915043

SEMI ANNUAL REPORT
OPERATION AND MAINTENANCE
JANUARY 2008 TO JUNE 2008
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
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Prepared for:

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

AUGUST 2008

URS

August 28, 2008

Mr. Jaspal Singh Walia, P.E.
New York State Department of Environmental Conservation
270 Michigan Ave.
Buffalo, NY 14203

Re: Semi-Annual Report
Pfohl Brothers Landfill, Town of Cheektowaga, New York

Dear Mr. Walia:

Enclosed are two copies of the ninth Semi-Annual Report for the Pfohl Brothers Landfill in Cheektowaga, New York. A copy has also been sent to Ms. Pamela Tames, P.E. of the United States Environmental Protection Agency. Also enclosed are Data Usability Summary Reports for laboratory analyses associated with the sampling events. PDF copies of the reports are also enclosed.

If you have any questions on this report, please feel free to contact me.

Sincerely,

URS CORPORATION

Jon Sundquist, Ph.D.
Project Manager

Enclosures

cc: Pamela Tames, P.E. - USEPA (w/attachments)
William Pugh, P.E. – Town of Cheektowaga (w/attachments)
File 11172700 (C-1)

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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 seventh 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 January 2008 through June 2008 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 January 2008 through June 2008, including graphs showing daily total discharge (gallons) as a function of calendar day, are presented in Appendix B.

- The wet well pumps were shutdown during wet weather flow conditions throughout the year to reduce hydraulic loading to the sewer. Such actions were only taken upon request of the Buffalo Sewer Authority during heavy storm events in order to reduce the hydraulic load on the BSA treatment system during such events. As noted below in Section 3.1, hydraulic measuring during this reporting period demonstrated that hydraulic control is maintained during these brief periods of pump shutdowns.

- Plowed snow to access the Control Building when necessary.

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

- Purchased two replacement 1.5 horsepower Goulds pumps for inventory.

- April 16, 2008: Replaced main fused service entrance disconnect on the wood utility pole which had significant internal corrosion.

- April 23: 2008: Engaged wildlife control contractor (trapper) to address woodchuck activity.

- May 23, 2008: Replaced wet well No. 3 pump and flex discharge hose.

- Performed repairs to level instrumentation, replaced surge suppressors and signal line fuses as necessary.

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 ninth 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. Surface water/sediment sample locations are shown on Figure 3-2.

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 showing groundwater elevations are presented in Appendix C. Tables 1 of this appendix lists the measured elevations. Table 2 provides a comparison of the measured levels in the wells and corresponding manholes/wet wells.

An additional elevation monitoring event was also completed on May 2, 2008 at the request of NYSDEC in correspondence dated November 29, 2007. Because the landfill's groundwater collection pumps are sometimes turned off (for example, for maintenance or during periods of very high flow at the wastewater treatment plant), NYSDEC requested that a test be performed where the pumps are shutdown and the water levels are measured, in order to evaluate whether the proper hydraulic gradient was maintained during such a shutdown. To test this, URS shut down the pumps on April 31, 2008, and returned two days later to take elevation measurements. The pumps were turned back on following the measurement.

The data presented in Appendix C indicate that groundwater levels outside the collection system were higher than the levels measured in the corresponding wet well or manhole for each

measurement date, including during the period when the pumps were deliberately shutdown for two days. These data verify that collection system is operating as designed.

3.2 Groundwater Quality Monitoring

The ninth semi-annual round of groundwater sampling was conducted between May 27, 2008 and May 30, 2008. 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. Three wells were purged dry using low flow techniques before a sample could be collected including GW-4S, GW-7S, and GW-7D and one well (GW-31S) went dry during sampling. These wells were sampled after their water levels recovered. 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 (CoC) control to Test America Laboratories of Amherst, New York.

Groundwater samples were analyzed for the parameters listed in Table 3.2 of the O&M plan as revised in accordance with Table 3-6 in the Semi Annual Report date September 2007 (January through June 2007) and as approved by the December 6, 2006 and November 29, 2007 correspondence from the NYSDEC authorizing a reduction in the parameters list (this table is included in this report as Table 3-5). Table 3-1 of this report presents the groundwater sample results compared with NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Class GA water quality standards.

No VOCs were detected at concentrations above the Class GA water quality standards at any location. Two SVOCs, bis(2-ethylhexyl)phthalate and phenol were detected at concentrations exceeding their respective Class GA water quality standards. Both compounds were detected in location GW-07D. Phenol has never been detected in this well during any of the semi-annual groundwater sampling events prior to this. The origin of the phenol is unknown, but is presumed to not be site-related as this well is an upgradient well.

Among the metals, iron, magnesium, manganese, and sodium routinely exceed Class GA standards in most site wells. The concentration of iron, magnesium, manganese, and sodium in most site wells was similar to the concentrations found during previous sampling events.

Sodium concentrations were generally higher in bedrock wells (GW-1D, GW-3D, GW-8D and GW-26D) and shallow wells adjacent to roads (GW-1S and GW-30S). No significant changes in metals concentrations were observed when compared to previous sampling event analytical results. 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.

Antimony, cadmium, chromium, copper, lead, and nickel exceeded their respective groundwater standards in upgradient well GW-07D.

Appendix E, Figures E-1 through E-19 presents a trend analysis of groundwater parameters that exceed Class GA groundwater standards. A review of the trend analysis indicated that no significant changes or trends in concentrations of any of the parameters exceeding groundwater standards have occurred over the nine semi-annual sampling events except as described below. Figure E-7 provides a trend analysis for upgradient monitoring well GW-7D for chromium, iron, lead, and sodium. The metals concentrations at this upgradient well have been slowly increasing over the past five or six monitoring events. Figure E-11 for GW-26, indicates periodic (perhaps seasonal) recent increases in sodium have occurred at this well.

The groundwater analytical data package was prepared by Test America 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. Qualifications applied to the data include "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 dated July 2008 is submitted separately from this report.

3.3 Groundwater Discharge Monitoring

URS completed two quarterly sampling events (March 2008 and June 2008) 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 the sampling events in March 208 and June 2008, 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 May 2008 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. Locks were repaired/replaced at MW-01S and MW-01D (road salt from the winter appears to rapidly corrode these locks). The monitoring well inspection logs may be found in Appendix H.

3.5 Surface Water/ Sediment Sampling

In a November 29, 2007 letter, NYSDEC authorized the discontinuation of surface water and sediment sampling based on review of trends of the parameter values. However, because

PCBs were inadvertently left off the list of parmeters on the chain of custody form during the last surface water/sediment sampling effort, an additional round of surface water and sediment sampling was conducted during this event on May 27, 2008 for PCBs only. All surface water and sediment locations listed in the O&M plan (Table 3.3) and shown on Figure 3-2 were sampled. Surface water at sediment locations SW-05 and SW-06 was not sampled during this sampling event because the locations were dry. At each location the surface water sample was collected prior to the sediment sample by immersing pre-cleaned, laboratory grade sample bottles into the middle of the water body. Sampling summary sheets are provided in Appendix H. Each sediment sample was collected from the same location as its corresponding surface water sample. Descriptions of the sediment samples were also recorded on the sample summary sheets (Appendix H). The water and sediment samples were packed with ice in coolers and transported under chain-of-custody control to Test America.

3.5.1 Surface Water Results

While the water bodies that surround the Pfohl Landfill are not designated in 6 NYCRR Part 825, these waters are within the Ellicott Creek drainage basin and are considered tributaries to the creek, which is designated as Class B in 6 NYCRR Part 825. Therefore, the water quality classification for Ellicott Creek is adopted in this semi-annual report to facilitate comparison and evaluation of the analytical results.

Table 3-2 presents a summary of the PCB analyses and the NYSDEC Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Class B water quality standards for Wildlife Propagation. No PCBs were detected in any of the surface water samples collected. Table 1 in Appendix E summarizes the historical surface water data and compares it to the NYSDEC TOGs Class B.

3.5.2 Sediment Sample Results

Tables 3-3 and 3-4 present the sediment PCB analysis results and the NYSDEC Technical Guidance for Screening Contaminated Sediments for wildlife bioaccumulation (Table 3-3) and for benthic chronic protection (Table 3-4). The precise values of the sediment guidance

values (Table 3-3 and 3-4) are proportional to the TOC levels in each sample. Total Organic Carbon (TOC) was analyzed during May 2007 so that location-specific sediment criteria could be calculated (Due to the fact that sediment at SW-05 was not collected during the May 2007 sampling event, the average TOC value [excluding the field duplicate] was used to calculate the sample specific sediment guidance criteria for this location). In the May 2008 analytical data, two polychlorinated biphenyl compounds (Aroclor 1254 and Aroclor 1260), were detected at estimated concentrations below their respective quantitation limits in the sample from SW-03 (Table 3-3). Both compounds slightly exceeded their respective wildlife bioaccumulation guidance values by 1 ug/kg. Historical results for PCBs at the eight sediment sample locations indicate that detections of PCBs have been sporadic and inconsistent.

No PCBs were detected at concentrations exceeding the benthic chronic protection criteria during this sampling event (Table 3-4). Table 2 and Table 3 in Appendix E summarize the historical PCB sediment data.

The sediment and surface water analytical data package was prepared by Test America in accordance with NYSDEC Category A deliverable requirements. It was reviewed for compliance with analytical method requirements and the following guidelines: United States Environmental Protection Agency (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 Science Applications International Corporation (SAIC), *Laboratory Data Validation Guidelines for Evaluating Radionuclide Analyses*, Document No. 143.20020404.001, Revision 07, 04 April 2002. 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 dated August 2007 is submitted under separate cover.

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.

During this semi-annual period, an additional evaluation of the hydraulic gradient was also conducted, focusing on the nature of the gradient when the collection pumps are turned off. This test showed that even after the collection pumps were manually turned off for two days, the hydraulic gradient remained inwards towards the landfill at all locations tested.

Groundwater Quality Monitoring: Groundwater sample results indicate that only low levels of organic compounds and metals are present. Similar concentrations of most parameters were found during previous sampling events, with the exception of phenol at upgradient monitoring well GW-7D. The tenth round of groundwater sampling will be conducted in November 2008. 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 four wells (GW-4S, GW-7S, GW-7D, and GW-31S) can still be purged to dryness even using low flow sampling techniques.

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

Surface Water and Sediment Sampling: In a letter dated November 29, 2007 the NYSDEC requested additional PCB analysis before making a final decision on the request

(presented in the January-June 2007 Semi Annual Report) to discontinue surface water and sediment sampling for this parameter. Surface water and sediment samples collected during this event were analyzed for PCBs only. No PCBs were detected in the surface water samples. During this event only two PCBs (Aroclor 1254 and Aroclor 1260) were detected, both at an estimated concentration of 44 ug/kg, and only 1 ug/kg over their respective wildlife bioaccumulation guidance values.

A review of historical surface water and sediment sampling data for PCBs indicate that PCBs have been detected on one or more occasions at SW-01, SW-02, SW-03, and SW-07. Aroclor 1260 was detected only once at location SW-01 at a concentration of 37.1 ug/kg, below its wildlife bioaccumulation value, and was not detected at this location during two subsequent sampling events. Similarly, Aroclors 1248, 1254, and 1260 were detected at concentrations exceeding their respective wildlife bioaccumulation criteria at location SW-02 in May of 2005 and concentrations were non-detect for these compounds during the two subsequent sampling events. At location SW-03 a low concentration (3.52 ug/kg) of Aroclor 1260 was indicated in May of 2005, and during the May 2008 event Aroclor 1254 and Aroclor 1260 were detected, both at an estimated concentration of 44 ug/kg, only 1 ug/kg over their respective wildlife bioaccumulation guidance values. At SW-07 no PCBs were detected in May 2004, but 118 ug/kg of Aroclor 1248 was indicated in May 2005. The concentration of Aroclor 1248 reduced to 34 ug/kg in 2006 and was not detected in 2008. The data indicates occurrences of PCBs at the sediment sample locations are sporadic and inconsistent, at low concentrations, and do not appear to have any increasing trends. URS again asks that the NYSDEC consider the discontinuation of surface water and sediment sampling at the site.

Wetland Inspection Summary: An inspection of the wetlands during the May 2008 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
GROUNDWATER SAMPLE RESULTS
PFOHL BROTHERS LANDFILL SITE
MAY 2008

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			05/29/08	05/29/08	05/28/08	05/28/08	05/29/08
Parameter	**Units**	*					
Volatile Organic Compounds							
1,2-Dichloroethene (total)	UG/L	5					
Acetone	UG/L	50					
Vinyl chloride	UG/L	2			0.92 J		
Semivolatile Organic Compounds							
1,3-Dichlorobenzene	UG/L	3			1 J		
1,4-Dichlorobenzene	UG/L	3			2 J		
bis(2-Ethylhexyl)phthalate	UG/L	5					
Phenol	UG/L	1					
Metals							
Antimony	MG/L	0.003					
Arsenic	MG/L	0.025					
Barium	MG/L	1	0.068	0.24	0.12	0.18	0.056
Cadmium	MG/L	0.005					
Chromium	MG/L	0.05				0.019	0.0042
Copper	MG/L	0.2					
Iron	MG/L	0.3	0.34	19.1	3.1	1.3	0.96
Lead	MG/L	0.025					
Magnesium	MG/L	35	33.1	17.0	18.3	80.8	58.3
Manganese	MG/L	0.3	0.022	0.60	1.0	0.36	0.024
Nickel	MG/L	0.1				0.20	
Sodium	MG/L	20	115	247	318	40.7	55.5
Zinc	MG/L	2				0.026	0.032

*- 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

U - Not detected above the reported quantitation limit.

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

Only Detected Results Reported

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[LOGDATE] BETWEEN #05/01/08# AND #05/30/08# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD'

TABLE 3-1
GROUNDWATER SAMPLE RESULTS
PFOHL BROTHERS LANDFILL SITE
MAY 2008

Location ID			GW-04S	GW-07D	GW-07S	GW-08D	GW-08D
Sample ID			GW-4S	GW-7D	GW-7S	GW052808DUP	GW-8D
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			05/29/08	05/28/08	05/28/08	05/28/08	05/28/08
Parameter	**Units**	*				Field Duplicate (1-1)	
Volatile Organic Compounds							
1,2-Dichloroethene (total)	UG/L	5					
Acetone	UG/L	50	4.2 J	20	3.9 J	3.4 J	
Vinyl chloride	UG/L	2					
Semivolatile Organic Compounds							
1,3-Dichlorobenzene	UG/L	3					
1,4-Dichlorobenzene	UG/L	3					
bis(2-Ethylhexyl)phthalate	UG/L	5		26			
Phenol	UG/L	1		140		0.4 J	
Metals							
Antimony	MG/L	0.003		0.034			
Arsenic	MG/L	0.025		0.013			
Barium	MG/L	1	0.12	0.15	0.21	0.056	0.056
Cadmium	MG/L	0.005		0.0057			
Chromium	MG/L	0.05		0.45	0.010	0.0046	
Copper	MG/L	0.2		0.32			
Iron	MG/L	0.3	4.4	96.4	0.60	3.4	3.2
Lead	MG/L	0.025		1.5			
Magnesium	MG/L	35	22.2	35.1	28.0	12.2	12.4
Manganese	MG/L	0.3	0.31	0.55	0.10	0.49	0.49
Nickel	MG/L	0.1		0.27	0.011		
Sodium	MG/L	20	28.4	91.7	56.4	179	180
Zinc	MG/L	2	0.017	0.76	0.014	0.044	0.038

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

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Only Detected Results Reported.

TABLE 3-1
GROUNDWATER SAMPLE RESULTS
PFOHL BROTHERS LANDFILL SITE
MAY 2008

Location ID			GW-08SR	GW-26D	GW-28S	GW-29S	GW-30S
Sample ID			GW-8S(R)	GW-26D	GW-28S	GW-29S	GW-30S
Matrix			Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)			-	-	-	-	-
Date Sampled			05/28/08	05/29/08	05/28/08	05/30/08	05/30/08
Parameter	**Units**	*					
Volatile Organic Compounds							
1,2-Dichloroethene (total)	UG/L	5		1.1 J			
Acetone	UG/L	50	5.2		4.4 J		
Vinyl chlonde	UG/L	2	1.6	1.2			
Semivolatile Organic Compounds							
1,3-Dichlorobenzene	UG/L	3					
1,4-Dichlorobenzene	UG/L	3					
bis(2-Ethylhexyl)phthalate	UG/L	5					
Phenol	UG/L	1					
Metals							
Antimony	MG/L	0.003					
Arsenic	MG/L	0.025				0.065	
Barium	MG/L	1	0.44	0.23	0.062	0.29	0.38
Cadmium	MG/L	0.005					
Chromium	MG/L	0.05					
Copper	MG/L	0.2					
Iron	MG/L	0.3	17.3	4.4	0.55	30.5	11.0
Lead	MG/L	0.025					
Magnesium	MG/L	35	45.2	24 5	44.9	70.2	44.4
Manganese	MG/L	0.3	0.90	0.66	1.2	0.75	2.0
Nickel	MG/L	0.1					
Sodium	MG/L	20	203	467	40.8	13.0	746
Zinc	MG/L	2					

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

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Printed: 7/21/2008 9:10:56 AM
[LOGDATE] BETWEEN #05/01/08# AND #05/30/08# AND [MATRIX] = 'WG' AND ([SACODE] = 'N' OR [SACODE] = 'FD'

TABLE 3-1
GROUNDWATER SAMPLE RESULTS
PFOHL BROTHERS LANDFILL SITE
MAY 2008

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			05/30/08	05/29/08	05/30/08	05/27/08	05/29/08
Parameter	**Units**	*					
Volatile Organic Compounds							
1,2-Dichloroethene (total)	UG/L	5					
Acetone	UG/L	50					
Vinyl chloride	UG/L	2					
Semivolatile Organic Compounds							
1,3-Dichlorobenzene	UG/L	3					
1,4-Dichlorobenzene	UG/L	3					
bis(2-Ethylhexyl)phthalate	UG/L	5					
Phenol	UG/L	1					
Metals							
Antimony	MG/L	0.003					
Arsenic	MG/L	0.025					
Barium	MG/L	1	0.042	0.051	0.015	0.12	0.048
Cadmium	MG/L	0.005					
Chromium	MG/L	0.05	0.0070				
Copper	MG/L	0.2					
Iron	MG/L	0.3	0.53	0.089	0.19	0.061	
Lead	MG/L	0.025					
Magnesium	MG/L	35	31.0	35.1	58.7	41.5	22.2
Manganese	MG/L	0.3	0.78	0.24	0.31	0.34	0.28
Nickel	MG/L	0.1					
Sodium	MG/L	20	7.3	5.4	9.4	38.6	3.4
Zinc	MG/L	2					

*- 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.

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Only Detected Results Reported.

TABLE 3-2
SURFACE WATER SAMPLE RESULTS
PFOHL BROTHERS LANDFILL SITE
MAY 2008

Location ID			SW-01	SW-01	SW-02	SW-03	SW-04
Sample ID			SW-01	SW-052708-DUP	SW-02	SW-03	SW-04
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			05/27/08	05/27/08	05/27/08	05/27/08	05/27/08
Parameter	Units	*		Field Duplicate (1-1)			
Polychlorinated Biphenyls							
Aroclor 1016	UG/L	1.20E-04 *	0.49 U	0.50 U	0.49 U	0.50 U	0.52 U
Aroclor 1221	UG/L	1.20E-04 *	0.49 U	0.50 U	0.49 U	0.50 U	0.52 U
Aroclor 1232	UG/L	1.20E-04 *	0.49 U	0.50 U	0.49 U	0.50 U	0.52 U
Aroclor 1242	UG/L	1.20E-04 *	0.49 U	0.50 U	0.49 U	0.50 U	0.52 U
Aroclor 1248	UG/L	1.20E-04 *	0.49 U	0.50 U	0.49 U	0.50 U	0.52 U
Aroclor 1254	UG/L	1.20E-04 *	0.49 U	0.50 U	0.49 U	0.50 U	0.52 U
Aroclor 1260	UG/L	1.20E-04 *	0.49 U	0.50 U	0.49 U	0.50 U	0.52 U

*- 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 based on sum of the aroclors

Flags assigned during chemistry validation are shown

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

TABLE 3-2
SURFACE WATER SAMPLE RESULTS
PFOHL BROTHERS LANDFILL SITE
MAY 2008

Location ID			SW-07	SW-08
Sample ID			SW-07	SW-08
Matrix			Surface Water	Surface Water
Depth Interval (ft)			-	-
Date Sampled			05/27/08	05/27/08
Parameter	Units	*		
Polychlorinated Biphenyls				
Aroclor 1016	UG/L	1.20E-04 *	0.47 U	0.53 U
Aroclor 1221	UG/L	1.20E-04 *	0.47 U	0.53 U
Aroclor 1232	UG/L	1.20E-04 *	0.47 U	0.53 U
Aroclor 1242	UG/L	1.20E-04 *	0.47 U	0.53 U
Aroclor 1248	UG/L	1.20E-04 *	0.47 U	0.53 U
Aroclor 1254	UG/L	1.20E-04 *	0.47 U	0.53 U
Aroclor 1260	UG/L	1.20E-04 *	0.47 U	0.53 U

*- 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 based on sum of the aroclors

Flags assigned during chemistry validation are shown

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE
MAY 2008

Location ID		SW-01	SW-01	SW-02	SW-03	SW-04
Sample ID		SW-052708-DUP	SW-1	SW-2	SW-3	SW-4
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/27/08	05/27/08	05/27/08	05/27/08	05/27/08
Parameter	Units	Field Duplicate (1-1)				
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	38 U (80.5)	45 U (80.5)	23 U (28.8)	48 U (43.0)	74 U (75.3)
Aroclor 1221	UG/KG	38 U (80.5)	45 U (80.5)	23 U (28.8)	48 U (43.0)	74 U (75.3)
Aroclor 1232	UG/KG	38 U (80.5)	45 U (80.5)	23 U (28.8)	48 U (43.0)	74 U (75.3)
Aroclor 1242	UG/KG	38 U (80.5)	45 U (80.5)	23 U (28.8)	48 U (43.0)	74 U (75.3)
Aroclor 1248	UG/KG	38 U (80.5)	45 U (80.5)	23 U (28.8)	48 U (43.0)	74 U (75.3)
Aroclor 1254	UG/KG	38 U (80.5)	45 U (80.5)	23 U (28.8)	44 J (43.0)	74 U (75.3)
Aroclor 1260	UG/KG	38 U (80.5)	45 U (80.5)	23 U (28.8)	44 J (43.0)	74 U (75.3)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	57,500	57,500	20,600	30,700	53,800

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

(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.

Detection Limits shown are PQL

N:\11172700.0000\GIS\dB\Program\EDMS.mxd
Printed: 7/22/2008 1:27:20 PM
[LOGDATE] BETWEEN #05/01/08# AND #06/01/08# AND [MATRIX] = 'SE

TABLE 3-3
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE
MAY 2008

Location ID		SW-05	SW-06	SW-07	SW-08
Sample ID		SW-5	SW-6	SW-7	SW-8
Matrix		Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-
Date Sampled		05/27/08	05/27/08	05/27/08	05/27/08
Parameter	Units				
Polychlorinated Biphenyls					
Aroclor 1016	UG/KG	22 U (57.0)	28 U (45.2)	22 U (13.2)	32 U (113)
Aroclor 1221	UG/KG	22 U (57.0)	28 U (45.2)	22 U (13.2)	32 U (113)
Aroclor 1232	UG/KG	22 U (57.0)	28 U (45.2)	22 U (13.2)	32 U (113)
Aroclor 1242	UG/KG	22 U (57.0)	28 U (45.2)	22 U (13.2)	32 U (113)
Aroclor 1248	UG/KG	22 U (57.0)	28 U (45.2)	22 U (13.2)	32 U (113)
Aroclor 1254	UG/KG	22 U (57.0)	28 U (45.2)	22 U (13.2)	32 U (113)
Aroclor 1260	UG/KG	22 U (57.0)	28 U (45.2)	22 U (13.2)	32 U (113)
Miscellaneous Parameters					
Total Organic Carbon (TOC)	MG/KG	40,689	32,300	9,420	80,500

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

(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

Detection Limits shown are PQL

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE
MAY 2008

Location ID		SW-01	SW-01	SW-02	SW-03	SW-04
Sample ID		SW-052708-DUP	SW-1	SW-2	SW-3	SW-4
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/27/08	05/27/08	05/27/08	05/27/08	05/27/08
Parameter	Units	Field Duplicate (1-1)				
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	38 U (1,110)	45 U (1,110)	23 U (398)	48 U (593)	74 U (1,038)
Aroclor 1221	UG/KG	38 U (1,110)	45 U (1,110)	23 U (398)	48 U (593)	74 U (1,038)
Aroclor 1232	UG/KG	38 U (1,110)	45 U (1,110)	23 U (398)	48 U (593)	74 U (1,038)
Aroclor 1242	UG/KG	38 U (1,110)	45 U (1,110)	23 U (398)	48 U (593)	74 U (1,038)
Aroclor 1248	UG/KG	38 U (1,110)	45 U (1,110)	23 U (398)	48 U (593)	74 U (1,038)
Aroclor 1254	UG/KG	38 U (1,110)	45 U (1,110)	23 U (398)	44 J (593)	74 U (1,038)
Aroclor 1260	UG/KG	38 U (1,110)	45 U (1,110)	23 U (398)	44 J (593)	74 U (1,038)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	57,500	57,500	20,600	30,700	53,800

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

(NV) - No Calculable Value, TOC Not Detected

Flags assigned during chemistry validation are shown.

Concentration Exeeeds Criteria.

U - Not detected above the reported quantitation limit.

Detection Limits shown are PQL

TABLE 3-4
SEDIMENT SAMPLE ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE
MAY 2008

Location ID		SW-05	SW-06	SW-07	SW-08
Sample ID		SW-5	SW-6	SW-7	SW-8
Matrix		Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-
Date Sampled		05/27/08	05/27/08	05/27/08	05/27/08
Parameter	Units				
Polychlorinated Biphenyls					
Aroclor 1016	UG/KG	22 U (785)	28 U (623)	22 U (182)	32 U (1,554)
Aroclor 1221	UG/KG	22 U (785)	28 U (623)	22 U (182)	32 U (1,554)
Aroclor 1232	UG/KG	22 U (785)	28 U (623)	22 U (182)	32 U (1,554)
Aroclor 1242	UG/KG	22 U (785)	28 U (623)	22 U (182)	32 U (1,554)
Aroclor 1248	UG/KG	22 U (785)	28 U (623)	22 U (182)	32 U (1,554)
Aroclor 1254	UG/KG	22 U (785)	28 U (623)	22 U (182)	32 U (1,554)
Aroclor 1260	UG/KG	22 U (785)	28 U (623)	22 U (182)	32 U (1,554)
Miscellaneous Parameters					
Total Organic Carbon (TOC)	MG/KG	40,689	32,300	9,420	80,500

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

(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

Detection Limits shown are PQL

TABLE 3-5

APPROVED 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

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)

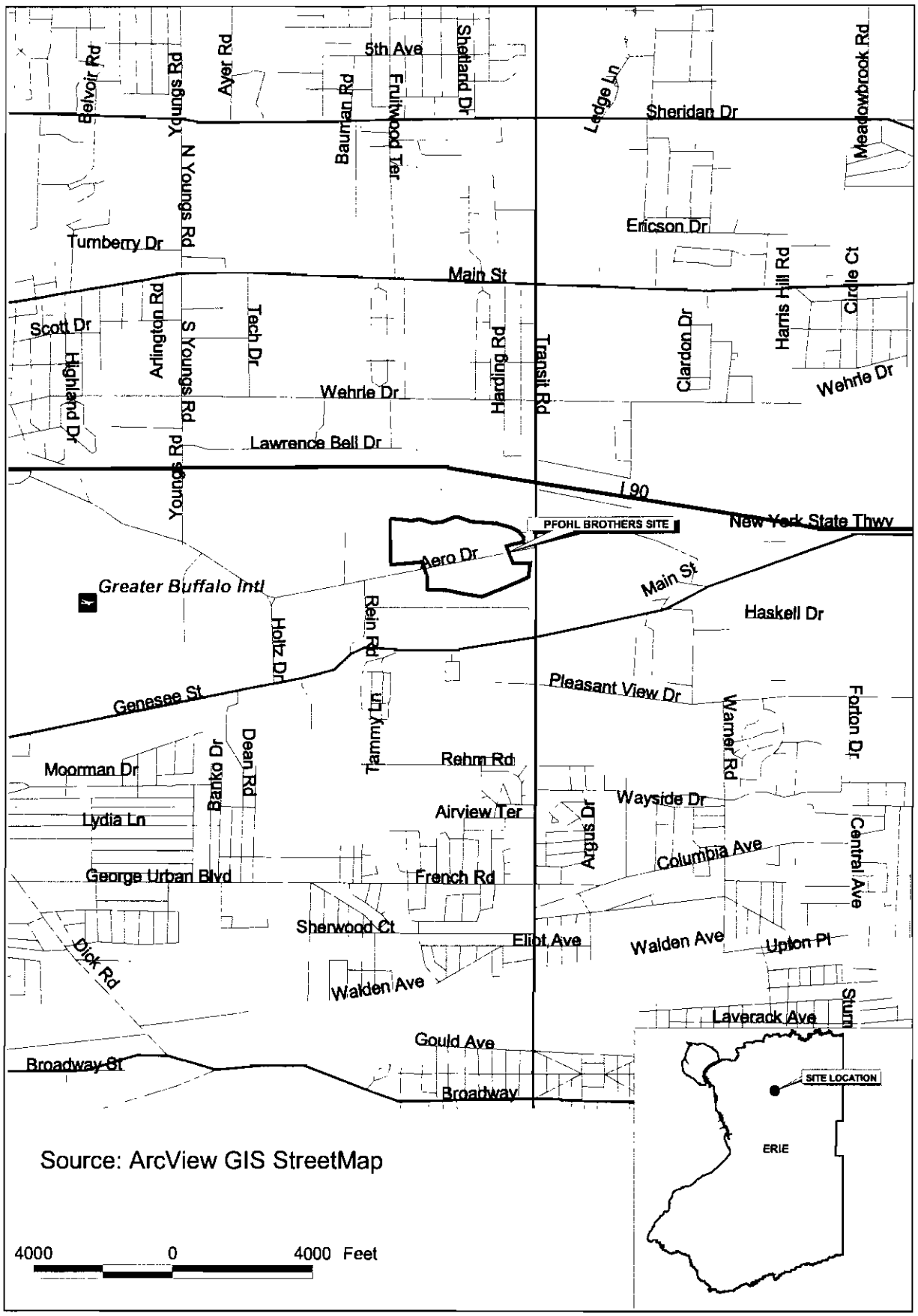
APPROVED REVISION OF TABLE 3.2 FROM THE O&M PLAN

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

FIGURES



n:\11172700.00000\gis\arcview\pfohl_sitelocation.apr Pfohl Bros Location Map
12/15/2005

URS	PFOHL BROTHERS LANDFILL SITE LOCATION MAP	FIGURE 1-1

N:\11172700.00000\GIS\Arc\Mewphot.apr WELL LOCATIONS
12/15/2005

Legend

Surface Water/Sediment Sample Location

350 0 350 Feet

PFOHL BROTHERS LANDFILL
SURFACE WATER/SEDIMENT SAMPLING LOCATIONS

URS

FIGURE 3-2

N:\11172700.00000\GIS\ArcView\pfhol.apr SURFACE WATER LOCATIONS
11/20/2005

APPENDIX A

EXAMPLE DAILY INSPECTION SHEETS

Pfohl Brothers Landfill Site

Daily Logsheet

Town of Cheektowaga

Date 10:10 AM

Time 1-31-08

Weather conditions COLD 24°F.

Read by: B. PUGH

	Level of Water from bottom (ft.)	Flow gallons / minute	Flow Totals gallons	Pump Run Time Hrs.
WW-3	4.7	15.3	885,926	558
WW-2	4.6	0	-1566	0
WW-1	4.4	33.9	992,597	376
WW-6	~~99~~ 7.6	0	2695718	712
WW-4	7.0	0	2,450,110	2655
WW-5	6.3	0	708,728	321

Flow Totalizer at Meter chamber 7,212,601

Heat Trace

Outside temp **T** = 24°

Current **A** = 2.6

Set point **SP** = 40

Surge Suppressor events 2688

Motor Control Center

Volts 480 **volts**

Amps 7 **amps**

Which WW was running?

1☒ 2☐ 3☒ 4☐ 5☐ 6☐

Filter **Checked** ☐ **Changed** ☐

Comments and/or Current Conditions

* RESET - LEVEL INVALID ALARM WW 6 OK
* WW-2 NEG. FLOW ALARM - RAN PUMP 2 ON MANUAL FOR 20 MIN ± TO CLEAR CHECK VALVE (34.1 gpm) - CLEARED ALA
* DELIVERED (2) NEW 1.5 H.P. GOULDS PUMPS TO SITE
* REMOVED SITE DAILY LOG SHEETS 7/07 TO 12/07 TO ENG. DEPT. OFFICE

Pfohl Brothers Landfill Site

Daily Logsheet FRIDAY

Town of Cheektowaga 3" SNOW COVER

Date 2-22-08

Weather conditions OVERCAST 30°

Time 2:50

Read by: BILL PUGH

	Level of Water from bottom (ft.)	Flow gallons / minute	Flow Totals gallons	Pump Run Time Hrs.
WW-3	4.2	0	1,032,627	707
WW-2	4.6	0	-2423	1
WW-1	4.7	0	1,148,676	479
WW-6	7.6	54.7	3,127,413	844
WW-4	7.0	0	2,572,938	2820
WW-5	7.2	0	976,436	454

Flow Totalizer at Meter chamber 8,338,627

Heat Trace

Outside temp **T** = 36

Current **A** = 2.2

Set point **SP** = 40

Surge Suppressor events 2704

Motor Control Center

Volts 480 **volts**

Amps 8 **amps**

Which WW was running?

1☐ 2☐ 3☐ 4☐ 5☐ 6☑

Filter **Checked** ☐ **Changed** ☐

Comments and/or Current Conditions

RESET LEVEL INVALID ALARM WW6 - OK

RESET ALL ALARMS

CHECK - WW2 CHECK VALVE WHEN WEATHER PERMITS

APPENDIX B

MONTHLY FLOW SUMMARIES
JANUARY 2008 – JUNE 2008

THE TOWN OF
CHEEKTOWAGA

Main Pump Station
171 Central Boulevard
Cheektowaga, NY 14225
Phone: 716-896-1777
Fax: 716-896-6437

JON W. NICHY
Superintendent

February 7, 2008

Mr. William R. Pugh, P.E.
Town Engineer
Town of Cheektowaga

Re: Pfohl Bros. Flow Data

Dear Mr. Pugh,

Enclosed for your review, please find a copy of the **January 2008** Direct Discharge Flow Data Report, prepared by Jon W. Nichy.

A monthly log sheet indicating inhibiting and enabling of pumping operation at the site is included.

Should you have any other questions or comments regarding this submittal, please contact this office @ 896-1777.

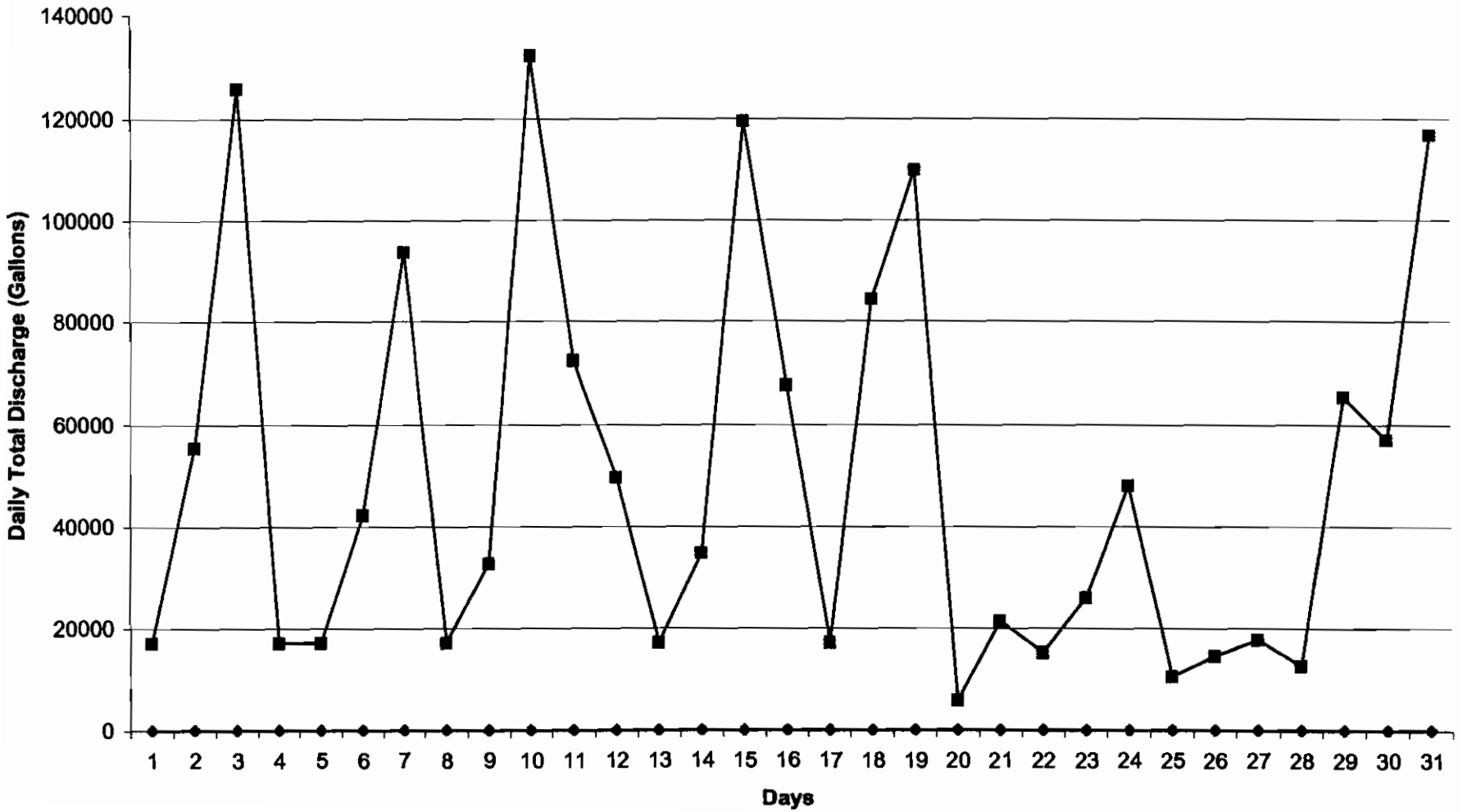
Yours truly,
Town of Cheektowaga

Jon W. Nichy
Superintendent
Main Pump Station

Direct Discharge Flow Data

12/31/2007		5743506	17,306	5,524,955	
January-08	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**		**Notes**
1		5760798	17,292	5,542,247	
2		5816174	55,376	5,597,623	
3		5942095	125,921	5,723,544	
4		5959375	17,280	5,740,824	
5		5976655	17,280	5,758,104	
6		6018779	42,125	5,800,229	
7		6112540	93,761	5,893,990	
8		6129820	17,280	5,911,270	
9		6162613	32,793	5,944,063	
10		6294746	132,134	6,076,197	
11		6367119	72,373	6,148,570	
12		6416600	49,481	6,198,051	
13		6433880	17,280	6,215,331	
14		6468728	34,848	6,250,179	
15		6588117	119,389	6,369,568	
16		6655816	67,699	6,437,267	
17		6673096	17,280	6,454,547	
18		6757448	84,352	6,538,899	
19		6867272	109,824	6,648,723	
20		6873307	6,035	6,654,758	
21		6894653	21,346	6,676,104	
22		6909901	15,248	6,691,352	
23		6935960	26,059	6,717,411	
24		6983868	47,908	6,765,319	
25		6994560	10,693	6,776,012	
26		7009177	14,617	6,790,629	
27		7026979	17,802	6,808,431	
28		7039799	12,820	6,821,251	
29		7105267	65,468	6,886,719	
30		7162454	56,888	6,943,607	
31		7278919	116,765	7,060,372	
		1,535,413	**1,535,417**	**1,535,417**	

Pfohl Bros.
January
2008



PFOHL BROTHERS LANDFILL SITE
CHEEKTOWAGA, NEW YORK

Auto Dialer System Log

DATE	PUMP Inhibit -08 (Off)	TIME Enable -07 (On)	COMMENTS
01/09/08	12:00 AM		RAIN
01/09/08	⟶	0849	High Winds
01/11/08	0600	14.04	Rain / Winds
01/30/08	0419	11.19	Rain, Severe Winds,

THE TOWN OF
CHEEKTOWAGA

Main Pump Station
171 Central Boulevard
Cheektowaga, NY 14225
Phone: 716-896-1777
Fax: 716-896-6437

JON W. NICHY
Superintendent

March 5, 2008

Mr. William R. Pugh, P.E.
Town Engineer
Town of Cheektowaga

Re: Pfohl Bros. Flow Data

Dear Mr. Pugh,

Enclosed for your review, please find a copy of the **February 2008** Direct Discharge Flow Data Report, prepared by Jon W. Nichy.

A monthly log sheet indicating inhibiting and enabling of pumping operation at the site is included.

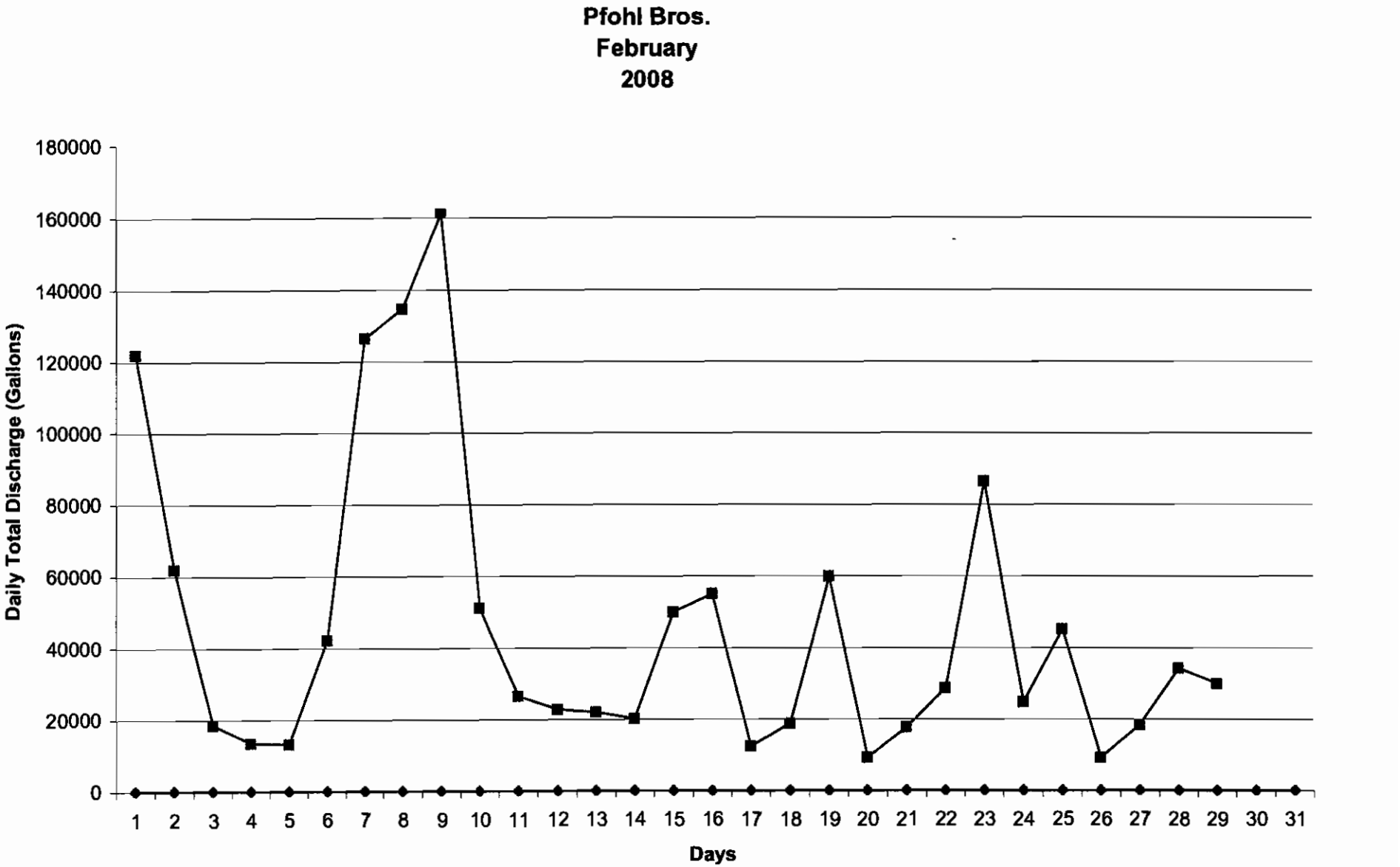
Should you have any other questions or comments regarding this submittal, please contact this office @ 896-1777.

Yours truly,
Town of Cheektowaga

Jon W. Nichy
Superintendent
Main Pump Station

Direct Discharge Flow Data

1/31/2008		7278919	116,765	7,060,372	
February-08	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**		**Notes**
1		7400847	121,929	7,182,301	
2		7462732	61,885	7,244,186	
3		7481281	18,549	7,262,735	
4		7494718	13,437	7,276,172	
5		7507886	13,169	7,289,341	
6		7550246	42,360	7,331,701	
7		7676756	126,510	7,458,211	
8		7811400	134,644	7,592,855	
9		7972417	161,018	7,753,873	
10		8023585	51,168	7,805,041	
11		8050147	26,562	7,831,603	
12		8073040	22,893	7,854,496	
13		8095114	22,075	7,876,571	
14		8115328	20,214	7,896,785	
15		8165290	49,962	7,946,747	
16		8220355	55,065	8,001,812	
17		8232840	12,485	8,014,297	
18		8251677	18,837	8,033,134	
19		8311457	59,780	8,092,914	
20		8320690	9,233	8,102,147	
21		8338454	17,765	8,119,912	
22		8367295	28,841	8,148,753	
23		8453695	86,401	8,235,154	
24		8478540	24,845	8,259,999	
25		8523765	45,225	8,305,224	
26		8533012	9,247	8,314,471	
27		8551473	18,461	8,332,932	
28		8585844	34,371	8,367,303	
29		8615833	29,989	8,397,292	
30					
31					
		1,336,914	**1,336,920**	**1,336,920**	


Pfohl Bros.
February
2008
Daily Total Discharge (Gallons)
180000
160000
140000
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
Days

PFOHL BROTHERS LANDFILL SITE
CHEEKTOWAGA, NEW YORK

Auto Dialer System Log

DATE	PUMP Inhibit -08 (Off)	TIME Enable -07 (On)	COMMENTS
2/5/08	0040	1824	SNOW MELT + RAIN
2/6/08	0110	1500	SNOW MELT + RAIN
2/17/08	2053	—	SNOW MELT + RAIN
2/18/08	—	1729	SNOW
3/3/08	1117	—	SNOW MELT
3/4/08	—	0800	

THE TOWN OF
CHEEKTOWAGA

JON W. NICHY
Superintendent

Main Pump Station
171 Central Boulevard
Cheektowaga, NY 14225
Phone: 716-896-1777
Fax: 716-896-6437

April 10, 2008

Mr. William R. Pugh, P.E.
Town Engineer
Town of Cheektowaga

Re: Pfohl Bros. Flow Data

Dear Mr. Pugh,

Enclosed for your review, please find a copy of the **March 2008** Direct Discharge Flow Data Report, prepared by Jon W. Nichy.

A monthly log sheet indicating inhibiting and enabling of pumping operation at the site is included.

Should you have any other questions or comments regarding this submittal, please contact this office @ 896-1777.

Yours truly,
Town of Cheektowaga

Jon W. Nichy
Superintendent
Main Pump Station

Direct Discharge Flow Data

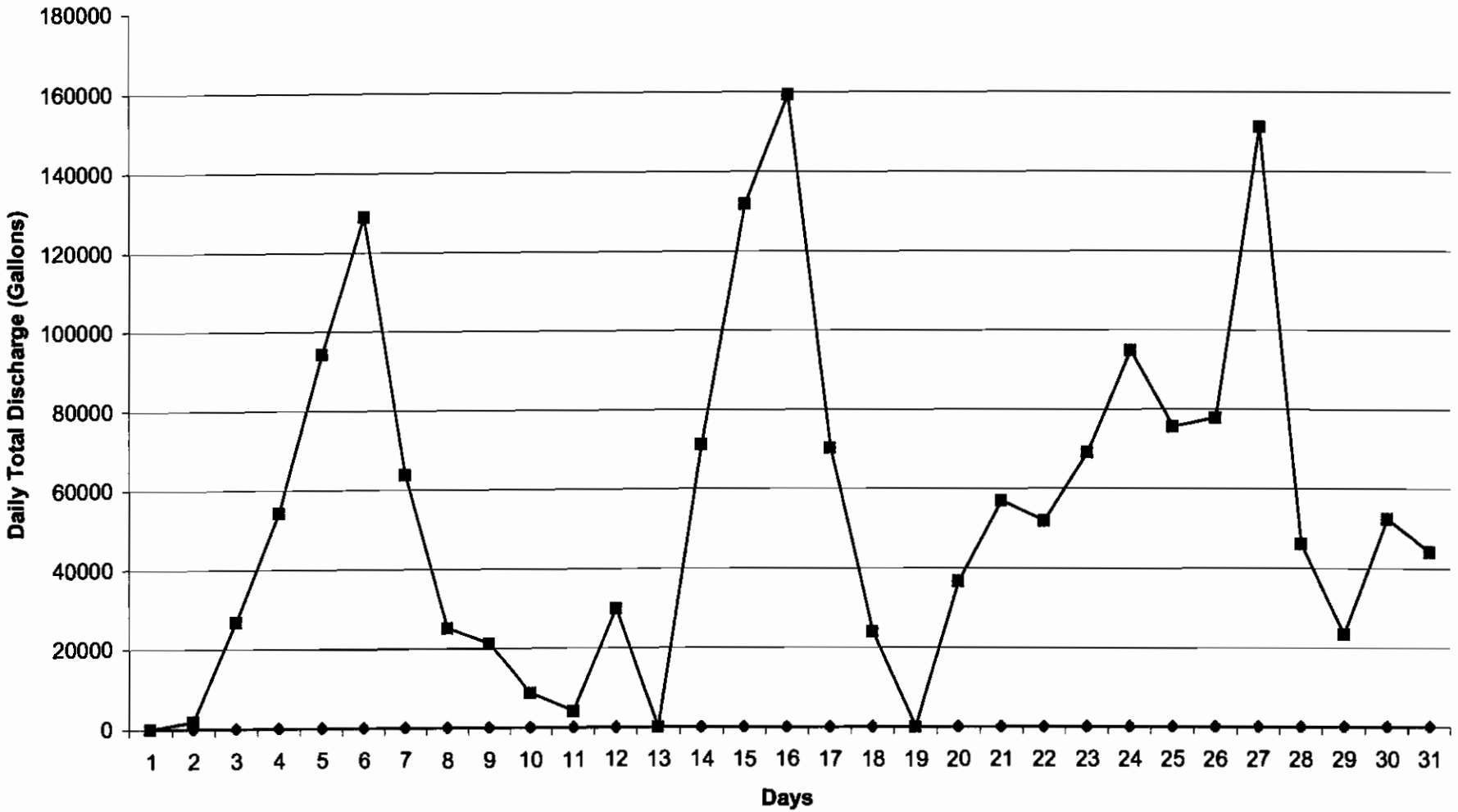
2/29/2008		8615833	29,989	8,397,292	
March-08	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**		**Notes**
1		8615833	0	8,397,292	
2		8617680	1,847	8,399,139	
3		8644554	26,874	8,426,013	
4		8698717	54,163	8,480,176	
5		8792971	94,254	8,574,430	
6		8921948	128,977	8,703,407	
7		8985708	63,760	8,767,167	
8		9010794	25,086	8,792,253	
9		9031976	21,182	8,813,435	
10		9040697	8,721	8,822,156	
11		9044785	4,088	8,826,244	
12		9074800	30,015	8,856,259	
13		9074800	0	8,856,259	
14		9145982	71,182	8,927,441	
15		9277776	131,794	9,059,235	
16		9436988	159,212	9,218,447	
17		9507229	70,241	9,288,688	
18		9531268	24,037	9,312,725	
19		9531268	0	9,312,725	
20		9568043	36,775	9,349,500	
21		9624910	56,867	9,406,367	
22		9676786	51,876	9,458,243	
23		9745874	69,088	9,527,331	
24		9840707	94,833	9,622,164	
25		9916304	75,597	9,697,761	
26		9994195	77,891	9,775,652	
27		10145248	151,053	9,926,705	
28		10191290	46,042	9,972,747	
29		10214639	23,349	9,996,096	
30		10267046	52,407	10,048,503	
31		10311094	44,048	10,092,551	
		1,695,261	**1,695,259**	**1,695,259**	

PFOHL BROTHERS LANDFILL SITE
CHEEKTOWAGA, NEW YORK

Auto Dialer System Log

DATE	PUMP Inhibit -08 (Off)	TIME Enable -07 (On)	COMMENTS
3/3/08	1117	—	SNOWMELT
3/4/08	—	0800	
3/18/08	2310		SNOW MELT + RAIN
3/20/08		0651	
3/25/08	2145	—	RAIN
3/26/08	—	0952	Clear

Pfohl Bros.
March
2008



THE TOWN OF
CHEEKTOWAGA

Main Pump Station
171 Central Boulevard
Cheektowaga, NY 14225
Phone: 716-896-1777
Fax: 716-896-6437

JON W. NICHY
Superintendent

May 7, 2008

Mr. William R. Pugh, P.E.
Town Engineer
Town of Cheektowaga

Re: Pfohl Bros. Flow Data

Dear Mr. Pugh,

Enclosed for your review, please find a copy of the **April 2008** Direct Discharge Flow Data Report, prepared by Jon W. Nichy.

A monthly log sheet indicating inhibiting and enabling of pumping operation at the site is included.

Should you have any other questions or comments regarding this submittal, please contact this office @ 896-1777.

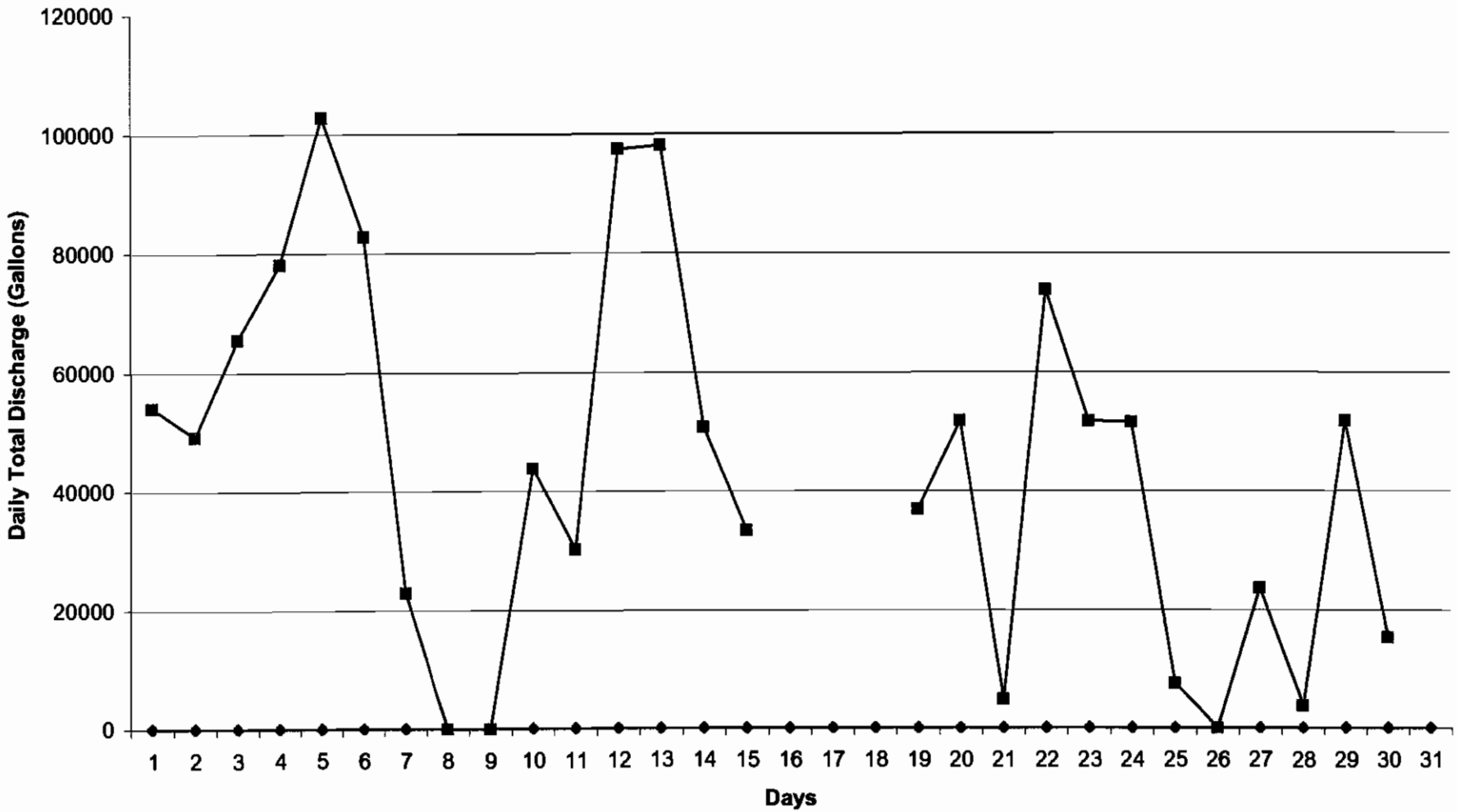
Yours truly,
Town of Cheektowaga

Jon W. Nichy
Superintendent
Main Pump Station

Direct Discharge Flow Data

3/312008		10311094	44,048	10,092,551	
April-08	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**		**Notes**
1		1036511	54,017	10,146,568	
2		10414267	49,156	10,195,724	
3		10479761	65,494	10,261,218	
4		10557874	78,113	10,339,331	
5		10660563	102,689	10,442,020	
6		10743370	82,807	10,524,827	
7		10766337	22,967	10,547,794	
8			0	10,547,794	
9			0	10,547,794	
10		10810171	43,834	10,591,628	
11		10840446	30,275	10,621,903	
12		10937714	97,268	10,719,171	
13		11035656	97,942	10,817,113	
14		11086358	50,702	10,867,815	
15		11119754	33,396	10,901,211	
16				10,901,211	
17				10,901,211	
18				10,901,211	
19		1156733	36,979	10,938,190	
20		11208573	51,840	10,990,030	
21		11213469	4,896	10,994,926	
22		11287247	73,778	11,068,704	
23		11338926	51,679	11,120,383	
24		11390450	51,524	11,171,907	
25		11398100	7,650	11,179,557	
26		11398100	0	11,179,557	
27		11421829	23,729	11,203,286	
28		11425614	3,785	11,207,071	
29		11477412	51,798	11,258,869	
30		11492838	15,426	11,274,295	
31					
		1,181,744	**1,181,744**	**1,181,744**	

Pfohl Bros.
April
2008



PFOHL BROTHERS LANDFILL SITE
CHEEKTOWAGA, NEW YORK

Auto Dialer System Log

DATE	PUMP Inhibit -08 (Off)	TIME Enable -07 (On)	COMMENTS
4/11/08	0829		Rain 40MGD
4/12/08	0100		Rain
4/12/08		0759	
4/28/08	1040		
4/28/08		2340	
4/30/08	1409		Eng. from testing Joba Sundquist

THE TOWN OF
CHEEKTOWAGA

Main Pump Station
171 Central Boulevard
Cheektowaga, NY 14225
Phone: 716-896-1777
Fax: 716-896-6437

JON W. NICHY
Superintendent

June 10, 2008

Mr. William R. Pugh, P.E.
Town Engineer
Town of Cheektowaga

Re: Pfohl Bros. Flow Data

Dear Mr. Pugh,

Enclosed for your review, please find a copy of the **May 2008** Direct Discharge Flow Data Report, prepared by Jon W. Nichy.

A monthly log sheet indicating inhibiting and enabling of pumping operation at the site is included.

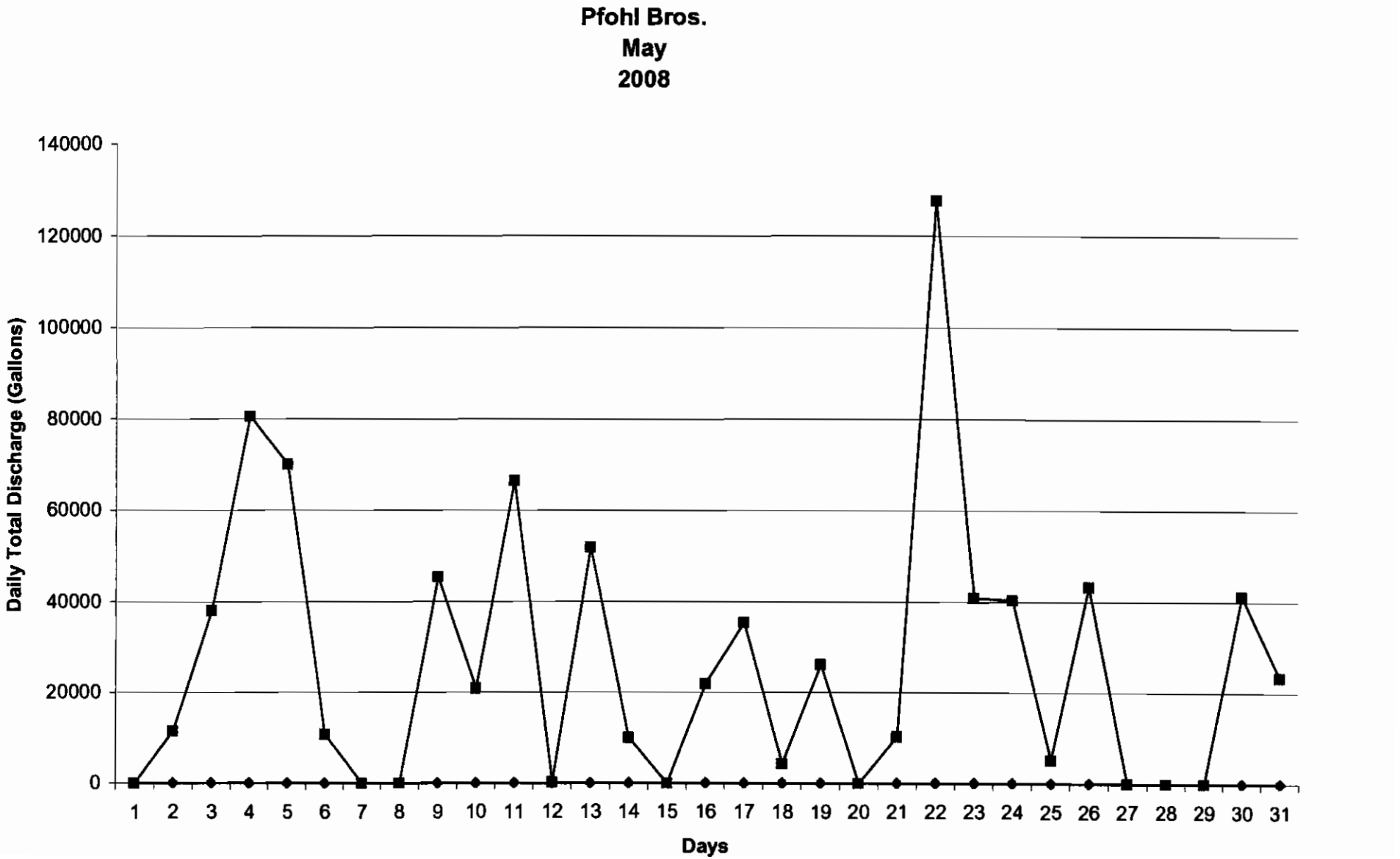
Should you have any other questions or comments regarding this submittal, please contact this office @ 896-1777.

Yours truly,
Town of Cheektowaga

Jon W. Nichy
Superintendent
Main Pump Station

Direct Discharge Flow Data

4/302008		11492838	15,426	11,274,295	
May-08	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**		**Notes**
1		11492838	0	11,274,295	
2		11504330	11,492	11,285,787	
3		11542328	37,998	11,323,785	
4		11622778	80,450	11,404,235	
5		11692767	69,989	11,474,224	
6		11703551	10,784	11,485,008	
7		11703551	0	11,485,008	
8		11703551	0	11,485,008	
9		11748956	45,405	11,530,413	
10		11769797	20,841	11,551,254	
11		11836293	66,496	11,617,750	
12		11836594	301	11,618,051	
13		11888479	51,885	11,669,936	
14		11898577	10,098	11,680,034	
15		11898577	0	11,680,034	
16		11920485	21,908	11,701,942	
17		11955864	35,379	11,737,321	
18		11960268	4,404	11,741,725	
19		11986460	26,192	11,767,917	
20		11986460	0	11,767,917	
21		11996781	10,321	11,778,238	
22		12124383	127,602	11,905,840	
23		12165156	40,773	11,946,613	
24		12205476	40,320	11,986,933	
25		12210643	5,167	11,992,100	
26		12253844	43,201	12,035,301	
27		12253844	0	12,035,301	
28		12253844	0	12,035,301	
29		12253844	0	12,035,301	
30		12295116	41,272	12,076,573	
31		12318441	23,325	12,099,898	
		825,603	**825,603**	**825,603**	


Pfohl Bros.
May
2008
Daily Total Discharge (Gallons)
140000
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
Days

PFOHL BROTHERS LANDFILL SITE
CHEEKTOWAGA, NEW YORK

Auto Dialer System Log

DATE	PUMP TIME Inhibit -08 (Off)	 Enable -07 (On)	COMMENTS
5/3/08	1545		
5/4/08		0905	
5/31/08	0300		
5/31/08		0700	

THE TOWN OF
CHEEKTOWAGA

Main Pump Station
171 Central Boulevard
Cheektowaga, NY 14225
Phone: 716-896-1777
Fax: 716-896-6437

JON W. NICHY
Superintendent

July 2, 2008

Mr. William R. Pugh, P.E.
Town Engineer
Town of Cheektowaga

Re: Pfohl Bros. Flow Data

Dear Mr. Pugh,

Enclosed for your review, please find a copy of the **June 2008** Direct Discharge Flow Data Report, prepared by Jon W. Nichy.

A monthly log sheet indicating inhibiting and enabling of pumping operation at the site, and a summary of **2007-2008 Annual Discharge** are included with this package.

Should you have any other questions or comments regarding this submittal, please contact this office @ 896-1777.

Yours truly,
Town of Cheektowaga

Jon W. Nichy
Superintendent
Main Pump Station

PFOHL BROTHERS LANDFILL SITE
CHEEKTOWAGA, NEW YORK

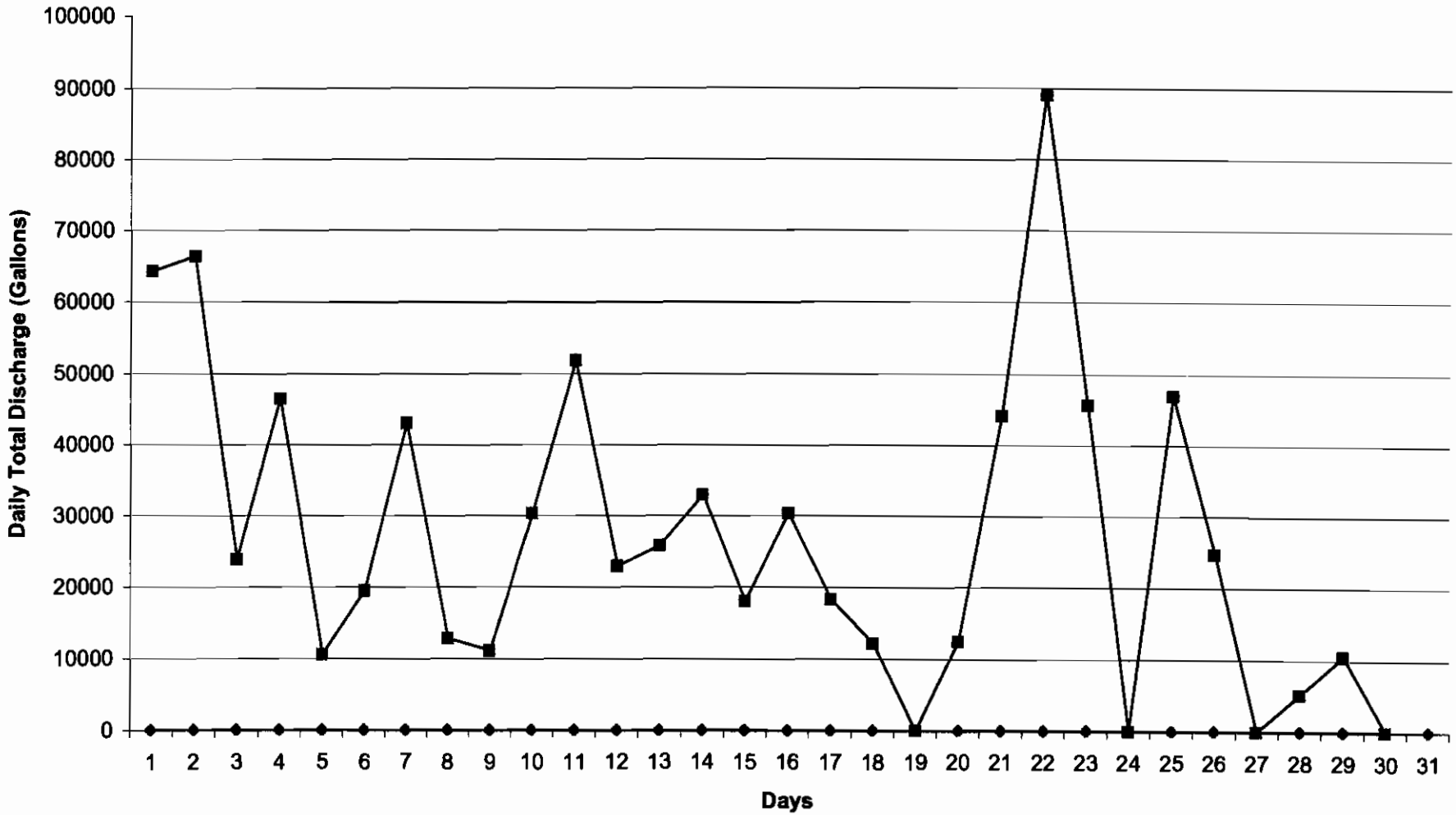
Auto Dialer System Log

DATE	PUMP Inhibit -08 (Off)	TIME Enable -07 (On)	COMMENTS
6/16/08	2027 HRS		HEAVY RAIN
6/17/08	[redacted]	0700	Cloudy
6/29/08	1322 HRS	2306 HRS	HEAVY RAIN / CLOUDY
6/30/08	1956 HRS	2324 HRS	RAIN
6/9/08	2222		Rain
6/10/08		0657	

Direct Discharge Flow Data

5/31/2008		12318441	23,325	12,099,898	
June-08	**Time; 11:58pm unless otherwise stated**	**Totalizer Reading (Gallons)**	**Daily Total Discharge (Gallons)**		**Notes**
1		12382738	64,297	12,164,195	
2		12449112	66,374	12,230,569	
3		12473033	23,921	12,254,490	
4		12519555	46,522	12,301,012	
5		12530130	10,575	12,311,587	
6		12549612	19,482	12,331,069	
7		12592639	43,027	12,374,096	
8		12605509	12,870	12,386,966	
9		12616643	11,134	12,398,100	
10		12646942	30,299	12,428,399	
11		12698782	51,840	12,480,239	
12		12721696	22,914	12,503,153	
13		12747494	25,798	12,528,951	
14		12780390	32,896	12,561,847	
15		12798394	18,004	12,579,851	
16		12828726	30,332	12,610,183	
17		12847060	18,334	12,628,517	
18		12859250	12,190	12,640,707	
19		12859250	0	12,640,707	
20		12871735	12,485	12,653,192	
21		12915861	44,126	12,697,318	
22		13004889	89,028	12,786,346	
23		13050564	45,675	12,832,021	
24		13050564	0	12,832,021	
25		13097510	46,946	12,878,967	
26		13122246	24,736	12,903,703	
27		13122246	0	12,903,703	
28		13127436	5,190	12,908,893	
29		13137960	10,524	12,919,417	
30		13137960	0	12,919,417	
31					
		819,519	**819,519**	**819,519**	

Pfohl Bros.
June
2008

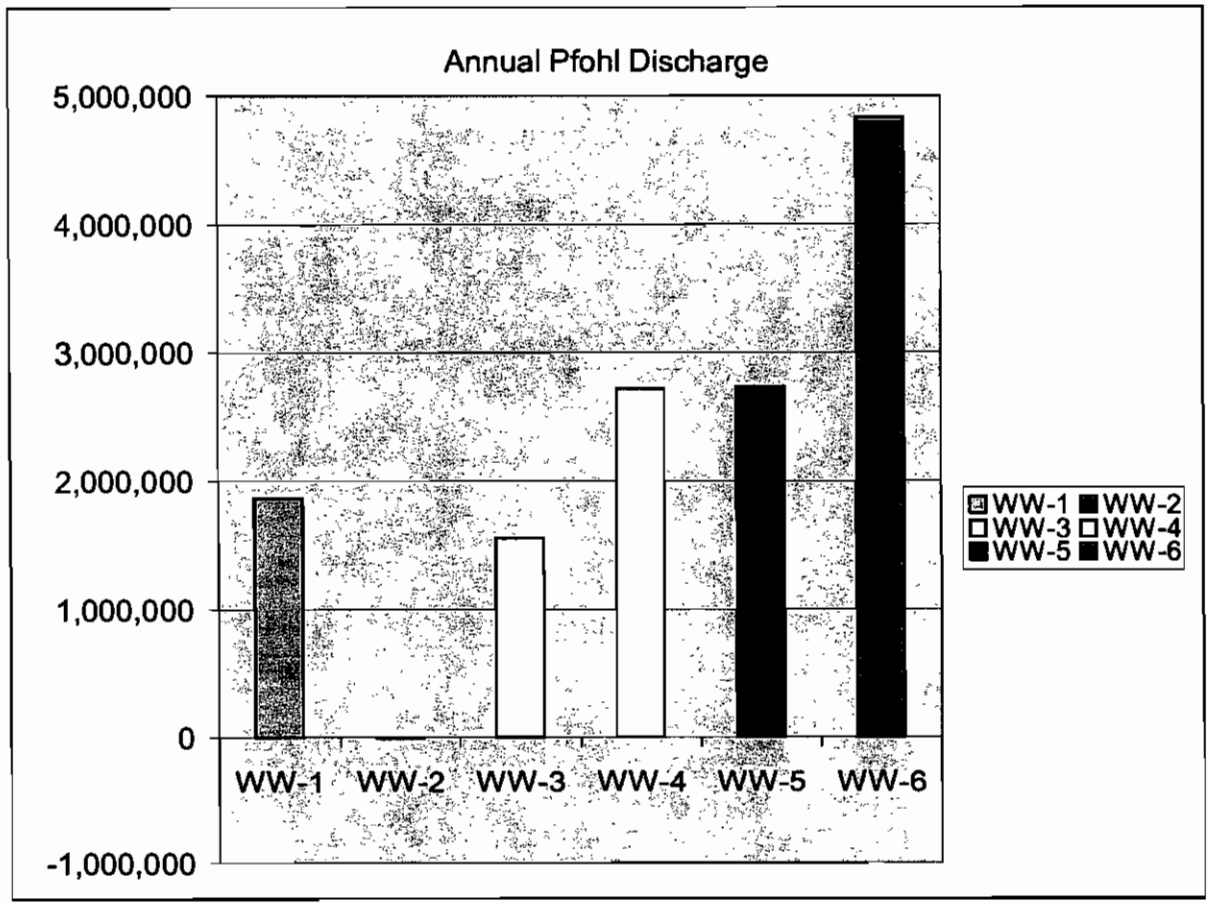


Total Annual Discharge Pfohl Bros. Site

7/1/2007 through 7/1/2008

WW-1	1864656
WW-2	-6249
WW-3	1553502
WW-4	2713330
WW-5	2728456
WW-6	4822273

Total 13675968



APPENDIX C

HYDRAULIC MONITORING TABLES

TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
JANUARY - JUNE 2008

GW-03D	1073819.106	1114602.426	892 35	NM	893.88	D	1						
MNW								3/21/2008 0000	1.39	692.49	0 00	692.49	
GW-03S	1073812 622	1114605.782	692.61	NM	693.80	S	1						
MNW								3/21/2008 0000	2.45	691 35	0.00	691.35	
MNW								5/2/2008 0000	2 62	691.18	0.00	691 18	
MNW								5/27/2008 0000	3.00	690 80	0 00	690.80	
MNW								6/16/2008 0000	5.06	688.74	0.00	688.74	
GW-04D	1072289.432	1114685.825	690.89	NM	692.75	D	1						
MNW								3/21/2008 0000	12.49	680 26	0.00	680.26	
GW-04S	1072284.458	1114685 127	690 76	NM	692.72	S	1						
MNW								3/21/2008 0000	3.48	689.24	0.00	689.24	
MNW								5/2/2008 0000	4.52	688.20	0 00	688.20	
MNW								5/27/2008 0000	4.99	687.73	0.00	687.73	
MNW								6/18/2008 0000	5.10	687.62	0.00	687.62	
GW-07D	1071242 458	1117669.925	697.15	NM	699 94	D	1						
MNW								3/21/2008 0000	46.17	653.77	0.00	653.77	
GW-07S	1071238.157	1117686 285	697.47	NM	699 51	S	1						
MNW								3/21/2008 0000	3.90	695 61	0.00	695.61	
MNW								5/2/2008 0000	5 16	694.35	0.00	694.35	
MNW								5/27/2008 0000	5 80	693.71	0.00	693.71	
MNW								6/16/2008 0000	6.00	693.51	0.00	693.51	
GW-08D	1073713.817	1116795.328	695.28	NM	897 79	D	1						
MNW								3/21/2008 0000	5 21	692.58	0.00	692.58	

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	Monitering Well
SG	Staff Gauge

Filter = ((tblGWD.LOGDATE Like "*2008*"))

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TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
JANUARY - JUNE 2008

GW-08SR	1073714 172	1116786.343	695.08	NM	697 50	S	1						
MNW								3/21/2008 0000	4.97	692.53	0.00	692.53	
MNW								5/2/2008 0000	5.22	692.28	0.00	692.28	
MNW								5/27/2008 0000	5.52	691.98	0.00	691.98	
MNW								6/16/2008 0000	5.24	692.26	0.00	692.26	
GW-26D	1071698.573	1115997.470	696.01	NM	698 50	D	1						
MNW								3/21/2008 0000	6.11	692.39	0.00	692.39	
GW-28S	1073129.479	1117648.927	698.60	NM	700.95	S	1						
MNW								3/21/2008 0000	8.58	692.37	0.00	692.37	
MNW								5/2/2008 0000	9.93	691.02	0.00	691 02	
MNW								5/27/2008 0000	10.54	890.41	0.00	690.41	
MNW								6/16/2008 0000	10.62	690.33	0.00	690.33	
GW-29S	1072552.638	1117761 993	697 50	NM	699 63	S	1						
MNW								3/21/2008 0000	6.54	693.09	0.00	693.09	
MNW								5/2/2008 0000	9.30	690.33	0 00	690.33	
MNW								5/27/2008 0000	9.90	689.73	0.00	689.73	
MNW								6/16/2008 0000	9.97	689.66	0.00	689.66	
GW-30S	1072096.109	1117743.563	693.67	NM	696.58	S	1						
MNW								3/21/2008 0000	4.93	691 85	0.00	691.65	
MNW								5/2/2008 0000	8.49	688.09	0.00	688.09	
MNW								5/27/2008 0000	8.61	687.97	0.00	687.97	
MNW								6/16/2008 0000	8 47	688.11	0.00	688.11	
GW-31S	1071786.280	1117191.441	695.84	NM	698 62	S	1						
MNW								3/21/2008 0000	1.64	696.98	0.00	696.98	
MNW								5/2/2008 0000	3.86	694.76	0.00	694.76	

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
SG	Staff Gauge

Filter = {(tblGWD LOGDATE Like "*2008")}

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TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
JANUARY - JUNE 2008

MNW								5/27/2008 0000	5.30	693.32	0.00	693.32	
MNW								6/16/2008 0000	5.23	693.39	0.00	693.39	
GW-32S	1071613 793	1116364 200	696.19	NM	698.37	S	1						
MNW								3/21/2008 0000	2.37	696.00	0.00	696.00	
MNW								5/2/2008 0000	3.96	694.41	0.00	694.41	
MNW								5/27/2008 0000	4.81	693.56	0.00	693.56	
MNW								6/16/2008 0000	4.66	693.71	0.00	693.71	
GW-33S	1072165.625	1115561 866	695 94	NM	698 24	S	1						
MNW								3/21/2008 0000	3.49	694 75	0.00	694.75	
MNW								5/2/2008 0000	5.42	692.82	0.00	692.82	
MNW								5/27/2008 0000	6.26	691.98	0.00	691.98	
MNW								6/16/2008 0000	5.75	692.49	0.00	692.49	
GW-34S	1072979.205	1114730 200	692.51	NM	694.77	S	1						
MNW								3/21/2008 0000	2 94	691 83	0 00	691.83	
MNW								5/2/2008 0000	2.93	691.84	0.00	691.84	
MNW								5/27/2008 0000	3.33	691.44	0.00	691.44	
MNW								6/16/2008 0000	3.10	691 67	0.00	691.67	
GW-35S	1071701 925	1115985 585	696.19	NM	697 39	S	1						
MNW								3/21/2008 0000	2 89	694 50	0.00	694.50	
MNW								5/2/2008 0000	3.88	693.51	0 00	693.51	
MNW								5/27/2008 0000	4 90	692.49	0.00	692 49	
MNW								6/16/2008 0000	4.94	692.45	0.00	692.45	
MH-01	1073806.665	1114810.501	698 62	NM	698.62	NA	1						
MH								3/21/2008 0000	9.57	689.05	0.00	689.05	
MH								5/2/2008 0000	9.74	688.88	0 00	688 88	

NM - No Measurement

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

Type:

MH	Manhole Monitoring Point
MNW	Monitoring Well
SG	Staff Gauge

TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
JANUARY - JUNE 2008

MH								5/27/2008 0000	10.34	688.28	0.00	688.28	
MH								6/16/2008 0000	10.59	688.03	0.00	688.03	
MH-03	1073736.789	1115259.334	699.40	NM	699.40	NA	1						
MH								3/21/2008 0000	10.50	688.90	0.00	688.90	
MH								5/2/2008 0000	10.60	688.80	0.00	688.80	
MH								5/27/2008 0000	11.21	688.19	0.00	688.19	
MH								6/16/2008 0000	11.23	688.17	0.00	688.17	
MH-07	1073838.229	1116243.757	696.82	NM	696.82	NA	1						
MH								3/21/2008 0000	8.75	688.07	0.00	688.07	
MH								5/2/2008 0000	8.81	688.01	0.00	688.01	
MH								5/27/2008 0000	9.41	687.41	0.00	687.41	
MH								6/16/2008 0000	9.43	687.39	0.00	687.39	
MH-10	1073540.729	1117381.524	703.01	NM	703.01	NA	1						
MH								3/21/2008 0000	14.44	688.57	0.00	688.57	
MH								5/2/2008 0000	14.45	688.56	0.00	688.56	
MH								5/27/2008 0000	14.44	688.57	0.00	688.57	
MH								6/16/2008 0000	14.45	688.56	0.00	688.56	
MH-15	1072531.567	1117761.125	699.02	NM	699.02	NA	1						
MH								3/21/2008 0000	14.81	684.21	0.00	684.21	
MH								5/2/2008 0000	14.76	684.26	0.00	684.26	
MH								5/27/2008 0000	14.91	684.11	0.00	684.11	
MH								6/16/2008 0000	14.86	684.16	0.00	684.16	
MH-16	1072133.714	1117748.238	698.57	NM	698.57	NA	1						
MH								3/21/2008 0000	14.45	684.12	0.00	684.12	
MH								5/2/2008 0000	14.38	684.19	0.00	684.19	

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
SG	Staff Gauge

Filter = ((tblGWD.LOGDATE Like "*2008*"))

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TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
JANUARY - JUNE 2008

MH								5/27/2008 0000	14.50	684.07	0.00	684.07	
MH								6/16/2008 0000	14.47	684.10	0.00	684.10	
MH-17	1071813.137	1117180.019	702.18	NM	702.16	NA	1						
MH								3/21/2008 0000	18.10	684.06	0.00	684.06	
MH								5/2/2008 0000	17.97	684.19	0.00	684.19	
MH								5/27/2008 0000	18.13	684.03	0.00	684.03	
MH								6/18/2008 0000	18.11	684.05	0.00	684.05	
MH-20	1071758.395	1115997.024	706.20	NM	706.20	NA	1						
MH								3/21/2008 0000	19.71	686.49	0.00	686.49	
MH								5/2/2008 0000	19.71	686.49	0.00	686.49	
MH								5/27/2008 0000	19.74	686.46	0.00	686.46	
MH								6/16/2008 0000	19.73	686.47	0.00	686.47	
MH-22	1072158.023	1115589.309	698.05	NM	698.05	NA	1						
MH								3/21/2008 0000	8.76	689.29	0.00	689.29	
MH								5/2/2008 0000	8.99	689.06	0.00	689.06	
MH								5/27/2008 0000	9.00	689.05	0.00	689.05	
MH								6/18/2008 0000	9.02	689.03	0.00	689.03	
MH-25	1072483.928	1114820.313	698.17	NM	698.17	NA	1						
MH								3/21/2008 0000	8.92	689.25	0.00	689.25	
MH								5/2/2008 0000	9.32	688.85	0.00	688.85	
MH								5/27/2008 0000	9.96	688.21	0.00	688.21	
MH								6/16/2008 0000	10.23	687.94	0.00	687.94	
SG-01	1073882.887	1114813.101	NM	NM	690.00	NA	1						
SG								3/21/2008 0000	-1.79	691.79	0.00	691.79	
SG								5/2/2008 0000	-1.17	691.17	0.00	691.17	

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
SG	Staff Gauge

TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
JANUARY - JUNE 2008

SG								5/27/2008 0000	-0.80	690.80	0.00	690.80	
SG								6/16/2008 0000	-0.96	690 96	0.00	690.96	
SG-02	1073738.27	1116805.85	NM	NM	690.00	NA	1						
SG								3/21/2008 0000	-3.68	693.68	0.00	693.68	
SG								5/2/2008 0000	-3.45	693.45	0.00	693.45	
SG								5/27/2008 0000	-3.10	693.10	0.00	693.10	
SG								6/16/2008 0000	-3.58	693.58	0.00	693.58	
WW-01	1073676 903	1115710.476	NM	NM	684.02	NA	1						
MH								3/21/2008 0000	-4.7	688.72	0.00	688.72	
MH								5/2/2008 0000	-4.6	688.62	0.00	688.62	
MH								5/27/2008 0000	-3.9	687.92	0.00	687 92	
MH								6/16/2008 0000	-3.9	687.92	0.00	687.92	
WW-02	1073684.724	1116792.311	NM	NM	684 18	NA	1						
MH								3/21/2008 0000	-4.7	688.88	0.00	688.88	
MH								5/2/2008 0000	-4.7	688.88	0.00	688.88	
MH								5/27/2008 0000	-4.7	688.88	0.00	688 88	
MH								6/16/2008 0000	-4.7	688.88	0.00	688.88	
WW-03	1073140.339	1117618 499	NM	NM	883.80	NA	1						
MH								3/21/2008 0000	-4.9	688.70	0.00	688.70	
MH								5/2/2008 0000	-4.9	688.70	0.00	688.70	
MH								5/27/2008 0000	-3.9	687.70	0.00	687.70	
MH								6/16/2008 0000	-3.7	687.50	0.00	687.50	
WW-04	1072057.563	1117610.508	NM	NM	676.62	NA	1						
MH								3/21/2008 0000	-7.0	683.62	0.00	683.62	
MH								5/2/2008 0000	-7.1	683.72	0 00	683.72	

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
SG	Staff Gauge

Filter = {{tblGWD LOGDATE Like "*2008"}}

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TABLE 1
PFOHL BROTHERS LANDFILL SITE
GROUNDWATER ELEVATIONS
JANUARY - JUNE 2008

MH								5/27/2008 0000	-7.0	683.62	0.00	683.62	
MH								6/16/2006 0000	-7.1	683.72	0 00	683.72	
WW-05	1071661.368	1116370 876	NM	NM	676.14	NA	1						
MH								3/21/2008 0000	-6.6	682.74	0.00	682.74	
MH								5/2/2008 0000	-7.8	683 94	0.00	683.94	
MH								5/27/2008 0000	-6.8	662.94	0.00	682.94	
MH								6/16/2008 0000	-7.3	683.44	0.00	683.44	
WW-06	1072988.420	1114811.518	NM	NM	681.89	NA	1						
MH								3/21/2008 0000	NM	-	NM	-	Pump Error
MH								5/2/2008 0000	-7 5	689.39	0.00	689.39	
MH								5/27/2008 0000	-6.8	688.69	0.00	688.69	
MH								6/16/2008 0000	-6.4	688.29	0.00	688.29	

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
SG	Staff Gauge

TABLE 2
PFOHL BROTHERS LANDFILL SITE
OVERBURDEN HYDRAULIC GRADIENT

WELL PAIR:	WW-1	*	Level	WW-2	GW-8SR	Level	SG-02	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft)
3/21/2008	688.72	---	---	688.88	692.53	3.65	693.68	4.80
5/2/2008	688.62	---	---	688.88	692.28	3.40	693.45	4.57
5/27/2008	687.92	---	---	688.88	691.98	3.10	693.10	4.22
6/16/2008	687.92	---	---	688.88	692.26	3.38	693.58	4.70

WELL PAIR:	WW-3	GW-28S	Level	WW-4	*	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
3/21/2008	688.70	692.37	3.67	683.62	---	---
5/2/2008	688.70	691.02	2.32	683.72	---	---
5/27/2008	687.70	690.41	2.71	683.62	---	---
6/16/2008	687.50	690.33	2.83	683.72	---	---

WELL PAIR:	WW-5	GW-32S	Level	WW-6	GW-34S	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
3/21/2008	682.74	696.00	13.26	**	691.83	---
5/2/2008	683.94	694.41	10.47	689.39	691.84	2.45
5/27/2008	682.94	693.56	10.62	688.69	691.44	2.75
6/16/2008	683.44	693.71	10.27	688.29	691.67	3.38

WELL PAIR:	MH-1	SG-1	Level	MH-15	GW-29S	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
3/21/2008	689.05	691.79	2.74	684.21	693.09	8.88
5/2/2008	688.88	691.17	2.29	684.26	690.33	6.07
5/27/2008	688.28	690.8	2.52	684.11	689.73	5.62
6/16/2008	688.03	690.96	2.93	684.16	689.66	5.5

WELL PAIR:	MH-16	GW-30S	Level	MH-17	GW-31S	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
3/21/2008	684.12	691.65	7.53	684.06	696.98	12.92
5/2/2008	684.19	688.09	3.90	684.19	694.76	10.57
5/27/2008	684.07	687.97	3.90	684.03	693.32	9.29
6/16/2008	684.10	688.11	4.01	684.05	693.39	9.34

WELL PAIR:	MH-20	GW-35S	Level	MH-22	GW-33S	Level
	Water Level	Water Level	Difference	Water Level	Water Level	Difference
DATE	(ft amsl)	(ft amsl)	(ft)	(ft amsl)	(ft amsl)	(ft)
3/21/2008	686.49	694.50	8.01	686.49	694.75	8.26
5/2/2008	686.49	693.51	7.02	689.06	692.82	3.76
5/27/2008	686.46	692.49	6.03	689.05	691.98	2.93
6/16/2008	686.47	692.45	5.98	689.03	692.49	3.46

Notes:

* = No corresponding monitoring well.
** = No water level available from Programmable Logic Controller (PLC).
*** = No water present - dry conditions.

The system was off for two days prior to the 5/2/2008 monitoring event.

APPENDIX D

GROUNDWATER PURGE AND SAMPLE COLLECTION LOGS

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-1S

Date: 5/29/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 4.30' Depth to Well Bottom: 14.96' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 6.6 Estimated Purge Volume (liters): 9.9

Sample ID: GW-1S Sample Time: 12:05 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1120	6.84	18.0	2.088	0.06	>1000	-83.4	270	4.30
1125	6.84	17.0	1.756	0.04	>1000	-80.9	190	5.12
1130	6.99	14.7	1.291	0.04	>1000	-83.5	190	5.29
1135	7.09	14.6	1.223	0.36	>1000	-74.2	190	5.34
1140	7.03	14.9	1.257	0.10	817	-74.8	190	5.35
1145	7.02	13.9	1.305	0.09	660	-74.6	190	5.37
1150	7.00	13.3	1.340	0.10	526	-74.0	190	5.38
1155	6.99	13.2	1.379	0.10	414	-73.0	190	5.89
1200	6.98	13.4	1.395	0.11	406	-72.2	190	5.42
1205	6.96	13.3	1.418	0.11	385	-71.2	190	5.44
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-1D

Date: 5/29/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 3.58' Depth to Well Bottom: 39.72' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 89.3 Estimated Purge Volume (liters): 55.0

Sample ID: GW-1D Sample Time: 13:15 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1225	7.26	14.7	1.098	0.40	8	-81.8	1000	3.58
1230	7.21	12.8	1.045	0.20	3	-96.0	1000	3.61
1235	7.22	12.2	1.039	0.18	3	-101.8	1000	3.61
1240	7.23	12.3	1.037	0.18	3	-108.1	1000	3.61
1245	7.23	12.2	1.035	0.17	3	-115.3	1000	3.61
1250	7.23	12.3	1.036	0.18	3	-125.0	1000	3.61
1255	7.23	12.2	1.038	0.17	2	-133.3	1000	3.61
1300	7.23	12.3	1.039	0.16	2	-140.8	1000	3.61
1305	7.23	12.3	1.040	0.18	2	-146.5	1000	3.61
1310	7.23	12.2	1.041	0.18	2	-151.2	1000	3.61
1315	7.23	12.1	1.041	0.19	2	-153.9	1000	3.61
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-3S

Date: 5/28/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 3.45' Depth to Well Bottom: 13.25' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 6.0 Estimated Purge Volume (liters): 5.8

Sample ID: GW-3S Sample Time: 14:15 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1325	6.93	17.0	1.044	0.54	198	-77.4	170	3.45
1335	6.97	13.5	1.029	0.20	115	-59.6	110	5.73
1340	6.98	12.6	1.026	0.20	88	-58.1	110	6.02
1345	7.00	12.2	1.018	0.16	44	-60.3	110	6.24
1350	7.03	12.1	1.008	0.16	30	-33.5	110	6.61
1355	7.02	12.1	1.004	0.17	18	-27.7	110	6.83
1400	7.03	12.1	1.005	0.18	17	-22.9	110	6.93
1405	7.04	12.1	1.005	0.18	13	-7.2	110	7.14
1410	7.04	12.1	1.001	0.21	17	-2.2	110	7.35
1415	7.04	12.1	1.000	0.19	15	2.7	110	7.41
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-3D

Date: 5/28/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 2.32' Depth to Well Bottom: 35.66' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 82.3 Estimated Purge Volume (liters): 50.0

Sample ID: GW-3D Sample Time: 15:30 QA/QC: MS/MSD

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

Other Information: Temperature probe malfunctioning

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)
1445	7.04	NA	1.700	0.07	8	-58.1	1000	2.32
1450	7.01	NA	1.696	0.02	8	-61.9	1000	2.35
1455	7.00	NA	1.703	0.01	2	-64.8	1000	2.35
1500	6.99	NA	1.699	0.01	3	-66.3	1000	2.35
1505	6.99	NA	1.704	0.01	2	-67.6	1000	2.35
1510	6.98	NA	1.708	0.01	3	-67.7	1000	2.35
1515	6.97	NA	1.711	0.00	3	-66.7	1000	2.35
1520	6.95	NA	1.710	0.00	3	-64.5	1000	2.35
1525	6.97	NA	1.713	0.01	3	-61.7	1000	2.35
1530	6.87	NA	1.709	0.01	3	-56.7	1000	2.35
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-4S

Date: 5/29/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 5.18' Depth to Well Bottom: 16.28' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 6.8 Estimated Purge Volume (liters): 24.5

Sample ID: GW-4S Sample Time: 10:40 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

Other Information: Well historically goes dry pumping at very low rates (75 ml/min). Well purged to dryness, allowed to recover, and then sampled.

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)
850	7.84	11.1	0.472	0.63	175	-217.0	500	5.18
855	7.79	10.4	0.372	0.13	62	-238.2	500	9.00
900	7.84	9.9	0.361	0.15	28	-232.4	500	10.62
905	7.81	9.9	0.360	0.18	68	-193.7	500	12.97
910	7.76	9.8	0.361	0.20	73	-178.8	500	14.26
915	7.68	10.5	0.359	0.06	7	-185.4	800	14.62
920	7.67	10.3	0.353	0.00	8	-198.0	800	15.66
925	7.67	10.4	0.353	0.00	7	-206.7	800	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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-4D

Date: 5/29/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 13.22' Depth to Well Bottom: 45.58' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 79.9 Estimated Purge Volume (liters): 8.2

Sample ID: GW-4D Sample Time: 10:15 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
940	7.31	14.8	0.944	0.40	33	-74.1	325	13.22
945	7.27	13.8	0.982	0.05	11	-84.6	195	13.69
950	7.28	12.5	0.993	0.04	8	-89.5	195	13.89
955	7.29	12.1	0.997	0.04	7	-93.1	195	14.13
1000	7.30	12.4	0.999	0.03	6	-95.3	190	14.28
1005	7.31	12.3	1.010	0.03	10	-95.5	180	14.34
1010	7.31	12.4	1.007	0.03	8	-96.9	180	14.42
1015	7.32	12.4	1.003	0.03	9	-98.5	180	14.50
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.. 11175616.00000

STAFF: Rob Murphy, Rob Piurek

DATE(S): 5/27/08 - 5/28/08

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	35.05	1"	0.040
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	5.82	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	29.23	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)	=	5.0	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 3)	=	14.9	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	3	5	7.5	sample 5/28/08						
pH	7.79	7.84	7.82	7.82							
SPEC. COND. (mS/cm)	0.469	0.457	0.254	0 455							
DO (mg/l)	1.13	1.35	1.91	1.72							
TEMPERATURE (^{0}C)	11.7	11.4	11.1	10.8							
TURBIDITY (NTU)	161	285	541	>1000							
ORP (millivolts)	-96.8	-81.9	-58.9	-41.9							
Water Level (BTOR-feet)	5.82	17.36	23.72	34.09							

COMMENTS:

Purged with dedicated stainless steel bailer. Well went dry after removing about 8 gallons. Return on 5/28/08 and sample with dedicated stainless steel bailer.

Sample Parameter VOCs, SVOCs, and TAL Metals

Depth to water was 6.06' on 5/28/08

Sample time 17:10 on 5/28/08

WELL PURGING LOG

URS Corporation

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

PROJECT NO.: 11175616.00000

STAFF: Rob Murphy, Rob Piurek

DATE(S): 5/27/08 - 5/28/08

			WELL ID.	VOL. (GAL/FT)
1. TOTAL CASING AND SCREEN LENGTH (FT.)	=	60.68	1"	0.040
2. WATER LEVEL BELOW TOP OF CASING (FT.)	=	41.21	2"	0.17
3. NUMBER OF FEET STANDING WATER (#1 - #2)	=	19.47	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)	=	12.9	5"	1.04
6. VOLUME OF WATER TO REMOVE (GAL.)(#5 x 3)	=	38.6	6"	1.50
7. VOLUME OF WATER ACTUALLY REMOVED (GAL.)	=	12.9	8"	2.60

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

	ACCUMULATED VOLUME PURGED (GALLONS)										
PARAMETERS	0	3	6	9	12						
pH	7.56	7.53	7.62	7.64	7.54						
SPEC. COND. (mS/cm)	0.020	0.369	0.313	0.304	0.609						
DO (mg/)	1.000	0.390	0.860	0.680	0.700						
TEMPERATURE (^{0}C)	54.3	13.0	12.1	11.8	11.9						
TURBIDITY (NTU)	10	7	4	6	10						
ORP (millivolts)	-161	-156.9	-120	-121.1	-150.1						
Water Level (BTOR-feet)	41.21	48.15	51.85	55.55	59.20						

COMMENTS:

Purged with a dedicated whale pump and tubing, and then with dedicated stainless steel bailer. Well went dry after removing about 12 gallons with whale pump, and additional 0.9 gallons with bailer. Return on 5/28/08 and sample with dedicated stainless steel bailer.

Sample time 16:40 on 5/28/08

Depth to water was 59.07' on 5/28/08

Sample Parameter VOCs, SVOCs, and TAL Metals

LOW FLOW GROUNDWATER PURGING/SAMPLING LOG

Project: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-8SR

Date: 5/28/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 6.02' Depth to Well Bottom: 13.04' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 4.3 Estimated Purge Volume (liters): 10.3

Sample ID: GW-8SR Sample Time: 11:00 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1005	6.68	14.5	1.542	0.36	>1000	-70.3	200	6.02
1010	6.70	13.1	1.528	0.22	567	-69.3	170	6.92
1015	6.72	12.3	1.521	0.17	675	-67.0	170	7.41
1020	6.72	13.0	1.531	0.15	728	-64.7	130	7.38
1025	6.72	13.0	1.543	0.14	625	-63.1	130	7.28
1030	6.72	12.8	1.540	0.38	499	-56.5	180	7.46
1035	6.68	13.0	1.535	0.19	316	-60.5	180	7.50
1040	6.66	12.7	1.551	0.14	187	-62.3	180	7.51
1045	6.64	12.7	1.569	0.14	75	-65.3	180	7.55
1050	6.64	12.7	1.574	0.15	50	-66.3	180	7.56
1055	6.63	12.7	1.576	0.16	34	-66.8	180	7.56
1100	6.63	12.7	1.576	0.15	25	-66.9	180	7.56
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-8D

Date: 5/28/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 6.62' Depth to Well Bottom: 32.62' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 64.2 Estimated Purge Volume (liters): 33.2

Sample ID: GW-8D Sample Time: 12:35 QA/QC: GW-052808-DUP

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1135	7.05	16.4	0.957	0.16	44	-86.0	630	6.62
1140	7.04	13.2	0.958	0.14	29	-86.9	500	6.34
1145	7.04	12.9	0.956	0.12	12	-86.6	500	6.34
1150	7.04	12.9	0.956	0.11	19	-86.0	500	6.34
1155	7.04	12.8	0.955	0.09	15	-86.3	500	6.34
1200	7.06	12.8	0.954	0.08	11	-86.6	500	6.34
1205	7.06	12.8	0.953	0.07	8	-85.4	500	6.34
1210	7.06	12.8	0.951	0.05	9	-85.1	500	6.34
1215	7.06	12.8	0.952	0.05	6	-83.3	500	6.34
1220	7.06	12.8	0.953	0.05	5	-83.1	500	6.34
1225	7.06	12.8	0.953	0.05	5	-82.7	500	6.34
1230	7.07	12.8	0.953	0.05	5	-83.3	500	6.34
1235	7.07	12.8	0.952	0.04	5	-83.4	500	6.34
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-26D

Date: 5/29/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 7.19' Depth to Well Bottom: 40.71' Well Diameter: 4" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 82.8 Estimated Purge Volume (liters): 20.0

Sample ID: GW-26D Sample Time: 15:22 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1447	7.15	14.0	2.561	0.47	146	-100.5	500	7.19
1452	7.03	13.0	2.509	0.03	8	-100.2	500	7.19
1457	7.03	13.1	2.505	0.04	5	-99.6	500	7.19
1502	7.03	12.7	2.507	0.06	60	-99.1	500	7.19
1507	7.03	12.8	2.506	0.08	2	-99.1	500	7.21
1512	7.03	12.8	2.507	0.13	27	-99.0	500	7.21
1517	7.04	12.7	2.507	0.14	1	-99.5	500	7.21
1522	7.05	12.8	2.504	0.16	1	-100.1	500	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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-28S

Date: 5/28/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 10.66' Depth to Well Bottom: 15.55' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 3.0 Estimated Purge Volume (liters): 7.1

Sample ID: GW-28S Sample Time: 9:10 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
840	7.11	10.1	0.731	0.39	>1000	-20.6	235	10.66
845	7.09	9.8	0.698	0.46	68	15.3	235	11.61
850	7.06	9.7	0.710	0.43	31	24.3	190	11.73
855	7.05	9.5	0.730	0.41	21	24.8	190	11.80
900	7.05	10.4	0.751	0.44	15	23.1	190	11.83
905	7.04	10.4	0.766	0.36	21	28.7	190	11.90
910	7.03	10.4	0.771	0.42	12	30.3	190	11.98
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-29S

Date: 5/30/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 9.96' Depth to Well Bottom: 20.01' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 6.2 Estimated Purge Volume (liters): 5.9

Sample ID: GW-29S Sample Time: 13:00 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

Other Information: Iron stained water.

Ran pump for 5 minutes without flow cell to wait for turbidity to clear.

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)
1225	6.98	13.7	1.101	0.25	>1000	-80.4	170	11.93
1230	6.93	14.2	0.983	0.20	>1000	-97.0	170	12.12
1235	6.93	14.2	0.918	0.20	>1000	-97.3	140	12.12
1240	6.92	13.6	0.979	0.16	>1000	-97.3	140	12.60
1245	6.92	13.0	0.978	0.13	>1000	-97.6	140	12.17
1250	6.92	13.0	0.975	0.11	>1000	-99.8	140	12.18
1255	6.92	13.5	0.979	0.09	923	-100.0	140	12.19
1300	6.92	13.4	0.983	0.08	903	-99.8	140	12.20
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-30S

Date: 5/30/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 8.57' Depth to Well Bottom: 17.99' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 5.8 Estimated Purge Volume (liters): 12.3

Sample ID: GW-30S Sample Time: 12:00 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1130	6.92	14.4	3.880	0.07	103	-93.5	350	8.57
1135	6.85	13.7	3.626	0.00	22	-103.0	350	8.60
1140	6.85	12.6	3.601	0.01	6	-105.4	350	8.60
1145	6.86	12.1	3.611	0.01	3	-107.4	350	8.60
1150	6.86	12.0	3.624	0.01	3	-108.4	350	8.60
1155	6.86	11.5	3.613	0.02	2	-109.5	350	8.60
1200	6.86	11.6	3.616	0.02	2	-110.0	350	8.60
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-31S

Date: 5/30/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 5.59' Depth to Well Bottom: 9.58' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 2.5 Estimated Purge Volume (liters): 7.5

Sample ID: GW-31S Sample Time: 11:10 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

Other Information: Well went dry during sampling after filling bottles for VOCs and Metals. Returned at 1335 to fill two 1L SVOC bottles.

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)
1015	7.06	16.9	0.801	0.27	57	72.0	140	5.59
1020	7.01	16.7	0.713	0.18	13	100.8	140	6.62
1025	7.02	16.4	0.716	0.18	8	113.3	140	7.35
1030	7.03	15.6	0.665	0.19	8	134.7	120	7.86
1035	7.04	15.6	0.614	0.21	6	134.8	120	8.25
1040	7.05	15.4	0.558	0.23	5	106.1	120	8.59
1045	7.04	15.0	0.527	0.23	25	83.4	120	8.84
1050	7.02	15.1	0.579	0.21	17	52.0	120	8.96
1055	7.01	14.9	0.645	0.17	14	31.2	120	9.12
1100	7.01	14.9	0.695	0.14	9	8.6	120	9.27
1105	7.01	14.8	0.707	0.13	6	12.7	120	9.35
1110	7.01	14.9	0.710	0.12	5	18.6	120	9.54
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-32S

Date: 5/29/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 4.94' Depth to Well Bottom: 9.93' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 3.1 Estimated Purge Volume (liters): 6.6

Sample ID: GW-32S Sample Time: 16:23 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1553	7.25	14.8	0.725	1.00	402	-4.8	235	4.94
1558	7.23	14.4	0.605	0.51	96	8.9	180	5.44
1603	7.29	13.3	0.534	0.83	39	15.8	180	5.47
1608	7.31	13.1	0.502	0.65	17	20.1	180	5.51
1613	7.31	12.8	0.492	0.70	8	21.6	180	5.53
1618	7.32	12.6	0.479	0.75	6	22.4	180	5.54
1623	7.32	12.6	0.478	0.70	5	25.7	180	5.54
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-33S

Date: 5/30/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 6.57' Depth to Well Bottom: 8.22' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 1.0 Estimated Purge Volume (liters): 4.6

Sample ID: GW-33S Sample Time: 09:20 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
845	6.71	14.7	1.635	0.73	78	236.9	180	6.57
850	6.89	14.5	1.128	0.48	47	238.1	125	6.95
855	6.96	14.9	0.969	0.46	26	231.7	110	7.08
900	7.01	14.8	0.886	0.43	13	214.0	110	7.25
905	7.00	14.8	0.838	0.41	6	200.0	100	7.38
910	6.99	14.5	0.794	0.40	4	194.1	100	7.50
915	6.97	14.2	0.780	0.37	3	195.2	100	7.71
920	6.97	13.9	0.810	0.35	3	201.0	100	7.91
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-34S

Date: 5/27/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 3.63' Depth to Well Bottom: 10.02' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 3.9 Estimated Purge Volume (liters): 9.6

Sample ID: GW-34S Sample Time: 16:40 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1600	7.02	12.2	0.682	1.45	97	24.2	370	3.63
1605	6.94	12.2	1.014	0.56	23	37.2	195	4.98
1610	6.95	11.8	0.996	0.42	16	37.9	195	5.32
1615	6.96	11.7	0.971	0.46	14	43.5	195	5.41
1620	7.00	11.7	0.863	0.54	11	46.2	195	5.53
1625	7.03	11.7	0.802	0.64	10	53.0	190	5.51
1630	7.01	12.1	0.813	0.58	6	54.7	190	5.54
1635	7.01	12.1	0.821	0.55	3	54.9	190	5.59
1640	7.01	12.0	0.824	0.53	3	54.6	190	5.62
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: 11175616.00000 Site: Pfohl Brothers Landfill Well I.D.: GW-35S

Date: 5/29/2008 Sampling Personnel: R. Murphy/R. Piurek Company: URS Corporation

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

Measuring Point: Below Top of Riser Initial Depth to Water: 5.12' Depth to Well Bottom: 7.46' Well Diameter: 2" Screen Length:

Casing Type: Stainless Steel Volume in 1 Well Casing (liters): 1.4 Estimated Purge Volume (liters): 4.8

Sample ID: GW-35S Sample Time: 14:20 QA/QC: None

Sample Parameters: TCL VOCs, TCL SVOCs, TAL Metals

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)
1355	7.19	17.9	0.623	0.65	12	2.8	185	5.12
1400	7.16	15.9	0.531	0.52	10	17.4	185	5.62
1405	7.23	15.3	0.440	0.52	3	26.2	175	5.72
1410	7.22	15.5	0.403	0.55	3	34.0	140	5.61
1415	7.22	15.4	0.400	0.55	3	37.6	140	5.58
1420	7.21	15.4	0.393	0.52	3	43.1	140	5.58
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 ($vol_{cyl} = \pi r^2 h$)

GROUNDWATER SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers* Project Number: *11175616.00000*

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

Date of Sampling: *May 27, 2008*

Sample I.D. Number	Well Number	Well Volume (liters)	Volume Purged (liters)	Sample Time	Sample Description	Analysis Required	Chain-of-Custody Number
GW-34S	GW-34S	3.9	9.6	16:40	Groundwater	VOCs/SVOCs/ Metals	Not Applicable
TB-052708	---	---	---	---	Trip Blank	VOCs	Not Applicable

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: *11175616.00000*

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

Date of Sampling: *May 28, 2008*

Sample I.D. Number	Well Number	Well Volume (liters)	Volume Purged (liters)	Sample Time	Sample Description	Analysis Required	Chain-of-Custody Number
GW-28S	GW-28S	3.0	7.1	9:10	Groundwater	VOCs/SVOCs/ Metals	Not Applicable
GW-08SR	GW-8SR	4.3	10.3	11:00	Groundwater		Not Applicable
GW-08D	GW-8D	64.2	33.2	12:35	Groundwater		Not Applicable
GW052808-DUP	GW-8D	64.2	33.2	13:35	Groundwater		Not Applicable
GW-03S	GW-3S	6.0	5.8	14:15	Groundwater		Not Applicable
GW-3D	GW-3D	82.3	50.0	15:30	Groundwater		Not Applicable
GW-3D-MS	GW-3D	82.3	50.0	15:30	Matrix Spike		Not Applicable

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: *11175616.00000*

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

Date of Sampling: *May 28, 2008 (continued)*

Sample I.D. Number	Well Number	Well Volume (liters)	Volume Purged (liters)	Sample Time	Sample Description	Analysis Required	Chain-of-Custody Number
GW-3D-MSD	GW-3D	82.3	50.0	15:30	Matrix Spike Duplicate	VOCs/SVOCs/ Metals	Not Applicable
GW-7D	GW-7D	48.8	48.8	16:40	Groundwater		Not Applicable
GW-7S	GW-7S	18.9	30.3	17:10	Groundwater		Not Applicable
TB-052808	---	---	---	---	Trip Blank	VOCs	Not Applicable

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: *11175616.00000*

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

Date of Sampling: *May 29, 2008*

Sample I.D. Number	Well Number	Well Volume (liters)	Volume Purged (liters)	Sample Time	Sample Description	Analysis Required	Chain-of-Custody Number
GW-4S	GW-4S	6.8	24.5	10:40	Groundwater	VOCs/SVOCs/ Metals	Not Applicable
GW-4D	GW-4D	79.9	8.2	10:15	Groundwater		Not Applicable
GW-1S	GW-1S	6.6	9.9	12:05	Groundwater		Not Applicable
GW-1D	GW-1D	89.3	55	13:15	Groundwater		Not Applicable
GW-35S	GW-35S	1.4	4.8	14:20	Groundwater		Not Applicable
GW-26D	GW-26D	82.8	20.0	15:22	Groundwater		Not Applicable
GW-32S	GW-32S	3.1	6.6	16:23	Groundwater		Not Applicable

Additional Comments: All wells were purged using low flow methods until parameter stabilization. Some wells went dry even at very low flow conditions. Trip blank (Sample I.D. TB-052908) was also submitted for analysis of VOCs.

GROUNDWATER SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers* Project Number: *11175616.00000*

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

Date of Sampling: *May 30, 2008*

Sample I.D. Number	Well Number	Well Volume (liters)	Volume Purged (liters)	Sample Time	Sample Description	Analysis Required	Chain-of-Custody Number
GW-33S	GW-33S	1.0	4.6	9:20	Groundwater	VOCs/SVOCs/ Metals	Not Applicable
GW-31S	GW-31S	2.5	7.5	11:10	Groundwater		Not Applicable
GW-30S	GW-30S	5.8	12.3	12:00	Groundwater		Not Applicable
GW-29S	GW-29S	6.2	5.9	13:00	Groundwater		Not Applicable
TB-053008	---	---	---	---	Trip Blank	VOCs	Not Applicable

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

APPENDIX E

HISTORICAL ANALYTICAL RESULTS

TABLE 1
SUMMARY OF DETECTED SURFACE WATER PCB ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID			SW-01	SW-01	SW-01	SW-01	SW-01
Sample ID			SW-1	SW-1	SW-01	SW-01	SW-052708-DUP
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	05/27/08	05/27/08
Parameter	Units	*					Field Duplicate (1-1)
Polychlorinated Biphenyls							
Aroclor 1016	UG/L	1.20E-04 *	0.050 U	0.05 U	0.60 U	0.49 U	0.50 U
Aroclor 1221	UG/L	1.20E-04 *	0.050 U	0.05 U	0.60 U	0.49 U	0.50 U
Aroclor 1232	UG/L	1.20E-04 *	0.050 U	0.05 U	0.60 U	0.49 U	0.50 U
Aroclor 1242	UG/L	1.20E-04 *	0.050 U	0.05 U	0.60 U	0.49 U	0.50 U
Aroclor 1248	UG/L	1.20E-04 *	0.050 U	0.05 U	0.60 U	0.49 U	0.50 U
Aroclor 1254	UG/L	1.20E-04 *	0.050 U	0.05 U	0.60 U	0.49 U	0.50 U
Aroclor 1260	UG/L	1.20E-04 *	0.050 U	0.05 U	0.60 U	0.49 U	0.50 U

*- 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 based on sum of the aroclors

Flags assigned during chemistry validation are shown.

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

Advanced Selection: PCB-hst
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[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] <> 'DIOXI' OR [PRCCODE] <> 'FURAN') AND [PRCCODE] = 'PCB'

TABLE 1
SUMMARY OF DETECTED SURFACE WATER PCB ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID			SW-02	SW-02	SW-02	SW-02	SW-03
Sample ID			SW-2	SW-2	SW-02	SW-02	SW-3
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	05/27/08	05/03/04
Parameter	Units	*					
Polychlorinated Biphenyls							
Aroclor 1016	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.49 U	0.050 U
Aroclor 1221	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.49 U	0.050 U
Aroclor 1232	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.49 U	0.050 U
Aroclor 1242	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.49 U	0.050 U
Aroclor 1248	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.49 U	0.050 U
Aroclor 1254	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.49 U	0.050 U
Aroclor 1260	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.49 U	0.050 U

*- 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 based on sum of the aroclors.

Flags assigned during chemistry validation are shown

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

TABLE 1
SUMMARY OF DETECTED SURFACE WATER PCB ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID			SW-03	SW-03	SW-03	SW-03	SW-04
Sample ID			SW-3-DUP	SW-3	SW-03	SW-03	SW-4
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	05/27/08	05/03/04
Parameter	Units	*	Field Duplicate (1-1)				
Polychlorinated Biphenyls							
Aroclor 1016	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.50 U	0.050 U
Aroclor 1221	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.50 U	0.050 U
Aroclor 1232	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.50 U	0.050 U
Aroclor 1242	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.50 U	0.050 U
Aroclor 1248	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.50 U	0.050 U
Aroclor 1254	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.50 U	0.050 U
Aroclor 1260	UG/L	1.20E-04 *	0.050 U	0.05 U	0.50 U	0.50 U	0.050 U

*- 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 based on sum of the aroclors

Flags assigned during chemistry validation are shown.

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

TABLE 1
SUMMARY OF DETECTED SURFACE WATER PCB ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID			SW-04	SW-04	SW-04	SW-05	SW-05
Sample ID			SW-4	SW-04	SW-04	SW-5	SW-5
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			05/03/05	05/15/06	05/27/08	05/03/04	05/03/05
Parameter	Units	*					
Polychlorinated Biphenyls							
Aroclor 1016	UG/L	1.20E-04 *	0.05 U	0.54 U	0.52 U	0.050 U	0.05 U
Aroclor 1221	UG/L	1.20E-04 *	0.05 U	0.54 U	0.52 U	0.050 U	0.05 U
Aroclor 1232	UG/L	1.20E-04 *	0.05 U	0.54 U	0.52 U	0.050 U	0.05 U
Aroclor 1242	UG/L	1.20E-04 *	0.05 U	0.54 U	0.52 U	0.050 U	0.05 U
Aroclor 1248	UG/L	1.20E-04 *	0.05 U	0.54 U	0.52 U	0.050 U	0.05 U
Aroclor 1254	UG/L	1.20E-04 *	0.05 U	0.54 U	0.52 U	0.050 U	0.05 U
Aroclor 1260	UG/L	1.20E-04 *	0.05 U	0.54 U	0.52 U	0.050 U	0.05 U

*- 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 based on sum of the aroclors

Flags assigned during chemistry validation are shown

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

Advanced Selection PCD.rist
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[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] <> 'DIOXI' OR [PRCCODE] <> 'FURAN') AND [PRCCODE] = 'PCB'

TABLE 1
SUMMARY OF DETECTED SURFACE WATER PCB 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	*			Field Duplicate (1-1)		
Polychlorinated Biphenyls							
Aroclor 1016	UG/L	1.20E-04 *	0.050 U	0.05 U	0.05 U	0.59 U	0.050 U
Aroclor 1221	UG/L	1.20E-04 *	0.050 U	0.05 U	0.05 U	0.59 U	0.050 U
Aroclor 1232	UG/L	1.20E-04 *	0 050 U	0.05 U	0.05 U	0.59 U	0.050 U
Aroclor 1242	UG/L	1 20E-04 *	0.050 U	0.05 U	0.05 U	0 59 U	0.050 U
Aroclor 1248	UG/L	1.20E-04 *	0.050 U	0 05 U	0.05 U	0.59 U	0.050 U
Aroclor 1254	UG/L	1.20E-04 *	0.050 U	0.05 U	0.05 U	0 59 U	0.050 U
Aroclor 1260	UG/L	1.20E-04 *	0.050 U	0.05 U	0.05 U	0 59 U	0.050 U

*- 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 based on sum of the aroclors

Flags assigned during chemistry validation are shown

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

TABLE 1
SUMMARY OF DETECTED SURFACE WATER PCB ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID			SW-07	SW-07	SW-07	SW-08	SW-08
Sample ID			SW-7	SW-07	SW-07	SW-8	SW-8
Matrix			Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-	-	-
Date Sampled			05/03/05	05/15/06	05/27/08	05/03/04	05/03/05
Parameter	Units	*					
Polychlorinated Biphenyls							
Aroclor 1016	UG/L	1.20E-04 *	0.05 U	0.53 U	0.47 U	0.050 U	0.05 U
Aroclor 1221	UG/L	1.20E-04 *	0.05 U	0.53 U	0.47 U	0.050 U	0.05 U
Aroclor 1232	UG/L	1.20E-04 *	0.05 U	0.53 U	0.47 U	0.050 U	0.05 U
Aroclor 1242	UG/L	1.20E-04 *	0.05 U	0.53 U	0.47 U	0.050 U	0.05 U
Aroclor 1248	UG/L	1.20E-04 *	0.05 U	0.53 U	0.47 U	0.050 U	0.05 U
Aroclor 1254	UG/L	1.20E-04 *	0.05 U	0.53 U	0.47 U	0.050 U	0.05 U
Aroclor 1260	UG/L	1.20E-04 *	0.05 U	0.53 U	0.47 U	0.050 U	0.05 U

*- 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 based on sum of the aroclors

Flags assigned during chemistry validation are shown

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

Advanced Selection PCD.hist
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[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] <> 'DIOXI' OR [PRCCODE] <> 'FURAN') AND [PRCCODE] = 'PCB'

TABLE 1
SUMMARY OF DETECTED SURFACE WATER PCB ANALYTICAL RESULTS
PFOHL BROTHERS LANDFILL SITE

Location ID			SW-08	SW-08	SW-08
Sample ID			SW-08	SW-08-DUP	SW-08
Matrix			Surface Water	Surface Water	Surface Water
Depth Interval (ft)			-	-	-
Date Sampled			05/15/06	05/15/06	05/27/08
Parameter	Units	*		Field Duplicate (1-1)	
Polychlorinated Biphenyls					
Aroclor 1016	UG/L	1.20E-04 *	0.55 U	0.53 U	0.53 U
Aroclor 1221	UG/L	1.20E-04 *	0.55 U	0.53 U	0.53 U
Aroclor 1232	UG/L	1.20E-04 *	0.55 U	0.53 U	0.53 U
Aroclor 1242	UG/L	1.20E-04 *	0.55 U	0.53 U	0.53 U
Aroclor 1248	UG/L	1.20E-04 *	0.55 U	0.53 U	0.53 U
Aroclor 1254	UG/L	1.20E-04 *	0.55 U	0.53 U	0.53 U
Aroclor 1260	UG/L	1.20E-04 *	0.55 U	0.53 U	0.53 U

*- 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 based on sum of the aroclors

Flags assigned during chemistry validation are shown

Concentration Exceeds

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

Advanced Selection PCD.nsl
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[MATRIX] = 'WS' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] <> 'DIOXI' OR [PRCCODE] <> 'FURAN') AND [PRCCODE] = 'PCB'

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-01	SW-01	SW-01	SW-01	SW-01
Sample ID		SW-1	SED-1	SW-01	SED-01	SW-052708-DUP
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/21/07	05/27/08
Parameter	Units					Field Duplicate (1-1)
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	41 U (80.5)	3.3 U (80.5)	47 U (80.5)	NA	38 U (80.5)
Aroclor 1221	UG/KG	41 U (80.5)	3.3 U (80.5)	47 U (80.5)	NA	38 U (80.5)
Aroclor 1232	UG/KG	41 U (80.5)	3.3 U (80.5)	47 U (80.5)	NA	38 U (80.5)
Aroclor 1242	UG/KG	41 U (80.5)	3.3 U (80.5)	47 U (80.5)	NA	38 U (80.5)
Aroclor 1248	UG/KG	41 U (80.5)	3.3 U (80.5)	47 U (80.5)	NA	38 U (80.5)
Aroclor 1254	UG/KG	41 U (80.5)	3.3 U (80.5)	47 U (80.5)	NA	38 U (80.5)
Aroclor 1260	UG/KG	41 U (80.5)	37.1 (80.5)	47 U (80.5)	NA	38 U (80.5)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	57,500	57,500	57,500	57,500	57,500

Criteria- NYSDEC Technical Guidanca for Screening Contaminated Sediments, Wildlife Bioaccumulation, January 25, 1999

(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

Detection Limits shown are PQL

[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-01	SW-02	SW-02	SW-02	SW-02
Sample ID		SW-1	SW-2	SED-2	SW-02	SED-02
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	0.0-0.5	-
Date Sampled		05/27/08	05/03/04	05/03/05	05/15/06	05/21/07
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	45 U (80.5)	240 UJ (28.8)	3.3 U (28.8)	27 U (28.8)	NA
Aroclor 1221	UG/KG	45 U (80.5)	240 UJ (28.8)	3.3 U (28.8)	27 U (28.8)	NA
Aroclor 1232	UG/KG	45 U (80.5)	240 UJ (28.8)	3.3 U (28.8)	27 U (28.8)	NA
Aroclor 1242	UG/KG	45 U (80 5)	240 UJ (28.8)	3.3 U (28 8)	27 U (28.8)	NA
Aroclor 1248	UG/KG	45 U (80.5)	240 UJ (28.8)	102 (28.8)	27 U (28.8)	NA
Aroclor 1254	UG/KG	45 U (80.5)	240 UJ (28.8)	62 (28.8)	27 U (28.8)	NA
Aroclor 1260	UG/KG	45 U (80.5)	240 UJ (28.8)	30.7 (28.8)	27 U (28.8)	NA
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	57,500	20,600	20,600	20,600	20,600

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

(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

Detection Limits shown are PQL

Advanced Selection PCB - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCODE] = 'PCB' OR [PRCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB 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-2	SW-3	SW-3-DUP	SED-3	SW-03
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/27/08	05/03/04	05/03/04	05/03/05	05/15/06
Parameter	Units			Field Duplicate (1-1)		
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	23 U (28.8)	6.1 U (43.0)	5.4 U (43.0)	3.3 U (43.0)	34 U (43.0)
Aroclor 1221	UG/KG	23 U (28.8)	6.1 U (43.0)	5.4 U (43.0)	3.3 U (43.0)	34 U (43.0)
Aroclor 1232	UG/KG	23 U (28.8)	6.1 U (43.0)	5.4 U (43.0)	3.3 U (43 0)	34 U (43.0)
Aroclor 1242	UG/KG	23 U (28.8)	6.1 U (43.0)	5.4 U (43.0)	3.3 U (43.0)	34 U (43.0)
Aroclor 1248	UG/KG	23 U (28.8)	6.1 U (43.0)	5.4 U (43.0)	3.3 U (43.0)	34 U (43.0)
Aroclor 1254	UG/KG	23 U (28.8)	6.1 U (43.0)	5.4 U (43.0)	3.3 U (43 0)	34 U (43.0)
Aroclor 1260	UG/KG	23 U (28.8)	6.1 U (43.0)	5.4 U (43.0)	3.52 (43.0)	34 U (43.0)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	20,600	30,700	30,700	30,700	30,700

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

(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

Detection Limits shown are PQL

Advanced Selection PCD - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-03	SW-03	SW-04	SW-04	SW-04
Sample ID		SED-03	SW-3	SW-4	SED-4	SW-04
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/21/07	05/27/08	05/03/04	05/03/05	05/15/06
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	NA	48 U (43.0)	84 U (75.3)	3.3 U (75.3)	47 U (75.3)
Aroclor 1221	UG/KG	NA	48 U (43.0)	84 U (75.3)	3.3 U (75.3)	47 U (75.3)
Aroclor 1232	UG/KG	NA	48 U (43.0)	84 U (75.3)	3.3 U (75.3)	47 U (75.3)
Aroclor 1242	UG/KG	NA	48 U (43.0)	84 U (75.3)	3.3 U (75.3)	47 U (75.3)
Aroclor 1248	UG/KG	NA	48 U (43.0)	84 U (75.3)	3.3 U (75.3)	47 U (75.3)
Aroclor 1254	UG/KG	NA	44 J (43.0)	84 U (75.3)	3.3 U (75.3)	47 U (75.3)
Aroclor 1260	UG/KG	NA	44 J (43.0)	84 U (75.3)	3.3 U (75.3)	47 U (75.3)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	30,700	30,700	53,800	53,800	53,800

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

(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

Detection Limits shown are PQL

Advanced Selection, PCO - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-04	SW-04	SW-04	SW-05	SW-05
Sample ID		DUP-052107	SED-04	SW-4	SW-5	SED-5
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/07	05/21/07	05/27/08	05/03/04	05/03/05
Parameter	Units	Field Duplicate (1-1)				
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	NA	NA	74 U (75.3)	4.8 U (57.0)	3.3 U (57.0)
Aroclor 1221	UG/KG	NA	NA	74 U (75.3)	4.8 U (57.0)	3.3 U (57.0)
Aroclor 1232	UG/KG	NA	NA	74 U (75.3)	4.8 U (57.0)	3.3 U (57.0)
Aroclor 1242	UG/KG	NA	NA	74 U (75.3)	4.8 U (57.0)	3.3 U (57.0)
Aroclor 1248	UG/KG	NA	NA	74 U (75.3)	4.8 U (57.0)	3.3 U (57.0)
Aroclor 1254	UG/KG	NA	NA	74 U (75.3)	4.8 U (57.0)	3.3 U (57.0)
Aroclor 1260	UG/KG	NA	NA	74 U (75.3)	4.8 U (57.0)	3.3 U (57.0)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	75,900	53,800	53,800	40,689	40,689

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

(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

Detection Limits shown are PQL

[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-05	SW-06	SW-06	SW-06	SW-06
Sample ID		SW-5	SW-6	SED-6	SED-9	SW-06
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/27/08	05/03/04	05/03/05	05/03/05	05/15/06
Parameter	Units				Field Duplicate (1-1)	
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	22 U (57.0)	5.4 U (45.2)	3.3 U (45.2)	3.3 U (45.2)	22 U (45.2)
Aroclor 1221	UG/KG	22 U (57.0)	5.4 U (45.2)	3.3 U (45.2)	3.3 U (45.2)	22 U (45.2)
Aroclor 1232	UG/KG	22 U (57.0)	5.4 U (45.2)	3.3 U (45.2)	3.3 U (45.2)	22 U (45.2)
Aroclor 1242	UG/KG	22 U (57.0)	5.4 U (45.2)	3.3 U (45.2)	3.3 U (45.2)	22 U (45.2)
Aroclor 1248	UG/KG	22 U (57.0)	5.4 U (45.2)	3.3 U (45.2)	3.3 U (45.2)	22 U (45.2)
Aroclor 1254	UG/KG	22 U (57.0)	5.4 U (45.2)	3 3 U (45.2)	3.3 U (45.2)	22 U (45.2)
Aroclor 1260	UG/KG	22 U (57.0)	5.4 U (45.2)	3.3 U (45.2)	3.3 U (45.2)	22 U (45.2)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	40,689	32,300	32,300	32,300	32,300

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

(NV) - No Calculable Value, TOC Not Detected

Flags assignad during chemistry validation are shown

Concentration Exceeds Criteria

U - Not detected above the reported quantitation limit

Detection Limits shown are PQL

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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-06	SW-06	SW-07	SW-07	SW-07
Sample ID		SED-06	SW-6	SW-7	SED-7	SW-07
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/21/07	05/27/08	05/03/04	05/03/05	05/15/06
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	NA	28 U (45.2)	5.1 U (13.2)	3.3 U (13.2)	29 U (13.2)
Aroclor 1221	UG/KG	NA	28 U (45.2)	5.1 U (13.2)	3.3 U (13.2)	29 U (13.2)
Aroclor 1232	UG/KG	NA	28 U (45.2)	5.1 U (13.2)	3.3 U (13.2)	29 U (13.2)
Aroclor 1242	UG/KG	NA	28 U (45.2)	5.1 U (13.2)	3.3 U (13.2)	29 U (13.2)
Aroclor 1248	UG/KG	NA	28 U (45.2)	5.1 U (13.2)	118 (13.2)	34 (13.2)
Aroclor 1254	UG/KG	NA	28 U (45.2)	5.1 U (13.2)	3.3 U (13.2)	29 U (13.2)
Aroclor 1260	UG/KG	NA	28 U (45.2)	5.1 U (13.2)	3.3 U (13.2)	29 U (13.2)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	32,300	32,300	9,420	9,420	9,420

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

(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

Detection Limits shown are PQL

Advanced Selection PCD - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'M') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB 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-07	SW-7	SW-8	SED-8	SW-08
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/21/07	05/27/08	05/03/04	05/03/05	05/15/06
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	NA	22 U (13.2)	600 U (113)	3.3 U (113)	34 U (113)
Aroclor 1221	UG/KG	NA	22 U (13.2)	600 U (113)	3.3 U (113)	34 U (113)
Aroclor 1232	UG/KG	NA	22 U (13.2)	600 U (113)	3.3 U (113)	34 U (113)
Aroclor 1242	UG/KG	NA	22 U (13.2)	600 U (113)	3.3 U (113)	34 U (113)
Aroclor 1248	UG/KG	NA	22 U (13.2)	600 U (113)	3.3 U (113)	34 U (113)
Aroclor 1254	UG/KG	NA	22 U (13.2)	600 U (113)	3.3 U (113)	34 U (113)
Aroclor 1260	UG/KG	NA	22 U (13.2)	600 U (113)	3.3 U (113)	34 U (113)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	9,420	9,420	80,500	80,500	80,500

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

(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

Detection Limits shown are PQL

Advanced Selection PCD - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO WILDLIFE BIOACCUMULATION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-08	SW-08	SW-08
Sample ID		SW-08-DUP	SED-08	SW-8
Matrix		Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-0.5	-	-
Date Sampled		05/15/06	05/21/07	05/27/08
Parameter	Units	Field Duplicate (1-1)		
Polychlorinated Biphenyls				
Aroclor 1016	UG/KG	24 U (113)	NA	32 U (113)
Aroclor 1221	UG/KG	24 U (113)	NA	32 U (113)
Aroclor 1232	UG/KG	24 U (113)	NA	32 U (113)
Aroclor 1242	UG/KG	24 U (113)	NA	32 U (113)
Aroclor 1248	UG/KG	24 U (113)	NA	32 U (113)
Aroclor 1254	UG/KG	24 U (113)	NA	32 U (113)
Aroclor 1260	UG/KG	24 U (113)	NA	32 U (113)
Miscellaneous Parameters				
Total Organic Carbon (TOC)	MG/KG	80,500	80,500	80,500

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

(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

Detection Limits shown are PQL

Advanced Selection PCD - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-01	SW-01	SW-01	SW-01	SW-01
Sample ID		SW-1	SED-1	SW-01	SED-01	SW-052708-DUP
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	0.0-0.5	-	-
Date Sampled		05/03/04	05/03/05	05/15/06	05/21/07	05/27/08
Parameter	Units					Field Duplicate (1-1)
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	41 U (1,110)	3 3 U (1,110)	47 U (1,110)	NA	38 U (1,110)
Aroclor 1221	UG/KG	41 U (1,110)	3.3 U (1,110)	47 U (1,110)	NA	38 U (1,110)
Aroclor 1232	UG/KG	41 U (1,110)	3.3 U (1,110)	47 U (1,110)	NA	38 U (1,110)
Aroclor 1242	UG/KG	41 U (1,110)	3 3 U (1,110)	47 U (1,110)	NA	38 U (1,110)
Aroclor 1248	UG/KG	41 U (1,110)	3.3 U (1,110)	47 U (1,110)	NA	38 U (1,110)
Aroclor 1254	UG/KG	41 U (1,110)	3.3 U (1,110)	47 U (1,110)	NA	38 U (1,110)
Aroclor 1260	UG/KG	41 U (1,110)	37.1 (1,110)	47 U (1,110)	NA	38 U (1,110)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	57,500	57,500	57,500	57,500	57,500

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

(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

Detection Limits shown are PQL

Advanced Selection PCD - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCODE] = 'PCB' OR [PRCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-01	SW-02	SW-02	SW-02	SW-02
Sample ID		SW-1	SW-2	SED-2	SW-02	SED-02
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	0.0-0.5	-
Date Sampled		05/27/08	05/03/04	05/03/05	05/15/06	05/21/07
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	45 U (1,110)	240 UJ (398)	3.3 U (398)	27 U (398)	NA
Aroclor 1221	UG/KG	45 U (1,110)	240 UJ (398)	3.3 U (398)	27 U (398)	NA
Aroclor 1232	UG/KG	45 U (1,110)	240 UJ (398)	3.3 U (398)	27 U (398)	NA
Aroclor 1242	UG/KG	45 U (1,110)	240 UJ (398)	3.3 U (398)	27 U (398)	NA
Aroclor 1248	UG/KG	45 U (1,110)	240 UJ (398)	102 (398)	27 U (398)	NA
Aroclor 1254	UG/KG	45 U (1,110)	240 UJ (398)	62 (398)	27 U (398)	NA
Aroclor 1260	UG/KG	45 U (1,110)	240 UJ (398)	30.7 (398)	27 U (398)	NA
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	57,500	20,600	20,600	20,600	20,600

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

(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

Detection Limits shown are PQL

Advanced Selection PCD - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB 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-2	SW-3	SW-3-DUP	SED-3	SW-03
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/27/08	05/03/04	05/03/04	05/03/05	05/15/06
Parameter	Units			Field Duplicate (1-1)		
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	23 U (398)	6 1 U (593)	5.4 U (593)	3.3 U (593)	34 U (593)
Aroclor 1221	UG/KG	23 U (398)	6.1 U (593)	5.4 U (593)	3.3 U (593)	34 U (593)
Aroclor 1232	UG/KG	23 U (398)	6.1 U (593)	5.4 U (593)	3.3 U (593)	34 U (593)
Aroclor 1242	UG/KG	23 U (398)	6.1 U (593)	5.4 U (593)	3.3 U (593)	34 U (593)
Aroclor 1248	UG/KG	23 U (398)	6.1 U (593)	5.4 U (593)	3.3 U (593)	34 U (593)
Aroclor 1254	UG/KG	23 U (398)	6.1 U (593)	5.4 U (593)	3.3 U (593)	34 U (593)
Aroclor 1260	UG/KG	23 U (398)	6 1 U (593)	5.4 U (593)	3.52 (593)	34 U (593)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	20,600	30,700	30,700	30,700	30,700

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

(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

Detection Limits shown are PQL

Advanced Selection PCD - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCODE] = 'PCB' OR [PRCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-03	SW-03	SW-04	SW-04	SW-04
Sample ID		SED-03	SW-3	SW-4	SED-4	SW-04
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/21/07	05/27/08	05/03/04	05/03/05	05/15/06
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	NA	48 U (593)	84 U (1,038)	3.3 U (1,038)	47 U (1,038)
Aroclor 1221	UG/KG	NA	48 U (593)	84 U (1,038)	3.3 U (1,038)	47 U (1,038)
Aroclor 1232	UG/KG	NA	48 U (593)	84 U (1,038)	3.3 U (1,038)	47 U (1,038)
Aroclor 1242	UG/KG	NA	48 U (593)	84 U (1,038)	3.3 U (1,038)	47 U (1,038)
Aroclor 1248	UG/KG	NA	48 U (593)	84 U (1,038)	3.3 U (1,038)	47 U (1,038)
Aroclor 1254	UG/KG	NA	44 J (593)	84 U (1,038)	3.3 U (1,038)	47 U (1,038)
Aroclor 1260	UG/KG	NA	44 J (593)	84 U (1,038)	3.3 U (1,038)	47 U (1,038)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	30,700	30,700	53,800	53,800	53,800

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

(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

Detection Limits shown are PQL

Advanced Selection PCB sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB 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		DUP-052107	SED-04	SW-4	SW-5	SED-5
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/21/07	05/21/07	05/27/08	05/03/04	05/03/05
Parameter	Units	Field Duplicate (1-1)				
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	NA	NA	74 U (1,038)	4.8 U (785)	3.3 U (785)
Aroclor 1221	UG/KG	NA	NA	74 U (1,038)	4.8 U (785)	3.3 U (785)
Aroclor 1232	UG/KG	NA	NA	74 U (1,038)	4.8 U (785)	3.3 U (785)
Aroclor 1242	UG/KG	NA	NA	74 U (1,038)	4.8 U (785)	3.3 U (785)
Aroclor 1248	UG/KG	NA	NA	74 U (1,038)	4.8 U (785)	3.3 U (785)
Aroclor 1254	UG/KG	NA	NA	74 U (1,038)	4.8 U (785)	3.3 U (785)
Aroclor 1260	UG/KG	NA	NA	74 U (1,038)	4.8 U (785)	3.3 U (785)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	75,900	53,800	53,800	40,689	40,689

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

(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

Detection Limits shown are PQL

Advanced Selection PCD - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCODE] = 'PCB' OR [PRCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-05	SW-06	SW-06	SW-06	SW-06
Sample ID		SW-5	SW-6	SED-6	SED-9	SW-06
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/27/08	05/03/04	05/03/05	05/03/05	05/15/06
Parameter	Units				Field Duplicate (1-1)	
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	22 U (785)	5.4 U (623)	3.3 U (623)	3.3 U (623)	22 U (623)
Aroclor 1221	UG/KG	22 U (785)	5.4 U (623)	3.3 U (623)	3.3 U (623)	22 U (623)
Aroclor 1232	UG/KG	22 U (785)	5.4 U (623)	3.3 U (623)	3.3 U (623)	22 U (623)
Aroclor 1242	UG/KG	22 U (785)	5.4 U (623)	3.3 U (623)	3.3 U (623)	22 U (623)
Aroclor 1248	UG/KG	22 U (785)	5.4 U (623)	3.3 U (623)	3.3 U (623)	22 U (623)
Aroclor 1254	UG/KG	22 U (785)	5.4 U (623)	3.3 U (623)	3.3 U (623)	22 U (623)
Aroclor 1260	UG/KG	22 U (785)	5.4 U (623)	3.3 U (623)	3.3 U (623)	22 U (623)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	40,689	32,300	32,300	32,300	32,300

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

(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

Detection Limits shown are PQL

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-06	SW-06	SW-07	SW-07	SW-07
Sample ID		SED-06	SW-6	SW-7	SED-7	SW-07
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/21/07	05/27/08	05/03/04	05/03/05	05/15/06
Parameter	Units					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	NA	28 U (623)	5.1 U (182)	3.3 U (182)	29 U (182)
Aroclor 1221	UG/KG	NA	28 U (623)	5.1 U (182)	3.3 U (182)	29 U (182)
Aroclor 1232	UG/KG	NA	28 U (623)	5.1 U (182)	3.3 U (182)	29 U (182)
Aroclor 1242	UG/KG	NA	28 U (623)	5.1 U (182)	3.3 U (182)	29 U (182)
Aroclor 1248	UG/KG	NA	28 U (623)	5 1 U (182)	118 (182)	34 (182)
Aroclor 1254	UG/KG	NA	28 U (623)	5.1 U (182)	3.3 U (182)	29 U (182)
Aroclor 1260	UG/KG	NA	28 U (623)	5.1 U (182)	3.3 U (182)	29 U (182)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	32,300	32,300	9,420	9,420	9,420

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

(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

Detection Limits shown are PQL

Advanced Selection PCB - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB 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-07	SW-7	SW-8	SED-8	SW-08
Matrix		Sediment	Sediment	Sediment	Sediment	Sediment
Depth Interval (ft)		-	-	-	-	0.0-0.5
Date Sampled		05/21/07	05/27/08	05/03/04	05/03/05	05/15/06
Parameter	**Units**					
Polychlorinated Biphenyls						
Aroclor 1016	UG/KG	NA	22 U (182)	600 U (1,554)	3.3 U (1,554)	34 U (1,554)
Aroclor 1221	UG/KG	NA	22 U (182)	600 U (1,554)	3.3 U (1,554)	34 U (1,554)
Aroclor 1232	UG/KG	NA	22 U (182)	600 U (1,554)	3.3 U (1,554)	34 U (1,554)
Aroclor 1242	UG/KG	NA	22 U (182)	600 U (1,554)	3.3 U (1,554)	34 U (1,554)
Aroclor 1248	UG/KG	NA	22 U (182)	600 U (1,554)	3.3 U (1,554)	34 U (1,554)
Aroclor 1254	UG/KG	NA	22 U (182)	600 U (1,554)	3.3 U (1,554)	34 U (1,554)
Aroclor 1260	UG/KG	NA	22 U (182)	600 U (1,554)	3.3 U (1,554)	34 U (1,554)
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/KG	9,420	9,420	80,500	80,500	80,500

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

(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

Detection Limits shown are PQL

Advanced Selection: PCB - sed-sum
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[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCCODE] = 'PCB' OR [PRCCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

TABLE 2
SUMMARY OF HISTORICAL SEDIMENT PCB ANALYTICAL RESULTS - COMPARED TO BENTHIC CHRONIC PROTECTION
PFOHL BROTHERS LANDFILL SITE

Location ID		SW-08	SW-08	SW-08
Sample ID		SW-08-DUP	SED-08	SW-8
Matrix		Sediment	Sediment	Sediment
Depth Interval (ft)		0.0-0.5	-	-
Date Sampled		05/15/06	05/21/07	05/27/08
Parameter	Units	Field Duplicate (1-1)		
Polychlorinated Biphenyls				
Aroclor 1016	UG/KG	24 U (1,554)	NA	32 U (1,554)
Aroclor 1221	UG/KG	24 U (1,554)	NA	32 U (1,554)
Aroclor 1232	UG/KG	24 U (1,554)	NA	32 U (1,554)
Aroclor 1242	UG/KG	24 U (1,554)	NA	32 U (1,554)
Aroclor 1248	UG/KG	24 U (1,554)	NA	32 U (1,554)
Aroclor 1254	UG/KG	24 U (1,554)	NA	32 U (1,554)
Aroclor 1260	UG/KG	24 U (1,554)	NA	32 U (1,554)
Miscellaneous Parameters				
Total Organic Carbon (TOC)	MG/KG	80,500	80,500	80,500

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

(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

Detection Limits shown are PQL

Advanced Selection: PCD - sed-sum
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Printed: 8/27/2008 4:45:32 PM
[MATRIX] = 'SE' AND ([SACODE] = 'N' OR [SACODE] = 'FD') AND ([PRCODE] = 'PCB' OR [PRCODE] = 'MI') AND ([PARNAME] <> 'Cyanide' AND [PARNAME] <> 'Percent Dry')

FIGURE E-1
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-1D

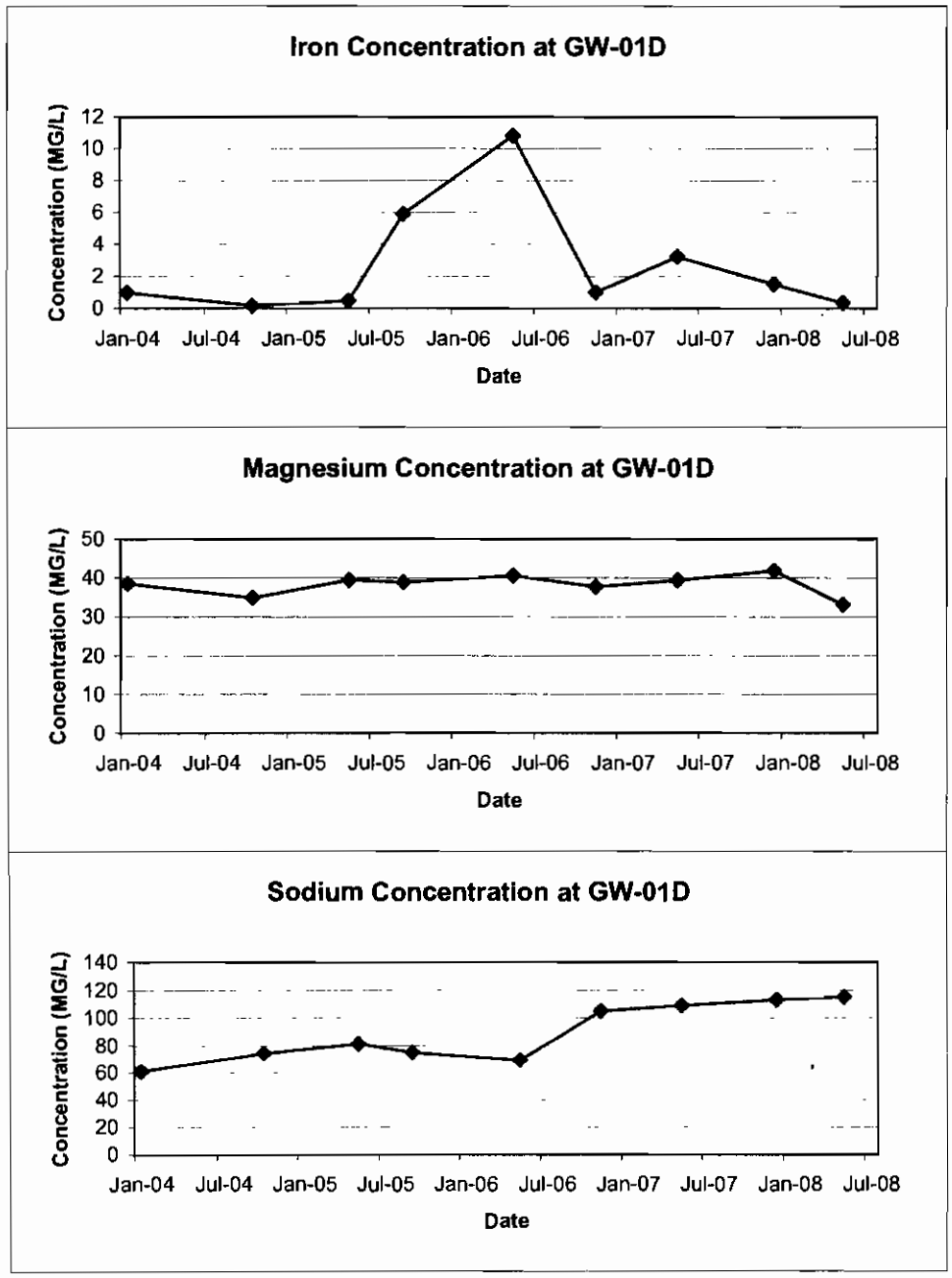

FIGURE E-2
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-1S

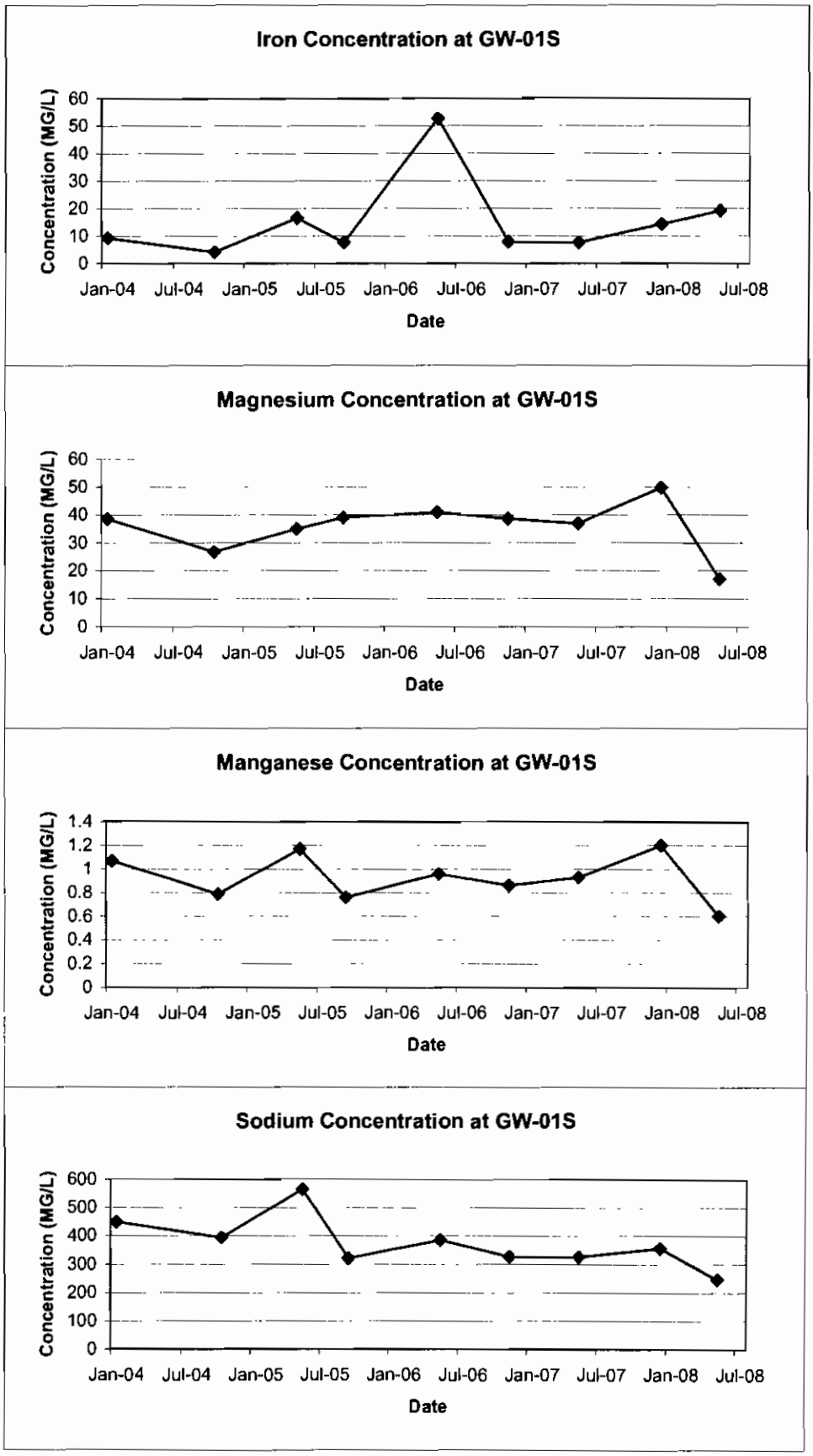

FIGURE E-3
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-3D

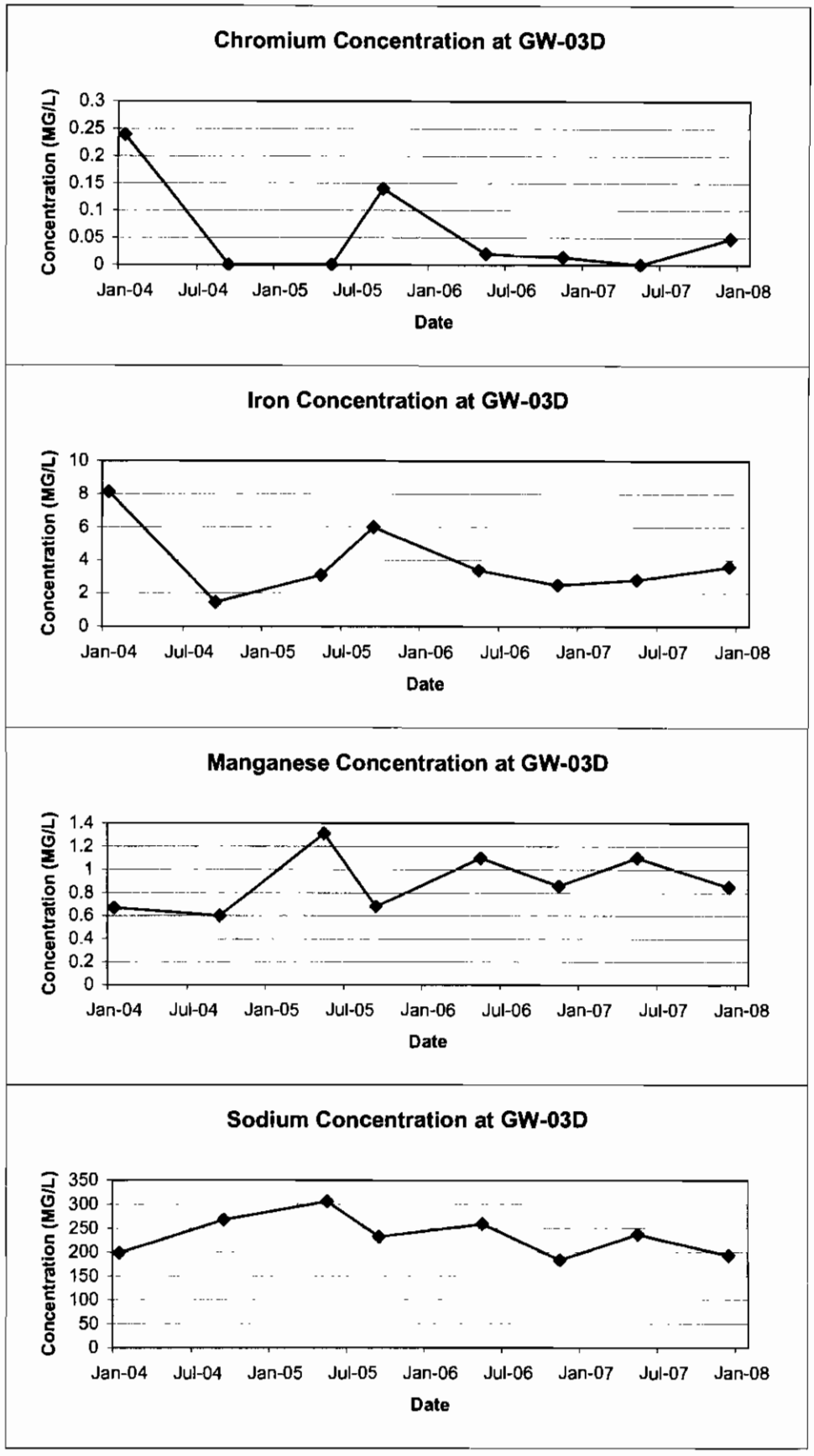

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FIGURE E-4
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-3S

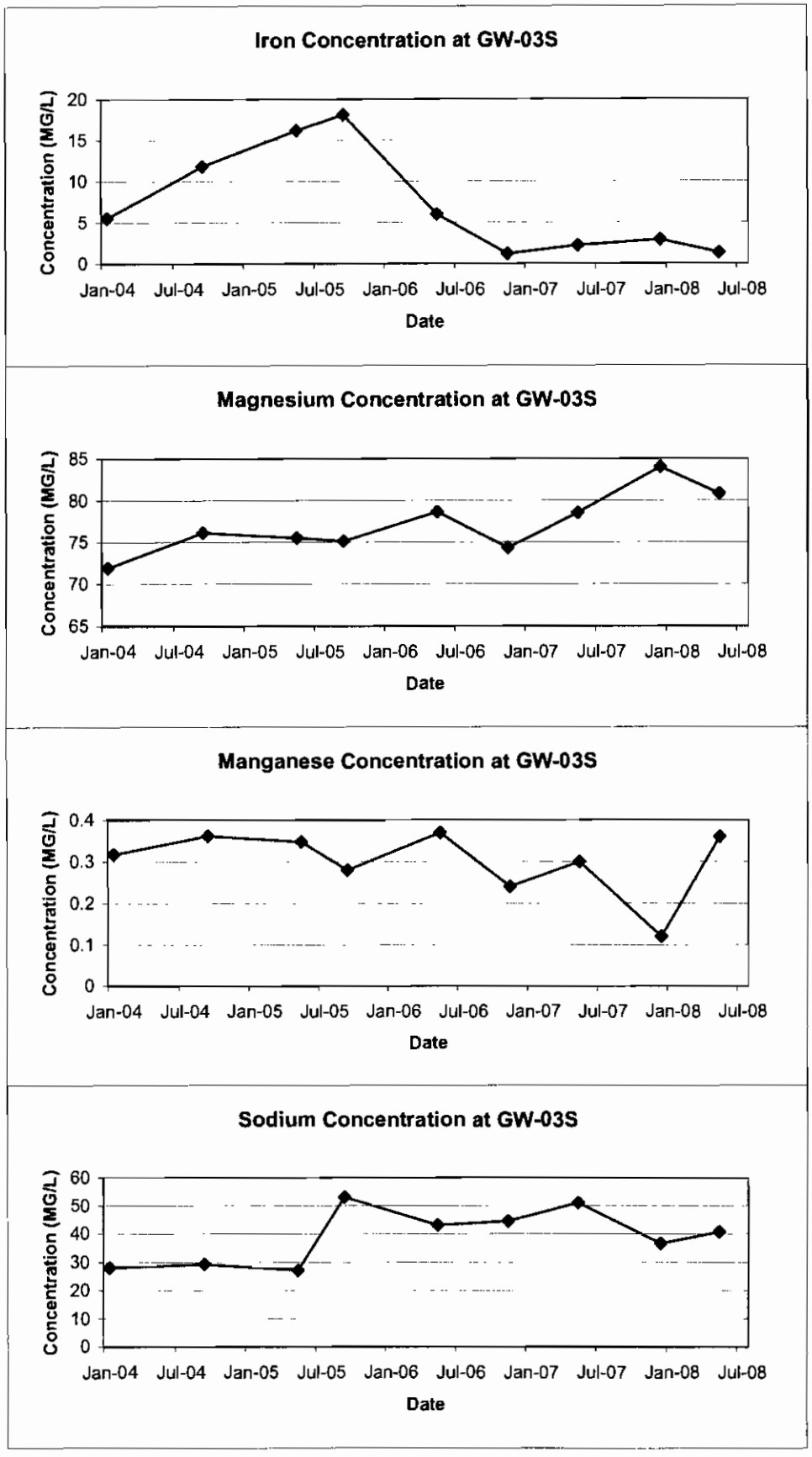

FIGURE E-5
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-4D

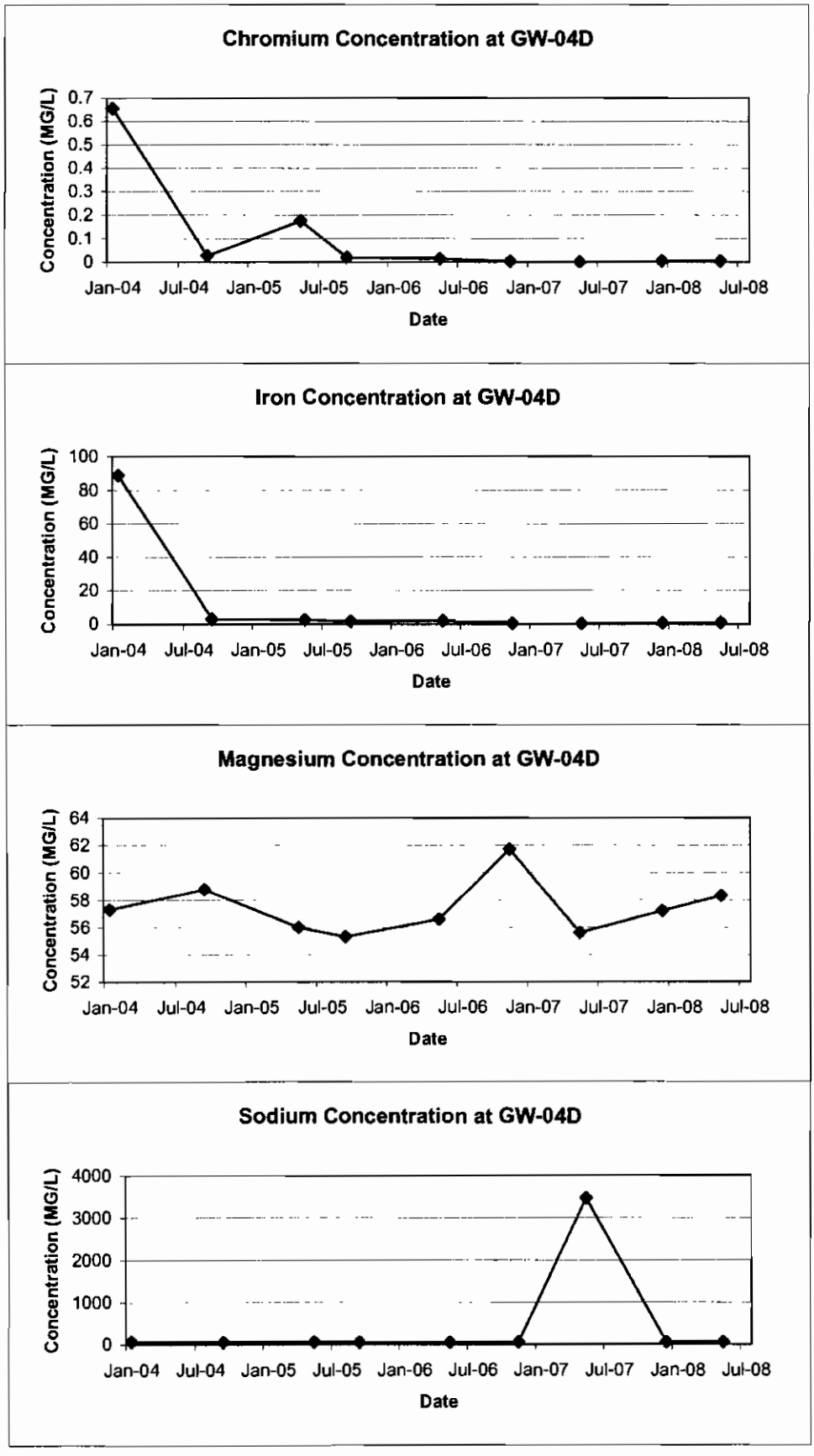

FIGURE E-6
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-4S

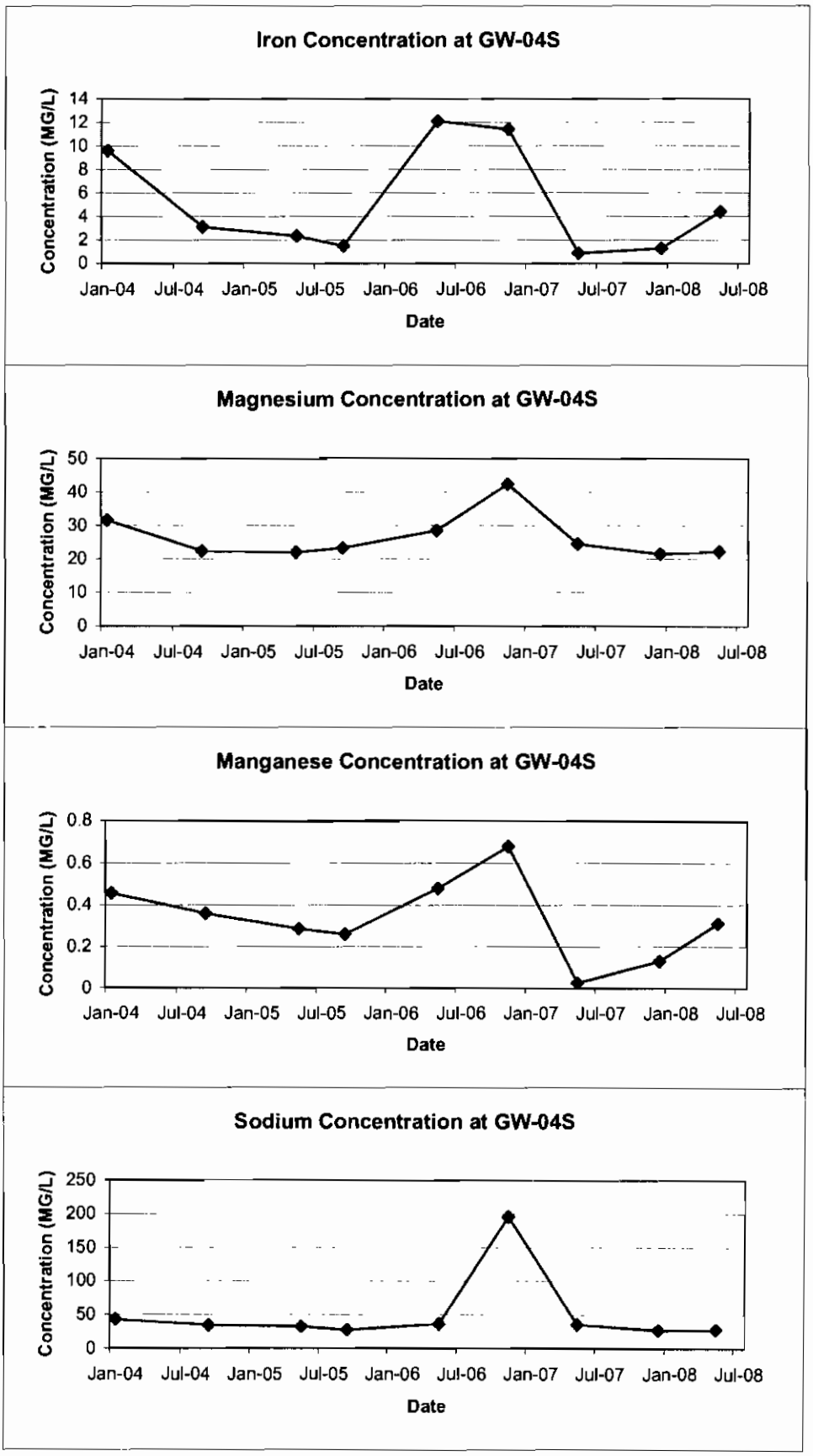

FIGURE E-7
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-7D

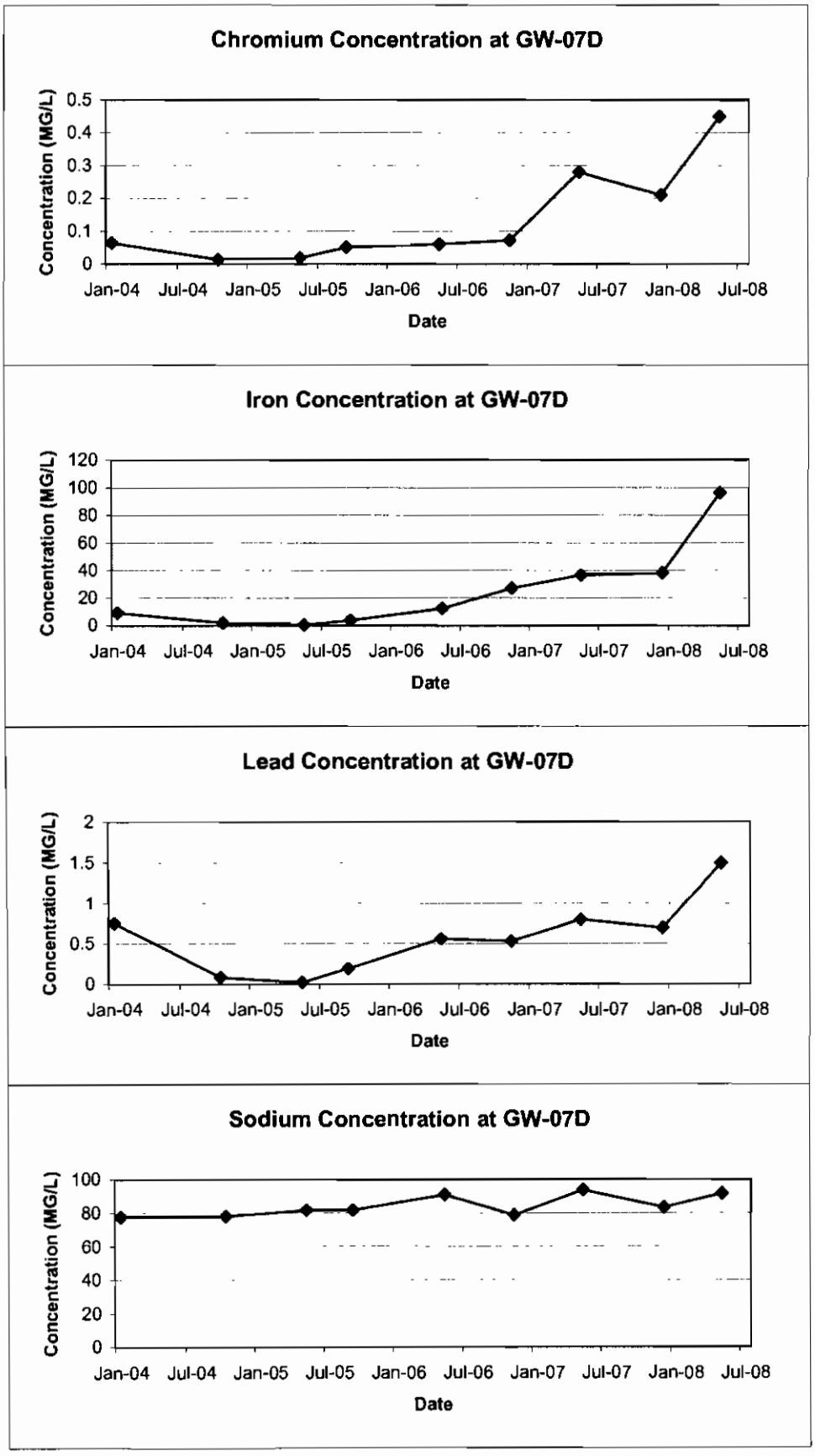

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FIGURE E-8
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-7S

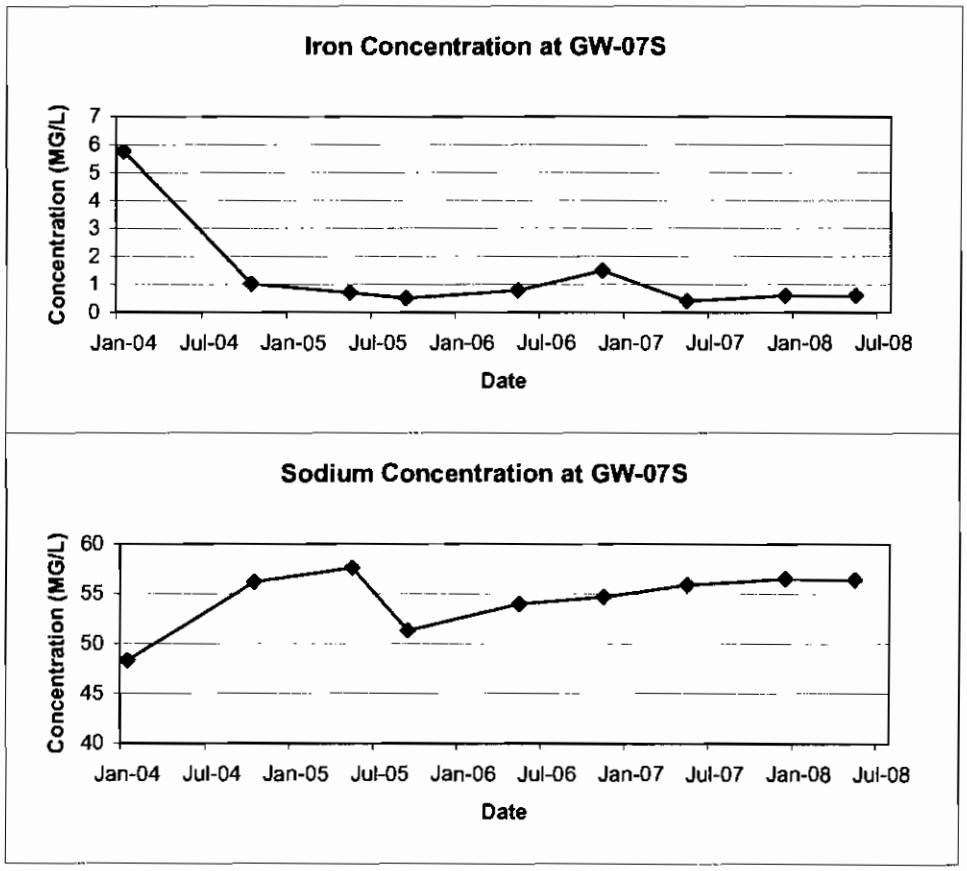

FIGURE E-9
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-8D

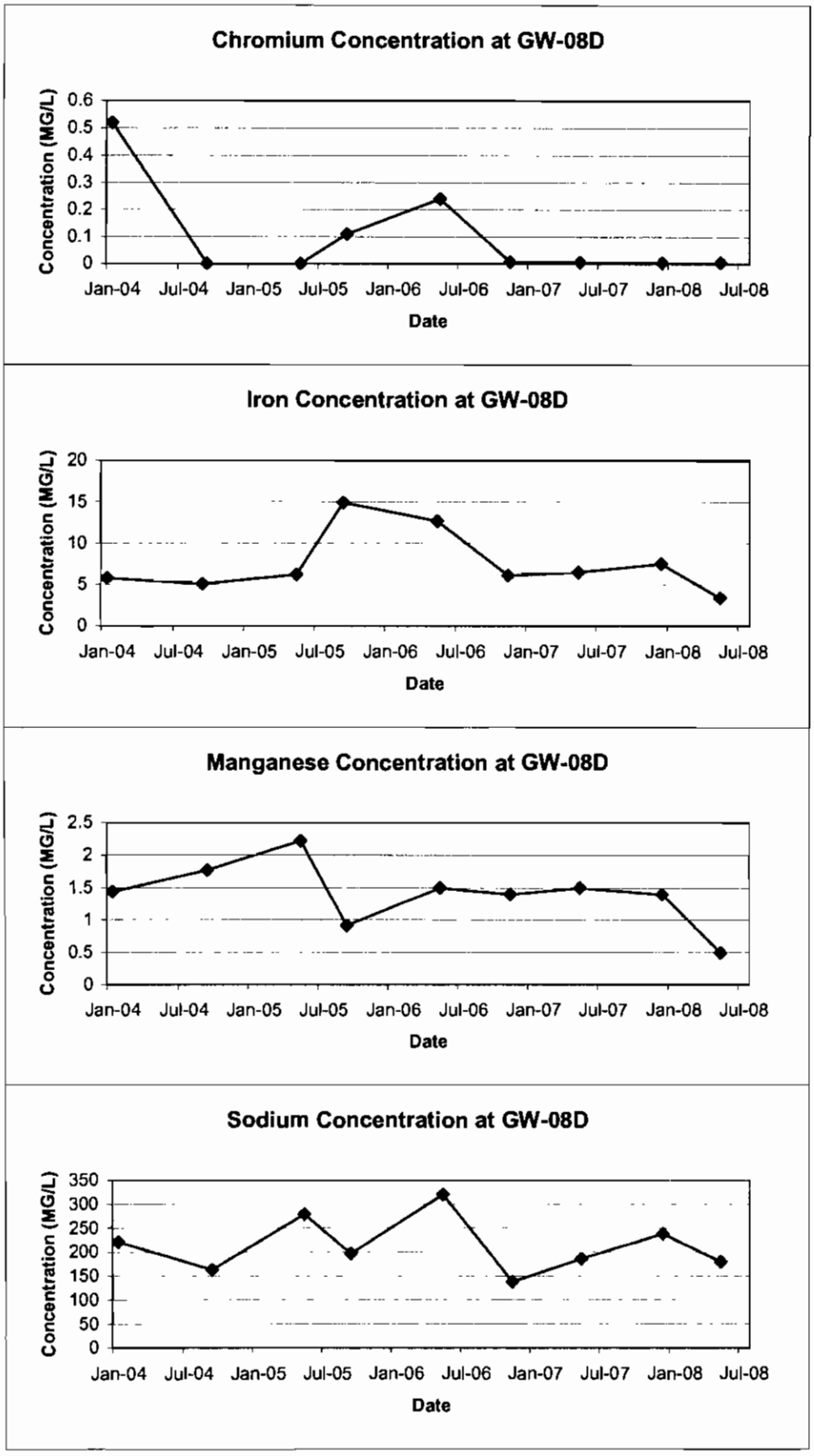

FIGURE E-10
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-8SR

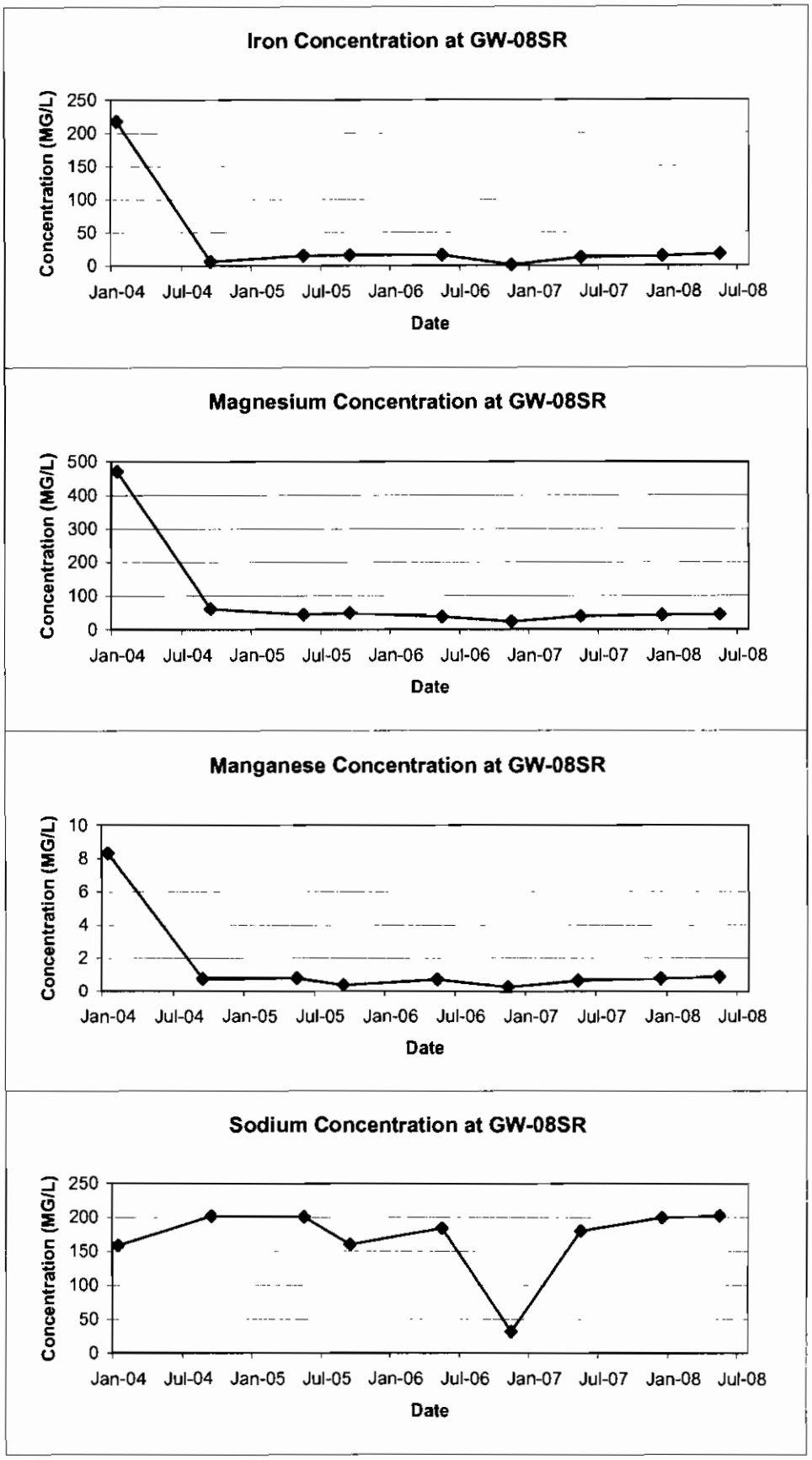

FIGURE E-11
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-26D

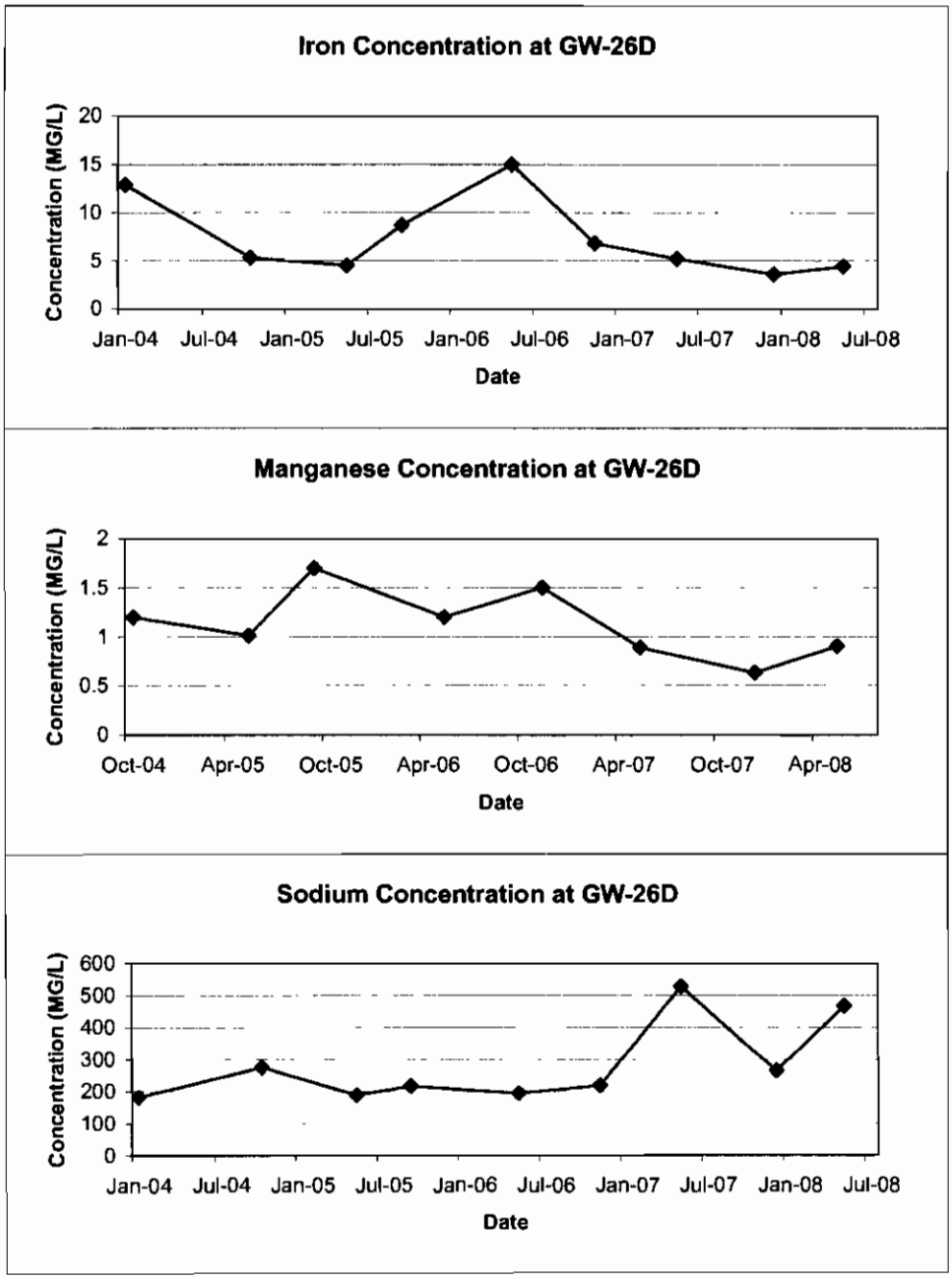

FIGURE E-12
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-28S

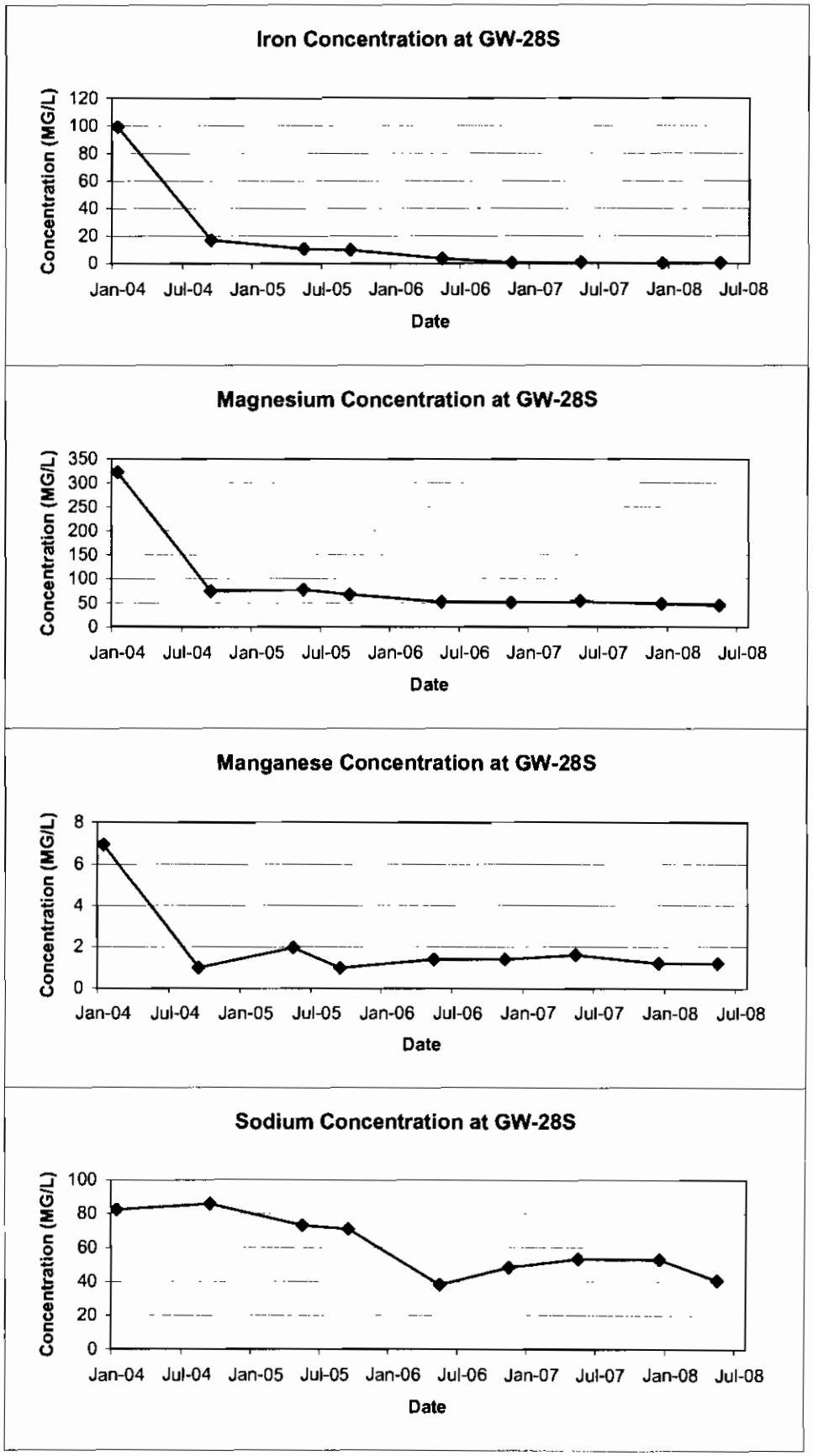

FIGURE E-13
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-29S

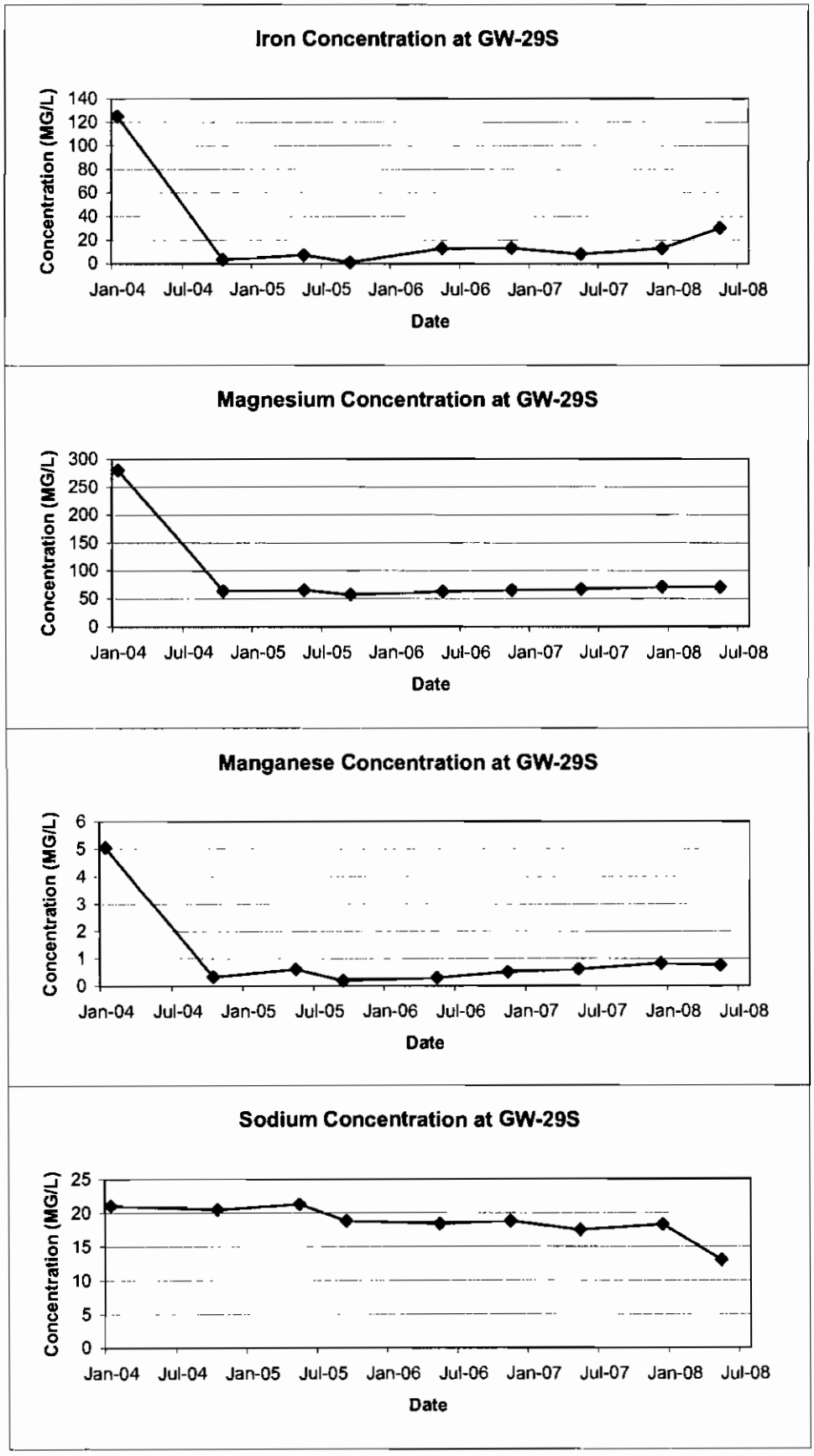

FIGURE E-14
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-30S

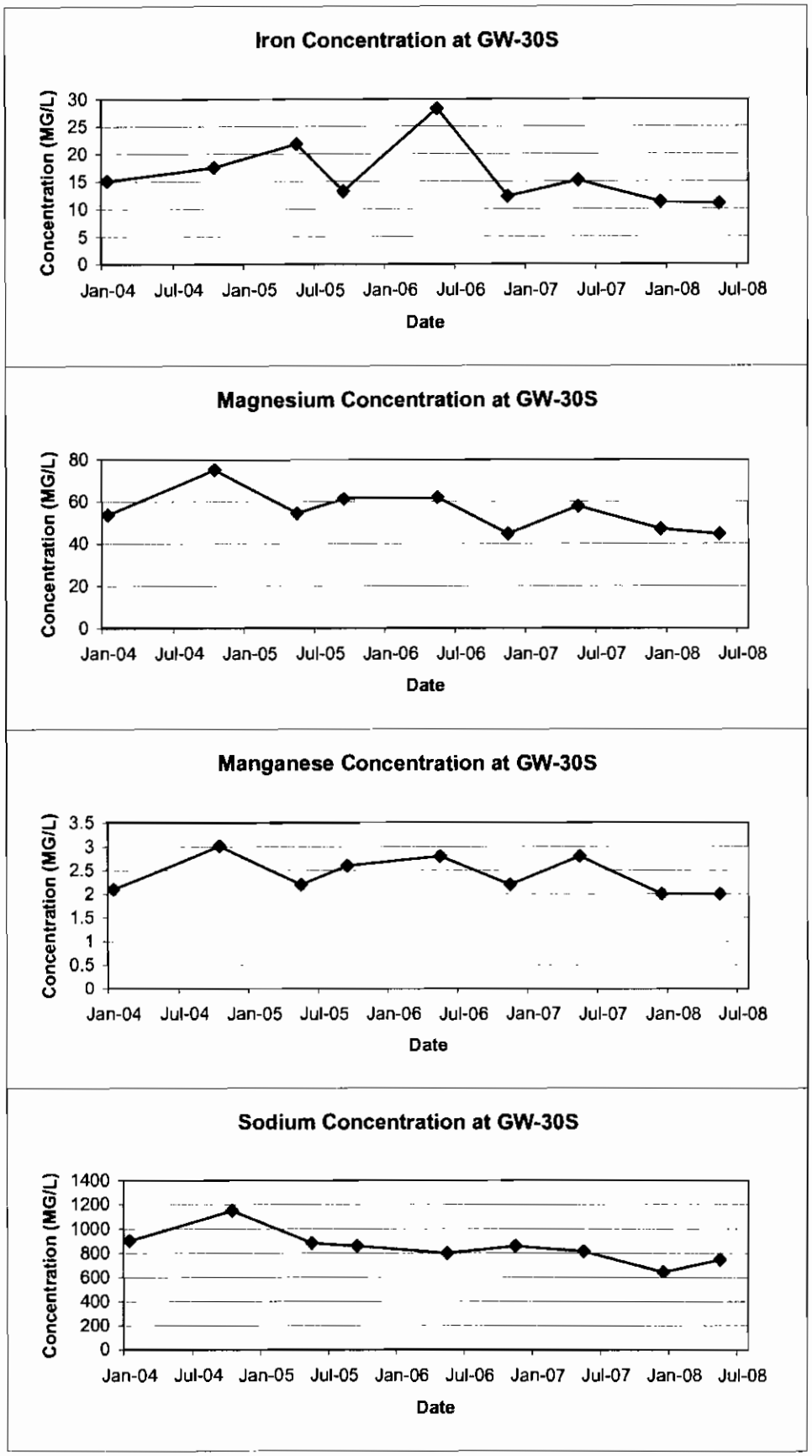

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FIGURE E-15
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-31S

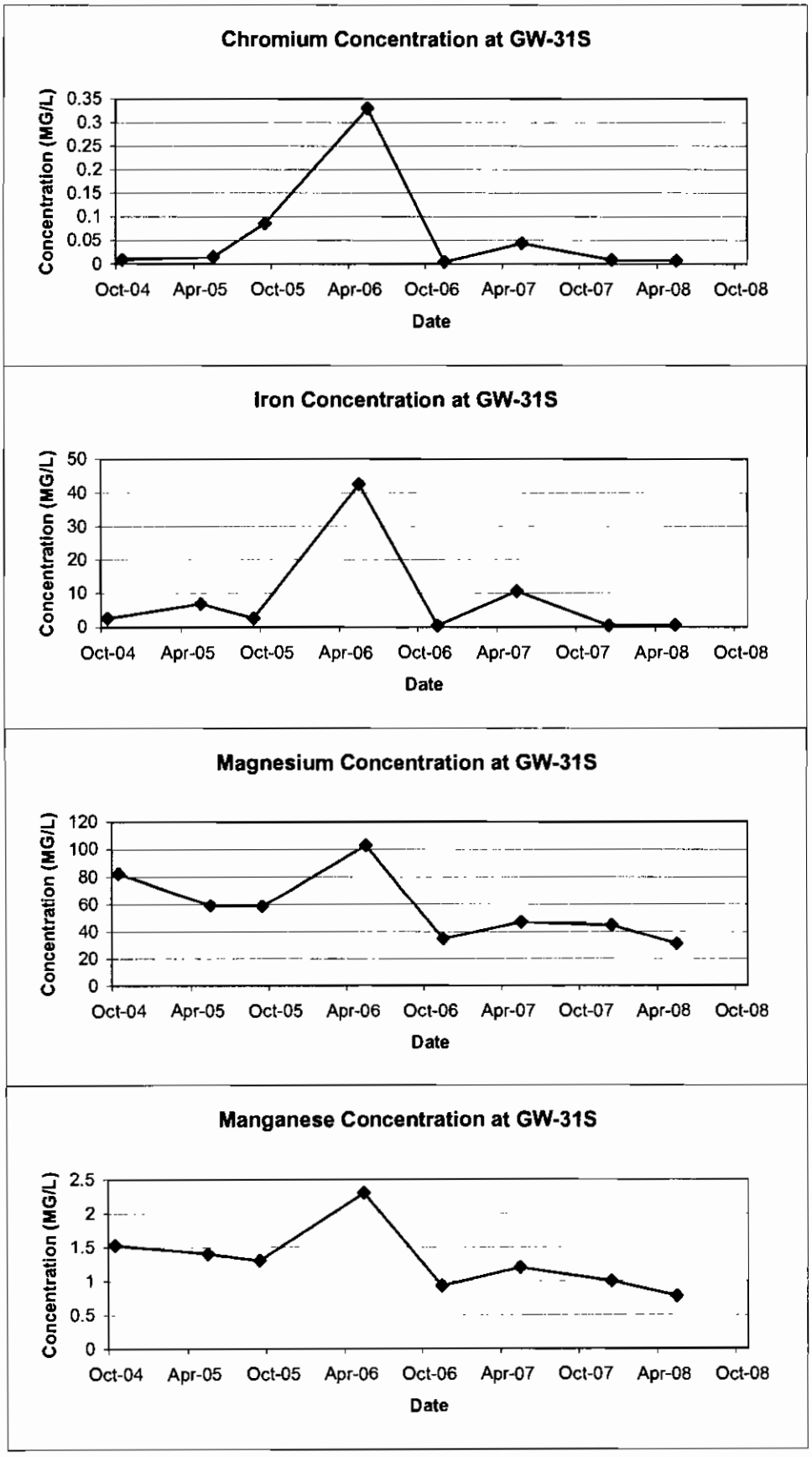


FIGURE E-16
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-32S

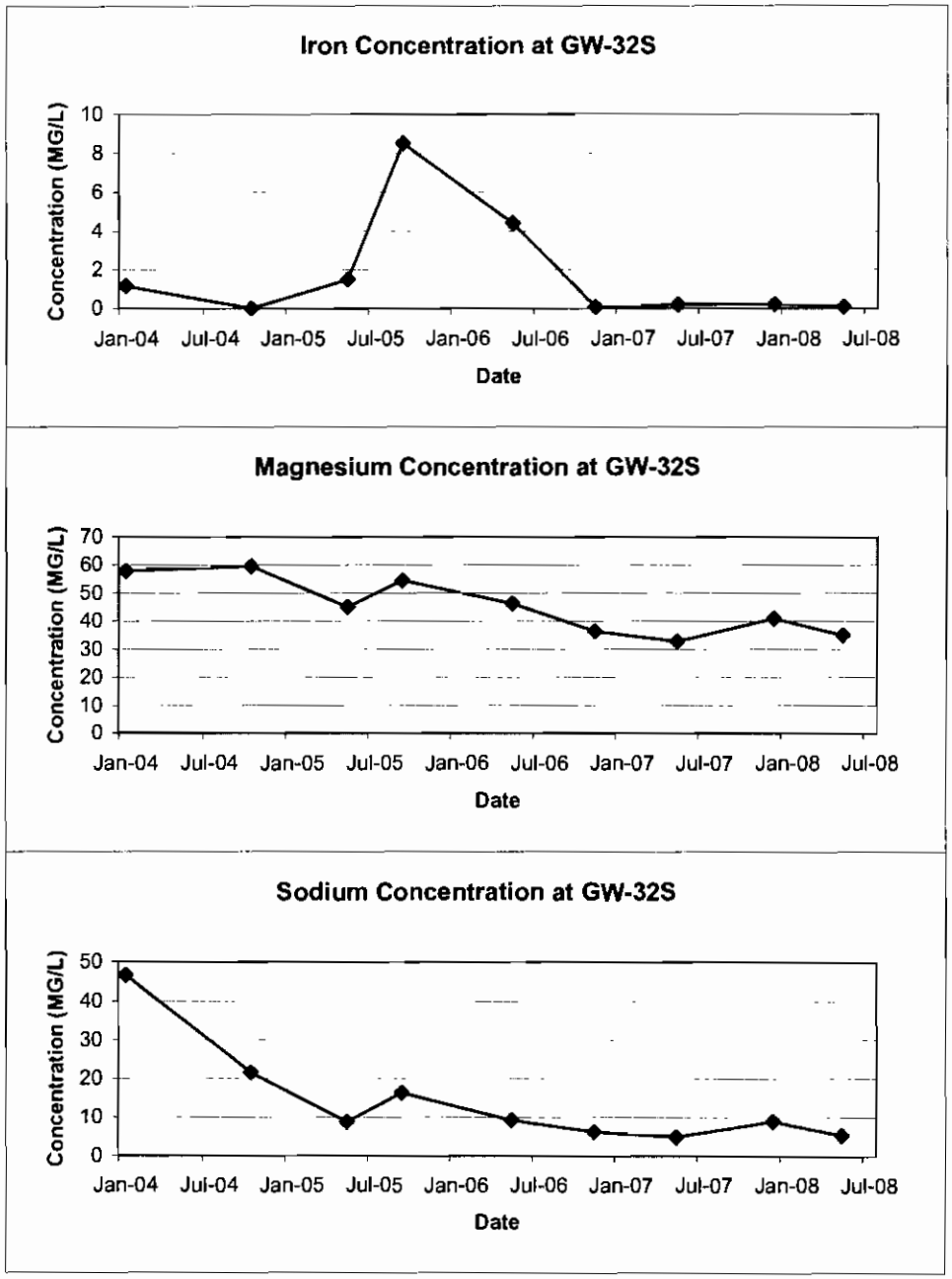


FIGURE E-17
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-33S

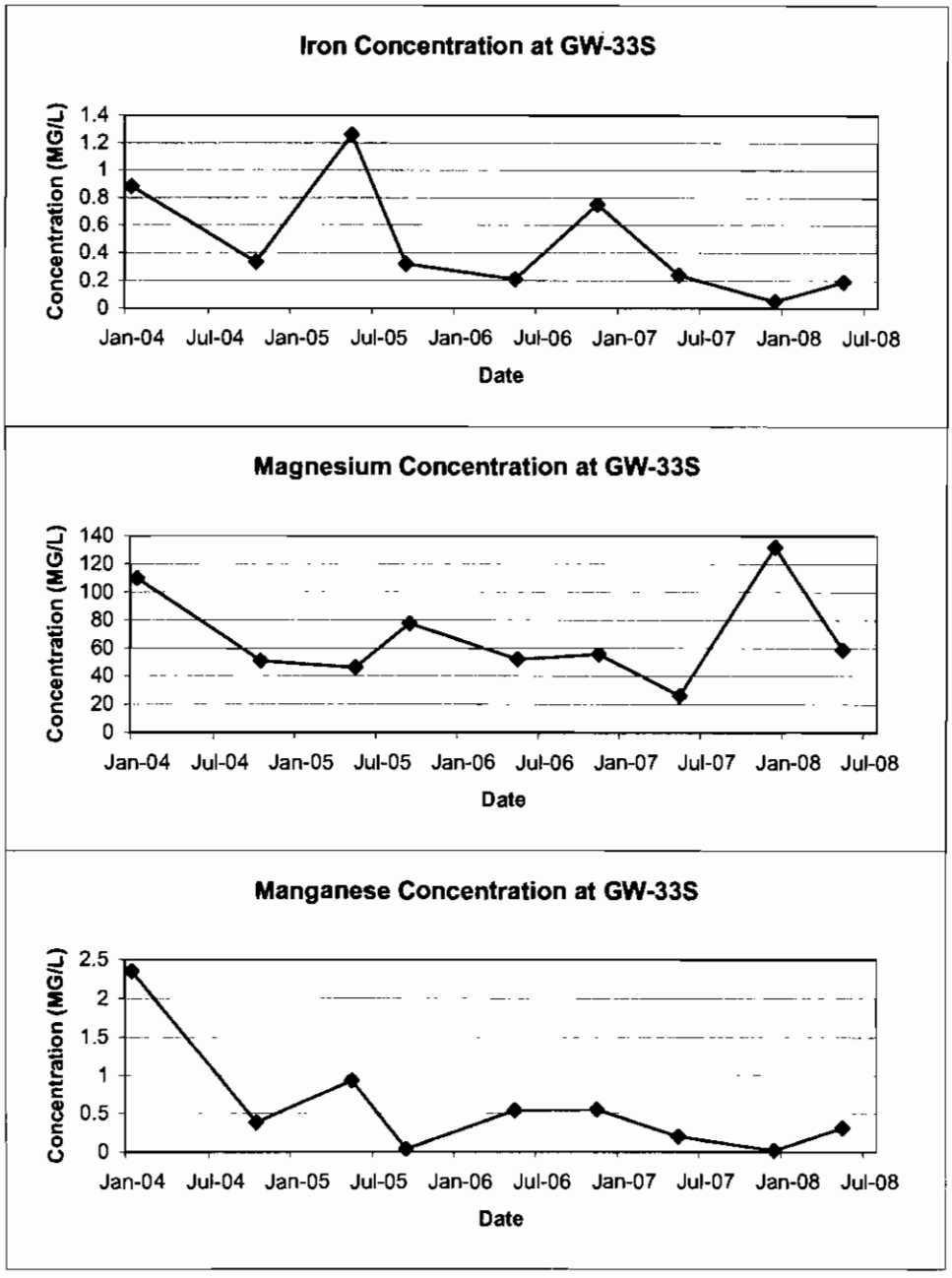


FIGURE E-18
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-34S

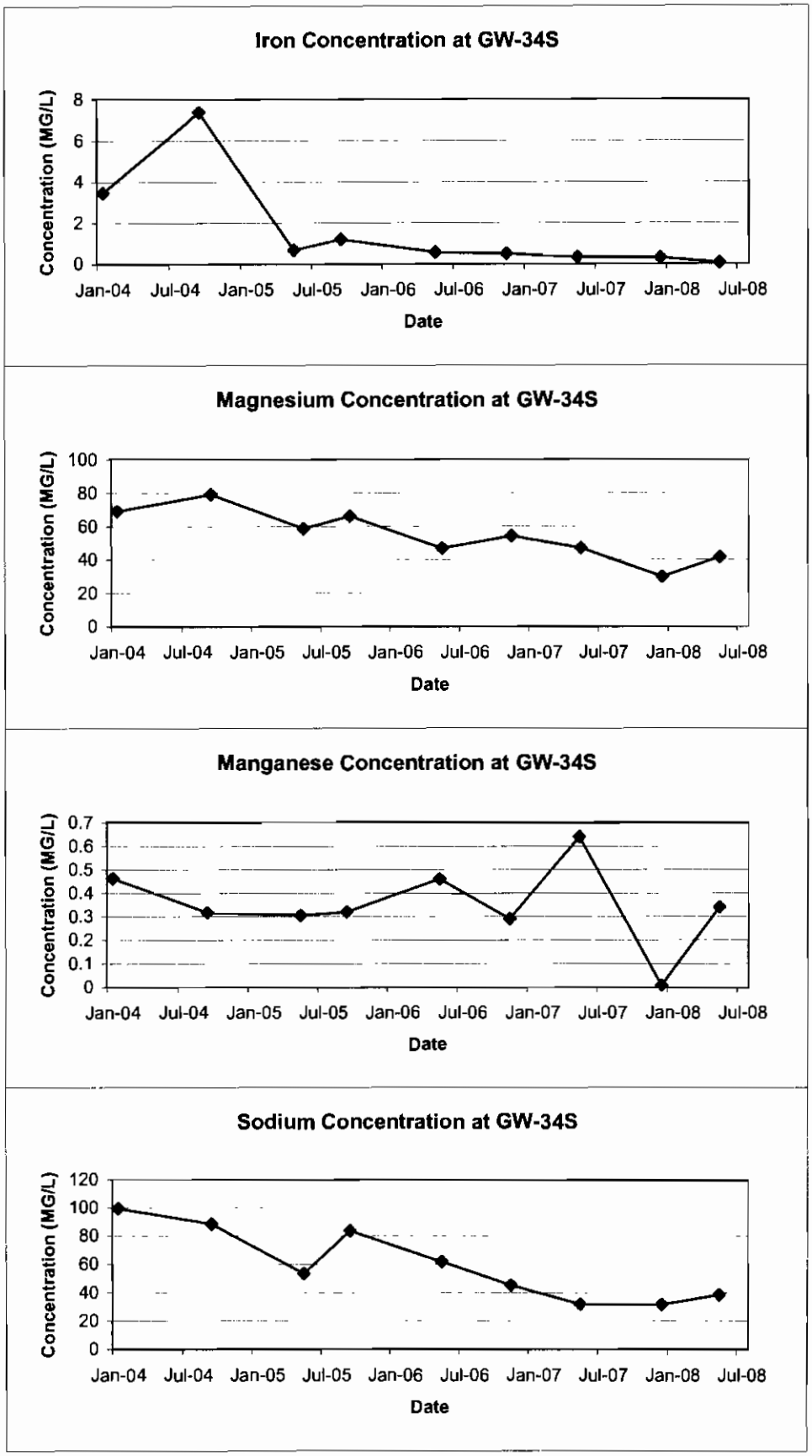
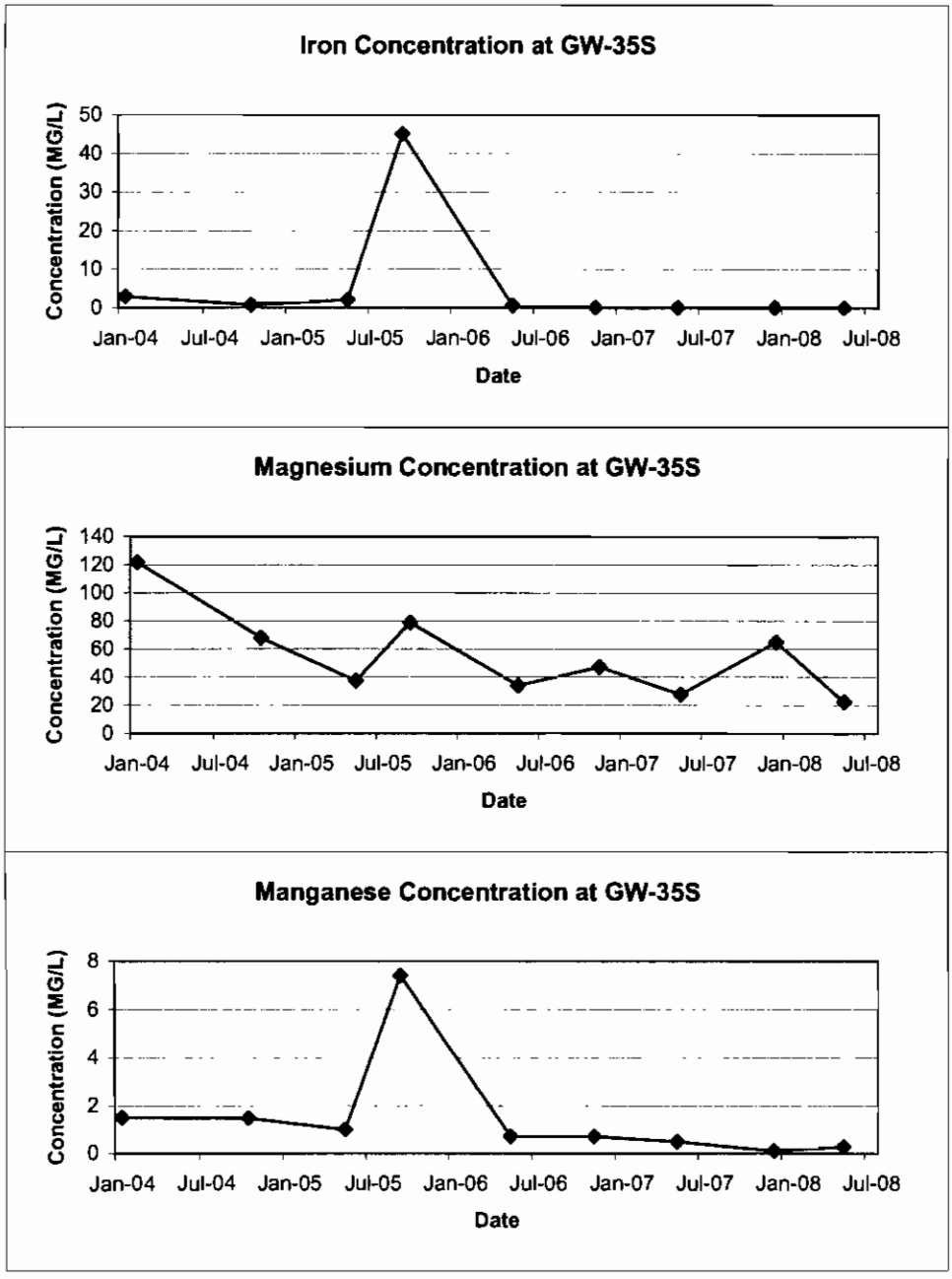


FIGURE E-19
TRENDS OF PARAMETERS ROUTINELY EXCEEDING GROUNDWATER STANDARDS
IN MONITORING WELL GW-35S



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		Discharge Limitations[1]	Sampling Requirements	
Point	**Parameter**	**Daily Max**	**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.

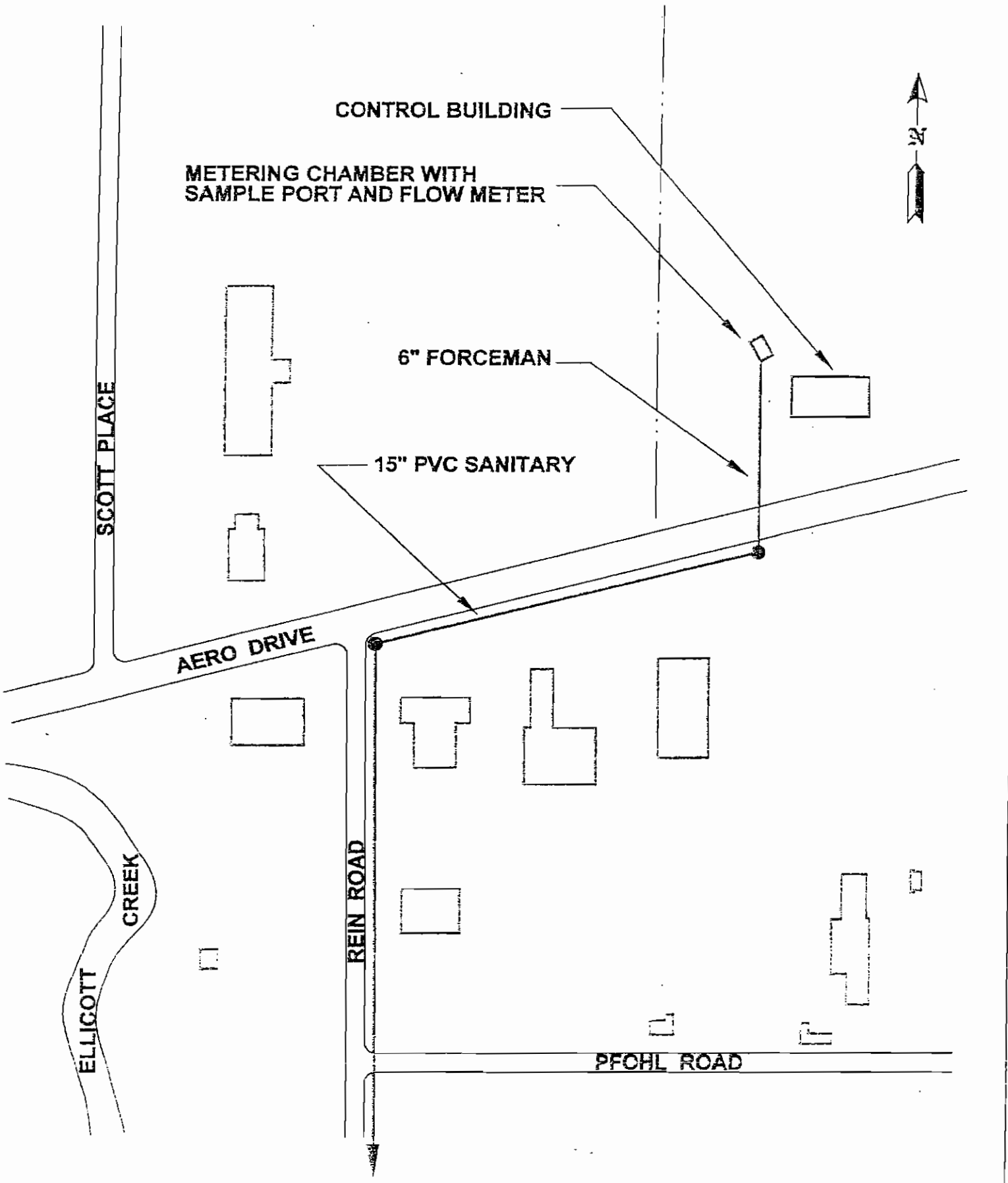
2. Composite samples may be time proportioned.

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
CHEEKTOWAGA ENGINEERING DEPT.
ALEXANDER COMMUNITY CENTER
275 ALEXANDER AVE.
CHEEKTOWAGA, NEW YORK 14221
PHONE: (716) 897-7288

PFOHL BROTHERS
LANDFILL SITE

DRAWN BY: MARK J. CHRISTEL
DATE: 10/28/2002

EXHIBIT
1

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: 3/19/08 Crew: G. Kisluk, S. McCabe, S. Fischer

Weather: 45° F, Cloudy, light/moderate rain

Sampling Device: NA

Time of Installation: 8:15 Type of Sample: Composite

Sample Interval: NA Sample Volume: NA

Comments and Observations: No wells were pumping, turned off due to rain. Wells were restarted on 3/20/08
PLC display volumes: WW-01 (1,334,434 gals), WW-02 (-3,162 gals), WW-03 (1,183,979 gals),
WW-04 (2,572,976 gals), WW-05 (1,375,914 gals), WW-06 (3,582,625 gals) & MH-25 (9,531,268 gals).

Date: 3/21/08 Crew. R. Piurek, S. McCabe, S. Fischer

Weather: 31° F, Partly Cloudy, Wind 5-10 from west

Time of Collection: 10:35

Field Measurements:

8:15 (time/initial)

pH Calibration: Buffer 7- 7 Buffer 4- 4 Buffer 10- 10

pH Measurement: 6.83

Temperature: 42.8°F

Identification: EFF-032108

Physical Observations:

Laboratory: Severn Trent, Buffalo, NY

Comments: Wells WW-1 and WW-5 were pumping.
PLC display volumes: WW-01 (1,350,346 gals), WW-02 (-3,162 gals), WW-03 (1,183,979 gals),
WW-04 (2,572,976 gals), WW-05 (1,422,282 gals), WW-06 (3,582,625 gals) & MH-25 (9,593,405 gals).

Reviewed By: _____ Date. _____
(Supervisor)

TABLE 1

PFOHL BROTHERS LANDFILL - EFFLUENT MONITORING ANALYTICAL RESULTS, TOTAL FLOW, AND MASS LOADINGS MARCH 2008

Sample ID	EFF-032108			
Matrix	Effluent Water			
Date Sampled	3/21/2008			
Parameter	Result (mg/L)	Mass Loading (lbs/day)	Discharge Limitation (lbs/day)	Violations (Y/N)
Total Barium	0.21	0.11	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]	6.83	NA	5.0 - 12.0	No
Total Flow [5]		62,137	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: 6/16/08 Crew: R. Murphy, R. Piurek, T. Ifkovich

Weather: 71° F, clear

Sampling Device: NA

Time of Installation: 8:00 Type of Sample: Composite

Sample Interval: NA Sample Volume: NA

Comments and Observations: Wells WW-3 and WW-5 were pumping.
PLC display volumes: WW-01 (1,847,841 gals), WW-02 (-6,249 gals), WW-03 (1,535,223 gals), WW-04 (2,695,497 gals), WW-05 (2,571,229 gals), WW-06 (4,684,643 gals) & MH-25 (12,798,861 gals).

Date: 6/17/08 Crew: R. Murphy, R. Piurek, T. Ifkovich

Weather: 57° F, partly clear

Time of Collection: 8:00

Field Measurements:

8:00 (time/initial)

pH Calibration: Buffer 7- 7 Buffer 4- 4 Buffer 10- 10

pH Measurement: 6.8

Temperature: 11°C

Identification: EFFLUENT-061708

Physical Observations:

Laboratory: Severn Trent, Buffalo, NY

Comments: Well WW-5 was pumping.
PLC display volumes: WW-01 (1,847,841 gals), WW-02 (-6,249 gals), WW-03 (1,540,401 gals), WW-04 (2,695,497 gals), WW-05 (2,598,140 gals), WW-06 (4,684,643 gals) & MH-25 (12,829,956 gals).

Reviewed By: _____ Date: _____
(Supervisor)

TABLE 1

PFOHL BROTHERS LANDFILL - EFFLUENT MONITORING ANALYTICAL RESULTS, TOTAL FLOW, AND MASS LOADINGS JUNE 2008

Sample ID	EFFLUENT-061708			
Matrix	Effluent Water			
Date Sampled	6/17/2008			
Parameter	Result	Mass Loading	Discharge Limitation	Violations
	(mg/L)	(lbs/day)	(lbs/day)	(Y/N)
Total Barium	0.36	0.09	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	0.016	0.004	5.84	No
Total Suspended Solids	22.4	5.8	250 [3]	No
pH [4]	6.8	NA	5.0 - 12.0	No
Total Flow [5]		31,095	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: *11175616.00000*

Inspection Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Sundquist*

Date(s) of Inspection: *May 27-30, 2008*

Well I.D. Number	Lock	Surface Seal	Protective Casing	Riser	Water Level (ft. BTOC)	Well Depth (ft. BTOC)	Other Comments
GW-1S	Repaired	OK	OK	OK	4.30	14.96	Lock corroded
GW-1D	Replaced	OK	OK	OK	3.58	39.72	Lock corroded
GW-3S	OK	OK	OK	OK	3.45	13.25	
GW-3D	OK	OK	OK	OK	2.32	35.66	
GW-4S	OK	OK	OK	OK	5.18	16.28	
GW-4D	OK	OK	OK	OK	13.22	45.58	
GW-7S	OK	OK	OK	OK	5.82	35.05	
GW-7D	OK	OK	OK	Damaged	41.21	60.68	

Additional Comments: _____

_____

_____

WELL INSPECTION SUMMARY

Project Name: *Pfohl Brothers Landfill* Project Number: *11175616.00000*

Inspection Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Sundquist*

Date(s) of Inspection: *May 27-30, 2008*

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	6.02	13.04	
GW-8D	OK	OK	OK	OK	6.62	32.62	
GW-26D	OK	OK	OK	OK	7.19	40.71	
GW-28S	OK	OK	OK	OK	10.66	15.55	
GW-29S	OK	OK	OK	OK	9.96	20.01	
GW-30S	OK	OK	OK	OK	8.57	17.99	
GW-31S	OK	OK	OK	OK	5.59	9.58	
GW-32S	OK	OK	OK	OK	4.94	9.93	

Additional Comments: _____

_____

_____

WELL INSPECTION SUMMARY

Project Name: *Pfohl Brothers Landfill* Project Number: *11175616.00000*

Inspection Crew Members: *R. Murphy, R. Piurek* Supervisor: *J. Sundquist*

Date(s) of Inspection: *May 27-30, 2008*

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	6.57	8.22	
GW-34S	OK	OK	OK	OK	3.63	10.02	
GW-35S	OK	OK	OK	OK	5.12	7.46	

Additional Comments: _____

_____

_____

APPENDIX I

SURFACE WATER AND SEDIMENT SAMPLE COLLECTION LOGS

SURFACE WATER AND SEDIMENT SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers Landfill*

Project Number: *11175616.00000*

Sampling Crew Members: *R. Murphy, R. Piurek*

Supervisor: *J. Stachowski*

Date of Sample Collection: *27-May-08*

Sample I.D. Number	Sample Location	Est. Stream Width	Est. Stream Depth	Est. Stream Velocity	Field pH	Field Temp. (° F)	Field Turb. (NTU)	Field Cond. (mS)	Time	Sample Analysis	Sample Description
SW-1	SW-1	15'	0.5'	0.1 f/sec	---	---	---	---	10:05	PCBs	Surface water Clear, no odor, no sheen
SED-1	SED-1	---	---	---	---	---	---	---	10:05	PCBs	Sediment: Dark gray, silt some organics trace sand
SW-052708-DUP	SW-1	15'	0.5'	0.1 f/sec	---	---	---	---	10:05	PCBs	Surface water Clear, no odor, no sheen
SW-052708-DUP	SED-1	---	---	---	---	---	---	---	10:05	PCBs	Sediment. Dark gray, silt some organics trace sand
SW-2	SW-2	10'	1.0'	none	---	---	---	---	10:30	PCBs	Surface water: Clear, no odor, no sheen
SED-2	SED-2	---	---	---	---	---	---	---	10:30	PCBs	Sediment Dark gray, silt some organics trace sand
SW-2 MS	SW-2	10'	1.0'	none	---	---	---	---	10:30	PCBs	Surface water Clear, no odor, no sheen
SED-2 MSD	SED-2	---	---	---	---	---	---	---	10:30	PCBs	Sediment Dark gray, silt some organics trace sand

Additional Comments: Field parameters were not measured.

SURFACE WATER AND SEDIMENT SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers Landfill*

Project Number: *11175616.00000*

Sampling Crew Members: *R. Murphy, R. Piurek*

Supervisor: *J. Stachowski*

Date of Sample Collection: *27-May-08*

Sample I.D. Number	Sample Location	Est. Stream Width	Est. Stream Depth	Est. Stream Velocity	Field pH	Field Temp. (° F)	Field Turb. (NTU)	Field Cond. (mS)	Time	Sample Analysis	Sample Description
SW-3	SW-3	20'	0.5'	none	---	---	---	---	10:48	PCBs	Surface water: Clear, no odor, no sheen
SED-3	SED-3	---	---	---	---	---	---	---	10:48	PCBs	Sediment: Dark gray, silt some organics trace sand
SW-4	SW-4	20'	0.5'	none	---	---	---	---	11:05	PCBs	Surface water: Clear, no odor, no sheen
SED-4	SED-4	---	---	---	---	---	---	---	11:05	PCBs	Sediment: Black, silt w/ root system organics
SED-5	SED-5	---	---	---	---	---	---	---	11:19	PCBs	Sediment: Dark gray, silt some organics trace sand
SED-6	SED-6	---	---	---	---	---	---	---	11:38	PCBs	Sediment: Dark gray, silt some organics trace sand
SW-7	SW-7	8'	0.5'	0.1 f/sec	---	---	---	---	11:45	PCBs	Surface water: Clear, no odor, no sheen
SED-7	SED-7	---	---	---	---	---	---	---	11:45	PCBs	Sediment: Dark gray, silt some organics trace sand

Additional Comments: Field parameters were not measured.

SURFACE WATER AND SEDIMENT SAMPLING - SAMPLE COLLECTION DATA SHEET

Project Name: *Pfohl Brothers Landfill*

Project Number: *11175616.00000*

Sampling Crew Members: *R. Murphy, R. Piurek*

Supervisor: *J. Stachowski*

Date of Sample Collection: *27-May-08*

Sample I.D. Number	Sample Location	Est. Stream Width	Est. Stream Depth	Est. Stream Velocity	Field pH	Field Temp. (° F)	Field Turb. (NTU)	Field Cond. (mS)	Time	Sample Analysis	Sample Description
SW-8	SW-8	15'	0.5'	0.1 f/sec	---	---	---	---	11:55	PCBs	Surface water- Clear, no odor, no sheen
SED-8	SED-8	---	---	---	---	---	---	---	11:55	PCBs	Sediment: Black, silt w/ some organics, iron floc

Additional Comments: Field parameters were not measured.