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US ARMY INSTALLATION MANAGEMENT COMMAND
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Directorate of Public Works

May 4, 2009

Mr. Larry Quinn, Site Manager
New Jersey Department of Environmental Protection
Bureau of Investigation, Design and Construction
401 East State Street, P.O. Box 413
Trenton, New Jersey 08625-0413

**Re: M-5 Landfill Site (FTMM-05) Remedial Action Progress Report:
October 2003 through September 2005 (4th Qtr. 2003 – 3rd Qtr. 2005)
Dated: March 2009
Fort Monmouth, New Jersey**

Dear Mr. Quinn:

Submitted for your review and edification, please find a copy of the Remedial Action Progress Report (RAPR) for the M-5 Landfill Site (FTMM-05), Fort Monmouth, New Jersey. This RAPR was prepared in accordance with the *Technical Requirements for Site Remediation (TRSR)*, New Jersey Administrative Code (N.J.A.C.) 7:26E-6.6 (February 2003). Enclosed please find the Electronic Delivery Documents (EDDs) as well as a completed RAPR Checklist.

Should you have any questions or require any additional information, please contact Mr. Charles Appleby, Environmental Protection Specialist, at 732-532-2692 or email: Charles.Appleby@US.Army.mil

Sincerely,

A handwritten signature in black ink that reads "Joseph M. Fallon".

Joseph M. Fallon, CHMM
Chief, Environmental Division

Attached: Completed Remedial Progress Report Checklist
Encl. 1: Remedial Action Progress Report, (4th Quarter 2003 through 3rd Quarter 2005)
Electronic Data Deliverable (EDDs), one disk in back of report

Encl. 2, Completed Remedial Progress Report Checklist

SRP CHECKLIST:		REMEDIAL ACTION PROGRESS REPORT 4 th Quarter 2003 through 3 rd Quarter 2005 M-5 Landfill Site (FTMM-05)		
	N.J.A.C. 7:26E-	Use this checklist to assure that the remedial action progress report is complete and meets all technical requirements.	Included: Yes/No/NA	Page #
	6.6(a)	Have progress reports been submitted as required?	Yes	2.2.3 and 2.2.4
	6.6(b)1	Is a description of each remedial action included and adequate?	Yes	3-1
	6.6(b)2	Is a discussion of problems and proposal for correction included and adequate?	NA	
	6.6(b)3	Are proposals for deviation from approved WP adequately addressed?	NA	
		6.3(e)3iii If requesting to reduce sampling frequency have the requirements at 6.3(e)3iii and in Appendix C been met?	NA	
	6.6(b)4	Is a revised schedule included and adequate?	Yes	6.1 & App.G
	6.6(b)5	Is the status of permit applications included and adequate?	Yes	3.1 & 6.2
	6.6(b)6	Is a list of upcoming remedial actions included and adequate?	Yes	6.5 & App.G
	6.6(b)7	Is the cost of each remedial action adequately documented?	Yes	6.1 & App.G
	6.6(b)8	Is a table of sampling results, summary of data and conclusions included and adequate?	Yes	Sections 5 and 6 and the Tables Section
	6.6(b)9	Is information for active GW remediation included and adequate?	Yes	3-1
		6.6(b)9i Has a ground water Contour-Map Reporting Form (Appendix G) been completed and included?	Yes	Figures Section, Behind each Contour Map
	6.6(b)10	Is information for natural GW remediation included and adequate?	Yes	Sections 4 and 5
	6.6(b)11	Is a description of wastes generated included and adequate?	Yes	3-3 & 4-4
	6.6(b)12	Has other important information been included:	NA	
		If not previously provided, has a map of the CEA been included along with a CEA Factsheet from Appendix F?	NA	
		If the RAPR includes a proposal to revise the CEA, has all the necessary information per 6.3 and Appendix F been included?	NA	
		Does the report indicate whether biennial certifications have been submitted for CEAs &/or DERs?	NA	

**U. S. Army Garrison
Fort Monmouth
Directorate of Public Works
Fort Monmouth, New Jersey**



**M-5 Landfill Site (FTMM-05)
Remedial Action Progress Report**
(4th Quarter 2003 through 3rd Quarter 2005)

Prepared by:



**113 Centrewest Court
Cary, N.C. 27513
919-388-0037**

Work Order Number: 2011-05-011

March 2009



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Appendix C	Material Safety Data Sheet for Hydrogen Release Compound®
Appendix D	Groundwater Laboratory Analytical Data, 4 th Quarter 2003 through 3 rd Quarter 2005
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Appendix F	Fort Monmouth Directorate of Public Works Analytical Sampling Standard Operating Procedures
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EXECUTIVE SUMMARY

This Remedial Action Progress Report (RAPR) documents the quarterly sampling of 13 monitoring wells [10 located at the M-5 Landfill Site (FTMM-05) and three located at the adjacent M-8 Landfill Site (FTMM-08)] from the 4th Quarter 2003 through the 3rd Quarter 2005 (Rounds 27 through 34) to monitor the progress of the enhanced natural attenuation program [Hydrogen Release Compound[®] (HRC)] in reducing contaminant levels in groundwater.

The M-5 Landfill Site consists of approximately 3.2 acres located on the western portion of the Main Post, just west of the Eatontown/Oceanport Borough line. The site is bordered by Mill Creek and Parkers Creek to the west and is adjacent to the southern boundary of the M-8 Landfill.

Groundwater monitoring of the site identified concentrations of tetrachloroethene (PCE) above the Groundwater Quality Criteria (GWQC) for Class II-A aquifers. The Remedial Investigation Report/Remedial Action Work Plan (RIR/RAWP) was submitted by ATC in February 2000 and approved by the New Jersey Department of Environmental Protection (NJDEP) in March 2001. The RAWP proposed enhanced natural attenuation with groundwater monitoring as the site remedy for the contaminant of concern (COC), tetrachloroethene (PCE). Predictive modeling indicated that the plume would degrade to below GWQC within a five-year period, and the plume was not predicted to migrate during this time frame.

Analytical results for six monitoring wells during the current reporting period exceeded the NJDEP GWQC for PCE and TCE. Analytical results for two monitoring wells exceeded the GWQC for cis-1,2-dichloroethene (DCE). Therefore, TCE and cis-1,2-DCE have been added as COCs at the M-5 Landfill Site. PCE, TCE, and cis-1,2-DCE concentrations have not exceeded their respective criteria in any of the wells bordering Mill Creek during this reporting period.

Tetrachloroethene (PCE) was detected above the GWQC of 1.0 µg/L in six wells with concentrations ranging from 1.08 µg/L (M-5MW11, Sampling Round 27) to 90.59 µg/L (M-5MW16, Round 33). **Trichloroethene (TCE)** was detected above the GWQC of 1.0 µg/L in six wells with concentrations ranging from 1.02 µg/L (M-5MW23, Round 28) to 34.20 µg/L (M-5MW16, Round 33). **Cis-1,2-dichloroethene (DCE)** was detected above the GWQC of 10.0 µg/L in two wells, with concentrations ranging from 13.20 µg/L (M-5MW20, Round 33) to 283.79 µg/L (M-5MW16, Round 34).

During this reporting period, surface water samples were collected from four surface water locations and analyzed for volatile organic compounds (VOCs); PCE and TCE were detected at one location, SS-15, at concentrations exceeding its Surface Water Quality Criteria (SWQC). However, the source of this contaminant (PCE and daughter products) has been identified as being upgradient of the Fort Monmouth property.

Although concentrations of PCE have fluctuated over time (specifically in M-5MW11, M-5MW16, M-5MW19, M-5MW20, M-5MW23, M-8MW12, and M-8MW23), the PCE levels have generally decreased in all monitoring wells where concentrations were above the GWQC at the onset of the first HRC[®] injection and the breakdown product concentrations have increased. The conclusion is that HRC[®] injections have enabled natural attenuation to proceed at an increased rate. Areas around M-5MW16, M-5MW19, M-5MW20, and M-5MW23 are still of concern. Based on the decreasing trend of PCE over time, VEETech recommends that the DPW continue quarterly groundwater and surface water sampling and monitoring activities.



1.0 INTRODUCTION

An enhanced natural attenuation program to remediate the contaminant of concern (CO_C), tetrachloroethene (PCE), at the M-5 Landfill Site (FTMM-05), located at the Main Post Area of Fort Monmouth, New Jersey, is being conducted in accordance with the Remedial Action Work Plan (RAWP) prepared by ATC, Inc. in February 2000 and approved by the New Jersey Department of Environmental Protection (NJDEP) in March 2001. Under contract number W9125S-05-D-0004, the U.S. Army Garrison Fort Monmouth, Directorate of Public Works has issued a delivery order (DO #2VO1) to VEETech, P.C. (VEETech) to prepare this Remedial Action Progress Report (RAPR). The report documents groundwater and surface water monitoring during the current reporting period of the 4th Quarter 2003 through the 3rd Quarter 2005 (Rounds 27 through 34).

1.1 Objectives

The objective of this RAPR is to document the implementation of the remedial action program performed at the M-5 Landfill Site during the current reporting period of the 4th Quarter 2003 through the 3rd Quarter 2005 following the 4th Hydrogen Release Compound[®] (HRC) injection event performed between June and August 2004. HRC[®] injections were implemented by the DPW as a Remedial Action (RA) based on the recommendations found in the Remedial Investigation Report/Remedial Action Work Plan (RIR/RAWP), prepared by ATC, dated February 2000, and approved by the New Jersey Department of Environmental Protection (NJDEP) in March 2001. The purpose of the RA was to treat the contaminant-affected areas at the site using HRC[®] to reduce the contaminant concentrations to comply with the NJDEP Class II-A aquifer Groundwater Quality Criteria (GWQC). The remedial activities were conducted in accordance with the NJDEP *Technical Requirements for Site Remediation* (February 2003), NJAC 7:26E, et seq. and the M-5 Landfill Site RIR/RAWP (Appendix B).

The RA and subsequent preparation of this RAPR encompassed the following:

- Applying HRC[®] treatment to seven areas of concern identified in ATC's RIR/RAWP within the M-5 Landfill Site where the most significant groundwater impacts were observed and documented,
- Conducting quarterly rounds of groundwater and surface water sampling and documenting the results to evaluate the effectiveness of the RA,
- Comparing the results of the groundwater and surface water sampling with the NJDEP GWQC and Surface Water Quality Criteria (SWQC),
- Identifying and discussing recommendations with the DPW for the continuation of this RA, and
- Documenting remedial activities as required by the NJDEP *Technical Requirements for Site Remediation* NJAC 7:26E et seq.



1.2 Report Organization

Section 2.0 discusses the site history and background information for the M-5 Landfill Site. Section 3.0 describes and summarizes the remedial activities (HRC[®] injection) conducted at the M-5 Landfill Site. Section 4.0 discusses groundwater and surface water monitoring and sampling activities at the site. Section 5.0 presents the analytical results of the groundwater and surface water sampling. Section 6.0 discusses the effectiveness of the RA and provides recommendations to the DPW for the M-5 Landfill Site. Section 7.0 is the reference section.



2.0 SITE BACKGROUND

The following sections describe the site background of the M-5 Landfill Site. Included is a description of the site location, site history, background investigations, and previous RAPRs.

2.1 Site Location and Description

Fort Monmouth is located in the central-eastern portion of New Jersey in Monmouth County, approximately 45 miles south of New York City and 70 miles northeast of Philadelphia (Figure 2-1). The M-5 Landfill Site is located on the western portion of the Main Post, just west of the Eatontown/Oceanport Borough line and east of Mill Creek and Parkers Creek, and consists of approximately 3.2 acres. The M-5 Landfill Site is adjacent to the southern boundary of the M-8 Landfill Site. According to a report prepared by the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) titled, *Installation Assessment of Fort Monmouth, Report 171*, dated May 1980, the M-5 Landfill was in use between 1952 and 1959 for general disposal of domestic and industrial wastes and also automobiles. This site has reportedly been inactive since 1959. Since 1959, there has been a steady growth and stabilization of vegetation (grass, trees, and bushes) on the site. The environmental setting (regional/local geology and hydrogeology) of the M-5 Landfill Site is described in ATC's RIR/RAWP, dated February 2000 (Appendix B).

2.2 Site History and Background Investigations

The U.S. Army Corps of Engineers (USACE), Baltimore District, initially contracted Roy F. Weston, Inc. (Weston) to perform a Site Investigation (SI) at Fort Monmouth, New Jersey. Suspected hazardous waste sites were initially identified at Fort Monmouth in a report prepared by the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA, 1980). The USATHAMA report identified 37 sites with known or suspected waste materials on the Main Post and the two sub-posts (Charles Wood and Evans areas). Weston conducted a background investigation of the 37 sites, as well as eight additional sites that were identified by Fort Monmouth and the NJDEP. Weston's findings were described in a report titled *Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey (1993)*. The M-5 Landfill Site was one of the 37 sites identified.

In 1995, Weston conducted a site investigation (SI) of the M-5 Landfill Site and prepared an SI Report (December 1995). The Weston SI Report, *Final Site Investigation, Fort Monmouth, New Jersey, Main Post and Charles Wood Areas* (Appendix A), was used as the basis for subsequent remedial investigations, which progressed to the development of remedial actions, including the remediation program at the M-5 Landfill Site. From May 1997 through September 1999, the Directorate of Public Works (DPW) conducted a Remedial Investigation (RI) of the site. ATC was contracted by the DPW to evaluate the data collected during the RI and prepare the RAWP (Appendix B).

2.2.1 Site Investigation Report – Weston

The Site Investigation (SI), performed by Weston in 1995, at the M-5 Landfill Site included installation and sampling of two groundwater monitoring wells [M-5MW10 (downgradient) and M-5MW11]. Surface water sampling was not performed for the M-5 Landfill Site, although



surface water had previously been sampled in conjunction with the M-2 Landfill Site, which is upgradient. Two rounds of groundwater sampling was performed and samples were analyzed for Target Compound List (TCL) plus 30 parameters (TCL+30), Target Analyte List (TAL) metals, sulfate, and cyanide.

A background study of the Main Post was conducted as part of the site investigation reported in 1995. Five borings on the Main Post were placed in areas believed to be unaffected by base activities, as specified by the 1993 *Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey report*. Two soil samples were collected from each of the five borings. The borings were converted to monitoring wells and two groundwater samples were collected from each well. Two sediment and surface water samples were also collected as part of the background study. Maximum background concentrations were then established and reported in the SI for soil, groundwater, surface water, and sediment for the Main Post Area of Fort Monmouth so that they could be compared to the analytical results from the SI (Weston, 1995).

Groundwater analytical data for one groundwater monitoring well indicated that tetrachloroethene (PCE) concentrations exceeding the NJDEP GWQC of 1.0 µg/L were present at the M-5 Landfill Site in well M-5MW11. There were no detections of sulfate, or cyanide above the NJDEP GWQC. Fourteen metals were detected in site groundwater; however, only four (aluminum, iron, manganese, and sodium) were found at concentrations exceeding the NJDEP GWQC, but were detected at concentrations below the maximum background concentrations established in the SI report (Weston, 1995) and are therefore not identified as Contaminants of Concern (COCs).

The Weston SI Report (1995) presented a proposal to the DPW for the M-5 Landfill Site that was subsequently implemented. A long-term groundwater and surface water monitoring program was proposed that utilized the existing groundwater-monitoring wells and surface water sampling locations to monitor and document the downgradient surface water and groundwater quality conditions over time.

An expanded SI, requested by the NJDEP, identified PCE as the only COC in groundwater at the M-5 Landfill Site. The DPW installed three additional wells (M-5MW12, M-5MW13, and M-5MW14) in 1998 as part of the expanded SI. This resulted in the performance of a Remedial Investigation (RI) encompassing soil and groundwater characterization to determine the extent of the impacts of PCE at the site.

2.2.2 RIR/Remedial Action Work Plan – ATC

From April 1995 through September 1999, the DPW performed an RI of the M-5 Landfill Site. ATC was contracted by the DPW to install additional groundwater monitoring wells, evaluate the data collected during the RI, and prepare the RAWP.

The following RI approach was established:

- Perform a Geoprobe[®] investigation of the soils and groundwater within the landfill to characterize the near-surface and subsurface soils and shallow groundwater to determine whether a source area existed for the PCE observed in the groundwater.



- Install additional groundwater-monitoring wells within the landfill and perform constant discharge pump tests to determine the aquifer characteristics of the shallow saturated zone beneath the M-5 Landfill Site.
- Incorporate the new wells into the quarterly groundwater-monitoring program.
- Continue quarterly surface water sampling to evaluate the potential impact to the stream from the PCE detected in the soils and shallow groundwater.

Geoprobe[®] Investigation

The RI involved the drilling of 261 Geoprobe[®] locations to facilitate the collection of soil and groundwater samples. The results of the RI indicated that PCE was detected at concentrations above the minimum detection limit (MDL) in seven of the soil borings and at concentrations that exceeded the NJDEP Impact to Groundwater Soil Cleanup Criteria (IGWSCC) of 1.0 milligrams per kilogram (mg/kg) in five samples (concentrations ranging from 1.1 µg/kg to 3.3 µg/kg). PCE was detected in groundwater samples collected from 105 boring locations at concentrations that exceeded the NJDEP GWQC for PCE of 1.0 µg/L.

Eight VOCs (PCE, trichloroethene (TCE), cis-1,2-dichloroethene (DCE), chlorobenzene, benzene, toluene, ethylbenzene, and total xylenes) were detected in groundwater samples above their respective method detection limits (MDL). Of these, PCE, TCE, cis-1,2-DCE chlorobenzene, and benzene were identified in groundwater at concentrations that exceeded their respective GWQC. PCE concentrations above the GWQC were detected in 105 samples. TCE (6 samples), cis-1,2-DCE (10 samples), chlorobenzene (5 samples), and benzene (9 samples) were detected in concentrations above their respective GWQC.

Monitoring Wells

A total of 15 groundwater monitoring wells, three (M-5MW10, M-5MW11, and M-8MW12) installed by Weston (1995), three (M-5MW12, M-5MW13, and M-5MW14) installed by the DPW (1998), and nine monitoring wells (M-5MW15, M-5MW16 M-5MW18, M-5MW19, M-5MW20, M-5MW23, M-5MW25, M-8MW23, and M-8MW24) installed by ATC (1999), have been incorporated in the groundwater-monitoring program at the M-5 Landfill Site. Monitoring well depths ranged from 14 to 20 feet below ground surface (bgs). Groundwater analytical results from the permanent monitoring wells identified PCE as the only contaminant of concern (COC) across the M-5 Landfill Site. Although PCE concentrations were expected to naturally attenuate to acceptable levels over time, the DPW proposed to actively remediate the affected areas at the M-5 Landfill Site by targeting seven specific locations and applying Hydrogen Release Compound (HRC[®]).

2.2.3 Remedial Action Progress Report, 2000-2002 – Versar

After the first and second HRC[®] injection periods and twelve rounds of groundwater monitoring well sampling (4th Quarter 1999 through 3rd Quarter 2002), Versar prepared a RAPR, dated August 2003. The RAPR documented the groundwater quality conditions over time and evaluated the impact of the HRC[®] injection program.



The initial injection of HRC[®] was performed between October and December 2000 and the second was performed between February and May 2002. These injection events were completed with the prior approval of the NJDEP under the provisions of a Permit-by-Rule agreement.

A generally decreasing trend of the concentrations of PCE and an increase in daughter (e.g. breakdown) product concentrations in groundwater were observed during the reporting period (4th Quarter 1999 through 3rd Quarter 2002). The results supported the contention that COC degradation is occurring at the M-5 Landfill Site, presumably due to the effectiveness of the HRC[®] injection program that supports the biodegradation processes.

Based on the concentrations of the COC in groundwater following the HRC[®] injections, the HRC[®] subsurface injection program was continued by the DPW.

2.2.4 Remedial Action Progress Report, 2002-2003 – Versar

The third HRC[®] injection round was performed by the DPW between June and August 2003. This injection event was completed with the prior approval of the NJDEP under the provisions of a Permit-by-Rule agreement. Versar prepared a second RAPR, dated September 2005, following the third injection event, for the reporting period 4th Quarter 2002 through 3rd Quarter 2003. Said RAPR documented the groundwater quality conditions over time and evaluated the effectiveness of the HRC[®] injection program.

A generally decreasing trend of PCE concentrations was observed in groundwater at the site throughout the four quarters of groundwater sampling. The results supported the contention that PCE degradation was occurring at the M-5 Landfill Site, presumably due to the effectiveness of the HRC[®] to support the biodegradation processes.

Based on the decreasing concentrations of the COC and the increased presence of degradation products in groundwater during the reporting period, the HRC[®] subsurface injection program was continued.



3.0 REMEDIAL ACTIVITIES

Sampling results documented in ATC's RIR/RAWP (February 2000) for the M-5 Landfill Site indicated that the shallow groundwater contained tetrachloroethene (PCE) at concentrations that exceeded the NJDEP GWQC. Although the COC concentrations in groundwater were expected to gradually decrease through natural attenuation, the DPW implemented an HRC[®] injection program to actively address the groundwater contamination at the site. This bioremediation involved treating seven areas identified in the RIR/RAWP where elevated concentrations of PCE were detected (Figure 3-1).

3.1 Hydrogen Release Compound[®]

HRC[®] is a proprietary, food quality, polylactate ester that, upon being deposited into the subsurface, creates anaerobic aquifer conditions and causes the release of hydrogen. Under anaerobic conditions, naturally occurring microorganisms use the hydrogen to progressively remove chlorine atoms from chlorinated hydrocarbons via reductive dechlorination. HRC[®] is a slow-release compound that provides a steady hydrogen source for between six months and one year, and has been shown to enhance the natural attenuation of PCE at other study sites. HRC[®] applications were conducted in accordance with the M-5 Landfill Site RIR/RAWP, prepared by ATC Associates, Inc. (ATC), dated February 2000, and approved by the NJDEP in March 2001.

The seven treatment areas designated for the application of HRC[®] are illustrated in Figure 3-1. Varying numbers of boring locations within each of the seven delineated areas (from 6 to 59), where concentrations of PCE were detected above the NJDEP GWQC, were selected for application of the biological enhancements.

The fourth HRC[®] injection event was performed between June and August 2004 using a Geoprobe[®] rig to install an array of temporary injection points around each of the selected boring locations. These injection points were established on 12 foot by 12 foot grids over each treatment area, for a total of 233 injection locations. Injection of the HRC[®] was continuous from four feet to eight feet below ground surface (bgs).

3.2 Discharge to Groundwater Permit

The purpose of the New Jersey Pollutant Discharge Elimination System (NJPDES) Discharge to Groundwater (DGW) permit is to request a formal approval of the HRC[®] subsurface injection program at the M-5 Landfill Site as described in the RAWP prepared by ATC (Appendix B). The fourth injection of HRC[®] was completed with the prior approval of the NJDEP under the provisions of a Permit-by-Rule agreement.

As described in the ATC RAWP, the HRC[®] injections do not result in the discharge of any hazardous compounds. A Material Data Safety Sheet (MSDS) for the HRC[®] is presented in Appendix C.



3.3 Types of Waste Generated and Disposal Methods

The waste types generated by the remedial activities included three-gallon polyethylene pails and personal protective equipment (PPE). The pails were recycled and the PPE was disposed of as non-hazardous waste.



4.0 MONITORING AND SAMPLING ACTIVITIES

As part of the Long Term Monitoring (LTM) program at the M-5 Landfill Site, quarterly groundwater monitoring (Rounds 27 through 34) and surface water sampling (Rounds 29 through 36) continued from the 4th Quarter 2003 through the 3rd Quarter 2005. Groundwater samples were collected from 10 monitoring wells (M-5MW10, M-5MW11, M-5MW12, M-5MW13, M-5MW14, M-5MW16, M-5MW18, M-5MW19, M-5MW20, and M-5MW23) at the M-5 Landfill Site and three monitoring wells (M-8MW12, M-8MW23, and M-8MW24) at the northern adjacent M-8 Landfill Site during eight quarterly sampling events. Surface water samples were collected from four locations (SS-4, SS-5, SS-15, and SS-16) along Mill Creek through the 3rd Quarter 2004 and in two locations (SS-5 and SS-15) from the 4th Quarter 2004 through the 3rd Quarter 2005.

Sampling was conducted by the DPW in accordance with the established protocols as described in the *Fort Monmouth Standard Sampling Operating Procedure [SOP No.: SAM-0205 (August 1999, Revised January 2003 and September 2004)]* and the *NJDEP Field Sampling Procedures Manual*, May 1992 and August 2005. Both groundwater and surface water samples were analyzed for VOCs + 15. Surface water samples were also analyzed for polychlorinated biphenyls (PCBs). Laboratory analyses of the samples were conducted at the Fort Monmouth Environmental Testing Laboratory (FMETL), a New Jersey-certified laboratory (Certification No. 13461).

4.1 Groundwater Monitoring

During the current groundwater sampling program at the M-5 Landfill Site, groundwater was encountered at depths ranging from approximately 2-13 feet bgs (2.10 to 12.75 feet below top of well casing). Static depth to water measurements were collected from 12 monitoring wells on October 8, 2003, January 14, 2004, May 13, 2004, August 20, 2004, December 16, 2004, March 15, 2005, June 3, 2005, and September 16, 2005. Depths were not reported for monitoring wells M-5MW15 and M-5MW25 for the 4th Quarter 2004 or the 1st Quarter 2005. No separate-phase product was observed in any of the 12 monitoring wells during the reporting period. Figure 2-2 shows the locations of the monitoring wells. Depth to water measurements results are summarized in Table 4-1. Groundwater-elevation contour maps were generated for each round based on groundwater elevations calculated for 12 monitoring wells. These contour maps are presented in Figures 4-1 through Figure 4-8 along with the required NJDEP contour map reporting forms.

The contour maps indicate that shallow groundwater underlying the M-5 Landfill Site consistently flows to the west towards Mill Creek and Parkers Creek at elevations ranging from 2.05 to 10.15 feet above mean sea level (msl). No significant variations in groundwater flow conditions were observed through the current monitoring period.

4.2 Groundwater Sampling

Quarterly groundwater sampling of the 10 monitoring wells at the M-5 Landfill Site was conducted by the DPW. Quality control samples for the monitoring period included 12 method blanks, 10 trip blanks, 11 field blanks, and 8 duplicate samples.



Sampling equipment was thoroughly decontaminated before and after each use. Following collection, the groundwater samples were immediately placed in laboratory-supplied bottle ware. Sample containers were labeled, sealed, packed in ice, and transported to the FMETL under proper chain-of-custody procedures.

Copies of the chain-of-custody forms and the laboratory analytical data sheets are presented in Appendix D. A summary of the groundwater sampling activities for the remediation monitoring (Rounds 1 through 34); including round numbers, well IDs, sample IDs, sample locations, collection/analysis dates, analytical parameters, and analysis methods is provided in Table 4-2. Figure 2-2 shows the locations of the monitoring wells. The analytical results are discussed in Section 5.1.

4.3 Surface Water Sampling

Surface water sampling was conducted by the DPW for the current reporting period as part of a base-wide surface-water sampling program. A total of 24 surface water samples were collected over eight rounds of sampling from four locations (SS-4, SS-5, SS-15, and SS-16) along Mill Creek. SS-5 and SS-15 were sampled during eight quarterly sampling events from November 2003 through September 2005, and SS-4 and SS-16 were sampled during four sampling events from November 2003 through August 2004. Figure 2-2 shows the locations of surface water sample collection points. SS-15 and SS-16 are located upstream of the site. SS-4 is located downstream of the site. SS-5 is located adjacent to the M-5 Landfill Site. The samples were analyzed by the FMETL for VOCs and PCBs. The results of these analyses are discussed in Section 5.2.

Sampling equipment was thoroughly decontaminated before and after each use. Surface water samples were collected and immediately placed in laboratory-supplied bottle ware. Sample containers were labeled, sealed, packed in ice, and transported to the FMETL under proper chain-of-custody procedures.

Copies of the chain-of-custody forms and the laboratory analytical data are presented in Appendix E. Table 4-3 presents a summary of surface water sampling activities for Rounds 1 through 36 for sampling points SS-4, SS-5, SS-15, and SS-16; including sampling rounds, sample IDs, stream sampling locations, collection/analysis dates, analytical parameters, and analysis methods.

4.4 Types of Waste Generated and Disposal Methods

The waste types generated by the sampling activities included polyethylene tubing, Teflon[®] bailers, mason string, and personal protective equipment (PPE). The tubing, bailers, string, and PPE were disposed of as non-hazardous waste.



5.0 SAMPLING ANALYTICAL RESULTS

This section includes a summary discussion of the chemical characterization of the site based on the samples collected and analyzed for the current reporting period, including eight quarterly rounds of groundwater monitoring well samples and eight rounds of surface water samples.

5.1 Groundwater Sampling Results

Summaries of the analytical results from each of the 10 monitoring wells on the M-5 Landfill Site and the three monitoring wells on the M-8 Landfill Site for Rounds 1 through 34 are summarized in Tables 5-1 through Table 5-15. Analytes detected in groundwater samples at concentrations above their respective NJDEP GWQC are highlighted and shaded in the tables. Graphs depicting PCE (and daughter product) concentrations over time at wells M-5MW11, M-5MW16, M-5MW19, M-5MW20, M-5MW23, M-8MW12, and M-8MW23 are provided as Figures 5-2A through Figure 5-8C. A summary of results exceeding GWQC in the current reporting period is presented in Table 5-16. Figure 5-1A summarizes the analytical results for tetrachloroethene (PCE), TCE, and cis-1,2-DCE to include all remediation phase sampling events.

During eight quarterly sampling events for the current reporting period, 12 VOCs were detected in the ten M-5 and three M-8 groundwater samples. Five VOCs (benzene, chlorobenzene, ethylbenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene) were identified only in M-8MW24. Benzene and chlorobenzene are contaminants of concern (COCs) at the M-8 Landfill Site. Seven VOCs [2-butanone, PCE, trichloroethene (TCE), cis-1,2-dichloroethene (DCE), vinyl chloride, benzene, and chlorobenzene] were detected at concentrations that exceeded their respective GWQC in more than one sample at the M-5 Landfill and M-8 Landfill monitoring wells, while five VOCs (ethylbenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, acetone, and chloroform) were detected below their respective GWQC at both sites. Based on these and previous results, daughter products, cis-1,2-DCE and TCE, have been added as COCs at the M-5 Landfill Site.

5.1.1 Contaminants of Concern

The following paragraphs summarize the results of the contaminants of concern (COCs) detected above the GWQC during the current reporting period:

- PCE concentrations in monitoring well M-5MW11 ranged from non-detect in Round 34 to 3.10 µg/L in Round 29. PCE concentrations exceeded the GWQC of 1.0 µg/L in seven of the eight sampling rounds.
- PCE concentrations in monitoring well M-5MW16 ranged from 6.22 µg/L in Round 32 to 90.59 µg/L in Round 33. In Round 34, PCE was detected at 9.51 µg/L. PCE concentrations exceeded the GWQC in all eight sampling rounds.
- PCE concentrations in monitoring well M-5MW19 ranged from non-detect in Rounds 29 and 31 through 33 to 5.73 µg/L in Round 34. PCE concentrations exceeded the GWQC in three of the eight sampling rounds.



- PCE concentrations in monitoring well M-5MW20 ranged from 3.96 µg/L in Round 31 to 43.96 µg/L in Round 27. In Round 34, PCE was detected at 8.74 µg/L. PCE concentrations exceeded the GWQC in all eight sampling rounds.
- PCE concentrations in monitoring well M-5MW23 ranged from non-detect in Round 30 to 23.07 µg/L in Round 33. In Round 34, PCE was detected at 7.24 µg/L. PCE concentrations exceeded the GWQC in seven of the eight sampling rounds.
- PCE concentrations in monitoring well M-8MW12 ranged from non-detect in Rounds 27 through 31 and Rounds 33 and 34 to 3.67 µg/L in Round 32. PCE concentrations exceeded the GWQC in one of the eight sampling rounds.
- TCE concentrations in monitoring well M-5MW11 ranged from non-detect in Rounds 30 through 34 to 1.2 µg/L in Round 29. TCE concentrations exceeded the GWQC of 1.0 µg/L in one of the eight sampling rounds.
- TCE concentrations in monitoring well M-5MW16 ranged from 2.80 µg/L in Round 32 to 34.20 µg/L in Round 33. In Round 34, TCE was detected at 34.10 µg/L. TCE concentrations exceeded the GWQC in all eight sampling rounds.
- TCE concentrations in monitoring well M-5MW19 ranged from non-detect in Rounds 30, 32, and 33 to 3.12 µg/L in Round 34. TCE concentrations exceeded the GWQC in five of the eight sampling rounds.
- TCE concentrations in monitoring well M-5MW20 ranged from non-detect in Round 31 to 8.55 µg/L in Round 33. In Round 34, TCE was detected at 2.67 µg/L. TCE concentrations exceeded the GWQC in six of the eight sampling rounds.
- TCE concentrations in monitoring well M-5MW23 ranged from non-detect in Round 27 and Rounds 30 through 33 to 2.07 µg/L in Round 29. In Round 34, TCE was detected at 0.89 µg/L. TCE concentrations exceeded the GWQC in two of the eight sampling rounds.
- TCE concentrations in monitoring well M-8MW12 ranged from non-detect in Round 27, Rounds 29 through 31, and Rounds 33 and 34 to 3.70 µg/L in Round 28. TCE concentrations exceeded the GWQC in two of the eight sampling rounds.
- Cis-1,2-dichloroethene concentrations in monitoring well M-5MW16 ranged from 22.47 µg/L in Round 29 to 283.79 µg/L in Round 34. Cis-1,2-DCE exceeded the GWQC of 10.0 µg/L in all eight sampling rounds.
- Cis-1,2-DCE concentrations in monitoring well M-5 MW20 ranged from non-detect in Round 29 to 13.20 µg/L in Round 33. In Round 34, cis-1,2-DCE was detected at 4.21 µg/L. Cis-1,2-DCE concentrations exceeded the GWQC in one of the eight sampling rounds.

Vinyl chloride was detected at M-8MW23 in two of the eight sampling rounds at 5.13 µg/L (Round 29) and 13.71 µg/L (Round 30), exceeding the GWQC of 5.0 µg/L in two of the eight



sampling rounds. The only other detections of vinyl chloride during all phases of sampling were below the GWQC in M-8MW23 at 2.40 µg/L (Round 28), 2.06 µg/L (Round 23), 1.18 µg/L (Round 10), and in M-5MW16 at 1.21 µg/L (Round 31). Therefore, vinyl chloride is not being named as a contaminant of concern at this time.

There was one detection during this reporting period of 2-butanone that exceeded the GWQC of 300 µg/L. The concentration of 2-butanone in monitoring well M-5MW11 was 448.97 µg/L in Round 27. The 2-butanone was not detected in the following seven sampling rounds (Rounds 28-34).

All other monitoring wells had PCE, TCE, and cis-1,2-DCE concentrations that were non-detect or below the NJDEP GWQC.

5.2 Surface Water Sampling Results

Quarterly surface water samples were collected along Mill Creek at two upstream locations (SS-15 and SS-16), one adjacent stream location (SS-5), and one downstream location (SS-4) during the current sampling period (Surface Water Sampling Rounds 29 through 36). Results for surface water samples for Rounds 1 through 36 (October 1996 through September 2005) are summarized in Tables 5-17 through Table 5-20. Surface water contaminant distributions over time are presented in Figure 5-1B. The results of the current surface water sampling events are discussed below.

Surface water sampling results were compared to the appropriate fresh or saline water NJDEP Surface Water Quality Criteria (SWQC). Concentrations of VOCs that exceeded their respective SWQC are summarized in Table 5-21.

During eight quarterly sampling events for the current reporting period, eight VOCs were detected in surface water samples. Two VOCs (PCE and TCE) were detected at concentrations that exceeded their respective SWQC in at least one sample from SS-15 only, while six VOCs were detected below their respective SWQC.

At SS-15, PCE was detected at concentrations ranging from 1.25 µg/L (Rounds 32 and 36) to 2.92 µg/L (Round 34) above its SWQC of 0.388 µg/L. PCE concentrations exceeded the SWQC in all eight rounds of sampling. Also at SS-15, TCE was detected at 1.24 µg/L (Round 35), which exceeded the SWQC of 1.09 µg/L.

As previously noted, surface water sampling point, SS-15, is located upstream of the M-5 Landfill Site and outside of the Fort Monmouth property boundary. The concentrations of PCE and TCE observed entering the property west of the M-2 and M-5 Landfill Sites are not derived from Army activities at Fort Monmouth.

5.3 Tentatively Identified Compounds (TICs)

During this reporting period, seven of the 13 monitoring wells sampled did not have detected VOC tentatively identified compounds. These were M-5MW10, M-5MW13, M-5MW14, M-5MW16, M-5MW18, M-5MW20, and M-8MW23. Sampling results also indicated five of the other six monitoring wells had only one round of detected TICs. These results ranged from a



concentration of 3 µg/L to 29 µg/L. TICs were reported in five of the eight sampling rounds at M-8MW24. There were no results exceeding the NJDEP criteria of 100 µg/L for individual compounds or 500 µg/L for Total TIC concentrations. Table 5-22 lists the VOC TICs for this reporting period.

5.4 Quality Assurance/Quality Control (QA/QC)

To verify the reliability of the analytical results, VEETech reviewed the holding times for each sample and the results of the analyses of 12 method blanks, 10 trip blanks, 11 field blanks, and eight field duplicate samples for VOCs. Samples were analyzed by the FMETL within the prescribed holding time requirements for the analytical method.

Method Blanks

Laboratory method blanks accompanied each batch of samples for the M-5 Landfill Site. These method blanks consisted of laboratory-grade water that was processed identically to the samples and analyzed with the sample batch. A total of 12 method blanks were analyzed with the M-5 Landfill Site samples.

Two VOCs, acetone and chloroform, were detected in three method blank samples at concentrations below their respective GWQC. Both acetone and chloroform are common laboratory contaminants, and their detection in the method blank samples is not indicative of a widespread laboratory contamination problem. More importantly, none of the COCs (PCE, TCE, and cis-12,-DCE) were detected in any of the method blank samples.

Trip Blanks

A total of 10 trip blanks were included as part of the M-5 Landfill Site sampling program to document that volatile organics were not introduced into the samples during the handling process. The trip blanks were prepared by the FMETL and consisted of sample bottles filled with laboratory-deionized water. The trip blanks remained with the sample bottles in coolers and were returned to the laboratory for analysis with the groundwater samples.

Chloroform was detected in six of the 10 trip blanks; none of the detections exceeded the NJDEP groundwater criteria. As noted above, chloroform is a common laboratory artifact.

Field Blanks

One field blank sample was obtained during each day's sampling activities to document the equipment decontamination procedures. A total of 11 field samples (e.g., field blanks) were collected during the M-5 Landfill Site sampling program. The field blanks were collected by rinsing deionized water, supplied by the laboratory, over the sampling equipment used for each day's activities. The water was collected in clean laboratory-supplied containers and submitted for analysis with the M-5 Landfill Site groundwater samples.

Chloroform was detected in six of the 11 field blanks; none of the detections exceeded the NJDEP groundwater criteria. As noted above, chloroform is a common laboratory artifact. The COCs were not detected in any of the field blanks.



Duplicate Samples

A total of eight field duplicate samples were also collected during the M-5 Landfill Site sampling events to verify the consistency of the entire sampling and analytical procedure. The results for all of the duplicate samples were close to those obtained for the original samples. The relative percent differences (RPDs) for the duplicate sample analyses ranged from 0.0% to 200.0%, however, the average RPD for all of the results was 28.05%. Based on average RPDs, the QA/QC sample results indicate good precision.

6.0 REMEDIAL ACTION PROGRESS

The long-term groundwater monitoring results indicate the concentrations of PCE are decreasing and the daughter product concentrations are increasing in the groundwater at the M-5 Landfill Site as a result of enhanced natural attenuation. There is also no indication of plume migration and contamination from the M-5 Landfill Site is not impacting Mill Creek.

6.1 Cost of Remediation Incurred To-Date

The total cost-to-date from the annual implementation of the remedial actions performed at the M-5 Landfill Site is provided below:

M-5 LANDFILL (SITE # FTMM-05) FUNDING HISTORY								
ACTUAL COST (THOUSANDS \$)								
YEAR	PA	SI	RI	RD	RA	RAO	LTM	TOTAL
1993	3.90							3.90
1994		43.40						43.40
1995		2.40						2.40
1996		0.55					22.50	23.05
1997			14.60				23.80	38.40
1998			68.00	5.00			14.80	87.80
1999			60.00	20.00	39.00	48.00	18.00	185.00
2000			163.00			48.00	35.00	246.00
2001						50.00	30.00	80.00
2002						89.00	27.00	116.00
2003						88.00	27.00	115.00
2004						88.00	27.00	115.00
2005						88.00	27.00	115.00
TOTALS =	3.90	46.35	305.60	25.00	39.00	499.00	252.10	1170.95

6.2 Discharge to Groundwater Permit

A NJPDES DGW permit application was submitted in November 2001 to obtain approval for continuation of the HRC[®] injection program at the M-5 Landfill Site. The fourth HRC[®] injection event was performed between June and August 2004 as an extension of the NJDEP Permit-by-Rule approval. All subsequent HRC[®] injections will be performed under NJDEP regulatory requirements.

6.3 Conclusions

Figures 5-2A through Figure 5-8C illustrate the trend in concentrations of PCE and its daughter products over time at monitoring wells M-5MW11, M-5MW16, M-5MW19, M-5MW20, M-5MW23, M-8MW12, and M-8MW23 where PCE and its daughter products have been



detected above and below their respective GWQC. During this reporting period, PCE and its daughter products were not detected in six of the 13 monitoring wells (M-5MW10, M-5MW12, M-5MW13, M-5MW14, M-5MW18, and M-8MW24). Monitoring wells M-5MW15 and M-5MW25 were last sampled in July 2003.

The trends of PCE and its daughter (breakdown) products in groundwater over time after the implementation of the HRC[®] injection program are discussed below:

PCE was detected at concentrations exceeding the GWQC of 1.0 µg/L in one to eight sampling rounds collected from six monitoring wells. Concentrations ranged from 1.08 µg/L in M-5MW11 (Round 27) to 90.59 µg/L in M-5MW16 (Round 33). The PCE concentration in M-5MW16 decreased to 9.51 µg/L in Round 34.

TCE was detected at concentrations exceeding the GWQC of 1.0 µg/L in one to eight sampling rounds from six monitoring wells. Concentrations ranged from 1.02 µg/L in M-5MW23 (Round 28) to 34.20 µg/L in M-5MW16 (Round 33).

Cis-1,2-DCE was detected at concentrations exceeding the GWQC of 10 µg/L in one to eight sampling rounds collected from two monitoring wells. Concentrations ranged from 13.20 µg/L in M-5MW20 to 283.79 µg/L in M-5MW16 (Round 34).

Vinyl chloride, which has not been designated a COC, was detected at concentrations exceeding the GWQC of 5.0 µg/L in two rounds at M-8MW23. Concentrations were 5.13 (Round 29) and 13.71 µg/L (Round 30). Sampling results from all sampling rounds at the other 14 monitoring wells (11 at the M-5 Landfill and three at the M-8 Landfill) for vinyl chloride have been either non-detect or below the GWQC.

Although concentrations of PCE have fluctuated over time (specifically in M-5MW11, M-5MW16, M-5MW19, M-5MW20, M-5MW23, M-8MW12, and M-8MW23), the PCE levels have generally decreased in all monitoring wells where concentrations were above the GWQC at the onset of the first HRC[®] injection. The conclusion is that HRC[®] injections have enabled natural attenuation to proceed at an increased rate; however, as expected, daughter product concentrations have increased. Areas around M-5MW16, M-5MW19, M-5MW20, and M-5MW23 are still of concern.

6.4 Recommendations

Although COC concentrations have fluctuated in some wells, based on the generally decreasing trend of PCE and the increase of daughter products over time, VEETech recommends that the DPW continue quarterly sampling and monitoring activities. Remedial action progress will be monitored and reported to the NJDEP periodically.

6.4.1 Sampling Program

The following table provides a summary of the current quarterly groundwater and surface water sampling program at the M-5 Landfill Site. At this time, no change in the current program is planned. Any future alterations involving laboratory analyses and the elimination of certain wells from the program will be based on the distribution of the COCs over time.

Monitoring Well	Analysis	Future Sampling Status	Reason
M-5MW10	VOCs	Continue VOCs Quarterly	Downgradient of Contamination Source
M-5MW11	VOCs	Continue VOCs Quarterly	Exceedances of PCE and TCE
M-5MW12	VOCs	Continue VOCs Quarterly	Downgradient of Contamination Source
M-5MW13	VOCs	Continue VOCs Quarterly	Downgradient of Contamination Source
M-5MW14	VOCs	Continue VOCs Quarterly	Downgradient of Contamination Source
M-5MW16	VOCs	Continue VOCs Quarterly	Exceedances of PCE, TCE, & cis-1,2-DCE
M-5MW18	VOCs	Continue VOCs Quarterly	Downgradient of Contamination Source
M5-MW19	VOCs	Continue VOCs Quarterly	Exceedances of PCE and TCE
M-5MW20	VOCs	Continue VOCs Quarterly	Exceedances of PCE, TCE, & cis-1,2-DCE
M-5MW23	VOCs	Continue VOCs Quarterly	Exceedances of PCE and TCE
M-8MW12	VOCs	Continue VOCs Quarterly	Exceedances of PCE and TCE
M-8MW23	VOCs	Continue VOCs Quarterly	Exceedances of vinyl chloride and downgradient of contamination source
M-8MW24	VOCs	Continue VOCs Quarterly	COCs for M-5 Landfill Site not detected, but exceedances of benzene and chlorobenzene

Surface Water Location	Analysis	Future Sampling Status	Reason
SS-4	VOCs, PCBs	Discontinued	No COCs detected above SWQC in 32 rounds and was eliminated after the 3 rd Quarter 2004
SS-5	VOCs, PCBs	Continue VOCs Quarterly	Exceedances of PCE
SS-15	VOCs, PCBs	Continue VOCs Quarterly	Exceedances of PCE and TCE
SS-16	VOCs, PCBs	Discontinued	No COCs detected above SWQC in 13 rounds and was eliminated after the 3 rd Quarter 2004

6.5 Remedial Action Schedule

The table provided in Appendix G is a schedule summary for all remedial activities at the M-5 Landfill Site from the Preliminary Assessment phase through the end of this reporting period, 3rd Quarter 2005.



7.0 REFERENCES

USATHAMA (U.S. Army Toxic and Hazardous Materials Agency), 1980. *Installation Assessment of Fort Monmouth*. Report 171. May 1980.

U.S. Geological Survey, Photorevised 1989, *Long Branch Quadrangle Map*.

Roy F. Weston, Inc. (Weston), December 1993, *Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey*

Roy F. Weston, Inc. (Weston), December 1995, *Final Site Investigation – Fort Monmouth, New Jersey, Main Post and Charles Wood Areas*

ATC Associates, Inc., February 2000, *Remedial Action Work Plan – Landfill M-5, Main Post, Fort Monmouth, New Jersey*.

New Jersey Department of Environmental Protection, February 2003, *Technical Requirements for Site Remediation*, NJAC 7:26E

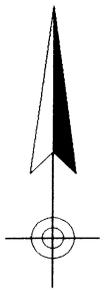
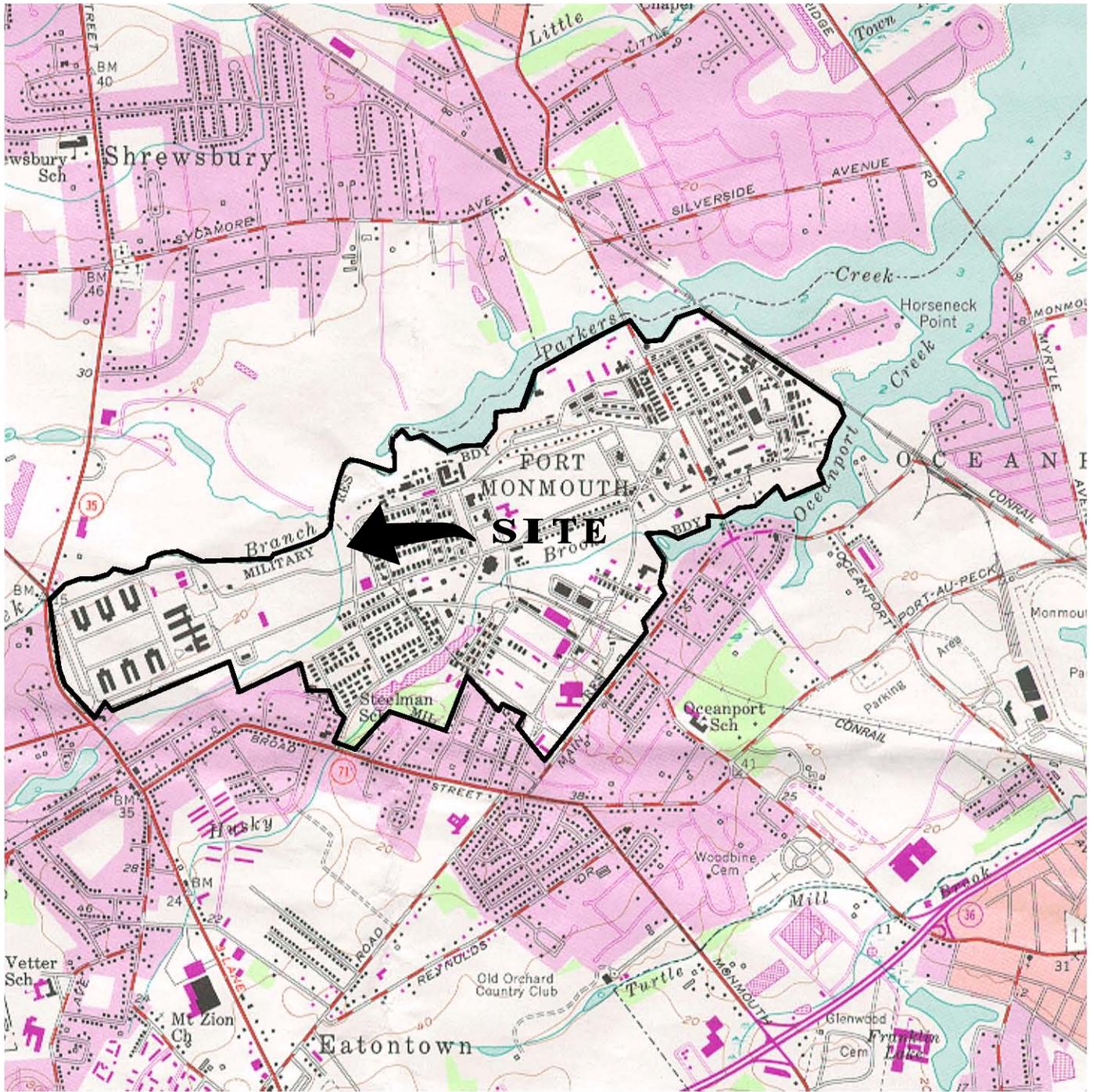
New Jersey Department of Environmental Protection *Field Sampling Procedures Manual*, 1992 and 2005.

U.S. Army Garrison, Fort Monmouth, New Jersey, Directorate of Public Works (DPW), August 1999, Revised January 2003 and September 2004, *Fort Monmouth Standard Sampling Operating Procedure (SOP No.: SAM-0205)*.

Versar, Inc., August 2003, *Final Remedial Action Progress Report- M-5 Landfill Site, U.S. Army Installation Fort Monmouth, Fort Monmouth, New Jersey*.

Versar, Inc., September 2005, *Final Remedial Action Progress Report- M-5 Landfill Site, U.S. Army Installation Fort Monmouth, Fort Monmouth, New Jersey*.

FIGURES



LONG BRANCH, N. J.
 40073-C8-TF-024
 1954
 PHOTOREVISED 1981
 DMA 6164 I SE - SERIES V822



Figure 2-1
M-5 Landfill (FTMM-05)
Site Location Map
Fort Monmouth, New Jersey



VEETech, P.C.

113 Centrestw Court
 Cary, NC 27513
 Ph. 919-388-0037 Ex. 919-388-0038
 www.veetechpc.com

Technologists, Engineers and Designers For a Cleaner Environment

Mapped, edited and published by the U.S. Geological Survey

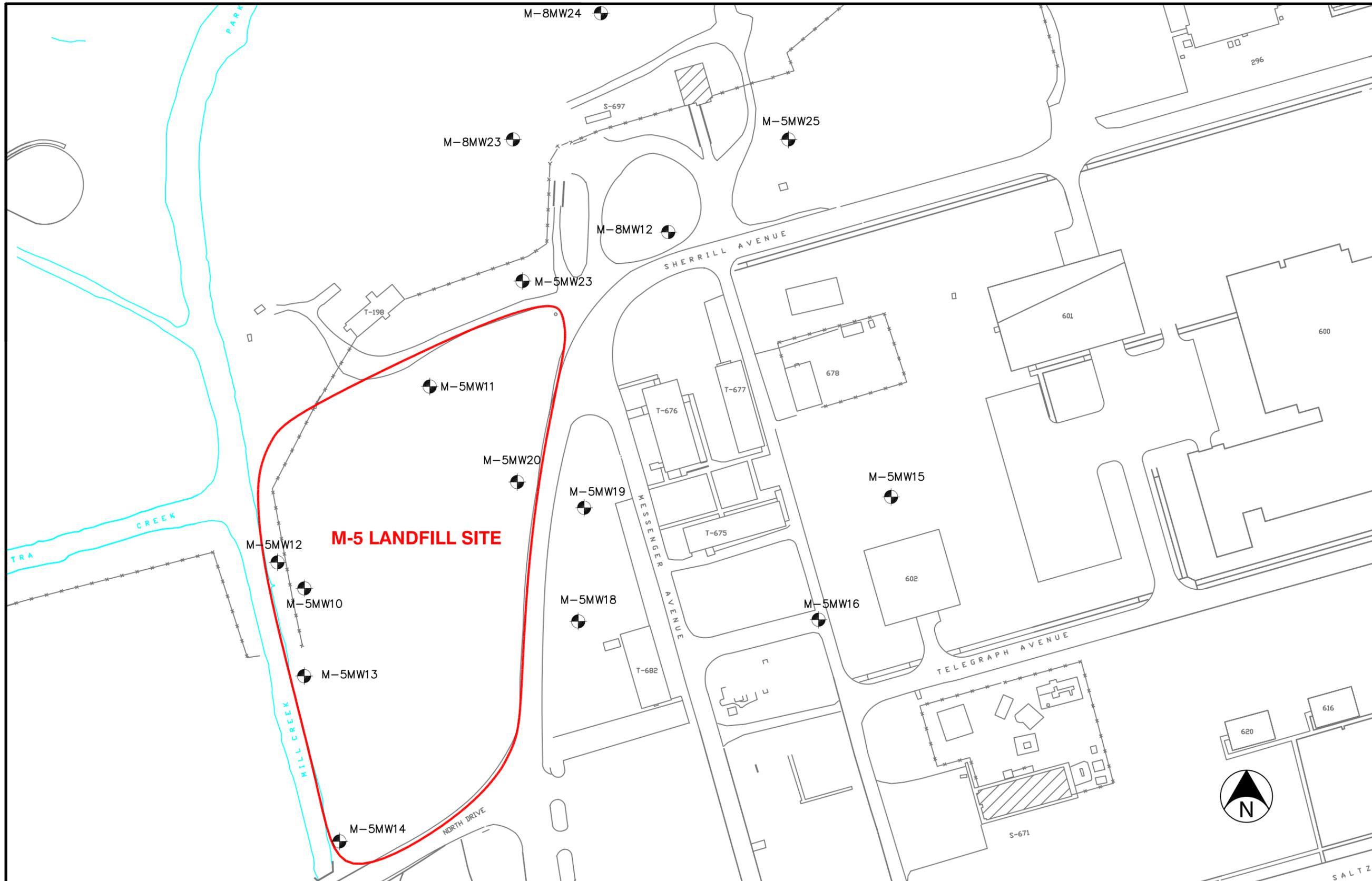


FIGURE 2-2
SITE LAYOUT MAP

M-5 LANDFILL SITE
FORT MONMOUTH, NEW JERSEY

PROJECT NO.: 2011-05-011

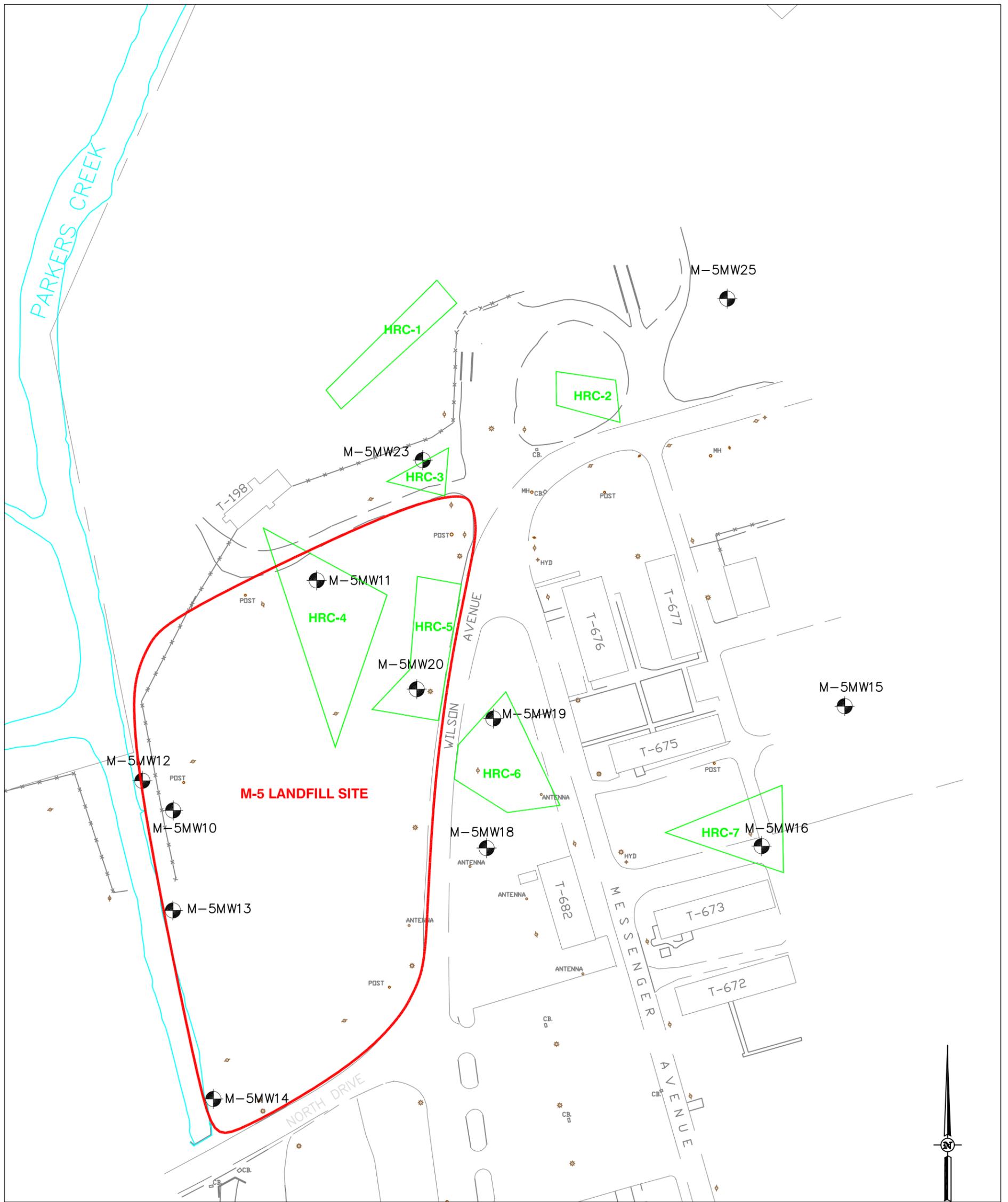
FIGURE NO.: 2-2

16-FEB-09

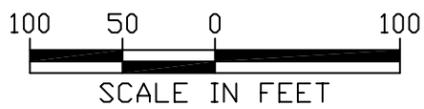
FIGURE NO.
2-2

SCALE





Treatment Area	Area (square feet)	Number of Injection Points
HRC-1	3,200	22
HRC-2	1,800	13
HRC-3	900	6
HRC-4	8,500	59
HRC-5	7,000	49
HRC-6	6,000	42
HRC-7	6,000	42

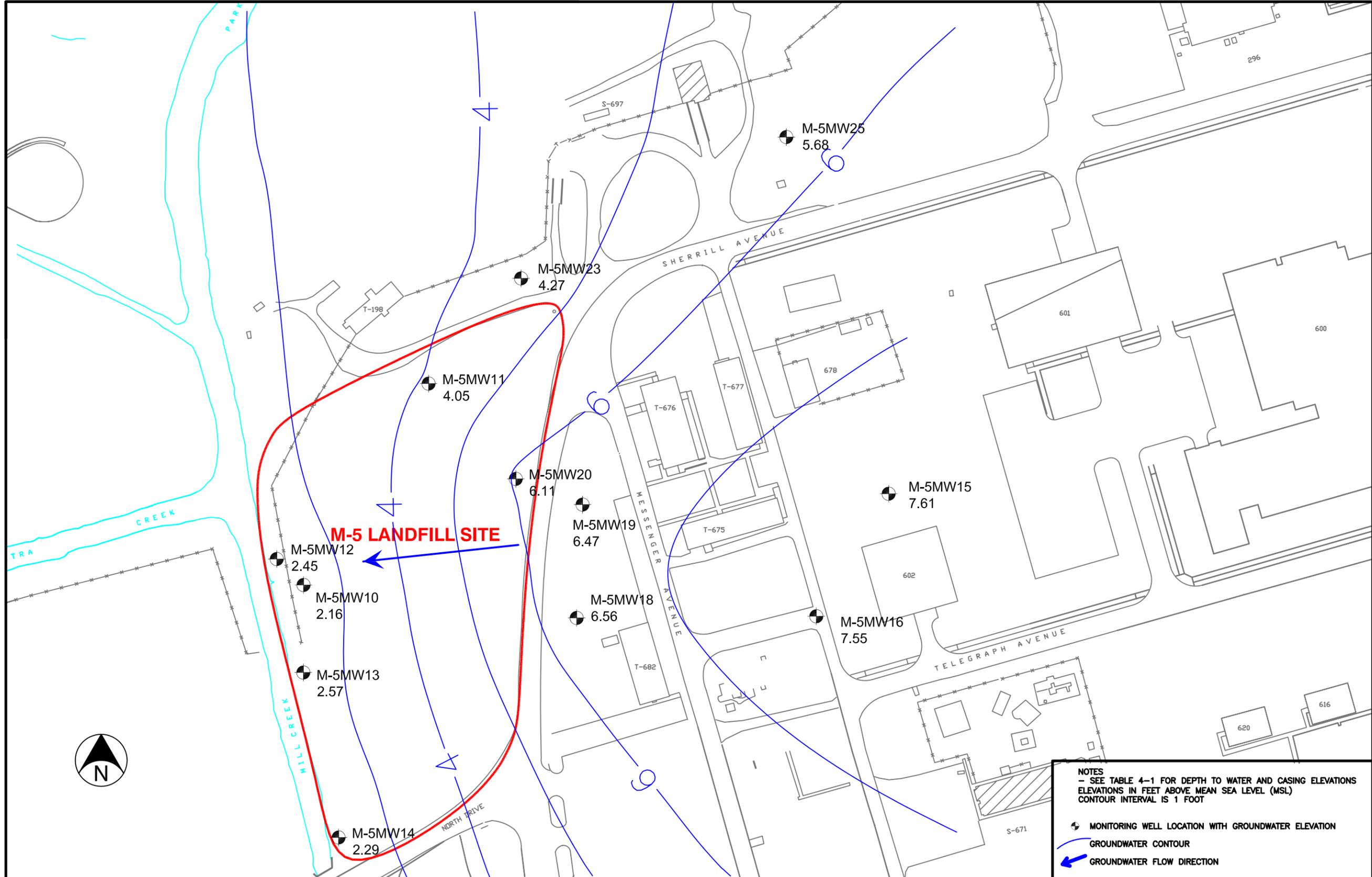


LEGEND

-  MONITORING WELL LOCATION
-  HYDROGEN RELEASING COMPOUND TREATMENT AREA

SOURCE: ATC ASSOCIATES, INC., 1998, REMEDIAL ACTION WORK PLAN
M-5 LANDFILL SITE, FORT MONMOUTH, NEW JERSEY

REV.	REVISIONS	APPROVED	DATE	DRAWN BY
TITLE: FIGURE 3-1 BIOREMEDIATION AREAS M-5 LANDFILL SITE FORT MONMOUTH, NEW JERSEY				
DRAWN BY: TJK		DATE DRAWN: 04 MAY 06		
CHECKED BY: SM		DATE CHECKED: 01 NOV 07		
APPROVED BY:		DATE APPROVED:		
		FIGURE No.: 3-1		
		PROJECT No.: 2011-05-011		
		SCALE: 1" = 100'		
SHEET 1 OF 1		REV.:		



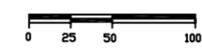
GROUNDWATER CONTOUR MAP (OCTOBER 8, 2003)

M-5 LANDFILL SITE
FORT MONMOUTH, NEW JERSEY

PROJECT NO.: 2011-05-011

FIGURE NO.: 4-1

SCALE



16-FEB-09

FIGURE NO.

4-1

APPENDIX G
Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

Figure 4-1

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ___ No . If yes, attach new "Well Certification - Form B - Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ___ No . If yes, identify these wells.

3. Are there any monitor wells present at the site but omitted from the contour map? Yes ___ No . Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event? Yes ___ No . Were any of the monitor wells with separate phase product included in the ground water contour map? Yes ___ No . If yes, show the formula used to correct the water table elevation.

7:26E - APPENDIX G - Contour Map Reporting Form

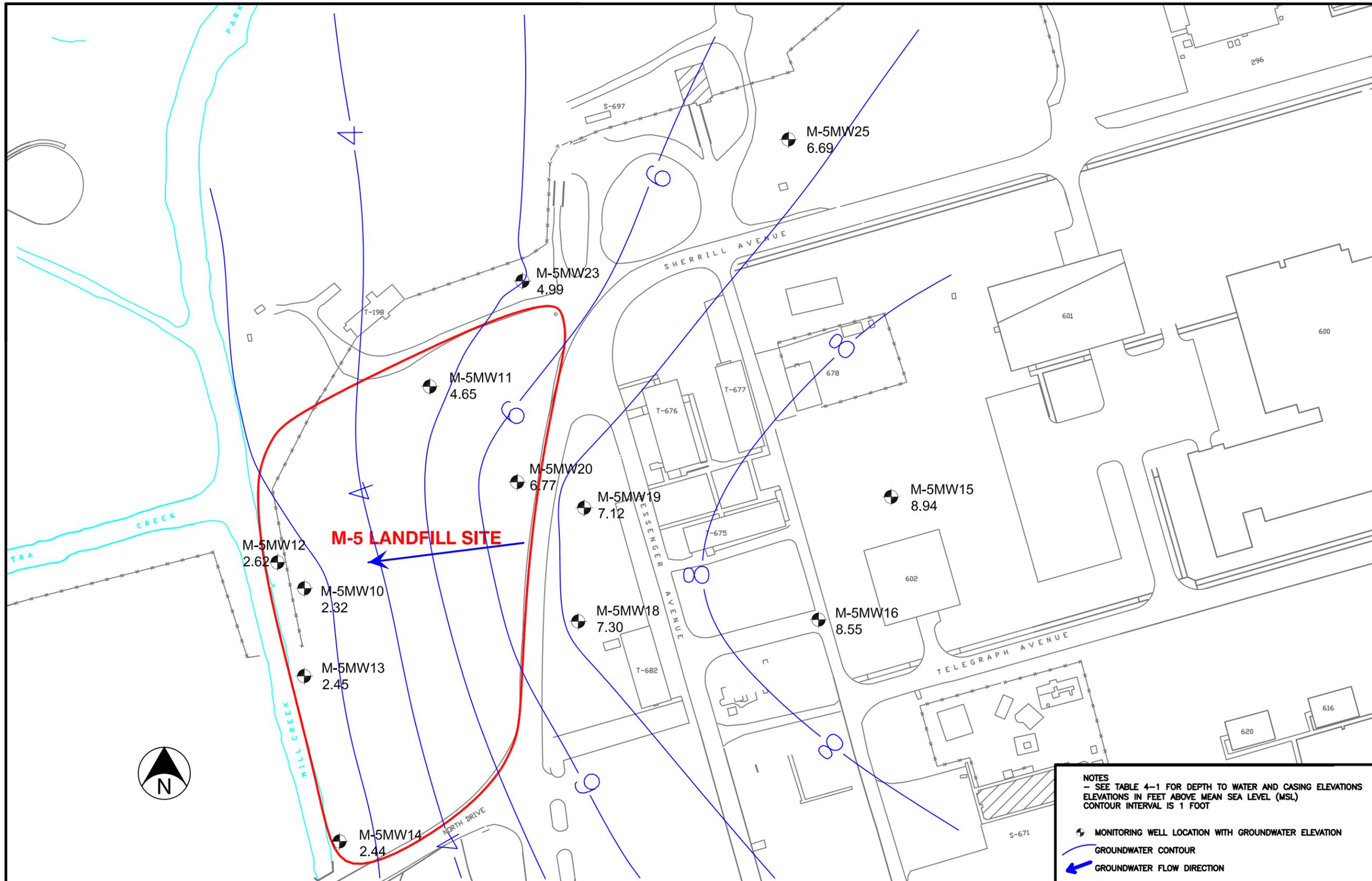
5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? Yes ___ No . If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ___ No . Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes No ___. If no, justify inclusion of those wells.

8. Were the ground water contours computer generated ___, computer aided , or hand-drawn ___? If computer aided or generated, identify the interpolation method(s) used.

Surfer Contouring Software



GROUNDWATER CONTOUR MAP (JANUARY 14, 2004)

M-5 LANDFILL SITE
FORT MONMOUTH, NEW JERSEY

PROJECT NO.: 2011-05-011

FIGURE NO.: 4-2

SCALE



16-FEB-09

FIGURE NO.
4-2

APPENDIX G
Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

Figure 4-2

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ___
No . If yes, attach new "Well Certification - Form B -- Location Certification" as found in the
"Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify
the reason for the elevation change (damage to casing, installation of recovery system in
monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher
than the top of the well screen? Yes ___ No . If yes, identify these wells.

3. Are there any monitor wells present at the site but omitted from the contour map? Yes ___
No . Unless the omission of the well(s) has been previously approved by the Department,
justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event?
Yes ___ No . Were any of the monitor wells with separate phase product included in the ground
water contour map? Yes ___ No . If yes, show the formula used to correct the water table
elevation.

7:26E - APPENDIX G - Contour Map Reporting Form

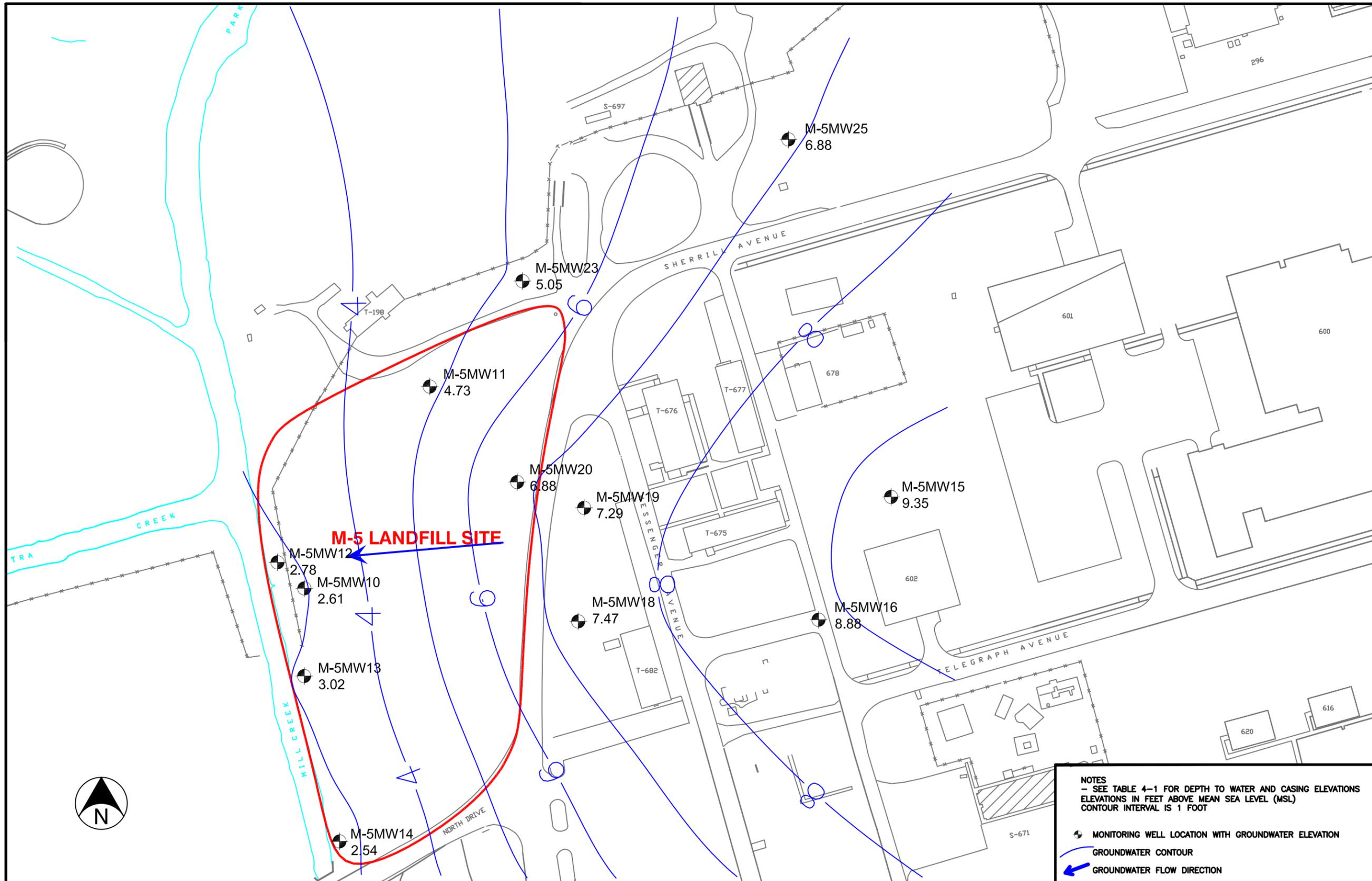
5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? Yes ___ No X. If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ___ No X. Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes X No ___ . If no, justify inclusion of those wells.

8. Were the ground water contours computer generated ___, computer aided X, or hand-drawn ___? If computer aided or generated, identify the interpolation method(s) used.

Surfer Contouring Software



NOTES
 - SEE TABLE 4-1 FOR DEPTH TO WATER AND CASING ELEVATIONS
 ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (MSL)
 CONTOUR INTERVAL IS 1 FOOT

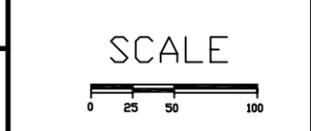
MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION
 GROUNDWATER CONTOUR
 GROUNDWATER FLOW DIRECTION

GROUNDWATER CONTOUR
 MAP (MAY 13, 2004)

M-5 LANDFILL SITE
 FORT MONMOUTH, NEW JERSEY

PROJECT NO.: 2011-05-011

FIGURE NO.: 4-3



16-FEB-09

FIGURE NO.
 4-3



APPENDIX G
Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

Figure 4-3

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ___
No . If yes, attach new "Well Certification - Form B - Location Certification" as found in the
"Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify
the reason for the elevation change (damage to casing, installation of recovery system in
monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher
than the top of the well screen? Yes ___ No . If yes, identify these wells.

3. Are there any monitor wells present at the site but omitted from the contour map? Yes ___
No . Unless the omission of the well(s) has been previously approved by the Department,
justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event?
Yes ___ No . Were any of the monitor wells with separate phase product included in the ground
water contour map? Yes ___ No . If yes, show the formula used to correct the water table
elevation.

7:26E - APPENDIX G - Contour Map Reporting Form

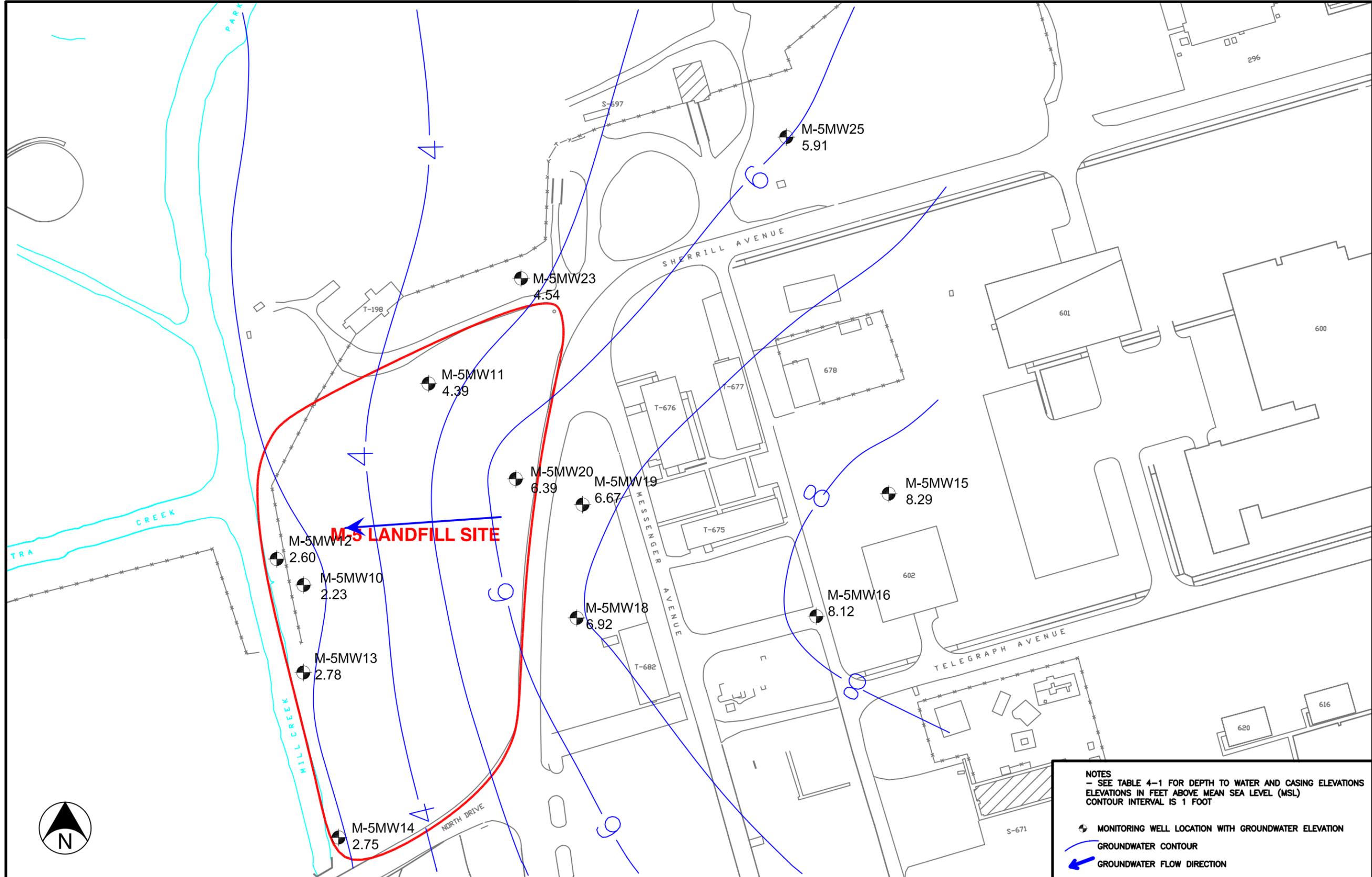
5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? Yes ___ No X. If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ___ No X. Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes X No ___ . If no, justify inclusion of those wells.

8. Were the ground water contours computer generated ___, computer aided X, or hand-drawn ___? If computer aided or generated, identify the interpolation method(s) used.

Surfer Contouring Software



NOTES
 - SEE TABLE 4-1 FOR DEPTH TO WATER AND CASING ELEVATIONS
 ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (MSL)
 CONTOUR INTERVAL IS 1 FOOT

MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION
 GROUNDWATER CONTOUR
 GROUNDWATER FLOW DIRECTION

PROJECT NO.: 2011-05-011

FIGURE NO.: 4-4

SCALE

16-FEB-09

FIGURE NO.
 4-4

GROUNDWATER CONTOUR
 MAP (AUGUST 20, 2004)

M-5 LANDFILL SITE
 FORT MONMOUTH, NEW JERSEY



APPENDIX G
Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

Figure 4-4

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ___
No . If yes, attach new "Well Certification - Form B - Location Certification" as found in the
"Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify
the reason for the elevation change (damage to casing, installation of recovery system in
monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher
than the top of the well screen? Yes ___ No . If yes, identify these wells.

3. Are there any monitor wells present at the site but omitted from the contour map? Yes ___
No . Unless the omission of the well(s) has been previously approved by the Department,
justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event?
Yes ___ No . Were any of the monitor wells with separate phase product included in the ground
water contour map? Yes ___ No . If yes, show the formula used to correct the water table
elevation.

7:26E - APPENDIX G - Contour Map Reporting Form

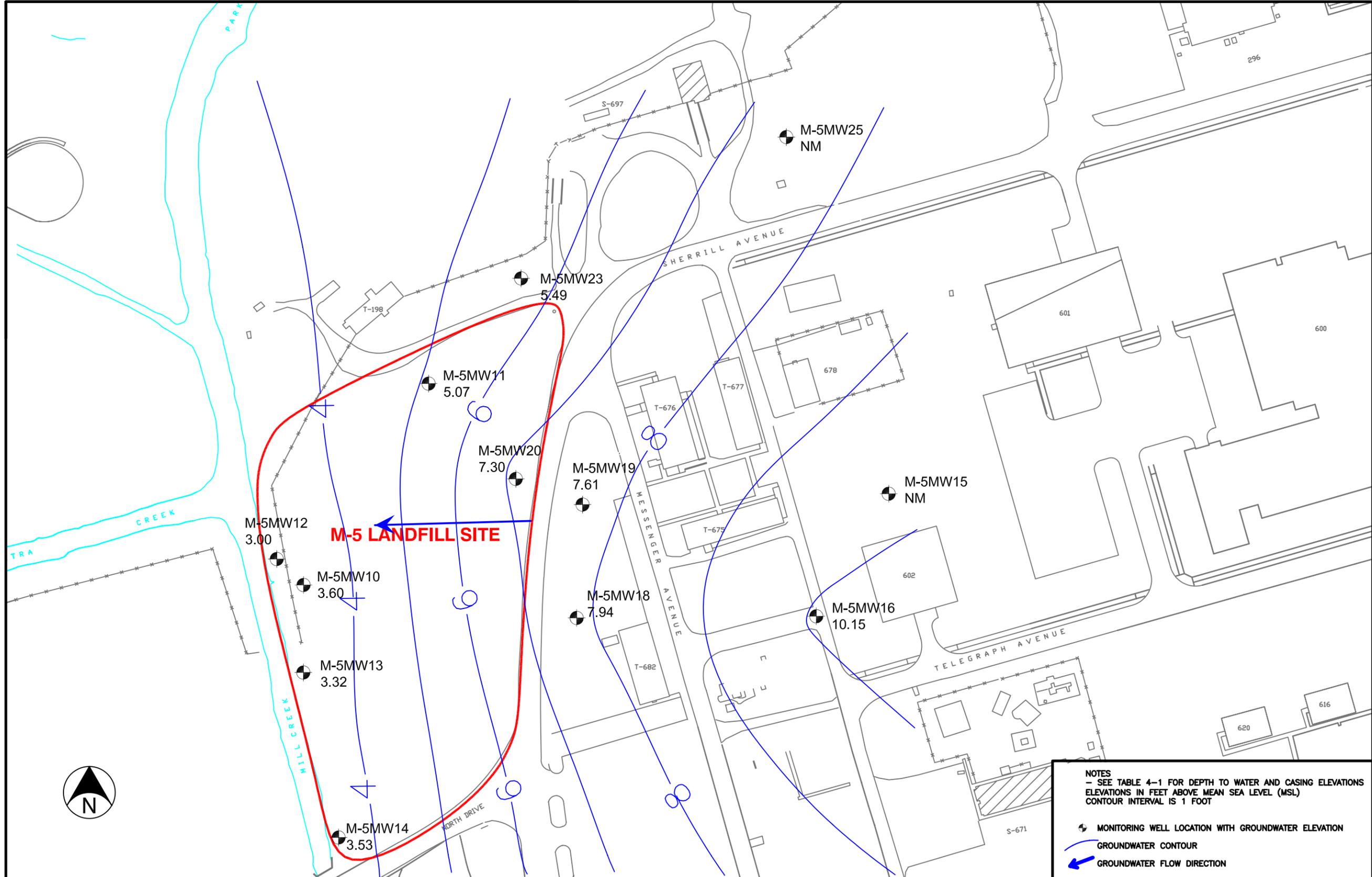
5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? Yes ___ No X. If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ___ No X. Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes X No ___ . If no, justify inclusion of those wells.

8. Were the ground water contours computer generated ___, computer aided X, or hand-drawn ___? If computer aided or generated, identify the interpolation method(s) used.

Surfer Contouring Software



NOTES
 - SEE TABLE 4-1 FOR DEPTH TO WATER AND CASING ELEVATIONS
 ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (MSL)
 CONTOUR INTERVAL IS 1 FOOT

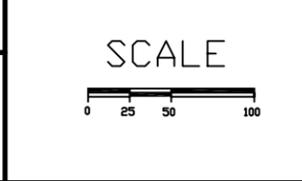
MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION
 GROUNDWATER CONTOUR
 GROUNDWATER FLOW DIRECTION

GROUNDWATER CONTOUR
 MAP (DECEMBER 16, 2004)

M-5 LANDFILL SITE
 FORT MONMOUTH, NEW JERSEY

PROJECT NO.: 2011-05-011

FIGURE NO.: 4-5



16-FEB-09
 FIGURE NO.
 4-5



APPENDIX G
Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

Figure 4-5

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ___ No . If yes, attach new "Well Certification - Form B - Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ___ No . If yes, identify these wells.

3. Are there any monitor wells present at the site but omitted from the contour map? Yes ___ No . Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event? Yes ___ No . Were any of the monitor wells with separate phase product included in the ground water contour map? Yes ___ No . If yes, show the formula used to correct the water table elevation.

7:26E - APPENDIX G - Contour Map Reporting Form

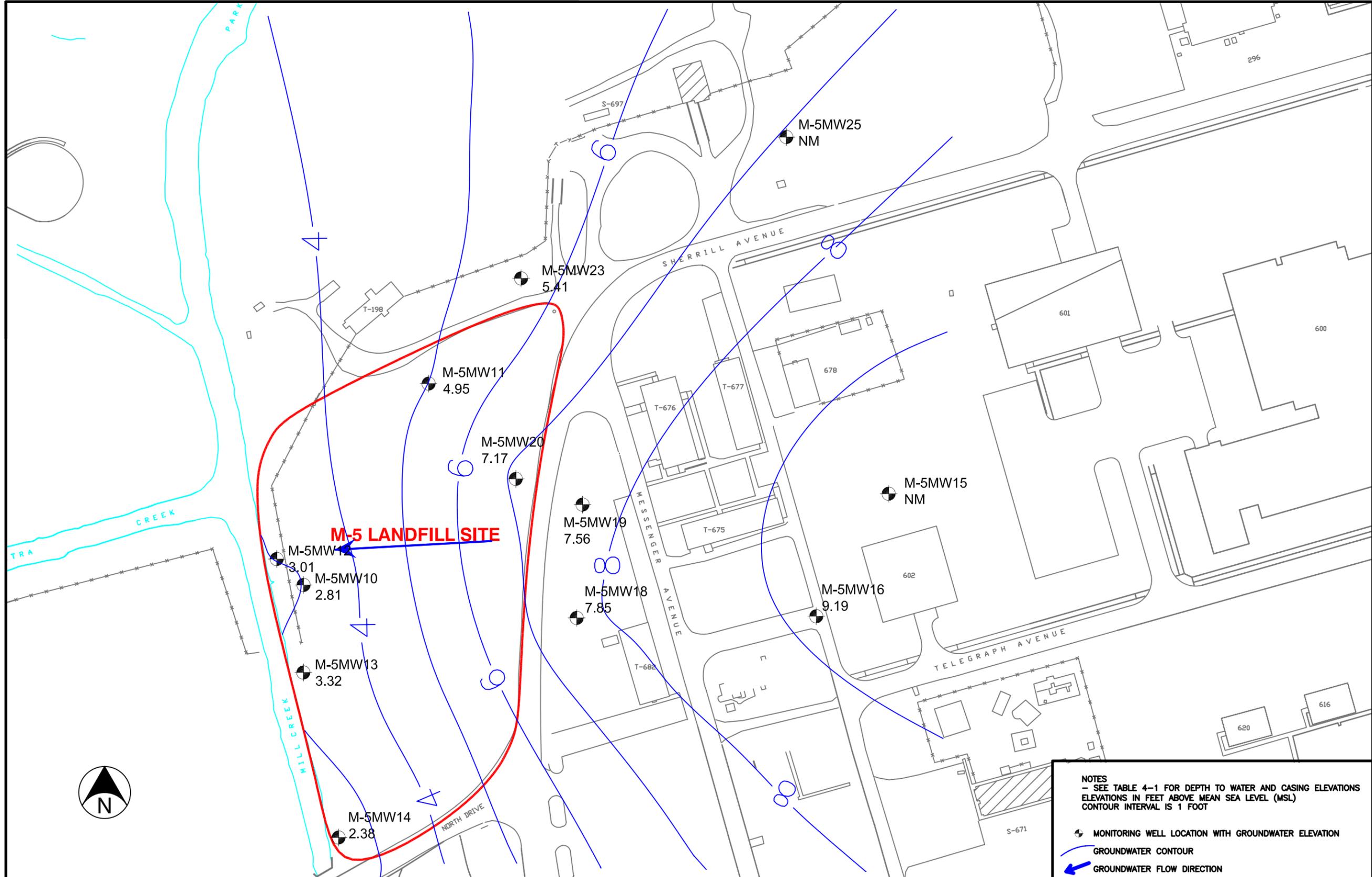
5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? Yes ___ No . If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ___ No . Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes No ___ . If no, justify inclusion of those wells.

8. Were the ground water contours computer generated ___, computer aided , or hand-drawn ___? If computer aided or generated, identify the interpolation method(s) used.

Surfer Contouring Software

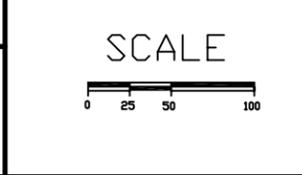


NOTES
 - SEE TABLE 4-1 FOR DEPTH TO WATER AND CASING ELEVATIONS
 ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (MSL)
 CONTOUR INTERVAL IS 1 FOOT

MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION
 GROUNDWATER CONTOUR
 GROUNDWATER FLOW DIRECTION

PROJECT NO.: 2011-05-011

FIGURE NO.: 4-6



16-FEB-09

FIGURE NO.
4-6

GROUNDWATER CONTOUR
 MAP (MARCH 15, 2005)

M-5 LANDFILL SITE
 FORT MONMOUTH, NEW JERSEY



APPENDIX G
Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

Figure 4-6

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ___ No . If yes, attach new "Well Certification - Form B - Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ___ No . If yes, identify these wells.

3. Are there any monitor wells present at the site but omitted from the contour map? Yes ___ No . Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event? Yes ___ No . Were any of the monitor wells with separate phase product included in the ground water contour map? Yes ___ No . If yes, show the formula used to correct the water table elevation.

7:26E - APPENDIX G - Contour Map Reporting Form

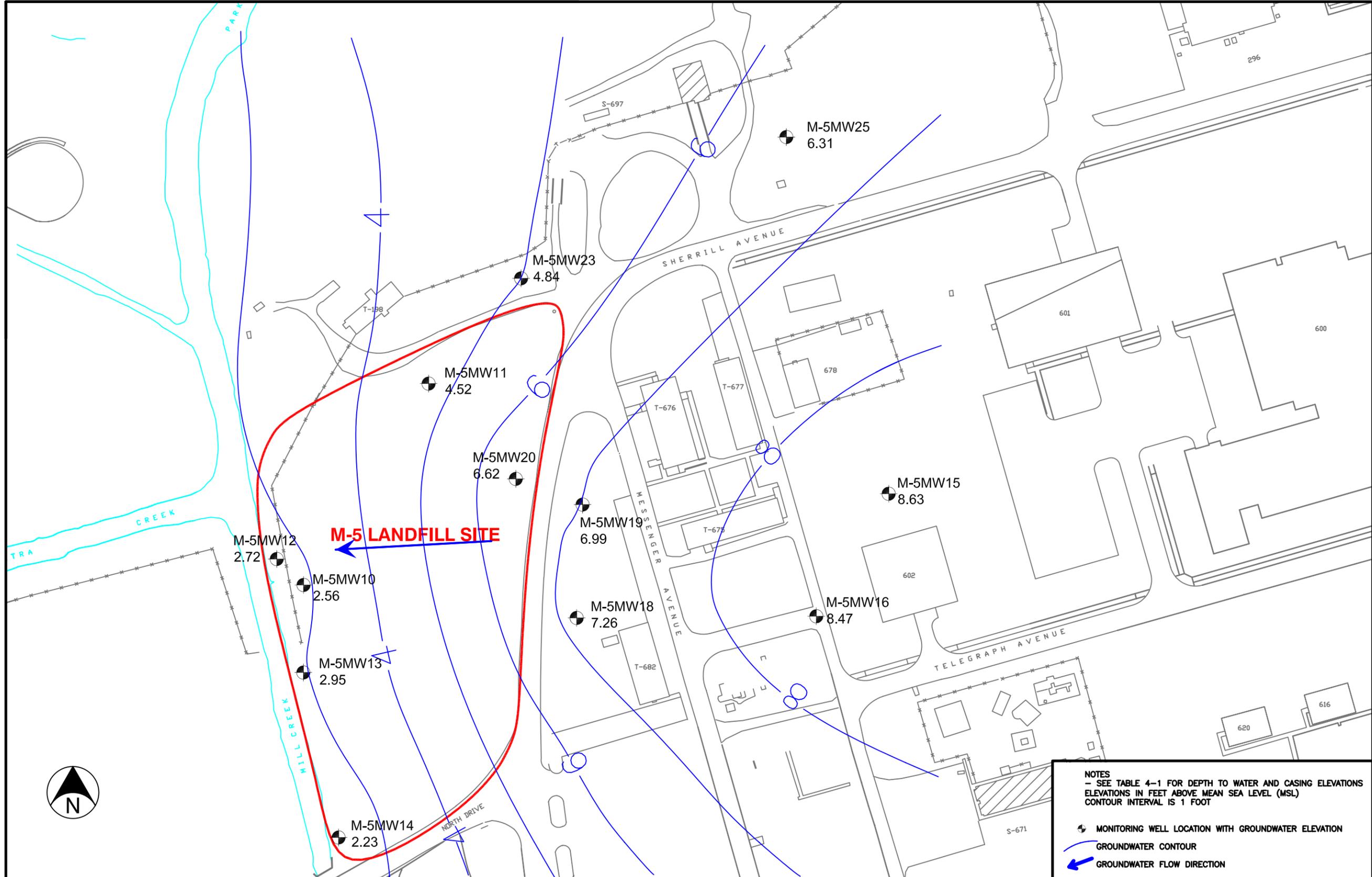
5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? Yes ___ No . If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ___ No . Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes No ___ . If no, justify inclusion of those wells.

8. Were the ground water contours computer generated ___, computer aided , or hand-drawn ___? If computer aided or generated, identify the interpolation method(s) used.

Surfer Contouring Software



NOTES
 - SEE TABLE 4-1 FOR DEPTH TO WATER AND CASING ELEVATIONS
 ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (MSL)
 CONTOUR INTERVAL IS 1 FOOT

MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION
 GROUNDWATER CONTOUR
 GROUNDWATER FLOW DIRECTION

GROUNDWATER CONTOUR
 MAP (JUNE 3, 2005)

M-5 LANDFILL SITE
 FORT MONMOUTH, NEW JERSEY

PROJECT NO.: 2011-05-011

FIGURE NO.: 4-7

SCALE

16-FEB-09
 FIGURE NO.
 4-7



APPENDIX G
Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

Figure 4-7

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ___
No . If yes, attach new "Well Certification - Form B - Location Certification" as found in the
"Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify
the reason for the elevation change (damage to casing, installation of recovery system in
monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher
than the top of the well screen? Yes ___ No . If yes, identify these wells.

3. Are there any monitor wells present at the site but omitted from the contour map? Yes ___
No . Unless the omission of the well(s) has been previously approved by the Department,
justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event?
Yes ___ No . Were any of the monitor wells with separate phase product included in the ground
water contour map? Yes ___ No . If yes, show the formula used to correct the water table
elevation.

7:26E - APPENDIX G - Contour Map Reporting Form

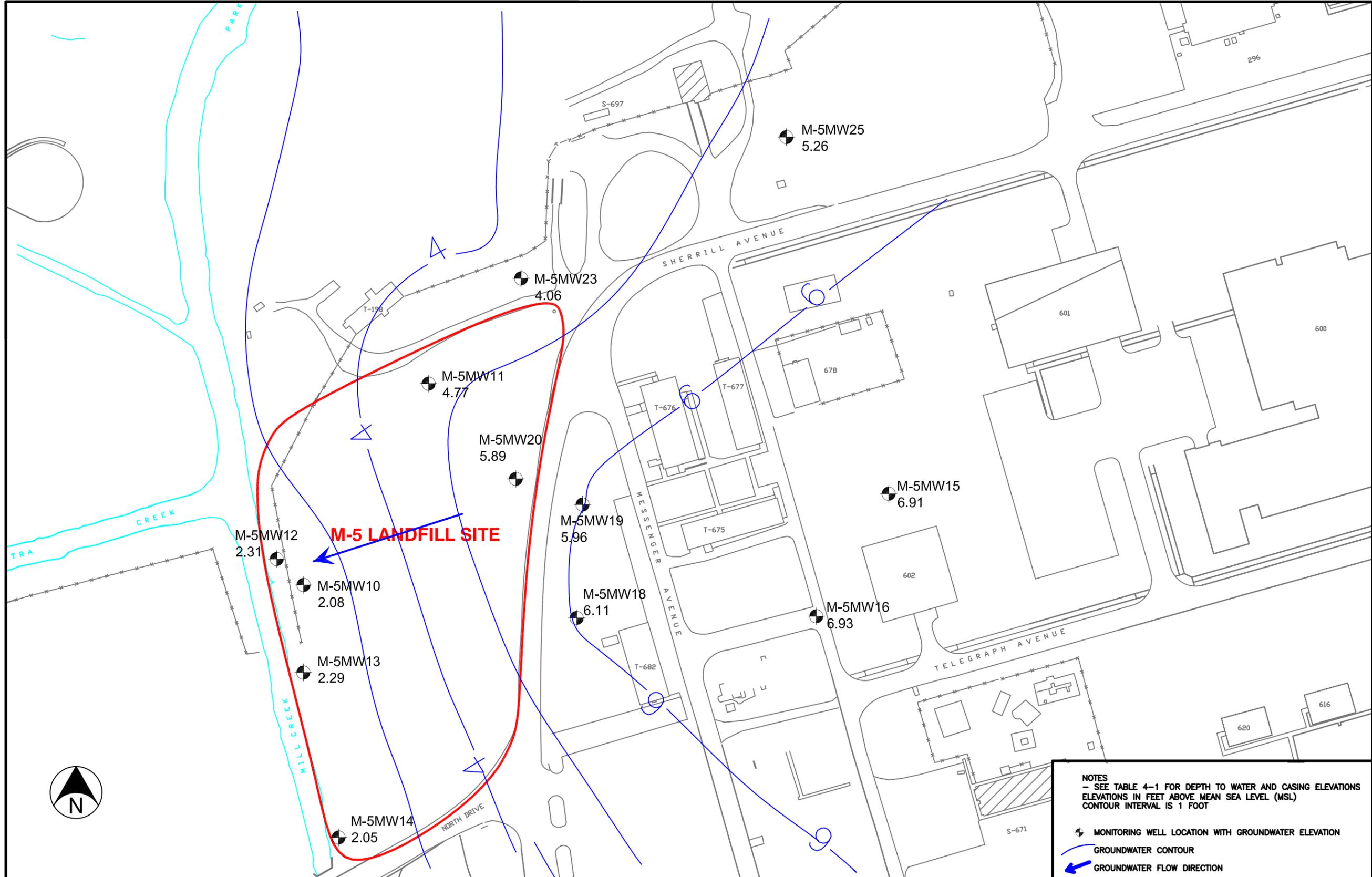
5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? Yes ___ No X. If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ___ No X. Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes X No ___ . If no, justify inclusion of those wells.

8. Were the ground water contours computer generated ___, computer aided X, or hand-drawn ___? If computer aided or generated, identify the interpolation method(s) used.

Surfer Contouring Software



NOTES
 - SEE TABLE 4-1 FOR DEPTH TO WATER AND CASING ELEVATIONS
 ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL (MSL)
 CONTOUR INTERVAL IS 1 FOOT

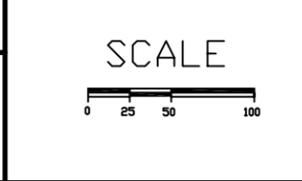
MONITORING WELL LOCATION WITH GROUNDWATER ELEVATION
 GROUNDWATER CONTOUR
 GROUNDWATER FLOW DIRECTION

GROUNDWATER CONTOUR
 MAP (SEPTEMBER 16, 2005)

M-5 LANDFILL SITE
 FORT MONMOUTH, NEW JERSEY

PROJECT NO.: 2011-05-011

FIGURE NO.: 4-8



16-FEB-09
 FIGURE NO.
 4-8



APPENDIX G
Contour Map Reporting Form

This reporting form shall accompany each ground water contour map submittal. Use additional sheets as necessary.

Figure 4-8

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ___ No . If yes, attach new "Well Certification - Form B - Location Certification" as found in the "Guide for the Submission of Remedial Action Workplans" (NJDEP, March 1995) and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc.).

2. Are there any monitor wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ___ No . If yes, identify these wells.

3. Are there any monitor wells present at the site but omitted from the contour map? Yes ___ No . Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

4. Are there any monitor wells containing separate phase product during this measuring event? Yes ___ No . Were any of the monitor wells with separate phase product included in the ground water contour map? Yes ___ No . If yes, show the formula used to correct the water table elevation.

7:26E - APPENDIX G - Contour Map Reporting Form

5. Has the ground water flow direction changed more than 45 degrees from the previous ground water contour map? Yes ___ No . If yes, discuss the reasons for the change.

6. Has ground water mounding and/or depressions been identified in the ground water contour map? Yes ___ No . Unless the ground water mounds and/or depressions are caused by the ground water remediation system, discuss the reasons for this occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes No ___. If no, justify inclusion of those wells.

8. Were the ground water contours computer generated ___, computer aided , or hand-drawn ___? If computer aided or generated, identify the interpolation method(s) used.

Surfer Contouring Software



NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
4/14/1999	14.93	ND	ND
4/28/1999	44.43	ND	ND
9/13/1999	29.55	ND	ND
11/18/1999	59.62	ND	ND
3/3/2000	11.53	ND	ND
5/31/2000	21.13	ND	ND
8/21/2000	4.22	ND	ND
10/11/2000	14.27	ND	ND
3/19/2001	6.39	ND	ND
6/5/2001	33.84	ND	ND
8/2/2001	3.41	ND	1.48
10/4/2001	3.85	ND	1.77
1/14/2002	8.26	ND	1.77
4/23/2002	8.97	ND	3.31
8/21/2002	16.88	ND	ND
10/28/2002	ND	ND	ND
1/22/2003	79.46	3.97	ND
4/21/2003	17.33	3.16	1.37
7/30/2003	20.45	2.31	4.6
10/29/2003	1.6	ND	ND
1/14/2004	4.35	1.02	0.89
5/13/2004	13.33	2.07	0.89
8/20/2004	ND	ND	ND
10/15/2004	2.15	ND	ND
3/14/2005	13.75	ND	ND
6/30/2005	23.07	ND	ND
9/16/2005	7.24	0.89	1.42

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
10/7/1998	ND	ND	ND
10/21/1998	ND	ND	ND
2/2/1999	ND	ND	ND
4/13/1999	ND	ND	ND
8/13/1999	ND	ND	ND
11/18/1999	ND	ND	ND
3/9/2000	ND	ND	ND
5/31/2000	ND	ND	ND
8/21/2000	ND	ND	ND
10/11/2000	ND	ND	ND
3/19/2001	ND	ND	ND
6/5/2001	45.3	ND	ND
8/2/2001	111.58	1.18	1.22
10/4/2001	83.81	3.58	3.38
1/14/2002	85.51	4.37	3.41
4/23/2002	76.89	ND	3.08
8/21/2002	79.41	ND	ND
10/28/2002	12.89	ND	ND
1/22/2003	27.87	ND	ND
4/21/2003	27.99	ND	ND
7/30/2003	15.28	ND	1.1
10/29/2003	49.96	4.63	5.33
1/14/2004	21.69	1.9	0.96
5/13/2004	13.74	0.92	ND
8/20/2004	7.91	2.08	4.12
10/15/2004	3.96	ND	2.77
3/14/2005	4.83	1.11	1.87
6/30/2005	13.75	1.35	13.2
9/16/2005	8.74	2.67	4.21

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
10/7/1998	ND	ND	ND
10/21/1998	ND	ND	ND
2/2/1999	ND	ND	ND
4/13/1999	ND	ND	ND
8/13/1999	ND	ND	ND
11/18/1999	ND	ND	ND
3/9/2000	ND	ND	ND
5/31/2000	ND	ND	ND
8/21/2000	ND	ND	ND
10/11/2000	ND	ND	ND
3/19/2001	ND	ND	ND
6/5/2001	ND	ND	ND
8/2/2001	ND	ND	ND
10/4/2001	ND	ND	ND
1/14/2002	ND	ND	ND
4/23/2002	ND	ND	ND
8/21/2002	ND	ND	ND
10/28/2002	ND	ND	ND
1/22/2003	ND	ND	ND
4/21/2003	ND	ND	ND
7/30/2003	ND	ND	ND
1/14/2004	ND	ND	ND
5/13/2004	ND	ND	ND
8/20/2004	ND	ND	ND
10/15/2004	ND	ND	ND
3/14/2005	ND	ND	ND
6/30/2005	ND	ND	ND
9/16/2005	ND	ND	ND

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
5/9/1997	62.85	ND	ND
9/9/1997	57.74	ND	ND
10/29/1997	14.96	ND	ND
2/18/1998	39.33	ND	ND
5/9/1998	24.39	ND	ND
8/4/1998	18.37	ND	ND
10/27/1998	52.64	ND	ND
2/21/1999	5.55	ND	ND
4/13/1999	33.38	ND	ND
8/13/1999	48.25	ND	ND
11/18/1999	74.12	ND	ND
3/9/2000	30.62	ND	ND
5/31/2000	13.38	ND	ND
8/21/2000	18.79	ND	ND
10/11/2000	18.88	ND	ND
3/19/2001	11.91	ND	ND
6/5/2001	11.27	ND	ND
8/2/2001	6.51	1.38	6.46
10/4/2001	15.13	1.05	ND
1/14/2002	19.94	1.4	ND
4/23/2002	14.43	ND	ND
8/21/2002	8.9	ND	7.36
10/28/2002	8.54	ND	ND
1/22/2003	5.2	1.08	ND
4/21/2003	4.5	1.42	ND
7/30/2003	5.74	0.88	ND
10/29/2003	1.08	0.91	5.39
1/14/2004	2.01	1.2	1.58
5/13/2004	3.1	ND	ND
8/20/2004	2.89	ND	2.29
10/15/2004	3.05	ND	ND
3/14/2005	2.3	ND	0.81
6/30/2005	2.86	ND	ND
9/16/2005	ND	ND	5.88

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
4/13/1999	142.59	1	10
4/27/1999	169.54	ND	ND
9/13/1999	186.38	ND	ND
11/18/1999	145.93	ND	ND
3/3/2000	90.03	ND	ND
5/31/2000	41.44	ND	ND
8/21/2000	23.85	ND	ND
10/11/2000	118.95	ND	ND
3/19/2001	65.73	ND	ND
6/5/2001	45.3	ND	ND
8/2/2001	111.58	1.18	1.22
10/4/2001	83.81	3.58	3.38
1/14/2002	85.51	4.37	3.41
4/23/2002	76.89	ND	3.08
8/21/2002	79.41	ND	ND
10/28/2002	12.89	ND	ND
1/22/2003	27.87	ND	ND
4/21/2003	27.99	ND	ND
7/30/2003	15.28	ND	1.1
10/29/2003	49.96	4.63	5.33
1/14/2004	21.69	1.9	0.96
5/13/2004	13.74	0.92	ND
8/20/2004	7.91	2.08	4.12
10/15/2004	3.96	ND	2.77
3/14/2005	4.83	1.11	1.87
6/30/2005	13.75	1.35	13.2
9/16/2005	8.74	2.67	4.21

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
10/7/1998	ND	ND	ND
10/21/1998	ND	ND	ND
2/2/1999	ND	ND	ND
4/13/1999	ND	ND	ND
8/13/1999	ND	ND	ND
11/18/1999	ND	ND	ND
3/9/2000	ND	ND	ND
5/31/2000	ND	ND	ND
8/21/2000	ND	ND	ND
10/11/2000	ND	ND	ND
3/19/2001	ND	ND	ND
6/5/2001	ND	ND	ND
8/2/2001	ND	ND	ND
10/4/2001	ND	ND	ND
1/14/2002	ND	ND	ND
4/23/2002	ND	ND	ND
8/21/2002	ND	ND	ND
10/28/2002	ND	ND	ND
1/22/2003	ND	ND	ND
4/21/2003	ND	ND	ND
7/30/2003	ND	ND	ND

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
5/9/1997	ND	ND	ND
9/9/1997	ND	ND	ND
10/29/1997	ND	ND	ND
2/18/1998	ND	ND	ND
5/9/1998	ND	ND	ND
8/4/1998	ND	ND	ND
11/18/1998	ND	ND	ND
2/9/1999	ND	ND	ND
4/13/1999	ND	ND	ND
8/13/1999	ND	ND	ND
11/18/1999	ND	ND	ND
3/9/2000	ND	ND	ND
5/31/2000	ND	ND	ND
8/21/2000	ND	ND	ND
10/11/2000	ND	ND	ND
3/19/2001	ND	ND	ND
6/5/2001	ND	ND	ND
8/2/2001	ND	ND	ND
10/4/2001	ND	ND	ND
1/14/2002	ND	ND	ND
4/23/2002	ND	ND	ND
8/21/2002	ND	ND	ND
10/28/2002	ND	ND	ND
1/22/2003	ND	ND	ND
4/21/2003	ND	ND	ND
7/30/2003	ND	ND	ND
1/14/2004	ND	ND	ND
5/13/2004	ND	ND	ND
8/20/2004	ND	ND	ND
10/15/2004	ND	ND	ND
3/14/2005	ND	ND	ND
6/30/2005	ND	ND	ND
9/16/2005	ND	ND	ND

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
10/21/1998	ND	ND	ND
2/2/1999	ND	ND	ND
4/13/1999	ND	ND	ND
8/13/1999	ND	ND	ND
11/18/1999	ND	ND	ND
3/9/2000	ND	ND	ND
5/31/2000	ND	ND	ND
8/21/2000	ND	ND	ND
10/11/2000	ND	ND	ND
3/19/2001	ND	ND	ND
6/5/2001	ND	ND	ND
8/2/2001	ND	ND	ND
10/4/2001	ND	ND	ND
1/14/2002	ND	ND	ND
4/23/2002	ND	ND	ND
8/21/2002	ND	ND	ND
10/28/2002	ND	ND	ND
1/22/2003	ND	ND	ND
4/21/2003	ND	ND	ND
7/30/2003	ND	ND	ND
1/14/2004	ND	ND	ND
5/13/2004	ND	ND	ND
8/20/2004	ND	ND	ND
10/15/2004	ND	ND	ND
3/14/2005	ND	ND	ND
6/30/2005	ND	ND	ND
9/16/2005	ND	ND	ND

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
4/27/1999	3.72	ND	ND
9/14/1999	13.24	ND	ND
11/18/1999	69.22	ND	ND
3/6/2000	5.44	ND	ND
5/31/2000	ND	ND	ND
8/21/2000	4.77	ND	ND
10/11/2000	3.8	ND	ND
3/19/2001	2.43	ND	ND
6/5/2001	6.89	ND	ND
8/2/2001	34.84	1.86	3.97
10/4/2001	13.62	ND	1.84
1/14/2002	394.64	17.44	18.64
4/23/2002	18.2	2.8	5.93
8/21/2002	34.31	6.44	51.33
10/28/2002	5.1	1	2.28
1/22/2003	1.54	ND	ND
4/21/2003	1.73	ND	ND
7/30/2003	1.91	ND	ND
10/29/2003	3.42	1.82	3.04
1/14/2004	1.89	1.04	0.49
5/13/2004	ND	1.41	ND
8/20/2004	5.96	ND	0.81
10/15/2004	ND	1.33	ND
3/14/2005	ND	0.91	ND
6/30/2005	ND	ND	ND
9/16/2005	5.73	3.12	1.58

NUDEP	PCE	TCE	cis-1,2-
CRITERIA	(ug/l)	(ug/l)	Dichloroethene (ug/L)
4/13/1999	ND	ND	ND
4/27/1999	ND	ND	ND
9/14/1999	ND	ND	ND
11/18/1999	ND	ND	ND
3/6/2000	ND	ND	ND
5/31/2000	ND	ND	ND
8/21/2000	ND	ND	ND
10/11/2000	ND	ND	ND
3/19/2001	ND	ND	ND
6/5/2001	ND	ND	ND
8/2/2001	ND	ND	ND
10/4/2001	ND	ND	ND
1/14/2002	ND	ND	ND
4/23/2002	ND	ND	ND
8/21/2002	ND	ND	ND
10/28/2002	ND	ND	ND
1/22/2003	ND	ND	ND
4/21/2003	ND	ND	ND
7/30/2003	ND	ND	ND
10/29/2003	ND	ND	ND
1/14/2004			



NUDEP	PCE	TCE	ca-1,2	NUDEP	PCE	TCE	ca-1,2
CHW	(ppb)	(ppb)	(ppb)	CHW	(ppb)	(ppb)	(ppb)
4/8/1987	4.20	81	NLE	4/8/1987	ND	ND	2.18
7/17/1987	2.58	ND	1.8	7/17/1987	1.61	ND	1.68
10/20/1987	1.7	ND	1.83	10/20/1987	1.24	ND	ND
2/10/1988	3.24	ND	ND	2/10/1988	4.41	ND	ND
4/21/1988	4.48	ND	ND	4/21/1988	ND	ND	ND
8/18/1988	3.80	1.37	2.26	8/18/1988	2.88	1.1	1.82
11/18/1988	2.17	ND	1.67	11/18/1988	1.62	ND	1.18
2/25/1989	3.42	ND	1.47	2/25/1989	3.81	ND	ND
6/29/1989	6.04	1.74	2.74	6/29/1989	5.27	1.98	2.41
9/23/1989	1.82	ND	1.86	9/23/1989	1.88	ND	2.02
12/8/1989	3.82	ND	1.8	12/8/1989	ND	ND	ND
3/1/1990	4.42	ND	1.27	3/1/1990	4.78	1.38	1.23
6/12/2000	4.38	ND	ND	6/12/2000	4.37	ND	ND
8/6/2000	3.88	ND	ND	8/6/2000	4.18	1.19	1.19
11/20/2000	3.88	ND	ND	11/20/2000	3.7	ND	ND
3/8/2001	ND	ND	ND	3/8/2001	2.92	ND	ND
6/14/2001	4.38	ND	0.87	6/14/2001	2.99	ND	ND
9/11/2001	ND	ND	ND	9/11/2001	ND	ND	ND
11/14/2001	1.88	ND	1.41	11/14/2001	ND	ND	ND
2/11/2002	2.44	ND	ND	2/11/2002	1.64	ND	ND
4/18/2002	2.38	ND	ND	4/18/2002	1.57	ND	ND
8/18/2002	ND	ND	ND	8/18/2002	ND	ND	ND
11/20/2002	ND	ND	ND	11/20/2002	ND	ND	ND
3/13/2003	3.08	0.71	0.81	3/13/2003	2.33	0.81	0.87
6/24/2003	3.14	ND	ND	6/24/2003	ND	ND	ND
9/17/2003	1.23	ND	1.38	9/17/2003	1.13	ND	1.14
11/4/2003	ND	ND	1.34	11/4/2003	ND	ND	ND
3/17/2004	2.21	0.87	0.87	3/17/2004	0.81	ND	ND
6/26/2004	1.17	ND	1.18	6/26/2004	ND	ND	ND
8/26/2004	1.09	0.73	1.01	8/26/2004	0.81	ND	0.87
11/20/2004	1.13	ND	1.28				
3/5/2005	1.84	ND	0.87				
6/16/2005	1.1	ND	1.6				
8/13/2005	ND	ND	1.77				

NUDEP	PCE	TCE	ca-1,2	NUDEP	PCE	TCE	ca-1,2
CHW	(ppb)	(ppb)	(ppb)	CHW	(ppb)	(ppb)	(ppb)
4/8/1987	6	1.4	2.69	4/8/1987	ND	ND	2.18
7/17/1987	2.72	2.3	6.63	7/17/1987	1.61	ND	1.68
10/20/1987	2.72	ND	2.87	10/20/1987	1.80	ND	1.78
2/10/1988	6.9	1.28	ND	2/10/1988	4.21	ND	ND
4/21/1988	5.72	1.21	1.32	4/21/1988	4.58	ND	ND
8/18/1988	2.38	2.88	ND	8/18/1988	4.31	1.81	2.84
11/18/1988	ND	ND	ND	11/18/1988	1.48	ND	ND
2/25/1989	2.31	ND	ND	2/25/1989	4.96	ND	ND
6/29/1989	7.86	2.4	4.17	6/29/1989	7.7	2.33	3.86
9/23/1989	2.41	1.37	1.89	9/23/1989	3.88	ND	3.74
12/8/1989	4.08	ND	ND	12/8/1989	4.13	ND	1.79
3/1/1990	4.66	1.39	1.89	3/1/1990	2.88	ND	1.82
6/12/2000	5.44	ND	ND	6/12/2000	3.74	ND	ND
8/6/2000	3.3	1.38	2.02	8/6/2000	4.47	1.8	1.88
11/20/2000	6.38	ND	ND	11/20/2000	4.49	ND	ND
3/8/2001	7.49	ND	ND	3/8/2001	4.29	ND	ND
6/14/2001	4.44	ND	1.8	6/14/2001	4.91	ND	1.28
9/11/2001	ND	ND	ND	9/11/2001	ND	ND	ND
11/14/2001	3.48	ND	1.8	11/14/2001	2	ND	1.41
2/11/2002	2.65	ND	ND	2/11/2002	2.48	ND	1.38
4/18/2002	2.67	ND	1.83	4/18/2002	1.85	ND	ND
8/18/2002	2.65	ND	2.89	8/18/2002	1.48	ND	ND
11/20/2002	1.82	ND	ND	11/20/2002	3.25	0.74	1.82
3/13/2003	3.99	1.11	1.44	3/13/2003	3.96	ND	1.86
6/24/2003	3.4	ND	1.89	6/24/2003	1.7	ND	1.79
9/17/2003	1.8	ND	1.84	9/17/2003	4.27	1.37	1.82
11/4/2003	1.49	0.58	1.11	11/4/2003	4.47	1.8	1.88
3/17/2004	2.38	0.86	0.86	3/17/2004	3.74	ND	ND
6/26/2004	1.38	ND	1.18	6/26/2004	4.47	1.8	1.88
8/26/2004	1.25	0.78	1.78	8/26/2004	4.49	ND	ND
11/20/2004	2	ND	2.17	11/20/2004	4.27	1.8	1.88
3/5/2005	2.82	ND	1.81	3/5/2005	1.19	1.74	1.83
6/16/2005	2.34	1.34	3.53	6/16/2005	1.38	ND	1.33
8/13/2005	1.35	0.91	6.06	8/13/2005	1.38	ND	1.69

NUDEP	PCE	TCE	ca-1,2	NUDEP	PCE	TCE	ca-1,2
CHW	(ppb)	(ppb)	(ppb)	CHW	(ppb)	(ppb)	(ppb)
4/8/1987	4.20	81	NLE	4/8/1987	ND	ND	2.18
7/17/1987	2.58	ND	1.8	7/17/1987	1.61	ND	1.68
10/20/1987	1.7	ND	1.83	10/20/1987	1.24	ND	ND
2/10/1988	3.24	ND	ND	2/10/1988	4.41	ND	ND
4/21/1988	4.48	ND	ND	4/21/1988	ND	ND	ND
8/18/1988	3.80	1.37	2.26	8/18/1988	2.88	1.1	1.82
11/18/1988	2.17	ND	1.67	11/18/1988	1.62	ND	1.18
2/25/1989	3.42	ND	1.47	2/25/1989	3.81	ND	ND
6/29/1989	6.04	1.74	2.74	6/29/1989	5.27	1.98	2.41
9/23/1989	1.82	ND	1.86	9/23/1989	1.88	ND	2.02
12/8/1989	3.82	ND	1.8	12/8/1989	ND	ND	ND
3/1/1990	4.42	ND	1.27	3/1/1990	4.78	1.38	1.23
6/12/2000	4.38	ND	ND	6/12/2000	4.37	ND	ND
8/6/2000	3.88	ND	ND	8/6/2000	4.18	1.19	1.19
11/20/2000	3.88	ND	ND	11/20/2000	3.7	ND	ND
3/8/2001	ND	ND	ND	3/8/2001	2.92	ND	ND
6/14/2001	4.38	ND	0.87	6/14/2001	2.99	ND	ND
9/11/2001	ND	ND	ND	9/11/2001	ND	ND	ND
11/14/2001	1.88	ND	1.41	11/14/2001	ND	ND	ND
2/11/2002	2.44	ND	ND	2/11/2002	1.64	ND	ND
4/18/2002	2.38	ND	ND	4/18/2002	1.57	ND	ND
8/18/2002	ND	ND	ND	8/18/2002	ND	ND	ND
11/20/2002	ND	ND	ND	11/20/2002	ND	ND	ND
3/13/2003	3.08	0.71	0.81	3/13/2003	2.33	0.81	0.87
6/24/2003	3.14	ND	ND	6/24/2003	ND	ND	ND
9/17/2003	1.23	ND	1.38	9/17/2003	1.13	ND	1.14
11/4/2003	ND	ND	1.34	11/4/2003	ND	ND	ND
3/17/2004	2.21	0.87	0.87	3/17/2004	0.81	ND	ND
6/26/2004	1.17	ND	1.18	6/26/2004	ND	ND	ND
8/26/2004	1.09	0.73	1.01	8/26/2004	0.81	ND	0.87
11/20/2004	1.13	ND	1.28				
3/5/2005	1.84	ND	0.87				
6/16/2005	1.1	ND	1.6				
8/13/2005	ND	ND	1.77				

NUDEP	PCE	TCE	ca-1,2	NUDEP	PCE	TCE	ca-1,2
CHW	(ppb)	(ppb)	(ppb)	CHW	(ppb)	(ppb)	(ppb)
4/8/1987	6	1.4	2.69	4/8/1987	ND	ND	2.18
7/17/1987	2.72	2.3	6.63	7/17/1987	1.61	ND	1.68
10/20/1987	2.72	ND	2.87	10/20/1987	1.80	ND	1.78
2/10/1988	6.9	1.28	ND	2/10/1988	4.21	ND	ND
4/21/1988	5.72	1.21	1.32	4/21/1988	4.58	ND	ND
8/18/1988	2.38	2.88	ND	8/18/1988	4.31	1.81	2.84
11/18/1988	ND	ND	ND	11/18/1988	1.48	ND	ND
2/25/1989	2.31	ND	ND	2/25/1989	4.96	ND	ND
6/29/1989	7.86	2.4	4.17	6/29/1989	7.7	2.33	3.86
9/23/1989	2.41	1.37	1.89	9/23/1989	3.88	ND	3.74
12/8/1989	4.08	ND	ND	12/8/1989	4.13	ND	1.79
3/1/1990	4.66	1.39	1.89	3/1/1990	2.88	ND	1.82
6/12/2000	5.44	ND	ND	6/12/2000	3.74	ND	ND
8/6/2000	3.3	1.38	2.02	8/6/2000	4.47	1.8	1.88
11/20/2000	6.38	ND	ND	11/20/2000	4.49	ND	ND
3/8/2001	7.49	ND	ND	3/8/2001	4.29	ND	ND
6/14/2001	4.44	ND	1.8	6/14/2001	4.91	ND	1.28
9/11/2001	ND	ND	ND	9/11/2001	ND	ND	ND
11/14/2001	3.48	ND	1.8	11/14/2001	2	ND	1.41
2/11/2002	2.65	ND	ND	2/11/2002	2.48	ND	1.38
4/18/2002	2.67	ND	1.83	4/18/2002	1.85	ND	ND
8/18/2002	2.65	ND	2.89	8/18/2002	1.48	ND	ND
11/20/2002	1.82	ND	ND	11/20/2002	3.25	0.74	1.82
3/13/2003	3.99	1.11	1.44	3/13/2003	3.96	ND	1.86
6/24/2003	3.4	ND	1.89	6/24/2003	1.7	ND	1.79
9/17/2003	1.8	ND	1.84	9/17/2003	4.27	1.37	1.82
11/4/2003	1.49	0.58	1.11	11/4/2003	4.47	1.8	1.88
3/17/2004	2.38	0.86	0.86	3/17/2004	3.74	ND	ND
6/26/2004	1.38	ND	1.18	6/26/2004	4.47	1.8	1.88
8/26/2004	1.25	0.78	1.78	8/26/2004	4.49	ND	ND
11/20/2004	2	ND	2.17	11/20/2004	4.27	1.8	1.88
3/5/2005	2.82	ND	1.81	3/5/2005	1.19	1.74	1.83
6/16/2005	2.34	1.34	3.53	6/16/2005	1.38	ND	1.33
8/13/2005	1.35	0.91	6.06	8/13/2005	1.38	ND	1.69

NUDEP	PCE	TCE	ca-1,2	NUDEP	PCE	TCE	ca-1,2
CHW	(ppb)	(ppb)	(ppb)	CHW	(ppb)	(ppb)	(ppb)
4/8/1987	4.20	81	NLE	4/8/1987	ND	ND	2.18
7/17/1987	2.58	ND	1.8	7/17/1987	1.61	ND	1.68
10/20/1987	1.7	ND	1.83	10/20/1987	1.24	ND	ND
2/10/1988	3.24	ND	ND	2/10/1988	4.41	ND	ND
4/21/1988	4.48	ND	ND	4/21/1988	ND	ND	ND
8/18/1988	3.80	1.37	2.26	8/18/1988	2.88	1.1	1.82
11/18/1988	2.17	ND	1.67	11/18/1988	1.62	ND	1.18
2/25/1989	3.42	ND	1.47	2/25/1989	3.81	ND	ND
6/29/1989	6.04	1.74	2.74	6/29/1989	5.27	1.98	2.41
9/23/1989	1.82	ND	1.86	9/23/1989	1.88	ND	2.02
12/8/19							

FIGURE 5-2A
Tetrachloroethene (PCE) Concentrations vs Time at M-5MW11

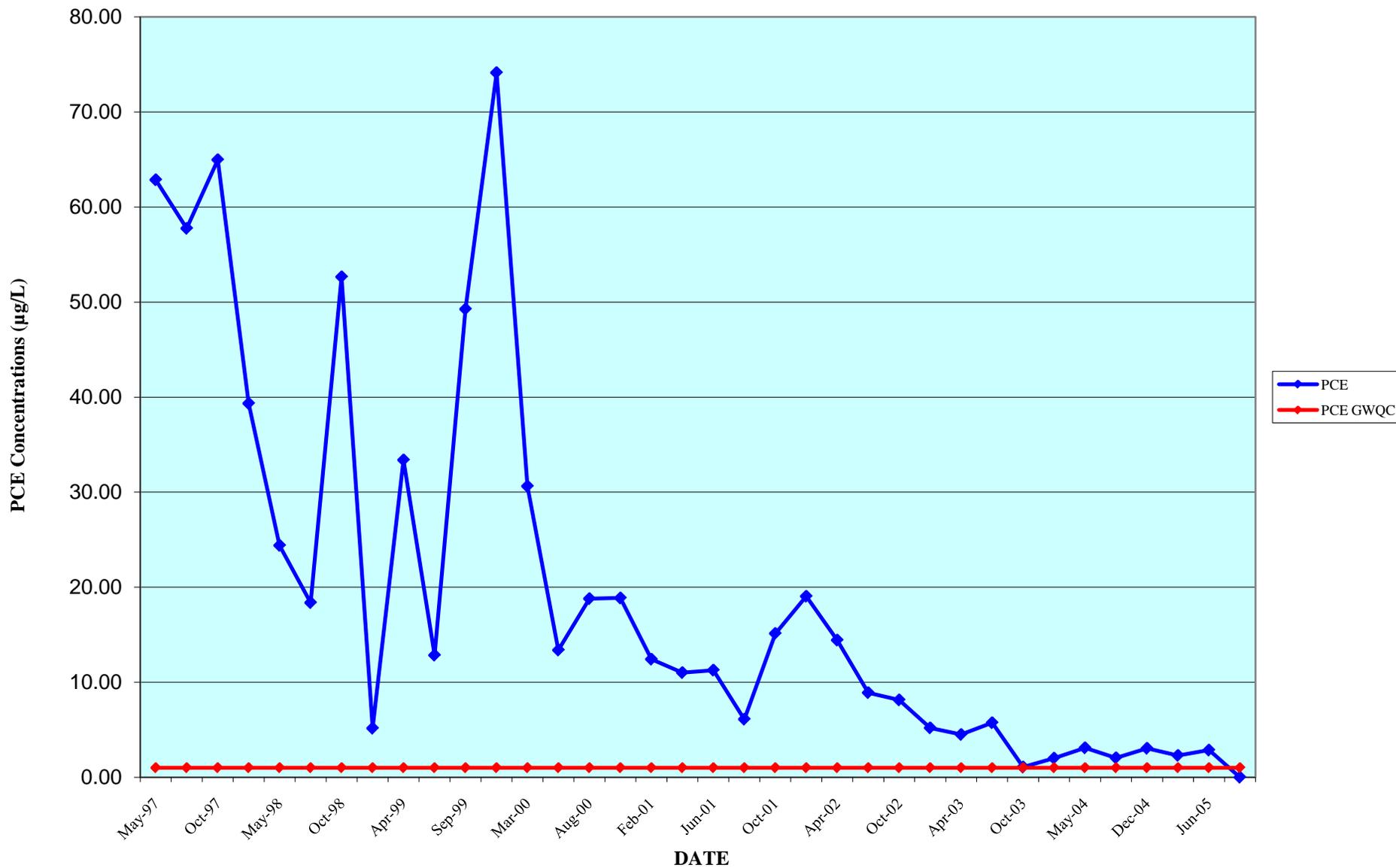


Figure 5-2B
Trichloroethene (TCE) Concentrations vs Time in M-5MW11

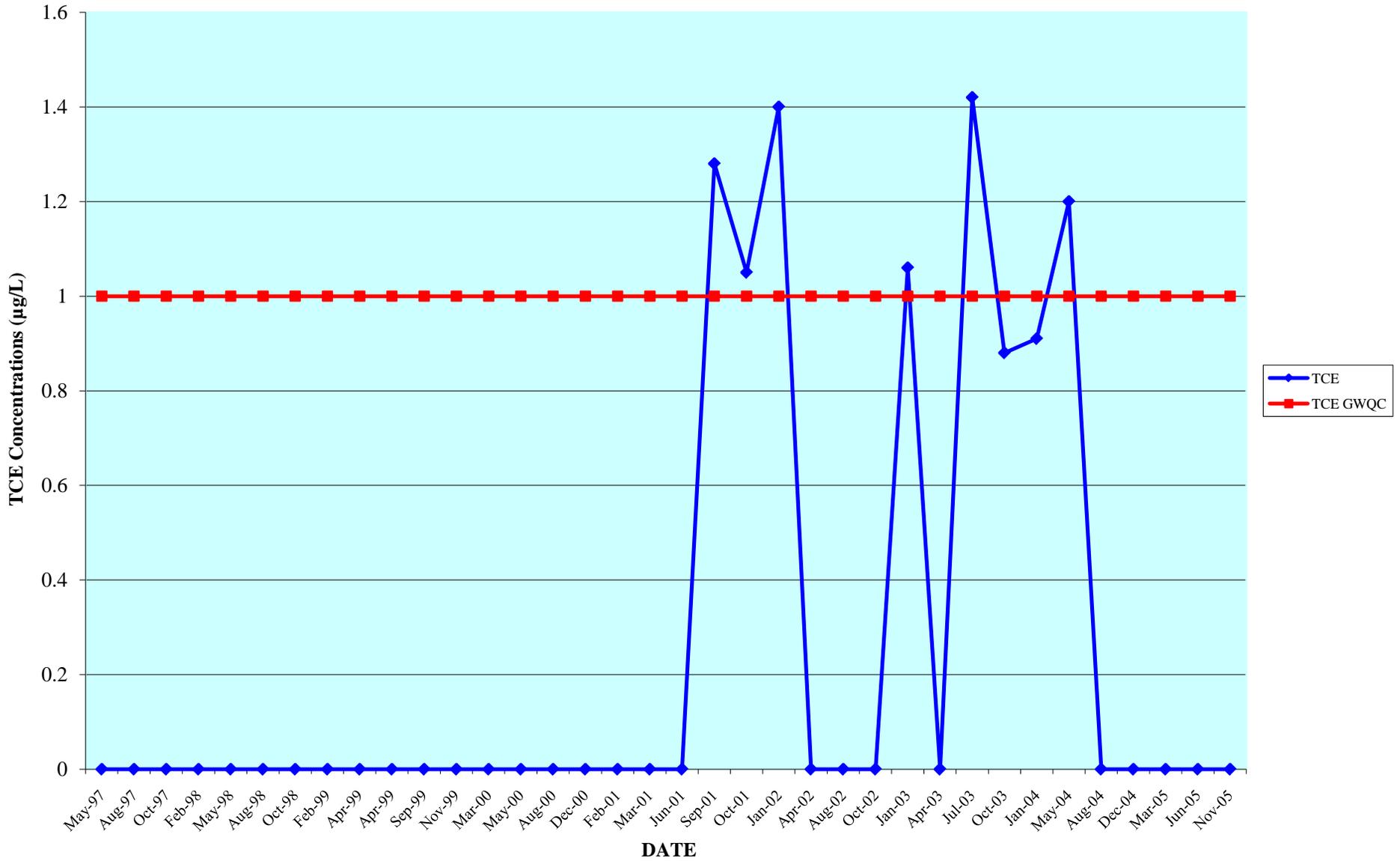


FIGURE 5-3A
Tetrachloroethene (PCE) Concentrations vs Time at M-5MW16

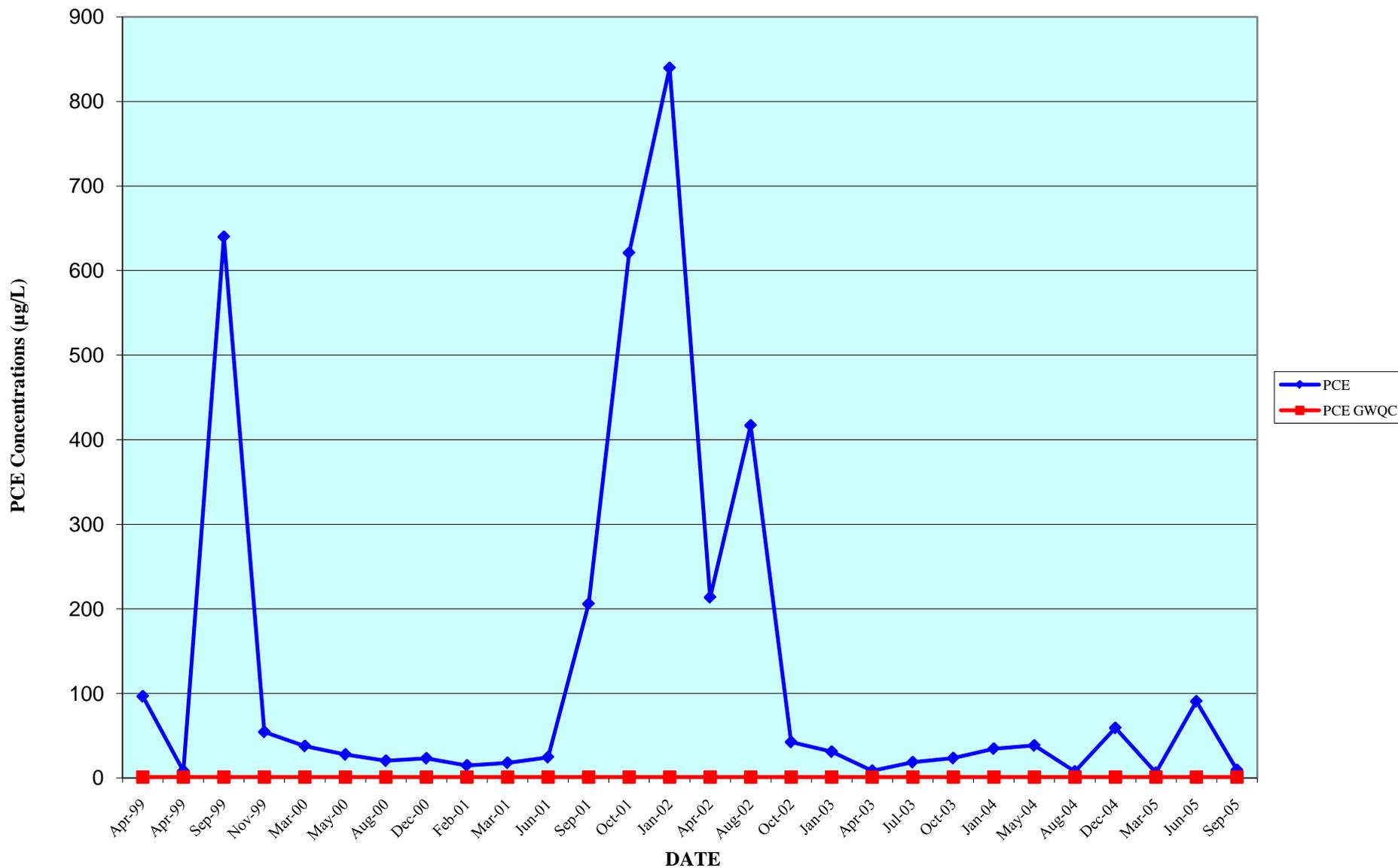


FIGURE 5-3B
Trichloroethene (TCE) Concentrations vs Time at M-5MW16

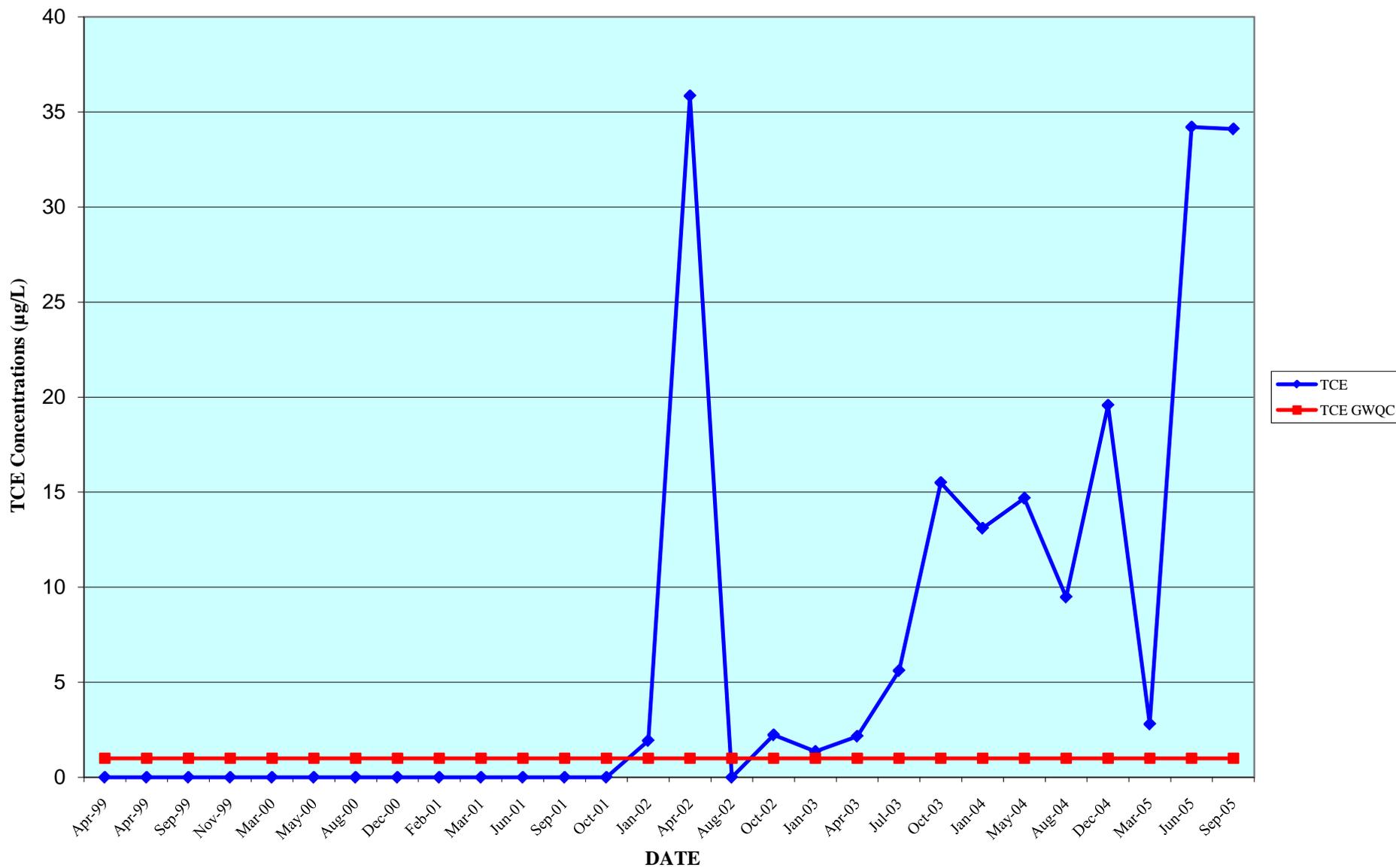


FIGURE 5-3C
cis-1,2-Dichloroethene (DCE) Concentrations vs Time at M-5MW16

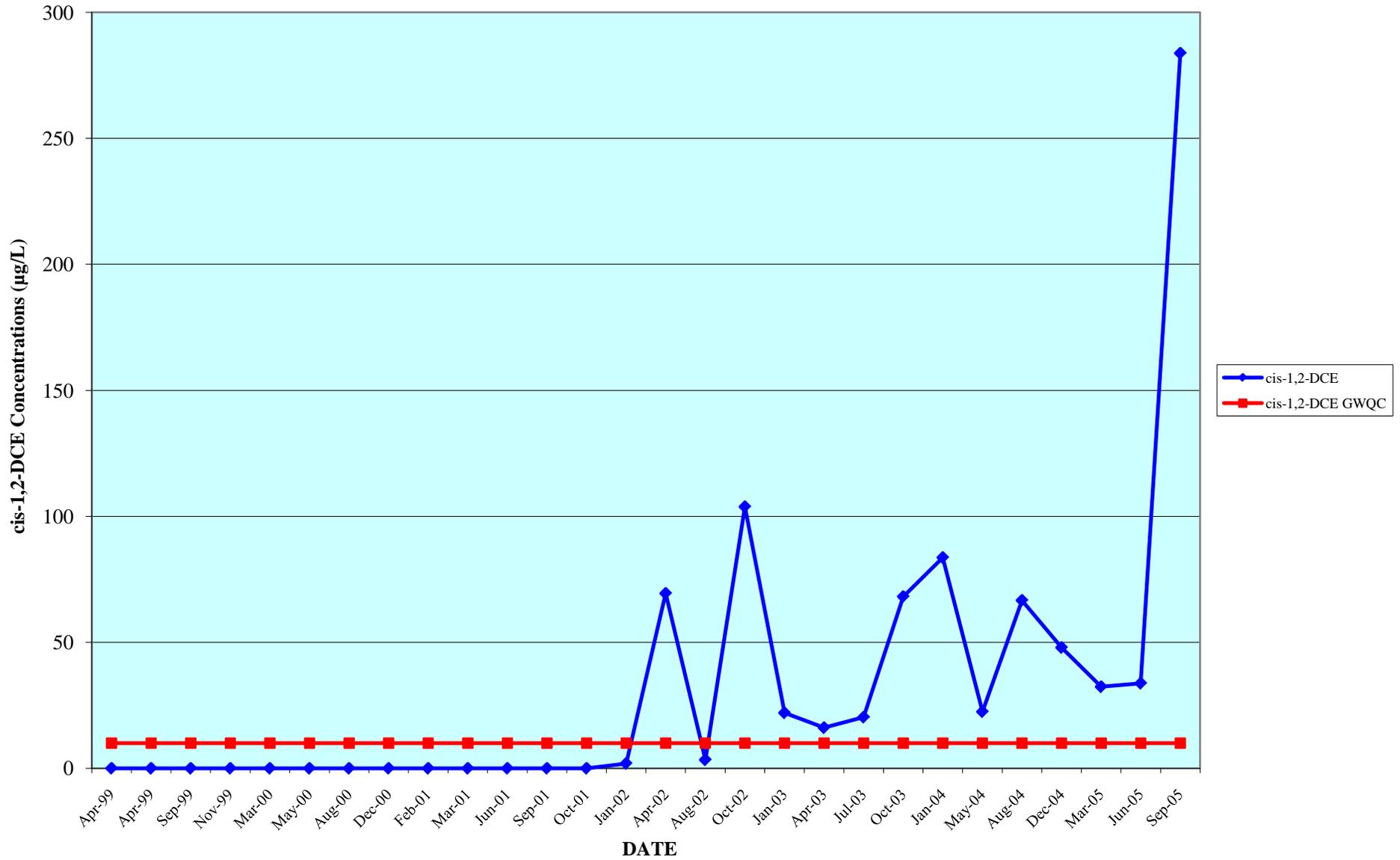


FIGURE 5-4A
Tetrachloroethene (PCE) Concentrations vs Time at M-5MW19

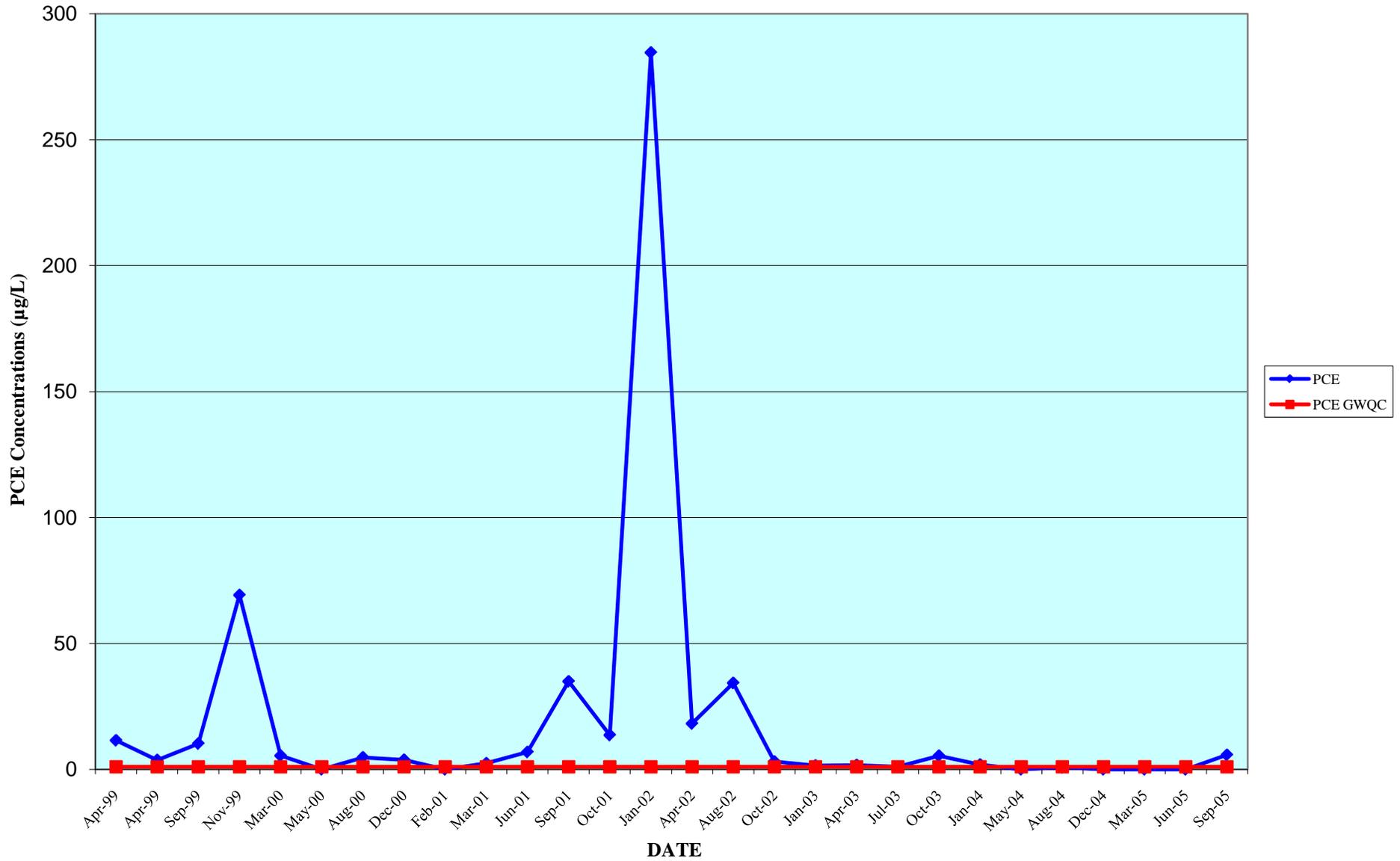


FIGURE 5-4B
Trichloroethene (TCE) Concentrations vs Time at M-5MW19

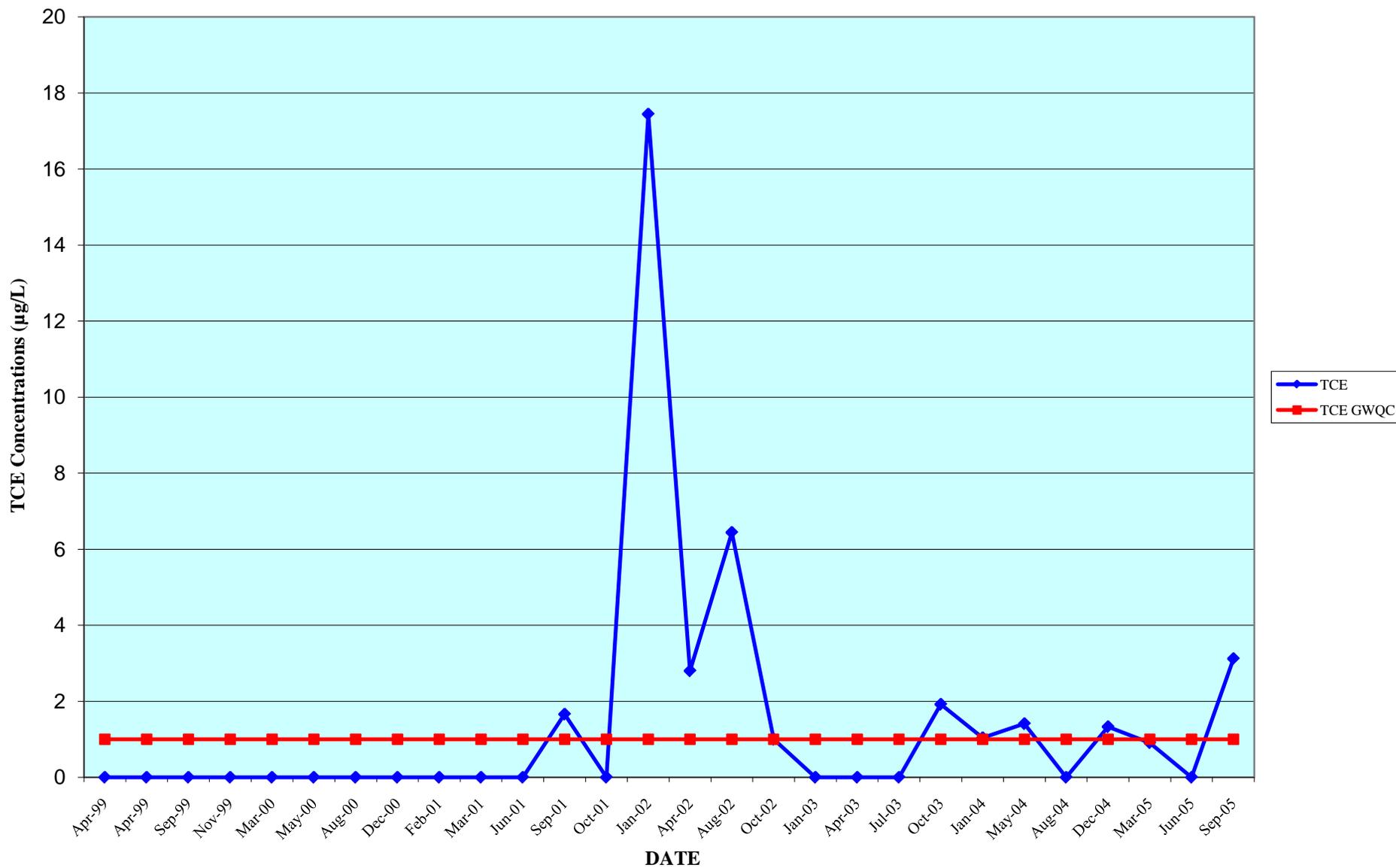


FIGURE 5-4C
cis-1,2-Dichloroethene (DCE) Concentrations vs Time at M-5MW19

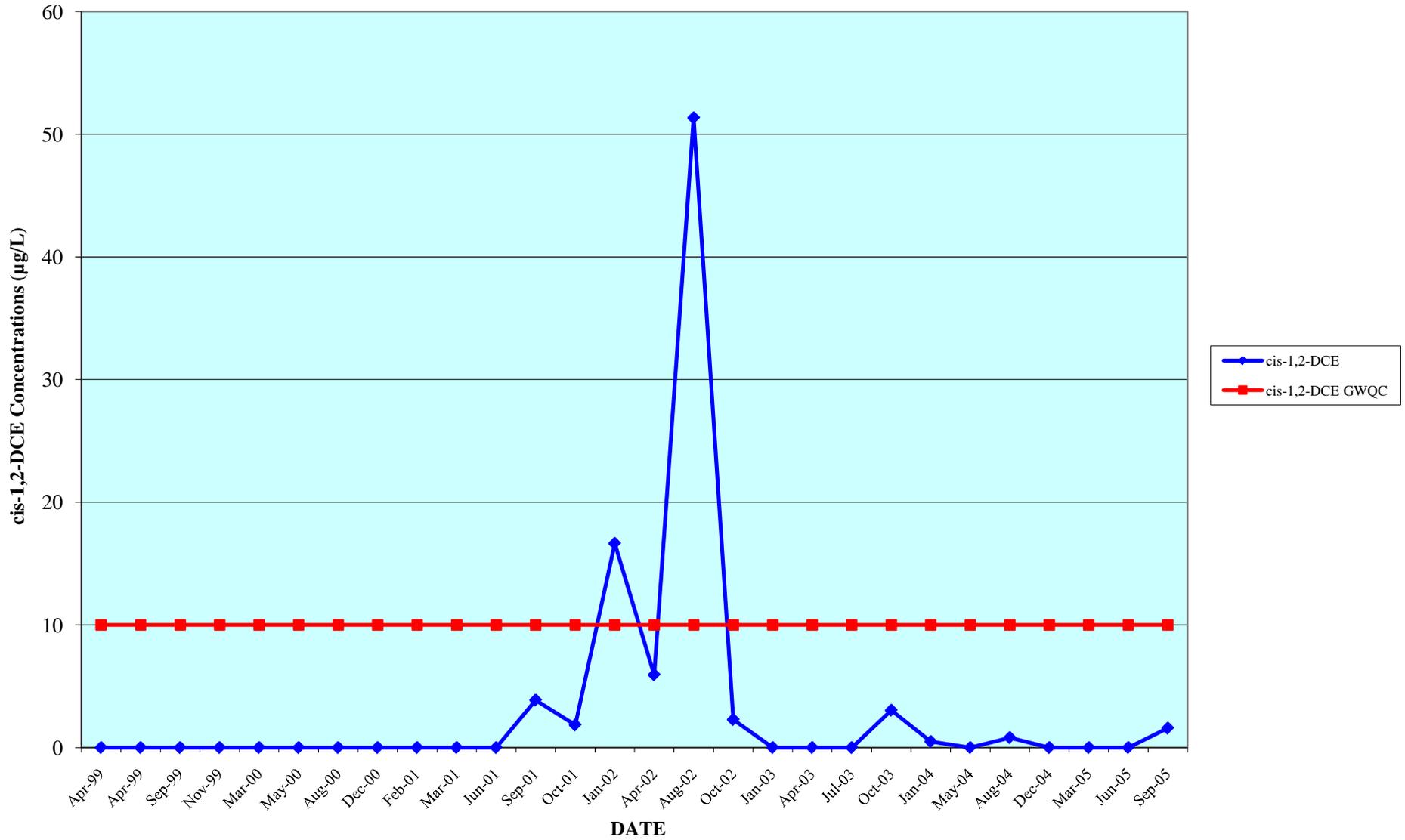


FIGURE 5-5A
Tetrachloroethene (PCE) Concentrations at M-5MW20

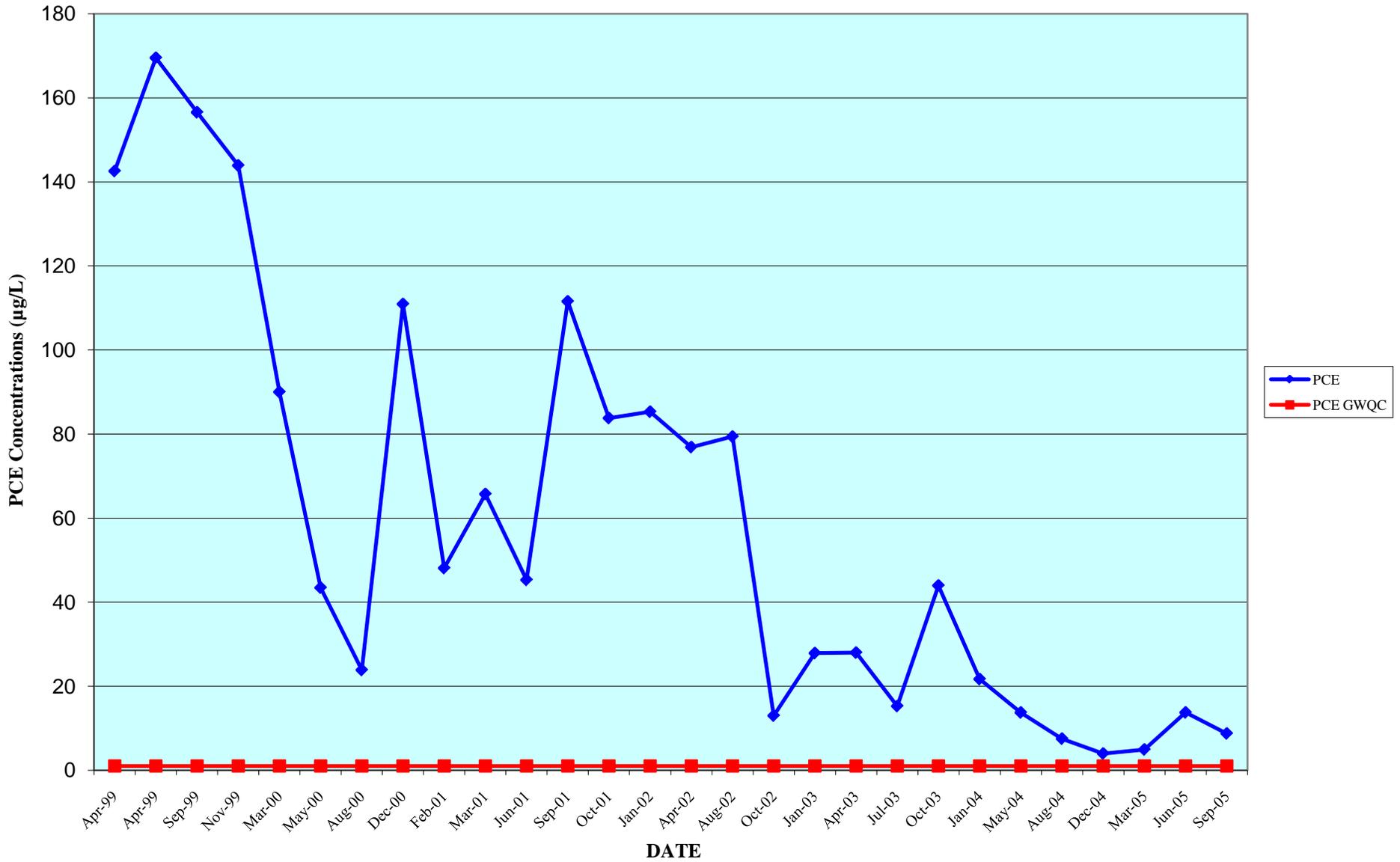


FIGURE 5-5B
Trichloroethene (TCE) Concentrations at M-5MW20

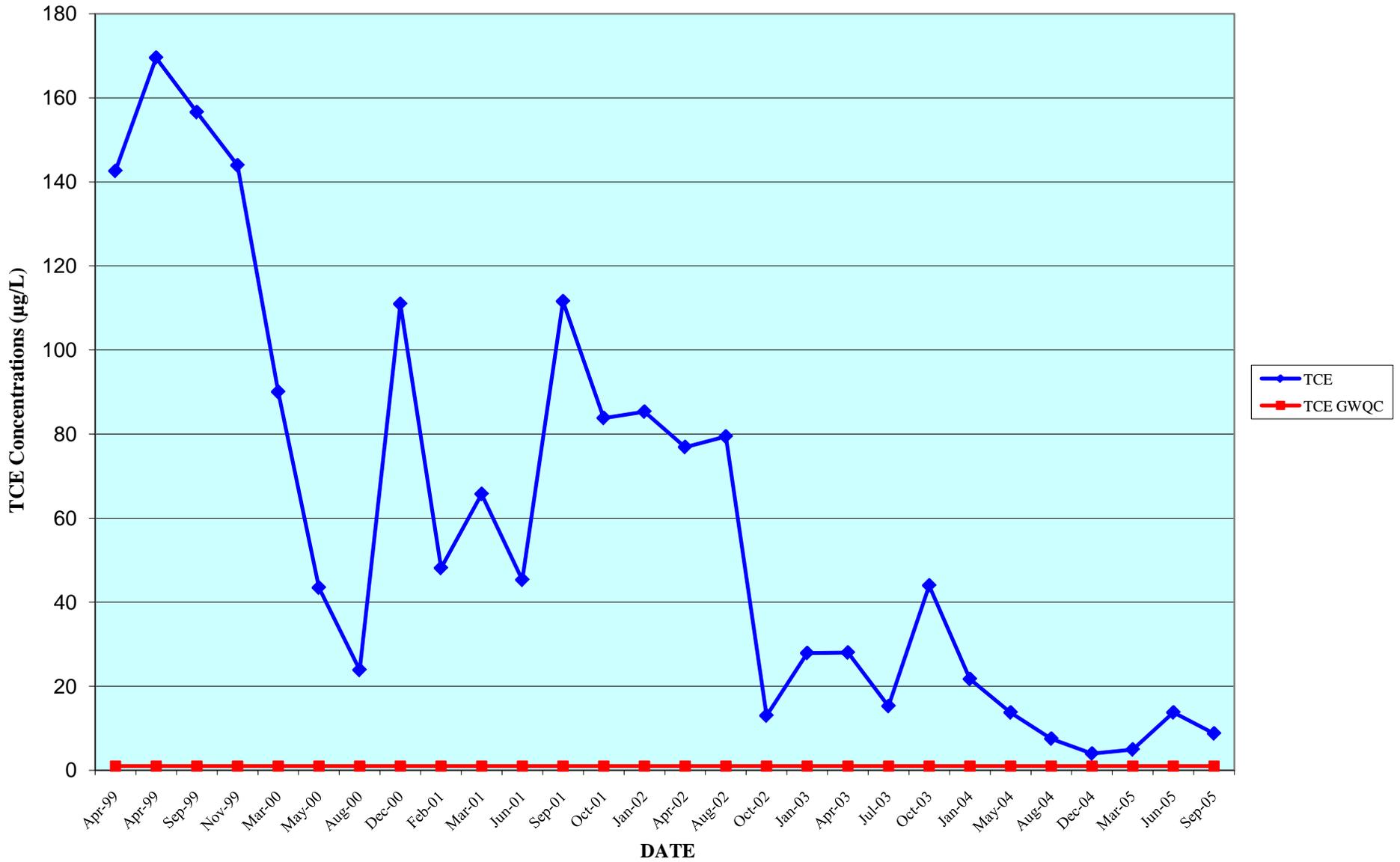


FIGURE 5-6A
Tetrachloroethene (PCE) Concentrations vs Time at M-5 MW23

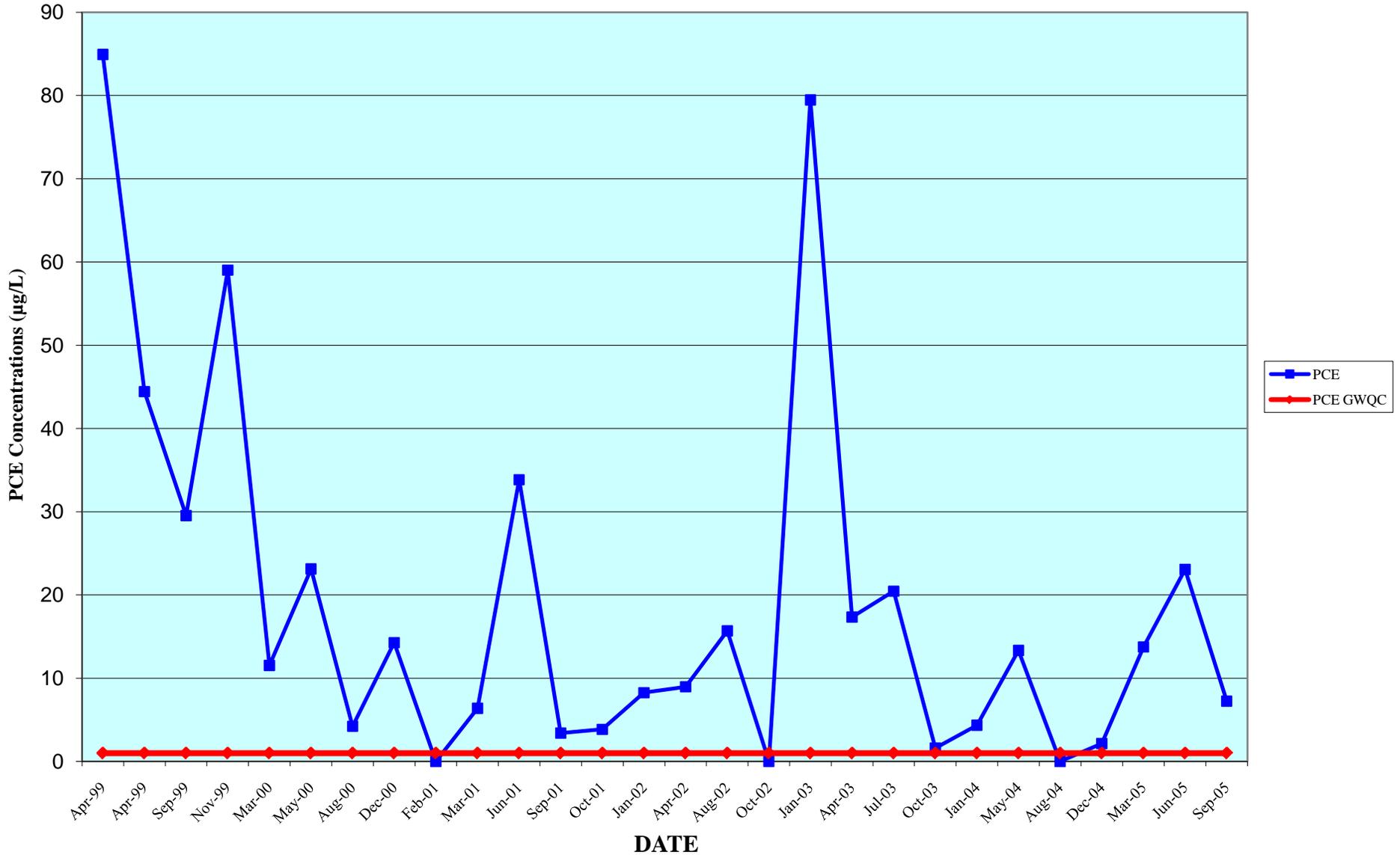


FIGURE 5-6B
Trichloroethene (TCE) Concentrations vs Time at M-5MW23

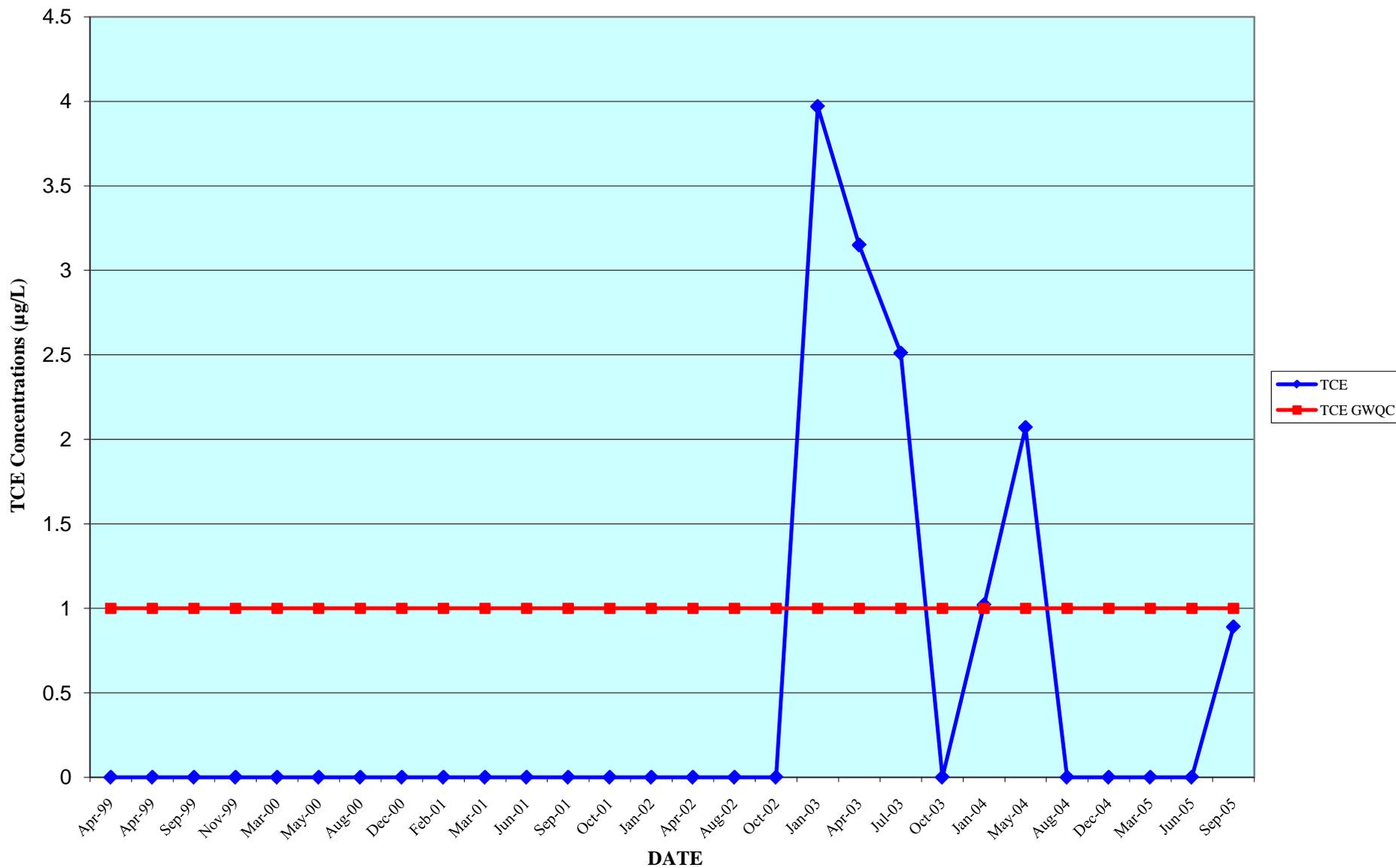


FIGURE 5-7A
Tetrachloroethene (PCE) Concentrations vs Time at M-8MW12

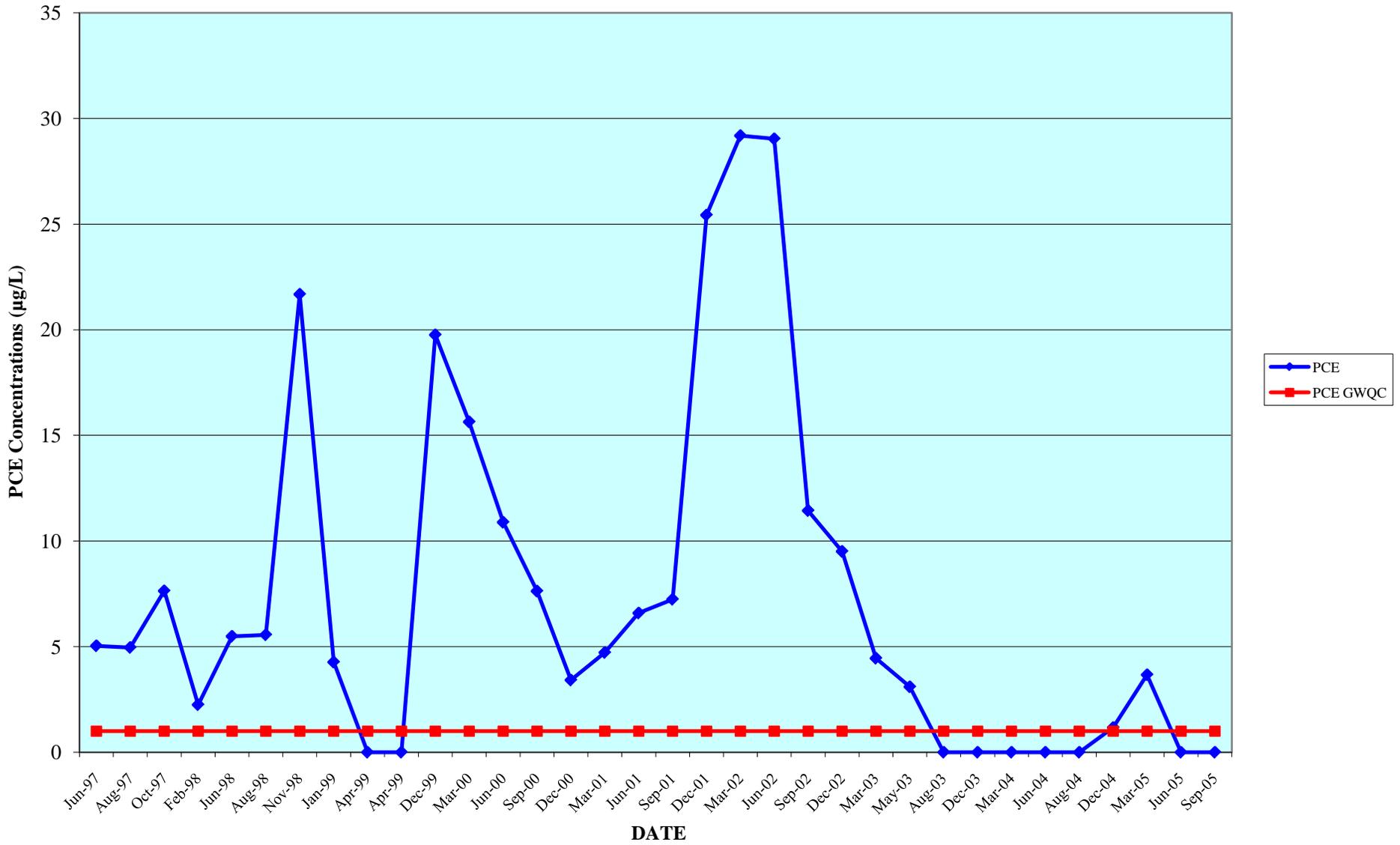


FIGURE 5-7B
Trichloroethene (TCE) Concentrations vs Time at M-8MW12

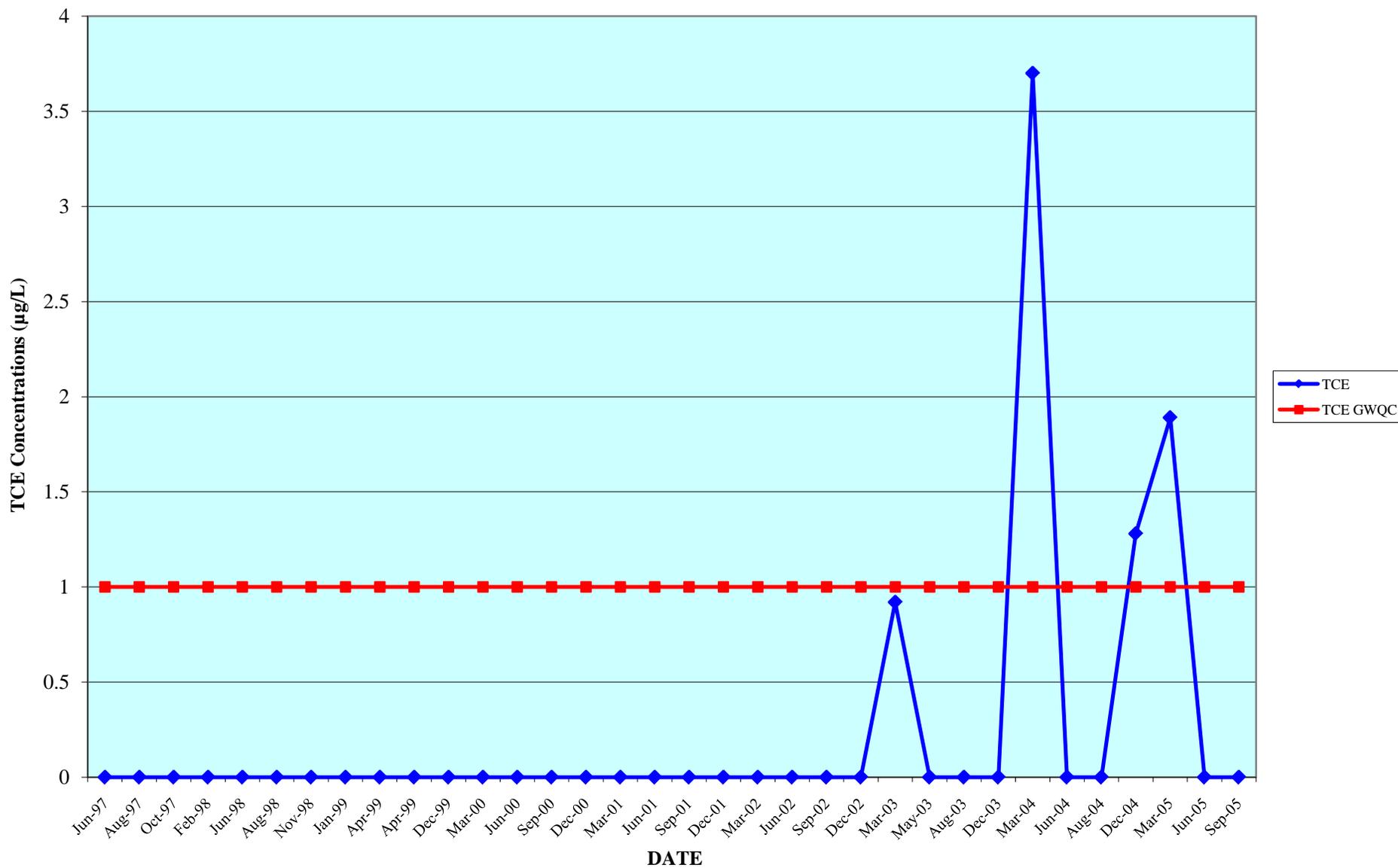


FIGURE 5-8A
Tetrachloroethene (PCE) Concentrations vs Time at M-8MW23

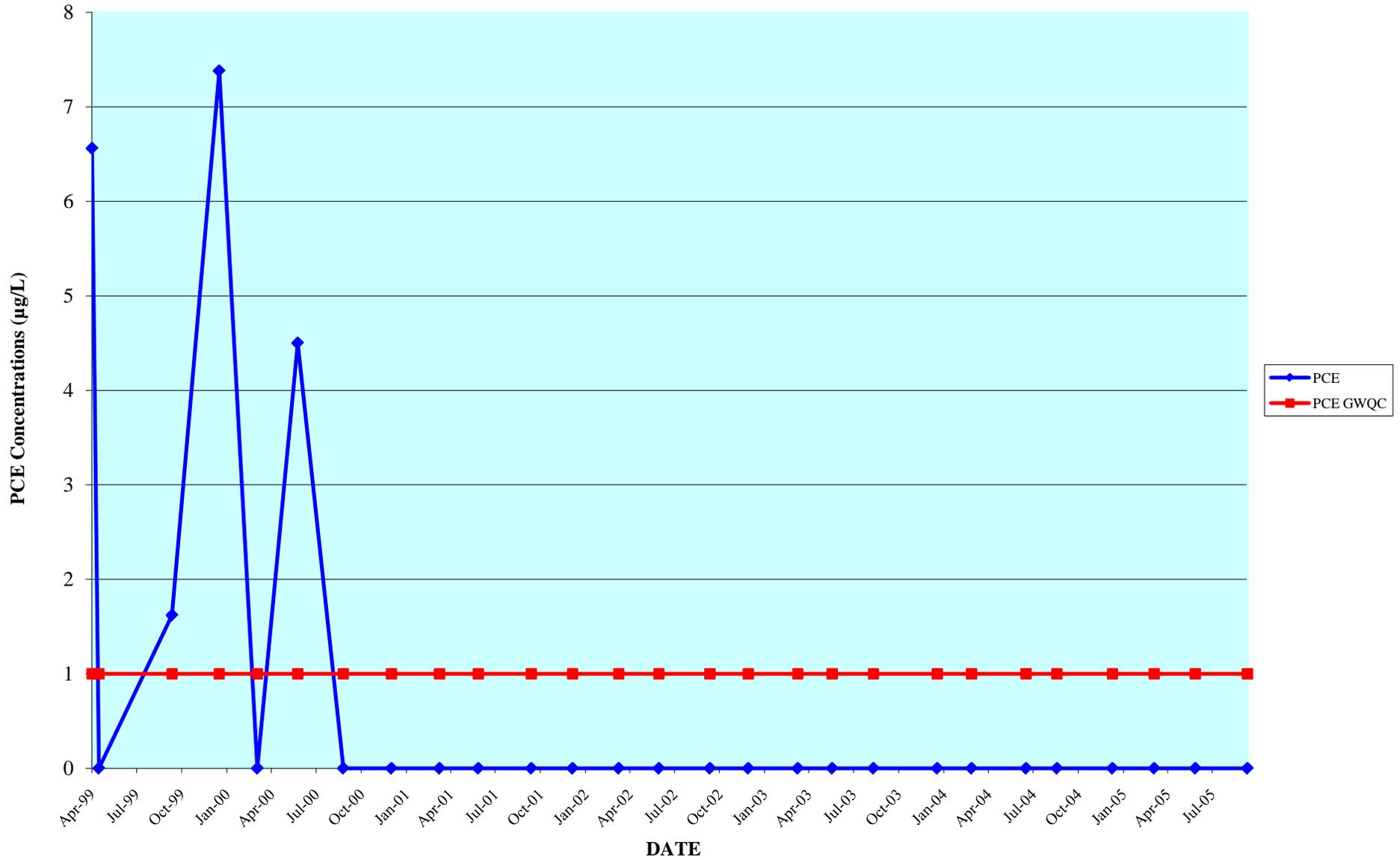


FIGURE 5-8B
Trichloroethene (TCE) Concentrations vs Time at M-8MW23

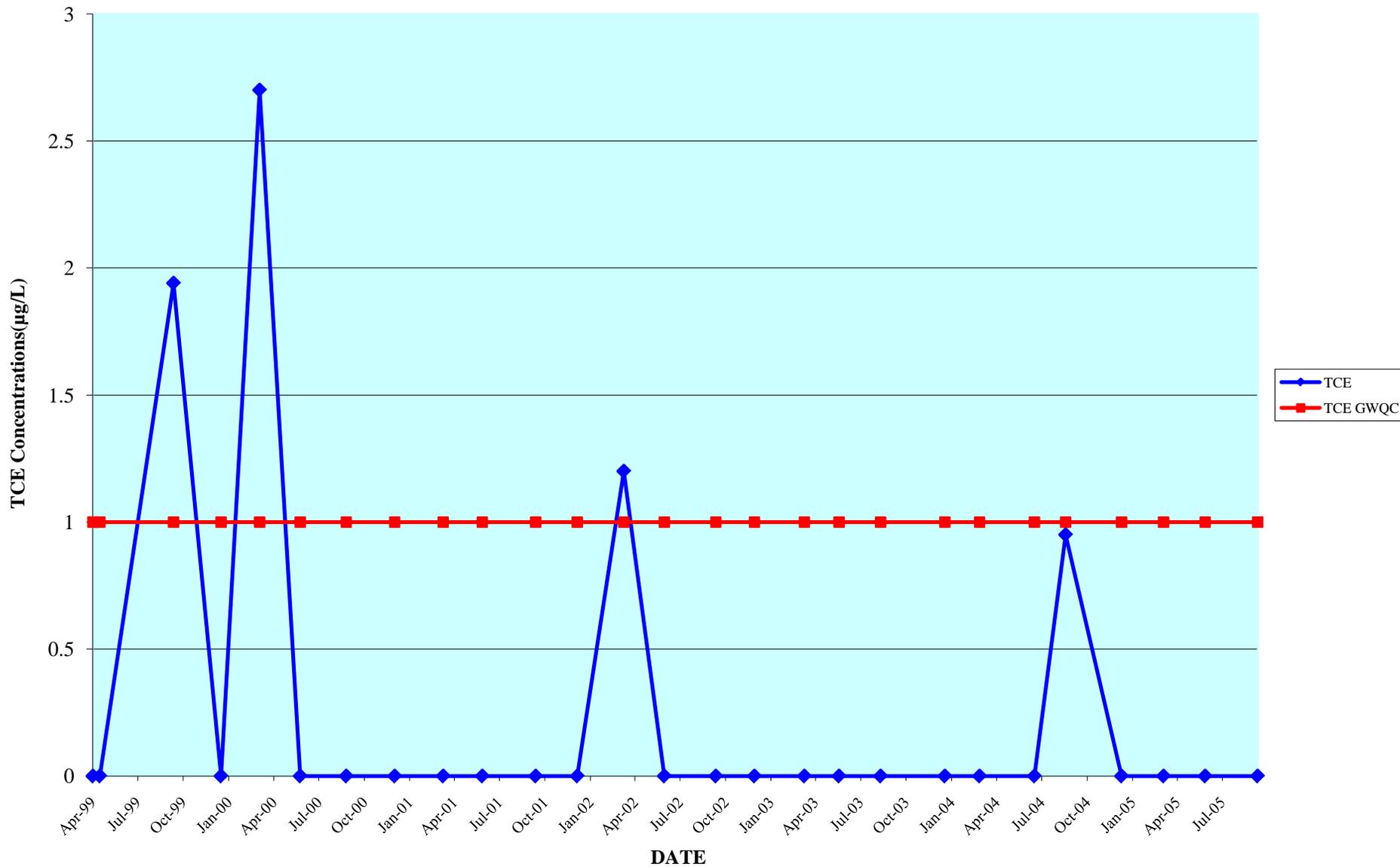
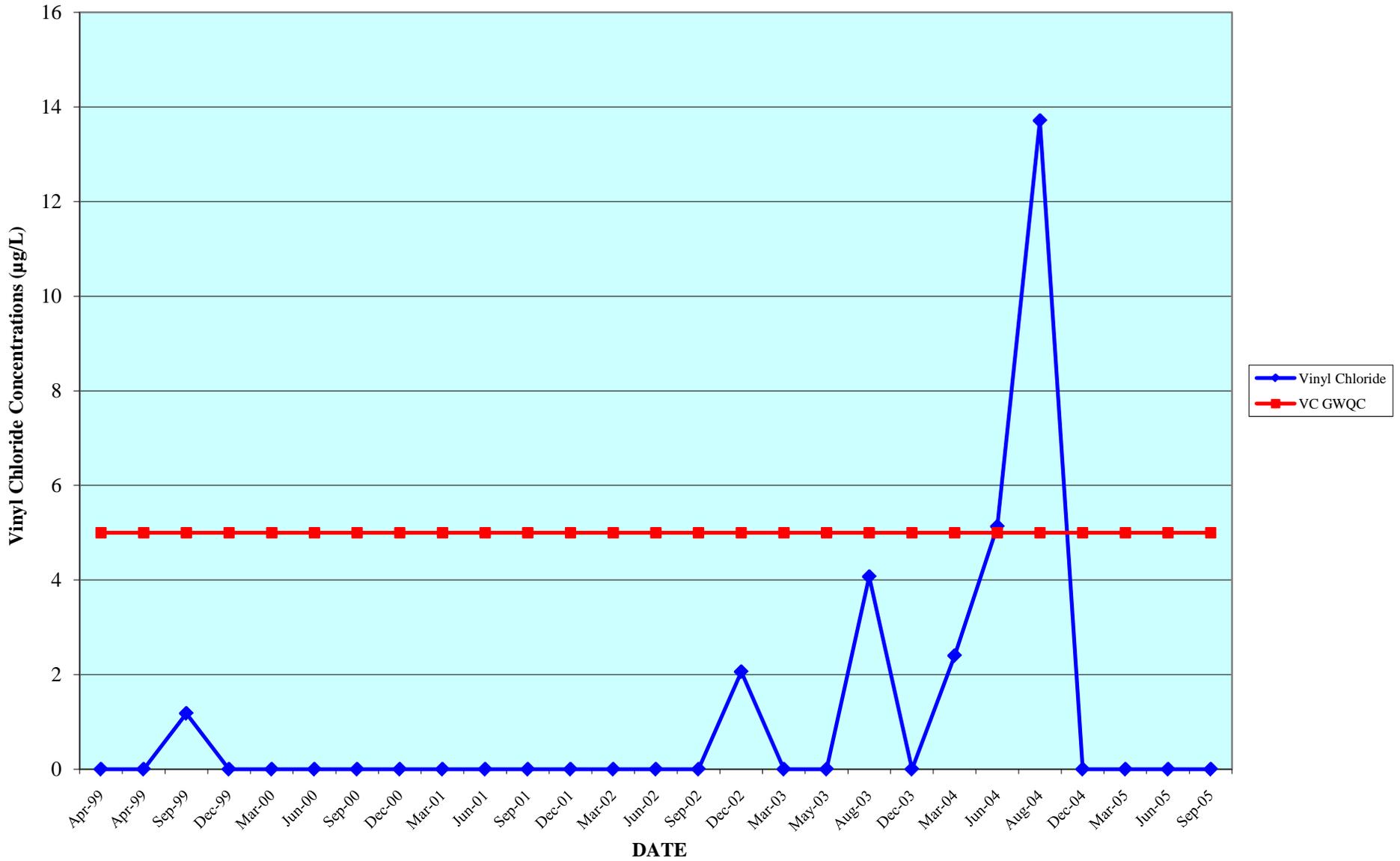


FIGURE 5-8C
Vinyl Chloride Concentrations vs Time at M-8MW23



TABLES

**Table 4-1
Groundwater Elevation Summary
M-5 Landfill
Fort Monmouth, New Jersey**

Groundwater Sampling Round:															
#27				#28				#29				#30			
Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.		
M5-MW10	6.91	10/08/03	4.75	2.16	01/14/04	4.59	2.32	05/13/04	4.30	2.61	08/20/04	4.68	2.23		
M5-MW11	11.70	10/08/03	7.65	4.05	01/14/04	7.05	4.65	05/13/04	6.97	4.73	08/20/04	7.31	4.39		
M5-MW12	8.58	10/08/03	6.13	2.45	01/14/04	5.96	2.62	05/13/04	5.80	2.78	08/20/04	5.98	2.60		
M5-MW13	5.42	10/08/03	2.85	2.57	01/14/04	2.97	2.45	05/13/04	2.40	3.02	08/20/04	2.64	2.78		
M5-MW14	5.74	10/08/03	3.45	2.29	01/14/04	3.30	2.44	05/13/04	3.20	2.54	08/20/04	2.99	2.75		
M5-MW15	17.40	10/08/03	9.79	7.61	01/14/04	8.46	8.94	05/13/04	8.05	9.35	08/20/04	9.11	8.29		
M5-MW16	15.18	10/08/03	7.63	7.55	01/14/04	6.63	8.55	05/13/04	6.30	8.88	08/20/04	7.06	8.12		
M5-MW18	14.47	10/08/03	7.91	6.56	01/14/04	7.17	7.30	05/13/04	7.00	7.47	08/20/04	7.55	6.92		
M5-MW19	14.02	10/08/03	7.55	6.47	01/14/04	6.90	7.12	05/13/04	6.73	7.29	08/20/04	7.35	6.67		
M5-MW20	12.64	10/08/03	6.53	6.11	01/14/04	5.87	6.77	05/13/04	5.76	6.88	08/20/04	6.25	6.39		
M5-MW23	13.00	10/08/03	8.73	4.27	01/14/04	8.01	4.99	05/13/04	7.95	5.05	08/20/04	8.46	4.54		
M5-MW25	18.01	10/08/03	12.33	5.68	01/14/04	11.32	6.69	05/13/04	11.13	6.88	08/20/04	12.10	5.91		

Notes:

- 1) Elev.: Elevation in feet above mean sea level.
- 2) Depth to water: depth in feet from the inner casing survey mark.
- 3) NM = Not Measured

**Table 4-1
Groundwater Elevation Summary
M-5 Landfill
Fort Monmouth, New Jersey**

Groundwater Sampling Round:		#31			#32			#33			#34		
Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.	Date	Depth to Water	Ground-water Elev.
M5-MW10	6.91	12/16/04	3.91	3.00	03/15/05	4.10	2.81	06/03/05	4.35	2.56	09/16/05	4.83	2.08
M5-MW11	11.70	12/15/04	6.63	5.07	03/14/05	6.75	4.95	06/03/05	7.18	4.52	09/16/05	6.93	4.77
M5-MW12	8.58	12/16/04	5.58	3.00	03/15/05	5.57	3.01	06/03/05	5.86	2.72	09/16/05	6.27	2.31
M5-MW13	5.42	12/16/04	2.10	3.32	03/15/05	2.10	3.32	06/03/05	2.47	2.95	09/16/05	3.13	2.29
M5-MW14	5.74	12/16/04	2.21	3.53	03/15/05	3.36	2.38	06/03/05	3.51	2.23	09/16/05	3.69	2.05
M5-MW15	17.40	12/16/04	NM	NM	03/15/05	NM	NM	06/03/05	8.77	8.63	09/16/05	10.49	6.91
M5-MW16	15.18	12/15/04	5.03	10.15	03/14/05	5.99	9.19	06/03/05	6.71	8.47	09/16/05	8.25	6.93
M5-MW18	14.47	12/13/04	6.53	7.94	03/14/05	6.62	7.85	06/03/05	7.21	7.26	09/16/05	8.36	6.11
M5-MW19	14.02	12/13/04	6.41	7.61	03/14/05	6.46	7.56	06/03/05	7.03	6.99	09/16/05	8.06	5.96
M5-MW20	12.64	12/13/04	5.34	7.30	03/14/05	5.47	7.17	06/03/05	6.02	6.62	09/16/05	6.75	5.89
M5-MW23	13.00	12/15/04	7.51	5.49	03/14/05	7.59	5.41	06/03/05	8.16	4.84	09/16/05	8.94	4.06
M5-MW25	18.01	12/16/04	NM	NM	03/15/05	NM	NM	06/03/05	11.70	6.31	09/16/05	12.75	5.26

Notes:

- 1) Elev.: Elevation in feet above mean sea level.
- 2) Depth to water: depth in feet from the inner casing survey mark.
- 3) NM = Not Measured

Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#1	M5MW10	2516.02	5/8/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	2516.01	5/8/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	2731.03	6/24/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 635
#2	M5MW10	2885.04	8/8/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	2885.03	8/8/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	2930.06	8/25/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#3	M5MW10	3116.04	10/29/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	3116.03	10/29/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	3125.06	10/31/1997	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#4	M5MW10	3348.01	2/18/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	3348.02	2/18/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	3366.03	2/25/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#5	M5MW10	3552.01	5/6/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	3552.02	5/6/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	3619.03	6/4/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#6	M5MW10	3784.03	8/4/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	3784.04	8/4/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	3843.07	8/28/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#7	M5MW10	4010.04	10/27/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	4010.03	10/27/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	4029.03	11/4/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#7A	M5MW12	2516.01	10/7/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	3967.04	10/7/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	3967.05	10/7/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#7B	M5MW12	2885.03	10/21/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	4001.03	10/23/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	4001.04	10/23/1998	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#8	M5MW10	4237.03	2/2/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	4237.04	2/2/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	3116.03	2/2/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	4237.06	2/2/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	4237.07	2/2/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	4227.03	1/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#9A	M5MW10	4416.03	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	4416.04	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	3348.02	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	4416.06	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	4416.07	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	4419.04	4/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	4419.05	4/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	4416.10	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	4416.09	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	4416.08	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	4419.08	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	4419.06	4/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	4419.07	4/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	4419.09	4/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24	4419.03	4/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624	
#9B	M5MW10	4444.03	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	4444.04	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	3552.02	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	4444.06	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	4444.07	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	4447.06	4/28/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	4447.07	4/28/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	4444.10	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	4444.09	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	4444.08	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	4447.08	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	4447.04	4/28/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	4447.05	4/28/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	4447.09	4/27/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24	4447.03	4/28/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624	
#10	M5MW10	4786.07	9/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	4786.08	9/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	3784.04	9/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	4786.05	9/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	4786.04	9/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	4788.05	9/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	4788.04	9/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	4788.06	9/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	4788.07	9/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	4447.09	9/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	4447.03	9/13/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#10	M5MW25	4788.08	9/14/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	4811.04	9/23/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	4811.16	9/23/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	4811.17	9/23/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#11	M5MW10	4955.04	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	4955.05	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	4955.06	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	4955.07	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	4955.08	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	4955.09	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	4955.10	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	4955.15	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	4955.14	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	4955.11	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	4955.12	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	4955.13	11/18/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	5051.04	12/28/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	5051.15	12/28/1999	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24	Not Available	Not Available	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624	
#12	M5MW10	5220.07	3/3/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	5220.06	3/3/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	5222.02	3/6/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	5222.03	3/6/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	5222.04	3/6/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	5220.1	3/3/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	5220.09	3/3/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	5220.11	3/3/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	5222.01	3/6/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	5220.05	3/3/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	5220.04	3/3/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	5220.08	3/3/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	5250.04	3/15/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	5250.16	3/15/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24	5250.17	3/15/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624	
#13	M5MW10	5445.04	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	5445.05	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	5445.06	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	5445.07	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	5445.08	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	5445.09	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

**Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey**

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#13	M5MW16	5445.10	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	5445.11	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	5445.12	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	5445.13	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	5445.14	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	5445.15	5/31/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	5454.04	6/5/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	5454.15	6/5/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	5454.16	6/5/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#14	M5MW10	5644.04	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	5644.05	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	5644.06	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	5644.07	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	5644.08	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	5644.09	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	5644.10	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	5644.11	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	5644.12	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	5644.13	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	5644.14	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	5644.15	8/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	5693.04	9/6/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	5693.15	9/6/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24	5693.16	9/6/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624	
#15	M5MW10	5903.04	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	5903.05	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	5903.06	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	5903.07	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	5903.08	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	5903.09	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	5903.10	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	5903.11	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	5903.12	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	5903.13	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	5903.14	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	5903.15	12/11/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	5906.04	12/13/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	5906.15	12/13/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24	5919.01	12/26/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624	

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-2
Groundwater Sampling Summary
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Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#16	M8MW12	1601104	3/21/2000	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	1601115	3/21/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	1601701	4/2/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#16A	M5MW10	778	2/13/2001	Aqueous	VOCs	Method 624
	M5MW11	779	2/13/2001	Aqueous	VOCs	Method 624
	M5MW12	780	2/13/2001	Aqueous	VOCs	Method 624
	M5MW13	781	2/13/2001	Aqueous	VOCs	Method 624
	M5MW14	782	2/13/2001	Aqueous	VOCs	Method 624
	M5MW15	783	2/13/2001	Aqueous	VOCs	Method 624
	M5MW16	784	2/13/2001	Aqueous	VOCs	Method 624
	M5MW18	785	2/13/2001	Aqueous	VOCs	Method 624
	M5MW19	786	2/13/2001	Aqueous	VOCs	Method 624
	M5MW20	787	2/13/2001	Aqueous	VOCs	Method 624
	M5MW23	788	2/13/2001	Aqueous	VOCs	Method 624
M5MW25	789	2/13/2001	Aqueous	VOCs	Method 624	
#16B	M5MW10	1600704	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	1600705	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	1600706	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	1600707	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	1600708	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	1600709	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	1600710	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	1600711	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	1600712	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	1600713	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	1600714	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	1600715	3/19/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#17	M5MW10	16166.04	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	16166.05	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	16166.06	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	16166.07	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	16166.08	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	16166.09	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	16166.10	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	16166.11	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	16166.12	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	16166.13	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	16166.14	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	16166.15	6/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	1617404	6/8/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

**Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey**

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#17	M8MW23	1617415	6/8/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	1620704	6/23/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#18	M5MW10	16407.04	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	16407.05	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	16407.06	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	16407.07	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	16407.08	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	16407.09	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	16407.10	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	16407.11	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	16407.12	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	16407.13	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	16407.14	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	16407.15	9/5/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	1644804	9/24/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	1644815	9/24/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	1646001	9/26/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	#19	M5MW10	16491.04	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs
M5MW11		16491.05	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW12		16491.06	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW13		16491.07	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW14		16491.08	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW15		16491.09	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW16		16491.10	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW18		16491.11	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW19		16491.12	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW20		16491.13	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW23		16491.14	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M5MW25		16491.15	10/4/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW12		1666204	12/17/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW23		1666215	12/17/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24		1663401	12/10/2001	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#20		M5MW10	2002904	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs
	M5MW11	2002905	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	2002906	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	2002907	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	2002908	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	2002909	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	2002910	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	2002911	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

**Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey**

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#20	M5MW19	2002912	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	2002913	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	2002914	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	2002915	1/14/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	2016204	3/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	2016215	3/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	2017101	3/27/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#21	M5MW10	2021904	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	2021905	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	2021906	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	2021907	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	2021908	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	2021909	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	2021910	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	2021911	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	2021912	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	2021913	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	2021914	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	2021915	4/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	2036104	6/11/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	2036115	6/11/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24	2039001	6/22/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624	
#22	M5MW10	2059404	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW11	2059405	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW12	2059406	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW13	2059407	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW14	2059408	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW15	2059409	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW16	2059410	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW18	2059411	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW19	2059412	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW20	2059413	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW23	2059414	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M5MW25	2059415	8/21/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW12	2067804	9/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	2067805	9/23/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24	2068801	9/26/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624	
#23	M5MW10	2076004	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW11	2076005	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW12	2076006	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

**Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey**

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#23	M5MW13	2076007	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW14	2076008	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW15	2076009	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW16	2076010	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW18	2076011	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW19	2076012	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW20	2076013	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW23	2076014	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW25	2076015	10/28/2002	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M8MW12	2088504	12/13/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	2087611	12/10/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	2088601	12/13/2002	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	#24	M5MW10	3003204	1/22/2003	Aqueous	Metals; SVOCs; VOCs
M5MW11		3003205	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW12		3003206	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW13		3003207	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW14		3003208	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW15		3003209	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW16		3003210	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW18		3003211	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW19		3003212	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW20		3003213	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW23		3003214	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M5MW25		3003215	1/22/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
M8MW12		3013204	3/21/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW23		3013215	3/21/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
M8MW24		3012704	3/20/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
#25	M5MW10	3018004	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW11	3018005	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW12	3018006	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW13	3018007	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW14	3018008	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW15	3018009	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW16	3018010	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW18	3018011	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW19	3018012	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW20	3018013	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW23	3018014	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW25	3018015	4/21/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M8MW12	3025404	5/30/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	3025415	5/30/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	3032103	6/25/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

**Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey**

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#26	M5MW10	3043904	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW11	3043905	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW12	3043906	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW13	3043907	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW14	3043908	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW15	3043909	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW16	3043910	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW18	3043911	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW19	3043912	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW20	3043913	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW23	3043914	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M5MW25	3043915	7/30/2003	Aqueous	Metals; SVOCs; VOCs	Methods 3112B and 3120B, Methods 625 & 624
	M8MW12	3054104	8/22/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW23	3054115	8/22/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	M8MW24	3058004	9/8/2003	Aqueous	Metals; Pest/PCBs; SVOCs; VOCs	Methods 3112B and 3120B, Methods 608, 625, & 624
	#27	M5MW10	3063804	10/8/2003	Aqueous	VOCs
M5MW11		3063805	10/8/2003	Aqueous	VOCs	Method 624
M5MW12		3063806	10/8/2003	Aqueous	VOCs	Method 624
M5MW13		3063807	10/8/2003	Aqueous	VOCs	Method 624
M5MW14		3063808	10/8/2003	Aqueous	VOCs	Method 624
M5MW16		3063809	10/8/2003	Aqueous	VOCs	Method 624
M5MW18		3063810	10/8/2003	Aqueous	VOCs	Method 624
M5MW19		3063811	10/8/2003	Aqueous	VOCs	Method 624
M5MW20		3063812	10/8/2003	Aqueous	VOCs	Method 624
M5MW23		3063813	10/8/2003	Aqueous	VOCs	Method 624
M8MW12		3080404	12/12/2003	Aqueous	VOCs	Method 624
M8MW23		3083107	12/30/2003	Aqueous	VOCs	Method 624
M8MW24		3075504	11/21/2003	Aqueous	VOCs	Method 624
#28	M5MW10	4002904	1/14/2004	Aqueous	VOCs	Method 624
	M5MW11	4002905	1/14/2004	Aqueous	VOCs	Method 624
	M5MW12	4002906	1/14/2004	Aqueous	VOCs	Method 624
	M5MW13	4002907	1/14/2004	Aqueous	VOCs	Method 624
	M5MW14	4002908	1/14/2004	Aqueous	VOCs	Method 624
	M5MW16	4002909	1/14/2004	Aqueous	VOCs	Method 624
	M5MW18	4002910	1/14/2004	Aqueous	VOCs	Method 624
	M5MW19	4002911	1/14/2004	Aqueous	VOCs	Method 624
	M5MW20	4002912	1/14/2004	Aqueous	VOCs	Method 624
	M5MW23	4002913	1/14/2004	Aqueous	VOCs	Method 624
	M8MW12	4015704	3/9/2004	Aqueous	VOCs	Method 624
	M8MW23	4015708	3/9/2004	Aqueous	VOCs	Method 624
	M8MW24	4014201	2/25/2004	Aqueous	VOCs	Method 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#29	M5MW10	4035904	5/13/2004	Aqueous	VOCs	Method 624
	M5MW11	4035905	5/13/2004	Aqueous	VOCs	Method 624
	M5MW12	4035906	5/13/2004	Aqueous	VOCs	Method 624
	M5MW13	4035907	5/13/2004	Aqueous	VOCs	Method 624
	M5MW14	4035908	5/13/2004	Aqueous	VOCs	Method 624
	M5MW16	4035909	5/13/2004	Aqueous	VOCs	Method 624
	M5MW18	4035910	5/13/2004	Aqueous	VOCs	Method 624
	M5MW19	4035911	5/13/2004	Aqueous	VOCs	Method 624
	M5MW20	4035912	5/13/2004	Aqueous	VOCs	Method 624
	M5MW23	4035913	5/13/2004	Aqueous	VOCs	Method 624
	M8MW12	4049404	6/28/2004	Aqueous	VOCs	Method 624
	M8MW23	4049415	6/28/2004	Aqueous	VOCs	Method 624
	M8MW24	40409901	6/28/2004	Aqueous	VOCs	Method 624
	#30	M5MW10	4061404	8/20/2004	Aqueous	VOCs
M5MW11		4061405	8/20/2004	Aqueous	VOCs	Method 624
M5MW12		4061406	8/20/2004	Aqueous	VOCs	Method 624
M5MW13		4061407	8/20/2004	Aqueous	VOCs	Method 624
M5MW14		4061408	8/20/2004	Aqueous	VOCs	Method 624
M5MW16		4061409	8/20/2004	Aqueous	VOCs	Method 624
M5MW18		4061410	8/20/2004	Aqueous	VOCs	Method 624
M5MW19		4061411	8/20/2004	Aqueous	VOCs	Method 624
M5MW20		4061412	8/20/2004	Aqueous	VOCs	Method 624
M5MW23		4061413	8/20/2004	Aqueous	VOCs	Method 624
M8MW12		4063704	8/30/2004	Aqueous	VOCs	Method 624
M8MW23		4063715	8/30/2004	Aqueous	VOCs	Method 624
M8MW24		4063716	8/30/2004	Aqueous	VOCs	Method 624
#31		M5MW10	4084603	12/16/2004	Aqueous	VOCs
	M5MW11	4084504	12/16/2004	Aqueous	VOCs	Method 624
	M5MW12	4084604	12/16/2004	Aqueous	VOCs	Method 624
	M5MW13	4084605	12/16/2004	Aqueous	VOCs	Method 624
	M5MW14	4084606	12/16/2004	Aqueous	VOCs	Method 624
	M5MW16	4084505	12/15/2004	Aqueous	VOCs	Method 624
	M5MW18	4083303	12/14/2004	Aqueous	VOCs	Method 624
	M5MW19	4083302	12/14/2004	Aqueous	VOCs	Method 624
	M5MW20	4083301	12/14/2004	Aqueous	VOCs	Method 624
	M5MW23	4084506	12/15/2004	Aqueous	VOCs	Method 624
	M8MW12	4086004	12/21/2004	Aqueous	VOCs	Method 624
	M8MW23	4086005	12/21/2004	Aqueous	VOCs	Method 624
	M8MW24	4086006	12/21/2004	Aqueous	VOCs	Method 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-2
Groundwater Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#32	M5MW10	5015404	3/15/2005	Aqueous	VOCs	Method 624
	M5MW11	5015204	3/14/2005	Aqueous	VOCs	Method 624
	M5MW12	5015405	3/15/2005	Aqueous	VOCs	Method 624
	M5MW13	5015406	3/15/2005	Aqueous	VOCs	Method 624
	M5MW14	5015407	3/15/2005	Aqueous	VOCs	Method 624
	M5MW16	5015205	3/14/2005	Aqueous	VOCs	Method 624
	M5MW18	5015206	3/14/2005	Aqueous	VOCs	Method 624
	M5MW19	5015207	3/14/2005	Aqueous	VOCs	Method 624
	M5MW20	5015208	3/14/2005	Aqueous	VOCs	Method 624
	M5MW23	5015209	3/14/2005	Aqueous	VOCs	Method 624
	M8MW12	5015704	3/16/2005	Aqueous	VOCs	Method 624
	M8MW23	5015712	3/16/2005	Aqueous	VOCs	Method 624
	M8MW24	5015807	3/17/2005	Aqueous	VOCs	Method 624
#33	M5MW10	5028404	6/3/2005	Aqueous	VOCs	Method 624
	M5MW11	5028405	6/3/2005	Aqueous	VOCs	Method 624
	M5MW12	5028406	6/3/2005	Aqueous	VOCs	Method 624
	M5MW13	5028407	6/3/2005	Aqueous	VOCs	Method 624
	M5MW14	5028408	6/3/2005	Aqueous	VOCs	Method 624
	M5MW16	5028409	6/3/2005	Aqueous	VOCs	Method 624
	M5MW18	5028410	6/3/2005	Aqueous	VOCs	Method 624
	M5MW19	5028411	6/3/2005	Aqueous	VOCs	Method 624
	M5MW20	5028412	6/3/2005	Aqueous	VOCs	Method 624
	M5MW23	5028413	6/3/2005	Aqueous	VOCs	Method 624
	M8MW12	5029104	6/7/2005	Aqueous	VOCs	Method 624
	M8MW23	5029910	6/8/2005	Aqueous	VOCs	Method 624
	M8MW24	5029109	6/17/2005	Aqueous	VOCs	Method 624
#34	M5MW10	5047303	9/16/2005	Aqueous	VOCs	Method 624
	M5MW11	5047304	9/16/2005	Aqueous	VOCs	Method 624
	M5MW12	5047305	9/16/2005	Aqueous	VOCs	Method 624
	M5MW13	5047306	9/16/2005	Aqueous	VOCs	Method 624
	M5MW14	5047307	9/16/2005	Aqueous	VOCs	Method 624
	M5MW16	5047308	9/16/2005	Aqueous	VOCs	Method 624
	M5MW18	5047309	9/16/2005	Aqueous	VOCs	Method 624
	M5MW19	5047310	9/16/2005	Aqueous	VOCs	Method 624
	M5MW20	5047311	9/16/2005	Aqueous	VOCs	Method 624
	M5MW23	5047312	9/16/2005	Aqueous	VOCs	Method 624
	M8MW12	5048304	9/22/2005	Aqueous	VOCs	Method 624
	M8MW23	5048312	9/22/2005	Aqueous	VOCs	Method 624
	M8MW24	5048607	9/23/2005	Aqueous	VOCs	Method 624

Notes:

Metals = Target Analyte List Metals; VOCs = Volatile Organic Compounds; SVOCs = Semi-Volatile Organic Compounds; Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-3
Surface Water Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#1A	SS-4	2178.04	10/8/1996	Aqueous	VOCs	Method 624
	SS-5	2178.05	10/8/1996	Aqueous	VOCs	Method 624
	SS-15	2178.15	10/8/1996	Aqueous	VOCs	
#1B	SS-4	2223.12	11/25/1996	Aqueous	VOCs	Method 624
	SS-5	2223.14	11/25/1996	Aqueous	VOCs	Method 624
	SS-15	2223.09	11/25/1996	Aqueous	VOCs	Method 624
	SS-16	2223.10	11/25/1996	Aqueous	VOCs	Method 624
#1C	SS-4	2246.12	12/12/1996	Aqueous	VOCs	Method 624
	SS-5	2246.14	12/12/1996	Aqueous	VOCs	Method 624
	SS-15	2246.09	12/12/1996	Aqueous	VOCs	Method 624
	SS-16	2246.10	12/12/1996	Aqueous	VOCs	Method 624
#2A	SS-4	2298.12	1/29/1997	Aqueous	VOCs	Method 624
	SS-5	2298.14	1/29/1997	Aqueous	VOCs	Method 624
	SS-15	2298.09	1/29/1997	Aqueous	VOCs	Method 624
	SS-16	2298.10	1/29/1997	Aqueous	VOCs	Method 624
#2B	SS-4	2361.12	2/26/1997	Aqueous	VOCs	Method 624
	SS-5	2361.13	2/26/1997	Aqueous	VOCs	Method 624
	SS-15	2361.09	2/26/1997	Aqueous	VOCs	Method 624
	SS-16	2361.10	2/26/1997	Aqueous	VOCs	Method 624
#2C	SS-4	2375.12	3/10/1997	Aqueous	VOCs	Method 624
	SS-5	2375.13	3/10/1997	Aqueous	VOCs	Method 624
	SS-15	2375.09	3/10/1997	Aqueous	VOCs	Method 624
	SS-16	2375.10	3/10/1997	Aqueous	VOCs	Method 624
#3	SS-4	2439.12	4/8/1997	Aqueous	VOCs	Method 624
	SS-5	2439.13	4/8/1997	Aqueous	VOCs	Method 624
	SS-15	2439.09	4/8/1997	Aqueous	VOCs	Method 624
	SS-16	2439.10	4/8/1997	Aqueous	VOCs	Method 624
#4	SS-4	2810.12	7/17/1997	Aqueous	VOCs	Method 624
	SS-5	2810.13	7/17/1997	Aqueous	VOCs	Method 624
	SS-15	2810.09	7/17/1997	Aqueous	VOCs	Method 624
	SS-16	2810.10	7/17/1997	Aqueous	VOCs	Method 624

Notes:

VOCs = Volatile Organic Compounds

Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-3
Surface Water Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#5	SS-4	3121.12	10/30/1997	Aqueous	VOCs	Method 624
	SS-5	3121.13	10/30/1997	Aqueous	VOCs	Method 624
	SS-15	3121.09	10/30/1997	Aqueous	VOCs	Method 624
	SS-16	3121.10	10/30/1997	Aqueous	VOCs	Method 624
#6	SS-4	3331.12	2/10/1998	Aqueous	VOCs	Method 624
	SS-5	3331.13	2/10/1998	Aqueous	VOCs	Method 624
	SS-15	3331.09	2/10/1998	Aqueous	VOCs	Method 624
	SS-16	3331.10	2/10/1998	Aqueous	VOCs	Method 624
#7	SS-4	3499.12	4/21/1998	Aqueous	VOCs	Method 624
	SS-5	3499.13	4/21/1998	Aqueous	VOCs	Method 624
	SS-15	3499.09	4/21/1998	Aqueous	VOCs	Method 624
	SS-16	3499.10	4/21/1998	Aqueous	VOCs	Method 624
#8	SS-4	3816.12	8/19/1998	Aqueous	VOCs	Method 624
	SS-5	3816.11	8/19/1998	Aqueous	VOCs	Method 624
	SS-15	3816.09	8/19/1998	Aqueous	VOCs	Method 624
	SS-16	3816.10	8/19/1998	Aqueous	VOCs	Method 624
#9	SS-4	4069.09	11/17/1998	Aqueous	VOCs	Method 624
	SS-5	4060.10	11/17/1998	Aqueous	VOCs	Method 624
	SS-16	4069.06	11/17/1998	Aqueous	VOCs	Method 624
	SS-15	4069.08	11/18/1998	Aqueous	VOCs	Method 624
#10	SS-4	4300.12	2/25/1999	Aqueous	VOCs	Method 624
	SS-5	4300.13	2/25/1999	Aqueous	VOCs	Method 624
	SS-15	4300.09	2/25/1999	Aqueous	VOCs	Method 624
	SS-16	4300.10	2/25/1999	Aqueous	VOCs	Method 624
#11	SS-4	4579.14	6/29/1999	Aqueous	VOCs	Method 624
	SS-5	4579.15	6/29/1999	Aqueous	VOCs	Method 624
	SS-15	4579.11	6/29/1999	Aqueous	VOCs	Method 624
	SS-16	4579.12	6/29/1999	Aqueous	VOCs	Method 624
#12	SS-4	4806.05	9/22/1999	Aqueous	VOCs	Method 624
	SS-5	4806.06	9/22/1999	Aqueous	VOCs	Method 624
	SS-15	4802.11	9/21/1999	Aqueous	VOCs	Method 624
	SS-16	4806.03	9/21/1999	Aqueous	VOCs	Method 624

Notes:

VOCs = Volatile Organic Compounds

Pest/PCBs = Pesticides/Polychlorinated Biphenyls

**Table 4-3
Surface Water Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey**

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#13	SS-4	4997.10	12/8/1999	Aqueous	VOCs	Method 624
	SS-5	4997.11	12/8/1999	Aqueous	VOCs	Method 624
	SS-16	4997.12	12/8/1999	Aqueous	VOCs	Method 624
	SS-15	4997.17	12/8/1999	Aqueous	VOCs	Method 624
#14	SS-4	5211.10	3/1/2000	Aqueous	VOCs	Method 624
	SS-5	5211.11	3/1/2000	Aqueous	VOCs	Method 624
	SS-16	5211.13	3/1/2000	Aqueous	VOCs	Method 624
	SS-15	5211.17	3/1/2000	Aqueous	VOCs	Method 624
#15	SS-4	5468.16	6/12/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	5468.15	6/12/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	5468.12	6/12/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	5468.14	6/12/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#16	SS-4	5658.16	8/24/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	5658.15	8/24/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	5658.12	8/24/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	5658.14	8/24/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#17	SS-4	5868.16	11/20/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	5868.15	11/20/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	5868.12	11/20/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	5868.14	11/20/2000	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#18	SS-4	1310	3/8/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	1309	3/8/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	962	2/21/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	963	2/21/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#19	SS-4	16120.16	5/16/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	16120.15	5/16/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	16120.12	5/16/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	16120.14	5/16/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#20	SS-4	16449.14	9/25/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	16449.16	9/25/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	16449.08	9/25/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	16449.15	9/25/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624

Notes:

VOCs = Volatile Organic Compounds

Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-3
Surface Water Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#21	SS-4	16579.19	11/14/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	16579.20	11/14/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	16579.12	11/14/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	16579.15	11/14/2001	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#22	SS-4	2008619	2/11/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	2008620	2/11/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	2008612	2/11/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	2008615	2/11/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#23	SS-4	2037619	6/18/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	2037620	6/18/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	2037611	6/18/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	2037615	6/18/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#24	SS-4	2066610	9/18/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	2066622	9/18/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	2066607	9/18/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	2066623	9/18/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#25	SS-4	2078012	11/5/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	2078014	11/4/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	2078707	11/5/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	2078710	11/5/2002	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#26	SS-4	3011817	3/13/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	3011818	3/13/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	3011813	3/13/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	3013404	3/24/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#27	SS-4	3024716	5/21/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	3024715	5/21/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	3024712	5/21/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	3024714	5/21/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#28	SS-4	3059215	9/17/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	3059216	9/17/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	3059217	9/17/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	3059220	9/17/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624

Notes:

VOCs = Volatile Organic Compounds

Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 4-3
Surface Water Sampling Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Field Sample ID	Lab Sample ID	Date Collected	Matrix	Analytical Parameters	Analytical Methods
#29	SS-4	3070015	11/4/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	3070016	11/4/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	3070017	11/4/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	3070020	11/4/2003	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#30	SS-4	4018215	3/17/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	4018216	3/17/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	4018217	3/17/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	4018220	3/17/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#31	SS-4	4050015	6/29/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	4050016	6/29/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	4050017	6/29/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	4050020	6/29/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#32	SS-4	4063215	8/26/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-5	4063216	8/26/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-16	4063217	8/26/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	4063220	8/26/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#33	SS-5	4080406	11/23/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	4080412	11/23/2004	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#34	SS-5	5011706	3/3/2005	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	5011712	3/3/2005	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#35	SS-5	5011706	6/15/2005	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	5011712	6/14/2005	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
#36	SS-5	5046204	9/13/2005	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624
	SS-15	5046006	9/12/2005	Aqueous	Pest/PCBs; VOCs	Methods 608 & 624

Notes:

VOCs = Volatile Organic Compounds

Pest/PCBs = Pesticides/Polychlorinated Biphenyls

Table 5-1
 MW10 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#10	
WELL ID			M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10
ANALYTE / Lab ID			2516.02	2885.04	3116.04	3348.01	3552.01	3784.03	4010.04	4237.03	4416.03	4444.03	4786.08	
Date Collected			5/8/1997	8/8/1997	10/29/1997	2/18/1998	5/6/1998	8/4/1998	10/27/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	
VOCs														
Acetone	6000	ug/L	ND	ND	ND	ND	ND	5.08	9.43	ND	ND	ND	ND	
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	4.10	ND	ND	ND	ND	
SVOCs														
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	ND	ND	5.57	ND	ND	ND	
Di-n-butylphthalate	700	ug/L	2.51	30.78	2.13	6.20	ND	ND	ND	ND	ND	ND	ND	
Pest/PCBs														
4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Gamma-BHC	0.20	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 1 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-1 (cont'd)
 MW10 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#10	
WELL ID			M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10
Date Collected			5/8/1997	8/8/1997	10/29/1997	2/18/1998	5/6/1998	8/4/1998	10/27/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	
ANALYTE / Lab ID			2516.02	2885.04	3116.04	3348.01	3552.01	3784.03	4010.04	4237.03	4416.03	4444.03	4786.08	

Metals													
Aluminum	200	ug/L	61.7	33.8	105	96	60.1	103	106	ND	43.9	44.5	ND
Antimony	6	ug/L	ND	ND	ND	ND	ND	3.01	5.96	ND	ND	ND	ND
Arsenic	3	ug/L	3.0	1.0	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barium	2000	ug/L	67.49	ND	78	108	99	26.5	34.4	114	93.2	89.5	40.4
Beryllium	1	ug/L	0.19	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.28	0.560
Calcium	NLE	ug/L	10650	8050	31340	17870	8165	10300	12900	15200	13100	14600	14400
Chromium	70	ug/L	0.7	76.0	2.6	ND	ND	3.33	3.98	3.17	4.09	3.51	5.11
Cobalt	NLE	ug/L	ND	ND	ND	ND	ND	ND	0.695	ND	ND	ND	ND
Copper	1300	ug/L	9.0	7.0	11.0	10	10.0	ND	6.27	5.29	22.1	8.55	10.1
Iron	300	ug/L	4083	1680	7386	4899	6027	2850	3690	8760	6110	4320	4330
Lead	5	ug/L	1.8	1.0	8.0	ND	ND	ND	2.45	ND	3.79	ND	ND
Magnesium	NLE	ug/L	10040.00	11160	16140	14860	5989	12500	13400	6920	8050	7990	14600
Manganese	50	ug/L	87.0	59.0	200	138	75	35.4	47.8	175	135	152	66.7
Mercury	2	ug/L	ND	ND	ND	ND	ND	0.19	ND	0.17	ND	ND	ND
Nickel	100	ug/L	ND	ND	1.3	2.3	2.2	ND	1.53	1.81	0.584	1.16	ND
Potassium	NLE	ug/L	9610.0	14410.0	13450	11160	6453	22700	20700	3300	6350	4990	15100
Selenium	40	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	3.91	ND	ND
Silver	40	ug/L	40.0*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	50000	ug/L	35250	29150	82150	114800	39780	23400	29100	42400	35200	39000	47100
Thallium	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NLE	ug/L	ND	ND	ND	ND	2.9	1.51	2.67	1.54	1.49	1.44	1.58
Zinc	2000	ug/L	20.0	4.0	71.0	16	15.5	20.1	85.9	46.7	21.0	18.7	8.68

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 1 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 *Laboratory contamination.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-1 (cont'd)
 MW10 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.04	5220.07	5445.04	5644.04	5903.04	778	1600704	16166.04	16407.04	16491.04	2002904	2021904	2059404	

VOCs

1,2-Dichlorobenzene	600	ug/L	ND												
1,3-Dichlorobenzene	600	ug/L	ND												
1,4-Dichlorobenzene	75	ug/L	ND												
2-Butanone	300	ug/L	ND												
4-Methyl-2-Pentanone	NLE	ug/L	ND												
Acetone	6000	ug/L	ND												
Benzene	1	ug/L	ND												
Chlorobenzene	4	ug/L	ND												
Chloroform	70	ug/L	ND												
Methylene Chloride	3	ug/L	ND												
Methyl-tert-Butyl ether	70	ug/L	ND												
o-Xylene	NLE	ug/L	ND												
tert-Butyl alcohol	NLE	ug/L	ND												
Toluene	1000	ug/L	ND												
Xylenes (Total)	1000	ug/L	ND												

SVOCS

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	6.34	ND	ND	ND
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.003	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.003	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-1 (cont'd)
 MW10 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.04	5220.07	5445.04	5644.04	5903.04	778	1600704	16166.04	16407.04	16491.04	2002904	2021904	2059404	
Metals																
Aluminum	200	ug/L	21.4	404	429	259	86.1	NA	80.0	ND	ND	ND	25.5	79.8	246	
Antimony	6	ug/L	4.19	ND	2.86	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	ND	NA	ND	2.93	3.72	ND	2.47	ND	ND	
Barium	2000	ug/L	41.7	145	60.9	86.0	45.9	NA	189	97.5	28.5	553	181	152	25.5	
Cadmium	4	ug/L	ND	3.12	ND	ND	ND	NA	2.5	1.95	ND	9.14	2.81	ND	ND	
Calcium	NLE	ug/L	9270	18200	11800	19600	13400	NA	35400	16200	11300	138000	36400	13900	14800	
Chromium	70	ug/L	4.68	6.39	8.43	ND	ND	NA	5.8	2.83	3.73	2.30	2.90	3.80	2.05	
Cobalt	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	1.95	ND	1.41	ND	ND	ND	
Copper	1300	ug/L	34.6	7.40	ND	7.39	ND	NA	11.0	16.7	17.1	10.4	5.11	10.1	14.9	
Iron	300	ug/L	5880	11700	6360	5940	3250	NA	23600	14200	4130	27400	14400	10000	1460	
Lead	5	ug/L	ND	14.9	8.36	3.56	ND	NA	ND	4.5	ND	3.33	3.42	3.07	ND	
Magnesium	NLE	ug/L	11400	12800	9970	9610	9600	NA	27300	14100	14500	14200	30200	14700	14100	
Manganese	50	ug/L	33.6	166	86.8	218	92.2	NA	796	237	76.8	1180	524	112	62.3	
Mercury	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.2	0.1	ND	ND	
Nickel	100	ug/L	1.71	2.15	1.62	ND	ND	NA	ND	4.64	ND	9.96	ND	ND	2.21	
Potassium	NLE	ug/L	15500	17000	18800	10700	14800	NA	8.25	12300	15400	50600	15900	13600	15300	
Selenium	40	ug/L	ND	ND	ND	ND	ND	NA	4.0	7.92	ND	4.58	11.4	8.46	6.97	
Silver	40	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	3.32	ND	ND	
Sodium	50000	ug/L	22900	44200	30900	49800	29900	NA	175000	39400	42300	996000	169000	49100	91200	
Vanadium	NLE	ug/L	2.25	5.27	3.99	ND	1.07	NA	ND	1.96	2.38	0.813	ND	2.16	1.57	
Zinc	2000	ug/L	43.8	71.6	26.6	27.9	51.9	NA	35.0	55.2	ND	673	33.3	56.8	111	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-1 (cont'd)
 MW10 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW10	M5MW10	M-5MW10	M-5MW10
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076004	3003204	3018004	3043904

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCS

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	281	306	241	93.2
Antimony	6	ug/L	ND	5.95	ND	ND
Arsenic	3	ug/L	4.68	2.65	ND	ND
Barium	2000	ug/L	66.7	183	172	55.9
Beryllium	1	ug/L	ND	ND	ND	ND
Cadmium	4	ug/L	ND	1.13	1.49	0.545
Calcium	NLE	ug/L	15700	14900	29400	11400
Chromium	70	ug/L	2.45	5.53	1.46	2.23
Cobalt	NLE	ug/L	ND	ND	3.37	ND
Copper	1300	ug/L	10.8	6.26	8.87	3.78
Iron	300	ug/L	6260	17100	15400	4280
Lead	5	ug/L	4.45	3.39	2.34	ND
Magnesium	NLE	ug/L	9840	10800	18000	13700
Manganese	50	ug/L	304	252	1060	106
Nickel	100	ug/L	ND	ND	3.59	ND
Potassium	NLE	ug/L	7580	7500	6630	15600
Selenium	40	ug/L	7.86	ND	ND	6.64
Sodium	50000	ug/L	57600	43100	93800	26100
Vanadium	NLE	ug/L	1.49	2.27	1.39	1.49
Zinc	2000	ug/L	38.2	27.7	99.3	26.8

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-1 (cont'd)
 MW10 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10	M5MW10
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/16/2004	3/15/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063804	4002904	4035904	4061404	4084603	5015404	5028404	5047303	

VOCs										
2-Butanone	300	ug/L	ND							
Acetone	6000	ug/L	ND							
Bromoform	4	ug/L	ND							
Chloroform	70	ug/L	ND							
cis-1,2-Dichloroethene	10	ug/L	ND							
Tetrachloroethene	1	ug/L	ND							
Trichloroethene	1	ug/L	ND							
Vinyl chloride	5	ug/L	ND							

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-2
MW11 Groundwater Sampling Results
M-5 Landfill Site
Fort Monmouth, New Jersey

Round	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#10	
WELL ID			M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11
ANALYTE / Lab ID			2516.01	2885.03	3116.03	3348.02	3552.02	3784.04	4010.03	4237.04	4416.04	4444.04	4786.07	
Date Collected			5/8/1997	8/8/1997	10/29/1997	2/28/1998	5/6/1998	8/4/1998	10/27/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	

VOCs

Compound	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#10
Acetone	6000	ug/L	ND	ND	ND	ND	ND	9.43	2.91	ND	ND	ND	ND
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	2.92	ND	ND	ND	ND	ND
Tetrachloroethene	1	ug/l	62.85	57.74	64.96	39.33	24.39	18.37	52.64	5.16	33.38	12.84	49.25

SVOCS

Compound	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#10
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	ND	5.28	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	3.25	13.68	4.75	10.05	ND	ND	ND	ND	ND	ND	ND

Pest/PCBs

Compound	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#10
4,4'-DDD	.1	ug/L	ND	ND	ND								
4,4'-DDE	.1	ug/L	ND	ND	ND								
4,4'-DDT	.1	ug/L	ND	ND	ND								
alpha-BHC	.02	ug/L	ND	ND	ND								
delta-BHC	NLE	ug/L	ND	ND	ND								
Gamma-BHC	0.20	ug/L	ND	ND	ND								
Dieldrin	.03	ug/L	ND	ND	ND								
Endrin ketone	NLE	ug/L	ND	ND	ND								
gamma-Chlordane	.5	ug/L	ND	ND	ND								
Heptachlor Epoxide	.2	ug/L	ND	ND	ND								

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; Historical Data for rounds 1 through 10 derived from previous RAPR

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-2 (cont'd)
 MW11 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#10	
WELL ID			M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11
ANALYTE / Lab ID			2516.01	2885.03	3116.03	3348.02	3552.02	3784.04	4010.03	4237.04	4416.04	4444.04	4786.07	
Date Collected			5/8/1997	8/8/1997	10/29/1997	2/28/1998	5/6/1998	8/4/1998	10/27/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	

Metals													
Aluminum	200	ug/L	76.7	55.1	669	222	ND	4570	78.8	267	92.9	92.0	ND
Arsenic	3	ug/L	3.0	ND									
Barium	2000	ug/L	12.23	ND	13.4	12	10.4	18.7	9.02	19.1	9.95	8.41	11.0
Beryllium	1	ug/L	0.16	0.14	ND								
Cadmium	4	ug/L	ND	ND	ND	ND	1.0	1.35	ND	ND	ND	1.74	0.556
Calcium	NLE	ug/L	11750	8730	10060	10710	8788	19500	9090	14800	11700	11000	14100
Chromium	70	ug/L	0.5	73.0	5.4	ND	ND	16.5	ND	3.34	1.72	1.39	2.11
Cobalt	NLE	ug/L	20.0	ND	1.1	ND	ND	1.44	ND	ND	ND	0.870	0.648
Copper	1300	ug/L	4.0	4.0	16.0	17	6.8	3.37	7.86	ND	8.28	5.55	4.28
Iron	300	ug/L	ND	110	1551	305	58	1500	184	1670	227	198	680
Lead	5	ug/L	ND	ND	8.0	ND	ND	2.38	ND	ND	ND	ND	ND
Magnesium	NLE	ug/L	4580	3630	3380	2990	2781	6090	2960	3930	3300	3660	7840
Manganese	50	ug/L	45.0	66.0	12.7	32	6.4	16.9	7.74	44.4	9.71	18.0	16.5
Mercury	2	ug/L	ND	0.18	ND	ND	ND						
Nickel	100	ug/L	ND	ND	3.9	4.9	4.3	3.19	3.87	2.94	2.62	2.28	2.62
Potassium	NLE	ug/L	2250	2320	6120	5260	4573	33000	3480	8340	4340	2670	5420
Selenium	40	ug/L	1.0	ND									
Silver	40	ug/L	39.0	ND									
Sodium	50000	ug/L	19470	20630	19220	14550	14570	20800	10200	22300	12400	15100	45900
Vanadium	NLE	ug/L	ND	ND	1.0	ND	1.2	1.62	ND	1.75	ND	4.05	ND
Zinc	2000	ug/L	237	165	168	172	170	149	96.1	118	126	142	163

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 1 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-2 (cont'd)
 MW11 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22
WELL ID			M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002
ANALYTE / Lab ID			4955.05	5220.06	5445.05	5644.05	5903.05	779	1600705	16166.05	16407.05	16491.05	2002905	2021905	2059405

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	370.61D							
Acetone	6000	ug/L	ND	ND	ND	ND	ND	ND	ND							
Carbon Disulfide	NLE	ug/L	ND	ND	ND	ND	ND	ND	9.00							
cis-1,2-Dichloroethene	10	ug/L	ND	6.64	ND	ND	ND	ND	7.39							
Methyl-tert-Butyl ether	70	ug/L	ND	ND	ND	ND	ND	ND	5.90							
Tetrachloroethene	1	ug/L	74.12	30.62	13.38	18.79	18.86	12.42	11.01	11.27	6.11	15.13	19.04	14.43	8.90	
Trichloroethene	1	ug/L	ND	1.28	1.05	1.40	ND	ND								

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND							
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND							
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND							
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND							
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND							
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND							
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND							
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND							
Bis(2-ethylhexy)lphthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND							
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND							
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND							
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND							
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND							
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND							
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND							
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND							
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND							
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND							
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND							
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND							

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.002	ND	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-2 (cont'd)
 MW11 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.05	5220.06	5445.05	5644.05	5903.05	779	1600705	16166.05	16470.05	16491.05	2002904	2021904	2059404	
Metals																
Aluminum	200	ug/L	ND	189	76.2	350	279	NA	240	ND	ND	75.2	31.1	48.1	137	
Antimony	6	ug/L	ND	ND	ND	3.36	ND	NA	ND	ND	ND	ND	ND	3.21	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	3.14	NA	ND	5.06	11.8	7.87	4.10	4.89	9.25	
Barium	2000	ug/L	0.649	12.2	5.70	18.9	14.4	NA	13.0	14.2	6.55	10.2	11.0	9.09	5.82	
Cadmium	4	ug/L	ND	ND	ND	ND	ND	NA	0.7	1.2	1.52	5.95	10.8	ND	ND	
Calcium	NLE	ug/L	ND	13900	31500	25400	23500	NA	17600	26200	38600	35000	27700	17800	24600	
Chromium	70	ug/L	ND	ND	2.72	ND	4.63	NA	3.1	1.46	2.04	2.45	2.04	2.03	2.82	
Cobalt	NLE	ug/L	ND	ND	ND	ND	0.931	NA	ND	2.49	2.23	1.73	1.26	0.737	1.45	
Copper	1300	ug/L	8.54	ND	ND	108	ND	NA	8.0	8.21	68.4	2.70	2.25	3.17	ND	
Iron	300	ug/L	30.5	330	657	438	5580	NA	35200	6590	31100	18500	10400	7850	18000	
Lead	5	ug/L	ND	ND	ND	1.34	ND	NA	ND	ND	6.36	ND	ND	ND	ND	
Magnesium	NLE	ug/L	ND	4080	5370	7410	6550	NA	41600	8010	14600	11900	8130	6420	8930	
Manganese	50	ug/L	ND	9.56	10.1	38.8	24.4	NA	17.7	31.9	93.3	62.7	174	34.2	61.3	
Mercury	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	0.2	0.1	ND	ND	ND	
Nickel	100	ug/L	ND	3.00	3.01	6.05	ND	NA	9.0	6.71	4.10	2.17	3.85	1.75	ND	
Potassium	NLE	ug/L	178	3110	9970	6940	4170	NA	24900	2920	2070	3840	3200	1710	1840	
Selenium	40	ug/L	ND	ND	ND	ND	ND	NA	ND	8.39	ND	ND	7.05	6.39	7.88	
Sodium	50000	ug/L	2150	8380	14000	18900	16100	NA	14300	20000	35300	37100	31700	27500	25000	
Vanadium	NLE	ug/L	ND	2.58	1.27	ND	2.39	NA	2.0	2.21	4.87	2.85	1.91	2.37	4.84	
Zinc	2000	ug/L	ND	147	56.5	203	111	NA	153	225	264	181	218	116	17.3	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-2 (cont'd)
 MW11 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW11	M5MW11	M5MW11	M5MW11
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076005	3003205	3018005	3043905

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	8.14	5.2	4.5	5.74
Trichloroethene	1	ug/L	ND	1.06	ND	1.42
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCs

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	111	202	185	240
Antimony	6	ug/L	2.23	ND	ND	ND
Arsenic	3	ug/L	3.04	2.6	2.8	4.12
Barium	2000	ug/L	15.4	5.08	6.33	8.91
Beryllium	1	ug/L	ND	ND	ND	ND
Cadmium	4	ug/L	ND	ND	0.51	0.759
Calcium	NLE	ug/L	17600	11800	14400	20500
Chromium	70	ug/L	2.26	2.49	1.75	3.03
Cobalt	NLE	ug/L	ND	ND	ND	2.03
Copper	1300	ug/L	ND	ND	1.15	1.54
Iron	300	ug/L	2240	5250	4000	11100
Lead	5	ug/L	1.84	ND	ND	0.804
Magnesium	NLE	ug/L	4130	3610	4890	7710
Manganese	50	ug/L	15.8	15.6	22.3	69
Nickel	100	ug/L	ND	ND	1.27	2.78
Potassium	NLE	ug/L	3740	1950	1840	3690
Selenium	40	ug/L	5.26	ND	ND	ND
Sodium	50000	ug/L	13000	13400	16600	47300
Vanadium	NLE	ug/L	2.03	8.52	3.92	8.22
Zinc	2000	ug/L	79.8	75.7	101	111

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-2 (cont'd)
 MW11 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34		
WELL ID			M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11	M5MW11
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/16/2004	3/14/2005	6/3/2005	9/16/2005		
ANALYTE / Lab ID			3063805	4002905	4035905	4061405	4084604	5015204	5028405	5047304		

VOCs										
2-Butanone	300	ug/L	448.97	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	ug/L	4.91	ND	ND	ND	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	5.39	1.56	ND	2.29	ND	0.61	ND	5.66
Tetrachloroethene	1	ug/L	1.08	2.01	3.1	2.05	3.05	2.3	2.86	ND
Trichloroethene	1	ug/L	0.88	0.91	1.2	ND	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-3
 MW12 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#7A	#7B	#8	#9A	#9B	#10	
WELL ID			M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12
ANALYTE / Lab ID			2516.01	2885.03	3116.03	3348.02	3552.02	3784.04	
Date Collected			10/7/1998	10/21/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	

VOCs

Acetone	6000	ug/L	9.00	ND	ND	ND	ND	ND
2-Butanone	300	ug/L	13.66	ND	ND	ND	ND	ND

SVOCS

Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; Historical Data for rounds 7 through 10 derived from previous RAPR

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-3 (cont'd)
 MW12 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#7A	#7B	#8	#9A	#9B	#10	
WELL ID			M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12
ANALYTE / Lab ID			2516.01	2885.03	3116.03	3348.02	3552.02	3784.04	
Date Collected			10/7/1998	10/21/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	

Metals								
Aluminum	200	ug/L	3310	359	1910	1880	6720	119
Arsenic	3	ug/L	10	3.22	ND	ND	3.54	ND
Barium	2000	ug/L	224	157.0	112	103	67.8	243
Cadmium	4	ug/L	ND	ND	1.37	0.954	3.97	0.788
Calcium	NLE	ug/L	111000	98000	28200	17400	14300	152000
Chromium	70	ug/L	28.5	5.87	13.2	14.8	31.6	13.3
Cobalt	NLE	ug/L	1.5	ND	0.638	1.25	2.88	ND
Copper	1300	ug/L	40	ND	ND	11.1	11.0	ND
Iron	300	ug/L	51400	28400	26600	29500	24600	36500
Lead	5	ug/L	7.0	ND	5.45	7.66	16.2	ND
Magnesium	NLE	ug/L	168000	145000	26300	20500	20200	284000
Manganese	50	ug/L	1340	853	1030	263	84.0	566
Mercury	2	ug/L	0.3	ND	0.16	ND	ND	ND
Nickel	100	ug/L	5.7	ND	8.54	3.79	4.43	ND
Potassium	NLE	ug/L	65300	42100	15900	18300	22600	89200
Sodium	50000	ug/L	1860000	1240000	235000	75300	65000	2040000
Vanadium	NLE	ug/L	14	2.69	4.17	7.14	17.2	2.12
Zinc	2000	ug/L	116	ND	169	178	119	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 7 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-3 (cont'd)
 MW12 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.06	5222.02	5445.06	5644.06	5903.06	780	1600706	16166.06	16407.06	16491.06	2002906	2021906	2059406	

VOCs

2-Butanone	300	ug/L	ND												
Acetone	6000	ug/L	ND												
Carbon Disulfide	NLE	ug/L	ND												
cis-1,2-Dichloroethene	10	ug/L	ND												
Methyl-tert-Butyl ether	70	ug/L	ND												
Tetrachloroethene	1	ug/L	ND												
Trichloroethene	1	ug/L	ND												

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND						
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Bis(2-ethylhexy)lphthalate	3	ug/L	ND	ND	ND	ND	1.87	NA	ND						
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND						

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND						
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND						
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND						
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND						

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-3 (cont'd)
 MW12 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.06	5222.02	5445.06	5644.06	5903.06	780	1600706	16166.06	16407.06	16491.06	2002906	2021906	2059406	
Metals																
Aluminum	200	ug/L	80.9	1060	422	503	189	NA	170	ND	732	24.6	192	481	1140	
Antimony	6	ug/L	2.97	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	2.70	3.05	
Barium	2000	ug/L	17.1	21.5	4.04	15.6	11.3	NA	21.1	17	39.8	92.0	31.4	34.0	24.8	
Cadmium	4	ug/L	ND	ND	ND	ND	ND	NA	1.4	0.782	0.651	9.98	0.710	ND	ND	
Calcium	NLE	ug/L	22300	22200	16500	16600	13400	NA	30300	17300	36700	66500	38200	20700	23700	
Chromium	70	ug/L	6.06	17.1	15.9	ND	1.88	NA	8.2	2.75	8.87	2.28	5.28	6.75	9.97	
Cobalt	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	1.76	1.01	ND	ND	ND	0.774	
Copper	1300	ug/L	19.2	3.71	82.6	ND	ND	NA	6.0	3.89	18.0	3.42	155	5.94	7.24	
Iron	300	ug/L	7020	13000	11400	9060	6620	NA	15100	8030	19900	24900	15600	16500	13800	
Lead	5	ug/L	ND	6.78	19.3	1.83	4.85	NA	ND	ND	4.43	1.30	16.8	2.64	2.40	
Magnesium	NLE	ug/L	32800	31800	26200	26300	22900	NA	41100	28900	55000	78500	52800	32200	36300	
Manganese	50	ug/L	76.9	109	67.9	97.0	43.8	NA	181	50.8	155	945	328	72.4	78.1	
Mercury	2	ug/L	0.1	0.2	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Nickel	100	ug/L	0.594	6.29	5.28	ND	ND	NA	ND	3.31	ND	ND	7.06	ND	ND	
Potassium	NLE	ug/L	23800	20000	20500	20800	21100	NA	22600	21300	30400	35000	29400	21700	26000	
Selenium	40	ug/L	ND	3.37	ND	ND	ND	NA	ND	13.6	ND	ND	13.1	9.60	13.3	
Silver	40	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	1.42	ND	ND	
Sodium	50000	ug/L	171000	77000	71800	72600	46000	NA	114000	57000	149000	341000	169000	64000	82500	
Thallium	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	5.53	ND	ND	
Vanadium	NLE	ug/L	1.63	7.60	3.23	ND	1.84	NA	1.2	1.48	5.66	1.14	1.16	4.31	5.77	
Zinc	2000	ug/L	18.9	65.6	136	26.2	60.7	NA	16.0	41	50.5	35.6	183	15.3	35.8	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-3 (cont'd)
 MW12 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW12	M5MW12	M5MW12	M5MW12
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076006	3003206	3018006	3043906

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCS

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy 1)phthalate	3	ug/L	1.3	1.3	ND	ND

Metals

Aluminum	200	ug/L	90.9	830	639	1310
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	ND	ND	ND	ND
Barium	2000	ug/L	11.6	24.6	29.3	56.8
Beryllium	1	ug/L	ND	ND	ND	0.0923
Cadmium	4	ug/L	ND	0.646	1.07	1.01
Calcium	NLE	ug/L	18600	18900	20100	22700
Chromium	70	ug/L	1.95	7.71	6.11	13.3
Cobalt	NLE	ug/L	ND	ND	ND	ND
Copper	1300	ug/L	5.87	13.3	7.5	3.01
Iron	300	ug/L	6090	10700	13000	19500
Lead	5	ug/L	2.12	4.16	1.72	2.15
Magnesium	NLE	ug/L	27700	25900	26300	32600
Manganese	50	ug/L	54.6	45.9	67.1	81.1
Nickel	100	ug/L	ND	ND	ND	1.47
Potassium	NLE	ug/L	20700	20100	18600	23700
Selenium	40	ug/L	10.6	4.1	ND	ND
Sodium	50000	ug/L	61100	53500	49400	76200
Vanadium	NLE	ug/L	1.35	5.02	3.7	7.58
Zinc	2000	ug/L	5.69	31.3	16.4	36.5

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7-9-6.

Table 5-3 (cont'd)
 MW12 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12	M5MW12
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/16/2004	3/14/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063806	4002906	4035906	4061406	4084604	5015204	5028406	5047305	

VOCs										
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	3.0	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-4
 MW13 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#7A	#7B	#8	#9A	#9B	#10	
WELL ID			M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13
ANALYTE / Lab ID			3967.04	4001.03	4237.06	4416.06	4444.06	4786.05	
Date Collected			10/7/1998	10/23/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	

VOCs

Acetone	6000	ug/L	6.34	ND	ND	ND	ND	ND
2-Butanone	300	ug/L	9.08	ND	ND	ND	ND	ND

SVOCS

Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; Historical Data for rounds 7 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-4 (cont'd)
 MW13 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#7A	#7B	#8	#9A	#9B	#10	
WELL ID			M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13
ANALYTE / Lab ID			3967.04	4001.03	4237.06	4416.06	4444.06	4786.05	
Date Collected			10/7/1998	10/23/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	

Metals								
Aluminum	200	ug/L	1450	287	244	64.8	1150	225
Antimony	6	ug/L	ND	ND	ND	ND	ND	2.61
Arsenic	3	ug/L	4.0	ND	ND	ND	ND	ND
Barium	2000	ug/L	160	196	108	24.2	48.3	193
Cadmium	4	ug/L	0.7	ND	0.886	ND	2.06	0.716
Calcium	NLE	ug/L	64100	67000	13700	35100	15600	130000
Chromium	70	ug/L	12.1	5.25	5.80	3.40	10.6	14.1
Cobalt	NLE	ug/L	5.9	ND	ND	ND	1.27	0.576
Copper	1300	ug/L	5	ND	5.72	5.00	4.27	7.59
Iron	300	ug/L	21800	11700	9810	1170	8350	9520
Lead	5	ug/L	ND	ND	17.6	2.37	3.60	ND
Magnesium	NLE	ug/L	113000	112000	9990	17700	12200	324000
Manganese	50	ug/L	211	203	137	18.4	131	203
Mercury	2	ug/L	ND	ND	0.17	ND	ND	ND
Nickel	100	ug/L	11.8	ND	3.35	0.743	1.05	2.75
Potassium	NLE	ug/L	55800	46400	5090	13100	8650	114000
Sodium	50000	ug/L	1160000	1030000	80100	7630	62700	2690000
Vanadium	NLE	ug/L	8	2.48	3.05	ND	5.05	2.51
Zinc	2000	ug/L	106	ND	126	14.6	43.9	12.2

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 7 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-4 (cont'd)
 MW13 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.07	5222.03	5445.07	5644.07	5903.07	781	1600707	16166.07	16407.07	16491.07	2002907	2021907	2059407	

VOCs

2-Butanone	300	ug/L	ND												
Acetone	6000	ug/L	ND												
Carbon Disulfide	NLE	ug/L	ND												
cis-1,2-Dichloroethene	10	ug/L	ND												
Methyl-tert-Butyl ether	70	ug/L	ND												
Tetrachloroethene	1	ug/L	ND												
Trichloroethene	1	ug/L	ND												

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND						
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Bis(2-ethylhexy)lphthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND						

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	0.003	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.004	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-4 (cont'd)
 MW13 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.07	5222.03	5445.07	5644.07	5903.07	781	1600707	16166.07	16407.07	16491.07	2002907	2021907	2059407	
Metals																
Aluminum	200	ug/L	901	282	175	301	128	NA	510	ND	711	16.0	66.5	606	179	
Antimony	6	ug/L	ND	ND	ND	3.33	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	ND	NA	ND	5.06	4.54	ND	ND	2.99	ND	
Barium	2000	ug/L	51.8	220	67.6	65.6	77.5	NA	154	70	71.9	236	216	150	62.7	
Cadmium	4	ug/L	0.736	ND	ND	ND	ND	NA	2.2	1.3	0.606	7.55	1.02	ND	ND	
Calcium	NLE	ug/L	16200	34300	20100	20000	20500	NA	34400	22700	33900	59600	53500	32000	28900	
Chromium	70	ug/L	13.4	10.8	7.31	ND	ND	NA	6.7	2.26	10.2	1.84	2.69	6.75	4.33	
Cobalt	NLE	ug/L	0.697	ND	ND	ND	ND	NA	ND	1.61	1.27	ND	0.750	0.902	ND	
Copper	1300	ug/L	15.2	ND	ND	ND	ND	NA	9.0	2.18	13.3	65.4	5.79	113	19.0	
Iron	300	ug/L	9860	26300	12900	7170	16500	NA	24200	12100	17300	27000	33300	25200	11900	
Lead	5	ug/L	3.04	3.62	ND	2.49	11.7	NA	ND	ND	5.36	284	1.81	11.1	ND	
Magnesium	NLE	ug/L	17300	27100	17100	15400	15700	NA	23300	16600	24800	51900	44000	25000	23300	
Manganese	50	ug/L	87.8	366	173	261	255	NA	717	357	348	880	1030	391	237	
Mercury	2	ug/L	0.1	ND	ND	ND	ND	NA	ND	ND	0.1	ND	ND	ND	0.11	
Nickel	100	ug/L	1.80	4.70	1.79	2.11	ND	NA	ND	3.98	ND	ND	ND	3.85	ND	
Potassium	NLE	ug/L	15100	15000	11000	8380	10400	NA	68800	8050	14200	21300	16700	12300	14400	
Selenium	40	ug/L	3.52	ND	ND	ND	ND	NA	6.0	8.56	ND	ND	14.1	6.94	7.38	
Silver	40	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	1.13	ND	ND	
Sodium	50000	ug/L	103000	121000	88700	88900	61200	NA	149000	81400	96300	331000	286000	152000	108000	
Vanadium	NLE	ug/L	5.69	4.13	2.35	ND	1.42	NA	0.9	1.66	6.50	0.964	ND	4.60	2.01	
Zinc	2000	ug/L	33.7	32.8	21.1	30.4	134	NA	10.0	41.4	29.3	80.4	29.0	130	41.1	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-4 (cont'd)
 MW13 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW13	M5MW13	M5MW13	M5MW13
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076007	3003207	3018007	3043907

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	2.3	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCS

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy 1)phthalate	3	ug/L	1.45	1.14	ND	ND

Metals

Aluminum	200	ug/L	132	246	152	449
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	ND	ND	ND	ND
Barium	2000	ug/L	105	132	133	142
Beryllium	1	ug/L	ND	ND	ND	0.375
Cadmium	4	ug/L	ND	1.64	1.54	0.99
Calcium	NLE	ug/L	21700	19100	25800	30300
Chromium	70	ug/L	1.94	3.56	1.64	2.55
Cobalt	NLE	ug/L	ND	0.685	ND	3.91
Copper	1300	ug/L	ND	2.52	ND	4.84
Iron	300	ug/L	10900	29600	20900	16100
Lead	5	ug/L	2.02	3.26	ND	ND
Magnesium	NLE	ug/L	15500	11300	15200	3530
Manganese	50	ug/L	364	339	415	256
Nickel	100	ug/L	ND	ND	ND	15.4
Potassium	NLE	ug/L	6960	5090	5430	3980
Selenium	40	ug/L	7.1	ND	ND	ND
Sodium	50000	ug/L	92700	67000	89600	71400
Vanadium	NLE	ug/L	1.53	3.49	2.06	2.02
Zinc	2000	ug/L	104	20.1	7.67	65

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-4 (cont'd)
 MW13 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13	M5MW13
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/16/2004	3/15/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063807	4002907	4035907	4061407	4084605	5015406	5028407	5047306	

VOCs										
2-Butanone	300	ug/L	ND							
Acetone	6000	ug/L	ND							
Bromoform	4	ug/L	ND							
Chloroform	70	ug/L	ND							
cis-1,2-Dichloroethene	10	ug/L	ND							
Tetrachloroethene	1	ug/L	ND							
Trichloroethene	1	ug/L	ND							
Vinyl chloride	5	ug/L	ND							

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-5
 MW14 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#7A	#7B	#8	#9A	#9B	#10	
WELL ID			M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14
ANALYTE / Lab ID			3967.05	4001.04	4237.07*	4416.07	4444.07	4786.04	
Date Collected			10/7/1998	10/23/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	

VOCs

Acetone	6000	ug/L	3.54	4.87	ND	ND	ND	ND
2-Butanone	300	ug/L	2.97	3.18	ND	ND	ND	ND

SVOCS

Bis(2-ethylhexy)lphthalate	3	ug/L	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; Historical Data for rounds 7 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established.

*-M2MW14 was resampled on 2/4/99 (Sample #4246.01) because the original pesticide/PCB sample was damaged.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-5 (cont'd)
 MW14 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#7A	#7B	#8	#9A	#9B	#10	
WELL ID			M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14
ANALYTE / Lab ID			3967.05	4001.04	4237.07*	4416.07	4444.07	4786.04	
Date Collected			10/7/1998	10/23/1998	2/2/1999	4/13/1999	4/27/1999	9/13/1999	

Metals								
Aluminum	200	ug/L	1210	120	172	658	303	ND
Barium	2000	ug/L	33.4	23.5	31.2	81.8	33.9	22.4
Cadmium	4	ug/L	0.7	ND	ND	0.670	1.15	0.655
Calcium	NLE	ug/L	38000	34600	36100	16400	39600	41300
Chromium	70	ug/L	10.8	1.16	5.25	9.65	3.37	3.31
Cobalt	NLE	ug/L	2.3	ND	ND	0.662	ND	ND
Copper	1300	ug/L	ND	ND	8.60	7.48	ND	10.5
Iron	300	ug/L	4740	911	1910	14000	2450	571
Lead	5	ug/L	ND	ND	ND	6.77	ND	ND
Magnesium	NLE	ug/L	23900	19300	17900	11600	18800	17600
Manganese	50	ug/L	22.1	15.0	20.7	191	19.0	16.4
Mercury	2	ug/L	0.2	ND	0.22	ND	ND	ND
Nickel	100	ug/L	2.2	ND	1.96	2.70	ND	ND
Potassium	NLE	ug/L	27000	16200	12900	7220	15100	13300
Sodium	50000	ug/L	45400	8970	9450	63400	9170	7290
Thallium	2	ug/L	5.0	ND	ND	ND	3.44	ND
Vanadium	NLE	ug/L	5.0	ND	ND	4.73	ND	ND
Zinc	2000	ug/L	26	ND	68.1	53.7	15.1	18.3

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 7 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 *-M2MW14 was resampled on 2/4/99 (Sample #4246.01) because the original pesticide/PCB sample was damaged.
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-5 (cont'd)
 MW14 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22
WELL ID			M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002
ANALYTE / Lab ID			4955.08	5222.04	5445.08	5644.08	5903.08	782	1600708	16166.08	16407.08	16491.08	2002908	2021908	2059408

VOCs

2-Butanone	300	ug/L	ND												
Acetone	6000	ug/L	ND												
Carbon Disulfide	NLE	ug/L	ND												
cis-1,2-Dichloroethene	10	ug/L	ND												
Methyl-tert-Butyl ether	70	ug/L	ND												
Tetrachloroethene	1	ug/L	ND												
Trichloroethene	1	ug/L	ND												

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND						
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Bis(2-ethylhexy)lphthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND						

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND						
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND						
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND						
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND						

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-5 (cont'd)
 MW14 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.08	5222.04	5445.08	5644.08	5903.08	782	1600708	16166.08	16407.08	16491.08	2002908	2021908	2059408	
Metals																
Aluminum	200	ug/L	ND	79.2	ND	242	234	NA	20.0	ND	ND	27.2	11.7	69.0	21.2	
Antimony	6	ug/L	ND	ND	ND	4.79	2.23	NA	ND	ND	ND	ND	ND	3.18	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	2.56	ND	
Barium	2000	ug/L	22.1	93.1	133	34.3	104	NA	33.4	32.6	34.4	38.3	67.8	87.6	28.2	
Cadmium	4	ug/L	0.779	ND	ND	ND	ND	NA	ND	ND	ND	7.32	ND	ND	ND	
Calcium	NLE	ug/L	39700	45200	57600	46300	44000	NA	46500	43500	47300	44800	46700	47300	47600	
Chromium	70	ug/L	2.92	5.06	4.45	ND	1.53	NA	2.6	0.986	1.04	1.16	1.99	2.40	ND	
Cobalt	NLE	ug/L	ND o	ND o	ND	ND	ND	NA	ND	1.66	ND	0.583	ND	ND	ND	
Copper	1300	ug/L	9.21	ND	ND	34.6	ND	NA	8.0	ND	8.84	10.5	2.82	3.52	11.8	
Iron	300	ug/L	639	6660	2480	844	6920	NA	12400	758	987	953	6010	4850	874	
Lead	5	ug/L	ND	ND	ND	12.0	ND	NA	ND	ND	ND	ND	ND	ND	1.81	
Magnesium	NLE	ug/L	16400	17300	14700	18000	17000	NA	18100	16200	18400	21700	17800	17300	17700	
Manganese	50	ug/L	17.9	29.1	178	96.3	21.5	NA	18.4	14.3	30.0	14.2	165	18.5	21.5	
Mercury	2	ug/L	NND	ND	ND	ND	0.44	NA	ND	0.19	0.1	0.1	ND	ND	ND	
Nickel	100	ug/L	01.27	3.66	5.55	4.85	ND	NA	ND	3.43	ND	ND	ND	1.59	ND	
Potassium	NLE	ug/L	12400	10700	7850	11800	13400	NA	12000	11000	12500	12700	13300	11400	12700	
Selenium	40	ug/L	ND	ND	ND	ND	ND	NA	ND	10.6	ND	ND	7.41	4.94	4.95	
Sodium	50000	ug/L	8460	10300	70700	11200	8240	NA	81000	14200	10000	72000	10500	8250	7910	
Vanadium	NLE	ug/L	ND	1.21	ND	ND	0.561	NA	ND	ND	0.865	0.690	ND	0.905	ND	
Zinc	2000	ug/L	40.3	23.3	7.51	114	44.3	NA	10.0	36.9	ND	41.5	20.4	ND	21.6	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-5 (cont'd)
 MW14 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW14	M5MW14	M5MW14	M5MW14
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076008	3003208	3018008	3043908

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCS

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	18.3	72.5	174	60.8
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	ND	ND	ND	ND
Barium	2000	ug/L	50.4	217	210	75.5
Beryllium	1	ug/L	ND	ND	ND	ND
Cadmium	4	ug/L	ND	0.602	1.15	ND
Calcium	NLE	ug/L	42700	57900	58500	45100
Chromium	70	ug/L	1.97	2.35	3.81	ND
Cobalt	NLE	ug/L	8.54	2.8	ND	ND
Copper	1300	ug/L	ND	2.96	ND	1.22
Iron	300	ug/L	1110	20100	21100	3830
Lead	5	ug/L	ND	ND	ND	ND
Magnesium	NLE	ug/L	16600	18100	20900	16400
Manganese	50	ug/L	632	227	35.7	32.7
Nickel	100	ug/L	3.7	1.46	ND	ND
Potassium	NLE	ug/L	10500	10600	14000	12400
Selenium	40	ug/L	8.11	ND	ND	7.05
Sodium	50000	ug/L	36000	32400	9900	11200
Vanadium	NLE	ug/L	ND	0.686	0.819	0.496
Zinc	2000	ug/L	13.9	13.3	7.59	7.65

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-5 (cont'd)
 MW14 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14	M5MW14
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/16/2004	3/15/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063808	4002908	4035908	4061408	4084606	5015407	5028408	5047307	

VOCs										
2-Butanone	300	ug/L	ND							
Acetone	6000	ug/L	ND							
Bromoform	4	ug/L	ND							
Chloroform	70	ug/L	ND							
cis-1,2-Dichloroethene	10	ug/L	ND							
Tetrachloroethene	1	ug/L	ND							
Trichloroethene	1	ug/L	ND							
Vinyl chloride	5	ug/L	ND							

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-6
 MW15 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW15	M5MW15	M5MW15
ANALYTE / Lab ID			4419.04	4447.06	4788.05
Date Collected			4/14/1999	4/28/1999	9/14/1999

VOCs					
Tetrachloroethene	1	ug/L	ND	ND	2.15

SVOCs					
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND

Pest/PCBs					
4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-6 (cont'd)
 MW15 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW15	M5MW15	M5MW15
ANALYTE / Lab ID			4419.04	4447.06	4788.05
Date Collected			4/14/1999	4/28/1999	9/14/1999

Metals					
Aluminum	200	ug/L	606	564	702
Barium	2000	ug/L	184	180	153
Beryllium	1	ug/L	0.734	0.788	1.37
Cadmium	4	ug/L	ND	1.98	1.13
Calcium	NLE	ug/L	11100	7240	4890
Chromium	70	ug/L	2.98	1.97	5.30
Cobalt	NLE	ug/L	8.02	8.28	7.50
Copper	1300	ug/L	ND	ND	5.18
Iron	300	ug/L	654	108	1050
Lead	5	ug/L	ND	ND	ND
Magnesium	NLE	ug/L	9370	10600	9050
Manganese	50	ug/L	30.2	20.7	15.7
Mercury	2	ug/L	ND	0.27	ND
Nickel	100	ug/L	15.2	15.2	13.4
Potassium	NLE	ug/L	4240	4540	4920
Sodium	50000	ug/L	11800	14000	10100
Thallium	2	ug/L	ND	5.17	ND
Vanadium	NLE	ug/L	ND	ND	1.25
Zinc	2000	ug/L	91.4	91.0	122

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-6 (cont'd)
 MW15 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22
WELL ID			M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002
ANALYTE / Lab ID			4955.09	5220.10	5445.09	5644.09	5903.09	783	1600709	16166.09	16407.09	16491.09	2002909	2021909	2059409

VOCs

2-Butanone	300	ug/L	ND												
Acetone	6000	ug/L	ND												
cis-1,2-Dichloroethene	10	ug/L	ND												
Tetrachloroethene	1	ug/L	ND												
Trichloroethene	1	ug/L	ND												

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND						
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Bis(2-ethylhexyl)phthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND						

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND						
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND						
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND						
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND						

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-6 (cont'd)
 MW15 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22
WELL ID			M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15	M5MW15
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002
ANALYTE / Lab ID			4955.08	5222.04	5445.08	5644.08	5903.08	782	1600708	16166.08	16407.08	16491.08	2002909	2021909	2059409
Metals															
Aluminum	200	ug/L	357	508	441	933	556	NA	1100	996	1220	981	629	676	624
Antimony	6	ug/L	ND	ND	2.33	3.70	ND	NA	ND	ND	ND	ND	ND	3.09	ND
Arsenic	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	2.87
Barium	2000	ug/L	164	152	124	149	129	NA	122	222	218	212	217	113	118
Beryllium	1	ug/l	1.10	0.862	1.03	1.35	1.16	NA	1.3	2.26	2.24	2.10	1.29	1.22	1.41
Cadmium	4	ug/L	ND	0.717	ND	ND	ND	NA	0.6	0.528	ND	6.02	0.803	ND	ND
Calcium	NLE	ug/L	4760	4970	5450	6170	5040	NA	76300	11000	8180	7560	6610	6720	5850
Chromium	70	ug/L	2.72	ND	3.88	ND	ND	NA	2.9	2.27	6.92	3.60	2.04	1.78	0.633
Cobalt	NLE	ug/L	7.08 o	7.65	7.59	8.02	7.71	NA	10.1	17.1	12.1	10.7	9.39	9.83	7.41
Copper	1300	ug/L	7.64	6.47	ND	ND	ND	NA	20.0	ND	9.43	8.15	2.55	2.33	3.58
Iron	300	ug/L	316	477	203	510	319	NA	300	150	788	588	334	48.2	93.6
Lead	5	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	1.64	3.22	ND	ND	ND
Magnesium	NLE	ug/L	8870	9190	10200	11200	10100	NA	15700	22700	17700	15300	13100	13600	11200
Manganese	50	ug/L	13.9	16.8	18.2	27.3	16.7	NA	23.9	31.1	27.1	21.0	157	19.5	14.9
Mercury	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	0.11
Nickel	100	ug/L	14.2	19.1	18.5	16.7	12.4	NA	25.0	36	23.9	21.5	21.3	19.4	16.2
Potassium	NLE	ug/L	3950	2950	3410	4330	4120	NA	37300	5270	6310	5570	4310	4740	4700
Selenium	40	ug/L	ND	ND	ND	ND	ND	NA	ND	13	ND	ND	11.1	88.84	8.69
Sodium	50000	ug/L	8990	6200	10300	13300	10600	NA	12800	15600	13900	12800	11500	11500	12500
Vanadium	NLE	ug/L	ND	2.20	ND	ND	ND	NA	ND	ND	1.34	0.793	ND	0.742	ND
Zinc	2000	ug/L	94.0	116	90.2	109	184	NA	293	222	154	163	135	130	122

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-6 (cont'd)
 MW15 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW15	M5MW15	M5MW15	M5MW15
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076009	3003209	3018009	3043909

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCS

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	511	708	1790	1590
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	ND	ND	ND	ND
Barium	2000	ug/L	115	72.1	163	121
Beryllium	1	ug/L	1.40	1.14	2.22	2.28
Cadmium	4	ug/L	ND	ND	1.28	0.553
Calcium	NLE	ug/L	4980	6770	13000	11300
Chromium	70	ug/L	1.25	1.01	1.81	2.09
Cobalt	NLE	ug/L	7.22	8.04	17.2	12.5
Copper	1300	ug/L	ND	ND	ND	0.563
Iron	300	ug/L	797	276	586	2480
Lead	5	ug/L	1.32	ND	ND	ND
Magnesium	NLE	ug/L	9370	11300	24100	20100
Manganese	50	ug/L	15.5	17.5	34.7	28.9
Nickel	100	ug/L	13.2	16.9	33.9	23.9
Potassium	NLE	ug/L	4040	4210	4950	7280
Selenium	40	ug/L	3.44	ND	ND	5.03
Sodium	50000	ug/L	10700	11500	17700	16400
Vanadium	NLE	ug/L	ND	108	0.821	1.11
Zinc	2000	ug/L	87.7	36.3	221	152

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

* Sampling discontinued after July 30, 2003.

Table 5-7
 MW16 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW16	M5MW16	M5MW16
ANALYTE / Lab ID			4419.05	4447.07	4788.04
Date Collected			4/14/1999	4/28/1999	9/14/1999

VOCs

Tetrachloroethene	1	ug/L	96.57	8.35	639.74
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SVOCS

Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample
 and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-7 (cont'd)
 MW16 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW16	M5MW16	M5MW16
ANALYTE / Lab ID			4419.05	4447.07	4788.04
Date Collected			4/14/1999	4/28/1999	9/14/1999

Metals					
Aluminum	200	ug/L	1030	1240	3510
Arsenic	3	ug/L	ND	4.11	ND
Barium	2000	ug/L	101	156	149
Beryllium	1	ug/L	ND	ND	0.597
Cadmium	4	ug/L	ND	2.62	7.58
Calcium	NLE	ug/L	11200	12500	10800
Chromium	70	ug/L	8.33	8.43	37.4
Cobalt	NLE	ug/L	3.30	2.78	4.08
Copper	1300	ug/L	ND	ND	12.5
Iron	300	ug/L	4770	11800	11100
Lead	5	ug/L	ND	ND	ND
Magnesium	NLE	ug/L	4020	3580	4990
Manganese	50	ug/L	29.2	31.9	32.1
Mercury	2	ug/L	ND	ND	ND
Nickel	100	ug/L	6.65	5.88	10.8
Potassium	NLE	ug/L	6230	8260	9670
Sodium	50000	ug/L	11700	15100	10000
Thallium	2	ug/L	ND	5.17	ND
Vanadium	NLE	ug/L	3.42	3.47	16.1
Zinc	2000	ug/L	36.5	36.3	46.2

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-7 (cont'd)
 MW16 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.10	5220.09	5445.10	5644.10	5903.10	784	1600710	16166.10	16407.10	16491.10	2002910	2021910	2059410	

VOCs

2-Butanone	300	ug/L	ND	13.45	ND	ND	ND	ND	ND						
Acetone	6000	ug/L	ND	ND	ND	ND	ND								
cis-1,2-Dichloroethene	10	ug/L	ND	ND	1.93	69.44	3.38								
Tetrachloroethene	1	ug/L	54.42	37.76	27.79	20.36	23.20	14.84	17.88	24.47	205.77D	620.81D	839.50D	213.53D	416.79D
Trichloroethene	1	ug/L	ND	ND	1.93	35.84	ND								

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND						
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Bis(2-ethylhexyl)phthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND						

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND						
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND						
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND						
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND						

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-7 (cont'd)
 MW16 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22
WELL ID			M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002
ANALYTE / Lab ID			4955.10	5220.09	5445.10	5644.10	5903.10	784	1600710	16166.10	16407.10	16491.10	2002910	2021910	2059410
Metals															
Aluminum	200	ug/L	242	848	78.2	293	258	NA	220	ND	175	1710	863	1010	1560
Antimony	6	ug/L	ND	61.9	ND	ND	ND	NA	ND	ND	7.58	ND	ND	ND	ND
Arsenic	3	ug/L	3.28	8.13	ND	ND	3.61	NA	3.0	7.04	7.34	7.68	3.16	ND	4.02
Barium	2000	ug/L	209	656	190	143	216	NA	195	188	287	309	356	257	549
Beryllium	1	ug/l	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	0.743	ND	1.26
Cadmium	4	ug/L	0.615	1.74	ND	ND	ND	NA	1.3	1.67	ND	6.04	1.53	ND	0.606
Calcium	NLE	ug/L	100800	14400	16500	16900	15400	NA	18800	18900	31100	33000	24200	20400	38800
Chromium	70	ug/L	1.72	3830	1.99	ND	ND	NA	15.1	0.982	1.90	15.6	2.73	5.39	5.66
Cobalt	NLE	ug/L	2.59	6.54	2.05	2.23	2.14	NA	2.8	3.54	6.00	6.60	6.30	5.31	10.9
Copper	1300	ug/L	4.87	ND	ND	ND	ND	NA	42.0	15.2	12.8	4.52	3.12	8.50	2.85
Iron	300	ug/L	9840	37800	10000	8060	11400	NA	13000	14500	14800	32100	9910	10000	4560
Lead	5	ug/L	ND	ND	ND	ND	ND	NA	4.0	ND	1.48	1.67	ND	1.23	ND
Magnesium	NLE	ug/L	3620	4410	4130	4410	4070	NA	46100	5340	9390	10500	11600	9500	18900
Manganese	50	ug/L	24.7	119	35.8	49.3	33.2	NA	73.0	46.6	83.4	83.0	197	63.5	112
Mercury	2	ug/L	0.00.2	ND	ND	ND	ND	NA	ND	ND	0.1	0.1	ND	ND	ND
Nickel	100	ug/L	6.73	24700	8.11	6.59	1.43	NA	22.0	10.5	14.8	16.1	20.3	15.1	32.6
Potassium	NLE	ug/L	5500	5500	6020	6050	6540	NA	5990	6320	10600	11500	7810	6400	12700
Selenium	40	ug/L	ND	ND	ND	ND	ND	NA	ND	6.65	ND	ND	11.5	8.86	5.36
Sodium	50000	ug/L	8850	7070	9380	11100	9500	NA	10700	15900	30100	38600	47300	39900	78600
Vanadium	NLE	ug/L	ND	11.7	ND	ND	ND	NA	ND	0.867	2.38	8.10	3.21	5.24	5.58
Zinc	2000	ug/L	41.2	65.4	6.87	29.0	42.5	NA	101	48.6	64.5	161	119	94.5	205

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-7 (cont'd)
 MW16 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW16	M5MW16	M5MW16	M5MW16
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076010	3003210	3018010	3043910

VOCs

2-Butanone	300	ug/L	2.59	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	103.82	22.02	16.12	20.3
Tetrachloroethene	1	ug/L	42.41	31.09	8.5	18.57
Trichloroethene	1	ug/L	2.23	1.36	2.16	5.61
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCs

4-Methylphenol	NLE	ug/L	7.99	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	446	301	280	258
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	27.3	12.6	13.6	4.38
Barium	2000	ug/L	233	135	154	258
Beryllium	1	ug/L	ND	ND	ND	0.166
Cadmium	4	ug/L	0.986	0.872	1.12	1.47
Calcium	NLE	ug/L	25500	15300	18700	34100
Chromium	70	ug/L	7.1	1.92	1.15	1.4
Cobalt	NLE	ug/L	6.28	2.09	1.9	2.29
Copper	1300	ug/L	ND	ND	ND	ND
Iron	300	ug/L	32300	14600	16400	44700
Lead	5	ug/L	1.6	ND	ND	ND
Magnesium	NLE	ug/L	10100	5350	6890	13700
Manganese	50	ug/L	85.6	45.2	84.7	136
Nickel	100	ug/L	15.3	7.06	7.31	9.46
Potassium	NLE	ug/L	5000	4750	4860	7210
Selenium	40	ug/L	4.27	ND	ND	ND
Sodium	50000	ug/L	43300	26800	25800	57800
Vanadium	NLE	ug/L	1.78	1.98	1.3	1.14
Zinc	2000	ug/L	32.8	36.3	17.1	57.1

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-7 (cont'd)
 MW16 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16	M5MW16
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/15/2004	3/14/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063809	4002909	4035909	4061409	4084505	5015205	5028409	5047308	

VOCs										
2-Butanone	300	ug/L	2.49	ND						
Acetone	6000	ug/L	ND	ND	2.06	ND	ND	ND	ND	ND
Bromoform	4	ug/L	ND							
Chloroform	70	ug/L	ND							
cis-1,2-Dichloroethene	10	ug/L	68.16	83.66	22.47	66.66	47.94	32.37	33.74	283.79
Tetrachloroethene	1	ug/L	23.44	34.59	38.41	7.63	59.14	6.22	90.59	9.51
Trichloroethene	1	ug/L	15.5	13.1	14.68	9.48	19.57	2.8	34.2	34.1
Vinyl chloride	5	ug/L	ND	ND	ND	ND	1.21	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-8
 MW18 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW18	M5MW18	M5MW18
ANALYTE / Lab ID			4416.10	4444.10	4788.06
Date Collected			4/13/1999	4/27/1999	9/14/1999

VOCs

Tetrachloroethene	1	ug/L	ND	ND	ND
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SVOCS

Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-8 (cont'd)
 MW18 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW18	M5MW18	M5MW18
ANALYTE / Lab ID			4416.10	4444.10	4788.06
Date Collected			4/13/1999	4/27/1999	9/14/1999

Metals					
Aluminum	200	ug/L	327	61.1	541
Barium	2000	ug/L	41.8	47.0	104
Cadmium	4	ug/L	0.621	1.99	1.30
Calcium	NLE	ug/L	18700	22200	22600
Chromium	70	ug/L	1.97	1.02	4.06
Cobalt	NLE	ug/L	0.996	0.916	3.11
Copper	1300	ug/L	5.04	ND	4.58
Iron	300	ug/L	6550	8140	9640
Lead	5	ug/L	11.8	ND	ND
Magnesium	NLE	ug/L	3380	3920	5800
Manganese	50	ug/L	40.9	42.1	65.8
Mercury	2	ug/L	0.12	ND	ND
Nickel	100	ug/L	2.63	1.86	7.64
Potassium	NLE	ug/L	6660	8150	7540
Sodium	50000	ug/L	8680	10200	15100
Thallium	2	ug/L	ND	4.32	ND
Zinc	2000	ug/L	34.2	19.6	52.9

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-8 (cont'd)
 MW18 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.15	5220.11	5445.11	5644.11	5903.11	785	1600711	16166.11	16407.11	16491.11	2002911	2021911	2059411	
VOCs																
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.34	ND	ND	
SVOCS																
1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Pest/PCBs																
4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.018	ND	ND	ND	
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-8 (cont'd)
 MW18 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.15	5220.11	5445.11	5644.11	5903.11	785	1600711	16166.11	16407.11	16491.11	2002911	2021911	2059411	
Metals																
Aluminum	200	ug/L	27.0	131	28.0	325	942	NA	60.0	63	38.3	111	113	541	162	
Antimony	6	ug/L	ND	ND	ND	2.54	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	14.2	NA	ND	11.0	2.68	ND	3.84	16.8	6.70	
Barium	2000	ug/L	52.2	115	132	83.3	3030	NA	182	1690	177	142	201	752	119	
Beryllium	1	ug/l	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Cadmium	4	ug/L	0.640	0.724	ND	ND	5.52	NA	1.7	10.4	ND	7.35	1.32	1.53	ND	
Calcium	NLE	ug/L	15900	20000	21500	23800	31300	NA	23700	28000	24200	24700	20800	27500	22500	
Chromium	70	ug/L	0.573	ND	1.46	ND	4.74	NA	5.3	ND	1.74	1.68	1.64	3.20	ND	
Cobalt	NLE	ug/L	0.566	ND	ND	ND	ND	NA	ND	ND	1.02	1.02	4.50	1.11	ND	
Copper	1300	ug/L	14.9	ND	ND	ND	ND	NA	12.0	8.52	5.99	ND	2.82	2.92	4.49	
Iron	300	ug/L	10300	19800	16200	14900	357000	NA	26200	98600	16500	21000	18400	82000	16500	
Lead	5	ug/L	ND	ND	ND	1.89	ND	NA	ND	3.08	1.14	ND	ND	1.35	ND	
Magnesium	NLE	ug/L	2990	3840	3990	4390	4560	NA	43600	4500	5260	4980	7120	4630	4080	
Manganese	50	ug/L	34.6	48.6	50.2	53.7	88.4	NA	59.1	70.5	69.7	60.2	240	66.8	49.0	
Mercury	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	0.1	0.15	ND	
Nickel	100	ug/L	1.73	3.39	2.84	ND	ND	NA	3.0	3.13	2.48	1.73	16.5	ND	1.25	
Potassium	NLE	ug/L	5610	6060	6690	7580	10300	NA	67200	7740	7770	7770	5170	7760	7650	
Selenium	40	ug/L	ND	ND	ND	ND	5.77	NA	4.0	ND	ND	ND	12.6	ND	5.92	
Silver	40	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Sodium	50000	ug/L	7320	6360	10100	10300	7400	NA	11200	10600	15300	13300	34100	8880	10000	
Thallium	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Vanadium	NLE	ug/L	ND	1.36	ND	ND	ND	NA	ND	ND	0.798	ND	ND	3.83	ND	
Zinc	2000	ug/L	19.3	19.4	ND	23.1	109	NA	27.0	46.5	ND	11.2	64.8	20.7	19.4	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-8 (cont'd)
 MW18 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW18	M5MW18	M5MW18	M5MW18
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076011	3003211	3018011	3043911

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCs

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	27.1	293	800	87.4
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	6.73	8.4	20.8	ND
Barium	2000	ug/L	78.9	561	4490	202
Beryllium	1	ug/L	ND	ND	0.62	ND
Cadmium	4	ug/L	ND	3.6	11.4	1.11
Calcium	NLE	ug/L	22200	27200	41500	27600
Chromium	70	ug/L	1.27	1.19	2.05	ND
Cobalt	NLE	ug/L	0.805	ND	ND	ND
Copper	1300	ug/L	ND	40.1	ND	ND
Iron	300	ug/L	13500	62100	204000	27900
Lead	5	ug/L	ND	4.38	5.65	ND
Magnesium	NLE	ug/L	4060	4580	5390	4920
Manganese	50	ug/L	53.7	65.5	137	58.5
Nickel	100	ug/L	ND	2.87	ND	1.06
Potassium	NLE	ug/L	7280	9430	10400	8700
Selenium	40	ug/L	3.59	ND	ND	ND
Sodium	50000	ug/L	9290	8490	8130	9810
Vanadium	NLE	ug/L	ND	ND	ND	0.408
Zinc	2000	ug/L	13.6	72.6	82.5	8.15

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-8 (cont'd)
 MW18 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18	M5MW18
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/14/2004	3/14/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063810	4002910	4035910	4061410	4083303	5015206	5028410	5047309	

VOCs										
2-Butanone	300	ug/L	ND							
Acetone	6000	ug/L	ND							
Bromoform	4	ug/L	ND							
Chloroform	70	ug/L	ND							
cis-1,2-Dichloroethene	10	ug/L	ND							
Tetrachloroethene	1	ug/L	ND							
Trichloroethene	1	ug/L	ND							
Vinyl chloride	5	ug/L	ND							

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-9
 MW19 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW19	M5MW19	M5MW19
ANALYTE / Lab ID			4416.09	4444.09	4788.07
Date Collected			4/13/1999	4/27/1999	9/14/1999

VOCs					
Tetrachloroethene	1	ug/L	11.53	3.72	10.24

SVOCs					
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND

Pest/PCBs					
4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-9 (cont'd)
 MW19 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW19	M5MW19	M5MW19
ANALYTE / Lab ID			4416.09	4444.09	4788.07
Date Collected			4/13/1999	4/27/1999	9/14/1999

Metals					
Aluminum	200	ug/L	1110	1710	2320
Antimony	6	ug/L	ND	ND	3.01
Barium	2000	ug/L	39.7	67.2	61.3
Cadmium	4	ug/L	ND	3.22	2.74
Calcium	NLE	ug/L	18400	20000	14400
Chromium	70	ug/L	10.6	12.1	32.8
Cobalt	NLE	ug/L	0.888	1.36	4.79
Copper	1300	ug/L	6.31	ND	5.35
Iron	300	ug/L	7900	12300	9230
Lead	5	ug/L	4.92	ND	ND
Magnesium	NLE	ug/L	3800	4220	6380
Manganese	50	ug/L	50.1	49.1	33.8
Mercury	2	ug/L	0.11	ND	ND
Nickel	100	ug/L	3.22	1.80	14.0
Potassium	NLE	ug/L	8060	9650	8200
Sodium	50000	ug/L	9830	11300	24900
Thallium	2	ug/L	ND	4.93	ND
Vanadium	NLE	ug/L	4.13	5.20	11.1
Zinc	2000	ug/L	34.5	21.3	56.2

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-9 (cont'd)
 MW19 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22
WELL ID			M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002
ANALYTE / Lab ID			4955.14	5222.01	5445.12	5644.12	5903.12	786	1600712	16166.12	16407.12	16491.12	2002912	2021912	2059412

VOCs

Chloroform	70	ug/l	ND	ND	ND	ND	ND	ND	ND	6.59	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	3.87	1.84	16.64	5.93	51.33
Tetrachloroethene	1	ug/L	69.22	5.44	ND	4.77	3.80	ND	2.43	6.89	34.94	13.62	284.64D	18.20	34.31
Trichloroethene	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	1.66	ND	17.44	2.80	6.44

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	7.57	10.10	ND	ND	ND
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	7.95	ND	ND	ND
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND						
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND						
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	NA	ND						
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND						

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-9 (cont'd)
 MW19 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19
Date Collected			11/18/1999	3/6/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.14	5222.01	5445.12	5644.12	5903.12	786	1600712	16166.12	16407.12	16491.12	2002912	2021912	2059412	
Metals																
Aluminum	200	ug/L	130	133	47.8	227	271	NA	740	ND	ND	ND	185	562	152	
Antimony	6	ug/L	2.85	ND	ND	3.46	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	2.99	NA	5.0	11.7	5.70	8.10	13.7	16.9	9.08	
Barium	2000	ug/L	79.3	104	80.9	78.9	345	NA	63.6	55	59.8	47.4	40.8	81.9	36.7	
Beryllium	1	ug/l	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Cadmium	4	ug/L	0.750	ND	ND	ND	ND	NA	1.3	2.35	0.769	2.96	1.13	ND	ND	
Calcium	NLE	ug/L	15600	20300	21200	22900	21800	NA	25000	26100	25000	23400	11800	19800	13000	
Chromium	70	ug/L	1.65	ND	1.69	ND	ND	NA	4.7	1.34	ND	ND	0.874	6.20	0.845	
Cobalt	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	0.731	ND	ND	0.735	ND	ND	
Copper	1300	ug/L	33.0	ND	ND	ND	ND	NA	18.0	ND	20.8	ND	ND	9.43	ND	
Iron	300	ug/L	11700	15000	12100	12400	39600	NA	17800	27300	22100	21700	30100	28900	20800	
Lead	5	ug/L	ND	ND	ND	1.14	ND	NA	ND	ND	2.10	ND	ND	ND	ND	
Magnesium	NLE	ug/L	3080	3840	3770	4230	4020	NA	46300	4780	4720	4540	4100	4240	3440	
Manganese	50	ug/L	39.0	53.9	51.6	71.7	56.2	NA	78.5	72.3	75.3	66.3	229	83.1	74.3	
Mercury	2	ug/L	ND	ND	ND	0.4	ND	NA	ND	0.12	ND	ND	ND	0.17	ND	
Nickel	100	ug/L	2.38	4.19	2.30	ND	ND	NA	3.0	2.36	ND	ND	11.73	ND	ND	
Potassium	NLE	ug/L	7080	6870	7830	8620	9180	NA	74200	7380	7890	7100	2710	5270	3700	
Selenium	40	ug/L	ND	ND	ND	ND	ND	NA	ND	4.72	ND	ND	10.2	ND	5.94	
Silver	40	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Sodium	50000	ug/L	8790	5770	8600	10300	8730	NA	9600	16000	11100	9430	21000	16900	20200	
Thallium	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Vanadium	NLE	ug/L	ND	1.53	ND	ND	ND	NA	ND	2.19	ND	ND	0.737	7.32	1.74	
Zinc	2000	ug/L	26.9	33.3	ND	18.4	32.5	NA	40.0	23.5	ND	14.1	37.3	16.7	11.8	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-9 (cont'd)
 MW19 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW19	M5MW19	M5MW19	M5MW19
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076012	3003212	3018012	3043912

VOCs

2-Butanone	300	ug/L	3.93	1.18	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	3.1	1.54	1.73	1.01
Trichloroethene	1	ug/L	1.0	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCS

4-Methylphenol	NLE	ug/L	3.13	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	73.6	33.7	97.4	71.3
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	8.1	ND	ND	2.37
Barium	2000	ug/L	69.1	48	52.5	65.8
Beryllium	1	ug/L	ND	ND	ND	ND
Cadmium	4	ug/L	ND	0.735	0.724	0.689
Calcium	NLE	ug/L	27500	22900	22100	28800
Chromium	70	ug/L	2.42	0.711	ND	ND
Cobalt	NLE	ug/L	ND	ND	ND	ND
Copper	1300	ug/L	ND	2.57	ND	ND
Iron	300	ug/L	21500	11700	11800	17600
Lead	5	ug/L	1.39	ND	ND	ND
Magnesium	NLE	ug/L	5410	4160	4090	5390
Manganese	50	ug/L	81.3	55	55.2	71.5
Nickel	100	ug/L	ND	ND	ND	ND
Potassium	NLE	ug/L	7280	8120	7780	8920
Selenium	40	ug/L	ND	ND	ND	ND
Sodium	50000	ug/L	9950	8420	8440	15300
Vanadium	NLE	ug/L	ND	ND	ND	0.738
Zinc	2000	ug/L	13.6	7.41	8.6	6.35

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-9 (cont'd)
 MW19 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19	M5MW19
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/14/2004	3/14/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063811	4002911	4035911	4061411	4083302	5015207	5028411	5047310	

VOCs										
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	3.04	0.49	ND	0.81	ND	ND	ND	1.58
Tetrachloroethene	1	ug/L	5.42	1.89	ND	0.84	ND	ND	ND	5.73
Trichloroethene	1	ug/L	1.92	1.04	1.41	ND	1.33	0.91	ND	3.12
Vinyl chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-10
 MW20 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW20	M5MW20	M5MW20
ANALYTE / Lab ID			4416.08	4444.08	4447.09
Date Collected			4/13/1999	4/27/1999	9/13/1999

VOCs

Tetrachloroethene	1	ug/L	142.59	169.54	156.58
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SVOCS

Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-10 (cont'd)
 MW20 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW20	M5MW20	M5MW20
ANALYTE / Lab ID			4416.08	4444.08	4447.09
Date Collected			4/13/1999	4/27/1999	9/13/1999

Metals					
Aluminum	200	ug/L	3150	2980	64.6
Antimony	6	ug/L	ND	ND	ND
Barium	2000	ug/L	45.2	36.3	38.7
Cadmium	4	ug/L	ND	3.16	2.45
Calcium	NLE	ug/L	17000	21600	14400
Chromium	70	ug/L	30.7	24.9	2.80
Cobalt	NLE	ug/L	1.84	2.11	2.15
Copper	1300	ug/L	4.46	6.08	6.05
Iron	300	ug/L	9380	7520	376
Lead	5	ug/L	9.54	2.50	ND
Magnesium	NLE	ug/L	6060	7270	5790
Manganese	50	ug/L	36.6	29.2	28.0
Mercury	2	ug/L	0.12	ND	ND
Nickel	100	ug/L	6.43	5.41	6.13
Potassium	NLE	ug/L	5860	6670	4330
Sodium	50000	ug/L	29200	35000	22000
Thallium	2	ug/L	ND	ND	ND
Vanadium	NLE	ug/L	12.9	9.93	ND
Zinc	2000	ug/L	40.5	32.7	20.3

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-10 (cont'd)
 MW20 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22
WELL ID			M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002
ANALYTE / Lab ID			4955.11	5220.05	5445.13	5644.13	5903.13	787	1600713	16166.13	16407.13	16491.13	2002913	2021913	2059413
VOCs															
Acetone	6000	ug/l	ND	ND	ND	ND	8.20	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	1.22	3.38	3.09	ND	ND
Tetrachloroethene	1	ug/L	143.93	90.03	43.44	23.85	110.95D	48.11	65.73	45.30	111.58D	83.81	85.31	76.89	79.41
Trichloroethene	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	1.18	3.56	4.27	ND	ND
SVOCs															
1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Pest/PCBs															
4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-10 (cont'd)
 MW20 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.11	5220.05	5445.13	5644.13	5903.13	787	1600713	16166.13	16407.13	16491.13	2002913	2021913	2059413	
Metals																
Aluminum	200	ug/L	143	500	248	1910	96.6	NA	280	ND	204	198	452	216	1580	
Antimony	6	ug/L	ND	ND	ND	2.87	ND	NA	ND	ND	ND	ND	ND	3.53	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	2.58	ND	ND	3.46	
Barium	2000	ug/L	30.7	25.8	3.70	15.8	16.0	NA	24.3	19.1	24.4	20.1	22.1	24.3	30.1	
Beryllium	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Cadmium	4	ug/L	ND	ND	ND	ND	ND	NA	0.6	ND	ND	10.2	ND	ND	ND	
Calcium	NLE	ug/L	12500	15200	20800	12900	11000	NA	44600	29000	12000	13400	16400	20900	27400	
Chromium	70	ug/L	3.37	4.34	4.37	3.94	ND	NA	3.6	1.03	4.96	3.00	5.43	2.64	12.6	
Cobalt	NLE	ug/L	1.59	1.09	ND	ND	0.577	NA	1.1	1.24	0.906	1.19	1.31	1.19	1.62	
Copper	1300	ug/L	4.14	ND	ND	ND	ND	NA	16.0	ND	11.3	3.03	ND	13.1	2.97	
Iron	300	ug/L	676	1640	914	4060	502	NA	900	495	1320	1640	2020	1510	5320	
Lead	5	ug/L	ND	ND	ND	1.66	ND	NA	ND	ND	ND	ND	ND	1.29	ND	
Magnesium	NLE	ug/L	4540	4900	5850	4060	3400	NA	13200	7980	4180	4740	5720	6510	9770	
Manganese	50	ug/L	21.1	17.8	13.2	14.9	11.9	NA	40.3	15.4	26.9	23.9	159	27.3	34.5	
Mercury	2	ug/L	ND	ND	ND	0.3	ND	NA	ND	0.12	ND	ND	ND	0.16	0.11	
Nickel	100	ug/L	5.65	4.92	2.77	ND	ND	NA	9.0	3.59	4.84	3.35	5.00	4.33	5.24	
Potassium	NLE	ug/L	3320	2510	3100	3980	2730	NA	30800	3000	3280	3130	3080	2690	5280	
Selenium	40	ug/L	ND	ND	3.42	ND	ND	NA	ND	5.04	ND	ND	10.7	5.55	4.15	
Silver	40	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Sodium	50000	ug/L	20300	20400	44000	40700	29000	NA	79100	82500	34300	33200	41200	44000	51200	
Thallium	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vanadium	NLE	ug/L	ND	4.45	1.57	4.80	ND	NA	0.7	0.716	2.55	1.54	2.01	2.37	7.57	
Zinc	2000	ug/L	23.2	26.7	ND	18.2	16.4	NA	36.0	22.4	18	17.0	31.1	53.4	25.7	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-10 (cont'd)
 MW20 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW20	M5MW20	M5MW20	M5MW20
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076013	3003213	3018013	3043913

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	1.1
Tetrachloroethene	1	ug/L	12.99	27.87	27.99	15.26
Trichloroethene	1	ug/L	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCS

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	6000	109	431	844
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	5.22	ND	ND	ND
Barium	2000	ug/L	22.1	9.36	30.7	11.3
Beryllium	1	ug/L	ND	ND	ND	0.0825
Cadmium	4	ug/L	ND	ND	ND	ND
Calcium	NLE	ug/L	11700	17100	63300	27800
Chromium	70	ug/L	40.3	1.4	3.3	6.62
Cobalt	NLE	ug/L	1.43	ND	ND	0.381
Copper	1300	ug/L	4.93	ND	ND	1.33
Iron	300	ug/L	11500	292	1370	4650
Lead	5	ug/L	4.41	ND	ND	ND
Magnesium	NLE	ug/L	4790	5050	19700	8670
Manganese	50	ug/L	19.6	9.34	32.9	22.8
Nickel	100	ug/L	3.36	1.53	3.21	2.08
Potassium	NLE	ug/L	4960	2440	3940	4090
Selenium	40	ug/L	4.13	ND	ND	6.37
Sodium	50000	ug/L	38000	57200	115000	92600
Vanadium	NLE	ug/L	21.7	1.04	2.23	4.63
Zinc	2000	ug/L	20.2	6.89	12.9	10.0

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-10 (cont'd)
 MW20 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20	M5MW20
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/14/2004	3/14/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063812	4002912	4035912	4061412	4083301	5015208	5028412	5047311	

VOCs										
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND	ND	ND	ND	0.6
cis-1,2-Dichloroethene	10	ug/L	5.33	0.96	ND	4.12	2.77	1.87	13.2	4.21
Tetrachloroethene	1	ug/L	43.96	21.69	13.74	7.51	3.96	4.93	13.75	8.74
Trichloroethene	1	ug/L	4.81	1.9	0.92	2.05	ND	1.11	8.55	2.67
Vinyl chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-11
 MW23 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW23	M5MW23	M5MW23
ANALYTE / Lab ID			4419.08	4447.08	4447.03
Date Collected			4/13/1999	4/27/1999	9/13/1999

VOCs

Tetrachloroethene	1	ug/L	84.93	44.43	29.53
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SVOCS

Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-11 (cont'd)
 MW23 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW23	M5MW23	M5MW23
ANALYTE / Lab ID			4419.08	4447.08	4447.03
Date Collected			4/13/1999	4/27/1999	9/13/1999

Metals					
Aluminum	200	ug/L	148	195	1410
Antimony	6	ug/L	ND	ND	ND
Barium	2000	ug/L	12.7	28.0	21.5
Cadmium	4	ug/L	1.17	2.89	0.786
Calcium	NLE	ug/L	11700	24400	7180
Chromium	70	ug/L	13.4	8.97	22.6
Cobalt	NLE	ug/L	1.07	1.53	1.09
Copper	1300	ug/L	ND	ND	6.92
Iron	300	ug/L	848	1590	10700
Lead	5	ug/L	ND	ND	ND
Magnesium	NLE	ug/L	2990	6840	2580
Manganese	50	ug/L	9.64	19.8	10.4
Mercury	2	ug/L	ND	ND	ND
Nickel	100	ug/L	3.94	6.27	2.59
Potassium	NLE	ug/L	3720	5640	3670
Sodium	50000	ug/L	16500	28300	12700
Thallium	2	ug/L	ND	6.70	ND
Vanadium	NLE	ug/L	ND	ND	9.78
Zinc	2000	ug/L	30.8	31.2	17.8

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-11 (cont'd)
 MW23 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22
WELL ID			M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002
ANALYTE / Lab ID			4955.12	5220.04	5445.14	5644.14	5903.14	788	1600714	16166.14	16407.14	16491.14	2002914	2021914	2059414

VOCs

2-Butanone	300	ug/l	ND	ND	ND	ND	4.92	ND	ND	ND	ND	ND	ND	ND	14.45
Acetone	6000	ug/l	ND	ND	ND	ND	ND	6.79	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ug/l	ND	ND	ND	ND	1.40	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/l	9.01	1.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/l	ND	ND	ND	ND	ND	ND	ND	1.48	1.77	1.77	3.31	ND	
Tetrachloroethene	1	ug/L	59.02	11.53	23.13	4.22	14.27	ND	6.39	33.84	3.41	3.85	8.26	8.97	15.68
Trichloroethene	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	1.37	NA	ND	ND	ND	ND	ND	ND	3.66
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexy)lphthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	1.40	ND	ND	ND
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND						
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND						
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
gamma-Chlordane	.5	ug/L	ND												
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND						

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-11 (cont'd)
 MW23 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.12	5220.04	5445.14	5644.14	5903.14	788	1600714	16166.14	16407.14	16491.14	2002914	2021914	2059414	
Metals																
Aluminum	200	ug/L	157	248	ND	332	108	NA	810	ND	1300	1270	1340	5120	426	
Antimony	6	ug/L	ND	ND	ND	2.39	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Arsenic	3	ug/L	ND	2.80	2.02	4.00	4.52	NA	ND	4.15	6.46	5.77	6.81	11.5	8.70	
Barium	2000	ug/L	16.9	52.0	131	110	57.7	NA	53.2	15.3	46.1	33.5	111	303	21.7	
Beryllium	1	ug/l	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Cadmium	4	ug/L	ND	ND	ND	ND	ND	NA	1.0	ND	0.992	3.41	1.32	1.35	ND	
Calcium	NLE	ug/L	10400	25400	18100	9460	10900	NA	10400	20300	5570	5440	7310	9280	11600	
Chromium	70	ug/L	3.29	1.52	1.71	ND	ND	NA	13.6	1.12	17.5	15.6	16.0	53.6	11.9	
Cobalt	NLE	ug/L	0.745	ND	0.644	ND	ND	NA	2.3	1.64	0.583	1.53	0.842	1.75	ND	
Copper	1300	ug/L	ND	ND	ND	ND	ND	NA	8.0	ND	8.27	3.40	3.29	4.89	ND	
Iron	300	ug/L	1290	13600	25100	20300	19200	NA	31400	3280	21600	13000	36400	67900	15400	
Lead	5	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	2.41	2.00	4.02	4.22	ND	
Magnesium	NLE	ug/L	3110	6710	4880	2420	2930	NA	46900	5270	1900	1890	1930	2530	2770	
Manganese	50	ug/L	10.4	23.1	23.6	30.9	27.1	NA	26.6	31.1	21.1	16.5	185	42.8	37.6	
Mercury	2	ug/L	ND	ND	ND	0.2	ND	NA	ND	ND	0.3	0.1	0.1	0.18	0.11	
Nickel	100	ug/L	2.73	4.97	2.21	ND	ND	NA	10.0	4.06	ND	2.20	2.22	1.11	ND	
Potassium	NLE	ug/L	2690	3470	3240	3010	2470	NA	33000	2590	2180	2190	3070	4850	3060	
Selenium	40	ug/L	ND	ND	ND	ND	ND	NA	ND	7.08	ND	ND	10.3	ND	ND	
Silver	40	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Sodium	50000	ug/L	12100	28100	37500	29200	14300	NA	43500	85600	29100	23200	17100	19300	19400	
Thallium	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Vanadium	NLE	ug/L	1.40	4.37	1.45	ND	1.13	NA	3.3	1.26	12.3	10.6	8.86	32.3	4.28	
Zinc	2000	ug/L	26.5	25.6	1.35	19.3	24.5	NA	250	27	ND	17.8	31.2	32.4	7.62	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-11 (cont'd)
 MW23 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW23	M5MW23	M5MW23	M5MW23
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076014	3003214	3018014	3043914

VOCs

2-Butanone	300	ug/L	ND	ND	ND	2.75
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	1.37	4.6
Tetrachloroethene	1	ug/L	ND	79.46	17.35	20.45
Trichloroethene	1	ug/L	ND	3.97	3.15	2.51
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCs

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	100	6920	1060	255
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	16.5	86.7	13.2	13.3
Barium	2000	ug/L	5.5	39.1	15.7	119
Beryllium	1	ug/L	ND	0.57	ND	0.0632
Cadmium	4	ug/L	ND	8.11	1.93	1.45
Calcium	NLE	ug/L	8910	19300	8980	14200
Chromium	70	ug/L	2.4	72.5	12.9	3.55
Cobalt	NLE	ug/L	0.911	4.67	ND	ND
Copper	1300	ug/L	ND	ND	ND	ND
Iron	300	ug/L	14000	137000	37000	37800
Lead	5	ug/L	1.29	8.02	ND	ND
Magnesium	NLE	ug/L	2300	5710	2070	2990
Manganese	50	ug/L	24.3	49.2	22.2	37.7
Nickel	100	ug/L	ND	3.96	ND	0.89
Potassium	NLE	ug/L	1410	5610	3080	4470
Selenium	40	ug/L	ND	ND	ND	ND
Sodium	50000	ug/L	23900	96300	70100	31600
Vanadium	NLE	ug/L	2.17	50	8.82	2.6
Zinc	2000	ug/L	ND	35.3	15.2	9.86

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7-9-6.

Table 5-11 (cont'd)
 MW23 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23	M5MW23
Date Collected			10/8/2003	1/14/2004	5/13/2004	8/20/2004	12/15/2004	3/14/2005	6/3/2005	9/16/2005	
ANALYTE / Lab ID			3063813	4002913	4035913	4061413	4084506	5015209	5028413	5047312	

VOCs										
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND	ND	0.57	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	0.69	0.59	ND	ND	ND	ND	1.42
Tetrachloroethene	1	ug/L	1.6	4.35	13.33	ND	2.15	13.75	23.07	7.24
Trichloroethene	1	ug/L	ND	1.02	2.07	ND	ND	ND	ND	0.89
Vinyl chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-12
 MW25 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW25	M5MW25	M5MW25
ANALYTE / Lab ID			4419.06	4447.04	4788.08
Date Collected			4/14/1999	4/28/1999	9/14/1999

VOCs					
Chloroform	70	ug/L	1.47	ND	ND

SVOCs					
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND

Pest/PCBs					
4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-12 (cont'd)
 MW25 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M5MW25	M5MW25	M5MW25
ANALYTE / Lab ID			4419.06	4447.04	4788.08
Date Collected			4/14/1999	4/28/1999	9/14/1999

Metals					
Aluminum	200	ug/L	5640	4630	151
Antimony	6	ug/L	ND	ND	2.66
Barium	2000	ug/L	47.5	37.2	50.1
Cadmium	4	ug/L	1.05	3.63	0.895
Calcium	NLE	ug/L	12100	15500	17700
Chromium	70	ug/L	56.3	40.5	2.32
Cobalt	NLE	ug/L	3.67	2.81	0.970
Copper	1300	ug/L	ND	14.3	ND
Iron	300	ug/L	18000	12300	8930
Lead	5	ug/L	4.75	6.35	ND
Magnesium	NLE	ug/L	6120	4960	3440
Manganese	50	ug/L	41.9	48.3	43.9
Mercury	2	ug/L	ND	0.16	ND
Nickel	100	ug/L	8.13	7.43	ND
Potassium	NLE	ug/L	9700	8700	8110
Sodium	50000	ug/L	18900	25200	8680
Thallium	2	ug/L	ND	3.58	ND
Vanadium	NLE	ug/L	22.4	15.6	ND
Zinc	2000	ug/L	78.4	94.1	22.1

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-12 (cont'd)
 MW25 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.13	5220.08	5445.15	5644.15	5903.15	789	1600715	16166.15	16407.15	16491.15	2002915	2021915	2059415	

VOCs

2-Butanone	300	ug/l	ND												
Acetone	6000	ug/l	ND												
Carbon Disulfide	NLE	ug/l	ND												
Chloroform	70	ug/l	ND												
cis-1,2-Dichloroethene	10	ug/l	ND												
Tetrachloroethene	1	ug/L	ND												
Trichloroethene	1	ug/l	ND												

SVOCs

1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	NA	ND						
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	NA	ND						
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	NA	ND						
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Bis(2-ethylhexy)lphthalate	3	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	NA	ND						
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Fluorene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	NA	ND						
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Phenol	2000	ug/L	ND	ND	ND	ND	ND	NA	ND						
Pyrene	200	ug/L	ND	ND	ND	ND	ND	NA	ND						

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	NA	ND						
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	NA	ND						
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	NA	ND						
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	NA	ND						
gamma-Chlordane	.5	ug/L	ND												
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	NA	ND						

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;

Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-12 (cont'd)
 MW25 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16A	#16B	#17	#18	#19	#20	#21	#22	
WELL ID			M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25	M5MW25
Date Collected			11/18/1999	3/3/2000	5/31/2000	8/21/2000	12/11/2000	2/13/2001	3/19/2001	6/5/2001	9/5/2001	10/4/2001	1/14/2002	4/23/2002	8/21/2002	
ANALYTE / Lab ID			4955.13	5220.08	5445.15	5644.15	5903.15	789	1600715	16166.15	16407.15	16491.15	2002915	2021915	2059415	
Metals																
Aluminum	200	ug/L	3560	220	ND	250	209	NA	140	ND	527	6880	388	70.2	262	
Antimony	6	ug/L	ND	ND	ND	3.92	ND	NA	ND	ND	ND	ND	ND	4.97	ND	
Arsenic	3	ug/L	ND	ND	ND	ND	ND	NA	3.0	3.55	ND	4.89	ND	2.90	2.42	
Barium	2000	ug/L	62.6	57.4	42.6	59.5	46.5	NA	50.7	99.3	141	114	93.5	77.5	78.4	
Beryllium	1	ug/l	ND	ND	ND	ND	ND	NA	ND	ND	ND	1.08	ND	ND	ND	
Cadmium	4	ug/L	1.54	0.934	ND	0.619	ND	NA	1.2	ND	ND	5.98	0.942	ND	ND	
Calcium	NLE	ug/L	14100	11000	8680	13200	9160	NA	38800	20900	27800	20300	18400	16300	17500	
Chromium	70	ug/L	53.4	4.77	2.72	ND	ND	NA	6.4	2.5	8.32	99.0	6.34	1.88	2.82	
Cobalt	NLE	ug/L	4.25	1.38	1.34	1.94	1.73	NA	1.9	5.78	7.67	8.56	5.26	3.19	4.48	
Copper	1300	ug/L	3.45	ND	ND	35.4	ND	NA	5.0	ND	12.1	6.99	99.1	4.87	ND	
Iron	300	ug/L	15400	783	191	453	877	NA	10900	295	2120	26500	1570	101	836	
Lead	5	ug/L	ND	ND	ND	1.91	ND	NA	ND	ND	1.42	6.17	11.0	1.59	ND	
Magnesium	NLE	ug/L	7040	4100	3460	4620	4130	NA	10400	10400	13400	13200	8590	7320	8210	
Manganese	50	ug/L	35.1	25.3	13.8	46.7	18.7	NA	43.1	27.7	62.8	56.4	182	27.8	40.6	
Mercury	2	ug/L	0.1	ND	ND	0.9	ND	NA	ND	ND	ND	ND	ND	0.15	ND	
Nickel	100	ug/L	14.8	10.7	4.92	10.7	2.38	NA	7.0	17.0	21.8	21.4	21.3	10.7	14.5	
Potassium	NLE	ug/L	9990	2740	2120	2990	2950	NA	30500	3000	5970	13200	5490	1930	4250	
Selenium	40	ug/L	ND	ND	ND	ND	ND	NA	ND	7.38	ND	ND	10.6	5.15	5.78	
Silver	40	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Sodium	50000	ug/L	25700	22900	49100	42900	42000	NA	153000	76100	69000	56900	48300	80400	64100	
Thallium	2	ug/L	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
Vanadium	NLE	ug/L	19.2	1.92	ND	ND	ND	NA	ND	ND	3.34	32.5	1.12	1.86	1.01	
Zinc	2000	ug/L	117	205	172	283	140	NA	6.0	181	116	142	170	245	86.9	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-12 (cont'd)
 MW25 Groundwater Sampling Results
 M-5 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#23	#24	#25	#26
WELL ID			M5MW25	M5MW25	M5MW25	M5MW25
Date Collected			10/28/2002	1/22/2003	4/21/2003	7/30/2003
ANALYTE / Lab ID			2076015	3003215	3018015	3043915

VOCs

2-Butanone	300	ug/L	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND

SVOCS

4-Methylphenol	NLE	ug/L	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND

Metals

Aluminum	200	ug/L	129	185	194	275
Antimony	6	ug/L	ND	ND	ND	ND
Arsenic	3	ug/L	7.50	2.72	ND	ND
Barium	2000	ug/L	57.9	50.5	47.5	147
Beryllium	1	ug/L	ND	ND	ND	0.373
Cadmium	4	ug/L	1.25	1.53	0.84	1.02
Calcium	NLE	ug/L	13000	12200	9460	33300
Chromium	70	ug/L	5.80	7.09	9.55	1.99
Cobalt	NLE	ug/L	3.27	1.99	1.41	7.54
Copper	1300	ug/L	ND	30.8	25.9	4.77
Iron	300	ug/L	6510	12400	2500	2160
Lead	5	ug/L	ND	ND	ND	ND
Magnesium	NLE	ug/L	4370	4550	3480	17800
Manganese	50	ug/L	101	41.7	24.1	46.7
Nickel	100	ug/L	13.0	13.1	9.36	17.3
Potassium	NLE	ug/L	2890	3550	2410	5140
Selenium	40	ug/L	3.38	ND	ND	6.21
Sodium	50000	ug/L	49300	43500	35100	149000
Vanadium	NLE	ug/L	ND	1.08	0.88	1.07
Zinc	2000	ug/L	522	380	305	180

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

* Sampling discontinued after July 30, 2003.

Table 5-13
MW12 Groundwater Sampling Results
M-8 Landfill Site
Fort Monmouth, New Jersey

Round	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#9C	#10
WELL ID			M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12
ANALYTE / Lab ID			2731.03	2930.06	3125.06	3366.03	3619.03	3843.07	4029.03	4227.03	4419.07	4447.05	4566.03	4811.04
Date Collected			6/24/97	8/25/97	10/31/97	2/25/98	6/4/98	8/28/98	11/4/98	1/27/99	4/14/99	4/28/99	6/22/99	9/23/99

VOCs

Methylene Chloride	3	ug/L	ND	ND	3.75	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	2.50	ND	ND	ND	ND	2.89	ND
Toluene	1000	ug/L	ND	ND	1.02	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	5.04	4.96	7.64	2.25	5.49	5.56	21.68	4.27	ND	ND	46.06	11.77

SVOCs

4 - Methylphenol	NLE	ug/L	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	23.36	5.49 B	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	1.51	ND	ND	2.48	ND	ND	2.23	ND	ND	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND											
4,4'-DDE	.1	ug/L	ND											
4,4'-DDT	.1	ug/L	ND											
alpha-BHC	.02	ug/L	ND											
delta-BHC	NLE	ug/L	ND											
Gamma-BHC	0.20	ug/L	ND											
Dieldrin	.03	ug/L	ND											
Endrin ketone	NLE	ug/L	ND											
gamma-Chlordane	.5	ug/L	ND											
Heptachlor Epoxide	.2	ug/L	ND											

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 1 through 10 derived from previous RAPR
PCBs = polychlorinated biphenyls; NLE= No Limit Established.
ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-13 (cont'd)
 MW12 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#1	#2	#3	#4	#5	#6	#7	#8	#9A	#9B	#9C	#10	
WELL ID			M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12
ANALYTE / Lab ID			2731.03	2930.06	3125.06	3366.03	3619.03	3843.07	4029.03	4227.03	4419.07	4447.05	4566.03	4811.04	
Date Collected			6/24/97	8/25/97	10/31/97	2/25/98	6/4/98	8/28/98	11/4/98	1/27/99	4/14/99	4/28/99	6/22/99	9/23/99	
Metals															
Aluminum	200	ug/L	56.4	170.4	182	7205	1210	6580	1110	5040	373	265	197	1930	
Antimony	6	ug/L	ND	ND	ND	ND	ND	4.83	ND	ND	ND	ND	ND	ND	
Arsenic	3	ug/L	ND	ND	ND	7.0	2.6	6.10	ND	ND	ND	ND	ND	ND	
Barium	2000	ug/L	6.4	ND	5.8	28.6	9.3	25.9	7.16	14.8	7.85	7.26	8.49	9.31	
Beryllium	1	ug/L	ND	ND	ND	ND	ND	0.797	ND	ND	ND	ND	ND	ND	
Cadmium	4	ug/L	ND	ND	ND	ND	ND	ND	ND	1.81	ND	0.579	0.841	ND	
Calcium	NLE	ug/L	10240	8750	7750	4190	5161	9480	10300	4950	6210	6660	18200	7650	
Chromium	70	ug/L	ND	83.0	2.3	53.3	1.4	56.0	8.23	42.5	2.91	1.52	1.53	14.40	
Cobalt	NLE	ug/L	ND	ND	ND	1.2	ND	1.06	0.778	1.54	0.959	0.703	0.947	0.636	
Copper	1300	ug/L	5.0	9.0	9.0	16	3.6	ND	ND	36.8	ND	ND	ND	11.0	
Iron	300	ug/L	370	760	378	18860	6520	18800	3360	16700	3750	2040	1380	5190	
Lead	5	ug/L	ND	1.0	19.0	10	ND	12.6	ND	3.00	ND	ND	ND	ND	
Magnesium	NLE	ug/L	3330.0	43.0	1990.0	2690	1337	3890	3120	2390	1390	1350	4410	2330	
Manganese	50	ug/L	22	4000	7.7	34.8	14.1	55.5	13.0	27.3	8.98	6.31	13.6	12.9	
Mercury	2	ug/L	ND	ND	ND	0.5	ND	0.11	ND	ND	ND	0.14	ND	ND	
Nickel	100	ug/L	ND	ND	1.9	6.0	3.9	5.18	12.7	6.04	ND	ND	4.40	3.26	
Potassium	NLE	ug/L	2510	2550	2310	5710	2692	12000	3400	4430	1750	1560	3120	3130	
Selenium	40	ug/L	2.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Silver	40	ug/L	28	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Sodium	50000	ug/L	38400	32350	18610	15640	16820	30700	ND	20800	14300	13700	38000	25000	
Thallium	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	4.10	6.04	ND	ND	
Vanadium	NLE	ug/L	ND	ND	ND	29	7.8	28.3	4.96	20.7	2.27	1.55	1.21	8.26	
Zinc	2000	ug/L	18.0	2.0	51.0	55	7.7	ND	43.4	39.8	11.9	9.70	ND	16.2	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 1 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-13 (cont'd)
 MW12 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20	#21	#22	#23
WELL ID			M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12
Date Collected			12/28/1999	3/15/2000	6/5/2000	9/6/2000	12/13/2000	3/21/2001	6/8/2001	9/24/2001	12/17/2001	3/21/2002	6/11/2002	9/23/2002	12/13/2002
ANALYTE / Lab ID			5051.04	5250.04	5454.04	5693.04	5906.04	1601104	1617404	1644804	1666204	2016204	2036104	2067804	2088504
VOCs															
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.04	59.8
Acetone	6000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.03
Methyl-tert-Butyl ether	70	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	19.76	15.64	10.89	7.63	3.42	4.72	6.59	7.24	25.43	29.19	29.04	11.44	9.51
Toluene	1000	ug/L	3.29	22.06	3.29	22.06	ND	ND	ND	ND	ND	ND	ND	1.18	2.66
Trichloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs															
1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	ug/L	ND	1.72	ND	1.79	ND	ND	ND	ND	ND	ND	ND	17.6	4.45
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	2000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pest/PCBs															
4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-13 (cont'd)
 MW12 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20	#21	#22	#23	
WELL ID			M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12
Date Collected			12/28/1999	3/15/2000	6/5/2000	9/6/2000	12/13/2000	3/21/2001	6/8/2001	9/24/2001	12/17/2001	3/21/2002	6/11/2002	9/23/2002	12/13/2002	
ANALYTE / Lab ID			5051.04	5250.04	5454.04	5693.04	5906.04	1601104	1617404	1644804	1666204	2016204	2036104	2067804	2088504	
Metals																
Aluminum	200	ug/L	ND	1240	355	1760	401	870	508	2530	290	568	553	847	133	
Antimony	6	ug/L	5.95	ND	ND	ND	ND	7.0	ND	ND	ND	2.62	ND	ND	ND	
Arsenic	3	ug/L	ND	ND	ND	3.59	ND	ND	5.65	ND	ND	4.44	ND	16.8	6.46	
Barium	2000	ug/L	4.28	10.4	13.4	10.5	5.6	5.7	15.2	18.9	7.28	7.49	8.19	12.9	7.47	
Beryllium	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Cadmium	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.31	ND o	2.37	0.669	
Calcium	NLE	ug/L	9020	8710	14700	13800	6710	7880	48100	47500	16800	9240	8900	28800	15700	
Chromium	70	ug/L	0.978	4.78	5.75	ND	4.12	8.6	4.84	22	3.56	4.66	4.79	9.05	1.14	
Cobalt	NLE	ug/L	ND	ND	ND	1.05	0.744	1.4	3.84	6.24	2.7	0.75	0.895	3.78	1.15	
Copper	1300	ug/L	9.22	6.83	ND	ND	ND	6.0	2.37	3.66	8.16	3.21	ND	6.81	ND	
Iron	300	ug/L	144	3860	3090	8540	2100	3420	14000	23300	14800	4750	3890	42100	24900	
Lead	5	ug/L	ND	ND	ND	ND	ND	3.0	1.46	2.97	2.08	ND	ND	3.78	ND	
Magnesium	NLE	ug/L	2410	2390	3620	3750	1950	2370	13900	16600	5340	2690	2560	9530	4610	
Manganese	50	ug/L	6.80	12.0	12.4	13.9	6.29	19.3	136	148	67.8	19.6	21.1	156	64.2	
Mercury	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Nickel	100	ug/L	2.78	3.43	4.51	ND	1.46	3.0	6.87	10.1	2.65	ND	1.11	2.66	ND	
Potassium	NLE	ug/L	1960	2440	2690	4020	2260	2070	3150	6760	2820	2540	2090	3360	2560	
Selenium	40	ug/L	ND	ND	ND	ND	ND	7.0	6.47	ND	ND	ND	3.51	4.25	ND	
Silver	40	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Sodium	50000	ug/L	24100	16800	36400	43600	27000	29800	82300	125000	101000	74000	62700	51200	50400	
Thallium	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vanadium	NLE	ug/L	ND	7.03	2.88	3.76	2.61	4.7	4.0	11.7	2.86	3.54	3.3	8.3	3.77	
Zinc	2000	ug/L	15.5	30.1	18.4	49.4	ND	10	29.3	47.1	ND o	10.2	17	34.5	10.7	

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-13 (cont'd)
 MW12 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#24	#25	#26
WELL ID			M8MW12	M8MW12	M8MW12
Date Collected			3/21/2003	5/30/2003	8/22/2003
ANALYTE / Lab ID			3013204	3025404	3054104

VOCs

2-Butanone	300	ug/L	2.78	ND	9.29
Acetone	6000	ug/L	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	ND	2.73
Tetrachloroethene	1	ug/L	4.45	3.1	ND
Trichloroethene	1	ug/L	0.92	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND

SVOCs

4-Methylphenol	NLE	ug/L	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	0.002	ND	ND
4,4'-DDE	.1	ug/L	0.002	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Metals

Aluminum	200	ug/L	80.3	4000	264
Antimony	6	ug/L	ND	ND	ND
Arsenic	3	ug/L	4.3	3.05	7.08
Barium	2000	ug/L	10.1	21.7	29.9
Beryllium	1	ug/L	ND	0.451	ND
Cadmium	4	ug/L	ND	1.1	3.97
Calcium	NLE	ug/L	7940	17000	79700
Chromium	70	ug/L	ND	33	2.57
Cobalt	NLE	ug/L	ND	0.5	ND
Copper	1300	ug/L	2.45	8.02	ND
Iron	300	ug/L	5310	27900	118000
Lead	5	ug/L	ND	8.61	3.52
Magnesium	NLE	ug/L	2000	5950	26300
Manganese	50	ug/L	20.6	62.6	341
Mercury	2	ug/L	ND	ND	ND
Nickel	100	ug/L	ND	12.7	1.7
Potassium	NLE	ug/L	2090	5890	12100
Selenium	40	ug/L	ND	ND	ND
Silver	40	ug/L	ND	ND	ND
Sodium	50000	ug/L	24700	51900	355000
Thallium	2	ug/L	ND	ND	ND
Vanadium	NLE	ug/L	2.08	18.5	3.33
Zinc	2000	ug/L	20.6	120	10.6

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-13 (cont'd)
 MW12 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12	M8MW12
Date Collected			12/12/2003	3/9/2004	6/28/2004	8/30/2004	12/21/2004	3/16/2005	6/7/2005	9/22/2005	
ANALYTE / Lab ID			3080404	4015704	4049404	4063704	4086004	5015704	5029104	5048304	

VOCs										
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	ug/L	4.04	ND	ND	ND	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	1.18	6.5	3.05	5.47	ND	ND	6.85	6.29
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	3.67	ND	ND
Trichloroethene	1	ug/L	ND	3.7	ND	ND	ND	1.89	ND	ND
Toluene	1000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-14
 MW23 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M8MW23	M8MW23	M8MW23
ANALYTE / Lab ID			4419.09	4447.09	4811.16
Date Collected			4/13/1999	4/27/1999	9/23/1999

VOCs

cis-1,2-Dichloroethene	10	ug/L	ND	2.74	6.44
Vinyl Chloride	5	ug/L	ND	ND	1.18
Trichloroethene	1	ug/L	ND	ND	1.94
Tetrachloroethene	1	ug/L	6.56	ND	1.62

SVOCs

Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-14 (cont'd)
 MW23 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M8MW23	M8MW23	M8MW23
ANALYTE / Lab ID			4419.09	4447.09	4811.16
Date Collected			4/13/1999	4/27/1999	9/23/1999

Metals					
Aluminum	200	ug/L	8440	150	27.6
Arsenic	3	ug/L	26.4	15.8	3.47
Antimony	6	ug/L	ND	ND	ND
Barium	2000	ug/L	142	65.9	89.9
Beryllium	1	ug/L	0.723	ND	ND
Cadmium	4	ug/L	6.11	1.13	0.607
Calcium	NLE	ug/L	24900	30700	28000
Chromium	70	ug/L	58.9	4.30	5.63
Cobalt	NLE	ug/L	18.2	13.2	1.55
Copper	1300	ug/L	371	ND	21.4
Iron	300	ug/L	27700	1940	5290
Lead	5	ug/L	464	8.10	5.92
Magnesium	NLE	ug/L	10800	7640	10700
Manganese	50	ug/L	1720	787	1280
Mercury	2	ug/L	2.74	0.18	ND
Nickel	100	ug/L	47.4	31.8	6.15
Potassium	NLE	ug/L	10100	5780	5260
Sodium	50000	ug/L	19200	28200	46900
Thallium	2	ug/L	ND	ND	ND
Vanadium	NLE	ug/L	31.5	ND	ND
Zinc	2000	ug/L	5440	3690	237

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-14 (cont'd)
 MW23 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20	#21	#22	#23
WELL ID			M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23
Date Collected			12/28/1999	3/15/2000	6/5/2000	9/6/2000	12/13/2000	3/21/2001	6/8/2001	9/24/2001	12/17/2001	3/21/2002	6/11/2002	9/23/2002	12/10/2002
ANALYTE / Lab ID			5051.15	5250.16	5454.15	5693.15	5906.15	1601115	1617415	1644815	1666215	2016215	2036115	2067805	2087611
VOCs															
2-Butanone	300	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22.19	ND	7.98
Acetone	6000	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	6.13	ND
Chloroform	70	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/l	ND	5.47	ND	6.81	10.99	3.92	8.29	16.42	18.47	6.85	15.89	5.86	5.78
Tetrachloroethene	1	ug/L	7.38	ND	4.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.79
Trichloroethene	1	ug/l	ND	2.70	ND	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND
Vinyl Chloride	5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.06
SVOCS															
1,2-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.97	10.11	34.0
Acenaphthene	400	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	2000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	3	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.86	ND	ND
Dibenzofuran	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	6000	ug/L	ND	ND	ND	ND	2.79	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	100	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	10	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	2000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pest/PCBs															
4,4'-DDD	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCS = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-14 (cont'd)
 MW23 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20	#21	#22	#23
WELL ID			M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23
Date Collected			12/28/1999	3/15/2000	6/5/2000	9/6/2000	12/13/2000	3/21/2001	6/8/2001	9/24/2001	12/17/2001	3/21/2002	6/11/2002	9/23/2002	12/10/2002
ANALYTE / Lab ID			5051.15	5250.16	5454.15	5693.15	5906.15	1601115	1617415	1644815	1666215	2016215	2036115	2067805	2087611
Metals															
Aluminum	200	ug/L	71.6	63.0	15.1	110	ND	ND	46.6	139	292	394	490	62.4	45.8
Antimony	6	ug/L	6.84	ND	3.55	ND	ND	ND	ND	ND	ND	3.2	ND	ND	ND
Arsenic	3	ug/L	ND	2.61	ND	ND	ND	12	3.41	3.87	6.74	4.93	ND	2.43	ND
Barium	2000	ug/L	65.6	49.5	76.7	45.8	34.4	39.3	56.1	57.3	91	41.6	96.6	142	91.1
Beryllium	1	ug/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	4	ug/L	0.634	ND	ND	ND	ND	5.0	ND	ND	ND	ND	ND	ND	ND
Calcium	NLE	ug/L	10500	33700	15200	30100	27100	26700	30000	32200	54500	39100	52200	27100	44900
Chromium	70	ug/L	4.78	1.74	4.08	ND	ND	ND	ND	1.86	3.27	3.03	2.58	1.14	ND
Cobalt	NLE	ug/L	1.58	1.69	2.2	2.0	0.647	7.2	1.31	1.26	1.84	6.49	1.15	ND	ND
Copper	1300	ug/L	3.34	4.02	5.63	ND	ND	ND	3.93	6.93	18.5	6.49	11.2	2.34	ND
Iron	300	ug/L	910	2580	203	3880	5180	2650	6260	6650	8300	4900	12300	7410	17100
Lead	5	ug/L	3.82	ND	3.06	2.79	3.94	7.0	12.2	13.5	33.5	9.98	21.9	4.0	ND
Magnesium	NLE	ug/L	11500	8980	10300	8190	5860	5810	6270	9090	17400	7670	9100	5230	9230
Manganese	50	ug/L	986	748	1800	1020	739	585	2280	1600	1400	640	2080	548	2190
Mercury	2	ug/L	0.2	0.2	ND	ND	ND	ND	ND	ND	0.1	ND	ND	ND	ND
Nickel	100	ug/L	5.74	9.03	11.5	ND	ND	22	10.4	5.4	5.41	27.2	1.86	ND	ND
Potassium	NLE	ug/L	6670	4240	6140	5150	3440	2050	3270	5560	7290	5310	5130	3890	5050
Selenium	40	ug/L	ND	ND	ND	ND	ND	ND	9.13	ND	ND	ND	8.43	ND	ND
Silver	40	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.31
Sodium	50000	ug/L	28900	30600	23000	46100	36600	20600	23300	46300	80200	41100	27300	25800	27700
Thallium	2	ug/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NLE	ug/L	ND	1.38	ND	ND	1.19	ND	0.923	1.16	2.18	2.66	6.81	1.89	1.39
Zinc	2000	ug/L	660	261	1680	490	57.7	1040	784	856	1720	882	1000	226	111

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-14 (cont'd)
 MW23 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#24	#25	#26
WELL ID			M8MW23	M8MW23	M8MW23
Date Collected			3/21/2003	5/30/2003	8/22/2003
ANALYTE / Lab ID			3013215	3025415	3054115

VOCs

2-Butanone	300	ug/L	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	ND	1.01	11.74
Tetrachloroethene	1	ug/L	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND
Vinyl chloride	5	ug/L	ND	ND	4.07

SVOCs

4-Methylphenol	NLE	ug/L	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	ND

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Metals

Aluminum	200	ug/L	524	500	599
Antimony	6	ug/L	4.16	ND	ND
Arsenic	3	ug/L	3.17	ND	10.1
Barium	2000	ug/L	21.3	9.54	75.8
Beryllium	1	ug/L	0.144	0.155	0.109
Cadmium	4	ug/L	0.513	ND	0.723
Calcium	NLE	ug/L	48200	73500	31200
Chromium	70	ug/L	3.25	4.39	5.12
Cobalt	NLE	ug/L	0.575	0.397	1.79
Copper	1300	ug/L	7.07	2.59	14.7
Iron	300	ug/L	3190	3370	4110
Lead	5	ug/L	32.4	2.76	42.6
Magnesium	NLE	ug/L	4930	7220	5820
Manganese	50	ug/L	70.2	160	430
Mercury	2	ug/L	ND	ND	0.19
Nickel	100	ug/L	4.47	2.98	5.26
Potassium	NLE	ug/L	3020	3130	5590
Selenium	40	ug/L	ND	7.15	ND
Silver	40	ug/L	ND	ND	ND
Sodium	50000	ug/L	6130	7460	15100
Thallium	2	ug/L	ND	2.08	ND
Vanadium	NLE	ug/L	5.52	3.36	3.82
Zinc	2000	ug/L	2010	35.6	2570

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-14 (cont'd)
 MW23 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23	M8MW23
Date Collected			12/30/2003	3/9/2004	6/28/2004	8/30/2004	12/21/2004	3/16/2005	6/8/2005	9/22/2005	
ANALYTE / Lab ID			3083107	4015708	4049415	4063715	4086005	5015712	5029910	5048312	

VOCs										
2-Butanone	300	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	4	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	70	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/L	0.47	2.12	5.46	8.29	2.66	2.15	1.06	5.99
Tetrachloroethene	1	ug/L	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	ug/L	ND	ND	ND	0.95	ND	ND	ND	ND
Vinyl chloride	5	ug/L	ND	2.4	5.13	13.71	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-15
 MW24 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M8MW24	M8MW24	M8MW24
ANALYTE / Lab ID			4419.03	4447.03	4811.17
Date Collected			4/14/1999	4/28/1999	9/23/1999

VOCs

Chlorobenzene	4	ug/L	ND	ND	1.01
Ethylbenzene	700	ug/L	1.78	ND	4.05
Total Xylenes	1000	ug/L	6.04	1.16	10.76

SVOCs

2,4-Dimethylphenol	100	ug/L	ND	3.14	ND
Naphthalene	NLE	ug/L	1.24	ND	3.24
Bis(2-ethylhexy l)phthalate	3	ug/L	ND	ND	1.74

Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Gamma-BHC	0.20	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-15 (cont'd)
 MW24 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#9A	#9B	#10
WELL ID			M8MW24	M8MW24	M8MW24
ANALYTE / Lab ID			4419.03	4447.03	4811.17
Date Collected			4/14/1999	4/28/1999	9/23/1999

Metals					
Aluminum	200	ug/L	531	5960	327
Arsenic	3	ug/L	ND	7.16	3.77
Antimony	6	ug/L	ND	3.50	ND
Barium	2000	ug/L	96.1	262	276
Beryllium	1	ug/L	ND	ND	ND
Cadmium	4	ug/L	ND	2.89	1.83
Calcium	NLE	ug/L	384000	409000	470000
Chromium	70	ug/L	8.01	39.3	8.75
Cobalt	NLE	ug/L	1.17	2.07	ND
Copper	1300	ug/L	22.4	196	29.3
Iron	300	ug/L	13100	13500	36600
Lead	5	ug/L	50.5	385	27.1
Magnesium	NLE	ug/L	21100	25500	29200
Manganese	50	ug/L	885	1260	1500
Mercury	2	ug/L	ND	1.03	0.2
Nickel	100	ug/L	1.51	7.97	3.59
Potassium	NLE	ug/L	10000	15100	16700
Silver	40	ug/L	ND	18.6	ND
Sodium	50000	ug/L	15400	29600	59600
Thallium	2	ug/L	ND	ND	ND
Vanadium	NLE	ug/L	2.64	21.3	3.74
Zinc	2000	ug/L	85.3	779	69.1

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; Historical Data for rounds 9 through 10 derived from previous RAPR
 PCBs = polychlorinated biphenyls; NLE= No Limit Established; ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb)
 NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-15 (cont'd)
 MW24 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20	#21	#22	#23
WELL ID			M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24
Date Collected			12/28/1999	3/15/2000	6/5/2000	9/6/2000	12/26/2000	4/2/2001	6/23/2001	9/26/2001	12/10/2001	3/27/2002	6/22/2002	9/26/2002	12/13/2002
ANALYTE / Lab ID			5051.15	5250.17	5454.16	5693.16	5919.01	1601701	1620704	1646001	1663401	2017101	2039001	2068801	2088601
VOCs															
1,3-Dichlorobenzene	600	ug/l	NA	ND	ND	ND	ND	4.17	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ug/l	NA	ND	ND	ND	ND	13.51	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	ug/l	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	6000	ug/l	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	ug/L	NA	1.67	1.35	1.49	ND	3.97	ND	1.28	1.4	ND	1.33	ND	ND
Carbon Disulfide	NLE	ug/l	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	4	ug/l	NA	1.99	2.74	2.91	1.37	39.77	1.7	2.8	1.94	ND	1.78	2.51	1.42
Chloroform	70	ug/l	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	10	ug/l	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	ug/L	NA	1.06	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m+p-Xylenes	NLE	ug/L	NA	2.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000	ug/L	NA	3.75	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1	ug/l	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	5	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs															
1,2-Dichlorobenzene	600	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	600	ug/L	NA	ND	ND	ND	ND	2.37	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	75	ug/L	NA	ND	ND	ND	ND	7.68	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	100	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol	NLE	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	400	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NLE	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	2000	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexy l)phthalate	3	ug/L	NA	1.78	ND	ND	ND	3.38	ND	ND	1.44	ND	ND	ND	ND
Dibenzofuran	NLE	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethylphthalate	6000	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butylphthalate	700	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	100	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	300	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	300	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	300	ug/L	NA	ND	ND	ND	ND	10.97	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	10	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	NLE	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	2000	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	200	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pest/PCBs															
4,4'-DDD	.1	ug/L	NA	ND	ND	0.15	ND	ND	ND	ND	0.004	ND	ND	ND	ND
4,4'-DDE	.1	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,4'-DDT	.1	ug/L	NA	ND	ND	0.042	ND	ND	ND	ND	ND	ND	ND	ND	ND
Alpha-Chlordane	.5	ug/L	NA	ND	ND	0.065	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arochlor 1242	.5	ug/L	NA	ND	1.08	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND
alpha-BHC	.02	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	NLE	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dieldrin	.03	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Endrin ketone	NLE	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
gamma-Chlordane	.5	ug/L	NA	ND	ND	0.066	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable;
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-15 (cont'd)
 MW24 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#11	#12	#13	#14	#15	#16	#17	#18	#19	#20	#21	#22	#23
WELL ID			M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24
Date Collected			12/28/1999	3/15/2000	6/5/2000	9/6/2000	12/26/2000	4/2/2001	6/23/2001	9/26/2001	12/10/2001	3/27/2002	6/22/2002	9/26/2002	12/13/2002
ANALYTE / Lab ID			5051.15	5250.17	5454.16	5693.16	5919.01	1601701	1620704	1646001	1663401	2017101	2039001	2068801	2088601
Metals															
Aluminum	200	ug/L	NA	124	ND	56.9	23.2	ND	ND	ND	ND	ND	ND	ND	18.9
Antimony	6	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	3	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	4.17	ND	3.49	ND
Barium	2000	ug/L	NA	137	120	113	65.9	601	173	289	186	85	137	201	136
Beryllium	1	ug/l	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	4	ug/L	NA	ND	ND	ND	ND	2.7	1.06	ND	ND	ND	ND	ND	ND
Calcium	NLE	ug/L	NA	54000	50800	49200	41100	201000	55000	78400	57500	46600	48000	61600	54500
Chromium	70	ug/L	NA	2.75	3.93	ND	ND	ND	ND	0.844	3.49	ND	ND	ND	ND
Cobalt	NLE	ug/L	NA	ND	ND	ND	ND	ND	ND	0.778	ND	ND	ND	ND	ND
Copper	1300	ug/L	NA	ND	ND	ND	ND	10	ND	24.4	2.32	ND	ND	ND	ND
Iron	300	ug/L	NA	7840	7150	7450	3130	30600	11300	22200	12700	6080	8000	13900	7080
Lead	5	ug/L	NA	ND	5.61	ND	ND	25	ND	4.76	2.37	ND	ND	ND	ND
Magnesium	NLE	ug/L	NA	8450	7920	7480	4970	34000	7920	14900	9800	6320	7200	11500	7700
Manganese	50	ug/L	NA	110	103	78.6	42.6	461	87.6	179	93.1	55.9	66	90.5	56.1
Mercury	2	ug/L	NA	0.2	ND	ND	ND	0.25	ND	ND	ND	ND	ND	ND	ND
Nickel	100	ug/L	NA	1.78	3.86	ND	ND	7.0	ND	2.32	1.81	ND	ND	ND	ND
Potassium	NLE	ug/L	NA	11400	10500	10900	7930	20500	9360	13700	11100	8460	8840	12300	9710
Selenium	40	ug/L	NA	ND	ND	ND	ND	ND	9.87	ND	ND	ND	5.68	5.88	ND
Silver	40	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	50000	ug/L	NA	21400	24000	26800	10100	92800	32000	57500	34500	21500	24400	45500	23300
Thallium	2	ug/L	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NLE	ug/L	NA	1.46	ND	ND	ND	1.3	ND	ND	ND	ND	ND	ND	ND
Zinc	2000	ug/L	NA	23.0	38.9	25.9	ND	ND	23.5	34.4	ND	6.03	5.97	22	ND

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-15 (cont'd)
 MW24 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#24	#25	#26
WELL ID			M8MW24	M8MW24	M8MW24
Date Collected			3/20/2003	6/25/2003	9/8/2003
ANALYTE / Lab ID			3012704	3032103	3058004

VOCs

1,3-Dichlorobenzene	600	ug/l	ND	ND	ND
1,4-Dichlorobenzene	75	ug/l	ND	ND	ND
2-Butanone	300	ug/l	1.15	ND	ND
Acetone	6000	ug/l	ND	ND	ND
Benzene	1	ug/L	ND	ND	ND
Carbon Disulfide	NLE	ug/l	ND	ND	1.08
Chlorobenzene	4	ug/l	ND	ND	ND
Chloroform	70	ug/l	5.0	3.02	2.15
cis-1,2-Dichloroethene	10	ug/l	ND	ND	ND
Ethylbenzene	700	ug/L	ND	ND	ND
m+p-Xylenes	NLE	ug/L	ND	ND	ND
Tetrachloroethene	1	ug/L	ND	ND	ND
Toluene	1000	ug/L	ND	ND	ND
Trichloroethene	1	ug/l	ND	ND	ND
Vinyl Chloride	5	ug/L	ND	ND	ND

SVOCs

Diethylphthalate	6000	ug/L	ND	1.05	ND
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Pest/PCBs

4,4'-DDD	.1	ug/L	ND	ND	ND
4,4'-DDE	.1	ug/L	ND	ND	ND
4,4'-DDT	.1	ug/L	ND	ND	ND
alpha-BHC	.02	ug/L	ND	ND	ND
delta-BHC	NLE	ug/L	ND	ND	ND
Dieldrin	.03	ug/L	ND	ND	ND
Endrin ketone	NLE	ug/L	ND	ND	ND
gamma-Chlordane	.5	ug/L	ND	ND	ND
Heptachlor Epoxide	.2	ug/L	ND	ND	ND

Metals

Aluminum	200	ug/L	292	74.7	33.4
Antimony	6	ug/L	ND	ND	ND
Arsenic	3	ug/L	ND	ND	ND
Barium	2000	ug/L	26	194	173
Beryllium	1	ug/L	0.0717	0.0528	0.037
Cadmium	4	ug/L	0.672	0.661	0.452
Calcium	NLE	ug/L	11400	60800	56200
Chromium	70	ug/L	3.4	1.35	ND
Cobalt	NLE	ug/L	1.89	ND	ND
Copper	1300	ug/L	3.77	ND	ND
Iron	300	ug/L	8220	12200	10800
Lead	5	ug/L	1.49	1.36	1.28
Magnesium	NLE	ug/L	4190	11700	9420
Manganese	50	ug/L	23.9	87.2	79.2
Mercury	2	ug/L	ND	ND	ND
Nickel	100	ug/L	12.2	1.01	ND
Potassium	NLE	ug/L	2020	12000	11600
Selenium	40	ug/L	ND	ND	ND
Silver	40	ug/L	ND	ND	ND
Sodium	50000	ug/L	30100	44700	35000
Thallium	2	ug/L	ND	ND	ND
Vanadium	NLE	ug/L	3.97	0.719	0.462
Zinc	2000	ug/L	34.7	6.85	4.98

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds

PCBs = polychlorinated biphenyls; NLE= No Limit Established.

ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb); NA = Not Analyzed/Not Applicable; Shaded block identifies sample and associated constituent concentration that exceeds the criterion.

Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-15 (cont'd)
 MW24 Groundwater Sampling Results
 M-8 Landfill Site
 Fort Monmouth, New Jersey

Round	Criterion	Units	#27	#28	#29	#30	#31	#32	#33	#34	
WELL ID			M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24	M8MW24
Date Collected			11/21/2003	2/25/2004	6/28/2004	8/30/2004	12/21/2004	3/17/2005	6/7/2005	9/23/2005	
ANALYTE / Lab ID			3075504	4014201	4049901	4063716	4086006	5015807	5029109	5048607	

VOCs										
1,2-Dichlorobenzene	600	ug/l	ND							
1,3-Dichlorobenzene	600	ug/l	ND	ND	ND	ND	0.44	ND	ND	ND
1,4-Dichlorobenzene	75	ug/l	ND	0.74	0.72	0.7	1.51	ND	0.62	0.85
2-Butanone	300	ug/l	ND							
Acetone	6000	ug/l	ND							
Benzene	1	ug/l	0.65	1.2	0.98	1.16	1.19	1.24	0.28	0.37
Carbon Disulfide	NLE	ug/l	ND							
Chlorobenzene	4	ug/l	1.45	3.11	2.61	2.56	6.70	3.76	2.14	3.04
Chloroform	70	ug/l	ND							
cis-1,2-Dichloroethylene	10	ug/l	ND							
Ethylbenzene	700	ug/l	ND	ND	ND	0.42	ND	ND	ND	ND
Methylene Chloride	3	ug/l	ND							
Methyl-tert-Butyl ether	70	ug/l	ND							
Tetrachloroethylene	1	ug/l	ND							
Toluene	1000	ug/l	ND							
Trichloroethylene	1	ug/l	ND							
Trichlorofluoromethane	NLE	ug/l	ND							
Vinyl chloride	5	ug/l	ND							

Notes: VOCs = volatile organic compounds; SVOCs = semi-volatile organic compounds; PCBs = polychlorinated biphenyls; NLE= No Limit Established.
 ND = Not Detected; ug/L = micrograms per liter, equivalent to parts per billion (ppb);
 Shaded block identifies sample and associated constituent concentration that exceeds the criterion.
 Criterion = GW Criterion: NJDEP Groundwater Quality Criteria (Higher of GWQC and PQL) per N.J.A.C. 7:9-6.

Table 5-16
Groundwater Exceedance Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Analyte	Criterion	Field ID	Round	Date Collected	Lab Sample ID	Result		
VOCs								
Tetrachloroethene	1	M-5MW11	#27	10/8/2003	3063805	1.08		
			#28	1/14/2004	4002905	2.01		
			#29	5/13/2004	4035905	3.10		
			#30	8/20/2004	4061405	2.05		
			#31	12/16/2004	4084604	3.05		
			#32	3/14/2005	5015204	2.30		
			#33	6/3/2005	5028405	2.86		
				M-5MW16	#27	10/8/2003	3063809	23.44
					#28	1/14/2004	4002909	34.59
					#29	5/13/2004	4035909	38.41
					#30	8/20/2004	4061409	7.63
					#31	12/15/2004	4084505	59.14
					#32	3/14/2005	5015205	6.22
					#33	6/3/2005	5028409	90.59
				#34	9/16/2005	5047308	9.51	
				M-5MW19	#27	10/8/2003	3063811	5.42
					#28	1/14/2004	4002911	1.89
					#34	9/16/2005	5047310	5.73
				M-5MW20	#27	10/8/2003	3063812	43.96
					#28	1/14/2004	4002912	21.69
					#29	5/13/2004	4035912	13.74
					#30	8/20/2004	4061412	7.51
					#31	12/14/2004	4083301	3.96
					#32	3/14/2005	5015208	4.93
					#33	6/3/2005	5028412	13.75
				#34	9/16/2005	5047311	8.74	
				M-5MW23	#27	10/8/2003	3063813	1.60
		#28	1/14/2004		4002913	4.35		
		#29	5/13/2004		4035913	13.33		
		#31	12/15/2004		4084506	2.15		
		#32	3/14/2005		5015209	13.75		
		#33	6/3/2005		5028413	23.07		
			#34	9/16/2005	5047312	7.24		
		M-8MW12	#32	3/16/2005	5015704	3.67		
Trichloroethene	1	M-5MW11	#29	5/13/2004	4035905	1.20		
		M-5MW16	#27	10/8/2003	3063809	15.50		
			#28	1/14/2004	4002909	13.10		
			#29	5/13/2004	4035909	14.68		
			#30	8/20/2004	4061409	9.48		
		#31	12/15/2004	4084505	19.57			

Notes:

All results are reported in micrograms per liter (ug/L).
VOCs = Volatile Organic Compounds

Table 5-16
Groundwater Exceedance Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Analyte	Criterion	Field ID	Round	Date Collected	Lab Sample ID	Result
VOCs						
			#32	3/14/2005	5015205	2.80
			#33	6/3/2005	5028409	34.20
			#34	9/16/2005	5047308	34.10

Notes:

All results are reported in micrograms per liter (ug/L).

VOCs = Volatile Organic Compounds

Table 5-16
Groundwater Exceedance Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Analyte	Criterion	Field ID	Round	Date Collected	Lab Sample ID	Result
VOCs						
Trichloroethene	1	M-5MW19	#27	10/8/2003	3063811	1.92
			#28	1/14/2004	4002911	1.04
			#29	5/13/2004	4035911	1.41
			#31	12/14/2004	4083302	1.33
			#34	9/16/2005	5047310	3.12
		M-5MW20	#27	10/8/2003	3063812	4.81
			#28	1/14/2004	4002912	1.90
			#30	8/20/2004	4061412	2.05
			#32	3/14/2005	5015208	1.11
			#33	6/3/2005	5028412	8.55
			#34	9/16/2005	5047311	2.67
		M-5MW23	#28	1/14/2004	4002913	1.02
			#29	5/13/2004	4035913	2.07
		M-8MW12	#28	3/9/2004	4015704	3.70
			#32	3/16/2005	5015704	1.89
cis-1,2-DCE	10	M-5MW16	#27	10/8/2003	3063809	68.16
			#28	1/14/2004	4002909	83.66
			#29	5/13/2004	4035909	22.47
			#30	8/20/2004	4061409	66.66
			#31	12/15/2004	4084505	47.94
			#32	3/14/2005	5015205	32.37
			#33	6/3/2005	5028409	33.74
			#34	9/16/2005	5047308	283.79
		M-5MW20	#33	6/3/2005	5028412	13.20
Vinyl Chloride	5	M-8MW23	#29	6/28/2004	4049415	5.13
			#30	8/30/2004	4063715	13.71
Benzene	1	M-8MW24	#28	2/25/2004	4014201	1.20
			#30	8/30/2004	4063716	1.16
		M-8MW24	#31	12/21/2004	4086006	1.19
			#32	3/17/2005	5015807	1.24
Chlorobenzene	4	M-8MW24	#31	12/21/2004	4086006	6.70

Notes:

All results are reported in micrograms per liter (ug/L).

VOCs = Volatile Organic Compounds

Table 5-16
Groundwater Exceedance Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Analyte	Criterion	Field ID	Round	Date Collected	Lab Sample ID	Result
VOCs						
2-Butanone	300	M-5MW11	#27	10/8/2003	3063805	448.97

Notes:

All results are reported in micrograms per liter (ug/L).
VOCs = Volatile Organic Compounds

Table 5-17
SS-4 Stream Sampling Results
Fort Monmouth, New Jersey

Round	Criteria	#1A	#1B	#1C	#2A	#2B	#2C	#3	#4	#5	#6
Date Collected		10/8/1996	11/25/1996	12/12/1996	1/29/1997	2/26/1997	3/10/1997	4/8/1997	7/17/1997	10/30/1997	2/10/1998
Analyte/Lab ID		2178.04	2223.12	2246.12	2298.12	2361.12	2375.12	2439.12	2810.12	3121.12	3331.12
VOCs											
Acetone	NLE	NA	NA	NA	30.91	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	NA	NA	NA	1.16	1.14	ND	2.18	1.63	ND	ND
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	1600	3.75	3.03	3.62	2.50	ND	ND	ND	ND	ND	ND
Methyl-tert-Butyl ether	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	2.35	6.26	2.28	4.42	6.37	2.33	ND	1.61	1.24	6.61
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	0.64	1.60	0.75	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Round	Criteria	#7	#8	#9	#10	#11	#12	#13	#14	#15
Date Collected		4/21/1998	8/19/1998	11/17/1998	2/25/1999	6/29/1999	9/22/1999	12/8/1999	3/1/2000	6/12/2000
Analyte/Lab ID		3499.12	3816.12	4069.09	4300.12	4579.14	4806.05	4997.10	5211.10	5468.16
VOCs										
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	ND	1.92	1.19	ND	2.41	2.02	ND	1.23	ND
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	1600	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-Butyl ether	NLE	ND	ND	ND	ND	ND	ND	ND	2.18	ND
Tetrachloroethene	4.29	4.42	2.85	1.62	5.61	5.27	1.85	ND	6.18	4.37
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	ND	1.1	ND	ND	1.56	ND	ND	1.26	ND
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

ND= Not Detected; NLE= No Limit Established; NA=Not Analyzed/Not Applicable/Not Available; B=Found in the Blank.

All results reported in micrograms/liter (µg/L).

Bolded and shaded results exceed the associated constituent criterion. Bolded analytes are contaminants of concern at this site.

Criteria (salt water)=NJDEP Surface Water Quality Criteria (SWQC) per N.J.A.C. 7:9B-1.14, 18 May 1998

Table 5-17
SS-4 Stream Sampling Results
Fort Monmouth, New Jersey

Round		#16	#17	#18	#19	#20	#21	#22	#23	#24	#25	#26
Date Collected		8/24/2000	11/20/2000	3/8/2001	5/16/2001	9/25/2001	11/14/2001	2/11/2002	6/18/2002	9/18/2002	11/5/2002	3/13/2003
Analyte/Lab ID	Criteria	5658.16	5868.16	1310	16120.16	16449.14	16579.19	2008619	2037619	2066610	2078012	3011817
VOCs												
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	1.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.57
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	1600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-Butyl ether	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	3.19	3.70	2.52	2.95	ND	ND	1.64	1.97	ND	ND	2.33
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	1.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.51
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Round		#27	#28	#29	#30	#31	#32
Date Collected		5/21/2003	9/17/2003	11/4/2003	3/17/2004	6/29/2004	8/26/2004
Analyte/Lab ID	Criteria	3024716	3059215	3070015	4018215	4050015	4063215
VOCs							
Acetone	NLE	ND	ND	ND	0.65	6.62	1.48
Benzene	71	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	ND	1.14	1.03	ND	ND	0.97
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND
Methylene Chloride	1600	ND	ND	ND	ND	ND	ND
Methyl-tert-Butyl ether	NLE	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	ND	1.13	ND	0.81	ND	0.61
Toluene	200000	ND	ND	ND	ND	ND	ND
Trichloroethene	81	ND	ND	ND	ND	ND	ND
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND

Notes:

ND= Not Detected; NLE= No Limit Established; NA=Not Analyzed/Not Applicable/Not Available.

All results reported in micrograms/liter (µg/L).

Bolded and shaded results exceed the associated constituent criterion. Bolded analytes are contaminants of concern at this site.

Criteria (fresh water)=NJDEP Surface Water Quality Criteria (SWQC) per N.J.A.C. 7:9B-1.14, 18 May 1998

Table 5-18
SS-5 Stream Sampling Results
Fort Monmouth, New Jersey

Round		#1A	#1B	#1C	#2A	#2B	#2C	#3	#4	#5	#6
Date Collected		10/8/1996	11/25/1996	12/12/1996	1/29/1997	2/26/1997	3/10/1997	4/8/1997	7/17/1997	10/30/1997	2/10/1998
Analyte/Lab ID	Criteria	2178.05	2223.14	2246.14	2298.14	2361.13	2375.13	2439.13	2810.13	3121.13	3331.13
VOCs											
Acetone	NLE	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	NA	NA	NA	1.19	ND	ND	1.8	3.66	1.83	ND
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	1600	3.52	3.08	3.47	3.41	ND	ND	1.96	ND	ND	ND
Methyl-tert-Butyl ether	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	2.76	7.53	2.98	4.76	5.32	2.42	2.28	3.54	1.7	6.34
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	0.81	1.86	0.71	1.04	ND	ND	ND	ND	ND	ND
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Round		#7	#8	#9	#10	#11	#12	#13	#14	#15
Date Collected		4/21/1998	8/19/1998	11/17/1998	2/25/1999	6/29/1999	9/22/1999	12/8/1999	3/1/2000	6/12/2000
Analyte/Lab ID	Criteria	3499.13	3816.11	4060.10	4300.13	4579.15	4806.06	4997.11	5211.11	5468.15
VOCs										
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	ND	2.28	1.67	ND	2.74	1.96	1.6	1.27	ND
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	1600	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-Butyl ether	NLE	ND	ND	ND	ND	ND	ND	ND	2.34	ND
Tetrachloroethene	4.29	4.48	3.39	2.17	5.45	6.04	1.82	3.82	6.62	4.38
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	ND	1.27	ND	ND	1.74	ND	ND	1.36	ND
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

ND= Not Detected; NLE= No Limit Established; NA=Not Analyzed/Not Applicable/Not Available; B=Found in the Blank.

All results reported in micrograms/liter (µg/L).

Bolded and shaded results exceed the associated constituent criterion. Bolded analytes are contaminants of concern at this site.

Criteria (salt water)=NJDEP Surface Water Quality Criteria (SWQC) per N.J.A.C. 7:9B-1.14, 18 May 1998

Table 5-18
SS-5 Stream Sampling Results
Fort Monmouth, New Jersey

Round		#16	#17	#18	#19	#20	#21	#22	#23	#24	#25	#26
Date Collected		8/24/2000	11/20/2000	3/8/2001	5/16/2001	9/25/2001	11/14/2001	2/11/2002	6/18/2002	9/18/2002	11/4/2002	3/13/2003
Analyte/Lab ID	Criteria	5658.15	5868.15	1309	16120.15	16449.16	16579.20	2008620	2037620	2066622	2078014	3011818
VOCs												
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	1.19	ND	ND	0.97	ND	1.51	ND	ND	ND	ND	0.81
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	1600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-Butyl ether	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	3.44	3.58	ND	4.09	ND	1.99	2.44	2.39	ND	ND	3.08
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.71
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Round		#27	#28	#29	#30	#31	#32	#33	#34	#35	#36
Date Collected		5/21/2003	9/17/2003	11/4/2003	3/17/2004	6/29/2004	8/26/2004	11/23/2004	3/3/2005	6/15/2005	9/13/2005
Analyte/Lab ID	Criteria	3024715	3059216	3070016	4018216	4050016	4063216	4080406	5011706	5031304	5046204
VOCs											
Acetone	NLE	ND	ND	ND	0.66	ND	1.51	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND						
Carbon Disulfide	NLE	ND	ND	ND	ND						
Chlorobenzene	21000	ND	ND	ND	ND						
Chloroform	470	ND	ND	ND	ND	ND	ND	1.07	ND	ND	ND
cis-1,2-Dichloroethene	NLE	ND	1.36	1.34	0.57	1.19	1.61	1.29	0.87	1.60	1.77
Dibromochloromethane	NLE	ND	ND	ND	ND						
Ethylbenzene	27900	ND	ND	ND	ND						
Methylene Chloride	1600	ND	ND	ND	ND						
Methyl-tert-Butyl ether	NLE	ND	ND	ND	ND						
Tetrachloroethene	4.29	3.54	1.23	ND	2.21	1.31	1.09	1.23	1.84	1.30	ND
Toluene	200000	ND	ND	ND	ND						
Trichloroethene	81	ND	ND	ND	0.57	ND	0.73	ND	ND	0.66	ND
Vinyl Chloride	525	ND	ND	ND	ND						

Notes:

ND= Not Detected; NLE= No Limit Established; NA=Not Analyzed/Not Applicable/Not Available.

All results reported in micrograms/liter (µg/L).

Bolded and shaded results exceed the associated constituent criterion. Bolded analytes are contaminants of concern at this site.

Criteria (fresh water)=NJDEP Surface Water Quality Criteria (SWQC) per N.J.A.C. 7:9B-1.14, 18 May 1998

Table 5-19
SS-15 Stream Sampling Results
Fort Monmouth, New Jersey

Round	Criteria	#1A	#1B	#1C	#2A	#2B	#2C	#3	#4	#5	#6
Date Collected		10/8/1996	11/25/1996	12/12/1996	1/29/1997	2/26/1997	3/10/1997	4/8/1997	7/17/1997	10/30/1997	2/10/1998
Analyte/Lab ID		2178.15	2223.09	2246.09	2298.09	2361.09	2375.09	2439.09	2810.09	3121.09	3331.09
VOCs											
Acetone	NLE	NA	NA	NA	4.22	ND	ND	ND	ND	ND	ND
Benzene	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.266	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	48.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	5.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	NA	NA	NA	1.57	1.46	ND	2.69	5.53	2.57	ND
Dibromochloromethane	72.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	3030	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	NLE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	2.49	3.85B	2.98B	5.51	2.68	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.388	8.41	10.38	5.63	5.68	7.84	3.39	6.00	7.12	2.72	6.90
Toluene	7440	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1.09	2.58	2.54	1.31	1.33	ND	ND	1.6	2.5	ND	1.03
Vinyl Chloride	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Round	Criteria	#7	#8	#9	#10	#11	#12	#13	#14	#15
Date Collected		4/21/1998	8/19/1998	11/18/1998	2/25/1999	6/29/1999	9/21/1999	12/8/1999	3/1/2000	6/12/2000
Analyte/Lab ID		3499.09	3816.09	4069.08	4300.09	4579.11	4802.11	4997.17	5211.17	5468.12
VOCs										
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.266	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	48.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	22	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	5.67	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	1.22	3.89	ND	ND	4.17	3.59	ND	1.39	ND
Dibromochloromethane	72.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	3030	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	NLE	ND	ND	ND	ND	ND	ND	ND	2.38	ND
Methylene Chloride	2.49	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.388	5.72	5.39	ND	7.33	7.86	2.61	4.08	6.95	5.94
Toluene	7440	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1.09	1.21	2.06	ND	ND	2.4	1.37	ND	1.39	ND
Vinyl Chloride	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

ND= Not Detected; NLE= No Limit Established; NA=Not Analyzed/Not Applicable/Not Available; B=Found in the Blank.

All results reported in micrograms/liter (µg/L).

Bolded and shaded results exceed the associated constituent criterion. Bolded analytes are contaminants of concern at this site.

Criteria (fresh water)=NJDEP Surface Water Quality Criteria (SWQC) per N.J.A.C. 7:9B-1.14, 18 May 1998

B = Compound found in related blank.

Table 5-19
SS-15 Stream Sampling Results
Fort Monmouth, New Jersey

Round		#16	#17	#18	#19	#20	#21	#22	#23	#24	#25	#26
Date Collected		8/24/2000	11/20/2000	2/21/2001	5/16/2001	9/25/2001	11/14/2001	2/11/2002	6/18/2002	9/18/2002	11/5/2002	3/24/2003
Analyte/Lab ID	Criteria	5658.12	5868.12	962	16120.12	16449.08	16579.12	2008612	2037611	2066607	2078707	3013404
VOCs												
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	0.266	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	48.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	5.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.44
Dibromochloromethane	72.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	3030	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2.49	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.388	5.2	6.29	7.19	6.64	ND	3.49	2.65	2.67	2.55	1.52	3.96
Toluene	7440	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	1.09	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Round		#27	#28	#29	#30	#31	#32	#33	#34	#35	#36
Date Collected		5/21/2003	9/17/2003	11/4/2003	3/17/2004	6/29/2004	8/26/2004	11/23/2004	3/3/2005	6/14/2005	9/12/2005
Analyte/Lab ID	Criteria	3024712	3059220	3070020	4050020	4050020	4063220	4080412	5011712	5031206	5046006
VOCs											
Acetone	NLE	ND	ND	ND	0.69	ND	2.15	ND	ND	ND	ND
Benzene	0.15	ND									
Bromodichloromethane	0.266	ND									
Bromomethane	48.4	ND									
Carbon Disulfide	NLE	ND									
Chlorobenzene	22	ND									
Chloroform	5.67	ND									
cis-1,2-Dichloroethene	NLE	1.89	1.64	1.71	0.55	1.18	1.78	2.17	1.51	3.23	5.05
Dibromochloromethane	72.6	ND									
Ethylbenzene	3030	ND	ND	0.69	ND						
Methyl tert-butyl ether	NLE	ND	ND	535.08	ND						
Methylene Chloride	2.49	ND									
Tetrachloroethene	0.388	3.84	1.60	1.49	2.26	1.28	1.25	2.00	2.92	2.34	1.25
Toluene	7440	ND									
Trichloroethene	1.09	ND	ND	0.53	0.55	ND	0.78	ND	ND	1.24	0.91
Vinyl Chloride	0.08	ND									
Total Xylenes	NLE	ND	ND	6.27	ND						

Notes:

ND= Not Detected; NLE= No Limit Established; NA=Not Analyzed/Not Applicable/Not Available.

All results reported in micrograms/liter (µg/L).

Bolded and shaded results exceed the associated constituent criterion. Bolded analytes are contaminants of concern at this site.

Criteria (fresh water)=NJDEP Surface Water Quality Criteria (SWQC) per N.J.A.C. 7:9B-1.14, 18 May 1998

Table 5-20
SS-16 Stream Sampling Results
Fort Monmouth, New Jersey

Round		#1B	#1C	#2A	#2B	#2C	#3	#4	#5	#6
Date Collected		11/25/1996	12/12/1996	1/29/1997	2/26/1997	3/10/1997	4/8/1997	7/17/1997	10/30/1997	2/10/1998
Analyte/Lab ID	Criteria	2223.10	2246.10	2298.10	2361.10	2375.10	2439.10	2810.10	3121.10	3331.10
VOCs										
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	ND	ND	1.30	1.27	ND	2.05	2.55	1.76	ND
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	1600	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	NLE	3.08	4.65	3.01	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	7.53	3.82	5.19	6.75	2.31	4.47	4.72	1.86	6.23
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	1.86	1.00	1.14	1.20	ND	1.26	ND	ND	ND
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND

Round		#7	#8	#9	#10	#11	#12	#13	#14	#15
Date Collected		4/21/1998	8/19/1998	11/17/1998	2/25/1999	6/29/1999	9/21/1999	12/8/1999	3/1/2000	6/12/2000
Analyte/Lab ID	Criteria	3499.10	3816.10	4069.06	4300.10	4579.12	4806.03	4997.12	5211.13	5468.14
VOCs										
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	ND	2.94	ND	ND	3.56	2.74	1.79	1.28	ND
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	1600	ND	ND	ND	ND	ND	ND	ND	2.33	ND
Methylene Chloride	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	4.58	4.33	1.48	6.06	7.70	2.63	4.13	6.47	3.74
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	ND	1.63	ND	ND	2.25	ND	ND	1.27	ND
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

ND= Not Detected; NLE= No Limit Established; NA=Not Analyzed/Not Applicable/Not Available; B=Found in the Blank.

All results reported in micrograms/liter (µg/L).

Bolded and shaded results exceed the associated constituent criterion. Bolded analytes are contaminants of concern at this site.

Criteria (fresh water)=NJDEP Surface Water Quality Criteria (SWQC) per N.J.A.C. 7:9B-1.14, 18 May 1998

Table 5-20
SS-16 Stream Sampling Results
Fort Monmouth, New Jersey

Round		#16	#17	#18	#19	#20	#21	#22	#23	#24	#25	#26
Date Collected		8/24/2000	11/20/2000	2/21/2001	5/16/2001	9/25/2001	11/14/2001	2/11/2002	6/18/2002	9/18/2002	11/5/2002	3/13/2003
Analyte/Lab ID	Criteria	5658.14	5868.14	963	16120.14	16449.15	16579.15	2008615	2037615	2066623	2078710	3011813
VOCs												
Acetone	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	71	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	1.68	ND	ND	1.23	ND	1.41	ND	1.35	ND	ND	0.9
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	1600	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	NLE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	4.47	4.49	6.25	4.91	ND	2.00	2.47	2.46	ND	1.49	3.21
Toluene	200000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	81	1.28	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.74
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Round		#27	#28	#29	#30	#31	#32
Date Collected		5/21/2003	9/17/2003	11/4/2003	3/17/2004	6/29/2004	8/26/2004
Analyte/Lab ID	Criteria	3024714	3059217	3070017	4018217	4050017	4063217
VOCs							
Acetone	NLE	ND	ND	ND	0.67	6.4	ND
Benzene	71	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	ND	ND	ND	ND	ND	ND
Chlorobenzene	21000	ND	ND	ND	ND	ND	ND
Chloroform	470	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	NLE	1.85	1.79	1.31	0.54	1.23	1.63
Dibromochloromethane	NLE	ND	ND	ND	ND	ND	ND
Ethylbenzene	27900	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	1600	ND	ND	ND	ND	ND	ND
Methylene Chloride	NLE	ND	ND	ND	ND	ND	ND
Tetrachloroethene	4.29	3.68	1.70	ND	2.26	1.32	1.17
Toluene	200000	ND	ND	ND	ND	ND	ND
Trichloroethene	81	ND	ND	ND	ND	ND	0.74
Vinyl Chloride	525	ND	ND	ND	ND	ND	ND

Notes:

ND= Not Detected; NLE= No Limit Established; NA=Not Analyzed/Not Applicable/Not Available.

All results reported in micrograms/liter (µg/L).

Bolded and shaded results exceed the associated constituent criterion. Bolded analytes are contaminants of concern at this site.

Criteria (fresh water)=NJDEP Surface Water Quality Criteria (SWQC) per N.J.A.C. 7:9B-1.14, 18 May 1998

Table 5-21
Surface Water Exceedance Summary
M-5 Landfill Site
Fort Monmouth, New Jersey

Analyte	Criterion	Field ID	Round	Date Collected	Lab Sample ID	Result
VOCs						
Tetrachloroethene	0.388	SS-15	#29	11/4/2003	3070020	1.49
			#30	3/17/2004	4018220	2.26
			#31	6/29/2004	4050020	1.28
			#32	8/26/2004	4063220	1.25
			#33	11/23/2004	4080412	2.00
			#34	3/3/2005	5011712	2.92
			#35	6/14/2005	5031206	2.34
			#36	9/12/2005	5046006	1.25
Trichloroethene	1.09	SS-15	#35	6/14/2005	5031206	1.24

Notes:

All results are in micrograms per liter ($\mu\text{g/l}$).

VOCs = Volatile Organic Compounds

Table 5-22
M-5 (FTMM-05) Tentatively Identified Compounds (TICs)
Fort Monmouth, New Jersey

	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-18	MW-19	MW-20
Sampling Round										
4th Qtr. 2003	ND	8/1	ND	ND	ND	NS	ND	ND	ND	ND
1st Qtr. 2004	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND
2nd Qtr. 2004	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND
3rd Qtr. 2004	ND	ND	14/3	ND	ND	NS	ND	ND	5/1	ND
4th Qtr. 2004	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND
1st Qtr. 2005	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND
2nd Qtr. 2005	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND
3rd Qtr. 2005	ND	ND	ND	ND	ND	NS	ND	ND	ND	ND

Notes:

Exceedances are bolded and shaded.

Exceedances based on 100 ug/L for individual TIC concentrations and 500 ug/L for total combined TICs.

Results are given as Total TIC concentrations/# TICs.

Table 5-22
M-5 (FTMM-05) Tentatively Identified Compounds (TICs)
Fort Monmouth, New Jersey

	MW-23	MW-25	M-8MW12	M-8MW-23	M-8MW-24
Sampling Round					
4th Qtr. 2003	3/1	NS	ND	ND	4/1
1st Qtr. 2004	ND	NS	ND	ND	11/2
2nd Qtr. 2004	ND	NS	ND	ND	NA
3rd Qtr. 2004	ND	NS	ND	ND	ND
4th Qtr. 2004	ND	NS	6/1	ND	3/1
1st Qtr. 2005	ND	NS	ND	ND	29/2
2nd Qtr. 2005	ND	NS	ND	ND	ND
3rd Qtr. 2005	ND	NS	ND	ND	4/1

Notes:

Exceedances are bolded and shaded.

Exceedances based on 100 ug/L for individual TIC concentrations and 500 ug/L for total combined TICs.

Results are given as Total TIC concentrations/# TICs.

APPENDICES

Appendix A

**Roy F. Weston, Inc., December 1995. *Final Site Investigation,
Fort Monmouth, New Jersey, Main Post and Charles Wood Areas*
(Included on disc only)**

APPENDIX B

**ATC Associates, Inc., February 2000. *Remedial Action Workplan – Landfill
M-5, Main Post, Fort Monmouth, New Jersey
(Included on disc only)***

Appendix C

Material Safety Data Sheet for Hydrogen Release Compound[®]



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MATERIAL SAFETY DATA SHEET

Last Revised: March 1, 2001

Section 1 - Material Identification

Supplier: RegenesiS Bioremediation Products
 1011 Calle Sombra
 San Clemente, CA 92673
 Telephone: (949) 366-8000
 Facsimile: (949) 366-8090

Chemical Name: Propanoic acid, 2-[2-[2-(2-hydroxy-1-oxopropoxy)-1-oxopropoxy]

-1-oxopropoxy]-1,2,3-propanetriyl ester

Chemical Family: Organic Chemical

Trade Name: Glycerol tripolylactate

Product Name: Hydrogen Release Compound[®] (HRC[®])

Section 2 - Hazardous Ingredients

CAS #: 201167-72-8

One should anticipate the potential for eye irritation and skin irritation with large scale exposure or in sensitive individuals.

Section 3 - Physical Data

Melting Point: NA

Boiling Point: ND

Flash Point: ND

Density: 1.347

Solubility: Acetone and DMSO

Appearance: Amber semi-solid

Odor: Not detectable

Vapor Pressure: None

Section 4 - Fire and Explosion Hazard Data

Extinguishing Media: Carbon Dioxide, Dry Chemical Powder or Appropriate Foam.

Water may be used to keep exposed containers cool.

For large quantities involved in a fire, one should wear full protective clothing and a NIOSH approved self contained breathing apparatus with full face piece operated in the pressure demand or positive pressure mode as for a situation where lack of oxygen and excess heat are present.

Section 5 - Toxicological Information

Acute Effects: May be harmful by inhalation, ingestion, or skin absorption.

May cause irritation. To the best of our knowledge, the chemical, physical, and toxicological properties of the glycerol tripoly lactate have not been investigated. Listed below are the toxicological information for glycerol and lactic acid.

RTECS#: MA8050000

Glycerol

Irritation data: SKN-RBT 500 MG/24H MLD 85JCAE-,207,1986

EYE-RBT 126 MG MLD BIOFX* 9-4/1970

EYE-RBT 500 MG/24H MLD 85JCAE-,207,1986

Toxicity data: ORL-MUS LD50:4090 MG/KG FRZKAP (6),56,1977

SCU-RBT LD50:100 MG/KG NIIRDN 6,215,1982
ORL-RAT LD50:12600 MG/KG FEPRA7 4,142,1945
IHL-RAT LC50: >570 MG/M3/1H BIOFX* 9-4/1970
IPR-RAT LD50: 4420 MG/KG RCOCB8 56,125,1987
IVN-RAT LD50:5566 MG/KG ARZNAD 26,1581,1976
IPR-MUS LD50: 8700 MG/KG ARZNAD 26,1579,1978
SCU-MUS LD50:91 MG/KG NIIRDN 6,215,1982
IVN-MUS LD50: 4250 MG/KG JAPMA8 39,583,1950
ORL-RBT LD50: 27 GM/KG DMDJAP 31,276,1959
SKN-RBT LD50:>10GM/KG BIOFX* 9-4/1970
IVN-RBT LD50: 53 GM/KG NIIRDN 6,215,1982
ORL-GPG LD50: 7750 MG/KG JIHTAB 23,259,1941

Target Organ data: Behavioral (headache), gastrointestinal (nausea or vomiting), Paternal effects (spermatogenesis, testes, epididymis, sperm duct), effects of fertility (male fertility index, post-implantation mortality).

RTECS#: OD2800000

Lactic acid

Irritation data: SKN-RBT 5MG/24H SEV 85JCAE -,656,86

EYE-RBT 750 UG SEV AJOPAA 29,1363,46

Toxicity data: ORL-RAT LD50:3543 MG/KG FMCHA2-,C252,91

SKN-RBT LD50:>2 GM/KG FMCHA2-,C252,91

ORL-MUS LD50: 4875 MG/KG FAONAU 40,144,67

ORL-GPG LD50: 1810 MG/KG JIHTAB 23,259,41

ORL-QAL LD50: >2250 MG/KG FMCHA2-,C252,91

Only selected registry of toxic effects of chemical substances (RTECS) data is presented here. See actual entry in RTECS for complete information on lactic acid and glycerol.

Section 6 - Health Hazard Data

Handling: Avoid continued contact with skin.

Avoid contact with eyes.

In any case of any exposure which elicits a response, a physician should be consulted immediately.

First Aid Procedures:

Inhalation: Remove to fresh air. If not breathing give artificial respiration. In case of labored breathing give oxygen. Call a physician.

Ingestion: No effects expected. Do not give anything to an unconscious person. Call a physician immediately.

Skin Contact: Flush with plenty of water. Contaminated clothing may be washed or dry cleaned normally.

Eye contact: Wash eyes with plenty of water for at least 15 minutes lifting both upper and lower lids. Call a physician.

Section 7 - Reactivity Data

Conditions to Avoid: Strong oxidizing agents, bases and acids

Hazardous Polymerization: None known

Further Information: Hydrolyses in water to form Lactic Acid and Glycerol.

Section 8 - Spill, Leak or Accident Procedures

After Spillage or Leakage: Neutralization is not required. This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber.

Disposal: Laws and regulations for disposal vary widely by locality. Observe all applicable regulations and laws. This material, may be disposed of in solid waste. Material is readily degradable and hydrolyses in several hours.

No requirement for a reportable quantity (CERCLA) of a spill is known.

Section 9 - Special Protection or Handling

Should be stored in plastic lined steel, plastic, glass, aluminum, stainless steel, or reinforced fiberglass containers.

Protective Gloves: Vinyl or Rubber

Eyes: Splash Goggles or Full Face Shield

Area should have approved means of washing

eyes.

Ventilation: General exhaust.

Storage: Store in cool, dry, ventilated area.

Protect from incompatible materials.

Section 10 - Other Information

This material will degrade in the environment by hydrolysis to lactic acid and glycerol.

Materials containing reactive chemicals should be used only by personnel with appropriate chemical training.

The information contained in this document is the best available to the supplier as of the time of writing. Some possible hazards have been determined by analogy to similar classes of material. No separate tests have been performed on the toxicity of this material. The items in this document are subject to change and clarification as more information becomes available.

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Appendix D

**Groundwater Monitoring Well Laboratory Analytical Data,
4th Quarter 2003 through 3rd Quarter 2005
(Included on disc only.)**

Appendix E

**Surface Water Laboratory Analytical Data,
4th Quarter 2003 through 3rd Quarter 2005
(Included on disc only.)**

APPENDIX F

**Fort Monmouth Directorate of Public Works
Analytical Sampling Standard Operating Procedures**

Appendix G

Final Costs and Schedule for the M-5 Landfill Site

