Feet	376.43	373.50	373.81	373.27	372.60	372.80		371.57	369.59	371.38	373.71	374.47	
Aug-94	Feet	376.93	370.83	370.80	370.66	369.88	370.16		368.63	366.37	367.88	370.58	370.93	
Nov-94	Feet	376.24	370.29	370.23	370.04	369.23	369.47	n/a*	367.94	365.85	366.87	370.29	370.53	
March - 95	Feet	378.68	372.74	374.10	372.58	371.80	372.03	n/a*	370.62	370.84	371.70	373.92	374.43	n/a*
June-95	Feet	376.81	371.04	370.93	370.69	369.96	370.23	n/a*	368.50	366.16	367.48	370.66	371.06	n/a*
Sept. - 95	Feet	375.35	368.76	368.63	368.54	367.90	368.07	n/a*	366.53	364.14	363.81	367.98	368.32	n/a*
Nov-95	Feet	378.27	371.50	372.72	371.28	370.59	370.80	n/a*	369.50	369.01	366.65	372.34	372.81	n/a*
April-96	Feet	379.39	371.84	374.96	373.50	372.81	370.64	n/a*	370.17	371.52	366.81	374.63	372.34	n/a*
June-96	Feet	378.84	369.35	373.42	373.12	372.25	368.97	n/a*	367.76	371.37	366.50	374.32	374.47	n/a*
Sept-96	Feet	379.25	372.64	374.46	372.67	372.08	372.17	n/a*	370.79	375.47	373.80	375.96	375.43	n/a*
Dec-96	Feet	378.46	372.99	374.19	372.78	372.05	372.38	n/a*	370.88	369.14	371.06	373.28	373.88	n/a*
May-97	Feet	377.96	373.03	374.35	373.83	373.10	373.48	n/a*	370.83	369.08	367.49	373.36	374.36	n/a*

	Units	MW 203S	MW 203DA	MW 203VD	MW 244S	MW 244D	MW 245S	MW 245D	MW 246S	MW 246D	PS 247-1	PS 247-2	PS 247-3
Top of PVC	feet	n/a*	383.84	384.07	387.49	386.98	390.74	390.76	388.97	388.38	n/a*	n/a*	n/a*
Nov 1990	feet		372.96	372.55	350.51	360.91	361.10	359.97	361.55	360.83			
Feb 1991	feet		375.04	374.06	361.49	361.51	360.72	360.61	359.97	360.66			
May 1991	feet		375.48	374.42	361.07	360.88	359.66	360.52	358.88	359.74			
Aug 1991	feet		371.71	371.93	359.37	359.13	358.11	357.92	357.46	358.29			
Nov 1991	feet		370.98	370.46	358.99	358.83	358.16	357.35	357.54	358.15			
Feb 1992	feet		371.83	372.18	360.32	360.21	359.53	359.30	359.01	359.57			
May 1992	feet		374.45	373.47	361.18	360.75	360.02	360.39	359.22	359.99			
Aug 1991	feet		373.19	372.86	360.89	360.36	359.53	359.78	358.69	359.47			
Dec 1992	feet		371.66	371.08	360.91	360.67	360.27	359.85	359.48	360.19			
Feb 1993	feet		374.05	373.14	361.51	361.33	360.70	360.28	360.31	360.72			
May 1993	feet		375.49	374.61	361.38	361.00	359.83	360.25	358.96	359.81			
Sep 1993	feet		371.17	370.29	358.44	358.28	357.47	357.72	356.88	357.54			
Dec 1993	feet		371.52	371.00	360.71	360.81	360.77	359.67	360.48	360.74			
Feb 1994	feet		373.63	372.54	362.73	362.70	362.66	362.73	361.91	362.44			
May-1994	feet		375.92	375.05	362.19	361.74	360.55	360.85	359.70	360.73			
Aug-94	feet		372.31	371.56	359.72	359.60	358.90	358.26	358.66	358.93			
Nov-94	feet	n/a*	371.99	371.09	359.85	359.64	358.72	358.71	358.20	358.80	n/a*	n/a*	n/a*
March - 95	Feet	n/a*	375.50	374.91	362.45	362.18	361.51	361.95	360.61	361.43	n/a*	n/a*	n/a*
June-95	Feet	n/a*	372.88	372.06	359.50	359.23	358.41	358.60	357.78	358.43	n/a*	n/a*	n/a*
Sept. - 95	Feet	n/a*	369.90	369.00	358.36	358.23	357.50	357.55	356.95	357.60	n/a*	n/a*	n/a*
Nov-95	Feet	n/a*	374.19	373.32	361.90	361.61	360.77	360.98	359.93	360.76	n/a*	n/a*	n/a*
April-96	Feet	n/a*	375.06	374.12	363.43	360.62	362.27	359.90	361.52	358.40	n/a*	n/a*	n/a*
June-96	Feet	n/a*	372.10	371.79	356.25	353.48	364.64	362.72	358.94	356.47	n/a*	n/a*	n/a*
Sept-96	Feet	n/a*	375.05	375.23	362.18	360.24	361.31	359.36	360.55	358.38	n/a*	n/a*	n/a*
Dec-96	Feet	n/a*	375.34	374.71	362.45	361.99	361.00	361.02	360.26	361.03	n/a*	n/a*	n/a*
May-97	Feet	n/a*	375.19	374.85	362.08	361.26	360.86	360.91	360.14	360.67	n/a*	n/a*	n/a*

** No Survey Data Available For Correlation.*

Table 3 - Groundwater Analytical Results - Inorganic and Metal Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	PZ 1A	PZ 4	PZ 11	PZ 12	MW 3B	MW 207SA	MW 207D
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/26/97*
Total Cyanide	mg/l	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	mg/l	1		<1	<1	<1	<1	<1	<1	<1
Potassium, total	mg/l			2.30	4.50	2.50	1.20	1.70	16.00	4.60
Sodium, total	mg/l	20		11	11	6.6	7.1	14	12	4.2
Iron, total	mg/l	0.3		1.7	22.0	2.8	1.1	2.4	170.0	12.0
Manganese, total	mg/l	0.3		0.39	1.40	1.60	0.53	0.61	6.90	1.80
Magnesium, total	mg/l		35	18	28	24.0	7.4	16	33	22
Lead, total	mg/l	0.025		<0.01	0.021	<0.01	<0.01	0.014	0.14	0.012
Cadmium, total	mg/l	0.010		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum	mg/l			0.76	9.1	0.92	0.55	1.2	73	0.73
Calcium, total	mg/l			95	200	150	52	100	320	120
Antimony	mg/l		0.003	<0.06	<0.06	<0.06	<0.06	<0.06	0.21	<0.06
Arsenic	mg/l	0.025		<0.01	<0.01	<0.01	<0.01	0.016	<0.01	<0.01
Beryllium	mg/l		0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	mg/l	1		<0.2	<0.2	<0.2	<0.2	<0.2	1.3	<0.2
Chromium	mg/l	0.05		<0.01	0.016	<0.01	<0.01	<0.01	0.1	<0.01
Copper	mg/l	0.2		<0.02	0.032	<0.02	<0.02	<0.02	0.42	<0.02
Mercury	mg/l	0.002		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Nickel	mg/l			<0.01	0.026	<0.01	<0.01	<0.01	0.16	<0.01
Selenium	mg/l	0.01		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thallium	mg/l		0.004	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Table 3 - Groundwater Analytical Results - Inorganic and Metal Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	PZ 1A	PZ 4	PZ 11	PZ 12	MW 3B	MW 207SA	MW 207D
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/26/97*
Zinc	mg/l	0.3		0.17	0.16	0.13	0.15	0.13	0.73	0.17
Cobalt	mg/l			<0.01	0.012	<0.01	<0.01	<0.01	0.097	<0.01
Vanadium	mg/l			<0.03	<0.03	<0.03	<0.03	<0.03	0.12	<0.03
Hardness	mg/l CaCO3			310	610	480	160	320	920	390
TKN	mg/l			0.18	0.59	0.76	0.36	0.29	0.69	0.69
Ammonia	mg/l	2		<0.03	0.08	<0.03	0.11	<0.03	<0.03	<0.03
TOC	mg/l			1	<1	3	1.7	2.8	2.6	4.8
Total Phenols	mg/l	0.001		<0.002	<0.002	0.0056	<0.002	<0.002	<0.002	<0.002
Nitrate	mg/l	10		0.086	<0.02	<0.02	<0.02	<0.02	<0.02	0.61
BOD-5	mg/l			<4	<4	<4	<4	<4	4.2	<4
TDS	mg/l	500		500	780	660	270	530	780	550
Sulfate	mg/l	250		180	480	160	44	110	86	90
Alkalinity	mg/l CaCO3			170	370	430	170	330	980	420
Chloride	mg/l	250		15.0	12.0	15.0	6.4	36.0	24.0	4.5
Color	Units	15		10	10.0	10.0	10.0	10.0	20.0	20.0
Hexavalent Chromium	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromide	mg/l	2.0		<2	<2	<2	<2	<2	<2	<2
Dissolved Oxygen	mg/l			1.40	1.94	3.55	3.29	3.34	<1	5.51
Redox Potential, field	mV			160	125	65	95	20	-10	115
pH, field	std units	6.5-8.5		7.5	7.2	7.1	8.1	7.4	6.2	6.5
Conductance, field	umhos/cm			718	1200	1080	402	920	1430	1000
Turbidity	NTU			125	643	41	55	38	>999	178
Temperature	deg C			9.8	10.3	9.9	10	10.5	10.5	9.6
COD	mg/l			6.4	26	13.0	9	15	53	13

Table 3 - Groundwater Analytical Results - Inorganic and Metal Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	MW 220	MW 221S	MW 221D	MW 222	MW 223S	MW 223D
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/26/96*
Total Cyanide	mg/l	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	mg/l	1		<1	<1	<1	<1	<1	<1
Potassium, total	mg/l			5.40	15.00	2.10	6.40	1.90	2.60
Sodium, total	mg/l	20		9.4	30	9.8	42	6.9	7.9
Iron, total	mg/l	0.3		13.0	91.0	0.19	41.00	11.00	2.20
Manganese, total	mg/l	0.3		1.50	10.0	<0.01	2.40	2.40	0.65
Magnesium, total	mg/l		35	32	33.0	14.0	26.0	29.0	22.0
Lead, total	mg/l	0.025		0.016	0.11	<0.01	0.036	<0.01	0.029
Cadmium, total	mg/l	0.010		<0.01	<0.01	<0.01	<0.01	<0.01	0.021
Aluminum	mg/l			6.2	59	<0.1	11	0.34	0.39
Calcium, total	mg/l			220	250	37	270	200	110
Antimony	mg/l		0.003	0.072	0.2	<0.06	<0.06	<0.06	<0.06
Arsenic	mg/l	0.025		<0.01	<0.01	<0.01	<0.01	<0.01	0.02
Beryllium	mg/l		0.003	<0.01	<0.01	<0.01	<0.01	<0.01	0.019
Barium	mg/l	1		<0.2	0.4	<0.2	0.28	<0.2	<0.2
Chromium	mg/l	0.05		<0.01	0.073	<0.01	0.015	<0.01	0.025
Copper	mg/l	0.2		0.021	0.2	<0.02	0.054	<0.02	0.028
Mercury	mg/l	0.002		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Nickel	mg/l			0.013	0.1	0.01	0.031	<0.01	0.02
Selenium	mg/l	0.01		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thallium	mg/l		0.004	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Table 3 - Groundwater Analytical Results - Inorganic and Metal Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	MW 220	MW 221S	MW 221D	MW 222	MW 223S	MW 223D
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/26/96*
Zinc	mg/l	0.3		0.13	0.55	0.056	0.19	0.07	0.12
Cobalt	mg/l			0.014	0.086	<0.01	0.018	<0.01	0.023
Vanadium	mg/l			<0.03	0.099	<0.03	<0.03	<0.03	<0.03
Hardness	mg/l CaCO3			690	760	150	790	620	370
TKN	mg/l			0.49	1.4	0.4	2	0.58	0.88
Ammonia	mg/l	2		<0.03	0.25	<0.03	1.00	0.096	0.12
TOC	mg/l			2.4	5	<1	9.6	2.2	2.2
Total Phenols	mg/l	0.001		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nitrate	mg/l	10		<0.02	<0.02	0.037	<0.02	<0.02	<0.02
BOD-5	mg/l			<4	<4	<4	11	<4	<4
TDS	mg/l	500		1000	1100	230	1100	860	520
Sulfate	mg/l	250		400	200	34	46	100	92
Alkalinity	mg/l CaCO3			550	800	140	370	720	320
Chloride	mg/l	250		27.0	68.0	58.0	150.0	18.0	18.0
Color	Units	15		10.0	10.0	10.0	25.0	50.0	15.0
Hexavalent Chromium	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromide	mg/l	2.0		<2	<2	<2	<2	<2	<2
Dissolved Oxygen	mg/l			2.57	3.30	2.60	3.84	1.62	1.49
Redox Potential, field	mV			155	120	180	10	-10	0
pH, field	std units	6.5-8.5		7	6.6	8	6.5	6.1	6.6
Conductance, field	umhos/cm			1590	1700	454	2030	1730	1340
Turbidity (field)	NTU			>999	>999	130	160	337	20
Temperature	deg C			10.6	7.6	9.1	10.1	9.9	9.3
COD	mg/l			57	160	11	74	13	8.6

Table 3 - Groundwater Analytical Results - Inorganic and Metal Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	MW 301 D	MW 301 S	MW 302	MW 303 D	MW 303 S	MW 304 D	MW 304 S	MW 304 VS
Sample Collection Date				*03/25/97*	*03/24/97*	*03/25/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*
Total Cyanide	mg/l	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	mg/l	1		<1	<1	<1	<1	<1	<1	<1	<1
Potassium, total	mg/l			8.1	1.7	2.20	9	10	4.8	9.10	11.00
Sodium, total	mg/l	20		55	22	10	92	18.0	29.0	16.0	100
Iron, total	mg/l	0.3		2.8	2.7	2.10	0.71	45	6.1	58	47
Manganese, total	mg/l	0.3		0.11	0.23	0.54	0.026	3.40	0.69	5	2.9
Magnesium, total	mg/l		35	22	8.9	23	15	31	25	31	32
Lead, total	mg/l	0.025		<0.01	<0.01	<0.01	<0.01	0.038	<0.01	0.052	0.052
Cadmium, total	mg/l	0.010		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum	mg/l			0.84	1.3	0.68	0.19	14	0.2	21	24
Calcium, total	mg/l			79	42	130	43	210	140	240	220
Antimony	mg/l		0.003	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.12
Arsenic	mg/l	0.025		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Beryllium	mg/l		0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	mg/l	1		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.32	0.24
Chromium	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	0.026	<0.01	0.11	0.036
Copper	mg/l	0.2		<0.02	<0.02	<0.02	<0.02	0.05	<0.02	0.099	0.074
Mercury	mg/l	0.002		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Nickel	mg/l			<0.01	<0.01	<0.01	<0.01	0.037	<0.01	0.09	0.05
Selenium	mg/l	0.01		<0.05	<0.05	<0.05	0.13	<0.05	<0.05	<0.05	<0.05
Silver	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thallium	mg/l		0.004	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Table 3 - Groundwater Analytical Results - Inorganic and Metal Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	MW 301 D	MW 301 S	MW 302	MW 303 D	MW 303 S	MW 304 D	MW 304 S	MW 304 VS
Sample Collection Date				*03/25/97*	*03/24/97*	*03/25/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*
Zinc	mg/l	0.3		0.047	0.17	0.057	0.088	0.16	0.22	0.33	0.24
Cobalt	mg/l			<0.01	<0.01	<0.01	<0.01	0.032	<0.01	0.14	0.037
Vanadium	mg/l			<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	0.059
Hardness	mg/l CaCO3			290	140	420	170	660	460	730	670
TKN	mg/l			0.71	0.47	0.46	7.00	8.9	1.8	0.59	0.71
Ammonia	mg/l	2		<0.03	<0.03	<0.03	0.078	5.7	0.85	0.086	0.14
TOC	mg/l			<1	<1	<1	1.3	3.8	4	7	3.9
Total Phenols	mg/l	0.001		<0.002	<0.002	0.0027	<0.002	<0.002	<0.002	<0.002	<0.002
Nitrate	mg/l	10		0.03	0.13	0.039	0.057	<0.02	<0.02	<0.02	<0.02
BOD-5	mg/l			<4	<4	<4	<4	16	<4	<4	<4
TDS	mg/l	500		620	300	580	740	790	690	860	1700
Sulfate	mg/l	250		150	70	150	74	96	66	90	61
Alkalinity	mg/l CaCO3			160	380	280	220	710	590.0	750	400
Chloride	mg/l	250		150	11.0	53.0	27.0	27.0	58.0	45.0	600.0
Color	Units	15		10	10.0	10.0	10	25.0	15.0	15.0	10
Hexavalent Chromium	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromide	mg/l	2.0		<2	<2	<2	2.1	<2	<2	<2	<2
Dissolved Oxygen	mg/l			2.13	3.95	3.14	2.21	2.12	4.55	3.34	4.19
Redox Potential, field	mV			90	95	60	180	40	10	-5	70
pH, field	std units	6.5-8.5		7.8	7.9	7.4	6.6	5.8	7	6.7	7.1
Conductance, field	umhos/cm			1230	561	990	1450	1650	1320	1450	2780
Turbidity	NTU			547	336	129	30	>999	127	171	50
Temperature	deg C			9.6	9.4	10	9.5	9	8.9	10	4.7
COD	mg/l			4.3	11.00	2.2	11	17.0	19	21	55

Table 4 - Groundwater Analytical Results - Organic Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	PZ 1A	PZ 4	PZ 11	PZ 12	MW 3B	MW 207SA	MW 207D
Sample Collection Date				*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/25/97*
Acetone	ug/l			<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/l	5		<200	<200	<200	<200	<200	<200	<200
Benzene	ug/l	0.7		<5	<5	<5	<5	<5	<5	<5
Bromochloromethane	ug/l		50	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	ug/l			<5	<5	<5	<5	<5	<5	<5
Bromoform	ug/l		50	<5	<5	<5	<5	<5	<5	<5
Bromomethane	ug/l			<5	<5	<5	<5	<5	<5	<5
2-Butanone	ug/l			<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	ug/l			<5	<5	<5	<5	<5	<5	<5
Carbon Tetrachloride	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Chloroethane	ug/l			<5	<5	<5	<5	<5	<5	<5
Chloromethane	ug/l			<5	<5	<5	<5	<5	<5	<5
Chloroform	ug/l	7		<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/l		50	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropan	ug/l			<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	ug/l			<5	<5	<5	<5	<5	<5	<5
Dibromomethane	ug/l			<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	ug/l	4.7		<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	ug/l	4.7		<5	<5	<5	<5	<5	<5	<5
Trans-1,4-Dichloro-2-Butene	ug/l			<100	<100	<100	<100	<100	<100	<100
1,1-Dichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5

Table 4 - Groundwater Analytical Results - Organic Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	PZ 1A	PZ 4	PZ 11	PZ 12	MW 3B	MW 207SA	MW 207D
Sample Collection Date				*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/25/97*
1,1-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5
t-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
2-Hexanone	ug/l		50	<10	<10	<10	<10	<10	<10	<10
Iodomethane	ug/l			<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	ug/l			<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	ug/l			<10	<10	<10	<10	<10	<10	<10
Styrene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Toluene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	ug/l			<5	<5	<5	<5	<5	<5	<5
Vinyl acetate	ug/l			<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	ug/l	2		<5	<5	<5	<5	<5	<5	<5
o-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
m-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
p-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5

Table 4 - Groundwater Analytical Results - Organic Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	MW 220	MW 221S	MW 221D	MW 222	MW 223S	MW 223D
Sample Collection Date				*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/25/97*
Acetone	ug/l			<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/l	5		<200	<200	<200	<200	<200	<200
Benzene	ug/l	0.7		<5	<5	<5	<5	<5	<5
Bromochloromethane	ug/l		50	<5	<5	<5	<5	<5	<5
Bromodichloromethane	ug/l			<5	<5	<5	<5	<5	<5
Bromoform	ug/l		50	<5	<5	<5	<5	<5	<5
Bromomethane	ug/l			<5	<5	<5	<5	<5	<5
2-Butanone	ug/l			<10	<10	<10	<10	<10	<10
Carbon Disulfide	ug/l			<5	<5	<5	<5	<5	<5
Carbon Tetrachloride	ug/l	5		<5	<5	<5	<5	<5	<5
Chlorobenzene	ug/l	5		<5	<5	<5	<5	<5	<5
Chloroethane	ug/l			<5	<5	<5	<5	<5	<5
Chloromethane	ug/l			<5	<5	<5	<5	<5	<5
Chloroform	ug/l	7		<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/l		50	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropane	ug/l			<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	ug/l			<5	<5	<5	<5	<5	<5
Dibromomethane	ug/l			<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	ug/l	4.7		<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	ug/l	4.7		<5	<5	<5	<5	<5	<5
Trans-1,4-Dichloro-2-Butene	ug/l			<100	<100	<100	<100	<100	<100
1,1-Dichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5
1,2-Dichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5

Table 4 - Groundwater Analytical Results - Organic Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	MW 220	MW 221S	MW 221D	MW 222	MW 223S	MW 223D
Sample Collection Date				*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/25/97*
1,1-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	ug/l	5		<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5
t-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/l	5		<5	<5	<5	<5	<5	<5
2-Hexanone	ug/l		50	<10	<10	<10	<10	<10	<10
Iodomethane	ug/l			<5	<5	<5	<5	<5	<5
Methylene Chloride	ug/l			<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	ug/l			<10	<10	<10	<10	<10	<10
Styrene	ug/l	5		<5	<5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/l	5		<5	<5	<5	<5	<5	<5
Toluene	ug/l	5		<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5
Trichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/l	5		<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	ug/l			<5	<5	<5	<5	<5	<5
Vinyl acetate	ug/l			<10	<10	<10	<10	<10	<10
Vinyl Chloride	ug/l	2		<5	<5	<5	<5	<5	<5
o-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5
m-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5
p-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5

Table 4 - Groundwater Analytical Results - Organic Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	MW 301 D	MW 301 S	MW 302	MW 303 D	MW 303 S	MW 304 D	MW 304 S	MW 304 VS
Sample Collection Date				*03/24/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/25/97*	*03/24/97*	*03/24/97*	*03/24/97*
Acetone	ug/l			<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/l	5		<200	<200	<200	<200	<200	<200	<200	<200
Benzene	ug/l	0.7		<5	<5	<5	<5	6.5	<5	<5	<5
Bromochloromethane	ug/l		50	<5	<5	<5	<5	<5	<5	<5	<5
Bromodichloromethane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
Bromoform	ug/l		50	<5	<5	<5	<5	<5	<5	<5	<5
Bromomethane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
2-Butanone	ug/l			<10	<10	<10	<10	<10	<10	<10	<10
Carbon Disulfide	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
Carbon Tetrachloride	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
Chlorobenzene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
Chloroethane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
Chloromethane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
Chloroform	ug/l	7		<5	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/l		50	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromo-3-chloropropan	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
Dibromomethane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichlorobenzene	ug/l	4.7		<5	<5	<5	<5	<5	<5	<5	<5
1,4-Dichlorobenzene	ug/l	4.7		<5	<5	<5	<5	<5	<5	<5	<5
Trans-1,4-Dichloro-2-Butene	ug/l			<100	<100	<100	<100	<100	<100	<100	<100
1,1-Dichloroethane	ug/l	5		<5	<5	<5	<5	7.2	<5	<5	<5
1,2-Dichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5

Table 4 - Groundwater Analytical Results - Organic Paramters

Parameter	Units	Class GA Standard	Class GA Guidance	MW 301 D	MW 301 S	MW 302	MW 303 D	MW 303 S	MW 304 D	MW 304 S	MW 304 VS
Sample Collection Date				*03/24/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/25/97*	*03/24/97*	*03/24/97*	*03/24/97*
1,1-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	8.6	<5	<5	<5
trans-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
t-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/l	5		<5	<5	<5	<5	9.8	<5	<5	<5
2-Hexanone	ug/l		50	<10	<10	<10	<10	<10	<10	<10	<10
Iodomethane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	ug/l			<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	ug/l			<10	<10	<10	<10	<10	<10	<10	<10
Styrene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
Toluene	ug/l	5		<5	<5	<5	<5	13	<5	<5	<5
1,1,1-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5
Vinyl acetate	ug/l			<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	ug/l	2		<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5
m-Xylene	ug/l	5		<5	<5	<5	<5	9.8	<5	<5	<5
p-Xylene	ug/l	5		<5	<5	<5	<5	*	<5	<5	<5

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PZ-01	Sep-87	12	170	1.5	18.2	590	370	3	7.6		<0.005		165	185	441	0.18	0.37	2	<5		<0.01	0.35	
PZ-01	May-88	18	190		17.4	504	240	2	7.25		0.025		154	37	477	0.12		11	<5			<.2	
PZ-01	Aug-88	13.5	162		18.0	608	270	6	7.97		<0.005		176	25	214	0.43		42	<5			0.7	
PZ-01	Nov-88	11	169		18.4	569	308	4	7.06		0.031		165	12	302	0.16		16	<5			0.57	
PZ-01	Feb-89	9	164	10.0	21.0	754	314	2	7.32		<0.005	152	174	18	404	0.04	<.10	6	<5		<0.01	0.2	
PZ-01-A	Feb-90	10.5	171	<10	22.0	650	329	4	7.78		<0.005	-45	209	295	474	0.15	0.1	2	10	<0.005	<0.01		
PZ-01-A	Apr-90	11.3	184		37.8	551	352	8	7.17		<0.005	-17	164	4	486	0.04		25	5			0.27	
PZ-1A	Nov-90	11	194	10.0	20.5	540	360	8	7.6	7.04	<0.05	85.1	175	22	528	<0.1	<0.1	3.7	<5	<0.004	0.009	<0.5	
PZ-1A	Feb-91	11	184	<0.5	22.8	760	360	<3	7.5	7.8	<0.010	-17	186	18	512	0.05	<0.04						
PZ-1A	May-91	11	176	6.4	19.1	550	352	<3.0	7.7	7.31	<0.010	189	192	11	521	0.10	0.21						
PZ-1A	Aug-91	13	178	3.7	21.9	830	340	<3.0	7.6	7.36	<0.010	250	148	50	603	0.07	0.06						
PZ-1A	Nov-91	12	176	4.5	19.0	771	316	4		7.58	<0.010	158	153	7	540	0.12	0.12						
PZ-1A	Feb-92	10	152	5.3	20.8	795	348	<1.0	7.42		<0.010	290	177	27	504	0.23	0.31	1.6	<5	<0.010	<0.004	<0.5	
PZ-1A	May-92	12	186	<1.0	24.0	741	320	<1.0		7.20	<0.010	127	195	25	612	0.10	<0.02	2.60	15	0.02	<0.004	0.05	
PZ-1A	Aug-92	12	198	2.0	21.5	726	298	10		7.08	<0.010	139	196	40	592	<0.04	<0.02						
PZ-1A	Dec-92	11	192	<1.0	15.5	811	308	<1.0		7.21	<0.010	182	188	37	564	0.08	0.07						
PZ-1A	Feb-93	10	178	11.4	16.5	412	254	11		7.59	<0.010	138	207	41	532	0.05	0.12						
PZ-1A	May-93	11.5	184	<1.0	16.5	470	323	7	7.46		<0.010	203.5	217	16	540	0.07	0.13	0.40	<4	<0.004	<0.004	<0.5	
PZ-1A	Aug-93	15	180	18.5	17.0	581	358	<1.0		7.19	<0.010	131	208	13	524	<0.02	0.03						
PZ-1A	Dec-93	10.5	176	12.7	16.0	710	355	6		7.10	<0.010	176	220	49	548	<0.02	0.06						
PZ-1A	Feb-94	10.5	188	<1.0	16.0	767	328	14		7.06	<0.010	126	214	58	460	<0.02	0.09	<2.0				<0.5	0.87
PZ-1A	May-94	12.5	180	<1.0	14.5	594	331	15		7.56	<0.010	84.1	216	21	473	0.05	0.04	<2.0				<0.50	0.84
PZ-1A	Aug-94	13	184	<5.0	16.0	720	445	5		7.14	<0.010	117	230	28	564	0.14	0.51	<2.0	15	<0.004	0.01	<0.5	1.66
PZ-1A	Nov-94	11.5	190	<5.0	16.0	583	246	25		7.72	<0.010	130	209	5	552	0.1	0.08	<2.0				<0.5	3.05
PZ-1A	March-95	10.5	182	<5.0	16.0	494	328	37		7.21	<0.010	117	224	21	512	0.3	0.14	<2				<0.5	<0.2
PZ-1A	June-95	12.5	182	9.3	16.0	478	318	1		7.20	<0.010	25.7	179	24	540	0.3	0.09	<2				2.4	<0.2
PZ-1A	Sept - 95	12.0	181	16.7	17.0	420	333	24		7.41	<0.010	70.2	207	27	568	0.15	<0.05	<2				<0.5	<0.2
PZ-1A	Nov-95	9.0	180	20.4	16.0	435	288	<1		7.52	<0.010	1.0	197	28	540	<0.02	<0.05	<2	<5	<0.004	<0.004	<0.5	0.3
PZ-1A	April-96	9.8	200	14.0	8.6	750	420	1		7.90	<0.002	190.0	56	220	520	0.05	0.10	<4	50.0	<0.01	<0.01	0.3	3.1
PZ-1A	June-96	11.6	210	30.0	11.0	720	390	<1		7.70	<0.002	625.0	180	66	550	<0.03	0.063	<4				0.9	<2
PZ-1A	Sept-96	12.7	170	1.0	10.0	700	330	1.6		7.50	<0.002	157.0	340	58	560	0.03	0.022	<4				0.37	<2
PZ-1A	Nov-96	12.0	180	13.0	15.0	659	290	1.1		7.58	0.0047	195.0	340	21	260	<0.03	0.047	<4				0.22	<2
PZ-1A	March-97	9.8	170	6.4	15.0	718	310	1.0		7.50	<0.002	160.0	180	125	500	<0.03	0.086	<4	10.0	<0.01	<0.01	0.18	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PZ-04	Sep-87	13	380	5.0	10.0	1225	740	3	7.21		0.007		450	210	996	0.25	0.17	9	<5		<0.01	0.32	
PZ-04	May-88	15	300		12.2	853	690	3	7.34		0.033		370	35	841	0.30		11	<5			0.37	
PZ-04	Aug-88	13	351		7.8	1211	712	1	7.26		<0.005		448	26	424	0.19		10	<5			0.5	
PZ-04	Nov-88	9.5	347		10.4	1028	756	6	7.03		0.028		419	26	506	0.25		38	<5			0.57	
PZ-04	Feb-89	9	337	16.7	9.0	1293	708	3	7.68		<0.005	101	438	40	834	0.24	<.1	3	<5		<0.01	0.58	
PZ-04	Apr-89	13.5	256		10.0	930	614	3	7.36		<0.005	13	432	18	426	0.10		18	10			0.54	
PZ-04	Jun-89	14	289		7.1	955	631	8	7.49		0.009		517	44	1120	0.10		39	15			0.5	
PZ-04	Feb-90	10	327	10.0	8.5	832	729	2	6.98		<0.005	-1.2	440	151	982	0.18	<0.1	3	<5	<0.005	<0.01		
PZ-04	Feb-90	11.3	216		8.3	957	570	13	6.29		<0.005	30	79	15	935	0.25		69	10			0.65	
PZ-04	Nov-90	10	357	21.0	7.8	840	740	14	7.4	6.91	<0.05	43.2	340	130	999	0.11	<0.1	4.4	<5	<0.004	0.017	<0.5	
PZ-04	Feb-91	13	336	<1.0	11.9	1100	730	16	7.2	7.46	<0.010	65.3	395	200	958	0.16	<0.04						
PZ-04	May-91	11	336	10.4	5.3	740	690	<3.0	7.3	6.9	<0.010	199	401	1200	518	0.21	0.08						
PZ-04	Aug-91	14	320	13.0	43.1	1385	640	5	7.2	6.98	<0.010		360	350	1014	0.18	<0.04						
PZ-4	Nov-91	12	340	5.6	7.0	1262	615	2		7.21	<0.010	179	365	38	1136	0.24	0.04						
PZ-4	Feb-92	11	336	4.9	8.9	1261	706	3	6.75		<0.010	212	355	63	908	0.27	0.22	0.6	<5	<0.010	<0.004	<0.5	
PZ-4	May-92	12	322	8.6	10.0	1146	629	<1.0		7.06	<0.010	235	354	81	980	0.12	<0.02						
PZ-4	Aug-92	12	322	16.0	11.0	1078	573	<1.0		6.83	<0.010	148.9	389	65	996	0.25	0.11						
PZ-4	Dec-92	10.5	346	3.0	7.0	1261	558	<1.0		6.65	<0.010	194.7	376	82	932	0.17	<0.02						
PZ-4	Feb-93	9.5	342	54.0	8.5	1016	569	38		7.22	<0.010	167	392	168	908	0.16	<0.02						
PZ-4	May-93	12.5	342	<1.0	7.0	565	585	2	7.07		<0.010	109.7	355	63	900	0.16	<0.02	0.2	<5	<0.004	<0.004	<0.5	
PZ-4	Aug-93	14.5	342	10.7	10.0	797	626	<1.0		7.01	<0.010	80.0	145	83	896	0.07	<0.02						
PZ-4	Dec-93	10.5	344	7.8	10.0	1051	642	6		6.94	<0.010	152.6	376	57	888	0.13	<0.05						
PZ-4	Feb-94	11	334	<1.0	10.0	1220	625	38		7.07	<0.010	162	330	63	776	0.09	<0.05	<2.0				<0.5	0.8
PZ-4	Jun-94	13.5	324	<1.0	8.0	843	598	<1		6.93	<0.010	263	355	68	888	0.06	0.02	<2.0				<0.5	0.92
PZ-4	Aug-94	13.5	344	8.9	10.5	1082	638	4		6.79	<0.010	131	426	38	888	0.25	0.4	<2.0	5	<0.004	0.004	<0.5	1.84
PZ-4	Nov-94	11.5	400	<5.0	12.0	809	502	15		7.26	<0.010	128	303	71	940	0.21	0.31	<2.0				<0.5	3.28
PZ-4	March-95	10.50	343	5.0	12.0	595	607	17		7.08	<0.010	130.6	386	27	896	0.74	0.26	<2				<0.5	<0.2
PZ-4	June-95	12.50	335	<5.0	13.0	584	580	<1		7.05	<0.010	19.6	307	65	892	0.54	<0.05	<2				<0.5	0.50
PZ-4	Sept.- 95	11.50	342	<5.0	11.0	506	591	6		7.10	<0.010	-2.7	357	42	944	0.31	0.14	<2				<0.5	0.50
PZ-4	Nov-95	9.50	340	<5.0	11.0	456	596	<1		7.36	<0.010	15.5	304	61	888	0.04	0.07	<2	5.00	<0.004	<0.004	<0.5	<0.2
PZ-4	April-96	9.40	300	32.0	9.5	1230	810	3.6		7.90	<0.002	190.0	330	>900	740	0.11	0.06	4.00	500.00	<0.01	<0.01	0.72	3.00
PZ-4	June-96	12.30	320	280.0	<5	1120	390	<1		7.40	<0.002	290.0	510	>900	810	0.11	<0.02	<4				4.60	<2
PZ-4	Sept-96	12.20	350	30.0	6.0	1200	610	3.7		7.00	<0.002	126.0	650	74	850	0.10	<0.02	<4				0.39	<2
PZ-4	Nov-96	10.70	360	<1	10.0	1180	450	1.4		7.43	<0.002	145.0	550	120	760	0.07	0.04	<4				0.82	<2
PZ-4	March-97	10.30	370	26.0	12.0	1200	610	<1		7.20	<0.002	125.0	480	643	780	0.08	<0.02	<4	10.00	<0.01	<0.01	0.59	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PZ-11	Sep-87	12	390	5.0	14.1	900	550	19	7.11		0.008		220	15	652	0.10	<.1	2	<5		<0.01	0.24	
PZ-11	May-88	14	265		14.8	554	380	8	7.04		0.016		127	350	495	0.16		25	<5			0.5	
PZ-11	Aug-88	13	335		17.7	782	422	<0.1	7.12		<0.005		156	340	262	0.20		66	<5			2.9	
PZ-11	Nov-88	8	295		20.8	629	450	5	7.22		0.025		206	10	352	0.13		27	<5			0.71	
PZ-11	Feb-89	9	258	108.0	25.0	545	453	5	6.85		<0.005	-19	144	265	433	0.13	<.1	6	<5		<0.01	1.54	
PZ-11	Apr-89	133	200		19.8	513	358	10	7.5		0.006	-473	153	200	293	0.09		25	15			0.4	
PZ-11	Jan-89	12	210		20.0	569	362	9	7.45		0.028		214	120	657	0.09		42	35			0.45	
PZ-11	Nov-89	13.5	264		19.8	552	435	7	7.34		0.014		142	58	543	0.12		21	<5			0.42	
PZ-11	Feb-90	19.8	249	34.7	20.7	715	411	15	7.32		<0.005	-22	181	98	507	0.18	0.32	15	10	<0.005	<0.01		
PZ-11	Apr-90	12.1	226		15.9	562	360	4	7.02		<0.005	-24	151	52	517	0.06		5	10			0.67	
PZ-11	Nov-90	12	347	21.0	17.9	770	480	24	7.3	7.21	<0.010	9.8	173	19	645	<1.0	<0.2	2.9	5	<0.004	<0.004	0.5	
PZ-11	Feb-91	10	252	25.2	16.9	810	400	46	6.9	7.74	<0.010	142	165	180	486	0.22	<0.04						
PZ-11	May-91	11	264	16.6	15.7	510	350	9	6.9	6.69	<0.010	200	103	815	464	0.14	0.28						
PZ-11	Aug-91	13	196	32.2	18.3	655	300	13	7.4	7.73	<0.010	96.3	134	570	544	0.12	0.43						
PZ-11	Nov-91	11	276	23.5	15.0	796	364	4		7.29	<0.010	127	85	160	436	0.23	0.06						
PZ-11	Feb-92	11	242	14.7	14.9	766	343	2	7.08		<0.010	101	137	52	428	0.21	<0.02	0.9	<5	<0.010	<0.004	<0.5	
PZ-11	May-92	12	173	15.0	11.0	642	306	<1.0		7.13	<0.010	205.1	14	64	392	0.08	0.02						
PZ-11	Aug-92	12	312	5.0	13.5	430	316	<1.0		6.90	<0.010	263.2	114	33	620	0.23	0.02						
PZ-11	Dec-92	10	294	8.9	12.5	892	354	<1.0		7.14	<0.010	181.0	159	58	556	0.13	0.10						
PZ-11	Feb-93	10	232	16.7	19.0	702	247	24		7.25	<0.010	120.6	101	120	412	0.10	<0.02						
PZ-11	May-93	11.5	256	<1.0	18.0	452	330	4	7.21		<0.010	175.7	94	30	528	0.11	<0.02	0.2	<5	<0.004	<0.004	<0.5	
PZ-11	Aug-93	14	340	22.4	18.0	653	463	<1.0		6.81	<0.010	35.2	105	20	660	0.06	<0.02						
PZ-11	Dec-93	9.5	328	15.7	19.0	809	461	8		7.08	<0.010	159	167	25	660	0.13	<0.05						
PZ-11	Feb-94	10.5	224	9.6	19.0	725	319	28		7.09	<0.010	109	101	45	404	<0.02	<0.05	<2.0				<0.5	0.73
PZ-11	May-94	13	288	5.4	12.0	637	390	26		7.15	<0.010	83.2	152	15	520	0.14	0.02	2.0				<0.50	0.94
PZ-11	Aug-94	13.5	352	13.3	19.0	921	513	5		6.77	<0.010	103	170	11	664	0.20	0.76	2.8	25	<0.004	0.02	<0.5	2.16
PZ-11	Nov-94	11	343	28.6	17.0	660	353	38		7.14	<0.010	116	166	20	600	0.15	0.43	<2.0				<0.5	3.42
PZ-11	March-95	10.50	295	10.0	15.0	512	436	7		7.09	<0.010	132.9	162	7.2	600	0.56	0.67	<2				<0.5	<0.2
PZ-11	June-95	12.00	339	18.6	17.0	510	437	<1		7.01	<0.010	-2.5	148	14.8	644	0.47	0.06	<2				0.73	<0.2
PZ-11	Sept. - 95	10.50	272	12.5	15.0	425	420	<1		7.11	<0.010	-28.3	167	20.0	628	0.18	<0.05	<2				<0.5	<0.2
PZ-11	Nov-95	8.50	356	16.3	18.0	431	428	<1		7.29	<0.010	-30.5	165	17.0	632	<0.02	<0.05	<2	10.00	<0.004	<0.004	<0.5	0.30
PZ-11	April-96	10.00	280	21.0	14.0	758	560	3		7.50	<0.002	165.0	130	40.0	560	0.06	<0.02	<4	25.00	<0.01	<0.01	0.45	3.60
PZ-11	June-96	11.00	230	12.0	11.0	1020	530	2.4		8.50	<0.002	150.0	140	<1	700	<0.03	<0.02	<4				8.10	<2
PZ-11	Sept-96	10.80	420	10.0	9.0	1100	500	1.9		7.00	<0.002	148.0	560	65.0	760	0.05	<0.02	<4				0.53	<2
PZ-11	Nov-96	11.30	380	<1	15.0	970	360	4.1		7.12	<0.002	125.0	530	15.0	640	<0.03	0.05	8.50				0.65	<2
PZ-11	March-97	9.90	430	13.0	15.0	1080	480	3.0		7.10	0.0056	65.0	160	41.0	660	<0.03	<0.02	<4	10.00	<0.01	<0.01	0.76	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PZ-12	Sep-87	12	79	6.4	10.0	390	200	2	7.42		0.024		34	6	300	0.59	<.1	2	<5.0		<.01	0.59	
PZ-12	May-88	14	200		8.2	479	190	3	7.51		0.024		46	330	296	0.51		16	<5.0			<.2	
PZ-12	Aug-88	12	191		10.2	443	200	7	7.47		0.009		43	75	148	0.55		26	<5.0			1.81	
PZ-12	Nov-88	9	172		13.9	334	188	6	7.52		<.005		349	95	195	0.47		17	<5.0			0.75	
PZ-12	Feb-89	8.5	168	91.8	10.0	385	215	2	8.24		0.027	167	56	230	261	0.56	<.1	2	5		0.07	3.2	
PZ-12	Apr-89	13	164		14.7	319	209	8	7.28		0.01	-12	67	170	209	0.48		14	30			2.58	
PZ-12	Jun-89	14	196		9.8	353	183	2	7.8		0.025		113	680	531	0.24		43	140			1.32	
PZ-12	Nov-90	12	173	15.0	10.9	420	190	13	7.6	7.61	<0.010	1.8	55	315	270	<1.0	<0.2	4.2	40	<0.004	<0.004	<5	
PZ-12	Feb-91	10	166	25.1	11.9	400	190	8	7.4	8.19	<0.010	47.2	75	1320	272	0.38	<0.04						
PZ-12	May-91	13	173	12.8	10.5	320	190	6	7.6	6.68	<0.010	239	44	810	288	0.36	0.26						
PZ-12	Aug-91	14	152	35.5	64.6	450	200	38	7.3	7.28	<0.010	319	114	530	286	0.32	0.11						
PZ-12	Nov-91	11	190	23.5	7.5	415	151	3		7.5	<0.010	158	30	530	464	0.53	0.06						
PZ-12	Feb-92	11	193	7.4	12.9	417	165	1		7.40	<0.010	127	26	430	300	0.48	0.24	0.8	<5	<0.010	<0.004	<0.5	
PZ-12	May-92	13	173	<1.	7.0	642	170	<1.0		7.44	<0.010	180.8	9	47	257	0.26	0.11						
PZ-12	Aug-92	13	212	<1.	9.5	280	152	<1.0		7.29	<0.010	327.6	47	29	252	0.52	0.02						
PZ-12	Dec-92	10.5	180	<1.	5.5	444	150	<1.0		7.36	<0.010	127.5	63	112	276	0.28	0.08						
PZ-12	Feb-93	9.5	170	1.8	4.0	456	140	16		7.70	<0.010	99.8	48	40	268	0.33	<0.02						
PZ-12	May-93	12	184	<1.0	9.0	317	166	9		7.23	<0.010	105.0	64	19	252	0.11	<0.02	1.2	<5	<0.004	<0.004	<0.5	
PZ-12	Aug-93	13.5	212	<1.0	5.0	384	177	<1.0		6.89	<0.010	58.2	85	42	192	0.20	0.04						
PZ-12	Dec-93	10	183	5.9	5.0	387	190	<1.0		7.03	<0.010	142	33	47	264	0.25	0.11						
PZ-12	Feb-94	10.5	182	<1.0	5.5	430	169	<1.0		7.83	<0.010	105	53	3	232	0.25	<0.05	<2.0				<0.5	0.67
PZ-12	May-94	13	184	<1.0	4.3	369	176	11		7.58	<0.010	58.0	42	45	220	0.18	0.07	3.0				<0.50	0.80
PZ-12	Aug-94	14	188	<5.0	4.5	405	190	3		7.29	<0.010	75.7	60	17	264	0.29	0.58	2.4	20	<0.004	0.02	<0.5	1.78
PZ-12	Nov-94	12	190	9.5	4.0	350	137	7		7.72	<0.010	104	46	12	260	0.3	0.34	<2.0				0.89	3.28
PZ-12	March-95	11	174	5.0	6.0	334	161	11		7.22	<0.010	123.6	48.2	19	256	1.03	0.38	<2				<0.5	<0.2
PZ-12	June-95	13	190	<5.0	5.0	318	171	<1		7.22	<0.010	-10.6	34.6	40	260	0.82	0.14	<2				<0.5	0.40
PZ-12	Sept. - 95	12	167	8.3	7.0	297	178	<1		7.35	<0.010	-57.6	32.2	35	264	0.26	0.06	<2				<0.5	<0.2
PZ-12	Nov-95	8.5	180	24.5	5.0	298	149	<1		7.47	<0.010	-48.9	42.1	45	260	0.06	<0.05	<2	5.00	<0.004	<0.004	<0.5	<0.2
PZ-12	April-96	9.5	200	14.0	6.7	407	280	<1		8.00	<0.002	90.0	32.0	69	270	0.12	0.024	<4	25.00	<0.01	<0.01	0.23	3.50
PZ-12	June-96	11.0	200	9.4	3.7	402	210	<1		7.50	<0.002	90.0	33.0	43	290	0.17	<0.02	<4				3.60	<2
PZ-12	Sept-96	12.2	210	<1	<1	390	180	<1		7.80	<0.002	30.0	35.0	47	240	<0.03	0.022	<4				0.66	<2
PZ-12	Nov-96	11.3	180	2.8	7.1	405	160	1.5		7.73	<0.002	60.0	34.0	19	250	0.08	0.035	<4				0.67	<2
PZ-12	March-97	10.0	170	9.0	6.4	402	160	1.7		8.10	<0.002	95.0	44.0	55	270	0.11	<0.02	<4	10.00	<0.01	<0.01	0.36	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-3B	Nov-89	12.6	339	10.0	28.6	774	567	3	7.26		0.008	-24	199	105	677	0.11	<0.10	7	<5	<0.005	<0.01		
MW-3B	Feb-90		299		19.0		513	8			<0.005		287	19	640	0.17		8	<5			25	
MW-3B	Apr-90	12	218		26.9	368	343	5	6.21		<0.005	33.3	143	8	659	<0.04		5	10			0.25	
MW-3B	Nov-90	10	420	96.0	34.2	830	600	20	7.3	6.98	<0.05	81.2	158	60	735	0.11	<0.04	8.4		0.004	0.004	<0.5	
MW-3B	Feb-91	10	258	<1.0	17.9	950	400	7	7.3	7.48	<0.010	-12	125	25	524	0.09	<0.04						
MW-3B	May-91	12	222	5.1	13.8	640	326	<3.0	7.4	7.11	<0.010	134	135	63	488	0.11	0.58						
MW-3B	Aug-91	13	228	6.2	17.2	865	64	2	7.4	7	<0.010	273	122	38	542	0.07	<0.04						
MW-3B	Nov-91	13	244	5.6	16.0	906	331	4		7.25	<0.010	101	100	9	516	0.14	<0.04						
MW-3B	Feb-92	11	324	26.4	24.8	1120	439	4	6.64		<0.010	113	151	46	560	0.16	0.17	1	<5	<0.010	<0.004	<0.5	
MW-3B	May-92	13	250	14.4	22.0	1049	528	<1.0		7.02	<0.010	198.2	126	33	488	<0.04	<0.02						
MW-3B	Aug-92	12	330	15.0	36.0	844	328	<1.0		6.79	<0.010	181.4	141	11	688	<0.04	0.17						
MW-3B	Dec-92	9.5	308	4.0	23.0	1032	379	<1.0		6.75	<0.010	160.0	155	49	600	0.07	<0.02						
MW-3B	Feb-93	10	300	2.6	26.5	931	326	21		7.11	<0.010	146.8	164	35	564	0.04	<0.02						
MW-3B	Jun-93	12.5	256	<1.0	25.0	458	335	7	7.07		<0.010	105.8	136	9	520	0.10	<0.02	1.2	<5	0.006	<0.004	<0.5	
MW-3B	Aug-93	14.5	368	<1.0	43.0	759	280	<1.0		6.89	<0.010	26.5	131	27	668	0.08	<0.02						
MW-3B	Dec-93	10.5	352	2.9	40.0	902	446	10		6.98	<0.010	138	158	16	700	0.07	<0.05						
MW-3B	Feb-94	10.5	504	6.7	67.0	1270	576	61		7.03	<0.010	168	128	39	732	0.03	<0.05	<2.0				<0.5	0.94
MW-3B	Jun-94	14	260	<1.0	26.0	621	510	<1		7.07	<0.010	290	102	2	520	<0.02	0.02	<2.0				<0.50	0.95
MW-3B	Aug-94	13	368	13.3	43.0	1075	582	5		6.83	<0.010	136	163	19	752	0.12	0.15	<2.0	10	<0.004	0.007	<0.5	1.64
MW-3B	Nov-94	11.5	307	9.5	34.0	623	2300	16		7.3	<0.010	123	119	8	568	0.16	0.07	<2.0				<0.5	3.6
MW-3B	March-95	10.50	299	10.0	42.0	531	405	36		7.06	<0.010	144.8	122	9.5	652	0.27	0.16	<2				<0.5	<0.2
MW-3B	June-95	11.50	258	9.3	30.0	565	336	7		7.02	<0.010	-30.6	104	7.4	504	0.32	<0.05	<2				<0.5	<0.2
MW-3B	Sept. - 95	11.50	278	12.5	34.0	521	379	6		6.93	<0.010	-31.7	122	5.9	580	0.28	<0.05	<2				<0.5	0.80
MW-3B	Nov-95	9.00	360	16.3	46.0	470	432	<1		7.22	<0.010	-25.0	139	23.0	688	<0.02	<0.05	<2	5.00	<0.004	<0.004	<0.5	0.50
MW-3B	April-96	9.90	170	26.0	19.0	490	280	1.9		8.30	<0.002	135.0	53	72.0	260	<0.03	0.37	<4	50.00	<0.01	<0.01	0.28	3.00
MW-3B	June-96	12.30	330	14.0	30.0	795	440	1.5		7.70	<0.002	195.0	92	23.0	570	<0.03	<0.02	<4				1.30	<2
MW-3B	Sept-96	11.20	420	2.8	34.0	1400	400	4.3		7.00	<0.002	104.0	300	54.0	660	<0.03	<0.02	<4				0.24	<2
MW-3B	Nov-96	10.70	300	<1	36.0	739	270	2.4		7.26	<0.002	110.0	340	21.0	560	<0.03	0.04	<4				0.63	<2
MW-3B	March-97	10.50	330	15.0	36.0	920	320	2.8		7.40	<0.002	20.0	110	38.0	530	<0.03	<0.02	<4	10.00	<0.01	<0.01	0.29	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-207SA	Nov-90	12	832	320.0	36.2	930	730	17	6.7	6.9	<0.010	79.6	130	7500	830	0.25	<0.1	11	40	<0.004	0.055	6.3	
MW-207SA	Feb-91	11	722	46.2	22.8	1200	720	22	6.6	6.73	0.023	68.7	130	8800	896	0.12	<0.04						
MW-207SA	May-91	12	674	54.8	26.6	960	800	8	6.6	6.23	0.02	180	126	6000	908	0.08	0.09						
MW-207SA	Aug-91	12	764	61.4	41.7	1570	720	<30	6.6	6.4	<0.010	297	118	4800	1100	0.09	<0.04						
MW-207SA	Nov-91	12	744	40.0	16.0	1441	1038	32		6.35	<0.010	92.5	9	3520	792	<0.02	0.08						
MW-207SA	Feb-92	12	734	115.0	20.0	1285	573	11	6.62		<0.010	61.8	98	2900	860	0.10	0.82	3.4	<5	<0.010	<0.004	3.47	
MW-207SA	May-92	12	682	26.0	17.0	1201	652	<1.0		6.68	<0.010	39.8	14	2000	888	<0.0	0.19	2.80	15	0.02	<0.004	0.12	
MW-207SA	Aug-92	13	690	36.7	22.5	1108	1207	<1.0		6.46	<0.010	58.9	143	1180	908	<0.0	0.18						
MW-207SA	Dec-92	11	704	93.6	10.0	1325	590	<1.0		6.87	<0.010	50.3	157	1960	856	<0.02	<0.02						
MW-207SA	Feb-93	10	1090	94.5	10.0	1101	922	59		6.52	<0.010	65.1	146	4400	4372	0.09	<0.02						
MW-207SA	May-93	11.5	628	<1	10.0	600	653	6	6.56		<0.010	27.7	122	560	944	<0.02	<0.02	1.6	<5	<0.004	<0.004	<0.5	
MW-207SA	Aug-93	14.5	716	78.8	30.0	949	1072	<1.0		6.58	<0.010	112	182	4700	864	0.05	<0.02						
MW-207SA	Dec-93	11.5	932	110.0	20.0	1164	1060	28		6.54	<0.010	-1.6	146	2000	816	<0.02	<0.05						
MW-207SA	Feb-94	11	668	35.5	16.0	1304	839	104		6.80	<0.010	144.0	132	3300	772	<0.02	<0.05	2.1				<0.5	0.93
MW-207SA	May-94	12.5	688	10.8	17.0	915	720	72		6.57	<0.010	66.9	140	750	766	<0.02	0.12	4.2				<0.50	1.12
MW-207SA	Aug-94	13	604	75.6	16.0	1303	700	2		6.49	<0.010	25.7	162	860	860	<0.02	0.21	3.6	10	<0.004	<0.004	<0.5	2.36
MW-207SA	Nov-94	11.5	840	14.3	16.0	862	590	25		6.56	<0.010	101	143	1880	876	<0.02	0.12	<2.0				<0.5	3.42
MW-207SA	March-95	10.50	731	5.0	23.0	629	666	22		6.48	<0.010	68.5	129	630	872	0.09	0.09	<2				<0.5	<0.2
MW-207SA	June-95	10.50	751	14.0	22.0	604	855	5		6.56	<0.010	-73.6	120	680	920	0.68	0.11	<2				<0.5	<0.2
MW-207SA	Sept. - 95	11.50	790	45.8	10.0	498	834	4		6.57	<0.010	-75.5	130	1960	992	0.11	<0.05	<2				1.73	<0.2
MW-207SA	Nov-95	10.00	816	12.2	15.0	493	833	<1		6.62	<0.010	-86.7	124	1300	864	<0.02	0.07	5.00	25.00	<0.004	<0.004	<0.5	<0.2
MW-207S	April-96	10.80	640	59.0	19.0	1510	840	1.7		5.80	<0.002	-20.0	100	>900	830	0.07	<0.02	6.60	600.00	<0.01	<0.01	1.40	4.40
MW-207S	June-96	11.10	620	110.0	<20	1370	820	1.7		6.60	<0.002	33.0	130	>900	860	<0.03	<0.02	6.60				8.80	<2
MW-207S	Sept-96	11.70	1000	140.0	<10	1400	930	1.3		6.50	<0.002	-40.0	120	17	880	0.059	0.029	6.10				0.91	<2
MW-207S	Nov-96	11.20	610	130.0	19.0	1260	710	2.1		6.68	<0.002	-35.0	<20	200	740	0.048	<0.02	<4				0.55	<2
MW-207S	March-97	10.50	980	53.0	24.0	1430	920	2.6		6.20	<0.002	-10.0	86	>999	780	<0.03	<0.02	4.20	20.00	<0.01	<0.01	0.69	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-207D	Sep-87	12.5	210	24.7	14.1	510	320	3	7.12		0.029		100	25	384	0.29	<0.10	20	<5.0		<0.01	0.29	
MW-207D	May-88	12.5	340		20.1	818	280	3	7.56		0.023		136	6	594	0.07		<1.0	<5.0			0.34	
MW-207D	Aug-88	13	296		22.4	767	310	16	7.6		0.007		147	150	289	0.09		11	5			0.56	
MW-207D	Nov-88	13	318		19.0	835	264	20	7.76		0.058		123	20	371	0.50		30	<5.0			1.05	
MW-207D	Feb-89	10	307	12.1	18.5	910	428	5	8.06		<.005	-186	153	41	551	0.07	<.10	12	<5.0		0.04	0.32	
MW-207D	Apr-89	9.5	288		7.0	713	413	4	7.32		0.007	220	139	17	343	0.13		11	10			0.37	
MW-207D	Jun-89	15	250		16.5	662	369	9	7.58		0.022	-1193	245	16	773	0.11		15	10			0.31	
MW-207D	Nov-89	17	283		16.9	633	385	33	8.06		0.008		159	27	444	0.08		48	10			0.37	
MW-207D	Feb-90	10.5	307	<10	14.6	810	459	2	8.14		0.011		167	549	555	0.05	<0.1	10	5	<0.005	<0.01		
MW-207D	Apr-90	9.15	290		15.8	705	400	8	6.91		<.005	4.75	162	12	624	0.04		18	10			0.24	
MW-207D	Nov-90	10	311	<1.0	14.7	580	445	11	7.4	7	<0.010	89.3	156	165	591	0.21	<0.1	4.5	25	<0.004	0.042	<0.5	
MW-207D	Feb-91	11	320	1.6	16.4	800	470	<3.0	7.2	7.1	0.019	73.3	172	150	618	0.09	<0.04						
MW-207D	May-91	11	288	<1.0	11.7	680	480	<3	7.2	6.75	<0.010	151	152	74	612	0.04	0.16						
MW-207D	Aug-91	14	272	7.9	11.4	940	450	<3.0	7.3	7.23	<0.010	282	153	70	702	0.05	0.04						
MW-207D	Nov-91	13	298	5.8	10.0	875	397	<1		6.99	<0.010	125	158	40	581	0.03	0.06						
MW-207D	Feb-92	11	350	4.6	13.9	871	416	4	7.17		<0.010	90.2	156	38	592	0.06	<0.02	<0.5	<5	<0.010	<0.004	<0.5	
MW-207D	May-92	12	314	<1.	15.0	846	430	<1.0		7.03	<0.010	108.5	15	45	612	<0.0	0.06	1.8	10	<0.010	<0.004	0.06	
MW-207D	Aug-92	12	326	29.0	13.0	796	538	<1.0		6.85	<0.010	102.6	162	15	680	<0.0	0.38						
MW-207D	Dec-92	10.5	352	<1.	10.0	949	396	<1.0		7.04	<0.010	78.7	174	83	652	<0.02	<0.02						
MW-207D	Feb-93	10	392	16.7	11.5	856	423	24		7.01	<0.010	75.4	163	500	632	<0.02	<0.02						
MW-207D	May-93	12	368	<1.0	12.0	506	277	7	7.16		<0.010	109.3	153	98	632	<0.02	<0.02	<0.5	<5	<0.004	<0.004	0.54	
MW-207D	Aug-93	13	388	<1.0	14.0	709	487	<1.0		6.98	<0.010	125	161	128	692	0.06	<0.02						
MW-207D	Dec-93	11	376	6.9	15.0	824	481	16		6.69	<0.010	-17	145	59	638	<0.02	0.05						
MW-207D	Feb-94	10.5	392	1.0	15.0	990	466	60		6.93	<0.010	49.0	151	105	612	<0.02	<0.05	<2.0				<0.5	0.94
MW-207D	May-94	12	410	16.1	15.0	750	530	40		7.09	<0.010	25.8	151	47	666	<0.02	0.07	<2.0				<0.50	1.05
MW-207D	Aug-94	13	388	<5.0	15.5	956	533	<1		6.92	<0.010	-2.9	160	37	720	0.05	0.27	2.6	90	<0.004	0.008	<0.5	2.04
MW-207D	Nov-94	11	408	<5.0	17.0	725	436	8		7.03	<0.010	79.2	146	21	752	0.02	0.35	<2.0				<0.5	3.42
MW-207D	March-95	11.50	436	20.0	19.0	563	529	15		6.79	<0.010	53.6	146	54	712	0.71	0.20	<2				<0.5	<0.2
MW-207D	June-95	11.50	481	9.3	20.0	548	515	6		6.73	<0.010	-23.2	134	34	792	<0.02	0.13	<2				<0.5	<0.2
MW-207D	Sept. - 95	11.50	456	16.7	19.0	465	557	21		6.69	<0.010	-53.3	148	33	768	0.11	<0.05	<2				<0.5	<0.2
MW-207D	Nov-95	10.00	488	<5.0	18.0	456	538	<1		6.94	<0.010	-74.8	130	55	776	<0.02	<0.05	<2	15.00	<0.004	<0.004	<0.5	<0.2
MW-207D	April-96	11.30	250	23.0	3.8	1210	360	6.4		6.60	0.003	40.0	83	33	390	<0.03	0.18	12.00	50.00	<0.01	<0.01	1.50	3.10
MW-207D	June-96	11.30	500	16.0	13.0	1130	620	1.1		7.00	<0.002	98.0	130	86	740	<0.03	<0.02	<4				5.40	<2
MW-207D	Sept-96	11.60	860	2.8	10.0	1300	580	1.8		6.90	<0.002	60.0	380	8	770	<0.03	<0.02	<4				0.40	<2
MW-207D	Nov-96	11.00	530	20.0	17.0	1070	450	2.2		7.10	<0.002	80.0	120	55	710	<0.03	<0.02	<4				1.40	<2
MW-207D	March-97	9.60	420	13.0	4.5	1000	390	4.8		6.50	<0.002	115.0	90	178	550	<0.03	0.61	<4	20.00	<0.01	<0.01	0.69	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-210S	Sep-87	14	171	11.6	10.7	757	333	3	7.34		<0.005		228	150	498	0.37	0.23	2			<0.01	0.5	
MW-210S	May-88	12.8	150		9.1	636	370	3	8.54		<0.005		209	140	524	0.43		8	<5.0			1.26	
MW-210S	Aug-88	13	188		4.7	768	177	2	7.58		0.017		228	3	264	0.26		5	<5.0			0.52	
MW-210S	Nov-88	12.6	204		6.4	753	304	1	7.53		0.045		303	30	319	0.32		13	<5.0			1.37	
MW-210S	Feb-89	10	201	49.6	8.0	837	364	2	8.46		0.014	-62	218	245	475	0.49	<0.10	4	40		<0.01	1.24	
MW-210S	Apr-89	10	211		6.9	642	364	9	7.46		<0.005	202	210	81	725	0.30		2	10			0.61	
MW-210S	Jun-89	13	160		6.7	583	255	8	8.43		0.009	******	260	190	539	0.37		7	220			1.7	
MW-210S	Nov-89	12.5	138		6.6	574	309	2	8		0.009	-71	230	98	444	0.40		5	<5.0			0.7	
MW-210S	Feb-90	11.2	26	<10	5.6	386	145	3	9.43		<0.005	-141	195	120	310	0.37	<0.1	8	10	<0.005	<0.01		
MW-210S	Apr-90	11.2	125		7.8	448	300	2	8.66		<0.005	-85	200	88	414	0.31		8	15			0.74	
MW-210S	Nov-90	12	188	34.0	9.8	460	300	11	7.8	7.13	<0.05	142	22	168	503	0.24	<0.1	8	<5	<0.004	0.04	0.93	
MW-210S	Feb-91	12	118	3.5	14.9	450	160	<3.0	9.5	9.56	0.01	36.5	173	180	338	<0.04	<0.04						
MW-210S	May-91	11	164	2.6	11.7	350	176	<3	9	9.64	<0.010	108	157	210	365	0.48	0.08						
MW-210S	Aug-91	14	108	13.7	10.8	325	200	5	8.3	7.67	<0.010	83.4	151	380	370	0.17	0.38						
MW-210S	Nov-91	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Feb-92	Monitoring Well Submerged - No Sample Collected																					
MW-210S	May-92	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Aug-92	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Nov-92	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Feb-93	Monitoring Well Submerged - No Sample Collected																					
MW-210S	May-93	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Sep-93	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Dec-93	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Feb-94	Monitoring Well Submerged - No Sample Collected																					
MW-210S	May-94	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Aug-94	Monitoring Well Submerged - No Sample Collected																					
MW-210S	Nov-94	Monitoring Well Removed From Monitoring Program - Replaced by MW -303S																					

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-210D	Sep-87	12	810	43.0	127.0	1750	900	9	6.54		0.024		68	98	1175	0.34	<0.10	28	<5.0		<0.01	0.33	
MW-210D	May-88	12	930		198.0	2250	1030	14	6.81		<0.005		106	100	1380	0.09		19	5			1.07	
MW-210D	Aug-88	13	946		167.0	2070	737	17	6.76		0.005		57	125	709	0.16		30	20			0.8	
MW-210D	Nov-88	12	837		132.0	1930	844	13	6.74		0.052		152	5	787	0.35		27	10			1.34	
MW-210D	Feb-89	10	977	70.8	127.0	2180	1000	15	7.26		<0.005	-78	71	280	1240	0.28	<0.1	9	10		0.02	1.79	
MW-210D	Apr-89	10	921		141.0	1739	928	36	6.73		0.015	172	97	84	735	0.28		8	100			1.21	
MW-210D	Jun-89	13.5	743		132.0	1693	780	38	7.03		0.042	******	307	110	1380	0.05		18	95			0.75	
MW-210D	Nov-89	12.7	747		125.0	1364	720	20	6.97		0.009	-8.2	106	105	1050	0.17		53	60			0.76	
MW-210D	Feb-90	11.7	846	16.1	128.0	1456	848	21	7.02		<0.005	-1.7	120	98	1220	1.42	<0.1	15	15	<0.005	<0.01		
MW-210D	Apr-90	10.8	851		126.0	1624	360	15	7.29		<0.005	15.3	113	56	1200	1.20		23	70			1.94	
MW-210D	Nov-90	10	828	25.0	76.0	1000	720	38	7	6.73	<0.05	29.9	151	600	1086	2.82	<0.1	9.1	<5	<0.004	0.058	4.4	
MW-210D	Feb-91	11	854	23.5	94.2	1400	900	16	7	7.17	0.013	-23	95	125	1189	5.40	<0.04						
MW-210D	May-91	12	808	18.6	87.2	1500	840	10	6.8	6.74	0.013	53.1	101	152	1160	5.00	0.14						
MW-210D	Aug-91	14	732	23.8	59.3	1750	700	13	6.9	7.22	<0.010	114	141	174	1088	9.69	<0.04						
MW-210D	Nov-91	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Feb-92	Monitoring Well Submerged - No Sample Collected																					
MW-210D	May-92	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Aug-92	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Nov-92	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Feb-93	Monitoring Well Submerged - No Sample Collected																					
MW-210D	May-93	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Sep-93	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Dec-93	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Feb-94	Monitoring Well Submerged - No Sample Collected																					
MW-210D	May-94	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Aug-94	Monitoring Well Submerged - No Sample Collected																					
MW-210D	Nov-94	Monitoring Well Removed From Monitoring Program - Replaced by MW-303D																					

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-211S	Sep-87	13	380	51.8	38.1	850	450	6	6.9		0.013		100	230	606	1.45	0.25	48	<5.0		<0.01	2.1	
MW-211S	May-88	11.5	500		51.5	1138	160	5	7.67		0.047		103	26	744	2.67		4	<5.0			4.42	
MW-211S	Aug-88	12	627		50.0	1223	614	4	7.2		<0.005		119	310	413	1.88		16	<5.0			2.46	
MW-211S	Nov-88	12	519		51.7	1157	580	6	6.93		0.055		110	65	495	2.16		19	5			2.78	
MW-211S	Feb-89	10	486	74.2	53.0	986	632	7	7.52		<0.005	-77	108	285	676	2.11	<0.1	9	<5.0		0.02	4.48	
MW-211S	Apr-89	11	537		58.9	1099	604	6	7.7		<0.005	189	87	230	529	2.32		11	50			3.23	
MW-211S	Jun-89	21	484		62.0	1218	513	14	7.19		0.011	******	389	70	1140	1.40		2	65			2	
MW-211S	Nov-89	13.8	348		42.4	755	451	8	7.02		0.009	-13	104	62	575	0.14		12	10			0.32	
MW-211S	Feb-90	11	502	26.0	53.7	895	617	6	6.98		0.017		107	130	745	0.25	<0.1	6	10	<0.005	<0.01		
MW-211S	Apr-90	12.4	438		57.0	912	560	16	7.43		<0.005	-22	102	27	699	0.07		26	25			0.52	
MW-211S	Nov-90	12	508	37.0	43.0	670	560	25	7.2	6.73	<0.05	152	140	117	710	<0.1	<0.1	5.5	10	<0.004	0.019	0.69	
MW-211S	Feb-91	12	460	<1.0	42.7	1000	550	14	7	7.24	<0.010	-20	90	270	675	0.25	<0.04						
MW-211S	May-91	12	360	14.0	23.9	730	380	10	7.3	6.64	<0.010	36.8	88	860	608	0.17	0.18						
MW-211S	Aug-91	16	480	18.0	44.8	1240	580	<3.0	7	7.01	<0.010	251	79	175	811	0.16	<0.04						
MW-211S	Nov-91	12	612	24.0	51.0	1416	623	<1		6.82	<0.010	69.1	85	87	846	0.35	<0.04						
MW-211S	Feb-92	Monitoring Well Submerged - No Sample Collected																					
MW-211S	May-92	Monitoring Well Submerged - No Sample Collected																					
MW-211S	Aug-92	Monitoring Well Submerged - No Sample Collected																					
MW-211S	Nov-92	Monitoring Well Submerged - No Sample Collected																					
MW-211S	Feb-93	Monitoring Well Submerged - No Sample Collected																					
MW-211S	May-93	Monitoring Well Submerged - No Sample Collected																					
MW-211S	Sep-93	Monitoring Well Submerged - No Sample Collected																					
MW-211S	Dec-93	Monitoring Well Submerged - No Sample Collected																					
MW-211S	Feb-94	Monitoring Well Submerged - No Sample Collected																					
MW-211S	May-94	Monitoring Well Submerged - No Sample Collected																					
MW-211S	Aug-94	Monitoring Well Submerged - No Sample Collected																					
MW-211S	Nov-94	Monitoring Well Removed From Monitoring Program - replaced vy MW-304S																					

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-211D	Sep-87	13.5	535	3.6	40.4	1170	600	4	6.85		0.025		110	50	735	1.41	<0.10	2	<5.0		<0.01	1.5	
MW-211D	May-88	11.8	490		75.9	1108	560	3	7.56		<.005		99	39	772	1.06		7	<5.0			2.05	
MW-211D	Aug-88	12.5	484		74.7	1275	740	7	6.97		<.005		103	3	396	1.15		16	5			1.42	
MW-211D	Nov-88	12	432		78.0	1141	518	7	7.11		0.052		83	30	473	0.99		13	5			2.24	
MW-211D	Feb-89	10	510	47.3	56.0	1112	620	5	7.6		0.025	283	130	50	700	2.31	<0.10	10	5		<0.01	3.64	
MW-211D	Apr-89	12	199		169.0	1255	157	5	7.45		0.008	184	67	22	495	0.24		1	10			0.49	
MW-211D	Jun-89	16	137		151.0	1236	163	12	7.88		0.006	******	100	3	654	0.33		<1.0	<1.0			0.46	
MW-211D	Nov-89	13.2	472		67.8	913	561	5	7		0.007	-11	81	58	675	1.22		13	10			1.32	
MW-211D	Feb-90	13.3	578	<10	68.0	1011	658	11	7.06		<0.005	-6.4	88	57	797	1.56	<0.1	7	10	<0.005	<0.01		
MW-211D	Apr-90	12.3	523		65.2	1026	480	9	7.25		<0.005	-13	76	39	745	1.45		14	60			1.7	
MW-211D	Nov-90	11	627	30.0	58.0	840	640	24	7.1	6.61	<0.05	138	123	57	827	1.51	<0.1	4.6	5	<0.004	0.019	1.8	
MW-211D	Feb-91	12	594	<1.0	63.5	1100	670	20	6.9	7.16	<0.010	-25	70	75	811	1.95	<0.04						
MW-211D	May-91	11	550	14.7	54.2	830	540	8	7	6.56	<0.010	38.7	67	117	775	1.95	0.05						
MW-211D	Aug-91	11	572	18.5	62.5	1440	600	8	6.9	7.17	<0.010	238	47	130	904	1.84	<0.04						
MW-211D	Nov-91	12	642	15.4	56.0	1436	619	28		6.81	<0.010	8.3	51	66	821	2.57	<0.04						
MW-211D	Feb-92	Monitoring Well Submerged - No Sample Collected																					
MW-211D	May-92	Monitoring Well Submerged - No Sample Collected																					
MW-211D	Aug-92	Monitoring Well Submerged - No Sample Collected																					
MW-211D	Nov-92	Monitoring Well Submerged - No Sample Collected																					
MW-211D	Feb-93	Monitoring Well Submerged - No Sample Collected																					
MW-211D	May-93	Monitoring Well Submerged - No Sample Collected																					
MW-211D	Sep-93	Monitoring Well Submerged - No Sample Collected																					
MW-211D	Dec-93	Monitoring Well Submerged - No Sample Collected																					
MW-211D	Feb-94	Monitoring Well Submerged - No Sample Collected																					
MW-211D	May-94	Monitoring Well Submerged - No Sample Collected																					
MW-211D	Aug-94	Monitoring Well Submerged - No Sample Collected																					
MW-211D	Nov-94	Monitoring Well Removed From Monitoring Program - Replaced by MW-304D																					

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-211VS	Sep-87	19	366	12.9	6.2	1196	635	5	6.72		0.017		305	150	833	0.12	0.31	2	<5.0		<0.01	0.3	
MW-211VS	May-88	11.8	390		4.3	636	410	3	8		<0.005		107	175	490	0.05		1	<5.0			<0.20	
MW-211VS	Nov-89	14.7	335		19.1	714	470	4	7.14		0.015	-23	153	205	554	0.07		17	5			1.24	
MW-211VS	Feb-90	8.8	359	29.7	11.8	543	447	9	4.68		<0.005	-37	94	199	485	0.09	2.34	4	10	<0.005	<0.01		
MW-211VS	Apr-90	11.2	341		6.5	590	360	5	7.43		<0.005	-23	49	100	472	<0.04		9	25			1.37	
MW-211VS	Nov-90	12	458	7.6	3.9	540	490	19	7.2	6.93	<0.05	97.4	120	320	580	<0.1	<0.1	1.4	30	<0.004	0.086	0.7	
MW-211VS	Feb-91	7	386	<1.0	6.0	650	430	9	7.2	7.6	<0.010	139	58	90	468	<0.04	<0.04						
MW-211VS	May-91	12	340	21.0	<1.0	680	370	8	7.3	6.9	<0.010	260	43	400	458	<0.03	0.3						
MW-211VS	Aug-91	22	512	14.0	5.2	1095	550	<30	7.1	6.96	<0.010	260	59	600	740	<0.03	<0.04						
MW-211VS	Nov-91	13	466	4.8	<1	936	491	98		6.92	<0.010	202	58	98	490	<0.02	0.11						
MW-211VS	Feb-92	Monitoring Well Submerged - No Sample Collected																					
MW-211VS	May-92	Monitoring Well Submerged - No Sample Collected																					
MW-211VS	Aug-92	Monitoring Well Submerged - No Sample Collected																					
MW-211VS	Nov-92	Monitoring Well Submerged - No Sample Collected																					
MW-211VS	Feb-93	Monitoring Well Submerged - No Sample Collected																					
MW-211VS	Jun-93	12.5	240	4.3	495.0	556	372	9	7.05		<0.010	128.6	72	86	1284	0.30	0.06	1.6	15	<0.004	<0.004	<0.5	
MW-211VS	Aug-93	19.5	412	45.9	445.0	1321	715	<1.0		6.42	<0.010	2.9	52	82	1652	0.63	0.21						
MW-211VS	Dec-93	Monitoring Well Submerged - No Sample Collected																					
MW-211VS	Feb-94	Monitoring Well Submerged - No Sample Collected																					
MW-211VS	May-94	13.5	348	54.9	1230.0	1725	1110	44		6.69	<0.010	265	48	120	3546	0.59	0.27	2.2				1.80	0.83
MW-211VS	Aug-94	Monitoring Well Submerged - No Sample Collected																					
MW-211VS	Nov-94	Monitoring Well Removed from Monitoring Program - Replaced by MW-304VS																					

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-220	May-88	12	460		18.8	1655	370	5	6.88		0.006		617	300	1390	0.09		14	<5.0			0.2	
MW-220	Aug-88	13	218		32.8	1383	852	<0.1	6.76		<0.005		518	200	483	0.14		5	<5.0			0.34	
MW-220	Nov-88	11	396		30.3	1333	868	4	6.99		0.026		600	18	682	0.12		42	5			0.73	
MW-220	Feb-89	9.3	428	45.5	24.0	1741	1300	4	7.46		0.028	66	741	170	1440	0.12	<0.10	4	5		0.06	1.14	
MW-220	Apr-89	13	378		32.5	1133	892	2	6.97		<0.005	-1	514	260	489	0.08		8	25			2.02	
MW-220	Jun-89	13.8	459		26.8	1447	1210	10	7.08		0.006		841	550	1720	0.05		48	480			1.53	
MW-220	Feb-90	11.7	383	29.7	41.6	1118	912	4	7.15		<0.005	-10	503	298	1170	0.07	0.1	5	10	<0.005	<0.01		
MW-220	Apr-90	11.6	455		39.7	1951	310	3	6.78		<0.005	12.7	515	175	1290	0.04		6	25			0.82	
MW-220	Nov-90	12	485	14.0	37.2	1700	880	25	7.1	6.92	<0.05	145	3	180	1230	<0.1	<0.04	1.7		0.008	0.004	<0.5	
MW-220	Feb-91	12	474	<1.0	50.6	1300	850	14	6.9	7.06	<0.010	24.6	420	290	554	0.07	<0.04						
MW-220	May-91	12	448	17.6	43.6	1200	810	11	7.1	6.54	<0.010	132	369	445	1192	0.06	0.18						
MW-220	Aug-91	13	444	10.4	54.2	1555	700	<30	7	6.9	<0.010	235	290	460	1086	0.06	<0.04						
MW-220	Nov-91	14	460	25.0	37.0	1393	700	7		6.79	<0.010	205	243	150	1076	0.10	<0.04						
MW-220	Feb-92	10	508	21.1	33.7	1460	839	8	7.03		<0.010	205	307	170	1060	0.11	0.03	<0.5	<5	<0.010	<0.004	<0.5	
MW-220	May-92	13	506	6.0	15.0	1403	810	<1.0		6.38	<0.010	147.3	32	250	1176	<0.04	0.11	1.95	10	<0.010	<0.004	0.13	
MW-220	Aug-92	13	444	22.4	39.5	1221	673	27		6.47	<0.010	132.2	331	134	1188	<0.04	0.2				<0.004		
MW-220	Dec-92	12.5	712	3.0	54.0	1367	610	<1.0		6.77	<0.010	109.5	280	1120	880	0.03	<0.02				<0.004		
MW-220	Feb-93	10.5	612	23.8	25.5	1202	697	45		6.93	<0.010	19.7	388	1000	1112	<0.02	<0.02				<0.004		
MW-220	Jun-93	11.5	498	5.1	23.0	511	788	1	6.94		<0.010	179.8	479	180	1136	0.07	<0.02	0.8	<5	<0.004	<0.004	<0.5	
MW-220	Aug-93	12.5	460	<1.0	24.0	847	784	<1.0		6.63	<0.010	42.9	112	180	1108	<0.02	<0.02						
MW-220	Dec-93	12	432	8.3	21.0	1183	699	12		6.87	<0.010	127	338	118	1060	<0.02	0.06						
MW-220	Mar-94	12	404	<1.0	25.0	1197	694	68		7.02	<0.010	231	310	75	808	<0.02	0.16	<2.0				<0.5	0.83
MW-220	Jun-94	13	512	8.6	17.0	1096	890	3		6.71	<0.010	77.5	450	260	1268	<0.02	0.03	<2.0				<0.50	1.18
MW-220	Aug-94	11.5	408	<5.0	18.5	1192	676	4		6.78	<0.010	57.9	354	12	948	0.04	0.18	<2.0	50	<0.004	<0.004	<0.5	2.24
MW-220	Nov-94	12	521	14.3	21.0	883	580	18		6.98	<0.010	94.9	310	156	1024	0.04	0.13	<2.0				0.81	3.75
MW-220	March-95	10.50	537	<5.0	36.0	636	756	36		6.84	<0.010	60.1	499	200	1204	0.13	0.13	<2				<0.5	<0.2
MW-220	June-95	11.50	553	18.6	26.0	624	607	8		6.90	<0.010	-0.6	319	190	1200	0.66	<0.05	<2				<0.5	<0.2
MW-220	Sept. - 95	12.50	512	25.0	34.0	525	680	<1		7.03	<0.010	-41.5	290	200	1224	0.22	<0.05	<2				<0.5	0.40
MW-220	Nov-95	10.50	536	12.2	30.0	506	929	<1		7.06	<0.010	-22.3	614	280	1504	<0.02	<0.05	<2	10.00	<0.004	<0.004	<0.5	0.60
MW-220	April-96	11.50	500	75.0	26.0	1800	1100	16		6.80	<0.002	175.0	560	703	1600	0.17	<0.02	<4	200.00	<0.01	<0.01	1.30	0.93
MW-220	June-96	11.70	450	37.0	16.0	1680	960	1		7.10	0.049	5.7	650	550	1300	<0.03	<0.02	<4				1.00	<2
MW-220	Sept-96	12.00	430	18.0	12.0	1500	770	6.5		6.90	<0.002	140.0	490	710	1200	<0.03	<0.02	<4				0.33	<2
MW-220	Nov-96	11.90	480	60.0	17.0	1750	800	1.6		6.84	<0.002	125.0	1000	250	1700	<0.03	<0.02	<4				0.52	<2
MW-220	March-97	10.60	550	57.0	27.0	1590	690	2.4		7.00	<0.002	155.0	400	>999	1000	<0.03	<0.02	<4	10.00	<0.01	<0.01	0.49	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-221S	Sep-87	14	630	10.0	83.9	1400	820	5	6.37		0.018		180	298	1010	0.16	<0.10	7	<5.0		<0.01	1.56	
MW-221S	May-88	12.5	540		75.9	1302	720	1	6.82		<0.005		131	200	927	0.05		10	<5.0			0.2	
MW-221S	Aug-88	13	808		99.7	1410	790	<0.1	6.48		<0.005		192	76	465	0.16		54	<5.0			0.76	
MW-221S	Nov-88	11.5	610		68.5	1250	752	2	6.42		<0.005		55	73	591	<0.04		36	<5.0			1.13	
MW-221S	Feb-89	9.5	591	492.0	80.0	1854	825	4	7.29		0.02	343	210	140	712	0.31	<0.10	5	5		0.03	8.87	
MW-221S	Apr-89	13	561		77.1	1079	782	6	6.66		<0.005	-18	179	640	500	<0.04		44	20			1.87	
MW-221S	Jun-89	13.5	452		58.2	394	180	25	6.2		0.01		44	38	500	<0.04		19	20			0.36	
MW-221S	Nov-89	14.7	660		174.0	1534	892	14	6.52		0.009	14	246	248	254	0.24		45	<5.0			1.42	
MW-221S	Feb-90	12.5	641	43.3	122.0	1551	827	17	6.71		<0.005	15.3	149	249	1050	0.08	0.68	8	10	<0.005	<0.01		
MW-221S	Apr-90	15	654		144.0	1505	740	20	6.53		<0.005	25.3	136	110	1180	<0.04		18	15			0.82	
MW-221S	Nov-90	15	677	37.0	107.0	1600	770	52	6.8	6.98	<0.05	132	110	240	1046	<0.1	<0.04	6.1	<5.0	0.008	<0.004	<0.5	
MW-221S	Feb-91	14	662	11.8	122.0	1600	830	11	6.6	6.78	<0.010	136	126	250	1091	0.10	<0.04		<5.0				
MW-221S	May-91	15	592	22.6	186.1	1700	780	18	6.7	6.45	<0.010	171	195	256	1224	0.24	0.09		<5.0				
MW-221S	Aug-91	19	636	18.0	167.0	1980	860	7	6.6	6.62	<0.010	226	145	470	1286	<0.03	<0.04		<5.0				
MW-221S	Nov-91	15	708	23.5	140.0	1825	816	14		6.58	<0.010	54.6	91	270	1252	<0.02	<0.04						
MW-221S	Feb-92	11	770	32.6	117.0	1597	767	10	6.5		<0.010	38.1	57	240	956	0.05	0.06	1.4	<5	<0.010	<0.004	<0.5	
MW-221S	May-92	13	600	58.0	185.0	1865	869	<1.0		6.52	<0.010	160.9	20	150	1456	<0.04	0.10	2.60	10	0.02	<0.004	0.15	
MW-221S	Aug-92	14	722	14.3	180.0	940	826	<1.0		6.50	<0.010	113.9	215	86	360	<0.04	0.14						
MW-221S	Dec-92	12	1094	16.8	88.0	1733	686	<1.0		6.90	<0.010	132.2	144	480	1080	<0.02	<0.02						
MW-221S	Feb-93	10.5	702	38.7	87.5	1363	673	95		6.11	<0.010	122.1	302	330	1320	<0.02	<0.02						
MW-221S	Jun-93	12	814	10.3	100.0	548	813	<1.0	6.46		<0.010	94.0	142	84	1160	0.13	<0.02	1.6	5	<0.004	<0.004	<0.5	
MW-221S	Aug-93	15.5	808	22.4	133.0	1141	967	<1.0		6.16	<0.010	34.5	148	220	1224	<0.02	<0.02						
MW-221S	Dec-93	12.5	760	34.0	77.0	1456	815	10		6.67	<0.010	11.6	87	350	1008	<0.02	0.03						
MW-221S	Feb-94	11.5	776	22.1	108.0	1661	762	128		6.93	<0.010	72.7	36	190	248	<0.02	<0.05	<2.0				<0.5	0.72
MW-221S	Jun-94	13.5	756	10.8	68.0	1156	834	4		6.33	<0.010	54.7	117	61	1124	0.18	0.04	3.0				<0.50	0.89
MW-221S	Aug-94	12.5	820	17.8	78.0	1501	802	<1		6.43	<0.010	26.6	100	84	1008	0.07	0.08	<2.0	100	<0.004	<0.004	<0.5	2.76
MW-221S	Nov-94	13.5	844	14.3	51.0	997	665	28		6.53	<0.010	54.1	122	19	1124	0.03	0.06	<2.0				<0.5	4.2
MW-221S	March-95	10.50	763	20.0	56.0	663	755	<1		6.64	<0.010	36.4	140	83	1068	1.67	0.13	<2				1.23	0.30
MW-221S	June-95	11.50	800	14.0	105.0	712	891	<1		6.58	<0.010	-21.7	104	72	1156	0.61	0.09	<2				2.60	<0.2
MW-221S	Sept. - 95	14.00	575	<5.0	54.0	502	624	<1		6.76	<0.010	-30.6	86.2	60	928	0.10	<0.05	<2				<0.5	0.50
MW-221S	Dec-95	12.50	648	8.3	75.0	502	598	<1		6.78	<0.010	12.6	103.0	3120	968	1.24	<0.05	<2	10.00	<0.004	<0.004	<0.5	<0.2
MW-221S	April-96	6.70	780	160.0	51.0	1600	580	11		6.80	<0.002	190.0	170.0	600	1000	0.89	<0.02	60.00	750.00	<0.01	<0.01	20.00	3.40
MW-221S	June-96	11.70	700	250.0	37.0	1540	880	4		6.70	<0.002	245.0	200.0	790	1000	0.24	0.043	6.40				10.00	<2
MW-221S	Sept-96	14.70	130	5.3	51.0	1600	160	1		6.50	<0.002	-10.0	6.3	>999	250	<0.03	0.077	<4				0.47	<2
MW-221S	Nov-96	13.00	130	<1	46.0	1700	590	4		6.58	<0.002	25.0	390.0	470	1100	0.24	<0.02	<4				0.88	<2
MW-221S	March-97	7.60	800	160.0	68.0	1700	760	5		6.60	<0.002	120.0	200.0	>999	1100	0.25	<0.02	<4	10.00	<0.01	<0.01	1.40	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-221D	Sep-87	12.5	180	21.9	51.3	410	185	3	7.72		0.009		20	50	274	0.10	0.1	10	<5.0		<0.01	0.15	
MW-221D	May-88	12.5	140		42.7	426	190	3	7.41		0.02		23	23	353	0.07		24	<5.0			<0.20	
MW-221D	Aug-88	13	125		59.7	486	178	<0.1	7.6		<0.005		21	4	122	0.14		4	<5.0			0.46	
MW-221D	Nov-88	11.3	127		60.5	380	182	2	7.9		0.038		5	20	197	0.06		21	<5.0			0.34	
MW-221D	Feb-89	10	124	10.2	66.0	548	205	2	8.73		0.012	362	35	31	499	0.07	<0.10	2	<5.0		<0.01	0.33	
MW-221D	Apr-89	13	122		58.7	352	204	10	7.61		<0.005	-1.5	35	16	212	0.07		22	10			1.43	
MW-221D	Jun-89	15	637		157.0	1627	900	17	6.94		0.034		330	85	2240	0.04		11	35			1.09	
MW-221D	Nov-89	13.5	121		56.6	365	183	1	7.9		0.009	-61	11	23	252	0.06		8	<5.0			0.16	
MW-221D	Feb-90	11.3	132	28.5	61.6	455	184	31	7.86		<0.005	-47	32	225	281	0.16	0.14	10	10	0.005	<0.01		
MW-221D	Apr-90	13.3	141		61.4	380	185	29	6.55		<0.005	14.9	12	52	253	0.04		13	15			0.46	
MW-221D	Nov-90	12	125	7.2	59.7	530	190	7	7.8	7.55	<0.05	104	17	8	269	<0.1	<0.04	3.5		0.008	0.005	<0.5	
MW-221D	Feb-91	12	122	<1.0	62.5	510	180	<3.0	7.9	7.71	<0.010	-13	24	6	289	0.05	<0.04						
MW-221D	May-91	13	118	4.2	58.5	320	184	<3.0	8	7.37	<0.010	99	21	10	259	0.04	0.18						
MW-221D	Aug-91	14	118	<0.5	58.3	500	180	<3.0	7.8	7.61	<0.010	202	18	6	342	0.05	<0.04						
MW-221D	Nov-91	14	126	2.8	58.5	469	161	1		7.55	<0.010	35.7	13	3	248	0.08	<0.04						
MW-221D	Feb-92	10	130	12.3	57.4	458	174	1	7.21		<0.010	77.8	19	3	252	0.11	<0.02	0.8	<5	<0.010	<0.004	<0.5	
MW-221D	May-92	13	122	<1.0	65.0	456	179	<1.0		7.41	<0.010	121.7	10	2	374	<0.04	0.09						
MW-221D	Aug-92	14	408	<1.0	62.0	340	147	<1.0		7.33	<0.010	89.4	27	3	352	<0.04	0.02						
MW-221D	Dec-92	12	106	7.5	65.0	506	146	<1.0		7.43	<0.010	108.0	52	2	272	<0.02	<0.02						
MW-221D	Feb-93	11	120	2.7	55.0	446	133	9		7.00	<0.010	97.7	35	18	248	0.04	0.02						
MW-221D	Jun-93	13	116	7.7	60.0	304	146	6	7.52		<0.010	66.5	69	3	296	0.05	<0.02	1.0	<5	<0.004	<0.004	<0.5	
MW-221D	Aug-93	15	124	<1.0	61.0	379	163	<1.0		7.10	<0.010	65.4	51	1	265	<0.02	<0.02						
MW-221D	Dec-93	12	106	5.5	59.0	402	177	2		7.10	<0.010	-37	32	4	316	<0.02	0.04						
MW-221D	Feb-94	11.5	116	<1.0	60.0	453	164	8		7.49	<0.010	64.7	30	8	224	<0.02	<0.05	<2.0				<0.5	0.98
MW-221D	Jun-94	13.5	118	<1.0	58.0	395	169	<1		7.57	<0.010	-1.4	27	2	273	<0.02	<0.02	<2.0				<0.50	0.98
MW-221D	Aug-94	12.5	116	8.9	58.5	439	167	4		7.24	<0.010	-2.0	46	3	260	0.06	0.19	<2.0	15	<0.004	<0.004	<0.5	2.22
MW-221D	Nov-94	12.5	129	9.5	59.0	385	144	1		7.72	<0.010	40.5	30	4	280	<0.02	0.18	<2.0				0.73	3.12
MW-221D	March-95	11.50	755	5.0	62.0	362	173	5		7.14	<0.010	-7.3	38.5	1.7	268	0.08	0.14	<2				<0.5	0.8
MW-221D	June-95	12.50	123	<5.0	59.0	355	158	<1		7.27	<0.010	72.90	19.7	3.1	296	0.69	0.07	<2				<0.5	0.40
MW-221D	Sept. - 95	12.50	116	8.3	60.0	319	168	<1		7.18	<0.010	-78.3	21.8	5.1	300	0.10	<0.05	<2				<0.5	1.10
MW-221D	Dec-95	11.00	120	<5.0	58.0	312	146	<1		7.35	<0.010	-29.40	26.6	5.5	276	0.06	<0.05	<2	<5	<0.004	<0.004	<0.5	0.70
MW-221D	April-96	8.30	140	1.0	57.0	450	280	<1		8.30	<0.002	535.00	19.0	28.0	310	<0.03	0.04	13.00	5.00	<0.01	<0.01	0.46	3.10
MW-221D	June-96	11.60	120	1.0	51.0	447	180	<1		8.20	<0.002	315.00	44.0	200	290	<0.03	0.03	<4				2.1	<2
MW-221D	Sept-96	13.70	830	5.7	32.0	450	790	22.0		8.00	<0.002	140.00	440.0	13	1100	0.06	<0.02	<4				3.2	<2
MW-221D	Nov-96	11.40	120	<1	52.0	425	140	<1		8.00	<0.002	45.00	20.0	3	290	<0.03	<0.02	<4				0.6	<2
MW-221D	March-97	9.10	140	11.0	58.0	454	150	<1		8.00	<0.002	180.00	34.0	130	230	<0.03	0.037	<4	10.00	<0.01	<0.01	0.4	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-222	Sep-87	13	685		48.5	1583	920	2	6.3		0.012		250	260	1128	0.15	0.61	10	<5.0		<0.01	0.67	
MW-222	May-88	13	875		41.3	1681	1100	5	6.71		0.041		197	775	686	0.24		12	<5.0			1.07	
MW-222	Aug-88	13	675		46.2	1481	808	3	6.44		<0.005		210	190	439	0.28		13	5			1.22	
MW-222	Nov-88	12	707		54.4	1462	982	3	6.5		0.031		202	15	683	0.39		12	10			2.51	
MW-222	Feb-89	10.8	739		88.0	1645	1140	4	7.03		0.032	-19	173	150	1080	0.19	<0.10	15	25		<0.01	1.53	
MW-222	Apr-89	11.5	488		80.5	1269	821	34	6.24		0.012	69	255	530	527	0.15		12	50			1.53	
MW-222	Jun-89	14	510		30.4	1002	541	12	6.64		0.011	-156	343	340	1010	0.08		9	165			0.9	
MW-222	Nov-89	17	449		46.2	819	502	16	6.83		0.008		65	105	1600	0.72		17	80			1.24	
MW-222	Feb-90	12.2	465	12.4	51.7	978	698	9	6.92		<0.005	4.8	248	120	895	0.41	<0.10	21	15	<0.005	<0.01		
MW-222	Apr-90	10.4	257		40.0	685	320	3	6.49		<0.005	25.5	382	48	495	0.15		11	70			0.65	
MW-222	Nov-90	11	666	20.0	53.8	890	710	32	6.9	6.56	<0.05	-12	88	90	922	0.29	<0.1	14	5	<0.004	0.032	0.67	
MW-222	Feb-91	13	691	7.8	61.0	1450	810	17	6.6	6.71	0.105	-14	116	150	1022	0.39	<0.04						
MW-222	May-91	11	548	21.9	63.8	1300	760	11	6.6	6.29	<0.010	71.8	205	190	1066	0.18	<0.02						
MW-222	Aug-91	14	660	19.0	48.5	1880	800	5	6.4	6.67	<0.010	232	192	300	1252	0.80	<0.04						
MW-222	Nov-91	14	892	140.0	115.0	1996	1036	94		6.48	<0.010	9.3	18	270	1484	1.70	<0.04						
MW-222	Feb-92	10	846	51.9	92.1	2170	1035	27	6.22		<0.010	13	90	380	1256	0.30	<0.02	15.3	<5	<0.010	<0.004	0.6	
MW-222	May-92	13	750	27.0	195.0	1903	1075	<1.0		6.32	<0.010	10.3	14	210	1568	0.53	0.15	9.30	10	0.01	<0.004	1.20	
MW-222	Aug-92	13	434	26.5	135.0	1449	707	<1.0		6.11	<0.010	7.7	80	110	1248	0.86	0.12						
MW-222	Dec-92	11.5	908	22.8	130.0	1941	844	<1.0		6.53	<0.010	5.7	97	300	1260	1.09	<0.02						
MW-222	Feb-93	11	47	39.6	135.0	1423	715	106		6.55	<0.010	-63.8	85	1000	1180	0.80	<0.02						
MW-222	Jun-93	13.5	812	9.4	51.0	526	761	<1.0	6.55		<0.010	-10.1	91	220	840	0.98	<0.02	5.5	3000	<0.004	<0.004	2.0	
MW-222	Aug-93	15.5	780	33.0	105.0	1101	808	<1.0		6.33	<0.010	-30	124	580	1064	14.4	<0.02						
MW-222	Dec-93	13.5	908	41.2	205.0	2060	1020	32		6.41	<0.010	-60	89	240	1468	7.78	<0.05						
MW-222	Feb-94	12	828	35.5	182.0	2360	1097	148		6.61	<0.010	50.9	282	260	1408	4.66	<0.05	5.1				6.95	0.52
MW-222	Jun-94	13.5	788	15.1	50.0	1059	798	8		6.22	<0.010	-45	62	150	907	1.22	0.10	7.8				2.51	0.33
MW-222	Aug-94	13	856	26.7	73.0	1702	949	12		6.40	<0.010	13.1	118	180	1200	6.03	0.17	6.7	80	<0.004	<0.004	9.77	1.00
MW-222	Nov-94	12	848	14.3	92.0	1113	753	18		6.49	<0.010	0.3	148	70	1124	1.51	<0.05	4.2				4.93	1.28
MW-222	March-95	11	888	30.0	42.0	724	849	20		6.50	<0.010	56.5	202	410	1264	2.71	0.11	5				2.60	0.30
MW-222	June-95	11.5	759	55.8	290.0	894	780	18		6.65	<0.010	-79.9	99.6	320	1476	1.55	<0.05	6				3.90	1.90
MW-222	Sept. - 95	11.5	948	112.5	322.0	812	730	5		6.79	<0.010	-80.0	78.5	225	1736	2.60	<0.05	4				3.10	2.40
MW-222	Nov-95	12.0	592	36.7	38.0	529	573	<1		6.82	<0.010	-89.1	151.0	380	908	0.56	<0.05	11	25.00	<0.004	<0.004	1.27	1.00
MW-222	April-96	9.7	820	59.0	77.0	1890	800	16		6.70	<0.002	85.0	120.0	1000	1200	1.50	<0.02	28	750.00	<0.01	<0.01	6.40	2.10
MW-222	June-96	11.7	730	73.0	75.0	1710	800	8.6		6.60	<0.002	140.0	62.0	490	1200	0.95	<0.02	16				4.00	<2
MW-222	Sept-96	13.7	1000	110.0	41.0	2000	890	15.0		6.30	<0.002	78.0	<10	480	1300	1.10	<0.02	11				2.30	<2
MW-222	Nov-96	11.5	860	140.0	88.0	1950	680	5.8		6.47	<0.002	0.0	110.0	440	1200	0.60	<0.02	21				2.30	<2
MW-222	March-97	10.1	370	74.0	150.0	2030	790	9.6		6.50	<0.002	10.0	46.0	160	1100	1.00	<0.02	11	25.00	<0.01	<0.01	2.00	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-223S	Sep-87	11.5	626	10.1	18.5	1492	900	73	7.01		<0.005		255	40	1010	0.10	0.3	4	<5.0		<0.01	0.26	
MW-223S	May-88	12.5	730		10.5	1346	890	4	7.89		<0.005		223	17	984	0.28		12	<5.0			0.59	
MW-223S	Aug-88	12	737		10.9	1508	650	9	6.85		<0.005		258	30	473	0.11		10	<5.0			0.81	
MW-223S	Nov-88	10	662		11.4	1223	898	19	6.93		0.05		404	5	631	0.15		69	<5.0			0.35	
MW-223S	Feb-89	8	593	17.4	11.0	1522	884	7	7.45		<0.005	97.5	269	85	960	0.14	<0.1	13	10		<0.01	0.66	
MW-223S	Apr-89	14	376		2.5	1458	474	12	6.02		0.01	-290	137	12	615	0.48		15	<5.0			1.02	
MW-223S	Jun-89	13.5	730		10.5	1352	972	12	6.96		<0.005		549	88	2040	0.06		11	22			0.22	
MW-223S	Nov-89	11.3	764		14.0	1193	991	6	6.82		0.009	-1.2	229	36	1060	0.11		8	<5.0			0.36	
MW-223S	Feb-90	11.5	744	11.2	11.0	1475	961	16	6.94		<0.005	-2.2	228	124	1060	0.14	<0.1	6	10	<0.005	<0.01		
MW-223S	Apr-90	11.7	693		10.2	1108	891	15	8.03		<0.005	-61	121	180	901	0.14		82	5			0.56	
MW-223S	Nov-90	10	819	11.0	11.7	970	920	6	7	7.1	<0.010	205	170	54	1069	0.16	<0.1	9.5	<5	<0.004	0.027	<0.5	
MW-223S	Feb-91	11	738	<0.5	12.9	1300	910	78	6.8	6.97	<0.010	66.9	165	110	1064	0.20	<0.04						
MW-223S	May-91	11	720	5.5	11.7	1100	940	<3	6.7	6.66	<0.010	203	152	47	1022	0.12	<0.04						
MW-223S	Aug-91	11	718	4.5	10.4	1540	880	19	6.9	7.17	<0.010	223	155	60	1080	0.06	<0.04						
MW-223S	Nov-91	10	664	3.8	11.0	1592	879	52		6.58	<0.010	101	182	100	1016	0.12	<0.04						
MW-223S	Feb-92	11	694	14.7	12.9	1499	853	3	6.85		<0.010	79.7	203	67	924	0.16	0.03	6.6	<5	<0.010	<0.004	<0.5	
MW-223S	May-92	12	622	96.0	10.0	1406	822	<1.0		6.69	<0.010	75.4	168	66	956	0.48	0.08	2.70	5	0.02	<0.004	0.31	
MW-223S	Aug-92	13	702	7.0	12.0	1256	725	7		6.81	<0.010	38.2	182	120	1036	0.09	0.02						
MW-223S	Dec-92	10	662	3.0	6.0	1603	746	<1.0		6.8	<0.010	39.5	162	82	1030	0.02	0.04						
MW-223S	Feb-93	10	740	<1.0	10.0	1241	614	58		6.90	<0.010	25.4	166	105	972	0.11	0.07						
MW-223S	May-93	12.5	742	15.4	9.0	571	779	14	6.79		<0.010	75.1	142	90	996	0.03	<0.02	0.8	<5	0.004	<0.004	<0.5	
MW-223S	Aug-93	14	772	2.0	11.0	976	864	<1.0		6.53	<0.010	1.2	147	140	1028	0.15	<0.02						
MW-223S	Dec-93	10	688	5.9	10.0	1305	923	30		6.75	<0.010	96.1	166	112	972	<0.02	<0.05						
MW-223S	Feb-94	10.5	700	<1.0	11.0	1456	765	224		6.80	<0.010	81.6	160	210	880	<0.02	<0.05	<2.0				<0.5	0.82
MW-223S	May-94	12.5	740	14.0	10.5	991	810	52		6.76	<0.010	67.1	171	150	556	0.05	0.04	3.0				<0.50	1.22
MW-223S	Aug-94	12.5	768	8.9	13.0	1378	853	5		6.69	<0.010	53.6	173	39	980	0.09	0.33	2.0	10	<0.004	0.007	<0.5	2.44
MW-223S	Nov-94	11	828	9.5	13.0	943	686	29		6.72	<0.010	67.5	150	80	1032	0.07	0.17	<6.0				<0.5	3.75
MW-223S	March-95	9.50	795	5.0	16.0	665	657	<1		6.69	<0.010	121.1	167	32	1060	1.48	0.29	<2				<0.5	<0.2
MW-223S	June-95	11.50	808	9.3	20.0	640	3570	<1		6.57	<0.010	-68.7	169	47	1160	0.33	<0.05	<2				<0.5	<0.2
MW-223S	Sept. - 95	11.00	718	12.5	15.0	512	837	10		6.86	<0.010	-77.9	148	47	1120	0.10	<0.05	<2				<0.5	<0.2
MW-223S	Nov-95	9.00	732	12.2	16.0	519	862	<1		6.92	<0.010	-75.3	159	86	1012	<0.02	<0.05	<2	200.00	<0.004	<0.004	<0.5	0.70
MW-223S	April-96	10.1	730	3.3	21.0	1700	440	26		5.80	<0.002	55.0	120	150	1100	0.05	0.12	4.20	300.00	<0.01	<0.01	0.92	3.00
MW-223S	June-96	11.4	720	22.0	7.5	1530	800	1.2		6.50	<0.002	57.0	54	120	930	0.11	<0.02	<4				7.30	<2
MW-223S	Sept-96	11.8	870	10.0	<10	1500	680	1.0		6.50	<0.002	10.0	390	31	920	0.14	<0.02	<4				0.48	<2
MW-223S	Nov-96	11.5	710	7.8	15.0	1310	600	3.2		7.09	<0.002	65.0	560	8	870	0.11	<0.02	<4				1.30	<2
MW-223S	March-97	9.9	720	13.0	18.0	1730	620	2.2		6.10	<0.002	-10.0	100	337	860	0.10	<0.02	<4	50.00	<0.01	<0.01	0.58	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-223D	Sep-87	11.5	690	22.3	11.3	1380	760	2	6.6		0.027		220	25	917	0.08	<0.10	20	<5.0		<0.01	0.16	
MW-223D	May-88	12.5	680		13.0	1268	740	4	6.83		<0.005		186	54	908	0.13		18	<5.0			<0.20	
MW-223D	Aug-88	13	941		17.7	1383	860	10	6.89		<0.005		211	7	494	0.18		7	<5.0			0.4	
MW-223D	Nov-88	10.3	395		13.9	621	410	2	8		0.03		639	5	396	0.13		21	5			0.38	
MW-223D	Feb-89	8	676	12.6	36.0	1458	868	5	7.37		<0.005	105	152	58	550	0.14	<0.10	10	<5.0		0.03	0.47	
MW-223D	Apr-89	12.5	488		16.5	720	525	19	7.66		0.007	-210	143	27	300	0.13		48	10			0.67	
MW-223D	Jun-89	12	752		42.9	1313	925	11	6.86		0.008		472	96	2020	0.04		16	25			0.27	
MW-223D	Nov-89	11.3	257		15.8	667	342	18	7.36		0.013	-35	133	30	489	0.23		36	<5.0			0.79	
MW-223D	Feb-90	11	834	<10	47.2	1563	987	44	6.99		<0.005	3.5	133	98	1070	0.08	<0.10	7	10	<0.005	<0.01		
MW-223D	Apr-90	10.5	669		30.3	830	862	441	7.03		<0.005	-8.9	119	19	712	0.04		94	10			0.38	
MW-223D	Nov-90	10	830	17.0	39.1	1000	880	9	7	7	<0.010	229	129	225	1072	0.16	<0.1	11	25	<0.004	0.024	<0.5	
MW-223D	Feb-91	10	846	<0.5	38.7	1400	980	97	6.7	6.8	<0.010	82.3	157	240	1152	0.17	<0.04						
MW-223D	May-91	11	758	12.1	29.8	1100	990	5	6.8	6.61	<0.010	199	147	56	1107	0.07	<0.04						
MW-223D	Aug-91	10	724	7.3	22.9	1760	810	23	6.8	7	<0.010	223	176	140	1220	<0.03	<0.04						
MW-223D	Nov-91	11	760	6.7	22.0	1860	1171	26		6.52	<0.010	121	247	65	1144	0.26	<0.04						
MW-223D	Feb-92	11	800	7.4	25.7	1556	916	3	6.68		<0.010	59.5	173	43	968	0.05	0.05	3.4	<5	<0.010	<0.004	<0.5	
MW-223D	May-92	12	682	<1.0	32.0	1484	803	<1.0		6.57	<0.010	93.3	17	34	860	<0.04	0.11						
MW-223D	Aug-92	13	734	6.0	25.0	1338	758	1		6.80	<0.010	49.4	173	87	1164	<0.04	<0.02						
MW-223D	Dec-92	10	662	6.9	20.5	1680	796	<1.0		6.93	<0.010	52.3	212	86	1080	<0.02	<0.02						
MW-223D	Feb-93	10	722	<1.0	22.5	1251	662	58		6.86	<0.010	56.8	192	56	1028	<0.02	0.07						
MW-223D	May-93	12	678	<1.0	21.0	565	785	12	6.84		<0.010	94.7	127	44	956	<0.02	<0.02	2.0	<5	0.00	<0.004	<0.5	
MW-223D	Aug-93	14	654	1.0	23.0	845	643	<1.0		6.73	<0.010	9.6	251	66	952	0.69	<0.02						
MW-223D	Dec-93	10	616	8.8	21.0	1201	775	22		6.71	<0.010	94.3	141	71	920	<0.02	<0.05						
MW-223D	Feb-94	10.5	616	<1.0	20.0	1296	668	84		6.84	<0.010	60.7	148	50	798	<0.02	<0.05	<2.0				<0.5	1.04
MW-223D	May-94	11.5	628	15.1	21.5	899	648	42		6.85	<0.010	26.7	135	280	780	<0.02	0.12	2.0				<0.50	1.10
MW-223D	Aug-94	13	604	<5.0	21.0	1114	710	<1		6.78	<0.010	50.8	139	56	788	<0.02	0.22	<2.0	10	<0.004	<0.004	<0.5	2.28
MW-223D	Nov-94	11.5	719	14.3	21.0	889	605	25		6.89	<0.010	63.1	155	14	1008	0.03	0.21	<2.0				0.55	3.92
MW-223D	March-95	11	622	5.0	22.0	632	603	36		6.81	<0.010	115.5	144	41	980	0.16	0.23	<2				<0.5	<0.2
MW-223D	June-95	11.5	674	<5.0	23.0	614	700	<1		6.72	<0.010	-46.6	132	21	904	0.37	0.09	<2				<0.5	<0.2
MW-223D	Sept. - 95	11.5	702	12.5	22.0	488	756	<1		6.84	<0.010	-50.3	129	16	1016	0.08	<0.05	<2				<0.5	0.30
MW-223D	Nov-95	9.0	604	<5.0	20.0	489	604	<1		6.98	<0.010	-53.5	152	66	884	<0.02	0.08	<2	10.00	<0.004	<0.004	<0.5	<0.2
MW-223D	April-96	10.0	440	10.0	22.0	760	720	1.6		6.80	<0.002	130.0	110	290	660	0.11	0.024	<4	100.00	<0.01	<0.01	1.10	3.50
MW-223D	June-96	11.7	340	5.1	10.0	1110	480	1.6		7.00	<0.002	100.0	52	20	550	0.036	0.070	<4				5.60	<2
MW-223D	Sept-96	11.7	700	5.3	<10	1300	560	1.0		6.70	<0.002	50.0	170	28	820	0.052	<0.02	<4				0.66	<2
MW-223D	Nov-96	11.1	440	1.0	20.0	1050	460	2.7		7.19	<0.002	25.0	390	24	640	<0.03	<0.02	<4				0.65	<2
MW-223D	March-97	9.3	320	8.6	18.0	1340	370	2.2		6.60	<0.002	0.0	92	20	520	0.120	<0.02	<4	15.00	<0.01	<0.01	0.88	<2

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW - 301D	Nov-94	10.5	190	13.0	155.0	732	465	9		8.03	<0.010	-46	174	16	660	0.23	0.31	<2.0				1.17	4.9
MW - 301D	March-95	9.5	226	5.0	120.0	597	379	1		6.72	<0.010	136	167	38	668	0.32	0.3	<2				0.33	1.5
MW - 301D	June-95	11.5	167	14.0	13.0	594	288	<1		6.92	<0.010	-81.0	183	13	696	0.2	0.28	<2				<0.5	0.9
MW-301D	Sept - 95	11	192	16.7	139.0	556	299	9		6.95	<0.010	-68.4	175	48	728	0.3	<0.05	<2				<0.5	1.4
MW-301D	Dec-95	10.5	192	8.3	125.0	487	278	<1		6.95	<0.010	6.3	182	25	676	0.16	<0.05	<2	5	<0.004	<0.004	<0.5	1.3
MW-301D	April-96	9.7	210	1.0	120.0	1080	410	7.0		7.9	<0.002	170	180	120	650	0.05	0.02	<4	10	<0.01	<0.01	0.69	3.1
MW-301D	June-96	11.3	230	3.0	110.0	1000	270	<1		8.6	<0.002	100	150	12	670	<0.03	0.04	<4				1.5	<2
MW-301D	Sept-96	10.8	190	10.0	100.0	1000	300	<1		7.5	<0.002	229	300	34	680	0.07	<0.02	<4				0.4	<2
MW-301D	Nov-96	10.4	190	20.0	110.0	1050	270	1.1		7.75	0.0031	170	420	21	610	0.05	<0.02	<4				0.66	<2
MW-301D	March-97	9.6	160	4.3	150.0	1230	290	<1		7.8	<0.002	90	150	547	620	<0.03	0.03	<4	10	<0.01	<0.01	0.71	<2
MW - 301S	Nov-94	10.5	194	<5.0	10.0	476	190	7		7.95	<0.010	59.6	120	43	396	0.27	0.16	<2.0				0.52	3.75
MW - 301S	March-95	10	267	30.0	13.0	438	356	5		6.64	<0.010	110	132	215	428	0.94	0.28	<2				0.7	0.3
MW - 301S	June-95	11	166	9.3	19.0	404	214	<1		6.84	<0.010	53.4	21	60	372	0.16	0.21	<2				<0.5	<0.2
MW-301S	Sept. - 95	10.5	174	<5.0	9.0	372	178	15		7.16	<0.010	138	101	41	364	0.28	0.07	<2				<0.5	0.4
MW-301S	Dec-95	10	184	<5.0	10.0	362	215	<1		6.94	<0.010	-10	145	28	420	0.11	<0.05	<2	<5	<0.004	<0.004	<0.5	0.4
MW-301S	April-96	9.2	200	53.0	2.8	570	640	<1		8.2	<0.002	195	150	650	380	0.06	0.03	<4	200	<0.01	<0.01	0.47	3.2
MW-301S	June-96	10.8	240	37.0	5.6	578	190	<1		6.4	<0.002	100	120	670	400	<0.03	<0.02	<4				3.5	<2
MW-301S	Sept-96	10.5	190	43.0	4.0	610	320	1		7.6	<0.002	148	610	320	440	0.09	<0.02	<4				0.36	<2
MW-301S	Nov-96	11	160	13.0	11.0	421	160	<1		7.95	0.0029	170	63	68	620	<0.03	0.1	<4				0.47	<2
MW-301S	March-97	9.4	380	11.0	11.0	561	140	<1		7.9	<0.002	95	70	336	300	<0.03	0.13	<4	10	<0.01	<0.01	0.47	<2
MW - 302	Nov-94	11	307	13.0	49.0	771	702	16		7.55	0.013	83.8	172	40	444	0.19	0.52	<2.0				<0.5	4.05
MW - 302	March-95	11.5	287	5.0	51.0	562	122	7		6.77	<0.010	140	177	24	636	0.18	0.26	<2				<0.2	0.3
MW - 302	June-95	12	228	<5.0	70.0	506	414	1		6.89	<0.010	-14.4	182	13	600	0.08	0.22	<2				<0.5	<0.2
MW-302	Sept. - 95	11.5	266	<5.0	49.0	438	436	27		7.22	<0.010	64.6	187	18	640	0.12	<0.05	<2				<0.5	0.3
MW-302	Dec-95	10	272	<5.0	49.0	423	358	<1		7.17	<0.010	55.6	224	19	660	0.04	<0.05	<2	<5	<0.004	<0.004	<0.5	<0.2
MW-302	April-96	9.5	360	<1	50.0	980	530	<1		8.0	<0.002	175	200	3	630	0.03	<0.02	<4	5	<0.01	<0.01	0.08	3.1
MW-302	June-96	12.1	280	<1	40.0	833	450	<1		7.7	<0.002	490	190	200	610	<0.03	<0.02	<4				1.3	<2
MW-302	Sept-96	13.3	260	<1	38.0	910	430	1.7		7.1	<0.002	240	300	80	620	<0.03	<0.02	<4				0.3	<2
MW-302	Nov-96	9.7	270	<1	46.0	940	310	<1		7.6	<0.002	170	170	51	580	<0.03	<0.02	<4				0.32	<2
MW-302	March-97	10	280	2.2	53.0	990	420	<1		7.4	0.0027	60	150	129	580	<0.03	0.04	<4	10	<0.01	<0.01	0.46	<2
MW - 303D	Nov-94	11.5	206	21.7	230.0	1073	214	8		9.58	<0.010	-30	156	12	772	0.48	0.36	<2.0				1.3	4.5
MW - 303D	March-95	11	174	5.0	250.0	789	157	2		7.63	<0.010	50	144	5	748	0.5	0.07	<2				0.2	2.5
MW - 303D	June-95	12	166	9.3	215.0	789	146	3		7.56	<0.010	-137.5	130	14	732	0.2	0.26	<2				<0.5	2.3
MW-303D	Sept. - 95	12	196	20.8	195.0	656	165	24		7.05	<0.010	-117.3	130	12	788	0.37	<0.05	<2				<0.5	2.1
MW-303D	Nov-95	10	128	8.2	212.0	612	164	<1		7.11	<0.010	-70	135	19	740	0.1	<0.05	<2	5	<0.004	<0.004	<0.5	2.1
MW-303D	April-96	10.6	190	1.0	11.0	1410	180	1.2		7.0	<0.002	55	130	360	700	0.09	0.02	<4	30	<0.01	<0.01	1.3	3.7
MW-303D	June-96	12	190	14.0	200.0	1350	250	<1		7.6	<0.002	84	120	33	730	0.1	<0.02	<4				7.4	2.1
MW-303D	Sept-96	11.7	370	15.0	190.0	1400	160	<1		7.7	<0.002	30	130	15	760	0.11	<0.02	<4				0.74	<2
MW-303D	Nov-96	11.3	200	<1	210.0	1320	160	1.6		7.9	<0.002	-45	160	14	720	0.21	<0.02	<4				0.74	<2
MW-303D	March-97	9.5	220	11.0	27.0	1450	170	1.3		6.6	<0.002	180	74	30	740	0.08	0.06	<4	10	<0.01	<0.01	7	2.1

Table 5. Historical Groundwater Analytical Data - Water Quality Parameters (Existing Landfill)

Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond umhos/cm	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	romid (mg/l)
Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW - 303S	Nov-94	13.5	743	39.1	45.0	907	1030	30		6.58	0.02	74.1	118	460	936	2.59	0.31	<2.0				2.05	2.85
MW - 303S	March-95	10.5	682	20.0	37.0	664	874	<1		6.5	<0.010	125	120	265	892	1.04	0.2	<2				1.17	0.3
MW - 303S	June-95	11.5	590	60.5	55.0	625	647	<1		6.44	<0.010	-63.3	148	465	900	2.09	0.14	<2				3.3	0.2
MW-303S	Sept. - 95	13.5	869	29.2	56.0	530	684	40		6.63	<0.010	-60.4	119	2600	952	4.47	<0.05	4				3.15	0.5
MW-303S	Nov-95	11	684	32.6	33.0	493	632	<1		6.52	<0.010	-39	130	300	900	0.97	<0.05	8	15	<0.004	<0.004	1.26	<0.2
MW-303S	April-96	8.7	690	30.0	38.0	1770	920	4.2		6.5	<0.002	90	130	>900	900	0.81	0.03	23	500	<0.01	<0.01	1.6	2.2
MW-303S	June-96	11.4	650	43.0	5.0	1440	680	2.6		6.3	<0.002	36	120	>900	880	2	<0.02	10				9.7	<2
MW-303S	Sept-96	13.1	1000	7.8	13.0	1600	730	21.0		6.3	<0.002	-15	130	24	900	2.2	<0.02	8.5				6.7	<2
MW-303S	Nov-96	11.6	650	58.0	23.0	1470	660	4.3		6.45	<0.002	5	62	280	810	7.6	<0.02	11				9	<2
MW-303S	March-97	9	710	17.0	27.0	1650	660	3.8		5.8	<0.002	40	96	>999	790	5.7	<0.02	16	25	<0.01	<0.01	8.9	<2
MW - 304D	Nov-94	11.5	598	8.7	70.0	835	379	22		6.89	0.013	54.3	62	26	804	1.38	0.18	<2.0				1.02	3.6
MW - 304D	March-95	11	569	10.0	66.0	512	722	5		6.88	<0.010	99.6	58.8	33	752	2.41	0.22	<2				1.17	0.8
MW - 304D	June-95	13	537	14.0	50.0	574	528	<1		6.79	<0.010	-74.2	63.4	62	844	1.73	0.24	<2				1.68	1.1
MW-304D	Sept. - 95	12	552	12.5	66.0	495	568	17		6.85	<0.010	-87.8	58.4	45	816	2.13	<0.05	<2				1.28	0.8
MW-304D	Nov-95	10.5	572	8.2	64.0	512	581	<1		6.81	<0.010	-55	51.6	64	760	1.15	<0.05	<2	25	<0.004	<0.004	1.21	0.4
MW-304D	April-96	10	570	7.8	69.0	1380	770	2.9		7.1	<0.002	55	65.0	72	730	1.1	0.02	<4	100	<0.01	<0.01	2.2	1.9
MW-304D	June-96	11.7	540	26.0	52.0	1260	570	2.1		6.8	0.0038	34	52.0	61	730	1.7	<0.02	<4				3.4	<2
MW-304D	Sept-96	12.2	530	2.8	50.0	1200	430	2.3		6.7	<0.002	400	67.0	29	740	1.1	<0.02	<4				2.2	<2
MW-304D	Nov-96	10.1	250	<1	68.0	691	320	2.3		7.46	<0.002	25	100.0	22	500	0.61	<0.02	<4				1.2	<2
MW-304D	March-97	8.9	590	19.0	58.0	1320	460	4.0		7	<0.002	10	66.0	127	690	0.85	<0.02	<4	15	<0.01	<0.01	1.8	<2
MW - 304S	Nov-94	12	852	30.4	29.0	893	494	33		6.75	0.013	69.1	77	660	884	0.49	0.37	<2.0				1.53	4.9
MW - 304S	March-95	10.5	824	20.0	25.0	657	966	3		6.73	<0.010	102	82.5	530	904	0.33	0.31	<2				0.56	<0.2
MW - 304S	June-95	12.5	606	18.6	450.0	585	718	<1		6.57	<0.010	-77.7	89.4	380	844	0.37	0.25	<2				0.69	<0.2
MW-304S	Sept. - 95	11.5	806	45.8	30.0	497	846	<1		6.84	<0.010	-80.1	89.4	1500	920	0.4	0.06	<2				1.09	0.5
MW-304S	Nov-95	10	772	12.2	28.0	516	669	<1		6.85	<0.010	-42	87.3	550	916	0.1	0.08	<2	15	<0.004	<0.004	<0.5	0.3
MW-304S	April-96	10.1	800	75.0	30.0	1500	550	3.7		6.8	<0.002	45	83.0	220	870	0.24	<0.02	<4	500	<0.01	<0.01	3.1	3.0
MW-304S	June-96	11.6	700	16.0	14.0	1480	890	2.8		6.7	0.0041	70	52.0	>900	900	0.14	<0.02	<4				5.1	<2
MW-304S	Sept-96	12.1	590	130.0	28.0	1400	730	2.8		6.5	<0.002	402	45.0	24	860	0.31	<0.02	<4				0.83	<2
MW-304S	Nov-96	10.4	710	60.0	23.0	1440	900	5.3		6.74	<0.002	-10	560.0	220	840	0.25	<0.02	<4				0.77	<2
MW-304S	March-97	10	750	21.0	45.0	1450	730	7.0		6.7	<0.002	-5	90.0	171	860	0.09	<0.02	<4	15	<0.01	<0.01	0.59	<2
MW - 304VS	Nov-94	12.5	658	34.8	400.0	1176	983	24		6.81	<0.010	188	85	1800	1564	0.25	0.09	6.2				0.69	4.35
MW - 304VS	March-95	9	828	45.0	840.0	921	1600	5		6.71	<0.010	125	85.8	860	2640	0.31	0.24	5				0.84	<0.2
MW - 304VS	June-95	15	448	46.5	740.0	895	478	<1		6.64	<0.010	7.4	66.3	540	2392	0.2	0.26	<2				1.09	<0.2
MW-304VS	Sept. - 95	17.5	567	33.3	465.0	822	719	<1		6.57	<0.010	62.2	65.4	1300	1420	0.21	0.07	<2				0.69	1.3
MW-304VS	Nov-95	8.5	568	32.6	355.0	721	545	<1		6.79	<0.010	114	72.0	770	1160	0.03	<0.05	<2	10	<0.004	<0.004	<0.5	<0.2
MW-304VS	April-96	5.1	590	120.0	11.0	1720	600	6.4		7.4	<0.002	135	61.0	>900	930	0.17	0.02	5.4	750	<0.01	<0.01	2.6	3.1
MW-304VS	June-96	14.7	440	150.0	220.0	1580	500	5.0		7.0	0.0058	170	79.0	>900	880	0.09	<0.02	4				6.9	<2
MW-304VS	Sept-96	16.8	550	100.0	180.0	2200	670	4.8		6.8	<0.002	388	<200	24	920	0.18	<0.02	<4				0.72	<2
MW-304VS	Nov-96	9.6	480	63.0	190.0	1780	630	5.8		7.0	<0.002	165	11.0	290	870	0.12	<0.02	<4				1.7	<2
MW-304VS	March-97	4.7	400	55.0	600.0	2780	670	3.9		7.1	<0.002	70	61.0	50	1700	0.14	<0.02	<4	10	<0.01	<0.01	0.71	<2

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
PZ-01	Sep-87	PZ-01	Sep-87	<0.010	122.00	1.72	<0.005		1.47		7.01	0.29	0.08	<0.010	<0.2	<0.005	<0.05	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	<0.020
PZ-01	May-88	PZ-01	May-88																						
PZ-01	Aug-88	PZ-01	Aug-88																						
PZ-01	Nov-88	PZ-01	Nov-88																						
PZ-01	Feb-89	PZ-01	Feb-89	<0.010	98.00	3.06	<0.005		0.48		18.40	1.69	<0.06	<0.010	<0.2	<0.005	<0.25	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.05
PZ-1A	Feb-90	PZ-1A	Feb-90	<0.010	100.00	1.01	<0.003		0.38		20.70	0.00	<0.06	<0.010	<0.2	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.06
PZ-1A	Apr-90	PZ-1A	Apr-90	<0.010		0.30	<0.003		0.52					<0.010											
PZ-1A	Nov-90	PZ-1A	Nov-90	<0.01	106.00	0.78	<0.020	22.00	0.47	1.80	18.00	0.32	<0.060	<0.020	0.06	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.04
PZ-1A	Feb-91	PZ-1A	Feb-91	<0.010	108.00	0.96	<0.020	22.60	0.48	1.83	17.80														
PZ-1A	May-91	PZ-1A	May-91	<0.010	98.00	0.48	<0.020	21.10	0.45	1.74	16.70														
PZ-1A	Aug-91	PZ-1A	Aug-91	<0.010	110.00	2.08	<0.020	23.10	0.50	2.39	17.50														
PZ-1A	Nov-91	PZ-1A	Nov-91	<0.010	96.20	0.53	<0.020	18 40	0.42	1.24	16.70														
PZ-1A	Feb-92	PZ-1A	Feb-92	<0.010	100.00	7.55	<0.020	23.90	0.64	3.07	17.20	5.52	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.06
PZ-1A	May-92	PZ-1A	May-92	<0.010	96.20	1.95	<0.020	19.40	0.43	1.72	14.00	1.35	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.02
PZ-1A	Aug-92	PZ-1A	Aug-92	<0.010	87.90	1.77	<0.020	19.10	0.38	2.52	12.60														
PZ-1A	Dec-92	PZ-1A	Dec-92	<0.010	93.30	1.55	<0.020	18.30	0.319	2.09	17.80														
PZ-1A	Feb-93	PZ-1A	Feb-93	<0.010	75.8	2.43	<0.020	15.7	0.465	2.24	18.6														
PZ-1A	May-93	PZ-1A	May-93	<0.010	97.30	1.13	<0.005	19.5	0.399	1.85	18.1	0.81	<0.060	<0.020	<0.010	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	0.006	<0.020	<0.010	<0.020
PZ-1A	Aug-93	PZ-1A	Aug-93	<0.010	99.8	1.35	0.006	26.6	0.376	1.95	16.4														
PZ-1A	Dec-93	PZ-1A	Dec-93	<0.010	101	3.37	0.005	25.0	0.557	2.35	17.7														
PZ-1A	Feb-94	PZ-1A	Feb-94	<0.010	94.9	3.70	<0.005	22.0	0.516	2.32	18.5														
PZ-1A	May-94	PZ-1A	May-94	<0.010	97.8	1.09	<0.005	21.1	0.40	1.44	18.5														
PZ-1A	Aug-94	PZ-1A	Aug-94	<0.010	104	2.51	<0.005	45.1	0.59	3.76	14.3	2.06	<0.060	<0.020	<0.10	<0.010	0.050	0.020	0.043	<0.001	0.049	<0.005	<0.020	<0.005	0.14
PZ-1A	Nov-94	PZ-1A	Nov-94	<0.010	68.5	0.42	<0.005	18.2	0.42	1.7	18.2														
PZ-1A	March-95	PZ-1A	March-95	<0.010	94.50	2.02	<0.005	22.50	0.48	1.94	17.50														
PZ-1A	June-95	PZ-1A	June-95	<0.010	93.00	0.54	<0.005	20.80	0.50	1.64	14.00														
PZ-1A	Sept. - 95	PZ-1A	Sept. - 95	<0.010	97.60	1.41	<0.005	21.80	0.48	2.22	17.40														
PZ-1A	Nov-95	PZ-1A	Nov-95	<0.010	81.60	1.48	<0.005	20.60	0.43	2.21	18.10	0.82	<0.060	<0.020	0.18	<0.010		<0.02	0.05	<0.001	<0.040	<0.005	<0.020	<0.005	0.11
PZ-1A	April-96	PZ-1A	April-96	<0.002	100.00	4.60	<0.01	18.00	0.52	2.40	18.00	2.10	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.15
PZ-1A	June-96	PZ-1A	June-96	<0.01	100.00	3.20	<0.01	19.00	0.51	2.40	17.00														
PZ-1A	Sept-96	PZ-1A	Sept-96	<0.01	99.00	2.60	0.023	20.00	0.50	2.50	19.00														
PZ-1A	Nov-96	PZ-1A	Nov-96	<0.01	88.00	1.00	<0.01	17.00	0.23	1.80	15.00														
PZ-1A	March-97	PZ-1A	March-97	<0.01	95.00	1.70	<0.01	18.00	0.39	2.30	11.00	0.76	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.17

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
PZ-04	Sep-87	PZ-04	Sep-87	<0.010	242.00	11.30	0.01		1.96		15.80	4.30	<0.06	<0.010	<0.2	<0.005	0.08	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.07
PZ-04	May-88	PZ-04	May-88	<0.010			<0.005																		
PZ-04	Aug-88	PZ-04	Aug-88	<0.010			<0.005																		
PZ-04	Nov-88	PZ-04	Nov-88	<0.010			<0.005																		
PZ-04	Feb-89	PZ-04	Feb-89	<0.010	208.00	1.04	<0.005		0.94		15.20	0.41	<0.06	<0.010	<0.2	<0.005	<0.25	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.03
PZ-04	Apr-89	PZ-04	Apr-89	<0.010		1.74	<0.005		0.66					<0.010											
PZ-04	Jul-89	PZ-04	Jul-89	<0.010		1.54	<0.005		0.31					<0.010											
PZ-04	Feb-90	PZ-04	Feb-90	<0.010	216.00	3.39	<0.003		1.06		15.60	1.66	<0.06	<0.010	<0.2	<0.005	<1.0	0.010	<0.025	0.00	<0.040	<0.005	<0.010	<0.010	0.02
PZ-04	Apr-90	PZ-04	Apr-90	<0.010		0.32	<0.003		0.38					<0.010											
PZ-4	Nov-90	PZ-4	Nov-90	<0.01	213.00	6.80	<0.020	51.00	1.20	2.90	14.00	3.50	<0.060	<0.020	0.05	<0.01	0.09	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.05
PZ-4	Feb-91	PZ-4	Feb-91	<0.010	210.00	11.70	<0.020	49.90	1.30	3.38	14.20														
PZ-4	May-91	PZ-4	May-91	<0.010	438.00	218.00	0.15	127.00	8.79	12.60	16.00														
PZ-4	Aug-91	PZ-4	Aug-91	<0.010	117.00	8.34	<0.020	26.30	0.77	1.87	7.51														
PZ-4	Nov-91	PZ-4	Nov-91	<0.010	185.00	1.42	<0.020	37.20	0.92	1.60	13.90														
PZ-4	Feb-92	PZ-4	Feb-92	<0.010	204.00	2.22	<0.020	47.70	1.02	2.17	13.20	1.00	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
PZ-4	May-92	PZ-4	May-92	<0.010	187.00	1.20	<0.020	39.40	0.84	1.73	13.60														
PZ-4	Aug-92	PZ-4	Aug-92	<0.010	168.00	4.02	<0.020	37.40	0.80	3.19	12.30														
PZ-4	Dec-92	PZ-4	Dec-92	<0.010	161.00	4.61	<0.020	37.80	0.666	2.88	14.30														
PZ-4	Feb-93	PZ-4	Feb-93	<0.010	161	26.0	<0.020	40.6	1.65	5.08	14.5														
PZ-4	May-93	PZ-4	May-93	<0.010	174	1.83	<0.005	36.6	0.837	2.11	14.7	1.22	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
PZ-4	Aug-93	PZ-4	Aug-93	<0.010	170	11.9	0.008	49.1	0.920	3.04	11.8														
PZ-4	Dec-93	PZ-4	Dec-93	<0.010	181	1.15	<0.005	46.1	0.947	2.32	13.8														
PZ-4	Feb-94	PZ-4	Feb-94	<0.010	178	15.0	0.008	44.0	1.27	3.88	13.0														
PZ-4	Jun-94	PZ-4	Jun-94	<0.010	176	1.94	<0.010	38.5	0.87	1.80	17.7														
PZ-4	Aug-94	PZ-4	Aug-94	<0.010	187	3.14	<0.005	41.6	1.06	2.91	11.7	1.68	<0.060	<0.020	<0.10	<0.010	<0.05	0.020	0.057	<0.001	0.065	<0.005	<0.020	<0.005	0.068
PZ-4	Nov-94	PZ-4	Nov-94	<0.010	137	0.41	<0.005	38.8	0.8	1.88	14.4														
PZ-4	March-95	PZ-4	March-95	<0.010	174.00	2.13	<0.005	42.0	0.93	2.30	14.30														
PZ-4	June-95	PZ-4	June-95	<0.010	166.00	2.68	<0.005	40.1	1.04	2.32	12.90														
PZ-4	Sept. - 95	PZ-4	Sept. - 95	<0.010	173.00	1.44	<0.005	38.6	0.88	2.36	13.60														
PZ-4	Nov-95	PZ-4	Nov-95	<0.010	156.00	8.92	<0.005	50.2	0.98	3.66	22.70	4.38	<0.060	<0.020	0.31	<0.010		<0.02	0.04	<0.001	<0.040	<0.005	<0.020	<0.005	0.04
PZ-4	April-96	PZ-4	April-96	<0.002	190.00	25.00	0.017	24.0	1.40	4.10	21.00	10.00	<0.1	<0.01	<0.2	<0.003	<1	0.014	0.035	<0.0002	0.023	<0.1	<0.01	<0.03	0.32
PZ-4	June-96	PZ-4	June-96	<0.01	490.00	220.00	0.190	37.0	10.00	16.00	25.00														
PZ-4	Sept-96	PZ-4	Sept-96	<0.01	190.00	11.00	<0.01	33.0	1.20	3.40	15.00														
PZ-4	Nov-96	PZ-4	Nov-96	<0.01	140.00	4.50	<0.01	26.0	0.83	2.60	13.00														
PZ-4	March-97	PZ-4	March-97	<0.01	200.00	22.00	0.021	28.0	1.40	4.50	11.00	9.10	<0.06	<0.01	<0.2	<0.01	<1	0.016	0.032	<0.0004	0.026	<0.05	<0.01	<0.03	0.16

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
PZ-11	Sep-87	PZ-11	Sep-87	<0.010	120.00	6.24	0.01		1.13		22.60	1.68	<0.06	<0.010	<0.2	<0.005	<0.05	0.02	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.08
PZ-11	May-88	PZ-11	May-88																						
PZ-11	Aug-88	PZ-11	Aug-88																						
PZ-11	Nov-88	PZ-11	Nov-88																						
PZ-11	Feb-89	PZ-11	Feb-89	<0.010	13.50	16.80	0.01		1.52		7.70	9.60	0.06	<0.010	<0.2	<0.005	<0.25	0.01	0.05	<0.0002	<0.040	<0.005	<0.010	<0.010	0.16
PZ-11	Apr-89	PZ-11	Apr-89	<0.010		8.51	0.01		1.09					<0.010											
PZ-11	Jul-89	PZ-11	Jul-89	<0.010		5.24	<0.005		1.00					<0.010											
PZ-11	Nov-89	PZ-11	Nov-89	<0.010		1.55	<0.003		1.04					<0.010											
PZ-11	Feb-90	PZ-11	Feb-90	<0.010	106.00	3.71	<0.003		1.03		11.30	1.81	<0.06	<0.010	<0.2	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.16
PZ-11	Apr-90	PZ-11	Apr-90	<0.010		1.81	0.0047		0.94					<0.010											
PZ-11	Nov-90	PZ-11	Nov-90	<0.01	133.00	2.10	<0.020	42.00	1.30	2.50	10.00	0.67	<0.060	<0.020	0.06	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.09
PZ-11	Feb-91	PZ-11	Feb-91	<0.010	107.00	3.42	<0.020	30.90	1.00	2.27	8.59														
PZ-11	May-91	PZ-11	May-91	<0.010	93.10	2.66	0.03	27.40	0.93	2.63	7.76														
PZ-11	Aug-91	PZ-11	Aug-91	<0.010	89.70	8.81	0.03	22.20	0.86	4.15	9.12														
PZ-11	Nov-91	PZ-11	Nov-91	<0.010	102.00	7.88	<0.020	26.50	1.04	2.05	8.03														
PZ-11	Feb-92	PZ-11	Feb-92	<0.010	92.30	3.20	<0.020	27.20	0.90	2.28	8.48	3.73	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.13
PZ-11	May-92	PZ-11	May-92	<0.010	86.70	2.25	<0.020	21.70	0.76	1.55	7.03														
PZ-11	Aug-92	PZ-11	Aug-92	<0.010	90.10	1.60	<0.020	22.20	0.75	2.47	6.86														
PZ-11	Dec-92	PZ-11	Dec-92	<0.010	102.00	2.12	<0.020	24.20	0.662	2.32	9.37														
PZ-11	Feb-93	PZ-11	Feb-93	<0.010	70.1	6.07	<0.020	17.5	0.860	2.61	8.38														
PZ-11	May-93	PZ-11	May-93	<0.010	94.0	1.78	0.007	23.0	0.904	1.78	9.36	1.24	<0.060	<0.020	<0.010	<0.010	0.025	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.065
PZ-11	Aug-93	PZ-11	Aug-93	<0.010	128	2.71	0.005	34.8	0.911	2.17	11.1														
PZ-11	Dec-93	PZ-11	Dec-93	<0.010	129	1.80	<0.005	33.8	1.14	2.21	10.8														
PZ-11	Feb-94	PZ-11	Feb-94	0.010	89.8	3.64	<0.005	23.0	0.859	2.22	9.13														
PZ-11	May-94	PZ-11	May-94	<0.010	111	2.28	0.005	27.4	0.89	1.77	18.8														
PZ-11	Aug-94	PZ-11	Aug-94	<0.010	152	1.33	<0.005	32.4	1.48	3.88	7.23	0.76	<0.060	<0.020	<0.10	<0.010	0.050	0.020	0.023	<0.001	0.063	<0.005	<0.020	<0.005	0.19
PZ-11	Nov-94	PZ-11	Nov-94	<0.010	99	2.04	<0.005	25.7	1.04	3.18	9.09														
PZ-11	March-95	PZ-11	March-95	<0.010	127.00	1.29	<0.005	29.00	1.20	3.26	8.00														
PZ-11	June-95	PZ-11	June-95	<0.010	128.00	0.96	<0.005	28.60	1.58	2.04	7.15														
PZ-11	Sept. - 95	PZ-11	Sept. - 95	<0.010	123.00	2.12	<0.005	27.40	1.37	2.28	9.50														
PZ-11	Nov-95	PZ-11	Nov-95	<0.010	122.00	1.64	0.03	30.10	1.34	2.43	13.00	0.62	<0.060	<0.020	0.31	<0.010		<0.02	0.03	<0.001	<0.040	<0.005	<0.020	<0.005	0.20
PZ-11	April-96	PZ-11	April-96	<0.002	120.00	2.40	0.027	20.00	1.10	2.40	9.60	1.10	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.11
PZ-11	June-96	PZ-11	June-96	<0.01	150.00	1.60	<0.01	25.00	1.60	2.60	10.00														
PZ-11	Sept-96	PZ-11	Sept-96	<0.01	160.00	3.90	0.016	28.00	1.70	3.20	11.00														
PZ-11	Nov-96	PZ-11	Nov-96	<0.01	110.00	1.90	<0.01	21.00	1.30	2.30	8.80														
PZ-11	March-97	PZ-11	March-97	<0.01	150.00	2.80	<0.01	24.00	1.60	2.50	6.60	0.92	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.13

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
PZ-12	Sep-87	PZ-12	Sep-87	<0.010	57.00	1.24	<0.005		1.16		10.40	<0.2	<0.06	<0.010	<0.2	<0.005	<0.05	0.010	<0.025	0.00	<0.040	<0.005	<0.010	<0.010	<0.020
PZ-12	May-88	PZ-12	May-88	No Sample Collected																					
PZ-12	Aug-88	PZ-12	Aug-88	No Sample Collected																					
PZ-12	Nov-88	PZ-12	Nov-88	No Sample Collected																					
PZ-12	Feb-89	PZ-12	Feb-89	<0.010	98.80	82.40	0.04		2.74		11.40	45.00	<0.06	0.0186	<0.2	<0.005	<0.25	0.07	0.12	<0.0002	0.08	<0.005	<0.010	<0.010	0.61
PZ-12	Apr-89	PZ-12	Apr-89	<0.010		32.00	0.0155		1.64					0.0191											
PZ-12	Jul-89	PZ-12	Jul-89	<0.010		35.10	0.0212		1.74					0.0157											
PZ-12	Nov-90	PZ-12	Nov-90	<0.01	69.00	11.00	<0.020	12.00	1.30	3.50	11.00	8.70	<0.060	<0.020	0.21	<0.01	0.07	<0.03	0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.10
PZ-12	Feb-91	PZ-12	Feb-91	<0.010	64.90	10.90	<0.020	11.00	1.14	2.55	10.50														
PZ-12	May-91	PZ-12	May-91	<0.010	60.80	8.98	<0.020	10.30	1.03	2.48	10.50														
PZ-12	Aug-91	PZ-12	Aug-91	<0.010	63.90	4.71	<0.020	9.37	0.89	2.37	10.80														
PZ-12	Nov-91	PZ-12	Nov-91	<0.010	42.20	17.60	<0.020	11.10	1.07	3.80	10.00														
PZ-12	Feb-92	PZ-12	Feb-92	<0.010	49.60	9.30	<0.020	10.00	0.98	5.20	9.54	9.12	<0.060	<0.020	0.21	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	0.04	<0.010	0.10
PZ-12	May-92	PZ-12	May-92	<0.010	56.20	2.13	<0.020	7.24	0.75	1.28	8.47														
PZ-12	Aug-92	PZ-12	Aug-92	<0.010	48.80	2.19	<0.020	7.23	0.70	1.91	7.07														
PZ-12	Dec-92	PZ-12	Dec-92	<0.010	47.50	3.78	<0.020	7.55	0.545	2.14	10.10														
PZ-12	Feb-93	PZ-12	Feb-93	<0.010	45.3	1.80	<0.020	6.60	0.788	2.77	10.6														
PZ-12	May-93	PZ-12	May-93	<0.010	53.8	1.52	0.009	7.78	0.703	1.44	12.0	0.82	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	0.027	<0.001	<0.040	<0.005	<0.020	<0.010	0.003
PZ-12	Aug-93	PZ-12	Aug-93	<0.010	54.1	2.30	<0.005	10.3	0.646	1.17	13.3														
PZ-12	Dec-93	PZ-12	Dec-93	<0.010	59.9	2.23	<0.005	9.8	0.813	1.75	11.5														
PZ-12	Feb-94	PZ-12	Feb-94	<0.010	52.9	2.87	<0.005	9.0	0.740	1.50	10.5														
PZ-12	May-94	PZ-12	May-94	<0.010	57.0	1.31	<0.005	8.06	0.66	0.79	12.3														
PZ-12	Aug-94	PZ-12	Aug-94	<0.010	61.4	1.62	<0.005	8.86	0.86	1.94	8.18	1.19	<0.060	<0.020	<0.10	<0.010	<0.05	0.020	0.038	<0.001	0.04	<0.005	<0.020	<0.005	0.12
PZ-12	Nov-94	PZ-12	Nov-94	<0.010	42.3	0.56		7.58	0.63	1.56	10.3														
PZ-12	March-95	PZ-12	March-95	<0.010	50.80	1.99	<0.005	8.40	0.67	2.27	10.00														
PZ-12	June-95	PZ-12	June-95	<0.010	55.00	0.71	<0.005	8.30	0.71	1.00	9.42														
PZ-12	Sept. - 95	PZ-12	Sept. - 95	<0.010	56.80	1.96	<0.005	8.72	0.66	1.49	10.70														
PZ-12	Nov-95	PZ-12	Nov-95	<0.010	45.60	2.20	<0.005	8.50	0.64	1.62	11.80	1.46	<0.060	<0.020	0.23	<0.010		<0.02	0.04	<0.001	<0.040	<0.005	<0.020	<0.005	0.27
PZ-12	April-96	PZ-12	April-96	<0.002	61.00	2.80	<0.01	8.50	0.63	1.20	10.00	1.30	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.046
PZ-12	June-96	PZ-12	June-96	<0.01	57.00	2.20	<0.01	8.50	0.66	1.10	9.50														
PZ-12	Sept-96	PZ-12	Sept-96	<0.01	59.00	1.40	<0.01	8.40	0.59	1.00	9.90														
PZ-12	Nov-96	PZ-12	Nov-96	<0.01	52.00	0.91	<0.01	7.80	0.52	<1	8.40														
PZ-12	March-97	PZ-12	March-97	<0.01	52.00	1.10	<0.01	7.40	0.53	1.20	7.10	0.55	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.150

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-3B	Nov-89	MW-3B	Nov-89	<0.01	180.00	5.05	<0.003		0.96		13.20	2.57	<0.060	0.02	<0.2	<0.005	<0.05	<0.01	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.01	0.06
MW-3B	Feb-90	MW-3B	Feb-90	<0.01		0.48	<0.003		0.78					0.02											
MW-3B	Apr-90	MW-3B	Apr-90	<0.01		1.91	0.0036		0.61					0.02											
MW-3B	Nov-90	MW-3B	Nov-90	<0.01	184.00	2.20	<0.020	32.00	1.00	1.50	15.00	1.10	<0.060	<0.020	0.05	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.06
MW-3B	Feb-91	MW-3B	Feb-91	<0.010	122.00	0.72	<0.020	19.70	0.64	1.00	12.00														
MW-3B	May-91	MW-3B	May-91	<0.010	107.00	1.73	<0.020	17.20	0.62	1.14	12.40														
MW-3B	Aug-91	MW-3B	Aug-91	<0.010	113.00	1.50	<0.020	17.50	0.57	1.18	13.50														
MW-3B	Nov-91	MW-3B	Nov-91	<0.010	107.00	1.07	<0.020	15.50	0.54	0.79	12.60														
MW-3B	Feb-92	MW-3B	Feb-92	<0.010	138.00	1.63	<0.020	22.90	0.75	1.47	10.60	1.19	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-3B	May-92	MW-3B	May-92	<0.010	167.00	1.24	<0.020	26.90	0.82	1.06	12.80														
MW-3B	Aug-92	MW-3B	Aug-92	<0.010	103.00	0.88	<0.020	17.20	0.49	1.56	9.27														
MW-3B	Dec-92	MW-3B	Dec-92	<0.010	120.00	2.30	<0.020	19.20	0.450	1.52	11.60														
MW-3B	Feb-93	MW-3B	Feb-93	<0.010	101	2.20	<0.020	18.0	0.724	1.44	11.5														
MW-3B	Jun-93	MW-3B	Jun-93	<0.010	108	0.632	<0.005	15.7	0.513	1.11	14.8	0.38	<0.060	<0.020	<0.010	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	0.008	<0.020	<0.010	<0.020
MW-3B	Aug-93	MW-3B	Aug-93	<0.010	138	2.17	0.010	34.0	0.688	1.23	15.9														
MW-3B	Dec-93	MW-3B	Dec-93	<0.010	135	1.54	<0.005	26.6	0.764	1.21	10.0														
MW-3B	Feb-94	MW-3B	Feb-94	<0.010	178	1.82	<0.005	32.0	1.13	1.56	12.3														
MW-3B	June-94	MW-3B	June-94	<0.010	110	0.38	<0.005	17.2	0.57	0.79	15.0														
MW-3B	Aug-94	MW-3B	Aug-94	<0.010	182	1.38	<0.005	31	1.06	1.79	19.8	0.67	<0.060	0.03	<0.10	<0.010	<0.05	0.020	0.044	<0.001	0.094	<0.005	<0.020	<0.005	0.033
MW-3B	Nov-94	MW-3B	Nov-94	<0.010	892	0.27	<0.005	19.1	0.60	1.05	13.4														
MW-3B	March-95	MW-3B	March-95	<0.010	126.00	1.10	<0.005	22.00	0.72	1.20	14.80														
MW-3B	June-95	MW-3B	June-95	<0.010	104.00	0.31	0.005	18.60	0.66	0.89	12.40														
MW-3B	Sept. - 95	MW-3B	Sept. - 95	<0.010	119.00	0.44	<0.005	19.80	0.64	1.13	14.30														
MW-3B	Nov-95	MW-3B	Nov-95	<0.010	130.00	0.89	<0.005	26.00	0.78	1.42	18.60	0.48	<0.060	0.025	0.33	<0.010		<0.02	0.026	<0.001	<0.040	<0.005	<0.020	<0.005	0.044
MW-3B	April-96	MW-3B	April-96	<0.002	62.00	3.60	0.012	10.00	0.34	1.50	8.10	1.90	<0.1	0.015	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.130
MW-3B	June-96	MW-3B	June-96	<0.01	100.00	1.70	<0.01	16.00	0.61	1.30	16.00														
MW-3B	Sept-96	MW-3B	Sept-96	<0.01	130.00	3.20	<0.01	20.00	0.78	1.80	17.00														
MW-3B	Nov-96	MW-3B	Nov-96	<0.01	84.00	0.70	<0.01	16.00	0.46	1.20	17.00														
MW-3B	March-97	MW-3B	March-97	<0.01	100.00	2.40	0.014	16.00	0.61	1.70	14.00	1.20	<0.06	0.016	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.130

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-207SA	Nov-90	MW-207SA	Nov-90	<0.01	350.00	270.00	0.20	100.00	12.00	13.00	13.00	120.00	<0.060	0.08	1.50	<0.01	0.09	0.14	0.52	<0.001	0.27	<0.005	<0.02	<0.010	0.87
MW-207SA	Feb-91	MW-207SA	Feb-91	<0.010	310.00	196.00	0.13	92.50	10.50	12.10	92.50														
MW-207SA	May-91	MW-207SA	May-91	<0.010	273.00	128.00	0.07	78.70	8.43	13.00	12.30														
MW-207SA	Aug-91	MW-207SA	Aug-91	<0.010	344.00	288.00	0.06	120.00	11.30	17.30	10.60														
MW-207SA	Nov-91	MW-207SA	Nov-91	0.02	272.00	207.00	0.09	87.20	9.38	30.10	13.80														
MW-207SA	Feb-92	MW-207SA	Feb-92	<0.010	165.00	12.00	<0.020	39.00	5.38	2.55	8.53	3.28	<0.060	<0.020	0.19	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	0.03	<0.010	0.05
MW-207SA	May-92	MW-207SA	May-92	<0.010	193.00	9.78	<0.020	41.20	4.09	1.26	9.84	0.36	<0.060	<0.020	<0.10	<0.010	<0.2	<0.02	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.02
MW-207SA	Aug-92	MW-207SA	Aug-92	<0.010	277.00	330.00	0.203	125.00	10.90	20.00	9.48														
MW-207SA	Dec-92	MW-207SA	Dec-92	<0.010	173.00	8.59	<0.020	38.40	2.61	2.44	11.20														
MW-207SA	Feb-93	MW-207SA	Feb-93	<0.010	221	231	0.120	90	10.7	19.5	12.7														
MW-207SA	May-93	MW-207SA	May-93	<0.010	192	15.7	<0.005	42.4	3.79	1.70	11.2	0.70	<0.060	0.021	0.21	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-207SA	Aug-93	MW-207SA	Aug-93	<0.010	184	376	0.208	149	9.25	15.2	16.8														
MW-207SA	Dec-93	MW-207SA	Dec-93	<0.010	233	260	0.061	116	11.4	22.1	13.9														
MW-207SA	Feb-94	MW-207SA	Feb-94	<0.010	196	185	0.012	85.0	7.22	27.6	11.5														
MW-207SA	May-94	MW-207SA	May-94	<0.010	210	31.8	0.022	47.5	4.08	1.54	11.1														
MW-207SA	Aug-94	MW-207SA	Aug-94	0.017	206	19.2	<0.005	45.2	4.95	2.22	8.13	1.76	<0.060	0.031	<0.1	<0.010	<0.05	0.020	0.022	<0.001	0.11	<0.005	<0.020	<0.005	0.070
MW-207SA	Nov-94	MW-207SA	Nov-94	<0.010	165	22	<0.005	43.3	3.7	1.7	10.9														
MW-207SA	March-95	MW-207SA	March-95	<0.010	194.00	26.00	<0.005	44.00	3.24	1.49	10.80														
MW-207SA	June-95	MW-207SA	June-95	<0.010	252.00	37.40	0.021	54.80	6.10	3.72	9.22														
MW-207SA	Sept. - 95	MW-207SA	Sept. - 95	<0.010	166.00	191.00	0.074	102.00	8.50	10.20	12.40														
MW-207SA	Nov-95	MW-207SA	Nov-95	<0.010	194.00	166.00	0.074	84.60	7.56	12.20	15.40	53.40	<0.060	0.063	1.39	<0.010		0.076	0.32	<0.001	0.18	<0.005	<0.020	<0.005	0.50
MW-207S	April-96	MW-207S	April-96	0.0039	290.00	120.00	0.080	28.00	5.30	11.00	14.00	50.00	0.20	<0.01	0.66	0.0031	<1	0.068	0.25	0.0012	0.11	0.21	<0.01	<0.03	0.42
MW-207S	June-96	MW-207S	June-96	<0.01	340.00	150.00	<0.01	35.00	7.30	10.00	14.00														
MW-207S	Sept-96	MW-207S	Sept-96	<0.01	300.00	160.00	0.120	44.00	7.10	10.00	11.00														
MW-207S	Nov-96	MW-207S	Nov-96	<0.01	220.00	150.00	0.100	38.00	5.70	11.00	12.00														
MW-207S	March-97	MW-207S	March-97	<0.01	320.00	170.00	0.140	33.00	6.90	16.00	12.00	73.00	0.21	<0.01	1.30	<0.01	<1	0.100	0.42	<0.0004	0.16	<0.05	<0.01	<0.03	0.73

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-207D	Sep-87	MW-207D	Sep-87	<0.010	81.00	0.92	<0.005		0.65		11.30	0.70	<0.06	<0.010	<0.2	<0.005	0.050	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	<0.020
MW-207D	Feb-89	MW-207D	Feb-89	<0.010	124.00	0.78	<0.005		0.98		15.50	0.24	<0.06	<0.010	<0.2	<0.005	<0.25	0.010	0.07	<0.0002	<0.040	<0.005	<0.010	<0.010	0.10
MW-207D	Apr-89	MW-207D	Apr-89	<0.010		1.45	<0.005		0.96					0.01											
MW-207D	Jun-89	MW-207D	Jun-89	<0.010		0.97	<0.005		0.92					0.02											
MW-207D	Nov-89	MW-207D	Nov-89	<0.010		1.89	<0.003		0.90					0.02											
MW-207D	Feb-90	MW-207D	Feb-90	<0.010	140.00	2.54	<0.003		1.31		12.60	1.79	<0.06	0.02	<0.2	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	<0.020
MW-207D	Apr-90	MW-207D	Apr-90	<0.010		1.32	0.0049		1.42					0.02											
MW-207D	Nov-90	MW-207D	Nov-90	<0.01	140.00	8.20	<0.020	27.00	1.80	3.30	13.00	4.30	<0.060	0.02	0.15	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.10
MW-207D	Feb-91	MW-207D	Feb-91	<0.010	140.00	5.08	<0.020	26.60	1.47	2.61	11.50														
MW-207D	May-91	MW-207D	May-91	<0.010	138.00	2.64	<0.020	25.20	1.48	2.26	11.50														
MW-207D	Aug-91	MW-207D	Aug-91	<0.010	143.00	4.22	<0.020	26.70	1.52	2.94	12.10														
MW-207D	Nov-91	MW-207D	Nov-91	<0.010	124.00	3.05	<0.020	21.20	1.20	1.80	11.40														
MW-207D	Feb-92	MW-207D	Feb-92	<0.010	124.00	4.75	<0.020	25.70	1.42	2.53	11.80	4.80	<0.060	<0.020	0.18	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.07
MW-207D	May-92	MW-207D	May-92	<0.010	134.00	1.29	<0.020	23.10	1.24	0.92	9.74	0.66	<0.060	<0.020	<0.10	<0.010	<0.2	<0.02	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.03
MW-207D	Aug-92	MW-207D	Aug-92	<0.010	148.00	1.71	<0.020	40.80	1.09	1.72	9.05														
MW-207D	Dec-92	MW-207D	Dec-92	<0.010	119.00	6.34	<0.020	24.00	0.96	2.93	11.60														
MW-207D	Feb-93	MW-207D	Feb-93	<0.010	115	49.2	0.028	33.0	2.60	6.90	11.4														
MW-207D	May-93	MW-207D	May-93	<0.010	69.30	6.23	0.006	25.4	1.49	2.31	12.5	4.63	<0.060	<0.020	0.29	<0.010	<0.25	0.020	0.052	<0.001	<0.040	<0.005	<0.020	<0.010	0.029
MW-207D	Aug-93	MW-207D	Aug-93	<0.010	138	8.50	0.013	34.5	1.30	1.57	14.2														
MW-207D	Dec-93	MW-207D	Dec-93	<0.010	143	3.77	<0.005	30.2	1.57	2.03	12.0														
MW-207D	Feb-94	MW-207D	Feb-94	<0.010	139	5.28	<0.005	29.0	1.91	1.87	10.0														
MW-207D	May-94	MW-207D	May-94	<0.010	164	2.03	<0.005	29.3	1.69	1.24	9.92														
MW-207D	Aug-94	MW-207D	Aug-94	0.013	164	2.40	<0.005	30.0	1.77	3.61	9.78	1.90	<0.060	<0.020	<0.10	<0.010	<0.05	0.020	<0.020	<0.001	0.11	<0.005	<0.020	<0.005	0.086
MW-207D	Nov-94	MW-207D	Nov-94	<0.010	127	0.7		28.9	1.38	1.14	10.9														
MW-207D	March-95	MW-207D	March-95	<0.010	159.00	4.59	<0.005	32.00	1.73	2.09	11.70														
MW-207D	June-95	MW-207D	June-95	<0.010	154.00	0.92	<0.005	31.70	1.63	1.31	9.60														
MW-207D	Sept. - 95	MW-207D	Sept. - 95	<0.010	171.00	2.39	<0.005	31.60	1.62	1.68	11.10														
MW-207D	Nov-95	MW-207D	Nov-95	<0.010	160.00	4.52	<0.005	33.70	1.73	2.19	14.20	1.97	<0.060	0.030	0.46	<0.010		<0.02	0.021	<0.001	<0.040	<0.005	<0.020	<0.005	0.080
MW-207D	April-96	MW-207D	April-96	<0.002	82.00	2.70	<0.01	19.00	0.43	7.30	8.80	0.82	<0.1	<0.01	<0.2	<0.003	<1	<0.01	0.028	<0.0002	<0.01	<0.1	<0.01	<0.03	0.190
MW-207D	June-96	MW-207D	June-96	<0.01	170.00	3.20	<0.01	25.00	1.70	1.70	14.00														
MW-207D	Sept-96	MW-207D	Sept-96	<0.01	180.00	4.20	<0.01	28.00	1.70	2.70	13.00														
MW-207D	Nov-96	MW-207D	Nov-96	<0.01	140.00	2.20	<0.01	24.00	1.60	1.40	13.00														
MW-207D	March-97	MW-207D	March-97	<0.01	120.00	12.00	0.01	22.00	1.80	4.60	4.20	0.73	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.170

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-210S	Sep-87	MW-210S	Sep-87	<0.010	101.00	0.93	0.01		0.87		29.50	7.33	<0.06	<0.010	<0.2	<0.005	0.07	0.01	0.08	<0.0002	<0.040	<0.005	<0.010	<0.010	<0.020
MW-210S	May-88	MW-210S	May-88																						
MW-210S	Aug-88	MW-210S	Aug-88																						
MW-210S	Nov-88	MW-210S	Nov-88	<0.010																					
MW-210S	Feb-89	MW-210S	Feb-89	<0.010	136.00	33.60	0.0161		1.41		28.80	1.77	<0.06		<0.2	<0.005	<0.25	0.03	0.06	<0.0002	<0.040	<0.005	<0.010	<0.010	0.14
MW-210S	Apr-89	MW-210S	Apr-89	<0.010		6.62	<0.005		0.59					<0.010											
MW-210S	Jun-89	MW-210S	Jun-89	<0.010		13.80	0.0072		0.65					<0.010											
MW-210S	Nov-89	MW-210S	Nov-89	<0.010		3.35	<0.003		0.44					0.01											
MW-210S	Feb-90	MW-210S	Feb-90	<0.010	69.20	1.57	<0.003		0.07		26.30	0.91	<0.06	<0.010	<0.2	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.02
MW-210S	Apr-90	MW-210S	Apr-90	<0.010		3.21	0.0064		0.20					<0.010											
MW-210S	Nov-90	MW-210S	Nov-90	<0.01	86.00	7.30	<0.020	29.00	0.31	2.90	28.00	4.40	<0.060	<0.020	0.10	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.06
MW-210S	Feb-91	MW-210S	Feb-91	<0.010	78.40	2.99	<0.020	20.10	0.13	2.59	24.60														
MW-210S	May-91	MW-210S	May-91	<0.010	92.10	3.08	<0.020	16.40	0.13	2.26	24.70														
MW-210S	Aug-91	MW-210S	Aug-91	<0.010	34.20	4.00	<0.020	8.05	0.08	1.77	7.82														
MW-210S	Nov-91	MW-210S	Nov-91	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Feb-92	MW-210S	Feb-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	May-92	MW-210S	May-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Aug-92	MW-210S	Aug-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Dec-92	MW-210S	Dec-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Feb-93	MW-210S	Feb-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	May-93	MW-210S	May-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Aug-93	MW-210S	Aug-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Dec-93	MW-210S	Dec-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Feb-94	MW-210S	Feb-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	May-94	MW-210S	May-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Aug-94	MW-210S	Aug-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-210S	Nov-94	MW-210S	Nov-94	*Monitoring Well Removed From Monitoring Program - Replaced by MW-303S*																					

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-210D	Sep-87	MW-210D	Sep-87	<0.010	251.00	10.80	<0.005		2.65		74.70	0.55	<0.06	0.03	<0.2	<0.005	0.15	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.04
MW-210D	May-88	MW-210D	May-88																						
MW-210D	Aug-88	MW-210D	Aug-88																						
MW-210D	Nov-88	MW-210D	Nov-88	<0.010																					
MW-210D	Feb-89	MW-210D	Feb-89	<0.010	279.00	28.90	<0.005		2.44		138.00	2.70	<0.06	0.06	0.22	<0.005	0.32	0.010	<0.025	<0.0002	0.05	<0.005	<0.010	<0.010	0.05
MW-210D	Apr-89	MW-210D	Apr-89	<0.010		11.80	<0.005		2.09					0.01											
MW-210D	Jun-89	MW-210D	Jun-89	<0.010		20.40	<0.005		1.90					0.06											
MW-210D	Nov-89	MW-210D	Nov-89	<0.010		17.10	<0.003		1.87					0.06											
MW-210D	Feb-90	MW-210D	Feb-90	<0.010	242.00	26.20	<0.003		2.01		122.00	1.24	<0.06	0.05	0.27	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.02
MW-210D	Apr-90	MW-210D	Apr-90	<0.010		9.73	<0.003		1.79					0.02											
MW-210D	Nov-90	MW-210D	Nov-90	<0.01	260.00	85.00	0.08	74.00	3.60	7.70	84.00	29.00	<0.060	0.08	0.46	<0.01	0.34	0.04	0.09	<0.001	0.09	<0.005	<0.02	<0.010	0.31
MW-210D	Feb-91	MW-210D	Feb-91	<0.010	245.00	28.40	<0.020	60.30	2.26	5.35	82.00														
MW-210D	May-91	MW-210D	May-91	<0.010	238.00	27.70	<0.020	58.10	2.14	5.75	84.40														
MW-210D	Aug-91	MW-210D	Aug-91	<0.010	235.00	26.50	<0.020	56.60	1.97	5.91	71.20														
MW-210D	Nov-91	MW-210D	Nov-91	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Feb-92	MW-210D	Feb-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	May-92	MW-210D	May-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Aug-92	MW-210D	Aug-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Dec-92	MW-210D	Dec-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Feb-93	MW-210D	Feb-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	May-93	MW-210D	May-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Aug-93	MW-210D	Aug-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Dec-93	MW-210D	Dec-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Feb-94	MW-210D	Feb-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	May-94	MW-210D	May-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Aug-94	MW-210D	Aug-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-210D	Nov-94	MW-210D	Nov-94	*Monitoring Well Removed From Monitoring Program - Replaced by MW-303D*																					

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-211S	Sep-87	MW-211S	Sep-87	<0.010	343.00	73.90	0.07		3.84		24.50	20.60	<0.06	<0.010	0.44	<0.005	0.08	0.05	0.09	<0.0002	0.05	<0.005	<0.010	<0.010	0.21
MW-211S	Nov-88	MW-211S	Nov-88	<0.010																					
MW-211S	Feb-89	MW-211S	Feb-89	<0.010	221.00	77.80	0.06		3.12		27.80	38.50	<0.06	0.01	0.53	<0.005	<0.25	0.05	0.12	<0.0002	0.08	<0.005	<0.010	<0.010	0.24
MW-211S	Apr-89	MW-211S	Apr-89	<0.010		18.40	<0.005		1.57					<0.010											
MW-211S	Jun-89	MW-211S	Jun-89	<0.010		7.63	<0.005		1.31					<0.010											
MW-211S	Nov-89	MW-211S	Nov-89	<0.010		6.80	<0.003		1.17					<0.010											
MW-211S	Feb-90	MW-211S	Feb-90	<0.010	196.00	30.30	0.0325		1.96		29.00	16.50	<0.06	<0.010	0.28	<0.005	<1.0	0.02	0.04	<0.0002	<0.040	<0.005	<0.010	<0.010	0.07
MW-211S	Apr-90	MW-211S	Apr-90	<0.010		3.57	<0.003		1.08					<0.010											
MW-211S	Nov-90	MW-211S	Nov-90	<0.01	180.00	17.00	0.033	42.00	2.00	4.20	33.00	8.30	<0.060	<0.020	0.25	<0.01	0.11	<0.03	0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.13
MW-211S	Feb-91	MW-211S	Feb-91	<0.010	159.00	9.23	<0.020	34.10	1.45	3.04	31.50														
MW-211S	May-91	MW-211S	May-91	<0.010	138.00	6.06	<0.020	29.40	1.23	2.38	28.00														
MW-211S	Aug-91	MW-211S	Aug-91	<0.010	182.00	7.48	<0.020	37.50	1.52	2.81	32.70														
MW-211S	Nov-91	MW-211S	Nov-91	<0.010	192.00	11.90	<0.020	34.90	1.71	2.92	36.90														
MW-211S	Feb-92	MW-211S	Feb-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	May-92	MW-211S	May-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Aug-92	MW-211S	Aug-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Dec-92	MW-211S	Dec-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Feb-93	MW-211S	Feb-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Jun-93	MW-211S	Jun-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Aug-93	MW-211S	Aug-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Dec-93	MW-211S	Dec-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Feb-94	MW-211S	Feb-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	May-94	MW-211S	May-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Aug-94	MW-211S	Aug-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-211S	Nov-94	MW-211S	Nov-94	*Monitoring Well Removed From Monitoring Program - Replaced by MW-304S*																					

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-211D	Sep-87	MW-211D	Sep-87	<0.010	170.00	4.66	<0.005		0.92		29.80	1.71	<0.06	<0.010	0.26	<0.005	0.11	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	<0.020
MW-211D	May-88	MW-211D	May-88																						
MW-211D	Aug-88	MW-211D	Aug-88																						
MW-211D	Nov-88	MW-211D	Nov-88	<0.010																					
MW-211D	Feb-89	MW-211D	Feb-89	<0.010	209.00	53.60	0.041		2.41		30.40	25.00	<0.06	<0.010	0.44	<0.005	<0.25	0.04	0.08	<0.0002	0.05	<0.005	<0.010	<0.010	0.18
MW-211D	Apr-89	MW-211D	Apr-89	<0.010		0.34	<0.005		2.14					<0.010											
MW-211D	Jun-89	MW-211D	Jun-89	<0.010		0.22	<0.005		0.02					<0.010											
MW-211D	Nov-89	MW-211D	Nov-89	<0.010		5.94	<0.003		1.02					<0.010											
MW-211D	Feb-90	MW-211D	Feb-90	<0.010	199.00	7.47	<0.003		1.22		40.10	<0.20	0.06	<0.010	0.35	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.05
MW-211D	Apr-90	MW-211D	Apr-90	<0.010		6.74	<0.003		0.11					<0.010											
MW-211D	Nov-90	MW-211D	Nov-90	<0.01	200.00	7.10	0.02	41.00	1.30	4.00	43.00	<0.20	<0.060	<0.020	0.38	<0.01	0.13	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.05
MW-211D	Feb-91	MW-211D	Feb-91	<0.010	195.00	8.03	<0.020	40.60	1.24	4.52	41.50														
MW-211D	May-91	MW-211D	May-91	<0.010	173.00	7.24	<0.020	37.60	1.10	4.24	40.40														
MW-211D	Aug-91	MW-211D	Aug-91	<0.010	205.00	7.10	<0.020	43.80	1.23	4.42	46.30														
MW-211D	Nov-91	MW-211D	Nov-91	<0.010	191.00	8.44	<0.020	34.50	1.19	3.73	43.10														
MW-211D	Feb-92	MW-211D	Feb-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	May-92	MW-211D	May-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Aug-92	MW-211D	Aug-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Dec-92	MW-211D	Dec-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Feb-93	MW-211D	Feb-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Jun-93	MW-211D	Jun-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Aug-93	MW-211D	Aug-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Dec-93	MW-211D	Dec-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Feb-94	MW-211D	Feb-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	May-94	MW-211D	May-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Aug-94	MW-211D	Aug-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-211D	Nov-94	MW-211D	Nov-94	*Monitoring Well Removed From Monitoring Program - Replaced by MW-304D*																					

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-211VS	Sep-87	MW-211VS	Sep-87	<0.010	172.00	11.00	0.015		1.50		6.50	4.64	0.06	<0.010	<0.2	<0.005	<0.05	0.01	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	<0.020
MW-211VS	May-88	MW-211VS	May-88			<0.1																			
MW-211VS	Nov-89	MW-211VS	Nov-89	<0.010		59.70	<0.003		2.56					<0.010											
MW-211VS	Feb-90	MW-211VS	Feb-90	<0.010	143.00	40.10	0.0406		1.67		7.36	19.70	<0.06	0.01	<0.2	<0.005	<1.0	0.03	0.09	<0.0002	0.04	<0.005	<0.010	<0.010	0.14
MW-211VS	Apr-90	MW-211VS	Apr-90	<0.010		0.98	0.0086		0.35					<0.010											
MW-211VS	Nov-90	MW-211VS	Nov-90	<0.01	140.00	8.40	<0.020	30.00	0.40	6.50	6.00	3.60	<0.060	<0.020	0.04	<0.01	<0.05	<0.03	0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.05
MW-211VS	Feb-91	MW-211VS	Feb-91	<0.010	114.00	3.49	<0.020	27.90	0.15	1.94	2.88														
MW-211VS	May-91	MW-211VS	May-91	<0.010	117.00	12.40	<0.020	28.50	0.60	2.73	2.71														
MW-211VS	Aug-91	MW-211VS	Aug-91	<0.010	166.00	0.39	<0.020	41.30	<0.010	2.67	3.90														
MW-211VS	Nov-91	MW-211VS	Nov-91	<0.010	144.00	17.10	<0.020	31.90	0.70	3.69	4.03														
MW-211VS	Feb-92	MW-211VS	Feb-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211VS	May-92	MW-211VS	May-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211VS	Aug-92	MW-211VS	Aug-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211VS	Dec-92	MW-211VS	Dec-92	*Monitoring Well Submerged - No Sample Collected*																					
MW-211VS	Feb-93	MW-211VS	Feb-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211VS	Jun-93	MW-211VS	Jun-93	<0.010	128	4.53	0.013	12.7	4.12	5.50	203	2.79	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	0.03	<0.001	<0.040	<0.005	<0.020	<0.010	0.026
MW-211VS	Aug-93	MW-211VS	Aug-93	<0.010	232	7.70	0.012	33.0	5.20	4.86	149														
MW-211VS	Dec-93	MW-211VS	Dec-93	*Monitoring Well Submerged - No Sample Collected*																					
MW-211VS	Feb-94	MW-211VS	Feb-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-211VS	May-94	MW-211VS	May-94	<0.010	384	2.11	0.006	36.2	13.6	6.06	532														
MW-211VS	Aug-94	MW-211VS	Aug-94	*Monitoring Well Submerged - No Sample Collected*																					
MW-211VS	Nov-94	MW-211VS	Nov-94	*Monitoring Well Removed From Monitoring Program - Replaced by MW-304VS*																					

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-220	Sep-87	MW-220	Sep-87	<0.010	277.00	16.70	0.014		1.85		21.90	8.64	<0.06	<0.010	<0.2	<0.005	<0.05	0.02	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.07
MW-220	May-88	MW-220	May-88																						
MW-220	Aug-88	MW-220	Aug-88																						
MW-220	Nov-88	MW-220	Nov-88	<0.010																					
MW-220	Feb-89	MW-220	Feb-89	<0.010	375.00	80.10	0.0338		3.30		10.20	40.40	0.07	0.03	0.34	<0.005	<0.25	0.06	0.13	<0.0002	0.09	<0.005	<0.010	<0.010	0.35
MW-220	Apr-89	MW-220	Apr-89	<0.010		16.70	0.015		1.74					0.02											
MW-220	Jun-89	MW-220	Jun-89	<0.010		249.00	0.147		9.78					0.06											
MW-220	Feb-90	MW-220	Feb-90	<0.010	249.00	2.39	<0.003		1.27		12.30	0.72	<0.06	<0.010	<0.2	<0.005	<1.0	0.010	<0.025	0.00	<0.040	<0.005	<0.010	<0.010	0.04
MW-220	Apr-90	MW-220	Apr-90	<0.010		22.90	0.0097		1.49					0.04											
MW-220	Nov-90	MW-220	Nov-90	<0.01	260.00	7.80	<0.020	75.00	1.30	3.40	14.00	4.00	<0.060	<0.020	0.08	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.08
MW-220	Feb-91	MW-220	Feb-91	<0.010	241.00	14.20	<0.020	70.00	1.45	3.94	14.90														
MW-220	May-91	MW-220	May-91	<0.010	242.00	16.60	0.02	69.20	1.50	4.09	14.60														
MW-220	Aug-91	MW-220	Aug-91	<0.010	239.00	22.00	<0.020	66.40	1.58	4.61	18.20														
MW-220	Nov-91	MW-220	Nov-91	<0.010	196.00	23.80	<0.020	51.20	1.51	4.16	16.70														
MW-220	Feb-92	MW-220	Feb-92	<0.010	221.00	18.20	<0.020	69.80	1.10	4.48	14.70	11.50	<0.060	<0.020	0.22	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.09
MW-220	May-92	MW-220	May-92	<0.010	231.00	2.08	<0.020	56.60	1.04	2.05	14.90	1.01	<0.060	<0.020	<0.10	<0.010	<0.2	<0.02	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-220	Aug-92	MW-220	Aug-92	<0.010	184.00	15.00	<0.020	52.00	1.14	4.69	12.40														
MW-220	Dec-92	MW-220	Dec-92	<0.010	173.00	1.15	<0.020	43.30	0.640	2.77	17.60														
MW-220	Feb-93	MW-220	Feb-93	<0.010	183	41.6	0.022	58.3	2.27	6.65	14.3														
MW-220	Jun-93	MW-220	Jun-93	<0.010	222	15.7	0.011	56.9	1.21	4.53	13.8	9.33	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.034
MW-220	Aug-93	MW-220	Aug-93	<0.010	199	22.0	0.016	69.8	1.10	3.79	16.6														
MW-220	Dec-93	MW-220	Dec-93	<0.010	186	6.60	0.006	57.1	0.939	3.57	16.4														
MW-220	Mar-94	MW-220	Mar-94	<0.010	158	1.70	<0.005	73.0	0.882	2.27	16.3														
MW-220	Jun-94	MW-220	Jun-94	<0.010	254	7.87	0.007	62.2	1.17	2.21	13.4														
MW-220	Aug-94	MW-220	Aug-94	<0.010	188	0.18	<0.005	50.2	0.73	4.61	8.50	0.24	<0.060	<0.020	<0.10	<0.010	0.07	0.020	0.028	<0.001	0.092	<0.005	<0.020	<0.005	0.058
MW-220	Nov-94	MW-220	Nov-94	<0.010	149	0.26	<0.005	50.6	0.8	2.31	14.1														
MW-220	March-95	MW-220	March-95	<0.010	199	22.6	0.017	63	1.5	4.83	19.5														
MW-220	June-95	MW-220	June-95	<0.010	198	2.65	<0.005	27.4	1.32	2.26	12.1														
MW-220	Sept. - 95	MW-220	Sept. - 95	<0.010	170	16	0.008	62.1	1.54	4.24	21.4														
MW-220	Nov-95	MW-220	Nov-95	<0.010	241	13.2	0.006	79.6	1.66	4.89	26.7	7.68	<0.060	<0.020	0.42	<0.010		<0.02	0.047	<0.001	<0.040	<0.005	<0.020	<0.005	0.11
MW-220	April-96	MW-220	April-96	<0.002	350	21	0.022	29	2.1	7.4	22	11	<0.1	<0.01	<0.2	<0.003	<1	0.017	<0.02	<0.0002	0.024	<0.1	<0.01	<0.03	0.11
MW-220	June-96	MW-220	June-96	<0.01	260	19	<0.01	34	1.8	5.6	14														
MW-220	Sept-96	MW-220	Sept-96	<0.01	240	13	0.014	41	1.6	4.7	16														
MW-220	Nov-96	MW-220	Nov-96	<0.01	250	14	0.012	43	2.2	5.3	13														
MW-220	March-97	MW-220	March-97	<0.01	220	13	0.016	32	1.5	5.4	9.4	6.2	0.072	<0.01	<0.2	<0.01	<1	<0.01	0.021	<0.0004	0.013	<0.05	<0.01	<0.03	0.13

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-221S	Sep-87	MW-221S	Sep-87	<0.010	276.00	65.00	0.09		3.20		30.40	21.70	<0.06	0.04	0.31	<0.005	<0.05	0.03	0.15	0.00	0.07	<0.005	<0.010	<0.010	0.25
MW-221S	May-88	MW-221S	May-88																						
MW-221S	Aug-88	MW-221S	Aug-88																						
MW-221S	Nov-88	MW-221S	Nov-88	<0.010																					
MW-221S	Feb-89	MW-221S	Feb-89	<0.010	484.00	382.00	0.24		9.39		29.50	173.00	0.06	0.21	1.06	0.01	<0.25	0.25	0.70	<0.0002	0.32	<0.005	<0.010	<0.010	1.05
MW-221S	Apr-89	MW-221S	Apr-89	<0.010		78.00	0.05		2.90					0.07											
MW-221S	Jul-89	MW-221S	Jul-89	<0.010		0.45	<0.005		0.03					<0.010											
MW-221S	Nov-89	MW-221S	Nov-89	<0.010		42.30	<0.003		1.25					0.02											
MW-221S	Feb-90	MW-221S	Feb-90	<0.010	258.00	38.10	0.04		1.65		51.30	17.40	<0.06	0.02	<0.2	<0.005	<1.0	0.02	0.06	<0.0002	<0.040	<0.005	<0.010	<0.010	0.17
MW-221S	Apr-90	MW-221S	Apr-90	<0.010		7.97	0.08		0.91					0.02											
MW-221S	Nov-90	MW-221S	Nov-90	<0.01	250.00	10.00	0.03	53.00	2.00	5.10	55.00	4.60	<0.060	<0.020	0.09	<0.01	0.08	<0.03	0.03	<0.001	<0.04	<0.005	<0.02	<0.010	0.09
MW-221S	Feb-91	MW-221S	Feb-91	<0.010	248.00	6.56	<0.020	56.10	6.04	4.86	46.10														
MW-221S	May-91	MW-221S	May-91	<0.010	254.00	10.60	<0.020	55.30	9.30	6.02	68.10														
MW-221S	Aug-91	MW-221S	Aug-91	<0.010	302.00	35.00	0.03	66.50	2.50	8.31	70.60														
MW-221S	Nov-91	MW-221S	Nov-91	0.01	249.00	17.30	<0.020	47.20	1.54	4.33	55.00														
MW-221S	Feb-92	MW-221S	Feb-92	<0.010	215.00	7.25	<0.020	56.00	1.82	3.99	42.00	1.57	<0.060	<0.020	0.20	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.03
MW-221S	May-92	MW-221S	May-92	<0.010	259.00	2.39	<0.020	53.90	4.34	3.19	64.50	0.60	<0.060	<0.020	<0.10	<0.010	<0.2	<0.02	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-221S	Aug-92	MW-221S	Aug-92	<0.010	234.00	11.70	<0.020	58.80	4.31	6.40	53.00														
MW-221S	Dec-92	MW-221S	Dec-92	<0.010	194.00	21.50	0.021	49.00	1.43	6.53	60.30														
MW-221S	Feb-93	MW-221S	Feb-93	<0.010	199	20.1	<0.020	42.8	12.6	6.23	51.2														
MW-221S	Jun-93	MW-221S	Jun-93	<0.010	248	6.65	0.009	47.1	17.5	5.38	47.9	3.36	<0.060	<0.020	0.27	<0.010	<0.25	0.020	0.04	<0.001	<0.040	0.020	<0.020	<0.010	0.049
MW-221S	Aug-93	MW-221S	Aug-93	<0.010	262	24.5	0.024	76.0	3.71	8.06	49.1														
MW-221S	Dec-93	MW-221S	Dec-93	<0.010	216	34.7	0.028	67.0	3.67	6.58	45.4														
MW-221S	Feb-94	MW-221S	Feb-94	<0.010	211	19.8	0.016	57.0	2.24	4.44	81.5														
MW-221S	Jun-94	MW-221S	Jun-94	0.016	251	4.77	0.007	50.4	20.2	4.48	41.0														
MW-221S	Aug-94	MW-221S	Aug-94	<0.010	240	3.60	0.006	49.2	8.27	8.93	35.0	0.34	<0.06	0.026	<0.10	<0.010	0.17	0.020	0.064	<0.001	0.013	<0.005	<0.020	<0.005	0.063
MW-221S	Nov-94	MW-221S	Nov-94	<0.010	182	2	<0.005	51.1	3.43	4.73	41.1														
MW-221S	March-95	MW-221S	March-95	<0.010	210	12.5	0.012	56	18	4.98	31.5														
MW-221S	June-95	MW-221S	June-95	<0.010	260	6.7	<0.005	60	5.55	3.82	37.2														
MW-221S	Sept. - 95	MW-221S	Sept. - 95	<0.010	186	11.2	0.005	38.8	4.66	4.44	22.2														
MW-221S	Dec-95	MW-221S	Dec-95	<0.010	185	2.31	<0.005	33	5.83	4.09	30.6	1.32	<0.060	<0.020	0.74	<0.010		<0.02	<0.020	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
MW-221S	April-96	MW-221S	April-96	0.0047	280	210	0.290	29	20	19	47	140	0.33	<0.01	1.1	0.008	<1	0.17	0.4	0.0008	0.26	0.45	0.012	<0.03	0.95
MW-221S	June-96	MW-221S	June-96	<0.01	280	180	0.260	36	22	20	42														
MW-221S	Sept-96	MW-221S	Sept-96	<0.01	38	0.17	<0.01	15	<0.01	2.5	14														
MW-221S	Nov-96	MW-221S	Nov-96	<0.01	190	2.5	<0.01	31	11	4.4	27														
MW-221S	March-97	MW-221S	March-97	<0.01	250	91	0.110	33	10	15	30	59	0.2	<0.01	0.4	<0.01	<1	0.07	0.2	<0.0004	0.13	<0.05	<0.01	<0.03	0.55

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-221D	Sep-87	MW-221D	Sep-87	<0.010	47.00	0.83	<0.005		0.07		14.70	<0.20	<0.06	0.04	<0.2	<0.005	<0.05	0.01	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	<0.020
MW-221D	May-88	MW-221D	May-88																						
MW-221D	Aug-88	MW-221D	Aug-88																						
MW-221D	Nov-88	MW-221D	Nov-88	<0.010																					
MW-221D	Feb-89	MW-221D	Feb-89	<0.010	58.60	1.18	<0.005		0.04		15.60	0.59	<0.06	<0.010	<0.2	<0.005	<0.25	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.05
MW-221D	Apr-89	MW-221D	Apr-89	<0.010		0.53	<0.005		0.02					<0.010											
MW-221D	Jul-89	MW-221D	Jul-89	<0.010		10.50	0.01		0.23					<0.010											
MW-221D	Nov-89	MW-221D	Nov-89	<0.010		<0.1	<0.003		<0.015					<0.010											
MW-221D	Feb-90	MW-221D	Feb-90	<0.010	52.30	1.01	0.0036		0.02		16.80	0.71	<0.06	<0.010	<0.2	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.05
MW-221D	Apr-90	MW-221D	Apr-90	<0.010		1.46	0.0033		0.04					<0.010											
MW-221D	Nov-90	MW-221D	Nov-90	<0.01	42.00	0.21	<0.020	17.00	0.02	2.30	15.00	<0.20	<0.060	<0.020	0.03	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.05
MW-221D	Feb-91	MW-221D	Feb-91	<0.010	43.60	0.21	<0.020	17.70	0.02	2.54	15.20														
MW-221D	May-91	MW-221D	May-91	<0.010	41.70	0.14	<0.020	17.40	<0.015	2.72	15.00														
MW-221D	Aug-91	MW-221D	Aug-91	<0.010	44.50	0.35	<0.020	17.70	0.01	2.87	15.20														
MW-221D	Nov-91	MW-221D	Nov-91	<0.010	40.60	0.48	<0.020	14.50	0.03	1.59	15.90														
MW-221D	Feb-92	MW-221D	Feb-92	<0.010	40.20	0.72	<0.020	17.90	0.03	2.08	13.50	0.45	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-221D	May-92	MW-221D	May-92	<0.010	44.50	0.25	<0.020	16.40	<0.020	1.67	12.50														
MW-221D	Aug-92	MW-221D	Aug-92	<0.010	34.40	0.09	<0.020	14.80	0.02	2.88	11.50														
MW-221D	Dec-92	MW-221D	Dec-92	<0.010	35.20	0.125	<0.020	14.10	<0.020	2.30	15.50														
MW-221D	Feb-93	MW-221D	Feb-93	<0.010	32.5	0.068	<0.020	12.6	<0.020	2.22	14.6														
MW-221D	Jun-93	MW-221D	Jun-93	<0.010	34.3	0.116	<0.005	14.6	<0.020	2.24	17.0	0.23	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	0.007	<0.020	<0.010	<0.020
MW-221D	Aug-93	MW-221D	Aug-93	<0.010	34.3	0.214	<0.005	18.9	<0.020	2.13	16.6														
MW-221D	Dec-93	MW-221D	Dec-93	<0.010	40.0	0.184	0.013	18.7	<0.020	2.46	16.4														
MW-221D	Feb-94	MW-221D	Feb-94	<0.010	37.5	0.566	0.007	17.0	<0.020	2.04	15.7														
MW-221D	Jun-94	MW-221D	Jun-94	<0.010	39.8	0.08	<0.005	16.9	0.046	2.02	17.9														
MW-221D	Aug-94	MW-221D	Aug-94	<0.010	40.1	0.25	<0.005	16.2	0.094	3.08	11.5	0.49	<0.060	<0.020	<0.10	<0.010	0.06	0.020	0.11	<0.001	0.069	<0.005	<0.020	<0.005	0.083
MW-221D	Nov-94	MW-221D	Nov-94	<0.010	30.8	0.073	<0.005	16.4	<0.020	2.24	14.7														
MW-221D	March-95	MW-221D	March-95	<0.010	39.5	0.89	<0.005	18	<0.020	2.96	15.5														
MW-221D	June-95	MW-221D	June-95	<0.010	35.5	<0.050	<0.005	16.8	<0.020	1.92	11														
MW-221D	Sept. - 95	MW-221D	Sept. - 95	<0.010	39.5	0.15	<0.005	16.9	<0.020	2.32	14.8														
MW-221D	Dec-95	MW-221D	Dec-95	<0.010	31.8	0.25	<0.005	16.2	0.025	2.6	18.6	0.26	<0.060	<0.020	0.18	<0.010		<0.02	0.021	<0.001	<0.040	<0.005	<0.020	<0.005	0.04
MW-221D	April-96	MW-221D	April-96	<0.002	40	0.5	<0.01	15	0.031	2.5	16	0.19	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.052
MW-221D	June-96	MW-221D	June-96	<0.01	41	0.26	<0.01	16	<0.01	3	15														
MW-221D	Sept-96	MW-221D	Sept-96	<0.01	240	130	0.18	43	14	13	40														
MW-221D	Nov-96	MW-221D	Nov-96	<0.01	31	0.13	<0.01	14	0.013	1.8	13														
MW-221D	March-97	MW-221D	March-97	<0.01	37	0.19	<0.01	14	<0.01	2.1	9.8	<0.01	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	0.012	<0.05	<0.01	<0.03	0.056

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-222	Sep-87	MW-222	Sep-87	<0.010	262.00	45.60	0.024		1.56		13.30	5.97	<0.06	0.03	0.25	<0.005	<0.05	0.02	0.03	<0.0002	<0.040	<0.005	<0.010	<0.010	0.07
MW-222	May-88	MW-222	May-88																						
MW-222	Aug-88	MW-222	Aug-88																						
MW-222	Nov-88	MW-222	Nov-88	<0.010																					
MW-222	Feb-89	MW-222	Feb-89	<0.010	319.00	83.70	0.04		1.93		11.30	26.10	0.06	0.03	0.35	<0.005	<0.25	0.03	0.13	<0.0002	0.05	<0.005	<0.010	<0.010	0.21
MW-222	Apr-89	MW-222	Apr-89	<0.010		65.60	0.04		2.55					0.03											
MW-222	Jul-89	MW-222	Jul-89	<0.010		52.30	0.04		2.23					0.04											
MW-222	Nov-89	MW-222	Nov-89	<0.010		17.20	<0.003		1.28					<0.010											
MW-222	Feb-90	MW-222	Feb-90	<0.010	214.00	24.20	0.01		1.40		27.30	3.70	0.02	<0.010	<0.2	<0.005	<1.0	0.010	<0.025	0.00	<0.040	<0.005	<0.010	<0.010	0.04
MW-222	Apr-90	MW-222	Apr-90	<0.010		9.57	0.004		1.12					0.01											
MW-222	Nov-90	MW-222	Nov-90	<0.01	260.00	24.00	<0.020	21.00	1.80	3.10	37.00	3.10	<0.060	<0.020	0.14	<0.01	0.11	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.02
MW-222	Feb-91	MW-222	Feb-91	<0.010	286.00	26.40	<0.020	23.00	2.14	2.66	32.30														
MW-222	May-91	MW-222	May-91	<0.010	275.00	28.50	<0.020	21.40	2.21	2.92	40.60														
MW-222	Aug-91	MW-222	Aug-91	<0.010	343.00	39.10	<0.020	28.80	1.93	3.89	30.10														
MW-222	Nov-91	MW-222	Nov-91	0.01	359.00	36.90	<0.020	34.10	1.47	2.60	33.10														
MW-222	Feb-92	MW-222	Feb-92	<0.010	341.00	32.30	<0.020	44.60	2.34	3.43	28.30	1.99	<0.060	<0.020	0.64	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.03
MW-222	May-92	MW-222	May-92	<0.010	371.00	24.10	<0.020	36.10	3.19	2.35	23.10	0.56	<0.060	0.08	<0.10	<0.010	<0.2	<0.02	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-222	Aug-92	MW-222	Aug-92	<0.010	229.00	25.70	<0.020	32.80	1.32	3.88	27.70														
MW-222	Dec-92	MW-222	Dec-92	<0.010	263.00	1.98	<0.020	45.60	0.842	3.52	44.50														
MW-222	Feb-93	MW-222	Feb-93	<0.010	219	59.1	0.044	40.9	2.96	6.86	44.0														
MW-222	Jun-93	MW-222	Jun-93	<0.010	241	46.4	0.012	38.6	2.07	4.65	22.5	7.27	<0.060	<0.020	0.39	<0.010	<0.25	0.020	0.044	<0.001	<0.040	0.012	<0.020	<0.010	0.053
MW-222	Aug-93	MW-222	Aug-93	<0.010	219	50.9	0.017	63.4	1.01	8.05	16.8														
MW-222	Dec-93	MW-222	Dec-93	<0.010	283	46.3	0.010	75.1	1.45	9.04	92.4														
MW-222	Feb-94	MW-222	Feb-94	<0.010	332	55.7	0.015	65.0	3.38	6.38	65.0														
MW-222	Jun-94	MW-222	Jun-94	0.015	244	29.4	0.007	45.8	2.68	2.50	15.1														
MW-222	Aug-94	MW-222	Aug-94	0.013	280	28.7	<0.005	60.8	1.76	6.33	18.7	0.88	<0.060	0.029	<0.10	<0.010	<0.05	0.020	0.032	<0.001	0.12	<0.005	<0.020	<0.005	0.51
MW-222	Nov-94	MW-222	Nov-94	<0.010	199	26	<0.005	62.2	1.36	7.27	21.4														
MW-222	March-95	MW-222	March-95	<0.010	236	50	0.019	63	2.86	5.64	23.6														
MW-222	June-95	MW-222	June-95	<0.010	233	26.2	0.009	48.2	1.92	2.91	206														
MW-222	Sept. - 95	MW-222	Sept. - 95	<0.010	214	28.8	0.007	47.5	1.14	6.87	276														
MW-222	Nov-95	MW-222	Nov-95	<0.010	163	29.2	<0.005	40.3	2.35	6.15	46.8	11.2	<0.060	0.038	0.48	<0.010		<0.02	0.051	<0.001	0.05	<0.005	<0.020	<0.005	0.092
MW-222	April-96	MW-222	April-96	<0.002	240	67	0.067	26	2.1	12	170	31	<0.1	<0.01	0.4	<0.003	<1	0.04	0.092	<0.0002	0.058	<0.1	<0.01	<0.03	0.24
MW-222	June-96	MW-222	June-96	<0.01	270	36	<0.01	30	2.8	5.2	41														
MW-222	Sept-96	MW-222	Sept-96	<0.01	300	46	0.014	31	2.2	5.5	37														
MW-222	Nov-96	MW-222	Nov-96	<0.01	230	37	0.019	28	2	5.4	42														
MW-222	March-97	MW-222	March-97	<0.01	270	41	0.036	26	2.4	6.4	42	11	<0.06	<0.01	0.28	<0.01	<1	0.02	0.054	<0.0004	0.031	<0.05	<0.01	<0.03	0.19

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-223S	Sep-87	MW-223S	Sep-87	<0.010	226.00	1.13	<0.005		2.83		7.25	0.87	<0.06	<0.010	<0.2	<0.005	<0.05	0.010	0.05	<0.0002	<0.040	<0.005	<0.010	0.01	<0.020
MW-223S	May-88	MW-223S	May-88																						
MW-223S	Aug-88	MW-223S	Aug-88																						
MW-223S	Nov-88	MW-223S	Nov-88	<0.010																					
MW-223S	Feb-89	MW-223S	Feb-89	<0.010	188.00	0.82	<0.005		1.34		9.09	0.20	<0.06	<0.010	<0.2	<0.005	<0.25	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.12
MW-223S	Apr-89	MW-223S	Apr-89	<0.010		0.53	<0.005		1.10					<0.010											
MW-223S	Jul-89	MW-223S	Jul-89	<0.010		5.71	<0.005		2.24					<0.010											
MW-223S	Nov-89	MW-223S	Nov-89	<0.010		1.94	<0.003		2.32					<0.010											
MW-223S	Feb-90	MW-223S	Feb-90	<0.010	270.00	5.53	<0.003		2.31		6.47	2.07	<0.06	<0.010	<0.2	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.07
MW-223S	Apr-90	MW-223S	Apr-90	<0.010		1.10	<0.003		2.08					<0.010											
MW-223S	Nov-90	MW-223S	Nov-90	<0.01	240.00	2.10	<0.020	76.00	2.20	1.80	5.90	1.20	<0.060	<0.020	0.09	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.04
MW-223S	Feb-91	MW-223S	Feb-91	<0.010	252.00	5.24	<0.020	70.90	2.54	2.63	5.75														
MW-223S	May-91	MW-223S	May-91	<0.010	236.00	2.11	<0.020	68.40	2.41	1.77	6.27														
MW-223S	Aug-91	MW-223S	Aug-91	<0.010	247.00	2.29	<0.020	69.60	2.75	1.72	6.50														
MW-223S	Nov-91	MW-223S	Nov-91	0.01	251.00	4.57	<0.020	61.20	2.62	1.60	6.74														
MW-223S	Feb-92	MW-223S	Feb-92	<0.010	235.00	4.75	<0.020	64.60	3.47	2.07	6.02	3.18	<0.060	<0.020	0.17	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.04
MW-223S	May-92	MW-223S	May-92	<0.010	224.00	21.80	<0.020	63.80	3.14	3.47	7.26	11.20	<0.060	0.03	<0.10	<0.010	<0.2	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.07
MW-223S	Aug-92	MW-223S	Aug-92	<0.010	194.00	8.68	<0.020	58.60	2.76	2.62	5.66														
MW-223S	Dec-92	MW-223S	Dec-92	<0.010	205.00	6.34	<0.020	56.80	1.99	1.88	7.49														
MW-223S	Feb-93	MW-223S	Feb-93	<0.010	163	8.50	<0.020	50.2	3.05	1.80	6.57														
MW-223S	May-93	MW-223S	May-93	<0.010	219	10.3	<0.005	56.3	2.88	1.55	7.19	1.16	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-223S	Aug-93	MW-223S	Aug-93	<0.010	226	14.5	0.011	73.0	2.49	1.50	10.7														
MW-223S	Dec-93	MW-223S	Dec-93	<0.010	251	13.0	0.013	71.9	3.55	2.38	8.65														
MW-223S	Feb-94	MW-223S	Feb-94	<0.010	206	29.8	0.010	61.0	3.40	4.51	8.40														
MW-223S	May-94	MW-223S	May-94	<0.010	229	14.6	<0.005	57.8	2.86	1.05	7.74														
MW-223S	Aug-94	MW-223S	Aug-94	0.014	240	12.9	<0.005	61.6	3.96	4.08	6.78	3.21	<0.060	0.022	<0.10	<0.010	<0.05	0.020	0.020	<0.001	0.090	<0.005	<0.020	<0.005	0.16
MW-223S	Nov-94	MW-223S	Nov-94	<0.010	181	10.7	<0.005	56.8	2.69	1.38	7.91														
MW-223S	March-95	MW-223S	March-95	<0.010	212	13.5	<0.005	31	3.24	1.75	4.3														
MW-223S	June-95	MW-223S	June-95	<0.010	972	25.6	<0.005	277	3.5	1.31	13.4														
MW-223S	Sept. - 95	MW-223S	Sept. - 95	<0.010	221	17.7	<0.005	69.4	3.44	1.86	8.9														
MW-223S	Nov-95	MW-223S	Nov-95	<0.010	229	15.6	<0.005	70.6	3.24	1.87	16.6	0.97	<0.060	<0.020	0.4	<0.010		<0.02	0.028	<0.001	<0.040	<0.005	<0.020	<0.005	0.089
MW-223S	April-96	MW-223S	April-96	<0.002	290	20	<0.01	27	3.5	2.5	11	1.8	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.061
MW-223S	June-96	MW-223S	June-96	<0.01	240	21	<0.01	31	3.4	2.3	8.6														
MW-223S	Sept-96	MW-223S	Sept-96	<0.01	210	23	<0.01	34	3.2	2.7	8.8														
MW-223S	Nov-96	MW-223S	Nov-96	<0.01	200	5.5	<0.01	27	1.9	1.9	9.5														
MW-223S	March-97	MW-223S	March-97	<0.01	200	11	<0.01	29	2.4	1.9	6.9	0.34	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.3	0.07

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW-223D	Sep-87	MW-223D	Sep-87	<0.010	256.00	1.57	<0.005		2.35		8.90	0.81	<0.06	<0.010	<0.2	<0.005	<0.05	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	0.01	<0.020
MW-223D	May-88	MW-223D	May-88																						
MW-223D	Aug-88	MW-223D	Aug-88																						
MW-223D	Nov-88	MW-223D	Nov-88	<0.010																					
MW-223D	Feb-89	MW-223D	Feb-89	<0.010	214.00	0.61	<0.005		1.34		13.90	0.26	<0.06	<0.010	<0.2	<0.005	<0.25	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.05
MW-223D	Apr-89	MW-223D	Apr-89	<0.010		0.41	<0.005		0.39					<0.010											
MW-223D	Jul-89	MW-223D	Jul-89	<0.010		6.83	<0.005		2.05					<0.010											
MW-223D	Nov-89	MW-223D	Nov-89	<0.010		0.91	<0.003		0.76					<0.010											
MW-223D	Feb-90	MW-223D	Feb-90	<0.010	295.00	3.31	0.00		2.12		11.70	1.61	<0.06	<0.010	0.00	<0.005	<1.0	0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.08
MW-223D	Apr-90	MW-223D	Apr-90	<0.010		1.03	0.00		0.35					<0.010											
MW-223D	Nov-90	MW-223D	Nov-90	<0.01	300.00	35.00	0.04	68.00	2.80	6.30	14.00	22.00	<0.060	<0.020	0.20	<0.01	<0.05	<0.03	0.06	<0.001	<0.04	<0.005	<0.02	<0.010	0.14
MW-223D	Feb-91	MW-223D	Feb-91	<0.010	296.00	8.65	<0.020	65.20	2.32	3.01	15.80														
MW-223D	May-91	MW-223D	May-91	<0.010	271.00	4.77	<0.020	59.30	2.08	2.18	15.20														
MW-223D	Aug-91	MW-223D	Aug-91	<0.010	277.00	2.71	<0.020	60.90	2.10	2.08	13.50														
MW-223D	Nov-91	MW-223D	Nov-91	0.01	353.00	2.96	<0.020	70.40	1.88	1.51	12.70														
MW-223D	Feb-92	MW-223D	Feb-92	<0.010	274.00	2.73	<0.020	56.40	2.28	2.17	10.80	2.21	<0.060	<0.020	0.13	<0.010	<0.25	0.020	0.03	<0.001	<0.040	<0.005	<0.020	<0.010	0.03
MW-223D	May-92	MW-223D	May-92	<0.010	240.00	3.50	<0.020	49.40	1.58	1.46	10.50														
MW-223D	Aug-92	MW-223D	Aug-92	<0.010	216.00	5.05	<0.020	53.20	1.89	2.79	9.95														
MW-223D	Dec-92	MW-223D	Dec-92	<0.010	234.00	3.63	<0.020	51.50	1.46	2.18	12.30														
MW-223D	Feb-93	MW-223D	Feb-93	<0.010	192	3.10	<0.020	44.4	1.96	2.02	10.9														
MW-223D	May-93	MW-223D	May-93	<0.010	223	3.88	<0.005	49.3	1.77	1.76	11.0	2.14	<0.060	<0.020	<0.10	<0.010	<0.25	0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-223D	Aug-93	MW-223D	Aug-93	<0.010	212	5.66	0.010	27.6	1.57	1.17	14.9														
MW-223D	Dec-93	MW-223D	Dec-93	<0.010	219	4.65	<0.005	55.4	2.20	2.13	12.4														
MW-223D	Feb-94	MW-223D	Feb-94	<0.010	192	5.66	<0.005	46.0	1.61	2.01	11.5														
MW-223D	May-94	MW-223D	May-94	<0.010	190	3.02	<0.005	42.1	1.64	0.96	9.74														
MW-223D	Aug-94	MW-223D	Aug-94	<0.010	208	9.60	<0.005	46	2.08	4.26	8.17	5.87	<0.060	0.020	<0.10	<0.010	<0.05	0.020	0.070	<0.001	0.078	<0.005	<0.020	<0.005	0.13
MW-223D	Nov-94	MW-223D	Nov-94	<0.010	164	2.26	<0.005	47.4	1.77	1.47	10.6														
MW-223D	March-95	MW-223D	March-95	<0.010	202	6.28	<0.005	24	1.54	1.89	9.8														
MW-223D	June-95	MW-223D	June-95	<0.010	200	2.7	<0.005	48.8	1.89	1.64	7.43														
MW-223D	Sept. - 95	MW-223D	Sept. - 95	<0.010	221	2.76	<0.005	49.7	1.92	1.53	8.98														
MW-223D	Nov-95	MW-223D	Nov-95	<0.010	164	6.06	<0.005	47.2	1.86	2.45	11.1	2.62	<0.060	<0.020	0.44	<0.010		<0.02	0.027	<0.001	<0.040	<0.005	<0.020	<0.005	0.072
MW-223D	April-96	MW-223D	April-96	<0.002	150	5.2	<0.01	23	0.82	3.5	13	2.5	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.097
MW-223D	June-96	MW-223D	June-96	<0.01	130	2.5	<0.01	24	0.5	4	12														
MW-223D	Sept-96	MW-223D	Sept-96	<0.01	170	5.7	<0.01	30	1.6	2	9.8														
MW-223D	Nov-96	MW-223D	Nov-96	<0.01	140	2.5	<0.01	25	0.89	1.8	11														
MW-223D	March-97	MW-223D	March-97	0.021	110	2.2	0.029	22	0.65	2.6	7.9	0.39	<0.06	0.02	<0.2	0.019	<1	0.03	0.028	<0.0004	0.023	<0.05	<0.01	<0.03	0.12

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW - 301D	Nov-94	MW - 301D	Nov-94	<0.010	121	0.95	<0.005	39.7	0.11	10.3	160														
MW - 301D	March-95	MW - 301D	March-95	<0.010	72.00	1.91	<0.005	33.00	0.096	5.74	77.00														
MW - 301D	June-95	MW - 301D	June-95	<0.010	70.00	0.55	<0.005	27.60	0.022	5.94	72.60														
MW-301D	Sept. - 95	MW-301D	Sept. - 95	<0.010	68.60	1.81	<0.005	31.00	0.099	6.12	79.40														
MW-301D	Dec-95	MW-301D	Dec-95	<0.010	64.60	0.85	0.006	28.30	0.064	6.29	93.10	0.32	<0.060	<0.020	0.18	<0.010		<0.02	0.028	<0.001	<0.040	<0.005	<0.020	<0.005	0.057
MW-301D	April-96	MW-301D	April-96	0.0032	81.00	1.60	<0.001	22.00	0.097	7.80	84.00	0.63	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.086
MW-301D	June-96	MW-301D	June-96	<0.01	75.00	1.20	<0.01	23.00	0.065	8.00	80.00														
MW-301D	Sept-96	MW-301D	Sept-96	<0.01	79.00	1.40	0.016	24.00	0.085	6.80	77.00														
MW-301D	Nov-96	MW-301D	Nov-96	<0.01	73.00	0.83	<0.01	21.00	0.058	6.80	69.00														
MW-301D	March-97	MW-301D	March-97	<0.01	79.00	2.80	<0.01	22.00	0.110	8.10	55.00	0.84	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.047
MW - 301S	Nov-94	MW - 301S	Nov-94	<0.010	56	0.25	<0.005	12.2	0.29	1.54	22.1														
MW - 301S	March-95	MW - 301S	March-95	<0.010	71.90	14.80	0.008	24.20	1.07	3.32	20.00														
MW - 301S	June-95	MW - 301S	June-95	<0.010	63.80	0.86	<0.005	13.40	0.31	1.67	22.70														
MW-301S	Sept. - 95	MW-301S	Sept. - 95	<0.010	49.20	0.62	<0.005	13.40	0.30	1.66	23.70														
MW-301S	Dec-95	MW-301S	Dec-95	<0.010	60.70	1.16	0.006	15.40	0.30	1.78	29.50	0.83	<0.060	<0.020	0.16	<0.010		<0.02	0.022	<0.001	<0.040	<0.005	<0.020	<0.005	0.027
MW-301S	April-96	MW-301S	April-96	<0.002	84.00	10.00	0.027	16.00	0.70	2.50	27.00	4.90	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.074
MW-301S	June-96	MW-301S	June-96	<0.01	92.00	19.00	<0.01	19.00	0.93	3.00	25.00														
MW-301S	Sept-96	MW-301S	Sept-96	<0.01	94.00	28.00	0.019	21.00	1.20	3.20	27.00														
MW-301S	Nov-96	MW-301S	Nov-96	<0.01	48.00	4.40	0.012	9.80	0.29	1.80	29.00														
MW-301S	March-97	MW-301S	March-97	<0.01	42.00	2.70	<0.01	8.90	0.23	1.70	22.00	1.30	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.170
MW - 302	Nov-94	MW - 302	Nov-94	<0.010	211	2.8	<0.005	42.6	1.03	4.2	28.4														
MW - 302	March-95	MW - 302	March-95	<0.010	11.5	1.27	<0.005	30	0.59	2.24	14.2														
MW - 302	June-95	MW - 302	June-95	<0.010	120	0.22	<0.005	27.7	0.49	2.43	13.3														
MW-302	Sept. - 95	MW-302	Sept. - 95	<0.010	127	0.55	<0.005	29	0.56	2.26	15.3														
MW-302	Dec-95	MW-302	Dec-95	<0.010	99.7	0.46	<0.005	26.5	0.53	3.11	23.2	0.32	<0.060	<0.020	0.26	<0.010		<0.02	0.033	<0.001	<0.040	<0.005	<0.020	<0.005	0.039
MW-302	April-96	MW-302	April-96	<0.002	140	1.20	<0.01	22	0.57	2.6	18.0	0.14	<0.1	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.018
MW-302	June-96	MW-302	June-96	<0.01	120	1.00	<0.01	23	0.56	2.3	16.0														
MW-302	Sept-96	MW-302	Sept-96	<0.01	130	2.50	<0.01	26	0.62	2.6	17.0														
MW-302	Nov-96	MW-302	Nov-96	<0.01	93	0.93	<0.01	20	0.49	2	14.0														
MW-302	March-97	MW-302	March-97	<0.01	130	2.10	<0.01	23	0.54	2.2	10.0	0.68	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.057
MW - 303D	Nov-94	MW - 303D	Nov-94	<0.010	53.8	0.7	<0.005	19.4	0.021	99.8	377														
MW - 303D	March-95	MW - 303D	March-95	<0.010	28.40	0.23	<0.005	16.00	<0.020	22.20	186.00														
MW - 303D	June-95	MW - 303D	June-95	<0.010	34.00	0.10	<0.005	14.90	<0.020	16.40	152.00														
MW-303D	Sept. - 95	MW-303D	Sept. - 95	<0.010	37.20	0.32	<0.005	17.50	<0.020	14.50	166.00														
MW-303D	Nov-95	MW-303D	Nov-95	<0.010	36.00	0.38	<0.005	18.10	0.07	10.00	202.00	0.26	<0.060	<0.020	0.14	<0.010		<0.02	0.027	<0.001	<0.040	<0.050	<0.020	<0.005	0.13
MW-303D	April-96	MW-303D	April-96	<0.002	39.00	1.30	<0.01	15.00	0.04	18.00	170.00	0.56	<0.01	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.072
MW-303D	June-96	MW-303D	June-96	<0.01	42.00	0.59	<0.01	16.00	0.04	9.60	150.00														
MW-303D	Sept-96	MW-303D	Sept-96	<0.01	41.00	0.64	0.01	15.00	0.02	7.00	150.00														
MW-303D	Nov-96	MW-303D	Nov-96	<0.01	41.00	0.73	<0.01	14.00	0.03	7.90	140.00														
MW-303D	March-97	MW-303D	March-97	<0.01	43.00	0.71	<0.01	15.00	0.03	9.00	92.00	0.19	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	0.13	<0.01	<0.03	0.088

Table 6. Historical Groundwater Analytical Data - Metals Parameters (Existing Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Quality		Class GA Groundwater Quality		0.01		0.3	0.025	35	0.3		20			0.025	1	0.003	1	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values		Standards and Guidance Values											0.003												
MW - 303S	Nov-94	MW - 303S	Nov-94	<0.010	325	44.30	<0.005	53.80	7.59	7.27	55.10														
MW - 303S	March-95	MW - 303S	March-95	<0.010	185.00	36.10	0.014	45.00	4.94	3.74	25.00														
MW - 303S	June-95	MW - 303S	June-95	<0.010	190.00	1.23	<0.005	42.00	4.20	3.99	29.00														
MW-303S	Sept. - 95	MW-303S	Sept. - 95	<0.010	187.00	33.40	0.007	52.80	3.62	6.84	29.10														
MW-303S	Nov-95	MW-303S	Nov-95	<0.010	174.00	33.70	<0.005	47.90	4.06	6.13	33.70	6.55	<0.060	0.026	0.58	<0.010		<0.02	0.049	<0.001	<0.040	<0.005	<0.020	<0.005	0.14
MW-303S	April-96	MW-303S	April-96	<0.002	240.00	59.00	0.035	26.00	4.80	5.90	30.00	20.00	0.12	<0.01	<0.2	<0.003	<1	0.044	0.064	<0.0002	0.049	0.12	<0.01	<0.03	0.20
MW-303S	June-96	MW-303S	June-96	<0.01	240.00	61.00	0.022	31.00	4.40	7.30	30.00														
MW-303S	Sept-96	MW-303S	Sept-96	<0.01	230.00	82.00	0.067	38.00	4.30	11.00	26.00														
MW-303S	Nov-96	MW-303S	Nov-96	<0.01	220.00	80.00	0.064	29.00	4.10	12.00	25.00														
MW-303S	March-97	MW-303S	March-97	<0.01	210.00	45.00	0.038	31.00	3.40	10.00	18.00	14.00	<0.06	<0.01	<0.2	<0.01	<1	0.026	0.050	<0.0004	0.037	<0.05	<0.01	<0.03	0.16
MW - 304D	Nov-94	MW - 304D	Nov-94	<0.010	123	5.45	<0.005	17.4	0.6	3.07	40.8														
MW - 304D	March-95	MW - 304D	March-95	<0.010	152.00	6.04	<0.005	38.50	0.77	3.14	41.00														
MW - 304D	June-95	MW - 304D	June-95	<0.010	152.00	7.15	<0.005	36.20	0.71	4.53	32.80														
MW-304D	Sept. - 95	MW-304D	Sept. - 95	<0.010	165.00	6.99	<0.005	38.00	0.82	4.47	39.90														
MW-304D	Nov-95	MW-304D	Nov-95	<0.010	154.00	8.42	<0.005	47.70	0.76	4.97	58.60	0.36	<0.060	<0.020	0.59	<0.010		<0.02	0.031	<0.001	<0.040	<0.005	<0.020	<0.005	0.14
MW-304D	April-96	MW-304D	April-96	0.0057	170.00	6.90	<0.01	23.00	0.67	5.80	48.00	0.44	<0.1	<0.01	0.22	0.005	<1	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.12
MW-304D	June-96	MW-304D	June-96	<0.01	160.00	9.10	<0.01	28.00	0.65	5.10	43.00														
MW-304D	Sept-96	MW-304D	Sept-96	<0.01	130.00	6.00	<0.01	26.00	0.66	4.40	41.00														
MW-304D	Nov-96	MW-304D	Nov-96	<0.01	97.00	4.90	<0.01	19.00	0.35	3.60	40.00														
MW-304D	March-97	MW-304D	March-97	<0.01	140.00	6.10	<0.01	25.00	0.69	4.80	29.00	0.20	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.22
MW - 304S	Nov-94	MW - 304S	Nov-94	<0.010	157	21.2	<0.005	24.6	2.49	3	21.1														
MW - 304S	March-95	MW - 304S	March-95	<0.010	206.00	26.70	0.017	47.50	3.34	3.74	21.00														
MW - 304S	June-95	MW - 304S	June-95	<0.010	214.00	17.50	0.010	44.60	3.44	2.72	18.60														
MW-304S	Sept. - 95	MW-304S	Sept. - 95	<0.010	218.00	80.40	0.042	73.20	5.40	8.36	26.10														
MW-304S	Nov-95	MW-304S	Nov-95	<0.010	188.00	14.20	<0.005	48.60	3.01	3.29	32.00	1.52	<0.060	<0.020	0.60	<0.010		<0.02	0.074	<0.001	<0.040	<0.005	<0.020	<0.005	0.16
MW-304S	April-96	MW-304S	April-96	0.006	360.00	130.00	0.110	28.00	7.20	9.00	26.00	53.00	0.21	<0.01	0.46	0.015	<1	0.26	0.270	<0.0002	0.16	0.22	0.018	<0.03	0.55
MW-304S	June-96	MW-304S	June-96	<0.01	320.00	140.00	<0.01	35.00	7.70	14.00	23.00														
MW-304S	Sept-96	MW-304S	Sept-96	<0.01	230.00	66.00	0.043	36.00	4.70	6.40	22.00														
MW-304S	Nov-96	MW-304S	Nov-96	<0.01	310.00	160.00	0.200	31.00	9.20	13.00	22.00														
MW-304S	March-97	MW-304S	March-97	<0.01	240.00	58.00	0.052	31.00	5.00	9.10	16.00	21.00	<0.06	<0.01	0.32	<0.01	<1	0.11	0.099	<0.0004	0.09	<0.05	<0.01	<0.03	0.33
MW - 304VS	Nov-94	MW - 304VS	Nov-94	<0.010	290	30.4	<0.005	62.7	4.1	8.69	159														
MW - 304VS	March-95	MW - 304VS	March-95	<0.010	327.00	24.80	0.018	103.00	2.62	7.06	220.00														
MW - 304VS	June-95	MW - 304VS	June-95	<0.010	133.00	3.74	0.011	35.50	1.31	3.20	89.10														
MW-304VS	Sept. - 95	MW-304VS	Sept. - 95	<0.010	180.00	39.00	0.018	65.60	0.11	9.32	242.00														
MW-304VS	Nov-95	MW-304VS	Nov-95	<0.010	129.00	43.80	<0.005	54.10	1.50	8.58	219.00	23.80	<0.060	<0.020	0.55	<0.010		0.026	0.096	<0.001	<0.040	<0.005	<0.020	<0.005	0.26
MW-304VS	April-96	MW-304VS	April-96	0.009	290.00	170.00	0.160	29.00	6.10	15.00	150.00	93.00	0.30	<0.01	0.50	0.008	<1	0.130	0.280	0.00021	0.20	0.31	0.014	<0.03	0.69
MW-304VS	June-96	MW-304VS	June-96	<0.01	230.00	100.00	0.095	34.00	4.40	13.00	150.00														
MW-304VS	Sept-96	MW-304VS	Sept-96	<0.01	200.00	110.00	0.098	40.00	3.80	13.00	150.00														
MW-304VS	Nov-96	MW-304VS	Nov-96	<0.01	200.00	120.00	0.110	29.00	4.60	13.00	140.00														
MW-304VS	March-97	MW-304VS	March-97	<0.01	220.00	47.00	0.052	32.00	2.90	11.00	100.00	24.00	0.12	<0.01	0.24	<0.01	<1	0.036	0.074	<0.0004	0.05	<0.05	<0.01	<0.03	0.24

Table 7. Upgradient Groundwater Quality (Shallow Wells)

Monitoring Well	Sample Date	ALK (mg/l)	Cl- (mg/l)	Hard (mg/l)	Cond (umhos/cm)	Phenols (mg/l)	TDS (mg/l)	SO4= (mg/l)	TOC (mg/l)	Ca (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)
MW-231S	Nov-89		8.7	126	485	0.065	171	45.9	5.90	59.1	0.53		0.01		15.00
MW-231S	Feb-90	137	20.6	190		0.011	246	37.3	0.49		3.12		0.15		
MW-231S	Apr-90	164	17	120	266	0.003	232	38.9	6.46		0.41		0.11		
MW-231S	Nov-90	142	15.7	165	220	0.005	210	36.0	6.40	58.0	20.00	25.0	0.52	4.60	11.00
MW-231S	Feb-91	144	15.9	160	320	0.005	248	36.7	12.00	48.7	8.09	20.8	0.24	3.57	10.50
MW-231S	May-91	154	13.8	162	260	0.005	252	37.2	1.50	50.2	9.73	20.0	0.29	2.37	10.30
MW-231S	Aug-91	154	14.6	162	410	0.005	252	46.8	4.70	54.5	6.55	17.7	0.26	3.08	10.10
MW-231S	Nov-91	134	13	142		0.005	212	24.3	0.50	31.9	2.52	15.1	0.121	1.3	10.1
MW-231S	Feb-92	152	17.8	187	372	0.005		23.6	2.00	43.3	13.6	19.1	0.346	3.93	9.48
MW-231S	May-92	160	17	167	379	0.005	296	85.0	0.50	40.5	4.70	16.10	0.16	1.41	10.40
MW-231S	Aug-92	152	17.5	215	344	0.005	260	76.8	1.00	36.6	4.33	30.10	0.17	2.47	6.97
MW-231S	Dec-92	178	16	164	378	0.005	248	56.0	0.50	39.2	10.3	16.1	0.233	3.42	10.3
MW-231S	Feb-93	170	17.5	139	452	0.005	268	46	7.00	32.8	4.23	13.9	0.182	1.99	10.1
MW-231S	May-93	162	20.0	176	318	0.005	276	69.9	5.0	46.8	5.23	14.4	0.158	2.51	10.4
MW-231S	Aug-93	156	21.0	180	361	0.005	268	97.7	0.5	40.6	7.84	19.2	0.194	1.93	13.7
MW-231S	Dec-93	156	20.0	190	351	0.005	232	88.6	2.0	46.2	4.92	18.2	0.211	2.45	11.0
MW-231S	Feb-94	152	23.0	176	448	0.005	232	45.8	0.5	44.2	0.626	16.0	0.204	1.94	18.5
MW-231S	May-94	164	22.0	173	359	0.005	268	36.7	16	46.5	2.32	13.8	0.18	0.84	10.4
MW-231S	Aug-94	152	24.0	182	408	0.005	256	44.2	0.5	52	0.41	12.6	0.16	1.52	0.40
MW-231S	Nov-94	186	24	149	361	0.005	248	38.9	4	39.1	0.3	12.5	0.14	1.25	8.87
MW-231S	March-95	166	26	176	354	0.005	296	42.6	5	45.8	1.83	15	0.19	1.86	8.8
MW-231S	June-95	155	30	168	356	0.005	284	38.2	25	46.9	0.9	12.4	0.2	1.15	7.38
MW-231S	Sept. - 95	171	25	194	312	0.005	284	32.7	9	52.6	3.32	15.3	0.22	1.9	9.58
MW-231S	Nov-95	172	24	186	319	0.005	288	45.5	0.5	48.6	7.28	15.7	0.28	2.61	21.5
MW-231S	April-96	240	27	350	500	0.001	320	78	0.5	60	7.4	14	0.29	2.1	9.1
MW-231S	June-96	190	20	230	485	0.002	270	40	0.5	59	6.2	14	0.31	1.8	8.2
MW-231S	Sept-96	130	15	220	460	0.001	320	38	1.5	65	5.2	14	0.29	1.7	9
MW-231S	Nov-96	20	22	71	178	0.001	130	2	5.9	21	1.5	4.5	0.05	1.1	12
MW-231S	March-97	35	19	120	308	0.001	130	35	2.2	39	2.1	5.7	0.12	1.6	10
t-Test Statistical Analysis															
n		28	29	29	27	29	28	29	29	27	29	26	29	26	27
MEAN		151.71	19.54	173.79	361.63	0.01	249.89	47.04	4.40	46.23	5.02	15.82	0.21	2.17	10.48
SUM x		4248.00	566.60	5040.00	9764.00	0.19	6997.00	1364.30	127.55	1248.10	145.49	411.20	5.98	56.40	283.08
SUM (x)^2		6.9E+05	1.2E+04	9.4E+05	3.7E+06	4.9E-03	1.8E+06	7.7E+04	1.4E+03	6.0E+04	1.3E+03	7.2E+03	1.5E+00	1.4E+02	3.3E+03
S^2		1670.73	22.51	2200.53	6331.70	0.0001	2187.58	447.53	30.54	97.10	19.77	25.87	0.0095	0.86	13.85
S		40.87	4.74	46.91	79.57	0.0114	46.77	21.15	5.53	9.85	4.45	5.09	0.0975	0.93	3.72
Sx		7.72	0.88	8.71	15.31	0.0021	8.84	3.93	1.03	1.90	0.83	1.00	0.0181	0.18	0.72
+/- RANGE		21.53	2.45	24.21	42.83	0.01	24.63	10.92	2.85	5.30	2.29	2.80	0.05	0.51	2.00
Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions. (Based Upon a 99% Confidence Interval)															
U.C.I.		173.24	21.99	198.00	404.46	0.01	274.53	57.96	7.25	51.53	7.31	18.62	0.26	2.68	12.49
L.C.I.		130.19	17.09	149.59	318.80	0.001	225.26	36.13	1.55	40.92	2.72	13.02	0.16	1.66	8.48

Table 7. Upgradient Groundwater Quality (Shallow Wells)

Monitoring Well	Sample Date	ALK (mg/l)	Cl- (mg/l)	Hard (mg/l)	Cond (umhos/cm)	Phenols (mg/l)	TDS (mg/l)	SO4= (mg/l)	TOC (mg/l)	Ca (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)
MW-230S	Nov-89	141	33.6	209	385	0.007	288	47.5	2.96		5.71		0.45		
MW-230S	Feb-90	146	36.4	210		0.011	281	49.3	8.48		3.55		0.29		
MW-230S	Apr-90	159	35.2	200	387	0.003	306	58.2	9.34						8.30
MW-230S	Nov-90	161	32.3	215	310	0.005	286	54.0	9.30	77.5	8.07	14.3	0.50	1.86	7.04
MW-230S	Feb-91	144	31.8	245	400	0.005	353	51.0	15.00	89.2	16.20	15.9	0.90	2.71	6.90
MW-230S	May-91	142	30.8	216	340	0.005	329	53.0	1.50	72.4	2.31	11.4	0.39	1.24	6.72
MW-230S	Aug-91	144	30.2	210	490	0.005	318	51.8	10.40	62.2	12.1	11.9	0.591	2.3	6.98
MW-230S	Nov-91	176	31	204	480	0.005	284	111.0	0.50	64.7	10.5	13.2	0.498	2.85	6.04
MW-230S	Feb-92	164	32.2	216	464	0.005	302		6.00		8.20	18.60	0.47	1.76	6.49
MW-230S	May-92	162	29.50		436	0.005	276	46.6	0.50						
MW-230S	Aug-92	140	31.0	184	408	0.005	316	72.8	0.50	54.9	8.68	11.3	0.43	2.36	4.74
MW-230S	Dec-92	150	27	183	469	0.005	308	63.2	0.50	55.1	7.96	11	0.324	2.18	7.14
MW-230S	Feb-93	182	30	233	495	0.005	340	48.5	19.00	63.1	27.6	18.1	1.37	4.13	7.30
MW-230S	May-93	168	28.0	197	332	0.005	276	73.8	6.0	61.4	10.6	10.6	0.380	2.79	6.91
MW-230S	Aug-93	176	30.0	195	383	0.005	320	71.3	0.5	48.3	20.9	17.9	0.574	2.07	9.75
MW-230S	Dec-93	150	29.0	225	391	0.005	328	47.9	2.0	61.5	14.4	17.3	0.683	3.07	7.94
MW-230S	Feb-94	160	29.0	263	461	0.005	240	51.1	0.5	77.2	19.7	17.0	0.720	3.46	7.36
MW-230S	May-94	164	28.0	244	356	0.005	272	49.1	13	62.0	6.04	21.6	0.44	0.69	9.65
MW-230S	Aug-94	140	29.0	187	423	0.005	280	57	0.5	53.7	1.19	12.8	0.12	1.30	6.43
MW-230S	Nov-94	145	30.0	159	365	0.005	152	52.9	4	47	0.5	10.1	0.18	0.97	7.37
MW-230S	March-95	165	32.0	215	356	0.005	272	49	8	66.2	1.83	12	0.38	1.48	6.5
MW-230S	June-95	143	34.0	299	357	0.005	308	44.5	0.5	67.6	2.64	31.6	0.46	0.99	6.72
MW-230S	Sept. - 95	151	3.0	202	317	0.005	312	45.2	25	61	6.77	12.1	0.44	2.14	7.4
MW-230S	Nov-95	144	30.0	166	315	0.005	284	47.7	0.5	48.8	2.43	10.7	0.024	1.51	10.4
MW-230S	April-96	140	28.0	520	520	0.001	310	110	0.5	78	12	13	0.55	1.80	7.6
MW-230S	June-96	270	27.0	200	417	0.001	270	32	0.5	65	9.2	11	0.47	1.70	6.5
MW-230S	Sept-96	160	24.0	230	410	0.001	240	42	1	70	9.1	12	0.44	1.70	7
MW-230S	Nov-96	70	25.0	110	329	0.001	180	2	1.3	31	2.9	8	0.081	1.80	8.1
MW-230S	March-97	42	24.0	130	409	0.001	140	48	1.9	42	4.2	6.5	0.19	2.60	6.2
t-Test Statistical Analysis															
n		29	29	28	28	29	29	28	29	24	27	25	27	25	26
MEAN		151.69	29.00	216.68	400.18	0.00	281.76	54.66	5.16	61.66	8.71	14.00	0.46	2.06	7.29
SUM x		4399.00	841.00	6067.00	11205.00	0.13	8171.00	1530.40	149.68	1479.80	235.28	349.90	12.34	51.46	189.48
SUM (x)^2		7.0E+05	2.5E+04	1.4E+06	4.6E+06	7.1E-04	2.4E+06	9.5E+04	1.9E+03	9.5E+04	3.2E+03	5.5E+03	7.5E+00	1.2E+02	1.4E+03
S^2		1317.44	33.83	4918.67	3557.41	0.0000	2575.48	420.90	40.62	166.06	43.64	26.06	0.07	0.66	1.46
S		36.30	5.82	70.13	59.64	0.0021	50.75	20.52	6.37	12.89	6.61	5.10	0.27	0.81	1.21
Sx		6.74	1.08	13.25	11.27	0.0004	9.42	3.88	1.18	2.63	1.27	1.02	0.05	0.16	0.24
+/- RANGE		18.73	3.00	36.94	31.41	0.0011	26.19	10.81	3.29	7.45	3.56	2.88	0.14	0.46	0.67
Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions. (Based Upon a 99% Confidence Interval)															
U.C.I.		170.42	32.00	253.62	431.59	0.01	307.95	65.46	8.45	69.11	12.27	16.87	0.60	2.52	7.95
L.C.I.		132.96	26.00	179.74	368.76	0.003	255.57	43.85	1.87	54.21	5.16	11.12	0.31	1.60	6.62

Table 7. Upgradient Groundwater Quality (Shallow Wells)

Monitoring Well	Sample Date	ALK (mg/l)	Cl- (mg/l)	Hard (mg/l)	Cond (umhos/cm)	Phenols (mg/l)	TDS (mg/l)	SO4= (mg/l)	TOC (mg/l)	Ca (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)
MW-203DA	Nov-89	112	14	109	219	0.098	186	27.7	3.46		7.94		0.24		
MW-203DA	Feb-90		11	116		0.003	176	35.6	0.55		21.70		0.97		
MW-203DA	Apr-90	104	9.2	261	215	0.003	172	28.9	2.08	42.0	2.00	5.6	0.26	1.00	5.70
MW-203DA	Nov-90	111	8.8	125	200	0.005	176	33.0	6.30	45.8	3.83	6.6	0.30	1.45	5.37
MW-203DA	Feb-91	106	8.9	134	260	0.132	238	36.1	8.20	42.9	2.39	5.8	0.26	1.16	4.80
MW-203DA	May-91	100	5.3	138	220	0.005	188	29.6	3.00	44.7	2.70	6.3	0.33	1.45	5.46
MW-203DA	Aug-91	102	7.3	130	310	0.005	197	34.0	9.80	37.5	2.27	5.74	0.281	0.71	5.53
MW-203DA	Nov-91	102	8	117	302	0.005	188	28.0	2.00	28.3	21.0	9.14	0.607	5.6	4.97
MW-203DA	Feb-92	126	14	84	296	0.005	188		2.00	37.5	1.90	5.41	0.20	0.79	4.25
MW-203DA	May-92	106	5.50	116	308	0.005	180	27.0	1.00						
MW-203DA	Aug-92	96	7.5	109	264	0.005	184	48.2	0.50	34.7	2.27	5.34	0.224	1.34	3.83
MW-203DA	Dec-92	140	5.5	107	295	0.005	132	48.9	0.50	33.7	3.06	5.65	0.186	1.27	5.29
MW-203DA	Feb-93	110	6.5	90.9	312	0.005	240	48.5	6.00	26.6	7.14	5.96	0.361	2.11	4.53
MW-203DA	May-93	104	6.5	113	224	0.005	168	71.2	4.0	36.4	3.34	5.41	0.217	1.44	5.59
MW-203DA	Aug-93	110	7.0	42.0	286	0.005	184	85.1	0.5	33.9	3.15	6.00	0.210	0.58	7.56
MW-203DA	Dec-93	112	7.0	130	288	0.005	192	106	0.5	40.3	4.07	7.0	0.358	1.43	5.96
MW-203DA	Feb-94	108	7.5	118	303	0.005	164	46.5	0.5	37.0	3.17	6.1	0.260	1.08	5.03
MW-203DA	May-94	108	6.0	126	249	0.005	176	24.4	14	38.8	2.90	7.00	0.32	0.25	6.48
MW-203DA	Aug-94	100	7.5	125	279	0.005	216	32.7	1	40.6	1.42	5.66	0.22	1.13	4.50
MW-203DA	Nov-94	105	8	100	262	0.005	192	35.6	0.5	31.6	0.5	5.02	0.17	0.61	5.79
MW-203DA	March-95	107	12	118	261	0.021	192	36.9	41	37.2	1.71	6	0.25	1.24	5.00
MW-203DA	June-95	103	11	121	256	0.005	184	28.4	7	39.8	0.46	5.34	0.23	0.9	5.40
MW-203DA	Sept. - 95	115	8	124	243	0.005	204	26.6	3	40.2	1.63	5.86	0.27	0.97	5.70
MW-203DA	Nov-95	112	7	110	238	0.005	196	47.7	0.5	35.4	1.1	5.38	0.2	1.01	7.58
MW-203DA	April-96	110	7.6	290	286	0.001	210	57	1.9	52	4.2	7.1	0.4	1.1	5.10
MW-203DA	June-96	110	3.7	360	285	0.001	190	32	0.5	41	0.91	5.5	0.19	0.67	4.30
MW-203DA	Sept-96	130	2	190	280	0.001	200	74	0.5	56	22	12	0.85	2.4	5.00
MW-203DA	Nov-96	110	7.5	130	270	0.0056	170	73	0.5	40	4.5	6.6	0.25	1.2	4.70
MW-203DA	March-97	120	7.3	230	298	0.001	160	37	1.4	69	24	14	0.99	3.7	3.50
t-Test Statistical Analysis															
n		28	29	29	28	29	29	28	29	26	28	26	28	26	26
MEAN		109.96	7.83	140.13	268.18	0.01	187.69	44.27	4.23	40.11	5.62	6.60	0.34	1.41	5.27
SUM x		3079.00	227.10	4063.90	7509.00	0.36	5443.00	1239.60	122.69	1042.90	157.26	171.47	9.62	36.59	136.92
SUM (x)^2		3.4E+05	2.0E+03	6.9E+05	2.0E+06	2.8E-02	1.0E+06	6.6E+04	2.2E+03	4.4E+04	2.2E+03	1.2E+03	4.7E+00	8.1E+01	7.4E+02
S^2		89.37	7.00	4349.40	1035.86	8.40E-04	467.51	416.10	61.23	74.69	50.43	4.33	0.05	1.18	0.90
S		9.45	2.65	65.95	32.18	2.9E-02	21.62	20.40	7.83	8.64	7.10	2.08	0.23	1.09	0.95
Sx		1.79	0.49	12.25	6.08	5.4E-03	4.02	3.85	1.45	1.69	1.34	0.41	0.04	0.21	0.19
+/- RANGE		4.98	1.37	34.03	16.95	0.01	11.16	10.74	4.04	4.76	3.74	1.15	0.12	0.60	0.52
Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions. (Based Upon a 99% Confidence Interval)															
U.C.I.		114.94	9.20	174.17	285.13	0.03	198.85	55.02	8.27	44.87	9.36	7.74	0.46	2.01	5.79
L.C.I.		104.99	6.47	106.10	251.23	0.00	176.53	33.53	0.19	35.35	1.88	5.45	0.22	0.81	4.74

Table 7. Upgradient Groundwater Quality (Shallow Wells)

Monitoring Well	Sample Date	ALK (mg/l)	Cl- (mg/l)	Hard (mg/l)	Cond (umhos/cm)	Phenols (mg/l)	TDS (mg/l)	SO4= (mg/l)	TOC (mg/l)	Ca (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)
MW-208SA	Mar-90	148	38.2	205		0.020	284	97.3	3.08		0.80		0.37		
MW-208SA	Apr-90	147	37.8	200	398	0.003	298	41.6	2.28	76.0	11.00	13.0	0.68	2.60	15.00
MW-208SA	Nov-90	161	38.2	215	330	0.005	304	54.0	4.70	78.5	7.89	12.6	0.61	2.12	16.00
MW-208SA	Feb-91	154	42.7	218	450		365	47.0	12.10	71.0	2.37	10.2	0.46	1.26	15.50
MW-208SA	May-91	150	42.5	224	440	0.005	347	44.8	0.50	78.2	3.21	11.5	0.63	1.46	15.60
MW-208SA	Aug-91	160	52.1		570	0.005	384	52.8	13.40	66.9	5.42	10.7	0.512	1.47	15.4
MW-208SA	Nov-91	156	42	186	545	0.005	316	41.4	0.50		0.696	6.6	0.132	0.82	10.3
MW-208SA	Feb-92	156		101	528	0.005		22.8	3.00	67.7	1.97	10.10	0.38	0.85	14.8
MW-208SA	May-92	156	45.50	211	522	0.005	320	42.0	0.50						
MW-208SA	Aug-92	154	48	196	486	0.005	364	54.1	0.50	62.7	2.56	9.68	0.386	1.89	13.6
MW-208SA	Dec-92	186	46	190	586	0.005	360	61.1	0.50	59.6	3.9	9.95	0.261	1.89	16.4
MW-208SA	Feb-93	168	45	162	561	0.005	376	44.50	11.00	50.30	5.03	8.75	0.499	1.95	16.4
MW-208SA	May-93	162	47.0	198	364	0.005	272	75.1	7.0	63.2	5.13	9.79	0.393	2.45	19.0
MW-208SA	Aug-93	172	45.0	211	412	0.005	340	54.2	0.5	61.7	3.35	13.9	0.331	1.40	19.3
MW-208SA	Dec-93	172	44.0	229	511	0.005	348	83.3	10.0	72.0	3.82	11.8	0.381	1.72	18.4
MW-208SA	Feb-94	170	50.0	226	574	0.005	296	55.6	0.5	72.5	3.90	11.0	0.419	1.66	19.4
MW-208SA	May-94	172	49.0	205	432	0.005	340	47.2	19	64.7	2.76	10.5	0.46	0.81	18.1
MW-208SA	Aug-94	160	47.0	221	529	0.005	328	59.4	0.5	71.7	0.53	10.1	0.41	1.39	14.9
MW-208SA	Nov-94	186	51	179	445	0.005	352	42.2	0.5	55.8	0.34	9.54	0.32	1.14	19.1
MW-208SA	March-95	125	50	218	417	0.005	344	48.2	9	66.4	2.43	12.6	0.56	2.49	19.4
MW-208SA	June-95	170	51	233	421	0.005	392	44	6	75.4	3.81	10.8	0.63	1.52	16.6
MW-208SA	Sept. - 95	169	47	236	372	0.005	384	48.5	0.5	76.1	2.47	11.1	0.46	1.6	19.8
MW-208SA	Nov-95	168	44	226	389	0.005	372	74.2	6	66.8	9.46	14.3	0.62	2.05	26
MW-208SA	April-96	170	49	320	540	0.001	350	91	2.3	78	5.3	10	0.47	1.4	21
MW-208SA	June-96	210	28	100	528	0.001	340	49	7.8	67	16	11	0.58	2.1	17
MW-208SA	Sept-96	250	4	270	550	0.001	310	100	12	81	39	16	1.2	3.4	19
MW-208SA	Nov-96	200	23	200	513	0.001	320	100	21	51	36	11	0.74	2.4	14
MW-208SA	March-97	230	23	210	561	0.001	310	44	30	64	55	13	0.85	2.8	9.3
t-Test Statistical Analysis															
n		28	27	27	27	27	27	28	28	25	27	26	27	26	26
MEAN		170.79	41.85	207.04	480.52	0.00	337.63	57.83	6.60	67.93	8.67	11.14	0.51	1.79	16.90
SUM x		4782.00	1130.00	5590.00	12974.00	0.13	9116.00	1619.30	184.66	1698.20	234.15	289.51	13.75	46.64	439.30
SUM (x)^2		8.3E+05	5.0E+04	1.2E+06	6.4E+06	9.1E-04	3.1E+06	1.0E+05	2.7E+03	1.2E+05	6.6E+03	3.3E+03	8.1E+00	9.4E+01	7.7E+03
S^2		662.92	117.84	1800.96	5599.95	1.19E-05	1030.55	406.97	55.24	69.67	175.68	3.69	0.04	0.41	11.34
S		25.75	10.86	42.44	74.83	3.4E-03	32.10	20.17	7.43	8.35	13.25	1.92	0.21	0.64	3.37
Sx		4.87	2.09	8.17	14.40	6.6E-04	6.18	3.81	1.40	1.67	2.55	0.38	0.04	0.13	0.66
+/- RANGE		13.56	5.84	22.84	40.28	0.0019	17.28	10.63	3.91	4.71	7.13	1.06	0.11	0.35	1.85
Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions. (Based Upon a 99% Confidence Interval)															
U.C.I.		184.35	47.70	229.88	520.80	0.01	354.91	68.46	10.51	72.63	15.81	12.19	0.62	2.15	18.75
L.C.I.		157.22	36.01	184.19	440.24	0.003	320.35	47.21	2.68	63.22	1.54	10.08	0.40	1.44	15.04
Average t-Test Statistical Analysis															
n		28	29	28	28	29	28	28	29	26	28	26	28	26	26
MEAN		146.04	24.56	184.41	377.63	0.01	264.24	50.95	5.10	53.98	7.00	11.89	0.38	1.86	9.98
SUM x		4127.00	691.18	5190.23	10363.00	0.20	7431.75	1438.40	146.15	1367.25	193.04	305.52	10.42	47.77	262.20
SUM (x)^2		6.4E+05	2.2E+04	1.1E+06	4.2E+06	8.6E-03	2.1E+06	8.6E+04	2.1E+03	7.9E+04	3.3E+03	4.3E+03	5.5E+00	1.1E+02	3.3E+03
S^2		935.11	45.30	3317.39	4131.23	0.0002	1565.28	422.88	46.91	101.88	72.38	14.99	0.04	0.78	6.89
S		28.09	6.02	56.36	61.56	0.0115	37.81	20.56	6.79	9.93	7.85	3.55	0.20	0.87	2.31
Sx		5.28	1.14	10.59	11.77	0.0021	7.11	3.87	1.27	1.97	1.50	0.70	0.04	0.17	0.45
+/- RANGE		14.70	3.16	29.51	32.87	0.0059	19.82	10.77	3.52	5.55	4.18	1.97	0.11	0.48	1.26
Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions. (Based Upon a 99% Confidence Interval)															
U.C.I.		160.74	27.72	213.92	410.50	0.013	284.06	61.72	8.62	59.53	11.19	13.86	0.49	2.34	11.25
L.C.I.		131.34	21.39	154.90	344.76	0.002	244.43	40.18	1.57	48.43	2.82	9.91	0.27	1.38	8.72

Table 8. Upgradient Groundwater Quality (Bedrock Wells)

Monitoring Well	Sample Date	ALK (mg/l)	Cl- (mg/l)	Hard (mg/l)	Cond (umhos/cm)	Phenols (mg/l)	TDS (mg/l)	SO4= (mg/l)	TOC (mg/l)	Ca (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)
MW-230D	Nov-89	113	1.5	79.6	136	0.011	135	5	9.22		0.29		0.11		
MW-230D	Feb-90	123	4.6	120		0.00025	174	13.5	3.57		0.19		0.17		
MW-230D	Apr-90	124	1.5	90	226	0.00025	184	14.1		28.0	1.60	6.6	0.16	1.20	22.00
MW-230D	Nov-90	130	4.9	130	190	0.005	156	16	9.1	27.5	0.39	6.3	0.13	0.91	22.60
MW-230D	Feb-91	126	5.0	98	250	0.005	184	13.2	8.6	27.5	0.10	6.0	0.12	0.92	22.10
MW-230D	May-91	124	1.1	94	180	0.005	155	13	1.5	25.7	0.23	5.8	0.12	1.01	21.60
MW-230D	Aug-91	122	2.1	96	300	0.005	170	13.9	4.4	23.6	0.258	5.3	0.14	0.66	22.6
MW-230D	Nov-91	134	3.0	80.7	290	0.005	157	13	0.5	26.1	0.96	5.88	0.144	1.1	17.7
MW-230D	Feb-92	126	5.9	89.4	280	0.005	160	12.8	3	24.50	0.28	5.49	0.11	0.62	19.90
MW-230D	May-92	122	2.5	83.80	272	0.01	172	17.80	0.50						
MW-230D	Aug-92	124	4.5	76.5	258	0.005	176	55.1	0.5	22	0.291	5.24	0.115	1.48	17.7
MW-230D	Dec-92	138	1.5	72.1	290	0.005	160	43.8	0.5	20.8	0.217	4.9	0.084	0.85	22.9
MW-230D	Feb-93	132	2.5	65.3	315	0.005	180	14.5	7	18.6	0.7	4.6	0.144	1.07	23.6
MW-230D	May-93	126	1.5	78.2	226	0.005	152	48	4	22.7	0.83	5.23	0.099	1.23	25
MW-230D	Aug-93	128	3.0	74.9	247	0.005	148	72.5	0.5	19.0	0.607	6.68	0.142	0.25	28.7
MW-230D	Dec-93	120	2.0	86.2	262	0.005	140	47.6	2.0	24.0	0.787	6.4	0.163	1.07	23.9
MW-230D	Feb-94	126	2.0	82.1	282	0.005	156	38.9	0.5	23.0	0.858	6.0	0.106	0.92	22.1
MW-230D	May-94	128	1.5	77.3	245	0.005	180	18.6	16	21.2	0.60	5.93	0.12	0.79	21.9
MW-230D	Aug-94	124	2.5	85.5	269	0.005	172	17.9	1	25	0.4	5.6	0.14	0.94	17.5
MW-230D	Nov-94	153	3	70.2	254	0.005	160	30.6	2	19.1	0.23	5.48	0.12	0.76	22.1
MW-230D	March-95	129	2	80.8	248	0.005	164	16.7	5	22.8	0.44	5.8	0.099	0.92	21.8
MW-230D	June-95	125	3	86	252	0.005	176	21	18	24.8	0.16	5.76	0.13	1.21	19.2
MW-230D	Sept. - 95	125	1.5	82.6	239	0.005	188	16.8	0.5	23.7	0.16	5.7	0.13	1.09	21.3
MW-230D	Nov-95	128	0.5	67.3	239	0.005	176	21.7	0.5	18.1	0.46	5.38	0.12	1.04	25.2
MW-230D	April-96	140	9.5	160	340	0.001	170	16	16	27	0.78	6.1	0.14	1.2	26
MW-230D	June-96	150	0.5	100	272	0.002	170	12	0.5	25	1.4	6	0.14	1.1	21
MW-230D	Sept-96	130	0.5	89	270	0.0024	150	11	0.5	26	0.9	6	0.13	0.88	22
MW-230D	Nov-96	130	1.9	89	252	0.001	180	39	0.5	25	3.2	6.6	0.16	1.1	19
MW-230D	March-97	130	2.7	92	276	0.001	230	37	1	25	4	6.8	0.21	1.6	15

t-Test Statistical Analysis

n	29	29	29	28	29	29	29	28	26	28	26	28	26	26
MEAN	128.62	2.70	88.84	255.71	0.00	168.10	24.52	4.17	23.68	0.76	5.83	0.13	1.00	21.71
SUM x	3.7E+03	7.8E+01	2.6E+03	7.2E+03	1.2E-01	4.9E+03	7.1E+02	1.2E+02	6.2E+02	2.1E+01	1.5E+02	3.7E+00	2.6E+01	5.6E+02
SUM (x)^2	4.8E+05	3.1E+02	2.4E+05	1.9E+06	6.6E-04	8.3E+05	2.5E+04	1.2E+03	1.5E+04	3.8E+01	8.9E+02	5.0E-01	2.8E+01	1.2E+04
S^2	67.67	3.65	379.21	1651.84	4.63E-06	324.95	264.54	27.26	8.10	0.79	0.30	0.0007	0.0724	8.59
S	8.23	1.91	19.47	40.64	0.0022	18.03	16.26	5.22	2.85	0.89	0.55	0.0259	0.2690	2.93
Sx	1.53	0.35	3.62	7.68	0.0004	3.35	3.02	0.99	0.56	0.17	0.11	0.0049	0.0528	0.57
+/- RANGE	4.25	0.99	10.05	21.41	0.0011	9.30	8.39	2.75	1.57	0.47	0.30	0.0136	0.1481	1.61

Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions.
(Based Upon a 99% Confidence Interval)

U.C.I.	132.87	3.68	98.89	277.12	0.005	177.41	32.91	6.92	25.25	1.23	6.13	0.15	1.14	23.32
L.C.I.	124.38	1.71	78.80	234.31	0.003	158.80	16.12	1.42	22.11	0.29	5.53	0.12	0.85	20.09

Table 8. Upgradient Groundwater Quality (Bedrock Wells)

Monitoring Well	Sample Date	ALK (mg/l)	Cl- (mg/l)	Hard (mg/l)	Cond (umhos/cm)	Phenols (mg/l)	TDS (mg/l)	SO4= (mg/l)	TOC (mg/l)	Ca (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)
MW-203VD	Nov-89	132	1.5	115		0.005	165	5	1.3		5.11				
MW-203VD	Feb-90	103	11.3	130		0.00025	166	28.4	0.54		0.35		0.02		
MW-203VD	Apr-90	130	1.5	108	210	0.00025	151	5	2.88	29.0	0.92	12.0	0.04	1.00	11.00
MW-203VD	Nov-90	136	3.9	110	180	0.005	146	10	3	28.4	0.36	11.1	0.02	0.87	11.30
MW-203VD	Feb-91	132	2.0	118	240	0.019	185	11.5	10	29.4	0.13	10.6	0.02	0.92	10.90
MW-203VD	May-91	130	0.0	116	180	0.005	157	6.25	1.5	27.4	0.18	10.7	0.03	1.02	10.90
MW-203VD	Aug-91	128	0.5	116	290	0.005	167	9	4.5	24.8	0.928	10.6	0.038	0.75	11.2
MW-203VD	Nov-91	130	3.0	106	272	0.005	156	11.4	0.5	25.8	2.2	11.3	0.051	1.39	9.55
MW-203VD	Feb-92	148	3.0	111	268	0.005	164	7.1	3	25.70	0.70	10.90	0.02	0.69	9.94
MW-203VD	May-92	128	0.5	109.00	259	0.01	124	14.20	0.50						
MW-203VD	Aug-92	128	2.5	98.7	241	0.005	164	15.2	0.5	23.7	1.08	9.6	0.029	1.41	9.14
MW-203VD	Dec-92	122	0.5	108	268	0.005	196	45.8	0.5	24.8	1.77	11.3	0.036	1.23	11.4
MW-203VD	Feb-93	132	0.5	78.7	284	0.005	180	8.6	10	18.5	1.08	7.9	0.041	1.06	10.5
MW-203VD	May-93	130	1.5	95.3	209	0.005	140	49.3	15	23.2	0.56	9.09	0.033	1.02	12.1
MW-203VD	Aug-93	130	0.5	114	239	0.005	156	52.4	0.5	20.3	0.869	15.3	0.067	0.44	15.8
MW-203VD	Dec-93	126	0.5	113	233	0.005	140	66.2	8.0	25.1	1.60	12.2	0.048	1.19	12.7
MW-203VD	Feb-94	132	0.5	142	270	0.005	136	38.2	0.5	27.2	1.86	18.0	0.035	1.11	11.2
MW-203VD	May-94	136	0.5	96.7	230	0.005	146	18.6	12	21.9	0.37	10.2	0.037	0.61	11.4
MW-203VD	Aug-94	124	0.5	74.6	260	0.005	148	14.6	0.5	12.9	0.24	10.3	0.011	0.92	9.09
MW-203VD	Nov-94	145	1	83.8	238	0.005	260	31.4	9	18.4	0.22	9.2	0.028	1.26	10.8
MW-203VD	March-95	129	0.5	102	242	0.035	160	11.7	14	23.2	0.66	10.6	0.01	1.08	11.2
MW-203VD	June-95	129	2	108	239	0.005	148	4.3	7	25	0.11	11	0.022	1	9.65
MW-203VD	Sept. - 95	133	0.5	104	223	0.005	164	9.1	8	24.5	0.34	10.3	0.044	1	10.5
MW-203VD	Nov-95	136	0.5	99.2	235	0.005	168	24.5	18	22.9	1.04	10.2	0.056	1.32	13.5
MW-203VD	April-96	150	8.6	160	260	0.001	160	10	0.5	29	0.4	11	0.028	1.4	14
MW-203VD	June-96	160	0.5	220	265	0.001	160	6.5	0.5	23	0.13	9.3	0.023	0.93	10
MW-203VD	Sept-96	120	0.5	100	260	0.001	170	13	0.5	24	0.4	10	0.05	1.1	10
MW-203VD	Nov-96	130	0.5	110	241	0.001	150	2.5	0.5	26	0.36	10	0.024	0.5	9.9
MW-203VD	March-97	150	0.5	110	252	0.001	170	10	1	26	0.45	10	0.023	1	6.8

t-Test Statistical Analysis

n	29	29	29	27	29	29	29	29	26	28	26	27	26	26
MEAN	132.38	1.72	112.31	243.98	0.01	161.97	18.61	4.63	24.23	0.87	10.87	0.03	1.01	10.94
SUM x	3.8E+03	5.0E+01	3.3E+03	6.6E+03	1.6E-01	4.7E+03	5.4E+02	1.3E+02	6.3E+02	2.4E+01	2.8E+02	8.9E-01	2.6E+01	2.8E+02
SUM (x)^2	5.1E+05	2.6E+02	3.9E+05	1.6E+06	2.1E-03	7.8E+05	1.8E+04	1.4E+03	1.6E+04	4.9E+01	3.2E+03	3.4E-02	2.8E+01	3.2E+03
S^2	113.46	6.26	708.64	746.01	0.00004	578.75	277.38	27.87	13.73	1.01	3.88	0.0002	0.0672	3.06
S	10.65	2.50	26.62	27.31	0.0066	24.06	16.65	5.28	3.71	1.00	1.97	0.0135	0.2593	1.75
Sx	1.98	0.46	4.94	5.26	0.0012	4.47	3.09	0.98	0.73	0.19	0.39	0.0026	0.0509	0.34
+/- RANGE	5.50	1.29	13.74	14.70	0.0034	12.41	8.59	2.72	2.04	0.53	1.08	0.0073	0.1427	0.96

Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions.
(Based Upon a 99% Confidence Interval)

U.C.I.	137.88	3.01	126.05	258.68	0.009	174.38	27.21	7.35	26.27	1.40	11.96	0.04	1.15	11.90
L.C.I.	126.88	0.43	98.57	229.28	0.002	149.55	10.02	1.90	22.19	0.34	9.79	0.03	0.87	9.98

Table 8. Upgradient Groundwater Quality (Bedrock Wells)

Monitoring Well	Sample Date	ALK (mg/l)	Cl- (mg/l)	Hard (mg/l)	Cond (umhos/cm)	Phenols (mg/l)	TDS (mg/l)	SO4= (mg/l)	TOC (mg/l)	Ca (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)
MW-208VD	Mar-90	102	8.0	94.4		0.022	172	36.9	7.41		0.78		0.13		
MW-208VD	Apr-90	103	4.7	98.6	207	0.00025	158	25.1	2.48	32.0	2.40	7.6	0.17	1.30	16.00
MW-208VD	Nov-90	113	5.9	110	210	0.0025	182			31.9	0.99	7.2	0.11	0.96	12.30
MW-208VD	Feb-91	102	6.0	114	250	0.005	225	28.8	7.6	31.2	0.18	6.8	0.11	0.93	11.60
MW-208VD	May-91	102	3.2	112	190	0.005	180	27.4	1.5	31.5	1.61	7.5	0.16	1.18	11.90
MW-208VD	Aug-91	102	5.2	108	300	0.005	169	30	10	28.3	1.14	6.7	0.15	0.75	11.2
MW-208VD	Nov-91	110	6.0	98.3	278	0.005	160	29.2	0.5		3.72	10.4	0.487	1.78	13.1
MW-208VD	Feb-92	178	46.5		282	0.005			3	21.20		11.30	0.42		12.70
MW-208VD	May-92	100	4.5	98.90	265	0.01	132	28.60	0.50						
MW-208VD	Aug-92	100	7.5	90.3	256	0.005	172	32.8	0.5	25.9	1.13	6.22	0.132	1.24	7.71
MW-208VD	Dec-92	114	4.0	89	277	0.005	204	56	0.5	22.5	6.99	7.95	0.152	2.65	11.9
MW-208VD	Feb-93	110	4.5	76.4	294	0.005	200	42	8	20.2	3.71	6.32	0.207	1.61	10.5
MW-208VD	May-93	102	4.0	96.6	225	0.005	160	62.2	4.0	28.9	1.04	5.93	0.110	0.99	11.3
MW-208VD	Aug-93	104	4.0	88.5	234	0.005	164	50.5	0.5	19.3	7.57	9.80	0.198	1.81	13.1
MW-208VD	Dec-93	100	5.0	106	256	0.005	168	80.7	0.5	30.4	0.277	7.20	0.141	0.79	12.2
MW-208VD	Feb-94	102	0.5	95.6	270	0.005	148	44.3	0.5	27.4	0.287	6.6	0.124	0.67	10.3
MW-208VD	May-94	104	3.0	96.0	236	0.005	168	22.4	9	27.3	1.41	6.68	0.13	0.56	10.7
MW-208VD	Aug-94	100	4.5	104	264	0.005	164	31.1	1	27.3	4.64	8.70	0.23	2.16	9.45
MW-208VD	Nov-94	121	5	84.5	246	0.005	184	37.2	0.5	22.9	0.26	6.64	0.13	0.78	14.1
MW-208VD	March-95	114	5	100	252	0.005	176	33.7	6	27.6	1.37	7.60	0.17	1.36	11.8
MW-208VD	June-95	102	6	96	248	0.005	172	28.4	16	28.1	0.08	6.42	0.15	1.3	8.42
MW-208VD	Sept. - 95	101	7	104	235	0.005	196	23.4	0.5	27.8	3.47	8.50	0.24	1.67	10.5
MW-208VD	Nov-95	100	5	95.3	235	0.005	192	40.5	0.5	27.3	0.17	6.60	0.14	0.87	12.1
MW-208VD	April-96	210	9.5	150	260	0.001	180	55	8.5	37	1.2	7.50	0.18	1.3	12
MW-208VD	June-96	130	1.9	100	271	0.0026	170	23	1	30	0.7	6.60	0.14	0.82	9.9
MW-208VD	Sept-96	170	0.5	110	260	0.001	150	26	1.5	31	0.34	7.00	0.15	0.5	8.9
MW-208VD	Nov-96	110	3.7	93	257	0.001	200	30	0.5	26	0.38	6.60	0.14	0.5	8.6
MW-208VD	March-97	180	5.4	94	385	0.001	190	29	0.5	28	0.22	5.90	0.13	0.5	10

t-Test Statistical Analysis

n	28	28	27	27	28	27	26	27	25	26	26	27	25	26
MEAN	117.36	6.29	100.13	257.13	0.00	175.41	36.70	3.44	27.64	1.77	7.39	0.18	1.16	11.24
SUM x	3.3E+03	1.8E+02	2.7E+03	6.9E+03	1.3E-01	4.7E+03	9.5E+02	9.3E+01	6.9E+02	4.6E+01	1.9E+02	4.7E+00	2.9E+01	2.9E+02
SUM (x)^2	4.1E+05	2.9E+03	2.8E+05	1.8E+06	1.0E-03	8.4E+05	4.0E+04	7.6E+02	1.9E+04	1.9E+02	1.5E+03	1.0E+00	4.1E+01	3.4E+03
S^2	863.72	66.01	173.98	1309.68	1.43E-05	388.17	197.88	17.01	16.69	4.23	1.84	0.008	0.30	3.45
S	29.39	8.12	13.19	36.19	0.0038	19.70	14.07	4.12	4.09	2.06	1.36	0.087	0.55	1.86
Sx	5.55	1.54	2.54	6.96	0.0007	3.79	2.76	0.79	0.82	0.40	0.27	0.017	0.11	0.36
+/- RANGE	15.48	4.28	7.10	19.48	0.00	10.61	7.74	2.22	2.30	1.13	0.75	0.047	0.31	1.02

Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions.
(Based Upon a 99% Confidence Interval)

U.C.I.	132.84	10.57	107.23	276.61	0.007	186.01	44.44	5.66	29.94	2.90	8.14	0.22	1.47	12.26
L.C.I.	101.88	2.01	93.03	237.65	0.003	164.80	28.96	1.22	25.34	0.64	6.64	0.13	0.85	10.22

Average t-Test Statistical Analysis

n	29	29	28	27	29	28	28	28	26	27	26	27	26	26
MEAN	126.12	3.57	100.43	252.28	0.0048	168.49	26.61	4.08	25.19	1.14	8.03	0.11	1.05	14.63
SUM x	3.6E+03	1.0E+02	2.8E+03	6.9E+03	1.4E-01	4.8E+03	7.3E+02	1.1E+02	6.5E+02	3.1E+01	2.1E+02	3.1E+00	2.7E+01	3.8E+02
SUM (x)^2	4.7E+05	1.2E+03	3.0E+05	1.8E+06	1.3E-03	8.2E+05	2.8E+04	1.1E+03	1.7E+04	9.1E+01	1.8E+03	5.2E-01	3.2E+01	6.3E+03
S^2	348.28	25.31	420.61	1235.85	0.0000	430.63	246.60	24.05	12.84	2.01	2.00	0.0028	0.15	5.03
S	16.09	4.18	19.76	34.72	0.0042	20.60	15.66	4.87	3.55	1.32	1.29	0.0423	0.36	2.18
Sx	14.51	12.67	14.49	16.07	12.0006	14.75	13.95	12.59	12.51	12.20	12.22	12.0065	12.05	12.24
+/- RANGE	8.41	2.19	10.30	18.53	0.0022	10.77	8.24	2.56	1.97	0.71	0.71	0.0227	0.20	1.20

Range of Data Values to be Considered Comparable with Background (Upgradient) Conditions.
(Based Upon a 99% Confidence Interval)

U.C.I.	134.53	5.75	110.72	270.80	0.0070	179.27	34.85	6.65	27.16	1.845	8.74	0.136	1.26	15.83
L.C.I.	117.71	1.38	90.13	233.75	0.0027	157.72	18.37	1.52	23.22	0.425	7.32	0.091	0.85	13.43

Table 9. Parameters Above Background Concentrations - Shallow Wells

Parameter	Units	Shallow Background	PZ 1A	PZ 4	PZ 11	PZ 12	MW 3B	MW 207SA	MW 220
Sample Collection Date			*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/25/97*
Alkalinity	mg/l CaCO3	160.74	170	370	430	170	330	980	550
Chloride	mg/l	27.72	15.0	12.0	15.0	6.4	36.0	24.0	27.0
Hardness	mg/l CaCO3	213.92	310	610	480	160	320	920	690
Conductance, field	umhos/cm	410.50	718	1200	1080	402	920	1430	1590
Total Phenols	mg/l	0.013	<0.002	<0.002	0.0056	<0.002	<0.002	<0.002	<0.002
TDS	mg/l	284.06	500	780	660	270	530	780	1000
Sulfate	mg/l	61.72	180	480	160	44	110	86	400
TOC	mg/l	8.62	1	<1	3	1.7	2.8	2.6	2.4
Calcium, total	mg/l	59.53	95	200	150	52	100	320	220
Iron, total	mg/l	11.19	1.70	22.00	2.80	1.10	2.40	170.00	13.00
Magnesium, total	mg/l	13.86	18	28	24	7.4	16	33	32
Manganese, total	mg/l	0.49	0.39	1.40	1.60	0.53	0.61	6.90	1.50
Potassium, total	mg/l	2.34	2.30	4.50	2.50	1.20	1.70	16.00	5.40
Sodium, total	mg/l	11.25	11	11	6.6	7.1	14	12	9.4

Normalized Values

Parameter	Units	Shallow Background	PZ 1A	PZ 4	PZ 11	PZ 12	MW 3B	MW 207SA	MW 220
Sample Collection Date			*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/25/97*
Alkalinity	mg/l CaCO3	160.74	1	2	3	1	2	6	3
Chloride	mg/l	27.72	1	0	1	0	1	1	1
Hardness	mg/l CaCO3	213.92	1	3	2	1	1	4	3
Conductance, field	umhos/cm	410.50	2	3	3	1	2	3	4
Total Phenols	mg/l	0.01							
TDS	mg/l	284.06	2	3	2	1	2	3	4
Sulfate	mg/l	61.72	3	8	3	1	2	1	6
TOC	mg/l	8.62	0		0	0	0	0	0
Calcium, total	mg/l	59.53	2	3	3	1	2	5	4
Iron, total	mg/l	11.19	0	2	0	0	0	15	1
Magnesium, total	mg/l	13.86	1	2	2	1	1	2	2
Manganese, total	mg/l	0.49	1	3	3	1	1	14	3
Potassium, total	mg/l	2.34	1	2	1	1	1	7	2
Sodium, total	mg/l	11.25	1	1	1	1	1	1	1

Table 9. Parameters Above Background Concentrations - Shallow Wells

Parameter	Units	Shallow Background	MW 221S	MW 222	MW 223S	MW 301 S	MW 303 S	MW 304 S	MW 304 VS
Sample Collection Date			*03/25/97*	*03/25/97*	*03/26/97*	*03/24/97*	*03/26/97*	*03/25/97*	*03/25/97*
Alkalinity	mg/l CaCO3	160.74	800	370	720	380	710	750	400
Chloride	mg/l	27.72	68.0	150.0	18.0	11.0	27.0	45.0	600.0
Hardness	mg/l CaCO3	213.92	760	790	620	140	660	730	670
Conductance, field	umhos/cm	410.50	1700	2030	1730	561	1650	1450	2780
Total Phenols	mg/l	0.01	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
TDS	mg/l	284.06	1100	1100	860	300	790	860	1700
Sulfate	mg/l	61.72	200	46	100	70	96	90	61
TOC	mg/l	8.62	5	9.6	2.2	<1	3.8	7	3.9
Calcium, total	mg/l	59.53	250	270	200	42	210	240	220
Iron, total	mg/l	11.19	91.0	41.0	11.0	2.7	45.0	58.0	47.0
Magnesium, total	mg/l	13.86	33	26	29	8.9	31	31	32
Manganese, total	mg/l	0.49	10.00	2.40	2.40	0.23	3.40	5.00	2.90
Potassium, total	mg/l	2.34	15.00	6.40	1.90	1.70	10.00	9.10	11.00
Sodium, total	mg/l	11.25	30	42	6.9	22	18	16	100

Normalized Values

Parameter	Units	Shallow Background	MW 221S	MW 222	MW 223S	MW 301 S	MW 303 S	MW 304 S	MW 304 VS
Sample Collection Date			*03/25/97*	*03/25/97*	*03/26/97*	*03/24/97*	*03/26/97*	*03/25/97*	*03/25/97*
Alkalinity	mg/l CaCO3	160.74	5	2	4	2	4	5	2
Chloride	mg/l	27.72	2	5	1	0	1	2	22
Hardness	mg/l CaCO3	213.92	4	4	3	1	3	3	3
Conductance, field	umhos/cm	410.50	4	5	4	1	4	4	7
Total Phenols	mg/l	0.01							
TDS	mg/l	284.06	4	4	3	1	3	3	6
Sulfate	mg/l	61.72	3	1	2	1	2	1	1
TOC	mg/l	8.62	1	1	0		0	1	0
Calcium, total	mg/l	59.53	4	5	3	1	4	4	4
Iron, total	mg/l	11.19	8	4	1	0	4	5	4
Magnesium, total	mg/l	13.86	2	2	2	1	2	2	2
Manganese, total	mg/l	0.49	21	5	5	0	7	10	6
Potassium, total	mg/l	2.34	6	3	1	1	4	4	5
Sodium, total	mg/l	11.25	3	4	1	2	2	1	9

Table 10. Parameters Above Background Concentrations - Deep Wells.

Parameter	Units	Deep Background	MW 207D	MW 221D	MW 223D	MW 301 D	MW 303 D	MW 304 D
Sample Collection Date			*03/26/97*	*03/25/97*	*03/26/96*	*03/25/97*	*03/26/97*	*03/25/97*
Alkalinity	mg/l CaCO3	134.53	420	140	320	160	220	590
Chloride	mg/l	5.75	4.5	58.0	18.0	150.0	27.0	58.0
Hardness	mg/l CaCO3	110.72	390	150	370	290	170	460
Conductance, field	umhos/cm	270.80	1000	454	1340	1230	1450	1320
Total Phenols	mg/l	0.0070	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
TDS	mg/l	179.27	550	230	520	620	740	690
Sulfate	mg/l	34.85	90	34	92	150	74	66
TOC	mg/l	6.65	4.8	<1	2.2	<1	1.3	4
Calcium, total	mg/l	27.16	120	37	110	79	43	140
Iron, total	mg/l	1.845	12	0.19	2.2	2.8	0.71	6.1
Magnesium, total	mg/l	8.74	22	14	22	22	15	25
Manganese, total	mg/l	0.136	1.8	<0.01	0.65	0.11	0.026	0.69
Potassium, total	mg/l	1.26	4.6	2.1	2.6	8.1	9	4.8
Sodium, total	mg/l	15.83	4.2	9.8	7.9	55	92	29

Parameter	Units	Deep Background	MW 207D	MW 221D	MW 223D	MW 301 D	MW 303 D	MW 304 D
Sample Collection Date			*03/26/97*	*03/25/97*	*03/26/96*	*03/25/97*	*03/26/97*	*03/25/97*
Alkalinity	mg/l CaCO3	134.53	3	1	2	1	2	4
Chloride	mg/l	5.75	1	10	3	26	5	10
Hardness	mg/l CaCO3	110.72	4	1	3	3	2	4
Conductance, field	umhos/cm	270.80	4	2	5	5	5	5
Total Phenols	mg/l	0.007						
TDS	mg/l	179.27	3	1	3	3	4	4
Sulfate	mg/l	34.85	3	1	3	4	2	2
TOC	mg/l	6.65	1		0		0	1
Calcium, total	mg/l	27.16	4	1	4	3	2	5
Iron, total	mg/l	1.85	7	0	1	2	0	3
Magnesium, total	mg/l	8.74	3	2	3	3	2	3
Manganese, total	mg/l	0.136	13		5	1	0	5
Potassium, total	mg/l	1.26	4	2	2	6	7	4
Sodium, total	mg/l	15.83	0	1	0	3	6	2

Table 11. Statistical Trend Analysis Summary - Existing Landfill

Monitoring Location	Parameter	Trend
PZ-1	Alkalinity	Increasing
	Chloride	Decreasing
	Sulfate	Increasing
	Iron	Increasing
	Magnesium	Increasing
	Potassium	Increasing
	Sodium	Increasing
PZ-4	Hardness	Decreasing
	Magnesium	Increasing
	Potassium	Increasing
	Sodium	Increasing
PZ-11	Chloride	Decreasing
	TDS	Increasing
	Calcium	Increasing
	Magnesium	Increasing
	Potassium	Increasing
	Sodium	Increasing
PZ-12	Chloride	Decreasing
	Sulfate	Decreasing
	Manganese	Decreasing
	Sodium	Increasing
MW-3B	Conductance	Increasing
	TDS	Decreasing
	Sodium	Increasing
MW-207SA	Chloride	Decreasing
	Magnesium	Decreasing
	Manganese	Decreasing
MW-207D	Alkalinity	Increasing
	Hardness	Increasing
	TDS	Increasing
	Calcium	Increasing
	Iron	Increasing
	Magnesium	Increasing
	Manganese	Increasing
	Potassium	Increasing
	Sodium	Increasing
MW-220	Alkalinity	Increasing
	Conductance	Decreasing
	Calcium	Increasing
	Potassium	Increasing
	Sodium	Increasing
MW-221S	Manganese	Increasing
	Potassium	Increasing
MW-221D	Calcium	Increasing
	Magnesium	Increasing
	Potassium	Increasing
	Sodium	Increasing

Monitoring Location	Parameter	Trend
MW-222	Calcium	Increasing
	Chloride	Increasing
	TDS	Increasing
	Sulfate	Decreasing
	Magnesium	Increasing
	Alkalinity	Increasing
	Potassium	Increasing
	Sodium	Increasing
	Manganese	Increasing
MW-223S	Alkalinity	Increasing
	Conductance	Decreasing
	Sulfate	Decreasing
	Calcium	Increasing
	Magnesium	Increasing
	Manganese	Increasing
	Potassium	Increasing
	Sodium	Increasing
	Iron	Increasing
MW-223D	Conductance	Decreasing
	Hardness	Decreasing
	Iron	Increasing
	Potassium	Increasing
	Sodium	Increasing
MW-301D	Magnesium	Decreasing
	TDS	Decresing
	Manganese	Increasing
MW-301S	Sulfate	Increasing
	Sodium	Increasing
MW-302	Chloride	Decreasing
	Sulfate	Increasing
	Magnesium	Decreasing
MW-303D	Alkalinity	Increasing
	TDS	Decreasing
	Potassium	Decreasing
	Sodium	Decreasing
MW-303S	Magnesium	Decreasing
	Potassium	Increasing
MW-304D	TDS	Decreasing
MW-304S	Conductance	Increasing
	Calcium	Increasing
	Manganese	Increasing
	Potassium	Increasing
MW-304VS	Alkalinity	Decreasing
	TDS	Decreasing
	Iron	Increasing
	Magnesium	Decreasing
	Potassium	Increasing

TABLE 12. GROUNDWATER ANALYTICAL DATA - INORGANIC AND METALS PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 203S	MW 203DA	MW 203VD	MW 208SA	MW 208VD	MW 312 S	MW 212DA	MW 230D	MW 230S
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/26/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*
Total Cyanide	mg/l	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	mg/l	1		<1	<1	<1	<1	<1	<1	<1	<1	<1
Potassium, total	mg/l			7.4	3.7	1	2.8	<1	14	1.5	1.6	2.6
Sodium, total	mg/l	20		12	3.5	6.8	9.3	10	2.9	7.8	15	6.2
Iron, total	mg/l	0.3		78	24	0.45	55	0.22	88	0.99	4.0	4.2
Manganese, total	mg/l	0.3		3.4	0.99	0.023	0.85	0.13	3.8	0.32	0.21	0.19
Magnesium, total	mg/l		35	28	14	10	13	6	29	17	7	7
Lead, total	mg/l	0.025		0.065	0.020	<0.01	0.018	<0.01	0.087	0.010	0.013	<0.01
Cadmium, total	mg/l	0.010		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum	mg/l			30	11	0.15	3.1	<0.1	54	0.28	2.4	1.9
Calcium, total	mg/l			190	69	26	64	28	170	110	25	42
Antimony	mg/l		0.003	0.15	<0.06	<0.06	<0.06	<0.06	0.11	<0.06	<0.06	<0.06
Arsenic	mg/l	0.025		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01
Beryllium	mg/l		0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	mg/l	1		0.28	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2
Chromium	mg/l	0.05		0.045	0.038	<0.01	<0.01	<0.01	0.074	<0.01	<0.01	<0.01
Copper	mg/l	0.2		0.12	0.038	<0.02	0.029	<0.02	0.14	<0.02	<0.02	<0.02
Mercury	mg/l	0.002		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Nickel	mg/l			0.069	0.041	<0.01	0.011	<0.01	0.1	<0.01	<0.01	0.016
Selenium	mg/l	0.01		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thallium	mg/l		0.004	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

TABLE 12. GROUNDWATER ANALYTICAL DATA - INORGANIC AND METALS PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 203S	MW 203DA	MW 203VD	MW 208SA	MW 208VD	MW 312 S	MW 212DA	MW 230D	MW 230S
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/26/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*
Zinc	mg/l	0.3		0.42	0.15	0.12	0.09	0.04	0.38	0.05	0.10	0.11
Cobalt	mg/l			0.042	0.016	<0.01	0.011	<0.01	0.130	<0.01	<0.01	<0.01
Vanadium	mg/l			0.065	0.036	<0.03	<0.03	<0.03	0.088	<0.03	<0.03	<0.03
Hardness	mg/l CaCO3			590	230	110	210	94	540	360	92	130
TKN	mg/l			0.83	0.25	0.28	4.60	0.61	0.84	0.40	0.33	0.95
Ammonia	mg/l	2		0.39	<0.03	<0.03	0.96	<0.03	<0.03	<0.03	0.037	0.4
TOC	mg/l			8.5	1.4	1	30	<1	<1	1.4	1	1.9
Total Phenols	mg/l	0.001		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nitrate	mg/l	10		<0.02	<0.02	<0.02	0.66	0.02	0.11	<0.02	<0.02	0.077
BOD-5	mg/l			<4	<4	<4	<4	<4	<4	<4	<4	<4
TDS	mg/l	500		390	160	170	310	190	290	470	230	140
Sulfate	mg/l	250		44	37	10	44	29	52	150	37	48
Alkalinity	mg/l CaCO3			140	120	150	230	180	200	320	130	42
Chloride	mg/l	250		59	7.3	<1	23	5.4	7.3	15	2.7	24
Color	Units	15		15	10	10	100	10	20	15	15	15
Hexavalent Chromium	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromide	mg/l	2.0		<2	<2	<2	<2	<2	<2	<2	<2	<2
Dissolved Oxygen	mg/l			2.26	2.58	2.31	3.21	2.77	5.98	2.82	1.13	1.89
Redox Potential, field	mV			-55	125	0	125	160	115	75	90	95
pH, field	std units	6.5-8.5		7.5	7.6	7.9	6.2	5.7	7.3	7.1	8.1	8.0
Conductance, field	umhos/cm			678	298	252	561	385	458	766	276	409
Turbidity	NTU			>999	402	168	1100	185	>999	90	432	>999
Temperature	deg C			7.3	9.2	9.7	9.3	9.4	7.1	9.7	10	10
COD	mg/l			66	23	4.3	89	<1	49	6.4	19	13

TABLE 12. GROUNDWATER ANALYTICAL DATA - INORGANIC AND METALS PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 231D	MW 231S	MW 232D	MW 232S	MW 233S	MW 233D	MW 234D
				03/25/97	*03/25/97*		*03/26/97*	*03/26/97*	*03/26/97*	*03/26/97*
Total Cyanide	mg/l	0.1		<0.01	<0.01	No Sample	<0.01	<0.01	<0.01	<0.01
Boron	mg/l	1		<1	<1	Taken	<1	<1	<1	<1
Potassium, total	mg/l			4	1.6		4	2.8	2.6	8.6
Sodium, total	mg/l	20		130	10		2	2.2	61	12
Iron, total	mg/l	0.3		0.49	2.1		18	1.8	0.21	1.2
Manganese, total	mg/l	0.3		0.079	0.12		1.7	1.2	0.034	0.26
Magnesium, total	mg/l		35	26	6		23	26	13	11
Lead, total	mg/l	0.025		<0.01	0.012		0.023	<0.01	0.015	0.012
Cadmium, total	mg/l	0.010		<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Aluminum	mg/l			0.1	1.2		7.2	0.42	<0.1	0.41
Calcium, total	mg/l			89	39		170	170	42	62
Antimony	mg/l		0.003	<0.06	<0.06		<0.06	<0.06	<0.06	<0.06
Arsenic	mg/l	0.025		<0.01	<0.01		<0.01	0.011	0.012	<0.01
Beryllium	mg/l		0.003	<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Barium	mg/l	1		<0.2	<0.2		<0.2	<0.2	<0.2	<0.2
Chromium	mg/l	0.05		<0.01	<0.01		0.013	<0.01	<0.01	<0.01
Copper	mg/l	0.2		<0.02	<0.02		0.022	<0.01	<0.02	<0.02
Mercury	mg/l	0.002		<0.0004	<0.0004		<0.0004	<0.0004	<0.0004	<0.0004
Nickel	mg/l			<0.01	<0.01		0.014	<0.01	<0.01	<0.01
Selenium	mg/l	0.01		<0.05	<0.05		<0.05	<0.05	<0.05	<0.05
Silver	mg/l	0.05		<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Thallium	mg/l		0.004	<0.03	<0.03		<0.03	<0.03	<0.03	<0.03

TABLE 12. GROUNDWATER ANALYTICAL DATA - INORGANIC AND METALS PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 231D	MW 231S	MW 232D	MW 232S	MW 233S	MW 233D	MW 234D
				03/25/97	*03/25/97*		*03/26/97*	*03/26/97*	*03/26/97*	*03/26/97*
Zinc	mg/l	0.3		0.12	0.13	No Sample	0.09	0.04	0.04	0.12
Cobalt	mg/l			<0.01	<0.01	Taken	<0.01	<0.01	<0.01	<0.01
Vanadium	mg/l			<0.03	<0.03		<0.03	<0.03	<0.03	<0.03
Hardness	mg/l CaCO3			330	120		510	530	160	200
TKN	mg/l			1.00	0.41		0.56	0.55	0.40	0.61
Ammonia	mg/l	2		1	0.14		<0.03	<0.03	<0.03	<0.03
TOC	mg/l			<1	2.2		2.5	3.4	<1	1.1
Total Phenols	mg/l	0.001		<0.002	<0.002		<0.002	<0.002	0.0027	<0.002
Nitrate	mg/l	10		0.081	0.27		<0.02	<0.02	0.024	0,092
BOD-5	mg/l			<4	<4		12	5.8	<4	<4
TDS	mg/l	500		1300	130		560	670	550	350
Sulfate	mg/l	250		110	35		56	48	53	74
Alkalinity	mg/l CaCO3			140	35		530	680	180	160
Chloride	mg/l	250		520	19		9	6.4	130	28
Color	Units	15		10	10		15	15	10	15
Hexavalent Chromium	mg/l	0.05		<0.01	<0.01		<0.01	<0.01	<0.01	<0.01
Bromide	mg/l	2.0		5.4	<2		<2	<2	<2	<2
Dissolved Oxygen	mg/l			2.04	4.36		1.78	1.23	1.72	3.05
Redox Potential, field	mV			70	80		145	70	75	135
pH, field	std units	6.5-8.5		7.8	8.8		6.6	6.5	7.6	7.4
Conductance, field	umhos/cm			2300	308		1120	1190	1110	550
Turbidity	NTU			15	151		>999	42	7.4	70
Temperature	deg C			9.7	9.9		10.2	8.3	9.8	9.9
COD	mg/l			6.4	4.3		13	21	17	8.6

TABLE 12. GROUNDWATER ANALYTICAL DATA - INORGANIC AND METALS PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 234S	MW 235D	MW 235S	MW 236D	MW 236S	Dupe MW 236S	MW 244D	MW 244S
				03/26/97	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
Total Cyanide	mg/l	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	mg/l	1		<1	<1	<1	<1	<1	<1	<1	<1
Potassium, total	mg/l			3.7	2.6	2.5	2	6.4	5.9	2.5	3
Sodium, total	mg/l	20		3.4	17	6.5	15	10	12	15	12
Iron, total	mg/l	0.3		17	1.9	9.3	0.83	45	33	1.8	6.5
Manganese, total	mg/l	0.3		1.0	0.61	1.1	0.025	5.0	5.5	0.03	0.94
Magnesium, total	mg/l		35	23	12	23	14	21	21	10	24
Lead, total	mg/l	0.025		0.028	0.012	0.015	0.011	0.041	0.033	<0.01	0.013
Cadmium, total	mg/l	0.010		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum	mg/l			9.4	0.64	3.6	0.3	22	16	1.1	2.8
Calcium, total	mg/l			140	51	120	33	110	110	24	150
Antimony	mg/l		0.003	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Arsenic	mg/l	0.025		<0.01	<0.01	0.015	<0.01	<0.01	0.011	<0.01	<0.01
Beryllium	mg/l		0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	mg/l	1		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium	mg/l	0.05		0.015	<0.01	<0.01	<0.01	0.036	0.032	<0.01	<0.01
Copper	mg/l	0.2		0.033	<0.02	<0.02	<0.02	0.044	0.034	<0.02	<0.02
Mercury	mg/l	0.002		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Nickel	mg/l			0.016	<0.01	<0.01	<0.01	0.047	0.048	<0.01	0.011
Selenium	mg/l	0.01		<0.05	<0.05	<0.05	0.062	<0.05	<0.05	<0.05	<0.05
Silver	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thallium	mg/l		0.004	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

TABLE 12. GROUNDWATER ANALYTICAL DATA - INORGANIC AND METALS PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 234S	MW 235D	MW 235S	MW 236D	MW 236S	Dupe MW 236S	MW 244D	MW 244S
				03/26/97	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
Zinc	mg/l	0.3		0.09	0.08	0.08	0.08	0.20	0.21	0.16	0.07
Cobalt	mg/l			0.013	<0.01	<0.01	<0.01	0.028	0.023	<0.01	<0.01
Vanadium	mg/l			<0.03	<0.03	<0.03	<0.03	0.048	0.037	<0.03	<0.03
Hardness	mg/l CaCO3			450	180	390	140	370	370	100	470
TKN	mg/l			0.39	0.62	5.20	0.48	0.81	0.38	0.28	0.66
Ammonia	mg/l	2		<0.03	0.038	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
TOC	mg/l			<1	1.6	4.2	<1	1.8	1.9	<1	1.4
Total Phenols	mg/l	0.001		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nitrate	mg/l	10		<0.02	<0.02	<0.02	<0.02	0.053	0.079	<0.02	<0.02
BOD-5	mg/l			<4	<4	<4	<4	<4	<4	<4	<4
TDS	mg/l	500		570	310	500	270	380	470	220	640
Sulfate	mg/l	250		190	54	61	30	66	83	32	200
Alkalinity	mg/l CaCO3			280	180	420	290	170	310	150	380
Chloride	mg/l	250		4.5	15	14	64	36	44	1.8	27
Color	Units	15		15	20	30	10	10	10	10	10
Hexavalent Chromium	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromide	mg/l	2.0		<2	<2	<2	<2	<2	<2	<2	<2
Dissolved Oxygen	mg/l			1.35	2.32	2.36	1.97	3.56		3.54	4.08
Redox Potential, field	mV			135	145	-50	135	135		95	140
pH, field	std units	6.5-8.5		6.9	7.4	6.9	6.2	6.7		8.1	7.1
Conductance, field	umhos/cm			1100	508	829	557	910		321	1060
Turbidity	NTU			197	50	241	280	637		121	105
Temperature	deg C			10.2	9.6	9.2	9.6	9.8		9.6	10.1
COD	mg/l			6.4	19	28	4.3	17	11	8.6	13

TABLE 12. GROUNDWATER ANALYTICAL DATA - INORGANIC AND METALS PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 245D	MW 245S	MW 246D	MW 246S	MW 247-1	PS 247-2	PS 247-3	PS 247-4	PS 247-5
				03/25/97	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*		
Total Cyanide	mg/l	0.1		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	No Sample	No Sample
Boron	mg/l	1		<1	<1	<1	<1	<1	<1	<1	Taken	Taken
Potassium, total	mg/l			4.9	8.3	1.3	2.6	2.2	3	2.2		
Sodium, total	mg/l	20		31	16	7.6	13	5.6	3.8	6.2		
Iron, total	mg/l	0.3		22	41	1.3	2.9	1.9	0.62	6.5		
Manganese, total	mg/l	0.3		0.12	2.5	0.02	1.0	4.0	0.53	10		
Magnesium, total	mg/l		35	28	29	8	26	23	24	14		
Lead, total	mg/l	0.025		0.040	0.032	<0.01	<0.01	0.012	<0.01	<0.01		
Cadmium, total	mg/l	0.010		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Aluminum	mg/l			9.7	20	0.87	1.4	0.67	0.21	<0.1		
Calcium, total	mg/l			120	190	41	160	130	180	100		
Antimony	mg/l		0.003	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06		
Arsenic	mg/l	0.025		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Beryllium	mg/l		0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Barium	mg/l	1		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2		
Chromium	mg/l	0.05		0.02	0.034	<0.01	<0.01	<0.01	<0.01	<0.01		
Copper	mg/l	0.2		0.045	0.062	<0.02	<0.02	<0.02	<0.02	<0.02		
Mercury	mg/l	0.002		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004		
Nickel	mg/l			0.095	0.044	<0.01	<0.01	<0.01	<0.01	<0.01		
Selenium	mg/l	0.01		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		
Silver	mg/l	0.05		<0.01	0.014	<0.01	<0.01	<0.01	<0.01	<0.01		
Thallium	mg/l		0.004	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03		

TABLE 12. GROUNDWATER ANALYTICAL DATA - INORGANIC AND METALS PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 245D	MW 245S	MW 246D	MW 246S	MW 247-1	PS 247-2	PS 247-3	PS 247-4	PS 247-5
				03/25/97	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*		
Zinc	mg/l	0.3		0.25	0.20	0.08	0.09	0.07	0.06	0.08	No Sample	No Sample
Cobalt	mg/l			<0.01	0.023	<0.01	<0.01	<0.01	<0.01	<0.01	Taken	Taken
Vanadium	mg/l			<0.03	0.051	<0.03	<0.03	<0.03	<0.03	<0.03		
Hardness	mg/l CaCO3			420	600	140	520	410	540	310		
TKN	mg/l			6.00	0.29	0.69	0.28	0.24	0.24	2.40		
Ammonia	mg/l	2		6	<0.03	<0.03	<0.03	<0.03	<0.03	1		
TOC	mg/l			2.1	3.2	3.4	2	4.6	4.1	25		
Total Phenols	mg/l	0.001			<0.002	<0.002	<0.002	<0.002	<0.002	0.0041		
Nitrate	mg/l	10		0.1	<0.02	0.12	<0.02	<0.02	0.02	0.21		
BOD-5	mg/l			<4	<4	<4	<4	<4	<4	<4		
TDS	mg/l	500		640	730	210	780	550	670	480		
Sulfate	mg/l	250		90	240	90	310	56	66	70		
Alkalinity	mg/l CaCO3			480	380	130	430	570	390	410		
Chloride	mg/l	250		18	25	22	26	<1	2.7	2.7		
Color	Units	15		10	15	15	10	10	10	50		
Hexavalent Chromium	mg/l	0.05		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		
Bromide	mg/l	2.0		<2	<2	<2	<2	<2	<2	<2		
Dissolved Oxygen	mg/l			2.91	1.59	8.81	2.35	2.31	3.13	2.01		
Redox Potential, field	mV			125	110	125	180	120	180	15		
pH, field	std units	6.5-8.5		7.0	7.1	6.6	7.1	6.8	6.7	6.9		
Conductance, field	umhos/cm			1010	1210	1010	1220	1020	1190	800		
Turbidity	NTU			110	>999	44	19	127	3	23		
Temperature	deg C			9.6	9.9	9.3	9.3	8.5	9.8	8.8		
COD	mg/l			38	23	15	30	81	23	8.6		

TABLE 13. GROUNDWATER ANALYTICAL DATA - ORGANIC PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 203S	MW 203DA	MW 203VD	MW 208SA	MW 208VD	MW 312 S	MW 212DA	MW 230D	MW 230S
Sample Collection Date				*03/24/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/24/97*	*03/24/97*
Acetone	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	ug/l	5		< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
Benzene	ug/l	0.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
2-Butanone	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Carbon Disulfide	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/l	7		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	4.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	4.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Trans-1,4-Dichloro-2-Butene	ug/l			< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
1,1-Dichloroethane	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5

TABLE 13. GROUNDWATER ANALYTICAL DATA - ORGANIC PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 203S	MW 203DA	MW 203VD	MW 208SA	MW 208VD	MW 312 S	MW 212DA	MW 230D	MW 230S
Sample Collection Date				*03/24/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/24/97*	*03/24/97*
cis-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5	<5	<5
t-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Hexanone	ug/l		50	<10	<10	<10	<10	<10	<10	<10	<10	<10
Iodomethane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	ug/l			<10	<10	<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	ug/l			<10	<10	<10	<10	<10	<10	<10	<10	<10
Styrene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
Toluene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	ug/l			<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl acetate	ug/l			<10	<10	<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	ug/l	2		<5	<5	<5	<5	<5	<5	<5	<5	<5
o-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
m-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5
p-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	<5	<5

TABLE 13. GROUNDWATER ANALYTICAL DATA - ORGANIC PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 231D	MW 231S	MW 232D	MW 232S	MW 233S	MW 233D	MW 234D
				03/24/97	*03/24/97*		*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
Acetone	ug/l			< 10	< 10	No Sample	< 10	< 10	< 10	< 10
Acrylonitrile	ug/l	5		< 200	< 200	Taken	< 200	< 200	< 200	< 200
Benzene	ug/l	0.7		< 5	< 5		< 5	< 5	< 5	< 5
Bromochloromethane	ug/l		50	< 5	< 5		< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l			< 5	< 5		< 5	< 5	< 5	< 5
Bromoform	ug/l		50	< 5	< 5		< 5	< 5	< 5	< 5
Bromomethane	ug/l			< 5	< 5		< 5	< 5	< 5	< 5
2-Butanone	ug/l			< 10	< 10		< 10	< 10	< 10	< 10
Carbon Disulfide	ug/l			< 5	< 5		< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	5		< 5	< 5		< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	5		< 5	< 5		< 5	< 5	< 5	< 5
Chloroethane	ug/l			< 5	< 5		< 5	< 5	< 5	< 5
Chloromethane	ug/l			< 5	< 5		< 5	< 5	< 5	< 5
Chloroform	ug/l	7		< 5	< 5		< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l		50	< 5	< 5		< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	ug/l			< 5	< 5		< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l			< 5	< 5		< 5	< 5	< 5	< 5
Dibromomethane	ug/l			< 5	< 5		< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	4.7		< 5	< 5		< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	4.7		< 5	< 5		< 5	< 5	< 5	< 5
Trans-1,4-Dichloro-2-Butene	ug/l			< 100	< 100		< 100	< 100	< 100	< 100
1,1-Dichloroethane	ug/l	5		< 5	< 5		< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	5		< 5	< 5		< 5	< 5	< 5	< 5
1,1-Dichloroethene	ug/l	5		< 5	< 5		< 5	< 5	< 5	< 5

TABLE 13. GROUNDWATER ANALYTICAL DATA - ORGANIC PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 231D	MW 231S	MW 232D	MW 232S	MW 233S	MW 233D	MW 234D
				03/24/97	*03/24/97*		*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
cis-1,2-Dichloroethene	ug/l	5		<5	<5	No Sample	<5	<5	<5	<5
trans-1,2-Dichloroethene	ug/l	5		<5	<5	Taken	<5	<5	<5	<5
1,2-Dichloropropane	ug/l	5		<5	<5		<5	<5	<5	<5
cis-1,3-Dichloropropene	ug/l			<5	<5		<5	<5	<5	<5
t-1,3-Dichloropropene	ug/l			<5	<5		<5	<5	<5	<5
Ethylbenzene	ug/l	5		<5	<5		<5	<5	<5	<5
2-Hexanone	ug/l		50	<10	<10		<10	<10	<10	<10
Iodomethane	ug/l			<5	<5		<5	<5	<5	<5
Methylene Chloride	ug/l			<10	<10		<10	<10	<10	<10
4-Methyl-2-Pentanone	ug/l			<10	<10		<10	<10	<10	<10
Styrene	ug/l	5		<5	<5		<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	ug/l	5		<5	<5		<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	ug/l	5		<5	<5		<5	<5	<5	<5
Tetrachloroethene	ug/l	5		<5	<5		<5	<5	<5	<5
Toluene	ug/l	5		<5	<5		<5	<5	<5	<5
1,1,1-Trichloroethane	ug/l	5		<5	<5		<5	<5	<5	<5
1,1,2-Trichloroethane	ug/l	5		<5	<5		<5	<5	<5	<5
Trichloroethene	ug/l	5		<5	<5		<5	<5	<5	<5
Trichlorofluoromethane	ug/l	5		<5	<5		<5	<5	<5	<5
1,2,3-Trichloropropane	ug/l			<5	<5		<5	<5	<5	<5
Vinyl acetate	ug/l			<10	<10		<10	<10	<10	<10
Vinyl Chloride	ug/l	2		<5	<5		<5	<5	<5	<5
o-Xylene	ug/l	5		<5	<5		<5	<5	<5	<5
m-Xylene	ug/l	5		<5	<5		<5	<5	<5	<5
p-Xylene	ug/l	5		<5	<5		<5	<5	<5	<5

TABLE 13. GROUNDWATER ANALYTICAL DATA - ORGANIC PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 234S	MW 235D	MW 235S	MW 236D	MW 236S	Dupe MW 236S	MW 244D	MW 244S
				03/25/97	*03/25/97*	*03/25/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/24/97*	*03/24/97*
Acetone	ug/l			< 10	< 10	< 10	< 10	< 10	No Sample	< 10	< 10
Acrylonitrile	ug/l	5		< 200	< 200	< 200	< 200	< 200	Taken	< 200	< 200
Benzene	ug/l	0.7		< 5	< 5	< 5	< 5	< 5		< 5	< 5
Bromochloromethane	ug/l		50	< 5	< 5	< 5	< 5	< 5		< 5	< 5
Bromodichloromethane	ug/l			< 5	< 5	< 5	< 5	< 5		< 5	< 5
Bromoform	ug/l		50	< 5	< 5	< 5	< 5	< 5		< 5	< 5
Bromomethane	ug/l			< 5	< 5	< 5	< 5	< 5		< 5	< 5
2-Butanone	ug/l			< 10	< 10	< 10	< 10	< 10		< 10	< 10
Carbon Disulfide	ug/l			< 5	< 5	< 5	< 5	< 5		< 5	< 5
Carbon Tetrachloride	ug/l	5		< 5	< 5	< 5	< 5	< 5		< 5	< 5
Chlorobenzene	ug/l	5		< 5	< 5	< 5	< 5	< 5		< 5	< 5
Chloroethane	ug/l			< 5	< 5	< 5	< 5	< 5		< 5	< 5
Chloromethane	ug/l			< 5	< 5	< 5	< 5	< 5		< 5	< 5
Chloroform	ug/l	7		< 5	< 5	< 5	< 5	< 5		< 5	< 5
Dibromochloromethane	ug/l		50	< 5	< 5	< 5	< 5	< 5		< 5	< 5
1,2-Dibromo-3-chloropropane	ug/l			< 5	< 5	< 5	< 5	< 5		< 5	< 5
1,2-Dibromoethane	ug/l			< 5	< 5	< 5	< 5	< 5		< 5	< 5
Dibromomethane	ug/l			< 5	< 5	< 5	< 5	< 5		< 5	< 5
1,2-Dichlorobenzene	ug/l	4.7		< 5	< 5	< 5	< 5	< 5		< 5	< 5
1,4-Dichlorobenzene	ug/l	4.7		< 5	< 5	< 5	< 5	< 5		< 5	< 5
Trans-1,4-Dichloro-2-Butene	ug/l			< 100	< 100	< 100	< 100	< 100		< 100	< 100
1,1-Dichloroethane	ug/l	5		< 5	< 5	< 5	< 5	< 5		< 5	< 5
1,2-Dichloroethane	ug/l	5		< 5	< 5	< 5	< 5	< 5		< 5	< 5
1,1-Dichloroethene	ug/l	5		< 5	< 5	< 5	< 5	< 5		< 5	< 5

TABLE 13. GROUNDWATER ANALYTICAL DATA - ORGANIC PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 234S	MW 235D	MW 235S	MW 236D	MW 236S	Dupe MW 236S	MW 244D	MW 244S
				03/25/97	*03/25/97*	*03/25/97*	*03/24/97*	*03/24/97*	*03/25/97*	*03/24/97*	*03/24/97*
cis-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	No Sample	<5	<5
trans-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	Taken	<5	<5
1,2-Dichloropropane	ug/l	5		<5	<5	<5	<5	<5		<5	<5
cis-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5		<5	<5
t-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5		<5	<5
Ethylbenzene	ug/l	5		<5	<5	<5	<5	<5		<5	<5
2-Hexanone	ug/l		50	<10	<10	<10	<10	<10		<10	<10
Iodomethane	ug/l			<5	<5	<5	<5	<5		<5	<5
Methylene Chloride	ug/l			<10	<10	<10	<10	<10		<10	<10
4-Methyl-2-Pentanone	ug/l			<10	<10	<10	<10	<10		<10	<10
Styrene	ug/l	5		<5	<5	<5	<5	<5		<5	<5
1,1,1,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5		<5	<5
1,1,2,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5		<5	<5
Tetrachloroethene	ug/l	5		<5	<5	<5	<5	<5		<5	<5
Toluene	ug/l	5		<5	<5	<5	<5	<5		<5	<5
1,1,1-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5		<5	<5
1,1,2-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5		<5	<5
Trichloroethene	ug/l	5		<5	<5	<5	<5	<5		<5	<5
Trichlorofluoromethane	ug/l	5		<5	<5	<5	<5	<5		<5	<5
1,2,3-Trichloropropane	ug/l			<5	<5	<5	<5	<5		<5	<5
Vinyl acetate	ug/l			<10	<10	<10	<10	<10		<10	<10
Vinyl Chloride	ug/l	2		<5	<5	<5	<5	<5		<5	<5
o-Xylene	ug/l	5		<5	<5	<5	<5	<5		<5	<5
m-Xylene	ug/l	5		<5	<5	<5	<5	<5		<5	<5
p-Xylene	ug/l	5		<5	<5	<5	<5	<5		<5	<5

TABLE 13. GROUNDWATER ANALYTICAL DATA - ORGANIC PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 245D	MW 245S	MW 246D	MW 246S	MW 247-1	PS 247-2	PS 247-3	PS 247-4	PS 247-5
				03/24/97	*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*		
Acetone	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10	No Sample	No Sample
Acrylonitrile	ug/l	5		< 200	< 200	< 200	< 200	< 200	< 200	< 200	Taken	Taken
Benzene	ug/l	0.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromochloromethane	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromodichloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromoform	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Bromomethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		
2-Butanone	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10		
Carbon Disulfide	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Carbon Tetrachloride	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Chlorobenzene	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Chloroethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Chloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Chloroform	ug/l	7		< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Dibromochloromethane	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,2-Dibromo-3-chloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,2-Dibromoethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Dibromomethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,2-Dichlorobenzene	ug/l	4.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,4-Dichlorobenzene	ug/l	4.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5		
Trans-1,4-Dichloro-2-Butene	ug/l			< 100	< 100	< 100	< 100	< 100	< 100	< 100		
1,1-Dichloroethane	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,2-Dichloroethane	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5		
1,1-Dichloroethene	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5		

TABLE 13. GROUNDWATER ANALYTICAL DATA - ORGANIC PARAMETERS (LANDFILL EXPANSION AREA)

Parameter	Units	Class GA Standard	Class GA Guidance	MW 245D	MW 245S	MW 246D	MW 246S	MW 247-1	PS 247-2	PS 247-3	PS 247-4	PS 247-5
				03/24/97	*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*	*03/24/97*		
cis-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	No Sample	No Sample
trans-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5	Taken	Taken
1,2-Dichloropropane	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
cis-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5		
t-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5		
Ethylbenzene	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
2-Hexanone	ug/l		50	<10	<10	<10	<10	<10	<10	<10		
Iodomethane	ug/l			<5	<5	<5	<5	<5	<5	<5		
Methylene Chloride	ug/l			<10	<10	<10	<10	<10	<10	<10		
4-Methyl-2-Pentanone	ug/l			<10	<10	<10	<10	<10	<10	<10		
Styrene	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
1,1,1,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
1,1,2,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
Tetrachloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
Toluene	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
1,1,1-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
1,1,2-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
Trichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
Trichlorofluoromethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
1,2,3-Trichloropropane	ug/l			<5	<5	<5	<5	<5	<5	<5		
Vinyl acetate	ug/l			<10	<10	<10	<10	<10	<10	<10		
Vinyl Chloride	ug/l	2		<5	<5	<5	<5	<5	<5	<5		
o-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
m-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5		
p-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5		

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-203S	Dec-92	MW-203S	Dec-92	10	364	29	18	838	283	<1		7.74	<0.010	63.9	55.1	1100	384	1	<0.02						
MW-203S	Feb-93	MW-203S	Feb-93	10	294	52.2	24.5	631	253	22		7.27	<0.010	-11.3	11.7	300	368	0.38	0.06						
MW-203S	May-93	MW-203S	May-93	12.5	286	10.3	27	389	271	9		7.25	<0.010	15.8	24.8	50	372	0.39	<0.02	2.2	<5	0.009	<0.004	<0.5	
MW-203S	Aug-93	MW-203S	Aug-93	15	336	70.1	25	496	524	<1.0	7.01		<0.010	-78	72.5	450	360	0.41	<0.02						
MW-203S	Dec-93	MW-203S	Dec-93	10.5	292	26.5	28	526	313	22		7.14	<0.010	-65.6	70.2	200	364	0.43	<0.05						
MW-203S	Feb-94	MW-203S	Feb-94	10	292	25.9	30	623	317	1		7.61	<0.010	-11.9	38.2	350	336	0.38	<0.05	<2.0				<0.5	0.46
MW-203S	May-94	MW-203S	May-94	10.5	288	22.6	30.5	462	282	31		7.32	<0.010	-83	18.6	130	376	0.54	0.04	2.4				<0.5	0.45
MW-203S	Aug-94	MW-203S	Aug-94	12	280	28.6	31.5	574	277	2.0		7.28	<0.01	-95.9	17.9	155	376	0.54	0.59	4.4	40	<0.004	<0.004	0.54	1.96
MW-203S	Nov-94	MW-203S	Nov-94	11.5	279	23.8	34	485	212	<1		7.38	<0.010	-36.2	32.3	71	376	0.47	0.06	4.2				0.77	3.42
MW-203S	March-95	MW-203S	March-95	11	295	30	34	437	248	10		6.97	<0.010	6.6	32.1	69	384	1.54	0.21	<2				<0.5	0.3
MW-203S	June-95	MW-203S	June-95	11	299	41.9	40	429	314	10		7.22	<0.010	-139.5	4.7	200	384	0.71	0.6	<2				<0.5	<0.2
MW-203S	Sept.-95	MW-203S	Sept.-95	12	302	66.7	34	391	168	6		7.15	<0.010	-125.7	9.7	200	408	0.54	<0.05	<2				<0.5	<0.2
MW-203S	Nov-95	MW-203S	Nov-95	11	296	20.4	36	417	310	<1		7.56	<0.010	-123.8	29.5	84	412	0.24	0.05	<2	30	<0.004	<0.004	<0.5	<0.2
MW-203S	April-96	MW-203S	April-96	No Sample Taken																					
MW-203S	June-96	MW-203S	June-96	10.6	310	63	19	593	340	6.5		7.2	<0.002	190	27	>900	400	0.32	<0.02	5.5				4.1	<2
MW-203S	Sept-96	MW-203S	Sept-96	15.1	370	48	<10	590	560	6.9		7.2	<0.002	100	450	14	400	0.43	<0.02	<4				0.86	<2
MW-203S	Nov-96	MW-203S	Nov-96	11.9	270	140	36	568	320	8.3		7.39	<0.002		<10	71	360	0.53	<0.02	<4				1.2	<2
MW-203S	March-97	MW-203S	March-97	7.3	140	66	59	678	590	8.5		7.5	<0.002	-55	44	>999	390	0.39	<0.02	<4	15	<0.01	<0.01	0.83	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-203DA	Nov-89	MW-203DA	Nov-89	14.3	112	16.1	14	219	109	3.46	8.34		0.098		27.7	175	186	0.19	<0.10	6	<5	<0.005	<0.01		
MW-203DA	Feb-90	MW-203DA	Feb-90		83.2		11		116	0.55			<0.005		35.6	8.15	176	0.08		5	5			145	
MW-203DA	Apr-90	MW-203DA	Apr-90	11.9	104		9.2	215	261	2.08	6.12		<0.005	40.1	28.9	198	172	<0.04		26	25			<0.04	
MW-203DA	Nov-90	MW-203DA	Nov-90	9	111	25	8.8	200	125	6.3	7.7	7.4	<0.010	122	33	51	176	0.08	0.13	3.3	15	<0.004	0.039	<0.5	
MW-203DA	Feb-91	MW-203DA	Feb-91	9	106	<0.5	8.9	260	134	8.2	7.7	8.25	0.132	158	36.1	97	238	0.11	<0.04						
MW-203DA	May-91	MW-203DA	May-91	12	100	2.3	5.3	220	138	3	7.8	7.69	<0.010	275.8	29.6	69	188	0.04	<0.04						
MW-203DA	Aug-91	MW-203DA	Aug-91	11	102	9.8	7.3	310	130	9.8	7.8	7.29	<0.010	180.5	34	91	197	<0.03	0.08						
MW-203DA	Nov-91	MW-203DA	Nov-91	10	102	3.8	8	302	117	2		7.71	<0.010	-93	28	38	188	0.15	<0.04						
MW-203DA	Feb-92	MW-203DA	Feb-92	10	126	29.4	14	296	84	2		7.73	<0.010	295.1	<2.0	690	188	0.08	0.21	1.2	<5	<0.010	<0.004	1.03	
MW-203DA	May-92	MW-203DA	May-92	12	106	<1.0	5.5	308	116	1		7.74	<0.010	292.3	27	59	180	0.13	0.08						
MW-203DA	Aug-92	MW-203DA	Aug-92	12	96	8.9	7.5	264	109	<1		7.73	<0.010	280	48.2	45	184	0.14	<0.02						
MW-203DA	Dec-92	MW-203DA	Dec-92	11	140	22.8	5.5	295	107	<1		7.79	<0.010	261.7	48.9	70	132	0.03	<0.02						
MW-203DA	Feb-93	MW-203DA	Feb-93	10	110	<1.0	6.5	312	90.9	6		7.61	<0.010	64.1	48.5	128	240	<0.02	0.06						
MW-203DA	May-93	MW-203DA	May-93	13	104	<1.0	6.5	224	113	4		7.72	<0.010	160	71.2	54	168	0.04	<0.02	1.2	<5	<0.004	<0.004	<0.5	
MW-203DA	Aug-93	MW-203DA	Aug-93	15.5	110	5.1	7	286	42	<1.0	7.31		<0.010	213.7	85.1	60	184	0.13	0.03						
MW-203DA	Dec-93	MW-203DA	Dec-93	10.5	112	8.8	7	288	130	<1.0		7.12	<0.010	161.3	106	120	192	0.09	<0.05						
MW-203DA	Feb-94	MW-203DA	Feb-94	11	108	1.9	7.5	303	118	<1.0		7.82	<0.010	-29.3	46.5	63	164	<0.02	<0.05	<2.0				<0.5	0.84
MW-203DA	May-94	MW-203DA	May-94	11.5	108	4.3	6	249	126	14		7.82	<0.010	-108.9	24.4	72	176	0.05	0.08	<2.0				<0.5	0.7
MW-203DA	Aug-94	MW-203DA	Aug-94	12.5	100	9.5	7.5	279	125	1		7.62	<0.01	-72.9	32.7	35	216	0.05	0.11	<2.0	10	<0.004	<0.004	<0.5	2.02
MW-203DA	Nov-94	MW-203DA	Nov-94	11	105	<5.0	8	262	100	<1		7.76	<0.010	-4.9	35.6	19	192	0.06	0.11	<2.0				<0.5	3.28
MW-203DA	March-95	MW-203DA	March-95	10.5	107	20	12	261	118	41		7.22	0.021	-17.5	36.9	35.6	192	0.16	0.29	<2				<0.5	<0.2
MW-203DA	June-95	MW-203DA	June-95	11.5	103	14	11	256	121	7		7.49	<0.010	-129.2	28.4	21	184	0.21	0.31	<2				<0.5	<0.2
MW-203DA	Sept.-95	MW-203DA	Sept.-95	11.5	115	8.3	8	243	124	3		7.38	<0.010	-91.1	26.6	26	204	0.11	0.06	<2				<0.5	<0.2
MW-203DA	Nov-95	MW-203DA	Nov-95	10.5	112	<5.0	7	238	110	<1		7.78	<0.010	-142.5	47.7	33	196	<0.02	<0.05	<2	10	<0.004	<0.004	<0.5	<0.2
MW-203DA	April-96	MW-203DA	April-96	8.4	110	19	7.6	286	290	1.9		8.1	<0.002	33.5	57	140	210	0.043	0.027	<4	50	<0.01	<0.01	0.52	3.1
MW-203DA	June-96	MW-203DA	June-96	11.2	110	1	3.7	285	360	<1		7.7	<0.002	170	32	160	190	<0.03	<0.02	<4				5.2	<2
MW-203DA	Sept-96	MW-203DA	Sept-96	13.8	130	7.8	2	280	190	<1		7.8	<0.002	220	74	135	200	0.042	0.026	<4				0.43	<2
MW-203DA	Nov-96	MW-203DA	Nov-96	11.7	110	38	7.5	270	130	<1		7.91	0.0056	185	73	140	170	0.072	<0.02	<4				0.56	<2
MW-203DA	March-97	MW-203DA	March-97	9.2	120	23	7.3	298	230	1.4		7.6	<0.002	125	37	402	160	<0.03	<0.02	<4	10	<0.01	<0.01	0.25	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-203VD	Nov-89	MW-203VD	Nov-89	13.3	132	<10.0	<3.0	103	115	1.3	7.42		0.005		<10.0	17	165	0.06	<0.10	7	<5	<0.005	<0.01		
MW-203VD	Feb-90	MW-203VD	Feb-90		103		11.3		130	0.54			<0.005		28.4	0.89	166	0.17		11	10			125	
MW-203VD	Apr-90	MW-203VD	Apr-90	12.4	130		<3.0	209.5	108	2.88	6.46		<0.005	29	<10.0	7	151	<0.04		7	10			0.06	
MW-203VD	Nov-90	MW-203VD	Nov-90	10	136	2.6	3.9	180	110	3	8	7.3	<0.010	105.2	10	27	146	0.06	<0.1	0.7	5	<0.004	0.01	<0.5	
MW-203VD	Feb-91	MW-203VD	Feb-91	10	132	<0.5	2	240	118	10	8	8.23	0.019	155.9	11.5	15	185	0.07	<0.04						
MW-203VD	May-91	MW-203VD	May-91	11	130	1.6	0	180	116	<3	7.9	7.86	<0.010	269.8	6.25	5.9	157	<0.03	<0.04						
MW-203VD	Aug-91	MW-203VD	Aug-91	11	128	6.5	<1.0	290	116	4.5	8	7.75	<0.010	184	9	6	167	<0.03	<0.04						
MW-203VD	Nov-91	MW-203VD	Nov-91	10	130	<1	3	272	106	<1		7.79	<0.010	-62.4	11.4	16	156	<0.02	<0.04						
MW-203VD	Feb-92	MW-203VD	Feb-92	10	148	12.9	3	268	111	3		7.91	<0.010	301	7.1	41	164	<0.02	0.05	1.4	<5	<0.010	<0.004	<0.5	
MW-203VD	May-92	MW-203VD	May-92	12	128	13	<1.0	259	109	<1.0		7.78	<0.01	269.0	14.2	22	124	0.32	0.05						
MW-203VD	Aug-92	MW-203VD	Aug-92	12	128	2	2.5	241	98.7	<1.0		7.82	<0.010	284.2	15.2	18.5	164	0.06	<0.02						
MW-203VD	Dec-92	MW-203VD	Dec-92	10	122	10.9	<1.0	268	108	<1.0		7.85	<0.010	260.4	45.8	32	196	<0.02	0.03						
MW-203VD	Feb-93	MW-203VD	Feb-93	10	132	<1.0	<1.0	284	78.7	10		7.83	<0.010	81.8	8.6	24.5	180	<0.02	0.07						
MW-203VD	May-93	MW-203VD	May-93	11	130	8.6	1.5	209	95.3	15		7.64	<0.010	213	49.3	7.9	140	<0.02	<0.02	0.6	<5	0.004	<0.004	<0.5	
MW-203VD	Aug-93	MW-203VD	Aug-93	13	130	7.1	<1.0	239	114	<1.0		7.42	<0.010	86.7	52.4	14	156	0.18	<0.02						
MW-203VD	Dec-93	MW-203VD	Dec-93	10.5	126	5.9	<1.0	233	113	8		7.27	<0.010	138.9	66.2	33	140	0.08	<0.05						
MW-203VD	Feb-94	MW-203VD	Feb-94	10.5	132	<1.0	<1.0	270	142	<1.0		7.86	<0.010	-26	38.2	36	136	<0.02	<0.05	<2.0				<0.5	0.9
MW-203VD	May-94	MW-203VD	May-94	12	136	1.1	<1.0	230	96.7	12		7.95	<0.010	-82	18.6	4.6	146	0.04	0.08	<2.0				<0.5	0.72
MW-203VD	Aug-94	MW-203VD	Aug-94	13	124	<5.0	<1.0	260	74.6	<1.0		7.69	<0.010	-68.9	14.6	2.4	148	0.07	0.29	<2.0	5	<0.004	0.007	<0.5	1.76
MW-203VD	Nov-94	MW-203VD	Nov-94	11.5	145	<5.0	1	238	83.8	9		7.98	<0.010	-1.8	31.4	4.9	260	0.02	0.19	<2.0				<0.5	3.28
MW-203VD	March-95	MW-203VD	March-95	11.5	129	10	<1	242	102	14		7.32	0.035	-6.5	11.7	7.3	160	0.15	0.14	<2				<0.5	<0.2
MW-203VD	June-95	MW-203VD	June-95	12	129	<5.0	2	239	108	7		7.48	<0.010	-100.7	4.3	7.3	148	0.27	0.2	<2				<0.5	<0.2
MW-203VD	Sept.-95	MW-203VD	Sept.-95	12	133	<5.0	<1	223	104	8		7.37	<0.010	-17.3	9.1	6.6	164	0.07	<0.05	<2				<0.5	<0.2
MW-203VD	Nov-95	MW-203VD	Nov-95	10	136	<5.0	<1	235	99.2	18		7.95	<0.010	-48.8	24.5	56	168	<0.02	<0.05	<2	5	<0.004	<0.004	<0.5	<0.2
MW-203VD	April-96	MW-203VD	April-96	9.9	150	10	8.6	260	160	<1		7.8	<0.002	295	10	10	160	<0.03	<0.02	<4	5	<0.01	<0.01	0.45	2.3
MW-203VD	June-96	MW-203VD	June-96	10.8	160	<1	<1	265	220	<1		7.9	<0.002	240	6.5	<1	160	<0.03	<0.02	<4				5.9	<2
MW-203VD	Sept-96	MW-203VD	Sept-96	12	120	5.3	<1	260	100	<1		7.8	<0.002	99	13	4.7	170	<0.03	0.027	<4				0.14	<2
MW-203VD	Nov-96	MW-203VD	Nov-96	12.2	130	7.8	<1	241	110	<1		7.89	<0.002	185	<5	5.7	150	<0.03	<0.02	<4				0.37	<2
MW-203VD	March-97	MW-203VD	March-97	9.7	150	4.3	<1	252	110	1		7.9	<0.002	0	10	168	170	<0.03	<0.02	<4	10	<0.01	<0.01	0.28	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-208SA	Mar-90	MW-208SA	Mar-90		148	43.3	38.2		205	3.08			0.02		97.3	240	284	0.06	<0.10	<1	45	<0.005	<0.01		
MW-208SA	Apr-90	MW-208SA	Apr-90	11.15	147		37.8	398	200	2.28	7.02		<0.005	-8	41.6	20	298	0.1		19	15			0.1	
MW-208SA	Nov-90	MW-208SA	Nov-90	9	161	17	38.2	330	215	4.7	7.8	7.1	<0.010	108.3	54	150	304	0.12	<0.1	2.4	20	<0.004	0.03	<0.5	
MW-208SA	Feb-91	MW-208SA	Feb-91	10	154	<0.5	42.7	450	218	12.1	7.6	8.34	0.465	163.4	47	120	365	0.13	<0.04						
MW-208SA	May-91	MW-208SA	May-91	11	150	5.9	42.5	440	224	<3	7.7	7.49	<0.010	254.9	44.8	97	347	0.06	<0.04						
MW-208SA	Aug-91	MW-208SA	Aug-91	11	160	8.7	52.1	570		13.4	7.6	7.4	<0.010	174.1	52.8	300	384	0.09	<0.04		230				
MW-208SA	Nov-91	MW-208SA	Nov-91	10	156	1.9	42	545	186	<1		7.65	<0.010	344.1	41.4	87	316	0.09	<0.04						
MW-208SA	Feb-92	MW-208SA	Feb-92	11	156	7.4	8.9	528	101	3		7.83	<0.010	280.5	22.8	22	164	0.03	0.03	1.2	<5	<0.010	<0.004	<0.5	
MW-208SA	May-92	MW-208SA	May-92	11	156	15	45.5	522	211	<1		7.57	<0.010	297.0	42	37	320	<0.04	0.28						
MW-208SA	Aug-92	MW-208SA	Aug-92	12	154	3	48	486	196	<1		7.48	<0.010	292.4	54.1	60	364	0.04	<0.02						
MW-208SA	Dec-92	MW-208SA	Dec-92	10	186	14.9	46	586	190	<1		7.64	<0.010	257.4	61.1	92	360	0.03	<0.02						
MW-208SA	Feb-93	MW-208SA	Feb-93	9.5	168	1.8	45	561	162	11		7.65	<0.010	202.7	44.5	80	376	0.04	0.09						
MW-208SA	May-93	MW-208SA	May-93	12	162	<1.0	47	364	198	7		7.48	<0.010	308.1	75.1	60	272	<0.02	<0.02	1.6	<5	<0.004	<0.004	<0.5	
MW-208SA	Aug-93	MW-208SA	Aug-93	14.5	172	10.7	45	412	211	<1.0		7.16	<0.010		54.2	53	340	<0.02	<0.02						
MW-208SA	Dec-93	MW-208SA	Dec-93	9.5	172	3.9	44	511	229	10		7.02	<0.010	157.9	83.3	48.5	348	0.08	0.05						
MW-208SA	Feb-94	MW-208SA	Feb-94	10	170	<1.0	50	574	226	<1.0		7.48	<0.010	254	55.6	65	296	<0.02	<0.05	<2.0				<0.5	0.83
MW-208SA	May-94	MW-208SA	May-94	11.5	172	4.3	49	432	205	19		7.63	<0.010	175.1	47.2	60	340	0.03	0.06	<2.0				<0.5	0.79
MW-208SA	Aug-94	MW-208SA	Aug-94	12	160	4.8	47	529	221	<1		7.26	<0.010	154.5	59.4	14.6	328	0.10	0.07	<2	10	<0.004	<0.004	<0.5	2.04
MW-208SA	Nov-94	MW-208SA	Nov-94	11.5	186	9.5	51	445	179	<1		7.46	<0.010	175.7	42.2	17	352	0.15	0.12	<2.0				0.5	2.55
MW-208SA	March-95	MW-208SA	March-95	11	125	10	50	417	218	9		6.79	<0.010	123.4	48.2	81	344	0.24	0.52	<2				<0.5	<0.2
MW-208SA	June-95	MW-208SA	June-95	13.5	170	14	51	421	233	6		7.34	<0.010	-120.3	44	100	392	0.38	0.22	<2				<0.5	<0.2
MW-208SA	Sept.-95	MW-208SA	Sept.-95	11.5	169	12.5	47	372	236	<1		7.26	<0.010	128.8	48.5	36	384	0.1	0.06	<2				<0.5	<0.2
MW-208SA	Nov-95	MW-208SA	Nov-95	9.5	168	20.4	44	389	226	6		7.7	<0.010	68.6	74.2	85	372	0.74	0.06	<2	25	<0.004	<0.004	<0.5	<0.2
MW-208SA	April-96	MW-208SA	April-96	9.1	170	1	49	540	320	2.3		7.8	<0.002	145	91	200	350	0.085	0.1	4	100	<0.01	<0.01	0.77	3
MW-208SA	June-96	MW-208SA	June-96	10.3	210	29	28	528	100	7.8		6.9	<0.002	130	49	270	340	0.56	0.095	<4				5.9	<2
MW-208SA	Sept-96	MW-208SA	Sept-96	12.8	250	43	4	550	270	12		6.8	<0.002	159	<200	150	310	0.86	0.049	<4				2.4	<2
MW-208SA	Nov-96	MW-208SA	Nov-96	11.4	200	68	23	513	200	21		6.88	<0.002	-50											
MW-208SA	March-97	MW-208SA	March-97	9.3	230	89	23	561	210	30		6.2	<0.002	125	44	1100	310	0.96	0.66	<4	100	<0.01	<0.01	4.6	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-208VD	Mar-90	MW-208VD	Mar-90		102	16.1	8		94.4	7.41			0.022		36.9	90	172	<0.04	<0.10	3	25	<0.005	<0.01		
MW-208VD	Apr-90	MW-208VD	Apr-90	11.9	103		4.7	206.5	98.6	2.48	6.86		<0.005	-6.9	25.1	9	158	<0.04		8	5			<0.04	
MW-208VD	Nov-90	MW-208VD	Nov-90	9	113	25	5.9	210	110	21	7.6	7.46	<0.05	106.3	50	68	182	<0.1	<0.1	6.4	5	<0.004	0.028	0.47	
MW-208VD	Feb-91	MW-208VD	Feb-91	10	102	<0.5	6	250	114	7.6	8	8.31	<0.010	153.4	28.8	17	225	0.11	<0.04						
MW-208VD	May-91	MW-208VD	May-91	11	102	2.7	3.2	190	112	<3	7.9	7.75	<0.010	263.1	27.4	10.9	180	0.06	<0.04						
MW-208VD	Aug-91	MW-208VD	Aug-91	11	102	17.4	5.2	300	108	10	8	7.51	<0.010	283.8	30	28	169	0.1	<0.04						
MW-208VD	Nov-91	MW-208VD	Nov-91	10	110	10.1	6	278	98.3	<1		7.98	<0.010	358.2	29.2	18	160	0.06	0.06						
MW-208VD	Feb-92	MW-208VD	Feb-92	11	178	4.6	46.5	282	217	3		7.83	<0.010	316.7	56.3	45	308	0.1	0.04	1.2	<5	<0.010	<0.004	<0.5	
MW-208VD	May-92	MW-208VD	May-92	13	100	13	4.5	265	98.9	<1		7.84	<0.010	293.6	28.6	6.7	132	0.63	<0.02						
MW-208VD	Aug-92	MW-208VD	Aug-92	13	100	7	7.5	256	90.3	<1		7.72	<0.010	304.6	32.8	90	172	0.19	<0.02						
MW-208VD	Dec-92	MW-208VD	Dec-92	11	114	3	4	277	89	<1		7.87	<0.010	260.5	56	108	204	0.04	0.1						
MW-208VD	Feb-93	MW-208VD	Feb-93	10	110	<1.0	4.5	294	76.4	8		7.78	<0.010	198	42	45	200	0.03	0.04						
MW-208VD	May-93	MW-208VD	May-93	13	102	<1.0	4	225	96.6	4		7.51	<0.010	344.4	62.2	5.6	160	<0.02	<0.02	0.6	<5	<0.004	<0.004	<0.5	
MW-208VD	Aug-93	MW-208VD	Aug-93	16	104	3.89	4	234	88.5	<1.0		7.47	<0.010	126	50.5	41	164	<0.02	<0.02						
MW-208VD	Dec-93	MW-208VD	Dec-93	9.5	100	<1.0	5	256	106	<1.0		7.2	<0.010	150.9	80.7	4.4	168	0.09	0.05						
MW-208VD	Feb-94	MW-208VD	Feb-94	10.5	102	9.6	<1.0	270	95.6	<1.0		7.72	<0.010	234.1	44.3	4.7	148	<0.02	<0.05	<2.0				<0.5	0.82
MW-208VD	May-94	MW-208VD	May-94	12	104	1.1	3	236	96	9		7.92	<0.010	162	22.4	17	168	0.06	0.05	<2.0				<0.5	0.75
MW-208VD	Aug-94	MW-208VD	Aug-94	13	100	23.8	4.5	264	104	1		7.39	<0.010	150.3	31.1	8.4	164	0.10	0.17	<2.0	10	<0.004	<0.004	<0.5	2.00
MW-208VD	Nov-94	MW-208VD	Nov-94	11	121	<5.0	5	246	84.5	<1		7.75	<0.010	167.8	37.2	6.2	184	0.06	0.07	<2.0				<0.5	2.72
MW-208VD	March-95	MW-208VD	March-95	11.5	114	25	5	252	100	6		7.05	<0.010	107.8	33.7	3.1	176	0.44	0.12	<2				<0.5	<0.2
MW-208VD	June-95	MW-208VD	June-95	13	102	9.3	6	248	96	16		7.51	<0.010	-25.0	28.4	6.2	172	<0.02	0.34	<2				<0.5	<0.2
MW-208VD	Sept.-95	MW-208VD	Sept.-95	12	101	8.3	7	235	104	<1		7.41	<0.010	110.6	23.4	8.6	196	0.1	<0.05	<2				<0.5	<0.2
MW-208VD	Nov-95	MW-208VD	Nov-95	9.5	100	8.2	5	235	95.3	<1		7.84	<0.010	44.8	40.5	1.5	192	<0.02	<0.05	<2	<5	<0.004	<0.004	<0.5	<0.2
MW-208VD	April-96	MW-208VD	April-96	10.8	210	39	9.5	260	150	8.5		7.1	<0.002	140	55	130	180	<0.03	0.034	<4	10	0.032	<0.01	0.58	2.6
MW-208VD	June-96	MW-208VD	June-96	11.1	130	12	1.9	271	100	1		7.5	0.0026	140	23	32	170	<0.03	0.021	<4				2.4	<2
MW-208VD	Sept-96	MW-208VD	Sept-96	10.6	170	60	<1	260	110	1.5		7.6	<0.002	242	26	5.7	150	0.08	<0.02	<4				0.42	<2
MW-208VD	Nov-96	MW-208VD	Nov-96	10.3	110	1	3.7	257	93	<1		7.93	<0.002	140	30	4.3	200	<0.03	<0.02	<4				0.45	<2
MW-208VD	March-97	MW-208VD	March-97	9.4	180	<1	5.4	385	94	<1		5.7	<0.002	160	29	185	190	<0.03	0.02	<4	10	<0.01	<0.01	0.61	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-212SA	Nov-90	MW-212SA	Nov-90	10	405	33	5.9	720	740	25	7.2	6.98	<0.05	187.7	375	660	944	0.16	<0.1	3.1	20	<0.004	0.058	0.85	
MW-212SA	Feb-91	MW-212SA	Feb-91	10	318	46.2	5	620	560	4.9	7.1	7.45	<0.010	151.1	71.7	390	672	<0.04	<0.04						
MW-212SA	May-91	MW-212SA	May-91	9	400	20.2	0	780	630	11.6	7.2	6.58	<0.010	244.9	225	880	804	0.03	0.26						
MW-212SA	Aug-91	MW-212SA	Aug-91	13	388	11.9	10.4	1545	730	<30	7.2	7.32	<0.010	286.7	341	450	1356	<0.03	<0.04						
MW-212SA	Nov-91	MW-212SA	Nov-91	11	444	26	5	1204	588	9		7.04	<0.010	359.3	186	830	916	<0.04	<0.04						
MW-212SA	Feb-92	MW-212SA	Feb-92	10	396	25.8	9	1355	773	8		7.2	<0.010	139.9	379	490	1048	0.02	0.1	0.6	<5	<0.010	<0.004	<0.5	
MW-212SA	May-92	MW-212SA	May-92	Well Broken - No Sample Collected																					
MW-212SA	Aug-92	MW-212SA	Aug-92	Well Broken - No Sample Collected																					
MW-212SA	Dec-92	MW-212SA	Dec-92	Well Broken - No Sample Collected																					
MW-212SA	Feb-93	MW-212SA	Feb-93	Well Broken - No Sample Collected																					
MW-212SA	May-93	MW-212SA	May-93	Well Broken - No Sample Collected																					
MW-212SA	Aug-93	MW-212SA	Aug-93	Well Broken - No Sample Collected																					
MW-212SA	Dec-93	MW-212SA	Dec-93	Well Broken - No Sample Collected																					
MW-212SA	Feb-94	MW-212SA	Feb-94	Well Broken - No Sample Collected																					
MW-212SA	May-94	MW-212SA	May-94	Well Broken - No Sample Collected																					
MW-212SA	Aug-94	MW-212SA	Aug-94	Well Broken - No Sample Collected																					
MW-212SA	Nov-94	MW-212SA	Nov-94	Well Removed From Monitoring Program - Replaced by MW-312S																					

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW - 312S	Nov-94	MW - 312S	Nov-94	12	404	<5.0	12	594	306	15		6.96	<0.010	126	112	490	540	0.11	0.11	<2.0				<0.5	4.5
MW - 312S	March-95	MW - 312S	March-95	11.5	384	20	14	494	443	<1		7.37	<0.010	71.6	94	360	472	0.37	0.36	<2				0.52	0.3
MW - 312S	June-95	MW - 312S	June-95	10.5	250	<5.0	140	465	354	<1		6.97	<0.010	30.8	154	500	472	0.09	0.12	<2				0.6	0.4
MW-312S	Sept.-95	MW-312S	Sept.-95	12	278	<5.0	14	369	32	9		7.32	<0.010	-12.1	113	360	480	0.13	<0.05	<2				<0.5	0.3
MW-312S	Dec-95	MW-312S	Dec-95	11.5	396	<5.0	6	356	602	<1		7.32	<0.010	71.2	200	1560	684	<0.02	0.33	<2	<5	<0.004	<0.004	<0.5	<0.2
MW-312S	April-96	MW-312S	April-96	7	300	95	12	520	330	<1		7.1	<0.002	130	80	24	290	<0.03	0.48	<4	300	<0.01	<0.01	3.4	3.1
MW-312S	June-96	MW-312S	June-96	9.5	170	63	<10	387	280	<1		7.5	0.0024	140	120	>900	290	<0.03	0.24	4				4.9	<2
MW-312S	Sept-96	MW-312S	Sept-96	13	410	35	<10	560	400	<1		6.7	<0.002	265	<50	19	340	<0.03	0.18	<4				0.32	<2
MW-312S	Nov-96	MW-312S	Nov-96	12.2	220	25	19	446	760	1.4		7.37	<0.002	140	410	180	280	0.063	0.11	<4				0.64	<2
MW-312S	March-97	MW-312S	March-97	7.1	200	49	7.3	458	540	<1		7.3	<0.002	115	52	>999	290	<0.03	0.11	<4	20	<0.01	<0.01	0.84	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-212DA	Nov-89	MW-212DA	Nov-89	9.4	249	10	17	523.5	436	3.04	7.28		<0.005	-38.2	164	180	471	0.13	<0.10	4	<5	<0.005	<0.01		
MW-212DA	Feb-90	MW-212DA	Feb-90		259		21.1		380	5.89			<0.005		155	30	530	0.06		7	30			0.34	
MW-212DA	Apr-90	MW-212DA	Apr-90	11	269		17.2	590	390	1.77	7.22		<0.005	-16.6	156	56	555	<0.04		5	15			0.32	
MW-212DA	Nov-90	MW-212DA	Nov-90	10	278	38	16.6	520	400	16	7.4	6.95	<0.05	162.5	136	30	558	<0.1	<0.1	14	<5	<0.004	0.02	<0.5	
MW-212DA	Feb-91	MW-212DA	Feb-91	9	272	8.8	18.9	700	460	<3.0	7.4	7.39	0.091	-12.7	156	20	565	<0.04	<0.04						
MW-212DA	May-91	MW-212DA	May-91	10	264	3.3	12.7	510	358	4	7.5	6.7	<0.010	221.2	138	32	560	<0.03	0.04						
MW-212DA	Aug-91	MW-212DA	Aug-91	11	264	4.8	13.5	900	390	<3.0	7.4	7.17	<0.010	263.9	130	13.5	624	<0.03	<0.04						
MW-212DA	Nov-91	MW-212DA	Nov-91	10	288	6.7	13.5	854	384	3		7.21	<0.010	47.6	112	9.4	560	0.05	<0.04						
MW-212DA	Feb-92	MW-212DA	Feb-92	10	322	17.5	16.8	836	464	1		7.11	<0.010	84.9	145	73	508	0.04	<0.02	<0.5	<5	<0.010	<0.004	<0.5	
MW-212DA	May-92	MW-212DA	May-92	11	280	<1.0	17	764	406	<1.0		7.21	<0.010	261.6	13.2	2.2	534	<0.04	0.3						
MW-212DA	Aug-92	MW-212DA	Aug-92	12	266	8.2	16.5	721	340	<1.0		7.14	<0.010	64.7	146	14.2	592	0.35	0.16						
MW-212DA	Dec-92	MW-212DA	Dec-92	10	296	<1.0	12.5	868	360	<1.0		7.18	<0.010	66.7	140	18	560	0.03	<0.02						
MW-212DA	Feb-93	MW-212DA	Feb-93	8	292	4.4	14	816	307	22		7.15	<0.010	97.1	140	15	536	0.1	<0.02						
MW-212DA	May-93	MW-212DA	May-93	12	288	<1.0	13	462	357	4		7.22	<0.010	143.4	125	23	496	<0.02	<0.02	0.6	<5	0.004	<0.004	<0.5	
MW-212DA	Aug-93	MW-212DA	Aug-93	14	276	<1.0	15	571	385	<1.0		7.03	<0.010	95.4	88.7	9.3	584	<0.02	<0.02						
MW-212DA	Dec-93	MW-212DA	Dec-93	9.5	288	7.8	16	692	420	16		7.06	<0.010	102.9	131	62	560	<0.02	0.07						
MW-212DA	Feb-94	MW-212DA	Feb-94	10.5	276	<1.0	14.5	803	368	34		7.22	<0.010	122.3	115	25	476	<0.02	<0.05	<2.0				<0.5	0.82
MW-212DA	May-94	MW-212DA	May-94	11	268	6.5	13.5	569	297	27		7.23	<0.010	67.1	134	13	536	0.03	0.17	<2.0				<0.5	0.77
MW-212DA	Aug-94	MW-212DA	Aug-94	12	270	10.0	14.0	739	381	3		7.27	<0.010	93.1	158	8.4	536	0.05	0.15	<20	20	<0.004	0.01	<0.5	2.30
MW-212DA	Nov-94	MW-212DA	Nov-94	10.5	295	<5.0	15	581	302	31		7.18	<0.010	136	122	7	564	0.18	0.1	<2.0				<0.5	4.05
MW-212DA	March-95	MW-212DA	March-95	11	260	5	15	504	376	30		7.22	<0.010	93	164	7.3	520	0.24	0.22	<2				<0.5	<0.2
MW-212DA	June-95	MW-212DA	June-95	12	270	<5.0	19	491	386	17		7.21	<0.010	-87.8	154	18	564	0.23	0.17	<2				<0.5	<0.2
MW-212DA	Sept.-95	MW-212DA	Sept.-95	11.5	278	16.7	14	429	407	<1		7.34	<0.010	-67.0	147	26	596	0.19	<0.05	<2				<0.5	<0.2
MW-212DA	Nov-95	MW-212DA	Nov-95	10.5	300	<5.0	16	449	364	<1		7.39	<0.010	-15.3	154	9.6	572	<0.02	<0.05	<2	15	<0.004	<0.004	<0.5	<0.2
MW-212DA	April-96	MW-212DA	April-96	9.1	270	1300	16	750	480	440		6.8	<0.002	155	140	230	520	0.064	0.042	<4	15	<0.01	<0.01	0.9	2.6
MW-212DA	June-96	MW-212DA	June-96	10	280	5.1	10	760	390	1.2		7.3	0.0022	120	140	26	530	<0.03	<0.02	<4				1.6	<2
MW-212DA	Sept-96	MW-212DA	Sept-96	10.7	500	50	5	720	360	<1		7.1	<0.002	155	530	9.3	510	<0.03	<0.02	<4				0.37	<2
MW-212DA	Nov-96	MW-212DA	Nov-96	10.9	280	<1	13	697	360	1.9		7.34	<0.002	140	180	20	470	< 0.03	<0.02	<4				0.5	<2
MW-212DA	March-97	MW-212DA	March-97	9.7	320	6.4	15	766	360	1.4		7.1	<0.002	75	150	90	470	<0.03	<0.02	<4	15	<0.01	<0.01	0.4	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-230S	Nov-89	MW-230S	Nov-89	13	141	10.6	33.6	385	209	2.96	6.41		0.007		47.5	90	288	0.13	<0.10	10	<5	<0.005	<0.01		
MW-230S	Feb-90	MW-230S	Feb-90		146		36.4		210	8.48			0.011		49.3	2.52	281	0.06		2	<5			100	
MW-230S	Apr-90	MW-230S	Apr-90	10.6	159		35.2	387	200	9.34			<0.005		58.2	57	306	<0.01		11	10			0.33	
MW-230S	Nov-90	MW-230S	Nov-90	10	161	56	32.3	310	215	9.3	7.9	7.3	<0.010	124.2	54	690	286	0.14	<0.1	4.5	10	<0.004	0.024	0.5	
MW-230S	Feb-91	MW-230S	Feb-91	10	144	8.6	31.8	400	245	15	8.1	8.32	<0.010	124.7	51	210	353	0.22	<0.04						
MW-230S	May-91	MW-230S	May-91	11	142	24.4	30.8	340	216	<3	7.9	7.74	<0.010	312.1	53	340	329	0.07	<0.04						
MW-230S	Aug-91	MW-230S	Aug-91	10	144	7.7	30.2	490	210	10.4	8	9.08	<0.010	198.1	51.8	120	318	<0.03	<0.04						
MW-230S	Nov-91	MW-230S	Nov-91	10	176	<1	31	480	204	<1.0		7.68	<0.010	239.3	111	250	284	0.06	<0.04						
MW-230S	Feb-92	MW-230S	Feb-92	10	164	12.9	32.2	464	216	6		7.83	<0.010	271.9	<2.0	240	302	0.18	0.05	1	<5	<0.010	<0.004	<0.5	
MW-230S	May-92	MW-230S	May-92	12	162	40.5	29.5	436	326	<1.0		7.66	<0.010	272.9	46.6	210	276	<0.04	0.08						
MW-230S	Aug-92	MW-230S	Aug-92	12	140	3	31	408	184	<1.0		7.86	<0.010	263.4	72.8	114	316	<0.04	0.02						
MW-230S	Dec-92	MW-230S	Dec-92	11	150	9.9	27	469	183	<1.0		7.76	<0.010	244.3	63.2	168	308	<0.02	<0.02						
MW-230S	Feb-93	MW-230S	Feb-93	9	182	55.8	30	495	233	19		7.81	<0.010	108.3	48.5	430	340	0.14	0.09						
MW-230S	May-93	MW-230S	May-93	13	168	16.3	28	332	197	6		7.53	<0.010	204.6	73.8	120	276	0.05	<0.02	0.8	<5	<0.004	<0.004	<0.5	
MW-230S	Aug-93	MW-230S	Aug-93	13.5	176	26.5	30	383	195	<1.0		6.91	<0.010	135	71.3	310	320	<0.02	<0.02						
MW-230S	Dec-93	MW-230S	Dec-93	10.5	150	29.4	29	391	225	2		7.17	<0.010	200.3	47.9	140	328	<0.02	0.04						
MW-230S	Feb-94	MW-230S	Feb-94	10.5	160	<1.0	29	461	263	<1.0		7.76	<0.010	78.5	51.1	215	240	<0.02	<0.05	<2.0				<0.5	0.83
MW-230S	May-94	MW-230S	May-94	11.5	164	8.6	28	356	244	13		7.96	<0.010	33.6	49.1	170	272	0.03	0.08	<2.0				<0.5	0.73
MW-230S	Aug-94	MW-230S	Aug-94	12	140	9.5	29	423	187	<1		7.69	<0.010	39.5	57	34	280	0.06	0.12	<2.0	15	<0.004	<0.004	<0.5	2.16
MW-230S	Nov-94	MW-230S	Nov-94	11.5	145	9.5	30	365	159	4		8.12	<0.010	55.2	52.9	61	152	<0.02	0.25	<2.0				<0.5	3.35
MW-230S	March-95	MW-230S	March-95	11	165	20	32	356	215	8		7.28	<0.010	52	49	108	272	0.18	0.42	<2				<0.5	<0.2
MW-230S	June-95	MW-230S	June-95	13	143	27.9	34	357	299	<1		7.44	<0.010	37.3	44.5	2.5	308	0.26	0.23	<2				<0.5	<0.2
MW-230S	Sept.-95	MW-230S	Sept.-95	11.5	151	16.7	3	317	202	25		7.48	<0.010	31.5	45.2	150	312	0.06	<0.05	<2				<0.5	<0.2
MW-230S	Nov-95	MW-230S	Nov-95	10	144	<5.0	30	315	166	<1		7.91	<0.010	38.8	47.7	54	284	0.11	<0.05	<2	<5	<0.004	<0.004	<0.5	<0.2
MW-230S	April-96	MW-230S	April-96	8.9	140	17	28	520	520	<1		8.0	<0.002	240	110	>900	310	0.071	0.036	<4	250	<0.01	<0.01	0.6	3.0
MW-230S	June-96	MW-230S	June-96	10.7	270	35	27	417	200	<1		7.7	<0.002	180	32	660	270	0.16	<0.02	<4				4.4	<2
MW-230S	Sept-96	MW-230S	Sept-96	12.4	160	18	24	410	230	1		8.0	<0.002	180	42	340	240	<0.03	0.022	<4				0.53	<2
MW-230S	Nov-96	MW-230S	Nov-96	10.1	70	15	25	329	110	1.3		8.2	<0.002	175	<4	170	180	0.19	0.11	<4				1.1	<2
MW-230S	March-97	MW-230S	March-97	10	42	13	24	409	130	1.9		8.0	<0.002	95	48	>999	140	0.4	0.077	<4	15	<0.01	<0.01	0.95	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-230D	Nov-89	MW-230D	Nov-89	13.5	113	<10.0	<3.0	136	79.6	9.22	6.44		0.011		<10.0	34	135	0.12	<0.10	17	<5	<0.005	<0.01		
MW-230D	Feb-90	MW-230D	Feb-90		123		4.6		120	3.57			<0.005		13.5	4.4	174	0.07		4	10			0.5	
MW-230D	Apr-90	MW-230D	Apr-90	11.1	124		<3.0	226	90	34.1			<0.005		14.1	4.2	184	<0.04		60	5			0.25	
MW-230D	Nov-90	MW-230D	Nov-90	11	130	18	4.9	190	130	9.1	7.9	7.4	<0.010	109.1	16	37	156	0.08	<0.1	5.8	5	<0.004	0.034	<0.5	
MW-230D	Feb-91	MW-230D	Feb-91	11	126	<0.5	5	250	98	8.6	8.1	8.38	<0.010	91	13.2	13	184	0.13	<0.04						
MW-230D	May-91	MW-230D	May-91	11	124	<1.0	1.1	180	94	<3	8.1	8	<0.010	293.8	13	3	155	0.07	<0.04						
MW-230D	Aug-91	MW-230D	Aug-91	10	122	3.2	2.1	300	96	4.4	8	8.46	<0.010	195.5	13.9	7.1	170	<0.03	<0.04						
MW-230D	Nov-91	MW-230D	Nov-91	10	134	<1	3	290	80.7	<1		7.87	<0.010	261	13	10	157	0.09	<0.04						
MW-230D	Feb-92	MW-230D	Feb-92	11	126	14.7	5.9	280	89.4	3		8.05	<0.010	258.3	12.8	9.5	160	0.31	0.03	1.2	<5	<0.010	<0.004	<0.5	
MW-230D	May-92	MW-230D	May-92	12	122	2.8	2.5	272	83.8	<1		7.86	<0.010	274.1	17.8	3.2	172	1.79	<0.02						
MW-230D	Aug-92	MW-230D	Aug-92	12	124	<1.0	4.5	258	76.5	<1		7.95	<0.010	281.2	55.1	6.7	176	<0.04	<0.02	1.2					
MW-230D	Dec-92	MW-230D	Dec-92	10.5	138	1	1.5	290	72.1	<1		7.9	<0.010	244.2	43.8	1.5	160	<0.02	<0.02	1.2					
MW-230D	Feb-93	MW-230D	Feb-93	9.5	132	<1.0	2.5	315	65.3	7		7.89	<0.010	125.2	14.5	13.5	180	0.18	0.07	1.2					
MW-230D	May-93	MW-230D	May-93	14	126	<1.0	1.5	226	78.2	4		7 86	<0.010	227.5	48	12.5	152	0.11	<0.02	0.6	<5	<0.004	<0.004	<0.5	
MW-230D	Aug-93	MW-230D	Aug-93	14	128	<1.0	3	247	74.9	<1.0		7.28	<0.010	133.7	72.5	6	148	0.06	<0.02						
MW-230D	Dec-93	MW-230D	Dec-93	10	120	4.9	2	262	86.2	2		7.24	<0.010	99.2	47.6	16	140	0.12	0.05						
MW-230D	Feb-94	MW-230D	Feb-94	10	126	<1.0	2	282	82.1	<1.0		7.86	<0.010	91.1	38.9	15	156	<0.02	<0.05	<2.0				<0.5	0.89
MW-230D	May-94	MW-230D	May-94	11.5	128	<1.0	1.5	245	77.3	16		7.92	<0.010	42.5	18.6	6.3	180	0.07	0.06	<2.0				<0.5	0.73
MW-230D	Aug-94	MW-230D	Aug-94	12	124	9.5	2.5	269	85.5	1		7.73	<0.01	50.0	17.9	7.7	172	0.06	0.49	<2.0	15	<0.004	0.006	<0.5	1.86
MW-230D	Nov-94	MW-230D	Nov-94	11.5	153	<5.0	3	254	70.2	2		8.22	<0.010	58.3	30.6	5.3	160	<0.02	0.11	<2.0				<0.5	3.42
MW-230D	March-95	MW-230D	March-95	11	129	<5.0	2	248	80.8	5		7.48	<0.010	59.1	16.7	5.2	164	0.24	0.26	<2				<0.5	0.3
MW-230D	June-95	MW-230D	June-95	12	125	<5.0	3	252	86	18		7.56	<0.010	35.6	21	4.9	176	0.27	0.27	125				<0.5	<0.2
MW-230D	Sept.-95	MW-230D	Sept.-95	11.5	125	<5.0	1.5	239	82.6	<1		7.53	<0.010	30.2	16.8	3.8	188	0.07	<0.05	<2				<0.5	<0.2
MW-230D	Nov-95	MW-230D	Nov-95	10	128	8.2	<1	239	67.3	<1		7.92	<0.010	10.9	21.7	7.6	176	0.04	<0.05	<2	5	<0.004	<0.004	<0.5	<0.2
MW-230D	April-96	MW-230D	April-96	10.1	140	28	9.5	340	160	16		8.4	<0.002	165	16	37	170	<0.03	0.024	<4	10	<0.01	<0.01	0.54	2.8
MW-230D	June-96	MW-230D	June-96	10.9	150	14	<1	272	100	<1		7.7	0.002	150	12	57	170	0.035	<0.02	<4				2.1	<2
MW-230D	Sept-96	MW-230D	Sept-96	12.9	130	2.8	<1	270	89	<1		8	0.0024	160	11	50	150	<0.03	0.034	<4				0.32	<2
MW-230D	Nov-96	MW-230D	Nov-96	11.2	130	48	1.9	252	89	<1		7.86	<0.002	175	39	98	180	0.064	<0.02	<4				0.58	<2
MW-230D	March-97	MW-230D	March-97	10	130	19	2.7	276	92	1		8.1	<0.002	90	37	432	230	0.037	<0.02	<4	15	<0.01	<0.01	0.33	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-231S	Nov-89	MW-231S	Nov-89	13	28.7	<10.0	8.7	485	126	5.9	11		0.065		45.9	58	171	0.78	<0.10	8	<5	<0.005	<0.01		
MW-231S	Feb-90	MW-231S	Feb-90		137		20.6		190	0.49			0.011		37.3	3.99	246	0.14		4	<5			150	
MW-231S	Apr-90	MW-231S	Apr-90	10.7	164		17	266	120	6.46			<0.005		38.9	55	232	0.06		4	10			0.44	
MW-231S	Nov-90	MW-231S	Nov-90	10	142	32	15.7	220	165	6.4	8.5	7.7	<0.010	77.5	36	330	210	0.16	<0.1	8.1	5	<0.004	0.019	0.6	
MW-231S	Feb-91	MW-231S	Feb-91	10	144	<0.5	15.9	320	160	12	8.5	8.45	<0.010	168.7	36.7	210	248	0.2	<0.04						
MW-231S	May-91	MW-231S	May-91	11	154	6.6	13.8	260	162	<3	8.4	8.27	<0.010	254.5	37.2	330	252	0.13	<0.04						
MW-231S	Aug-91	MW-231S	Aug-91	10	154	6.5	14.6	410	162	4.7	8.4	9.34	<0.010	204.8	46.8	190	252	0.08	<0.04						
MW-231S	Nov-91	MW-231S	Nov-91	10	134	3.8	13	648	142	<1.0		7.92	<0.010	107.9	24.3	100	212	0.12	<0.04						
MW-231S	Feb-92	MW-231S	Feb-92	10	152	9.2	17.8	372	187	2		8.43	<0.010	218.7	23.6	450	472	0.3	0.09	1.2	<5	<0.010	<0.004	0.8	
MW-231S	May-92	MW-231S	May-92	11	160	11	16.5	379	167	<1.0		8.2	<0.010	261.4	85	215	296	0.1	<0.02						
MW-231S	Aug-92	MW-231S	Aug-92	12	152	11	17.5	344	215	1		7.97	<0.010	257.3	76.8	122	260	0.21	0.04						
MW-231S	Dec-92	MW-231S	Dec-92	10	178	11.9	16	378	164	<1.0		7.97	<0.010	255.3	56	196	248	0.05	<0.02						
MW-231S	Feb-93	MW-231S	Feb-93	9.5	170	<1.0	17.5	452	139	7		8.02	<0.010	142.7	46	98	268	0.08	0.07						
MW-231S	May-93	MW-231S	May-93	12.5	162	<1.0	20	318	176	5		8.51	<0.010	274.8	69.9	74	276	0.17	<0.02	1.2	<5	<0.004	<0.004	<0.5	
MW-231S	Aug-93	MW-231S	Aug-93	15	156	<1.0	21	361	180	<1.0		6.81	<0.010	119.9	97.7	122	268	0.12	<0.02						
MW-231S	Dec-93	MW-231S	Dec-93	9.5	156	2.9	20	351	190	2		7.57	<0.010	124.8	88.6	100	232	0.14	<0.05						
MW-231S	Feb-94	MW-231S	Feb-94	10	152	<1.0	23	448	176	<1.0		7.72	<0.010	139.4	45.8	135	232	<0.02	<0.05	<2.0				<0.5	0.8
MW-231S	May-94	MW-231S	May-94	12.5	164	1.1	22	359	173	16		7.92	<0.010	71.7	36.7	59	268	0.12	0.03	<2.0				<0.5	0.69
MW-231S	Aug-94	MW-231S	Aug-94	12	152	5	24	408	182	<1		7.91	<0.010	55.6	44.2	24	256	0.09	0.12	<2.0	5	<0.004	<0.004	<0.5	1.96
MW-231S	Nov-94	MW-231S	Nov-94	10.5	186	<5.0	24	361	149	4		8.04	<0.010	85.7	38.9	20	248	0.11	0.1	<2.0				<0.5	3.12
MW-231S	Nov-94	MW-231S	Nov-94	9.5	166	5	26	354	176	5		7.67	<0.010	90.9	42.6	37.2	296	0.3	0.53	<2				<0.5	0.4
MW-231S	June-95	MW-231S	June-95	11.5	155	9.3	30	356	168	25		7.58	<0.010	42	38.2	66	284	0.3	0.3	<2				<0.5	1.4
MW-231S	Sept.-95	MW-231S	Sept.-95	10.5	171	8.3	25	312	194	9		7.68	<0.010	48.1	32.7	80	284	0.11	0.06	<2				<0.5	<0.2
MW-231S	Nov-95	MW-231S	Nov-95	10	172	<5.0	24	319	186	<1		7.91	<0.010	75.4	45.5	130	288	0.06	<0.05	<2	5	<0.004	<0.004	<0.5	<0.2
MW-231S	April-96	MW-231S	April-96	8.8	240	1	27	500	350	<1		8.2	<0.002	205	78	320	320	0.069	0.11	<4	50	<0.01	<0.01	0.46	3
MW-231S	June-96	MW-231S	June-96	10.8	190	35	20	485	230	<1		7.8	0.002	190	40	230	270	0.17	<0.02	<4				3.6	<2
MW-231S	Sept-96	MW-231S	Sept-96	11.8	130	5.3	15	460	220	1.5		7.9	<0.002	90	38	170	320	<0.03	0.027	<4				0.5	<2
MW-231S	Nov-96	MW-231S	Nov-96	11.2	20	28	22	178	71	5.9		9.73	<0.002	140	<4	40	130	0.035	0.25	<4				1.8	<2
MW-231S	March-97	MW-231S	March-97	9.9	35	4.3	19	308	120	2.2		8.8	<0.002	80	35	151	130	0.14	0.27	<4	10	<0.01	<0.01	0.41	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-231D	Nov-89	MW-231D	Nov-89	12	90.3	<10.0	563	1587	442	3.64	6.91		0.009		139	18	1230	0.2	<0.10	5	<5	<0.005	<0.01		
MW-231D	Feb-90	MW-231D	Feb-90		89.1		616		410	0.33			<0.005		142	6.19	1270	0.11		11	<5			17	
MW-231D	Apr-90	MW-231D	Apr-90	11.4	99		612	1684	400	2.34	7.02		<0.005	-4.7	140	3.7	1310	0.23		4	15			0.46	
MW-231D	Nov-90	MW-231D	Nov-90	11	135	19	541	1400	478	6.8	7.3	7.1	0.01	151.6	130	11	1342	1.23	<0.1	10	15	<0.004	0.018	1.4	
MW-231D	Feb-91	MW-231D	Feb-91	9	110	<0.5	586	1600	520	12	7.3	7.98	<0.010	-2.8	138	13	1325	0.8	<0.04						
MW-231D	May-91	MW-231D	May-91	11	94	6.2	845.5	1850	1160	<3	7.4	7.28	<0.010	183.5	121	15.9	1383	0.45	<0.04						
MW-231D	Aug-91	MW-231D	Aug-91	10	102	9.3	557.6	2560	400	3.9	7.5	7.97	<0.010	230.2	132	8	1640	0.28	<0.04						
MW-231D	Nov-91	MW-231D	Nov-91	10	118	<1	563	2350	408	7		7.29	<0.010	37	125	15	1402	0.26	<0.04						
MW-231D	Feb-92	MW-231D	Feb-92	10	110	28.5	539	2210	425	3		7.45	<0.010	59.4	128	8.5	1336	1.23	0.02	2.6	<5	<0.010	<0.004	1.3	
MW-231D	May-92	MW-231D	May-92	12	114	40.5	770	2140	484	<1.0		7.43	<0.010	65.9	144	2.3	1460	0.34	0.13						
MW-231D	Aug-92	MW-231D	Aug-92	12	104	11	600	1884	290	<1.0		7.43	<0.010	68.7	127	11	1636	0.43	<0.02						
MW-231D	Dec-92	MW-231D	Dec-92	10	150	23.8	610	2550	422	<1.0		7.22	<0.010	49.5	137	20	1420	0.2	<0.02						
MW-231D	Feb-93	MW-231D	Feb-93	9	110	14.1	610	1876	312	5		7.13	<0.010	39.2	141	7.2	1348	0.26	0.06						
MW-231D	May-93	MW-231D	May-93	14	132	12.8	570	879	671	6		7.75	<0.010	-105.8	132.	5.4	1440	0.38	<0.02	2.6	<5	0.006	<0.004	<0.5	
MW-231D	Aug-93	MW-231D	Aug-93	12.5	104	184	604	1736	418	<1.0		6.52	<0.010	-4.3	133	3	1480	0.18	<0.02						
MW-231D	Dec-93	MW-231D	Dec-93	9.5	108	45.1	600	1998	444	10		7.12	<0.010	58.5	158	4.8	1436	0.34	0.05						
MW-231D	Feb-94	MW-231D	Feb-94	10	104	20.2	562	2280	405	<1.0		7.07	<0.010	162.2	148	4.7	1208	0.22	<0.05	<2.0				<0.5	5
MW-231D	May-94	MW-231D	May-94	12.5	104	19.4	572	1235	367	13		7.09	<0.010	108.8	144	1.4	536	0.43	0.04	<2.0				<0.5	6.25
MW-231D	Aug-94	MW-231D	Aug-94	11.5	108	105	594	2260	512	1		7.03	<0.010	56.5	147	3.8	1364	0.39	0.27	<2.0	10	<0.004	0.008	<0.5	2.04
MW-231D	Nov-94	MW-231D	Nov-94	11	117	19	565	1291	356	6		7.65	<0.010	128.1	132	5	1432	0.89	0.11	<2.0				1.38	4.5
MW-231D	March-95	MW-231D	March-95	11	113	15	560	923	508	28		7.18	0.018	22.9	134	4.8	1372	4.64	0.18	<2				1.58	5.7
MW-231D	June-95	MW-231D	June-95	11	101	46.5	590	964	403	7		7.14	<0.010	-41.9	117	7.2	1500	0.57	0.42	<2				<0.5	4.9
MW-231D	Sept.-95	MW-231D	Sept.-95	12	101	20.8	568	831	433	12		7.19	<0.010	-40.0	140	5.2	1508	0.4	0.06	<2				<0.5	5.6
MW-231D	Nov-95	MW-231D	Nov-95	10	100	16.3	577	823	378	3		7.32	<0.010	-27	151	3.4	1408	0.16	<0.05	<2	5	<0.004	<0.004	<0.5	5.3
MW-231D	April-96	MW-231D	April-96	9.4	120	14	510	270	480	1.8		7.6	<0.002	100	140	10	1300	0.18	<0.02	<4	10	<0.01	<0.01	0.77	2.3
MW-231D	June-96	MW-231D	June-96	11	120	14	500	2250	380	<1		7.5	0.0025	230	130	<1	1400	0.57	0.029	<4				4	5.8
MW-231D	Sept-96	MW-231D	Sept-96	11	130	10	480	2200	350	<1		7.4	<0.002	-65	11	250	1300	0.89	<0.02	<4				2.1	5.5
MW-231D	Nov-96	MW-231D	Nov-96	11.2	110	13	550	2100	310	<1		8.26	<0.002	70	150	6.2	1200	0.94	<0.02	<4				1.8	5.3
MW-231D	March-97	MW-231D	March-97	9.7	140	6.4	520	2300	330	<1		7.8	<0.002	70	110	15	1300	1	0.081	<4	10	<0.01	<0.01	1	5.4

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-232S	Nov-89	MW-232S	Nov-89	15.3	120	<10.0	24.3	297	184	1.29	7.35		0.011		75.4	199	236	0.07	<0.01	12	<5	<0.005	<0.01		
MW-232S	Feb-90	MW-232S	Feb-90		124		3.13		156	0.58			<0.005		33.6	5.34	217	0.1		6	5			99	
MW-232S	Apr-90	MW-232S	Apr-90	11.1	113		<3	256	100	2.98	7.6		<0.005	-29.5	38.9	32	206	<0.04		6	10			0.2	
MW-232S	Nov-90	MW-232S	Nov-90	13	125	7.7	6.8	240	215	6.1	7.8	8.6	<0.010	218.4	72	120	232	0.06	<0.1	1.1	15	<0.004	0.02	<0.5	
MW-232S	Feb-91	MW-232S	Feb-91	12	136	1.9	5	520	240	3	7.4	8.19	<0.010	176.5	118	130	317	<0.04	<0.04						
MW-232S	May-91	MW-232S	May-91	12	140	4.3	1.1	290	204	<3	7.8	7.61	<0.010	240.5	57.6	162	260	<0.03	<0.04						
MW-232S	Aug-91	MW-232S	Aug-91	11	156	3.2	2.1	590	230	8.2	7.7	8.04	<0.010	207.1	74	145	360	<0.03	<0.04						
MW-232S	Nov-91	MW-232S	Nov-91	12	186	14.4	<1	589	311	<1.0		7.35	<0.010	179.6	52	600	276	<0.02	<0.04						
MW-232S	Feb-92	MW-232S	Feb-92	10	176	19.3	6.9	512	317	4		7.41	<0.010	178.5	85.9	360	380	<0.02	0.05	1.2	<5	<0.010	<0.004	<0.5	
MW-232S	May-92	MW-232S	May-92	11	214	7.7	4	541	286	<1.0		7.21	<0.010	336.6	105	61	416	<0.04	0.08	2.1	10	0.016	<0.004	0.04	
MW-232S	Aug-92	MW-232S	Aug-92	13	212	2.5	7	543	261	<1.0		7.43	<0.010	225.4	86.6	57	380	<0.04	<0.02						
MW-232S	Dec-92	MW-232S	Dec-92	11	268	4	2.5	644	312	<1.0		7.41	<0.010	88.3	86.6	144	404	<0.02	<0.02						
MW-232S	Feb-93	MW-232S	Feb-93	9	720	7	4	631	267	20		7.33	<0.010	111.2	90	220	524	<0.02	0.04						
MW-232S	May-93	MW-232S	May-93	11	352	<1.0	1.5	483	378	4		6.93	<0.010	142.9	90.5	45	476	<0.02	<0.02	1.6	<5	<0.004	<0.004	<0.5	
MW-232S	Aug-93	MW-232S	Aug-93	14.5	480	13.3	4	792	595	<1.0		6.67	<0.010	169.9	99	94	632	<0.02	<0.02						
MW-232S	Dec-93	MW-232S	Dec-93	11	436	52.9	2	803	513	22		7.02	<0.010	132.6	103	105	540	0.06	0.06						
MW-232S	Feb-93	MW-232S	Feb-93	10	345	<1.0	2.5	783	411	52		7.04	<0.010	236.7	89.5	60	460	<0.02	<0.05	<2.0				<0.5	0.92
MW-232S	May-94	MW-232S	May-94	10	432	<1.0	2	649	418	49		6.83	<0.010	103.2	58.6	31	548	<0.02	0.03	2				<0.5	0.87
MW-232S	Aug-94	MW-232S	Aug-94	13	520	10.0	4.5	907	501	<1		6.79	<0.010	74.5	47.5	12.4	572	<0.02	0.08	<2.0	20	<0.004	0.008	<0.5	2.50
MW-232S	Nov-94	MW-232S	Nov-94	12	517	<5.0	3	722	464	19		6.98	<0.010	119.3	64.5	19	644	<0.02	0.11	<2.0				<0.5	3.92
MW-232S	March-95	MW-232S	March-95	11	392	<5.0	4	520	428	29		7.08	<0.010	-38.8	81.3	32	544	0.21	0.34	<2				<0.5	0.4
MW-232S	June-95	MW-232S	June-95	11	504	<5.0	5	542	521	<1		6.91	<0.010	26.1	67.5	33	652	0.24	0.25	<2				<0.5	<0.2
MW-232S	Sept.-95	MW-232S	Sept.-95	11.5	587	8.3	3	515	618	8		7.06	<0.010	21.6	88.4	50	744	0.12	0.05	<2				<0.5	<0.2
MW-232S	Nov-95	MW-232S	Nov-95	11	380	8.2	<1	464	404	1		6.86	<0.010	2.3	107	71	576	<0.02	<0.05	<2	10	<0.004	<0.004	<0.5	<0.2
MW-232S	April-96	MW-232S	April-96	10.6	630	1	6.7	1220	670	40		6.5	<0.002	180	64	59	780	0.035	0.025	11	100	<0.01	<0.01	1.1	3.1
MW-232S	June-96	MW-232S	June-96	11	600	24	<1	1160	510	1.4		6.7	0.0052	140	70	190	680	<0.03	<0.02	9.8				1.6	<2
MW-232S	Sept-96	MW-232S	Sept-96	13.1	530	10	<1	1100	530	1.1		6.6	<0.002	110	<5	7.6	660	<0.03	<0.02	9.1				0.35	<2
MW-232S	Nov-96	MW-232S	Nov-96	11.4	540	<1	6.5	910	450	2.8		6.79	<0.002	110	42	34	590	<0.03	<0.02	7.1				0.56	<2
MW-232S	March-97	MW-232S	March-97	10.2	530	13	9	1120	510	2.5		6.6	<0.002	145	56	>999	560	<0.03	<0.02	12	15	<0.01	<0.01	0.56	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-232D	Nov-89	MW-232D	Nov-89	13	37.2	<10.0	210	747.5	100	1.77	9.51		0.009		89	16	522	0.12	<0.01	4	<5	<0.005	<0.01		
MW-232D	Feb-90	MW-232D	Feb-90		52.3		250		126	0.86			<0.005		87.4	14.5	629	0.08		21	5			40	
MW-232D	Apr-90	MW-232D	Apr-90	12.2	41.2		202	836	82	3.28	9.33		<0.005	-126.1	88.2	1.9	1450	<0.04		10	5			0.21	
MW-232D	Nov-90	MW-232D	Nov-90	11	56	17	225	630	130	4.9	9.1	8.7	<0.010	243.8	79	22	611	0.13	<0.1	6.3	<5	<0.004	0.024	<0.5	
MW-232D	Feb-91	MW-232D	Feb-91																						
MW-232D	May-91	MW-232D	May-91	11	54	11.7	202.1	480	124	5.1	9.3	8.92	<0.010	172.9	70	11.4	505	0.58	0.09						
MW-232D	Aug-91	MW-232D	Aug-91	12	52	<0.5	218.8	1500	136	4	9.2	8.44	<0.010	214.2	75.6	6.7	618	0.08	<0.04						
MW-232D	Nov-91	MW-232D	Nov-91	10	84	3.8	225	1380	132	<1		8.32	<0.010	122.3	79	10	596	0.04	<0.04						
MW-232D	Feb-92	MW-232D	Feb-92	10	60	25.8	226	1056	140	<1.0		8.48	<0.010	102.1	90	8.5	548	0.07	<0.02	1.8	<5	<0.010	<0.004	<0.5	
MW-232D	May-92	MW-232D	May-92	12	76	21	240	1102	370	<1.0		8.52	<0.010	128.4	94	3.4	664	0.1	0.26						
MW-232D	Aug-92	MW-232D	Aug-92	13	136	58.5	154	1179	186	16		7.74	<0.010	163.6	78.8	22.5	580	<0.04	<0.02						
MW-232D	Dec-92	MW-232D	Dec-92	11	122	16.9	225	1508	210	<1.0		7.38	<0.010	-0.6	81.5	20	624	<0.02	0.1						
MW-232D	Feb-93	MW-232D	Feb-93	10	78	7.2	202	1041	116	6		7.76	<0.010	149.3	81	3	596	0.06	0.02						
MW-232D	May-93	MW-232D	May-93	12	80	12.8	262	756	152	4		7.47	<0.010	36.6	102	4	576	0.07	<0.02	1.6	<5	<0.004	<0.004	<0.5	
MW-232D	Aug-93	MW-232D	Aug-93	14	88	18.4	284	1189	169	<1.0		7.22	<0.010	-108.9	125	4.2	668	<0.02	<0.02						
MW-232D	Dec-93	MW-232D	Dec-93	9.5	86	59.4	262	994	187	4		7.24	<0.010	125.7	112	5.8	656	0.11	0.08						
MW-232D	Feb-94	MW-232D	Feb-94	9.5	92	1	256	1272	163	6		6.98	<0.010	268	91.5	5.7	616	<0.02	<0.05	<2.0				<0.5	3.8
MW-232D	May-94	MW-232D	May-94	12	84	45.2	250	804	148	8		7.99	<0.010	111	79.5	1.6	636	0.04	0.04	<2.0				<0.5	5
MW-232D	Aug-94	MW-232D	Aug-94	12.5	90.0	60.0	250	1579	295	1		7.46	<0.010	75.6	97.9	5.7	624	0.06	0.74	2.2	10	<0.004	0.01	<0.5	2.74
MW-232D	Nov-94	MW-232D	Nov-94	11.5	117	14.3	235	803	147	<1		8.08	<0.010	124.5	86.8	8	632	0.06	0.36	<2.0				<0.5	4.2
MW-232D	March-95	MW-232D	March-95	13	178	85	44	635	161	61		7.14	0.018	-53.3	44.2	6.8	332	3.59	0.4	8				3.37	<0.2
MW-232D	June-95	MW-232D	June-95	13	101	32.6	195	623	60	9		7.28	<0.010	20.6	78.4	6.2	580	1.06	0.24	<2				0.71	1.6
MW-232D	Sept.-95	MW-232D	Sept.-95	12.5	119	33.3	224	594	176	9		7.12	<0.010	3.1	85.7	9.5	648	0.56	0.08	<2				<0.5	2.4
MW-232D	Nov-95	MW-232D	Nov-95	10.5	120	16.3	252	584	158	<1		7.35	0.025	4	84.2	9.2	668	0.22	<0.05	<2	15	<0.004	<0.004	<0.5	2.1
MW-232D	April-96	MW-232D	April-96	No Sample Taken																					
MW-232D	June-96	MW-232D	June-96	No Sample Taken																					
MW-232D	Sept-96	MW-232D	Sept-96	No Sample Taken																					
MW-232D	Nov-96	MW-232D	Nov-96	No Sample Taken																					

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-233S	Nov-90	MW-233S	Nov-90	12	366	12	4.9	590	520	6.4	7.4	8.2	<0.010	-95.9	175	385	612	0.08	0.13	1.5	25	<0.004	0.021	0.53	
MW-233S	Feb-91	MW-233S	Feb-91	9	354	<0.5	5	880	520	5	7.3	7.71	<0.010	180.9	104	140	576	<0.04	5.34						
MW-233S	May-91	MW-233S	May-91	10	374	14.3	6.4	680	490	10.2	7.2	6.95	<0.010	195.4	75	81	570	<0.03	2.8						
MW-233S	Aug-91	MW-233S	Aug-91	15	484	<0.5	9.4	1010	580	<3.0	7.1	6.6	<0.010	284	126	66	794	<0.03	3.53						
MW-233S	Nov-91	MW-233S	Nov-91	12	338	14.4	5	919	411	<1		6.99	<0.010	371.8	116	70	534	<0.02	0.44						
MW-233S	Feb-92	MW-233S	Feb-92	10	378	2.8	9.9	856	464	13		7.48	<0.010	201.7	149	68	1308	<0.02	0.64	1	<5	<0.010	<0.004	<0.5	
MW-233S	May-92	MW-233S	May-92	10	370	<1.0	5.5	867	476	<1.0		7.13	<0.010	256.2	145	4.2	448	0.1	2.35						
MW-233S	Aug-92	MW-233S	Aug-92	13	372	<1.0	10.5	953	497	<1		6.94	<0.010	329.5	162	1.4	732	<0.04	0.33						
MW-233S	Dec-92	MW-233S	Dec-92	11	474	3	1.5	1106	549	<1		7.18	<0.010	176.6	144	30	720	<0.02	0.12						
MW-233S	Feb-93	MW-233S	Feb-93	9	792	4.4	4	1194	706	74		6.77	<0.010	144.5	148	126	940	0.1	0.07						
MW-233S	May-93	MW-233S	May-93	10.5	698	32.5	<1.0	558	591	4		6.65	<0.010	42.6	80.6	52	732	<0.02	<0.02	15.6	<5	<0.004	<0.004	<0.5	
MW-233S	Aug-93	MW-233S	Aug-93	13	968	<1.0	1	1174	918	<1.0		6.48	<0.010	-6.9	108	3	1040	<0.02	<0.02						
MW-233S	Dec-93	MW-233S	Dec-93	11	728	51	2	1294	900	44		6.69	<0.010	140.1	183	36	988	0.64	3.44						
MW-233S	Feb-94	MW-233S	Feb-94	10	740	7.7	<1.0	1224	664	<1.0		7.64	<0.010	162.4	71.6	330	704	<0.02	<0.05	2.4				<0.5	1
MW-233S	May-94	MW-233S	May-94	11	544	<1.0	<1.0	736	550	62		6.68	0.064	-15.8	73.8	24	672	<0.02	0.12	10.2				<0.5	1
MW-233S	Aug-94	MW-233S	Aug-94	13	456	5.0	2.0	922	516	4		6.85	<0.010	84.0	99.4	9.6	548	0.06	0.08	2.2	10	<0.004	<0.004	<0.5	2.40
MW-233S	Nov-94	MW-233S	Nov-94	12.5	460	<5.0	<1.0	651	399	13		7.08	<0.010	123.8	62.8	11.4	548	<0.02	0.05	7.6				<0.5	3.28
MW-233S	March-95	MW-233S	March-95	10	711	35	2	694	895	<1		6.78	<0.010	33.9	243	23.2	1128	0.42	2.4	<2				0.95	<0.2
MW-233S	June-95	MW-233S	June-95	11	650	9.3	8	645	761	6		6.89	<0.010	48.2	189	27	1032	0.58	1.29	<2				<0.5	<0.2
MW-233S	Sept.-95	MW-233S	Sept.-95	12.5	629	<5.0	<1	545	702	5		7.06	<0.010	29.9	140	24	840	0.56	0.1	<2				<0.5	<0.2
MW-233S	Nov-95	MW-233S	Nov-95	10	452	8.2	9	525	475	<1		6.79	<0.010	84.7	130	17	716	<0.02	3.06	<2	5	<0.004	<0.004	<0.5	<0.2
MW-233S	April-96	MW-233S	April-96	6.6	150	1	12	510	320	2.8		7	<0.002	-55	21	88	340	<0.03	<0.02	10	50	<0.01	<0.01	1.3	3.7
MW-233S	June-96	MW-233S	June-96	9.6	260	33	7.5	552	310	1.8		7.2	<0.002	85	110	50	480	<0.03	<0.02	7.8				2	<2
MW-233S	Sept-96	MW-233S	Sept-96	14.7	520	20	<1	950	450	15		6.6	<0.002	55	<5	10	600	<0.03	<0.02	4.9				0.71	<2
MW-233S	Nov-96	MW-233S	Nov-96	9.4	530	5.3	4.6	930	420	4.3		7.96	<0.002	190	27	12	560	<0.03	0.027	4.3				0.91	<2
MW-233S	March-97	MW-233S	March-97	8.3	680	21	6.4	1190	530	3.4		6.5	<0.002	70	48	42	670	<0.03	<0.02	5.8	15	<0.01	<0.01	0.55	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-233D	Nov-90	MW-233D	Nov-90	11	161	11	127	600	170	<3.0	7.9	8.1	0.01	201.2	130	11	550	0.07	<0.1	4.4	<5	<0.004	0.026	<0.5	
MW-233D	Feb-91	MW-233D	Feb-91	10	154	4.9	149	910	170	<3	7.9	7.92	<0.010	177.9	114	10	577	<0.04	<0.04						
MW-233D	May-91	MW-233D	May-91	11	150	19	148.9	740	166	<3	7.9	7.44	<0.010	207.2	85	3.1	574	0.07	0.13						
MW-233D	Aug-91	MW-233D	Aug-91	14	150	5.9	120	1080	166	<3.0	8	7.26	<0.010	268.8	116	5	562	0.03	<0.04						
MW-233D	Nov-91	MW-233D	Nov-91	10	196	1.9	131	999	147	2		7.59	<0.010	323.1	98	2.3	553	0.03	<0.04						
MW-233D	Feb-92	MW-233D	Feb-92	11	194	9.2	136	969	161	1		7.8	<0.010	159.1	119	33	552	0.08	<0.02	1	<5	<0.010	<0.004	<0.5	
MW-233D	May-92	MW-233D	May-92	12	164	7.4	135	952	160	<1.0		7.81	<0.010	198.6	122	52	632	0.05	<0.02						
MW-233D	Aug-92	MW-233D	Aug-92	13	358	<1.0	150	886	1002	<1.0		7.48	<0.010	280.6	130	25	568	<0.04	0.13						
MW-233D	Dec-92	MW-233D	Dec-92	10	162	4	165	1012	167	<1.0		7.48	<0.010	136.7	106	8.3	544	<0.02	<0.02						
MW-233D	Feb-93	MW-233D	Feb-93	10	704	6.3	153	882	118	7		7.69	<0.010	99.3	124	37.5	592	0.07	<0.02						
MW-233D	May-93	MW-233D	May-93	12	160	<1.0	153	603	154	2		7.58	<0.010	109.2	117	2.7	528	0.03	<0.02	<0.5	<5	<0.004	<0.004	<0.5	
MW-233D	Aug-93	MW-233D	Aug-93	12.5	148	<1.0	143	821	151	<1.0		7.31	<0.010	80.2	122	0.9	512	<0.02	<0.02						
MW-233D	Dec-93	MW-233D	Dec-93	9.5	150	33.9	139	831	166	2		7.08	<0.010	108	154	1.1	508	0.07	0.46						
MW-233D	Feb-94	MW-233D	Feb-94	10	154	1.9	140	991	162	<1.0		7.37	<0.010	163.8	113	4.7	532	<0.02	<0.05	<2.0				<0.5	1.1
MW-233D	May-94	MW-233D	May-94	12	156	4.3	144	715	142	14		7.73	<0.010	-12.8	117	2	556	0.03	0.12	<2.0				<0.5	1.01
MW-233D	Aug-94	MW-233D	Aug-94	12.5	158	30.0	146	973	166	2		7.65	<0.010	88.2	131	2.8	522	0.05	0.44	<2.0	10	<0.004	0.01	<0.5	2.64
MW-233D	Nov-94	MW-233D	Nov-94	11.5	162	9.5	140	720	149	3		7.63	<0.010	129.2	121	2.9	484	0.32	0.19	<2.0				<0.5	3.84
MW-233D	March-95	MW-233D	March-95	11	157	25	147	603	152	8		7.16	<0.010	17.4	122	4.5	584	0.41	0.42	<2				<0.5	1.6
MW-233D	June-95	MW-233D	June-95	11.5	153	18.6	150	649	154	<1		7.22	<0.010	48.7	98	3.1	596	0.23	0.29	<2				<0.5	1.4
MW-233D	Sept.-95	MW-233D	Sept.-95	11	169	20.8	130	539	178	<1		7.12	<0.010	30.5	123	9.7	568	0.1	0.07	<2				<0.5	1.5
MW-233D	Nov-95	MW-233D	Nov-95	10.5	160	16.3	130	556	124	<1		7.21	<0.010	85.7	134	5.4	572	<0.02	0.07	<2	5	<0.004	<0.004	<0.5	1.2
MW-233D	April-96	MW-233D	April-96	9.9	170	5.5	13	970	230	8.9		7.2	<0.002	100	110	22	540	<0.03	0.025	<4	10	<0.01	<0.01	1.2	3
MW-233D	June-96	MW-233D	June-96	10.3	170	<1	110	912	180	<1		7.6	<0.002	98	110	18	560	<0.03	<0.02	<4				1.8	<2
MW-233D	Sept-96	MW-233D	Sept-96	11.6	170	23	120	960	170	<1		7.3	<0.002	65	270	14	580	<0.03	<0.02	<4				0.51	<2
MW-233D	Nov-96	MW-233D	Nov-96	11.5	170	<1	4.6	940	160	1.2		6.85	<0.002	90	140	2.3	520	<0.03	<0.02	<4				0.48	<2
MW-233D	March-97	MW-233D	March-97	9.8	180	17	130	1110	160	<1		7.6	0.0027	75	53	7.4	550	<0.03	0.024	<4	10	<0.01	<0.01	0.4	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-234S	Nov-89	MW-234S	Nov-89	11.6	152	13.7	10.7	322	228	7.19	7.66		0.005	-50.4	81.1	188	264	0.09	<0.10	19	<5	<0.005	0.02		
MW-234S	Feb-90	MW-234S	Feb-90		162		4.4		230	3.87			<0.005		77.9	94	321	0.09		13	30			0.96	
MW-234S	Apr-90	MW-234S	Apr-90	10.2	174		<3	423	243	1.93	7.4		<0.005	-38.3	77.7	50	288	<0.04		3	10			0.07	
MW-234S	Nov-90	MW-234S	Nov-90	10	176	<1	4.9	340	260	5.1	7.8	7.3	<0.010	132.5	83	81	312	0.06	<0.1	6.5	<5	<0.004	0.024	<0.5	
MW-234S	Feb-91	MW-234S	Feb-91	9	167	<0.5	5	480	290	<3	7.7	7.97	<0.010	147.1	78	26	347	<0.04	<0.04						
MW-234S	May-91	MW-234S	May-91	11	164	1	1.1	340	248	3.1	7.7	7.36	<0.010	227	60.5	23	337	<0.03	0.13						
MW-234S	Aug-91	MW-234S	Aug-91	13	152	<0.5	<1.0	570	230	<3.0	7.8	7.68	<0.010	293.9	77.6	58	363	<0.03	<0.04						
MW-234S	Nov-91	MW-234S	Nov-91	11	222	3.8	<1	676	228	<1		7.41	<0.010	323.6	85.1	40	328	<0.02	<0.04						
MW-234S	Feb-92	MW-234S	Feb-92	11	172	13.8	5	517	312	<1.0		7.29	<0.010	78.5	83	42	396	0.07	<0.02	0.6	<5	<0.010	<0.004	<0.5	
MW-234S	May-92	MW-234S	May-92	12	178	6	<1.0	486	248	<1.0		7.74	<0.010	354.9	113	59	320	<0.04	0.02						
MW-234S	Aug-92	MW-234S	Aug-92	12	196	<1.0	5.5	487	215	<1		7.51	<0.010	329.9	110	39	384	<0.04	0.14						
MW-234S	Dec-92	MW-234S	Dec-92	10	196	<1.0	<1.0	516	221	<1		7.83	<0.010	294.1	86.6	95	328	<0.02	<0.02						
MW-234S	Feb-93	MW-234S	Feb-93	9	204	8.8	<1.0	635	186	18		7.3	<0.010	250.3	84	150	364	<0.02	0.02						
MW-234S	May-93	MW-234S	May-93	12	184	<1.0	1.5	424	218	4		7.5	<0.010	207.1	88.1	84	324	<0.02	0.06	<0.5	<5	<0.004	<0.004	<0.5	
MW-234S	Aug-93	MW-234S	Aug-93	13	184	<1.0	1.5	451	241	<1.0		7.32	<0.010	165.3	130	90	332	<0.02	<0.02						
MW-234S	Dec-93	MW-234S	Dec-93	9.5	188	5.9	2	469	259	6		7.09	<0.010	259.9	79.5	155	328	<0.02	0.09						
MW-234S	Feb-94	MW-234S	Feb-94	10	188	2.9	1	528	257	<1.0		7.88	<0.010	131.4	87.5	90	300	<0.02	<0.05	<2.0				<0.5	0.9
MW-234S	May-94	MW-234S	May-94	10.5	196	2.2	<1.0	453	287	17		7.57	<0.010	210.8	95.7	67	360	0.02	0.14	<2.0				<0.50	0.84
MW-234S	Aug-94	MW-234S	Aug-94	12	308	<5.0	2.0	524	325	<1		7.26	<0.010	39.7	105	10.4	352	0.10	0.22	<2.0	5	<0.004	<0.004	<0.5	2.22
MW-234S	Nov-94	MW-234S	Nov-94	11.5	198	9.5	2	532	204	5		7.47	<0.010	110.6	81.8	53	328	0.03	0.25	<2.0				<0.5	3.28
MW-234S	March-95	MW-234S	March-95	11	224	10	1	439	301	6		7.24	<0.010	36.8	154	47	424	0.31	0.2	<2				<0.5	<0.2
MW-234S	June-95	MW-234S	June-95	11.5	222	<5.0	7	404	259	15		7.45	<0.010	1.8	84.2	62	400	0.41	0.24	<2				<0.5	<0.2
MW-234S	Sept.-95	MW-234S	Sept.-95	11	179	<5.0	1	349	260	6		7.46	<0.010	48.9	97.2	42	380	0.07	0.06	<2				<0.5	<0.2
MW-234S	Nov-95	MW-234S	Nov-95	10	244	12.2	<1	463	245	<1		7.28	<0.010	50	174	76	488	<0.02	<0.05	<2	10	<0.004	<0.004	<0.5	0.6
MW-234S	April-96	MW-234S	April-96	10.4	210	7.8	18	1290	350	<1		6.7	<0.002	110	120	16	420	<0.03	0.086	<4	50	<0.01	<0.01	0.85	3.1
MW-234S	June-96	MW-234S	June-96	10.9	250	24	<1	721	400	<1		7.4	<0.002	92	22	300	330	<0.03	<0.02	<4				1.8	<2
MW-234S	Sept-96	MW-234S	Sept-96	10.9	250	25	<1	980	440	<1		7	0.0035	165	760	21	580	0.037	<0.02	<4				0.25	<2
MW-234S	Nov-96	MW-234S	Nov-96	10.4	260	<1	2.8	587	370	1		7.5	<0.002	175	210	10	530	<0.03	<0.02	<4				0.53	<2
MW-234S	March-97	MW-234S	March-97	10.2	280	6.4	4.5	1100	450	<1		6.9	<0.002	135	190	197	570	<0.03	<0.02	<4	15	<0.01	<0.01	0.39	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-234D	Nov-89	MW-234D	Nov-89	11.6	78.9	<10.0	16.1	281.5	62.4	2.51	8.5		0.006	-95.6	51.9	27	174	0.11	0.3	10	<5	<0.005	<0.01		
MW-234D	Feb-90	MW-234D	Feb-90		162		40.7		276	2.36			<0.005		103	22	546	0.07		2	10			0.3	
MW-234D	Apr-90	MW-234D	Apr-90	10.7	272		30.8	371	344	8.63	8.63		<0.005	-93.7	88.5	30	361	<0.04		17	10			0.11	
MW-234D	Nov-90	MW-234D	Nov-90	10	188	<1	30.3	420	290	5	7.7	7.2	<0.010	130.6	120	35	401	0.08	<0.1	7.4	10	<0.004	0.032	<0.5	
MW-234D	Feb-91	MW-234D	Feb-91	10	184	<0.5	34.7	620	300	3.4	7.5	7.83	<0.010	115.4	98	17	448	<0.04	<0.04						
MW-234D	May-91	MW-234D	May-91	11	178	5	32.9	450	286	3.2	7.5	7.36	<0.010	222.9	78.5	12.5	437	0.03	0.13						
MW-234D	Aug-91	MW-234D	Aug-91	10	176	1.6	26	670	270	<3.0	7.8	7.56	<0.010	280.3	79.2	10	437	<0.03	<0.04						
MW-234D	Nov-91	MW-234D	Nov-91	11	220	1.9	21	659	264	<1		7.46	<0.010	303.6	90	4.1	364	<0.02	0.07						
MW-234D	Feb-92	MW-234D	Feb-92	11	186	18	25.7	641	284	<1.0		7.22	<0.010	79	90	19	364	0.06	<0.02	<0.5	<5	<0.010	<0.004	<0.5	
MW-234D	May-92	MW-234D	May-92	13	234	6	40.5	662	331	<1.0		7.44	<0.010	290.1	113	56	400	0.07	0.06						
MW-234D	Aug-92	MW-234D	Aug-92	12	166	1	30.5	592	245	<1		7.36	<0.010	315.2	106	4.3	420	<0.04	0.22						
MW-234D	Dec-92	MW-234D	Dec-92	10	228	<1.0	30.5	776	355	<1		7.39	<0.010	37.9	96.8	38	456	0.05	<0.02						
MW-234D	Feb-93	MW-234D	Feb-93	9	212	2.6	34.5	674	225	12		7.26	<0.010	227.3	83	34.5	428	<0.02	<0.02						
MW-234D	May-93	MW-234D	May-93	10.5	222	<1.0	38	431	271	7		7.36	<0.010	191	90.6	18	428	<0.02	<0.02	<0.5	<5	<0.004	<0.004	<0.5	
MW-234D	Aug-93	MW-234D	Aug-93	12.5	218	<1.0	41	563	301	<1.0		7.2	<0.010	134.6	107	3	456	<0.02	<0.02						
MW-234D	Dec-93	MW-234D	Dec-93	10	220	4.9	31	638	308	<1.0		6.95	<0.010	276.4	86.8	23.5	416	<0.02	0.06						
MW-234D	Feb-94	MW-234D	Feb-94	10	218	<1.0	34	683	283	<1.0		7.64	<0.010	157.6	86	26	388	<0.02	0.45	<2.0				<0.5	0.89
MW-234D	May-94	MW-234D	May-94	11	220	3.2	43	554	300	26		7.37	<0.010	238	97.6	6.9	440	0.22	0.12	<2.0				<0.50	0.92
MW-234D	Aug-94	MW-234D	Aug-94	12	252	10.0	37.0	704	322	<1		7.40	<0.010	85.2	115	9.2	480	0.06	0.34	2.2	5	<0.004	<0.004	<0.5	2.40
MW-234D	Nov-94	MW-234D	Nov-94	11	262	9.5	40	585	301	10		7.33	<0.010	127.4	89.3	11.2	500	0.03	0.21	<2.0				<0.5	3.42
MW-234D	March-95	MW-234D	March-95	10.5	214	5	33	456	279	4		7.22	<0.010	72.8	105	4.3	428	0.19	0.3	<2				<0.5	<0.2
MW-234D	June-95	MW-234D	June-95	12.5	250	<5.0	39	476	307	11		7.24	<0.010	16	79	7.2	500	0.22	0.15	<2				<0.5	<0.2
MW-234D	Sept.-95	MW-234D	Sept.-95	12	270	12.5	37	435	323	<1		7.29	<0.010	31.7	99.4	7.8	520	0.07	<0.05	<2				<0.5	<0.2
MW-234D	Nov-95	MW-234D	Nov-95	10.5	236	<5.0	33	425	228	<1		7.25	<0.010	54.6	91.9	18	456	<0.02	<0.05	<2	<5	<0.004	<0.004	<0.5	<0.2
MW-234D	April-96	MW-234D	April-96	10.2	160	<1	8.6	690	240	2.3		7	<0.002	-35	83	150	340	<0.03	0.091	<4	10	<0.01	<0.01	1	3.2
MW-234D	June-96	MW-234D	June-96	11.2	260	1	28	718	350	<1		7.2	<0.002	78	84	24	520	<0.03	<0.02	<4				1.2	<2
MW-234D	Sept-96	MW-234D	Sept-96	10.8	230	1	31	740	300	1		7	0.0035	60	84	7.4	490	<0.03	<0.02	<4				0.34	<2
MW-234D	Nov-96	MW-234D	Nov-96	11.5	220	<1	26	770	270	2.4		7.45	<0.002	160	91	11	380	<0.03	<0.02	<4				0.56	<2
MW-234D	March-97	MW-234D	March-97	9.9	160	8.6	28	550	200	1.1		7.4	<0.002	135	74	70	350	<0.03	0.092	<4	15	<0.01	<0.01	0.61	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-235S	Nov-89	MW-235S	Nov-89	11.2	249	96.5	14.6	483	299	5.25	7.29		0.011	-28.5	72.1	91	506	0.14	<0.10	13	20	<0.005	<0.01		
MW-235S	Feb-90	MW-235S	Feb-90		278		20.3		422	7.05			<0.005		69.8	32	405	0.35			5			0.68	
MW-235S	Apr-90	MW-235S	Apr-90	11.5	273		15.1	578	310	3.95	6.36		0.005	30	69.3	77	440	<0.04		1	60			0.47	
MW-235S	Nov-90	MW-235S	Nov-90	10	295	24	14.7	460	343	9.1	7.5	7.1	<0.010	80.5	70	98	426	0.012	<0.1	6	<5	<0.004	0.06	<0.5	
MW-235S	Feb-91	MW-235S	Feb-91	10	286	13.5	13.9	620	360	29	7.4	7.71	<0.010	-42.6	62.7	190	444	0.27	<0.04						
MW-235S	May-91	MW-235S	May-91	11	274	7.6	11.7	500	340	8.1	7.3	7.04	<0.010	135.6	55.5	6.4	419	0.04	0.02						
MW-235S	Aug-91	MW-235S	Aug-91	11	260	13.3	14.6	750	320	<3.0	7.5	7.51	<0.010	173.3	63.2	76	536	0.04	<0.04						
MW-235S	Nov-91	MW-235S	Nov-91	13	294	19.2	12	804	324	<1.		7.32	<0.010	66.4	67.3	60	400	0.04	<0.04						
MW-235S	Feb-92	MW-235S	Feb-92	11	364	14.7	15.8	744	370	3		7.15	<0.010	46.2	81.6	85	444	0.08	<0.02	1	<5	<0.010	<0.004	<0.5	
MW-235S	May-92	MW-235S	May-92	12	306	<1.0	36.4	752	389	<1.0		7.3	<0.010	37.1	87	73	466	0.04	0.03						
MW-235S	Aug-92	MW-235S	Aug-92	12	222	3.1	18.5	683	305	<1		7.16	<0.010	19	103	40	282	<0.04	0.13						
MW-235S	Dec-92	MW-235S	Dec-92	10	324	6	10	693	314	<1		7.32	<0.010	87	95.8	138	432	<0.02	<0.02						
MW-235S	Feb-93	MW-235S	Feb-93	9	318	18.5	10.5	782	274	28		7.1	<0.010	32.6	80.5	124	460	0.06	<0.02						
MW-235S	May-93	MW-235S	May-93	12.5	316	<1.0	9	469	315	8		7.25	<0.010	-9.5	78.1	65	444	0.04	<0.02	0.2	<5	<0.004	<0.004	<0.5	
MW-235S	Aug-93	MW-235S	Aug-93	14	312	<1.0	10	610	369	<1.0		7.09	<0.010	-69.7	105	58	468	<0.02	<0.02						
MW-235S	Dec-93	MW-235S	Dec-93	10.5	312	15.7	11	652	380	18		7.08	<0.010	50.5	71.6	125	472	<0.02	<0.05						
MW-235S	Feb-94	MW-235S	Feb-94	10.5	332	4.8	9.5	749	336	7		7.31	<0.010	125.4	66.2	73	440	<0.02	<0.05	<2.0				<0.5	0.84
MW-235S	May-94	MW-235S	May-94	11.5	332	17.2	8.5	603	381	34		7.19	<0.010	45.7	84.2	35	440	0.06	0.14	<2.0				<0.50	0.94
MW-235S	Aug-94	MW-235S	Aug-94	13	340	15.0	11.0	743	402	2		7.16	<0.010	33.5	99.4	83	480	0.06	0.25	<2.0	50	<0.004	0.01	<0.5	2.30
MW-235S	Nov-94	MW-235S	Nov-94	11.5	380	14.3	10	599	313	11		7.28	<0.010	-15	81.8	41	564	0.06	0.3	<2.0				0.63	3.6
MW-235S	March-95	MW-235S	March-95	9.5	367	10	11	459	369	31		6.53	<0.010	32.3	120	29	524	1.11	0.43	<2				<0.5	<0.2
MW-235S	June-95	MW-235S	June-95	12.5	363	14	17	497	358	7		7.12	<0.010	-117.8	68.1	46	528	0.2	0.12	<2				<0.5	<0.2
MW-235S	Sept.-95	MW-235S	Sept.-95	11.5	357	12.5	10	426	383	3		7.31	<0.010	-112.8	73.7	47	508	0.07	0.1	<2				<0.5	<0.2
MW-235S	Nov-95	MW-235S	Nov-95	10.5	378	16.3	10	441	344	<1		7.27	<0.010	-115.1	90.3	70	536	<0.02	<0.05	<2	35	<0.004	<0.004	<0.5	<0.2
MW-235S	April-96	MW-235S	April-96	10.6	380	37	13	780	440	5.5		6.6	<0.002	-90	79	310	500	0.051	0.031	<4	250	<0.01	<0.01	0.96	3
MW-235S	June-96	MW-235S	June-96	10.9	170	14	6.6	785	220	3		7.6	<0.002	95	57	220	260	<0.03	<0.02	<4				1.5	<2
MW-235S	Sept-96	MW-235S	Sept-96	11.4	240	20	6	760	440	2.6		7	<0.002	55	66	25	520	<0.03	<0.02	<4				0.46	<2
MW-235S	Nov-96	MW-235S	Nov-96	11	380	20	11	724	360	5.8		7.29	<0.002	155	85	50	540	<0.03	<0.02	<4				1.1	<2
MW-235S	March-97	MW-235S	March-97	9.2	420	28	14	829	390	4.2		6.9	<0.002	-50	61	241	500	<0.03	<0.02	<4	30	<0.01	<0.01	5.2	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-235D	Nov-89	MW-235D	Nov-89	11.5	208	21	20.5	394.5	205	12.2	7.89		0.007	-62.35	75.6	44	315	0.09	<0.04	24	5	<0.005	<0.01		
MW-235D	Feb-90	MW-235D	Feb-90		261		6.9		260	13			<0.005		51.4	22	360	<0.04		9	10			0.2	
MW-235D	Apr-90	MW-235D	Apr-90	11.1	72.1		<3	496	53.6	10.2	8.15		<0.005	-67.5	87.7	72	352	<0.04		16	15			0.13	
MW-235D	Nov-90	MW-235D	Nov-90	9	288	<1.0	5.9	360	315	9.5	7.6	7.2	<0.010	118	47	35	359	0.07	<0.1	5.6	<5	<0.004	0.024	<0.5	
MW-235D	Feb-91	MW-235D	Feb-91	10	302	<0.5	6	520	340	26	7.5	7.53	<0.010	245.8	49.2	15	400	0.05	<0.04						
MW-235D	May-91	MW-235D	May-91	12	304	2.6	1.2	420	350	6.1	7.4	7.1	<0.010	131.8	47.5	28	424	<0.03	0.15						
MW-235D	Aug-91	MW-235D	Aug-91	12	272	8.1	3.1		300	<3.0	7.4	7.63	<0.010		41	21	442	<0.03	<0.04						
MW-235D	Nov-91	MW-235D	Nov-91	12	276	17.3	<1	614	276	<1		7.33	<0.010	162.5	40.3	9	320	<0.02	<0.04						
MW-235D	Feb-92	MW-235D	Feb-92	11	290	8.3	5.9	595	294	3		7.3	<0.010	122.6	40	15	320	0.06	<0.02	0.5	<5	<0.010	<0.004	<0.5	
MW-235D	May-92	MW-235D	May-92	12	274	9	2	564	332	<1.0		7.44	<0.010	150.2	64.8	8	376	<0.04	0.16						
MW-235D	Aug-92	MW-235D	Aug-92	12	282	<1.0	6	552	259	<1		7.22	<0.010	135.2	72.8	36	392	<0.04	0.14						
MW-235D	Dec-92	MW-235D	Dec-92	10	336	<1.0	3.5	686	384	<1		7.29	<0.010	122.2	72.3	25	348	<0.02	<0.02						
MW-235D	Feb-93	MW-235D	Feb-93	9	276	8.8	6.5	623	232	20		7.21	<0.010	99.8	45.5	18.5	384	<0.02	<0.02						
MW-235D	May-93	MW-235D	May-93	13	250	<1.0	9	389	242	7		7.42	<0.010	79.3	76.9	7	336	<0.02	<0.02	0.8	<5	0.006	<0.004	<0.5	
MW-235D	Aug-93	MW-235D	Aug-93	14	248	<1.0	12	469	239	<1.0		7.24	<0.010	82.1	83	6	308	<0.02	<0.02						
MW-235D	Dec-93	MW-235D	Dec-93	10.5	220	3.9	14	481	242	4		7.04	<0.010	107.1	49.3	9.4	324	<0.02	0.11						
MW-235D	Feb-94	MW-235D	Feb-94	10.5	128	7.7	4.5	341	128	18		7.32	<0.010	189.9	27.2	38	180	0.39	0.17	<2.0				<0.5	0.46
MW-235D	May-94	MW-235D	May-94	11	172	15.1	2.5	347	178	19		7.65	<0.010	39.2	37.7	2.5	220	0.34	0.11	2.2				<0.50	0.81
MW-235D	Aug-94	MW-235D	Aug-94	13.5	132	<5.0	8.5	420	192	2		7.45	<0.010	27.1	58.6	4.2	248	0.39	0.09	<2.0	10	<0.004	0.005	<0.5	2.22
MW-235D	Nov-94	MW-235D	Nov-94	11	206	<5.0	12	386	202	21		7.68	<0.010	-25.8	59.5	5.4	280	0.29	0.33	<2.0				0.8	3.28
MW-235D	March-95	MW-235D	March-95	10.5	190	5	14	351	180	9		6.73	<0.010	30.9	67.6	4.8	292	0.71	0.26	<2				<0.5	<0.2
MW-235D	June-95	MW-235D	June-95	13	214	14	16	380	172	9		7.32	<0.010	-109.8	39.4	4.3	320	0.34	0.62	<2				<0.5	<0.2
MW-235D	Sept.-95	MW-235D	Sept.-95	11	188	12.5	15	341	211	9		7.39	<0.010	-58.5	58.9	9.1	320	0.24	<0.05	<2				<0.5	0.3
MW-235D	Nov-95	MW-235D	Nov-95	10.5	164	8.2	13	334	167	<1		7.43	<0.010	-70.8	59.3	45	288	0.1	<0.05	<2	10	<0.004	<0.004	<0.5	<0.2
MW-235D	April-96	MW-235D	April-96	10.3	140	28	10	370	210	2.9		7.3	<0.002	-40	40	98	230	<0.03	0.033	<4	100	0.012	<0.01	1.3	2.6
MW-235D	June-96	MW-235D	June-96	11	370	29	6.6	439	400	1.6		7.1	<0.002	100	58	20	500	0.065	<0.02	<4				1.7	<2
MW-235D	Sept-96	MW-235D	Sept-96	11.5	320	38	7	440	170	1.7		7.5	<0.002	245	67	27	290	0.12	0.1	<4				0.72	<2
MW-235D	Nov-96	MW-235D	Nov-96	11	180	5.3	14	506	180	2.5		7.72	<0.002	150	91	11	280	0.088	0.039	<4				0.5	<2
MW-235D	March-97	MW-235D	March-97	9.6	180	19	15	508	180	1.6		7.4	<0.002	145	54	50	310	0.038	<0.02	<4	20	<0.01	<0.01	0.62	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Quality Standards and Guidance Values		Class GA Groundwater Quality Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-236S	Nov-89	MW-236S	Nov-89	10.9	156	<10.0	13.8	355	212	2.22	7.72		0.016	-53.3	48.2	35	287	0.11	<0.10	10	<5	<0.005	0.03		
MW-236S	Feb-90	MW-236S	Feb-90		169		16.4		234	1.12			<0.005		65.4	3.08	252	0.19		5	10			78	
MW-236S	Apr-90	MW-236S	Apr-90	12.4	168		14.3	487	200	11.5	7.6		<0.005	-32.4	65.9	19	334	<0.04		44	5			0.19	
MW-236S	Nov-90	MW-236S	Nov-90	10	180	49	17.1	360	255	15	7.8	7.1	<0.010	105.2	68	625	314	0.05	<0.1	9.2	5	<0.004	0.033	<0.5	
MW-236S	Feb-91	MW-236S	Feb-91	9	172	4.3	15.9	520	240	14	7.8	7.45	<0.010	64.5	65	145	353	0.12	<0.04						
MW-236S	May-91	MW-236S	May-91	11	168	2.2	12.8	360	236	<3	7.7	7.27	<0.010	229.8	60	109	313	0.03	<0.04						
MW-236S	Aug-91	MW-236S	Aug-91	11	170	6.7	14.6	530	232	12	7.9	6.98	<0.010	169.7	64.8	74	347	0.05	<0.04						
MW-236S	Nov-91	MW-236S	Nov-91	11	170	5.8	12	482	210	<1		7.68	<0.010	366.9	58	17	307	0.03	<0.04						
MW-236S	Feb-92	MW-236S	Feb-92	10	204	10.6	15.8	487	216	3		7.67	<0.010	328.9	51	42	272	0.06	<0.02	<0.5	<5	<0.010	<0.004	<0.5	
MW-236S	May-92	MW-236S	May-92	12	200	6.4	14	469	213	<1.0		7.54	<0.010	331.3	63	84	336	<0.04	0.1						
MW-236S	Aug-92	MW-236S	Aug-92	12	168	1	16.5	448	190	<1		7.49	<0.010	359.5	72.8	60	372	<0.04	<0.02						
MW-236S	Dec-92	MW-236S	Dec-92	10	192	8.9	13	582	185	<1		7.69	<0.010	291.1	69.3	59	300	<0.02	<0.02						
MW-236S	Feb-93	MW-236S	Feb-93	10	202	7	16	481	166	13		7.35	<0.010	258.2	54	355	384	<0.02	<0.02						
MW-236S	May-93	MW-236S	May-93	12.5	172	<1.0	22	350	201	5		6.86	<0.010	306.4	75.1	86	292	<0.02	<0.02	1	<5	0.005	<0.004	<0.5	
MW-236S	Aug-93	MW-236S	Aug-93	14.5	174	2.92	19	356	205	<1.0		6.86	<0.010	154.2	61.6	110	312	<0.02	<0.02						
MW-236S	Dec-93	MW-236S	Dec-93	10	210	3.9	17	498	222	1		7.04	0.027	170.4	117	410	868	0.06	0.07						
MW-236S	Feb-94	MW-236S	Feb-94	10.5	222	8.9	17	670	256	<1.0		7.18	<0.010	260.6	76.1	425	316	<0.02	<0.05	<2.0				<0.5	0.8
MW-236S	May-94	MW-236S	May-94	11.5	212	12.9	30	473	252	17		7.16	0.033	150.2	77.6	70	400	<0.02	0.08	3				<0.5	0.79
MW-236S	Aug-94	MW-236S	Aug-94	12.5	176	9.5	20.5	499	242	<1		7.12	<0.010	61.1	71.2	34.5	348	0.03	0.13	<2.0	<5	<0.004	<0.004	<0.5	2.00
MW-236S	Nov-94	MW-236S	Nov-94	11.5	242	14.3	32	465	288	4		7.08	<0.010	108.4	85.2	45	472	0.02	0.26	<2.0				<0.5	2.05
MW-236S	March-95	MW-236S	March-95	10	327	10	43	512	406	15		6.48	<0.010	58.8	120	63	620	0.72	0.42	<2				<0.5	<0.2
MW-236S	June-95	MW-236S	June-95	13.5	258	<5.0	40	448	289	9		7.04	<0.010	1.6	79	120	468	0.34	0.3	6				<0.5	<0.2
MW-236S	Sept.-95	MW-236S	Sept.-95	11	155	12.5	21	330	191	<1		6.87	<0.010	100.1	48.5	240	328	0.11	0.13	<2				<0.5	<0.2
MW-236S	Nov-95	MW-236S	Nov-95	10	204	12.2	27	374	258	<1		7.56	<0.010	94.7	86.4	120	392	<0.02	0.08	<2	10	<0.004	<0.004	<0.5	<0.2
MW-236S	April-96	MW-236S	April-96	9.8	260	41	41	770	450	2.5		7.9	<0.002	210	110	>900	530	<0.03	0.13	6.6	150	<0.01	<0.01	0.86	3
MW-236S	June-96	MW-236S	June-96	10.6	220	44	23	5400	210	1.1		7.4	<0.002	220	45	360	390	0.14	0.052	<4				3.7	<2
MW-236S	Sept-96	MW-236S	Sept-96	13.4	240	28	19	560	260	1.1		7.7	<0.002	310	520	28	360	0.038	0.059	<4				0.35	<2
MW-236S	Nov-96	MW-236S	Nov-96	10.1	230	<1	32	712	260	1.8		6.61	<0.002	125	83	54	370	<0.03	0.04	<4				0.59	<2
MW-236S	March-97	MW-236S	March-97	9.8	170	17	36	910	370	1.8		6.7	<0.002	135	66	637	380	<0.03	0.053	<4	10	<0.01	<0.01	0.81	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-236D	Nov-89	MW-236D	Nov-89	11.8	121	<0.01	77.5	363	167	0.84	8.03		0.011	-71.15	10.1	135	266	0.07	<0.10	21	5	<0.005	<0.01		
MW-236D	Feb-90	MW-236D	Feb-90		113		75.6		167	1.28			<0.005		<10.0	14.3	260	0.37		47	10			35	
MW-236D	Apr-90	MW-236D	Apr-90	11.9	106		81	419	172	19.2	6.55		<0.005		10.6	12	281	<0.04		92	15			0.04	
MW-236D	Nov-90	MW-236D	Nov-90	10	119	8.8	76.8	340	185	7.2	7.7	7.35	<0.05	-66.8	13	55	298	<0.1	<0.1	2.9	<5	<0.004	0.026	<0.5	
MW-236D	Feb-91	MW-236D	Feb-91	10	116	<0.5	81.4	1000	190	9	8	8 11	<0.010	81.1	13.5	40	369	0.14	<0.04						
MW-236D	May-91	MW-236D	May-91	11	110	24	82.9	360	186	8	7.9	7.33	<0.010	222.8	13.5	61	331	0.05	<0.04						
MW-236D	Aug-91	MW-236D	Aug-91	12	108	9.8	82.3	550	182	4.6	7.9	7.28	<0.010	280.7	13.4	13	387	<0.03	<0.04						
MW-236D	Nov-91	MW-236D	Nov-91	10	108	2.9	78	530	160	<1		7.8	<0.010	392	11.4	5	306	0.03	<0.04						
MW-236D	Feb-92	MW-236D	Feb-92	11	126	15.8	80.2	525	108	2		7.59	<0.010	263.1	11.6	3.4	252	0.07	<0.02	<0.5	<5	<0.010	<0.004	<0.5	
MW-236D	May-92	MW-236D	May-92	13	116	1.8	70	494	163	<1.0		7.67	<0.010	269.2	19.2	1.5	352	0.05	0.08						
MW-236D	Aug-92	MW-236D	Aug-92	13	114	3	83	459	142	<1		7.63	<0.010	296.7	18.8	14.5	216	<0.04	0.02						
MW-236D	Dec-92	MW-236D	Dec-92	11	132	11.9	70	619	144	<1		7.79	<0.010	271.1	45.8	5.2	240	<0.02	<0.02						
MW-236D	Feb-93	MW-236D	Feb-93	11	114	<1.0	75	494	125	7		7.46	<0.010	221.1	13.5	1.6	296	0.02	0.04						
MW-236D	May-93	MW-236D	May-93	13	116	<1.0	75	346	140	4		7.49	<0.010	268.5	49.3	1.4	240	<0.02	<0.02	1	<5	0.004	<0.004	<0.5	
MW-236D	Aug-93	MW-236D	Aug-93	14	114	1.94	74	365	159	<1.0		7.24	<0.010	7	44.3	1.1	284	<0.02	<0.02						
MW-236D	Dec-93	MW-236D	Dec-93	11	116	3.9	77	447	166	<1.0		7.2	0.014	142.8	78	1.3	292	0.06	<0.05						
MW-236D	Feb-94	MW-236D	Feb-94	10	112	<1.0	75	502	109	<1.0		7.45	<0.010	232.5	38.2	3	256	<0.02	<0.05	<2.0				<0.5	0.94
MW-236D	May-94	MW-236D	May-94	11	120	4.3	75	376	144	14		7.75	<0.010	156.9	31	1.9	288	0.07	0.04	2.2				<0.5	0.93
MW-236D	Aug-94	MW-236D	Aug-94	12.5	112	14.3	73	475	164	<1.0		7.34	<0.010	128.0	17.9	3	260	0.04	0.16	<2.0	5	<0.004	<0.004	<0.5	2.24
MW-236D	Nov-94	MW-236D	Nov-94	11	145	19	75	411	134	<1		7.52	<0.010	154.7	14.4	3.7	316	<0.02	0.13	<2.0				<0.5	2.55
MW-236D	March-95	MW-236D	March-95	11	131	<5.0	76	371	154	4		6.79	0.038	49.9	32.9	4.7	288	0.34	0.25	<2				<0.5	0.7
MW-236D	June-95	MW-236D	June-95	14	121	<5.0	72	391	160	<1		7.03	<0.010	-17.7	15.8	2.6	296	0.29	0.12	<2				<0.5	0.5
MW-236D	Sept.-95	MW-236D	Sept.-95	12	123	<5.0	71	339	158	18		6.97	<0.010	93.8	10.2	3.3	292	0.09	<0.05	<2				<0.5	0.7
MW-236D	Nov-95	MW-236D	Nov-95	10.5	112	<5.0	73	345	147	<1		7.69	<0.010	23.5	26.7	4.2	288	<0.02	<0.05	<2	5	<0.004	<0.004	<0.5	1.2
MW-236D	April-96	MW-236D	April-96	11.3	120	<1	69	450	230	<1		7.2	<0.002	30	14	230	260	<0.03	0.023	<4	10	<0.01	<0.01	0.41	2.8
MW-236D	June-96	MW-236D	June-96	11.2	150	1	62	459	200	<1		7.7	<0.002	230	10	10	280	<0.03	<0.02	<4				6.0	<2
MW-236D	Sept-96	MW-236D	Sept-96	10.9	95	18	57	500	160	<1		7.3	<0.002	387	12	12	260	<0.03	<0.02	<4				0.5	<2
MW-236D	Nov-96	MW-236D	Nov-96	9.9	120	<1	60	467	140	1.2		6.93	<0.002	190	13	9.4	230	<0.03	<0.02	<4				0.5	<2
MW-236D	March-97	MW-236D	March-97	9.6	290	4.3	64	557	140	<1		6.2	<0.002	135	30	280	270	<0.03	<0.02	<4	10	<0.01	<0.01	0.5	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PS247-1	Dec-92	PS247-1	Dec-92	11.5	688	16.8	9	1853	589	2		6.65	<0.010	168.3	100	63	876	0.02	<0.02						
PS247-1	Feb-93	PS247-1	Feb-93	8.5	654	15.3	<1.0	988	461	70		6.21	<0.010	237.2	96.5	86	812	<0.02	<0.02						
PS247-1	Jun-93	PS247-1	Jun-93	11.5	616	<1.0	1	469	582	8		6.77	<0.010	286.5	93.1	37	760	<0.02	<0.02	1	<5	<0.004	<0.004	<0.5	
PS247-1	Sep-93	PS247-1	Sep-93	14.5	636	2.92	2	721	681	20		6.56	<0.010	105.9	98.6	33	752	<0.02	<0.02						
PS247-1	Dec-93	PS247-1	Dec-93	12.5	552	6.4	2	962	564	34		6.86	<0.010	173.8	76.2	28	696	<0.02	0.07						
PS247-1	Mar-94	PS247-1	Mar-94	9.5	556	4.8	1.5	1356	486	120		6.68	<0.010	224.7	80.5	9	592	<0.02	<0.05	<2.0				<0.5	0.93
PS247-1	May-94	PS247-1	May-94	11.5	576	19 4	<1.0	764	309	67		6.56	<0.010	218.2	59.5	37	680	0.04	0.12	<2.0				<0.5	1.12
PS247-1	Aug-94	PS247-1	Aug-94	13.5	588	8.9	1.0	1072	596	9		6.68	<0.010	31.9	82.1	22	684	0.15	0.74	<2.0	100	<0.004	<0.004	<0.5	2.39
PS247-1	Nov-94	PS247-1	Nov-94	13	577	8.7	1	756	422	37		6.72	<0.010	223.5	58.1	12	720	0.08	0.07	<2.0				0.58	4.9
PS247-1	March-95	PS247-1	March-95	10.5	541	16.7	<1	537	541	12		6.37	<0.010	59.6	65.3	7.4	636	0.08	0.24	<2				<0.5	<0.2
PS247-1	June-95	PS247-1	June-95	11.5	529	18.6	1	544	471	4		6.8	<0.010	84.3	61.7	18.4	620	0.52	0.17	<2				<0.5	<0.2
PS247-1	Sept.-95	PS247-1	Sept.-95	14	604	20.8	<1	469	530	12		6.41	<0.010	135.1	69.1	21	748	0.36	0.12	<2				<0.5	<0.2
PS247-1	Dec-95	PS247-1	Dec-95	9	576	<5.0	<1	456	495	<1		6.78	<0.010	-14.6	98.7	27	760	0.03	0.07	<2	15	<0.004	<0.004	<0.5	<0.2
PS247-1	April-96	PS247-1	April-96	8.8	560	17	<1	1120	640	4		7	<0.002	185	72	41	690	<0.03	0.058	<4	15	<0.01	<0.01	0.47	3.2
PS247-1	June-96	PS247-1	June-96	10.5	590	5.1	<1	1010	490	2.7		6.7	<0.002	240	52	51	610	0.037	<0.02	<4				4.0	<2
PS247-1	Sept-96	PS247-1	Sept-96	13.7	660	23	<1	1100	450	10		6.6	0.0033	108	67	5.3	660	<0.03	<0.02	<4				0.3	<2
PS247-1	Nov-96	PS247-1	Nov-96	13	510	25	<1	950	420	4.7		7.02	<0.002	80	78	14	680	<0.03	<0.02	<4				0.67	<2
PS247-1	March-97	PS247-1	March-97	8.5	570	81	<1	1020	410	4.6		6.8	<0.002	120	56	127	550	<0.03	<0.02	<4	10	<0.01	<0.01	0.24	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PS247-2	Dec-92	PS247-2	Dec-92	10.5	502	15	3	1426	527	3		7.04	<0.010	192.1	100	49	668	1.31	<0.02						
PS247-2	Feb-93	PS247-2	Feb-93	9	542	1.8	3	912	437	55		6.48	<0.010	254.1	109	25	720	<0.02	<0.02						
PS247-2	Jun-93	PS247-2	Jun-93	11.5	570	1.7	2	461	587	6		6.81	<0.010	299.7	126	5.3	768	<0.02	<0.02	0.8	<5	<0.004	<0.004	<0.5	
PS247-2	Sep-93	PS247-2	Sep-93	14.5	650	<1.0	3	749	777	<1.0		6.58	<0.010	128	113	4.8	832	<0.02	0.05						
PS247-2	Dec-93	PS247-2	Dec-93	12	580	1.8	3	1306	680	24		6.77	<0.010	202.3	96	18	748	<0.02	0.05						
PS247-2	Mar-94	PS247-2	Mar-94	10.5	580	<1.0	2	1228	648	100		6.96	<0.010	278.2	109	3.3	688	<0.02	<0.05	<2.0				<0.5	0.89
PS247-2	May-94	PS247-2	May-94	12	636	<1.0	1	861	593	47		6.67	<0.010	251.5	115	1.9	746	0.03	0.16	<2.0				<0.5	1.02
PS247-2	Aug-94	PS247-2	Aug-94	13	644	<5.0	1.5	1177	730	1		6.74	<0.01	105	117	5.7	804	<0.02	0.53	<2.0	20	<0.004	0.004	<0.5	2.44
PS247-2	Nov-94	PS247-2	Nov-94	12.5	618	<5.0	3	905	528	39		6.98	<0.010	251.3	108	4.8	860	0.08	0.38	<2.0				0.9	4.5
PS247-2	March-95	PS247-2	March-95	12	571	16.7	2	607	674	1		6.42	<0.010	146	115	3.8	788	0.08	0.12	<2				<0.5	<0.2
PS247-2	June-95	PS247-2	June-95	12.5	547	9.3	3	653	509	7		6.78	<0.010	92.7	98.5	18	732	0.6	0.07	<2				0.62	<0.2
PS247-2	Sept.-95	PS247-2	Sept.-95	13	528	12.5	1	482	525	18		6.56	<0.010	-32.3	118	15	740	0.26	<0.05	<2				<0.5	<0.2
PS247-2	Dec-95	PS247-2	Dec-95	9.5	536	<5.0	3	534	543	<1		6.76	<0.010	51	112	11	748	0.03	<0.05	<2	5	<0.004	<0.004	<0.5	<0.2
PS247-2	April-96	PS247-2	April-96	Monitoring Well Dry																					
PS247-2	June-96	PS247-2	June-96	10.7	71	14	2.8	1180	520	3		6.7	<0.002	250	56	14	740	<0.03	0.14	<4				2.2	<2
PS247-2	Sept-96	PS247-2	Sept-96	12.3	760	5.3	<1	1200	520	2.5		6.8	0.0045	58	67	6.4	740	<0.03	0.12	<4				0.39	<2
PS247-2	Nov-96	PS247-2	Nov-96	11.4	620	10	3.7	1130	500	2.6		6.72	<0.002	110	95	19	720	<0.03	0.078	<4				0.36	<2
PS247-2	March-97	PS247-2	March-97	9.8	390	23	2.7	1190	540	4.1		6.7	<0.002	180	66	3	670	<0.03	0.02	<4	10	<0.01	<0.01	0.24	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PS247-3	Dec-92	PS247-3	Dec-92	11.5	704	79.6	10	1791	600	34		6.59	<0.010	102.2	82.9	430	988	3.3	<0.02							
PS247-3	Feb-93	PS247-3	Feb-93	9.5	688	76.5	5	1057	479	<1.0		6.19	<0.010	30.2	52.5	395	888	<0.02	<0.02							
PS247-3	Jun-93	PS247-3	Jun-93	11	492	66.8	4	451	477	22		6.62	<0.010	47.6	89.4	185	772	3.39	0.15	4.8	8000	<0.004	<0.004	5.4	
PS247-3	Sep-93	PS247-3	Sep-93	15.5	520	272	8.5	684	469	14		6.38	<0.010	-15.3	101	230	756	5.73	<0.02							
PS247-3	Dec-93	PS247-3	Dec-93	12.5	572	46	8	1010	544	76		6.61	<0.010	72.6	74.3	135	768	0.84	0.18							
PS247-3	Mar-94	PS247-3	Mar-94	10	528	108	7.5	1116	520	160		6.85	<0.010	241.2	80.5	66	636	2.31	<0.05	3.6				3.22	0.17
PS247-3	May-94	PS247-3	May-94	12	448	66.7	4.7	718	383	64		6.55	<0.010	261.9	103	23	586	1.25	1.01	4.6				3.44	0.86
PS247-3	Aug-94	PS247-3	Aug-94	13	428	17.8	5.0	841	434	12		6.64	<0.010	47.1	87.9	41	620	0.56	0.27	<2.0	500	<0.004	0.009	<0.5	1.86
PS247-3	Nov-94	PS247-3	Nov-94	13	505	52.2	5	652	361	44		6.68	<0.010	226.9	68.9	25	696	2.3	0.13	4.8				3.7	1.95
PS247-3	March-95	PS247-3	March-95	11	396	38.9	4	540	467	12		6.43	<0.010	154.1	87.9	46	580	0.82	0.44	<2				1.21	<0.2
PS247-3	June-95	PS247-3	June-95	11.5	586	140	3	506	374	19		6.63	<0.010	-63.3	79.3	82	564	6.05	0.23	13				7.8	0.7
PS247-3	Sept.-95	PS247-3	Sept.-95	13	440	347	<1	463	278	27		6.36	<0.010	-71.2	77.1	310	648	10.7	<0.05	<2				9.16	<0.2
PS247-3	Dec-95	PS247-3	Dec-95	10.5	464	75	3	432	213	<1		6.61	<0.010	-18.2	71	110	676	2.48	0.24	<2	150	<0.004	<0.004	2.12	<0.2
PS247-3	April-96	PS247-3	April-96	8.7	440	97	6.6	1070	670	29		7.2	<0.002	50	110	24	580	1.3	0.21	8.8	300	<0.01	<0.01	0.9	2.3
PS247-3	June-96	PS247-3	June-96	10.2	470	65	<1	950	460	20		6.7	<0.002	40	73	51	580	1.4	0.26	5.3				4 0	<2
PS247-3	Sept-96	PS247-3	Sept-96	14.2	480	88	<1	830	350	17		6.8	<0.002	37	100	21	620	1.2	0.11	6.3				3.2	<2
PS247-3	Nov-96	PS247-3	Nov-96	12.8	430	100	<40	837	340	26		6.69	<0.002	10	39	79	600	1.2	0.077	10				3.2	<2
PS247-3	March-97	PS247-3	March-97	8.8	410	8.6	2.7	800	310	25		6.9	0.0041	15	70	23	480	1	0.21	<4	50	<0.01	<0.01	2.4	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PS247-4	Dec-92	PS247-4	Dec-92	Monitoring Well Dry - No Sample Collected																					
PS247-4	Feb-93	PS247-4	Feb-93	Monitoring Well Dry - No Sample Collected																					
PS247-4	Jun-93	PS247-4	Jun-93	Monitoring Well Dry - No Sample Collected																					
PS247-4	Sep-93	PS247-4	Sep-93	Monitoring Well Dry - No Sample Collected																					
PS247-4	Dec-93	PS247-4	Dec-93	Monitoring Well Dry - No Sample Collected																					
PS247-4	Feb-94	PS247-4	Feb-94	Monitoring Well Dry - No Sample Collected																					
PS247-4	May-94	PS247-4	May-94	Monitoring Well Dry - No Sample Collected																					
PS247-4	Aug-94	PS247-4	Aug-94	Monitoring Well Dry - No Sample Collected																					
PS247-4	Nov-94	PS247-4	Nov-94	Monitoring Well Dry - No Sample Collected																					
PS247-4	March-95	PS247-4	March-95	Monitoring Well Dry - No Sample Collected																					
PS247-4	June-95	PS247-4	June-95	Monitoring Well Dry - No Sample Collected																					
PS247-4	Sept-95 Monit	PS247-4	Sept-95 Monitoring Well Dry - No Sample Collected																						
PS247-4	Dec-95 Monito	PS247-4	Dec-95 Monitoring Well Dry - No Sample Collected																						
PS247-4	April-96	PS247-4	April-96	Monitoring Well Dry																					
PS247-4	June-96	PS247-4	June-96	Monitoring Well Dry																					
PS247-4	Sept-96	PS247-4	Sept-96	Monitoring Well Dry																					
PS247-4	Nov-96	PS247-4	Nov-96	Monitoring Well Dry																					
PS247-4	March-97	PS247-4	March-97	Monitoring Well Dry																					

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
PS247-5	Dec-92	PS247-5	Dec-92	Monitoring Well Dry - No Sample Collected																					
PS247-5	Feb-93	PS247-5	Feb-93	Monitoring Well Dry - No Sample Collected																					
PS247-5	Jun-93	PS247-5	Jun-93	Monitoring Well Dry - No Sample Collected																					
PS247-5	Sep-93	PS247-5	Sep-93	Monitoring Well Dry - No Sample Collected																					
PS247-5	Dec-93	PS247-5	Dec-93	Monitoring Well Dry - No Sample Collected																					
PS247-5	Feb-94	PS247-5	Feb-94	Monitoring Well Dry - No Sample Collected																					
PS247-5	May-94	PS247-5	May-94	Monitoring Well Dry - No Sample Collected																					
PS247-5	Aug-94	PS247-5	Aug-94	Monitoring Well Dry - No Sample Collected																					
PS247-5	Nov-94	PS247-5	Nov-94	Monitoring Well Dry - No Sample Collected																					
PS247-5	March-95	PS247-5	March-95	Monitoring Well Dry - No Sample Collected																					
PS247-5	June-95	PS247-5	June-95	Monitoring Well Dry - No Sample Collected																					
PS247-5	Sept-95 Monit	PS247-5	Sept-95 Monitoring Well Dry - No Sample Collected																						
PS247-5	Dec-95 Monito	PS247-5	Dec-95 Monitoring Well Dry - No Sample Collected																						
PS247-5	April-96	PS247-5	April-96	Monitoring Well Dry																					
PS247-5	June-96	PS247-5	June-96	Monitoring Well Dry																					
PS247-5	Sept-96	PS247-5	Sept-96	Monitoring Well Dry																					
PS247-5	Nov-96	PS247-5	Nov-96	Monitoring Well Dry																					
PS247-5	March-97	PS247-5	March-97	Monitoring Well Dry																					

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-244S	Nov-90	MW-244S	Nov-90	11	268	15	18.6	1100	570	14	7.4	7.46	<0.05	56.4	293	200	819	<0.1	<0.04	1.9		<0.004	<0.004	<0.5	
MW-244S	Feb-91	MW-244S	Feb-91	11	244	<1.0	15.9	950	540	4.6	7.3	7.49	<0.010	16.8	296	210	734	<0.04	<0.04						
MW-244S	May-91	MW-244S	May-91	13	214	24	13.8	720	450	3	7.4	7.06	<0.010	124.5	287	140	699	<0.03	0.53						
MW-244S	Aug-91	MW-244S	Aug-91	14	276	9.3	21.5	1145	570	1.9	7.3	7.26	<0.010	231.3	251	115	864	<0.03	<0.04						
MW-244S	Nov-91	MW-244S	Nov-91	12	328	6.7	17	1203	567	<1		7.17	<0.010	208.8	294	32	884	<0.02	<0.04						
MW-244S	Feb-92	MW-244S	Feb-92	9	308	8.3	16.8	1008	572	1		6.84	<0.010	149.8	279	55	676	0.05	<0.02	<0.5	<5	<0.010	<0.004	<0.5	
MW-244S	May-92	MW-244S	May-92	13	248	3	50	1047	581	<1.0		7.37	<0.010	168.6	361	76	806	<0.04	<0.02						
MW-244S	Aug-92	MW-244S	Aug-92	13	220	<1.0	26.5	600	413	<1		6.95	<0.010	97.5	234	18	1372	<0.04	0.02						
MW-244S	Dec-92	MW-244S	Dec-92	10.5	242	5.6	14	1001	387	<1		7.33	<0.010	180.9	208	25.5	616	<0.02	<0.02						
MW-244S	Feb-93	MW-244S	Feb-93	10.5	254	1.8	18.5	872	356	23		6.96	<0.010	171.6	214	33	656	<0.02	<0.02						
MW-244S	Jun-93	MW-244S	Jun-93	11.5	178	27.4	37	449	420	7		7.36	<0.010	201.4	354	27.5	748	0.03	<0.02	0.8	<5	<0.004	<0.004	<0.5	
MW-244S	Sep-93	MW-244S	Sep-93	15.5	242	<1.0	32	619	471	<1.0		6.81	<0.010	108.3	245	27	784	<0.02	<0.02						
MW-244S	Dec-93	MW-244S	Dec-93	10.5	244	8.3	26	872	534	10		7.09	<0.010	124.5	293	28	856	<0.02	0.02						
MW-244S	Mar-94	MW-244S	Mar-94	11	248	<1.0	31	1017	454	43		7.48	<0.010	268.2	246	30	644	<0.02	<0.05	<2.0				<0.5	0.84
MW-244S	Jun-94	MW-244S	Jun-94	11.5	188	1.1	18	651	366	<1		7.19	<0.010	223.7	210	36	540	<0.02	0.03	<2.0				<0.50	0.89
MW-244S	Aug-94	MW-244S	Aug-94	12.5	212	<5.0	17.5	773	388	<1		7.35	<0.010	10.1	230	8.3	560	<0.02	0.04	<2.0	10	<0.004	<0.004	<0.5	1.62
MW-244S	Nov-94	MW-244S	Nov-94	11	271	<5.0	16	690	348	12		7.08	<0.010	205.3	194	8	636	0.98	<0.05	<2.0				<0.5	4.38
MW-244S	March-95	MW-244S	March-95	11.5	186	<5.0	29	493	376	3		7.27	<0.010	117.1	185	9.9	516	0.14	0.11	<2				<.5	<0.2
MW-244S	June-95	MW-244S	June-95	12.5	319	<5.0	20	485	470	<1		6.97	<0.010	-2.9	200	15	716	0.07	0.21	<2				<0.5	0.5
MW-244S	Sept.-95	MW-244S	Sept.-95	11	322	<5.0	27	494	500	21		7.11	<0.010	-13.4	247	26	808	0.18	0.09	<2				<0.5	0.50
MW-244S	Nov-95	MW-244S	Nov-95	10.5	324	<5.0	38	480	557	<1		7.26	<0.010	4.1	335	12	952	0.10	<0.05	<2	<5	<0.004	<0.004	<0.5	0.30
MW-244S	April-96	MW-244S	April-96	10.5	310	26	31	330	550	1		8.30	<0.002	200.0	220	120	730	<0.03	0.02	<4	100.00	<0.01	<0.01	0.55	0.65
MW-244S	June-96	MW-244S	June-96	11.9	390	41	19	1130	560	1.7		7.00	0.0025	1.3	350	20	790	<0.03	<0.02	<4				3.10	<2
MW-244S	Sept-96	MW-244S	Sept-96	10.5	460	1	19	1100	510	<1		7.00	<0.002	115.0	380	280	770	<0.03	<0.02	<4				0.58	<2
MW-244S	Nov-96	MW-244S	Nov-96	10.2	380	10	24	1120	420	1.5		7.20	<0.002	125.0	380	22	700	<0.03	<0.02	11.00				0.50	<2
MW-244S	March-97	MW-244S	March-97	10.1	380	13	27	1060	470	1.4		7.10	<0.002	140.0	200	105	640	<0.03	<0.02	<4	10.00	<0.01	<0.01	0.66	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-244D	Nov-90	MW-244D	Nov-90	10	142	31	7.8	510	120	7.1	8.1	7.77	<0.05	34	32	35	189	<0.1	<0.04	5.2		0.004	0.017	<0.5	
MW-244D	Feb-91	MW-244D	Feb-91	11	134	2.6	8.9	360	120	<3.0	8.1	8.21	<0.010	35.3	30.4	30	187	<0.04	<0.04						
MW-244D	May-91	MW-244D	May-91	12	132	5.7	3.17	210	100	<3.0	8.2	7.64	<0.010	104.6	26.25	57	197	0.04	0.31						
MW-244D	Aug-91	MW-244D	Aug-91	12	124	5	5.4	345	110	1.7	8.1	7.95	<0.010	210.8	24.2	20	227	<0.03	<0.04						
MW-244D	Nov-91	MW-244D	Nov-91	12	138	<1	2.5	328	95.2	2		7.49	<0.010	165	19	4	188	0.09	<0.04						
MW-244D	Feb-92	MW-244D	Feb-92	10	166	4.6	5.8	312	102	2		7.44	<0.010	131.3	19.5	32	172	0.08	<0.02	0.8	<5	<0.010	<0.004	<0.5	
MW-244D	May-92	MW-244D	May-92	12	143	<1.0	4	306	141	<1.0		8.01	<0.010	148.7	26.4	42	184	<0.04	0.15						
MW-244D	Aug-92	MW-244D	Aug-92	13	134	2	8	230	85.3	<1.0		7.61	<0.010	84.1	30.2	34	1130	<0.04	<0.02						
MW-244D	Dec-92	MW-244D	Dec-92	10	138	<1.0	3	341	97.2	<1.0		7.7	<0.010	183.5	65.6	41	204	<0.02	<0.02						
MW-244D	Feb-93	MW-244D	Feb-93	9.5	142	5.4	2.5	321	87	13		7.64	<0.010	160.4	34.5	80	196	<0.02	0.02						
MW-244D	Jun-93	MW-244D	Jun-93	12	142	<1.0	3	232	94.2	4		7.86	<0.010	208.1	54.3	19	196	0.05	<0.02	0.8	<5	<0.004	<0.004	<0.5	
MW-244D	Sep-93	MW-244D	Sep-93	13.5	134	<1.0	3.5	261	101	<1.0		7.35	<0.010	189.5	50.5	14.2	216	<0.02	<0.02						
MW-244D	Dec-93	MW-244D	Dec-93	10.5	135	<1.0	3	260	111	<1.0		7.44	<0.010	94.1	37.4	17.5	196	<0.02	0.02						
MW-244D	Mar-94	MW-244D	Mar-94	10.5	132	<1.0	3	322	105	16		7.46	<0.010	251.1	30.8	14	172	<0.02	<0.05	<2.0				<0.5	0.82
MW-244D	Jun-94	MW-244D	Jun-94	12	132	<1.0	2	291	99.9	<1		7.86	<0.010	253.9	25.3	7.1	207	<0.02	0.03	<2.0				<0.50	0.85
MW-244D	Aug-94	MW-244D	Aug-94	12	156	<5.0	1.5	304	103	2		7.91	<0.010	16.4	59.2	16.4	388	<0.02	0.31	<2.0	30	<0.004	<0.004	<0.5	2.04
MW-224D	Nov-94	MW-224D	Nov-94	10.5	14.5	<5.0	3	286	89.5	13		7.74	0.028	208.2	30.1	10	196	0.09	0.06	<2.0				<0.5	4.2
MW-244D	March-95	MW-244D	March-95	12	153	10	2	281	105	11		7.58	<0.010	112	32.4	8.9	168	0.19	0.18	<2				<0.5	0.30
MW-244D	June-95	MW-244D	June-95	12.5	133	<5.0	3	256	93	2		7.35	<0.010	70.2	21.8	7.3	164	0.06	0.22	<2				<0.5	0.40
MW-244D	Sept.-95	MW-244D	Sept.-95	11.5	136	12.5	3	268	95.9	21		7.3	<0.010	-22.9	25.6	16	204	0.14	<0.05	<2				<0.5	0.6
MW-244D	Dec-95	MW-244D	Dec-95	10.5	136	<5.0	3	259	86.4	<1		7.64	<0.010	-9	39.9	6.9	204	0.04	<0.05	<2	<5	<0.004	<0.004	<0.5	0.4
MW-244D	April-96	MW-244D	April-96	11.3	140	17	5.7	1100	200	<1		7.5	<0.002	145	29	10	220	<0.03	0.035	<4	15	<0.01	<0.01	0.48	0.64
MW-244D	June-96	MW-244D	June-96	12.2	140	12	<1	307	140	<1		7.5	0.0024	145	32	10	220	<0.03	<0.02	<4				4.8	<2
MW-244D	Sept-96	MW-244D	Sept-96	10.5	180	<1	<1	310	110	<1		7.9	<0.002	120	25	64	260	<0.03	0.023	<4				0.29	<2
MW-244D	Nov-96	MW-244D	Nov-96	9.8	140	10	1.9	298	90	<1		8.1	<0.002	105	31	24	220	<0.03	<0.02	<4				0.59	<2
MW-244D	March-97	MW-244D	March-97	9.6	150	8.6	1.8	321	100	<1		8.1	<0.002	95	32	121	220	<0.03	<0.02	<4	10	<0.01	<0.01	0.28	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-245S	Nov-89	MW-245S	Nov-89	10.7	297	35.9	35.5	851	648	2.93	7.87		0.024	-16.4	339	280	781	0.29	<0.10	32	<5	<0.005	<0.01		
MW-245S	Feb-90	MW-245S	Feb-90		336		47.9		750	9.42			<0.005		337	2150	945	0.14		8	70			2.34	
MW-245S	Apr-90	MW-245S	Apr-90	11.4	382		57.3	969	670	3.57			<0.005		331	50	970	0.11		8	15			0.75	
MW-245S	Nov-90	MW-245S	Nov-90	12	334	31	27.4	1200	610	19	7.3	7.01	<0.05	134.5	750	300	899	0.14	<0.04	3.4		0.004	<0.004	<0.5	
MW-245S	Feb-91	MW-245S	Feb-91	11	364	3	43.6	1100	640	8.6	7.1	7.35	<0.010	-4	154	125	884	0.1	<0.04						
MW-245S	May-91	MW-245S	May-91	12	356	7.5	55.6	890	640	9	7	6.8	<0.010	233.9	218	196	876	0.05	0.31						
MW-245S	Aug-91	MW-245S	Aug-91	12	336	14.8	44.2	1320	650	9.2	7	7.25	<0.010	105.6	277	250	485	0.07	<0.04						
MW-245S	Nov-91	MW-245S	Nov-91	12	330	35	26	1244	614	<1		7.05	<0.010	175.9	286	280	920	0.17	<0.04						
MW-245S	Feb-92	MW-245S	Feb-92	10	318	21.1	25.7	1221	707	10		6.76	<0.010	172.9	380	37	844	0.17	<0.02	<0.5	<5	<0.010	<0.004	<0.5	
MW-245S	May-92	MW-245S	May-92	13	422	8.6	90	1268	658	<1.0		7.01	<0.010	217.4	266	80	1068	0.06	<0.02						
MW-245S	Aug-92	MW-245S	Aug-92	14	1910	<1.0	43.5	900	546	<1		6.74	<0.010	97.7	225	35	720	0.06	<0.02						
MW-245S	Dec-92	MW-245S	Dec-92	10.5	390	42.1	40	1426	588	<1		7.22	<0.010	211.8	341	435	944	0.1	<0.02						
MW-245S	Feb-93	MW-245S	Feb-93	10	426	27	42	1102	516	34		6.52	<0.010	159.4	293	360	936	0.11	0.02						
MW-245S	Jun-93	MW-245S	Jun-93	12.5	354	12.8	38	457	502	8		7.1	<0.010	216.8	296	220	916	0.02	<0.02	1	<5	<0.004	<0.004	0.5	
MW-245S	Sep-93	MW-245S	Sep-93	13.5	314	4.86	40	683	568	<1.0		6.75	<0.010	96.1	317	190	888	<0.02	<0.02						
MW-245S	Dec-93	MW-245S	Dec-93	11	256	7.4	31	904	568	10		7.08	<0.010	139.2	352	240	872	<0.02	0.02						
MW-245S	Mar-94	MW-245S	Mar-94	11	416	10.6	37	1275	628	60		6.96	<0.010	248.4	402	260	860	0.04	<0.05	<2.0				<0.5	0.82
MW-245S	Jun-94	MW-245S	Jun-94	13.5	472	6.5	35	1035	633	3		6.86	<0.010	109.1	339	230	1053	<0.02	0.02	<2.0				<0.50	1
MW-245S	Aug-94	MW-245S	Aug-94	11.5	236	<5.0	22.5	852	447	2		6.99	<0.010	69.4	235	28	646	0.07	<0.05	<2.0	100	<0.004	0.004	<0.5	2.00
MW-245S	Nov-94	MW-245S	Nov-94	11	396	9.5	42	822	498	7		7.05	<0.010	126.8	288	41	920	0.1	<0.05	<2.0				0.64	3.92
MW-245S	March-95	MW-245S	March-95	11.5	509	5	46	686	844	13		7.12	<0.010	106.4	229	53	1052	1.83	0.11	<2				<0.5	0.3
MW-245S	June-95	MW-245S	June-95	12	355	<5.0	39	558	607	<1		7.08	<0.010	-13.0	286	93	952	0.18	0.64	<2				<0.5	0.2
MW-245S	Sept.-95	MW-245S	Sept.-95	11.5	378	20.8	45	525	562	32		7.12	<0.010	11.7	315	110	992	0.21	0.1	<2				<0.5	0.3
MW-245S	Dec-95	MW-245S	Dec-95	10.5	532	<5.0	45	512	646	<1		7.01	<0.010	16.3	239	15	1036	0.1	<0.05	<2	10	<0.004	<0.004	<0.5	<0.2
MW-245S	April-96	MW-245S	April-96	11.2	480	79	45	1390	770	2.3		7.1	<0.002	150	280	140	1100	0.042	<0.02	<4	200	<0.01	<0.01	0.49	0.84
MW-245S	June-96	MW-245S	June-96	12.3	350	88	21	1180	550	2.3		6.6	0.0056	120	380	560	830	0.046	<0.02	<4				11	<2
MW-245S	Sept-96	MW-245S	Sept-96	10.8	410	43	28	1200	620	2.2		7.5	<0.002	70	460	82	860	<0.03	0.033	<4				0.72	<2
MW-245S	Nov-96	MW-245S	Nov-96	9.5	370	120	29	1130	540	2.3		7.02	<0.002	100	440	150	750	0.06	<0.02	<4				0.87	<2
MW-245S	March-97	MW-245S	March-97	9.9	380	23	25	1210	600	3.2		7.1	<0.002	110	240	>999	730	<0.03	<0.02	<4	15	<0.01	<0.01	0.29	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-245D	Feb-90	MW-245D	Feb-90		167	39.6	16		153	25			0.006		149	8	411	<0.04	<0.01			<0.005	0.01		
MW-245D	Apr-90	MW-245D	Apr-90	11.3	197		17.2	536	250	3.72	7.23		<0.005	-16.75	163	13	482	0.8		22	10			0.98	
MW-245D	Nov-90	MW-245D	Nov-90	9	366	116	14.7	890	210	26	7.7	7.45	0.085	1.7	110	42	565	2.8	<0.04	23		0.004	0.004	8.1	
MW-245D	Feb-91	MW-245D	Feb-91	11	358	18.1	18.9	930	260	<3.0	7.6	7.63	<0.010	-48.3	138	180	496	4.4	<0.04						
MW-245D	May-91	MW-245D	May-91	12	288	9.4	15.7	600	290	6.1	7.3	7.01	<0.010	171.5	122	80	530	2.62	0.55						
MW-245D	Aug-91	MW-245D	Aug-91	11	276	11.7	18.3	915	330	7.3	7.3	7.58	<0.010	104.9	154	40	580	1.91	<0.04						
MW-245D	Nov-91	MW-245D	Nov-91	13	306	7.8	17	898	288	<1		7.18	<0.010	53	112	21	540	5.95	<0.04						
MW-245D	Feb-92	MW-245D	Feb-92	10	340	28.6	19.8	862	370	3		6.86	<0.010	131.2	151	29	496	4.8	<0.02	1.2	<5	<0.010	<0.004	6	
MW-245D	May-92	MW-245D	May-92	13	288	10.6	11	842	320	<1.0		7.24	<0.010	199.2	164	2.3	624	2.59	<0.02						
MW-245D	Aug-92	MW-245D	Aug-92	13	330	<1.0	20	570	297	<1		6.93	<0.010	64.1	125	20	176	4.44	<0.02						
MW-245D	Dec-92	MW-245D	Dec-92	10	314	9.14	14.5	1046	293	<1		7.24	<0.010	203.8	158	7.7	572	3.34	0.12						
MW-245D	Feb-93	MW-245D	Feb-93	10	288	16.2	14.5	804	262	27		6.79	<0.010	142.7	184	3.6	556	2.89	<0.02						
MW-245D	Jun-93	MW-245D	Jun-93	13.5	300	1.7	16	441	325	7		7.31	<0.010	202.2	175	5	560	3.99	0.09	2.2	<5	<0.004	<0.004	5	
MW-245D	Sep-93	MW-245D	Sep-93	13	264	<1.0	17	609	350	<1.0		6.94	<0.010	151.5	159	0.5	568	2.87	<0.02						
MW-245D	Dec-93	MW-245D	Dec-93	10.5	244	<1.0	18	814	398	10		7.09	<0.010	-0.1	212	3.1	592	2	0.03						
MW-245D	Mar-94	MW-245D	Mar-94	11	244	<1.0	19	904	338	34		6.88	<0.010	240.6	181	2	448	2.97	<0.05	<2.0				3.54	0.19
MW-245D	Jun-94	MW-245D	Jun-94	14	260	<1.0	17	709	362	<1		7.15	<0.010	105.8	181	1.3	593	3.78	0.02	<2.0				6.03	0.16
MW-245D	Aug-94	MW-245D	Aug-94	11.5	248	13.3	19	885	412	12		7.08	<0.010	64.8	195	2.1	548	2.39	1.18	2.0	10	<0.004	<0.004	<0.5	1.12
MW-245D	Nov-94	MW-245D	Nov-94	11.5	267	23.8	19	649	347	9		7.26	<0.010	128.9	173	1.3	560	1.65	0.33	<2.0				3.8	1.88
MW-245D	March-95	MW-245D	March-95	11.5	148	<5.0	18	535	459	6		7.22	<0.010	107.2	157	0.6	544	3.55	0.22	<2				1.38	<0.2
MW-245D	June-95	MW-245D	June-95	12	271	14	18	502	378	3		6.99	<0.010	-12.8	182	2.9	604	2.17	0.22	<2				3.2	<0.2
MW-245D	Sept.-95	MW-245D	Sept.-95	11	242	12.5	19	461	356	15		7.05	<0.010	14.8	204	1.2	668	3.27	0.08	<2				1.13	<0.2
MW-245D	Dec-95	MW-245D	Dec-95	10	250	<5.0	20	426	362	<1		7.07	<0.010	27.4	206	1	640	2.46	<0.05	<2	<5	<0.004	<0.004	0.73	<0.2
MW-245D	April-96	MW-245D	April-96	11.2	270	5.5	21	95	610	2.6		7.5	<0.002	175	210	10	650	1	0.02	<4	30	<0.01	<0.01	2.1	0.12
MW-245D	June-96	MW-245D	June-96	12.4	290	14	16	1000	520	1.4		7.2	<0.002	-5	320	10	1300	1	<0.02	5.2				10	<2
MW-245D	Sept-96	MW-245D	Sept-96	11	330	<1	16	980	400	5.4		7.3	<0.002	-30	350	45	700	0.73	<0.02	11				2.3	<2
MW-245D	Nov-96	MW-245D	Nov-96	9.9	340	10	20	1000	300	1.4		7.17	<0.002	105	380	26	650	2.2	<0.02	8.5				6.1	<2
MW-245D	March-97	MW-245D	March-97	9.6	480	38	18	1010	420	2.1		7		125	90	110	640	6	0.1	<4	10	<0.01	<0.01	6	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-246S	Nov-89	MW-246S	Nov-89	9	332	54.5	29.8	927	835	3.12	6.84		<0.005	-13	362	180	980	0.11	<0.10	6	<5	<0.005	<0.01		
MW-246S	Feb-90	MW-246S	Feb-90		338		31.4		758	8.5			<0.005		397	2.73	950	0.19		22	5			150	
MW-246S	Apr-90	MW-246S	Apr-90	10.8	359		29	969	688	3.61			<0.005		433	250	1020	<0.04		12	25			0.31	
MW-246S	Nov-90	MW-246S	Nov-90	9	347	27	29.4	1300	740	18	7.2	7.43	<0.05	-0.6	675	300	1000	0.24	<0.04	11		0.004	<0.004	<0.5	
MW-246S	Feb-91	MW-246S	Feb-91	11	324	25.8	27.8	1200	810	<3.0	7.1	7.44	<0.010	53.8	385	300	988	0.07	<0.04						
MW-246S	May-91	MW-246S	May-91	11	292	15.8	23.6	840	620	7.2	7	6.95	<0.010	189.7	366	924	924	0.04	0.12						
MW-246S	Aug-91	MW-246S	Aug-91	12	248	66.4	26.9	1260	710	84	7.1	7.39	<0.010	107.1	325	410	932	0.03	<0.04						
MW-246S	Nov-91	MW-246S	Nov-91	12	306	5.6	21	1249	633	<1		7.03	<0.010	150.8	303	72	884	<0.02	0.04						
MW-246S	Feb-92	MW-246S	Feb-92	10	324	3.5	23.8	1159	725	14		6.77	<0.010	172.6	339	120	828	0.07	0.2	0.8	<5	<0.010	<0.004	<0.5	
MW-246S	May-92	MW-246S	May-92	12	320	4.8	29	1156	623	<1.0		6.95	<0.010	102.2	388	74	592	<0.04	0.02						
MW-246S	Aug-92	MW-246S	Aug-92	12	320	<1.0	25	680	526	<1		6.78	<0.010	242.7	279	44	900	<0.04	<0.02						
MW-246S	Dec-92	MW-246S	Dec-92	9	140	<1.0	22	1196	571	<1		7.13	<0.010	164.9	76	2	876	<0.02	<0.02						
MW-246S	Feb-93	MW-246S	Feb-93	9	388	50.4	21.5	1001	505	34		6.92	<0.010	161	330	1840	836	<0.02	<0.02						
MW-246S	Jun-93	MW-246S	Jun-93	12	350	3.4	23	463	536	4		7.13	<0.010	174.6	299	430	812	0.03	<0.02	0.8	<5	<0.004	<0.004	<0.5	
MW-246S	Sep-93	MW-246S	Sep-93	15	306	9.72	56	687	560	11		6.97	<0.010	110.6	307	400	816	<0.02	<0.02						
MW-246S	Dec-93	MW-246S	Dec-93	10.5	300	46.1	28	1071	642	10		6.8	<0.010	111.6	413	250	920	<0.02	<0.05						
MW-246S	Mar-94	MW-246S	Mar-94	11	296	<1.0	30	1156	589	47		7.18	<0.010	271.9	362	90	774	<0.02	<0.05	<2.0				<0.5	0.93
MW-246S	Jun-94	MW-246S	Jun-94	13.5	300	3.2	35	861	604	2		7.02	<0.010	113.6	341	200	820	<0.02	0.04	<2.0				<0.50	0.98
MW-246S	Aug-94	MW-246S	Aug-94	11.5	288	8.9	31.0	1012	526	13		6.92	<0.010	62.9	282	17.2	784	<0.02	<0.05	<2.0	35	<0.004	<0.004	<0.5	2.16
MW-246S	Nov-94	MW-246S	Nov-94	11.5	275	<5.0	25	732	267	7		7.2	<0.010	125.7	259	19.2	728	0.02	0.06	<2.0				0.55	3.50
MW-246S	March-95	MW-246S	March-95	11	303	5	27	595	639	3		7.26	<0.010	131.8	271	66	796	0.1	0.16	<2				<0.5	<0.2
MW-246S	June-95	MW-246S	June-95	12	307	9.3	26	521	461	5		7.19	<0.010	-10.7	284	112	772	0.09	0.18	<2				1.2	<0.2
MW-246S	Sept.-95	MW-246S	Sept.-95	12	262	8.3	26	494	427	12		7.19	<0.010	-14.5	270	106	740	0.28	0.06	<2				<0.5	<0.2
MW-246S	Dec-95	MW-246S	Dec-95	10.5	296	<5.0	29	446	455	<1		7.32	<0.010	18.2	239	76	796	<0.02	<0.05	<2	<5	<0.004	<0.004	<0.5	0.90
MW-246S	April-96	MW-246S	April-96	11.5	320	53	32	1160	740	1.2		7.4	<0.002	145	280	10	800	<0.03	<0.02	<4	100	<0.01	<0.01	0.61	0.51
MW-246S	June-96	MW-246S	June-96	12.4	340	37	28	1290	590	2.1		6.5	<0.002	155	54	>900	930	<0.03	<0.02	9.1				8.0	<2
MW-246S	Sept-96	MW-246S	Sept-96	10.7	410	30	25	1200	620	<1		6.9	<0.002	100	440	710	860	<0.03	<0.02	<4				0.5	<2
MW-246S	Nov-96	MW-246S	Nov-96	10.1	370	38	28	1140	500	1.7		7.07	<0.002	215	360	45	750	0.043	<0.02	<4				0.5	<2
MW-246S	March-97	MW-246S	March-97	9.3	430	30	26	1220	520	2		7.1	<0.002	180	310	19	780	<0.03	<0.02	<4	10	<0.01	<0.01	0.3	<2

Table 14. Historical Groundwater Analytical Data - Water Quality Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Monitoring Well	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond mhos/c	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	H (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turb (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	Br- (mg/l)
Class GA Groundwater Qulity Standards and Guidance Values		Class GA Groundwater Qulity Standards and Guidance Values					250					6.5-8.5	0.001		250		500	2	10						2
MW-246D	Nov-89	MW-246D	Nov-89	10	93.4	<10.0	70.5	339	170	1.22	7.6		<0.005	-53.4	63.6	3.9	271	0.12	<0.10	1	<5	<0.005	<0.01		
MW-246D	Feb-90	MW-246D	Feb-90		95		70.1		170	0.61			0.015		53.9	7.47	305	0.07		16	5			1.75	
MW-246D	Apr-90	MW-246D	Apr-90	10.8	95		66.7	392	150	5.67			<0.005		57.3	8.4	345	<0.04		9	5			0.06	
MW-246D	Nov-90	MW-246D	Nov-90	10	106	11	61.6	560	205	5.7	7.8	7.57	<0.05	-9.8	63.8	39	294	<0.1	<0.04	4.7		0.008	0.004	<0.5	
MW-246D	Feb-91	MW-246D	Feb-91	11	90	5.2	62.5	440	200	<3.0	7.8	8.05	0.012	133.7	54	10	307	0.06	<0.04						
MW-246D	May-91	MW-246D	May-91	12	96	<1.0	62.9	380	176	<3.0	7.8	7.43	<0.010	171.1	48.4	11.6	300	<0.03	0.03						
MW-246D	Aug-91	MW-246D	Aug-91	13	94	5.8	64.6	545	178	<3.0	7.8	7.79	<0.010	94.6	58	6.4	376	<0.03	<0.04						
MW-246D	Nov-91	MW-246D	Nov-91	13	100	2.2	58	504	146	<1		7.58	<0.010	87.4	49.4	0.85	328	0.04	<0.04						
MW-246D	Feb-92	MW-246D	Feb-92	10	204	4.6	61.9	492	214	1		7.22	<0.010	110.4	53	2.8	300	0.08	0.03	0.8	<5	<0.010	<0.004	<0.5	
MW-246D	May-92	MW-246D	May-92	12	98	<1.0	64	476	150	<1.0		7.65	<0.010	119.2	44.5	2	304	<0.04	0.07						
MW-246D	Aug-92	MW-246D	Aug-92	13	104	<1.0	64	380	143	<1		7.34	<0.010	103.1	68.8	9.7	556	<0.04	<0.02						
MW-246D	Dec-92	MW-246D	Dec-92	10	350	<1.0	60	482	243	<1		7.59	<0.010	144.9	341	450	296	<0.02	<0.02						
MW-246D	Feb-93	MW-246D	Feb-93	9	96	9.9	57	470	126	8		7.27	<0.010	106.3	52	1.4	268	<0.02	<0.02						
MW-246D	Jun-93	MW-246D	Jun-93	12.5	96	<1.0	55	319	144	9		7.48	<0.010	154	71.8	2.9	308	0.04	<0.02	1	<5	<0.004	<0.004	<0.5	
MW-246D	Sep-93	MW-246D	Sep-93	13	104	88	41	379	171	14		7.43	<0.010	137	73.9	9.5	348	<0.02	<0.02						
MW-246D	Dec-93	MW-246D	Dec-93	10.5	134	33.9	28	362	179	6		7	<0.010	92.8	44.7	15.5	272	<0.02	<0.05						
MW-246D	Mar-94	MW-246D	Mar-94	10.5	96	<1.0	55	483	136	13		7.16	<0.010	252.2	48.7	2.8	304	<0.02	<0.05	<2.0				<0.5	0.92
MW-246D	Jun-94	MW-246D	Jun-94	13	108	6.5	32	346	171	<1		7.56	<0.010	98.7	39.8	56	233	<0.02	0.06	<2.0				<0.50	0.95
MW-246D	Aug-94	MW-246D	Aug-94	11	100	8.9	46.0	434	173	5		7.21	<0.01	48.7	70.0	11	264	<0.02	0.11	<2.0	15	<0.004	0.004	<0.5	2.12
MW-246D	Nov-94	MW-246D	Nov-94	12	101	38.1	50	391	355	17		7.71	<0.010	110.7	59.5	14	272	0.03	0.17	<2.0				<0.5	4.20
MW-246D	March-95	MW-246D	March-95	11	121	33.3	29	316	166	9		7.54	<0.010	114.1	49.4	29	232	0.13	0.32	<2				<0.5	<0.2
MW-246D	June-95	MW-246D	June-95	12	84	14	45	347	152	<1		7.36	<0.010	-32.8	64.1	17	284	0.08	0.24	<2				<0.5	<0.2
MW-246D	Sept.-95	MW-246D	Sept.-95	12	96	16.7	48	333	145	<1		7.39	<0.010	-28.2	71.8	5.8	316	0.2	0.06	<2				<0.5	0.70
MW-246D	Dec-95	MW-246D	Dec-95	10.5	104	<5.0	48	315	147	<1		7.45	<0.010	4.3	80.9	6.1	308	<0.02	<0.05	<2	5	<0.004	<0.004	<0.5	1.00
MW-246D	April-96	MW-246D	April-96	11.5	130	26	18	340	320	3.3		9	<0.002	345	37	10	250	<0.03	0.13	<4	100	<0.01	<0.01	0.54	0.47
MW-246D	June-96	MW-246D	June-96	13.2	130	24	<1	276	160	6.1		5.9	<0.002	195	13	10	230	<0.03	0.077	<4				3.9	<2
MW-246D	Sept-96	MW-246D	Sept-96	10.5	130	25	<1	290	120	7.5		5.9	<0.002	190	17	110	190	<0.03	0.04	<4				0.71	<2
MW-246D	Nov-96	MW-246D	Nov-96	9.9	130	38	15	313	140	4.5		6.32	0.0037	250	30	43	200	<0.03	0.042	<4				0.49	<2
MW-246D	March-97	MW-246D	March-97	9.3	130	15	22	1010	140	3.4		6.6	<0.002	125	90	44	210	<0.03	0.12	<4	15	<0.01	<0.01	0.69	<2

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-203S	Dec-92	<0.010	88.2	12.8	<0.020	15.3	0.667	2.77	10.5													
MW-203S	Feb-93	<0.010	72.4	21.8	<0.020	17.4	1.31	3.91	10.6													
MW-203S	May-93	<0.010	87.3	7.29	0.009	12.9	0.616	1.9	11.8	2.18	<0.060	0.069	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.034
MW-203S	Aug-93	<0.010	122	106	0.094	53.2	1.52	5.02	12.8													
MW-203S	Dec-93	<0.010	96.2	12.5	0.007	17.7	1.12	2.03	11.3													
MW-203S	Feb-94	<0.010	97.3	16.6	0.006	18	1.1	2.59	12													
MW-203S	May -94	<0.010	88.2	7.96	0.006	15.1	0.88	0.86	13.7													
MW-203S	Aug-94	<0.010	89.4	8.37	<0.005	13.0	0.86	1.90	10.2	2.14	<0.060	0.059	<0.10	<0.010	<0.020	<0.020	<0.001	0.18	<0.005	<0.020	<0.005	0.029
MW-203S	Nov-94	<0.010	65	3.2	<0.005	12.1	0.62	1.8	13.3													
MW-203S	March-95	<0.010	78	2.28	<0.005	13	0.75	1.4	13													
MW-203S	June-95	<0.010	100	7.41	0.005	15.8	1.08	1.9	12.3													
MW-203S	Sept-95	<0.010	45.5	9.8	<0.005	13.2	1.01	2.12	13.9													
MW-203S	Nov-95	<0.010	93.3	10.5	<0.005	18.7	0.93	2.04	21.7	2.94	<0.060	0.092	0.28	<0.010	<0.020	0.024	<0.001	<0.040	<0.005	<0.020	<0.005	0.044
MW-203S	April-96	No Sample Taken																				
MW-203S	June-96	<0.01	120	28	<0.01	19	1.6	3.1	15													
MW-203S	Sept-96	<0.01	170	69	0.052	29	3.3	4.9	15													
MW-203S	Nov-96	<0.01	100	26	0.018	17	1.4	2.5	14													
MW-203S	Mar-97	<0.01	190	78	0.065	28	3.4	7.4	12	30	0.15	<0.01	0.28	<0.01	0.045	0.12	<0.0004	0.069	<0.05	<0.01	<0.03	0.42

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-203DA	Nov-89	<0.010	0.0593	16	0.0104		0.677		6.97	0.0075	<0.060	<10.0	<0.2	<0.005	0.0104	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.0945
MW-203DA	Feb-90	<0.010		7.94	0.0046		0.244					10.5										
MW-203DA	Apr-90	<0.010		21.7	0.0111		0.973					<10.0										
MW-203DA	Nov-90	<0.010	42	2	0.028	5.6	0.26	1	5.7	1.3	<0.060	<0.020	0.05	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.05
MW-203DA	Feb-91	<0.010	45.8	3.83	<0.020	6.59	0.303	1.45	5.37													
MW-203DA	May-91	<0.010	42.9	2.39	<0.020	5.82	0.264	1.16	4.8													
MW-203DA	Aug-91	<0.010	44.7	2.7	<0.020	6.25	0.328	1.45	5.46													
MW-203DA	Nov-91	<0.010	37.5	2.27	<0.020	5.74	0.281	0.71	5.53													
MW-203DA	Feb-92	<0.010	28.3	21	<0.020	9.14	0.607	5.6	4.97	19.8	<0.060	<0.020	0.14	<0.010	<0.020	0.021	<0.001	<0.040	<0.005	<0.020	<0.010	0.098
MW-203DA	May-92	<0.010	37.5	1.9	<0.020	5.41	0.199	0.79	4.25													
MW-203DA	Aug-92	<0.010	34.7	2.27	<0.020	5.34	0.224	1.34	3.83													
MW-203DA	Dec-92	<0.010	33.7	3.06	<0.020	5.65	0.186	1.27	5.29													
MW-203DA	Feb-93	<0.010	26.6	7.14	<0.020	5.96	0.361	2.11	4.53													
MW-203DA	May-93	<0.010	36.4	3.34	0.014	5.41	0.217	1.44	5.59	2.55	<0.060	<0.020	<0.10	<0.010	<0.020	0.031	<0.001	<0.040	<0.005	<0.020	<0.010	0.032
MW-203DA	Aug-93	<0.010	33.9	3.15	0.006	6	0.21	0.58	7.56													
MW-203DA	Dec-93	<0.010	40.3	4.07	0.008	7	0.358	1.43	5.96													
MW-203DA	Feb-94	<0.010	37	3.17	<0.005	6.1	0.26	1.08	5.03													
MW-203DA	May -94	<0.010	38.8	2.9	0.009	7	0.32	<0.50	6.48													
MW-203DA	Aug-94	<0.010	40.6	1.42	<0.005	5.66	0.22	1.13	4.50	1.70	<0.060	<0.020	<0.10	<0.010	<0.020	0.036	<0.001	0.16	<0.005	<0.020	<0.005	0.031
MW-203DA	Nov-94	0.012	31.6	0.5	<0.005	5.02	0.17	0.61	5.79													
MW-203DA	March-95	<0.010	37.2	1.71	0.006	6	0.25	1.24	5													
MW-203DA	June-95	<0.010	39.8	0.46	<0.005	5.34	0.23	0.9	5.4													
MW-203DA	Sept.-95	<0.010	40.2	1.63	<0.005	5.86	0.27	0.97	5.7													
MW-203DA	Nov-95	<0.010	35.4	1.1	<0.005	5.38	0.2	1.01	7.58	0.88	<0.060	<0.020	0.15	<0.010	<0.020	0.038	<0.001	<0.040	<0.005	<0.020	<0.005	0.038
MW-203DA	April-96	<0.002	52	4.2	<0.01	7.1	0.4	1.1	5.1	2.1	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.082
MW-203DA	June-96	<0.01	41	0.91	<0.01	5.5	0.19	0.67	4.3													
MW-203DA	Sept-96	<0.01	56	22	0.018	12	0.85	2.4	5													
MW-203DA	Nov-96	<0.01	40	4.5	<0.01	6.6	0.25	1.2	4.7													
MW-203DA	Mar-97	<0.01	69	24	0.02	14	0.99	3.7	3.5	11	<0.06	<0.01	<0.2	<0.01	0.038	0.038	<0.0004	0.041	<0.05	<0.01	<0.03	0.15

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-203VD	Nov-89	<0.010	31	0.23	<0.003		0.0233		12.6	<0.2	<0.060	<0.010	<0.200	<0.005	<0.10	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.049
MW-203VD	Feb-90	<0.010		5.11	0.0033		0.352					<0.010										
MW-203VD	Apr-90	<0.010		0.348	0.003		0.0226					<0.010										
MW-203VD	Nov-90	<0.010	29	0.92	0.02	12	0.04	1	11	0.66	<0.060	<0.020	0.02	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	<0.02
MW-203VD	Feb-91	<0.010	28.4	0.364	<0.020	11.1	0.023	0.867	11.3													
MW-203VD	May-91	<0.010	29.4	0.13	<0.020	10.6	0.024	0.915	10.9													
MW-203VD	Aug-91	<0.010	27.4	0.184	<0.020	10.7	0.026	1.02	10.9													
MW-203VD	Nov-91	<0.010	24.8	0.928	<0.020	10.6	0.038	0.75	11.2													
MW-203VD	Feb-92	<0.010	25.8	2.2	<0.020	11.3	0.051	1.39	9.55	1.82	<0.060	<0.020	<0.10	<0.010	<0.020	0.05	<0.001	<0.040	<0.005	<0.020	<0.010	0.056
MW-203VD	May-92	<0.010	25.7	0.699	<0.020	10.9	0.023	0.69	9.94													
MW-203VD	Aug-92	<0.010	23.7	1.08	<0.020	9.6	0.029	1.41	9.14													
MW-203VD	Dec-92	<0.010	24.8	1.77	<0.020	11.3	0.036	1.23	11.4													
MW-203VD	Feb-93	<0.010	18.5	1.08	<0.020	7.9	0.041	1.06	10.5													
MW-203VD	May-93	<0.010	23.2	0.56	<0.005	9.09	0.033	1.02	12.1	0.52	<0.060	<0.020	<0.10	<0.010	<0.020	0.025	<0.001	<0.040	<0.005	<0.020	<0.010	0.042
MW-203VD	Aug-93	<0.010	20.3	0.869	0.005	15.3	0.067	0.44	15.8													
MW-203VD	Dec-93	<0.010	25.1	1.6	0.008	12.2	0.048	1.19	12.7													
MW-203VD	Feb-94	<0.010	27.2	1.86	<0.005	18	0.035	1.11	11.2													
MW-203VD	May -94	<0.010	21.9	0.37	<0.005	10.2	0.037	0.61	11.4													
MW-203VD	Aug-94	<0.010	12.9	0.24	<0.005	10.3	<0.020	0.92	9.09	0.34	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.15	<0.005	<0.020	<0.005	<0.020
MW-203VD	Nov-94	0.012	18.4	0.22	<0.005	9.2	0.028	1.26	10.8													
MW-203VD	March-95	<0.010	23.2	0.66	0.007	10.6	<0.020	1.08	11.2													
MW-203VD	June-95	<0.010	25	0.11	0.005	11	0.022	1	9.65													
MW-203VD	Sept.-95	<0.010	24.5	0.34	<0.005	10.3	0.044	1	10.5													
MW-203VD	Nov-95	<0.010	22.9	1.04	<0.005	10.2	0.056	1.32	13.5	0.61	<0.060	<0.020	0.1	<0.010	<0.020	0.021	<0.001	<0.040	<0.005	<0.020	<0.005	0.054
MW-203VD	April-96	<0.002	29	0.4	0.012	11	0.028	1.4	14	0.2	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	0.036	0.046
MW-203VD	June-96	<0.01	23	0.13	<0.01	9.3	0.023	0.93	10													
MW-203VD	Sept-96	<0.01	24	0.4	<0.01	10	0.05	1.1	10													
MW-203VD	Nov-96	<0.01	26	0.36	<0.01	10	0.024	<1	9.9													
MW-203VD	Mar-97	<0.01	26	0.45	<0.01	10	0.023	1	6.8	0.15	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.12

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-208SA	Mar-90	<0.010	80.7	20	0.0091		0.887		15.8	12.3	<0.060	0.0056	<0.200	<0.005	0.0163	0.0363	<0.002	<0.040	<0.005	<0.010	<0.010	0.124
MW-208SA	Apr-90	<0.010		0.799	<0.003		0.374					<0.010										
MW-208SA	Nov-90	<0.01	76	11	0.02	13	0.68	2.6	15	6.6	<0.060	<0.020	0.15	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.07
MW-208SA	Feb-91	<0.010	78.5	7.89	<0.020	12.6	0.609	2.12	16													
MW-208SA	May-91	<0.010	71	2.37	<0.020	10.2	0.464	1.26	15.5													
MW-208SA	Aug-91	<0.010	78.2	3.21	<0.020	11.5	0.625	1.46	15.6													
MW-208SA	Nov-91	<0.010	66.9	5.42	<0.020	10.7	0.512	1.47	15.4													
MW-208SA	Feb-92	<0.010	29.4	0.696	<0.020	6.6	0.132	0.82	10.3	0.68	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.029
MW-208SA	May-92	<0.010	67.7	1.97	<0.020	10.1	0.384	0.85	14.8													
MW-208SA	Aug-92	<0.010	62.7	2.56	<0.020	9.68	0.386	1.89	13.6													
MW-208SA	Dec-92	<0.010	59.6	3.9	<0.020	9.95	0.261	1.89	16.4													
MW-208SA	Feb-93	<0.010	50.3	5.03	<0.020	8.75	0.499	1.95	16.4													
MW-208SA	May-93	<0.010	63.2	5.13	0.006	9.79	0.393	2.45	19	5	<0.060	<0.020	<0.10	<0.010	<0.020	0.042	<0.001	<0.040	<0.005	<0.020	<0.010	0.045
MW-208SA	Aug-93	<0.010	61.7	3.35	<0.005	13.9	0.331	1.4	19.3													
MW-208SA	Dec-93	<0.010	72	3.82	<0.005	11.8	0.381	1.72	18.4													
MW-208SA	Feb-94	<0.010	72.5	3.9	<0.005	11	0.419	1.66	19.4													
MW-208SA	May -94	<0.010	64.7	2.76	<0.005	10.5	0.46	0.81	18.1													
MW-208SA	Aug-94	<0.010	71.7	0.53	<0.005	10.1	0.41	1.39	14.9	0.49	<0.060	<0.020	<0.10	<0.010	<0.020	0.020	<0.001	0.11	<0.005	<0.020	<0.005	0.027
MW-208SA	Nov-94	<0.010	55.8	0.34	<0.005	9.54	0.32	1.14	19.10													
MW-208SA	March-95	<0.010	66.4	2.43	<0.005	12.60	0.56	2.49	19.40													
MW-208SA	June-95	0.013	75.4	3.81	<0.005	10.80	0.63	1.52	16.60													
MW-208SA	Sept.-95	<0.010	76.1	2.47	<0.005	11.10	0.46	1.60	19.80													
MW-208SA	Nov-95	<0.010	66.8	9.46	<0.005	14.30	0.62	2.05	26	1.26	<0.060	<0.020	0.32	<0.010	<0.020	0.029	<0.001	<0.040	<0.005	<0.020	<0.005	0.036
MW-208SA	April-96	<0.002	78.0	5.30	0.02	10.00	0.47	1.40	21	1.10	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.028
MW-208SA	June-96	<0.01	67.0	16	<0.01	11.00	0.58	2.10	17													
MW-208SA	Sept-96	<0.01	81.0	39	0.02	16.00	1.20	3.40	19													
MW-208SA	Nov-96	<0.01	51.0	36	<0.01	11.00	0.74	2.40	14													
MW-208SA	Mar-97	<0.01	64.0	55	0.018	13.00	0.85	2.80	9	3.10	<0.06	<0.01	<0.2	<0.01	<0.01	0.029	<0.0004	0.01	<0.05	<0.01	<0.03	0.085

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-208VD	Mar-90	<0.010	32.3	3.62	<0.003		0.171		17.5	2.21	<0.060	<0.010	<0.200	<0.005	<0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.0383
MW-208VD	Apr-90	<0.010		0.782	<0.003		0.128					<0.010										
MW-208VD	Nov-90	<0.01	32	2.4	0.02	7.6	0.17	1.3	16	1.3	<0.060	<0.020	0.07	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.06
MW-208VD	Feb-91	<0.010	31.9	0.989	<0.020	7.16	0.114	0.962	12.3													
MW-208VD	May-91	<0.010	31.2	0.177	<0.020	6.75	0.11	0.928	11.6													
MW-208VD	Aug-91	<0.010	31.5	1.61	<0.020	7.48	0.155	1.18	11.9													
MW-208VD	Nov-91	<0.010	28.3	1.14	<0.020	6.7	0.15	0.75	11.2													
MW-208VD	Feb-92	<0.010	69.8	3.72	<0.020	10.4	0.487	1.78	13.1	3.26	<0.060	<0.020	0.11	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.051
MW-208VD	May-92	<0.010	21.2	17.9	<0.020	11.3	0.42	2.24	12.7													
MW-208VD	Aug-92	<0.010	25.9	1.13	<0.020	6.22	0.132	1.24	7.71													
MW-208VD	Dec-92	<0.010	22.5	6.99	<0.020	7.95	0.152	2.65	11.9													
MW-208VD	Feb-93	<0.010	20.2	3.71	<0.020	6.32	0.207	1.61	10.5													
MW-208VD	May-93	<0.010	28.9	1.04	0.006	5.93	0.11	0.99	11.3	1.17	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-208VD	Aug-93	<0.010	19.3	7.57	0.011	9.8	0.198	1.81	13.1													
MW-208VD	Dec-93	<0.010	30.4	0.277	<0.005	7.2	0.141	0.79	12.2													
MW-208VD	Feb-94	<0.010	27.4	0.287	<0.005	6.6	0.124	0.67	10.3													
MW-208VD	May -94	<0.010	27.3	1.41	<0.005	6.68	0.13	0.56	10.7													
MW-208VD	Aug-94	<0.010	27.3	4.64	<0.005	8.70	0.23	2.16	9.45	3.63	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.14	<0.005	<0.020	<0.005	0.048
MW-208VD	Nov-94	<0.010	22.9	0.26	<0.005	6.64	0.13	0.78	14.10													
MW-208VD	March-95	<0.010	27.6	1.37	0.015	7.60	0.17	1.36	11.80													
MW-208VD	June-95	<0.010	28.1	0.08	<0.005	6.42	0.15	1.30	8.42													
MW-208VD	Sept.-95	<0.010	27.8	3.47	0.007	8.50	0.24	1.67	10.50													
MW-208VD	Nov-95	<0.010	27.3	0.17	<0.005	6.60	0.14	0.87	12.10	<0.20	<0.060	<0.020	0.27	<0.010	<0.020	0.024	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
MW-208VD	April-96	<0.002	37.0	1.20	<0.01	7.50	0.18	1.30	12.00	0.73	<0.1	<0.01	<0.2	<0.003	<0.01	0.030	<0.0002	<0.01	0.14	<0.01	<0.03	0.07
MW-208VD	June-96	<0.01	30.0	0.70	<0.01	6.60	0.14	0.82	9.9													
MW-208VD	Sept-96	<0.01	31.0	0.34	0.012	7.00	0.15	<1	8.9													
MW-208VD	Nov-96	<0.01	26.0	0.38	<0.01	6.60	0.14	<1	8.6													
MW-208VD	Mar-97	<0.01	28.0	0.22	<0.01	5.90	0.13	<1	10.0	<0.1	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.036

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-212SA	Nov-90	<0.01	205	27	0.022	57	1.2	4.2	5.8	11	<0.060	<0.020	0.07	<0.01	<0.03	0.05	<0.001	<0.04	<0.005	<0.02	<0.010	0.09
MW-212SA	Feb-91	<0.010	95.7	15.4	<0.020	27.5	0.619	2.95	3.08													
MW-212SA	May-91	<0.010	177	35.9	0.028	57.4	2.03	5.52	4.13													
MW-212SA	Aug-91	<0.010	242	36.8	0.021	64	2	5.15	4.88													
MW-212SA	Nov-91	<0.010	154	45.8	0.023	49.2	12.89	4.46	4.45													
MW-212SA	Feb-92	<0.010	189	40.1	<0.020	73.2	3.71	7.52	4.64	24.7	<0.060	<0.020	0.25	<0.010	<0.020	0.059	<0.001	<0.040	<0.005	0.049	<0.010	0.114
MW-212SA	May-92	Monitoring Well Broken - No Sample Collected																				
MW-212SA	Aug-92	Monitoring Well Broken - No Sample Collected																				
MW-212SA	Dec-92	Monitoring Well Broken - No Sample Collected																				
MW-212SA	Feb-93	Monitoring Well Broken - No Sample Collected																				
MW-212SA	May-93	Monitoring Well Broken - No Sample Collected																				
MW-212SA	Aug-93	Monitoring Well Broken - No Sample Collected																				
MW-212SA	Dec-93	Monitoring Well Broken - No Sample Collected																				
MW-212SA	Feb-94	Monitoring Well Broken - No Sample Collected																				
MW-212SA	May-94	Monitoring Well Broken - No Sample Collected																				
MW-212SA	Aug-94	Monitoring Well Broken - No Sample Collected																				
MW-212SA	Nov-94	Monitoring Well Removed from Monitoring Program - Replaced by MW-312S																				
MW-212SA	Sept-96	Monitoring Well Removed from Monitoring Program - Replaced by MW-312S																				
MW-212SA	Nov-96	Monitoring Well Removed from Monitoring Program - Replaced by MW-312S																				
MW - 312S	Nov-94	<0.010	85.20	2.33	0.005	22.80	1.00	1.56	3.13													
MW - 312S	March-95	<0.010	90.00	27.80	0.018	29.00	8.99	3.24	4.10													
MW - 312S	June-95	<0.010	105.00	7.90	0.008	22.40	5.65	2.10	2.31													
MW-312S	Sept.-95	<0.010	96.00	0.74	<0.005	20.00	0.93	1.36	3.68													
MW-312S	Dec-95	<0.010	149.00	50.90	<0.005	55.90	4.28	5.48	9.26	27.10	<0.060	<0.020	0.38	<0.010	0.035	0.10	<0.001	<0.040	<0.005	<0.020	<0.005	0.24
MW-312S	April-96	0.0028	320.00	73	0.076	25.00	7.20	7.20	4.20	36.00	0.16	<0.01	<0.2	<0.003	0.056	0.14	<0.0002	0.08	0.16	<0.01	<0.03	0.39
MW-312S	June-96	<0.01	190.00	84	<0.01	27.00	6.60	7.10	3.40													
MW-312S	Sept-96	<0.01	120.00	39	0.041	23.00	2.20	4.40	3.80													
MW-312S	Nov-96	<0.01	250.00	150	0.130	30.00	6.50	13.00	4.40													
MW-312S	Mar-97	<0.01	170.00	88	0.087	29.00	3.80	14.00	2.90	54.00	0.11	<0.01	0.20	<0.01	0.074	0.14	<0.0004	0.10	<0.05	<0.01	<0.03	0.38

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-212DA	Nov-89	<0.010	117	7.01	0.0046		0.365		25.7	2.03	<0.060	<0.010	<0.200	<0.005	<0.010	<0.025	<0.0002	<0.040	<0.005	<0.010	<0.010	0.0554
MW-212DA	Feb-90	<0.010		2.35	<0.003		0.341					<0.010										
MW-212DA	Apr-90	<0.010		1.6	<0.003		0.32					<0.010										
MW-212DA	Nov-90	<0.01	130	2	<0.020	20	0.44	1.2	12	<0.20	<0.060	<0.020	0.09	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.1
MW-212DA	Feb-91	<0.010	135	1.91	<0.020	20.8	0.391	1.08	11.7													
MW-212DA	May-91	<0.010	126	1.44	<0.020	20.2	0.38	1.12	11.6													
MW-212DA	Aug-91	<0.010	133	1.63	<0.020	21.2	0.406	1.15	11.5													
MW-212DA	Nov-91	<0.010	125	1.55	<0.020	17.5	0.377	0.82	11.9													
MW-212DA	Feb-92	<0.010	134	7.91	<0.020	31.4	0.568	2.53	10.9	6.62	<0.060	<0.020	0.17	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.093
MW-212DA	May-92	<0.010	130	1.63	<0.020	19.7	0.346	0.87	9.84													
MW-212DA	Aug-92	<0.010	108	1.11	<0.020	16.9	0.299	1.46	8.41													
MW-212DA	Dec-92	<0.010	115	1.4	<0.020	17.6	0.239	1.22	11.8													
MW-212DA	Feb-93	<0.010	98.4	1.2	<0.020	14.7	0.329	1.07	10.8													
MW-212DA	May-93	<0.010	115	1.88	<0.005	17.1	0.312	1.16	10.9	0.41	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-212DA	Aug-93	<0.010	117	1.29	0.007	22.6	0.274	0.82	11.3													
MW-212DA	Dec-93	<0.010	125	4	0.005	26.3	0.471	1.78	11.4													
MW-212DA	Feb-94	<0.010	113	2.5	<0.005	21	0.371	1.17	10.7													
MW-212DA	May -94	<0.010	88.4	1.26	0.006	18.6	0.29	0.93	111													
MW-212DA	Aug-94	<0.010	122	0.65	<0.005	18.6	0.44	1.32	8.30	0.23	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.078	<0.005	<0.020	<0.005	0.034
MW-212DA	Nov-94	<0.010	90.5	1.5	<0.005	18.4	0.32	2.1	10.4													
MW-212DA	March-95	<0.010	118	0.98	<0.005	19.8	0.34	1.33	9.75													
MW-212DA	June-95	<0.010	121	0.9	<0.005	20.4	0.4	1.34	8.75													
MW-212DA	Sept-95	<0.010	128	1.35	<0.005	21.2	0.4	1.39	10.8													
MW-212DA	Nov-95	<0.010	113	0.8	<0.005	19.8	0.36	1.34	13	<0.20	<0.060	<0.020	0.33	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.005	0.11
MW-212DA	April-96	<0.002	130	1.3	<0.01	17	0.37	1.5	12	0.47	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.043
MW-212DA	June-96	<0.01	120	1.2	<0.01	18	0.38	1.4	11													
MW-212DA	Sept-96	<0.01	120	0.98	<0.01	18	0.38	1.3	9.8													
MW-212DA	Nov-96	<0.01	120	1.2	0.019	16	0.37	1.1	9.5													
MW-212DA	Mar-97	<0.01	110	0.99	0.01	17	0.32	1.5	7.8	0.28	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.050

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-230S	Nov-89	<0.010	77.3	2.4	<0.003		0.35		8.15	1.32	<0.060	<0.010	<0.2	<0.005	<0.01	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.010	0.032
MW-230S	Feb-90	<0.010		5.71	0.0035		0.449					<0.010										
MW-230S	Apr-90	<0.010		3.55	<0.03		0.289					<0.010										
MW-230S	Nov-90	<0.01	230	120	0.1	61	5.4	11	8.3	61	<0.060	0.036	0.38	<0.01	0.07	0.25	<0.001	0.11	<0.005	<0.02	<0.010	0.41
MW-230S	Feb-91	<0.010	77.5	8.07	<0.020	14.3	0.499	1.86	7.04													
MW-230S	May-91	<0.010	89.2	16.2	<0.020	15.9	0.9	2.71	6.9													
MW-230S	Aug-91	<0.010	72.4	2.31	<0.020	11.4	0.388	1.24	6.72													
MW-230S	Nov-91	<0.010	62.2	12.1	<0.020	11.9	0.591	2.3	6.98													
MW-230S	Feb-92	<0.010	64.7	10.5	<0.020	13.2	0.498	2.85	6.04	8.97	<0.060	<0.020	0.13	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.053
MW-230S	May-92	<0.010	100	8.2	<0.020	18.6	0.472	1.76	6.49													
MW-230S	Aug-92	<0.010	54.9	8.68	<0.020	11.3	0.43	2.36	4.74													
MW-230S	Dec-92	<0.010	55.1	7.96	<0.020	11	0.324	2.18	7.14													
MW-230S	Feb-93	<0.010	63.1	27.6	<0.020	18.1	1.37	4.13	7.3													
MW-230S	May-93	<0.010	61.4	10.6	0.01	10.6	0.38	2.79	6.91	7.7	<0.060	<0.020	<0.10	<0.010	<0.020	0.027	<0.001	<0.040	<0.005	<0.020	<0.010	0.053
MW-230S	Aug-93	<0.010	48.3	20.9	0.02	17.9	0.574	2.07	9.75													
MW-230S	Dec-93	<0.010	61.5	14.4	0.009	17.3	0.683	3.07	7.94													
MW-230S	Feb-94	<0.010	77.2	19.7	0.009	17	0.72	3.46	7.36													
MW-230S	May -94	<0.010	62	6.04	0.006	21.6	0.44	0.69	9.65													
MW-230S	Aug-94	<0.010	53.7	1.19	<0.005	12.8	0.12	1.30	6.43	1.16	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.17	<0.005	<0.020	<0.005	0.044
MW-230S	Nov-94	<0.010	47	0.5	<0.005	10.1	0.18	0.97	7.37													
MW-230S	March-95	<0.010	66.2	1.83	<0.005	12	0.38	1.48	6.5													
MW-230S	June-95	<0.010	67.6	2.64	<0.005	31.6	0.46	0.99	6.72													
MW-230S	Sept.-95	<0.010	61	6.77	<0.005	12.1	0.44	2.14	7.4													
MW-230S	Nov-95	<0.010	48.8	2.43	0.023	10.7	0.024	1.51	10.4	1.56	<0.060	<0.020	0.21	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
MW-230S	April-96	<0.002	78	12	0.017	13	0.55	1.8	7.6	5.7	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	0.0002	0.013	<0.1	<0.01	<0.03	0.055
MW-230S	June-96	<0.01	65	9.2	<0.01	11	0.47	1.7	6.5													
MW-230S	Sept-96	<0.01	70	9.1	<0.01	12	0.44	1.7	7													
MW-230S	Nov-96	<0.01	31	2.9	<0.01	8	0.081	1.8	8.1													
MW-230S	Mar-97	<0.01	42	4.2	<0.01	6.5	0.19	2.6	6.2	1.9	<0.06	0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	0.016	<0.05	<0.01	<0.03	0.11

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-230D	Nov-89	<0.010	20.9	1.63	0.0042		0.107		15.1	0.998	<0.060	<0.010	<0.2	<0.005	<0.010	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.010	0.202
MW-230D	Feb-90	<0.010		0.289	<0.003		0.106					<0.010										
MW-230D	Apr-90	<0.010		0.188	<0.003		0.17					<0.010										
MW-230D	Nov-90	<0.01	28	1.6	<0.020	6.6	0.16	1.2	22	0.93	<0.060	<0.020	0.06	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.08
MW-230D	Feb-91	<0.010	27.5	0.385	<0.020	6.27	0.125	0.913	22.6													
MW-230D	May-91	<0.010	27.5	0.099	<0.020	6.01	0.118	0.915	22.1													
MW-230D	Aug-91	<0.010	25.7	0.234	<0.020	5.84	0.12	1.01	21.6													
MW-230D	Nov-91	<0.010	23.6	0.258	<0.020	5.3	0.14	0.66	22.6													
MW-230D	Feb-92	<0.010	26.1	0.96	<0.020	5.88	0.144	1.1	17.7	0.7	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.058
MW-230D	May-92	<0.010	24.5	0.281	<0.020	5.49	0.111	0.62	19.9													
MW-230D	Aug-92	<0.010	22	0.291	<0.020	5.24	0.115	1.48	17.7													
MW-230D	Dec-92	<0.010	20.8	0.217	<0.020	4.9	0.084	0.85	22.9													
MW-230D	Feb-93	<0.010	18.6	0.7	<0.020	4.6	0.144	1.07	23.6													
MW-230D	May-93	<0.010	22.7	0.83	0.007	5.23	0.099	1.23	25	0.49	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.010	<0.040	<0.005	<0.020	<0.010	<0.010
MW-230D	Aug-93	<0.010	19	0.607	0.005	6.68	0.142	<0.50	28.7													
MW-230D	Dec-93	<0.010	24	0.787	0.006	6.4	0.163	1.07	23.9													
MW-230D	Feb-94	<0.010	23	0.858	<0.005	6	0.106	0.92	22.1													
MW-230D	May -94	<0.010	21.2	0.6	<0.005	5.93	0.12	0.79	21.9													
MW-230D	Aug94	<0.010	25	0.40	<0.005	5.60	0.14	0.94	17.5	0.34	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.16	<0.005	<0.020	<0.005	0.035
MW-230D	Nov.94	<0.010	19.1	0.23	<0.005	5.48	0.12	0.76	22.1													
MW-230D	March-95	<0.010	22.8	0.44	<0.005	5.8	0.099	0.92	21.8													
MW-230D	June-95	<0.010	24.8	0.16	<0.005	5.76	0.13	1.21	19.2													
MW-230D	Sept.-95	<0.010	23.7	0.16	<0.005	5.7	0.13	1.09	21.3													
MW-230D	Nov-95	<0.010	18.1	0.46	<0.005	5.38	0.12	1.04	25.2	0.3	<0.060	<0.020	0.27	<0.010	<0.020	0.025	<0.001	<0.040	<0.005	<0.020	<0.005	0.062
MW-230D	April-96	<0.002	27	0.14	<0.01	6.1	0.78	1.2	26	0.48	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.085
MW-230D	June-96	<0.01	25	1.4	<0.01	6	0.14	1.1	21													
MW-230D	Sept-96	<0.01	26	0.9	<0.01	6	0.13	0.88	22													
MW-230D	Nov-96	<0.01	25	3.2	<0.01	6.6	0.16	1.1	19													
MW-230D	Mar-97	<0.01	25	4	0.013	6.8	0.21	1.6	15	2.4	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.098

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-231S	Nov-89	<0.010	59.1	0.533	<0.003		<0.015		15	0.344	<0.06	<0.010	<0.2	<0.005	<0.01	<0.025	<0.0002	<0.040	<0.005	<0.01	<0.01	0.0423
MW-231S	Feb-90	<0.010		3.12	<0.003		0.145					<0.010										
MW-231S	Apr-90	<0.010		0.41	<0.003		0.107					<0.010										
MW-231S	Nov-90	<0.01	58	20	0.024	25	0.52	4.6	11	12	<0.060	<0.020	0.19	<0.01	<0.03	0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.09
MW-231S	Feb-91	<0.010	48.7	8.09	<0.020	20.8	0.238	3.57	10.5													
MW-231S	May-91	<0.010	50.2	9.73	<0.020	20	0.287	2.37	10.3													
MW-231S	Aug-91	<0.010	54.5	6.55	<0.020	17.7	0.262	3.08	10.1													
MW-231S	Nov-91	<0.010	31.9	2.52	<0.020	15.1	0.121	1.3	10.1													
MW-231S	Feb-92	<0.010	43.3	13.6	<0.020	19.1	0.346	3.93	9.48	12.4	<0.060	<0.020	0.16	<0.010	<0.020	0.02	<0.001	<0.040	<0.005	<0.020	<0.010	0.054
MW-231S	May-92	<0.010	40.5	4.7	<0.020	16.1	0.158	1.41	10.4													
MW-231S	Aug-92	<0.010	36.6	4.33	<0.020	30.1	0.174	2.47	6.97													
MW-231S	Dec-92	<0.010	39.2	10.3	<0.020	16.1	0.233	3.42	10.3													
MW-231S	Feb-93	<0.010	32.8	4.23	<0.020	13.9	0.182	1.99	10.1													
MW-231S	May-93	<0.010	46.8	5.23	0.006	14.4	0.158	2.51	10.4	4.94	<0.060	<0.020	<0.10	<0.010	<0.020	0.02	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-231S	Aug-93	<0.010	40.6	7.84	0.01	19.2	0.194	1.93	13.7													
MW-231S	Dec-93	<0.010	46.2	4.92	<0.005	18.2	0.211	2.45	11													
MW-231S	Feb-94	<0.010	44.2	0.626	<0.005	16	0.204	1.94	18.5													
MW-231S	May -94	<0.010	46.5	2.32	0.011	13.8	0.18	0.84	10.4													
MW-231S	Aug-94	<0.010	52.0	0.41	<0.005	12.6	0.16	1.52	0.40	0.56	<0.060	<0.020	<0.10	<0.010	<0.020	0.022	<0.001	0.064	<0.005	<0.020	<0.005	0.043
MW-231S	Nov-94	<0.010	39.1	0.3	<0.005	12.5	0.14	1.25	8.87													
MW-231S	March-95	<0.010	45.8	1.83	<0.005	15	0.19	1.86	8.8													
MW-231S	June-95	<0.010	46.9	0.9	<0.005	12.4	0.2	1.15	7.38													
MW-231S	Sept.-95	<0.010	52.6	3.32	<0.005	15.3	0.22	1.9	9.58													
MW-231S	Nov-95	<0.010	48.6	7.28	<0.005	15.7	0.28	2.61	21.5	4.45	<0.060	<0.020	0.23	<0.010	<0.020	0.031	<0.001	<0.040	<0.005	<0.020	<0.005	0.079
MW-231S	April-96	0.0021	60	7.4	<0.01	14	0.29	2.1	9.1	4.2	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.058
MW-231S	June-96	<0.01	59	6.2	<0.01	14	0.31	1.8	8.2													
MW-231S	Sept-96	<0.01	65	5.2	<0.01	14	0.29	1.7	9													
MW-231S	Nov-96	<0.01	21	1.5	<0.01	4.5	0.05	1.1	12													
MW-231S	Mar-97	<0.01	39	2.1	0.012	5.7	0.12	1.6	10	1.2	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.13

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-231D	Nov-89	<0.010	111	<0.1	<0.003		0.0494		267	<0.2	<0.06	<0.010	<0.2	<0.005	<0.01	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.01	<0.02
MW-231D	Feb-90	<0.010		0.445	<0.003		0.0779					<0.010										
MW-231D	Apr-90	<0.010		0.453	<0.003		0.0617					<0.010										
MW-231D	Nov-90	<0.01	110	1.1	0.05	40	0.08	3	260	<0.20	<0.060	<0.020	0.03	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.06
MW-231D	Feb-91	<0.010	107	0.912	<0.020	40.7	0.064	2.83	263													
MW-231D	May-91	<0.010	103	0.848	<0.020	39.2	0.061	2.77	252													
MW-231D	Aug-91	<0.010	103	0.908	<0.020	39.5	0.065	2.76	249													
MW-231D	Nov-91	<0.010	104	0.778	<0.020	36	0.079	2.62	262													
MW-231D	Feb-92	<0.010	108	0.696	<0.020	37.7	0.076	3.67	209	<0.020	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.04
MW-231D	May-92	<0.010	124	3.72	<0.020	42.3	0.095	2.44	229													
MW-231D	Aug-92	<0.010	87.6	0.507	<0.020	17.3	0.07	4.59	205													
MW-231D	Dec-92	<0.010	109	1.57	<0.020	36.4	0.061	3.68	266													
MW-231D	Feb-93	<0.010	77.4	0.355	<0.020	28.9	0.056	3.36	241													
MW-231D	May-93	<0.010	173	0.86	<0.005	58.1	0.081	4.07	485	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	0.076	<0.001	<0.040	<0.005	<0.020	<0.010	0.088
MW-231D	Aug-93	<0.010	92.8	0.762	0.013	45.2	0.069	1.94	682													
MW-231D	Dec-93	<0.010	108	0.518	<0.005	42.3	0.083	3.56	294													
MW-231D	Feb-94	<0.010	99.8	0.494	0.009	38	0.065	2.54	217													
MW-231D	May -94	<0.010	87.1	0.4	0.008	36.4	0.046	3.18	270													
MW-231D	Aug-94	<0.010	128	1.78	<0.005	46.8	0.15	4.15	252	0.98	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.093	<0.005	<0.020	<0.005	0.045
MW-231D	Nov-94	<0.010	81	0.32	<0.005	37.4	0.67	2.67	284													
MW-231D	March-95	<0.010	126	1.62	0.005	47	0.10	3.91	285													
MW-231D	June-95	<0.010	99.5	0.41	<0.005	37.5	0.075	3.23	221													
MW-231D	Sept.-95	<0.010	108	0.38	<0.005	39.8	0.074	3.76	254													
MW-231D	Nov-95	<0.010	84.5	0.34	<0.005	40.6	0.072	3.3	316	<0.20	<0.060	<0.020	0.25	<0.010	<0.020	0.022	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
MW-231D	April-96	<0.002	120	0.57	<0.01	25	0.074	4.6	240	0.22	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.043
MW-231D	June-96	<0.01	87	0.31	<0.01	25	0.056	3.5	190													
MW-231D	Sept-96	<0.01	96	0.6	<0.01	28	0.060	3.6	190													
MW-231D	Nov-96	<0.01	85	0.28	0.012	24	0.053	3.3	180													
MW-231D	Mar-97	<0.01	89	0.49	<0.01	26	0.079	4	130	0.1	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.12

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-232S	Nov-89	<0.010	80.1	18.9	0.0117		0.7		2.59	9.2	<0.06	<0.010	<0.2	<0.005	0.015	0.026	<0.0002	<0.04	<0.005	<0.01	<0.01	0.102
MW-232S	Feb-90	<0.010		3.5	<0.003		0.263					<0.010										
MW-232S	Apr-90	<0.010		0.434	<0.003		0.189					<0.010										
MW-232S	Nov-90	<0.01	67	15	<0.020	14	1.7	4.2	2.3	9.5	<0.060	<0.020	0.12	<0.01	<0.03	0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.06
MW-232S	Feb-91	<0.010	79.1	4.95	<0.020	14.2	0.646	2.34	2.03													
MW-232S	May-91	<0.010	68.1	6.43	<0.020	12.5	1.23	2.44	2.29													
MW-232S	Aug-91	<0.010	84.2	6.69	<0.020	15.4	1.05	2.66	2.97													
MW-232S	Nov-91	<0.010	87.6	45	<0.020	22.4	1.45	7.29	3.05													
MW-232S	Feb-92	<0.010	90.1	28.8	<0.020	22.3	1.23	5.2	2.71	19.4	<0.060	<0.020	0.15	<0.010	<0.020	0.029	<0.001	<0.040	<0.005	<0.020	<0.010	0.096
MW-232S	May-92	<0.010	90.1	1.59	<0.020	14.9	0.35	1.07	1.93	1.13	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	
MW-232S	Aug-92	<0.010	78.7	3.52	<0.020	15.5	0.654	2.74	2.35													
MW-232S	Dec-92	<0.010	93.5	4.47	<0.020	19	0.622	3.34	2.89													
MW-232S	Feb-93	<0.010	76.7	13.2	<0.020	18.2	0.941	3.62	2.5													
MW-232S	May-93	<0.010	116	3.61	0.007	21.3	0.667	2.83	3.93	3.25	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	0.667	<0.040	<0.005	<0.020	<0.010	0.022
MW-232S	Aug-93	<0.010	167	10.8	0.007	43.2	1.01	2.83	7.07													
MW-232S	Dec-93	<0.010	150	8.1	<0.005	33.5	1.26	3.59	3.74													
MW-232S	Feb-94	<0.010	125	5.86	<0.005	24	0.908	2.37	3.58													
MW-232S	May -94	<0.010	118	1.69	0.01	30	0.88	1.59	5.77													
MW-232S	Aug-94	<0.010	146	0.18	<0.005	33.2	1.22	2.42	3.19	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	0.032	<0.001	0.073	<0.005	<0.020	<0.005	0.035
MW-232S	Nov-94	<0.010	128	0.13	<0.005	35.2	1.03	2.3	3.29													
MW-232S	March-95	<0.010	127	2.05	<0.005	27	0.78	2.37	2.7													
MW-232S	June-95	<0.010	152	0.98	<0.005	34.4	1.17	2.3	3.17													
MW-232S	Sept.-95	<0.010	183	2.59	<0.005	39.2	1.32	2.95	3.03													
MW-232S	Nov-95	<0.010	118	5.32	<0.005	26.6	0.77	2.96	7.52	3.13	<0.060	<0.020	0.12	<0.010	<0.020	0.038	<0.001	<0.040	<0.005	<0.020	<0.005	0.14
MW-232S	April-95	<0.002	230	5.6	<0.01	25	1.6	3.8	4.8	2.3	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.01	<0.01	<0.03	0.045
MW-232S	June-96	<0.01	190	7.4	<0.01	26	1.7	3.2	3.5													
MW-232S	Sept-96	<0.01	170	8.5	<0.01	27	1.4	3.7	3.2													
MW-232S	Nov-96	<0.01	150	5.4	<0.01	19	1.4	2.8	2.4													
MW-232S	Mar-97	<0.01	170	18	0.023	23	1.7	4	2	7.2	<0.06	<0.01	<0.2	<0.01	0.013	0.022	<0.0004	0.014	<0.05	<0.01	<0.03	0.094

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-232D	Nov-89	<0.010	44.9	0.178	<0.003		<0.015		148	0.279	<0.06	<0.010	<0.2	<0.005	<0.01	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.01	0.031
MW-232D	Feb-90	<0.010		0.317	<0.003		<0.015					<0.010										
MW-232D	Apr-90	<0.010		0.223	<0.003		<0.015					<0.010										
MW-232D	Nov-90	<0.01	38	0.55	0.03	9.4	0.02	7.4	140	0.26	<0.060	<0.020	0.02	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.03
MW-232D	Feb-91																					
MW-232D	May-91	<0.010	32.6	0.424	<0.020	6.76	0.012	6.89	87.9													
MW-232D	Aug-91	<0.010	38.3	0.296	<0.020	10.4	0.013	5.25	144													
MW-232D	Nov-91	<0.010	36.8	0.277	<0.020	9.7	0.031	3.79	152													
MW-232D	Feb-92	<0.010	38.5	0.419	<0.020	10.6	0.029	5.21	77.1	0.28	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.035
MW-232D	May-92	<0.010	94.8	4.52	<0.020	32.3	0.093	2.75	178													
MW-232D	Aug-92	<0.010	59.9	2.22	<0.020	8.8	0.079	11.3	9.08													
MW-232D	Dec-92	<0.010	56.6	0.881	<0.020	16.7	0.033	5.71	162													
MW-232D	Feb-93	<0.010	31.9	0.235	<0.020	8.8	<0.020	4.41	141													
MW-232D	May-93	<0.010	41.6	0.27	<0.005	11.7	<0.020	3.65	164	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	0.023	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-232D	Aug-93	<0.010	38.2	0.668	<0.005	17.8	<0.020	2.74	275													
MW-232D	Dec-93	<0.010	48.4	0.363	0.007	16	0.032	4.36	153													
MW-232D	Feb-94	<0.010	42.2	0.427	<0.005	14	0.022	3.19	147													
MW-232D	May -94	<0.010	35.4	0.33	<0.005	14.6	0.021	3.77	135													
MW-232D	Aug-94	<0.010	73.6	0.41	<0.005	27.1	0.030	4.00	163	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.081	<0.005	<0.020	<0.005	<0.020
MW-232D	Nov-94	<0.010	34.6	0.21	<0.005	14.7	0.032	3.5	135													
MW-232D	March-95	<0.010	38	1.36	0.005	16	0.44	11.4	32													
MW-232D	June-95	<0.010	35.7	0.48	<0.005	14.6	0.13	5.68	97													
MW-232D	Sept.-95	<0.010	43.8	0.57	<0.005	16.3	0.094	4.75	129													
MW-232D	Nov-95	<0.010	37.2	1.4	0.007	15.8	0.12	4.4	156	0.27	<0.060	<0.020	0.27	<0.010	<0.020	0.057	<0.001	<0.040	<0.005	<0.020	<0.005	0.22
MW-232D	April-96	No Sample Taken																				
MW-232D	June-96	No Sample Taken																				
MW-232D	Sept-96	No Sample Taken																				
MW-232D	Nov-96	No Sample Taken																				
MW-232D	Mar-97	No Sample Taken																				

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-233S	Nov-90	<0.01	140	20	0.022	50	1.4	4.7	5	12	<0.060	<0.020	0.12	<0.01	<0.03	0.05	<0.001	<0.04	<0.005	<0.02	<0.010	0.07
MW-233S	Feb-91	<0.010	119	5.2	<0.020	44.4	0.886	2.53	4.5													
MW-233S	May-91	<0.010	116	2.14	<0.020	45.5	0.803	2.3	4.94													
MW-233S	Aug-91	<0.010	127	4.58	<0.020	76.9	1.02	3.84	6.49													
MW-233S	Nov-91	<0.010	106	8.38	<0.020	35.4	0.857	2.82	4.97													
MW-233S	Feb-92	<0.010	109	7.85	<0.020	46.7	0.956	2.37	4.74	4.7	<0.060	<0.020	0.12	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.027
MW-233S	May-92	<0.010	114	0.571	<0.020	46.5	0.745	1.47	4.41													
MW-233S	Aug-92	<0.010	118	0.197	<0.020	49	0.794	2.68	3.5													
MW-233S	Dec-92	<0.010	131	2.87	<0.020	54	0.774	2.9	5.61													
MW-233S	Feb-93	<0.010	153	11.7	<0.020	78.6	1.91	4.34	5.17													
MW-233S	May-93	<0.010	161	5.65	<0.005	45.9	2.91	1.88	2.21	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-233S	Aug-93	<0.010	213	2	<0.005	93.8	1.47	2.29	7.01													
MW-233S	Dec-93	<0.010	217	2.89	<0.005	87	1.9	3.34	4.86													
MW-233S	Feb-94	<0.010	142	18.5	<0.005	75	1.57	5.22	3.6													
MW-233S	May -94	<0.010	112	4.4	<0.005	65.8	2.16	1.6	4.26													
MW-233S	Aug-94	<0.010	112	0.73	<0.005	57.4	1.27	2.62	2.07	0.41	<0.060	<0.020	<0.10	<0.010	<0.020	0.03	<0.001	0.082	<0.005	<0.020	<0.005	0.078
MW-233S	Nov-94	<0.010	76	0.19	<0.005	50.8	0.83	1.88	3.4													
MW-233S	March-95	<0.010	220	1.75	<0.005	84	2.68	2.71	2.2													
MW-233S	June-95	<0.010	170	0.63	<0.005	81.8	1.58	2.07	2.36													
MW-233S	Sept.-95	<0.010	160	3.61	<0.005	73.6	1.1	2.57	3.32													
MW-233S	Nov-95	<0.010	133	0.57	<0.005	34.8	1.21	2.82	1.85	0.26	<0.060	<0.020	0.11	<0.010	<0.020	0.025	<0.001	<0.040	<0.005	<0.020	<0.005	0.031
MW-233S	April-96	<0.002	86	1.3	<0.01	12	0.54	1.3	2.2	0.21	<0.01	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.023
MW-233S	June-96	<0.01	84	1.2	<0.01	13	0.83	1.4	2.5													
MW-233S	Sept-96	<0.01	150	2.4	<0.01	20	2.7	2.5	6.6													
MW-233S	Nov-96	<0.01	140	2.7	0.016	19	1.6	2.1	3.3													
MW-233S	Mar-97	<0.01	170	1.8	<0.01	26	1.2	2.8	2.2	0.42	<0.06	0.011	<0.2	<0.01	<0.01	<0.01	<0.0004	<0.01	<0.05	<0.01	<0.03	0.039

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-233D	Nov-90	<0.01	42	0.22	0.024	15	0.03	1.9	130	<0.20	<0.060	<0.020	0.04	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.06
MW-233D	Feb-91	<0.010	41.6	0.081	<0.020	14.4	0.025	1.8	126													
MW-233D	May-91	<0.010	42.6	0.081	<0.020	14.4	0.025	1.93	132													
MW-233D	Aug-91	<0.010	21.6	0.079	<0.020	7.45	0.014	0.889	61.4													
MW-233D	Nov-91	<0.010	38.9	0.287	<0.020	12.2	0.043	1.65	126													
MW-233D	Feb-92	<0.010	38.1	1.67	<0.020	16	0.04	2.54	114	3.92	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.027
MW-233D	May-92	<0.010	40.7	1.01	<0.020	14.3	0.035	1.51	117													
MW-233D	Aug-92	<0.010	37.4	3.03	0.037	16.4	0.067	3.6	101													
MW-233D	Dec-92	<0.010	33.2	5.11	0.032	20.4	0.028	2.8	142													
MW-233D	Feb-93	<0.010	27.6	1.3	<0.020	11.9	0.036	2.3	128													
MW-233D	May-93	<0.010	41.6	0.251	<0.005	12.2	0.021	2.31	162	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	0.014	<0.020	<0.010	<0.020
MW-233D	Aug-93	<0.010	32.7	0.286	<0.005	16.8	<0.020	1.46	185													
MW-233D	Dec-93	<0.010	40.9	0.216	0.013	15.5	0.026	2.44	128													
MW-233D	Feb-94	<0.010	40.2	0.311	<0.005	15	0.026	1.79	131													
MW-233D	May-94	<0.010	33.2	0.3	0.006	14.5	0.029	2.02	111													
MW-233D	Aug-94	<0.010	42.2	0.46	<0.005	14.8	0.054	3.58	101	0.84	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.042	<0.005	<0.020	<0.005	0.075
MW-233D	Nov-94	<0.010	33.8	0.45	<0.005	15.6	0.044	2.13	129													
MW-233D	March-95	<0.010	37.8	0.47	0.005	14	<0.020	2.44	131													
MW-233D	June-95	<0.010	37.1	0.055	<0.005	14.9	0.033	2.3	130													
MW-233D	Sept.-95	<0.010	45.8	0.19	<0.005	15.4	0.036	2.5	110													
MW-233D	Nov-95	<0.010	28.3	0.21	<0.005	13	0.038	1.8	108	<0.20	<0.060	<0.020	0.24	<0.010	<0.020	0.024	<0.001	<0.040	<0.005	<0.020	<0.005	0.034
MW-233D	April-96	<0.002	46	0.28	<0.01	14	0.036	2.5	110	0.17	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.083
MW-233D	June-96	<0.01	42	0.2	<0.01	13	0.022	2.2	100													
MW-233D	Sept-96	<0.01	46	0.83	0.02	15	0.043	2.5	100													
MW-233D	Nov-96	<0.01	40	0.26	<0.01	13	0.034	2.1	97													
MW-233D	Mar-97	<0.01	42	0.21	0.015	13	0.034	2.6	61	<0.1	<0.06	0.012	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.043

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-234S	Nov-89	<0.01	112	58	0.0284		1.68		4.42	27.4	<0.06	0.0131	0.275	<0.005	0.042	0.084	0.0003	0.056	<0.005	<0.01	<0.01	0.175
MW-234S	Feb-90	<0.01		5.09	<0.3		0.41					<0.01										
MW-234S	Apr-90	<0.01		5.57	<0.3		0.461					<0.01										
MW-234S	Nov-90	<0.01	81	4.4	<0.020	13	0.46	1.5	4	3.1	<0.060	<0.020	0.12	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.08
MW-234S	Feb-91	<0.010	82.5	1.21	<0.020	12.1	0.381	0.776	3.66													
MW-234S	May-91	<0.010	83.1	0.806	<0.020	11.7	0.374	0.8	3.78													
MW-234S	Aug-91	<0.010	80.9	3.33	<0.020	12.4	0.444	1.25	3.64													
MW-234S	Nov-91	<0.010	74	3.55	<0.020	10.4	0.404	1.23	3.9													
MW-234S	Feb-92	<0.010	97.5	0.975	<0.020	16.6	0.559	0.94	3.82	0.79	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	0.047	<0.010	<0.020
MW-234S	May-92	<0.010	78.2	3.74	<0.020	12.7	0.432	0.98	2.27													
MW-234S	Aug-92	<0.010	68.3	2.47	<0.020	10.7	0.346	1.35	2.47													
MW-234S	Dec-92	<0.010	69.2	5.84	<0.020	11.7	0.331	2.35	4.15													
MW-234S	Feb-93	<0.010	54.4	9.1	0.035	12.1	0.574	2.25	3.73													
MW-234S	May-93	<0.010	68.2	7.86	0.008	11.6	0.466	2.5	4.56	5.4	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.048
MW-234S	Aug-93	<0.010	69.9	9.25	0.009	16.1	0.423	1.6	6.63													
MW-234S	Dec-93	<0.010	76.6	11.9	0.008	16.6	0.695	3.14	4.49													
MW-234S	Feb-94	<0.010	79.7	7.91	<0.005	14	0.537	1.93	4													
MW-234S	May -94	<0.010	91.1	3.36	0.071	14.4	0.48	1.05	5.84													
MW-234S	Aug-94	<0.010	104	0.20	<0.005	15.8	0.48	1.21	3.18	0.26	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.075	<0.005	<0.020	<0.005	<0.020
MW-234S	Nov-94	<0.010	62	0.66	<0.005	12	0.42	0.96	3.99													
MW-234S	March-95	<0.010	91	2.19	<0.005	18	0.59	1.86	3.2													
MW-234S	June-95	<0.010	80.5	1.05	<0.005	14.2	0.55	1.02	2.9													
MW-234S	Sept.-95	<0.010	80.9	3.05	<0.005	14.2	0.56	1.43	2.86													
MW-234S	Nov-95	<0.010	71.4	2.06	<0.005	16.2	0.58	1.09	3.85	1.02	<0.060	<0.020	0.16	0.01	<0.020	0.027	<0.001	<0.040	<0.005	<0.020	<0.005	0.078
MW-234S	April-96	<0.002	95	3.4	0.019	14	0.31	1.6	5	1.9	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.082
MW-234S	June-96	<0.01	120	6.9	<0.01	18	0.72	1.7	3.7													
MW-234S	Sept-96	<0.01	130	20	0.028	24	1.3	3.3	4.3													
MW-234S	Nov-96	<0.01	120	0.46	<0.01	18	0.6	<1	3.5													
MW-234S	Mar-97	<0.01	140	17	0.028	23	1	3.7	3.4	9.4	<0.06	<0.01	<0.2	<0.01	0.015	0.033	<0.0004	0.016	<0.05	<0.01	<0.03	0.086

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values																						
MW-234D	Nov-89	<0.01	30	0.799	<0.003		0.0432		21.1	0.483	<0.06	<0.01	<0.2	<0.005	<0.04	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.01	0.039
MW-234D	Feb-90	<0.01		1.1	<0.003		0.332					<0.01										
MW-234D	Apr-90	<0.01		0.777	<0.003		0.126					<0.01										
MW-234D	Nov-90	<0.01	87	0.39	<0.020	16	0.36	4.5	19	<0.2	<0.060	<0.020	0.06	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.04
MW-234D	Feb-91	<0.010	89.9	0.323	<0.020	15.9	0.368	2.31	19.1													
MW-234D	May-91	<0.010	92.4	0.341	<0.020	16.4	0.367	2.49	19.4													
MW-234D	Aug-91	<0.010	87.3	0.309	<0.020	15.1	0.38	3.17	14.5													
MW-234D	Nov-91	<0.010	84.9	0.189	<0.020	12.7	0.369	2.17	14													
MW-234D	Feb-92	<0.010	87.5	0.563	<0.020	15.9	0.418	1.95	11.7	0.49	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	0.043	<0.010	0.032
MW-234D	May-92	<0.010	98.6	2.04	<0.020	20.6	0.49	1.86	18.9													
MW-234D	Aug-92	<0.010	75.8	0.3	<0.020	13.5	0.334	1.88	11													
MW-234D	Dec-92	<0.010	101	3.49	<0.020	25	0.362	2.54	18.3													
MW-234D	Feb-93	<0.010	69	0.951	<0.020	12.9	0.374	2.06	17.4													
MW-234D	May-93	<0.010	84	0.631	<0.005	14.9	0.363	1.85	21.5	0.32	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.023
MW-234D	Aug-93	<0.010	87	0.784	<0.005	20.5	0.331	1.61	28.3													
MW-234D	Dec-93	<0.010	92	0.602	<0.005	19	0.459	2.31	18.1													
MW-234D	Feb-94	<0.010	83.6	1.29	<0.005	18	0.418	3.99	18.5													
MW-234D	May -94	<0.010	91.6	0.45	0.006	17.4	0.36	3.41	18.8													
MW-234D	Aug-94	<0.010	98.5	0.25	<0.005	18.4	0.58	2.70	15.8	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	0.029	<0.001	0.085	<0.005	<0.020	<0.005	0.028
MW-234D	Nov-94	<0.010	84.5	0.42	<0.005	21.8	0.55	1.35	22.4													
MW-234D	March-95	<0.010	85.5	0.27	<0.005	16	0.39	2.25	13.5													
MW-234D	June-95	<0.010	91.5	0.14	<0.005	19	0.52	2.28	16.7													
MW-234D	Sept.-95	<0.010	97.8	0.23	<0.005	19.1	0.51	2.09	18.3													
MW-234D	Nov-95	<0.010	65.5	0.3	<0.005	15.8	0.38	1.96	18.4	<0.20	<0.060	<0.020	0.27	0.011	<0.020	0.027	<0.001	<0.040	<0.005	<0.020	<0.005	0.041
MW-234D	April-96	<0.002	66	0.48	<0.01	11	0.15	7.8	21	0.2	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.044
MW-234D	June-96	<0.01	99	0.48	<0.01	17	0.49	2.2	18													
MW-234D	Sept-96	<0.01	92	0.42	<0.01	17	0.46	1.9	16													
MW-234D	Nov-96	<0.01	83	0.48	<0.01	14	0.4	2.6	13													
MW-234D	Mar-97	<0.01	62	1.2	0.012	11	0.26	8.6	12	0.41	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.12

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values																						
MW-235S	Nov-89	<0.010	138	39.4	0.0198		2.03		14	15.7	<0.06	0.0574	0.213	<0.005	0.0231	0.0495	0.0084	<0.04	<0.005	<0.01	<0.01	0.113
MW-235S	Feb-90	<0.010		17.8	<0.003		1.1					0.0448										
MW-235S	Apr-90	<0.010		7.7	0.0036		0.984					0.0481										
MW-235S	Nov-90	<0.01	100	4.7	<0.020	23	0.99	1.2	12	0.93	<0.060	0.039	0.15	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.07
MW-235S	Feb-91	<0.010	105	12.9	<0.020	25.9	1.15	2.69	12.1													
MW-235S	May-91	<0.010	92.8	4.51	<0.020	21.9	0.912	1.27	11													
MW-235S	Aug-91	<0.010	100	6.83	<0.020	23.8	1.02	1.39	11.2													
MW-235S	Nov-91	<0.010	96.9	6.39	<0.020	19.8	0.952	1.3	11.5													
MW-235S	Feb-92	<0.010	109	5.25	<0.020	23.8	1.02	1.9	12.2	2.86	<0.060	0.04	0.17	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	0.042	<0.010	<0.020
MW-235S	May-92	<0.010	122	3.04	<0.020	20.7	1.12	0.91	12.3													
MW-235S	Aug-92	<0.010	88.3	4.53	<0.020	20.6	0.828	1.79	8.73													
MW-235S	Dec-92	<0.010	91	7.94	<0.020	21.1	0.746	2.38	11.7													
MW-235S	Feb-93	<0.010	77.6	9.17	<0.020	19.5	1.04	2.38	11.8													
MW-235S	May-93	<0.010	91.3	7.52	0.007	21.2	0.879	1.82	11.3	2.1	<0.060	0.034	0.26	<0.010	<0.020	<0.020	<0.001	<0.040	0.005	<0.020	<0.010	<0.020
MW-235S	Aug-93	<0.010	100	7.57	0.006	28.8	0.807	1.13	14.9													
MW-235S	Dec-93	<0.010	104	10.4	0.005	29.1	1.22	2.54	12.4													
MW-235S	Feb-94	<0.010	93.5	6.5	<0.005	25	1.03	1.58	10.5													
MW-235S	May -94	<0.010	111	6.32	<0.005	25.2	0.94	0.84	113													
MW-235S	Aug-94	<0.010	118	6.80	<0.005	26.1	1.06	1.42	7.32	0.58	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.081	<0.005	<0.020	<0.005	<0.020
MW-235S	Nov-94	<0.010	84.5	4.49	<0.005	24.8	1.0	3.56	11.2													
MW-235S	March-95	<0.010	104	5.56	<0.005	26.5	1.13	1.65	10.6													
MW-235S	June-95	<0.010	102	4.42	<0.005	25.1	1.19	1.12	10													
MW-235S	Sept.-95	<0.010	110	4.94	<0.005	26.3	1.14	1.45	5.1													
MW-235S	Nov-95	<0.010	91	6.62	<0.005	28.4	1.15	7.26	153	1.53	<0.060	0.043	0.42	<0.010	<0.020	0.03	<0.001	<0.040	<0.005	<0.020	<0.005	0.077
MW-235S	April-96	<0.002	130	11	0.012	22	1.20	3.3	13	3.8	<0.1	0.021	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.076
MW-235S	June-96	<0.01	48	0.81	<0.01	11	0.53	2.5	20													
MW-235S	Sept-96	<0.01	130	24	0.02	27	1.60	3.5	10													
MW-235S	Nov-96	<0.01	110	5.1	<0.01	22	1.20	1.5	10													
MW-235S	March-97	<0.01	120	9.3	0.015	23	1.10	2.5	6.5	3.6	<0.06	0.015	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.077

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-235D	Nov-89	<0.010	59.8	0.72	<0.003		0.231		48.5	0.329	<0.06	<0.01	<0.2	<0.005	<0.01	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.01	0.0215
MW-235D	Feb-90	<0.010		1.33	<0.003		0.421					<0.01										
MW-235D	Apr-90	<0.010		6.88	0.004		3.16					<0.01										
MW-235D	Nov-90	<0.01	93	1.6	<0.020	19	2.6	1.3	8.5	0.25	<0.060	<0.020	0.11	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.05
MW-235D	Feb-91	<0.010	105	0.418	<0.020	22	0.175	1.14	5.64													
MW-235D	May-91	<0.010	103	0.679	<0.020	20.5	0.871	1.03	4.08													
MW-235D	Aug-91	<0.010	103	1.35	<0.020	21.1	0.78	1.27	4.38													
MW-235D	Nov-91	<0.010	85.8	1.29	<0.020	15.1	1.65	0.87	3.96													
MW-235D	Feb-92	<0.010	86	1.38	<0.020	19.3	1.74	1.09	4.51	0.49	<0.060	<0.020	0.14	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	0.035	<0.010	0.052
MW-235D	May-92	<0.010	98.7	1.3	<0.020	20.7	0.939	0.85	3.09													
MW-235D	Aug-92	<0.010	76.3	0.584	<0.020	16.5	0.545	1.44	5.21													
MW-235D	Dec-92	<0.010	111	4.18	<0.020	26	1.47	2.23	5.87													
MW-235D	Feb-93	<0.010	65.5	1.69	<0.020	16.5	1.58	1.49	12.2													
MW-235D	May-93	<0.010	70.9	0.589	<0.005	15.9	0.325	1.65	17.7	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.035
MW-235D	Aug-93	<0.010	64.1	1.06	<0.005	19.2	0.366	1.06	27													
MW-235D	Dec-93	<0.010	67.6	0.566.	0.006	17.7	0.549	1.83	24.3													
MW-235D	Feb-94	<0.010	38.7	1.24	<0.005	7.7	0.38	2.7	7.51													
MW-235D	May -94	<0.010	55.4	0.29	<0.005	9.7	0.59	1.57	15.4													
MW-235D	Aug-94	<0.010	57.5	0.50	<0.005	11.8	0.87	2.02	11.7	0.42	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.074	<0.005	<0.020	<0.005	0.024
MW-235D	Nov-94	<0.010	42.2	0.18	<0.005	11.2	0.35	2.08	19.2													
MW-235D	March-95	<0.010	52.5	0.40	<0.005	12	0.38	1.85	21.5													
MW-235D	June-95	<0.010	49.6	0.14	<0.005	11.8	0.46	2.57	21.2													
MW-235D	Sept.-95	<0.010	61	0.54	<0.005	14.2	0.48	2.15	25.6													
MW-235D	Nov-95	<0.010	46.7	0.84	<0.005	12.3	0.63	3.3	23.9	0.54	<0.060	<0.020	0.22	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.005	0.048
MW-235D	April-96	<0.002	49	1.40	<0.01	10	0.66	3.2	15	0.81	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.056
MW-235D	June-96	<0.01	120	12.0	<0.01	24	1.3	2.2	11													
MW-235D	Sept-96	<0.01	49	3.2	0.021	11	0.86	3.2	22													
MW-235D	Nov-96	<0.01	52	1.3	<0.01	12	0.52	2.2	24													
MW-235D	Mar-97	<0.01	51	1.9	0.012	12	0.61	2.6	17	0.64	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.081

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-236S	Nov-89	<0.010	78.7	0.73	<0.003		0.419		8.33	0.437	<0.06	<0.01	<0.2	<0.005	<0.01	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.01	<0.02
MW-236S	Feb-90	<0.010		2.69	0.0035		0.443					<0.01										
MW-236S	Apr-90	<0.010		0.239	<0.003		0.399					<0.01										
MW-236S	Nov-90	<0.01	97	24	0.023	18	1.1	3.1	8.3	12	<0.060	<0.020	0.2	<0.01	<0.03	0.03	<0.001	<0.04	<0.005	<0.02	<0.010	0.12
MW-236S	Feb-91	<0.010	85.1	7.14	<0.020	12.7	0.61	1.95	8.24													
MW-236S	May-91	<0.010	80.7	4.42	<0.020	11	0.539	1.83	7.83													
MW-236S	Aug-91	<0.010	75	1.19	<0.020	10	0.495	1.1	7.53													
MW-236S	Nov-91	<0.010	69.8	2.04	<0.020	8.78	0.527	0.91	7.75													
MW-236S	Feb-92	<0.010	69.5	3.03	<0.020	10.2	0.489	1.35	8.09	2.26	<0.060	<0.020	0.16	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.047
MW-236S	May-92	<0.010	69.2	3.63	<0.020	9.73	0.446	1.16	6.46													
MW-236S	Aug-92	<0.010	61.6	2.86	<0.020	8.85	0.403	1.9	6.13													
MW-236S	Dec-92	<0.010	59.7	3.04	<0.020	8.65	0.295	1.56	7.32													
MW-236S	Feb-93	<0.010	48.3	12.8	<0.020	10.9	0.764	3.63	7.39													
MW-236S	May-93	<0.010	65.2	4.77	<0.005	9.34	0.408	2.38	9.15	4.34	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-236S	Aug-93	<0.010	58.3	7.68	0.008	14.4	0.586	1.87	8.78													
MW-236S	Dec-93	<0.010	68.1	9.79	<0.005	12.7	0.725	2.94	9.61													
MW-236S	Feb-94	<0.010	74.4	23	0.01	17	0.989	3.59	10.1													
MW-236S	May -94	<0.010	76.1	2.31	<0.005	15.2	0.52	0.74	12.8													
MW-236S	Aug-94	<0.010	78.6	13.2	<0.005	11.2	0.15	1.62	0.771	1.30	<0.060	<0.020	<0.10	<0.010	<0.020	0.062	<0.001	0.12	<0.005	<0.020	<0.005	<0.020
MW-236S	Nov-94	<0.010	83.6	1.71	<0.005	19.2	1.09	1.55	14.1													
MW-236S	March-95	<0.010	116	2.21	<0.005	28.4	2.01	2.13	14.3													
MW-236S	June-95	<0.010	96.8	1.22	0.005	18.8	1.85	1.33	9.35													
MW-236S	Sept.-95	<0.010	57.5	6.33	<0.005	11.6	2.08	2.4	9.62													
MW-236S	Nov-95	<0.010	77.8	4.4	<0.005	15.5	1.46	2.28	14.4	2.9	<0.060	<0.020	0.31	<0.010	<0.020	0.037	<0.001	<0.040	<0.005	<0.020	<0.005	0.035
MW-236S	April-96	<0.002	120	15	0.016	20	4.9	2.9	16	7.5	<0.1	<0.01	<0.2	<0.003	0.012	<0.02	<0.0002	0.019	<0.1	<0.01	<0.03	0.11
MW-236S	June-96	<0.01	79	9.9	0.011	13	2.6	2.4	10													
MW-236S	Sept-96	<0.01	83	7.7	<0.01	14	1.6	1.9	12													
MW-236S	Nov-96	<0.01	82	3.6	0.012	13	1.6	1.4	11													
MW-236S	Mar-97	<0.01	110	45	0.041	21	5	6.4	10	22	<0.06	<0.01	<0.2	<0.01	0.036	0.044	<0.0004	0.047	<0.05	<0.01	<0.03	0.2

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values																						
MW-236D	Nov-89	<0.010	77.4	27.4	0.0106		0.525		24.5	6.91	<0.6	<0.01	<0.2	<0.005	0.0198	0.0303	<0.0002	<0.04	<0.005	<0.01	<0.01	0.103
MW-236D	Feb-90	<0.010		0.985	<0.003		0.0411					<0.01										
MW-236D	Apr-90	<0.010		0.214	<0.003		0.0221					<0.01										
MW-236D	Nov-90	<0.01	44	2.2	<0.020	19	0.06	2	24	0.73	<0.060	<0.020	0.04	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	<0.02
MW-236D	May-91	<0.010	46.1	4.58	<0.020	19.3	0.103	2.48	23													
MW-236D	Aug-91	<0.010	40.3	0.262	<0.020	17.1	0.024	1.83	23													
MW-236D	Nov-91	<0.010	40.3	0.432	<0.020	14.4	0.048	1.64	24.7													
MW-236D	Feb-92	<0.010	38.3	3.09	<0.020	17.8	0.051	2.05	21.2	1.38	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.02
MW-236D	May-92	<0.010	38.8	0.439	<0.020	16	<0.020	1.31	20.2													
MW-236D	Aug-92	<0.010	33.3	0.209	<0.020	14.4	0.023	2.48	18.4													
MW-236D	Dec-92	<0.010	35.2	0.659	<0.020	13.7	0.026	1.79	24.5													
MW-236D	Feb-93	<0.010	29.1	0.156	<0.020	12.6	0.024	1.74	21.8													
MW-236D	May-93	<0.010	33.6	0.11	<0.005	13.7	<0.020	1.95	24.5	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-236D	Sep-93	<0.010	32.7	0.263	<0.005	18.8	<0.020	1.66	23.6													
MW-236D	Dec-93	<0.010	37.9	0.272	<0.005	17.4	0.023	1.87	25.9													
MW-236D	Feb-94	<0.010	18.9	0.492	<0.005	15	0.022	1.52	24.1													
MW-236D	May -94	<0.010	33.1	0.2	0.006	14.8	<0.020	1.44	21.2													
MW-236D	Aug-94	<0.010	40.2	0.56	0.007	15.6	0.029	2.34	18.0	0.66	<0.060	<0.020	<0.10	<0.010	<0.020	0.07	<0.001	0.14	<0.005	<0.020	<0.005	0.055
MW-236D	Nov-94	<0.010	29	0.16	<0.005	15.1	<0.020	1.63	23.7													
MW-236D	March-95	<0.010	35.2	0.43	0.007	16	<0.020	2.31	24													
MW-236D	June-95	<0.010	35.2	0.16	<0.005	17.4	0.027	2.11	9.34													
MW-236D	Sept.-95	<0.010	37.2	0.092	<0.005	15.8	0.026	1.85	22.4													
MW-236D	Nov-95	<0.010	32.7	0.33	<0.005	15.9	0.025	1.96	27.5	0.23	<0.060	<0.020	0.18	<0.010	<0.020	0.14	<0.001	<0.040	<0.005	<0.020	<0.005	0.052
MW-236D	April-96	<0.002	35	0.22	<0.01	14	0.019	1.9	26	<0.1	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.053
MW-236D	June-96	<0.01	26	0.37	<0.01	14	0.019	1.9	23													
MW-236D	Sept-96	<0.01	37	0.53	0.015	16	0.024	2	24													
MW-236D	Nov-96	<0.01	34	0.42	<0.01	13	0.022	1.5	20													
MW-236D	Mar-97	<0.01	33	0.83	0.011	14	0.025	2	15	0.3	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	0.062	<0.01	<0.03	0.079

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
PS247-1	Dec-92	<0.010	169	6.54	<0.020	40.5	0.77	4.02	13.3													
PS247-1	Feb-93	<0.010	126	5.11	<0.020	35.4	5.5	2.97	9.88													
PS247-1	Jun-93	<0.010	165	3.43	0.006	41.3	4.89	2.83	10.2	1.62	<0.060	<0.020	<0.10	<0.010	<0.020	0.037	<0.001	<0.040	<0.005	<0.020	<0.010	0.049
PS247-1	Sep-93	<0.010	179	2.72	<0.005	56.8	5.25	1.99	9.73													
PS247-1	Dec-93	<0.010	155	2.71	<0.005	42.9	5.59	2.68	8.34													
PS247-1	Feb-94	<0.010	130	1.85	<0.005	39	4.21	1.98	4.35													
PS247-1	May -94	<0.010	92.8	1.52	<0.005	18.8	5.84	1.38	9.21													
PS247-1	Aug-94	<0.010	172	2.45	<0.005	40.5	8.77	3.22	6.06	0.79	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.09	<0.005	<0.020	<0.005	0.080
PS247-1	Nov-94	<0.010	108	1.08	<0.005	37	5.6	2.05	6.11													
PS247-1	March-95	<0.010	112	0.84	<0.005	32	3.58	2.16	8.8													
PS247-1	June-95	<0.010	132	0.31	<0.005	34.3	4.58	1.89	7.9													
PS247-1	Sept.-95	<0.010	147	2.44	<0.005	39.5	7.35	2.44	5.04													
PS247-1	Dec-95	<0.010	136	2.09	<0.005	37.7	5.07	2.53	18.1	0.57	<0.060	<0.020	0.25	<0.010	<0.020	0.036	<0.001	<0.040	<0.005	<0.020	<0.005	0.047
PS247-1	April-96	<0.002	160	2.5	<0.01	24	5.5	2.4	9	0.62	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.053
PS247-1	June-96	<0.01	140	0.99	<0.01	25	4.5	2.2	9.3													
PS247-1	Sept-96	<0.01	140	1.5	<0.01	26	5.1	2.3	6.4													
PS247-1	Nov-96	<0.01	120	3.3	<0.01	27	6.3	2.3	5.8													
PS247-1	Mar-97	<0.01	130	1.9	0.012	23	4	2.2	5.6	0.67	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.067
PS247-2	Dec-92	<0.010	158	4.45	<0.020	32.2	1.09	2.43	5.33													
PS247-2	Feb-93	<0.010	127	1.29	<0.020	29.1	0.975	1.81	4.43													
PS247-2	Jun-93	<0.010	169	0.379	<0.005	40.1	0.324	4.41	7.42	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.035
PS247-2	Sep-93	<0.010	217	0.71	<0.005	57.2	0.737	2.6	5.36													
PS247-2	Dec-93	<0.010	195	1.55	<0.005	47	1.22	11.5	20.3													
PS247-2	Feb-94	<0.010	192	0.695	<0.005	41	1.22	3.97	6.47													
PS247-2	May -94	<0.010	165	0.36	<0.005	44	0.62	5.62	5.95													
PS247-2	Aug-94	<0.010	221	0.59	<0.005	43.4	1.44	6.02	4.86	0.22	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.095	<0.005	<0.020	<0.005	0.071
PS247-2	Nov-94	<0.010	141	0.3	<0.005	42.3	1.43	7.41	15.6													
PS247-2	March-95	<0.010	142	0.51	<0.005	36	1.3	7.89	8													
PS247-2	June-95	<0.010	172	0.9	<0.005	19.4	1.5	7.63	7.2													
PS247-2	Sept.-95	<0.010	150	1.34	<0.005	36.6	1.51	9.32	9.08													
PS247-2	Dec-95	<0.010	154	1.95	<0.005	38.5	1.2	3.11	9.3	0.97	<0.060	<0.020	0.26	<0.010	<0.020	0.027	<0.001	<0.040	<0.005	<0.020	<0.005	0.052
PS247-2	April-96	Sampling Location Dry																				
PS247-2	June-96	<0.01	180	1.5	<0.01	24	0.98	4.5	5.2													
PS247-2	Sept-96	<0.01	170	1.2	<0.01	25	0.66	2.4	4													
PS247-2	Nov-96	<0.01	160	1.3	<0.01	26	0.46	3.8	4.8													
PS247-2	Mar-97	<0.01	180	0.62	<0.01	24	0.53	3	3.8	0.21	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.056
PS247-3	Dec-92	<0.010	189	15.4	<0.020	31.2	1.08	6.44	7.77													
PS247-3	Feb-93	<0.010	147	44.3	<0.020	27.1	24.3	4.68	8.01													
PS247-3	Jun-93	<0.010	150	28.1	<0.005	24.9	17.5	3.61	8.18	<0.20	<0.060	<0.020	0.13	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
PS247-3	Sep-93	<0.010	158	113	<0.005	18	1.79	3.08	7.14													
PS247-3	Dec-93	<0.010	167	21.3	<0.005	30.8	27.3	3.05	5.97													
PS247-3	Feb-94	<0.010	162	40.2	<0.005	28	24.3	2.72	2.94													
PS247-3	May -94	<0.010	116	8.02	<0.005	22.8	13	2.18	11.3													
PS247-3	Aug-94	<0.010	139	4.90	0.022	21.0	18.6	2.73	5.37	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.091	<0.005	<0.020	<0.005	0.27
PS247-3	Nov-94	<0.010	106	24.9	<0.005	23.3	19	2.79	7.75													
PS247-3	March-95	<0.010	102	21.7	<0.005	19	0.84	2.18	8													
PS247-3	June-95	<0.010	115	54	<0.005	21	20.1	2.3	5.92													
PS247-3	Sept.-95	<0.010	75.9	92.4	<0.005	21.5	21.3	3.39	5.69													
PS247-3	Dec-95	<0.010	47.9	9.3	<0.005	22.6	13.9	3.22	16.4	0.36	<0.060	<0.020	0.27	<0.010	<0.020	0.044	<0.001	<0.040	<0.005	<0.020	<0.005	0.048
PS247-3	April-96	<0.002	140	24	0.019	18	15	2.9	11	0.33	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	0.041	0.058
PS247-3	June-96	<0.01	120	14	<0.01	16	13	2.9	13													
PS247-3	Sept-96	<0.01	120	14	<0.01	16	16	2.8	10													
PS247-3	Nov-96	<0.01	110	17	<0.01	17	14	3.1	16													
PS247-3	Mar-97	<0.01	100	6.5	<0.01	14	10	2.2	6.2	<0.1	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.081

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
PS247-4	Dec-92	Monitoring Well Dry - No Sample Collected																				
PS247-4	Feb-93	Monitoring Well Dry - No Sample Collected																				
PS247-4	Jun-93	Monitoring Well Dry - No Sample Collected																				
PS247-4	Sep-93	Monitoring Well Dry - No Sample Collected																				
PS247-4	Dec-93	Monitoring Well Dry - No Sample Collected																				
PS247-4	Mar-94	Monitoring Well Dry - No Sample Collected																				
PS247-4	May-94	Monitoring Well Dry - No Sample Collected																				
PS247-4	Aug-94	Monitoring Well Dry - No Sample Collected																				
PS247-4	Nov-94	Monitoring Well Dry - No Sample Collected																				
PS247-4	March-95	Monitoring Well Dry - No Sample Collected																				
PS247-4	June-95	Monitoring Well Dry - No Sample Collected																				
PS247-4	Sept.-95	Monitoring Well Dry - No Sample Collected																				
PS247-4	Dec-95	Monitoring Well Dry - No Sample Collected																				
PS247-4	April-96	Sampling Location Dry																				
PS247-4	June-96	Sampling Location Dry																				
PS247-4	Sept-96	Sampling Location Dry																				
PS247-5	Dec-92	Monitoring Well Dry - No Sample Collected																				
PS247-5	Feb-93	Monitoring Well Dry - No Sample Collected																				
PS247-5	Jun-93	Monitoring Well Dry - No Sample Collected																				
PS247-5	Sep-93	Monitoring Well Dry - No Sample Collected																				
PS247-5	Dec-93	Monitoring Well Dry - No Sample Collected																				
PS247-5	Mar-94	Monitoring Well Dry - No Sample Collected																				
PS247-5	May-94	Monitoring Well Dry - No Sample Collected																				
PS247-5	Aug-94	Monitoring Well Dry - No Sample Collected																				
PS247-5	Nov-94	Monitoring Well Dry - No Sample Collected																				
PS247-5	March-95	Monitoring Well Dry - No Sample Collected																				
PS247-5	June-95	Monitoring Well Dry - No Sample Collected																				
PS247-5	Sept-95	Monitoring Well Dry - No Sample Collected																				
PS247-5	Dec-95	Monitoring Well Dry - No Sample Collected																				
PS247-5	April-96	Sampling Location Dry																				
PS247-5	June-96	Sampling Location Dry																				
PS247-5	Sept-96	Sampling Location Dry																				

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-244S	Nov-90	<0.01	180	7.4	<0.020	44	1.2	2.7	6.3	4	<0.060	<0.020	0.07	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.1
MW-244S	Feb-91	<0.010	158	9.06	0.02	40.4	1.01	2.87	6.12													
MW-244S	May-91	<0.010	141	5.51	<0.020	36	0.925	2.58	5.57													
MW-244S	Aug-91	<0.010	170	4.09	<0.020	42.1	0.96	2.75	6.08													
MW-244S	Nov-91	<0.010	166	2.62	<0.020	37	1.04	1.65	7.63													
MW-244S	Feb-92	<0.010	163	1.92	<0.020	40.1	1.24	1.55	8.1	0.89	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-244S	May-92	<0.010	171	2.04	<0.020	37.4	1.2	1.43	6.97													
MW-244S	Aug-92	<0.010	117	1.63	<0.020	29.4	0.629	2.19	5.28													
MW-244S	Dec-92	<0.010	112	1.17	<0.020	26	0.488	1.7	10.1													
MW-244S	Feb-93	<0.010	100	1.99	<0.020	25.8	0.787	2.1	9.74													
MW-244S	Jun-93	<0.010	119	1.91	<0.005	29.9	0.735	2.38	19.2	1.6	<0.060	<0.020	<0.10	<0.010	<0.020	0.025	<0.001	<0.040	<0.005	<0.020	<0.010	0.03
MW-244S	Sep-93	<0.010	123	2.17	<0.005	39.8	0.589	1.47	15.4													
MW-244S	Dec-93	<0.010	142	2.13	<0.005	43.5	0.853	2.35	18.5													
MW-244S	Feb-94	<0.010	124	6.89	<0.005	35	0.885	2.61	7.91													
MW-244S	May -94	0.013	102	1.34	<0.005	27.1	0.52	1.34	10.8													
MW-244S	Aug-94	<0.010	110	0.29	<0.005	27.5	0.63	1.70	9.68	0.31	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.067	<0.005	<0.020	<0.005	0.11
MW-244S	Nov-94	<0.010	92.8	1.02	<0.005	28.2	0.83	1.45	11.7													
MW-244S	March-95	<0.010	78	0.82	<0.005	22	0.53	1.2	12													
MW-244S	June-95	<0.010	130	0.61	<0.005	35.4	0.7	1.74	11.5													
MW-244S	Sept.-95	<0.010	135	1.6	<0.005	39.6	0.89	2.31	11.5													
MW-244S	Dec-95	<0.010	150	0.65	<0.005	44.4	0.86	2.06	18.2	0.3	<0.060	<0.020	0.31	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.005	0.024
MW-244S	April-96	<0.002	150	5.1	<0.01	24	0.82	3.3	<0.2	3.1	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.044
MW-244S	June-96	<0.01	170	5.7	<0.01	28	1.0	2.9	17													
MW-244S	Sept-96	<0.01	160	4.2	0.011	29	0.8	2.9	17													
MW-244S	Nov-96	<0.01	120	4.8	<0.01	26	1.0	2.4	16													
MW-244S	Mar-97	<0.01	150	6.5	<0.01	24	0.9	3	12	2.8	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	0.011	<0.05	<0.01	<0.03	0.065

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-244D	Nov-90	<0.01	27	0.75	<0.020	12	0.02	2.2	22	0.83	<0.060	<0.020	0.04	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.07
MW-244D	Feb-91	<0.010	28.5	0.697	<0.020	13	0.022	2.32	23.3													
MW-244D	May-91	<0.010	26.2	1.69	<0.020	12.6	0.03	2.38	21.6													
MW-244D	Aug-91	<0.010	27.8	0.689	<0.020	12.1	0.014	2.33	23.4													
MW-244D	Nov-91	<0.010	22.8	0.403	<0.020	9.3	0.027	1.5	21.7													
MW-244D	Feb-92	<0.010	22	1.79	<0.020	11.5	0.03	2.53	22.8	1.75	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-244D	May-92	<0.010	21.5	2.09	<0.020	21.3	0.032	1.85	19.4													
MW-244D	Aug-92	<0.010	17.5	1.33	<0.020	10.1	0.026	2.87	16.4													
MW-244D	Dec-92	<0.010	21.3	2.19	<0.020	10.7	0.03	2.69	23.2													
MW-244D	Fed-93	<0.010	18.8	3.22	<0.020	9.75	0.054	2.67	20.9													
MW-244D	Jun-93	<0.010	22	0.831	<0.005	9.54	<0.020	2.3	25.6	1.25	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-244D	Sep-93	<0.010	17.7	0.735	<0.005	13.9	<0.020	1.6	23													
MW-244D	Dec-93	<0.010	24.6	0.66	0.013	12	<0.020	2.36	23.8													
MW-244D	Feb-94	<0.010	23.7	1.63	0.007	11	0.021	2.04	21.4													
MW-244D	May -94	0.01	23.2	0.38	0.005	10.2	<0.020	1.83	19.3													
MW-244D	Aug-94	<0.010	25.6	0.24	<0.005	9.45	<0.020	2.25	19.0	0.42	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.072	<0.005	0.026	<0.005	0.044
MW-244D	Nov-94	<0.010	17.7	0.68	<0.005	11	0.025	2.21	23.4													
MW-244D	March-95	<0.010	19.5	0.49	<0.005	10	<0.020	1.96	21													
MW-244D	June-95	<0.010	20.9	0.17	<0.005	10	<0.020	2.02	18.3													
MW-244D	Sept.-95	<0.010	21.1	0.59	<0.005	10.5	0.021	2.3	20.2													
MW-244D	Dec-95	<0.010	17.8	1.2	0.008	10.2	0.042	2.61	30.1	0.97	<0.060	<0.020	0.18	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
MW-244D	April-96	<0.002	30	2.7	<0.01	12	0.044	2.7	24	2.1	<0.1	<0.01	<0.2	<0.003	0.012	<0.02	<0.0002	0.013	<0.05	<0.01	<0.03	0.048
MW-244D	June-96	<0.01	27	0.78	<0.01	11	0.013	2.3	23													
MW-244D	Sept-96	<0.01	27	1.2	<0.01	11	0.033	2.5	23													
MW-244D	Nov-96	<0.01	20	1.8	<0.01	9.8	0.034	1.9	20													
MW-244D	Mar-97	<0.01	24	1.8	<0.01	10	0.03	2.5	15	1.1	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.16

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-245S	Nov-89	<0.010	450	269	0.168		0.01		12.7	116	<0.6	0.05	0.889	0.01	0.199	0.425	0.0005	0.286	<0.005	<0.01	<0.01	0.725
MW-245S	Feb-90	<0.010		150	0.0719		0.0054															
MW-245S	Apr-90	<0.010		0.917	0.0033		0.002															
MW-245S	Nov-90	<0.01	207	7.3	<0.020	41	2.2	2.6	13	4	<0.060	<0.020	0.07	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.05
MW-245S	Feb-91	<0.010	197	4.83	<0.020	42.4	1.9	2.61	15.6													
MW-245S	May-91	<0.010	178	1.63	<0.020	45.7	1.58	2.26	20.1													
MW-245S	Aug-91	<0.010	208	7.84	<0.020	41.4	2.16	2.9	16.3													
MW-245S	Nov-91	<0.010	171	55.9	0.028	45.4	2.78	6.8	11.7													
MW-245S	Feb-92	<0.010	214	1.92	<0.020	42	2.08	1.93	13.1	1.08	<0.060	<0.020	0.15	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
MW-245S	May-92	<0.010	191	1.72	<0.020	44.1	1.6	1.64	15.8													
MW-245S	Aug-92	<0.010	156	4.41	<0.020	37.9	1.46	3.2	13.6													
MW-245S	Dec-92	<0.010	159	32.1	0.021	46.3	1.73	7.12	19.9													
MW-245S	Feb-93	<0.010	140	20.8	0.02	40.3	2.09	4.82	23.2													
MW-245S	Jun-93	<0.010	147	9.36	0.009	32.9	1.34	4.13	14	8.08	<0.060	<0.020	<0.10	<0.010	<0.020	0.028	<0.001	<0.040	<0.005	<0.020	<0.010	0.046
MW-245S	Sep-93	<0.010	150	13.3	0.011	46.8	1.35	3.15	16.1													
MW-245S	Dec-93	<0.010	163	0.419	<0.005	39.1	1.78	2.95	18.2													
MW-245S	Feb-94	<0.010	176	13.7	<0.005	46	1.88	4.06	20													
MW-245S	May -94	0.013	180	5.32	0.01	44.7	1.72	2.01	25.7													
MW-245S	Aug-94	<0.010	136	0.26	<0.005	26.1	1.29	1.59	12.8	0.27	<0.060	<0.020	<0.10	<0.010	<0.020	0.048	<0.001	0.095	<0.005	<0.020	<0.005	0.047
MW-245S	Nov-94	<0.010	136	0.37	<0.005	38.6	1.36	1.63	18.4													
MW-245S	March-95	<0.010	174	3.08	<0.005	51	1.9	2.34	23													
MW-245S	June-95	<0.010	170	2.03	<0.005	44.3	1.54	2.11	15.1													
MW-245S	Sept.-95	<0.010	150	9.54	<0.005	45.6	2.17	3.07	16.9													
MW-245S	Dec-95	<0.010	173	0.59	<0.005	52.1	1.8	2.21	30.5	<0.20	<0.060	<0.020	0.33	<0.010	<0.020	0.072	<0.001	<0.040	<0.005	<0.020	<0.005	0.05
MW-245S	April-96	<0.002	240	18	0.019	27	2.2	5.8	27	11	<0.1	<0.01	<0.2	<0.003	0.015	0.03	<0.0002	0.021	<0.1	<0.01	<0.03	0.064
MW-245S	June-96	<0.01	220	52	<0.01	31	3	6.4	24													
MW-245S	Sept-96	<0.01	200	29	0.029	33	2.2	4.8	24													
MW-245S	Nov-96	<0.01	160	54	0.035	33	2.8	6.8	22													
MW-245S	Mar-97	<0.01	190	41	0.032	29	2.5	8.3	16	20	<0.06	<0.01	<0.2	<0.01	0.034	0.062	<0.0004	0.044	<0.05	0.014	<0.03	0.2

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values																						
MW-245D	Feb-90	<0.01	42.9	0.425	<0.003		0.063		54.9	<0.2	<0.06	<0.01	<0.2	<0.005	<0.01	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.01	0.0276
MW-245D	Apr-90	<0.01		0.171	<0.003		0.0597					<0.01										
MW-245D	Nov-90	<0.01	66	14	0.042	33	0.12	4	98	2.6	<0.060	<0.020	0.09	<0.01	<0.03	0.03	<0.001	0.09	<0.005	<0.02	<0.010	0.12
MW-245D	Feb-91	<0.010	69.6	5.05	<0.020	29.1	0.119	3.61	103													
MW-245D	May-91	<0.010	63.8	2.91	<0.020	29.7	0.049	2.79	69.7													
MW-245D	Aug-91	<0.010	89.4	6.32	<0.020	36.4	0.067	2.69	51.6													
MW-245D	Nov-91	<0.010	70.3	8.38	<0.020	27.2	0.092	2.25	69.2													
MW-245D	Feb-92	<0.010	88.1	2.23	<0.020	36.4	0.114	2.49	44.7	0.54	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.03
MW-245D	May-92	<0.010	80.9	2.01	<0.020	28.7	0.089	2.07	48.1													
MW-245D	Aug-92	<0.010	73.5	0.197	<0.020	27.4	0.06	3.39	40.2													
MW-245D	Dec-92	<0.010	74.8	0.471	<0.020	25.7	0.034	2.6	49.5													
MW-245D	Feb-93	<0.010	67	0.312	<0.020	23.1	0.06	2.47	39													
MW-245D	Jun-93	<0.010	86.2	1.7	0.008	26.7	0.062	3.52	54.1	0.41	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.027
MW-245D	Aug-93	<0.010	79.3	0.219	<0.005	36.9	0.036	2.12	34													
MW-245D	Dec-93	<0.010	99	0.081	<0.005	36.8	0.053	2.08	22.9													
MW-245D	Feb-94	<0.010	86.1	0.605	<0.005	30	0.036	1.85	23.8													
MW-245D	May -94	<0.010	91.5	0.1	<0.005	32.2	0.087	2.25	33.9													
MW-245D	Aug-94	<0.010	110	1.57	<0.005	33.3	0.86	4.75	22.1	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	0.035	<0.001	0.091	<0.005	<0.020	<0.005	0.100
MW-245D	Nov-94	<0.010	83	1.53	<0.005	33.9	0.076	6.54	24.7													
MW-245D	March-95	<0.010	91	1.92	0.006	34	0.062	4.2	40													
MW-245D	June-95	<0.010	97	0.77	<0.05	32.9	0.033	2.98	22													
MW-245D	Sept.-95	<0.010	86.7	0.38	<0.005	33.8	0.058	2.32	19.9													
MW-245D	Dec-95	<0.010	89.9	0.097	<0.005	33.5	0.044	2.12	24.6	<0.20	<0.060	<0.020	0.26	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.005	0.042
MW-245D	April-96	<0.002	120	0.92	0.011	24	0.058	2.2	22	0.11	<0.1	<0.01	<0.2	<0.003	<0.01	<0.02	<0.0002	<0.01	<0.1	<0.01	<0.03	0.068
MW-245D	June-96	<0.01	130	2.5	<0.01	27	0.069	2.6	21													
MW-245D	Sept-96	<0.01	120	3.5	<0.01	28	0.064	2.6	22													
MW-245D	Nov-96	<0.01	80	0.64	<0.01	24	0.055	2.7	36													
MW-245D	Mar-97	<0.01	120	22	0.04	28	0.12	4.9	31	9.7	<0.06	<0.01	<0.2	<0.01	0.016	0.045	<0.0004	0.095	<0.05	<0.01	<0.03	0.25

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit Standards and Guidance Values		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
MW-246S	Nov-89	<0.01	315	199	0.0616		5.61		8.68	97.8	<0.06	0.0227	0.461	<0.005	0.142	0.326	<0.0002	0.199	<0.005	<0.01	<0.01	0.567
MW-246S	Feb-90	<0.01		2.86	<0.003		1.45					<0.01										
MW-246S	Apr-90	<0.01		0.513	<0.003		1.32					<0.01										
MW-246S	Nov-90	<0.01	245	28	0.034	56	2.4	4.7	9.8	15	<0.060	<0.020	0.12	<0.01	<0.03	0.05	<0.001	<0.04	<0.005	<0.02	<0.010	0.13
MW-246S	Feb-91	<0.010	236	12.3	<0.020	50.9	1.87	3.01	9.63													
MW-246S	May-91	<0.010	201	10.6	<0.020	44.6	1.64	3	8.84													
MW-246S	Aug-91	<0.010	218	34.1	<0.020	51.7	2.16	6.02	8.91													
MW-246S	Nov-91	<0.010	192	13.3	<0.020	37.3	1.44	2.94	8.72													
MW-246S	Feb-92	<0.010	200	10.2	<0.020	54.8	1.69	2.98	10.5	7.28	<0.060	<0.020	0.13	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.035
MW-246S	May-92	<0.010	189	2.49	<0.020	36.8	1.22	1.42	8.09													
MW-246S	Aug-92	<0.010	153	10.3	<0.020	34.9	1.29	3.36	6.92													
MW-246S	Dec-92	<0.010	172	6.24	<0.020	34.3	0.911	3.07	10.7													
MW-246S	Feb-93	<0.010	125	80.5	<0.020	46.8	3.31	9.71	10.1													
MW-246S	Jun-93	<0.010	158	12.3	0.016	34.2	1.21	4.12	10.9	9.15	<0.060	<0.020	<0.10	<0.010	<0.020	0.037	<0.001	<0.040	<0.005	<0.020	<0.010	0.045
MW-246S	Sep-93	<0.010	141	33.2	0.024	50.5	1.41	4.42	8.82													
MW-246S	Dec-93	<0.010	184	6.53	0.005	44.5	1.75	2.62	13													
MW-246S	Feb-94	<0.010	170	13.2	0.007	40	1.52	3.03	11													
MW-246S	May -94	0.013	175	3.76	<0.005	40.5	1.36	1.44	13.6													
MW-246S	Aug-94	<0.010	158	0.51	<0.005	31.9	1.26	1.79	9.88	<0.20	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.12	<0.005	<0.020	<0.005	0.042
MW-246S	Nov-94	<0.010	114	0.23	<0.005	31.1	0.92	1.37	11.5													
MW-246S	March-95	<0.010	134	6.48	<0.005	35	1.47	2.34	15													
MW-246S	June-95	<0.010	134	1.38	<0.005	30.7	1.04	1.7	12													
MW-246S	Sept.-95	<0.010	118	3.85	<0.005	32.1	1.49	2.23	12.5													
MW-246S	Dec-95	<0.010	128	0.42	0.029	33	0.94	1.68	17.4	<0.20	<0.060	<0.020	0.28	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
MW-246S	April-96	<0.002	210	25	0.025	26	1.9	7	17	16	<0.1	<0.01	<0.2	<0.003	0.022	0.047	<0.0002	0.026	<0.1	<0.01	<0.03	0.13
MW-246S	June-96	<0.01	190	11	<0.01	28	1.5	3.3	17													
MW-246S	Sept-96	<0.01	190	22	0.022	33	2	5.6	19													
MW-246S	Nov-96	<0.01	160	12	0.016	26	1.4	2.8	15													
MW-246S	Mar-97	<0.01	160	2.9	<0.01	26	1	2.6	13	1.4	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.088

Table 15. Historical Groundwater Analytical Data - Metals Parameters (Expansion Landfill)

Monitoring Well	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class GA Groundwater Qualit		0.010		0.3	0.025	35	0.3		20			0.025	1	0.003	0.05	0.2	0.002		0.01	0.05	0.004	0.3
Standards and Guidance Values																						
MW-246D	Nov-89	<0.01	44	0.361	<0.003		0.0233		23.4	0.212	<0.06	<0.01	<0.2	<0.005	<0.01	<0.025	<0.0002	<0.04	<0.005	<0.01	<0.01	0.0262
MW-246D	Feb-90	<0.01		0.71	<0.003		0.029					<0.01										
MW-246D	Apr-90	<0.01		0.124	<0.003		0.0159					<0.01										
MW-246D	Nov-90	<0.01	51	0.63	<0.020	16	0.03	1.4	26	0.26	<0.060	<0.020	0.09	<0.01	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.05
MW-246D	Feb-91	<0.010	44.8	0.156	<0.020	16.2	0.015	1.32	25.4													
MW-246D	May-91	<0.010	56.8	1.09	<0.020	16	0.035	1.73	23.5													
MW-246D	Aug-91	<0.010	46.5	0.242	<0.020	16	0.016	1.36	25.8													
MW-246D	Nov-91	<0.010	37.9	0.223	<0.020	12.5	0.023	0.89	23													
MW-246D	Feb-92	<0.010	58.3	3.03	<0.020	16.7	0.095	2.58	21.8	2.42	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	0.08
MW-246D	May-92	<0.010	37.8	0.05	<0.020	13.4	<0.020	0.98	21.5													
MW-246D	Aug-92	<0.010	35.8	0.147	<0.020	13.1																
MW-246D	Dec-92	<0.010	73.9	3.82	<0.020	14.3	0.055	3.49	24.7													
MW-246D	Feb-93	<0.010	32.1	0.191	<0.020	11	<0.020	1.24	22.2													
MW-246D	Jun-93	<0.010	36.5	0.244	0.005	12.9	<0.020	1.54	24.9	0.27	<0.060	<0.020	<0.10	<0.010	<0.020	0.042	<0.001	<0.040	0.005	<0.020	<0.010	0.03
MW-246D	Sep-93	<0.010	39.2	0.922	0.008	17.8	<0.020	1.31	29.5													
MW-246D	Dec-93	<0.010	50.5	0.519	0.005	12.9	0.023	1.17	12.1													
MW-246D	Feb-94	<0.010	31.2	0.952	<0.005	14	<0.020	1.16	22.9													
MW-246D	May-94	0.01	51.5	2.58	0.008	10.4	0.051	1.01	13.9													
MW-246D	Aug-94	<0.010	48.4	0.27	<0.005	12.5	<0.02	1.64	15.8	0.32	<0.060	<0.020	<0.10	<0.010	<0.020	<0.020	<0.001	0.070	<0.005	<0.020	<0.005	0.052
MW-246D	Nov-94	<0.010	32.6	0.4	<0.005	12.8	0.027	1.33	20													
MW-246D	March-95	<0.010	34.5	2.22	0.005	9.5	0.028	1.86	13													
MW-246D	June-95	<0.010	39.8	0.12	<0.005	12.8	<0.020	1.56	16.4													
MW-246D	Sept.-95	<0.010	36	0.19	<0.005	13.4	0.026	1.42	19													
MW-246D	Dec-95	<0.010	36.60	0.29	<0.005	13.50	<0.020	1.39	26	0.25	<0.060	<0.020	0.11	<0.010	<0.020	0.025	<0.001	<0.040	<0.005	<0.020	<0.005	0.037
MW-246D	April-96	<0.002	51.00	3.00	<0.01	8.60	0.05	1.80	10	2.40	<0.1	<0.01	<0.2	<0.003	0.03	<0.02	<0.0002	0.02	<0.1	<0.01	<0.03	0.088
MW-246D	June-96	<0.01	48.00	2.10	<0.01	6.70	0.04	0.80	3.1													
MW-246D	Sept-96	<0.01	41.00	1.60	<0.01	5.40	0.03	0.78	1.9													
MW-246D	Nov-96	<0.01	42.00	1.60	0.011	7.70	0.03	1.10	8.0													
MW-246D	Mar-97	<0.01	41.00	1.30	<0.01	7.80	0.02	1.30	7.6	0.87	<0.06	<0.01	<0.2	<0.01	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.078

Table 16. Parameters Exhibiting Concentrations Above Background - Shallow Wells

Parameter	Units	Shallow Background	MW 203S	MW 208SA	MW 230S	MW 231S	MW 232S	MW 233S	MW 234S	MW 235S	MW 236S	MW 244S	MW 245S	MW 246S	MW 312 S	PS 247-1	PS 247-2	PS 247-3
Sample Collection Date			*03/25/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/26/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*
Alkalinity	mg/l CaCO3	160.74	140	230	42	35	530	680	280	420	170	380	380	430	200	570	390	410
Chloride	mg/l	27.72	59	23	24	19	9	6.4	4.5	14	36	27	25	26	7.3	<1	2.7	2.7
Hardness	mg/l CaCO3	213.92	590	210	130	120	510	530	450	390	370	470	600	520	540	410	540	310
Conductance, field	umhos/cm	410.50	678	561	409	308	1120	1190	1100	829	910	1060	1210	1220	458	1020	1190	800
Total Phenols	mg/l	0.013	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0041
TDS	mg/l	284.06	390	310	140	130	560	670	570	500	380	640	730	780	290	550	670	480
Sulfate	mg/l	61.72	44	44	48	35	56	48	190	61	66	200	240	310	52	56	66	70
TOC	mg/l	8.62	8.5	30	1.9	2.2	2.5	3.4	<1	4.2	1.8	1.4	3.2	2	<1	4.6	4.1	25
Calcium, total	mg/l	59.53	190.0	64.0	42.0	39.0	170.0	170.0	140.0	120.0	110.0	150.0	190.0	160.0	170.0	130.0	180	100.0
Iron, total	mg/l	11.19	78.00	55.00	4.20	2.10	18.00	1.80	17.00	9.30	45.00	6.50	41.00	2.90	88.00	1.90	0.62	6.50
Magnesium, total	mg/l	13.86	28.00	13.00	6.50	5.70	23.00	26.00	23.00	23.00	21.00	24.00	29.00	26.00	29.00	23.00	24	14.00
Manganese, total	mg/l	0.49	3.4	0.85	0.19	0.12	1.70	1.20	1.00	1.10	5.00	0.94	2.50	1.00	3.80	4.00	0.53	10.00
Potassium, total	mg/l	2.34	7.40	2.80	2.60	1.60	4.00	2.80	3.70	2.50	6.40	3.00	8.30	2.60	14.00	2.20	3	2.20
Sodium, total	mg/l	11.25	12	9.30	6.20	10.00	2.00	2.20	3.40	6.50	10.00	12.00	16.00	13.00	2.90	5.60	3.8	6.20

Normalized

Parameter	Units	Shallow Background	MW 203S	MW 208SA	MW 230S	MW 231S	MW 232S	MW 233S	MW 234S	MW 235S	MW 236S	MW 244S	MW 245S	MW 246S	MW 312 S	PS 247-1	PS 247-2	PS 247-3
Sample Collection Date			*03/25/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/26/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*
Alkalinity	mg/l CaCO3	160.74	1	1	0	0	3	4	2	3	1	2	2	3	1	4	2	3
Chloride	mg/l	27.72	2	1	1	1	0	0	0	1	1	1	1	1	0		0	0
Hardness	mg/l CaCO3	213.92	3	1	1	1	2	2	2	2	2	2	3	2	3	2	3	1
Conductance, field	umhos/cm	410.50	2	1	1	1	3	3	3	2	2	3	3	3	1	2	3	2
Total Phenols	mg/l	0.01																0
TDS	mg/l	284.06	1	1	0	0	2	2	2	2	1	2	3	3	1	2	2	2
Sulfate	mg/l	61.72	1	1	1	1	1	1	3	1	1	3	4	5	1	1	1	1
TOC	mg/l	8.62	1	3	0	0	0	0		0	0	0	0	0		1	0	3
Calcium, total	mg/l	59.53	3	1	1	1	3	3	2	2	2	3	3	3	3	2	3	2
Iron, total	mg/l	11.19	7	5	0	0	2	0	2	1	4	1	4	0	8	0	0	1
Magnesium, total	mg/l	13.86	2	1	0	0	2	2	2	2	2	2	2	2	2	2	2	1
Manganese, total	mg/l	0.49	7	2	0	0	4	2	2	2	10	2	5	2	8	8	1	21
Potassium, total	mg/l	2.34	3	1	1	1	2	1	2	1	3	1	4	1	6	1	1	1
Sodium, total	mg/l	11.25	1	1	1	1	0	0	0	1	1	1	1	1	0	0	0	1

Table 17. Parameters Exhibiting Concentrations Above Background - Deep Wells

Parameter	Units	Deep Background	MW 203DA	MW 203VD	MW 208VD	MW 212DA	MW 230D	MW 231D	MW 232D	MW 233D	MW 234D	MW 235D	MW 236D	MW 244D	MW 245D	MW 246D
Sample Collection Date			*03/25/97*	*03/25/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*		*03/26/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
Alkalinity	mg/l CaCO3	134.53	120	150	180	320	130	140	No Sample	180	160	180	290	150	480	130
Chloride	mg/l	5.75	7.3	<1	5.4	15	2.7	520	Taken	130	28	15	64	1.8	18	22
Hardness	mg/l CaCO3	110.72	230	110	94	360	92	330		160	200	180	140	100	420	140
Conductance, field	umhos/cm	270.80	298	252	385	766	276	2300		1110	550	508	557	321	1010	1010
Total Phenols	mg/l	0.0070	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002		0.0027	<0.002	<0.002	<0.002	<0.002		<0.002
TDS	mg/l	179.27	160	170	190	470	230	1300		550	350	310	270	220	640	210
Sulfate	mg/l	34.85	37	10	29	150	37	110		53	74	54	30	32	90	90
TOC	mg/l	6.65	1.4	1	<1	1.4	1	<1		<1	1.1	1.6	<1	<1	2.1	3.4
Calcium, total	mg/l	27.16	69.0	26.0	28.0	110.0	25.0	89.0		42.0	62.0	51.0	33.0	24.0	120.0	41.0
Iron, total	mg/l	1.845	24.00	0.45	0.22	0.99	4.00	0.49		0.21	1.20	1.90	0.83	1.80	22.00	1.30
Magnesium, total	mg/l	8.74	14.00	10.00	5.90	17.00	6.80	26.00		13.00	11.00	12.00	14.00	10.00	28.00	7.80
Manganese, total	mg/l	0.136	0.99	0.02	0.13	0.32	0.21	0.08		0.03	0.26	0.61	0.03	0.03	0.12	0.02
Potassium, total	mg/l	1.26	3.70	1.00	<1	1.50	1.60	4.00		2.60	8.60	2.60	2.00	2.50	4.90	1.30
Sodium, total	mg/l	15.83	3.50	6.80	10.00	7.80	15.00	130.00		61.00	12.00	17.00	15.00	15.00	31.00	7.60

Normalized

Parameter	Units	Deep Background	MW 203DA	MW 203VD	MW 208VD	MW 212DA	MW 230D	MW 231D	MW 232D	MW 233D	MW 234D	MW 235D	MW 236D	MW 244D	MW 245D	MW 246D
Sample Collection Date			*03/25/97*	*03/25/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*		*03/26/97*	*03/26/97*	*03/26/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
Alkalinity	mg/l CaCO3	134.53	1	1	1	2	1	1	0	1	1	1	2	1	4	1
Chloride	mg/l	5.75	1	0	1	3	0	90	0	23	5	3	11	0	3	4
Hardness	mg/l CaCO3	110.72	2	1	1	3	1	3	0	1	2	2	1	1	4	1
Conductance, field	umhos/cm	270.80	1	1	1	3	1	8	0	4	2	2	2	1	4	4
Total Phenols	mg/l	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TDS	mg/l	179.27	1	1	1	3	1	7	0	3	2	2	2	1	4	1
Sulfate	mg/l	34.85	1	0	1	4	1	3	0	2	2	2	1	1	3	3
TOC	mg/l	6.65	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Calcium, total	mg/l	27.16	3	1	1	4	1	3	0	2	2	2	1	1	4	2
Iron, total	mg/l	1.85	13	0	0	1	2	0	0	0	1	1	0	1	12	1
Magnesium, total	mg/l	8.74	2	1	1	2	1	3	0	1	1	1	2	1	3	1
Manganese, total	mg/l	0.136	7	0	1	2	2	1	0	0	2	4	0	0	1	0
Potassium, total	mg/l	1.26	3	1	0	1	1	3	0	2	7	2	2	2	4	1
Sodium, total	mg/l	15.83	0	0	1	0	1	8	0	4	1	1	1	1	2	0

Table 18. Statistical Trend Analysis Summary - Expansion Landfill

Monitoring Location	Parameter	Trend
MW-203DA	Alkalinity	Increasing
MW-203VD	Potassium	Increasing
MW-208SA	Alkalinity	Increasing
	Sodium	Increasing
MW-212DA	Alkalinity	Increasing
	Chloride	Decreasing
	Potassium	Increasing
MW-230S	Chloride	Decreasing
	TDS	Decreasing
MW-230D	Alkalinity	Increasing
	Conductance	Increasing
	Potassium	Increasing
MW-231S	Alkalinity	Increasing
	Chloride	Increasing
	Hardness	Increasing
	TDS	Increasing
MW-231D	Potassium	Increasing
MW-232S	Alkalinity	Increasing
	Conductance	Increasing
	Hardness	Increasing
	TDS	Increasing
	Calcium	Increasing
	Magnesium	Increasing
	Manganese	Increasing
	Potassium	Increasing
MW-233S	Iron	Decreasing
	Potassium	Decreasing
	Sodium	Decreasing
MW-234S	Alkalinity	Increasing
	Conductance	Increasing
	Hardness	Increasing
	Sulfate	Increasing
	TDS	Increasing
	Magnesium	Increasing
	Potassium	Increasing
MW-234D	Alkalinity	Increasing
	TDS	Increasing
	Manganese	Increasing
MW-235S	Alkalinity	Increasing
	Chloride	Decreasing
	TDS	Increasing
	Magnesium	Increasing
	Potassium	Increasing
MW-235D	Chloride	Increasing
	Manganese	Increasing
	Potassium	Increasing
	Sodium	Increasing

Monitoring Location	Parameter	Trend
MW-236S	Alkalinity	Increasing
	Conductance	Increasing
	Hardness	Increasing
	Sulfate	Increasing
	Iron	Increasing
	Magnesium	Increasing
	Manganese	Increasing
	Potassium	Increasing
	Sodium	Increasing
MW-236D	Alkalinity	Increasing
	Chloride	Decreasing
MW-247-1	Chloride	Decreasing
	Magnesium	Decreasing
MW-247-2	Magnesium	Decreasing
MW-247-3	Iron	Decreasing
	TDS	Decreasing
	Calcium	Decreasing
	Magnesium	Decreasing
MW-244S	Alkalinity	Increasing
	Conductance	Decreasing
	Magnesium	Decreasing
	Iron	Decreasing
MW-244D	Chloride	Decreasing
MW-245S	TDS	Increasing
	Manganese	Increasing
	Potassius	Increasing
	Sodium	Increasing
MW-245D	Hardness	Increasing
	Sulfate	Increasing
	TDS	Increasing
	Calcium	Increasing
	Iron	Decreasing
	Sodium	Decreasing
MW-246S	Hardness	Decreasing
	Sulfate	Decreasing
	TDS	Decreasing
	Sodium	Increasing
MW-246D	Chloride	Decreasing
	Alkalinity	Increasing
	TDS	Decreasing
	Iron	Increasing

Table 19. Surface Water Analytical Data - Inorganic and Metal Parameters

Parameter	Units	Class C Standard	Class C Guidance	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
Total Cyanide	mg/l	0.0052		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Boron	mg/l	10		<1	<1	<1	<1	<1	<1	<1
Potassium, total	mg/l			1.3	1.3	1.1	1.3	1.3	1.9	1.8
Sodium, total	mg/l			18	15	12	13	13	7.4	17
Iron, total	mg/l	0.3		0.44	0.35	0.41	0.34	0.37	0.37	0.18
Manganese, total	mg/l			0.11	0.042	0.09	0.05	0.047	<0.01	0.082
Magnesium, total	mg/l			6.1	6.1	5.3	9.2	9.2	8	15
Lead, total	mg/l	****		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cadmium, total	mg/l	*		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aluminum	mg/l			<0.1	<0.1	0.13	<0.01	<0.1	0.16	<0.1
Calcium, total	mg/l			31	28.0	24.0	30.0	30.0	43.0	51.0
Antimony	mg/l			<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06
Arsenic	mg/l			<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.011
Beryllium	mg/l	1		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Barium	mg/l			<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chromium	mg/l	**		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Copper	mg/l	***		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mercury	mg/l		0.0002	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Nickel	mg/l	*****		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium	mg/l	0.001		0.056	0.056	<0.05	<0.05	<0.05	<0.05	<0.05
Silver	mg/l	0.0001		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Thallium	mg/l	0.008		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Zinc	mg/l	0.03		0.034	0.032	0.055	0.048	0.037	0.033	0.054
Cobalt	mg/l	0.005		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Vanadium	mg/l			<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Table 19. Surface Water Analytical Data - Inorganic and Metal Parameters

Parameter	Units	Class C Standard	Class C Guidance	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
Hardness	mg/l CaCO3			100	95	82	110	110	140	190
TKN	mg/l			0.91	0.8	0.65	0.56	0.77	0.83	1.1
Ammonia	mg/l	*		<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
TOC	mg/l			7.1	6.7	4.9	4.2	7.3	8.9	8.8
Total Phenols	mg/l	0.005		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Nitrate	mg/l			0.068	0.056	0.71	0.68	0.27	0.021	<0.02
BOD-5	mg/l			4.2	4.4	4.2	<4	<4	5.4	5.4
TDS	mg/l	500		250	200	180	190	130	210	320
Sulfate	mg/l			34	19	24	21	30	57	83
Alkalinity	mg/l CaCO3			67	65	92	100	65	100	170
Chloride	mg/l			76	57	40	38	41	13	34
Color	Units			30	25	20	25	30	25	25
Hexavalent Chromium	mg/l	0.011		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromide	mg/l			<2	<2	<2	<2	<2	<2	<2
Dissolved Oxygen	mg/l			11.47	12.72	12.4	12.79	13.4	11.52	12.66
Redox Potential, field	mV			120	125	110	125	110	95	140
pH, field	std units	6.5-8.5		8.0	7.9	7.9	7.9	7.9	8.5	8.7
Conductance, field	umhos/cm			490	372	356	360	356	375	546
Turbidity	NTU			68	82	20	105	55	8	10
Temperature	deg C			5.9	6	4.2	4.3	4.2	6.1	6.7
COD	mg/l			19	17	11	11	17	28	21

* exp(0.7852 {ln (hardness)}-3.490

** exp(0.819 {ln (hardness)}+1.561

*** exp(0.8545 {ln (hardness)}-1.465

**** exp(1.266 {ln (hardness)}-4.661

***** exp(0.76 {ln (hardness)+1.06

Table 20. Surface Water Analytical Data - Organic Parameters

Parameter	Units	Class C Standard	Class C Guidance	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
Acetone	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10
Acrylonitrile	ug/l	5		< 200	< 200	< 200	< 200	< 200	< 200	< 200
Benzene	ug/l	0.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromochloromethane	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromodichloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromoform	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
Bromomethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5
2-Butanone	ug/l			< 10	< 10	< 10	< 10	< 10	< 10	< 10
Carbon Disulfide	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5
Carbon Tetrachloride	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chlorobenzene	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloromethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5
Chloroform	ug/l	7		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Dibromochloromethane	ug/l		50	< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromo-3-chloropropane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dibromoethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5
Dibromomethane	ug/l			< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichlorobenzene	ug/l	4.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,4-Dichlorobenzene	ug/l	4.7		< 5	< 5	< 5	< 5	< 5	< 5	< 5
Trans-1,4-Dichloro-2-Butene	ug/l			< 100	< 100	< 100	< 100	< 100	< 100	< 100
1,1-Dichloroethane	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5
1,2-Dichloroethane	ug/l	5		< 5	< 5	< 5	< 5	< 5	< 5	< 5

Table 20. Surface Water Analytical Data - Organic Parameters

Parameter	Units	Class C Standard	Class C Guidance	SW-1	SW-2	SW-3	SW-4	SW-5	SW-6	SW-7
Sample Collection Date				*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*	*03/25/97*
1,1-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
cis-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
trans-1,2-Dichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,2-Dichloropropane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
cis-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5
t-1,3-Dichloropropene	ug/l			<5	<5	<5	<5	<5	<5	<5
Ethylbenzene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
2-Hexanone	ug/l		50	<10	<10	<10	<10	<10	<10	<10
Iodomethane	ug/l			<5	<5	<5	<5	<5	<5	<5
Methylene Chloride	ug/l			<10	<10	<10	<10	<10	<10	<10
4-Methyl-2-Pentanone	ug/l			<10	<10	<10	<10	<10	<10	<10
Styrene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,1,1,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,1,2,2-Tetrachloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Tetrachloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Toluene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,1,1-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,1,2-Trichloroethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
Trichlorofluoromethane	ug/l	5		<5	<5	<5	<5	<5	<5	<5
1,2,3-Trichloropropane	ug/l			<5	<5	<5	<5	<5	<5	<5
Vinyl acetate	ug/l			<10	<10	<10	<10	<10	<10	<10
Vinyl Chloride	ug/l	2		<5	<5	<5	<5	<5	<5	<5
o-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
m-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5
p-Xylene	ug/l	5		<5	<5	<5	<5	<5	<5	<5

Table 21. Historical Surface Water Analytical Data - Water Quality Parameters.

Sample Location	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond (umhos/cm)	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	pH (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turbidity (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	DO (mg/l)	Bromide (mg/l)
Class C Surface Water Quality Standards and Guidance Values										6.5-8.5	0.005				500	*1				0.0052	0.011		<4	
SW-1	Sep-87	23		50.2	38.1	304	114	12.2	7.37				16.5		210	0.21	0.3					2.1		
SW-1	May-88	24	84.4		41	305	140	11.7	7.31		0.015		34	7.4	201	0.07		8	40			1.28		
SW-1	Aug-88	27	108		44.3	350	130	0.75	6.77		<0.005		37.2	14	124	0.26		9	80			0.89		
SW-1	Nov-88	6	36.3		11.4	139	56	12.5	7.12		0.031		32.6	13	96.4	0.31		24	80			2.16	4.2	
SW-1	Feb-89																							
SW-1	Apr-89	12.5	110		9.2	312	150	29.8	7.17		0.008	-136	39.3	25	149	0.44		55	100			3.9	3.2	
SW-1	Jun-89	26.5	138		5.7	476	175	41.3	6.81		0.045	-1638	25.1	880	346	1.88		20	600			16.5	6	
SW-1	Nov-89	16.8	111		13.8	170	144	28.6	7.2		0.008		47.4	49	218	0.19		11	140			1.92	6.6	
SW-1	Feb-90		91.5	14.9	20.8		124	12.2			<0.005		46.8	950	185	0.2	0.36	8	60	<0.005	<0.01		7.8	
SW-1	Apr-90	15.1	134		8.6	238	160	31	6.03		0.010	54.5	10.5	30	202	0.28		24	100			1.42	3.2	
SW-1	Nov-90	2	77.3	38	30.3	270	140	17	7.3	7.02	<0.05	99.3	16.3	17	211	<0.1	<0.04	2	60	<0.004	0.008	0.7	9.8	
SW-1	Feb-91	2	56	28	48.6	342	115	12	6.9	8.22	<0.010	115.6	32.5	35	224	0.1	0.15						10	
SW-1	May-91	22	76	81.7	36.7	300	112	34.1	7.3	7.02	<0.010	204.8	8	35	214	0.08	0.18						6.24	
SW-1	Aug-91	20	120	438	43.1	375	130	83	6.6	6.19	0.039	340.7	20.2	1110	500	1.94	0.4						0.51	
SW-1	Nov-91	11	112	90	32	324	118	6		7.04	<0.010	172.7	24.7	3.9	252	0.1	0.14						3.2	
SW-1	Feb-92	2	98	46.6	39.6	328	95.8	8		7.65	<0.010	236.9	34.5	7.3	208	0.76	0.22	4.9	<5	<0.010	<0.004	1.18	7.2	
SW-1	May-92	17.00	98.00	38.40	47.00	356	110	6.0		7.37	<0.010	200	12.10	23.00	260	<0.04	<0.02						5.60	
SW-1	Aug-92	23	94	143	38	150	130	4		6.36	<0.010	122	21	35	312	<0.04	0.06						3	
SW-1	Dec-92	2	136	32.8	40	417	110	1		7.48	<0.010	207.8	65.6	10	244	0.15	0.04						9	
SW-1	Feb-93	1	86.0	28.8	84.0	519	124	13		7.09	<0.010	165.1	33.5	6.5	312	0.09	0.19						7	
SW-1	Jun-93	14	78	59.9	35	211	95.4	8	7.44		<0.010	178.5	85.6	2.7	184	<0.02	<0.02	7.3	55	<0.004	<0.004	0.5	8.4	
SW-1	Sep-93	25	82.0	96.0	44.0	248	93.8	12.0		7.12	<0.010	257.0	16.0	4.5	240	<0.02	<0.02						6.6	
SW-1	Dec-93	3.5	58.0	42.4	40.0	326	117	11.0		7.52	<0.010	294.4	51.9	7.8	248	<0.02	0.65						6	
SW-1	Mar-94	0.5	50.0	25.9	81.0	456	97.9	16		7.41	<0.010	291.9	42.7	3.3	244	0.05	0.65	2.4				<0.5	5.2	0.49
SW-1	Jun-94	11.5	100	95.2	51.0	403	122	5		7.02	<0.010	289.4	30.7	12	240	0.214	0.02	7.4				2.25	3.8	0.28
SW-1	Aug-94	17.0	72.0	84.4	33.5	336	124	10		6.80	<0.010	116.2	65.6	7	240	0.21	0.06	10.2	250	<0.004	<0.004	<0.5	1.0	1.32
SW-1	Nov-94	3	73	56.5	45	319	87.8	19		7.28	0.02	236.6	51.8	26	292	0.19	0.14	4.6				1.81	3	3.28
SW-1	March-95	10	63	66.7	51	298	123	15		6.88	<0.010	130	35.7	2.3	216	0.08	<0.05	7				1.34	7.4	<0.2
SW-1	June-95	20.5	133	1009	38	276	127	<1		6.33	<0.010	-78.9	24.1	66	244	0.28	0.1	30				7.75		<0.2
SW-1	Sept-95	17.5	438	3876	29	256	333	54		6.68	<0.010	-56.9	12.4	175	228	6.15	0.19	174				123	0.5	<0.2
SW-1	Dec-95	1	48	33.3	35	269	78.7	<1		7.47	<0.010	17.3	51.6	25	228	0.03	0.44	<2	60	<0.004	<0.004	0.92	7.1	<0.2
SW-1	April-96	3.4	58	21	70	400	130	7.9		8.5	0.006	295	27	10	280	<0.03	<0.02	8.4	30	<0.01	<0.01	1.4		3.5
SW-1	June-96	20.6	79	170	27	295	160	30		5.7	0.0034	70	40	7	250	0.4	0.11	9.4				8.8	9.5	<2
SW-1	Sept-96	10.2	79	200	26	280	110	50		6.8	0.016	90	27	600	200	<0.03	0.047	14				25	2.6	<2
SW-1	Nov-96	2.7	100	210	21	271	96	43		6.51	0.026	190	<4	91	240	0.91	<0.02	42				7.9	9.96	<2
SW-1	March-97	5.9	67	19	76	490	100	7.1		8	<0.002	120	34	68	250	0.91	0.068	4.2		<0.01	<0.01	0.91	11.47	<2

NOTE: *1 - Dependant upon sample temperatureand pH (see regs)

Table 21. Historical Surface Water Analytical Data - Water Quality Parameters.

Sample Location	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond (umhos/cm)	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	pH (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turbidity (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	DO (mg/l)	Bromide (mg/l)
Class C Surface Water Quality Standards and Guidance Values										6.5-8.5	0.005				500	*1				0.0052	0.011		<4	
SW-2	Sep-87	23		57.2	14.4	320	129	14.4	6.48				77.4		218	0.37	0.3					2.74		
SW-2	May-88	23	33.8		18.3	161	94	7.2	7.29		<0.005		27.7	4.3	184	0.07		8	20			0.2		
SW-2	Aug-88	31	154		16.4	296	158	45.4	6.76		<0.005		21.5	500	112	0.52		36	160			0.48		
SW-2	Nov-88	8	24.5		19.4	174	72	7.76	7.06		0.014		74.3	23	95.4	0.43		10	40			1.72	5.6	
SW-2	Feb-89	7	49.8	26.1	36	233	96	8.85	7.79		<0.005	113	39.4	24	184	0.14	<10	11	50			0.76	9.4	
SW-2	Apr-89	16.5	39.8		21.5	196	110	8.53	6.47		0.014	35	54.1	8	1300	0.13		16	50			1.14	3.2	
SW-2	Jun-89	21	89.6		22.1	327	64	16.6	7.27		0.037		31.8	36	295	0.3		3	50			2.29	3.6	
SW-2	Nov-89	13	66.1		21.1	140	90.4	13.4	7.35		0.008		37.6	28	181	0.15		11	70			1.77	6	
SW-2	Feb-90		45.5	<10	43.2		87.4	6.84			<0.005		54.2	185	173	0.19	0.46	2	25	<0.005	<0.01		8.6	
SW-2	Apr-90	12.9	53.6		38.8	229	60.2	10.4	5.95		0.005	50.4	14.7	14	164	0.24		15	100			0.47	3.6	
SW-2	Nov-90	4	71.1	51	29.4	260	110	19	7.2	6.99	<0.05	99.5	20	21	213	<0.1	0.16	4.2	70	0.004	0.009	1.1	7	
SW-2	Feb-91	5	60	22.5	50.6	360	150	13	6.6	8.13	<0.010	201	35	10	252	0.1	0.14						11.4	
SW-2	May-91	18	132	19	22	320	162	10.2	7	6.61	0.011	164.7	6.6	9.9	230	0.33	0.07						1.53	
SW-2	Aug-91	23	80	45.3	23.7	285	110	23.1	7.5	6.46	0.014	337.4	17	8.5	208	<3.0	<0.04						3.8	
SW-2	Nov-91	10	118	44	20	295	96.7	2		7.34	<0.010	188.4	18.5	4.3	192	<0.02	0.07						8	
SW-2	Feb-92	4	56	23.8	42.6	321	90.7	3		7.70	<0.010	268.1	26	8.5	188	0.17	0.16	<0.5	<5	<0.010	<0.004	<0.5	10.2	
SW-2	May-92	16.00	44.00	<1.0	27.00	235	71.50	<1.0		7.18	<0.010	230.20	11.40	1.30	106	<0.04	0.11						6.0	
SW-2	Aug-92	22	72	22.4	22	210	87.6	<1.0		6.58	<0.010	257.3	26	2	956	<0.04	0.02						2.8	
SW-2	Dec-92	2	102	32.8	27.5	346	101	<1.0		7.57	<0.010	226.1	67.9	3.9	208	0.04	<0.02						12.8	
SW-2	Feb-93	1	66.0	18.0	58.0	378	74.0	10		7.08	<0.010	179.0	29.5	2.8	248	0.1	0.14						7	
SW-2	Jun-93	12.5	82	<1.0	32	214	94.7	7	7.31		<0.010	198.3	64.3	3.4	180	1	0.141	2.4	60	<0.004	<0.004	<0.5	5.2	
SW-2	Sep-93	Dry																						
SW-2	Dec-93	4	54.0	8.8	25.0	236	92.3	6		7.24	<0.010	288.7	36.8	8	184	<0.02	0.16						8.6	
SW-2	Mar-94	1	42.0	7.7	65.0	378	88.2	12		7.02	<0.010	308.9	47.7	1.5	220	0.05	0.39	<2.0				<0.5	7.4	0.53
SW-2	Jun-94	14	80.0	85.7	35.0	303	108	7		7.05	<0.010	272.8	49.8	320	220	<0.02	0.04	3.0				1.85	4.4	0.76
SW-2	Aug-94	18	72.0	22.20	26.0	287	106	9		6.72	<0.01	133.4	59.2	5.1	164	<0.02	0.06	<2.0	100	<0.004	<0.004	<0.5	3.0	2.00
SW-2	Nov-94	4.5	86	30.4	29	296	87.4	16		7.27	0.013	229.8	41	6.7	216	0.13	0.06	<2.0				1.16	6.8	3.6
SW-2	March-95	9	63	16.7	29	188	64.9	4		7.15	<0.010	162.9	22.9	1.5	120	0.08	<0.05	<2				<0.5	9.8	<0.2
SW-2	June-95	No sample taken - monitoring location dry																						
SW-2	Sept.-95	No sample taken - monitoring location dry																						
SW-2	Dec-95	4.5	40	12.5	29	254	66.2	<1		7.63	<0.010	97.9	38.6	2.1	172	<0.02	0.37	<2	35	<0.004	<0.004	<0.5	11.4	<0.2
SW-2	April-96	4.4	56	17	52	320	110	7		8.3	0.03	290	25	10	220	<0.03	<0.02	9.2	25	<0.01	<0.01	1.4		2.6
SW-2	June-96	22.3	72	33	24	266	100	9.9		6.4	0.0043	200	16	10	190	<0.03	0.042	4.2				1.9	3.4	<2
SW-2	Sept-96	12	71	33	17	250	90	18		6.9	0.0062	210	18	22	160	<0.03	0.026	<4				1.8	2.3	<2
SW-2	Nov-96	6.5	80	30	25	264	84	10		7.77	<0.002	175	14	4.3	160	<0.03	<0.02	11				0.73	12.45	<2
SW-2	March-97	6	65	17	57	372	95	6.7		7.9	<0.002	125	19	82	200	0.8	0.056	4.4		<0.01	<0.01	0.8	12.72	<2

NOTE: *1 - Dependant upon sample temperatureand pH (see regs)

Table 21. Historical Surface Water Analytical Data - Water Quality Parameters.

Sample Location	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond (umhos/cm)	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	pH (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turbidity (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	DO (mg/l)	Bromide (mg/l)
Class C Surface Water Quality Standards and Guidance Values										6.5-8.5	0.005				500	*1				0.0052	0.011		<4	
SW-3	Sep-87	20		66.9	41.7	423	179	8.4	7.61				54.2		305	0.21	0.61					0.56		
SW-3	May-88	16	94.3		27.6	283	150	5.8	7.51		0.041		30.6	7.7	236	0.1		9	35			0.45		
SW-3	Aug-88	28	158		42.7	459	186	<0.1	8.02		0.007		90	25	136	0.13		5	25			1.24		
SW-3	Nov-88	6	56.8		26.8	280	122	8.99	6.89		0.011		39	5	154	0.34		18	50			2.14	5.2	
SW-3	Feb-89	0	88.6	<10.0	41	370	140	5.1	7.99		0.027	140	50	23	207	0.15	1	5	30			1.66	10.9	
SW-3	Apr-89	13	100		33.8	292	155	7.04	8.17		<0.005	-28	30.9	8	1300	0.06		30	10			0.67	5.2	
SW-3	Jun-89	25	144		37.7	592	172	6.08	8.43		0.021	-1645	54.7	8	441	<0.04		<1	15			0.43	8	
SW-3	Nov-89	11.2	103		26.6	226	132	8.02	6.69		<0.005		45.8	16	207	0.1		18	40			0.59	8.6	
SW-3	Feb-90		74.8	<10	32.5		111	5.9			<0.005		49.4	175	176	0.14	1.53	4	25	<0.005	<0.01		5.9	
SW-3	Apr-90	16.85	109		35	315	136	6.15	6.95		0.006	14.9	14.3	7	193	0.09		8	40			0.49	8.1	
SW-3	Nov-90	4	58.5	43	23.5	210	88	16	7.2	7.01	<0.05	102.1	22.5	23	178	<0.1	0.63	14	60	0.004	0.008	0.82	11.8	
SW-3	Feb-91	5	46	31.1	33.7	290	110	12	7	8.42	<0.010	197.9	34.1	17	200	0.1	0.51						11.4	
SW-3	May-91	23	120	14.3	30.4	360	156	9	7.8	7.47	0.026	222.2	31.9	13.1	247	0.05	1.1						8.12	
SW-3	Aug-91	23	80	26	47.4	520	190	16.4	8.8	7.58	<0.010	333	58	43	369	<0.03	0.17						9.07	
SW-3	Nov-91	11	126	35	46	563	191	<1.0		7.42	<0.010	199.2	60.2	25	384	0.13	0.4						10.2	
SW-3	Feb-92	3	84	36.1	31.7	348	113	6		7.65	<0.010	296.1	41.6	17	192	0.18	0.27	<0.5	<5	<0.010	<0.004	<0.5	11.2	
SW-3	May-92	19.00	122	12.00	50.00	359	134	<1.0		7.65	<0.010	258	12.60	4.50	232	0.06	0.88						8.20	
SW-3	Aug-92	23	122	9.2	42	330	150	<1.0		7.26	<0.010	274	45.6	6.4	164	<0.04	1.08						8	
SW-3	Dec-92	2	122	7.5	31.5	2720	117	<1.0		7.44	<0.010	245	64.4	4.1	228	0.2	<0.02						13	
SW-3	Feb-93	1	120	17.1	46.5	449	115	12		7.78	<0.010	176.1	32.5	3.8	280	0.08	1.18						12.6	
SW-3	Jun-93	12	134	6.8	39	286	156	5	7.62		<0.010	206.7	74.4	13	268	<0.02	1.2	2	40	0.004	<0.004	<0.5	6	
SW-3	Sep-93	24.5	168	8.75	56.0	426	169	2.0		7.67	<0.010	247.0	75.2	32	408	<0.02	0.93						6.8	
SW-3	Dec-93	4.5	60	33.9	25.0	267	114	13.0		6.96	<0.010	286.4	46	28.5	216	<0.02	1.6						10	
SW-3	Mar-94	1	68.0	5.8	41.0	316	111	9.0		6.98	<0.010	330.3	59.6	1.8	200	<0.02	0.81	<2.0				<0.5	11.2	0.63
SW-3	Jun-94	15	140	14.0	39.0	404	161	<1		7.79	<0.010	253.8	25.3	11	240	<0.02	0.70	<2.0				<0.50	7.6	0.73
SW-3	Aug-94	17	60	31.1	24.5	272	89.2	9		7.72	<0.010	140.2	58.5	16.5	184	<0.02	0.87	<2.0	150	<0.004	<0.004	<0.5	6.80	1.86
SW-3	Nov-94	5.5	71	34.8	30	277	82.4	10		7.56	0.013	235.8	43.6	16	208	0.16	0.92	<2.0				1.48	9.8	3.28
SW-3	March-95	11	112	16.7	35	320	147	5		7.34	<0.010	169.3	22.3	3.1	220	0.07	0.76	<2				<0.5	10.4	<0.2
SW-3	June-95	21.5	121	18.6	45	375	166	2		7.45	<0.010	108.2	29.9	19	300	0.11	1.17	5				<0.5	13.5	<0.2
SW-3	Sept.-95	17	126	20.8	58	378	173	12		7.65	<0.010	98.2	41	20	368	0.16	1.26	<2				<0.5	9.1	<0.2
SW-3	Dec-95	3	96	8.3	34	297	120	<1		7.82	<0.010	118	46	4.3	236	0.06	1.12	<2	30	<0.004	<0.004	<0.5	12.9	<0.2
SW-3	April-96	3.9	100	7.8	39	460	180	6.1		8.5	<0.002	375	28	10	240	<0.03	0.18	8.2	25	<0.01	<0.01	1.4		3
SW-3	June-96	22	130	20	35	435	170	6.8		6.8	<0.002	200	38	10	320	<0.03	0.71	<4				1.3	4.9	<2
SW-3	Sept-96	13	96	28	22	320	120	11		7.2	0.0053	250	29	250	210	<0.03	0.64	<4				1.8	8.8	<2
SW-3	Nov-96	4.8	100	13	29	343	110	6.1		8.17	<0.002	175	22	5.9	200	<0.03	0.88	<4				0.77	11.62	<2
SW-3	March-97	4.2	92	11	40	356	82	4.9		7.9	<0.002	110	24	20	180	0.65	0.71	4.2		<0.01	<0.01	0.65	12.4	<2

NOTE: *1 - Dependant upon sample temperatureand pH (see regs)

Table 21. Historical Surface Water Analytical Data - Water Quality Parameters.

Sample Location	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond (umhos/cm)	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	pH (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turbidity (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	DO (mg/l)	Bromide (mg/l)
Class C Surface Water Quality Standards and Guidance Values										6.5-8.5	0.005				500	*1				0.0052	0.011		<4	
SW-4	Sep-87	19		21.5	41.5	404	185	7.6	7.67				53.9		275	0.21	1.29					0.69		
SW-4	May-88	16	100		27.9	292	130	5.9	7.5		0.005		25.9	11	211	0.1		8	40			0.42		
SW-4	Aug-88	28	154		46.4	473	192	<0.1	7.65		<0.005		43.7	15	178	0.16		7	30			1.82		
SW-4	Nov-88	6	65.7		27.3	264	126	9.21	7.65		0.031		20.7	5	132	0.38		11	50			2.07	3.6	
SW-4	Feb-89	4	87.6	10.2	39	395	136	4.95	8.48		<0.005	330	46.5	25	217	0.16	0.99	5	30			1.36	10.8	
SW-4	Apr-89	15	98.5		32.9	300	176	4.24	8.2		<0.005	-85	313	9	172	0.09		15	10			0.57	5.5	
SW-4	Jun-89	24	147		37.6	615	180	5.96	7.86		0.018	-1376	21	10	459	0.29		<1	25			0.39	7.6	
SW-4	Nov-89	11.8	101		26.5	228	133	7.76	5.78		0.005		38.6	19	201	0.1		1	40			0.69	8.4	
SW-4	Feb-90		73.6	<10	31.6		110	7.26			<0.005		49.4	175	186	0.11	1.53	5	20	<0.005	<0.01		8.8	
SW-4	Apr-90	16.7	110		35.1	316	137	5.86	7.3		<0.005	-25.1	16	6	196	0.06		5	35			0.57	8.4	
SW-4	Nov-90	4	56.4	37	18.6	190	78	11	7.3	6.98	<0.05	106	23.8	28	171	<0.1	0.93	14	45	<0.004	0.007	0.57	12.8	
SW-4	Feb-91	4	68	12	29.8	340	116	8.6	7.4	8.57	<0.010	232.4	28	17	209	0.1	1.76						10.6	
SW-4	May-91	23	128	5	32.5	380	170	4.5	7.7	7.51	<0.010	266.8	31.9	10.1	259	0.03	1.21						7.93	
SW-4	Aug-91	23	124	31	48.5	560	210	13.6	8.2	7.8	<0.010	332.8	132	56	416	<0.03	0.21						7.6	
SW-4	Nov-91	11	140	39	48	573	191	<1.0		7.72	<0.010	190.2	60.7	26	396	0.14	0.85						9.8	
SW-4	Feb-92	3	52	44	31.7	349	112	5		7.75	<0.010	291.4	40	17	204	0.21	0.58	<0.5	<5	<0.010	<0.004	<0.5	11.2	
SW-4	May-92	19.00	112	12.00	31.00	362	133	<1.0		7.69	<0.010	282	13.0	70.00	240	0.07	1.19						8.20	
SW-4	Aug-92	24	138	5.1	44	350	152	<1.0		7.29	<0.010	260.4	46.4	6.8	136	<0.04	0.52						7.8	
SW-4	Dec-92	2	122	10.3	30.5	386	117	<1.0		7.6	<0.010	248.7	67.9	4	220	0.19	<0.02						13.2	
SW-4	Feb-93	1	118	9.0	45.5	461	113	14		7.73	<0.010	184.8	41.0	3.7	284	0.08	1.09						10.8	
SW-4	Jun-93	14.5	132	<1.0	39	291	82.2	5	7.6		<0.010	226.4	80.6	12	280	<0.02	1.27	1.8	35	<0.004	<0.004	<0.5	7.2	
SW-4	Sep-93	24.5	174	4.86	55.0	431	217	4.0		7.56	<0.010	264.7	70.2	30	400	<0.02	0.91						5.8	
SW-4	Dec-93	4	58	33.9	25.0	268	111	9.0		6.97	<0.010	175.5	47.3	14	208	<0.02	0.35						10	
SW-4	Mar-94	0.5	72.0	5.8	41.0	368	116	11		7.02	<0.010	329.3	50.7	2.1	220	<0.02	0.78	<2.0				<5.0	10.6	0.68
SW-4	Jun-94	15	134	9.7	40.0	412	258	2		7.68	<0.010	251.2	38.0	15	247	<0.02	0.72	<2.0				<0.50	7.6	0.76
SW-4	Aug-94	17.5	60.0	66.7	23.5	274	88.3	6		7.44	<0.010	146	59.2	19.5	182	0.03	0.78	<2.0	80.00	<0.004	<0.004	<0.5	6.8	2.12
SW-4	Nov-94	5.5	72	34.8	29	282	78.6	8		7.45	0.013	237.2	39.1	21	208	0.18	0.99	<2.0				1.7	9.6	3.92
SW-4	March-95	11	114	22.2	38	324	158	5		7.42	<0.010	173.4	24.6	3.2	228	0.07	0.75	<2				<0.5	11.7	<0.2
SW-4	June-95	21.5	155	14	35	378	173	2		7.36	<0.010	136	27.6	17	296	0.09	1.17	<2				<0.5	7.4	<0.2
SW-4	Sept.-95	17.5	156	20.8	53	378	185	51		7.43	<0.010	121.5	46.8	20	356	0.13	1.27	<2				0.65	7.6	<0.2
SW-4	Dec-95	2.5	94	8.3	35	304	124	<1		7.79	<0.010	134.6	43.7	7.8	248	0.11	1.11	<2	35	<0.004	<0.004	<0.5	12.9	<0.2
SW-4	April-96	4.3	110	7.8	38	370	130	6		8.5	<0.002	225	26	10	240	<0.03	0.14	5.8	25	<0.01	<0.01	1.2		2.6
SW-4	June-96	22.2	130	14	36	460	200	6.4		7.8	<0.002	515	35	2	310	<0.03	0.93	<4				1.8	8.8	<2
SW-4	Sept-96	12.9	98	35	22	360	120	11		6.5	0.0026	505	27	110	210	<0.03	0.65	<4				2.5	8.7	<2
SW-4	Nov-96	4.2	100	15	39	333	110	6.1		7.98	<0.002	110	27	6.8	190	<0.03	0.83	4.1				0.73	11.6	<2
SW-4	March-97	4.3	100	11	38	360	110	4.2		7.9	<0.002	125	21	105	190	0.56	0.68	<4		<0.01	<0.01	0.56	12.79	<2

NOTE: *1 - Dependant upon sample temperatureand pH (see regs)

Table 21. Historical Surface Water Analytical Data - Water Quality Parameters.

Sample Location	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond (umhos/cm)	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	pH (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turbidity (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	DO (mg/l)	Bromide (mg/l)
Class C Surface Water Quality Standards and Guidance Values										6.5-8.5	0.005				500	*1				0.0052	0.011		<4	
SW-5	Nov-91	10	48	50	22	276	69.1	4		7.3	<0.010	205	33.3	240	232	0.05	0.65						8.2	
SW-5	Feb-92	3	53	23.8	32.7	272	77.9	5		7.58	<0.010	303.2	30	22	162	0.1	0.3	<0.5	<5	<0.010	<0.004	<0.5	10.2	
SW-5	May-92	19.00	50.00	35.00	30.50	256	85.80	<1.0		7.70	<0.010	259	25.20	5.80	210	<0.04	0.25						8.80	
SW-5	Aug-92	20	96	92.4	24	230	99	12		7.27	<0.010	294	34.4	50	284	0.1	0.35						4.4	
SW-5	Dec-92	2	88	25.3	23.5	2160	89.4	2		7.52	<0.010	234.3	69	5.8	192	0.06	<0.02						12.2	
SW-5	Feb-93	1	54.0	19.8	48.0	356	70.4	10		7.60	<0.010	179.5	41.0	5.3	232	0.12	0.34						9.4	
SW-5	Jun-93	11.5	132	3.8	18	294	178	12	7.59		<0.010	220.6	101.9	8.2	332	0.07	0.62	1.6	50	<0.004	<0.004	<0.5	7.2	
SW-5	Sep-93	Dry																						
SW-5	Dec-93	4	30.0	33.9	21.0	222	94.1	10		6.99	<0.010	283.5	62.4	3.8	192	<0.02	1.5						10.6	
SW-5	Mar-94	1	26.0	13.4	52.0	367	76.5	12		7.01	<0.010	310.0	48.7	1.6	182	<0.02	0.42	<2.0				<0.5	7.8	0.57
SW-5	Jun-94	15	92.0	45.2	24.0	234	129	9		7.56	<0.010	259.3	52.5	6	240	<0.02	0.14	<2.0				0.59	8.2	0.52
SW-5	Aug-94	16	48.0	40.0	18.0	266	96.8	16.0		7.38	<0.010	142.2	70.7	6.9	196.0	0.02	0.14	<2.0	130	<0.004	0.006	<0.5	7.8	2.02
SW-5	Nov-94	4.5	59	39.1	28	271	79.5	13		7.53	0.02	234.5	47.3	6.4	216	0.15	0.92	<2.0				2.17	9.2	3.6
SW-5	March-95	10	34	44.4	22	197	77.1	12		7.53	<0.010	176.6	34.5	2.6	160	0.09	0.3	<2				0.53	10.9	<0.2
SW-5	June-95	18.5	186	65.1	60	379	170	25.8		7.41	<0.010	120.4	25.8	29	330	0.15	0.65	10				0.82	8.55	4.5
SW-5	Sept.-95	15	108	54.2	119	556	442	30		7.36	<0.010	115.2	308	14	1004	0.13	15.2	<2				1.5	6.5	<0.2
SW-5	Dec-95	4	28	20.8	25	225	59.5	<1		7.8	<0.010	128.2	55	3.7	188	0.04	0.29	<2	50	<0.004	<0.004	<0.5	12.1	<0.2
SW-5	April-96	2.1	24	17	35	266	220	7.3		8.2	0.0022	400	30	10	170	<0.03	0.031	9.6	30	<0.01	<0.01	1.2		3.4
SW-5	June-96	19.5	51	46	19	228	80	15		6.7	0.0025	195	36	7	190	<0.03	0.18	<4				1.8	9.9	<2
SW-5	Sept-96	10.8	64	53	13	230	82	22		7.2	0.0034	290	32	110	180	<0.03	0.19	<4				0.72	10	<2
SW-5	Nov-96	5.4	50	33	21	211	68	12		7.87	0.0043	180	19	13	150	<0.03	0.12	<4				1.1	12.38	<2
SW-5	March-97	4.2	65	17	41	356	110	7.3		7.9	<0.002	110	30	55	130	0.77	0.27	<4		<0.01	<0.01	0.77	13.4	<2

Table 21. Historical Surface Water Analytical Data - Water Quality Parameters.

Sample Location	Sample Date	Temp (C)	ALK (mg/l)	COD (mg/l)	Cl- (mg/l)	Cond (umhos/cm)	Hard (mg/l)	TOC (mg/l)	pH (S.U.)	pH (field) (S.U.)	Phenols (mg/l)	Eh (mV)	SO4= (mg/l)	Turbidity (NTU)	TDS (mg/l)	NH3 (mg/l)	NO3- (mg/l)	BOD5 (mg/l)	Color (units)	CN- (mg/l)	Cr+6 (mg/l)	TKN (mg/l)	DO (mg/l)	Bromide (mg/l)
Class C Surface Water Quality Standards and Guidance Values										6.5-8.5	0.005				500	*1				0.0052	0.011		<4	
SW-6	Dec-92	2.5	204	51.5	62	1046	430	8		7.45	<0.010	235.7	286	92	828	0.2	<0.02						12	
SW-6	Feb-93	DRY																						
SW-6	Sep-93	DRY																						
SW-6	Dec-93	2	76	93.3	8	223	96.1	8		6.27	<0.010	269.8	65	260	244	<0.02	0.5						9	
SW-6	Mar-94	No Sample Taken - Sampling Location Frozen.																						
SW-6	Jun-94	No Sample Taken - Sampling Location Dry.																						
SW-6	Aug-94	18	78.0	22.2	5.0	228	85.2	6		7.21	<0.010	71.9	68.5	47	188	<0.020	0.03	2.40	200	<0.004	<0.004	<0.5	5.80	1.90
SW-6	Nov-94	2.5	62	26.1	8	250	80.5	9		7.43	0.02	214	67.1	162	268	0.15	0.16	<2.0				1.59	8.2	3.92
SW-6	March-95	10.5	87	44.4	29	357	197	7		6.79	<0.010	87.4	88.5	7.1	292	0.09	<0.05	4				0.57	9.2	<0.2
SW-6	June-95	No Sample Taken - Sampling Location Dry.																						
SW-6	Sept.-95	22	48	25	50	625	486	<1		6.96	<0.010	-3.2	510	10	988	0.11	0.47	<2				<0.5	11.4	<0.2
SW-6	Dec-95	1.5	96	12.5	8	274	105	<1		7.76	<0.010	108.4	30.2	76	220	<0.02	0.17	<2	30	<0.004	<0.004	<0.5	12.6	<0.2
SW-6	April-96	3.9	96	35	20	340	150	7.3		8.6	<0.002	270	54	170	220	<0.03	<0.02	8.8	30	<0.01	<0.01	1.5		2.6
SW-6	June-96	23.3	66	20	1.9	223	110	6.5		7.4	<0.002	160	30	10	170	<0.03	1.2	<4				1.4	6.1	<2
SW-6	Sept-96	11.6	86	28	<1	200	98	8.6		7.1	0.0031	175	23	980	150	<0.03	0.03	<4				6.1	10	<2
SW-6	Nov-96	2.7	100	20	8	271	130	7.4		6.51	<0.002	190	45	38	190	<0.03	0.034	4.9				0.77	9.96	<2
SW-6	March-97	6.1	100	28	13	375	140	8.9		8.5	<0.002	95	57	8	210	0.83	0.021	5.4		<0.01	<0.01	0.83	11.52	<2
SW-7	Dec-92	2	140	15	24	409	139	4		7.61	<0.010	241.8	78.3	30	268	<0.02	<0.02						14.6	
SW-7	Feb-93	1	100	18.0	23.0	351	100	12		7.74	<0.010	178.7	40.5	6.3	216	<0.02	0.14						13	
SW-7	Jun-93	20	86	<1.0	28	306	109	6	7.94		<0.010	190.9	75.6	9.7	200	0.03	0.14	1.9	25	<0.004	<0.004	<0.5	8.4	
SW-7	Sep-93	25.5	93.0	33.0	67.0	341	128	9.0		7.85	<0.010	205.3	124	13	316	<0.02	<0.02						8.4	
SW-7	Dec-93	3	79.0	19.6	20.0	249	112	6.0		7.16	<0.010	279.3	50	128	224	<0.02	0.12						10.4	
SW-7	Mar-94	0.5	58.0	10.6	27.0	249	68.8	16		7.26	<0.010	317.4	40.8	5.1	136	<0.02	0.36	<2.0				<0.05	18.0	0.61
SW-7	Jun-94	15.5	52.0	10.8	19.0	194	64.4	<1		9.68	<0.010	213.1	30.7	20	110	<0.02	0.05	<2.0				<0.50	8.8	0.68
SW-7	Aug-94	19.5	68	13.3	16	220	79	8		8.64	<0.010	100.6	54.9	14.8	184	<0.02	0.03	<2.0	90	<0.004	<0.004	<0.5	8.20	1.98
SW-7	Nov-94	5	93	21.7	16	234	75.6	10		7.66	0.013	217.5	39.1	31	176	0.11	0.04	<2.0				1.16	8.8	3.92
SW-7	March-95	10.5	109	27.8	11	247	127	12		7.46	<0.010	144.6	14.2	16.5	160	0.05	<0.05	<2				<0.5	10.1	<0.2
SW-7	June-95	24.0	75	23.3	10	196	61	<1		8.23	<0.010	14.1	14.3	15	348	0.09	<0.05	<2				<0.5	18.75	0.4
SW-7	Sept.-95	21.5	89	41.7	24	325	74.9	24		8.53	<0.010	8.8	46.3	54	204	0.11	0.2	<2				0.54	15.7	<0.2
SW-7	Dec-95	5.0	108	25	8	235	93.9	<1		7.63	<0.010	82	20	110	236	0.04	0.15	<2	50	<0.004	<0.004	0.59	11.4	<0.2
SW-7	April-96	2.8	200	17	53	690	250	6.4		8.4	<0.002	265	89	10	450	<0.03	<0.02	13	25	<0.01	<0.01	1.5		3.5
SW-7	June-96	23.1	84	20	18	323	130	9.9		6.0	<0.002	175	36	200	230	<0.03	0.036	<4				4.5	8.3	<2
SW-7	Sept-96	13.1	71	28	22	440	160	11		8.5	0.006	65	46	3	230	0.96	0.063	6.6				2.5	9	<2
SW-7	Nov-96	6.3	70	35	22	289	91	14		10.2	<0.002	145	33	2.2	200	<0.03	1.6	<4				1.3	13.43	<2
SW-7	March-97	6.7	170	21	34	546	190	8.8		8.7	<0.002	140	83	10	320	1.1	<0.02	5.4		<0.01	<0.01	1.1	12.66	<2

NOTE: *1 - Dependant upon sample temperatureand pH (see regs)

Table 22. Historical Surface Water Analytical Data - Metals Parameters

Sample Location	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class C Surface Water Quality Standards and Guidance Values		*1		0.3	*2					0.1		0.19		*3		*4	*5	0.0002	*6	0.001	0.0001	0.006	0.09
SW-1	Sep-87	<0.010			<0.005						<0.06	<0.01		<0.005		<0.010	<0.03	<0.002	<0.04	<0.05	<0.01	<0.01	<0.020
SW-1	May-88	<0.010		1.07	<0.005		0.398					<0.01											
SW-1	Aug-88	<0.010		3.43	<0.005		0.63					<0.01											
SW-1	Nov-88	<0.010		0.834	<0.005		0.047					<0.02											
SW-1	Feb-89																						
SW-1	Apr-89	<0.010		9.06	<0.005		1.18					<0.01											
SW-1	Jun-89	<0.010		137	0.155		2.63					0.0196											
SW-1	Nov-89	<0.010		2.95	0.0045		0.934					<0.01											
SW-1	Feb-90	<0.010	38.4	2.83	0.0038		0.304		14.5	1.22	<0.06	<0.01	<0.2	<0.005	<1.0	<0.010	<0.025	<0.002	<0.04	<0.005	<0.01	<0.01	<0.020
SW-1	Apr-90	<0.010		4.72	0.0031		0.689					<0.01											
SW-1	Nov-90	<0.01	34	0.85	<0.020	7.1	0.12	3.8	16	0.36	<0.06	<0.02	0.02	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	0.04
SW-1	Feb-91	<0.010	31.1	2.16	<0.020	6.45	0.151	1.82	21.9														
SW-1	May-91	<0.010	32.9	3.09	<0.020	7.13	0.309	2.52	19.9														
SW-1	Aug-91	<0.010	61.4	33.2	0.036	15.8	1.98	13.9	28.5														
SW-1	Nov-91	<0.010	35.9	1.37	<0.020	7	0.418	3.68	13.1														
SW-1	Feb-92	<0.010	26.3	12.2	<0.020	7.31	0.286	1.97	13.7	0.54	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-1	May-92	<0.010	33.20	3.90	<0.020	6.59	0.91	4.19	23.60														
SW-1	Aug-92	<0.010	24.8	5.14	<0.020	5.25	0.378	2.98	13.4														
SW-1	Dec-92	<0.010	34.1	1.15	<0.020	6.05	0.329	3.66	22.6														
SW-1	Feb-93	<0.010	30.9	0.676	<0.020	11.4	0.327	2.56	41.3														
SW-1	Jun-93	<0.010	29.7	0.870	<0.005	5.14	0.051	0.97	17	<0.20	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-1	Sep-93	<0.010	25.2	2.42	<0.005	7.50	0.123	<0.050	19.8														
SW-1	Dec-93	<0.010	32.7	0.530	<0.005	8.6	0.065	3.52	19.7														
SW-1	Mar-94	<0.010	28.0	1.11	<0.005	6.8	0.297	1.77	32.8														
SW-1	Jun-94	<0.010	36.4	1.13	<0.005	7.58	0.21	2.46	26.8														
SW-1	Aug-94	<0.010	37.2	2.41	<0.005	7.46	1.46	8.79	16.6	0.54	<0.060	<0.020	<0.10	<0.01	0.22	<0.020	0.085	<0.001	0.066	<0.005	0.027	<0.005	0.084
SW-1	Nov-94	<0.010	22.9	1.42	<0.005	7.42	0.23	3.84	19.3														
SW-1	March-95	<0.010	26.4	0.9	<0.005	5.8	0.23	1.56	22.2														
SW-1	June-95	<0.010	34	8.48	<0.005	10.2	2.98	12.4	26.8														
SW-1	Sept.-95	0.014	47.7	294	0.33	51.9	17.1	3.88	38.6														
SW-1	Dec-95	<0.010	22.5	0.8	<0.005	5.48	0.14	2.29	21.8	0.5	<0.060	<0.020	<0.10	<0.010		<0.020	0.04	<0.001	2.29	<0.005	<0.020	<0.005	0.035
SW-1	April-96	<0.002	34	0.9	<0.01	6.7	0.14	1.8	31	0.3	<0.06	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	0.077	<0.01	<0.03	0.012
SW-1	June-96	<0.01	33	8.6	<0.01	8.1	0.66	2.8	17														
SW-1	Sept-96	<0.01	33	6.8	0.012	7.6	0.71	14	22														
SW-1	Nov-96	<0.01	28	6.5	0.011	6.3	0.5	6.2	12														
SW-1	March-97	<0.01	31	0.44	<0.01	6.1	0.11	1.3	18	<0.1	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	0.056	<0.01	<0.03	0.034

*1 - exp(0.7852[ln(hard)]-3.490)

*2 - exp(1.266[ln(hard)]-4.661)

*3 - 0.011 mg/l when hardness < 75 mg/l

*4 - exp(0.819[ln(hard)]+1.516)

*5 - exp(0.8545[ln(hard)]-1.465)

*6 - exp(0.76[ln(hard)]+1.06)

Table 22. Historical Surface Water Analytical Data - Metals Parameters

Sample Location	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class C Surface Water Quality Standards and Guidance Values		*1		0.3	*2					0.1		0.19		*3		*4	*5	0.0002	*6	0.005	0.0001	0.006	0.03
SW-2	Sep-87	<0.010			<0.005						<0.06	<0.01				<0.010	<0.03	<0.002	<0.04	<0.05	<0.01	<0.01	0.03
SW-2	May-88	<0.010		0.622	<0.005		0.244					<0.01											
SW-2	Aug-88	<0.010		65.5	0.141		6.22					0.015											
SW-2	Nov-88	<0.010		0.31	<0.005		0.075					<0.02											
SW-2	Feb-89	<0.010	27.6	0.604	<0.005		0.084		14.3	0.242	<0.06	<0.01	<0.2	<0.005	<0.25	<0.010	<0.025	<0.002	<0.04	<0.005	<0.01	<0.01	<0.020
SW-2	Apr-89	<0.010		1.28	<0.005		0.509					<0.01											
SW-2	Jun-89	<0.010		1.33	<0.005		0.197					<0.01											
SW-2	Nov-89	<0.010		1.39	<0.003		0.143					<0.01											
SW-2	Feb-90	<0.010	27.6	0.958	<0.003		0.099		20.6	0.702	<0.06	<0.01	<0.2	<0.005	<1.0	<0.010	<0.025	<0.002	<0.04	<0.005	<0.01	<0.01	<0.020
SW-2	Apr-90	<0.010		2.67	0.0036		0.888					<0.01											
SW-2	Nov-90	<0.01	30	1.2	<0.020	6.4	0.05	3.6	14	0.46	<0.06	<0.02	0.02	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	<0.02
SW-2	Feb-91	<0.010	31.9	0.887	<0.020	6.47	0.125	1.62	21.9														
SW-2	May-91	<0.010	47.7	3.71	<0.020	8.99	1.19	1.28	9.89														
SW-2	Aug-91	<0.010	33.9	0.819	<0.020	6.67	0.172	0.66	12.1														
SW-2	Nov-91	<0.010	29.6	0.728	<0.020	5.54	0.095	1.8	10.2														
SW-2	Feb-92	<0.010	26.8	0.673	<0.020	5.78	0.1	1.64	17.1	0.59	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-2	May-92	<0.010	22.0	0.167	<0.020	4.03	0.06	0.63	10.40														
SW-2	Aug-92	<0.010	27.5	0.581	<0.020	4.58	0.176	1.55	4.82														
SW-2	Dec-92	<0.010	31.3	0.324	<0.020	5.65	<0.02	2.7	13.2														
SW-2	Feb-93	<0.010	22.8	0.510	<0.020	4.16	0.305	1.65	24.6														
SW-2	Jun-93	<0.010	29.2	0.8	<0.005	5.29	0.42	1.57	15	0.34	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-2	Sep-93	DRY																					
SW-2	Dec-93	<0.010	26.9	0.412	<0.005	6.1	0.035	1.97	12.0														
SW-2	Mar-94	<0.010	25.6	0.716	<0.005	5.9	0.215	1.34	25.6														
SW-2	Jun-94	<0.010	30.7	5.99	0.008	7.76	0.35	1.45	16.2														
SW-2	Aug-94	<0.010	32.90	0.42	<0.005	5.74	0.11	1.30	11.0	0.26	<0.060	<0.020	<0.10	<0.010	0.10	<0.02	<0.020	<0.001	0.062	<0.005	<0.020	<0.005	0.042
SW-2	Nov-94	<0.010	24.5	0.32	<0.005	6.38	0.048	2.17	15.5														
SW-2	March-95	<0.010	13.7	<0.050	<0.005	3.4	0.048	0.58	10.9														
SW-2	June-95	No sample taken - sampling location dry																					
SW-2	Sept.-95	No sample taken - sampling location dry																					
SW-2	Dec-95	<0.010	18.7	0.26	<0.005	4.74	0.027	1.51	17.2	<0.20	<0.060	<0.020	<0.10	<0.010		<0.020	0.055	<0.001	<0.040	<0.005	<0.020	<0.005	0.02
SW-2	April-96	<0.002	28	0.25	<0.01	5.6	0.029	1.5	22	<0.1	<0.06	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	0.056	<0.01	<0.03	0.11
SW-2	June-96	<0.01	28	0.86	<0.01	5.2	0.081	0.44	16														
SW-2	Sept-96	<0.01	27	1.2	0.01	5	0.32	2.3	15														
SW-2	Nov-96	<0.01	25	0.41	<0.01	5.3	0.071	2.6	13														
SW-2	March-97	<0.01	28	0.35	<0.01	6.1	0.042	1.3	15	<0.1	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	0.056	<0.01	<0.03	0.032

*1 - exp(0.7852[ln(hard)]-3.490)

*2 - exp(1.266[ln(hard)]-4.661)

*3 - 0.011 mg/l when hardness < 75 mg/l

*4 - exp(0.819[ln(hard)]+1.516)

*5 - exp(0.8545[ln(hard)]-1.465)

*6 - exp(0.76[ln(hard)]+1.06)

Table 22. Historical Surface Water Analytical Data - Metals Parameters

Sample Location	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class C Surface Water Quality Standards and Guidance Values		*1		0.3	*2					0.1		0.19		*3		*4	*5	0.0002	*6	0.001	0.0001	0.006	0.09
SW-3	Sep-87	<0.010			0.006						<0.06	<0.01		<0.005		<0.010	<0.03	0.006	<0.04	<0.05	<0.01	<0.01	0.05
SW-3	May-88	<0.010		0.544	<0.005		0.111					<0.01											
SW-3	Aug-88	<0.010		1	<0.005		0.11					<0.01											
SW-3	Nov-88	<0.010		0.686	<0.005		0.099					<0.02											
SW-3	Feb-89	<0.010	37.6	0.586	<0.005		0.071		16.3	0.253	<0.06	<0.01	<0.2	<0.005	<0.25	<0.010	<0.025	<0.002	<0.04	<0.005	<0.01	<0.01	0.0488
SW-3	Apr-89	<0.010		0.652	<0.005		0.087					<0.01											
SW-3	Jun-89	<0.010		0.576	<0.005		0.074					<0.01											
SW-3	Nov-89	<0.010		0.527	<0.003		0.055					<0.01											
SW-3	Feb-90	<0.010	31.5	0.765	<0.003		0.054		15.1	0.493	<0.06	<0.01	<0.2	<0.005	<1.0	<0.010	<0.025	<0.002	<0.04	<0.005	<0.01	<0.01	<0.020
SW-3	Apr-90	<0.010		0.47	<0.003		0.077					<0.01											
SW-3	Nov-90	<0.01	27	1.2	<0.020	6.1	0.07	2.8	13	0.58	<0.06	<0.02	0.02	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	<0.02
SW-3	Feb-91	<0.010	27.8	1.23	<0.020	7.01	0.092	1.52	14.7														
SW-3	May-91	<0.010	39.4	12.7	<0.020	12.7	0.077	1.51	16														
SW-3	Aug-91	<0.010	49	1.52	<0.020	17.3	0.12	3.33	24.4														
SW-3	Nov-91	<0.010	51.8	2.7	<0.020	13.1	0.167	2.75	21.3														
SW-3	Feb-92	<0.010	31.1	4.63	<0.020	8.63	0.135	1.83	12.9	1.22	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-3	May-92	<0.010	36.70	0.59	<0.020	10.30	0.08	1.06	15.0														
SW-3	Aug-92	<0.010	41.6	0.591	<0.020	11.2	0.069	2.78	14														
SW-3	Dec-92	<0.010	32.1	0.345	<0.020	9.05	0.050	1.69	17.2														
SW-3	Feb-93	<0.010	30.2	0.299	<0.020	9.50	0.072	1.36	22.3														
SW-3	Jun-93	<0.010	42	0.841	<0.005	12.4	0.075	1.9	21.2	0.72	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-3	Sep-93	<0.010	44.2	1.61	<0.005	23.6	0.097	2.68	30.0														
SW-3	Dec-93	<0.010	30.2	0.909	<0.005	9.3	0.080	1.64	12.1														
SW-3	Mar-94	<0.010	29.6	0.453	<0.005	8.9	0.049	1.59	19.5														
SW-3	Jun-94	0.012	42.4	0.36	<0.005	13.4	0.066	1.29	20.1														
SW-3	Aug-94	<0.010	25.6	0.95	<0.005	6.15	<0.020	2.22	9.86	0.70	<0.060	<0.020	<0.10	<0.010	0.10	<0.020	<0.020	<0.001	0.055	<0.005	<0.020	<0.005	<0.020
SW-3	Nov-94	<0.010	20.5	1.02	<0.005	7.6	0.13	2.82	13.5														
SW-3	March-95	<0.010	29	0.37	<0.005	11	0.051	1.12	16														
SW-3	June-95	<0.010	40.8	0.55	<0.005	15.5	0.11	2.06	20.6														
SW-3	Sept.-95	<0.010	38.4	0.88	<0.005	18.8	0.088	3.92	26.7														
SW-3	Dec-95	<0.010	29.8	0.36	<0.005	11	0.061	1.64	20.7	0.23	<0.060	<0.020	<0.10	<0.010		<0.020	0.021	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
SW-3	April-96	<0.002	34	0.33	<0.01	11	0.041	1.7	20	0.1	<0.06	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	<0.05	<0.01	<0.03	0.034
SW-3	June-96	<0.01	42	1.1	<0.01	13	0.12	2	22														
SW-3	Sept-96	<0.01	34	1.1	<0.01	9.4	0.08	1.8	15														
SW-3	Nov-96	<0.01	30	0.43	<0.01	9.5	0.05	1.4	14														
SW-3	March-97	<0.01	24	0.41	<0.01	5.3	0.09	1.1	12	0.13	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.055

*1 - exp(0.7852[ln(hard)]-3.490)

*2 - exp(1.266[ln(hard)]-4.661)

*3 - 0.011 mg/l when hardness < 75 mg/l

*4 - exp(0.819[ln(hard)]+1.516)

*5 - exp(0.8545[ln(hard)]-1.465)

*6 - exp(0.76[ln(hard)]+1.06)

Table 22. Historical Surface Water Analytical Data - Metals Parameters

Sample Location	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class C Surface Water Quality Standards and Guidance Values		*1		0.3	*2					0.1		0.19		*3		*4	*5	0.0002	*6	0.005	0.0001	0.006	0.03
SW-4	Sep-87	<0.010			<0.005							<0.01		<0.005		<0.010	<0.03	<0.002	<0.04	<0.05	<0.01	<0.01	<0.020
SW-4	May-88	<0.010		0.747	<0.005		0.116					<0.01											
SW-4	Aug-88	<0.010		0.465	<0.005		0.123					<0.01											
SW-4	Nov-88	<0.010		0.626	<0.005		0.096					<0.02											
SW-4	Feb-89	<0.010	39.2	0.732	<0.005		0.082		17.4	0.457	<0.06	<0.01	<0.2	<0.005	<0.25	<0.010	<0.025	<0.002	<0.04	<0.005	<0.01	<0.01	<0.020
SW-4	Apr-89	<0.010		0.585	<0.005		0.081					<0.01											
SW-4	Jun-89	<0.010		0.57	<0.005		0.082					<0.01											
SW-4	Nov-89	<0.010		0.466	<0.003		0.057					<0.01											
SW-4	Feb-90	<0.010	32.6	0.81	<0.003		0.055		15.6	0.474	<0.06	<0.01	<0.2	<0.005	<1.0	<0.010	<0.025	<0.002	<0.04	<0.005	<0.01	<0.01	<0.020
SW-4	Apr-90	<0.010		0.631	<0.003		0.083					<0.01											
SW-4	Nov-90	<0.01	23	1.4	<0.020	6.7	0.08	2	10	0.72	<0.06	<0.02	0.01	<0.01	<0.05	<0.03	<0.02	<0.001	<0.04	<0.005	<0.02	<0.010	<0.02
SW-4	Feb-91	<0.010	30.9	0.821	<0.020	8.64	0.06	1.61	13.8														
SW-4	May-91	<0.010	42	0.367	<0.020	14.3	0.065	1.5	17.8														
SW-4	Aug-91	<0.010	54.2	1.87	<0.020	18	0.185	3.21	24.1														
SW-4	Nov-91	<0.010	54.6	1.93	<0.020	13.3	0.153	2.71	21.8														
SW-4	Feb-92	<0.010	30.7	1.5	<0.020	8.58	0.112	1.84	13	1.33	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-4	May-92	<0.010	36.80	0.54	<0.020	10.10	0.09	1.12	14.40														
SW-4	Aug-92	<0.010	41.9	0.536	<0.020	11.4	0.075	2.74	13.8														
SW-4	Dec-92	<0.010	31.9	0.365	<0.020	9.05	0.054	1.68	16.5														
SW-4	Feb-93	<0.010	29.4	0.482	<0.020	9.58	0.085	1.53	22.3														
SW-4	Jun-93	<0.010	22.5	0.633	<0.005	6.32	0.075	1.82	10.1	0.6	<0.060	<0.020	<0.10	<0.010	0.53	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-4	Sep-93	<0.010	48.1	1.58	<0.005	23.6	0.145	2.94	32.7														
SW-4	Dec-93	<0.010	29.0	0.624	<0.005	9.3	0.069	1.67	13.5														
SW-4	Mar-94	<0.010	31.4	0.432	<0.005	9.2	0.055	1.38	19.8														
SW-4	Jun-94	<0.010	43.1	0.46	<0.005	36.5	0.094	1.31	20.4														
SW-4	Aug-94	<0.010	24.7	1.26	<0.005	6.46	0.12	2.17	9.65	0.95	<0.060	<0.020	<0.10	<0.010	0.09	<0.020	<0.020	<0.001	0.057	<0.005	<0.020	<0.005	0.033
SW-4	Nov-94	<0.010	19.9	0.96	<0.005	7	0.14	2.84	14														
SW-4	March-95	<0.010	31.4	0.34	<0.005	11.4	0.055	1.2	16.6														
SW-4	June-95	<0.010	42.8	0.43	<0.005	16	0.13	2.03	20.4														
SW-4	Sept.-95	<0.010	40.8	1.01	<0.005	20.2	0.11	4.12	28.2														
SW-4	Dec-95	<0.010	32	0.32	<0.005	10.6	0.064	1.64	23.6	0.24	<0.060	<0.020	<0.10	<0.010		<0.020	0.034	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
SW-4	April-96	<0.002	34	0.23	<0.01	11	0.043	1.4	20	0.11	<0.06	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	0.06	<0.01	<0.03	0.017
SW-4	June-96	<0.01	44	1.1	<0.01	14	0.12	2.1	23														
SW-4	Sept-96	<0.01	32	1.4	<0.01	9	0.084	1.8	15														
SW-4	Nov-96	<0.01	30	0.41	<0.01	9.5	0.053	1.4	14														
SW-4	March-97	<0.01	30	0.34	<0.01	9.2	0.05	1.3	13	<0.01	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.048

*1 - exp(0.7852[ln(hard)]-3.490)

*2 - exp(1.266[ln(hard)]-4.661)

*3 - 0.011 mg/l when hardness < 75 mg/l

*4 - exp(0.819[ln(hard)]+1.516)

*5 - exp(0.8545[ln(hard)]-1.465)

*6 - exp(0.76[ln(hard)]+1.06)

Table 22. Historical Surface Water Analytical Data - Metals Parameters

Sample Location	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class C Surface Water Quality Standards and Guidance Values		*1		0.5	*2					0.1		0.19		*3		*4	*5	0.0002	*6	0.001	0.0001	0.008	0.09
SW-5	Nov-91	<0.010	15.3	13.1	<0.020	7.5	0.48	4.51	8.58														
SW-5	Feb-92	<0.010	22.4	1.36	<0.020	5.35	0.084	1.45	12.8	0.87	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-5	May-92	<0.010	25.90	1.03	<0.020	5.14	0.12	0.77	12.20														
SW-5	Aug-92	<0.010	29.5	3.5	<0.020	6.15	0.162	2.63	6.55														
SW-5	Dec-92	<0.010	26.9	0.558	<0.020	5.4	0.059	2.22	11.9														
SW-5	Feb-93	<0.010	21.7	0.510	<0.020	4.66	0.162	1.45	19.0														
SW-5	Jun-93	<0.010	55.6	0.529	<0.005	9.67	0.301	2.23	13.5	0.6	<0.060	<0.020	<0.10	<0.010	<0.25	<0.020	0.02	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-5	Sep-93	DRY																					
SW-5	Dec-93	<0.010	26.8	0.781	<0.005	6.6	0.102	1.62	10.6														
SW-5	Mar-94	<0.010	21.6	0.607	<0.005	5.5	0.117	1.19	19.6														
SW-5	Jun-94	<0.010	39.3	0.75	<0.005	7.60	0.18	1.39	12.3														
SW-5	Aug-94	<0.010	29.8	0.81	<0.005	5.45	0.16	1.30	10.4	0.56	<0.060	<0.020	<0.10	<0.010	0.09	<0.020	0.051	<0.001	0.074	<0.005	<0.020	<0.005	0.087
SW-5	Nov-94	<0.010	20.8	0.61	<0.005	6.7	0.11	2.22	14.2														
SW-5	March-95	<0.010	16	0.61	<0.005	4.5	0.16	0.8	9.5														
SW-5	June-95	<0.010	50	1.23	<0.005	11	1.2	3.01	24.8														
SW-5	Sept.-95	<0.010	130	0.61	<0.005	28.5	0.14	12.2	74.4														
SW-5	Dec-95	<0.010	16	0.27	<0.005	4.75	0.066	1.32	14.8	0.24	<0.060	<0.020	<0.10	<0.010		<0.020	0.035	<0.001	<0.040	<0.005	<0.020	<0.005	<0.020
SW-5	April-96	<0.002	23	0.28	<0.01	5	0.05	1.2	16	0.15	<0.06	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	0.058	<0.01	<0.03	0.018
SW-5	June-96	<0.01	22	1.9	<0.01	4.9	0.26	1.3	13														
SW-5	Sept-96	<0.01	25	1.3	<0.01	4.9	0.15	1.4	12														
SW-5	Nov-96	<0.01	19	0.95	<0.01	4.8	0.12	1.8	9.6														
SW-5	March-97	<0.01	30	0.37	<0.01	9.2	0.047	1.3	13	<0.1	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.037

Table 22. Historical Surface Water Analytical Data - Metals Parameters

Sample Location	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class C Surface Water Quali		*1		0.3	*2					0.1		0.19		*3		*4	*5	0.0002	*6	0.001	0.0001	0.006	0.03
Standards and Guidance Values																							
SW-6	Dec-92	<0.010	131	4.05	<0.020	24.9	0.113	11.8	15.3														
SW-6	Feb-93	DRY																					
SW-6	Sep-93	DRY																					
SW-6	Dec-93	<0.010	27.1	8.04	<0.005	6.9	0.147	5.56	4.58														
SW-6	Mar-94	f - Sampling Location Frozen																					
SW-6	Jun-94	m - Sampling Location Dry																					
SW-6	Aug-94	<0.010	27.6	3.28	<0.005	3.96	0.18	3.93	3.62	3.83	<0.060	<0.020	<0.10	<0.010	0.09	<0.020	<0.020	<0.001	0.079	<0.005	<0.020	<0.005	0.027
SW-6	Nov-94	<0.010	22.6	4.66	<0.005	5.85	0.15	3.86	4.16														
SW-6	March-95	<0.010	42.5	0.49	<0.005	9	0.022	2.02	13.5														
SW-6	June-95	m - Sampling Location Dry																					
SW-6	Sept.-95	<0.010	160	0.47	<0.005	20.9	0.032	3.55	22.9														
SW-6	Dec-95	<0.010	32.3	2.7	<0.005	5.96	0.05	3.46	8.4	2.72	<0.060	<0.020	0.1	<0.010		<0.020	0.055	<0.001	<0.040	<0.005	<0.020	<0.005	0.094
SW-6	April-96	<0.002	47	5.6	<0.01	8.6	0.11	2.5	11	2.8	<0.06	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	0.068	<0.01	<0.03	0.095
SW-6	June-96	<0.01	29	1.1	<0.01	4.7	0.058	1.4	5.2														
SW-6	Sept-96	<0.01	32	1.9	0.011	4.2	0.85	2.6	3.9														
SW-6	Nov-96	<0.01	41	6.2	0.012	7.5	0.17	3.4	5														
SW-6	March-97	<0.01	43	0.37	<0.01	8	<0.01	1.9	7.4	0.16	<0.06	<0.01	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.033

*1 - exp(0.7852[ln(hard)]-3.490)

*2 - exp(1.266[ln(hard)]-4.661)

*3 - 0.011 mg/l when hardness < 75 mg/l

*4 - exp(0.819[ln(hard)]+1.516)

*5 - exp(0.8545[ln(hard)]-1.465)

*6 - exp(0.76[ln(hard)]+1.06)

Table 22. Historical Surface Water Analytical Data - Metals Parameters

Sample Location	Sample Date	Cd (mg/l)	Ca (mg/l)	Fe (mg/l)	Pb (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)	Al (mg/l)	Sb (mg/l)	As (mg/l)	Ba (mg/l)	Be (mg/l)	B (mg/l)	Cr (mg/l)	Cu (mg/l)	Hg (mg/l)	Ni (mg/l)	Se (mg/l)	Ag (mg/l)	Th (mg/l)	Zn (mg/l)
Class C Surface Water Quality Standards and Guidance Values		*1		0.3	*2					0.1		0.19		*3		*4	*5	0.0002	*6	0.005	0.0001	0.006	0.03
SW-7	Dec-92	<0.010	35.9	0.875	<0.020	11.9	<0.02	2.42	12.4														
SW-7	Feb-93	<0.010	26.3	0.280	<0.020	8.30	<0.020	1.74	12.2														
SW-7	Jun-93	<0.010	29	0.434	<0.005	8.76	0.027	1.61	15.5	0.58	<0.060	<0.020	<0.10	<0.010	0.6	<0.020	<0.020	<0.001	<0.040	<0.005	<0.020	<0.010	<0.020
SW-7	Sep-93	<0.010	18.5	0.572	<0.005	19.9	0.067	1.85	32.2														
SW-7	Dec-93	<0.010	24.7	2.38	<0.005	12.2	0.049	1.96	10.1														
SW-7	Mar-94	<0.010	18.0	0.680	<0.005	5.8	0.062	1.46	15.0														
SW-7	Jun-94	<0.010	14.4	1.73	<0.005	6.90	0.023	0.52	10.2														
SW-7	Aug-94	<0.010	20.0	0.54	<0.005	7.05	<0.020	2.54	7.52	0.59	<0.060	<0.020	<0.10	<0.010	0.08	<0.020	0.022	<0.001	0.043	<0.005	<0.020	<0.005	0.052
SW-7	Nov-94	<0.010	15.1	0.64	<0.005	9.23	0.029	2.24	9.44														
SW-7	March-95	<0.010	26	0.86	<0.005	8	0.027	1.66	7														
SW-7	June-95	<0.010	11.7	0.36	<0.005	7.84	0.03	1.39	9.04														
SW-7	Sept.-95	<0.010	13.2	1.82	<0.005	10.2	0.054	5.54	13.8														
SW-7	Dec-95	<0.010	22.5	4.72	<0.005	9.16	0.08	5.34	8.42	5.97	<0.060	<0.020	0.15	<0.010		<0.020	0.034	<0.001	<0.040	<0.005	<0.020	<0.005	0.022
SW-7	April-96	<0.002	83	0.74	<0.01	17	0.12	3.5	32	0.46	<0.06	<0.01	<0.2	<0.003	<1	<0.01	<0.02	<0.0002	<0.01	0.073	0.01	<0.03	0.092
SW-7	June-96	<0.01	31	0.13	<0.01	8.7	0.14	1.9	17														
SW-7	Sept-96	<0.01	48	0.18	<0.01	8.8	0.16	5.7	22														
SW-7	Nov-96	<0.01	21	0.2	<0.01	9.2	0.078	2.1	14														
SW-7	March-97	<0.01	51	0.18	<0.01	15	0.082	1.8	17	<0.1	<0.06	0.011	<0.2	<0.01	<1	<0.01	<0.02	<0.0004	<0.01	<0.05	<0.01	<0.03	0.054

*1 - exp(0.7852[ln(hard)]-3.490)

*2 - exp(1.266[ln(hard)]-4.661)

*3 - 0.011 mg/l when hardness < 75 mg/l

*4 - exp(0.819[ln(hard)]+1.516)

*5 - exp(0.8545[ln(hard)]-1.465)

*6 - exp(0.76[ln(hard)]+1.06)

Table 23. Statistical Trend Analysis Summary (Surface Water)

Monitoring Location	Parameter	Trend
SW-1	TDS	Increasing
	Calcium	Increasing
	Magnesium	Increasing
	Potassium	Increasing
	Sodium	Increasing
SW-2	Calcium	Increasing
	Magnesium	Increasing
	Potassium	Increasing
	Sodium	Increasing
SW-3	Sulfate	Decreasing
	Calcium	Increasing
	Magnesium	Increasing
	Potassium	Increasing
	Sodium	Increasing
SW-4	Calcium	Increasing
	Magnesium	Increasing
	Potassium	Increasing
	Sodium	Increasing
SW-5	Iron	Decreasing
SW-6	Alkalinity	Increasing
SW-7	Manganese	Increasing
	Potassium	Increasing

TABLE 24. QA/QC

PARAMETER	UNITS	CLASS GA STANDARD	CLASS GA GUIDANCE	TRIP BLANK
DATE SAMPLED				*03/25/97*
Acetone	ug/l			<10
Acrylonitrile	ug/l			<200
Benzene	ug/l	0.7		<5
Bromochloromethane	ug/l			<5
Bromodichloromethane	ug/l			<5
Bromoform	ug/l		50	<5
Bromomethane	ug/l			<5
2-Butanone	ug/l			<10
Carbon Disulfide	ug/l			<5
Carbon Tetrachloride	ug/l	5		<5
Chlorobenzene	ug/l	5		<5
Chloroethane	ug/l			<5
Chloroform	ug/l	7		<5
Chloromethane	ug/l			<5
Dibromochloromethane	ug/l		50	<5
1,2-Dibromo-3-Chlororopane	ug/l			<5
1,2-Dibromomethane	ug/l			<5
Dibromomethane	ug/l			<5
1,2-Dichlorobenzene	ug/l			<5
1,4-Dichlorobenzene	ug/l			<5
trans-1,4-Dichloro-2-butene	ug/l			<5
1,1-Dichloroethane	ug/l	5		<5
1,2-Dichloroethane	ug/l	5		<5
1,1-Dichloroethene	ug/l	5		<5
cis 1,2-Dichloroethene	ug/l	5		<5
trans-1,2-Dichloroethene	ug/l			<5
1,2-Dichloropropane	ug/l	5		<5
cis-1,3-Dichloropropene	ug/l			<5
t-1,3-Dichloropropene	ug/l			<5
Ethylbenzene	ug/l	5		<5
2-Hexanone	ug/l		50	<10
Iodomethane	ug/l			<5
Methylene Chloride	ug/l	5		<10
4-Methyl 2- Pentanone	ug/l			<10
Styrene	ug/l	5		<5
1,1,2,2-Tetrachloroethane	ug/l	5		<5
1,1,2,2-Tetrachloroethane	ug/l			<5
Tetrachloroethene	ug/l	5		<5
Toluene	ug/l	5		<5
1,1,1-Trichloroethane	ug/l	5		<5
1,1,2-Trichloroethane	ug/l	5		<5
Trichloroethylene	ug/l	5		<5
Trichlorofluoromethane	ug/l			<5
1,2,3-Trichloropropane	ug/l			<5
Vinyl acetate	ug/l			<10
Vinyl Chloride	ug/l	2		<5
o-Xylene	ug/l	5		<5
m-Xylene	ug/l	5		<5
p-Xylene	ug/l	5		<5

Table 25. Upstream/Downstream Surface Water Quality - Statistical Analysis

Sample Location	Sample Date	ALK (mg/l)	NH3 (mg/l)	Cl- (mg/l)	Hard (mg/l)	NO3- (mg/l)	Cond umhos/cm	DO (mg/l)	Phenols (mg/l)	SO4= (mg/l)	TOC (mg/l)	Turbidity (NTU)	Ca (mg/l)	Fe (mg/l)	Mg (mg/l)	Mn (mg/l)	K (mg/l)	Na (mg/l)
SW-3	Nov-91	126	0.13	46	191	0.4	563	10.2	0.005	60.2	0.5	25	51.8	2.7	13.1	0.167	2.75	21.3
SW-3	Feb-92	84	0.18	31.7	113	0.27	348	11.2	0.005	41.6	6	17	31.1	4.63	8.63	0.135	1.83	12.9
SW-3	May-92	122	0.06	50	134	0.88	359	8.2	0.005	12.6	0.5	4.5	36.70	0.59	10.30	0.08	1.06	15.0
SW-3	Aug-92	122	0.02	42	150	1.08	330	8	0.005	45.6	0.5	6.4	41.6	0.591	11.2	0.069	2.78	14
SW-3	Dec-92	122	0.2	31.5	117	0.01		13	0.005	64.4	0.5	4.1	32.1	0.345	9.05	0.050	1.69	17.2
SW-3	Feb-93	120	0.08	46.5	115	1.18	449	12.6	0.005	32.5	12	3.8	30.2	0.299	9.50	0.072	1.36	22.3
SW-3	Jun-93	134	0.01	39.0	156	1.2	286	6.0	0.005	74.4	5	13	42	0.841	12.4	0.075	1.9	21.2
SW-3	Sep-93	168	0.01	56.0	169	0.93	426	6.8	0.005	75.2	2.0	32	44.2	1.61	23.6	0.097	2.68	30.0
SW-3	Dec-93	60.0	0.01	25.0	114	1.6	267	10.0	0.005	46.0	13.0	28.5	30.2	0.909	9.3	0.080	1.64	12.1
SW-3	Mar-94	68.0	0.01	41.0	111	0.81	316	11.2	0.005	59.6	9.0	1.8	29.6	0.453	8.9	0.049	1.59	19.5
SW-3	Jun-94	140	0.01	39.0	161	0.70	404	7.6	0.005	25.3	0.5	11	42.4	0.36	13.4	0.066	1.29	20.1
SW-3	Aug-94	60	0.01	24.5	89.2	0.87	272	6.8	0.005	58.5	9	16.5	25.6	0.95	6.15	0.01	2.22	9.86
SW-3	Nov-94	71	0.16	30	82.4	0.92	277	9.8	0.013	43.6	10	16	20.5	1.02	7.6	0.13	2.82	13.5
SW-3	March-95	112	0.07	35	147	0.76	320	10.4	0.005	22.3	5	3.1	29	0.37	11	0.051	1.12	16
SW-3	June-95	121	0.11	45	166	1.17	375	13.5	0.005	29.9	2	19	40.8	0.55	15.5	0.11	2.06	20.6
SW-3	Sept.-95	126	0.16	58	173	1.26	378	9.1	0.005	41	12	20	38.4	0.88	18.8	0.088	3.92	26.7
SW-3	Dec-95	96	0.06	34	120	1.12	297	12.9	0.005	46	0.5	4.3	29.8	0.36	11	0.061	1.64	20.7
SW-3	April-96	100	0.015	39	180	0.18	460		0.001	28	6.1	10	34	0.33	11	0.041	1.7	20
SW-3	June-96	130	0.015	35	170	0.71	435	4.9	0.001	38	6.8	10	42	1.1	13	0.12	2	22
SW-3	Sept-96	96	0.015	22	120	0.64	320	8.8	0.0053	29	11	250	34	1.1	9.4	0.08	1.8	15
SW-3	Nov-96	100	0.015	29	110	0.88	343	11.62	0.001	22	6.1	5.9	30	0.43	9.5	0.05	1.4	14
SW-3	March-97	92	0.015	40	82	0.71	356	12.4	0.001	24	4.9	20	24	0.41	5.3	0.09	1.1	12
t-Test Statistical Analysis																		
n		22	22	22	22	22	21	21	22	22	22	22	22	22	22	22	22	22
MEAN		107.73	0.062	38.145	135.03	0.8309	361	9.7629	0.0047	41.805	5.5864	23.723	34.545	0.9467	11.256	0.0805	1.925	17.998
SUM x		2370	1.365	839.2	2970.6	18.28	7581	205.02	0.1023	919.7	122.9	521.9	760	20.828	247.63	1.771	42.35	395.96
SUM (x)^2		2.7E+05	1.7E-01	3.4E+04	4.2E+05	1.8E+01	2.8E+06	2.1E+03	6.0E-04	4.5E+04	1.1E+03	6.8E+04	2.7E+04	4.0E+01	3.1E+03	1.7E-01	9.2E+01	7.7E+03
S^2		770.11	0.0042	93.00	1067.02	0.14	5539.40	6.22	6.0E-06	308.95	18.74	2628.92	57.87	0.98	16.50	1.3E-03	0.49	25.62
S		27.75	0.065	9.64	32.67	0.38	74.43	2.49	2.4E-03	17.58	4.33	51.27	7.61	0.99	4.06	0.036	0.70	5.06
Sx		5.92	0.014	2.06	6.96	0.08	16.24	0.54	5.2E-04	3.75	0.92	10.93	1.62	0.21	0.87	0.008	0.15	1.08
+/- RANGE		16.93	0.040	5.88	19.92	0.23	46.74	1.57	1.49E-03	10.72	2.64	31.27	4.64	0.60	2.48	0.022	0.43	3.09
Range of Data Values to be Considered Comparable with Background (upgradient) Conditions.																		
(Based Upon a 99% Confidence Interval)																		
U.C.I.		124.65	0.10	44.03	154.95	1.06	407.74	11.33	0.006	52.53	8.23	55.00	39.19	1.55	13.73	0.10	2.35	21.09
L.C.I.		90.80	0.02	32.26	115.10	0.60	314.26	8.20	0.003	31.08	2.95	-7.55	29.91	0.34	8.78	0.059	1.50	14.91
Downstream Surface Water Sampling Point (Existing Landfill)																		
SW-4		100	<0.03	38	110	0.68	360	12.29	<0.002	21	4.2	105	30	0.34	9.2	0.05	1.3	13.0

= Above Background Conditions

TABLE 26

CHEMICAL ABSTRACT SERVICE NUMBERS

AND METHOD DETECTION LIMITS

Method Summary for Orange County Landfill Sampling of 3/96

Parameter/Method	LSL Reportable MDL(ug/l)	Part 360 Baseline PQL (ug/l)*
Alkalinity as CaCO3, SM18 2320B	1000	20000
Aluminum, EPA 200.7	100	10
Ammonia as N, EPA 350.1	30	60
Antimony, EPA 200.7	100	300
Arsenic, EPA 200.7	10	500
BOD-5 Day, EPA 405.1	4000	2000
Barium, EPA 200.7	200	20
Beryllium, EPA 200.7	3	3
Boron, EPA 200.7	1000	N/E
Bromide, EPA 320.1	100	2000
COD, LL, EPA 410.2	1000	50000
Cadmium, EPA 200.7	2	40
Calcium, EPA 200.7	1000	40
Chloride, SM 18 4500-Cl B	1000	N/E
Chromium,Hexavalent, SM 18 3500C	10	30
Chromium,Total, EPA 200.7	10	70
Cobalt, EPA 200.7	10	70
Color, EPA 110.2	10	80
Copper, EPA 200.7	20	60
Cyanide,Total, EPA 335.2	10	200
Dissolved Oxygen, EPA 360.2	1000	N/E
Eh, Redox Potential	—	N/E
Hardness,Total, EPA 130.2	1000	30000
Iron, EPA 200.7	50	100
Lead, EPA 200.7	10	400
Magnesium, EPA 200.7	1000	4
Manganese, EPA 200.7	10	40
Mercury, EPA 245.1	0.2	2
Nickel, EPA 200.7	10	150
Nitrate as N, EPA 353.1	20	N/E
Phenolics, Rec., EPA 420.1	2	N/E
Potassium, EPA 200.7	1000	40
Selenium, EPA 200.7	60	750
Silver, EPA 200.7	10	70
Sodium, EPA 200.7	200	8
Solids,Dissolved, EPA 160.1	4000	40000
Specific Conductance, EPA 120.1	—	N/E
Sulfate as SO4, EPA 375.4	5000	N/E
TKN as N, EPA 351.2	40	60
TOC, SM 18 5310C	1000	N/E
Temperature, EPA 170.1	—	N/E
Thallium, EPA 200.7	30	400
Turbidity, EPA 180.1	1000	N/E
Vanadium, EPA 200.7	10	80
Zinc, EPA 200.7	10	20
pH, Field, EPA 150.1	—	N/E

EPA 8260M, Part 360 Baseline	CAS Number		
Acetone	67-64-1	10	100
Acrylonitrile	107-13-1	200	200
Benzene	71-43-2	5	5
Bromochloromethane	74-97-5	5	5
Bromodichloromethane	75-27-4	5	5
Bromoform	75-25-2	5	5
Bromomethane	74-83-9	5	10
2-Butanone (MEK)	78-93-3	10	100
Carbon disulfide	75-15-0	5	100
Carbon tetrachloride	56-23-5	5	10
Chlorobenzene	108-90-7	5	5
Chloroethane	75-00-3	5	5
Chloromethane	74-87-3	5	1
Chloroform	67-66-3	5	5
Dibromochloromethane	124-48-1	5	5
1,2-Dibromo-3-chloropropane(DBCP)	96-12-8	5	25
1,2-Dibromoethane (EDB)	106-93-4	5	5
Dibromomethane	74-95-3	5	10
1,2-Dichlorobenzene	95-50-1	5	5
1,4-Dichlorobenzene	106-46-7	5	5
trans-1,4-Dichloro-2-butene	110-57-6	100	100
1,1-Dichloroethane	75-34-3	5	5
1,2-Dichloroethane	107-06-2	5	5
1,1-Dichloroethene	75-35-4	5	5
cis-1,2-Dichloroethene	156-59-2	5	5
trans-1,2-Dichloroethene	156-60-5	5	5
1,2-Dichloropropane	78-87-5	5	5
cis-1,3-Dichloropropene	10061-01-5	5	10
trans-1,3-Dichloropropene	10061-02-6	5	10
Ethylbenzene	100-41-4	5	5
2-Hexanone	591-78-6	10	50
Iodomethane	74-88-4	5	10
Methylene chloride	75-09-2	5	10
4-Methyl-2-pentanone (MIBK)	108-10-1	10	100
Styrene	100-42-5	5	10
1,1,1,2-Tetrachloroethane	630-20-6	5	5
1,1,2,2-Tetrachloroethene	79-34-5	5	5
Tetrachloroethene	127-18-4	5	5
Toluene	108-88-3	5	5
1,1,1-Trichloroethane	71-55-6	5	5
1,1,2-Trichloroethane	79-00-5	5	5
Trichloroethene	79-01-6	5	5
Trichlorofluoromethane	75-69-4	5	5
1,2,3-Trichloropropane	96-18-4	5	15
Vinyl acetate	108-05-4	50	50
Vinyl chloride	75-01-4	5	10
o-Xylene	95-47-6	5	5
m-Xylene	108-38-3	5	5
p-Xylene	106-42-3	5	5

N/E = Not Established in 6 NYCRR Part 360

* The PQL's listed in 6 NYCRR Part 360 are estimates that may not be able to be achieved on real samples; PQL's are not part of the regulation.

Figure(s)

LEGEND

- PS - Expansion Area Berm Monitoring Wells
- MW / PZ — Groundwater Monitoring Installation (Sampling Location)
- SW-5 - Surface Water / Sediment Sampling Location
- Pond / Leachate Tank Location (Leachate Sample)
- LPI-1 Or LP2-1 — Leachate Pond Overflow Sampling Locations

OLD CHANNEL

(WALLKILL RIVER)

PHASE 1

PHASE 2

PHASE 3

PHASE 4

PROPOSED LANDFILL EXPANSION

EXISTING LANDFILL

APPROXIMATE LIMIT OF EXISTING SOLID WASTE

CHEECHUNK CANAL

(WALLKILL RIVER)

Landfill Expansion Leachate Lagoon

MW-208 SA/VD

MW-203 DA/VD

MW-236 S/D

SW-1

SW-2

SW-6

MW-230 S/D

PS 247-1

PS 247-2

PS 247-3

PS 247-4

PS 247-5

PZ-1

PZ-2

PZ-3

PZ-4

MW-231 S/D

MW-232 S/D

MW-233 S/D

MW-234 S/D

MW-235 S/D

MW-212 DA

MW-312 S

MW-207 SA/D

MW-223 S/D

MW-303 S/D

MW-304 VS/S/D

MW-221 S/D

MW-244 S/D

MW-246 S/D

MW-245 S/D

MW-222

MW-220

MW-3B

MW-301 S/D

MW302

SW-3

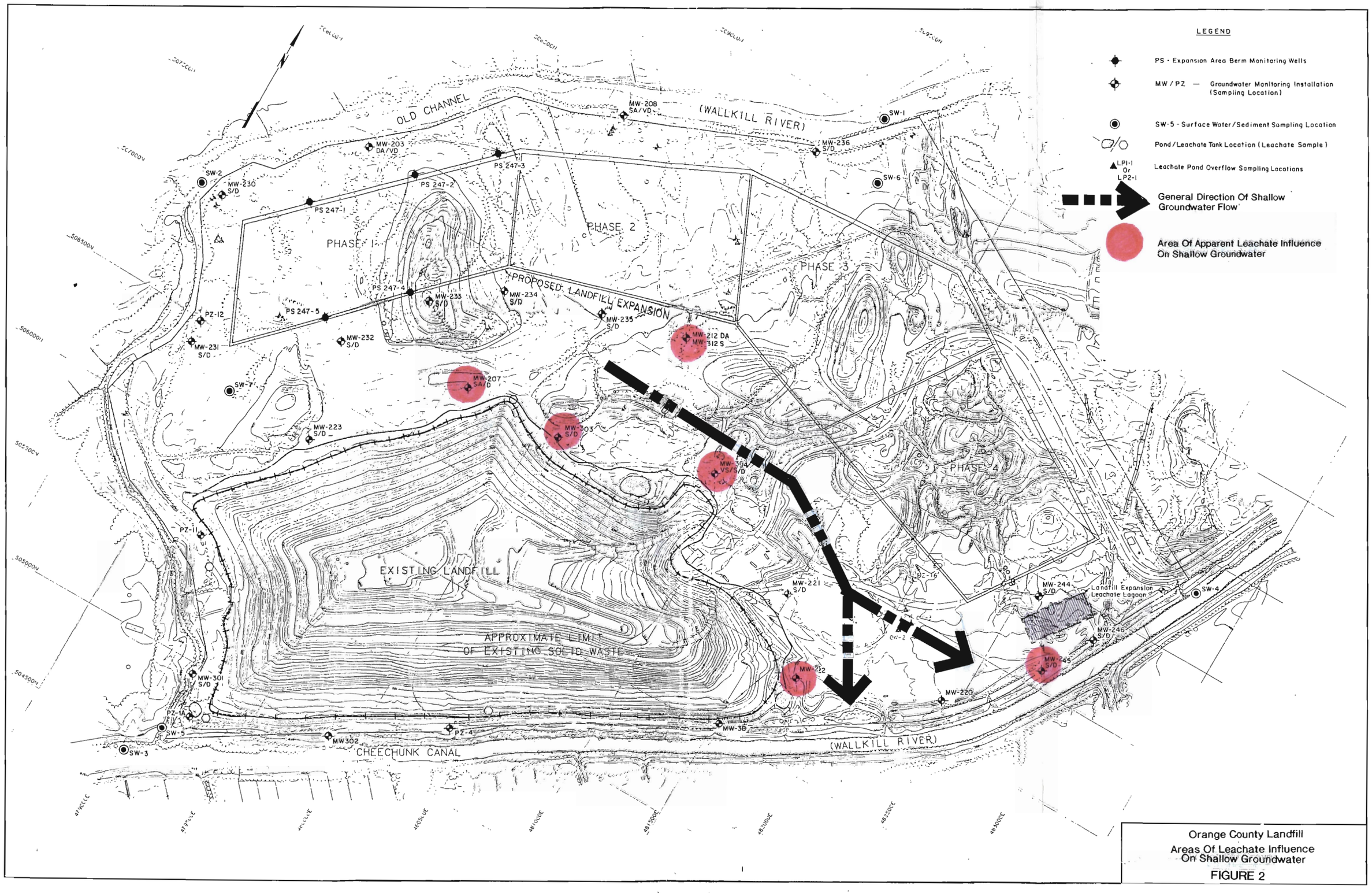
SW-4

SW-5

OW-2

ORANGE COUNTY LANDFILL
QUARTERLY MONITORING POINTS

FIGURE 1



Orange County Landfill

Areas Of Leachate Influence On Shallow Groundwater

FIGURE 2