SEMI ANNUAL REPORT
OPERATION AND MAINTENANCE
JULY 2006 TO DECEMBER 2006
PFOHL BROTHERS LANDFILL
CHEEKTOWAGA, NY

Submitted to:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
270 MICHIGAN AVENUE
BUFFALO, NEW YORK 14203

Prepared by:

URS CORPORATION
77 GOODELL STREET
BUFFALO, NEW YORK 14203

Prepared for:

TOWN OF CHEEKTOWAGA
ENGINEERING DEPARTMENT
275 ALEXANDER AVE
CHEEKTOWAGA, NEW YORK 14211

MARCH 2007

TABLE OF CONTENTS

Page No.

TABLES

FIGURES

APPENDICES

1.0 INTRODUCTION

1.1 Background

The Pfohl Brothers Landfill is located on Aero Drive in the Town of Cheektowaga, New York (Figure 1-1). The site is listed as site No. 9-15-043 on the New York State Department of Environmental Conservation's (NYSDEC's) Registry of Inactive Hazardous Waste Disposal Sites. A Consent Order between NYSDEC and potentially responsible parties (PRPs) for closure of the site was signed in 2001 and remedial construction commenced in 2001. The remedy included consolidation of waste material, capping of the waste disposal and consolidation areas, and encircling the landfill areas with a groundwater collection system to prevent off-site migration. The remedial action was completed in 2002.

Responsibility for implementing the remedy was divided between a "steering committee" of industrial PRPs and the Town of Cheektowaga. The steering committee responsibilities lay generally with the capital construction activities of the remedy including waste consolidation, cap and drainage system installation, etc. The Town of Cheektowaga, which was named as a PRP for disposal of municipal waste at the Pfohl Brothers Landfill when it was operating, is performing the operation and maintenance (O&M) activities at the landfill, pursuant to a settlement agreement between the Town and the steering committee.

1.2 Operation and Maintenance Activities

While construction of the remedy was substantially complete by late 2002, the final O&M manual was not approved by the NYSDEC until March 10, 2006. However, the Town of Cheektowaga and its consultant (URS Corporation) assumed most of the operational responsibilities since 2002. This includes a variety of general maintenance activities as outlined in Section 2 and sampling and other monitoring activities outlined in Section 3.

Beginning in 2004, the Town and URS assumed all of the O&M activities described in the O&M plan. This report is the sixth semi-annual report as called for by Section 3.6 of the O&M plan.

2.0 GENERAL MAINTENANCE ACTIVITIES

Since completion of construction activities in 2002, personnel from the Town of Cheektowaga Engineering Department have performed general activities to ensure the physical operation of the landfill as intended by the design. The various O&M activities performed by the Town from July 2006 through December 2006 include the following actions.

- The amount of groundwater discharged through the collection system was recorded on a daily basis. The flow rate displayed by each wet well pump at the time of daily inspection and the total cumulative volume of flow was recorded for each wet well on daily inspection sheets. Examples of the daily inspection sheet are attached in Appendix A.

- Total cumulative effluent flow rates and volumes were summarized on a monthly basis starting in February 2003. The monthly totals for the period of July 2006 through December 2006, including graphs showing daily total discharge (gallons) as a function of calendar day, are presented in Appendix B. The Totalizer readings were reset on June 30, 2006 to zero, to coincide with the Buffalo Sewer Authority (BSA) fiscal year for cost allocation purposes.

- The wet well pumps were shutdown during wet weather flow conditions throughout the year to reduce hydraulic loading to the sewer.

- Plowed snow to access the Control Building when necessary.

- Replaced pumps WW5 and WW6 and replaced discharge hose.

- Cleaned/replaced check valves as necessary at all wet wells.

- Repaired level control instrumentation at WW2.

- Verizon repaired the incoming overhead phone cable.
- Repaired discharge hose WW3.
- Removed/repaired Control Building heater and re-installed.
- Installed posts and signage along north side of Area B to delineate wetlands.
- Niagara Grass mowed entire site over a four (4) day period in October.
- Ordered six (6) pumps for replacement inventory, which are stored in the Control Building.
- Ordered six (6) ball check valves for replacement inventory, which are stored in the Control Building.
- Continued to engage trapper to control ground-burrowing animals as necessary.

A review of the total cumulative effluent flow rates and volumes presented in Appendix B indicates that discharge did not occur on numerous days between July and December 2006. The lack of discharge is attributable to level sensor instrumentation failures, which required operating the pumps in manual mode, power outages, and well shutdowns during heavy precipitation events.

3.0 MONITORING ACTIVITIES

The Town of Cheektowaga retained URS Corporation to perform monitoring activities as outlined in Section 3.1 of the O&M plan. During the period of January 2004 through the present, URS performed groundwater hydraulic monitoring (Section 3.1.1.2 of the O&M plan) and effluent monitoring (Section 3.1.4 of the O&M plan) on a quarterly basis. URS also performed the sixth semi-annual groundwater quality monitoring event (Section 3.1.1.3 of the O&M plan). A summary of the monitoring activities is presented in the following subsections. Hydraulic and groundwater sampling locations are shown on Figure 3-1.

3.1 Groundwater Hydraulic Monitoring

Groundwater and surface water elevations were monitored on a quarterly basis at all locations listed in Table 3.1 of the O&M Plan. The hydraulic monitoring data tables and figures showing groundwater elevations are presented in Appendix C. Tables 1 through 3 of this appendix list the measured elevations. Table 4 provides a comparison of the measured levels in the wells and corresponding manholes/wet wells. For the wet wells, where water elevations vary with pump activity, the set point elevation of the pump switch is also presented.

The surface water elevations for the wetlands are presented on the following table.

Location ID	Water Elevation (ft amsl) 10/5/06	Water Elevation (ft amsl) 11/6/06	Water Elevation (ft amsl) 12/21/06
SG-01	691.97	691.65	691.57
SG-02	NA	NA	NA

Notes:

NM=not measured, NA= staff gauge not surveyed, elevation is not available

The data presented in Appendix C indicates that groundwater levels outside the collection system were higher than the levels measured in the corresponding wet well or manhole for each measurement date. This data verifies that collection system is operating as designed.

3.2 Groundwater Quality Monitoring

The sixth semi-annual round of groundwater sampling was conducted between November 6, 2006 and November 9, 2006. All wells listed in Table 3.2 of the O&M plan were purged and sampled using dedicated equipment. Figure 3-1 shows the well locations. During this sampling event, low flow sampling techniques were used on wells that historically have been purged to dryness. Purge logs and sampling summary sheets are provided in Appendix D. Measurements of pH, specific conductivity, temperature, dissolved oxygen, oxidation reduction potential, and turbidity taken during purging are provided in Appendix D. The samples were packed with ice in

coolers and transported under chain-of-custody control to Severn Trent Laboratories, Inc. of Amherst, New York (STL-Buffalo).

Groundwater samples were analyzed for the parameters listed in Table 3.2 of the O&M plan. Specifically, the following parameter classes were analyzed for: volatile organic compounds (VOCS), semivolatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), Metals, Dioxins & Furans, and Cyanide. Following discussions between URS, the Town of Cheektowaga, the NYSDEC, and the United States Environmental Protection Agency (USEPA), it was determined that PCBs would only be analyzed for at five locations (GW-3S, GW-4S, GW-8SR, GW-29S, and GW-34S) during this event. Table 3-1 of this report presents a summary of detected parameters.

Only one VOC, vinyl chloride, was detected at concentrations slightly above the Class GA water quality standards at three locations (GW-03D, GW-04S, and GW-26D).

Only one SVOC, 1,4-dichlorobenzene, was estimated at a concentration exceeding its respective Class GA water quality standard. It was estimated at 4.0 µg/L in GW-03D which is slightly above its Class GA water quality standard of 3.0 µg/L.

No PCBs, Cyanide, or Dioxins/Furans were detected.

Among the metals, iron, magnesium, manganese, and sodium routinely exceed Class GA standards in most site wells. Sodium concentrations were higher in bedrock wells (GW-3D, GW-8D and GW-26D) and shallow wells adjacent to roads (GW-1S, GW-4S, and GW-30S). The higher sodium concentrations in the bedrock wells may be attributed to the local bedrock composition and the elevated concentration in the shallow wells may be the result of seasonal road de-icing activities. The concentration of iron, magnesium, manganese, and sodium in most site wells was similar to the concentrations found during previous sampling events. Chromium exceeded its standard of 0.05 mg/L in one well, GW-07D where it was detected at a concentration of 0.072 mg/L. Lead exceeded its standard of 0.025 mg/L also in GW-07D where it was detected at a concentration of 0.53 mg/L. Both these detections were similar to earlier semi-annual sampling results.

Appendix E contains a historical summary of detected groundwater analytical results (Table E-1). A review of the historical data indicated that no significant changes or trends in concentrations of any of the parameters exceeding groundwater standards have occurred over the six semi-annual sampling events. Graphs for individual parameters demonstrating distinct patterns have been included in Appendix E as Figures E-1 through E-19.

The groundwater analytical data package was prepared by STL-Buffalo in accordance with NYSDEC Category A deliverable requirements. It was reviewed for compliance with analytical method requirements and the following guidelines: USEPA *Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review*, EPA-540-R-99-008, October 1999; USEPA *CLP National Functional Guidelines for Inorganic Data Review*, EPA-540-R-01-008, July 2002; and USEPA *Region II Data Validation SOP for SW-846 Method 8290, PCDDs and PCDFs by High Resolution Gas Chromatography/High-Resolution Mass Spectrometry (HRGC/HRMS)*, SOP No. HW-19, Revision 1, October 1994. Qualifiers applied to the data include "R" (rejected), "J/UJ" (estimated concentration/ estimated quantitation limit), "J+" (estimated concentration with possible high bias), "J-" (estimated concentration with possible low bias), and "U" (not detected).

A Data Usability Summary Report (DUSR) was prepared following the guidelines provided in NYSDEC Division of Environmental Remediation *Guidance for the Development of Data Usability Summary Reports*, dated June 1999. The DUSR was submitted separately from this report.

3.3 Groundwater Discharge Monitoring

URS completed two quarterly sampling events (October 2006 and December 2006) of the groundwater collection system discharge since the previous semi-annual report. The sampling was performed in accordance with the requirements of Discharge Permit No. 05-12-CH016 between the Buffalo Sewer Authority and the Town of Cheektowaga. A copy of Permit No. 05-12-CH016 is included as Appendix F.

During all sampling events, each regulated parameter was below the limits set by the permit. Copies of the data summary tables that were included with the monitoring reports are included as Appendix G.

3.4 Monitoring Well Inspections

During the November 2006 groundwater sampling event, a well inspection was performed. All wells appeared to be in good condition with the exception of damage to the riser on MW-07D. The monitoring well inspection logs may be found in Appendix H.

4.0 SUMMARY AND RECOMMENDATIONS

General Maintenance: The Town will continue to maintain mechanical equipment at the landfill on an as-needed basis and operate the groundwater collection and discharge system as designed. The Town will also continue regular inspections, mow the cap once per year, and plow access to the control building during winter months as necessary.

Groundwater Hydraulic Monitoring: Hydraulic monitoring has been performed on a quarterly basis in conjunction with the discharge monitoring. Water level measurement data demonstrates that the hydraulic gradient is from outside the landfill towards the collection trench. Continued quarterly monitoring is recommended.

Groundwater Quality Monitoring: Groundwater sample results indicate that only low levels of contamination are present. Similar concentrations of most contaminants were found during previous sampling events. The seventh round of groundwater sampling will be conducted during May of 2007. Low flow sampling techniques will continue to be used on wells that historically have been purged to dryness. A review of the purge logs (Appendix D) has indicated that three wells (GW-04S, GW-07S, and GW-07D) can still be purged to dryness even using low flow sampling techniques.

Pursuant to Section 3.1.1.3 of the O&M plan, the Site Specific Parameter List (SSPL) for groundwater monitoring at the Pfohl Brothers Landfill site will be revised. In a letter dated

December 6, 2006, the NYSDEC approved a revised list of site specific parameters (Table 3-5), with the addition of silver. Based on the sampling results through November 2006 and the conclusion of the first three years of sampling it is requested that dioxins and furans are removed from the list. Dioxins and furans have not been detected in groundwater samples above criteria except in the May 2006 sampling where 2,3,7,8-TCDD was detected in two wells at less than 3.7×10^{-6} µg/L over its standard of 0.7×10^{-6} µg/L. Since there were no exceedances detected in five of the six monitoring events, the May 2006 results are believed to be an isolated occurrence and we recommend that this analysis be removed from the site specific parameter list.

Groundwater Discharge Monitoring: Groundwater discharges remain within permit limits. Continued quarterly monitoring is recommended.

Surface Water and Sediment Sampling: Surface water and sediment sampling is performed during the spring semi-annual event, not the fall event. In spring 2006, the third scheduled surface water and sediment sampling event was performed. Pursuant to the guidance from NYSDEC via telephone in March 2007, the results of the three sampling events have been compared to applicable criteria and guidance values to determine whether impacts have occurred from the remedial activities. The cumulative results of the three annual events are summarized on Tables 3-2, 3-3, and 3-4. Table 3-2 summarizes the detections in surface water samples. This table shows that only the common metals aluminum and iron exceed Class B standards, and are unlikely to be caused by remedial activities.

Tables 3-3 and 3-4 present the sediment results compared to the NYSDEC Technical Guidance for Screening Contaminated Sediments for Wildlife Bioaccumulation (Table 3-3) and for acute Benthic Toxicity (Table 3-4). The precise value of the guidance values are proportional to the Total Organic Carbon (TOC) levels in the range of 0.2% to 10%. Because there are no TOC data available, the guidance criteria were conservatively set at the lowest end of this range (0.2%). These tables show that only the low detections (0.1 mg/kg or less) of PCBs and common PAHS and bis(2-ethylhexyl)phthalate were detected at levels above screening values. These detections are not likely due to the remediation and are more readily attributable to the adjacent Thruway exit and parking area.

Considering also that the values of the low level detections have not varied over the three years of sampling, we recommend that surface water and sediment sampling be discontinued in accordance with the approved Operation and Maintenance Manual.

Wetland Inspection Summary: An inspection of the wetlands during the May 2006 event indicated that most of the replanted wetland stock has flourished and the wetland areas are returning to their natural state.

TABLES

TABLE 3-1
DETECTED ANALYTES IN GROUNDWATER
PFOHL BROTHERS LANDFILL SITE
NOVEMBER 2006

Location ID			GW-01D	GW-01S	GW-03D	GW-03S	GW-04D
Sample ID			GW-1D	GW-1S	GW-3D	GW-3S	GW-4D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/08/06	11/08/06	11/09/06	11/09/06	11/08/06
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
1,2-Dichloroethene (total)	UG/L	5			1.8 J		
Acetone	UG/L	50					
Chlorobenzene	UG/L	5			0.99 J		
Toluene	UG/L	5					
Vinyl chloride	UG/L	2			2.4		
Semivolatile Organic Compounds							
1,3-Dichlorobenzene	UG/L	3			3 J		
1,4-Dichlorobenzene	UG/L	3			4 J		
N-Nitrosodiphenylamine	UG/L	50					
Metals							
Aluminum	MG/L	-		0.34			
Arsenic	MG/L	0.025					
Barium	MG/L	1	0.066	0.25	0.088	0.19	0.063
Cadmium	MG/L	0.005					
Calcium	MG/L	-	114	225	102	106	122
Chromium	MG/L	0.05	0.0042	0.0047	0.014	0.0045	
Copper	MG/L	0.2					
Iron	MG/L	0.3	1.0	7.9	2.5	1.2	0.48
Lead	MG/L	0.025					
Magnesium	MG/L	35	37.7	38.7	17.8	74.3	61.7
Manganese	MG/L	0.3	0.038	0.86	0.86	0.24	0.022
Nickel	MG/L	0.1				0.020	

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

Only Detected Results Reported.

TABLE 3-1
DETECTED ANALYTES IN GROUNDWATER
PFOHL BROTHERS LANDFILL SITE
NOVEMBER 2006

Location ID			GW-01D	GW-01S	GW-03D	GW-03S	GW-04D
Sample ID			GW-1D	GW-1S	GW-3D	GW-3S	GW-4D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/08/06	11/08/06	11/09/06	11/09/06	11/08/06
Parameter	**Units**	**Criteria***					
Metals							
Potassium	MG/L	-	3.6	2.3	3.6	2.7	3.1
Sodium	MG/L	20	105	326	183	44.5	60.7
Zinc	MG/L	2		0.010		0.022	

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

Only Detected Results Reported.

TABLE 3-1
DETECTED ANALYTES IN GROUNDWATER
PFOHL BROTHERS LANDFILL SITE
NOVEMBER 2006

Location ID			GW-04S	GW-07D	GW-07S	GW-08D	GW-08SR
Sample ID			GW-4S	GW-7D	GW-7S	GW-8D	GW-8SR
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/08/06	11/07/06	11/07/06	11/08/06	11/08/06
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
1,2-Dichloroethene (total)	UG/L	5	1.0 J			2.7	
Acetone	UG/L	50		12			
Chlorobenzene	UG/L	5					
Toluene	UG/L	5					
Vinyl chloride	UG/L	2	2.4			1.3	
Semivolatile Organic Compounds							
1,3-Dichlorobenzene	UG/L	3					
1,4-Dichlorobenzene	UG/L	3					
N-Nitrosodiphenylamine	UG/L	50					
Metals							
Aluminum	MG/L	-	0.82	2.3	0.26		
Arsenic	MG/L	0.025					
Barium	MG/L	1	0.44	0.097	0.19	0.11	0.099
Cadmium	MG/L	0.005		0.0013			
Calcium	MG/L	-	134	90.4	35.2	111	37.3
Chromium	MG/L	0.05		0.072	0.022	0.0073	
Copper	MG/L	0.2		0.082			
Iron	MG/L	0.3	11.4	27.0	1.5	6.1	1.1
Lead	MG/L	0.025		0.53			
Magnesium	MG/L	35	42.4	23.3	26.5	21.4	23.8
Manganese	MG/L	0.3	0.68	0.19	0.10	1.4	0.28
Nickel	MG/L	0.1		0.056	0.022	0.010	

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

Only Detected Results Reported.

TABLE 3-1
DETECTED ANALYTES IN GROUNDWATER
PFOHL BROTHERS LANDFILL SITE
NOVEMBER 2006

Location ID			GW-04S	GW-07D	GW-07S	GW-08D	GW-08SR
Sample ID			GW-4S	GW-7D	GW-7S	GW-8D	GW-8SR
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/08/06	11/07/06	11/07/06	11/08/06	11/08/06
Parameter	**Units**	**Criteria***					
Metals							
Potassium	MG/L	-	2.0	7.2	2.4	4.1	2.3
Sodium	MG/L	20	196	78.8	54.7	138	31.6
Zinc	MG/L	2		1.2	0.018	0.043	

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

Only Detected Results Reported.

TABLE 3-1
DETECTED ANALYTES IN GROUNDWATER
PFOHL BROTHERS LANDFILL SITE
NOVEMBER 2006

Location ID			GW-26D	GW-26D	GW-28S	GW-29S	GW-30S
Sample ID			DUP-110706	GW-26D	GW-28S	GW-29S	GW-30S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/07/06	11/07/06	11/07/06	11/06/06	11/06/06
Parameter	**Units**	**Criteria***	Field Duplicate (1-1)				
Volatile Organic Compounds							
1,2-Dichloroethene (total)	UG/L	5	2.4	2.4			
Acetone	UG/L	50					
Chlorobenzene	UG/L	5					
Toluene	UG/L	5					
Vinyl chloride	UG/L	2	2.8	2.9			
Semivolatile Organic Compounds							
1,3-Dichlorobenzene	UG/L	3					
1,4-Dichlorobenzene	UG/L	3					
N-Nitrosodiphenylamine	UG/L	50					
Metals							
Aluminum	MG/L	-			0.32	0.26	
Arsenic	MG/L	0.025				0.023	
Barium	MG/L	1	0.12	0.12	0.073	0.23	0.33
Cadmium	MG/L	0.005					
Calcium	MG/L	-	126	123	151	160	181
Chromium	MG/L	0.05					
Copper	MG/L	0.2					
Iron	MG/L	0.3	6.9	6.8	0.55	13.4	12.3
Lead	MG/L	0.025					
Magnesium	MG/L	35	21.4	21.0	51.0	64.9	44.6
Manganese	MG/L	0.3	1.5	1.5	1.4	0.51	2.2
Nickel	MG/L	0.1					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

Only Detected Results Reported.

TABLE 3-1
DETECTED ANALYTES IN GROUNDWATER
PFOHL BROTHERS LANDFILL SITE
NOVEMBER 2006

Location ID			GW-26D	GW-26D	GW-28S	GW-29S	GW-30S
Sample ID			DUP-110706	GW-26D	GW-28S	GW-29S	GW-30S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/07/06	11/07/06	11/07/06	11/06/06	11/06/06
Parameter	**Units**	**Criteria***	Field Duplicate (1-1)				
Metals							
Potassium	MG/L	-	4.5	4.5	5.8	0.80	2.7
Sodium	MG/L	20	223	218	48.3	18.8	858
Zinc	MG/L	2					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

Only Detected Results Reported.

TABLE 3-1
DETECTED ANALYTES IN GROUNDWATER
PFOHL BROTHERS LANDFILL SITE
NOVEMBER 2006

Location ID			GW-31S	GW-32S	GW-33S	GW-34S	GW-35S
Sample ID			GW-31S	GW-32S	GW-33S	GW-34S	GW-35S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/06/06	11/06/06	11/07/06	11/09/06	11/07/06
Parameter	**Units**	**Criteria***					
Volatile Organic Compounds							
1,2-Dichloroethene (total)	UG/L	5					
Acetone	UG/L	50	17				
Chlorobenzene	UG/L	5					
Toluene	UG/L	5	0.91 J				
Vinyl chloride	UG/L	2					
Semivolatile Organic Compounds							
1,3-Dichlorobenzene	UG/L	3					
1,4-Dichlorobenzene	UG/L	3					
N-Nitrosodiphenylamine	UG/L	50	0.4 J				
Metals							
Aluminum	MG/L	-	0.23		0.60		
Arsenic	MG/L	0.025					
Barium	MG/L	1	0.033	0.049	0.031	0.11	0.077
Cadmium	MG/L	0.005					
Calcium	MG/L	-	137	66.6	228	170	132
Chromium	MG/L	0.05					
Copper	MG/L	0.2					
Iron	MG/L	0.3	0.38	0.063	0.75	0.50	0.070
Lead	MG/L	0.025					
Magnesium	MG/L	35	34.6	36.4	55.7	54.3	47.1
Manganese	MG/L	0.3	0.93	0.16	0.55	0.29	0.71
Nickel	MG/L	0.1					

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

Only Detected Results Reported.

TABLE 3-1
DETECTED ANALYTES IN GROUNDWATER
PFOHL BROTHERS LANDFILL SITE
NOVEMBER 2006

Location ID			GW-31S	GW-32S	GW-33S	GW-34S	GW-35S
Sample ID			GW-31S	GW-32S	GW-33S	GW-34S	GW-35S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			11/06/06	11/06/06	11/07/06	11/09/06	11/07/06
Parameter	**Units**	**Criteria***					
Metals							
Potassium	MG/L	-	10.3	3.5	5.2	7.6	3.4
Sodium	MG/L	20	6.3	6.3	6.5	45.4	5.2
Zinc	MG/L	2			0.041		

*Criteria- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

Only Detected Results Reported.

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-01	SW-01	SW-01	SW-02	SW-02
Sample ID				SW-1	SW-1	SW-01	SW-2	SW-2
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
Acetone	UG/L	-	-	10 U	10 U	5.0 U	10 U	10 U
Bromodichloromethane	UG/L	-	-	1 U	1 U	1.0 U	1 U	1 U
Chloroform	UG/L	-	-	1 U	1 U	NA	1 U	2
Semivolatile Organic Compounds								
Benzo(b)fluoranthene	UG/L	-	-	2 U	2 U	1 J	2 U	2 U
Benzo(g,h,i)perylene	UG/L	-	-	2 U	2 U	10 U	2 U	2 U
Benzo(k)fluoranthene	UG/L	-	-	2 U	2 U	1 J	2 U	2 U
bis(2-Ethylhexyl)phthalate	UG/L	-	-	2 U	2 U	10 U	2 U	2 U
Fluoranthene	UG/L	-	-	2 U	2 U	0.7 J	2 U	2 U
Pyrene	UG/L	-	-	2 U	2 U	0.6 J	2 U	2 U
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	-	-	NA	NA	0.0029 J	NA	NA
2,3,7,8-TCDF	NG/L	-	-	NA	NA	0.012	NA	NA
Metals								
Aluminum	MG/L	0.1	-	0.663 J+	0.295 J+	2.6	0.079 J+	0.056 J+
Barium	MG/L	-	-	0.054	0.055	0.088	0.049	0.048
Calcium	MG/L	-	-	69.1	70.2	75.3	74.7	67.8
Chromium	MG/L	-	-	0.005 U	0.005 U	0.0051	0.005 U	0.005 U
Cobalt	MG/L	-	-	0.005 U	0.005 U	0.0040 U	0.005 U	0.005 U
Copper	MG/L	*	-	0.009 U	0.009 U	0.010 U	0.009 U	0.009 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:43 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-01	SW-01	SW-01	SW-02	SW-02
Sample ID				SW-1	SW-1	SW-01	SW-2	SW-2
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Iron	MG/L	0.3	-	1.49	1.06	6.5	0.540	0.258
Lead	MG/L	*	-	0.003 U	0.003 U	0.015	0.003 U	0.003 U
Magnesium	MG/L	-	-	13.9	15.5	17.5	15.3	15.0
Manganese	MG/L	-	-	0.126	0.09	0.27 J+	0.060	0.032
Nickel	MG/L	-	-	0.005 U	0.005 U	0.010 U	0.005 U	0.005 U
Potassium	MG/L	-	-	3.77	3.76	3.6 J+	3.58	3.62
Silver	MG/L	0.1	-	0.005 UR	0.005 UR	0.0030 U	0.005 UR	0.005 UR
Sodium	MG/L	-	-	235	219 D	189	237	190
Vanadium	MG/L	0.14	-	0.00181	0.005 U	0.0056	0.000542	0.005 U
Zinc	MG/L	*	-	0.020	0.039	0.073	0.013	0.013 U
Radionuclides								
Bismuth 212 (Insoluble)	PCI/L	-	-	1.8 U	4.317 U	120 U	1.5 U	5.279 U
Bismuth 212 (Soluble)	PCI/L	-	-	11 U	17.8 U	130 U	6.7 U	19.65 U
Cesium 134 (Soluble)	PCI/L	-	80	1.5 U	2.135 U	8.6 U	1.5 U	2.529 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:43 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-02	SW-03	SW-03	SW-03	SW-03
Sample ID				SW-02	SW-3	SW-3-DUP	SW-3	SW-03
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/15/06	05/03/04	05/03/04	05/03/05	05/15/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			Field Duplicate (1-1)		
Volatile Organic Compounds								
Acetone	UG/L	-	-	5.0 U	10 U	10 U	20	5.0 U
Bromodichloromethane	UG/L	-	-	1.0 U	1 U	1 U	1	1.0 U
Chloroform	UG/L	-	-	NA	1 U	1 U	2	NA
Semivolatile Organic Compounds								
Benzo(b)fluoranthene	UG/L	-	-	10 U	2 U	2 U	2 U	10 U
Benzo(g,h,i)perylene	UG/L	-	-	10 U	2 U	2 U	2 U	10 U
Benzo(k)fluoranthene	UG/L	-	-	10 U	2 U	2 U	2 U	10 U
bis(2-Ethylhexyl)phthalate	UG/L	-	-	10 U	2 U	2 U	2 U	10 U
Fluoranthene	UG/L	-	-	10 U	2 U	2 U	2 U	10 U
Pyrene	UG/L	-	-	10 U	2 U	2 U	2 U	10 U
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	-	-	0.0013 U	NA	NA	NA	0.0012 U
2,3,7,8-TCDF	NG/L	-	-	0.0012 U	NA	NA	NA	0.00088 U
Metals								
Aluminum	MG/L	0.1	-	0.20 U	0.032 J+	0.629 J+	0.151 J+	0.20 U
Barium	MG/L	-	-	0.060	0.051	0.058	0.051	0.058
Calcium	MG/L	-	-	79.2	78.6	86.2	72.9	78.9
Chromium	MG/L	-	-	0.0040 U	0.005 U	0.005 U	0.005 U	0.0040 U
Cobalt	MG/L	-	-	0.0040 U	0.005 U	0.005 U	0.005 U	0.0040 U
Copper	MG/L	*	-	0.010 U	0.009 U	0.009 U	0.009 U	0.010 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:43 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-02	SW-03	SW-03	SW-03	SW-03
Sample ID				SW-02	SW-3	SW-3-DUP	SW-3	SW-03
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/15/06	05/03/04	05/03/04	05/03/05	05/15/06
Parameter	Units	Criteria (1)	Criteria (2)			Field Duplicate (1-1)		
Metals								
Iron	MG/L	0.3	-	0.41	0.485	1.24	0.299	0.39
Lead	MG/L	*	-	0.0050 U	0.003 U	0.003	0.003 U	0.0050 U
Magnesium	MG/L	-	-	17.6	16.1	17.9	15.9	17.6
Manganese	MG/L	-	-	0.10 J+	0.066	0.107	0.038	0.13 J+
Nickel	MG/L	-	-	0.010 U	0.005 U	0.005 U	0.005 U	0.010 U
Potassium	MG/L	-	-	2.8 J+	3.69	3.97	3.65	2.9 J+
Silver	MG/L	0.1	-	0.0030 U	0.005 UR	0.005 UR	0.005 UR	0.0030 U
Sodium	MG/L	-	-	185	243	248	207	176
Vanadium	MG/L	0.14	-	0.0050 U	0.000486	0.00173	0.005 U	0.0050 U
Zinc	MG/L	*	-	0.011	0.014	0.027	0.017	0.014
Radionuclides								
Bismuth 212 (Insoluble)	PCI/L	-	-	110 U	2.2 U	2.2 U	6.01 U	130 U
Bismuth 212 (Soluble)	PCI/L	-	-	200 U	11 U	6.3 U	19.7 U	190 U
Cesium 134 (Soluble)	PCI/L	-	80	11 U	5.90 J ± 3.50E+00	3.80 J ± 2.20E+00	2.275 U	12 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:43 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-04	SW-04	SW-04	SW-05	SW-05
Sample ID				SW-4	SW-4	SW-04	SW-5	SW-5
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
Acetone	UG/L	-	-	10 U	10 U	5.0 U	10 U	10 U
Bromodichloromethane	UG/L	-	-	1 U	1 U	1.0 U	1 U	1 U
Chloroform	UG/L	-	-	1 U	1 U	NA	1 U	1 U
Semivolatile Organic Compounds								
Benzo(b)fluoranthene	UG/L	-	-	2 U	2 U	0.9 J	2 U	2 U
Benzo(g,h,i)perylene	UG/L	-	-	2 U	2 U	0.5 J	2 U	2 U
Benzo(k)fluoranthene	UG/L	-	-	2 U	2 U	0.9 J	2 U	2 U
bis(2-Ethylhexyl)phthalate	UG/L	-	-	2 U	2 U	5 J	2 U	2 U
Fluoranthene	UG/L	-	-	2 U	2 U	0.8 J	2 U	2 U
Pyrene	UG/L	-	-	2 U	2 U	0.7 J	2 U	2 U
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	-	-	NA	NA	0.0012 U	NA	NA
2,3,7,8-TCDF	NG/L	-	-	NA	NA	0.0019 U	NA	NA
Metals								
Aluminum	MG/L	0.1	-	0.353 J+	0.025 U	3.1	0.198 J+	0.056 J+
Barium	MG/L	-	-	0.043	0.038	0.11	0.019	0.015
Calcium	MG/L	-	-	78.9	77.3	82.4	69.8	62.6
Chromium	MG/L	-	-	0.005 U	0.005 U	0.0076	0.005 U	0.005 U
Cobalt	MG/L	-	-	0.005 U	0.005 U	0.0040 U	0.005 U	0.005 U
Copper	MG/L	*	-	0.009 U	0.009 U	0.014	0.009 U	0.009 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:44 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

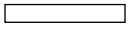
Location ID				SW-04	SW-04	SW-04	SW-05	SW-05
Sample ID				SW-4	SW-4	SW-04	SW-5	SW-5
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Iron	MG/L	0.3	-	2.48	0.33	10.6	0.249	0.114
Lead	MG/L	*	-	0.019	0.003 U	0.016	0.003 U	0.003 U
Magnesium	MG/L	-	-	16.6	17.0	17.7	20.6	20.8
Manganese	MG/L	-	-	0.595	0.056	2.8 J+	0.084	0.053
Nickel	MG/L	-	-	0.005 U	0.005 U	0.010 U	0.005 U	0.005 U
Potassium	MG/L	-	-	3.75	2.75	3.0 J+	4.73	3.31
Silver	MG/L	0.1	-	0.005 UR	0.005 UR	0.0030 U	0.005 UR	0.084 J-
Sodium	MG/L	-	-	176	153	103	179	18.5
Vanadium	MG/L	0.14	-	0.00132	0.005 U	0.0078	0.00208	0.005 U
Zinc	MG/L	*	-	0.022	0.013 U	0.092	0.030	0.014
Radionuclides								
Bismuth 212 (Insoluble)	PCI/L	-	-	0.6 U	5.156 U	120 U	8.80 E ± 5.10E+00	5.441 U
Bismuth 212 (Soluble)	PCI/L	-	-	9.6 U	17.2 U	190 U	51.0 J ± 2.50E+01	17.78 U
Cesium 134 (Soluble)	PCI/L	-	80	1.3 U	2.222 U	12 UR	1.9 U	2.186 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.


Concentration Exceeds Criteria (1)


Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:44 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-06	SW-06	SW-06	SW-06	SW-07
Sample ID				SW-6	SW-6	SW-9	SW-06	SW-7
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/03/04	05/03/05	05/03/05	05/15/06	05/03/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			Field Duplicate (1-1)		
Volatile Organic Compounds								
Acetone	UG/L	-	-	10 U	10 U	10 U	5.0 U	10 U
Bromodichloromethane	UG/L	-	-	1 U	1 U	1 U	1.0 U	1 U
Chloroform	UG/L	-	-	1 U	1 U	1 U	NA	1 U
Semivolatile Organic Compounds								
Benzo(b)fluoranthene	UG/L	-	-	2 U	2 U	2 U	10 U	2 U
Benzo(g,h,i)perylene	UG/L	-	-	2 U	2 U	2 U	10 U	2 U
Benzo(k)fluoranthene	UG/L	-	-	2 U	2 U	2 U	10 U	2 U
bis(2-Ethylhexyl)phthalate	UG/L	-	-	2 U	2 U	2 U	10 U	2 U
Fluoranthene	UG/L	-	-	2 U	2 U	2 U	10 U	2 U
Pyrene	UG/L	-	-	2 U	2 U	2 U	10 U	2 U
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	-	-	NA	NA	NA	0.0015 U	NA
2,3,7,8-TCDF	NG/L	-	-	NA	NA	NA	0.0013 U	NA
Metals								
Aluminum	MG/L	0.1	-	1.17 J+	0.119 J+	0.123 J+	7.8	0.049 J+
Barium	MG/L	-	-	0.042	0.034	0.035	0.085	0.045
Calcium	MG/L	-	-	155	131	131	190	95.0
Chromium	MG/L	-	-	0.005 U	0.005 U	0.005 U	0.0095	0.005 U
Cobalt	MG/L	-	-	0.005 U	0.005 U	0.005 U	0.0049	0.005 U
Copper	MG/L	*	-	0.009 U	0.015	0.011	0.015	0.009 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:44 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-06	SW-06	SW-06	SW-06	SW-07
Sample ID				SW-6	SW-6	SW-9	SW-06	SW-7
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/03/04	05/03/05	05/03/05	05/15/06	05/03/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**			Field Duplicate (1-1)		
Metals								
Iron	MG/L	0.3	-	1.85	0.268	0.255	9.9	0.869
Lead	MG/L	*	-	0.026	0.003 U	0.003 U	0.013	0.003 U
Magnesium	MG/L	-	-	42.5	35.6	35.4	52.3	22.4
Manganese	MG/L	-	-	0.170	0.155	0.172	0.70 J+	0.135
Nickel	MG/L	-	-	0.005 U	0.005 U	0.005 U	0.011	0.005 U
Potassium	MG/L	-	-	8.43	7.15	7.27	13.4 J+	2.44
Silver	MG/L	0.1	-	0.005 UR	0.005 UR	0.005 UR	0.0030 U	0.005 UR
Sodium	MG/L	-	-	52.3	38.8	40.1	35.9	116
Vanadium	MG/L	0.14	-	0.00254	0.005 U	0.005 U	0.015	0.000499
Zinc	MG/L	*	-	0.017	0.013 U	0.013 U	0.073	0.013 U
Radionuclides								
Bismuth 212 (Insoluble)	PCI/L	-	-	1.2 U	5.416 U	5.598 U	120 U	14.2 E ± 8.10E+00
Bismuth 212 (Soluble)	PCI/L	-	-	9.7 U	18.25 U	19.79 U	190 U	9 U
Cesium 134 (Soluble)	PCI/L	-	80	1.4 U	2.514 U	2.285 U	11 U	1.4 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:44 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-07	SW-07	SW-08	SW-08	SW-08
Sample ID				SW-7	SW-07	SW-8	SW-8	SW-08
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/03/05	05/15/06	05/03/04	05/03/05	05/15/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
Acetone	UG/L	-	-	10 U	5.0 U	10 U	10 U	5.0 U
Bromodichloromethane	UG/L	-	-	1 U	1.0 U	1 U	1 U	1.0 U
Chloroform	UG/L	-	-	1 U	NA	1 U	1 U	NA
Semivolatile Organic Compounds								
Benzo(b)fluoranthene	UG/L	-	-	2 U	10 U	2 U	2 U	10 U
Benzo(g,h,i)perylene	UG/L	-	-	2 U	10 U	2 U	2 U	10 U
Benzo(k)fluoranthene	UG/L	-	-	2 U	10 U	2 U	2 U	10 U
bis(2-Ethylhexyl)phthalate	UG/L	-	-	2 U	10 U	2 U	2 U	10 U
Fluoranthene	UG/L	-	-	2 U	10 U	2 U	2 U	10 U
Pyrene	UG/L	-	-	2 U	10 U	2 U	2 U	10 U
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	-	-	NA	0.0019 U	NA	NA	0.001 U
2,3,7,8-TCDF	NG/L	-	-	NA	0.0013 U	NA	NA	0.00081 U
Metals								
Aluminum	MG/L	0.1	-	0.025 U	0.20 U	0.025 U	0.069 J+	0.20 U
Barium	MG/L	-	-	0.038	0.048	0.052	0.052	0.076
Calcium	MG/L	-	-	86.6	97.7	102	94.6	97.5
Chromium	MG/L	-	-	0.005 U	0.0040 U	0.005 U	0.005 U	0.0040 U
Cobalt	MG/L	-	-	0.005 U	0.0040 U	0.005 U	0.005 U	0.0040 U
Copper	MG/L	*	-	0.009 U	0.010 U	0.009 U	0.009 U	0.010 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:44 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-07	SW-07	SW-08	SW-08	SW-08
Sample ID				SW-7	SW-07	SW-8	SW-8	SW-08
Matrix				Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/03/05	05/15/06	05/03/04	05/03/05	05/15/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Iron	MG/L	0.3	-	0.308	0.30	1.37	2.02	0.81
Lead	MG/L	*	-	0.003 U	0.0050 U	0.003 U	0.003	0.0050 U
Magnesium	MG/L	-	-	20.5	29.7	23.0	22.0	26.9
Manganese	MG/L	-	-	0.128	0.13 J+	0.292	0.188	0.18 J+
Nickel	MG/L	-	-	0.005 U	0.010 U	0.005 U	0.005 U	0.010 U
Potassium	MG/L	-	-	2.13	1.7 J+	2.03	1.70	3.4 J+
Silver	MG/L	0.1	-	0.005 UR	0.0030 U	0.005 UR	0.005 UR	0.0030 U
Sodium	MG/L	-	-	94.4	121	107	94.6	326
Vanadium	MG/L	0.14	-	0.005 U	0.0050 U	0.000219	0.005 U	0.0050 U
Zinc	MG/L	*	-	0.019	0.010 U	0.029	0.020	0.010 U
Radionuclides								
Bismuth 212 (Insoluble)	PCI/L	-	-	5.9979 U ± 7.11E+01	150 U	2.2 U	5.553 U	110 U
Bismuth 212 (Soluble)	PCI/L	-	-	19 U	160 U	7.6 U	20.63 U	220 U
Cesium 134 (Soluble)	PCI/L	-	80	2.264 U	9.8 U	1.4 U	2.824 U	11 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:44 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-08
Sample ID				SW-08-DUP
Matrix				Surface Water
Depth Interval (ft)				-
Date Sampled				05/15/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)
Volatile Organic Compounds				
Acetone	UG/L	-	-	5.0 U
Bromodichloromethane	UG/L	-	-	1.0 U
Chloroform	UG/L	-	-	NA
Semivolatile Organic Compounds				
Benzo(b)fluoranthene	UG/L	-	-	10 U
Benzo(g,h,i)perylene	UG/L	-	-	10 U
Benzo(k)fluoranthene	UG/L	-	-	10 U
bis(2-Ethylhexyl)phthalate	UG/L	-	-	10 U
Fluoranthene	UG/L	-	-	10 U
Pyrene	UG/L	-	-	10 U
Dioxins/Furans				
2,3,7,8-TCDD	NG/L	-	-	0.0014 U
2,3,7,8-TCDF	NG/L	-	-	0.0012 U
Metals				
Aluminum	MG/L	0.1	-	0.28
Barium	MG/L	-	-	0.082
Calcium	MG/L	-	-	98.7
Chromium	MG/L	-	-	0.0040 U
Cobalt	MG/L	-	-	0.0040 U
Copper	MG/L	*	-	0.010 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:44 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-2
SUMMARY OF DETECTED SURFACE WATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				SW-08
Sample ID				SW-08-DUP
Matrix				Surface Water
Depth Interval (ft)				-
Date Sampled				05/15/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**	Field Duplicate (1-1)
Metals				
Iron	MG/L	0.3	-	1.4
Lead	MG/L	*	-	0.0050 U
Magnesium	MG/L	-	-	27.1
Manganese	MG/L	-	-	0.27 J+
Nickel	MG/L	-	-	0.010 U
Potassium	MG/L	-	-	3.5 J+
Silver	MG/L	0.1	-	0.0030 U
Sodium	MG/L	-	-	325
Vanadium	MG/L	0.14	-	0.0050 U
Zinc	MG/L	*	-	0.014
Radionuclides				
Bismuth 212 (Insoluble)	PCI/L	-	-	100 U
Bismuth 212 (Soluble)	PCI/L	-	-	180 U
Cesium 134 (Soluble)	PCI/L	-	80	14 U

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class B.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:07:44 AM
[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD')

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-01	SW-01	SW-01	SW-02	SW-02
Sample ID		SW-1	SED-1	SW-01	SW-2	SED-2
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**					
Volatile Organic Compounds						
Acetone	UG/KG	32 J	489	110	32 J	164
Chlorobenzene	UG/KG	2 U	2 U	14 U	2 U	9
Methyl ethyl ketone (2-Butanone)	UG/KG	10 U	100	28 J	10 U	33
Toluene	UG/KG	2 U	2 U	14 U	2 U	2 U
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	67 U	67 U	940 U	67 U	67 U
4-Methylphenol (p-cresol)	UG/KG	NA	NA	940 U	NA	NA
Acenaphthylene	UG/KG	67 U	67 U	150 J	67 U	67 U
Anthracene	UG/KG	67 U	67 U	110 J	67 U	67 U
Benzo(a)anthracene	UG/KG	67 U	804	460 J	491	415
Benzo(a)pyrene	UG/KG	67 U	1,690	760 J	671 J	758
Benzo(b)fluoranthene	UG/KG	67 U	2,310	1,800	913 J	1,080
Benzo(g,h,i)perylene	UG/KG	67 U	863	530 J	290 J	349
Benzo(k)fluoranthene	UG/KG	67 U	2,100	1,800	815 J	916
bis(2-Ethylhexyl)phthalate	UG/KG	624 U	1,680	240 J	1,490 U	1,010
Carbazole	UG/KG	67 U	67 U	66 J	67 U	67 U
Chrysene	UG/KG	67 U	1,290	720 J	713	719
Dibenz(a,h)anthracene	UG/KG	67 U	243	110 J	67 UJ	67 U
Fluoranthene	UG/KG	67 U	2,000	1,100	1,180	1,330
Fluorene	UG/KG	67 U	67 U	940 U	67 U	67 U
Indeno(1,2,3-cd)pyrene	UG/KG	67 U	787	480 J	254 J	311
Phenanthrene	UG/KG	67 U	528	320 J	446	419

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:44 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-01	SW-01	SW-01	SW-02	SW-02
Sample ID		SW-1	SED-1	SW-01	SW-2	SED-2
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**					
Semivolatile Organic Compounds						
Pyrene	UG/KG	67 U	3,270	820 J	1,470	1,270
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	41 U (2.8)	3.3 U (2.8*)	47 U (2.8*)	240 UJ (2.8*)	102 (2.8*)
Aroclor 1254	UG/KG	41 U (2.8)	3.3 U (2.8*)	47 U (2.8*)	240 UJ (2.8*)	62 (2.8*)
Aroclor 1260	UG/KG	41 U (2.8)	37.1 (2.8*)	47 U (2.8*)	240 UJ (2.8*)	30.7 (2.8*)
Miscellaneous Parameters						
Cyanide	MG/KG	0.50 U	1.73	3.5 J-	0.50 U	1.88
Percent Dry	PERCENT	40.6	NA	NA	42.0	NA
Total Organic Carbon (TOC)	MG/KG	2,000	NA	NA	NA	NA

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:44 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-02	SW-03	SW-03	SW-03	SW-03
Sample ID		SW-02	SW-3	SW-3-DUP	SED-3	SW-03
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-0.5	-	-	-	0.0-0.5
Date Sampled		05/15/06	05/03/04	05/03/04	05/03/05	05/15/06
Parameter	**Units**			Field Duplicate (1-1)		
Volatile Organic Compounds						
Acetone	UG/KG	32 J	19 J	10 UJ	126	56
Chlorobenzene	UG/KG	2 J	2 U	2 U	2 U	10 U
Methyl ethyl ketone (2-Butanone)	UG/KG	40 U	10 U	10 U	29	13 J
Toluene	UG/KG	8 U	2 U	2 U	2 U	8 J
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	520 U	67 U	67 U	67 U	660 U
4-Methylphenol (p-cresol)	UG/KG	230 J	NA	NA	NA	280 J
Acenaphthylene	UG/KG	42 J	67 U	67 U	67 U	68 J
Anthracene	UG/KG	43 J	67 U	67 U	67 U	53 J
Benzo(a)anthracene	UG/KG	230 J	405	238	417	420 J
Benzo(a)pyrene	UG/KG	340 J	416	286	622	620 J
Benzo(b)fluoranthene	UG/KG	780	481	357	847	1,400
Benzo(g,h,i)perylene	UG/KG	240 J	142	119	251	340 J
Benzo(k)fluoranthene	UG/KG	790	432	334	641	1,400
bis(2-Ethylhexyl)phthalate	UG/KG	200 J	740 U	471 U	1,060	240 J
Carbazole	UG/KG	29 J	67 U	67 U	67 U	46 J
Chrysene	UG/KG	330 J	435	318	665	580 J
Dibenz(a,h)anthracene	UG/KG	57 J	67 U	67 U	67 U	88 J
Fluoranthene	UG/KG	550	540	361	1,450	840
Fluorene	UG/KG	520 U	67 U	67 U	67 U	660 U
Indeno(1,2,3-cd)pyrene	UG/KG	220 J	157	118	241	330 J
Phenanthrene	UG/KG	170 J	147	67 U	576	220 J

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:44 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-02	SW-03	SW-03	SW-03	SW-03
Sample ID		SW-02	SW-3	SW-3-DUP	SED-3	SW-03
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-0.5	-	-	-	0.0-0.5
Date Sampled		05/15/06	05/03/04	05/03/04	05/03/05	05/15/06
Parameter	**Units**			Field Duplicate (1-1)		
Semivolatile Organic Compounds						
Pyrene	UG/KG	400 J	576	370	1,200	600 J
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	27 U (2.8*)	6.1 U (2.8*)	5.4 U (2.8*)	3.3 U (2.8*)	34 U (2.8*)
Aroclor 1254	UG/KG	27 U (2.8*)	6.1 U (2.8*)	5.4 U (2.8*)	3.3 U (2.8*)	34 U (2.8*)
Aroclor 1260	UG/KG	27 U (2.8*)	6.1 U (2.8*)	5.4 U (2.8*)	3.52 (2.8*)	34 U (2.8*)
Miscellaneous Parameters						
Cyanide	MG/KG	1.4 UJ	0.50 U	0.50 U	0.50 U	1.8 UJ
Percent Dry	PERCENT	NA	54.0	60.9	NA	NA
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-04	SW-04	SW-04	SW-05	SW-05
Sample ID		SW-4	SED-4	SW-04	SW-5	SED-5
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**					
Volatile Organic Compounds						
Acetone	UG/KG	25 J	37	42 J	10 UJ	39
Chlorobenzene	UG/KG	2 U	2 U	14 U	2 U	2 U
Methyl ethyl ketone (2-Butanone)	UG/KG	10 U	14	73 U	10 U	10 U
Toluene	UG/KG	2 U	2 U	14 U	2 U	2 U
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	67 U	67 U	64 J	67 U	67 U
4-Methylphenol (p-cresol)	UG/KG	NA	NA	220 J	NA	NA
Acenaphthylene	UG/KG	67 U	67 U	70 J	67 U	67 U
Anthracene	UG/KG	67 U	67 U	80 J	67 U	67 U
Benzo(a)anthracene	UG/KG	205	67 U	380 J	67 U	67 U
Benzo(a)pyrene	UG/KG	221 J	97	480 J	67 U	67 U
Benzo(b)fluoranthene	UG/KG	236 J	67 U	790 J	67 U	67 U
Benzo(g,h,i)perylene	UG/KG	67 UJ	67 U	240 J	67 U	67 U
Benzo(k)fluoranthene	UG/KG	289 J	101	220 J	67 U	67 U
bis(2-Ethylhexyl)phthalate	UG/KG	1,170 U	135	940 U	336 U	135
Carbazole	UG/KG	67 U	67 U	52 J	67 U	67 U
Chrysene	UG/KG	244	67 U	420 J	67 U	67 U
Dibenz(a,h)anthracene	UG/KG	67 UJ	67 U	63 J	67 U	67 U
Fluoranthene	UG/KG	449	128	800 J	67 U	67 U
Fluorene	UG/KG	67 U	67 U	940 U	67 U	67 U
Indeno(1,2,3-cd)pyrene	UG/KG	67 UJ	67 U	220 J	67 U	67 U
Phenanthrene	UG/KG	243	67 U	330 J	67 U	67 U

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-04	SW-04	SW-04	SW-05	SW-05
Sample ID		SW-4	SED-4	SW-04	SW-5	SED-5
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**					
Semivolatile Organic Compounds						
Pyrene	UG/KG	488	146	540 J	67 U	67 U
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	84 U (2.8*)	3.3 U (2.8*)	47 U (2.8*)	4.8 U (2.8*)	3.3 U (2.8*)
Aroclor 1254	UG/KG	84 U (2.8*)	3.3 U (2.8*)	47 U (2.8*)	4.8 U (2.8*)	3.3 U (2.8*)
Aroclor 1260	UG/KG	84 U (2.8*)	3.3 U (2.8*)	47 U (2.8*)	4.8 U (2.8*)	3.3 U (2.8*)
Miscellaneous Parameters						
Cyanide	MG/KG	0.50 U	0.50 U	2.6 UJ	0.50 U	0.50 U
Percent Dry	PERCENT	39.1	NA	NA	68.6	NA
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-06	SW-06	SW-06	SW-06	SW-07
Sample ID		SW-6	SED-6	SED-9	SW-06	SW-7
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	0.0-0.5	-
Date Sampled		05/03/04	05/03/05	05/03/05	05/15/06	05/03/04
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Acetone	UG/KG	20 J	22	48	33 U	10 UJ
Chlorobenzene	UG/KG	2 U	2 U	2 U	7 U	2 U
Methyl ethyl ketone (2-Butanone)	UG/KG	10 U	10 U	10 U	33 U	10 U
Toluene	UG/KG	2 U	2 U	2 U	7 U	2 U
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	67 U	67 U	67 U	430 U	67 U
4-Methylphenol (p-cresol)	UG/KG	NA	NA	NA	430 U	NA
Acenaphthylene	UG/KG	67 U	67 U	67 U	430 U	67 U
Anthracene	UG/KG	67 U	67 U	67 U	22 J	67 U
Benzo(a)anthracene	UG/KG	67 U	67 U	67 U	97 J	67 U
Benzo(a)pyrene	UG/KG	67 U	67 U	67 U	90 J	67 U
Benzo(b)fluoranthene	UG/KG	67 U	67 U	67 U	190 J	67 U
Benzo(g,h,i)perylene	UG/KG	67 U	67 U	67 U	38 J	67 U
Benzo(k)fluoranthene	UG/KG	67 U	67 U	67 U	190 J	67 U
bis(2-Ethylhexyl)phthalate	UG/KG	1,140 U	115	136	430 U	738 U
Carbazole	UG/KG	67 U	67 U	67 U	430 U	67 U
Chrysene	UG/KG	67 U	67 U	67 U	97 J	67 U
Dibenz(a,h)anthracene	UG/KG	67 U	67 U	67 U	430 U	67 U
Fluoranthene	UG/KG	67 U	135	67 U	230 J	67 U
Fluorene	UG/KG	67 U	67 U	67 U	23 J	67 U
Indeno(1,2,3-cd)pyrene	UG/KG	67 U	67 U	67 U	42 J	67 U
Phenanthrene	UG/KG	67 U	112	67 U	160 J	67 U

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-06	SW-06	SW-06	SW-06	SW-07
Sample ID		SW-6	SED-6	SED-9	SW-06	SW-7
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	0.0-0.5	-
Date Sampled		05/03/04	05/03/05	05/03/05	05/15/06	05/03/04
Parameter	**Units**			Field Duplicate (1-1)		
Semivolatile Organic Compounds						
Pyrene	UG/KG	67 U	67 U	67 U	130 J	67 U
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	5.4 U (2.8*)	3.3 U (2.8*)	3.3 U (2.8*)	22 U (2.8*)	5.1 U (2.8*)
Aroclor 1254	UG/KG	5.4 U (2.8*)	3.3 U (2.8*)	3.3 U (2.8*)	22 U (2.8*)	5.1 U (2.8*)
Aroclor 1260	UG/KG	5.4 U (2.8*)	3.3 U (2.8*)	3.3 U (2.8*)	22 U (2.8*)	5.1 U (2.8*)
Miscellaneous Parameters						
Cyanide	MG/KG	0.50 U	0.50 U	0.50 U	1.1 J-	0.50 U
Percent Dry	PERCENT	61.1	NA	NA	NA	64.1
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-07	SW-07	SW-08	SW-08	SW-08
Sample ID		SED-7	SW-07	SW-8	SED-8	SW-08
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	0.0-0.5	-	-	0.0-0.5
Date Sampled		05/03/05	05/15/06	05/03/04	05/03/05	05/15/06
Parameter	**Units**					
Volatile Organic Compounds						
Acetone	UG/KG	105	40 J	10 UJ	75	22 J
Chlorobenzene	UG/KG	2 U	9 U	2 U	2 U	10 U
Methyl ethyl ketone (2-Butanone)	UG/KG	22	45 U	10 U	10 U	52 U
Toluene	UG/KG	2 U	9 U	2 U	2 U	10 U
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	67 U	590 U	67 U	67 U	3,500 U
4-Methylphenol (p-cresol)	UG/KG	NA	590 U	NA	NA	250 J
Acenaphthylene	UG/KG	67 U	86 J	67 U	67 U	3,500 U
Anthracene	UG/KG	67 U	49 J	67 U	67 U	3,500 U
Benzo(a)anthracene	UG/KG	67 U	300 J	397 J	225	460 J
Benzo(a)pyrene	UG/KG	67 U	290 J	399 J	284	540 J
Benzo(b)fluoranthene	UG/KG	67 U	590	429 J	346	1,100 J
Benzo(g,h,i)perylene	UG/KG	67 U	97 J	174 J	67 U	430 J
Benzo(k)fluoranthene	UG/KG	67 U	600	427 J	329	260 J
bis(2-Ethylhexyl)phthalate	UG/KG	159	590 U	873 U	649	3,500 U
Carbazole	UG/KG	67 U	590 U	67 U	67 U	3,500 U
Chrysene	UG/KG	67 U	310 J	419 J	264	540 J
Dibenz(a,h)anthracene	UG/KG	67 U	36 J	67 UJ	67 U	3,500 U
Fluoranthene	UG/KG	67 U	350 J	601	416	860 J
Fluorene	UG/KG	67 U	590 U	67 U	67 U	3,500 U
Indeno(1,2,3-cd)pyrene	UG/KG	67 U	99 J	134 J	67 U	360 J
Phenanthrene	UG/KG	67 U	43 J	326	227	350 J

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-07	SW-07	SW-08	SW-08	SW-08
Sample ID		SED-7	SW-07	SW-8	SED-8	SW-08
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	0.0-0.5	-	-	0.0-0.5
Date Sampled		05/03/05	05/15/06	05/03/04	05/03/05	05/15/06
Parameter	**Units**					
Semivolatile Organic Compounds						
Pyrene	UG/KG	67 U	360 J	1,430 J	755	620 J
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	118 (2.8*)	34 (2.8*)	600 U (2.8*)	3.3 U (2.8*)	34 U (2.8*)
Aroclor 1254	UG/KG	3.3 U (2.8*)	29 U (2.8*)	600 U (2.8*)	3.3 U (2.8*)	34 U (2.8*)
Aroclor 1260	UG/KG	3.3 U (2.8*)	29 U (2.8*)	600 U (2.8*)	3.3 U (2.8*)	34 U (2.8*)
Miscellaneous Parameters						
Cyanide	MG/KG	2.86	1.5 UJ	1.14	1.91	1.8 UJ
Percent Dry	PERCENT	NA	NA	59.0	NA	NA
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-08
Sample ID		SW-08-DUP
Matrix		Sediment
Depth Interval (ft)		0.0-0.5
Date Sampled		05/15/06
Parameter	**Units**	Field Duplicate (1-1)
Volatile Organic Compounds		
Acetone	UG/KG	16 J
Chlorobenzene	UG/KG	7 U
Methyl ethyl ketone (2-Butanone)	UG/KG	11 J
Toluene	UG/KG	7 U
Semivolatile Organic Compounds		
2-Methylphenol (o-cresol)	UG/KG	2,300 U
4-Methylphenol (p-cresol)	UG/KG	2,300 U
Acenaphthylene	UG/KG	2,300 U
Anthracene	UG/KG	2,300 U
Benzo(a)anthracene	UG/KG	360 J
Benzo(a)pyrene	UG/KG	500 J
Benzo(b)fluoranthene	UG/KG	1,200 J
Benzo(g,h,i)perylene	UG/KG	320 J
Benzo(k)fluoranthene	UG/KG	1,200 J
bis(2-Ethylhexyl)phthalate	UG/KG	2,300 U
Carbazole	UG/KG	2,300 U
Chrysene	UG/KG	460 J
Dibenz(a,h)anthracene	UG/KG	2,300 U
Fluoranthene	UG/KG	720 J
Fluorene	UG/KG	2,300 U
Indeno(1,2,3-cd)pyrene	UG/KG	280 J
Phenanthrene	UG/KG	290 J

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-08
Sample ID		SW-08-DUP
Matrix		Sediment
Depth Interval (ft)		0.0-0.5
Date Sampled		05/15/06
Parameter	**Units**	Field Duplicate (1-1)
Semivolatile Organic Compounds		
Pyrene	UG/KG	500 J
Polychlorinated Biphenyls		
Aroclor 1248	UG/KG	24 U (2.8*)
Aroclor 1254	UG/KG	24 U (2.8*)
Aroclor 1260	UG/KG	24 U (2.8*)
Miscellaneous Parameters		
Cyanide	MG/KG	1.3 UJ
Percent Dry	PERCENT	NA
Total Organic Carbon (TOC)	MG/KG	NA

Criteria- NYSDEC Technica Guidance for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:09:45 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-01	SW-01	SW-01	SW-02	SW-02
Sample ID		SW-1	SED-1	SW-01	SW-2	SED-2
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**					
Volatile Organic Compounds						
Acetone	UG/KG	32 J	489	110	32 J	164
Chlorobenzene	UG/KG	2 U (7.0)	2 U (7.0*)	14 U (7.0*)	2 U (7.0*)	9 (7.0*)
Methyl ethyl ketone (2-Butanone)	UG/KG	10 U	100	28 J	10 U	33
Toluene	UG/KG	2 U (98.0)	2 U (98.0*)	14 U (98.0*)	2 U (98.0*)	2 U (98.0*)
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	67 U	67 U	940 U	67 U	67 U
4-Methylphenol (p-cresol)	UG/KG	NA	NA	940 U	NA	NA
Acenaphthylene	UG/KG	67 U	67 U	150 J	67 U	67 U
Anthracene	UG/KG	67 U (214)	67 U (214*)	110 J (214*)	67 U (214*)	67 U (214*)
Benzo(a)anthracene	UG/KG	67 U (24.0)	804 (24.0*)	460 J (24.0*)	491 (24.0*)	415 (24.0*)
Benzo(a)pyrene	UG/KG	67 U	1,690	760 J	671 J	758
Benzo(b)fluoranthene	UG/KG	67 U	2,310	1,800	913 J	1,080
Benzo(g,h,i)perylene	UG/KG	67 U	863	530 J	290 J	349
Benzo(k)fluoranthene	UG/KG	67 U	2,100	1,800	815 J	916
bis(2-Ethylhexyl)phthalate	UG/KG	624 U (399)	1,680 (399*)	240 J (399*)	1,490 U (399*)	1,010 (399*)
Carbazole	UG/KG	67 U	67 U	66 J	67 U	67 U
Chrysene	UG/KG	67 U	1,290	720 J	713	719
Dibenz(a,h)anthracene	UG/KG	67 U	243	110 J	67 UJ	67 U
Fluoranthene	UG/KG	67 U (2,040)	2,000 (2,040*)	1,100 (2,040*)	1,180 (2,040*)	1,330 (2,040*)
Fluorene	UG/KG	67 U (16.0)	67 U (16.0*)	940 U (16.0*)	67 U (16.0*)	67 U (16.0*)
Indeno(1,2,3-cd)pyrene	UG/KG	67 U	787	480 J	254 J	311
Phenanthrene	UG/KG	67 U (240)	528 (240*)	320 J (240*)	446 (240*)	419 (240*)

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

( ) Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:55 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-01	SW-01	SW-01	SW-02	SW-02
Sample ID		SW-1	SED-1	SW-01	SW-2	SED-2
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**					
Semivolatile Organic Compounds						
Pyrene	UG/KG	67 U (1,922)	3,270 (1,922*)	820 J (1,922*)	1,470 (1,922*)	1,270 (1,922*)
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	41 U (38.6)	3.3 U (38.6*)	47 U (38.6*)	240 UJ (38.6*)	102 (38.6*)
Aroclor 1254	UG/KG	41 U (38.6)	3.3 U (38.6*)	47 U (38.6*)	240 UJ (38.6*)	62 (38.6*)
Aroclor 1260	UG/KG	41 U (38.6)	37.1 (38.6*)	47 U (38.6*)	240 UJ (38.6*)	30.7 (38.6*)
Miscellaneous Parameters						
Cyanide	MG/KG	0.50 U	1.73	3.5 J-	0.50 U	1.88
Percent Dry	PERCENT	40.6	NA	NA	42.0	NA
Total Organic Carbon (TOC)	MG/KG	2,000	NA	NA	NA	NA

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:55 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-02	SW-03	SW-03	SW-03	SW-03
Sample ID		SW-02	SW-3	SW-3-DUP	SED-3	SW-03
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-0.5	-	-	-	0.0-0.5
Date Sampled		05/15/06	05/03/04	05/03/04	05/03/05	05/15/06
Parameter	**Units**			Field Duplicate (1-1)		
Volatile Organic Compounds						
Acetone	UG/KG	32 J	19 J	10 UJ	126	56
Chlorobenzene	UG/KG	2 J (7.0*)	2 U (7.0*)	2 U (7.0*)	2 U (7.0*)	10 U (7.0*)
Methyl ethyl ketone (2-Butanone)	UG/KG	40 U	10 U	10 U	29	13 J
Toluene	UG/KG	8 U (98.0*)	2 U (98.0*)	2 U (98.0*)	2 U (98.0*)	8 J (98.0*)
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	520 U	67 U	67 U	67 U	660 U
4-Methylphenol (p-cresol)	UG/KG	230 J	NA	NA	NA	280 J
Acenaphthylene	UG/KG	42 J	67 U	67 U	67 U	68 J
Anthracene	UG/KG	43 J (214*)	67 U (214*)	67 U (214*)	67 U (214*)	53 J (214*)
Benzo(a)anthracene	UG/KG	230 J (24.0*)	405 (24.0*)	238 (24.0*)	417 (24.0*)	420 J (24.0*)
Benzo(a)pyrene	UG/KG	340 J	416	286	622	620 J
Benzo(b)fluoranthene	UG/KG	780	481	357	847	1,400
Benzo(g,h,i)perylene	UG/KG	240 J	142	119	251	340 J
Benzo(k)fluoranthene	UG/KG	790	432	334	641	1,400
bis(2-Ethylhexyl)phthalate	UG/KG	200 J (399*)	740 U (399*)	471 U (399*)	1,060 (399*)	240 J (399*)
Carbazole	UG/KG	29 J	67 U	67 U	67 U	46 J
Chrysene	UG/KG	330 J	435	318	665	580 J
Dibenz(a,h)anthracene	UG/KG	57 J	67 U	67 U	67 U	88 J
Fluoranthene	UG/KG	550 (2,040*)	540 (2,040*)	361 (2,040*)	1,450 (2,040*)	840 (2,040*)
Fluorene	UG/KG	520 U (16.0*)	67 U (16.0*)	67 U (16.0*)	67 U (16.0*)	660 U (16.0*)
Indeno(1,2,3-cd)pyrene	UG/KG	220 J	157	118	241	330 J
Phenanthrene	UG/KG	170 J (240*)	147 (240*)	67 U (240*)	576 (240*)	220 J (240*)

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:55 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-02	SW-03	SW-03	SW-03	SW-03
Sample ID		SW-02	SW-3	SW-3-DUP	SED-3	SW-03
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-0.5	-	-	-	0.0-0.5
Date Sampled		05/15/06	05/03/04	05/03/04	05/03/05	05/15/06
Parameter	**Units**			Field Duplicate (1-1)		
Semivolatile Organic Compounds						
Pyrene	UG/KG	400 J (1,922*)	576 (1,922*)	370 (1,922*)	1,200 (1,922*)	600 J (1,922*)
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	27 U (38.6*)	6.1 U (38.6*)	5.4 U (38.6*)	3.3 U (38.6*)	34 U (38.6*)
Aroclor 1254	UG/KG	27 U (38.6*)	6.1 U (38.6*)	5.4 U (38.6*)	3.3 U (38.6*)	34 U (38.6*)
Aroclor 1260	UG/KG	27 U (38.6*)	6.1 U (38.6*)	5.4 U (38.6*)	3.52 (38.6*)	34 U (38.6*)
Miscellaneous Parameters						
Cyanide	MG/KG	1.4 UJ	0.50 U	0.50 U	0.50 U	1.8 UJ
Percent Dry	PERCENT	NA	54.0	60.9	NA	NA
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:55 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-04	SW-04	SW-04	SW-05	SW-05
Sample ID		SW-4	SED-4	SW-04	SW-5	SED-5
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**					
Volatile Organic Compounds						
Acetone	UG/KG	25 J	37	42 J	10 UJ	39
Chlorobenzene	UG/KG	2 U (7.0*)	2 U (7.0*)	14 U (7.0*)	2 U (7.0*)	2 U (7.0*)
Methyl ethyl ketone (2-Butanone)	UG/KG	10 U	14	73 U	10 U	10 U
Toluene	UG/KG	2 U (98.0*)	2 U (98.0*)	14 U (98.0*)	2 U (98.0*)	2 U (98.0*)
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	67 U	67 U	64 J	67 U	67 U
4-Methylphenol (p-cresol)	UG/KG	NA	NA	220 J	NA	NA
Acenaphthylene	UG/KG	67 U	67 U	70 J	67 U	67 U
Anthracene	UG/KG	67 U (214*)	67 U (214*)	80 J (214*)	67 U (214*)	67 U (214*)
Benzo(a)anthracene	UG/KG	205 (24.0*)	67 U (24.0*)	380 J (24.0*)	67 U (24.0*)	67 U (24.0*)
Benzo(a)pyrene	UG/KG	221 J	97	480 J	67 U	67 U
Benzo(b)fluoranthene	UG/KG	236 J	67 U	790 J	67 U	67 U
Benzo(g,h,i)perylene	UG/KG	67 UJ	67 U	240 J	67 U	67 U
Benzo(k)fluoranthene	UG/KG	289 J	101	220 J	67 U	67 U
bis(2-Ethylhexyl)phthalate	UG/KG	1,170 U (399*)	135 (399*)	940 U (399*)	336 U (399*)	135 (399*)
Carbazole	UG/KG	67 U	67 U	52 J	67 U	67 U
Chrysene	UG/KG	244	67 U	420 J	67 U	67 U
Dibenz(a,h)anthracene	UG/KG	67 UJ	67 U	63 J	67 U	67 U
Fluoranthene	UG/KG	449 (2,040*)	128 (2,040*)	800 J (2,040*)	67 U (2,040*)	67 U (2,040*)
Fluorene	UG/KG	67 U (16.0*)	67 U (16.0*)	940 U (16.0*)	67 U (16.0*)	67 U (16.0*)
Indeno(1,2,3-cd)pyrene	UG/KG	67 UJ	67 U	220 J	67 U	67 U
Phenanthrene	UG/KG	243 (240*)	67 U (240*)	330 J (240*)	67 U (240*)	67 U (240*)

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

( ) Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:55 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-04	SW-04	SW-04	SW-05	SW-05
Sample ID		SW-4	SED-4	SW-04	SW-5	SED-5
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/03/04	05/03/05
Parameter	**Units**					
Semivolatile Organic Compounds						
Pyrene	UG/KG	488 (1,922*)	146 (1,922*)	540 J (1,922*)	67 U (1,922*)	67 U (1,922*)
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	84 U (38.6*)	3.3 U (38.6*)	47 U (38.6*)	4.8 U (38.6*)	3.3 U (38.6*)
Aroclor 1254	UG/KG	84 U (38.6*)	3.3 U (38.6*)	47 U (38.6*)	4.8 U (38.6*)	3.3 U (38.6*)
Aroclor 1260	UG/KG	84 U (38.6*)	3.3 U (38.6*)	47 U (38.6*)	4.8 U (38.6*)	3.3 U (38.6*)
Miscellaneous Parameters						
Cyanide	MG/KG	0.50 U	0.50 U	2.6 UJ	0.50 U	0.50 U
Percent Dry	PERCENT	39.1	NA	NA	68.6	NA
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:55 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-06	SW-06	SW-06	SW-06	SW-07
Sample ID		SW-6	SED-6	SED-9	SW-06	SW-7
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	0.0-0.5	-
Date Sampled		05/03/04	05/03/05	05/03/05	05/15/06	05/03/04
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
Acetone	UG/KG	20 J	22	48	33 U	10 UJ
Chlorobenzene	UG/KG	2 U (7.0*)	2 U (7.0*)	2 U (7.0*)	7 U (7.0*)	2 U (7.0*)
Methyl ethyl ketone (2-Butanone)	UG/KG	10 U	10 U	10 U	33 U	10 U
Toluene	UG/KG	2 U (98.0*)	2 U (98.0*)	2 U (98.0*)	7 U (98.0*)	2 U (98.0*)
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	67 U	67 U	67 U	430 U	67 U
4-Methylphenol (p-cresol)	UG/KG	NA	NA	NA	430 U	NA
Acenaphthylene	UG/KG	67 U	67 U	67 U	430 U	67 U
Anthracene	UG/KG	67 U (214*)	67 U (214*)	67 U (214*)	22 J (214*)	67 U (214*)
Benzo(a)anthracene	UG/KG	67 U (24.0*)	67 U (24.0*)	67 U (24.0*)	97 J (24.0*)	67 U (24.0*)
Benzo(a)pyrene	UG/KG	67 U	67 U	67 U	90 J	67 U
Benzo(b)fluoranthene	UG/KG	67 U	67 U	67 U	190 J	67 U
Benzo(g,h,i)perylene	UG/KG	67 U	67 U	67 U	38 J	67 U
Benzo(k)fluoranthene	UG/KG	67 U	67 U	67 U	190 J	67 U
bis(2-Ethylhexyl)phthalate	UG/KG	1,140 U (399*)	115 (399*)	136 (399*)	430 U (399*)	738 U (399*)
Carbazole	UG/KG	67 U	67 U	67 U	430 U	67 U
Chrysene	UG/KG	67 U	67 U	67 U	97 J	67 U
Dibenz(a,h)anthracene	UG/KG	67 U	67 U	67 U	430 U	67 U
Fluoranthene	UG/KG	67 U (2,040*)	135 (2,040*)	67 U (2,040*)	230 J (2,040*)	67 U (2,040*)
Fluorene	UG/KG	67 U (16.0*)	67 U (16.0*)	67 U (16.0*)	23 J (16.0*)	67 U (16.0*)
Indeno(1,2,3-cd)pyrene	UG/KG	67 U	67 U	67 U	42 J	67 U
Phenanthrene	UG/KG	67 U (240*)	112 (240*)	67 U (240*)	160 J (240*)	67 U (240*)

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:55 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-06	SW-06	SW-06	SW-06	SW-07
Sample ID		SW-6	SED-6	SED-9	SW-06	SW-7
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	0.0-0.5	-
Date Sampled		05/03/04	05/03/05	05/03/05	05/15/06	05/03/04
Parameter	**Units**			Field Duplicate (1-1)		
Semivolatile Organic Compounds						
Pyrene	UG/KG	67 U (1,922*)	67 U (1,922*)	67 U (1,922*)	130 J (1,922*)	67 U (1,922*)
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	5.4 U (38.6*)	3.3 U (38.6*)	3.3 U (38.6*)	22 U (38.6*)	5.1 U (38.6*)
Aroclor 1254	UG/KG	5.4 U (38.6*)	3.3 U (38.6*)	3.3 U (38.6*)	22 U (38.6*)	5.1 U (38.6*)
Aroclor 1260	UG/KG	5.4 U (38.6*)	3.3 U (38.6*)	3.3 U (38.6*)	22 U (38.6*)	5.1 U (38.6*)
Miscellaneous Parameters						
Cyanide	MG/KG	0.50 U	0.50 U	0.50 U	1.1 J-	0.50 U
Percent Dry	PERCENT	61.1	NA	NA	NA	64.1
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:55 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-07	SW-07	SW-08	SW-08	SW-08
Sample ID		SED-7	SW-07	SW-8	SED-8	SW-08
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	0.0-0.5	-	-	0.0-0.5
Date Sampled		05/03/05	05/15/06	05/03/04	05/03/05	05/15/06
Parameter	**Units**					
Volatile Organic Compounds						
Acetone	UG/KG	105	40 J	10 UJ	75	22 J
Chlorobenzene	UG/KG	2 U (7.0*)	9 U (7.0*)	2 U (7.0*)	2 U (7.0*)	10 U (7.0*)
Methyl ethyl ketone (2-Butanone)	UG/KG	22	45 U	10 U	10 U	52 U
Toluene	UG/KG	2 U (98.0*)	9 U (98.0*)	2 U (98.0*)	2 U (98.0*)	10 U (98.0*)
Semivolatile Organic Compounds						
2-Methylphenol (o-cresol)	UG/KG	67 U	590 U	67 U	67 U	3,500 U
4-Methylphenol (p-cresol)	UG/KG	NA	590 U	NA	NA	250 J
Acenaphthylene	UG/KG	67 U	86 J	67 U	67 U	3,500 U
Anthracene	UG/KG	67 U (214*)	49 J (214*)	67 U (214*)	67 U (214*)	3,500 U (214*)
Benzo(a)anthracene	UG/KG	67 U (24.0*)	300 J (24.0*)	397 J (24.0*)	225 (24.0*)	460 J (24.0*)
Benzo(a)pyrene	UG/KG	67 U	290 J	399 J	284	540 J
Benzo(b)fluoranthene	UG/KG	67 U	590	429 J	346	1,100 J
Benzo(g,h,i)perylene	UG/KG	67 U	97 J	174 J	67 U	430 J
Benzo(k)fluoranthene	UG/KG	67 U	600	427 J	329	260 J
bis(2-Ethylhexyl)phthalate	UG/KG	159 (399*)	590 U (399*)	873 U (399*)	649 (399*)	3,500 U (399*)
Carbazole	UG/KG	67 U	590 U	67 U	67 U	3,500 U
Chrysene	UG/KG	67 U	310 J	419 J	264	540 J
Dibenz(a,h)anthracene	UG/KG	67 U	36 J	67 UJ	67 U	3,500 U
Fluoranthene	UG/KG	67 U (2,040*)	350 J (2,040*)	601 (2,040*)	416 (2,040*)	860 J (2,040*)
Fluorene	UG/KG	67 U (16.0*)	590 U (16.0*)	67 U (16.0*)	67 U (16.0*)	3,500 U (16.0*)
Indeno(1,2,3-cd)pyrene	UG/KG	67 U	99 J	134 J	67 U	360 J
Phenanthrene	UG/KG	67 U (240*)	43 J (240*)	326 (240*)	227 (240*)	350 J (240*)

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

( ) Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:56 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-07	SW-07	SW-08	SW-08	SW-08
Sample ID		SED-7	SW-07	SW-8	SED-8	SW-08
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	0.0-0.5	-	-	0.0-0.5
Date Sampled		05/03/05	05/15/06	05/03/04	05/03/05	05/15/06
Parameter	**Units**					
Semivolatile Organic Compounds						
Pyrene	UG/KG	67 U (1,922*)	360 J (1,922*)	1,430 J (1,922*)	755 (1,922*)	620 J (1,922*)
Polychlorinated Biphenyls						
Aroclor 1248	UG/KG	118 (38.6*)	34 (38.6*)	600 U (38.6*)	3.3 U (38.6*)	34 U (38.6*)
Aroclor 1254	UG/KG	3.3 U (38.6*)	29 U (38.6*)	600 U (38.6*)	3.3 U (38.6*)	34 U (38.6*)
Aroclor 1260	UG/KG	3.3 U (38.6*)	29 U (38.6*)	600 U (38.6*)	3.3 U (38.6*)	34 U (38.6*)
Miscellaneous Parameters						
Cyanide	MG/KG	2.86	1.5 UJ	1.14	1.91	1.8 UJ
Percent Dry	PERCENT	NA	NA	59.0	NA	NA
Total Organic Carbon (TOC)	MG/KG	NA	NA	NA	NA	NA

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:56 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-08
Sample ID		SW-08-DUP
Matrix		Sediment
Depth Interval (ft)		0.0-0.5
Date Sampled		05/15/06
Parameter	**Units**	Field Duplicate (1-1)
Volatile Organic Compounds		
Acetone	UG/KG	16 J
Chlorobenzene	UG/KG	7 U (7.0*)
Methyl ethyl ketone (2-Butanone)	UG/KG	11 J
Toluene	UG/KG	7 U (98.0*)
Semivolatile Organic Compounds		
2-Methylphenol (o-cresol)	UG/KG	2,300 U
4-Methylphenol (p-cresol)	UG/KG	2,300 U
Acenaphthylene	UG/KG	2,300 U
Anthracene	UG/KG	2,300 U (214*)
Benzo(a)anthracene	UG/KG	360 J (24.0*)
Benzo(a)pyrene	UG/KG	500 J
Benzo(b)fluoranthene	UG/KG	1,200 J
Benzo(g,h,i)perylene	UG/KG	320 J
Benzo(k)fluoranthene	UG/KG	1,200 J
bis(2-Ethylhexyl)phthalate	UG/KG	2,300 U (399*)
Carbazole	UG/KG	2,300 U
Chrysene	UG/KG	460 J
Dibenz(a,h)anthracene	UG/KG	2,300 U
Fluoranthene	UG/KG	720 J (2,040*)
Fluorene	UG/KG	2,300 U (16.0*)
Indeno(1,2,3-cd)pyrene	UG/KG	280 J
Phenanthrene	UG/KG	290 J (240*)

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:56 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-08
Sample ID		SW-08-DUP
Matrix		Sediment
Depth Interval (ft)		0.0-0.5
Date Sampled		05/15/06
Parameter	**Units**	Field Duplicate (1-1)
Semivolatile Organic Compounds		
Pyrene	UG/KG	500 J (1,922*)
Polychlorinated Biphenyls		
Aroclor 1248	UG/KG	24 U (38.6*)
Aroclor 1254	UG/KG	24 U (38.6*)
Aroclor 1260	UG/KG	24 U (38.6*)
Miscellaneous Parameters		
Cyanide	MG/KG	1.3 UJ
Percent Dry	PERCENT	NA
Total Organic Carbon (TOC)	MG/KG	NA

Criteria- NYSDEC Technical Guidance for Screening Contaminated Sediments, Benthic Chronic Toxicity, January 25, 1999.

* - Criteria Derived From User Defined TOC Value of 2000 MG/KG (NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria.

U - Not detected above the reported quantitation limit.

J - The analyte was positively identified, the quantitation is an estimation.

D - Result reported from a secondary dilution analysis.

NA - Not Analyzed

Only Detected Results Reported.

Detection Limits shown are PQL

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:10:56 AM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND [PRCCODE] <> 'MET'

TABLE 3-5

REVISION OF TABLE 3.2 FROM THE O&M PLAN

GROUNDWATER SAMPLING SUMMARY
OPERATION AND MAINTENANCE PLAN
PFOHL BROTHERS LANDFILL SITE, CHEEKTOWAGA, NEW YORK

LOCATIONS

GW-1D/1S
GW- 3D/3S
GW- 4D/4S
GW- 7D/7S
GW- 8D/8S(R)
GW- 26D/35S
GW- 28S
GW- 29S
GW- 30S
GW- 31S
GW- 32S
GW- 33S
GW- 34S

FREQUENCY

semi-annually for overburden and bedrock groundwater
annually for radiological parameters by gamma spectroscopy

PARAMETERS

Field	pH
	conductivity
	temperature
	turbidity
VOCs	Acetone
	Benzene
	1,2-Dichloroethene (total)
	1,1,2-Trichloroethane
	Vinyl chloride
SVOCs	Phenol
	1,3-Dichlorobenzene
	1,4-Dichlorobenzene
	bis(2-Ethylhexyl)phthalate

TABLE 3-5 (continued)

REVISION OF TABLE 3.2 FROM THE O&M PLAN

GROUNDWATER SAMPLING SUMMARY
OPERATION AND MAINTENANCE PLAN
PFOHL BROTHERS LANDFILL SITE, CHEEKTOWAGA, NEW YORK

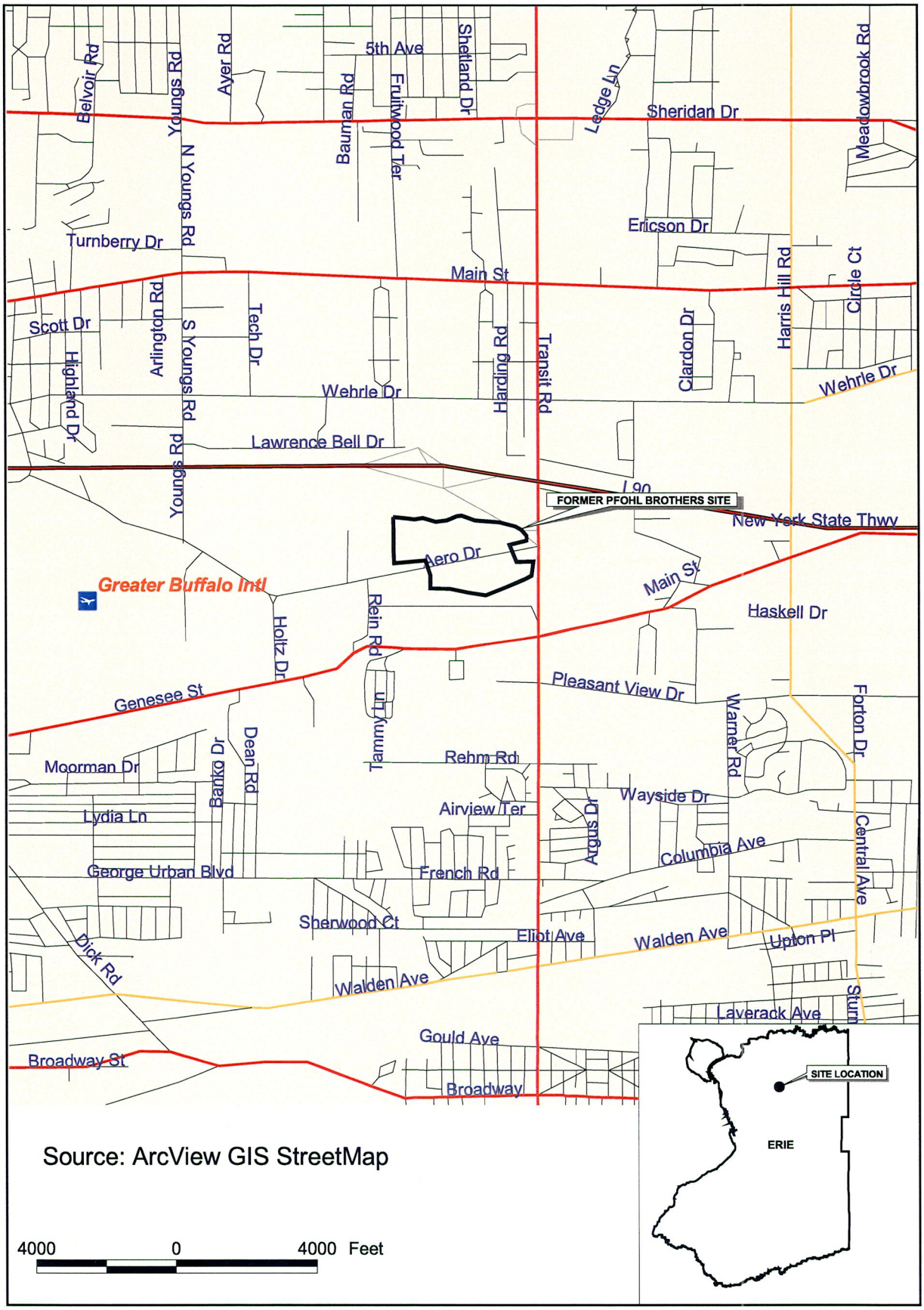
PARAMETERS (cont'd)

Metals
Antimony
Arsenic
Barium
Cadmium
Chromium
Copper
Iron
Lead
Magnesium
Manganese
Mercury
Nickel
Silver
Sodium
Zinc

Radiochemistry by Gamma Spectroscopy [(1)]

Note:
(1) Each sample for radiochemistry will be filtered by the laboratory to create a dissolved (filtrate) sample and an insoluble (filter) sample. Each sample will be analyzed.

FIGURES

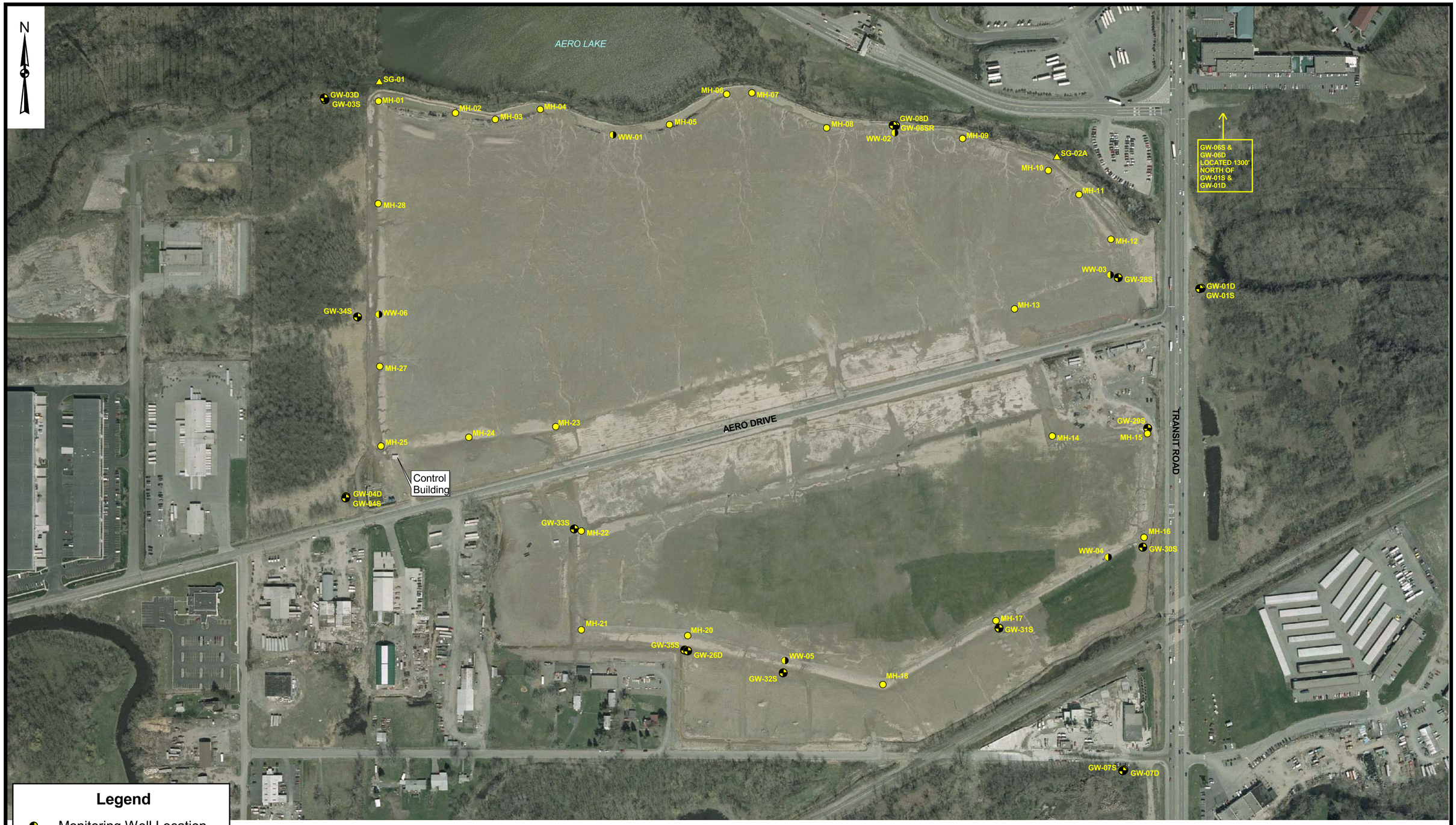


n:\1117270_00000\gis\arcview\pfohl_sitelocation.apr Pfohl Bros Location Map 12/15/2005

URS

PFOHL BROTHERS LANDFILL
SITE LOCATION MAP

FIGURE 1-1



Legend

- Monitoring Well Location
- Staff Gauge Location
- Manhole Location
- Wet Well Location

400 0 400 Feet

PFOHL BROTHERS LANDFILL
MONITORING LOCATIONS

URS

FIGURE 3-1

N:\11172700.00000\GIS\ArcView\pfhol.apr WELL LOCATIONS
12/15/2005

APPENDIX A

EXAMPLE DAILY INSPECTION SHEETS

Pfohl Brothers Landfill Site

Daily Logsheet — **Town of Cheektowaga** NICE

Date 7-19-06 — Weather conditions 80°

Time 9:40 — Read by: B. PUGH

	Level of Water from bottom (ft.)	Flow gallons / minute	Flow Totals gallons	Pump Run Time Hrs.
WW-3	4.2	0	68,288	40
WW-2	99.0	0	—	0
WW-1	3.4	-6.9	166,381	87
WW-6	4.8	0	63,615	29
WW-4	4.9	32.4	321,920	179
WW-5	6.4	0	10920	11

Flow Totalizer at Meter chamber: 607,048

Heat Trace

Outside temp T = 86

Current A = 0

Set point SP = 46

ge Suppressor events: 519847

Motor Control Center

Volts 480 volts

Amps 10 amps

Which WW was running?

1☐ 2☐ 3☐ 4☑ 5☐ 6☐

Filter — Checked ☐ — Changed ☐

Comments and/or Current Conditions

JON NICHY
BILL PUGH @ SITE

WW2 - LEVEL CONTROL OUT

* WW5 - HOSE TO BE CHANGED + LOCKED OUT. WW5 HOSE REPLACED TO PUMP WITH NEW LENGTH OF 2" PIPE NIPPLE AND BACK IN SERVICE

* WW1 - replaced check valve OK

Pfohl Brothers Landfill Site

Daily Logsheet — **Town of Cheektowaga**

Date: 11/20/06
Time: 12:10
Weather conditions: SUNNY 42°F.
Read by: B. PUGH

	Level of Water from bottom (ft.)	Flow gallons / minute	Flow Totals gallons	Pump Run Time Hrs.
WW-3	5.5	0	382,347	272
WW-2	4.5	0	22571	12
WW-1	4.6	0	603,033	299
WW-6	7.5	0	1509456	628
WW-4	4.4	23.0	2,714,275	1656
WW-5	6.0	0	788,067	354

Flow Totalizer at Meter chamber: 5,714,807

Heat Trace
Outside temp T =
Current A =
Set point SP =
AWAITING RE PROGRAM

Surge Suppressor events: 519964

Motor Control Center
Volts 480 volts
Amps 5 amps
Which WW was running?
1☐ 2☐ 3☐ 4☑ 5☐ 6☐

Filter Checked ☐ Changed ☐

Comments and/or Current Conditions

WW-3 LOCKED OUT.
WW-6 FLOW FAILURE ALARM.

WW-6 - discharge hose damaged — pulled pump - replace pump & hose

WW 3 - hose/nipple damaged - need to replace hose only

Pfohl Brothers Landfill Site

Daily Logsheet — **Town of Cheektowaga**

Date: 12/28/06

Time: 2:00

Weather conditions: OVERCAST COOL 45°

Read by: B. PUGH

	Level of Water from bottom (ft.)	Flow gallons / minute	Flow Totals gallons	Pump Run Time Hrs.
WW-3	4.6	27.2	482469	318
WW-2	4.5	0	22571	12
WW-1	5.4	0	844145	400
WW-6	8.3	58.6	1509875	628
WW-4	5.7	10.9	3275398	2213
WW-5	4.3	35.8	1366285	613

Flow Totalizer at Meter chamber: 7114530

Heat Trace

Outside temp T = 44

Current A = 2.5

Set point SP = 40

Large Suppressor events: 519973

Motor Control Center

Volts: 480 volts

Amps: 10 amps

Which WW was running? 1☐ 2☐ 3☐ ~~4☐ 5☐ 6☐~~

Filter: Checked ☐ Changed ☐

Comments and/or Current Conditions

REPLACED PUMP 6 (NEW PUMP, YELLOW FLEX HOSE, NEW BALL VALVE) BACK IN SERVICE (OK)

REPLACED BALL CHECK VALVE WW5 (OK)

PUMP NO. 1 LOCKED OUT AWAITING REPLACEMENT

HEATER REINSTALLED (OK)

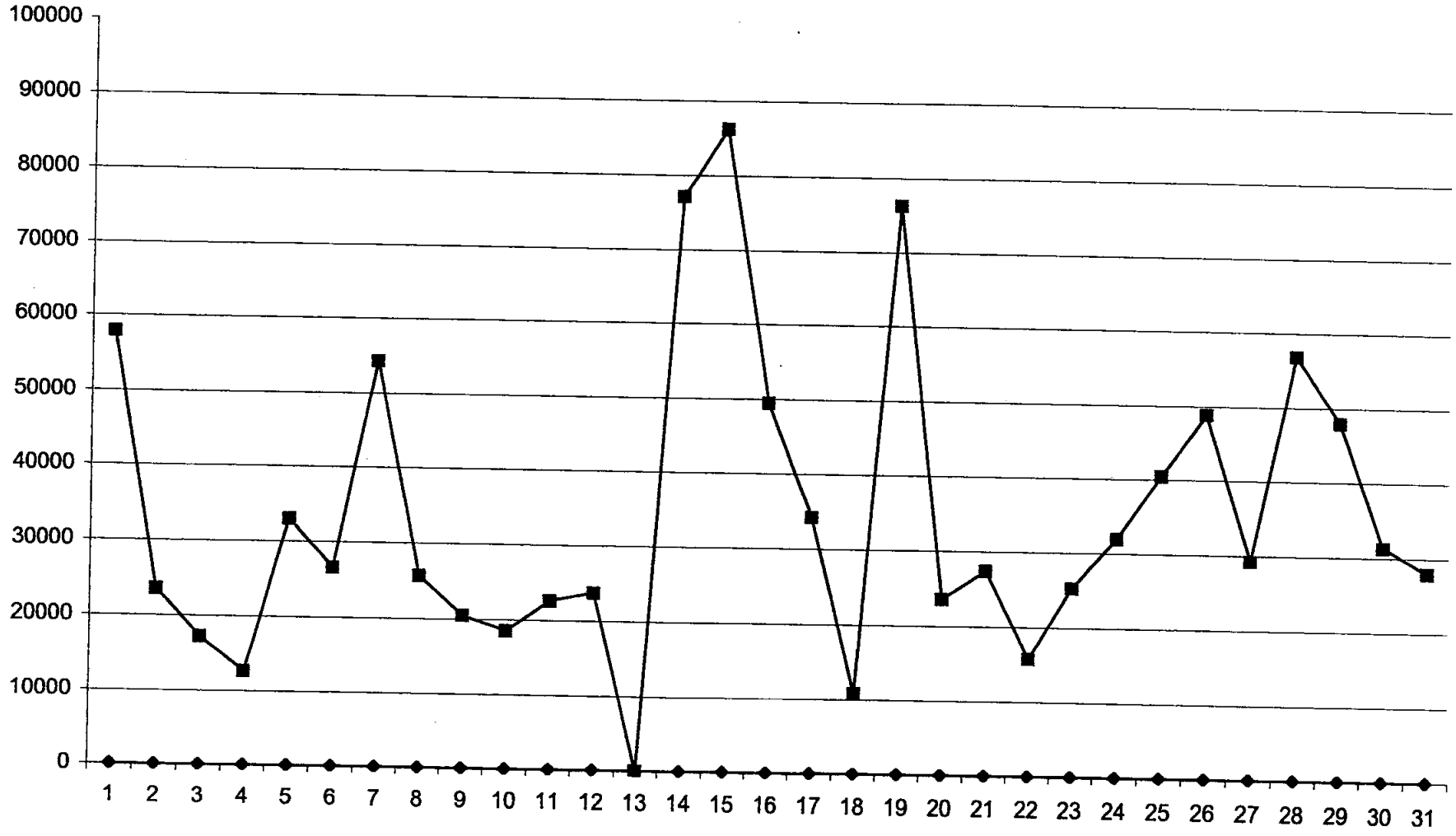
APPENDIX B

MONTHLY FLOW SUMMARIES
JULY 2006 – DECEMBER 2006

Direct Discharge Flow Data

6/30/2006		0	0	0	
July-06	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**	**Total Direct Discharge (Gallons)**	**Notes**
1		57857	57,857	57,857	
2		81363	23,507	81,364	
3		98559	17,196	98,560	
4		111200	12,641	111,201	
5		144134	32,934	144,135	
6		170657	26,523	170,658	
7		224855	54,198	224,856	
8		250463	25,608	250,464	
9		270920	20,457	270,921	
10		289429	18,508	289,429	
11		311959	22,530	311,959	
12		335625	23,666	335,625	
13		335625	0	335,625	
14		412771	77,146	412,771	
15		498958	86,187	498,958	
16		548396	49,438	548,396	
17		582590	34,195	582,591	
18		593438	10,848	593,439	
19		669707	76,268	669,707	
20		693297	23,590	693,297	
21		720689	27,392	720,689	
22		736476	15,787	736,476	
23		761758	25,282	761,758	
24		793710	31,951	793,709	
25		834135	40,426	834,135	
26		882950	48,814	882,949	
27		912165	29,215	912,164	
28		968946	56,781	968,945	
29		1016865	47,919	1,016,864	
30		1048152	31,287	1,048,151	
31		1076112	27,960	1,076,111	
		1,076,112	**1,076,111**	**1,076,111**	

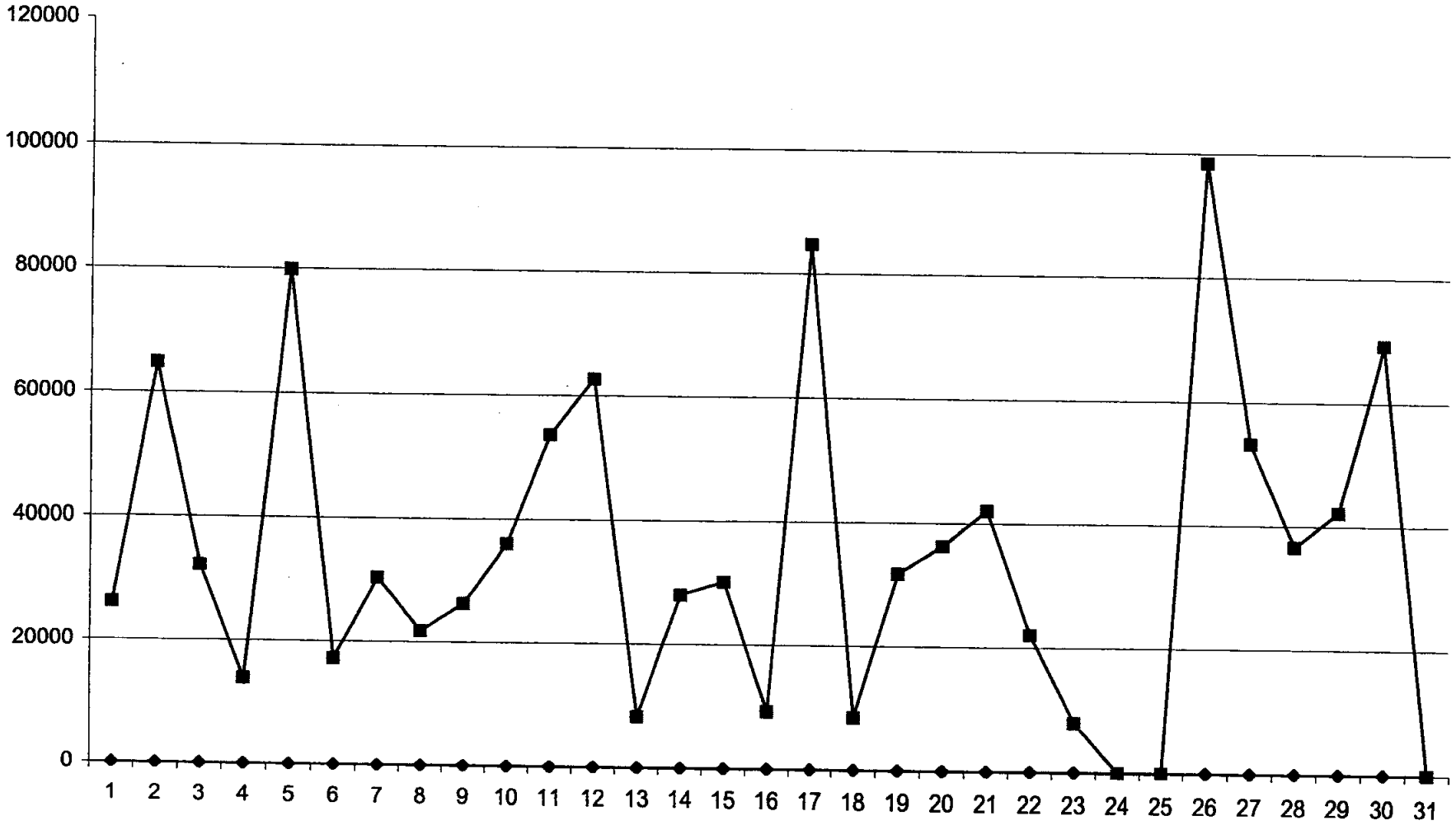
July
2006


100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Direct Discharge Flow Data

7/31/2006		1,076,112	27,960	0	
August-06	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**	**Total Direct Discharge (Gallons)**	**Notes**
1		1102224	26,113	26,113	
2		1166966	64,742	90,855	
3		1199147	32,181	123,036	
4		1213003	13,856	136,892	
5		1292892	79,889	216,781	
6		1310096	17,203	233,984	
7		1640429	30,334	264,318	
8		1362176	21,747	286,065	
9		1388360	26,184	312,249	
10		1424280	35,920	348,169	
11		1477973	53,693	401,862	
12		1540666	62,693	464,555	
13		1548880	8,214	472,769	
14		1576852	27,971	500,740	
15		1606985	30,133	530,873	
16		1616239	9,254	540,127	
17		1700939	84,700	624,827	
18		1709357	8,418	633,245	
19		1741129	31,773	665,018	
20		1777413	36,283	701,301	
21		1819471	42,059	743,360	
22		1841548	22,077	765,437	
23		1849493	7,945	773,382	
24		1849493	0	773,382	
25		1849493	0	773,382	
26		1947885	98,392	871,774	
27		2001179	53,294	925,068	
28		2037828	36,649	961,717	
29		2080026	42,198	1,003,915	
30		2149277	69,252	1,073,167	
31		2149277	0	1,073,167	
		1,073,165	**1,073,167**	**1,073,167**	

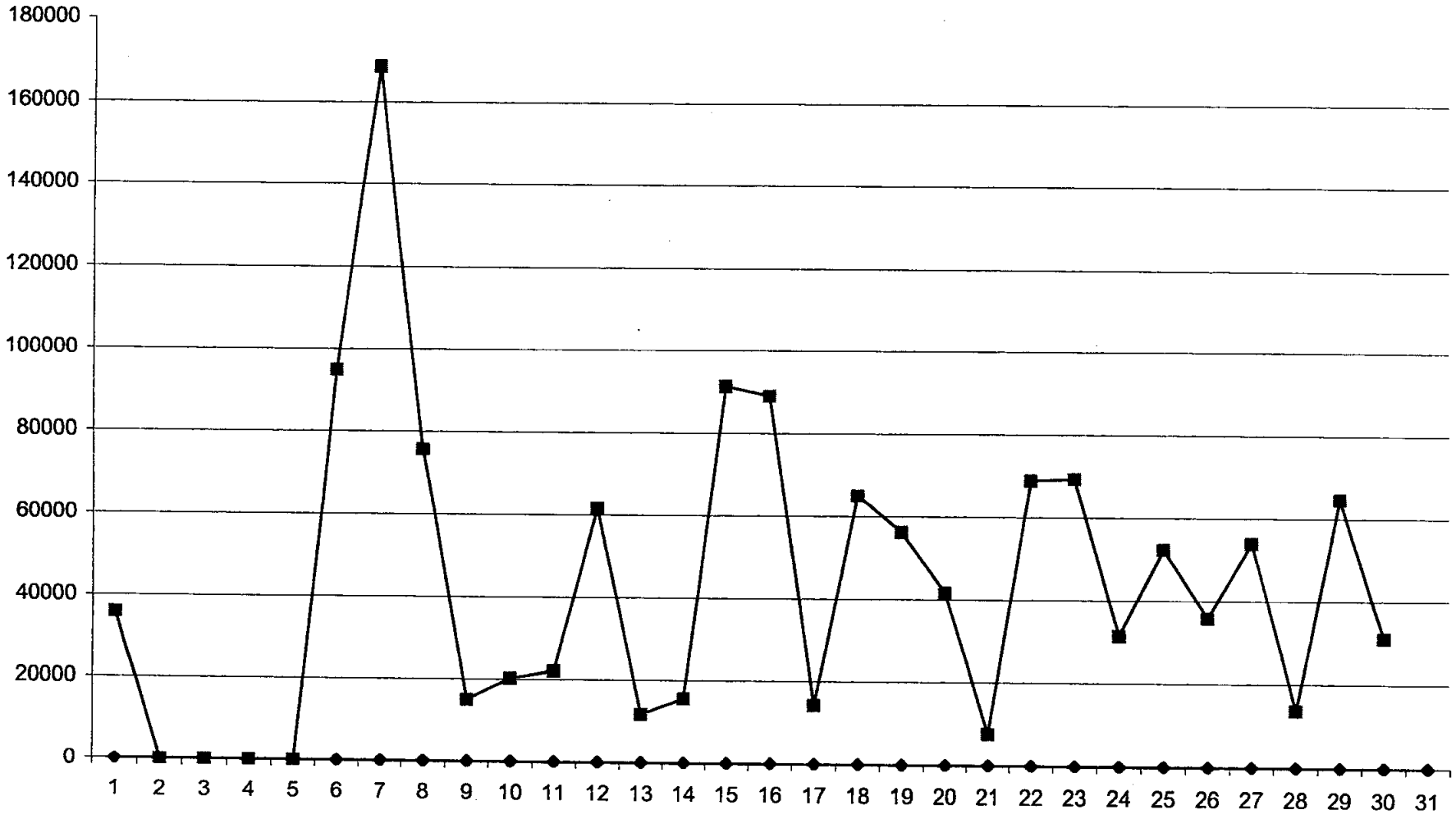
August
2006


120000
100000
80000
60000
40000
20000
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

Direct Discharge Flow Data

8/31/2006		2149277	0	1,073,167	
September-06	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**	**Total Direct Discharge (Gallons)**	**Notes**
1		2185126	35,849	1,109,016	
2		2185126	0	1,109,016	
3		2185123	0	1,109,016	
4		2185126	0	1,109,016	
5		2185126	0	1,109,016	
6		2279944	94,818	1,203,834	
7		2448498	168,555	1,372,389	
8		2524228	75,730	1,448,119	
9		2539254	15,027	1,463,146	
10		2559439	20,185	1,483,331	
11		2581495	22,056	1,505,387	
12		2643161	61,666	1,567,053	
13		2654934	11,773	1,578,826	
14		2670534	15,600	1,594,426	
15		2761864	91,330	1,685,756	
16		2850824	88,960	1,774,716	
17		2865064	14,240	1,788,956	
18		2930115	65,051	1,854,007	
19		2986369	56,255	1,910,262	
20		3027933	41,564	1,951,826	
21		3035522	7,589	1,959,415	
22		3104492	68,970	2,028,385	
23		3173861	69,370	2,097,755	
24		3205247	31,386	2,129,141	
25		3257643	52,396	2,181,537	
26		3293390	35,747	2,217,284	
27		3347339	53,949	2,271,233	
28		3361072	13,733	2,284,966	
29		3425742	64,670	2,349,636	
30		3456811	31,069	2,380,705	
31					
		1,307,534	**1,307,538**	**1,307,538**	

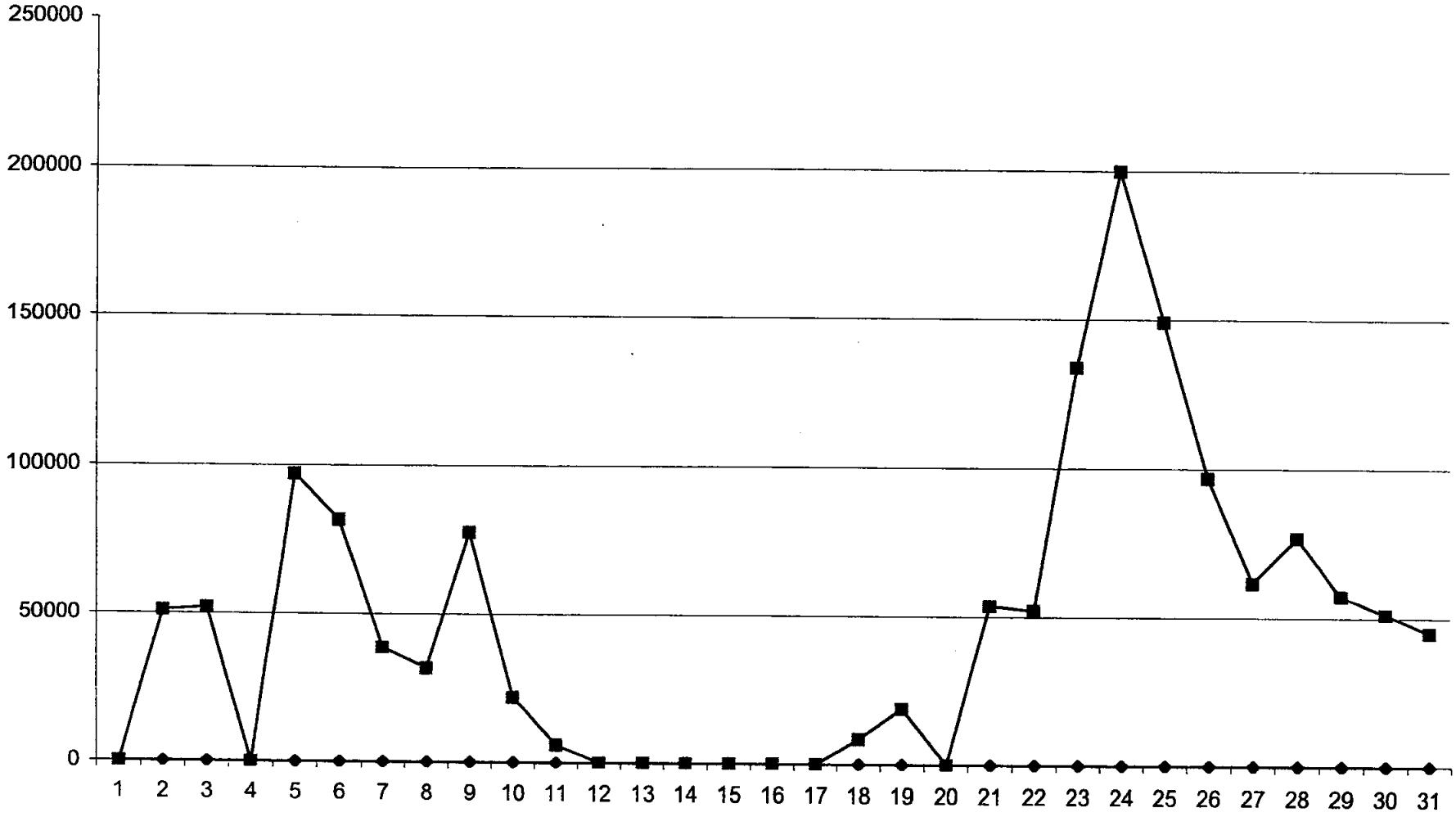
September
2006



Direct Discharge Flow Data

9/30/2006		3456811	31,069	2,380,705	
October-06	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**	**Total Direct Discharge (Gallons)**	**Notes**
1		3456811	0	2,380,705	
2		3507872	51,061	2,431,766	
3		3559962	52,090	2,483,856	
4		3559962	0	2,483,856	
5		3657146	97,184	2,581,040	
6		3738854	81,708	2,662,748	
7		3777352	38,498	2,701,246	
8		3808901	31,549	2,732,795	
9		3886672	77,772	2,810,567	
10		3908438	21,765	2,832,332	
11		3914422	5,984	2,838,316	
12		3914422	0	2,838,316	
13		3914422	0	2,838,316	
14		3914422	0	2,838,316	
15		3914422	0	2,838,316	
16		3914422	0	2,838,316	
17		3914422	0	2,838,316	
18		3922895	8,473	2,846,789	
19		3941527	18,632	2,865,421	
20		3941527	0	2,865,421	
21		3995345	53,819	2,919,240	
22		4047523	52,178	2,971,418	
23		4181558	134,036	3,105,454	
24		4381504	199,946	3,305,400	
25		4530735	149,231	3,454,631	
26		4627523	96,788	3,551,419	
27		4689314	61,792	3,613,211	
28		4766291	76,977	3,690,188	
29		4823694	57,403	3,747,591	
30		4874960	51,267	3,798,858	
31		4919904	44,944	3,843,802	
		1,463,093	**1,463,097**	**1,463,097**	

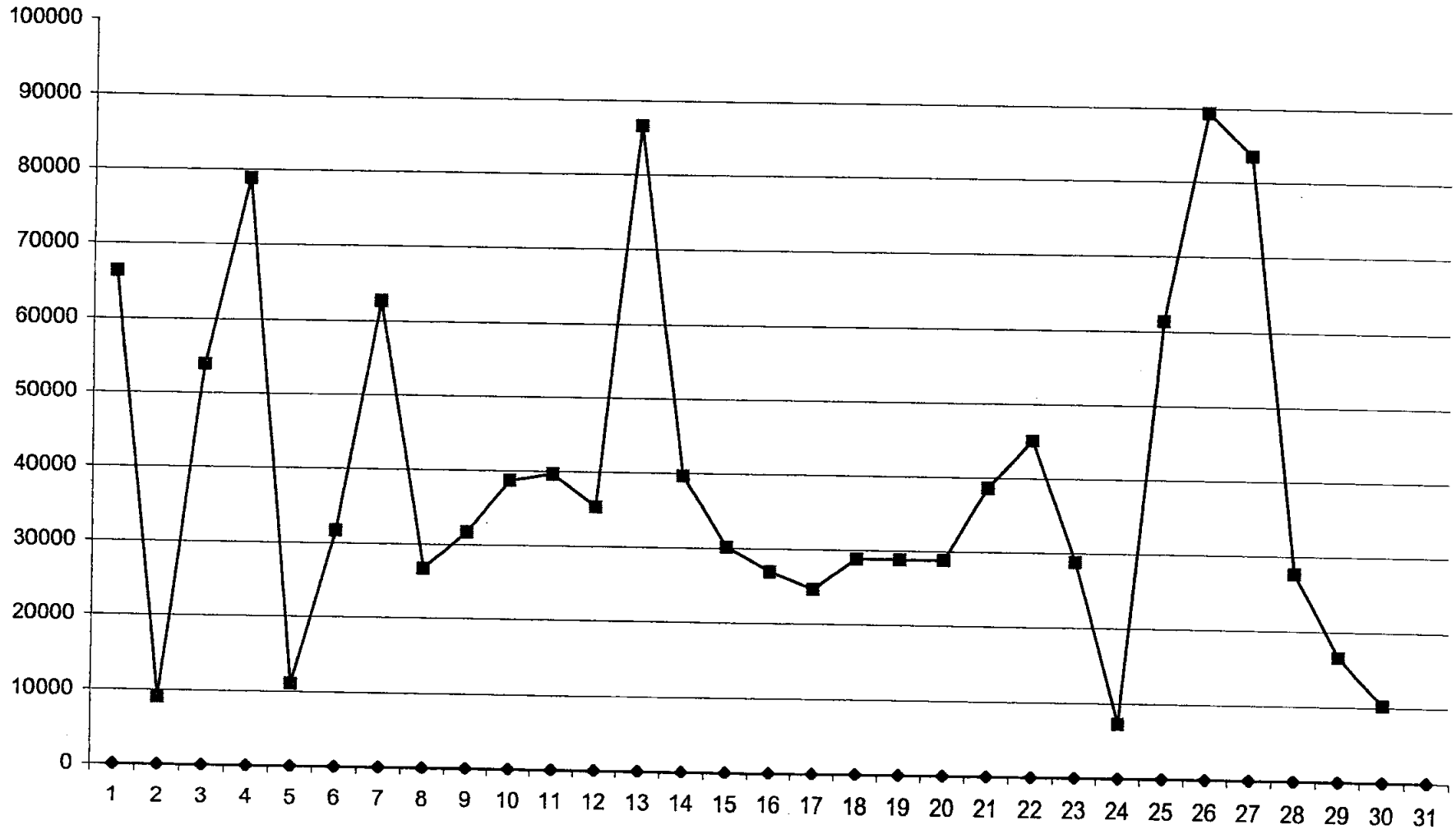
October
2006



Direct Discharge Flow Data

10/31/2006		4919904	44,944	1,463,097	
November-06	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**	**Total Direct Discharge (Gallons)**	**Notes**
1		4986194	66,290	1,529,387	
2		4995217	9,023	1,538,410	
3		5049135	53,918	1,592,328	
4		5127959	78,824	1,671,152	
5		5138997	11,039	1,682,191	
6		5170688	31,691	1,713,882	
7		5233386	62,698	1,776,580	
8		5260114	26,728	1,803,308	
9		5291805	31,691	1,834,999	
10		5330511	38,706	1,873,705	
11		5370107	39,596	1,913,301	
12		5405381	35,274	1,948,575	
13		5492032	86,651	2,035,226	
14		5531663	39,631	2,074,857	
15		5561831	30,169	2,105,026	
16		5588738	26,907	2,131,933	
17		5613387	24,649	2,156,582	
18		5642202	28,815	2,185,397	
19		5670992	28,790	2,214,187	
20		5699787	28,795	2,242,982	
21		5738426	38,640	2,281,622	
22		5783485	45,059	2,326,681	
23		5812274	28,789	2,355,470	
24		5819559	7,286	2,362,756	
25		5880928	61,369	2,424,125	
26		5970327	89,400	2,513,525	
27		6053941	83,614	2,597,139	
28		6081605	27,664	2,624,803	
29		6098156	16,551	2,641,354	
30		6108407	10,251	2,651,605	
31				2,651,605	
		1,188,503	**1,188,508**	**1,188,508**	

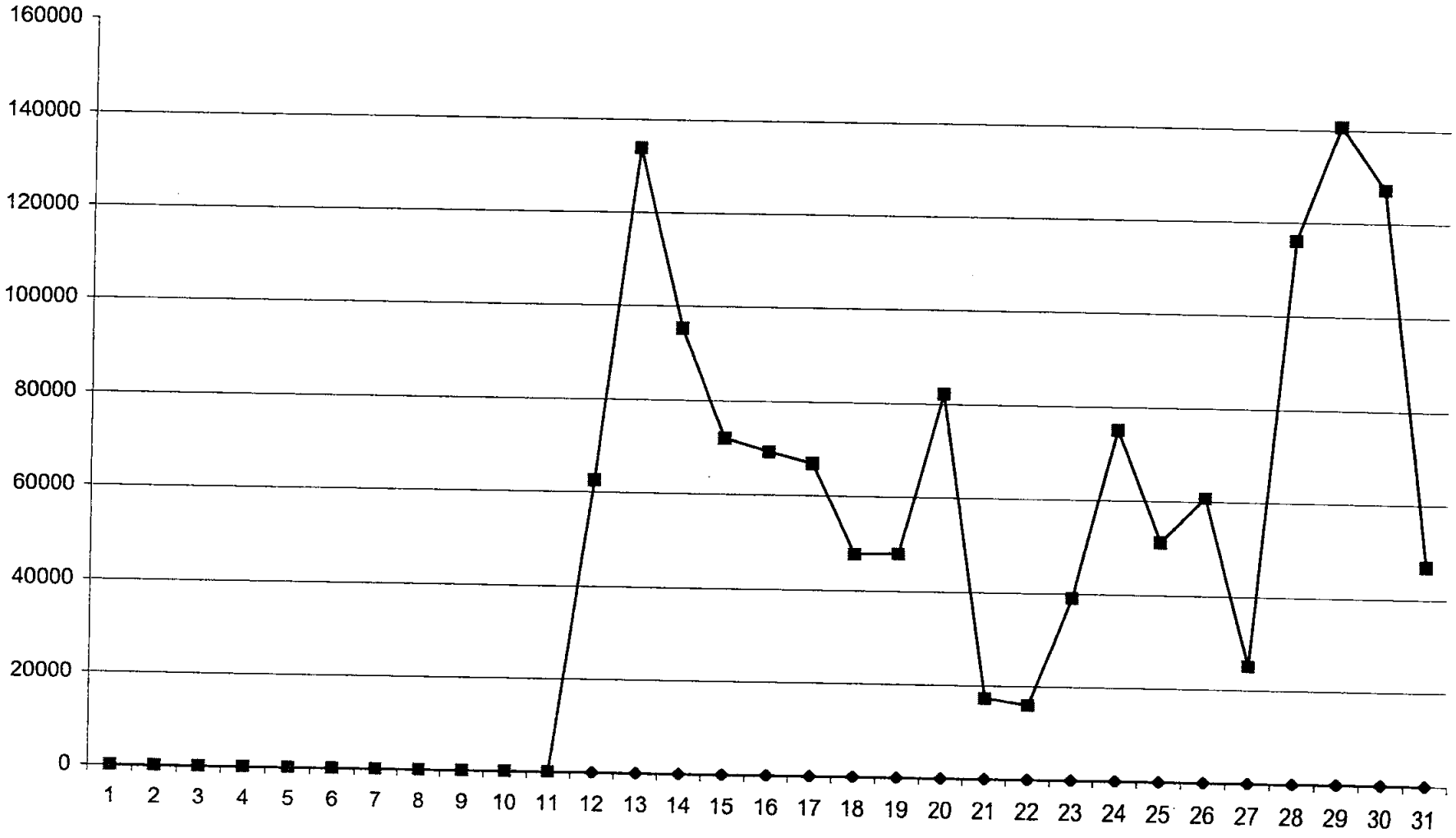
November
2006



Direct Discharge Flow Data

11/30/2006		6108407	10,251	2,651,605	
December-06	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**	**Total Direct Discharge (Gallons)**	**Notes**
1		6108407	0	2,651,605	
2		6108407	0	2,651,605	
3		6108407	0	2,651,605	
4		6108407	0	2,651,605	
5		6108407	0	2,651,605	
6		6108407	0	2,651,605	
7		6108407	0	2,651,605	
8		6108407	0	2,651,605	
9		6108407	0	2,651,605	
10		6108407	0	2,651,605	
11		6108407	0	2,651,605	
12		6170924	62,518	2,714,123	
13		6304887	133,963	2,848,086	
14		6400286	95,399	2,943,485	
15		6472238	71,952	3,015,437	
16		6541354	69,116	3,084,553	
17		6608143	66,789	3,151,342	
18		6655782	47,640	3,198,982	
19		6703637	47,855	3,246,837	
20		6785784	82,147	3,328,984	
21		6803071	17,287	3,346,271	
22		6818935	15,865	3,362,136	
23		6858039	39,104	3,401,240	
24		6933125	75,086	3,476,326	
25		6984334	51,209	3,527,535	
26		7045106	60,773	3,588,308	
27		7070262	25,156	3,613,464	
28		7186303	116,041	3,729,505	
29		7327034	140,731	3,870,236	
30		7454305	127,271	3,997,507	
31		7501126	46,922	4,044,429	
		1,392,719	**1,392,824**	**1,392,824**	

December
2006



APPENDIX C

HYDRAULIC MONITORING TABLES

TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
OCTOBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
GW-03S MNW	1073812.622	1114605.762	692.61	NA	693.80	S	1	10/5/2006 1221	2.07	691.73	0.00	691.73	
GW-04S MNW	1072284.456	1114685.127	690.76	NA	692.72	S	1	10/5/2006 1358	3.80	688.92	0.00	688.92	
GW-07S MNW	1071238.157	1117666.265	697.47	NA	699.51	S	1	10/5/2006 1353	4.98	694.53	0.00	694.53	
GW-08SR MNW	1073714.172	1116786.343	695.08	NA	697.50	S	1	10/5/2006 1236	5.09	692.41	0.00	692.41	
GW-28S MNW	1073129.479	1117648.927	698.60	NA	700.95	S	1	10/5/2006 0000	5.07	695.88	0.00	695.88	
GW-29S MNW	1072552.638	1117761.993	697.50	NA	699.63	S	1	10/5/2006 1250	5.17	694.46	0.00	694.46	
GW-30S MNW	1072096.109	1117743.563	693.67	NA	696.58	S	1	10/5/2006 1340	6.14	690.44	0.00	690.44	
GW-31S MNW	1071786.280	1117191.441	695.84	NA	698.62	S	1	10/5/2006 1301	2.71	695.91	0.00	695.91	
GW-32S MNW	1071613.793	1116364.200	696.19	NA	698.37	S	1	10/5/2006 1304	2.36	696.01	0.00	696.01	
GW-33S MNW	1072165.625	1115561.866	695.94	NA	698.24	S	1	10/5/2006 1343	3.31	694.93	0.00	694.93	
GW-34S MNW	1072979.205	1114730.200	692.51	NA	694.77	S	1	10/5/2006 1213	2.65	692.12	0.00	692.12	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:

MH	Manhole Monitoring Point
MNW	Monitoring Well

TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
OCTOBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
GW-35S MNW	1071701.925	1115985.585	696.19	NA	697.39	S	1	10/5/2006 1308	2.77	694.62	0.00	694.62	
MH-01 MH	1073806.665	1114810.501	698.62	NA	698.62	NA	1	10/5/2006 1216	11.19	687.43	0.00	687.43	
MH-03 MH	1073736.789	1115259.334	699.40	NA	699.40	NA	1	10/5/2006 1227	11.22	688.18	0.00	688.18	
MH-07 MH	1073838.229	1116243.757	696.82	NA	696.82	NA	1	10/5/2006 1234	9.43	687.39	0.00	687.39	
MH-10 MH	1073540.729	1117381.524	703.01	NA	703.01	NA	1	10/5/2006 1239	14.46	688.55	0.00	688.55	
MH-15 MH	1072531.567	1117761.125	699.02	NA	699.02	NA	1	10/5/2006 1248	15.05	683.97	0.00	683.97	
MH-16 MH	1072133.714	1117748.238	698.57	NA	698.57	NA	1	10/5/2006 1253	14.57	684.00	NP		
MH-17 MH	1071813.137	1117180.019	702.16	NA	702.16	NA	1	10/5/2006 1258	18.19	683.97	0.00	683.97	
MH-20 MH	1071756.395	1115997.024	706.20	NA	706.20	NA	1	10/5/2006 1306	19.72	686.48	0.00	686.48	
MH-22 MH	1072158.023	1115589.309	698.05	NA	698.05	NA	1	10/5/2006 1312	8.98	689.07	0.00	689.07	
MH-25 MH	1072483.928	1114820.313	698.17	NA	698.17	NA	1	10/5/2006 1206	10.76	687.41	0.00	687.41	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:
MH Manhole Monitoring Point
MNW Monitoring Well

Filter = ((tblGWD.LOGDATE=#10/5/2006#))

Printed: 4/6/2007 9:13:15 AM
N:\11172700.00000\GIS\dB\Program\EDMS.mde/Groundwater Level

TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
OCTOBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
SG-01 SG	1073882.887	1114813.101		NA	690.00	S	1	10/5/2006 1218	-1.97	691.97	0.00	691.97	
SG-02	1073796.856	1115255.756						10/5/2006 1237	-3.70	-	0.00	-	
WW-01 MH	1073676.903	1115710.476		NA	684.02		1	10/5/2006 1130	-4.0	688.02	0.00	688.02	
WW-02 MH	1073684.724	1116792.311		NA	684.18		1	10/5/2006 1130	-4.5	688.68	0.00	688.68	
WW-03 MH	1073140.339	1117618.499		NA	683.80		1	10/5/2006 1130	-5.5	689.30	0.00	689.30	
WW-04 MH	1072057.563	1117610.508		NA	676.62		1	10/5/2006 1130	-7.0	683.62	0.00	683.62	
WW-05 MH	1071661.368	1116370.876		NA	676.14		1	10/5/2006 1130	-6.1	682.24	0.00	682.24	
WW-06 MH	1072988.420	1114811.518		NA	681.89		1	10/5/2006 1130	-5.9	687.79	0.00	687.79	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:

MH	Manhole Monitoring Point
MNW	Monitoring Well

Filter = ((tblGWD.LOGDATE=#10/5/2006#))

Printed: 4/6/2007 9:13:15 AM
N:\11172700.00000\GIS\dB\Program\EDMS.mde/Groundwater Level

TABLE 2
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
NOVEMBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
GW-03S MNW	1073812.622	1114605.762	692.61	NA	693.80	S	1	11/6/2006 832	2.28	691.52	0.00	691.52	
GW-04S MNW	1072284.456	1114685.127	690.76	NA	692.72	S	1	11/6/2006 932	4.42	688.30	0.00	688.30	
GW-07S MNW	1071238.157	1117666.265	697.47	NA	699.51	S	1	11/6/2006 952	4.79	694.72	0.00	694.72	
GW-08SR MNW	1073714.172	1116786.343	695.08	NA	697.50	S	1	11/6/2006 850	5.33	692.17	0.00	692.17	
GW-28S MNW	1073129.479	1117648.927	698.60	NA	700.95	S	1	11/6/2006 855	5.90	695.05	0.00	695.05	
GW-29S MNW	1072552.638	1117761.993	697.50	NA	699.63	S	1	11/6/2006 905	5.74	693.89	0.00	693.89	
GW-30S MNW	1072096.109	1117743.563	693.67	NA	696.58	S	1	11/6/2006 908	7.12	689.46	0.00	689.46	
GW-31S MNW	1071786.280	1117191.441	695.84	NA	698.62	S	1	11/6/2006 912	3.42	695.20	0.00	695.20	
GW-32S MNW	1071613.793	1116364.200	696.19	NA	698.37	S	1	11/6/2006 917	3.15	695.22	0.00	695.22	
GW-33S MNW	1072165.625	1115561.866	695.94	NA	698.24	S	1	11/6/2006 925	4.46	693.78	0.00	693.78	
GW-34S MNW	1072979.205	1114730.200	692.51	NA	694.77	S	1	11/6/2006 824	2.69	692.08	0.00	692.08	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:
MH Manhole Monitoring Point
MNW Monitoring Well

Filter = ((tblGWD.LOGDATE=#11/6/2006#))

Printed: 4/6/2007 9:14:19 AM
N:\11172700.00000\GIS\dB\Program\EDMS.mde/Groundwater Level

TABLE 2
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
NOVEMBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
GW-35S MNW	1071701.925	1115985.585	696.19	NA	697.39	S	1	11/6/2006 923	3.08	694.31	0.00	694.31	
MH-01 MH	1073806.665	1114810.501	698.62	NA	698.62	NA	1	11/6/2006 829	11.52	687.10	0.00	687.10	
MH-03 MH	1073736.789	1115259.334	699.40	NA	699.40	NA	1	11/6/2006 842	11.21	688.19	0.00	688.19	
MH-07 MH	1073838.229	1116243.757	696.82	NA	696.82	NA	1	11/6/2006 847	9.44	687.38	0.00	687.38	
MH-10 MH	1073540.729	1117381.524	703.01	NA	703.01	NA	1	11/6/2006 853	14.50	688.51	0.00	688.51	
MH-15 MH	1072531.567	1117761.125	699.02	NA	699.02	NA	1	11/6/2006 905	15.05	683.97	0.00	683.97	
MH-16 MH	1072133.714	1117748.238	698.57	NA	698.57	NA	1	11/6/2006 907	16.31	682.26	0.00	682.26	
MH-17 MH	1071813.137	1117180.019	702.16	NA	702.16	NA	1	11/6/2006 911	18.41	683.75	0.00	683.75	
MH-20 MH	1071756.395	1115997.024	706.20	NA	706.20	NA	1	11/6/2006 9.22	19.72	686.48	0.00	686.48	
MH-22 MH	1072158.023	1115589.309	698.05	NA	698.05	NA	1	11/6/2006 926	9.12	688.93	0.00	688.93	
MH-25 MH	1072483.928	1114820.313	698.17	NA	698.17	NA	1	11/6/2006 819	11.11	687.06	0.00	687.06	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:

MH	Manhole Monitoring Point
MNW	Monitoring Well

TABLE 2
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
NOVEMBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
SG-01 SG	1073882.887	1114813.101		NA	690.00	S	1	11/6/2006 831	-1.65	691.65	0.00	691.65	
SG-02	1073796.856	1115255.756						11/6/2006 851	-3.30	-	0.00	-	
WW-01 MH	1073676.903	1115710.476		NA	684.02		1	11/6/2006 0730	-4.0	688.02	0.00	688.02	
WW-02 MH	1073684.724	1116792.311		NA	684.18		1	11/6/2006 0730	-4.5	688.68	0.00	688.68	
WW-03 MH	1073140.339	1117618.499		NA	683.80		1	11/6/2006 0730	-5.5	689.30	0.00	689.30	
WW-04 MH	1072057.563	1117610.508		NA	676.62		1	11/6/2006 0730	-5.1	681.72	0.00	681.72	
WW-05 MH	1071661.368	1116370.876		NA	676.14		1	11/6/2006 0730	-4.7	680.84	0.00	680.84	
WW-06 MH	1072988.420	1114811.518		NA	681.89		1	11/6/2006 0730	-5.6	687.49	0.00	687.49	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:

MH	Manhole Monitoring Point
MNW	Monitoring Well

Filter = ((tblGWD.LOGDATE=#11/6/2006#))

Printed: 4/6/2007 9:14:20 AM
N:\11172700.00000\GIS\dB\Program\EDMS.mde/Groundwater Level

TABLE 3
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
DECEMBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
GW-03S MNW	1073812.622	1114605.762	692.61	NA	693.80	S	1	12/21/2006 1216	2.19	691.61	0.00	691.61	
GW-04S MNW	1072284.456	1114685.127	690.76	NA	692.72	S	1	12/21/2006 1236	4.49	688.23	0.00	688.23	
GW-07S MNW	1071238.157	1117666.265	697.47	NA	699.51	S	1	12/21/2006 1302	5.12	694.39	0.00	694.39	
GW-08SR MNW	1073714.172	1116786.343	695.08	NA	697.50	S	1	12/21/2006 1224	5.33	692.17	0.00	692.17	
GW-28S MNW	1073129.479	1117648.927	698.60	NA	700.95	S	1	12/21/2006 1230	6.40	694.55	0.00	694.55	
GW-29S MNW	1072552.638	1117761.993	697.50	NA	699.63	S	1	12/21/2006 1257	6.15	693.48	0.00	693.48	
GW-30S MNW	1072096.109	1117743.563	693.67	NA	696.58	S	1	12/21/2006 1252	7.15	689.43	0.00	689.43	
GW-31S MNW	1071786.280	1117191.441	695.84	NA	698.62	S	1	12/21/2006 1248	3.22	695.40	0.00	695.40	
GW-32S MNW	1071613.793	1116364.200	696.19	NA	698.37	S	1	12/21/2006 1245	3.36	695.01	0.00	695.01	
GW-33S MNW	1072165.625	1115561.866	695.94	NA	698.24	S	1	12/21/2006 1241	4.78	693.46	0.00	693.46	
GW-34S MNW	1072979.205	1114730.200	692.51	NA	694.77	S	1	12/21/2006 1208	3.04	691.73	0.00	691.73	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:

MH	Manhole Monitoring Point
MNW	Monitoring Well

TABLE 3
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
DECEMBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
GW-35S MNW	1071701.925	1115985.585	696.19	NA	697.39	S	1	12/21/2006 1244	3.40	693.99	0.00	693.99	
MH-01 MH	1073806.665	1114810.501	698.62	NA	698.62	NA	1	12/21/2006 1211	9.03	689.59	0.00	689.59	
MH-03 MH	1073736.789	1115259.334	699.40	NA	699.40	NA	1	12/21/2006 1219	9.93	689.47	0.00	689.47	
MH-07 MH	1073838.229	1116243.757	696.82	NA	696.82	NA	1	12/21/2006 1222	8.12	688.70	0.00	688.70	
MH-10 MH	1073540.729	1117381.524	703.01	NA	703.01	NA	1	12/21/2006 1228	14.45	688.56	0.00	688.56	
MH-15 MH	1072531.567	1117761.125	699.02	NA	699.02	NA	1	12/21/2006 1254	15.0	684.02	0.00	684.02	
MH-16 MH	1072133.714	1117748.238	698.57	NA	698.57	NA	1	12/21/2006 1251	15.81	682.76	0.00	682.76	
MH-17 MH	1071813.137	1117180.019	702.16	NA	702.16	NA	1	12/21/2006 1247	18.36	683.80	0.00	683.80	
MH-20 MH	1071756.395	1115997.024	706.20	NA	706.20	NA	1	12/21/2006 1242	19.58	686.62	0.00	686.62	
MH-22 MH	1072158.023	1115589.309	698.05	NA	698.05	NA	1	12/21/2006 1240	8.51	689.54	0.00	689.54	
MH-25 MH	1072483.928	1114820.313	698.17	NA	698.17	NA	1	12/21/2006 1205	8.63	689.54	0.00	689.54	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:

MH	Manhole Monitoring Point
MNW	Monitoring Well

Filter = ((tblGWD.LOGDATE=#12/21/2006#))

Printed: 4/6/2007 9:15:08 AM
N:\11172700.00000\GIS\dB\Program\EDMS.mde/Groundwater Level

TABLE 3
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
DECEMBER 2006

Location ID / Type	Northing	Easting	Ground Elevation (ft)	Casing Elevation (ft)	Meas.point (Riser)Elev.(ft)	Geol. Zone	Specific Gravity	Date / Time	Depth to Water (ft)	Water Elev. (ft)	Product Thick. (ft)	Corrected Water Elev. (ft)	Remark
SG-01 SG	1073882.887	1114813.101		NA	690.00	S	1	12/21/2006 1212	-1.57	691.57	0.00	691.57	
SG-02	1073796.856	1115255.756						12/21/2006 1225	-3.40	-	0.00	-	
WW-01 MH	1073676.903	1115710.476		NA	684.02		1	12/21/2006 1130	-5.3	689.32	0.00	689.32	
WW-02 MH	1073684.724	1116792.311		NA	684.18		1	12/21/2006 1130	-4.5	688.68	0.00	688.68	
WW-03 MH	1073140.339	1117618.499		NA	683.80		1	12/21/2006 1130	-3.8	687.60	0.00	687.60	
WW-04 MH	1072057.563	1117610.508		NA	676.62		1	12/21/2006 1130	-5.5	682.12	0.00	682.12	
WW-05 MH	1071661.368	1116370.876		NA	676.14		1	12/21/2006 1130	-4.9	681.04	0.00	681.04	
WW-06 MH	1072988.420	1114811.518		NA	681.89		1	12/21/2006 1130	-8.3	690.19	0.00	690.19	

NM - No Measurement

The value noted in the column labeled Specific Gravity is an assumed value for free product, if found.

Type:
MH Manhole Monitoring Point
MNW Monitoring Well

Filter = ((tblGWD.LOGDATE=#12/21/2006#))

Printed: 4/6/2007 9:15:08 AM
N:\11172700.00000\GIS\dB\Program\EDMS.mde/Groundwater Level

TABLE 4
PFOHL BROTHERS LANDFILL SITE
OVERBURDEN HYDRAULIC GRADIENT

WELL PAIR:	WW-1	*	Level	WW-2	GW-8SR	Level	WW-3	GW-28S	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
10/5/2006	688.02	---	---	688.68	692.41	3.73	689.30	695.88	6.58
11/6/2006	688.02	---	---	688.68	692.17	3.49	689.30	695.05	5.75
12/21/2006	689.32	---	---	688.68	692.17	3.49	687.60	694.55	6.95

WELL PAIR:	WW-4	*	Level	WW-5	GW-32S	Level	WW-6	GW-34S	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
10/5/2006	683.62	---	---	682.24	696.01	13.77	687.79	692.12	4.33
11/6/2006	681.72	---	---	680.84	695.22	14.38	687.49	692.08	4.59
12/21/2006	682.12	---	---	681.04	695.01	13.97	690.19	691.73	1.54

WELL PAIR:	MH-1	SG-1	Level	MH-1	GW-3S	Level	MH-15	GW-29S	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
10/5/2006	687.43	691.97	4.54	687.43	691.73	4.30	683.97	694.46	10.49
11/6/2006	687.10	691.65	4.55	687.10	691.52	4.42	683.97	693.89	9.92
12/21/2006	689.59	691.57	1.98	689.59	691.61	2.02	684.02	693.48	9.46

WELL PAIR:	MH-16	GW-30S	Level	MH-17	GW-31S	Level	MH-20	GW-35S	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
10/5/2006	684.00	690.44	6.44	683.97	695.91	11.94	686.48	694.62	8.14
11/6/2006	682.26	689.46	7.20	683.75	695.2	11.45	686.48	694.31	7.83
12/21/2006	682.76	689.43	6.67	683.8	695.4	11.60	686.62	693.99	7.37

WELL PAIR:	MH-22	GW-33S	Level
	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)
10/5/2006	689.07	694.93	5.86
11/6/2006	688.93	693.78	4.85
12/21/2006	689.54	693.46	3.92

Notes:
* = No corresponding monitoring well

ft amsl = feet above mean sea level
ft = feet

APPENDIX D

GROUNDWATER PURGE AND COLLECTION LOGS

GROUNDWATER SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers* Project Number: *11172700.00004*

Sampling Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Stachowski*

Date of Inspection: *November 6, 2006*

Sample I.D. Number	***Well Number***	***Well Volume (gal.)***	***Volume Purged (gal.)***	***Sample Time***	***Sample Description***	***Analysis Required***	***Chain-of-Custody Number***
GW-29S	GW-29S	2.3	3.3	13:30	Groundwater	VOCs/SVOCs/ Metals/Dioxins & Furans/Cyanide/ PCBs (at GW-29S only)	
GW-30S	GW-30S	1.8	5.9	14:45	Groundwater		
GW-30S-MS	GW-30S	1.8	5.9	14:45	Matrix Spike		
GW-30S-MSD	GW-30S	1.8	5.9	14:45	Matrix Spike Duplicate		
GW-31S	GW-31S	1.2	2.0	16:00	Groundwater		
GW-32S	GW-32S	1.1	2.9	17:10	Groundwater		
TB-110606	---	---	---	---	Trip Blank	VOCs	

Additional Comments: All wells were purged using low flow methods until parameter stabilization. Some wells went dry even at very low flow conditions.

GROUNDWATER SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers* Project Number: *11172700.00004*

Sampling Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Stachowski*

Date of Inspection: *November 7, 2006*

Sample I.D. Number	***Well Number***	***Well Volume (gal.)***	***Volume Purged (gal.)***	***Sample Time***	***Sample Description***	***Analysis Required***	***Chain-of-Custody Number***
GW-7S	GW-7S	5.1	8.0	8:40	Groundwater	VOCs/SVOCs/ Metals/Dioxins & Furans/Cyanide	
GW-7D	GW-7D	16	16	9:00	Groundwater		
GW-33S	GW-33S	0.6	2.0	11:35	Groundwater		
GW-35S	GW-35S	0.7	2.8	13:05	Groundwater		
GW-26D	GW-26D	22.4	8.3	14:15	Groundwater		
DUP-110706	GW-26D	22.4	8.3	14:15	Field Duplicate		
GW-28S	GW-28S	1.6	4.3	16:10	Groundwater		
TB-110706	---	---	---	---	Trip Blank	VOCs	

Additional Comments: All wells were purged using low flow methods until parameter stabilization. Some wells went dry even at very low flow conditions.

GROUNDWATER SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers* Project Number: *11172700.00004*

Sampling Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Stachowski*

Date of Inspection: *November 8, 2006*

Sample I.D. Number	***Well Number***	***Well Volume (gal.)***	***Volume Purged (gal.)***	***Sample Time***	***Sample Description***	***Analysis Required***	***Chain-of-Custody Number***
GW-4D	GW-4D	22.0	5.0	10:00	Groundwater	VOCs/SVOCs/ Metals/ Dioxins & Furans/Cyanide/ PCBs (at GW-4S and GW-8SR only)	
GW-4S	GW-4S	1.9	4.9	10:30	Groundwater		
GW-1S	GW-1S	2.0	4.5	11:30	Groundwater		
GW-1D	GW-1D	24.4	8.5	12:30	Groundwater		
GW-8SR	GW-8SR	1.3	3.9	14:25	Groundwater		
GW-8D	GW-8D	20.3	10.9	16:00	Groundwater		
DUP-110806	GW-8SR	1.3	3.9	14:25	Field Duplicate	PCBs only	
TB-110806	---	---	---	---	Trip Blank	VOCs	

Additional Comments: All wells were purged using low flow methods until parameter stabilization. Some wells went dry even at very low flow conditions.

GROUNDWATER SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers* Project Number: *11172700.00004*

Sampling Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Stachowski*

Date of Inspection: *November 9, 2006*

Sample I.D. Number	***Well Number***	***Well Volume (gal.)***	***Volume Purged (gal.)***	***Sample Time***	***Sample Description***	***Analysis Required***	***Chain-of-Custody Number***
GW-34S-MS	GW-34S	1.2	4.9	9:20	Matrix Spike	PCBs only	
GW-34S-MSD	GW-34S	1.2	4.9	9:20	Matrix Spike Duplicate	PCBs only	
GW-34S	GW-34S	1.2	4.9	9:20	Groundwater	VOCs/SVOCs/ Metals/ Dioxins & Furans/Cyanide/ PCBs (at GW-3S and GW-34S only)	
GW-3S	GW-3S	1.8	2.4	11:25	Groundwater		
GW-3D	GW-3D	22.1	6.4	12:45	Groundwater		
TB-110906	---	---	---	---	Trip Blank	VOCs	

Additional Comments: All wells were purged using low flow methods until parameter stabilization. Some wells went dry even at very low flow conditions.

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-1S

Date: 11/8/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/ Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 2.43' Depth to Well Bottom: 14.94' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 7.7 Estimated Purge Volume (liters): 17.2

Sample ID: GW-1S Sample Time: 11:30 QA/QC: None

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
10:55	7.04	12.0	2.97	0.00	260	-167	600	2.43
11:00	7.00	12.0	2.94	0.00	102	-173	490	4.43
11:05	6.95	12.1	2.92	0.00	44	-179	470	4.41
11:10	6.92	12.1	2.92	0.00	38	-183	470	4.30
11:15	6.90	12.1	2.92	0.00	31	-186	470	4.19
11:20	6.89	12.2	2.92	0.00	25	-187	470	4.04
11:25	6.87	12.2	2.91	0.00	25	-189	470	3.92
11:30	6.87	12.1	2.91	0.00	22	-189	470	3.88
Tolerance:	**0.1**	**---**	**3%**	**10%**	**10%**	**+ or - 10**	**---**	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-1D

Date: 11/8/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 2.29' Depth to Well Bottom: 39.64' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 92.3 Estimated Purge Volume (liters): 32.0

Sample ID: GW-1D Sample Time: 12:30 QA/QC: None

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
11:50	7.36	1.5	0.683	0.00	111	-210	800	2.29
11:55	7.39	11.5	0.681	0.00	62	-230	800	2.32
12:00	7.39	11.6	0.680	0.00	26	-255	800	2.33
12:05	7.40	11.6	0.679	0.00	15	-266	800	2.32
12:10	7.40	11.6	0.679	0.00	11	-273	800	2.32
12:15	7.40	11.7	0.678	0.00	8	-277	800	2.32
12:20	7.39	11.7	0.677	0.00	7	-280	800	2.35
12:25	7.38	11.7	0.675	0.00	5	-280	800	2.33
12:30	7.37	11.8	0.675	0.00	6	-281	800	2.33
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-3S

Date: 11/9/2007 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 2.14' Depth to Well Bottom: 13.26' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 6.9 Estimated Purge Volume (liters): 9.1

Sample ID: GW-3S Sample Time: 11:25 QA/QC: None

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide, PCBs

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
10:45	7.37	11.5	0.668	3.61	18	2	390	2.14
10:50	7.05	11.6	0.678	2.01	10	-17	280	4.67
10:55	6.99	11.9	0.684	0.63	7	-37	200	4.86
11:00	6.99	12.2	0.690	0.23	4	-47	200	4.88
11:05	7.06	11.8	0.682	0.69	4	-53	200	4.93
11:10	7.06	12.0	0.689	0.23	4	-54	200	4.99
11:15	7.04	12.2	0.693	0.00	2	-59	170	4.94
11:20	7.06	12.2	0.688	0.00	2	-61	170	4.90
11:25	7.06	12.3	0.688	0.00	2	-62	170	4.90
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-3D

Date: 11/9/2007 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 1.72' Depth to Well Bottom: 35.65' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 83.8 Estimated Purge Volume (liters): 24.4

Sample ID: GW-3D Sample Time: 12:45 QA/QC: None

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
12:05	6.98	12.8	0.781	0.00	9	-91	610	1.72
12:10	6.86	12.7	0.780	0.00	3	-106	610	1.72
12:15	6.88	12.7	0.780	0.00	2	-113	610	1.73
12:20	6.92	12.7	0.780	0.00	3	-122	610	1.72
12:25	6.92	12.7	0.780	0.00	3	-124	610	1.72
12:30	6.94	12.8	0.780	0.00	2	-128	610	1.72
12:35	6.94	12.8	0.779	0.00	3	-130	610	1.72
12:40	6.94	12.7	0.779	0.00	2	-132	610	1.72
12:45	6.95	12.7	0.780	0.00	3	-134	610	1.72
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-4S

Date: 11/8/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 4.61' Depth to Well Bottom: 16.28' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 7.2 Estimated Purge Volume (liters): 18.6

Sample ID: GW-4S Sample Time: 10:30 QA/QC: None

Sample Parameters: VOCs, SVOCs, PCBs, Dioxin, TAL Metals, Total Cyanide

Other Information: Well only makes ~90 ml/min;decided to pump dry, let recharge and grab sample.
Would have taken 60+ minutes to fill sample bottles at 90 ml/min.

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
8:15	7.90	11.6	0.258	0.00	370	-193	440	4.61
8:20	7.89	11.5	0.258	0.00	226	-181	150	6.14
8:25	7.86	11.3	0.258	0.00	192	-176	150	6.66
8:30	7.89	11.4	0.257	0.00	205	-163	150	7.24
8:35	7.82	11.5	0.260	0.00	194	-188	940	9.90
8:40	7.84	11.6	0.261	0.00	171	-193	940	12.20
8:45	7.66	12.1	0.272	0.00	27	-206	940	14.70
8:50	7.66	12.2	0.267	0.00	43	-191	940	Dry
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-4D

Date: 11/8/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 11.89' Depth to Well Bottom: 45.56' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 83.2 Estimated Purge Volume (liters): 19.0

Sample ID: GW-4D Sample Time: 10:00 QA/QC: None

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information: Slight sulfur odor.

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
9:05	7.43	11.0	0.682	0.00	24	-203	600	11.89
9:10	7.44	11.1	0.684	0.00	18	-255	470	12.86
9:15	7.43	11.1	0.692	0.00	16	-288	470	13.20
9:20	7.39	11.2	0.698	0.00	15	-312	350	13.47
9:25	7.32	11.2	0.705	0.00	14	-325	350	13.77
9:30	7.31	11.2	0.704	0.00	12	-328	300	13.90
9:35	7.29	11.2	0.711	0.00	12	332	300	14.01
9:40	7.27	11.5	0.714	0.00	8	-334	240	14.03
9:45	7.25	11.3	0.720	0.00	8	-339	240	14.02
9:50	7.24	11.3	0.719	0.00	10	-341	240	14.03
9:55	7.24	11.3	0.723	0.00	8	-344	240	14.03
10:00	7.23	11.3	0.724	0.00	6	-345	240	14.03
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

WELL PURGING LOG

URS Corporation

SITE NAME: Pfohl Brothers Landfill WELL NO.: GW-7S

PROJECT NO.: 11172700.00004

STAFF: R. Murphy, R. Piurek

DATE(S): 11/6/06 - 11/7/06

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	35.02	1"	0.040
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	4.81	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	30.21	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	0.17	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	5.1	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 3)	=	15.4	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	8	8"	2.60

$V=0.0408 \times (\text{CASING DIAMETER [INCHES]})^2$

	ACCUMULATED VOLUME PURGED (GALLONS)										
PARAMETERS	0	2	4	6	8						
pH	7.89	7.94	7.99	7.94	-						
SPEC. COND. (mS/cm)	0.316	0.313	0.312	0.311	-						
TEMPERATURE (^{0}C)	13.3	12.7	12.4	11.8	-						
TURBIDITY (NTU)	15	11	32	834	-						
Eh (mV)	-85	-60	-44	-32	-						

COMMENTS:

Purged with dedicated stainless steel bailer. Well went dry after removing about 8 gallons. Return on 11/7/06 and sample with dedicated stainless steel bailer.

Sample time 8:40 on 11/7/06

Depth to water was 5.05' on 11/7/06

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

WELL PURGING LOG

URS Corporation

SITE NAME: Pfohl Brothers Landfill WELL NO.: GW-7D

PROJECT NO.: 11172700.00004

STAFF: R. Murphy, R. Piurek

DATE(S): 11/6/06 - 11/7/06

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	60.60	1"	0.040
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	35.88	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	24.72	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	0.66	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	16.3	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 3)	=	48.9	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	16	8"	2.60

$V=0.0408 \times (\text{CASING DIAMETER [INCHES]})^2$

	ACCUMULATED VOLUME PURGED (GALLONS)										
PARAMETERS	0	4	8	12	16						
pH	6.54	7.16	7.33	7.48	7.53						
SPEC. COND. (mS/cm)	0.482	0.438	0.407	0.396	0.390						
TEMPERATURE (^{0}C)	12.4	12.2	13.0	12.6	12.6						
TURBIDITY (NTU)	60	5	7	9	10						
Eh (mV)	-95	-197	-167	-155	-145						

COMMENTS:

Purged with a dedicated whale pump and tubing. Well went dry after removing about 16 gallons. Return on 11/7/06 and sample with dedicated stainless steel bailer.

Sample time 9:00 on 11/7/06

Depth to water was 58.41' on 11/7/06

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-8SR

Date: 11/8/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 5.29' Depth to Well Bottom: 13.03' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 4.8 Estimated Purge Volume (liters): 14.8

Sample ID: GW-8SR Sample Time: 14:25 QA/QC: DUP-110806 (PCBs only)

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide, PCBs

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
13:30	6.92	12.6	0.935	0.08	>1000	-103	380	5.29
13:35	6.83	12.5	0.930	0.00	>1000	-105	240	7.78
13:40	6.84	12.4	0.933	0.00	503	-84	270	8.03
13:45	6.82	12.6	0.935	0.00	389	-86	270	8.20
13:50	6.81	12.6	0.937	0.00	279	-94	270	8.32
13:55	6.80	12.6	0.938	0.00	198	-105	270	8.38
14:00	6.79	12.6	0.937	0.00	148	-115	270	8.47
14:05	6.79	12.7	0.938	0.00	126	-118	250	8.33
14:10	6.78	12.7	0.939	0.00	96	-121	250	8.32
14:15	6.78	12.6	0.938	0.00	63	-123	250	8.33
14:20	6.78	12.6	0.938	0.00	45	-125	250	8.33
14:25	6.78	12.6	0.939	0.00	28	-126	250	8.33
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-8D

Date: 11/8/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 5.53' Depth to Well Bottom: 36.58' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 76.7 Estimated Purge Volume (liters): 41.3

Sample ID: GW-8D Sample Time: 16:00 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
15:05	6.87	12.1	2.44	2.17	103	-101	750	5.53
15:10	6.90	12.0	2.49	0.00	36	-123	750	5.53
15:15	6.93	12.1	2.49	0.00	25	-140	750	5.54
15:20	6.93	12.1	2.48	0.00	19	-148	750	5.53
15:25	6.94	12.1	2.47	0.00	18	-155	750	5.53
15:30	6.94	12.2	2.46	0.00	8	-163	750	5.53
15:35	6.94	12.2	2.34	0.00	11	-176	750	5.53
15:40	6.91	12.2	1.83	0.00	7	-199	750	5.53
15:45	6.90	12.2	1.50	0.00	4	-197	750	5.53
15:50	6.87	12.2	1.43	0.00	3	-196	750	5.55
15:55	6.88	12.2	1.42	0.00	3	-200	750	5.53
16:00	6.87	12.2	1.42	0.00	4	-202	750	5.53
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-26D

Date: 11/7/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 6.44' Depth to Well Bottom: 40.75' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 84.8 Estimated Purge Volume (liters): 31.5

Sample ID: GW-26D Sample Time: 14:15 QA/QC: DUP-110706

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
13:30	7.02	12.6	0.832	5.27	31	-114	700	6.44
13:35	6.97	12.2	0.875	0.00	12	-128	700	6.45
13:40	6.98	12.1	0.903	0.00	4	-132	700	6.45
13:45	6.98	12.1	0.906	0.00	5	-134	700	6.45
13:50	6.98	12.0	0.908	0.00	3	-137	700	6.45
13:55	6.99	12.0	0.908	0.00	3	-138	700	6.45
14:00	6.99	12.0	0.908	0.00	3	-140	700	6.45
14:05	6.99	12.0	0.909	0.00	2	-141	700	6.45
14:10	6.99	12.0	0.909	0.00	2	-142	700	6.45
14:15	6.99	12.0	0.910	0.00	3	-142	700	6.45
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-28S

Date: 11/7/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 5.82' Depth to Well Bottom: 15.58' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 6.0 Estimated Purge Volume (liters): 16.1

Sample ID: GW-28S Sample Time: 16:10 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
15:15	7.06	12.4	1.22	0.13	464	20	250	5.82
15:20	7.07	12.4	1.22	0.00	144	24	280	6.85
15:25	7.07	12.4	1.23	0.00	72	17	300	7.40
15:30	7.07	12.4	1.23	0.00	43	8	300	7.55
15:35	7.07	12.5	1.23	0.00	26	-2	300	7.65
15:40	7.06	12.5	1.23	0.00	18	-16	300	7.72
15:45	7.05	12.5	1.24	0.00	11	-15	300	7.79
15:50	7.05	12.5	1.23	0.00	10	-23	300	7.79
15:55	7.05	12.5	1.23	0.00	14	-30	300	7.79
16:00	7.04	12.5	1.24	0.00	12	-42	300	7.79
16:05	7.02	12.5	1.25	0.00	13	-47	300	7.78
16:10	7.01	12.5	1.26	0.00	18	-52	270	7.74
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-29S

Date: 11/6/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 5.73' Depth to Well Bottom: 20.02' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 8.8 Estimated Purge Volume (liters): 12.6

Sample ID: GW-29S Sample Time: 13:30 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide, PCBs

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
12:40	7.79	12.9	0.396	4.61	>1000	-48	450	8.12
12:45	7.75	13.1	0.396	4.30	>1000	-42	300	8.42
12:50	7.55	13.4	0.412	3.63	343	-107	220	8.64
12:55	7.35	13.4	0.438	2.94	278	-118	220	8.71
13:00	7.18	13.2	0.485	2.09	228	-122	220	8.78
13:05	7.06	13.3	1.08	1.54	199	-124	220	8.82
13:10	7.07	13.3	1.15	0.00	207	-131	220	8.88
13:15	7.00	13.3	1.10	0.55	150	-127	220	8.92
13:20	6.99	13.3	1.19	0.00	121	-130	220	8.97
13:25	7.00	13.4	1.20	0.00	73.3	-130	220	8.98
13:30	7.00	13.4	1.21	0.00	63.1	-131	220	9.00
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-30S

Date: 11/6/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 7.15' Depth to Well Bottom: 17.98' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 6.7 Estimated Purge Volume (liters): 22.5

Sample ID: GW-30S Sample Time: 14:45 QA/QC: MS/MSD

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
14:20	6.89	13.5	5.25	0.00	>1000	-122	900	7.22
14:25	6.82	13.5	4.70	0.00	9	-134	900	7.26
14:30	6.83	13.5	4.70	0.00	4	-138	900	7.26
14:35	6.83	13.5	4.72	0.00	4	-140	900	7.28
14:40	6.83	13.5	4.72	0.00	2	-143	900	7.30
14:45	6.84	13.5	4.73	0.00	2	-144	900	7.29
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

WELL PURGING LOG

URS Corporation

SITE NAME: Pfohl Brothers Landfill WELL NO.: GW-31S

PROJECT NO.: 11172700.00004

STAFF: R. Murphy, R. Piurek

DATE(S): 11/6/06

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	9.55	1"	0.040
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	2.58	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	6.97	3"	0.38
4. VOLUME OF WATER/FOOT OF CASING (GAL.)	=	0.17	4"	0.66
5. VOLUME OF WATER IN CASING (GAL.)(#3 x #4)	=	1.2	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 3)	=	3.6	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	2	8"	2.60

$V=0.0408 \times (\text{CASING DIAMETER [INCHES]})^2$

	ACCUMULATED VOLUME PURGED (GALLONS)										
PARAMETERS	0	0.5	0.75	1.0	2.0						
pH	7.40	7.17	7.11	7.09	7.09						
SPEC. COND. (mS/cm)	0.606	0.609	0.586	0.576	0.578						
TEMPERATURE (^{0}C)	12.0	10.9	10.7	11.1	12.1						
TURBIDITY (NTU)	418	211	91	232	240						
Eh (mV)	39	32	25	13	4						

COMMENTS:

Purged with a Geopump 2 and dedicated tubing. Well went dry after removing about 2 gallons. Return later on same day and collect sample.

Sample time 16:00 on 11/6/06
Depth to water was 2.75' at 16:00.
Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-32S

Date: 11/6/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 3.03' Depth to Well Bottom: 9.92' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 4.3 Estimated Purge Volume (liters): 10.8

Sample ID: GW-32S Sample Time: 17:10 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
16:35	7.54	11.4	0.351	4.29	502	82	350	3.03
16:40	7.40	11.4	0.338	2.68	239	85	320	3.84
16:45	7.38	11.5	0.337	1.20	33	72	300	3.81
16:50	7.43	11.4	0.331	0.59	12	55	300	3.83
16:55	7.46	11.4	0.324	0.17	8	45	300	3.85
17:00	7.46	11.5	0.319	0.00	5	39	300	3.56
17:05	7.47	11.4	0.317	0.00	3	35	300	3.88
17:10	7.47	11.4	0.311	0.00	2	31	300	3.90
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-33S

Date: 11/7/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 4.41' Depth to Well Bottom: 8.22' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 2.4 Estimated Purge Volume (liters): 7.5

Sample ID: GW-33S Sample Time: 11:35 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
11:05	6.59	11.3	0.674	3.03	196	205	300	4.75
11:10	6.90	10.9	0.667	1.39	62	162	250	6.25
11:15	6.98	11.2	0.665	0.65	26	148	250	6.42
11:20	7.00	11.3	0.656	0.00	12	139	250	6.64
11:25	7.02	11.3	0.662	0.00	9	130	230	6.90
11:30	7.03	11.4	0.662	0.00	13	130	220	7.07
11:35	7.03	11.5	0.661	0.00	6	133	220	7.21
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-34S

Date: 11/9/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/ Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 2.65' Depth to Well Bottom: 10.01' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 4.5 Estimated Purge Volume (liters): 18.6

Sample ID: GW-34S Sample Time: 9:20 QA/QC: MS/MSD (PCBs only)

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide, PCBs

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
8:35	6.62	10.0	1.55	0.00	447	-53	480	2.65
8:40	6.81	9.4	1.48	0.00	138	-43	480	5.63
8:45	6.84	9.4	1.44	0.00	22	-29	480	5.64
8:50	6.85	9.3	1.31	0.00	13	-19	480	5.66
8:55	6.85	9.3	1.28	0.00	6	-16	480	5.98
9:00	6.87	9.3	1.33	0.00	6	-17	390	6.17
9:05	6.88	9.6	1.41	0.00	16	-27	390	6.43
9:10	6.89	9.7	1.42	0.00	29	-24	270	6.42
9:15	6.92	9.8	1.41	0.00	29	-23	270	6.42
9:20	6.94	9.9	1.41	0.00	27	-28	270	6.42
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-35S

Date: 11/7/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 3.07' Depth to Well Bottom: 7.45' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 2.7 Estimated Purge Volume (liters): 10.5

Sample ID: GW-35S Sample Time: 13:05 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
12:35	7.22	11.8	0.423	0.93	0	150	400	3.07
12:40	7.19	11.9	0.452	0.00	10	116	340	4.26
12:45	7.20	12.0	0.468	0.00	7	80	340	4.22
12:50	7.22	12.1	0.467	0.00	4	53	340	4.24
12:55	7.22	12.2	0.468	0.00	7	44	340	4.24
13:00	7.23	12.1	0.466	0.00	6	42	340	4.21
13:05	7.23	12.1	0.466	0.00	3	40	340	4.21
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-32S

Date: 11/6/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 3.03' Depth to Well Bottom: 9.92' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 4.3 Estimated Purge Volume (liters): 10.8

Sample ID: GW-32S Sample Time: 17:10 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
16:35	7.54	11.4	0.351	4.29	502	82	350	3.03
16:40	7.40	11.4	0.338	2.68	239	85	320	3.84
16:45	7.38	11.5	0.337	1.20	33	72	300	3.81
16:50	7.43	11.4	0.331	0.59	12	55	300	3.83
16:55	7.46	11.4	0.324	0.17	8	45	300	3.85
17:00	7.46	11.5	0.319	0.00	5	39	300	3.56
17:05	7.47	11.4	0.317	0.00	3	35	300	3.88
17:10	7.47	11.4	0.311	0.00	2	31	300	3.90
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-33S

Date: 11/7/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 4.41' Depth to Well Bottom: 8.22' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 2.4 Estimated Purge Volume (liters): 7.5

Sample ID: GW-33S Sample Time: 11:35 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
11:05	6.59	11.3	0.674	3.03	196	205	300	4.75
11:10	6.90	10.9	0.667	1.39	62	162	250	6.25
11:15	6.98	11.2	0.665	0.65	26	148	250	6.42
11:20	7.00	11.3	0.656	0.00	12	139	250	6.64
11:25	7.02	11.3	0.662	0.00	9	130	230	6.90
11:30	7.03	11.4	0.662	0.00	13	130	220	7.07
11:35	7.03	11.5	0.661	0.00	6	133	220	7.21
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-34S

Date: 11/9/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/ Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 2.65' Depth to Well Bottom: 10.01' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 4.5 Estimated Purge Volume (liters): 18.6

Sample ID: GW-34S Sample Time: 9:20 QA/QC: MS/MSD (PCBs only)

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide, PCBs

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
8:35	6.62	10.0	1.55	0.00	447	-53	480	2.65
8:40	6.81	9.4	1.48	0.00	138	-43	480	5.63
8:45	6.84	9.4	1.44	0.00	22	-29	480	5.64
8:50	6.85	9.3	1.31	0.00	13	-19	480	5.66
8:55	6.85	9.3	1.28	0.00	6	-16	480	5.98
9:00	6.87	9.3	1.33	0.00	6	-17	390	6.17
9:05	6.88	9.6	1.41	0.00	16	-27	390	6.43
9:10	6.89	9.7	1.42	0.00	29	-24	270	6.42
9:15	6.92	9.8	1.41	0.00	29	-23	270	6.42
9:20	6.94	9.9	1.41	0.00	27	-28	270	6.42
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11172700.00004 Site: Pfohl Brothers Well I.D.: GW-35S

Date: 11/7/2006 Sampling Personnel: Rob Murphy, Rob Piurek Company: URS Corporation

Purging/Sampling Device: Geopump 2 Tubing Type: HDPE Pump/Tubing Inlet Location: Screen midpoint

Measuring Point: Below Top of Riser Initial Depth to Water: 3.07' Depth to Well Bottom: 7.45' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 2.7 Estimated Purge Volume (liters): 10.5

Sample ID: GW-35S Sample Time: 13:05 QA/QC: -

Sample Parameters: VOCs, SVOCs, Dioxin, TAL Metals, Total Cyanide

Other Information:

PURGE PARAMETERS

TIME	pH	TEMP (°C)	COND. (mS/cm)	DISS. O_2 (mg/l)	TURB. (NTU)	Eh (mV)	FLOW RATE (ml/min.)	DEPTH TO WATER (btor)
12:35	7.22	11.8	0.423	0.93	0	150	400	3.07
12:40	7.19	11.9	0.452	0.00	10	116	340	4.26
12:45	7.20	12.0	0.468	0.00	7	80	340	4.22
12:50	7.22	12.1	0.467	0.00	4	53	340	4.24
12:55	7.22	12.2	0.468	0.00	7	44	340	4.24
13:00	7.23	12.1	0.466	0.00	6	42	340	4.21
13:05	7.23	12.1	0.466	0.00	3	40	340	4.21
Tolerance:	0.1	---	3%	10%	10%	+ or - 10	---	

Information: WATER VOLUMES--0.75 inch diameter well = 87 ml/ft; 1 inch diameter well = 154 ml/ft; 2 inch diameter well = 617 ml/ft; 4 inch diameter well = 2470 ml/ft ($vol_{cyl} = \pi r^2 h$)

APPENDIX E

HISTORICAL ANALYTICAL RESULTS

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01D	GW-01D	GW-01D	GW-01D	GW-01D
Sample ID				GW-1D-012204	GW-01D	GW-1D	GW-1D	GW-01D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/22/04	10/02/04	05/05/05	09/21/05	05/18/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-				NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA	NA		
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-				0.16 J	
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-				0.14 J	
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01D	GW-01D	GW-01D	GW-01D	GW-01D
Sample ID				GW-1D-012204	GW-01D	GW-1D	GW-1D	GW-01D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/22/04	10/02/04	05/05/05	09/21/05	05/18/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-	2 J				
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					
Total TCDD	NG/L	-	-	NA			NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA			NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA			NA	NA
Total TCDF	NG/L	-	-	NA			NA	NA
Metals								
Aluminum	MG/L	-	-		0.025 J+			

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01D	GW-01D	GW-01D	GW-01D	GW-01D
Sample ID				GW-1D-012204	GW-01D	GW-1D	GW-1D	GW-01D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/22/04	10/02/04	05/05/05	09/21/05	05/18/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-					
Barium	MG/L	1	-	0.050	0.052	0.054	0.056	0.055
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	110	106	101	110	117
Chromium	MG/L	0.05	-	0.034			0.037 J-	0.048 J+
Cobalt	MG/L	-	-					
Copper	MG/L	0.2	-	0.072		0.015	0.037	0.022
Iron	MG/L	0.3	-	0.985	0.161	0.456	5.9 J-	10.8
Lead	MG/L	0.025	-	0.006				
Magnesium	MG/L	35	-	38.5	34.8	39.4	38.8	40.5
Manganese	MG/L	0.3	-	0.027	0.017	0.020	0.10	0.088
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.035			0.025	0.012
Potassium	MG/L	-	-	2.85	2.41	2.54	2.8	2.7
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	60.9	74.2	81.3	74.8	69.1
Vanadium	MG/L	-	-					
Zinc	MG/L	2	-	0.037				0.015

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01D	GW-01D	GW-01D	GW-01D	GW-01D
Sample ID				GW-1D-012204	GW-01D	GW-1D	GW-1D	GW-01D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/22/04	10/02/04	05/05/05	09/21/05	05/18/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA		NA	
Barium 133 (Insoluble)	PCI/L	-	1520		NA		NA	
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA		NA	
Bismuth 214 (Soluble)	PCI/L	-	18900		NA		NA	
Cesium 134 (Insoluble)	PCI/L	-	80	1.75 ± 8.40E-01	NA		NA	
Cesium 137 (Soluble)	PCI/L	-	200		NA		NA	
Lead 212 (Insoluble)	PCI/L	-	123		NA		NA	
Lead 214 (Insoluble)	PCI/L	-	11800		NA		NA	
Lead 214 (Soluble)	PCI/L	-	11800		NA		NA	
Potassium 40 (Insoluble)	PCI/L	-	-		NA		NA	
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA		NA	
Thorium 234 (Insoluble)	PCI/L	-	401		NA		NA	
Uranium 235 (Insoluble)	PCI/L	-	-		NA		NA	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01D	GW-01S	GW-01S	GW-01S	GW-01S
Sample ID				GW-1D	GW-1S-012104	GW-01S	GW-1S	GW-1S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/08/06	01/21/04	10/02/04	05/05/05	09/21/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA				NA
1,2-Dichloroethene (total)	UG/L	5	-		NA	NA	NA	
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01D	GW-01S	GW-01S	GW-01S	GW-01S
Sample ID				GW-1D	GW-1S-012104	GW-01S	GW-1S	GW-1S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/08/06	01/21/04	10/02/04	05/05/05	09/21/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-				4	3 J
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-	NA				
Total TCDD	NG/L	-	-	NA	NA			NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA			NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA			NA
Total TCDF	NG/L	-	-	NA	NA			NA
Metals								
Aluminum	MG/L	-	-		3.59 J+	0.026 J+	0.331	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01D	GW-01S	GW-01S	GW-01S	GW-01S
Sample ID				GW-1D	GW-1S-012104	GW-01S	GW-1S	GW-1S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/08/06	01/21/04	10/02/04	05/05/05	09/21/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-		0.009			
Barium	MG/L	1	-	0.066	0.247	0.279	0.310	0.30
Cadmium	MG/L	0.005	-				0.001	
Calcium	MG/L	-	-	114	220	183	196	237
Chromium	MG/L	0.05	-	0.0042	0.087		0.037	
Cobalt	MG/L	-	-					
Copper	MG/L	0.2	-		0.069		0.037	
Iron	MG/L	0.3	-	1.0	9.27	4.17	16.6	7.6 J-
Lead	MG/L	0.025	-		0.009			
Magnesium	MG/L	35	-	37.7	38.6	26.7	35	39.1
Manganese	MG/L	0.3	-	0.038	1.07	0.788	1.17	0.76
Mercury	MG/L	7.00E-04	-			0.0002		
Nickel	MG/L	0.1	-		0.062	0.01	0.026	
Potassium	MG/L	-	-	3.6	3.24	3.70	2.84	2.8
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	105	449	394	565	321
Vanadium	MG/L	-	-		0.006			
Zinc	MG/L	2	-		0.090	0.016	0.05 J+	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01D	GW-01S	GW-01S	GW-01S	GW-01S
Sample ID				GW-1D	GW-1S-012104	GW-01S	GW-1S	GW-1S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/08/06	01/21/04	10/02/04	05/05/05	09/21/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270	NA		NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520	NA		NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900	NA		NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900	NA		NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80	NA		NA		NA
Cesium 137 (Soluble)	PCI/L	-	200	NA		NA		NA
Lead 212 (Insoluble)	PCI/L	-	123	NA		NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800	NA		NA		NA
Lead 214 (Soluble)	PCI/L	-	11800	NA		NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-	NA	29.8 ± 1.80E+01	NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05	NA		NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401	NA		NA	80.096 ± 4.41E+01	NA
Uranium 235 (Insoluble)	PCI/L	-	-	NA		NA		NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01S	GW-01S	GW-03D	GW-03D	GW-03D
Sample ID				GW-01S	GW-1S	GW-3D-012204	GW-3DD-012204	GW-3D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	11/08/06	01/22/04	01/22/04	09/30/04
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA	NA	0.7 J		1
1,2-Dichloroethene (total)	UG/L	5	-			NA	NA	NA
Acetone	UG/L	50	-				5 J	12 U
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-			1	1	2
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					1
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					1
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-			3	3	
1,4-Dichlorobenzene	UG/L	3	-			5	5	
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01S	GW-01S	GW-03D	GW-03D	GW-03D
Sample ID				GW-01S	GW-1S	GW-3D-012204	GW-3DD-012204	GW-3D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	11/08/06	01/22/04	01/22/04	09/30/04
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-		NA			
Total TCDD	NG/L	-	-	NA	NA	NA	NA	
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA	NA	NA	
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA	NA	NA	
Total TCDF	NG/L	-	-	NA	NA	NA	NA	
Metals								
Aluminum	MG/L	-	-		0.34	0.480 J+	0.496 J+	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01S	GW-01S	GW-03D	GW-03D	GW-03D
Sample ID				GW-01S	GW-1S	GW-3D-012204	GW-3DD-012204	GW-3D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	11/08/06	01/22/04	01/22/04	09/30/04
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-			0.011	0.010	
Barium	MG/L	1	-	0.33	0.25	0.112	0.113	0.102
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	238	225	125	125	110
Chromium	MG/L	0.05	-	0.016 J+	0.0047	0.239	0.243	
Cobalt	MG/L	-	-					
Copper	MG/L	0.2	-			0.041	0.030	
Iron	MG/L	0.3	-	52.7	7.9	8.12	8.35	1.46
Lead	MG/L	0.025	-				0.004	0.045
Magnesium	MG/L	35	-	40.9	38.7	19.7	19.7	18.1
Manganese	MG/L	0.3	-	0.96	0.86	0.670	0.675	0.599
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.012		0.027	0.027	0.005
Potassium	MG/L	-	-	2.7	2.3	3.69	3.73	4.17
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	385	326	199	202	268
Vanadium	MG/L	-	-					
Zinc	MG/L	2	-	0.022	0.010	0.013		

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-01S	GW-01S	GW-03D	GW-03D	GW-03D
Sample ID				GW-01S	GW-1S	GW-3D-012204	GW-3DD-012204	GW-3D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	11/08/06	01/22/04	01/22/04	09/30/04
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA			NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA			NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA			NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	51.9 ± 1.70E+01	67.2 ± 2.10E+01	NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA			NA
Cesium 137 (Soluble)	PCI/L	-	200		NA			NA
Lead 212 (Insoluble)	PCI/L	-	123		NA			NA
Lead 214 (Insoluble)	PCI/L	-	11800		NA			NA
Lead 214 (Soluble)	PCI/L	-	11800		NA	46.5 ± 1.90E+01	66.8 ± 1.70E+01	NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA			NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA			NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA			NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA			NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-03D	GW-03D	GW-03D	GW-03D	GW-03S
Sample ID				GW-3D	GW-3D	GW-03D	GW-3D	GW-3S-012004
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/05/05	09/21/05	05/17/06	11/09/06	01/20/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	2	NA	NA	NA	
1,2-Dichloroethene (total)	UG/L	5	-	NA	0.72 J	1.3 J	1.8 J	NA
Acetone	UG/L	50	-					2.8 J
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-		0.58 J	0.77 J	0.99 J	
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-	1	0.55 J	0.87 J	2.4	
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-	2		2 J	3 J	
1,4-Dichlorobenzene	UG/L	3	-	3	2 J	3 J	4 J	
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-03D	GW-03D	GW-03D	GW-03D	GW-03S
Sample ID				GW-3D	GW-3D	GW-03D	GW-3D	GW-3S-012004
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/05/05	09/21/05	05/17/06	11/09/06	01/20/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-				NA	
Total TCDD	NG/L	-	-		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-		NA	NA	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-		NA	NA	NA	NA
Total TCDF	NG/L	-	-		NA	NA	NA	NA
Metals								
Aluminum	MG/L	-	-		0.80			1.56 J+

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-03D	GW-03D	GW-03D	GW-03D	GW-03S
Sample ID				GW-3D	GW-3D	GW-03D	GW-3D	GW-3S-012004
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/05/05	09/21/05	05/17/06	11/09/06	01/20/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-					
Barium	MG/L	1	-	0.143	0.099	0.13	0.088	0.217
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	138	109	150	102	105
Chromium	MG/L	0.05	-		0.14 J-	0.020 J+	0.014	0.015
Cobalt	MG/L	-	-		0.0072			
Copper	MG/L	0.2	-		0.035			0.057
Iron	MG/L	0.3	-	3.1	6.0 J-	3.4	2.5	5.53
Lead	MG/L	0.025	-					0.006
Magnesium	MG/L	35	-	26.2	20.7	23.8	17.8	71.9
Manganese	MG/L	0.3	-	1.31	0.68	1.1	0.86	0.318
Mercury	MG/L	7.00E-04	-					0.0008
Nickel	MG/L	0.1	-	0.007	0.068			0.018
Potassium	MG/L	-	-	5.48	5.5	4.5	3.6	3.71
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	306	232	259	183	28.0
Vanadium	MG/L	-	-					
Zinc	MG/L	2	-			0.014		0.095

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

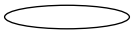
TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-03D	GW-03D	GW-03D	GW-03D	GW-03S
Sample ID				GW-3D	GW-3D	GW-03D	GW-3D	GW-3S-012004
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/05/05	09/21/05	05/17/06	11/09/06	01/20/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA	NA	NA	
Barium 133 (Insoluble)	PCI/L	-	1520		NA	NA	NA	
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA	NA	NA	
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	NA	NA	27.2 ± 1.20E+01
Cesium 134 (Insoluble)	PCI/L	-	80		NA	NA	NA	
Cesium 137 (Soluble)	PCI/L	-	200		NA	NA	NA	
Lead 212 (Insoluble)	PCI/L	-	123		NA	NA	NA	
Lead 214 (Insoluble)	PCI/L	-	11800		NA	NA	NA	
Lead 214 (Soluble)	PCI/L	-	11800		NA	NA	NA	41.5 ± 1.70E+01
Potassium 40 (Insoluble)	PCI/L	-	-		NA	NA	NA	
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA	NA	NA	
Thorium 234 (Insoluble)	PCI/L	-	401		NA	NA	NA	
Uranium 235 (Insoluble)	PCI/L	-	-		NA	NA	NA	

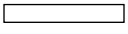
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-03S	GW-03S	GW-03S	GW-03S	GW-03S
Sample ID				GW-3S	GW-3S	GW-3S	GW-03S	GW-3S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/29/04	05/05/05	09/21/05	05/17/06	11/09/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-			NA	NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA			
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-	1				
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-03S	GW-03S	GW-03S	GW-03S	GW-03S
Sample ID				GW-3S	GW-3S	GW-3S	GW-03S	GW-3S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/29/04	05/05/05	09/21/05	05/17/06	11/09/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					NA
Total TCDD	NG/L	-	-			NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-			NA	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-			NA	NA	NA
Total TCDF	NG/L	-	-			NA	NA	NA
Metals								
Aluminum	MG/L	-	-	0.157 J+	0.259		0.68	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-03S	GW-03S	GW-03S	GW-03S	GW-03S
Sample ID				GW-3S	GW-3S	GW-3S	GW-03S	GW-3S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/29/04	05/05/05	09/21/05	05/17/06	11/09/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-					
Barium	MG/L	1	-	0.237	0.177	0.25	0.21	0.19
Cadmium	MG/L	0.005	-				0.0011	
Calcium	MG/L	-	-	109	91	127	119	106
Chromium	MG/L	0.05	-		0.006		1.2 J+	0.0045
Cobalt	MG/L	-	-				0.0043	
Copper	MG/L	0.2	-		0.014		0.017	
Iron	MG/L	0.3	-	11.8	16.2	18.1 J-	6.0	1.2
Lead	MG/L	0.025	-				0.0053	
Magnesium	MG/L	35	-	76.1	75.5	75.1	78.6	74.3
Manganese	MG/L	0.3	-	0.362	0.348	0.28	0.37	0.24
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.007	0.051	0.012	0.099	0.020
Potassium	MG/L	-	-	3.11	2.62	2.8	2.7	2.7
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	29.3	27.1	53.1	43.1	44.5
Vanadium	MG/L	-	-				0.0058	
Zinc	MG/L	2	-	0.034	0.028 J		0.097	0.022

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-03S	GW-03S	GW-03S	GW-03S	GW-03S
Sample ID				GW-3S	GW-3S	GW-3S	GW-03S	GW-3S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/29/04	05/05/05	09/21/05	05/17/06	11/09/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270	NA		NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520	NA		NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900	NA		NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900	NA		NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80	NA		NA		NA
Cesium 137 (Soluble)	PCI/L	-	200	NA		NA		NA
Lead 212 (Insoluble)	PCI/L	-	123	NA		NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800	NA		NA		NA
Lead 214 (Soluble)	PCI/L	-	11800	NA		NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-	NA		NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05	NA		NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401	NA		NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-	NA		NA		NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04D	GW-04D	GW-04D	GW-04D	GW-04D
Sample ID				GW-4D-012304	GW-04D	GW-4D	GW-4D	GW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/23/04	10/02/04	05/04/05	09/21/05	05/17/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-				NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA	NA		
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-				0.21 J	
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-				0.26 J	
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04D	GW-04D	GW-04D	GW-04D	GW-04D
Sample ID				GW-4D-012304	GW-04D	GW-4D	GW-4D	GW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/23/04	10/02/04	05/04/05	09/21/05	05/17/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-				3 J	
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-	5 J				
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					
Total TCDD	NG/L	-	-	NA			NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA			NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA			NA	NA
Total TCDF	NG/L	-	-	NA			NA	NA
Metals								
Aluminum	MG/L	-	-	10.0 J+	1.08	0.448	0.26	0.68

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04D	GW-04D	GW-04D	GW-04D	GW-04D
Sample ID				GW-4D-012304	GW-04D	GW-4D	GW-4D	GW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/23/04	10/02/04	05/04/05	09/21/05	05/17/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-	0.011				
Barium	MG/L	1	-	0.136	0.070	0.061	0.053	0.057
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	208	183	120	117	123
Chromium	MG/L	0.05	-	0.655	0.026	0.175	0.019 J-	0.014 J+
Cobalt	MG/L	-	-	0.017				
Copper	MG/L	0.2	-	0.178		0.016		
Iron	MG/L	0.3	-	88.8	3.07	2.56	1.6 J-	2.1
Lead	MG/L	0.025	-	0.020				
Magnesium	MG/L	35	-	57.3	58.8	56.0	55.3	56.6
Manganese	MG/L	0.3	-	0.571	0.066	0.053	0.035	0.038
Mercury	MG/L	7.00E-04	-		0.0002			
Nickel	MG/L	0.1	-	0.388	0.01	0.072	0.023	0.023
Potassium	MG/L	-	-	14.4	3.53	4.41	3.2	3.2
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	68.2	59.5	63.0	54.5	53.2
Vanadium	MG/L	-	-	0.023				
Zinc	MG/L	2	-	0.544	0.023			

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:17:23 AM
[MATRIX] = 'WG' AND [LOCID] <> 'EFFLUENT'

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04D	GW-04D	GW-04D	GW-04D	GW-04D
Sample ID				GW-4D-012304	GW-04D	GW-4D	GW-4D	GW-04D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/23/04	10/02/04	05/04/05	09/21/05	05/17/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA		NA	
Barium 133 (Insoluble)	PCI/L	-	1520		NA		NA	
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA		NA	
Bismuth 214 (Soluble)	PCI/L	-	18900	22.1 ± 1.20E+01	NA	34.338 ± 1.13E+01	NA	
Cesium 134 (Insoluble)	PCI/L	-	80		NA		NA	
Cesium 137 (Soluble)	PCI/L	-	200		NA		NA	
Lead 212 (Insoluble)	PCI/L	-	123		NA		NA	
Lead 214 (Insoluble)	PCI/L	-	11800		NA		NA	
Lead 214 (Soluble)	PCI/L	-	11800		NA	17.183 ± 9.02E+00	NA	
Potassium 40 (Insoluble)	PCI/L	-	-		NA		NA	
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA		NA	
Thorium 234 (Insoluble)	PCI/L	-	401		NA		NA	
Uranium 235 (Insoluble)	PCI/L	-	-		NA		NA	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04D	GW-04S	GW-04S	GW-04S	GW-04S
Sample ID				GW-4D	GW-4S-012004	GW-04S	GW-4S	GW-4S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/08/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA				NA
1,2-Dichloroethene (total)	UG/L	5	-		NA	NA	NA	
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04D	GW-04S	GW-04S	GW-04S	GW-04S
Sample ID				GW-4D	GW-4S-012004	GW-04S	GW-4S	GW-4S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/08/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-	NA				
Total TCDD	NG/L	-	-	NA	NA			NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA		0.015 J	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA		0.015 J	NA
Total TCDF	NG/L	-	-	NA	NA			NA
Metals								
Aluminum	MG/L	-	-		4.00 J+	0.050 J+		0.34

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04D	GW-04S	GW-04S	GW-04S	GW-04S
Sample ID				GW-4D	GW-4S-012004	GW-04S	GW-4S	GW-4S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/08/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-		0.010		0.009	
Barium	MG/L	1	-	0.063	0.174	0.101	0.096	0.10
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	122	60.6	38.0	36.7	39.6
Chromium	MG/L	0.05	-		0.053			0.0093 J-
Cobalt	MG/L	-	-		0.010	0.007		
Copper	MG/L	0.2	-		0.054			
Iron	MG/L	0.3	-	0.48	9.61	3.12	2.35	1.5 J-
Lead	MG/L	0.025	-		0.011			
Magnesium	MG/L	35	-	61.7	31.6	22.4	22.0	23.3
Manganese	MG/L	0.3	-	0.022	0.456	0.359	0.286	0.26
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-		0.039	0.09	0.013	0.015
Potassium	MG/L	-	-	3.1	6.36	3.22	3.05	2.6
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	60.7	43.3	34.8	32.8	27.4
Vanadium	MG/L	-	-		0.008			
Zinc	MG/L	2	-		0.083	0.030	0.057	0.021

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04D	GW-04S	GW-04S	GW-04S	GW-04S
Sample ID				GW-4D	GW-4S-012004	GW-04S	GW-4S	GW-4S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/08/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270	NA		NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520	NA		NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900	NA		NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900	NA		NA	45.504 ± 1.36E+01	NA
Cesium 134 (Insoluble)	PCI/L	-	80	NA		NA		NA
Cesium 137 (Soluble)	PCI/L	-	200	NA		NA		NA
Lead 212 (Insoluble)	PCI/L	-	123	NA		NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800	NA		NA		NA
Lead 214 (Soluble)	PCI/L	-	11800	NA		NA	21.406 ± 9.27E+00	NA
Potassium 40 (Insoluble)	PCI/L	-	-	NA		NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05	NA		NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401	NA		NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-	NA		NA		NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04S	GW-04S	GW-06D	GW-07D	GW-07D
Sample ID				GW-04S	GW-4S	GW-06D	GW-7D-012304	GW-07D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/16/06	11/08/06	05/19/06	01/23/04	10/03/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA	NA	NA		
1,2-Dichloroethene (total)	UG/L	5	-		1.0 J		NA	NA
Acetone	UG/L	50	-				7 J	26
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-		2.4			
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-			12 J		
Benzo(a)anthracene	UG/L	0.002	-			20 J		
Benzo(a)pyrene	UG/L	ND	-			17 J		
Benzo(b)fluoranthene	UG/L	0.002	-			23 J		
Benzo(g,h,i)perylene	UG/L	-	-			11 J		

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04S	GW-04S	GW-06D	GW-07D	GW-07D
Sample ID				GW-04S	GW-4S	GW-06D	GW-7D-012304	GW-07D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/16/06	11/08/06	05/19/06	01/23/04	10/03/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-			7 J		
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-			17 J		
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-			52 J		
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-			10 J		
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-			35 J		
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-			40 J		
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-		NA			
Total TCDD	NG/L	-	-	NA	NA	NA	NA	
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA	NA	NA	
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA	NA	NA	
Total TCDF	NG/L	-	-	NA	NA	NA	NA	
Metals								
Aluminum	MG/L	-	-	2.3	0.82		2.32 J+	0.278

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04S	GW-04S	GW-06D	GW-07D	GW-07D
Sample ID				GW-04S	GW-4S	GW-06D	GW-7D-012304	GW-07D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/16/06	11/08/06	05/19/06	01/23/04	10/03/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-				0.008	
Arsenic	MG/L	0.025	-	0.014				
Barium	MG/L	1	-	0.18	0.44	0.11	0.173	0.047
Cadmium	MG/L	0.005	-	0.0026				
Calcium	MG/L	-	-	51.5	134	143	85.9	42.5
Chromium	MG/L	0.05	-	0.26 J+		0.14 J+	0.064	0.013
Cobalt	MG/L	-	-	0.0061				
Copper	MG/L	0.2	-	0.021			0.080	0.010
Iron	MG/L	0.3	-	12.1	11.4	0.54	9.29	1.89
Lead	MG/L	0.025	-	0.0054			0.756	0.082
Magnesium	MG/L	35	-	28.5	42.4	34.1	15.1	3.92
Manganese	MG/L	0.3	-	0.48	0.68	0.035	0.181	0.026
Mercury	MG/L	7.00E-04	-	0.00022				0.0002
Nickel	MG/L	0.1	-	0.086			0.052	0.04
Potassium	MG/L	-	-	5.2	2.0	2.9	12.4	8.23
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	36.4	196	200	77.7	78.1
Vanadium	MG/L	-	-					
Zinc	MG/L	2	-	0.39		0.020	0.383	0.163

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

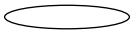
TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-04S	GW-04S	GW-06D	GW-07D	GW-07D
Sample ID				GW-04S	GW-4S	GW-06D	GW-7D-012304	GW-07D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/16/06	11/08/06	05/19/06	01/23/04	10/03/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA			NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA			NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA			NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA		82.0 ± 2.00E+01	NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA			NA
Cesium 137 (Soluble)	PCI/L	-	200		NA			NA
Lead 212 (Insoluble)	PCI/L	-	123		NA			NA
Lead 214 (Insoluble)	PCI/L	-	11800		NA			NA
Lead 214 (Soluble)	PCI/L	-	11800		NA		35.7 ± 1.40E+01	NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA			NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA			NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA			NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA			NA

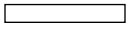
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07D	GW-07D	GW-07D	GW-07D	GW-07D
Sample ID				GW-7D	GW-07D	GW-7D	GW-07D	GW-7D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/04/05	09/20/05	09/21/05	05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-			NA		
1,2-Dichloroethene (cis)	UG/L	5	-		NA	NA	NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA		NA		
Acetone	UG/L	50	-	14		NA	12	12
Benzene	UG/L	1	-			NA		
Carbon disulfide	UG/L	60	-		0.53 J	NA		
Chlorobenzene	UG/L	5	-			NA		
Chloroethane	UG/L	5	-			NA		
Methyl ethyl ketone (2-Butanone)	UG/L	50	-		3.2 J	NA		
Tetrachloroethene	UG/L	5	-			NA		
Toluene	UG/L	5	-			NA		
Vinyl chloride	UG/L	2	-			NA		
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-		NA			
1,4-Dichlorobenzene	UG/L	3	-		NA			
Anthracene	UG/L	50	-		NA			
Benzo(a)anthracene	UG/L	0.002	-		NA			
Benzo(a)pyrene	UG/L	ND	-		NA			
Benzo(b)fluoranthene	UG/L	0.002	-		NA			
Benzo(g,h,i)perylene	UG/L	-	-		NA			

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07D	GW-07D	GW-07D	GW-07D	GW-07D
Sample ID				GW-7D	GW-07D	GW-7D	GW-07D	GW-7D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/04/05	09/20/05	09/21/05	05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-		NA			
bis(2-Ethylhexyl)phthalate	UG/L	5	-	11	NA	8 J		
Butylbenzylphthalate	UG/L	50	-		NA			
Chrysene	UG/L	0.002	-		NA			
Diethylphthalate	UG/L	50	-	3	NA			
Fluoranthene	UG/L	50	-		NA			
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-		NA			
N-Nitrosodiphenylamine	UG/L	50	-		NA			
Phenanthrene	UG/L	50	-		NA			
Phenol	UG/L	1	-		NA			
Pyrene	UG/L	50	-		NA			
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-		NA			NA
Total TCDD	NG/L	-	-		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-		NA	NA	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-	0.0034 J	NA			
Total HpCDF	NG/L	-	-		NA	NA	NA	NA
Total TCDF	NG/L	-	-	0.0064 J	NA	NA	NA	NA
Metals								
Aluminum	MG/L	-	-	0.086	NA	0.84	2.2	2.3

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:17:25 AM
[MATRIX] = 'WG' AND [LOCID] <> 'EFFLUENT'

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07D	GW-07D	GW-07D	GW-07D	GW-07D
Sample ID				GW-7D	GW-07D	GW-7D	GW-07D	GW-7D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/04/05	09/20/05	09/21/05	05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-		NA			
Arsenic	MG/L	0.025	-		NA			
Barium	MG/L	1	-	0.028	NA	0.069	0.13	0.097
Cadmium	MG/L	0.005	-		NA		0.0014	0.0013
Calcium	MG/L	-	-	28.7	NA	57.9	89.5	90.4
Chromium	MG/L	0.05	-	0.018	NA	0.051 J-	0.061 J+	0.072
Cobalt	MG/L	-	-		NA			
Copper	MG/L	0.2	-		NA	0.021	0.062	0.082
Iron	MG/L	0.3	-	0.379	NA	3.8 J-	12.4	27.0
Lead	MG/L	0.025	-	0.020	NA	0.19	0.56	0.53
Magnesium	MG/L	35	-	7.25	NA	20.7	31.0	23.3
Manganese	MG/L	0.3	-	0.008	NA	0.065	0.16	0.19
Mercury	MG/L	7.00E-04	-		NA			
Nickel	MG/L	0.1	-	0.016	NA	0.044	0.055	0.056
Potassium	MG/L	-	-	8.10	NA	7.8	9.0	7.2
Silver	MG/L	0.05	-		NA			
Sodium	MG/L	20	-	81.7	NA	81.7	91.0	78.8
Vanadium	MG/L	-	-		NA			
Zinc	MG/L	2	-	0.015	NA	0.079	0.27	1.2

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:17:25 AM
[MATRIX] = 'WG' AND [LOCID] <> 'EFFLUENT'

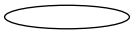
TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07D	GW-07D	GW-07D	GW-07D	GW-07D
Sample ID				GW-7D	GW-07D	GW-7D	GW-07D	GW-7D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/04/05	09/20/05	09/21/05	05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA	NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA	NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA	NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA	NA		NA
Cesium 137 (Soluble)	PCI/L	-	200		NA	NA		NA
Lead 212 (Insoluble)	PCI/L	-	123		NA	NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800		NA	NA		NA
Lead 214 (Soluble)	PCI/L	-	11800		NA	NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA	NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA	NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA	NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA	NA		NA

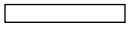
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:17:25 AM
[MATRIX] = 'WG' AND [LOCID] <> 'EFFLUENT'

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07S	GW-07S	GW-07S	GW-07S	GW-07S
Sample ID				GW-7S-012104	GW-07S	GW-7S	DUP-092005	GW-7S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/21/04	10/02/04	05/04/05	09/20/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-				NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA	NA		
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

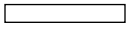
Location ID				GW-07S	GW-07S	GW-07S	GW-07S	GW-07S
Sample ID				GW-7S-012104	GW-07S	GW-7S	DUP-092005	GW-7S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/21/04	10/02/04	05/04/05	09/20/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					
Total TCDD	NG/L	-	-	NA			NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA			NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA			NA	NA
Total TCDF	NG/L	-	-	NA			NA	NA
Metals								
Aluminum	MG/L	-	-	2.81 J+	0.046 J+	0.190	0.23	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07S	GW-07S	GW-07S	GW-07S	GW-07S
Sample ID				GW-7S-012104	GW-07S	GW-7S	DUP-092005	GW-7S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/21/04	10/02/04	05/04/05	09/20/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-					
Barium	MG/L	1	-	0.215	0.204	0.209	0.19	0.19
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	43.3	30.8	30.9	27.1	33.4
Chromium	MG/L	0.05	-	0.024			0.020 J-	0.0058 J-
Cobalt	MG/L	-	-					
Copper	MG/L	0.2	-	0.050				
Iron	MG/L	0.3	-	5.77	1.03	0.707	0.95 J-	0.51 J-
Lead	MG/L	0.025	-	0.030				
Magnesium	MG/L	35	-	27.3	22.8	24.6	24.2	25.8
Manganese	MG/L	0.3	-	0.453	0.223	0.157	0.16	0.12
Mercury	MG/L	7.00E-04	-		0.0002			
Nickel	MG/L	0.1	-	0.036	0.02	0.01	0.014	
Potassium	MG/L	-	-	3.76	2.55	2.84	5.0	2.6
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	48.3	56.2	57.6	3,170	51.3
Vanadium	MG/L	-	-					
Zinc	MG/L	2	-	0.355	0.013	0.022		

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07S	GW-07S	GW-07S	GW-07S	GW-07S
Sample ID				GW-7S-012104	GW-07S	GW-7S	DUP-092005	GW-7S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/21/04	10/02/04	05/04/05	09/20/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA		NA	NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA		NA	NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA		NA	NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	32.656 ± 1.24E+01	NA	NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA		NA	NA
Cesium 137 (Soluble)	PCI/L	-	200		NA		NA	NA
Lead 212 (Insoluble)	PCI/L	-	123		NA		NA	NA
Lead 214 (Insoluble)	PCI/L	-	11800	6.3 ± 3.20E+00	NA		NA	NA
Lead 214 (Soluble)	PCI/L	-	11800		NA		NA	NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA		NA	NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA		NA	NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA		NA	NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA		NA	NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07S	GW-07S	GW-08D	GW-08D	GW-08D
Sample ID				GW-07S	GW-7S	GW-8D-012204	GW-8A	GW-8D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/17/06	11/07/06	01/22/04	09/30/04	09/30/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA	NA	2	2	2
1,2-Dichloroethene (total)	UG/L	5	-			NA	NA	NA
Acetone	UG/L	50	-					
Benzene	UG/L	1	-				0.2 J	
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-			1	1	2
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07S	GW-07S	GW-08D	GW-08D	GW-08D
Sample ID				GW-07S	GW-7S	GW-8D-012204	GW-8A	GW-8D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/17/06	11/07/06	01/22/04	09/30/04	09/30/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-				2	
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-		NA			
Total TCDD	NG/L	-	-	NA	NA	NA		
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA	NA		
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA	NA		
Total TCDF	NG/L	-	-	NA	NA	NA		
Metals								
Aluminum	MG/L	-	-	0.80	0.26	0.298 J+	0.052 J+	0.034 J+

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07S	GW-07S	GW-08D	GW-08D	GW-08D
Sample ID				GW-07S	GW-7S	GW-8D-012204	GW-8A	GW-8D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/17/06	11/07/06	01/22/04	09/30/04	09/30/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-				0.009	
Barium	MG/L	1	-	0.19	0.19	0.191	0.104	0.103
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	36.2	35.2	148	105	104
Chromium	MG/L	0.05	-	0.011 J+	0.022	0.520	0.007	
Cobalt	MG/L	-	-			0.006		
Copper	MG/L	0.2	-			0.043		
Iron	MG/L	0.3	-	0.78	1.5	5.76	5.15	5.07
Lead	MG/L	0.025	-					
Magnesium	MG/L	35	-	26.6	26.5	31.7	18.0	17.9
Manganese	MG/L	0.3	-	0.13	0.10	1.44	1.77	1.77
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.053	0.022	0.078	0.01	0.01
Potassium	MG/L	-	-	2.6	2.4	5.26	4.84	4.93
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	54.0	54.7	221	161	163
Vanadium	MG/L	-	-					
Zinc	MG/L	2	-	0.016	0.018	0.106	0.048	0.043

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-07S	GW-07S	GW-08D	GW-08D	GW-08D
Sample ID				GW-07S	GW-7S	GW-8D-012204	GW-8A	GW-8D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/17/06	11/07/06	01/22/04	09/30/04	09/30/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA		NA	NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA		NA	NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA		NA	NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	59.5 ± 1.90E+01	NA	NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA	1.87 ± 1.10E+00	NA	NA
Cesium 137 (Soluble)	PCI/L	-	200		NA		NA	NA
Lead 212 (Insoluble)	PCI/L	-	123		NA		NA	NA
Lead 214 (Insoluble)	PCI/L	-	11800		NA		NA	NA
Lead 214 (Soluble)	PCI/L	-	11800		NA	75.6 ± 1.80E+01	NA	NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA		NA	NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA		NA	NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA		NA	NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA		NA	NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-08D	GW-08D	GW-08D	GW-08D	GW-08SR
Sample ID				GW-8D	GW-8D	GW-08D	GW-8D	GW-8SR-012104
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/05/05	09/21/05	05/18/06	11/08/06	01/21/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	3	NA	NA	NA	4
1,2-Dichloroethene (total)	UG/L	5	-	NA	1.8	3.1	2.7	NA
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					0.4 J
Carbon disulfide	UG/L	60	-		0.13 J			
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-	2	2.0	1.3	1.3	2
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-08D	GW-08D	GW-08D	GW-08D	GW-08SR
Sample ID				GW-8D	GW-8D	GW-08D	GW-8D	GW-8SR-012104
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/05/05	09/21/05	05/18/06	11/08/06	01/21/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-	2				
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-			0.0026 J	NA	
Total TCDD	NG/L	-	-		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-		NA	NA	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-		NA	NA	NA	NA
Total TCDF	NG/L	-	-		NA	NA	NA	NA
Metals								
Aluminum	MG/L	-	-		1.1	0.32		112 J+

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-08D	GW-08D	GW-08D	GW-08D	GW-08SR
Sample ID				GW-8D	GW-8D	GW-08D	GW-8D	GW-8SR-012104
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/05/05	09/21/05	05/18/06	11/08/06	01/21/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-			0.013		0.077
Barium	MG/L	1	-	0.109	0.20	0.20	0.11	1.54
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	105	126	146	111	1,230
Chromium	MG/L	0.05	-		0.11 J-	0.24 J+	0.0073	0.219
Cobalt	MG/L	-	-			0.0043		0.107
Copper	MG/L	0.2	-	0.009	0.010			0.343
Iron	MG/L	0.3	-	6.2	14.9 J-	12.7	6.1	218
Lead	MG/L	0.025	-					0.184
Magnesium	MG/L	35	-	20.8	30.8	32.4	21.4	472
Manganese	MG/L	0.3	-	2.22	0.91	1.5	1.4	8.34
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.006	0.056	0.054	0.010	0.282
Potassium	MG/L	-	-	3.98	6.0	4.8	4.1	21.6
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	279	196	320	138	159
Vanadium	MG/L	-	-					0.255
Zinc	MG/L	2	-	0.03 J+	0.096	0.13	0.043	2.15

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-08D	GW-08D	GW-08D	GW-08D	GW-08SR
Sample ID				GW-8D	GW-8D	GW-8D	GW-8D	GW-8SR-012104
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/05/05	09/21/05	05/18/06	11/08/06	01/21/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA		NA	10.0 ± 5.60E+00
Barium 133 (Insoluble)	PCI/L	-	1520		NA		NA	
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA		NA	11.7 ± 4.70E+00
Bismuth 214 (Soluble)	PCI/L	-	18900		NA		NA	
Cesium 134 (Insoluble)	PCI/L	-	80		NA		NA	
Cesium 137 (Soluble)	PCI/L	-	200		NA		NA	
Lead 212 (Insoluble)	PCI/L	-	123		NA		NA	15.2 ± 3.70E+00
Lead 214 (Insoluble)	PCI/L	-	11800		NA		NA	10.2 ± 4.50E+00
Lead 214 (Soluble)	PCI/L	-	11800		NA		NA	18.7 ± 1.10E+01
Potassium 40 (Insoluble)	PCI/L	-	-		NA		NA	167 ± 6.00E+01
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA		NA	
Thorium 234 (Insoluble)	PCI/L	-	401		NA		NA	
Uranium 235 (Insoluble)	PCI/L	-	-		NA		NA	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-08SR	GW-08SR	GW-08SR	GW-08SR	GW-08SR
Sample ID				GW-8SR	GW-8SR	GW-8SR	GW-08SR	GW-8SR
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/30/04	05/05/05	09/21/05	05/18/06	11/08/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	4	1	NA	NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA	0.96 J		
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-	1 U				
Vinyl chloride	UG/L	2	-	2	1	6.9		
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-08SR	GW-08SR	GW-08SR	GW-08SR	GW-08SR
Sample ID				GW-8SR	GW-8SR	GW-8SR	GW-08SR	GW-8SR
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/30/04	05/05/05	09/21/05	05/18/06	11/08/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					NA
Total TCDD	NG/L	-	-			NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-			NA	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-			NA	NA	NA
Total TCDF	NG/L	-	-			NA	NA	NA
Metals								
Aluminum	MG/L	-	-	0.543	3.22	3.2	2.1	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-08SR	GW-08SR	GW-08SR	GW-08SR	GW-08SR
Sample ID				GW-8SR	GW-8SR	GW-8SR	GW-08SR	GW-8SR
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/30/04	05/05/05	09/21/05	05/18/06	11/08/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-	0.015	0.011			
Barium	MG/L	1	-	0.554	0.423	0.54	0.36	0.099
Cadmium	MG/L	0.005	-		0.001		0.0011	
Calcium	MG/L	-	-	178	117	150	119	37.3
Chromium	MG/L	0.05	-		0.012	0.0046 J-	0.020 J+	
Cobalt	MG/L	-	-		0.008		0.0057	
Copper	MG/L	0.2	-		0.019			
Iron	MG/L	0.3	-	6.31	15.1	15.8 J-	16.1	1.1
Lead	MG/L	0.025	-	0.007	0.004			
Magnesium	MG/L	35	-	61.1	44.3	49.6	37.6	23.8
Manganese	MG/L	0.3	-	0.762	0.817	0.40	0.74	0.28
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.02	0.019		0.018	
Potassium	MG/L	-	-	2.65	4.08	3.6	2.4	2.3
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	202	201	160	184	31.6
Vanadium	MG/L	-	-	0.008	0.012	0.0075	0.0071	
Zinc	MG/L	2	-	0.023	0.027 J+		0.022	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-08SR	GW-08SR	GW-08SR	GW-08SR	GW-08SR
Sample ID				GW-8SR	GW-8SR	GW-8SR	GW-08SR	GW-8SR
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/30/04	05/05/05	09/21/05	05/18/06	11/08/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270	NA		NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520	NA		NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900	NA		NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900	NA		NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80	NA		NA		NA
Cesium 137 (Soluble)	PCI/L	-	200	NA		NA		NA
Lead 212 (Insoluble)	PCI/L	-	123	NA		NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800	NA		NA		NA
Lead 214 (Soluble)	PCI/L	-	11800	NA		NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-	NA		NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05	NA		NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401	NA		NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-	NA		NA		NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-26D	GW-26D	GW-26D	GW-26D	GW-26D
Sample ID				GW-26D-012204	GW-26D	GW-26D	GW-27D	GW-26D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/22/04	10/01/04	05/04/05	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	2	2	2	2	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA	NA	NA	1.9
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-	2	2	2	2	1.8
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-26D	GW-26D	GW-26D	GW-26D	GW-26D
Sample ID				GW-26D-012204	GW-26D	GW-26D	GW-27D	GW-26D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/22/04	10/01/04	05/04/05	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					
Total TCDD	NG/L	-	-	NA				NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA				NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA				NA
Total TCDF	NG/L	-	-	NA				NA
Metals								
Aluminum	MG/L	-	-	0.052 J+				

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-26D	GW-26D	GW-26D	GW-26D	GW-26D
Sample ID				GW-26D-012204	GW-26D	GW-26D	GW-27D	GW-26D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/22/04	10/01/04	05/04/05	05/04/05	09/20/05
Parameter	Units	Criteria (1)	Criteria (2)				Field Duplicate (1-1)	
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-	0.009				
Barium	MG/L	1	-	0.151	0.168	0.117	0.118	0.16
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	133	153	116	117	142
Chromium	MG/L	0.05	-	0.031				0.28 J-
Cobalt	MG/L	-	-					
Copper	MG/L	0.2	-	0.030				
Iron	MG/L	0.3	-	12.9	5.33	4.50	4.53	8.7 J-
Lead	MG/L	0.025	-	0.004				
Magnesium	MG/L	35	-	22.3	26.5	20.2	20.3	23.1
Manganese	MG/L	0.3	-	1.39	1.20	1.01	1.02	1.7
Mercury	MG/L	7.00E-04	-		0.0002			
Nickel	MG/L	0.1	-	0.030				0.059
Potassium	MG/L	-	-	4.83	4.78	4.88	5.08	5.7
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	182	275	188	192	216
Vanadium	MG/L	-	-					
Zinc	MG/L	2	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-26D	GW-26D	GW-26D	GW-26D	GW-26D
Sample ID				GW-26D-012204	GW-26D	GW-26D	GW-27D	GW-26D
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/22/04	10/01/04	05/04/05	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**				Field Duplicate (1-1)	
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA			NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA			NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA			NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	14.76 ± 8.89E+00		NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA			NA
Cesium 137 (Soluble)	PCI/L	-	200		NA			NA
Lead 212 (Insoluble)	PCI/L	-	123		NA			NA
Lead 214 (Insoluble)	PCI/L	-	11800		NA			NA
Lead 214 (Soluble)	PCI/L	-	11800		NA			NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA			NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA			NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA			NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA			NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-26D	GW-26D	GW-26D	GW-26D	GW-28S
Sample ID				GW-26D	GW-27D-DUP	DUP-110706	GW-26D	GW-28S-012104
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	05/18/06	11/07/06	11/07/06	01/21/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)	Field Duplicate (1-1)		
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA	NA	NA	NA	
1,2-Dichloroethene (total)	UG/L	5	-	2.2	2.3	2.4	2.4	NA
Acetone	UG/L	50	-		2.9 J			
Benzene	UG/L	1	-					0.7 J
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-	1.8	1.8	2.8	2.9	
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-26D	GW-26D	GW-26D	GW-26D	GW-28S
Sample ID				GW-26D	GW-27D-DUP	DUP-110706	GW-26D	GW-28S-012104
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	05/18/06	11/07/06	11/07/06	01/21/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)	Field Duplicate (1-1)		
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-			NA	NA	
Total TCDD	NG/L	-	-	NA	NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA	NA	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA	NA	NA	NA
Total TCDF	NG/L	-	-	NA	NA	NA	NA	NA
Metals								
Aluminum	MG/L	-	-					42.4 J+

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-26D	GW-26D	GW-26D	GW-26D	GW-28S
Sample ID				GW-26D	GW-27D-DUP	DUP-110706	GW-26D	GW-28S-012104
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	05/18/06	11/07/06	11/07/06	01/21/04
Parameter	Units	Criteria (1)	Criteria (2)		Field Duplicate (1-1)	Field Duplicate (1-1)		
Metals								
Antimony	MG/L	0.003	-					0.005
Arsenic	MG/L	0.025	-	0.018	0.022			0.054
Barium	MG/L	1	-	0.13	0.13	0.12	0.12	0.985
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	124	128	126	123	892
Chromium	MG/L	0.05	-	0.012 J+	0.016 J+			0.089
Cobalt	MG/L	-	-					0.055
Copper	MG/L	0.2	-					0.201
Iron	MG/L	0.3	-	15.0	17.5	6.9	6.8	99.2
Lead	MG/L	0.025	-					0.190
Magnesium	MG/L	35	-	21.0	21.6	21.4	21.0	323
Manganese	MG/L	0.3	-	1.2	1.3	1.5	1.5	6.94
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-					0.148
Potassium	MG/L	-	-	4.4	4.5	4.5	4.5	19.6
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	194	199	223	218	82.4
Vanadium	MG/L	-	-					0.103
Zinc	MG/L	2	-					2.42

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-26D	GW-26D	GW-26D	GW-26D	GW-28S
Sample ID				GW-26D	GW-27D-DUP	DUP-110706	GW-26D	GW-28S-012104
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	05/18/06	11/07/06	11/07/06	01/21/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		Field Duplicate (1-1)	Field Duplicate (1-1)		
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270			NA	NA	
Barium 133 (Insoluble)	PCI/L	-	1520			NA	NA	
Bismuth 214 (Insoluble)	PCI/L	-	18900			NA	NA	12.3 ± 5.40E+00
Bismuth 214 (Soluble)	PCI/L	-	18900			NA	NA	
Cesium 134 (Insoluble)	PCI/L	-	80			NA	NA	
Cesium 137 (Soluble)	PCI/L	-	200			NA	NA	
Lead 212 (Insoluble)	PCI/L	-	123			NA	NA	14.2 ± 3.80E+00
Lead 214 (Insoluble)	PCI/L	-	11800			NA	NA	8.7 ± 4.00E+00
Lead 214 (Soluble)	PCI/L	-	11800			NA	NA	
Potassium 40 (Insoluble)	PCI/L	-	-			NA	NA	
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05			NA	NA	4.8 ± 2.20E+00
Thorium 234 (Insoluble)	PCI/L	-	401			NA	NA	
Uranium 235 (Insoluble)	PCI/L	-	-			NA	NA	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-28S	GW-28S	GW-28S	GW-28S	GW-28S
Sample ID				GW-28S	GW-28S	GW-28S	GW-28S	GW-28S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/30/04	05/05/05	09/20/05	05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-			NA	NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA			
Acetone	UG/L	50	-				4.1 J	
Benzene	UG/L	1	-	2	1	2.3 J		
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-	1 U				
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-28S	GW-28S	GW-28S	GW-28S	GW-28S
Sample ID				GW-28S	GW-28S	GW-28S	GW-28S	GW-28S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/30/04	05/05/05	09/20/05	05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					NA
Total TCDD	NG/L	-	-			NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-			NA	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-			NA	NA	NA
Total TCDF	NG/L	-	-			NA	NA	NA
Metals								
Aluminum	MG/L	-	-	0.035 J+	3.58	1.0	1.7	0.32

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-28S	GW-28S	GW-28S	GW-28S	GW-28S
Sample ID				GW-28S	GW-28S	GW-28S	GW-28S	GW-28S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/30/04	05/05/05	09/20/05	05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-					
Barium	MG/L	1	-	0.456	0.169	0.67	0.061	0.073
Cadmium	MG/L	0.005	-				0.0014	
Calcium	MG/L	-	-	213	190	201	156	151
Chromium	MG/L	0.05	-		0.017	0.0043 J-	0.022 J+	
Cobalt	MG/L	-	-		0.015	0.0047	0.0045	
Copper	MG/L	0.2	-		0.019			
Iron	MG/L	0.3	-	17.0	10.6	9.9 J-	3.6	0.55
Lead	MG/L	0.025	-		0.007			
Magnesium	MG/L	35	-	73.9	77.3	67.3	51.9	51.0
Manganese	MG/L	0.3	-	0.992	1.96	0.98	1.4	1.4
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.006	0.026		0.019	
Potassium	MG/L	-	-	36.4	18.6	37.7	5.1	5.8
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	85.8	73.1	70.9	38.3	48.3
Vanadium	MG/L	-	-	0.006	0.011	0.0058		
Zinc	MG/L	2	-		0.045 J+		0.026	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-28S	GW-28S	GW-28S	GW-28S	GW-28S
Sample ID				GW-28S	GW-28S	GW-28S	GW-28S	GW-28S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/30/04	05/05/05	09/20/05	05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270	NA		NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520	NA		NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900	NA		NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900	NA		NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80	NA		NA		NA
Cesium 137 (Soluble)	PCI/L	-	200	NA		NA		NA
Lead 212 (Insoluble)	PCI/L	-	123	NA		NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800	NA		NA		NA
Lead 214 (Soluble)	PCI/L	-	11800	NA		NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-	NA		NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05	NA		NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401	NA		NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-	NA		NA		NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-29S	GW-29S	GW-29S	GW-29S	GW-29S
Sample ID				GW-29S-012104	GW-29S	GW-29S	GW-29S	GW-29S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/21/04	10/01/04	05/04/05	09/20/05	05/16/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-				NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA	NA		
Acetone	UG/L	50	-					2.8 J
Benzene	UG/L	1	-	0.2 J				
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-29S	GW-29S	GW-29S	GW-29S	GW-29S
Sample ID				GW-29S-012104	GW-29S	GW-29S	GW-29S	GW-29S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/21/04	10/01/04	05/04/05	09/20/05	05/16/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					
Total TCDD	NG/L	-	-	NA			NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA			NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA			NA	NA
Total TCDF	NG/L	-	-	NA			NA	NA
Metals								
Aluminum	MG/L	-	-	50.8 J+	0.076 J+	0.462	0.29	4.4

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-29S	GW-29S	GW-29S	GW-29S	GW-29S
Sample ID				GW-29S-012104	GW-29S	GW-29S	GW-29S	GW-29S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/21/04	10/01/04	05/04/05	09/20/05	05/16/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-	0.124	0.015	0.021		0.026
Barium	MG/L	1	-	0.880	0.181	0.212	0.20	0.23
Cadmium	MG/L	0.005	-					0.0017
Calcium	MG/L	-	-	779	144	156	106	104
Chromium	MG/L	0.05	-	0.096		0.005	0.0040 J-	0.033 J+
Cobalt	MG/L	-	-	0.056				
Copper	MG/L	0.2	-	0.216				
Iron	MG/L	0.3	-	125	3.40	7.35	1.2 J-	13.1
Lead	MG/L	0.025	-	0.150				0.0058
Magnesium	MG/L	35	-	280	63.2	65.1	56.7	62.6
Manganese	MG/L	0.3	-	5.05	0.327	0.596	0.19	0.29
Mercury	MG/L	7.00E-04	-		0.0002			
Nickel	MG/L	0.1	-	0.151	0.007	0.012	0.016	0.021
Potassium	MG/L	-	-	12.4	1.18	1.07	1.2	2.7
Silver	MG/L	0.05	-			0.079 J-		
Sodium	MG/L	20	-	21.1	20.5	21.3	18.8	18.4
Vanadium	MG/L	-	-	0.106				0.0080
Zinc	MG/L	2	-	0.986				0.025

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-29S	GW-29S	GW-29S	GW-29S	GW-29S
Sample ID				GW-29S-012104	GW-29S	GW-29S	GW-29S	GW-29S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/21/04	10/01/04	05/04/05	09/20/05	05/16/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA		NA	
Barium 133 (Insoluble)	PCI/L	-	1520		NA		NA	
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA		NA	
Bismuth 214 (Soluble)	PCI/L	-	18900	16.1 ± 9.70E+00	NA		NA	
Cesium 134 (Insoluble)	PCI/L	-	80		NA		NA	
Cesium 137 (Soluble)	PCI/L	-	200		NA		NA	
Lead 212 (Insoluble)	PCI/L	-	123		NA		NA	
Lead 214 (Insoluble)	PCI/L	-	11800		NA		NA	
Lead 214 (Soluble)	PCI/L	-	11800		NA		NA	
Potassium 40 (Insoluble)	PCI/L	-	-		NA		NA	
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA		NA	
Thorium 234 (Insoluble)	PCI/L	-	401	39 ± 7.80E+01	NA		NA	
Uranium 235 (Insoluble)	PCI/L	-	-		NA		NA	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-29S	GW-30S	GW-30S	GW-30S	GW-30S
Sample ID				GW-29S	GW30S-012004	GW-30S	GW-30S	GW-30S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/06/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA				NA
1,2-Dichloroethene (total)	UG/L	5	-		NA	NA	NA	
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					0.53 J
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-29S	GW-30S	GW-30S	GW-30S	GW-30S
Sample ID				GW-29S	GW30S-012004	GW-30S	GW-30S	GW-30S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/06/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-	NA				
Total TCDD	NG/L	-	-	NA	NA			NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA			NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA			NA
Total TCDF	NG/L	-	-	NA	NA			NA
Metals								
Aluminum	MG/L	-	-	0.26	3.09 J+	0.034 J+	0.219	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-29S	GW-30S	GW-30S	GW-30S	GW-30S
Sample ID				GW-29S	GW30S-012004	GW-30S	GW-30S	GW-30S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/06/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-	0.023				
Barium	MG/L	1	-	0.23	0.404	0.656	0.489	0.50
Cadmium	MG/L	0.005	-		0.007		0.006	
Calcium	MG/L	-	-	160	206	301	202	245
Chromium	MG/L	0.05	-				0.139	
Cobalt	MG/L	-	-					
Copper	MG/L	0.2	-		0.042		0.015	
Iron	MG/L	0.3	-	13.4	15.1	17.5	21.8	13.2 J-
Lead	MG/L	0.025	-		0.005	0.004		
Magnesium	MG/L	35	-	64.9	53.6	75.2	45.4	61.2
Manganese	MG/L	0.3	-	0.51	2.1	3.01	2.20	2.6
Mercury	MG/L	7.00E-04	-			0.0003		
Nickel	MG/L	0.1	-		0.006		0.012	
Potassium	MG/L	-	-	0.80	3.21	3.30	9.31	4.2
Silver	MG/L	0.05	-				0.038 J-	
Sodium	MG/L	20	-	18.8	901	1,150	882	857
Vanadium	MG/L	-	-					
Zinc	MG/L	2	-		0.018		0.025	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-29S	GW-30S	GW-30S	GW-30S	GW-30S
Sample ID				GW-29S	GW30S-012004	GW-30S	GW-30S	GW-30S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/06/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270	NA		NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520	NA	2.50 ± 1.40E+00	NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900	NA		NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900	NA	24.6 ± 1.30E+01	NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80	NA		NA		NA
Cesium 137 (Soluble)	PCI/L	-	200	NA		NA		NA
Lead 212 (Insoluble)	PCI/L	-	123	NA		NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800	NA		NA		NA
Lead 214 (Soluble)	PCI/L	-	11800	NA	22.7 ± 1.10E+01	NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-	NA	37.5 ± 2.00E+01	NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05	NA		NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401	NA		NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-	NA		NA	2.4219 ± 1.42E+00	NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-30S	GW-30S	GW-31S	GW-31S	GW-31S
Sample ID				GW-30S	GW-30S	GW-31S	GW-31S	GW-31S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	11/06/06	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA	NA			NA
1,2-Dichloroethene (total)	UG/L	5	-			NA	NA	
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-30S	GW-30S	GW-31S	GW-31S	GW-31S
Sample ID				GW-30S	GW-30S	GW-31S	GW-31S	GW-31S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	11/06/06	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					4 J
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-		NA			
Total TCDD	NG/L	-	-	NA	NA		0.028	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA		0.02 J	NA
2,3,7,8-TCDF	NG/L	0.007	-					0.0021 J
Total HpCDF	NG/L	-	-	NA	NA		0.02 J	NA
Total TCDF	NG/L	-	-	NA	NA		0.0021 J	NA
Metals								
Aluminum	MG/L	-	-	1.6		0.731	4.86	1.5

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-30S	GW-30S	GW-31S	GW-31S	GW-31S
Sample ID				GW-30S	GW-30S	GW-31S	GW-31S	GW-31S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	11/06/06	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-					
Barium	MG/L	1	-	0.50	0.33	0.051	0.070	0.054
Cadmium	MG/L	0.005	-	0.0014		0.001	0.001	
Calcium	MG/L	-	-	249	181	259	198	208
Chromium	MG/L	0.05	-	0.031 J+		0.009	0.015	0.086 J-
Cobalt	MG/L	-	-			0.005	0.006	0.0044
Copper	MG/L	0.2	-			0.023	0.020	
Iron	MG/L	0.3	-	28.2	12.3	2.57	6.88	2.6 J-
Lead	MG/L	0.025	-			0.014	0.011	
Magnesium	MG/L	35	-	61.9	44.6	82.6	59.1	58.6
Manganese	MG/L	0.3	-	2.8	2.2	1.53	1.40	1.3
Mercury	MG/L	7.00E-04	-			0.0002		
Nickel	MG/L	0.1	-	0.014		0.01	0.016	0.052
Potassium	MG/L	-	-	4.5	2.7	18.6	16.9	21.0
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	799	858	14.1	9.15	10.8
Vanadium	MG/L	-	-				0.009	
Zinc	MG/L	2	-	0.058		0.047	0.071	0.027

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

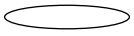
TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-30S	GW-30S	GW-31S	GW-31S	GW-31S
Sample ID				GW-30S	GW-30S	GW-31S	GW-31S	GW-31S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/18/06	11/06/06	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA	NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA	NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA	NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA	NA		NA
Cesium 137 (Soluble)	PCI/L	-	200		NA	NA		NA
Lead 212 (Insoluble)	PCI/L	-	123		NA	NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800		NA	NA		NA
Lead 214 (Soluble)	PCI/L	-	11800		NA	NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA	NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA	NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA	NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA	NA		NA

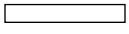
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-31S	GW-31S	GW-32S	GW-32S	GW-32S
Sample ID				GW-31S	GW-31S	GW32S-012004	GW-32S	GW-32S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/16/06	11/06/06	01/20/04	10/01/04	05/04/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA	NA			
1,2-Dichloroethene (total)	UG/L	5	-			NA	NA	NA
Acetone	UG/L	50	-		17			
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-		0.91 J			
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-31S	GW-31S	GW-32S	GW-32S	GW-32S
Sample ID				GW-31S	GW-31S	GW32S-012004	GW-32S	GW-32S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/16/06	11/06/06	01/20/04	10/01/04	05/04/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-		0.4 J			
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-	0.0044	NA			
Total TCDD	NG/L	-	-	NA	NA	NA		
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA	NA		
2,3,7,8-TCDF	NG/L	0.007	-	0.0037				
Total HpCDF	NG/L	-	-	NA	NA	NA		
Total TCDF	NG/L	-	-	NA	NA	NA		
Metals								
Aluminum	MG/L	-	-	23.7	0.23	0.931 J+	0.032 J+	0.824

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:17:29 AM
[MATRIX] = 'WG' AND [LOCID] <> 'EFFLUENT'

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-31S	GW-31S	GW-32S	GW-32S	GW-32S
Sample ID				GW-31S	GW-31S	GW32S-012004	GW-32S	GW-32S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/16/06	11/06/06	01/20/04	10/01/04	05/04/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-	0.014				
Barium	MG/L	1	-	0.23	0.033	0.074	0.047	0.038
Cadmium	MG/L	0.005	-	0.0051				
Calcium	MG/L	-	-	337	137	141	133	86.1
Chromium	MG/L	0.05	-	0.33 J+		0.010		0.011
Cobalt	MG/L	-	-	0.021				
Copper	MG/L	0.2	-	0.078		0.039		
Iron	MG/L	0.3	-	42.6	0.38	1.17		1.50
Lead	MG/L	0.025	-	0.037		0.003	0.019	0.003
Magnesium	MG/L	35	-	103	34.6	57.9	59.6	45.0
Manganese	MG/L	0.3	-	2.3	0.93	0.075	0.100	0.191
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.20		0.047	0.006	0.011
Potassium	MG/L	-	-	18.4	10.3	4.58	3.83	3.39
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	7.5	6.3	46.7	21.5	8.83
Vanadium	MG/L	-	-	0.048				
Zinc	MG/L	2	-	0.37		0.599		0.034

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-31S	GW-31S	GW-32S	GW-32S	GW-32S
Sample ID				GW-31S	GW-31S	GW32S-012004	GW-32S	GW-32S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/16/06	11/06/06	01/20/04	10/01/04	05/04/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA		NA	
Barium 133 (Insoluble)	PCI/L	-	1520		NA		NA	
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA		NA	
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	20.7 ± 1.10E+01	NA	
Cesium 134 (Insoluble)	PCI/L	-	80		NA		NA	
Cesium 137 (Soluble)	PCI/L	-	200		NA		NA	
Lead 212 (Insoluble)	PCI/L	-	123		NA		NA	
Lead 214 (Insoluble)	PCI/L	-	11800		NA		NA	
Lead 214 (Soluble)	PCI/L	-	11800		NA		NA	
Potassium 40 (Insoluble)	PCI/L	-	-		NA	44.9 ± 2.30E+01	NA	
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA		NA	
Thorium 234 (Insoluble)	PCI/L	-	401		NA		NA	
Uranium 235 (Insoluble)	PCI/L	-	-		NA		NA	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-32S	GW-32S	GW-32S	GW-33S	GW-33S
Sample ID				GW-32S	GW-32S	GW-32S	GW33S-012004	GW-33S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/20/05	05/18/06	11/06/06	01/20/04	10/01/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA	NA	NA		
1,2-Dichloroethene (total)	UG/L	5	-				NA	NA
Acetone	UG/L	50	-					
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-32S	GW-32S	GW-32S	GW-33S	GW-33S
Sample ID				GW-32S	GW-32S	GW-32S	GW33S-012004	GW-33S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/20/05	05/18/06	11/06/06	01/20/04	10/01/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-			NA		
Total TCDD	NG/L	-	-	NA	NA	NA	NA	
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA	NA	NA	
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA	NA	NA	
Total TCDF	NG/L	-	-	NA	NA	NA	NA	
Metals								
Aluminum	MG/L	-	-	5.9	3.2		0.820 J+	0.182 J+

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-32S	GW-32S	GW-32S	GW-33S	GW-33S
Sample ID				GW-32S	GW-32S	GW-32S	GW33S-012004	GW-33S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/20/05	05/18/06	11/06/06	01/20/04	10/01/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-					
Barium	MG/L	1	-	0.085	0.070	0.049	0.026	0.029
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	111	85.5	66.6	525	216
Chromium	MG/L	0.05	-	0.070 J-	0.043 J+		0.008	
Cobalt	MG/L	-	-	0.0044				
Copper	MG/L	0.2	-	0.017	0.012		0.045	
Iron	MG/L	0.3	-	8.5 J-	4.4	0.063	0.883	0.335
Lead	MG/L	0.025	-	0.0094				0.008
Magnesium	MG/L	35	-	54.5	46.3	36.4	110	51.0
Manganese	MG/L	0.3	-	0.28	0.30	0.16	2.35	0.384
Mercury	MG/L	7.00E-04	-					0.0002
Nickel	MG/L	0.1	-	0.051	0.025		0.029	0.005
Potassium	MG/L	-	-	7.9	4.6	3.5	5.49	3.95
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	16.3	9.3	6.3	33.2	16.9
Vanadium	MG/L	-	-	0.010	0.0053			
Zinc	MG/L	2	-	0.093	0.049		0.019	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-32S	GW-32S	GW-32S	GW-33S	GW-33S
Sample ID				GW-32S	GW-32S	GW-32S	GW33S-012004	GW-33S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				09/20/05	05/18/06	11/06/06	01/20/04	10/01/04
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270	NA		NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520	NA		NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900	NA		NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900	NA		NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80	NA		NA		NA
Cesium 137 (Soluble)	PCI/L	-	200	NA		NA	6.35 ± 3.80E+00	NA
Lead 212 (Insoluble)	PCI/L	-	123	NA		NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800	NA		NA		NA
Lead 214 (Soluble)	PCI/L	-	11800	NA		NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-	NA		NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05	NA		NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401	NA		NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-	NA		NA		NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-33S	GW-33S	GW-33S	GW-33S	GW-33S
Sample ID				GW-33S	GW-33S	GW-33S	GW-33S	GW-33S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/04/05	09/20/05	09/21/05	05/16/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-			NA		
1,2-Dichloroethene (cis)	UG/L	5	-		NA	NA	NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA		NA		
Acetone	UG/L	50	-			NA	2.8 J	
Benzene	UG/L	1	-			NA		
Carbon disulfide	UG/L	60	-			NA		
Chlorobenzene	UG/L	5	-			NA		
Chloroethane	UG/L	5	-			NA		
Methyl ethyl ketone (2-Butanone)	UG/L	50	-			NA		
Tetrachloroethene	UG/L	5	-			NA		
Toluene	UG/L	5	-			NA		
Vinyl chloride	UG/L	2	-			NA		
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-		NA			
1,4-Dichlorobenzene	UG/L	3	-		NA			
Anthracene	UG/L	50	-		NA			
Benzo(a)anthracene	UG/L	0.002	-		NA			
Benzo(a)pyrene	UG/L	ND	-		NA			
Benzo(b)fluoranthene	UG/L	0.002	-		NA			
Benzo(g,h,i)perylene	UG/L	-	-		NA			

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-33S	GW-33S	GW-33S	GW-33S	GW-33S
Sample ID				GW-33S	GW-33S	GW-33S	GW-33S	GW-33S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/04/05	09/20/05	09/21/05	05/16/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-		NA			
bis(2-Ethylhexyl)phthalate	UG/L	5	-	3	NA			
Butylbenzylphthalate	UG/L	50	-		NA			
Chrysene	UG/L	0.002	-		NA			
Diethylphthalate	UG/L	50	-		NA			
Fluoranthene	UG/L	50	-		NA			
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-		NA			
N-Nitrosodiphenylamine	UG/L	50	-		NA			
Phenanthrene	UG/L	50	-		NA			
Phenol	UG/L	1	-		NA			
Pyrene	UG/L	50	-		NA			
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-		NA			NA
Total TCDD	NG/L	-	-		NA	NA	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-		NA	NA	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-		NA			
Total HpCDF	NG/L	-	-		NA	NA	NA	NA
Total TCDF	NG/L	-	-		NA	NA	NA	NA
Metals								
Aluminum	MG/L	-	-	1.14	NA	0.33		0.60

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-33S	GW-33S	GW-33S	GW-33S	GW-33S
Sample ID				GW-33S	GW-33S	GW-33S	GW-33S	GW-33S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/04/05	09/20/05	09/21/05	05/16/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-		NA			
Arsenic	MG/L	0.025	-		NA			
Barium	MG/L	1	-	0.027	NA	0.029	0.014	0.031
Cadmium	MG/L	0.005	-		NA			
Calcium	MG/L	-	-	180	NA	283	194	228
Chromium	MG/L	0.05	-	0.007	NA	0.055 J-		
Cobalt	MG/L	-	-		NA			
Copper	MG/L	0.2	-		NA			
Iron	MG/L	0.3	-	1.26	NA	0.32 J-	0.21	0.75
Lead	MG/L	0.025	-		NA			
Magnesium	MG/L	35	-	46.2	NA	77.6	52.1	55.7
Manganese	MG/L	0.3	-	0.931	NA	0.037	0.54	0.55
Mercury	MG/L	7.00E-04	-		NA			
Nickel	MG/L	0.1	-	0.008	NA			
Potassium	MG/L	-	-	3.67	NA	3.4	3.4	5.2
Silver	MG/L	0.05	-		NA			
Sodium	MG/L	20	-	13.5	NA	19.9	11.4	6.5
Vanadium	MG/L	-	-		NA			
Zinc	MG/L	2	-	0.332	NA			0.041

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

N:\11172700.00000\GIS\dB\Program\EDMS.mde
Printed: 4/6/2007 9:17:30 AM
[MATRIX] = 'WG' AND [LOCID] <> 'EFFLUENT'

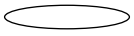
TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-33S	GW-33S	GW-33S	GW-33S	GW-33S
Sample ID				GW-33S	GW-33S	GW-33S	GW-33S	GW-33S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				05/04/05	09/20/05	09/21/05	05/16/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA	NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA	NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA	NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA	NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA	NA		NA
Cesium 137 (Soluble)	PCI/L	-	200		NA	NA		NA
Lead 212 (Insoluble)	PCI/L	-	123		NA	NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800		NA	NA		NA
Lead 214 (Soluble)	PCI/L	-	11800		NA	NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA	NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA	NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA	NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA	NA		NA

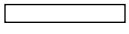
Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.



Concentration Exceeds Criteria (1)



Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-34S	GW-34S	GW-34S	GW-34S	GW-34S
Sample ID				GW-34S-012004	GW-34S	GW-34S	GW-34S	GW-34S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/20/04	09/29/04	05/04/05	09/21/05	05/16/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-		2			
1,2-Dichloroethene (cis)	UG/L	5	-				NA	NA
1,2-Dichloroethene (total)	UG/L	5	-	NA	NA	NA		
Acetone	UG/L	50	-	3.2 J	17 J+			
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

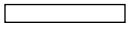
Location ID				GW-34S	GW-34S	GW-34S	GW-34S	GW-34S
Sample ID				GW-34S-012004	GW-34S	GW-34S	GW-34S	GW-34S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/20/04	09/29/04	05/04/05	09/21/05	05/16/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-				4 J	
Butylbenzylphthalate	UG/L	50	-					
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-					
Total TCDD	NG/L	-	-	NA			NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA		0.022 J	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA		0.022 J	NA	NA
Total TCDF	NG/L	-	-	NA			NA	NA
Metals								
Aluminum	MG/L	-	-	2.06 J+	0.282	0.240		0.22

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.


Concentration Exceeds Criteria (1)


Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-34S	GW-34S	GW-34S	GW-34S	GW-34S
Sample ID				GW-34S-012004	GW-34S	GW-34S	GW-34S	GW-34S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/20/04	09/29/04	05/04/05	09/21/05	05/16/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-		0.011			
Barium	MG/L	1	-	0.141	0.138	0.119	0.12	0.16
Cadmium	MG/L	0.005	-					
Calcium	MG/L	-	-	162	181	175	175	166
Chromium	MG/L	0.05	-	0.007	0.015			
Cobalt	MG/L	-	-					
Copper	MG/L	0.2	-	0.057	0.012			
Iron	MG/L	0.3	-	3.47	7.37	0.668	1.2 J-	0.57
Lead	MG/L	0.025	-	0.006	0.003			
Magnesium	MG/L	35	-	69.2	79.2	58.7	66.1	46.9
Manganese	MG/L	0.3	-	0.464	0.318	0.305	0.32	0.46
Mercury	MG/L	7.00E-04	-					
Nickel	MG/L	0.1	-	0.023	0.03	0.012	0.016	0.011
Potassium	MG/L	-	-	9.44	9.23	9.73	8.4	8.9
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	99.4	88.5	53.4	83.8	61.8
Vanadium	MG/L	-	-	0.020	0.012			
Zinc	MG/L	2	-	0.062	0.025			

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-34S	GW-34S	GW-34S	GW-34S	GW-34S
Sample ID				GW-34S-012004	GW-34S	GW-34S	GW-34S	GW-34S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				01/20/04	09/29/04	05/04/05	09/21/05	05/16/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270		NA		NA	
Barium 133 (Insoluble)	PCI/L	-	1520		NA		NA	
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA		NA	
Bismuth 214 (Soluble)	PCI/L	-	18900	33.8 ± 1.70E+01	NA		NA	
Cesium 134 (Insoluble)	PCI/L	-	80		NA		NA	
Cesium 137 (Soluble)	PCI/L	-	200		NA		NA	
Lead 212 (Insoluble)	PCI/L	-	123		NA		NA	
Lead 214 (Insoluble)	PCI/L	-	11800		NA		NA	
Lead 214 (Soluble)	PCI/L	-	11800		NA		NA	
Potassium 40 (Insoluble)	PCI/L	-	-	32.1 ± 1.90E+01	NA		NA	
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA		NA	
Thorium 234 (Insoluble)	PCI/L	-	401		NA		NA	
Uranium 235 (Insoluble)	PCI/L	-	-		NA		NA	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-34S	GW-35S	GW-35S	GW-35S	GW-35S
Sample ID				GW-34S	GW35S-012004	GW-35S	GW-35S	GW-35S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/09/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Volatile Organic Compounds								
1,1,2-Trichloroethane	UG/L	1	-					
1,2-Dichloroethene (cis)	UG/L	5	-	NA				NA
1,2-Dichloroethene (total)	UG/L	5	-		NA	NA	NA	
Acetone	UG/L	50	-			13 U		
Benzene	UG/L	1	-					
Carbon disulfide	UG/L	60	-					
Chlorobenzene	UG/L	5	-					
Chloroethane	UG/L	5	-					
Methyl ethyl ketone (2-Butanone)	UG/L	50	-					
Tetrachloroethene	UG/L	5	-					
Toluene	UG/L	5	-					
Vinyl chloride	UG/L	2	-					
Semivolatile Organic Compounds								
1,3-Dichlorobenzene	UG/L	3	-					
1,4-Dichlorobenzene	UG/L	3	-					
Anthracene	UG/L	50	-					
Benzo(a)anthracene	UG/L	0.002	-					
Benzo(a)pyrene	UG/L	ND	-					
Benzo(b)fluoranthene	UG/L	0.002	-					
Benzo(g,h,i)perylene	UG/L	-	-					

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-34S	GW-35S	GW-35S	GW-35S	GW-35S
Sample ID				GW-34S	GW35S-012004	GW-35S	GW-35S	GW-35S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/09/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Semivolatile Organic Compounds								
Benzo(k)fluoranthene	UG/L	0.002	-					
bis(2-Ethylhexyl)phthalate	UG/L	5	-					
Butylbenzylphthalate	UG/L	50	-		4			
Chrysene	UG/L	0.002	-					
Diethylphthalate	UG/L	50	-					
Fluoranthene	UG/L	50	-					
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-					
N-Nitrosodiphenylamine	UG/L	50	-					
Phenanthrene	UG/L	50	-					
Phenol	UG/L	1	-					
Pyrene	UG/L	50	-					
Dioxins/Furans								
2,3,7,8-TCDD	NG/L	7.00E-04	-	NA				
Total TCDD	NG/L	-	-	NA	NA			NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA			NA
2,3,7,8-TCDF	NG/L	0.007	-					
Total HpCDF	NG/L	-	-	NA	NA			NA
Total TCDF	NG/L	-	-	NA	NA			NA
Metals								
Aluminum	MG/L	-	-		3.25 J+	0.292	1.16	26.0

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-34S	GW-35S	GW-35S	GW-35S	GW-35S
Sample ID				GW-34S	GW35S-012004	GW-35S	GW-35S	GW-35S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/09/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Metals								
Antimony	MG/L	0.003	-					
Arsenic	MG/L	0.025	-					0.016
Barium	MG/L	1	-	0.11	0.043	0.031	0.034	0.32
Cadmium	MG/L	0.005	-					0.0025
Calcium	MG/L	-	-	170	356	195	98.4	194
Chromium	MG/L	0.05	-				0.005	0.21 J-
Cobalt	MG/L	-	-					0.036
Copper	MG/L	0.2	-		0.042			0.093
Iron	MG/L	0.3	-	0.50	2.96	0.726	2.03	45.1 J-
Lead	MG/L	0.025	-		0.007	0.005	0.003	0.050
Magnesium	MG/L	35	-	54.3	122	67.8	37.1	78.7
Manganese	MG/L	0.3	-	0.29	1.52	1.49	1.00	7.4
Mercury	MG/L	7.00E-04	-			0.0003		
Nickel	MG/L	0.1	-		0.013	0.007	0.005	0.15
Potassium	MG/L	-	-	7.6	5.44	4.89	3.74	13.0
Silver	MG/L	0.05	-					
Sodium	MG/L	20	-	45.4	20.5	13.4	6.06	13.3
Vanadium	MG/L	-	-					0.050
Zinc	MG/L	2	-		0.063	0.037	0.153	0.66

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-34S	GW-35S	GW-35S	GW-35S	GW-35S
Sample ID				GW-34S	GW35S-012004	GW-35S	GW-35S	GW-35S
Matrix				Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)				-	-	-	-	-
Date Sampled				11/09/06	01/20/04	10/01/04	05/04/05	09/20/05
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**					
Radionuclides								
Actinium 228 (Insoluble)	PCI/L	-	3270	NA		NA		NA
Barium 133 (Insoluble)	PCI/L	-	1520	NA		NA		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900	NA		NA		NA
Bismuth 214 (Soluble)	PCI/L	-	18900	NA		NA		NA
Cesium 134 (Insoluble)	PCI/L	-	80	NA		NA		NA
Cesium 137 (Soluble)	PCI/L	-	200	NA		NA		NA
Lead 212 (Insoluble)	PCI/L	-	123	NA		NA		NA
Lead 214 (Insoluble)	PCI/L	-	11800	NA		NA		NA
Lead 214 (Soluble)	PCI/L	-	11800	NA		NA		NA
Potassium 40 (Insoluble)	PCI/L	-	-	NA		NA		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05	NA		NA		NA
Thorium 234 (Insoluble)	PCI/L	-	401	NA		NA		NA
Uranium 235 (Insoluble)	PCI/L	-	-	NA		NA		NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.

J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.

J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.

NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-35S	GW-35S
Sample ID				GW-35S	GW-35S
Matrix				Groundwater	Groundwater
Depth Interval (ft)				-	-
Date Sampled				05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Volatile Organic Compounds					
1,1,2-Trichloroethane	UG/L	1	-		
1,2-Dichloroethene (cis)	UG/L	5	-	NA	NA
1,2-Dichloroethene (total)	UG/L	5	-		
Acetone	UG/L	50	-		
Benzene	UG/L	1	-		
Carbon disulfide	UG/L	60	-		
Chlorobenzene	UG/L	5	-		
Chloroethane	UG/L	5	-		
Methyl ethyl ketone (2-Butanone)	UG/L	50	-		
Tetrachloroethene	UG/L	5	-		
Toluene	UG/L	5	-		
Vinyl chloride	UG/L	2	-		
Semivolatile Organic Compounds					
1,3-Dichlorobenzene	UG/L	3	-		
1,4-Dichlorobenzene	UG/L	3	-		
Anthracene	UG/L	50	-		
Benzo(a)anthracene	UG/L	0.002	-		
Benzo(a)pyrene	UG/L	ND	-		
Benzo(b)fluoranthene	UG/L	0.002	-		
Benzo(g,h,i)perylene	UG/L	-	-		

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-35S	GW-35S
Sample ID				GW-35S	GW-35S
Matrix				Groundwater	Groundwater
Depth Interval (ft)				-	-
Date Sampled				05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Semivolatile Organic Compounds					
Benzo(k)fluoranthene	UG/L	0.002	-		
bis(2-Ethylhexyl)phthalate	UG/L	5	-		
Butylbenzylphthalate	UG/L	50	-		
Chrysene	UG/L	0.002	-		
Diethylphthalate	UG/L	50	-		
Fluoranthene	UG/L	50	-		
Indeno(1,2,3-cd)pyrene	UG/L	0.002	-		
N-Nitrosodiphenylamine	UG/L	50	-		
Phenanthrene	UG/L	50	-		
Phenol	UG/L	1	-		
Pyrene	UG/L	50	-		
Dioxins/Furans					
2,3,7,8-TCDD	NG/L	7.00E-04	-		NA
Total TCDD	NG/L	-	-	NA	NA
1,2,3,4,6,7,8-HpCDF	NG/L	0.07	-	NA	NA
2,3,7,8-TCDF	NG/L	0.007	-	0.0016	
Total HpCDF	NG/L	-	-	NA	NA
Total TCDF	NG/L	-	-	NA	NA
Metals					
Aluminum	MG/L	-	-	0.25	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-35S	GW-35S
Sample ID				GW-35S	GW-35S
Matrix				Groundwater	Groundwater
Depth Interval (ft)				-	-
Date Sampled				05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Metals					
Antimony	MG/L	0.003	-		
Arsenic	MG/L	0.025	-		
Barium	MG/L	1	-	0.046	0.077
Cadmium	MG/L	0.005	-		
Calcium	MG/L	-	-	94.5	132
Chromium	MG/L	0.05	-	0.018 J+	
Cobalt	MG/L	-	-		
Copper	MG/L	0.2	-		
Iron	MG/L	0.3	-	0.56	0.070
Lead	MG/L	0.025	-		
Magnesium	MG/L	35	-	33.9	47.1
Manganese	MG/L	0.3	-	0.72	0.71
Mercury	MG/L	7.00E-04	-		
Nickel	MG/L	0.1	-		
Potassium	MG/L	-	-	4.2	3.4
Silver	MG/L	0.05	-		
Sodium	MG/L	20	-	14.4	5.2
Vanadium	MG/L	-	-		
Zinc	MG/L	2	-	0.030	

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

TABLE E-1
SUMMARY OF HISTORICAL GROUNDWATER ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID				GW-35S	GW-35S
Sample ID				GW-35S	GW-35S
Matrix				Groundwater	Groundwater
Depth Interval (ft)				-	-
Date Sampled				05/18/06	11/07/06
Parameter	**Units**	**Criteria (1)**	**Criteria (2)**		
Radionuclides					
Actinium 228 (Insoluble)	PCI/L	-	3270		NA
Barium 133 (Insoluble)	PCI/L	-	1520		NA
Bismuth 214 (Insoluble)	PCI/L	-	18900		NA
Bismuth 214 (Soluble)	PCI/L	-	18900		NA
Cesium 134 (Insoluble)	PCI/L	-	80		NA
Cesium 137 (Soluble)	PCI/L	-	200		NA
Lead 212 (Insoluble)	PCI/L	-	123		NA
Lead 214 (Insoluble)	PCI/L	-	11800		NA
Lead 214 (Soluble)	PCI/L	-	11800		NA
Potassium 40 (Insoluble)	PCI/L	-	-		NA
Thallium 208 (Insoluble)	PCI/L	-	2.83E+05		NA
Thorium 234 (Insoluble)	PCI/L	-	401		NA
Uranium 235 (Insoluble)	PCI/L	-	-		NA

Criteria (1)- NYSDEC TOGS (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998 (includes 4/2000 Addendum). Class GA.

Criteria (2)- Derived from EPA Maximum Contaminant Level (MCL) of 4 millirem/year exposure.

Flags assigned during chemistry validation are shown.

Concentration Exceeds Criteria (1)

Concentration Exceeds Criteria (2)

J - The analyte was positively identified, the quantitation is an estimation.
J+ - The analyte was positively identified, the quantitation is an estimation with possible high bias.
J- - The analyte was positively identified, the quantitation is an estimation with possible low bias.
NA - Not Analyzed; U - Not detected above the reported quantitation limit.; R - The data is rejected.

Only Detected Results Reported.

FIGURE E-1
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-1D

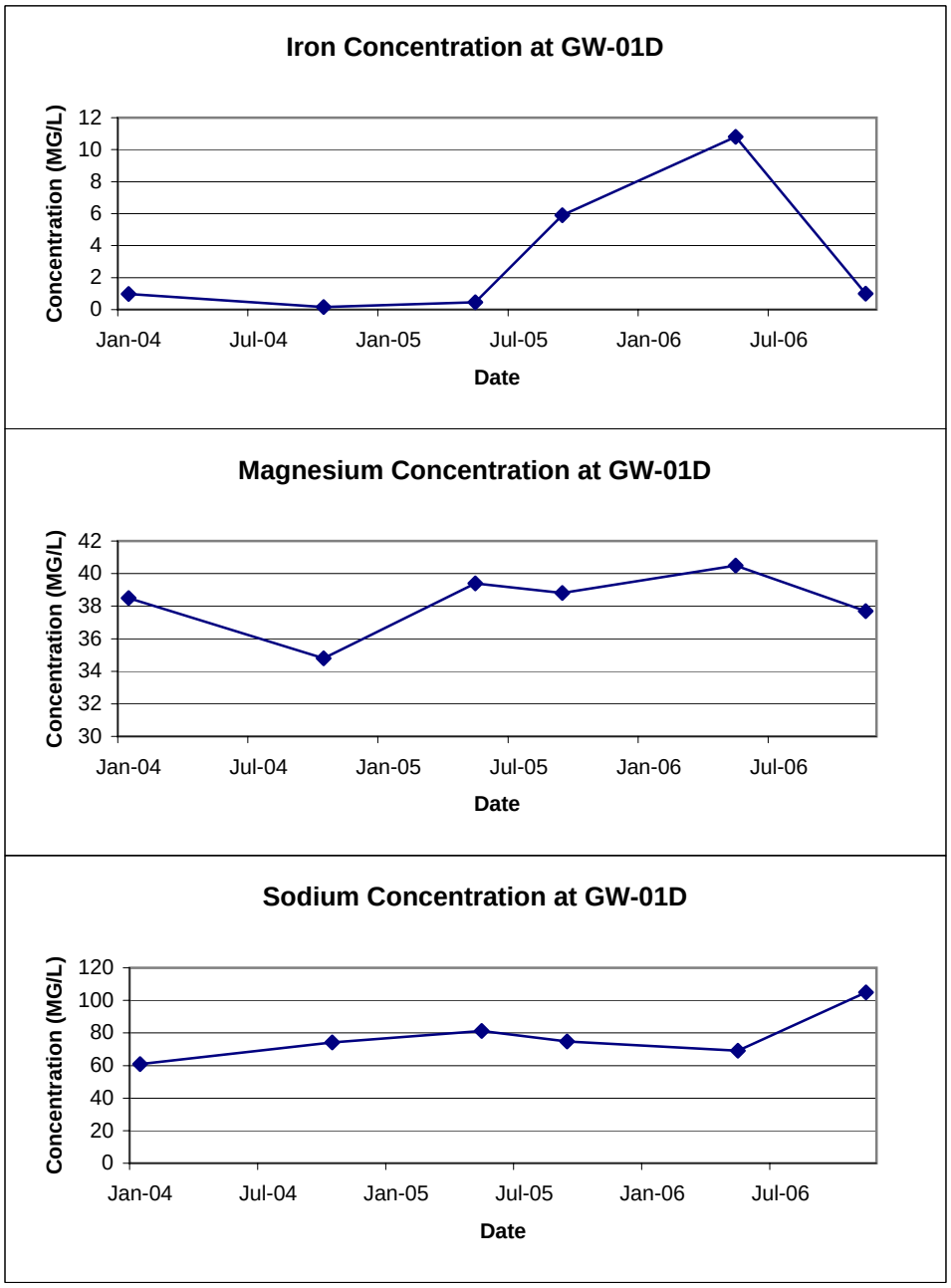


FIGURE E-2
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-1S

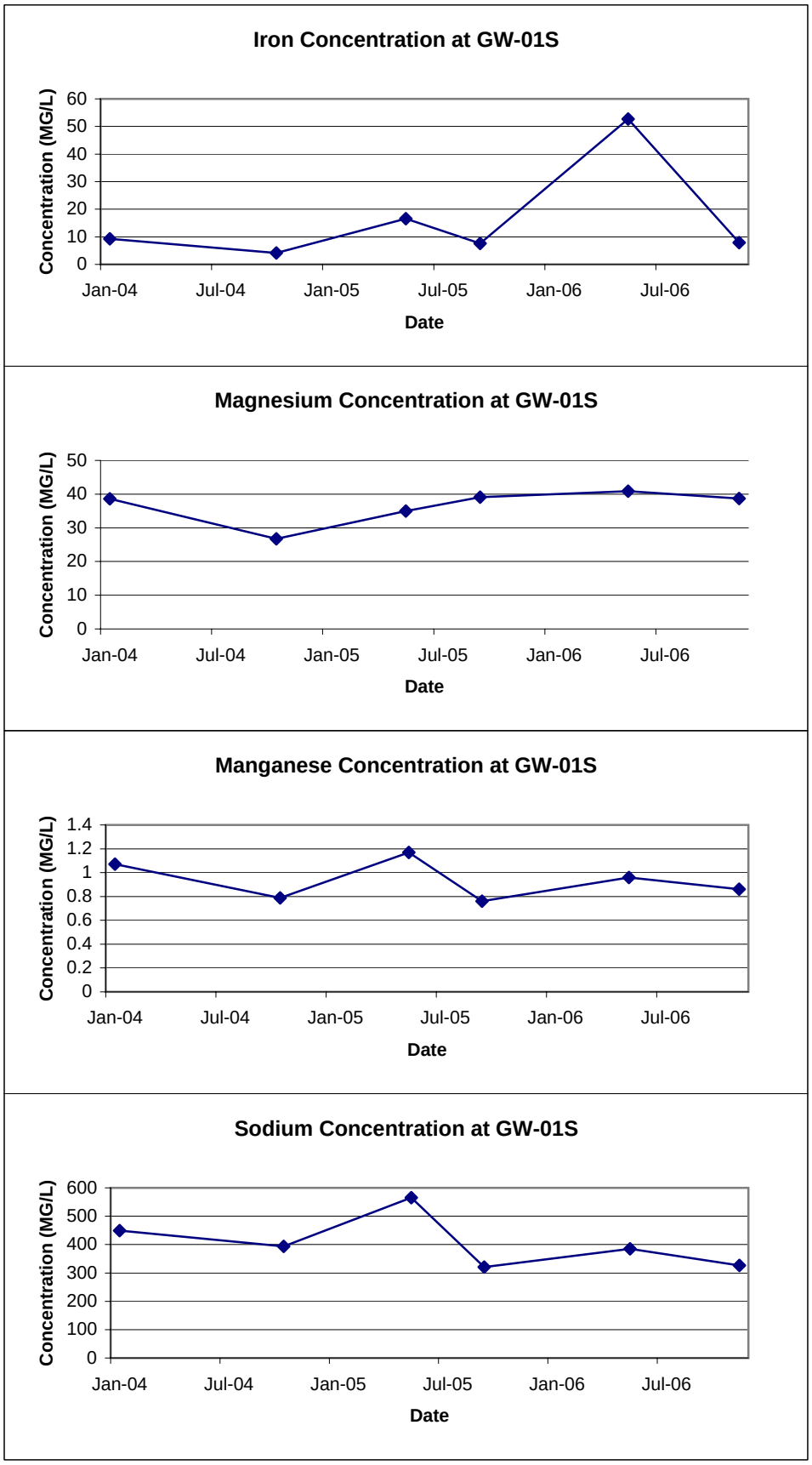


FIGURE E-3
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-3D

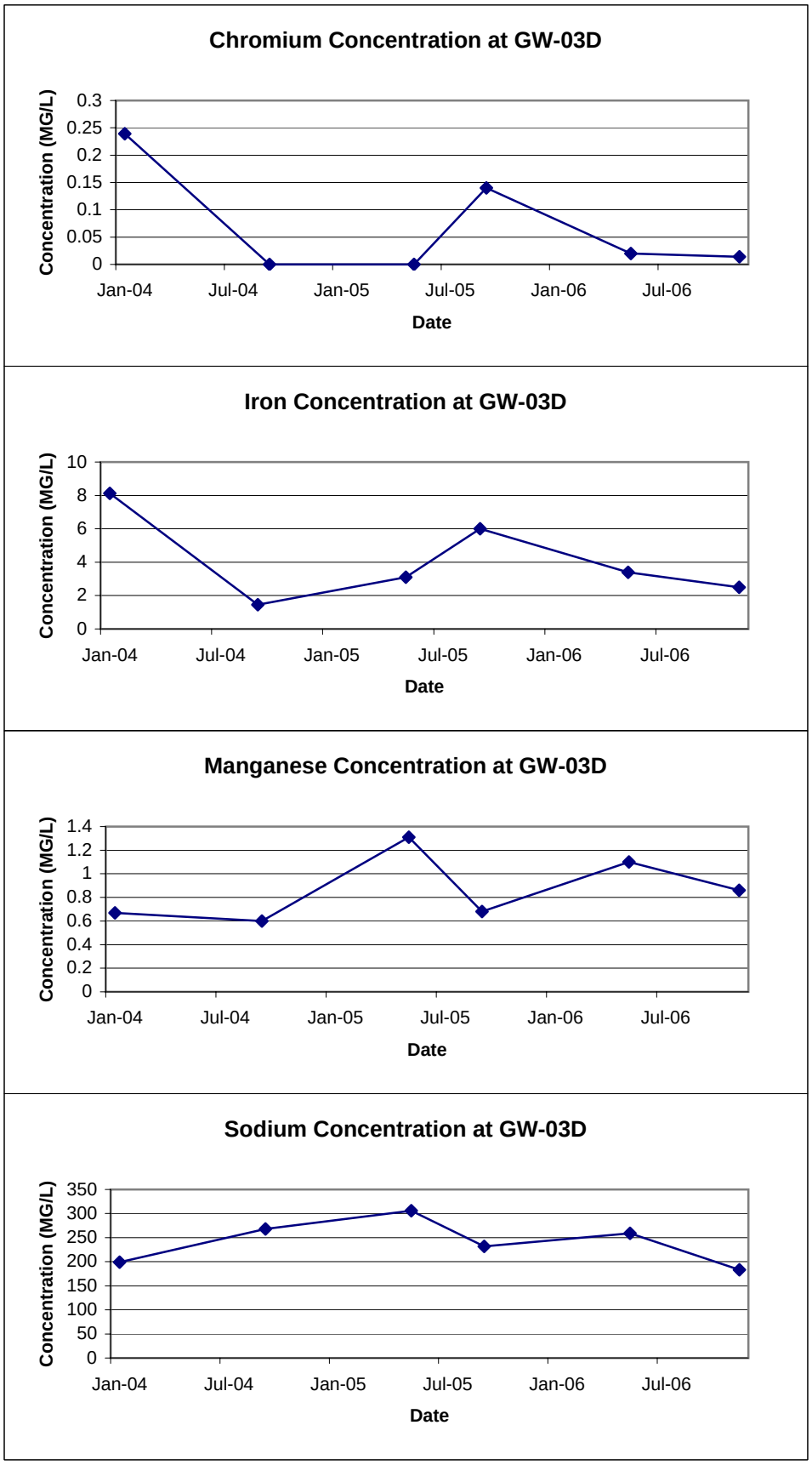
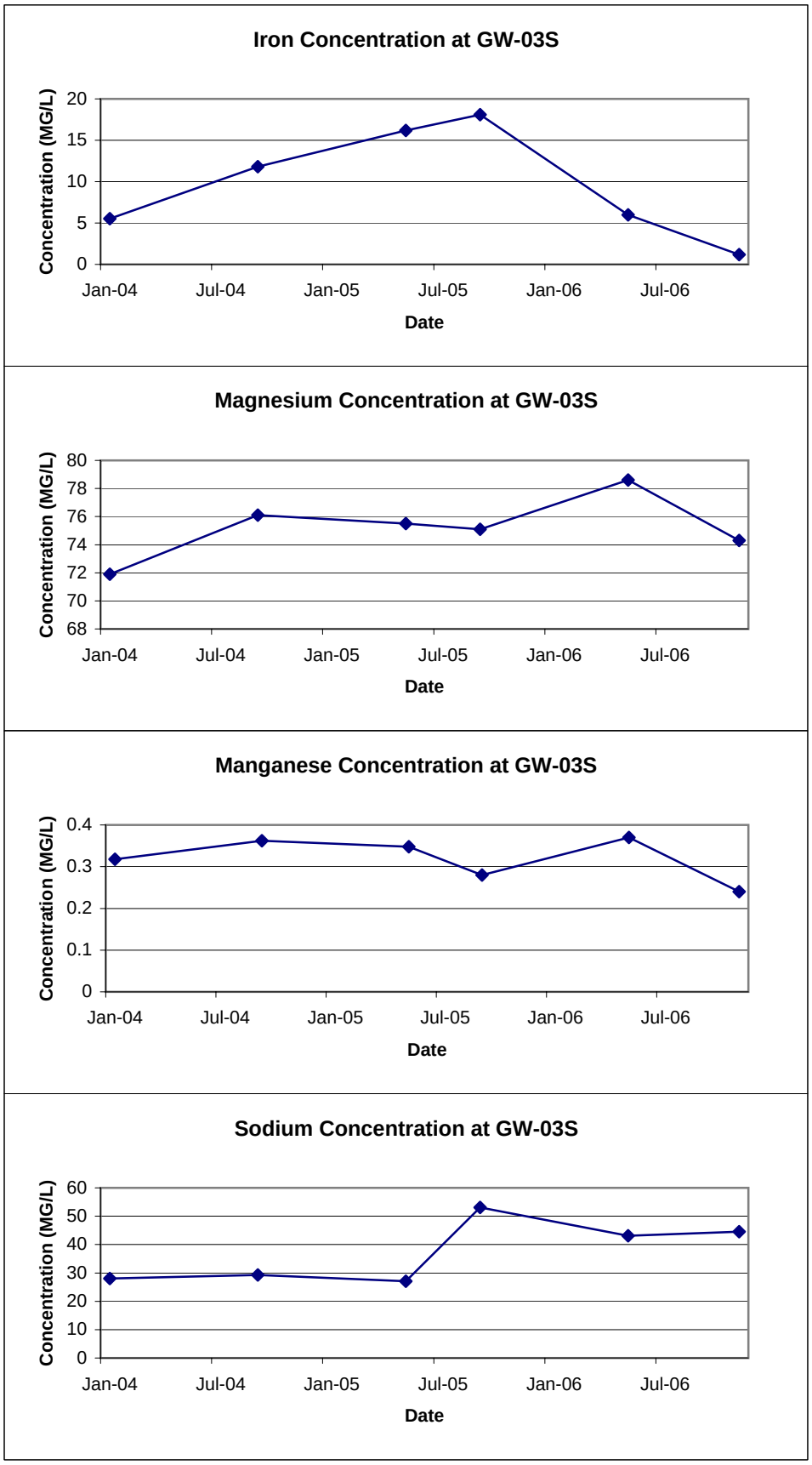
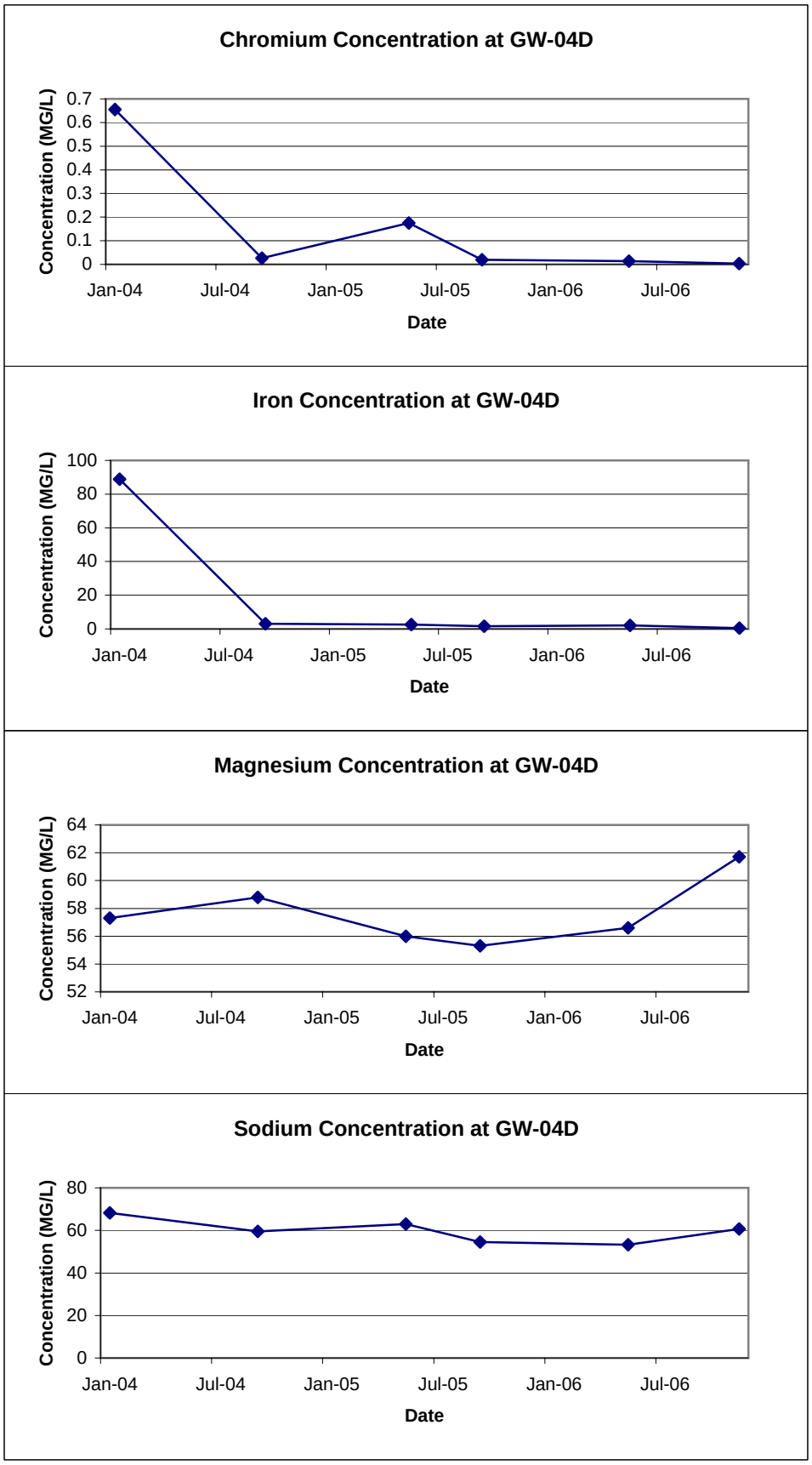


FIGURE E-4
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-3S



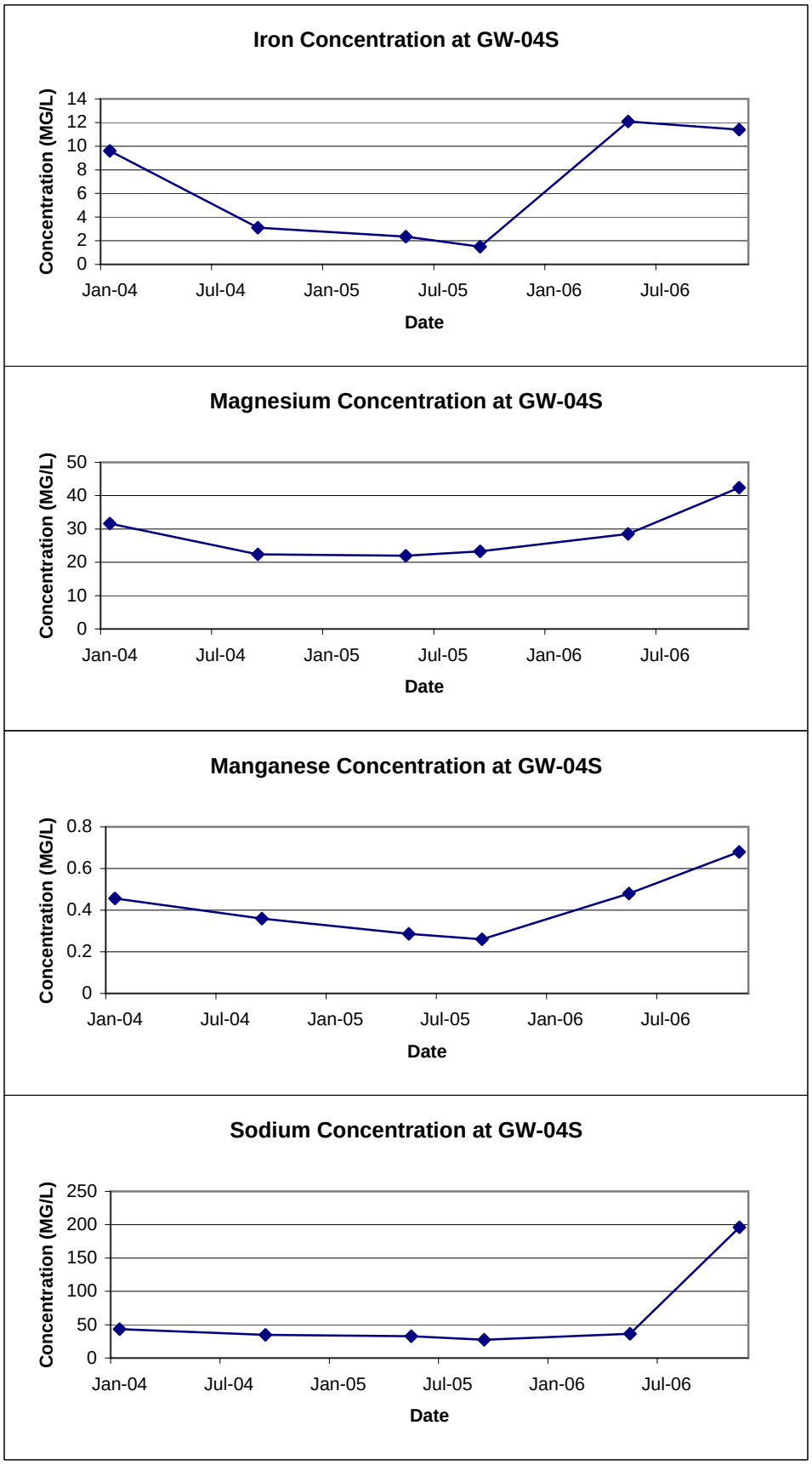
N/11172700/EXCEL/pfohl trends thru 11_06.xls

FIGURE E-5
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-4D



N/11172700/EXCEL/pfohl trends thru 11_06.xls

FIGURE E-6
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-4S



N/11172700/EXCEL/pfohl trends thru 11_06.xls

FIGURE E-7
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-7D

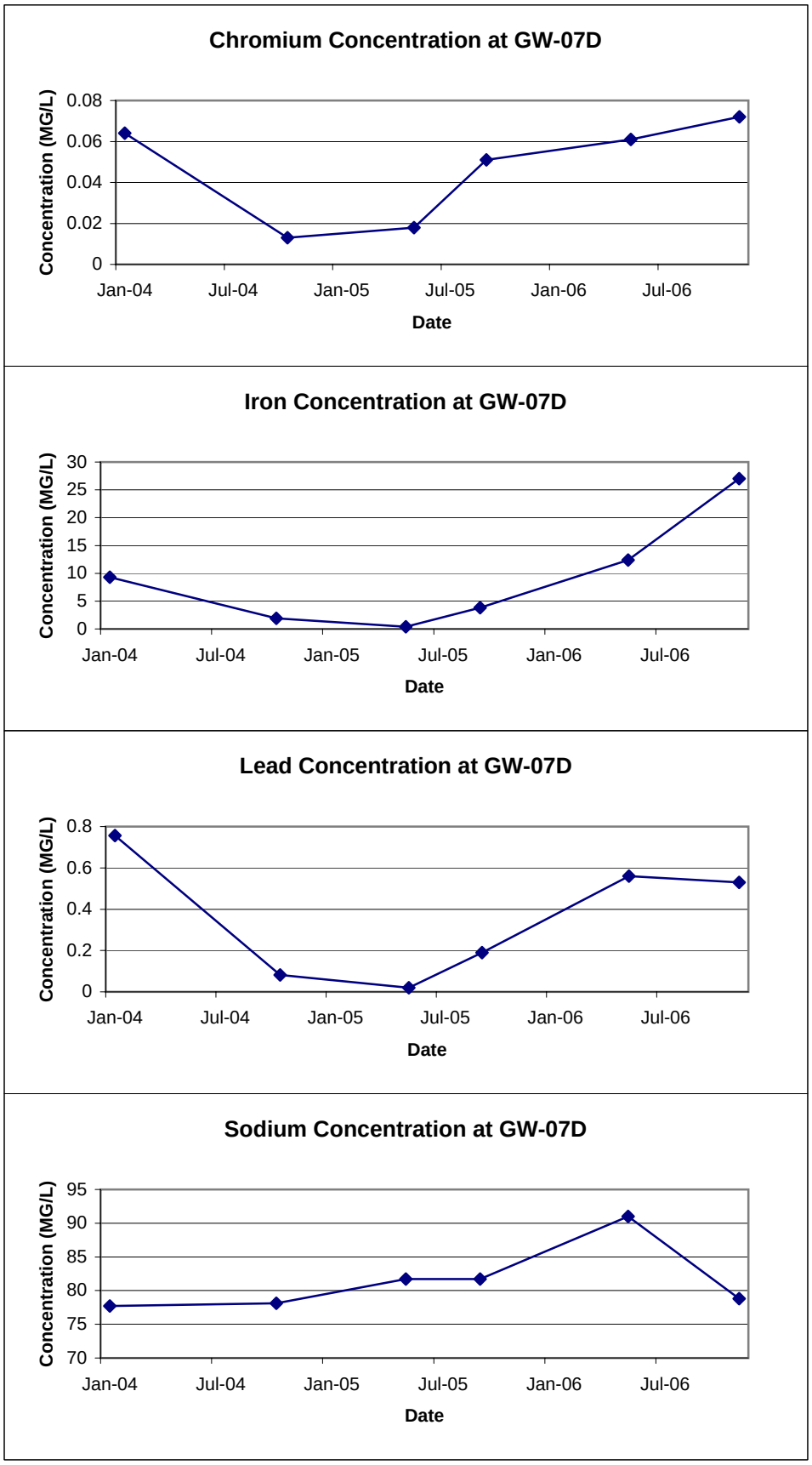


FIGURE E-8
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-7S

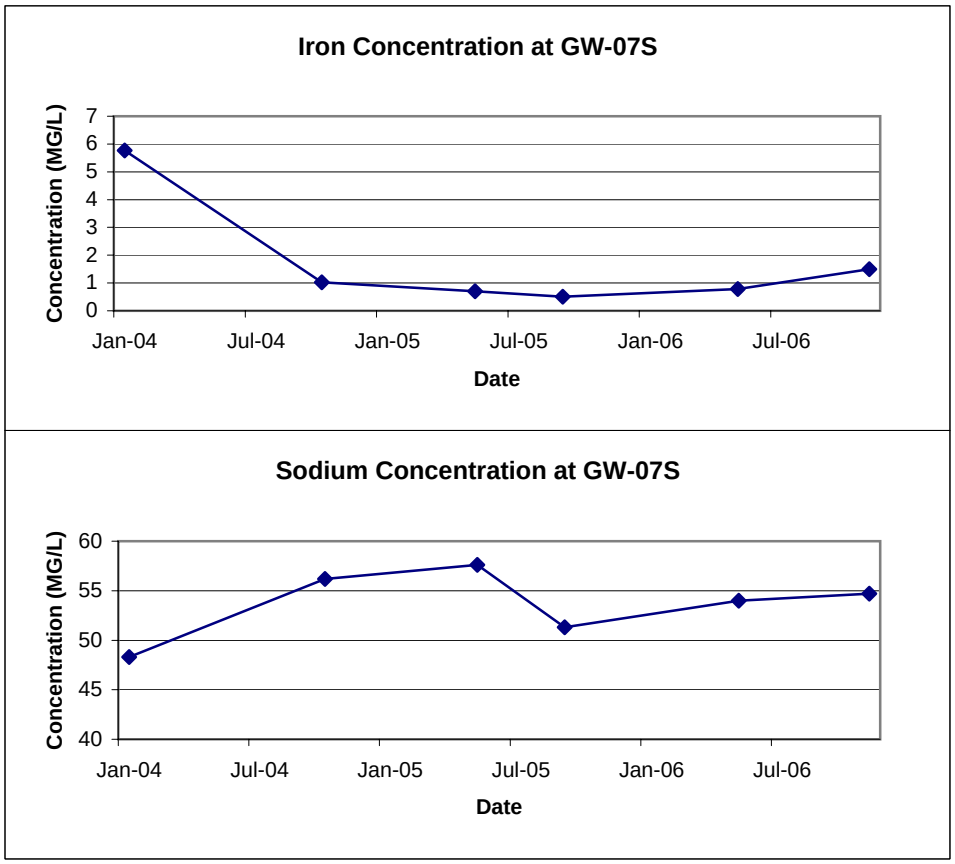


FIGURE E-9
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-8D

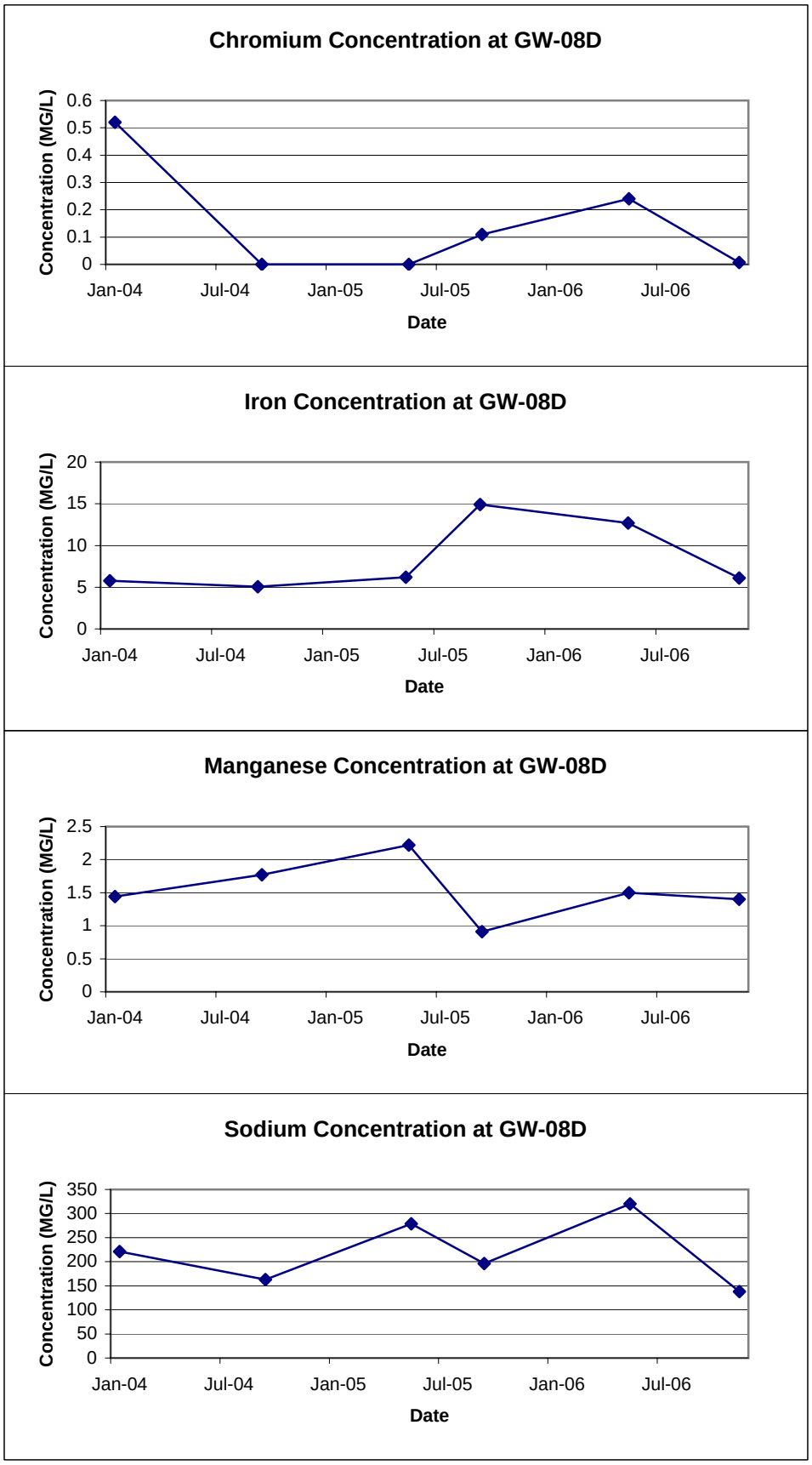
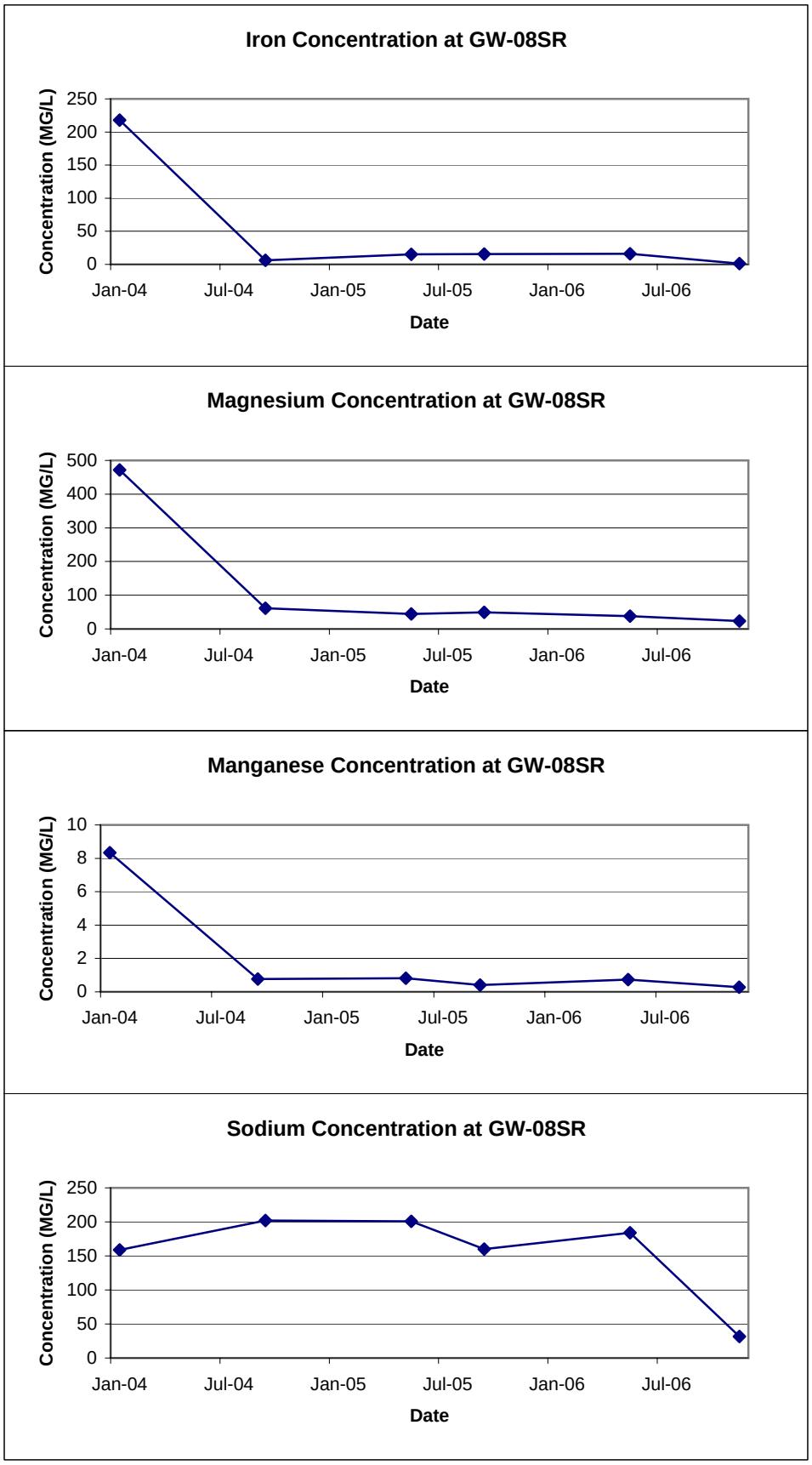


FIGURE E-10
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-8SR



N/11172700/EXCEL/pfohl trends thru 11_06.xls

FIGURE E-11
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-26D

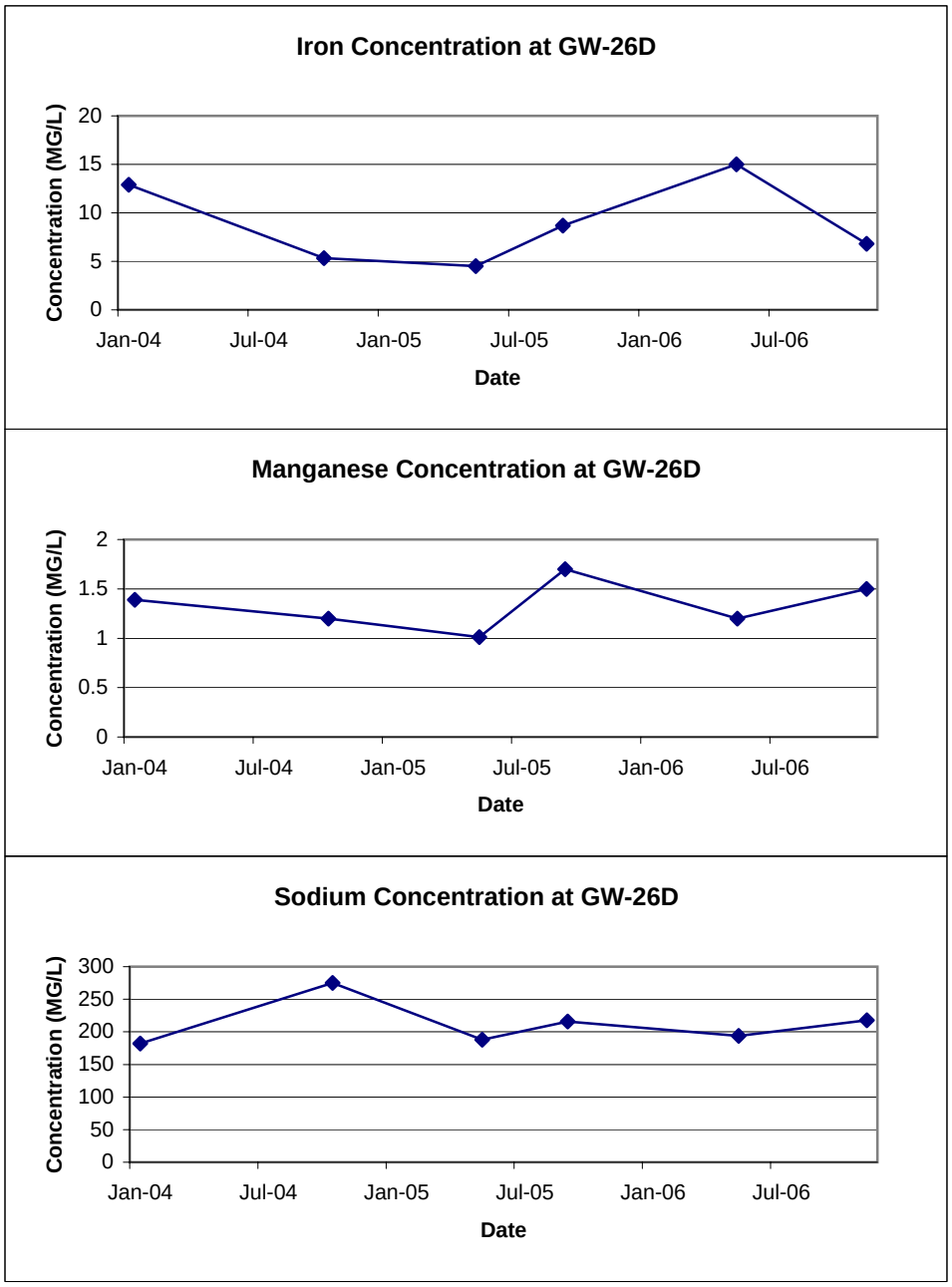
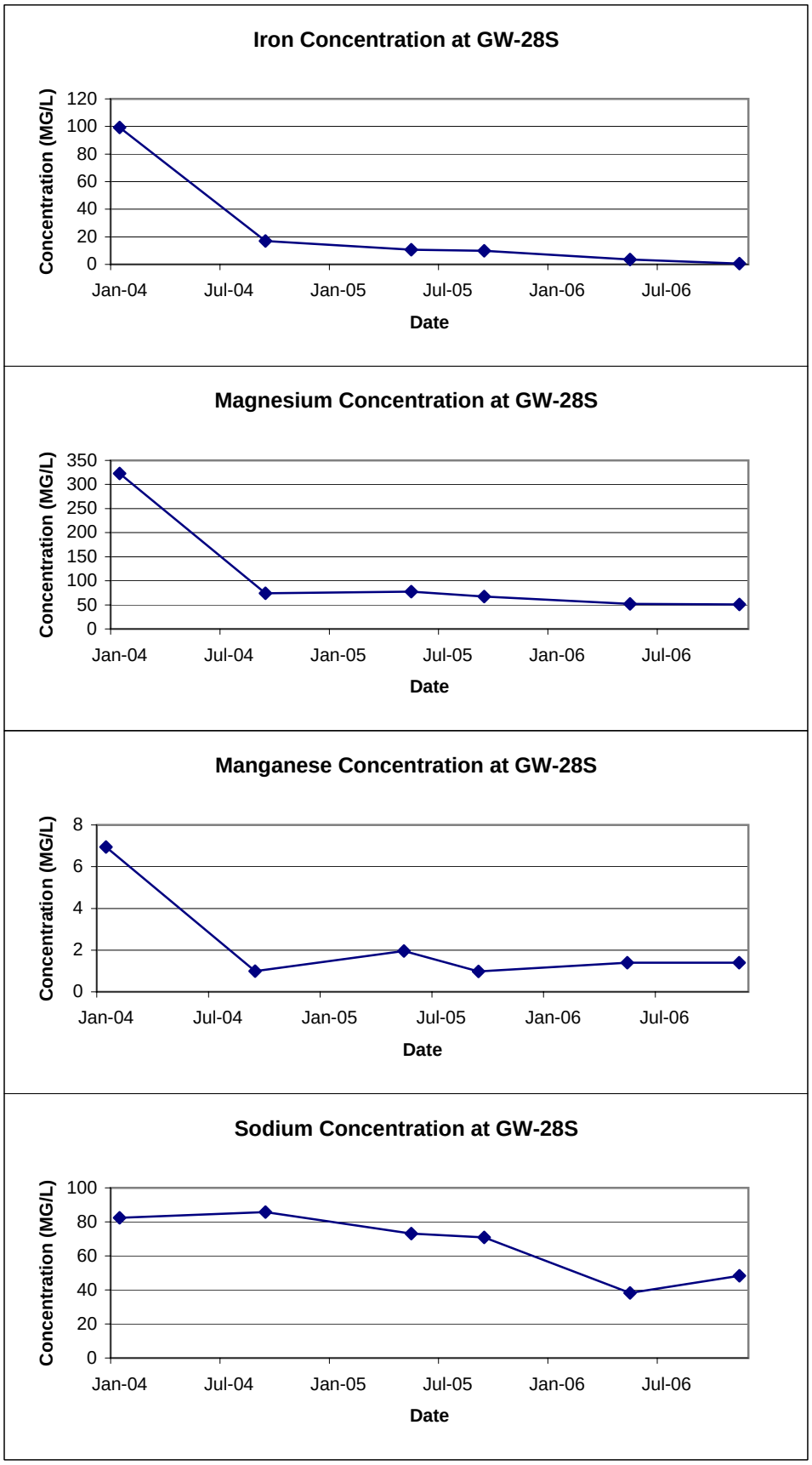
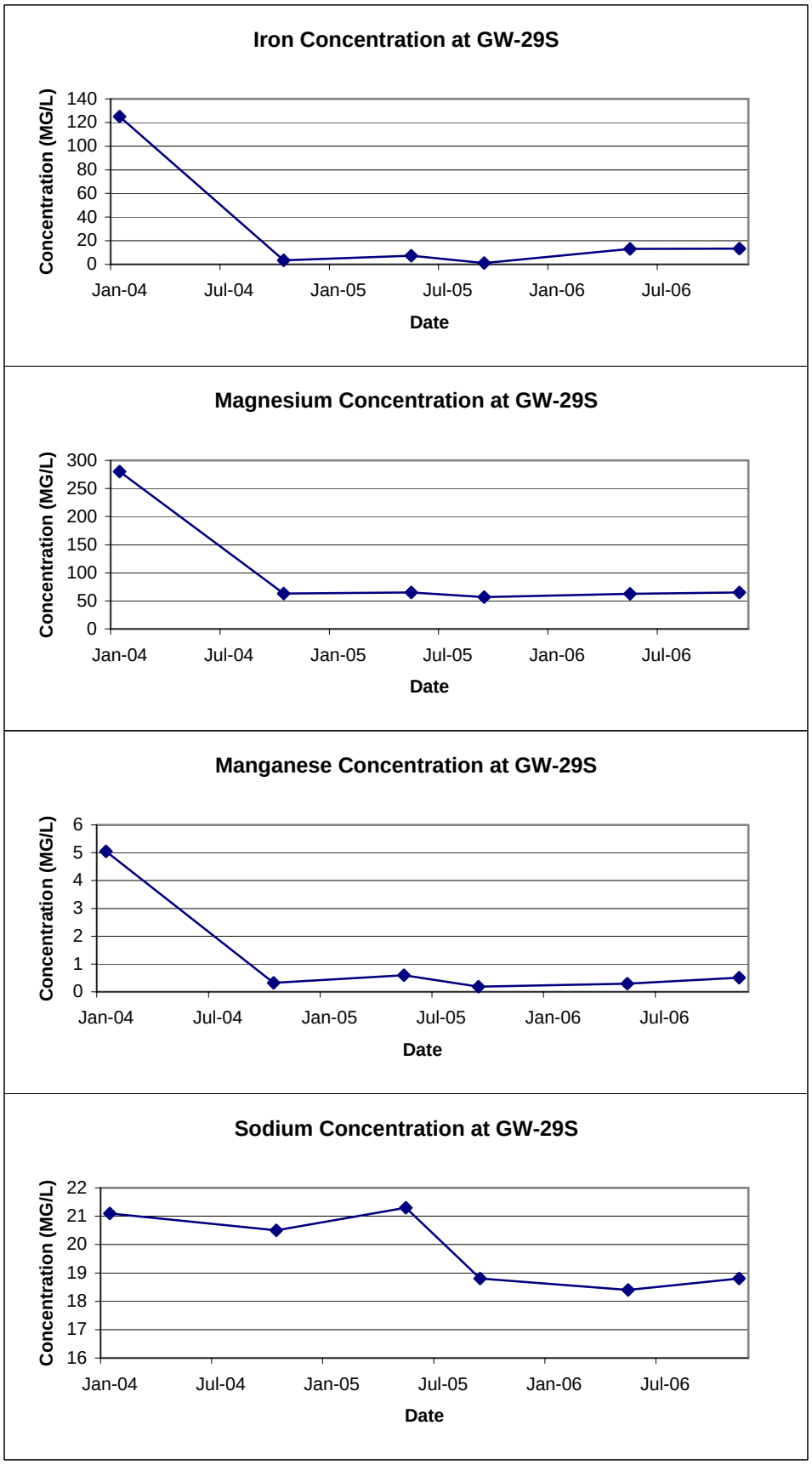


FIGURE E-12
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-28S



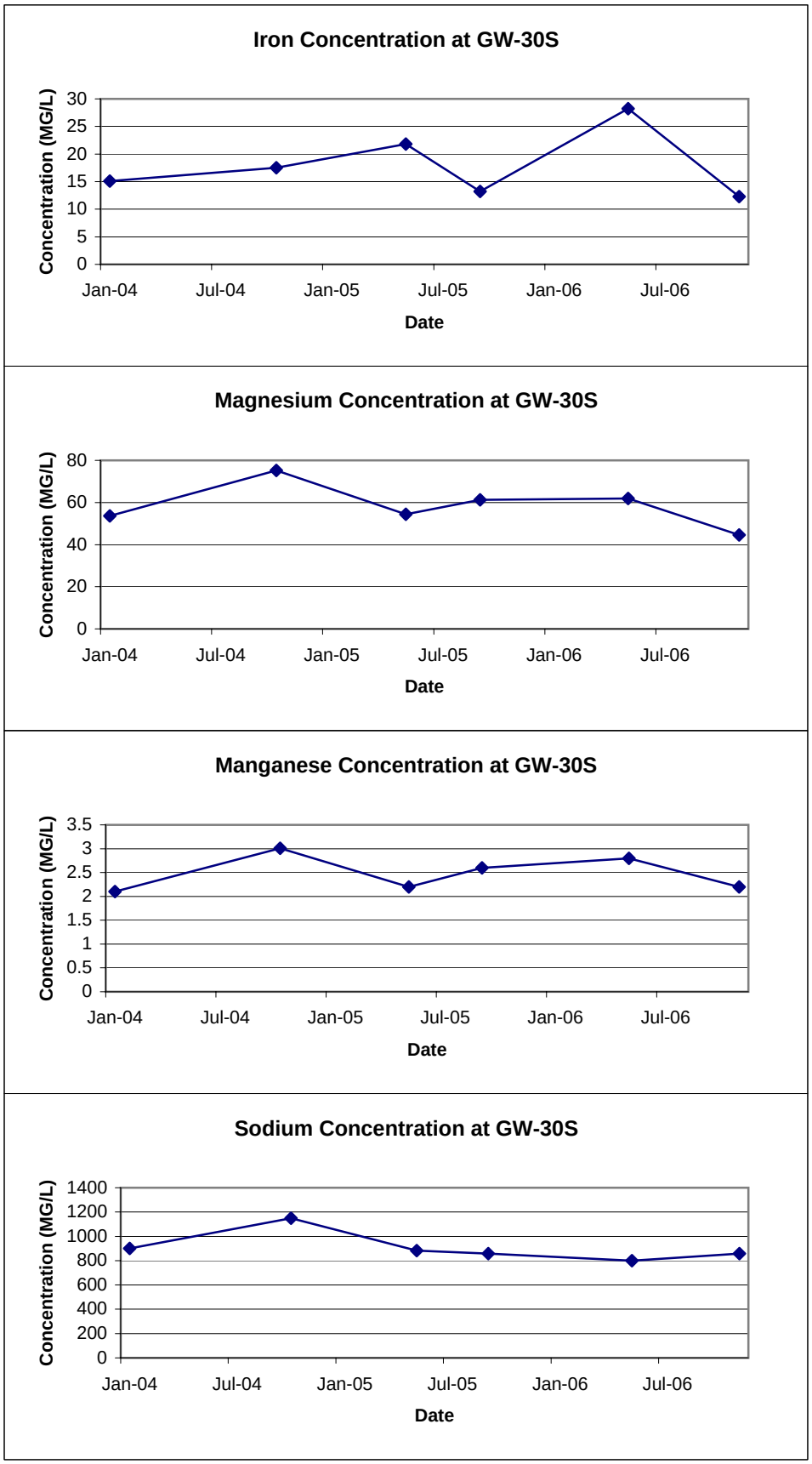
N/11172700/EXCEL/pfohl trends thru 11_06.xls

FIGURE E-13
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-29S



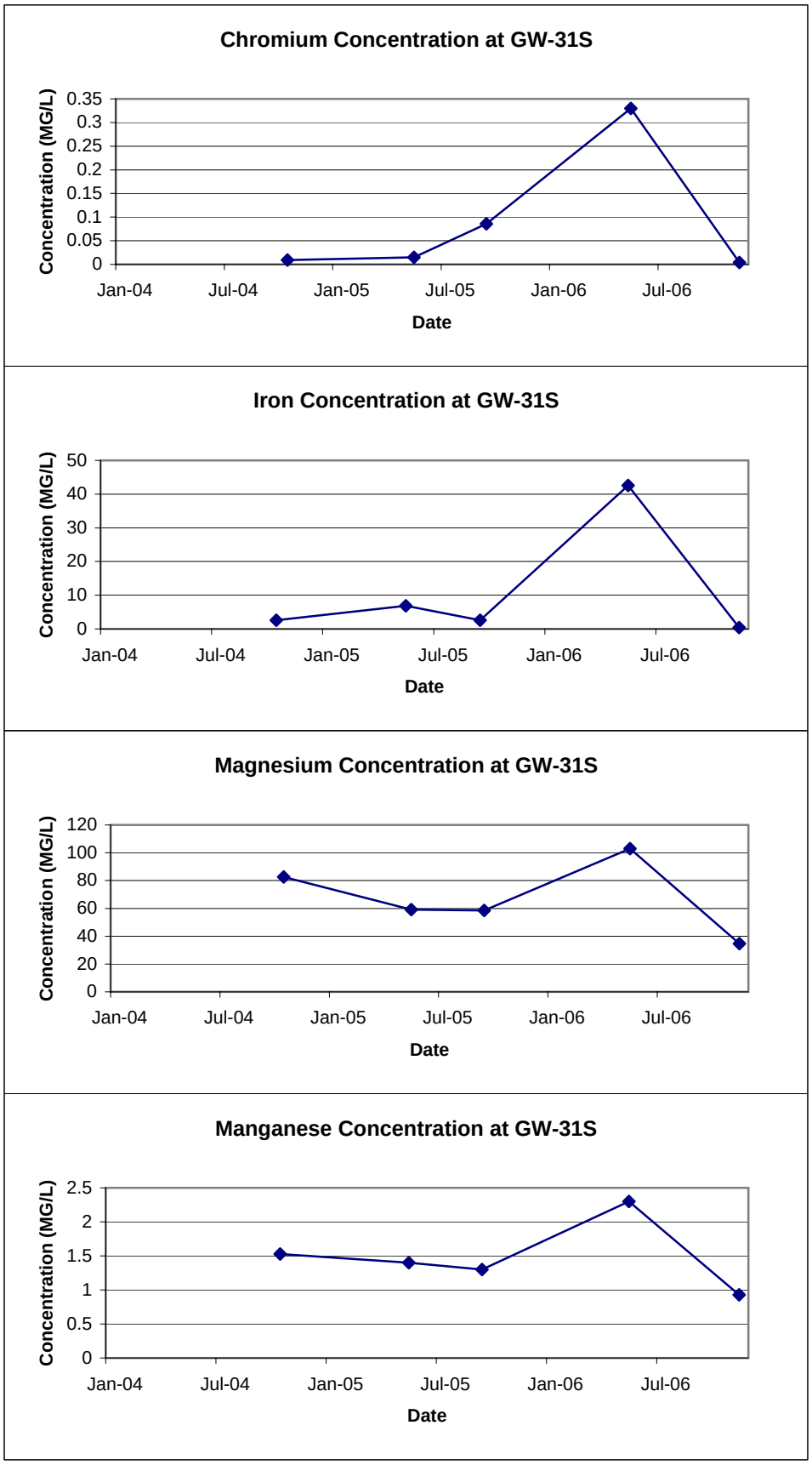
N/11172700/EXCEL/pfohl trends thru 11_06.xls

FIGURE E-14
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-30S



N/11172700/EXCEL/pfohl trends thru 11_06.xls

FIGURE E-15
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-31S



N/11172700/EXCEL/pfohl trends thru 11_06.xls

FIGURE E-16
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-32S

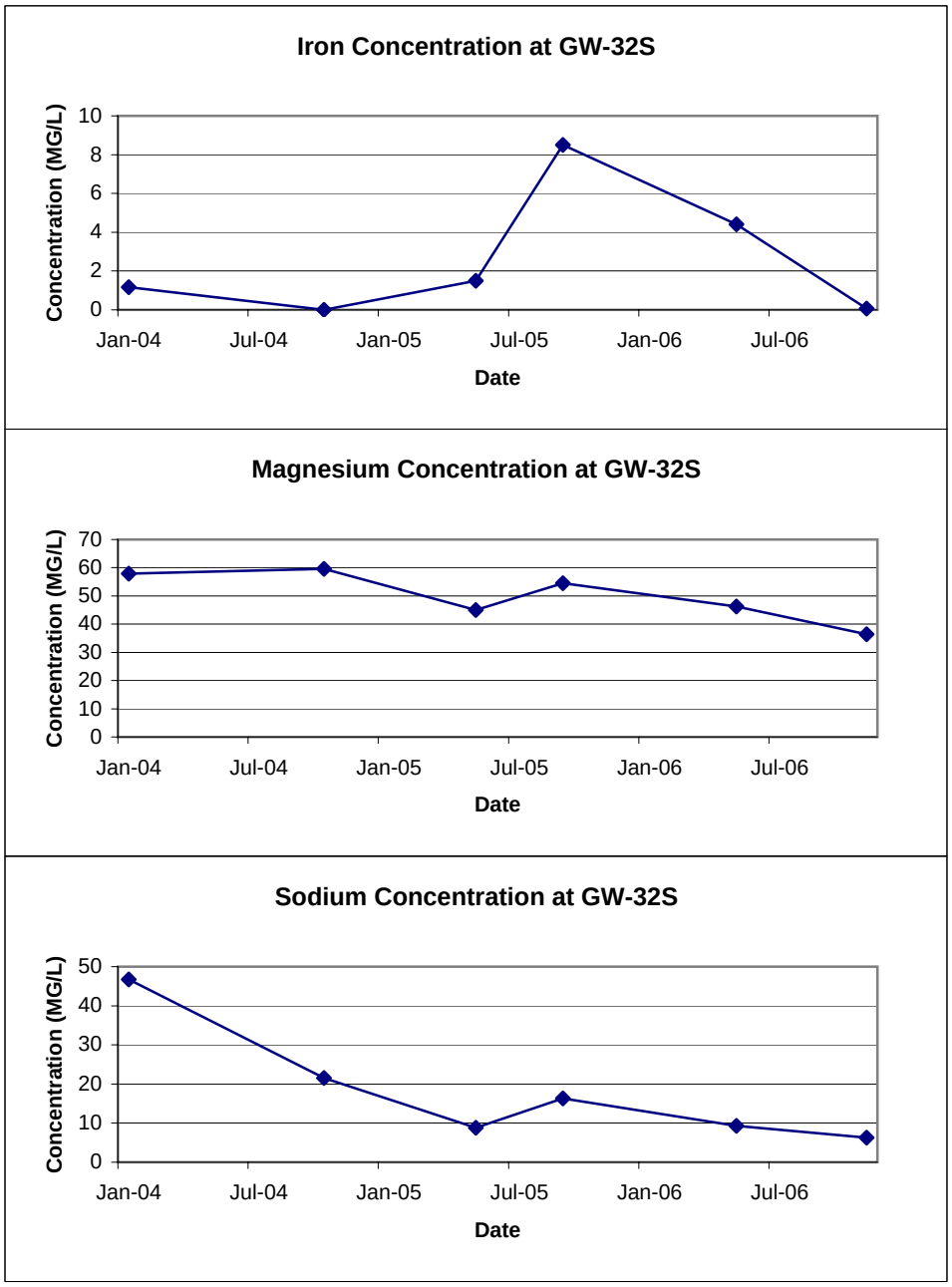


FIGURE E-17
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-33S

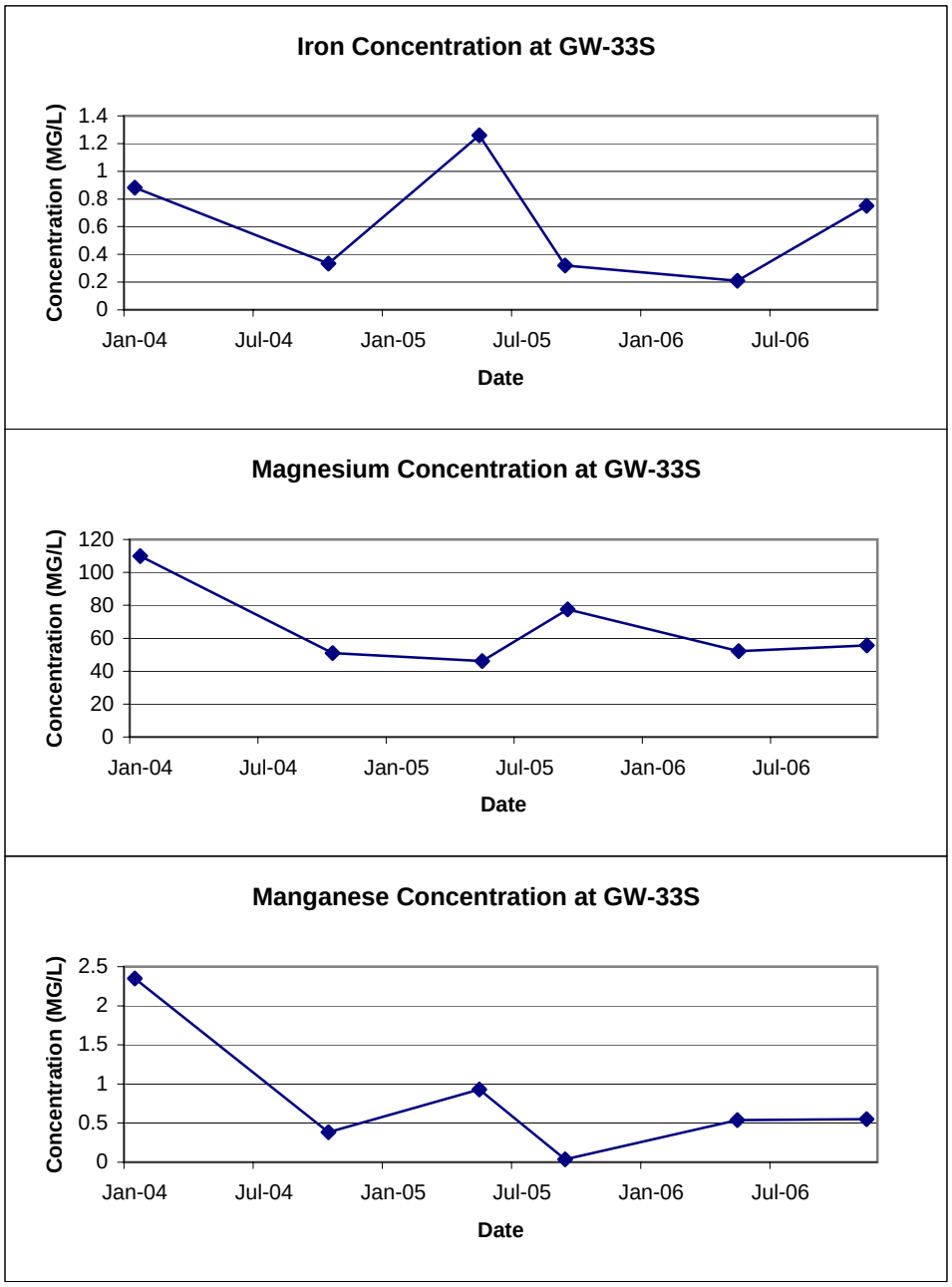


FIGURE E-18
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-34S

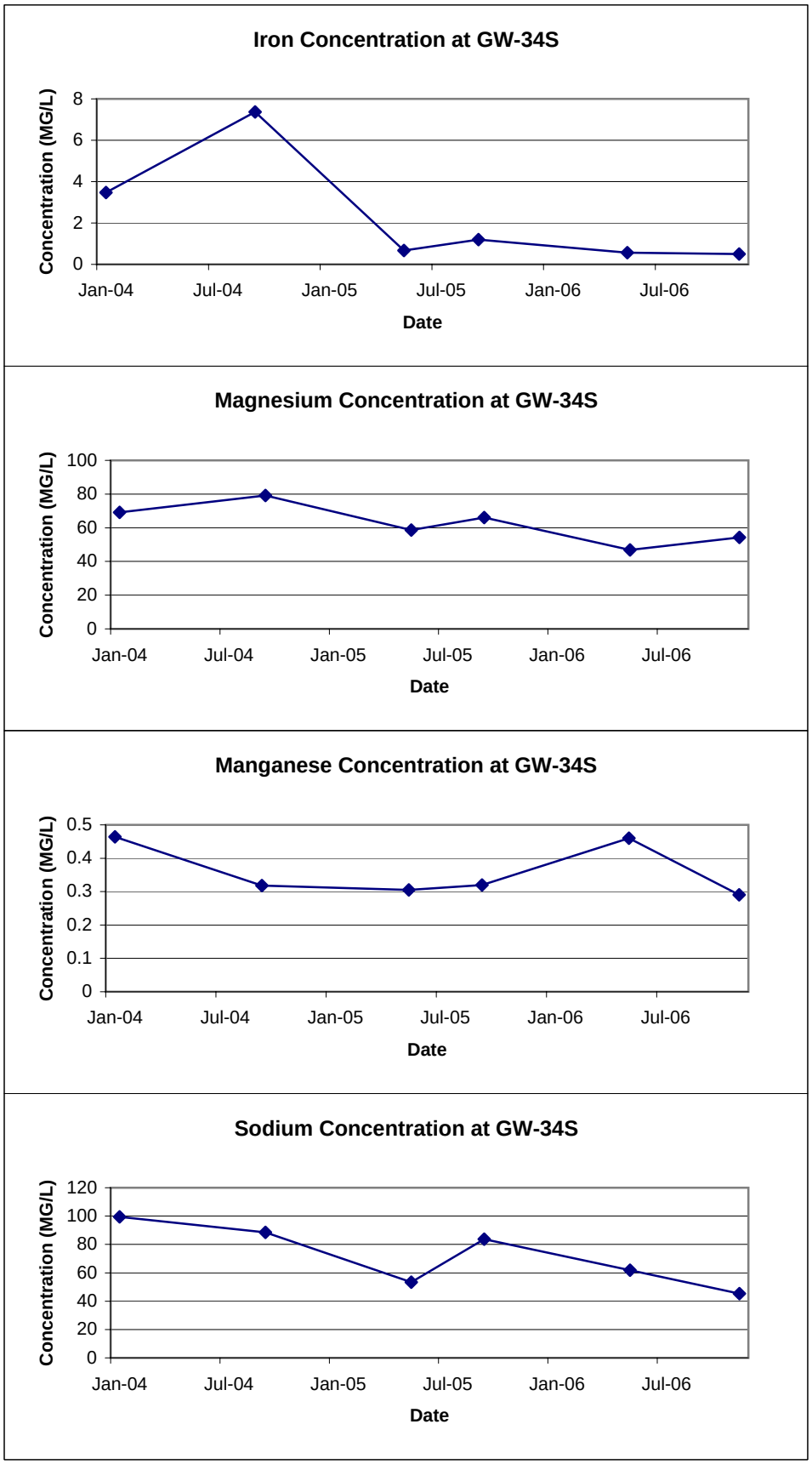
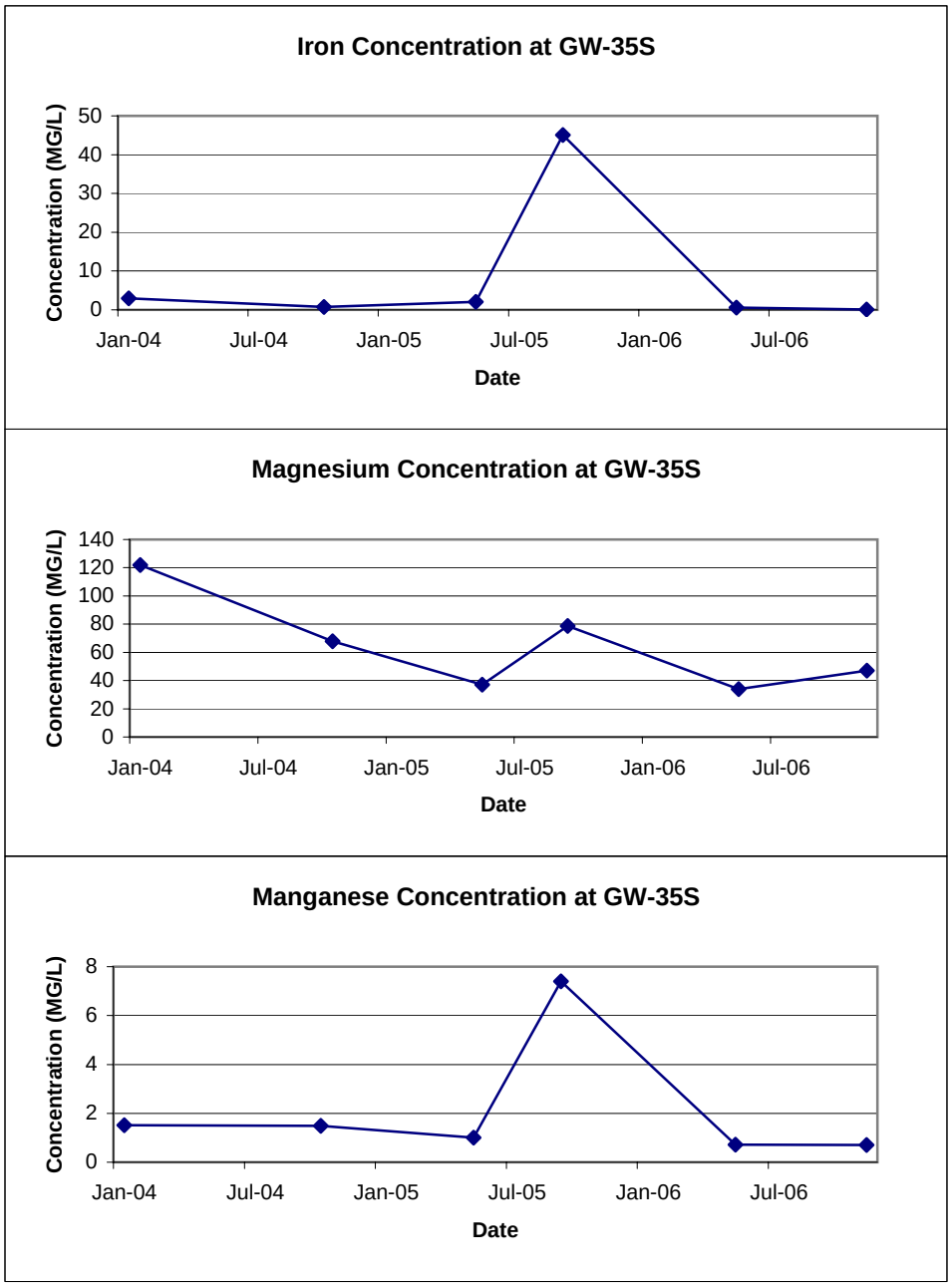


FIGURE E-19
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-35S



APPENDIX F

BSA PERMIT NO. 05-12-CH016

AUTHORIZATION TO DISCHARGE UNDER THE BUFFALO POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT NO. 05-12-CH016
USEPA Category 40 CFR Part 403

In accordance with the provisions of the Federal Water Pollution Control Act, as amended, and the Sewer Regulations of the Buffalo Sewer Authority, authorization is hereby granted to:

THE TOWN OF CHEEKTOWAGA

to discharge wastewater from a facility located at:

PFOHL BROTHERS LANDFILL REMEDIATION SITE
1000 AERO DRIVE
CHEEKTOWAGA, NEW YORK 14225

The wastewater permitted herein shall be discharged to the Town of Cheektowaga sewer system, which is connected to the Buffalo Municipal Sewer System and Treatment facilities, and which wastewater will be treated at the Buffalo Sewer Authority's Treatment Plant.

Issuance of this permit is based upon a permit application filed on **November 3, 2005** analytical data. This permit is granted in accordance with discharge limitations, monitoring requirements and other conditions set forth in Parts I and II hereof.

Effective this 1st day of April, 2006

To Expire the 31st day of March, 2009

General Manager

Signed this 30th **day of** March **, 2006**

PART I: SPECIFIC CONDITIONS

A. DISCHARGE LIMITATIONS & MONITORING REQUIREMENTS

During the period beginning the effective date of this Permit and lasting until the expiration date, discharge from the permitted facility outfall (see attached map) shall be limited and monitored **quarterly** by the permittee as specified below.

Sample Point	Parameter	Discharge Limitations[1] Daily Max	Sampling Requirements Period	Type
001	pH	5.0 – 12.0 S.U.	1 day	Composite[2]
	Total Cadmium	1.17 lbs.	1 day	Composite[2]
	Total Chromium	1.17 lbs.	1 day	Composite[2]
	Total Copper	3.74 lbs.	1 day	Composite[2]
	Total Lead	1.17 lbs.	1 day	Composite[2]
	Total Nickel	3.27 lbs.	1 day	Composite[2]
	Total Zinc	5.84 lbs.	1 day	Composite[2]
	Total Barium	2.34 lbs.	1 day	Composite[2]
	Total Suspended Solids[5]	250 mg/l	1 day	Composite[2]
	Total Flow	140,100 gallons[6]	1 day	Discharge meter reading

Footnotes are explained on page 5.

PART I: SPECIFIC CONDITIONS

A. DISCHARGE LIMITATIONS & MONITORING REQUIREMENTS

During the period beginning the effective date of this Permit and lasting until the expiration date, discharge from the permitted facility outfall (see attached map) shall be limited and monitored **once** by the permittee as specified below.

Sample Point	Parameter	Discharge Limitations[1] Daily Max	Sampling Requirements Period	Type
001	Total Mercury	0.001 lbs.	1 day	Composite[2]
	USEPA Test Method 608[4]	To be monitored	1 day	Grab[3]
	USEPA Test Method 624[4]	To be monitored	1 day	Grab[3]
	USEPA Test Method 625[4]	To be monitored	1 day	Grab[3]

Footnotes are explained on page 5.

PART I: SPECIFIC CONDITIONS

B. DISCHARGE MONITORING REPORTING REQUIREMENTS

During the period beginning the effective date of this permit and lasting until the expiration date, discharge monitoring results shall be summarized and reported **quarterly** by the permittee on the days specified below:

Sample		**Reporting Requirements**	
Point	**Parameter**	**Initial Report**	**Subsequent Reports**
001	All except USEPA Test Methods 608, 624, 625 & T Mercury	June 30, 2006	Every March 31st, June 30th, September 30th and December 31st
	USEPA Test Methods 608, 624 and 625 & T Mercury	March 31, 2008	

PART I: SPECIFIC CONDITIONS

C. SPECIAL REQUIREMENTS

1. Mass limits based on an average discharge of 140,100 gpd.

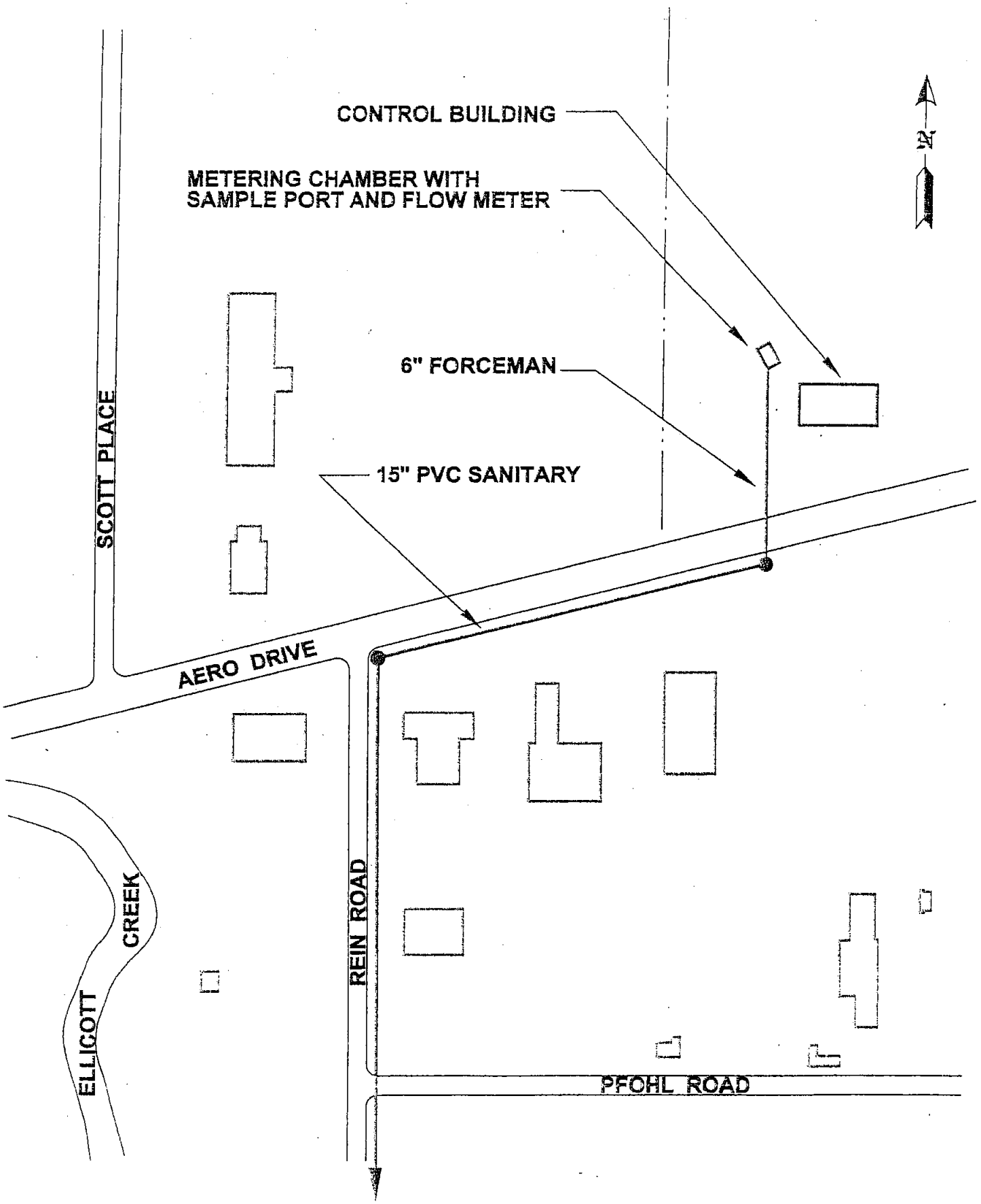
2. Composite samples may be time proportioned.

3. Four grab samples must be collected at equally spaced intervals throughout the sample day. The four (4) grab samples must be composited by a NYSDOH certified laboratory prior to analysis.

4. The permittee must report any compound whose concentration is equal to or greater than 0.01 mg/L. The permittee is not authorized to discharge any of the parameters evaluated by these test procedures which may cause or contribute to a violation of water quality standards or harm the sewerage system. Any parameter detected may, at the discretion of the BSA, be specifically limited and incorporated in this permit.

5. Surchargeable over 250 mg/L.

6. Flow is an action level only. If the permittee consistently exceeds this level, the BSA must be notified so that this permit can be modified.



GROWING IN A NEW DIRECTION
TOWN OF CHEEKTOWAGA
Erie County, New York

TOWN OF CHEEKTOWAGA
CHEEKTOWAGA ENGINEERING DEPT.
ALEXANDER COMMUNITY CENTER
275 ALEXANDER AVE.
CHEEKTOWAGA, NEW YORK 14221
PHONE: (716) 897-7288
FAX: (716) 897-7299

PFOHL BROTHERS LANDFILL SITE

DRAWN BY:	MARK J. CHRISTEL
DATE:	10/28/2002
REVISED:	-
SCALE:	NONE

EXHIBIT

1

FILE: (M: PFOHL BROS.)

APPENDIX G

DISCHARGE REPORT SUMMARY TABLES

SAMPLING FIELD SHEET

URS

Client Name: Pfohl Brothers Landfill

Address: Aero Drive, Cheektowaga, NY

Contact: Bill Pugh, P.E. Phone: 716-897-7288

Installation:

Sample Point: SP-001

Sample Location: Meter Chamber - ball valve on 6" HDPE forcemain

Date: 10/05/06 Crew: R. Murphy, B. Fabian, J. Stachowski

Weather: 53° F, mostly clear

Sampling Device: NA

Time of Installation: 11:57 Type of Sample: Composite

Sample Interval: NA Sample Volume: NA

Comments and Observations: Wet wells WW-4, WW-5 and WW-6 were pumping at time of sample set-up. PLC display volumes: WW-01 (502,444 gals), WW-02 (3 gals), WW-03 (382,347 gals), WW-04 (1,672,986 gals), WW-05 (337,833 gals), WW-06 (847,939 gals) & MH-25 (3,587,818 gals).

Date: 10/06/06 Crew: R. Murphy, B. Fabian, J. Stachowski

Weather: 55° F, clear

Time of Collection: 12:05

Field Measurements:

12:06/RM (time/initial)

pH Calibration: Buffer 7- 7 Buffer 4- 4 Buffer 10- 10

pH Measurement: 7.19

Temperature: 15.2°C

Identification: Effluent-10-06-06

Physical Observations: None

Laboratory: Severn Trent, Buffalo, NY

Comments: Wet wells WW-4 and WW-6 were pumping at the conclusion of the sampling period. PLC display volumes: WW-01 (502,444 gals), WW-02 (3 gals), WW-03 (382,347 gals), WW-04 (1,706,714 gals), WW-05 (382,156 gals), WW-06 (903,670 gals) & MH-25 (3,717,095 gals).

Reviewed By: _____ Date: _____
(Supervisor)

TABLE 1

PFOHL BROTHERS LANDFILL - EFFLUENT MONITORING ANALYTICAL RESULTS, TOTAL FLOW, AND MASS LOADINGS OCTOBER 2006

Sample ID	**EFFLUENT**			
Matrix	**Effluent Water**			
Date Sampled	**10/6/2006**			
Parameter	**Result**	**Mass Loading**	**Discharge Limitation**	**Violations**
	(mg/L)	**(lbs/day)**	**(lbs/day)**	**(Y/N)**
Total Barium	0.26	0.28	2.34	No
Total Cadmuim	ND[(1)]	NA[(2)]	1.17	No
Total Chromium	ND	NA	1.17	No
Total Copper	ND	NA	3.74	No
Total Lead	ND	NA	1.17	No
Total Nickel	ND	NA	3.27	No
Total Zinc	ND	NA	5.84	No
Total Suspended Solids	ND	NA	250 [(3)]	No
pH [(4)]	7.2	NA	5.0 - 12.0	No
Total Flow [(5)]		129,277	140,000	No

Notes:

(1) ND = Not Detected
(2) NA = Not Applicable
(3) Discharge Limitation in units of mg/L
(4) pH measurement and Discharge Limitation in Standard Units
(5) Total Flow reported in gallons

Calculation: $\left(\frac{x\ mg}{L}\right)\left(\frac{y\ gal}{day}\right)\left(\frac{1\ lb}{453{,}600\ mg}\right)\left(\frac{3.785\ L}{gal}\right) = \frac{x \times y}{119{,}841}\ \frac{lb}{day}$

SAMPLING FIELD SHEET

URS

Client Name: Pfohl Brothers Landfill

Address: Aero Drive, Cheektowaga, NY

Contact: Bill Pugh, P.E. Phone: 716-897-7288

Installation:

Sample Point: SP-001

Sample Location: Meter Chamber - ball valve on 6" HDPE forcemain

Date: 12/21/06 Crew: R. Murphy, N. Taft, D. Henneberger

Weather: 47° F, clear

Sampling Device: NA

Time of Installation: 11:45 Type of Sample: Composite

Sample Interval: NA Sample Volume: NA

Comments and Observations: Wet well WW-04 was pumping at the time of sample set-up.
PLC display volumes: WW-01 (844,145 gals), WW-02 (22,571 gals), WW-03 (440,254 gals),
WW-04 (3,124,173 gals), WW-05 (1,214,238 gals), WW-06 (1,509,456 gals) & MH-25 (6,794,469 gals).

Date: 12/22/06 Crew: R. Murphy, N. Taft, B. Frears

Weather: 47° F, overcast, light rain

Time of Collection: 11:50

Field Measurements:

11:50/RM
(time/initial)

pH Calibration: Buffer 7- 7 Buffer 4- 4 Buffer 10- 10

pH Measurement: 7.30

Temperature: 11.3°C

Identification: Effluent-122206

Physical Observations: The pump at WW-05 was off but registering negative flow during the sampling event.

Laboratory: Severn Trent, Buffalo, NY

Comments: Wet well WW-04 was pumping at the conclusion of the sampling period.
PLC display volumes: WW-01 (844,145 gals), WW-02 (22,571 gals), WW-03 (440,254 gals),
WW-04 (3,153,801 gals), WW-05 (1,210,740 gals), WW-06 (1,509,456 gals) & MH-25 (6,814,198 gals).

Reviewed By: _____ Date: _____
(Supervisor)

TABLE 1

PFOHL BROTHERS LANDFILL - EFFLUENT MONITORING ANALYTICAL RESULTS, TOTAL FLOW, AND MASS LOADINGS DECEMBER 2006

Sample ID	EFFLUENT			
Matrix	Effluent Water			
Date Sampled	12/22/2006			
Parameter	Result	Mass Loading	Discharge Limitation	Violations
	(mg/L)	(lbs/day)	(lbs/day)	(Y/N)
Total Barium	0.24	0.04	2.34	No
Total Cadmuim	ND[1]	NA[2]	1.17	No
Total Chromium	ND	NA	1.17	No
Total Copper	ND	NA	3.74	No
Total Lead	ND	NA	1.17	No
Total Nickel	ND	NA	3.27	No
Total Zinc	ND	NA	5.84	No
Total Suspended Solids	18.0	NA	250 [3]	No
pH [4]	7.3	NA	5.0 - 12.0	No
Total Flow [5]		19,729	140,000	No

Notes:

(1) ND = Not Detected
(2) NA = Not Applicable
(3) Discharge Limitation in units of mg/L
(4) pH measurement and Discharge Limitation in Standard Units
(5) Total Flow reported in gallons

Calculation: $$\left(\frac{x\ mg}{L}\right)\left(\frac{y\ gal}{day}\right)\left(\frac{1\ lb}{453{,}600\ mg}\right)\left(\frac{3.785\ L}{gal}\right) = \frac{x \times y}{119{,}841}\ \frac{lb}{day}$$

APPENDIX H

MONITORING WELL INSPECTION LOGS

WELL INSPECTION SUMMARY

Project Name: *Pfohl Brothers Landfill* Project Number: *11172700.00004*

Inspection Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Stachowski*

Date(s) of Inspection: *November 6, 2006*

Well I.D. Number	*Lock*	*Surface Seal*	*Protective Casing*	*Riser*	*Water Level (ft. BTOC)*	*Well Depth (ft. BTOC)*	*Other Comments*
GW-1S	OK	OK	OK	OK	2.43	14.94	
GW-1D	OK	OK	OK	OK	2.29	39.64	
GW-3S	OK	OK	OK	OK	2.14	13.26	
GW-3D	OK	OK	OK	OK	1.72	35.65	
GW-4S	OK	OK	OK	OK	4.61	16.28	
GW-4D	OK	OK	OK	OK	11.89	45.56	
GW-07S	OK	OK	OK	OK	4.81	35.02	
GW-7D	OK	OK	OK	Damaged	35.88	60.60	

Additional Comments: _____

_____

_____

WELL INSPECTION SUMMARY

Project Name: *Pfohl Brothers Landfill* Project Number: *11172700.00004*

Inspection Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Stachowski*

Date(s) of Inspection: *November 6, 2006*

Well I.D. Number	*Lock*	*Surface Seal*	*Protective Casing*	*Riser*	*Water Level (ft. BTOC)*	*Well Depth (ft. BTOC)*	*Other Comments*
GW-8SR	OK	OK	OK	OK	5.29	13.03	
GW-8D	OK	OK	OK	OK	5.53	36.58	
GW-26D	OK	OK	OK	OK	6.44	40.75	
GW-28S	OK	OK	OK	OK	5.82	15.58	
GW-29S	OK	OK	OK	OK	5.73	20.02	
GW-30S	OK	OK	OK	OK	7.15	17.98	
GW-31S	OK	OK	OK	OK	2.58	9.55	
GW-32S	OK	OK	OK	OK	3.03	9.92	

Additional Comments: _____

_____

_____

WELL INSPECTION SUMMARY

Project Name: *Pfohl Brothers Landfill* Project Number: *11172700.00004*

Inspection Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Stachowski*

Date(s) of Inspection: *November 6, 2006*

Well I.D. Number	*Lock*	*Surface Seal*	*Protective Casing*	*Riser*	*Water Level (ft. BTOC)*	*Well Depth (ft. BTOC)*	*Other Comments*
GW-33S	OK	OK	OK	OK	4.41	8.22	
GW-34S	OK	OK	OK	OK	2.65	10.01	
GW-35S	OK	OK	OK	OK	3.07	7.45	

Additional Comments: _____

_____

_____