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U.S. Army Corps of Engineers
Baltimore District

FINAL

Site Investigation
Fort Monmouth, New Jersey
Main Post and Charles Wood Areas

Site Investigation Report

Contract Number DACA31-92-D-0018

Delivery Order 0041/0045/0047

December 1995

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
10 South Howard Street
Baltimore, Maryland 21201

95P-4674

Prepared by:

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Roy F. Weston, Inc.
West Chester,
Pennsylvania 19380-149

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EXECUTIVE SUMMARY

95P-4674

EXECUTIVE SUMMARY

BACKGROUND

The U.S. Army Corps of Engineers (USACE), Baltimore District, contracted Roy F. Weston, Inc. (WESTON®) to perform a field investigation at Fort Monmouth, NJ. This investigation was conducted at two separate areas of Fort Monmouth, i.e., the Main Post and Charles Wood. 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) in 1980. This report identified 37 sites with known or suspected waste materials on the Main Post and the two subposts (Charles Wood and Evans Area). A background investigation was conducted of the 37 sites and 8 additional sites that were identified by Fort Monmouth and the New Jersey Department of Environmental Protection (NJDEP). WESTON's recommendations were described in a report titled *Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey*. Additional investigations (including sampling and other field work) were recommended at 22 of the sites on the Main Post and Charles Wood areas (WESTON, 1993). NJDEP approved the recommendations on 20 April 1995. Additional investigations were also recommended at the Evans Area, but since the Evans Area will be closed, further investigations there will be completed under the Base Realignment and Closure (BRAC) program.

This report presents the results of field investigation activities that were performed at 13 sites at the Main Post area and 8 sites at the Charles Wood area. Field investigation activities were performed between November 1994 and March 1995. The field investigation activities included surface geophysical investigations, sediment and surface-water sampling, transformer site sampling, surface and subsurface soil sampling, groundwater monitor well installation and sampling, and tidal monitoring. At one site in the Charles Wood area (CW-3) the presence of construction rubble prohibited sample collection as planned. The rubble was removed in June 1995 and exploratory trenches are planned at this site.

The geophysical investigations were performed between 29 November and 15 December 1994 to delineate the landfill boundaries at Main Post areas M-3, M-12, M-14, and M-18, and at

Charles Wood area CW-3A. The sediment and surface-water samples were collected on 1 and 2 December 1994 from locations along Parkers Creek on the Main Post and in a tributary to Wampum Brook on the Charles Wood site. The purpose of collecting the surface-water and sediment samples was to evaluate the potential impact of the areas of concern on sediment and surface water, and to confirm sample results collected as part of a previous investigation. The sampling of eight transformer areas at Main Post and three transformer areas at Charles Wood was conducted on 1 and 2 December 1994. The transformer area sampling consisted of collection of concrete chips and soil samples from areas potentially impacted by leaking transformers.

Subsurface soil samples were collected as part of soil boring and monitor well installation program, which was conducted between 13 December 1994 and 23 January 1995.

Soil borings were completed at the following Main Post sites: M-16, M-18, and AOC-3; and at Charles Wood sites: CW-1, CW-2, CW-4, CW-5, CW-6, CW-9, and AOC-7. A total of 45 shallow groundwater monitor wells were installed and developed at both the Main Post and Charles Wood areas. Additionally, at Landfill 8 (M-8), a total of 11 previously installed wells were abandoned because of suspect well integrity (six 4-in. diameter monitor wells and five 2-in. diameter piezometers).

Groundwater monitor wells were sampled twice. Both rounds of sampling were conducted in conjunction with a 72-hr tidal monitoring study to evaluate the effect of tidal fluctuations on water levels in site monitor wells. Round 1 tidal monitoring was performed on 30 January to 3 February 1995, followed by round 1 of groundwater sampling on 13 to 22 February 1995. Round 2 tidal monitoring was performed on 20 to 24 March 1995, which was preceded by round 2 groundwater sampling on 7 to 15 March 1995. Two existing monitor wells, one at site M-18 on the Main Post, and one at site CW-6 on Charles Wood, were sampled for two rounds in May 1995. The two rounds of groundwater sampling were conducted within 30 days of each other as specified in the *Technical Requirements for Site Remediation* (NJAC 7:26) to provide for averaging the analytical results.

The concentrations were then compared to the NJDEP criteria and then to maximum background concentrations. Background concentrations are based on sampling at on-site background locations and a review of Monmouth County data.

The results of and recommendations for the investigated sites follow.

MAIN POST

M-2: Chlorobenzene concentrations were detected in all three wells indicating a potential upgradient source. Other volatile organic compounds (VOCs) were detected in surface-water samples. Samples will be collected on a long-term basis from existing groundwater and surface-water sampling locations.

M-3: Low chlorobenzene concentrations were detected in one downgradient well. No surface-water concentrations exceeded NJDEP criteria and background. Samples will be collected on a long-term basis from existing groundwater and surface-water sampling locations. Additionally, a partially exposed drum was observed in the northeast corner of the site. The location of the exposed drum will be investigated by excavation.

M-4: One pesticide compound was detected at a concentration just above the NJDEP Groundwater Quality Criteria (GWQC) in the upgradient well in both the routine and duplicate samples. The pesticide was not detected in downgradient monitor wells. Existing monitor wells will be sampled on a long-term basis.

M-5: Tetrachloroethene (PCE) was detected in the upgradient well. Existing monitor wells will be sampled on a long-term basis.

M-8: VOCs were detected in upgradient and downgradient wells. Existing monitor wells will be sampled on a long-term basis.

M-12: Compounds of concern were not detected in groundwater samples collected at the site. Existing monitor wells will be sampled on a long-term basis.

M-14: No compounds of concern were detected in groundwater samples. Compounds of concern were not detected in surface-water samples collected at the site. Existing monitor wells and surface-water sampling locations will be sampled on a long-term basis.

M-15: Pesticides, lead, cadmium, and zinc were detected in soil samples collected near the water tank. Paint chips and affected soil will be removed and confirmation samples will be collected following removal.

M-16: Compounds of concern were not detected in the groundwater samples collected at the site. Pesticide concentrations were detected in soil samples collected around the former pesticide storage building. The contaminated soil will be excavated in conjunction with confirmatory sampling and the monitor well will be abandoned.

M-18: Semivolatile organic compound (SVOC) concentrations were detected in soil samples collected from one soil boring and pesticides were detected in groundwater samples from one monitor well. Geophysical results indicate an area where anomalous readings may indicate an underground storage tank (UST). Trenching will be performed at the suspected UST location and the SVOC-contaminated soil will be removed at the soil boring location. Additionally, the monitor wells will be sampled on a long-term basis.

AOC-3: Former Main Post Sanitary Treatment Plant (AOC-3): No compounds of concern were identified in soil borings and sediment samples. No additional action will be taken.

STP: Pre-1941 Sanitary Treatment Plant: Metals were detected in a sediment sample at the outfall of the pre-1941 sanitary treatment plant (STP). No further action will be taken because access to the site is restricted.

PCB Transformers—Main Post: Polychlorinated biphenyl (PCB) levels in stained concrete were found to exceed NJDEP criteria in three indoor vaults. PCBs were also detected above applicable soil standards in the soil beneath one pole-mounted transformer near Building 292. Since the indoor vaults are normally locked and access is restricted, remedial work will be performed when the transformers are removed from service and the stained areas are made accessible. In addition, the soil beneath the former location of the pole-mounted transformer will be resampled to determine the extent of contamination.

CHARLES WOOD AREA

CW-1: Compounds of concern were not detected in soil samples. VOC concentrations were detected in groundwater samples from three of the four wells. The extent of VOC concentrations in groundwater will be investigated by soil-gas survey techniques. The results of the soil-gas survey will be used to locate two additional monitor wells. The new and existing wells will be sampled on a long-term basis.

CW-2: PCB concentrations were detected slightly above the NJDEP Soil Cleanup Criteria (SCC) in one sample from the 7- to 9-ft interval. VOC concentrations were detected in one well in one of the two sampling rounds. The extent of VOC concentrations in groundwater will be investigated by soil-gas survey techniques. The results of the soil-gas survey will be used to locate two additional monitor wells. The new and existing wells will be sampled on a long-term basis.

CW-3: Investigation activities were not conducted as part of this investigation because of construction rubble that was present at the site during the field effort, which prohibited sample collection as planned. The rubble was removed in June 1995, and exploratory trenches are planned to determine if any subsurface debris or soil staining is present.

CW-3A: The results of the geophysical surveys indicated possible buried material at two areas. Exploratory trenching will be conducted at each area to evaluate the nature of the geophysical anomaly.

CW-4: Lead was detected in one soil sample exceeding background concentrations and the NJDEP SCC. Impacted soils will be removed and confirmation samples will be collected at the base of the excavation.

CW-5: No compounds of concern were identified in soil and sediment samples. No further action will be taken.

CW-6: Dieldrin and cadmium were detected in separate soil samples above NJDEP SCC and site background concentrations. The average concentrations of dieldrin and cadmium in surface soil samples collected at CW-6 and CW-9 do not exceed the NJDEP criteria. Benzene was detected in one monitor well. The existing monitor wells will be sampled on a long-term basis.

CW-9: The average concentration of cadmium in surface soil samples at CW-6 and CW-9 does not exceed the NJDEP criteria. No further action will be taken at this site.

AOC-7: No compounds of concern were identified in soil samples. No further action will be taken at this site.

PCB Transformers—Charles Wood: PCBs were detected above NJDEP criteria in soil samples taken near the former location of a transformer pad (see Figure 4.3-18). The contaminated soil will be removed in conjunction with confirmatory sampling.

REPORT ORGANIZATION

Section 1 of this report is the Introduction and describes project objectives, facility information, site descriptions, sampling strategy, and site history. Section 2, Environmental Setting, summarizes environmental conditions such as climate, topography, surface-water drainage, soils, geology, hydrogeology, vegetation, and wildlife. Section 3, Investigation Activities, describes the procedures and methodologies used for the various site investigation activities. Section 4 summarizes the results of the investigation. Section 5 documents the data quality objectives (DQOs) and quality control (QC) procedures. Section 6 presents site-specific conclusions and recommendations. Field investigation data are presented in the appendices. Ground-penetrating radar (GPR) profiles are contained in a separate volume (Appendix F), and are available upon request.

SECTION 1
INTRODUCTION

SECTION 1

INTRODUCTION

1.1 PROJECT OBJECTIVES

The objectives of this investigation are as follows:

- Perform site investigations to determine if contamination exists, and, if present, to evaluate the extent and degree of contamination at the 22 sites (presented in Figure 1.1-1). These sites were originally identified as potential hazardous waste sites in the Installation Assessment (IA) (USATHAMA, 1980).

- Evaluate the results of the investigation and compare with the following criteria:

  - New Jersey Soil Cleanup Guidance Criteria, 3 February 1994, and winter 1995.

  - NJDEP Groundwater Quality Standards, February 1993.

  - NJDEP Surface-Water Quality Standard, December 1993.

  - Cleanup Standard for Contaminated Sites, New Jersey Administrative Code 7:26D (proposed and withdrawn).

  - NJDEP Sediment Quality Standards, 1991, or marine/estuarine biological effects screening levels (Long et al., 1995).

- Recommend one of four alternatives for each site:

  1. No additional investigation or remediation is required.

  2. Additional field investigations are necessary.

  3. Conduct long-term groundwater and/or surface-water monitoring.

  4. Sufficient data exist to proceed with remedial design and interim or final remedial action.

Refer to the Executive Summary for background information regarding this effort.

WESTON performed the investigation activities as set forth in the U.S. Army Corps of Engineers (USACE) Scopes of Work dated 10 August 1994 for Charles Wood and 12 August 1994 for Main Post. Site investigation activities included:

- Planning documents preparation:
  - Chemical Data Acquisition Plan and Field Sampling Plan (CDAP/FSP).
  - Safety, Health and Emergency Response Plan (SHERP).
- Field investigations:
  - Geophysical investigation.
  - Sediment sampling.
  - Surface-water sampling.
  - Surface and subsurface soil sampling.
  - Transformer site sampling.
  - Groundwater well installation and sampling.
  - Tidal monitoring.
- Report preparation:
  - Draft and final site investigation reports.

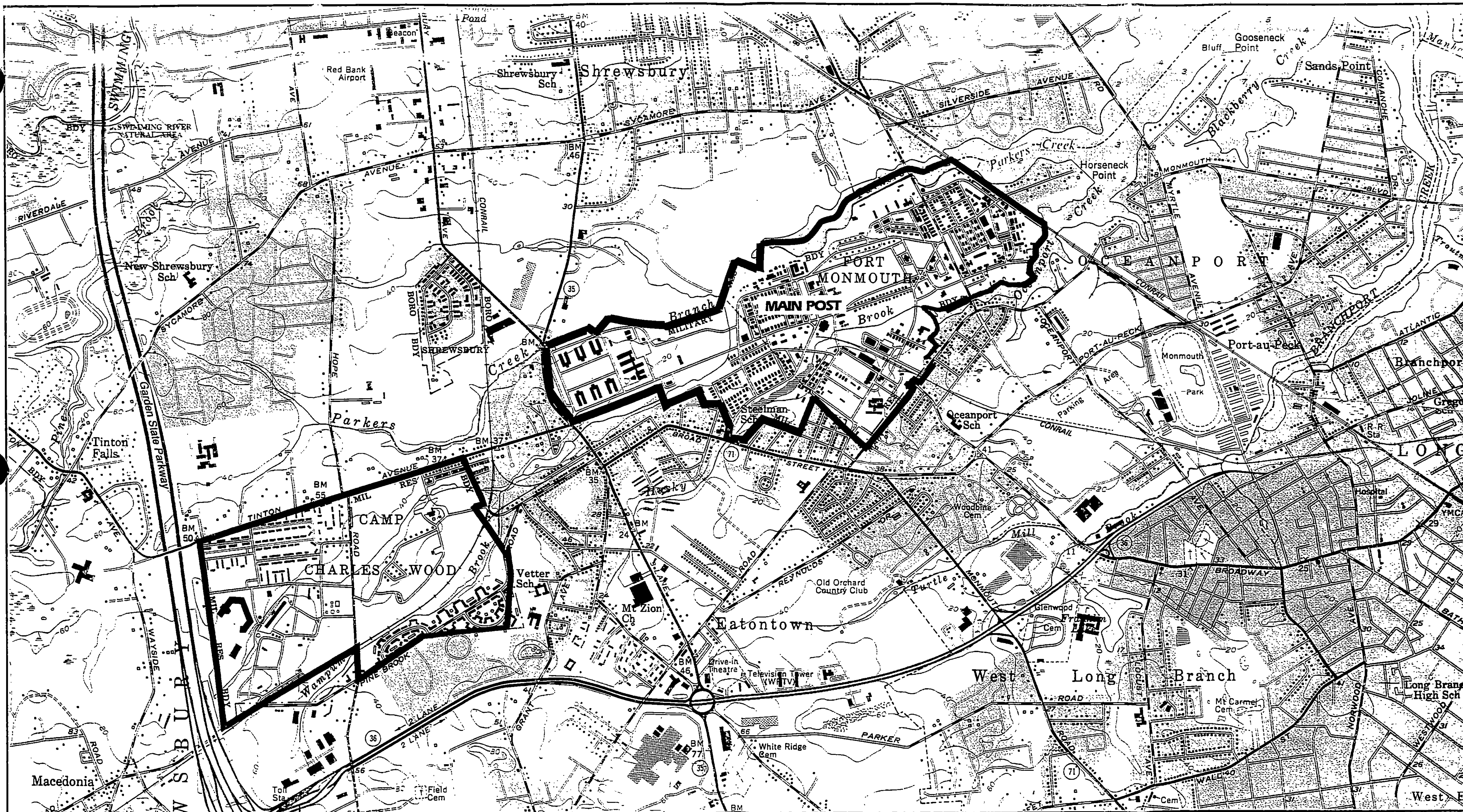
1.2 FACILITY DESCRIPTION

1.2.1 Owner/Operator Information

Fort Monmouth is a government-owned, government-operated (GOGO) military installation that provides command, administrative, and logistical support for Headquarters, U.S. Army Communications and Electronics Command (CECOM).

1.2.2 Location of Fort Monmouth

Fort Monmouth is located in the central-eastern portion of New Jersey in Monmouth County (see Figure 1.1-1). The installation contains two subposts (Charles Wood Area and Evans Area), in addition to the Main Post, which are located within a 12-mile radius of the Main Post. Descriptions of the Main Post and Charles Wood are presented in the subsections that follow.



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Source: USGS Long Branch, New Jersey Quadrangle (1981)

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SCALE IN FEET

NEW JERSEY

QUADRANGLE LOCATION

2017-0595 10/19/93

Fort Monmouth, Main Post and Charles Wood

FIGURE 1.1-1
LOCATION OF MAIN POST AND CHARLES WOOD
MONMOUTH COUNTY, NEW JERSEY

The Evans Area will be handled under the Base Realignment and Closure (BRAC) Program and will not be discussed in this report.

1.2.2.1 Main Post

The Main Post (Figure 1.1-1) encompasses an area of approximately 630 acres and is bounded by State Highway 35 to the west, Parkers Creek and Lafetra Creek to the north, the New Jersey Transit Railroad to the east, and a residential neighborhood to the south. The Main Post provides supporting administrative, training, and housing functions as well as many of the community facilities for Fort Monmouth.

1.2.2.2 Charles Wood Area

The Charles Wood Area (Figure 1.1-1), is composed of approximately 511 acres, and is located 1 mile west of the Main Post and is bounded by Tinton Avenue to the north, residential development and Pine Brook Road to the south, and the Garden State Parkway to the west. This area is used primarily for research and development (R&D), and testing, and provides the greatest number of housing units available on-post.

1.2.3 Mission Statement

The primary mission of Fort Monmouth is to provide command, administrative, and logistical support for Headquarters, CECOM. CECOM is a major subordinate command of the U.S. Army Materiel Command (AMC) and is the host tenant. The support provided is used by tenant activities in the performance of R&D, procurement, and production of prototype electronic communication material for use by the U.S. Armed Forces.

The major tenant activities to which Headquarters, CECOM is the host tenant include:

- U.S. Army Laboratory Command (LABCOM)
- U.S. Army Aviation Research and Development Activity (AVRADA)

- U.S. Army Information System Management Agency (ISMA)
- Joint Tactical Communications Office (TRI-TAC)
- U.S. Army Chaplain Board
- U.S. Army Chaplain Center and School (USACHCS)
- U.S. Army Military Preparatory School (USAMPS)
- U.S. Army Medical Department Activities (MEDDAC)
- U.S. Army Dental Activity (DENTAC)
- U.S. Army Audit Agency
- Small Business Administration (SBA)
- U.S. Army Information Systems Command (ISC)
- U.S. Army Special Security Detachment
- 902nd Military Intelligence Group
- U.S. Army Criminal Investigation Command
- U.S. Army Commissary
- U.S. Army Newark District Recruiting Command
- U.S. Army Corps of Engineers (USACE), New York District
- Defense Contract Administration Services Management Area, Springfield District
- Defense Investigation Services (DIS)
- Defense Contract Audit Agency (DCAA)
- 513th Military Intelligence Brigade
- Joint Interface Test Force
- 535th Engineer Detachment
- 54th Ordnance Detachment

1.2.4 History of Fort Monmouth

This subsection presents a history of Fort Monmouth with emphasis on environmentally significant activities. The subsection is based primarily on the books, *A Concise History of Fort Monmouth, New Jersey,* and *Fort Monmouth History and Place Names, 1917-1959.*

The Main Post of Fort Monmouth was established on 17 June 1917 as Camp Little Silver. The site of the Main Post had formerly been a horse racetrack, but the track had not been used since 1890. The name of the Camp was changed after 3 months to Camp Alfred Vail. The initial mission of the Camp was to train Signal Corps operators for service in World War I. In the first 19 months of the Camp's existence, 129 semipermanent structures were built, a tent camp was established on the site of a former swamp, and a parade ground was established on the site of a former marsh. A radio laboratory and an airfield were developed in 1918. After the war, Camp Vail was designated as the site of the Signal Corps School, the only training area for Signal Corpsmen in the country. All but four of the World War I structures were demolished by 1924.

In 1925 the facility became a permanent post and its name was changed to Fort Monmouth. The primary mission of Fort Monmouth continued to be Signal Corps training and electronics research. In 1934 the laboratory was consolidated in a new building, Squier Laboratory (Building 283), and research on radios and radar continued. During World War II, the pace of training increased tremendously at Fort Monmouth. The expanded laboratory effort was accomplished by starting laboratories at other Army facilities. Squier Laboratory continued to be the principal laboratory on Main Post until 1954, after which laboratory operations moved to Charles Wood. In 1955 and 1956, 72 World War II wooden structures were demolished to accommodate permanent structures. These new buildings were used for residential, administration, commercial, and recreational purposes. A small number of additional administrative buildings were constructed during the 1970s and 1980s.

Camp Charles Wood was purchased in 1941 by the U.S. Army and opened in 1942. The eastern half of the property was formerly a golf course, and the western half was residential and farmland. During World War II, the Camp was used for training Signal Corpsmen. Antenna shelters were constructed on 26.5 acres of land and used by the Signal Corps Laboratory for R&D purposes. This operation was placed under the command of the Army Air Force until 1951, when the operation moved to another post. Signal Corps training ceased after World War II.

A new R&D laboratory, the Hexagon (Building 2700), was completed in 1954. Research activities that had formerly been conducted at Squier Laboratory on the Main Post, and some activities from the Evans Area, were transferred to Charles Wood. The laboratory continued to develop electronic equipment. A large amount of residential housing was built from 1953 to 1970. In 1956, 90 World War II wooden structures were razed. The Pulse Power Laboratory was built in the early 1980s.

The document, *A Concise History of Fort Monmouth, New Jersey*, describes a number of R&D activities that were performed by the laboratories at Fort Monmouth. The document does not generally say where these activities were conducted. A partial list of research activities that were conducted in the Fort Monmouth laboratories includes:

- Radios, including vacuum tubes.
- Radar.
- Field TV cameras.
- Radiation dosimeters.
- Satellite instrumentation.
- Solar batteries.
- Laser communication, range-finding, and relay devices.
- Microelectronics.
- Night vision devices.
- Defibrillator pacemakers.
- Lithium batteries.

SECTION 2
ENVIRONMENTAL SETTING

SECTION 2

ENVIRONMENTAL SETTING

2.1 CLIMATE

The temperate-humid climate of Monmouth County, NJ, is characteristic of the temperate zone of the Mid-Atlantic states. The mean annual temperature for Monmouth County is 53 °F; the summers are generally warm, with an average temperature of 72 °F and a maximum temperature of 103 °F, recorded in July 1954. Winters are moderate, with an average temperature of 33 °F. The winter temperatures rarely drop below 0 °F, although the lowest recorded temperature was -8 °F, recorded at Freehold, NJ in February 1961 (Jablonski and Baumley, 1989).

Precipitation in Monmouth County averages 45.18 inches per year; slightly more than half the total annual precipitation falls between April and September (Jablonski and Baumley, 1989). Thunderstorms generally occur in the summer and may combine high winds with heavy rainfall. Heavy rains have occurred in connection with hurricanes or tropical storms that move northward along the Mid-Atlantic coast. Snow has fallen in Monmouth County in every month between October and April. The average seasonal snowfall is 25 inches, with the greatest amounts falling in December, January, and February (Jablonski and Baumley, 1989).

2.2 TOPOGRAPHY

2.2.1 Main Post

The land surface at the Main Post is relatively flat and ranges in elevation from 4 ft above mean sea level (msl) in the east at Oceanport Creek to 32 ft msl at the western end of the post, near Highway 35. The eastern half of the post is generally 10 ft msl in elevation. The greatest elevation is at Landfill 8, located on Parkers Creek, and along Lafetra Creek, Mill Creek, and Husky Brook.

2.2.2 Charles Wood

At Charles Wood the land surface slopes from 72 ft msl in the southwest, to 20 ft msl at the eastern end of the golf course. In general, the southwestern corner of Charles Wood is gently rolling and has the greatest relief.

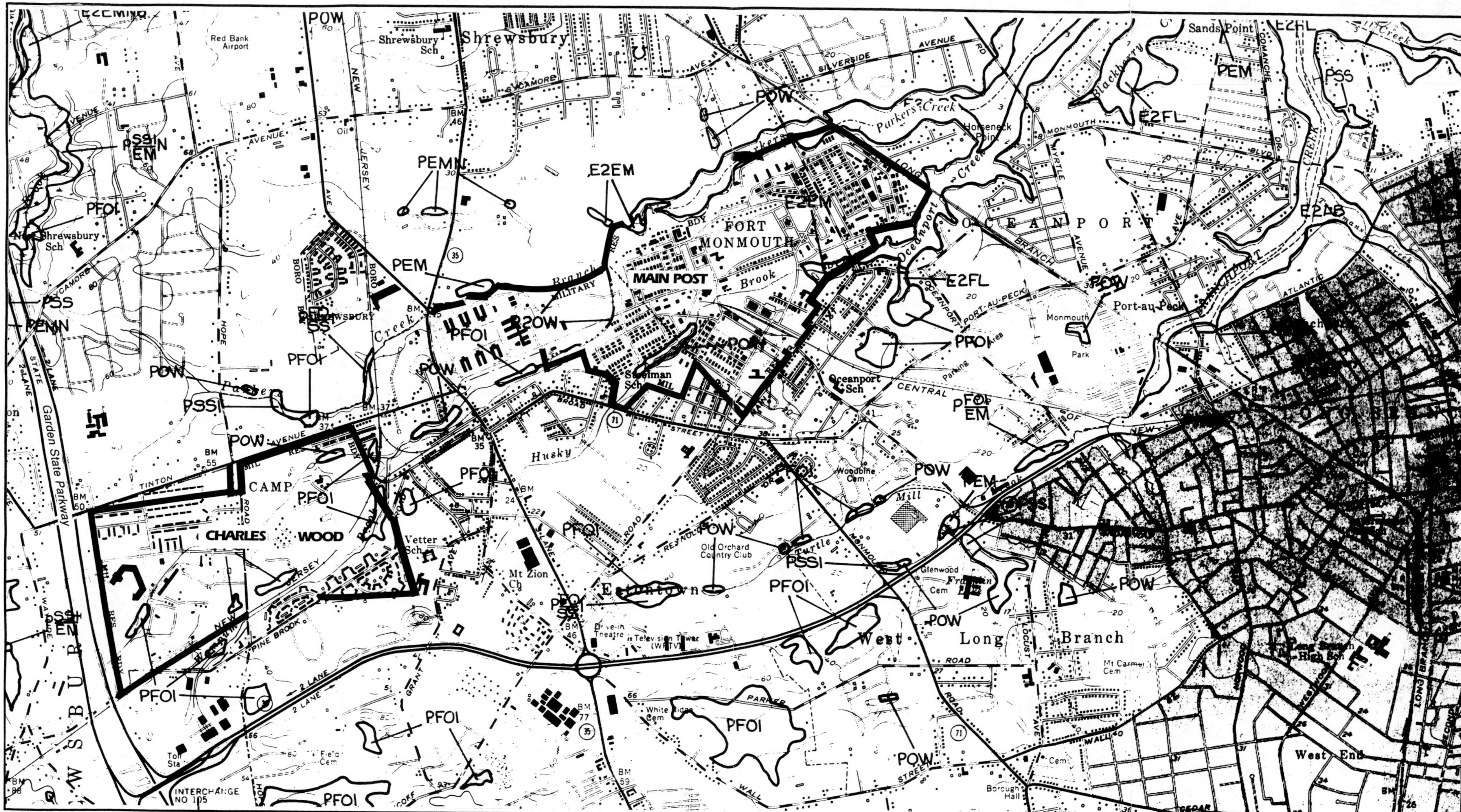
2.3 SURFACE-WATER DRAINAGE AND WETLANDS

2.3.1 Main Post

Surface-water runoff from the western part of the Main Post flows into Lafetra Creek to the north or into Mill Creek to the south. The names of streams indicated on U.S. Army site maps are used in this report. The USGS map (Figure 1.1-1) shows Lafetra Creek as Parkers Creek Branch and Mill Creek as Wampum Brook. Both Mill Creek and Lafetra Creek originate off-post. Mill Creek flows along the southern boundary of Main Post until it turns north just past the Auto Craft Shop. Mill Creek is channelized and flows past several landfills. Lafetra Creek forms the northern boundary of the Main Post and joins Mill Creek to form Parkers Creek. Parkers Creek flows eastward along the northern boundary and joins Oceanport Creek east of the post. Most of Parkers Creek, Lafetra Creek, and Mill Creek are tidally influenced.

Husky Brook originates off-post and, shortly after it flows onto the post, enters Husky Brook Lake. Surface-water drainage from the southern half of the post flows into Husky Brook and Husky Brook Lake through a series of drainage ditches and outfalls. Husky Brook exits Husky Brook Lake and flows into Oceanport Creek, which forms the southern boundary of the eastern post area. Oceanport Creek and Husky Brook are tidally influenced below Husky Brook Lake.

The U.S. Fish and Wildlife Service (FWS) National Wetland Inventory Long Branch quadrangle maps indicated the presence of wetlands at the Main Post (Figure 2.3-1). Parkers and Oceanport Creeks are classified as estuarine intertidal aquatic beds. The area of Parkers Creek northwest of Building 294 and the part of Oceanport Creek/Husky Brook west of Murray Drive and east of Building 551 are classified as estuarine intertidal emergent wetlands. Lafetra Creek and



LEGEND

E2AB Estuarine Intertidal Aquatic Bed
E2EM Estuarine Intertidal Emergent Wetland
R2OW Riverine Lower Perennial Open Water/Unknown Bottom
POW Palustrine Open Water/Unknown Bottom
PF01 Palustrine Forested Wetland, Broad-leaved Deciduous

Source: USFWS National Wetlands Inventory
Long Branch, New Jersey Quadrangle Map, 1981

N

0 1000 2000 3000 4000
SCALE IN FEET

2017-0600 10/20/93

Fort Monmouth, Main Post and Charles Wood

FIGURE 2.3-1
MAIN POST AND CHARLES WOOD WETLANDS

Mill Creek are classified as riverine lower perennial open water/unknown bottom. Husky Brook Lake is classified as palustrine open water/unknown bottom.

2.3.2 Charles Wood

The Charles Wood area is drained principally by two unnamed tributaries of Wampum Brook; one tributary flows eastward through the center of the camp, and the other flows along the southern boundary (Figure 1.1-1). East of Charles Wood, Wampum Brook is joined by several other unnamed tributaries before it becomes Wampum Lake. Wampum Lake discharges into Mill Creek, which flows through Main Post. Some runoff from the northwestern part of the golf course flows into Lafetra Creek, which is located just north of Tinton Avenue.

At Charles Wood, several wetland areas were identified on the FWS National Wetland Inventory Long Branch quadrangle map (Figure 2.3-1). The lake on the golf course is classified as palustrine open water/unknown bottom. Several areas along the unnamed tributaries to Wampum Brook are classified palustrine forested wetland, broad-leaved deciduous.

2.4 SOILS

2.4.1 Main Post

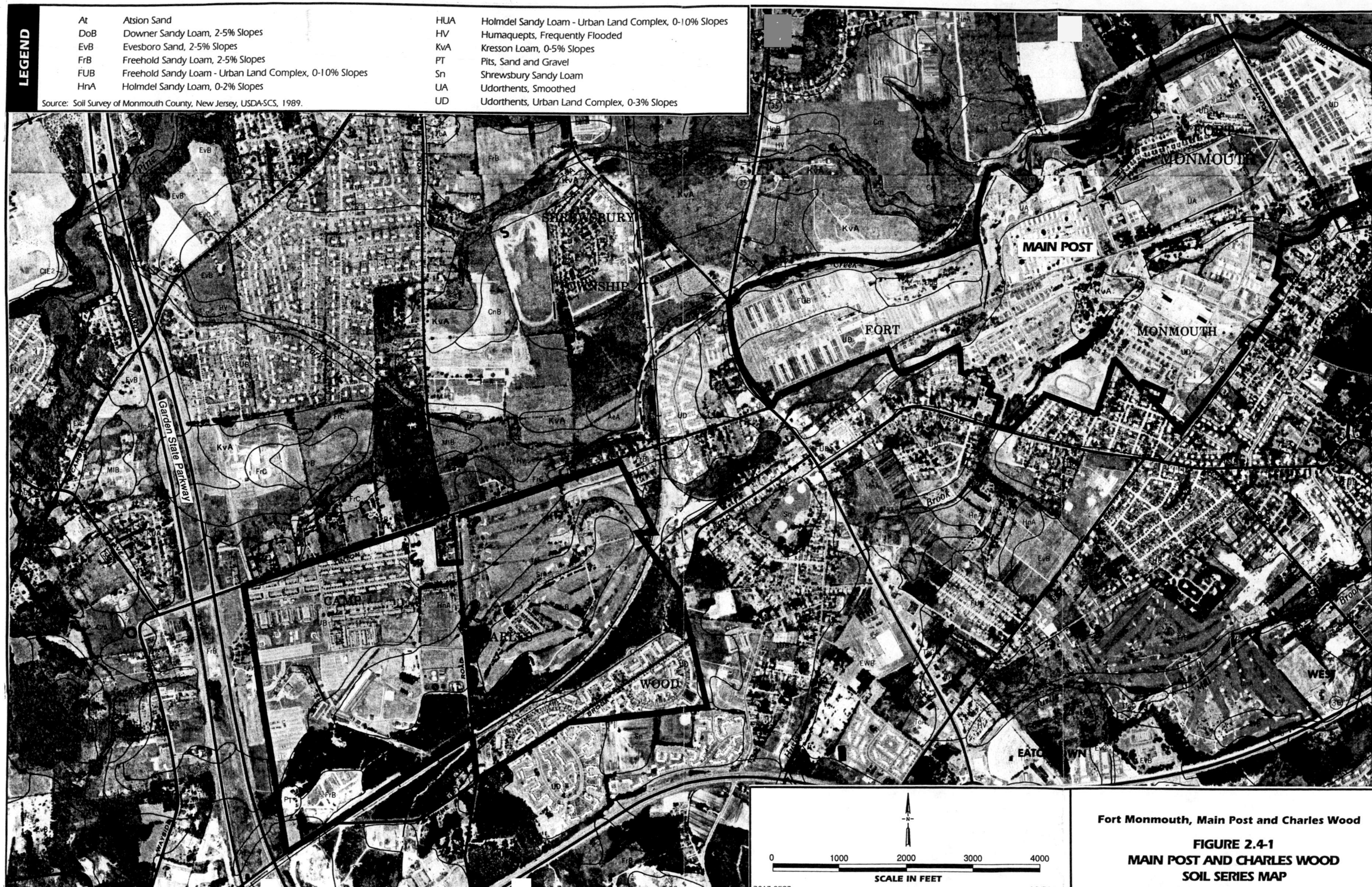
According to the Monmouth County Soil Survey (MCSS) (Jablonski and Baumley, 1989), much of the Main Post is covered by urban land (developed land with disturbed soils). The following soil series and classification units are mapped in the Main Post area:

- DoB Downer sandy loam, 2 to 5% slopes
- FrB Freehold sandy loam, 2 to 5% slopes
- FUB Freehold sandy loam — urban land complex, 0 to 10% slopes
- HV Humaquepts, frequently flooded
- KvA Kresson loam, 0 to 5% slopes
- UA Udorthents, smoothed
- UD Udorthents — urban land complex, 0 to 3% slopes

Figure 2.4-1 illustrates the distribution of these soil series. The Unified Soil Classification (USC) descriptors are shown in parentheses.

Downer series soils are well-drained soils found on uplands and terraces. These soils formed in acid, silty coastal plain sediments. The upper 10 inches are a very friable dark brown sandy loam, which has fine and medium roots and 2% pebbles (sandy silt: SM). The subsoil is 16 inches of strong brown sandy loam with faint clay in bridges between grains, fine and medium roots, and 10% pebbles (sandy silt to sandy clay: SM to SC). The substratum is a strong brown gravelly loamy sand with 35% pebbles, which is strongly acidic (sandy silt to sandy clay to poorly graded sand: SM, SC, SP). Permeability is moderate or moderately rapid in the subsoil and moderately rapid in the substratum, and as a result runoff is slow. The available water capacity is moderate. The seasonal high water table is at a depth of greater than 6 feet. The Downer series is represented on-site by the Downer sandy loam, 2 to 5% slopes (DoB). Downer soils are classified as nonhydric (Jablonski and Baumley, 1989).

Freehold soils are well-drained soils that formed in acid, loamy, coastal plain sediments that, by volume, are 1 to 10% glauconite and are found on uplands. The surface layer is a 9-in. thick, dark yellowish-brown sandy loam (sandy silt, sandy clay, silt, clay: SM, SC, ML, CL). The subsoil is 26 inches thick. The upper 16 inches of the subsoil are dark brown sandy loam and sandy clay loam with some glauconite. The lower 10 inches are brown sandy loam with glauconite. The substratum is yellowish-brown loamy sand with much glauconite to a depth of 70 inches (sandy silt: SM). Permeability is moderate in the subsoil and moderate or moderately rapid in the substratum and surface runoff is medium. The available water capacity is high. Two Freehold soils are found at Main Post: Freehold sandy loam, 2 to 5% slopes (FrB), and the Freehold sandy loam — urban land complex, with 0 to 10% slopes (FUB). Urban land consists of areas covered by impermeable surfaces, such as buildings, roads, and parking lots. The FUB soils were mapped as a complex because Freehold soils and urban land are found in an intricate pattern that made it impractical to map the Freehold soil separately. Freehold soils are classified as nonhydric (Jablonski and Baumley, 1989).



Fort Monmouth, Main Post and Charles Wood

FIGURE 2.4-1
MAIN POST AND CHARLES WOOD SOIL SERIES MAP

Humaquept soils are somewhat poorly to very poorly drained soils formed in stratified, sandy, or loamy sediments of fluvial origin. These soils are located on the flood plain and are subject to flooding several times a year. Humaquept soils are nearly always hydric. These soils differ in stratification from place-to-place. Typically, the surface layer and subsoil consist of stratified layers of sandy loam, loam, and silt loam (sandy silt, silt: SM, ML). The substratum consists of stratified layers of loamy sand, sandy loam, loam, and silt loam (sandy silt, silty clay, poorly graded sand: SM, SC, SP). In some areas, the stratified layers are gravelly or mucky. Permeability is moderate or moderately rapid in the subsoil and the substratum, and as a result runoff is slow. The available water capacity is high. The apparent seasonal high water table is between the surface and 1.5 feet. Organic matter varies from low to high. The soil is subject to frequent flooding in the early spring and during heavy rainfall (Jablonski and Baumley, 1989).

The Kresson loam is a nearly level to gently sloping, somewhat poorly drained, soil found on low divides and in depressions. The surface layer is dark brown loam, 9 inches thick (silty clay, sandy silt, sandy clay: CL, SM, SC). The first 22 inches of the subsoil are mottled olive-brown clay loam, and below that is a mottled olive-gray clay to a depth of 40 inches. The substratum is mottled, dark grayish-brown stratified sandy loam and sandy clay loam to a depth of 60 inches or more. The permeability of this soil is slow in the subsoil and the substratum. The available water capacity is high. The perched seasonal high water table is at a depth of 1 to 1.5 feet from December to May. Runoff is slow to medium. Organic content is moderate. The soil on-site is found in areas with 2 to 5% slopes (Jablonski and Baumley, 1989).

Udorthent soils have been altered by excavating or filling (Jablonski and Baumley, 1989). In filled areas, these soils consist of loamy material that is more than 20 in. thick. Filled areas include flood plains, tidal marshes, and areas with moderately well-drained to very poorly drained soils. Some Udorthent soils contain concrete, asphalt, metal, or glass. Two Udorthent soils are found at Main Post: Udorthents, smoothed (UA), which may also include old sand and gravel pits that have been smoothed or filled in, and Udorthents — urban land complex, with 0 to 3% slopes (UD).

2.4.2 Charles Wood

The Monmouth County Soil Survey (Jablonski and Baumley, 1989) identified nine soil types at Charles Wood (Figure 2.4-1) as follows:

- At Atsion sand
- EvB Evesboro sand, 2 to 5% slopes
- FrB Freehold sandy loam, 2 to 5% slopes
- FUB Freehold sandy loam — urban land complex, 0 to 10% slopes
- HnA Holmdel sandy loam, 0 to 2% slopes
- HUA Holmdel sandy loam — urban land complex, 0 to 5% slopes
- PT Pits, sand, and gravel
- Sn Shrewsbury sandy loam
- UD Udorthents — urban land complex, 0 to 3% slopes

Freehold and Udorthents soils were previously discussed in Subsection 2.4.1 and are not discussed in this subsection.

The Atsion sand is a nearly level, poorly drained, soil found in depressional areas and on broad flats. The uppermost 2 inches are matted, partly decomposed organic material and roots with 6 inches of black sand below. The subsurface layer is a 14-in. thick grayish-brown sand (sandy silt to poorly graded sand: SM, SP). The subsoil is a dark reddish-brown loamy sand, 18 in. thick, with approximately 10 inches of mottled brown sand in the lower layer (sandy silt, sandy clay to poorly graded sand: SM, SC, SP). The substratum is a mottled yellowish-brown fine sand to a depth of at least 60 inches. Permeability is moderately rapid or rapid in the subsoil and rapid in the substratum. The available water capacity is low. Between November and June the seasonal high water table ranges from the surface to 1 foot (Jablonski and Baumley, 1989).

Evesboro soils are excessively drained soils that developed in acid, sandy, coastal plain sediments located on uplands. These soils have a 4-in. surface layer where the upper 2 inches are matted decomposed organic matter with 2 inches of grayish-brown sand in the lower layer. The subsurface layer is 5 inches of yellowish-brown sand (poorly graded sand to silty sand: SP, SM). The subsoil and substratum are yellowish-brown sand (poorly to well graded sand: SP, SW). Permeability is rapid in the subsoil and substratum. The available water capacity is low. The seasonal high water table is at a depth of more than 6 feet. Runoff is slow. At Charles Wood, Evesboro soils are represented by the Evesboro sand with 2 to 5% slopes (EvB) (Jablonski and Baumley, 1989).

Holmdel soils are level, moderately well-drained to somewhat poorly drained soils found in depressions and on low divides. The surface layer is a 12-in. thick dark grayish-brown sandy loam (silty sand, sandy silt, sandy clay, clay, silt: SM, SC, CL, ML). The subsoil has two layers: the upper is a yellowish-brown sandy loam, 12-in. thick, and the lower layer is mottled yellowish-brown sandy clay loam to a depth of 38 inches. The substratum is mottled, yellowish-brown and light olive-brown sand and sandy loam to a depth of at least 60 inches (poorly graded sand, clayey sand: SP, SC). Permeability is moderate in the subsoil and the substratum, and the available water capacity is high. The seasonal high water table ranges from 1.5 to 4 feet between December and May. Runoff is slow. Two Holmdel soils are found at Charles Wood: the Holmdel sandy loam, 0 to 2% slopes (HnA), and the Holmdel sandy loam — urban land complex, with 0 to 5% slopes (HUA) (Jablonski and Baumley, 1989).

Soils classified as Pits, sand and gravel, have been excavated for sand and gravel. These areas are sand with varying amounts of gravel. The properties of these soils vary from place-to-place (Jablonski and Baumley, 1989).

The Shrewsbury sandy loam is a level poorly drained soil found in depressions, along drainageways, and on broad flats. The first inch is dark reddish-brown matted, partly decomposed organic material and roots with 8 inches of black sandy loam below. The subsurface layer is a 4-in. thick dark gray sandy loam (sandy silt, sandy clay, silt, clay: SM, SC, ML, CL). The subsoil has a 9-in. thick mottled grayish-brown sandy clay loam and 9 inches of mottled olive-gray sandy clay loam. The substratum is a mottled dark greenish-gray loamy sand (poorly graded sand, silty sand: SP, SM). Permeability is moderately slow or moderate in the subsoil and moderately rapid or rapid in the substratum, and the available water capacity is high. The seasonal high water table is between the surface and a depth of 1 foot from October to June. Runoff is slow and water ponds on the surface (Jablonski and Baumley, 1989).

2.5 GEOLOGY

2.5.1 Regional Geology

Monmouth County lies within the New Jersey section of the Atlantic Coastal Plain physiographic province. Main Post and Charles Wood are located in the Outer Coastal Plain subprovince, or the Outer Lowlands.

In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, sand, and gravel. These formations typically strike northeast-southwest with a dip ranging from 10 to 60 feet per mile and were deposited on Precambrian and lower Paleozoic rocks (Zapecza, 1989). Coastal Plain sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from the Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

The formations record several major transgressive/regressive cycles and contain units that are generally thicker to the southeast and reflect a deeper water environment. More than 20 regional geologic units are present within the sediments of the Coastal Plain (Table 2.5-1). Regressive, upward-coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations, and the Cohansey Sand), while the transgressive deposits act as confining units (e.g., the Merchantville, Marshalltown, and Navesink Formations). The thicknesses of these units vary greatly (i.e., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from 0 foot at the Fall Line to greater than 6,500 feet in Cape May County (Brown and Zapecza, 1990).

2.5.2 Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous Age Red Bank and Tinton Sands outcrop at the Main Post. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at a slope of 35 feet per mile. The upper member of the Red Bank sand (Shrewsbury) is a yellowish-gray to reddish-brown clayey, medium- to coarse-grained sand that contains abundant rock fragments, minor mica, and glauconite (Jablonski, 1968). The

Table 2.5-1 *Geologic and Hydrogeologic Units in the New Jersey Coastal Plain*

System	Series	Geologic Unit	Lithology	Hydrogeologic Unit	Hydrologic Characteristics
Quaternary	*Holocene*	Alluvial deposits	Sand, silt, and black mud	Undifferentiated	Surficial material, often hydraulically connected to underlaying aquifers. Locally some units may act as confining beds. Thicker sands are capable of yielding large quantities of water.
		Beach sand and gravel	Sand, quartz, light-colored, medium- to coarse-grained, pebbly		
	Pleistocene	Cape May Formation	Sand, quartz, light-colored, heterogeneous, clayey, pebbly		
Tertiary	*Miocene*	Pensauken Formation			
		Bridgeton Formation		Kirkwood-Cohansey aquifer system	A major aquifer system. Groundwater occurs generally under water-table conditions.
		Beacon Hill Gravel	Gravel, quartz, light-colored, sandy		
		Cohansey Sand	Sand, quartz, light-colored, medium- to coarse-grained, pebbly; local clay beds		
		Kirkwood Formation	Sand, quartz, gray and tan, very fine to medium-grained, micaceous, and dark-colored diatomaceous clay		
				Confining bed Rio Grande w-b Confining bed	Thick diatomaceous clay bed occurs along coast and for a short distance inland. A thin water-bearing sand occurs within the middle of this unit.
				Atlantic City 800-foot sand	A major aquifer along the coast.
				Composite confining bed	Alloway Clay Member or equivalent.
	Eocene	Piney Point Formation	Sand, quartz, and glauconite, fine- to coarse-grained	Composite confining bed: Piney Point aquifer	Yields moderate quantities of water locally.
		Shark River Formation	Clay, silty and sandy, glauconitic, green, gray, and brown, fine-grained quartz sand	Composite confining bed	Poorly permeable sediments.
		Manasquan Formation			
	Paleocene	Vincentown Formation	Sand, quartz, gray and green, fine- to coarse-grained, glauconitic, and brown, clayey, very fossiliferous, glauconite and quartz calcarenite	Composite confining bed: Vincentown aquifer	Yields small to moderate quantities of water in and near its outcrop area.
		Hornerstown Sand	Sand, clayey, glauconitic, dark green, fine- to coarse-grained	Composite confining bed	Poorly permeable sediments.
Cretaceous	*Upper Cretaceous*	Tinton Sand	Sand, quartz, and glauconite, brown and gray, fine- to coarse-grained, clayey, micaceous		
		Red Bank Sand		Composite confining bed: Red Bank Sand	Yields small quantities of water in and near its outcrop area.
		Navesink Formation	Sand, clayey, silty, glauconitic, green and black, medium- to coarse-grained	Composite confining bed	Poorly permeable sediments.
		Mount Laurel Sand	Sand, quartz, brown and gray, fine- to coarse-grained, slightly glauconitic	Wenonah-Mount Laurel aquifer	A major aquifer.
		Wenonah Formation	Sand, very fine to fine-grained, gray and brown, silty, slightly glauconitic		
		Marshalltown Formation	Clay, silty, dark greenish-gray, glauconitic quartz sand	Marshalltown-Wenonah confining bed	A leaky confining bed.
		Englishtown Formation	Sand, quartz, tan and gray, fine- to medium-grained; local clay beds	Englishtown aquifer system	A major aquifer. Two sand units in Monmouth and Ocean Counties.
		Woodbury Clay	Clay, gray and black, micaceous silt	Merchantville-Woodbury confining bed	A major confining bed. Locally the Merchantville Formation may contain a thin water-bearing sand.
		Merchantville Formation	Clay, glauconitic, micaceous, gray and black; locally very fine-grained quartz and glauconitic sand		
		Magothy Formation	Sand, quartz, light-gray, fine- to coarse-grained; local beds of dark-gray lignitic clay	Potomac-Raritan Magothy aquifer: Upper aquifer	A major aquifer system. In the northern Coastal Plain, the upper aquifer is equivalent to the Old Bridge aquifer and the middle aquifer is the equivalent of the Farrington aquifer.
		Raritan Formation	Sand, quartz, light-gray, fine- to coarse-grained; pebbly, arkosic, red, white, and variegated clay	Confining bed Middle aquifer	
	Lower Cretaceous	Potomac Group	Alternating clay, silt, sand, and gravel	Confining bed Lower aquifer	
Pre-Cretaceous		Bedrock	Precambrian and lower Paleozoic crystalline rocks, metamorphic schist and gneiss; locally Triassic basalt, sandstone, and shale and Jurassic diabase	Bedrock confining bed	No wells obtain water from these consolidated rocks, except along the Fall Line.

95P-3382 9/26/95 Adapted from Zapecza, 1989.

lower member (Sandy Hook) is a dark gray to black medium- to fine-grained sand with abundant clay, mica, and glauconite.

The Tinton sand conformably overlies the Red Bank sand and ranges from a clayey medium- to very coarse-grained feldspathic quartz and glauconite sand to a glauconitic coarse sand. The color varies from dark yellowish-orange or light brown to moderate brown, and from light olive to grayish olive. Glauconite may constitute 60 to 80% of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton sand is often highly oxidized and iron-oxide encrusted (Minard, 1969).

Both the Tinton sand and the Hornerstown sand (or marl) crop out at Charles Wood. The Hornerstown unconformably overlies the Tinton sand and is a dusky-green to grayish-olive or grayish-olive-green clayey glauconitic sand that may oxidize to moderate reddish-brown and dusky red. The percentage of quartz sand ranges from a few percent to 30%. Approximately half of this formation is composed of silt and clay.

The Kirkwood Formation (part of the Kirkwood-Cohansey system) crops out southeast of the Main Post and dips to the southeast at a slope of 20 feet per mile (Jablonski, 1968). The Kirkwood Formation consists of alternating layers of sand and clay. The upper unit is a light gray to yellowish-brown fine-grained quartz sand with quartz nodules and small pebbles. The lower unit is a brown silt in Monmouth County (Jablonski, 1968).

2.6 HYDROGEOLOGY

Fort Monmouth lies in the Atlantic and Eastern Gulf Coastal Plain groundwater region (Meisler et al., 1988). This groundwater region is underlain by undeformed unconsolidated to semiconsolidated sedimentary deposits. The chemistry of the water near the surface is variable with low dissolved solids and high iron concentrations. The water chemistry in areas underlain by glauconitic sediments (such as the Red Bank and Tinton sands) is dominated by calcium, magnesium, and iron. The sediments in the area of Fort Monmouth were deposited in fluvial-deltaic to nearshore environments.

The water table aquifer at the Main Post area is identified as part of the "composite confining units," or minor aquifers. The minor aquifers include the Navesink Formation, the Red Bank sand, Tinton sand, Hornerstown sand, Vincentown Formation, the Manasquan Formation, Shark River Formation, Piney Point Formation, and the basal clay of the Kirkwood Formation.

According to Jablonski (1968), wells drilled in the Red Bank and Tinton sands produce from 2 to 25 gallons per minute (gpm). Water in these upper hydrogeologic units is typically encountered at shallow depths (2 to 9 ft bgs). However, domestic wells are generally screened deeper in these upper hydrogeologic units. The shallow water table conditions in the Tinton and Red Bank sands, and the similar composition of these sands within the Kirkwood Formation, suggest that the Tinton-Red Bank-Kirkwood sequence forms a single, laterally continuous aquifer. Some well owners have reported acidic water that requires treatment to remove iron. Water in this water table aquifer will flow east toward the Atlantic Ocean. Local topography (stream valleys, etc.) will tend to deflect the flow toward local depressions.

Because of the high silt and clay content, the Hornerstown sand most likely serves as an aquitard or aquiclude rather than as an aquifer. Jablonski (1968) reports that localized areas may yield enough water for domestic use.

2.7 VEGETATION AND WILDLIFE

The information in this subsection was originally reported in the Installation Assessment (IA) (USATHAMA, 1980). Information on vegetation and wildlife of the Evans Area is not discussed in this document, but is presented in the IA.

The Fort Monmouth complex (Main Post and Charles Wood areas) lies within the outer Atlantic Coastal Plain, a region characterized by salt marsh wetlands. Both areas of Fort Monmouth have flood plain salt marshes along or within their boundaries. The ecosystem includes marsh grasses (*Phragmites, Spartina, Distichlis,* and *Scerpus*), small mammals, reptiles, amphibians, and migratory waterfowl. Parkers Creek is an ecologically unique area proximal to Fort Monmouth and its subposts. It is designated as a wildlife habitat bordering the Main Post.

Tables 2.7-1 through 2.7-4 were adapted from Appendix B of the IA report. Appendix B of the IA report also contains a list of vegetation and wildlife found during a survey of the Naval Weapons Station Earle, located approximately 10 miles from Fort Monmouth. Table 2.7-1 lists trees and shrubs found in Monmouth County. Monmouth County mammals are listed in Table 2.7-2, and reptiles and amphibians found in Monmouth County are listed in Table 2.7-3. Table 2.7-4 lists endangered birds and very rare fish in Monmouth County.

The FWS of the U.S. Department of the Interior (DOI) stated in a letter (included as Appendix E of the IA) that there are no federally listed or proposed threatened or endangered flora or fauna on Fort Monmouth. The letter also contains a list of federally endangered and threatened or candidate species in New Jersey. The Office of Natural Lands Management of NJDEP stated in a letter that there was one observance of a New Jersey listed endangered plant, the clustered sedge, in 1992, but there have been no other observances of federal or state rare species. The letter contained a list of rare species in the general vicinity of each area and in Monmouth County.

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Table 2.7-1

A Partial List of Trees and Shrubs Found in Monmouth County

Trees	
White ash	Green ash
Big-toothed aspen	Quaking aspen
Atlantic white cedar	Basswood
American beech	Black birch
Gray birch	Black gum
Box elder	Black cherry
American chestnut	Flowering dogwood
Eastern red cedar	American elm
Eastern hemlock	Pignut hickory
Shagbark hickory	American holly
Ironwood	Black locust
Honey locust	Norway maple
Red maple	Silver maple
Red mulberry	White mulberry
Black oak	Swamp white oak
Chestnut oak	White oak
Pin oak	Willow oak
Pitch pine	Red pine
White pine	Sassafras
Black spruce	Norway spruce
Tree-of-heaven	Water tupelo
Black walnut	Black willow
Crack willow	Weeping willow
Shrubs	
Pink azalea	Swamp azalea
Wild azalea	Southern bayberry
Blackberry	Blackhaw
Blueberry	Common buttonbush
Chokeberry	Sand cherry
Coralberry	Large cranberry
Red osier dogwood	Swamp dogwood
Common elderberry	Fetter bush
Hawthorn	Huckleberry
Inkberry	Mountain laurel
Sweet pepperbush	Raspberry
Shadbush	Spicebush
Staghorn sumac	Poison sumac
Winged sumac	Arrowwood viburnum
Winterberry	Witch hazel

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Table 2.7-2

Mammals Found in Monmouth County

Mammals	
Opossum	Gray fox
Smokey shrew	Woodchuck
Least shrew	Eastern chipmunk
Short-tail shrew	Eastern gray squirrel
Starnose mole	Red squirrel
Eastern mole	Southern flying squirrel
Keen's myotis (bat)	Beaver
Little brown myotis	White-footed mouse
Small-footed myotis	House mouse
Silver-haired bat	Norway rat
Eastern pipistrel	Southern bog lemming
Red bat	Boreal redback vole
Big brown bat	Meadow vole
Hoary bat	Pine vole
Raccoon	Muskrat
Longtail weasel	Meadow jumping mouse
Mink	Eastern cottontail rabbit
River otter	New England cottontail*
Striped skunk	Virginia white-tailed deer
Red fox	European hare

*Candidate for Federal List of Endangered Species.

Table 2.7-3

Reptiles and Amphibians Found in Monmouth County

Reptiles	
<u>Lizards</u>	
Northern fence	Five-lined skink
	Mud salamander*
<u>Turtles</u>	
Common snapping	Bog*
Wood*	Spotted
Musk	Eastern mud
Diamond-backed terrapin	Eastern painted
Eastern box	Red-eared
<u>Snakes</u>	
Eastern smooth earth	Red-bellied
Northern brown	Northern water
Eastern garter	Eastern ribbon
Eastern hognose	Eastern worm
Northern ringneck	Rough green
Northern black racer	Northern pine*
Black rat	Corn
Scarlet	Eastern milk
Eastern king	Timber rattler*
Amphibians	
<u>Toads</u>	
Eastern spadefoot	Fowlers
<u>Tree Frogs</u>	
Spring peeper	Gray
Pine barrens*	New Jersey chorus
<u>True Frogs</u>	
Cricket	Carpenter
Pickerel	Green
Northern leopard	Wood
Bull	

*On list of endangered or threatened species or candidate for Federal List of Endangered Species.

Table 2.7-4

Endangered Birds and Very Rare Fish Found in Monmouth County

Birds	
Bald eagle[a,b]	Black skimmer[b]
Peregrine falcon[a]	Least tern[b]
Osprey — Fish hawk — Salt marsh[b]	Eskimo curlew — protected by U.S. Government
Coppershawk	
American bittern[b]	
Barred owl[b]	
Black call[b]	
Bobolink[b]	
Cooper's hawk[b]	
Grasshopper sparrow[b]	
Great blue heron[b]	
Loggerhead shrike[b]	
Merlin[b]	
Northern harrier[b]	
Pied-billed grebe[b]	
Piping plover[b]	
Red-shouldered hawk[b]	
Roseate tern[b]	
Savannah sparrow[b]	
Short-eared owl[b]	
Upland sand piper[b]	
Vesper sparrow	
Fish	
Short nose sturgeon	

[a]Federal endangered and threatened species.
[b]New Jersey endangered and threatened species.

SECTION 3
INVESTIGATION ACTIVITIES

WESTON MANAGERS DESIGNERS/CONSULTANTS

SECTION 3
INVESTIGATION ACTIVITIES

The site investigation (SI) at Fort Monmouth was performed in accordance with the CDAP (WESTON, 1994). A description of procedures used during the field investigation is provided in the following subsections.

3.1 GEOPHYSICS

A geophysical investigation was performed as part of the site investigation at Fort Monmouth between 29 November 1994 and 15 December 1994. The investigation was performed at locations within the Main Post and Charles Wood areas using electromagnetic (EM) conductivity, magnetometry (MAG), and/or ground penetrating radar (GPR) surveying methods. The objective of the geophysical investigations was to evaluate the location and extent of the known or suspected waste disposal areas at sites M-3, M-12, M-14, M-18, and CW-3A. The geophysical survey data were used to confirm planned subsequent monitor well and soil boring locations at each area.

Prior to the start of the geophysical investigation, a reference grid was established by a licensed surveyor at 20-ft by 100-ft centers to provide surface control for data collected at each site. The survey grid was established based on a local relative coordinate system using existing monuments and was later surveyed to a state-plane coordinate system. All field data collected at the Main Post and Charles Wood sites were referenced to the established grid coordinates.

3.1.1 Electromagnetic (EM) Terrain Conductivity Surveying Methods

3.1.1.1 Description

An EM survey was conducted at sites M-18 and CW-3A on 1 and 8 December 1994, respectively, using a Geonics, Ltd. EM-31™ terrain conductivity meter. The EM-31 is battery-powered and operates at a frequency of 9.8 kiloHertz (kHz). This system consists of a transmitting coil (primary field source), receiving coil (sensor), phase-sensing circuits, and an amplifier. A fixed 3.7-meter intercoil spacing is standard for the EM-31. The instrument measures apparent conductivity in units of milliSiemens per meter (mS/m) in materials with true conductivities ranging up to 1,000 mS/m.

The EM-31 was operated in both the quadrature and in-phase components. The quadrature component is sensitive to conductors with low induction numbers (i.e., low conductivity materials). Relative conductivity values associated with in-phase measurements have a greater sensitivity to buried metal objects.

3.1.1.2 Methodology

Prior to conducting each survey, the EM-31 was calibrated in accordance with the instrument operating manual. No anomalies were observed in the calibration data. After calibration was completed, both the quadrature and in-phase components of the EM field were measured at the sites. Conductivity measurements were obtained in the vertical dipole mode of operation for single layer mapping. The effective depth of exploration associated with this mode of operation is approximately 18 feet (McNeill, 1980b).

The EM-31 was operated in a "continuous" mode along pre-established survey grid lines. Measurements were recorded at 5-ft intervals as the operator traversed the line. These measurements were digitally recorded and stored in memory in an Omni Data Logger™. Random quality assurance/quality control (QA/QC) readings were obtained from the EM-31 analog meter and manually recorded in the field notebook. The data in memory were downloaded from the data logger to a field computer. The computer-generated output files were edited and formatted, then compared against the random QA/QC readings recorded in the field logbook. Based on the QA/QC review of the data, no deficiencies were observed in the digitally recorded data.

Conductivity data point postings and contour plots were prepared from the field data using Geosoft™ contour plotting software. These maps (presented in Section 4) were interpreted initially for cultural features on the surface, such as fences. If it was determined that anomalies could be attributed solely to surface features, the anomalies were disregarded. The contour plots were interpreted with regard to site soil characteristics, site-specific geology, and the suspected presence of buried waste materials. The results of the EM survey are presented and discussed in Section 4.

3.1.2 Magnetic (MAG) Methods

3.1.2.1 Description

The MAG survey was conducted at sites M-3, M-12, M-14, and CW-3A on 6 through 8 December 1994, using a GSM-19 Walking Gradiometer/Magnetometer. The instrument operates on the principle that protons or nuclei of hydrogen atoms in a hydrocarbon fluid behave as spinning magnetic dipoles where the protons are aligned or polarized by an induced current. When the current is removed, the natural spin of the proton causes them to precess about the direction of the earth's ambient magnetic field. This precession generates a small signal with a frequency proportional to the intensity of the total magnetic field. Local perturbations (induced magnetization) generated by anthropogenic (i.e., buried ferrous drums) and natural (i.e., magnetic mineral deposits) features add to the intensity of the ambient magnetic field. The magnetometer measures the vector sum of the earth's magnetic field and the anomalous induced magnetic field in standard nanoTesla (nT) units.

3.1.2.2 Methodology

Prior to conducting the survey, a base station magnetometer was established at each site in an area suspected to be representative of background conditions. The purpose of the base station was to monitor diurnal variations in the regional or "ambient" magnetic field during the actual survey. Both the base station and field magnetometers were calibrated and synchronized in accordance with the manufacturer's operating manual. No anomalies were observed in the calibration data. When calibration was completed, both the total field and magnetic gradient were measured at each station point. Additional QA/QC checks included taking readings at several locations periodically over the survey period to verify the repeatability of field results along with a swing sensor test, which was conducted to identify whether any directional bias existed in the instrument.

Consistent with the EM-31 survey, the magnetometer was operated in a "continuous" mode along the same pre-established survey grid lines. In the continuous mode, MAG measurements were recorded on at least 3-ft spacing intervals as the operator traversed the line. The MAG measurements were digitally recorded and stored in memory in the instrument's data logger.

The data in memory were downloaded from both data loggers to a field computer. Diurnal effects were monitored throughout the survey period but were considered to be negligible relative to the overall range of magnetic data. Therefore, postings of the data points and contour plots of both the total magnetic field and magnetic gradients were prepared from the field data using Geosoft™ contour plotting software. Each magnetic anomaly, as defined by a relatively high vertical gradient, was analyzed with respect to cultural features present on the surface, and the potential for buried ferrous material in the subsurface.

3.1.3 Ground Penetrating Radar (GPR) Methods

3.1.3.1 Description

A GPR survey was conducted at site M-18 on 30 November 1994 and at sites M-3, M-12, M-14, and CW-3A on 9 through 15 December 1994 using a Subsurface Interface Radar™ (SIR) System 10 model. The System 10 is a computer-controlled, multichannel unit that automatically displays, processes, and records cross-sectional color profiles of the subsurface.

The GPR method uses high frequency radio waves to acquire relatively shallow subsurface information. Short pulses of EM energy are radiated downward into the subsurface from a transmitting antenna. A portion of the energy is then reflected back to a receiving antenna, where variations in the reflected signal are continuously processed by a control unit, graphically recorded, and digitally stored on magnetic tape. The amplitude and frequency of the reflected signal are caused by variations in the electrical properties of subsurface materials. These variations may be caused by natural geologic conditions, such as composition, moisture content, salinity, and structure, as well as manmade objects such as utilities, underground storage tanks (USTs), and other buried objects.

The ability of the GPR system to resolve buried targets depends on the physical size and relative electrical contrast of an object/feature with respect to the surrounding materials. Consequently, not every subsurface feature can be identified using the GPR method. Also, since the GPR investigation is a nonintrusive surface electronic testing method, it is not possible to determine the exact description of subsurface anomalies.

3.1.3.2 Methodology

The GPR system was calibrated to site-specific conditions prior to implementation of the survey. To calibrate the system, either the dielectric constant of the survey medium or the depth to a buried object or interface must be known. The GPR system was field calibrated using an averaged dielectric constant for the survey medium. Based on assumed geologic and site conditions a dielectric constant of approximately 5 for the unsaturated unconsolidated soils and 10 for saturated unconsolidated soils was calculated for the materials underlying the sites. QA/QC checks included collecting a duplicate profile at each site to field-verify the repeatability of results.

The GPR survey was referenced to the surface control grid that was previously established at each site. Surveying was accomplished by traversing each area with a 300-megaHertz (MHz) antenna along the same grid lines previously surveyed with the EM and MAG. The product of the GPR survey is a series of real-time subsurface field profiles. The GPR data profiles were processed and interpreted using the GSSI RADAN3 software package. Select color profiles were reproduced in the office from the data tape to enhance subtle features that were not easily recognized on the gray scale of the black-and-white field profiles. These results were integrated with the EM and MAG data and are discussed in Section 4.

3.2 SEDIMENT SAMPLING

Sediment samples were collected by WESTON personnel from seven locations on and in the vicinity of Fort Monmouth on 1 and 2 December 1994. Sediments were sampled from two locations in Parkers Creek on the Main Post and one location in a tributary to Wampum Brook on the Charles Wood site. Sediments were also collected at two locations upstream from the Main Post, one in Parkers Creek, and one in Mill Creek for background comparisons. Two background samples for Charles Wood were taken in Wampum Brook.

Sediment was collected from the top 3 to 6 inches of the substrate, using either with a stainless-steel trowel or a hand corer, depending on the water depth and compaction of the sediments. A trowel was used in shallow water with loose sediments, whereas a corer was used in deep water with compacted sediments. Sampling was based in areas of fine-grained sediment because some potentially site-related contaminants preferentially adsorb onto fine-grained sediment particles (U.S. EPA, 1982).

At all but one location, sediment samples were submitted for laboratory analysis of the following parameters:

- Target Compound List volatile organic compounds (TCL VOCs).
- TCL semivolatile organic compounds (TCL SVOCs).
- Target Analyte List (TAL) metals.
- Pesticides/polychlorinated biphenyls (PCBs).
- Cyanide.

In accordance with the CDAP, the sediment sample collected at the downstream location in Parkers Creek on the Main Post was only analyzed for TAL metals. This site was a sewage treatment plant in the 1940s, and metals are the only suspected contaminants.

To minimize the potential for volatilizing sediment samples collected for VOC analysis, VOC samples were collected first at each location. The sediment was placed directly into precleaned, prelabeled bottles. Sediment samples collected for all other analyses were then put in a stainless-steel bowl and mixed thoroughly before being transferred to bottles.

Sediment was collected for an original sample, a duplicate sample, a matrix spike (MS) sample, and a matrix spike duplicate (MSD) sample at the location suspected to have the greatest potential for contamination originating from the site and where the full suite of parameters was being analyzed (MP08, near Landfill 8 in Parkers Creek). After all samples collected for VOC analysis were prepared at that location, sufficient sediment was collected in the bowl and mixed thoroughly to provide for both the original sample and duplicate samples.

Stainless-steel bowls and trowels, and the hand corer were decontaminated prior to use at each location according to instructions in the *Chemical Data Acquisition Plan for Site Investigation at Fort Monmouth, New Jersey* (WESTON, 1994). A laboratory-prepared trip blank was carried throughout the collecting effort for TCL VOC analysis.

After filling, sample bottles were sealed with a signed and dated custody seal, and put into polyethylene bags. Prepared bottles were packed in vermiculite in coolers. Bagged ice was put in the coolers, which were custody sealed and shipped according to U.S. Army Sampling Protocols ER 1110-263 and International Air Transport Association (IATA) regulations for next morning delivery to the laboratory.

3.3 SURFACE-WATER SAMPLING

Surface-water samples were collected from 10 locations on and in the vicinity of Fort Monmouth on 1 December 1994. Table 3.3-1 presents a summary of the surface-water parameters collected at the selected locations prior to sampling.

Surface-water samples were collected from six locations on the Main Post: two from Oceanport Creek, two from Parkers Creek, and two from Mill Creek. Surface water was also collected from both Lafetra Creek and Mill Creek upstream from the Main Post for background comparisons. Both background locations were selected because they are upstream from the head-of-tide and, therefore, were thought to be isolated from releases on the Main Post. Two surface-water samples were also collected on the Charles Wood site from a tributary to Wampum Brook for background comparison.

Surface-water samples were collected directly by submersing laboratory-cleaned sample bottles to a depth of 3 to 6 inches below the surface until completely filled. At locations where surface

Table 3.3-1

Summary of Surface-Water Field Parameters

Location ID	Temperature (°C)	Dissolved Oxygen (mg/L)	pH	Conductivity (µmhos)	Water Depth (inches)	Channel Width (feet)	Sediment Type	Tidally Influenced
Main Post								
Background								
Lafetra Creek	6.5	9.8	7.6	260	12	15	Sand	No[a]
Wampum Creek	8.5	9.0	7.6	220	12	25	Large cobble	No[a]
Lafetra Creek								
MP10	6.5	9.6	7.7	270	3	25	Sand	Yes[a]
MP06	5.0	10.0	7.5	410	5	40	Sand	Yes[a]
Wampum Brook (MP02)								
SW01	9.0	9.2	8.0	230	12	20	Sand	No[a]
SW02	8.5	10.0	7.8	220	12	25	Sand	No[a]
Oceanport Creek (MP14)								
SW01	8.0	10.5	7.6	510	3	20	Sand	Yes[a]
SW02	8.0	9.4	7.7	980	36	20	Sand	Yes[a]
Charles Wood Background								
CW02	5.0	11.2	8.3	1,000	12	3	Sand, gravel, small cobble	No[b]
CW05	10.0	3.0	7.4	220	3	15	Silty sand, leaf choked	No[b]

[a]Results determined from conductivity and salinity measurements collected during tidal monitoring tests.
[b]Results based on field observations.

water was not sufficiently deep, a hole was made in the sediment to facilitate sample collection. Disturbed sediment was allowed to settle before water samples were collected. Clean surgical gloves were worn during surface-water sample collection and when handling sample bottles for shipping. Gloves were changed between sample locations.

Surface water was analyzed for the following parameters:

- TCL VOCs.
- TCL SVOCs.
- TAL total metals (unfiltered).
- TAL soluble metals (filtered).
- Pesticides/PCBs.
- Cyanide.

Samples for soluble metals were filtered with a peristaltic pump through a high capacity 0.45-micron filter.

Surface water was collected for an original sample, a duplicate sample, an MS sample, and an MSD sample at the location suspected to have the greatest potential for contamination originating from the site (sample MP06, near Landfill 6 in Parkers Creek). No equipment was used to collect surface water, so no rinsate blanks were collected.

Filled sample bottles were handled in the same manner as sediment sample bottles (see Subsection 3.2).

3.4 SURFACE SOIL SAMPLES

Surface soil samples were collected by WESTON personnel from 17 locations on and in the vicinity of Fort Monmouth, NJ on 29 and 30 November 1994. Of the surface soil locations, 6 were on the Main Post and 11 were on the Charles Wood site.

Surface soil was collected from within the upper 6 inches with a decontaminated stainless-steel trowel. To minimize the potential for volatilization, surface soil samples submitted for VOC analysis were collected first at each location, placing the soil directly into laboratory-prepared bottles. Soil samples collected for all other analyses were then put in a decontaminated stainless-steel bowl and mixed thoroughly before being transferred to laboratory-prepared bottles.

At Main Post, the soil from all six sampling locations was analyzed for pesticides/PCBs and TCL SVOCs; the soil from the two locations at site M-15 was also analyzed for TAL metals and cyanide; and the soil from the four locations at site M-16 was also analyzed for TCL VOCs. Of those Charles Wood site locations where soil was analyzed for more than PCBs, all were analyzed for TAL metals and cyanide, and soil from location CW-6 was also analyzed for pesticides, TCL VOCs, and TCL SVOCs.

Rinse blanks submitted for TCL VOC analysis were collected or labeled at a Main Post location (MP-16) and a Charles Wood site location (CW-9). A duplicate soil sample for TAL metals and cyanide analysis was also collected at the Charles Wood site location (CW-9). Sufficient soil was collected at each duplicate sample location and mixed thoroughly in the bowl to provide for both the original and duplicate samples. Handling of soil samples was similar to that of sediment (Subsection 3.2).

3.5 PCB TRANSFORMER SITE SAMPLING

3.5.1 General

Two types of samples were collected (soil samples and concrete chip samples) to determine whether PCB contamination exists at any of the former PCB class transformer locations. Soil samples were taken under the former location of pole-mounted transformers and on each side of a pad-mounted transformer. Concrete chip samples were taken at stained areas on the concrete pads or vault floors. Table 3.5-1 summarizes PCB transformer sampling. All samples were analyzed for PCBs.

Table 3.5-1

Sampling at Former PCB Transformer Sites

Transformer Code	Location	Size (kVA)	Remarks	Description	Sampling
CW010	Building 2276-W side on Bataan Ave., pole	37	Replaced by CW261, CW262, and CW263.	Pole over grass-covered soil. No stain.	Collected soil sample (CWAE-TR01) at pole under former location of transformer.
CW035	Building 2000-NE side, pad	300	Replaced by CW268, CW269, and CW270.	On old approximately 4-ft by 6-ft concrete pad. Dark stains on pad.	Concrete pad had been removed. Collected four soil samples (CW07-TR01 to TR04) downgradient of former pad location (see Figure 3.5-2).
CW039, CW040	Building 2018-S side, pole	25	Replaced by CW265.	Pole over grass-covered soil. No visible stains.	Collected soil samples (CW07-TR05 and TR06) at poles. Because of uncertainty of exact location of former PCB transformers, sampled two pole sites (see Figure 3.5-2).
MP-007	Building 718, pole located approx. 75 ft east of Wilson.	37	Replaced by MP-495.	Pole located over grass-covered soil. No visible stain.	Collected soil sample (MPT4-TR01) at pole under former location of transformer.
MP-062	Building 292-NW side, pole	75	Removed, replaced.	Three on pole replaced by 3 on old pad that is directly under pole. No visible oil stain on pad.	Collected soil sample (MPT5-TR01) at pole under former location of transformer.
MP-104	Building 686-east, pole	37	Replaced by MP-489.	Located over grass-covered soil. No visible stain.	Collected soil sample (MPT6-TR01) at pole under former location of transformer.
MP-124	Building 1220-west side, pad	500	Replaced by MP-493.	On old approximately 8-ft by 10-ft concrete pad. Approximately 1-ft diameter brown stain on west side of pad.	Collected four soil samples and one concrete chip sample from pad (see Figure 3.5-1).
MP-280	Building 1002, indoor vault	750	Replaced by MP-494.	Concrete floor not refurbished; in good condition. Stains visible under front and back of new transformer. Stains may be connected, in which case stain would be about 5 ft in diameter.	Collected concrete sample from stained area under transformer (MPT7-CC01).

Table 3.5-1

Sampling at Former PCB Transformer Sites (Continued)

Transformer Code	Location	Size (kVA)	Remarks	Description	Sampling
MP-282, MP-283	Building 1004, pole located approx. 50 ft west of corner of Razor and Stephenson	10	Removed, no replacement.	Pole over pavement and grass-covered soil. No visible stain.	Collected soil sample (MPT8-TR01) at pole under former location of transformer.
MP-347, MP-348, MP-349	Building 1208, indoor vault	250	Replaced by MP-496.	Two small stains about 1 ft in diameter, one between MP-347 and MP-348 and one on NE side of MP-349.	Collected concrete sample from stained area (MPT2-CC01).
MP350, MP351, MP352	Building 1209, indoor vault	250	Replaced by MP-499.	Concrete was not refurbished; it is in good condition. Very slight stain, about 1 ft in diameter, between MP-352 and wall.	Collected concrete sample from stained area (MPT1-CC01).

Location:

CW — Charles Wood
MP — Main Post

3.5.2 Sample Collection Procedures

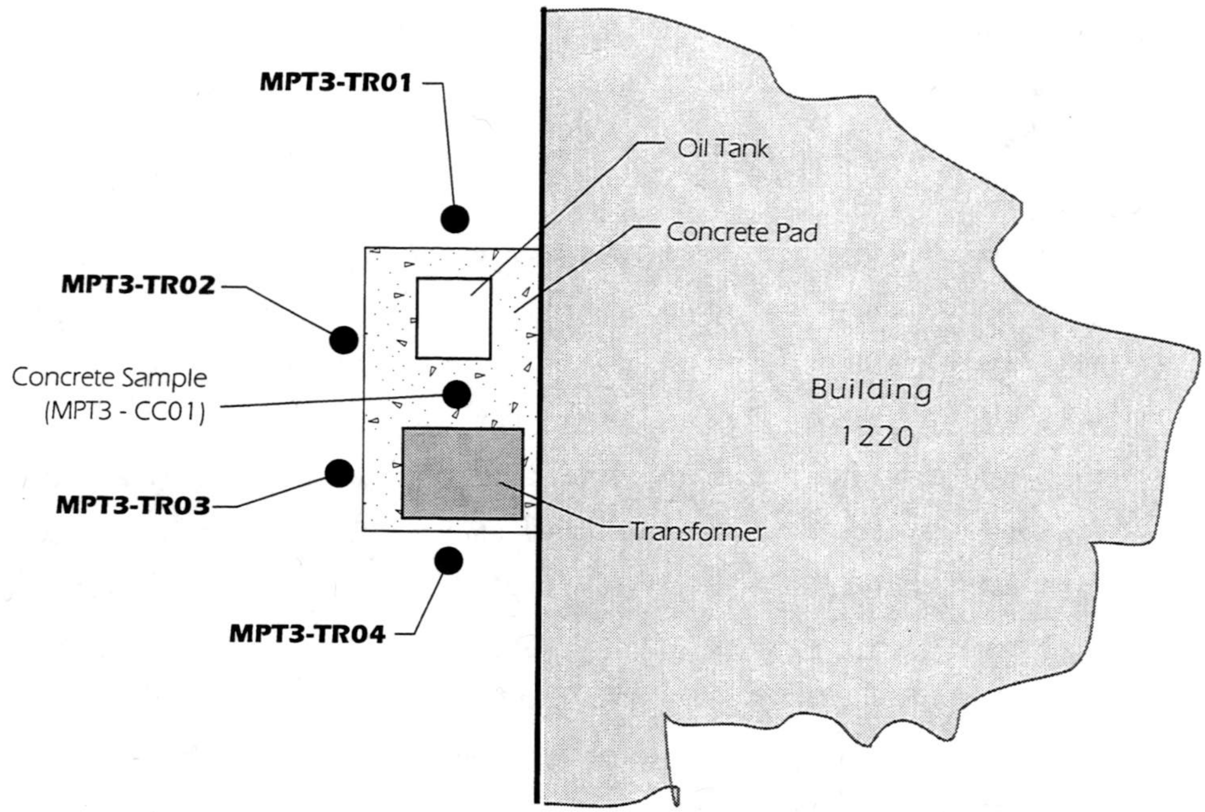
A soil sample was collected for PCB screening underneath each pole-mounted unit. Four discrete soil samples were taken at the sides of the concrete pad at Building 1220 (Figure 3.5-1). The pad at Building 2000 on Charles Wood had been removed prior to sampling, so four surface soil samples were taken along a natural drainage swale north and west of the former pad location (Figure 3.5-2).

Because a leak from a pole-mounted transformer could have occurred at any point on the transformer, a screening process was performed to detect soil contamination. Soil samples for screening were taken at three points immediately below the location of the pole-mounted transformer and were mixed. The samplers were directed to take a sample at any location with stressed vegetation, but no stressed areas were found. This process increases the likelihood of detecting small areas of contamination. Additional sampling will be conducted at locations where PCBs were detected in the soil at levels above or close to the NJDEP soil criteria.

At each soil sampling location a soil sample from 0 to 6 inches was collected with a stainless-steel scoop and placed in a mixing bowl. Stones and vegetation were removed from the soil matrix, and the remaining soil was mixed in a stainless-steel bowl. The sample was placed in a glass bottle with a Teflon-lined cap. A clean pair of disposable sample gloves was worn by the sampler during collection of each separate sample.

A concrete chip sample was taken in the middle of each stain on the concrete of a pad or vault. An electronic chipping hammer was used to chip the concrete to a depth of up to ½ inch and to pulverize the concrete for analysis. Chips were pulverized as fine as possible to facilitate laboratory extraction and analysis. A clean pair of disposable sample gloves was worn by the sampler during collection of each discrete sample.

Stainless-steel bowls and trowels were used and decontaminated prior to use in accordance with instructions in the CDAP (WESTON, 1994). Trip and field blanks and duplicate samples were prepared and submitted for analysis.



NOT TO SCALE

Legend

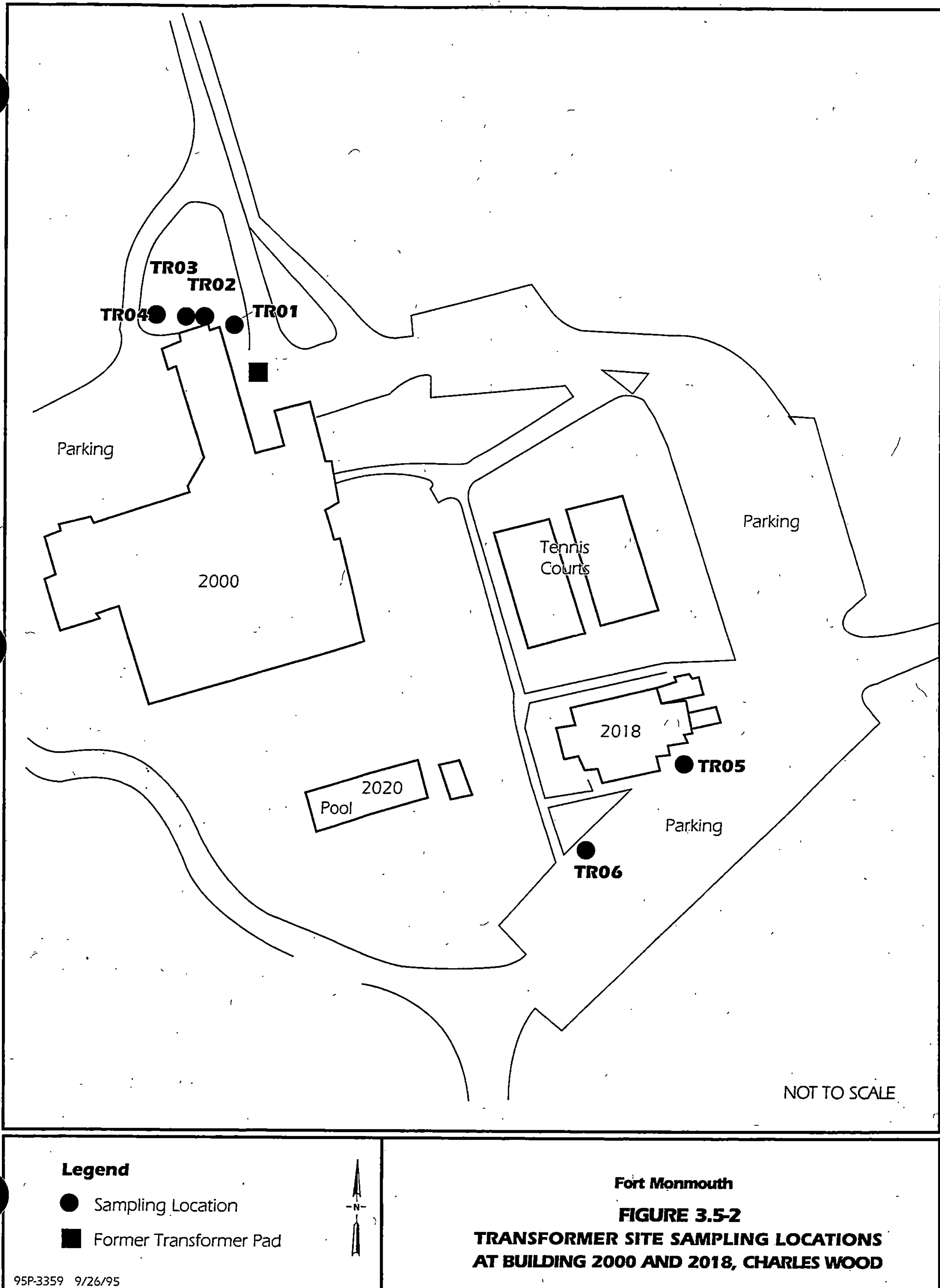
● Sampling Location

N

95P-3360 9/26/95

Fort Monmouth, Main Post

FIGURE 3.5-1
TRANSFORMER SITE SAMPLING LOCATIONS AT BUILDING 1220, MAIN POST



Fort Monmouth

FIGURE 3.5-2
TRANSFORMER SITE SAMPLING LOCATIONS AT BUILDING 2000 AND 2018, CHARLES WOOD

3.6 SOIL BORINGS

Soil borings were drilled at the following Main Post sites: M-16, M-18, and AOC-3; and Charles Wood sites: CW-1, CW-2, CW-4, CW-5, CW-6, CW-9, and AOC-7. The borings were completed to site-specific depths using hollow-stem auger drilling techniques to collect soil samples for laboratory analysis. Site-specific soil samples were analyzed for the parameters listed in Table 3.6-1. Lithologic logs are presented in Appendix A.

The borings were drilled using either 4.25-in. or 8-in. inside diameter (ID) hollow stem augers. Borings that were converted into monitor wells were drilled using the larger auger. Continuous split-spoon samples were collected according to the techniques specified in American Society for Testing and Materials (ASTM) Method 1586. All drilling was conducted by a New Jersey licensed driller.

Soil samples were collected from the soil borings using the following procedures:

1. Soil samples submitted for laboratory analysis were collected from borings using a 2-ft long, 2- or 3-in. diameter split spoon.

2. After retrieval, the split spoon was opened and immediately scanned with an organic vapor detector as a preliminary assessment of the amount of organic compounds present in the soils. Field screening for headspace was conducted according to the protocols outlined in the *NJDEP Field Sampling Procedures Manual*, May 1992.

3. If required by the site-specific sampling protocol, a portion of the soil sample was taken directly from the split spoon and placed in the sample bottle for VOC analysis to minimize volatilization of the sample. VOC samples were collected from discrete 6-in. intervals prior to organic vapor scanning of the soil samples.

4. Samples submitted for laboratory analysis were collected from intervals where high organic vapor monitor (OVM) readings were measured, visible staining was observed, or as specified in Section 4 of the CDAP.

5. The remaining sample was then homogenized in a stainless-steel bowl after a lithologic description of the soil sample and other pertinent drilling information was recorded according to the procedures outlined in the *NJDEP Field Sampling Procedures Manual*, May 1992.

Table 3.6-1
Fort Monmouth - Main Post and Charles Wood
Soil Sampling Analytical Parameters

SITE SAMPLE LOCATION	TCL VOC	TCL SVOC	TCL PEST/ PCB	TAL METALS	TPH	CYANIDE
Main Post						
M-15		X	X	X		
M-16	X	X	X			
M-18	X	X*	X	X	X	
AOC-3	X	X	X	X		
Background	X	X	X	X		X
Charles Wood						
CW-1	X	X	X	X		
CW-2	X	X	X	X		
CW-4	X	X	X	X		
CW-5	X	X	X			
CW-6	X	X	X	X**		
CW-9	X	X	X	X		
AOC-7	X	X	X	X		
Background	X	X	X	X		X

Notes:
* = Only sampled SVOCs at SB-06.
** = Only sampled at SS-01.
SVOC - Semi-Volatile Organic Compound
PEST - Pesticides
PCB - Polychlorinated biphenyls
TAL - Target Analyte List
TCL - Target Compound List
TPH - Total Petroleum Hydrocarbons
VOC - Volatile Organic Compound
See Table 5.1-1 for analytical methods.

6. The soil was then placed in the appropriate sample containers.

7. Field QA/QC samples were collected at a frequency of 1 set per 10 samples as specified in the CDAP.

A total of 16 trip blanks, 3 duplicates, and 3 equipment blanks were collected during the soil sampling program. Extra soil for laboratory MS/MSD analysis was also obtained as part of the QA/QC program. One split sample was collected and sent to the USACE New England Division Environmental Laboratory for analysis. Specific sampling protocols were in accordance with the procedures outlined in the CDAP.

After sampling was completed, the shallow borings were allowed to fill by the natural collapse of surrounding soil, and then further backfilled with a cement/bentonite mixture to ground surface. Split spoons and stainless-steel bowls were decontaminated prior to each use according to the procedures specified in the CDAP. Field blanks consisted of chromatography-grade distilled water rinsed over the inside of a decontaminated split spoon and bowl. Field blanks were collected once every 10 soil samples collected per analysis to verify the effectiveness of the decontamination process. All nonsampling, downhole drilling equipment was decontaminated between boring locations at each site, as described in the CDAP. Filled sample bottles were handled in the same manner as sediment sample bottles (Subsection 3.2).

3.7 GROUNDWATER MONITOR WELL INSTALLATION

A total of 45 shallow groundwater monitor wells were installed at both the Main Post and Charles Wood areas between 13 December 1994 and 23 January 1995 in accordance with the procedures and materials specified in the CDAP (December 1994). A total of 29 monitor wells were installed at the Main Post location and 16 monitor wells were installed at Charles Wood (these numbers include background wells). All monitor wells were drilled using an auger-type drilling rig equipped with 8-in. and 4.25-in. ID hollow-stem augers.

Continuous split-spoon samples were collected using ASTM Method 1586. A complete lithologic profile was recorded for each well by the WESTON site geologist from the split-spoon sample.

Monitor wells were installed within the shallow unconfined hydrogeologic water-bearing zone at depths ranging from 14 to 28 ft bgs. The shallow monitor wells were constructed with 4-in. diameter Schedule 40 polyvinyl chloride (PVC) casing and screen. Well screens were placed approximately 2 feet above the noted saturation depth to monitor seasonal fluctuations. However, where saturation was observed in boreholes immediately below ground surface (1 to 4 ft) screens were placed entirely in the saturation zone in order to get the proper sand pack and seal above the slotted screened interval. Screen lengths varied from 10 to 15 feet (screen slot size is 0.01 in.). The annular space around the well screen was filled with sand pack to approximately 1 to 2 feet above the top of the screen. A minimum 2.5- to 3-ft bentonite slurry was placed above the sand pack and a bentonite/cement grout mixture was used to seal the remaining annular space. All wells were secured with a locking steel protective casing. Summaries of well completion specifications for Main Post and Charles Wood are presented in Tables 3.7-1 and 3.7-2, respectively. Individual lithologic logs and well construction summaries are presented in Appendix A.

Well permit numbers and site identification numbers were stamped on the 6-in. diameter steel outer protective casing. The top of the PVC casing and ground surface was surveyed by a New Jersey-licensed surveyor and was referenced in feet above msl. Appendix B presents the survey data for site monitor and stilling wells. All well permit numbers and survey information are also included with each lithologic log and are summarized in Tables 3.7-1 and 3.7-2.

All drilling equipment was decontaminated in accordance with the decontamination procedures described in the CDAP prior to use at each well location. Drill cuttings were spread on the ground near the well location since no OVM readings above background were recorded. Holes, ruts, or divots developed during drilling were backfilled.

3.7.1 Well Development

Following installation, wells were developed according to the procedures described in the CDAP. The development procedures consisted of manually surging with a PVC surge block for 15 to 30 minutes. After surging, the wells were purged using a PVC bailer to remove any fine particles

Table 3.7-1
Fort Monmouth - Main Post
Well Completion Summary

Site and Location ID	Well Permit No.	Completion Date	Surveyed GS Elev. (Ft. MSL)	Surveyed PVC Elev. (Ft. MSL)	Total Depth (Ft. BGS)	Total Depth (Ft. TOIC)	Screened Interval (Ft. BGS)	Top of Sand Pack (Ft. BGS)	Top of Seal (Ft. BGS)
SITE M-2									
MW-01	2932584	14-Dec-94	19.44	21.04	22.75	24.35	7.00-22.29	5.75	3.75
MW-02	2932585	13-Dec-94	13.36	15.5	17.46	19.6	7.46-17.00	5.46	3.46
MW-03	2932586	13-Dec-94	10.98	12.63	15.6	17.25	5.60-15.14	4.6	2.6
SITE M-3									
MW-04	2932568	5-Jan-95	17.34	19.02	23.72	25.40	8.72-23.26	6.72	3.72
MW-05	2932569	9-Jan-95	11.28	13.30	16.43	18.45	6.43-15.97	4.43	2.43
MW-06	2932570	11-Jan-95	10.25	12.42	15.33	17.50	5.33-14.87	3.33	1.33
SITE M-4									
MW-07	2932571	14-Dec-94	14.83	16.75	16.01	17.93	6.01-15.55	4.01	1.51
MW-08	2932572	13-Dec-94	9.02	10.68	18.64	20.30	3.64-18.18	1.64	0.20
MW-09	2932573	13-Dec-94	7.77	9.69	22.69	24.61	7.69-22.23	5.69	3.19
SITE M-5									
MW-10	2932574	14-Dec-94	5.13	6.91	15.00	16.78	5.00-14.54	3.00	0.80
MW-11	2932575	15-Dec-94	9.77	11.70	15.00	16.93	5.00-14.54	3.00	0.80
SITE M-8									
MW-12	2932560	20-Dec-94	13.47	15.20	15.00	16.73	5.00-14.54	3.00	0.50
MW-13	2932560	17-Jan-95	6.02	7.80	15.00	16.78	5.00-14.54	3.50	1.00
MW-14	2932562	16-Jan-95	12.88	14.91	15.00	17.03	5.00-14.54	3.00	0.50
MW-15	2932563	17-Jan-95	5.01	7.01	15.00	17.00	5.00-14.54	3.50	1.00
SITE M-12									
MW-16	2932576	4-Jan-95	6.33	8.35	14.50	16.52	4.50-14.01	3.00	0.50
MW-17	2932577	11-Jan-95	5.90	7.87	14.50	16.47	4.50-14.04	3.00	0.50
MW-18	2932578	11-Jan-95	4.78	6.62	14.50	16.34	4.50-14.04	3.00	0.50
SITE M-14									
MW-19	2932579	4-Jan-95	7.98	9.68	15.00	16.70	5.00-14.54	3.50	0.50
MW-20	2932580	4-Jan-95	7.43	9.29	14.50	16.36	4.50-14.04	3.00	1.00
MW-21	2932581	4-Jan-95	7.50	9.57	16.00	18.07	6.00-15.54	4.00	1.00
SITE M-16									
MW-22	2932582	15-Dec-94	5.5	7.25	14.50	16.25	4.50-14.04	3.00	1.00
SITE M-18									
MW-24	2932565	12-Jan-95	6.78	8.16	15.00	16.38	5.00-14.54	3.50	1.00
MW-25	2932566	13-Jan-95	6.35	8.28	15.00	16.93	5.00-14.54	3.00	0.50
BACKGROUND									
MW1B	2932587	9-Jan-95	22.48	24.59	14.00	16.11	4.00-13.54	3.00	0.50
MW2B	2932588	6-Jan-95	19.44	20.23	20.00	20.79	19.54-20.00	8.00	5.00
MW3B	2932589	9-Jan-95	19.2	21.09	26.00	27.89	16.00-25.54	14.00	11.00
MW4B	2932567	9-Jan-95	9.78	12.08	15.00	17.30	5.00-14.54	3.00	1.00
MW5B	2932583	11-Jan-95	13.4	15.4	14.50	16.50	4.50-14.04	3.00	1.00

Notes:
All wells were completed as 4 inch PVC single cased wells with 10-slot screen (0.010 -inches) and have a 6-inch diameter outer steel protective casing.
GS - Ground surface
Elev. - Elevation
Ft - Feet
TOIC - Top of Inner Casing
MSL - Mean Sea Level
BGS - Below Ground Surface

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Table 3.7-2
Fort Monmouth - Charles Wood
Well Completion Summary

Site and Location ID	Well Permit No.	Completion Date	Surveyed GS Elev. (Ft. MSL)	Surveyed PVC Elev. (Ft. MSL)	Total Depth (Ft. BGS)	Total Depth (Ft. TOIC)	Screened Interval (Ft. BGS)	Top of Sand Pack (Ft. BGS)	Top of Seal (Ft. BGS)
SITE CW-1									
MW-26	2932591	19-Dec-94	60.54	62.46	15.00	17.01	5.00-14.54	4.00	2.00
MW-27	2932592	19-Dec-94	60.81	62.56	15.00	16.75	5.00-14.54	4.00	2.00
MW-28	2932593	19-Dec-94	60.73	62.89	15.00	17.16	5.00-14.54	5.00	0.50
MW-29	2932590	19-Dec-94	60.41	62.44	15.00	17.03	5.00-14.54	3.00	0.50
SITE CW-2									
MW-30	2932594	16-Dec-94	49.47	51.71	16.00	18.24	6.00-15.54	4.00	2.00
MW-31	2932595	16-Dec-94	49.67	51.58	15.00	16.91	5.00-14.54	3.00	1.00
MW-32	2932596	16-Dec-94	49.47	51.38	15.00	16.91	5.00-14.54	3.00	0.80
MW-33	2932597	15-Dec-94	49.18	51.09	15.00	16.91	5.00-14.54	3.00	0.50
SITE CW-6									
MW-34	2932599	3-Jan-95	31.97	33.76	14.50	16.29	4.50-14.04	3.00	1.00
SITE CW-9									
MW-35	2932600	4-Jan-95	29.27	31.43	14.50	16.66	4.50-14.01	3.00	0.50
MW-36	2932601	4-Jan-95	31.22	33.21	14.00	15.99	4.00-13.54	3.00	1.00
BACKGROUND									
MW-6B	2932602	10-Jan-95	35.19	37.37	14.00	16.18	4.00-13.54	3.00	1.00
MW-7B	2932604	10-Jan-95	64.27	66.31	15.00	17.04	5.00-14.54	3.00	1.00
MW-8B	2932598	10-Jan-95	47.04	48.9	15.00	16.86	5.00-14.54	3.00	0.50
MW-9B	2932603	23-Jan-95	43.13	45.31	15.00	17.18	5.00-14.54	3.00	1.00
MW-10B	2932605	10-Jan-95	51.36	53.14	14.50	16.28	4.50-14.04	3.00	0.50

All wells were completed as 4-inch PVC single cased wells with 10-slot screen (0.010-inches) and have a 6-inch diameter outer steel protective casing.

Notes:

GS - Ground surface
Elev. - Elevation
Ft - Feet
TOIC - Top of Inner Casing
MSL - Mean Sea Level
BGS - Below Ground Surface

that may have accumulated in the well column and were then purged by bailing or pumping with a submersible pump to remove the fine particles from the sand pack. Monitor wells MW-1, MW-24, MW-25, MW-30 through MW-33, MW-03B, MW-05B, and MW-09B were developed by bailing; all other wells had sufficient yield to sustain pumping. Throughout the development process, the temperature, pH, and specific conductance of the purge water were measured and recorded in the field at a minimum of once per well volume of water removed. The well development sheets are included in Appendix C. Well development continued until moderately low turbidity was visually observed or where well turbidity was believed to be a result of natural conditions after a maximum of 2 hours of purging. However, well development continued after 2 hours of purging at several locations where high turbidity was believed to be a result of inadequate well yields. Consequently, low volumes of water were removed. After a sufficient volume of water was removed and ample time was applied toward well development, development ceased (see Appendix C).

All development equipment was decontaminated prior to use in each well in accordance with the procedures described in the CDAP. Since no OVM readings above background were recorded during development, the purge water was discharged to the ground, as directed in the CDAP.

3.7.2 Well Abandonment

All existing monitor wells and piezometers at Landfill 8 were abandoned in accordance with the requirements specified in the CDAP. Several site reconnaissance efforts were conducted in an effort to locate all of the previously installed monitor wells and piezometers, in or around Landfill 8. A total of 11 wells, six 4-in. monitor wells and five 2-in. piezometers, were identified for abandonment (Figure 4.2-12). Access to the locations was made with the use of an all terrain vehicle (ATV) rig. The wells were abandoned by a New Jersey licensed driller in accordance with the NJDEP procedures for wells screened across an aquifer (unconfined). Abandonment procedures consisted of:

1. Recording field observations of well construction details, if available.
2. Pulling the outer protective casing out of the ground.

3. Cutting the inner PVC casing stick-up off to ground surface.

4. Tremie-grouting the well from the bottom of the PVC screen to the ground surface with a cement/bentonite mixture.

3.8 GROUNDWATER SAMPLING

Two groundwater sampling rounds were conducted at the Main Post and Charles Wood areas between 13 through 22 February 1995 and 7 through 15 March 1995. A complete set of depth to water readings at all well locations on the Main Post and Charles Wood areas were collected prior to start of the groundwater sampling round. The full set of depth to water readings and elevations, which are provided in the discussion of site groundwater flow, are presented in Appendix C, Tables C-1 and C-2. The groundwater sampling was conducted in accordance with the *NJDEP Field Sampling Procedures Manual* (May 1992), as indicated in the CDAP, to ensure that water samples were representative of subsurface conditions. Groundwater samples were collected from the 45 newly installed monitor wells after a minimum of 2 to 3 weeks following well development. Site-specific groundwater samples were analyzed for the constituents presented in Table 3.8-1. Two existing monitor wells were also sampled; one at site M-18 on the Main Post, and one at site CW-6 on Charles Wood.

Prior to sampling, all monitor wells were purged with a variable rate stainless-steel submersible pump at rates between 0.5 and 1.0 gpm. Well yield data collected during well development were used to estimate the purge rate for each well. Prior to well purging, pH, temperature, and specific conductance measurements were recorded to compare to subsequent measurements taken during purging as each well volume was evacuated. Purging was continued until parameters stabilized and a minimum of three well volumes were evacuated. Monitor wells that purged dry were allowed to recover and purged again to remove a minimum of 1.5 well volumes before sampling. Groundwater samples from all wells were collected from the monitor wells using dedicated, disposable Teflon bailers. Groundwater was transferred from the bailers directly into the appropriate sample containers. Sample portions designated for soluble metals analyses were field-filtered. Field QA/QC samples were collected at a frequency of 1 set per 10 samples. A total of seven trip blanks, three duplicates, and seven equipment blanks were collected during

Table 3.8-1
Fort Monmouth - Main Post and Charles Wood
Sampling Parameters Table for
February & March 1995 Sampling Rounds

SITE SAMPLE LOCATION	TCL VOC (8240)	TCL SVOC	TCL PEST/ PCB	TAL Metals Total	TAL Metals Dissolved	TPH	Cyanide	Sulfate	Ammonia
Main Post									
M-2	X	X	X	X	X		X		
M-3	X	X	X	X	X		X		
M-4	X	X	X	X	X		X		
M-5	X	X	X	X	X		X	X	
M-8	X	X	X	X	X		X	X	X
M-12	X	X	X	X	X		X		
M-14	X	X	X	X	X		X		
M-16	X	X	X						
M-18	X	X	X	X	X	X			
Background	X	X	X	X	X		X		
Charles Wood									
CW-1	X	X	X	X	X				
CW-2	X	X	X	X	X				
CW-6	X	X	X						
CW-9	X	X	X	X	X				
Background	X	X	X	X	X		X		

Notes:
PCB - Polychlorinated biphenyls
PEST - Pesticides
SVOC - Semi-Volatile Organic Compounds
TAL - Target Analyte List
TCL - Target Compound List
TPH - Total Petroleum Hydrocarbons
VOC - Volatile Organic Compound
See table 5.1-1 for analytical methods.

each sampling round. Extra groundwater for laboratory MS/MSD analysis was also obtained as part of the QA/QC program. One split sample per sampling round was collected and sent to the USACE New England Division Environmental Laboratory for analysis. Specific sampling protocols were in accordance with the procedures outlined in the CDAP. Filled sample bottles were handled in the same manner as sediment sample bottles (Subsection 3.2). Appendix D presents the analytical results of the field sampling activities at both the Main Post and Charles Wood areas.

3.9 TIDAL MONITORING

Two 72-hr tidal monitoring tests were conducted in three areas at the Main Post: Landfill 2, Landfill 8, and Landfills 12 and 14. The tests were conducted the week of 30 January through 3 February 1995, prior to the February 1995 groundwater sampling round, and the week of 20 through 24 March following the March 1995 groundwater sampling round in an effort to evaluate the effect of tidal fluctuations on water levels in the monitor wells. A total of four stilling wells were installed; one at Landfill 2, one at Landfill 8, and two at the Landfill 12 and 14 areas.

The stilling wells at Fort Monmouth are temporarily installed measuring points that are used to monitor water-level fluctuations in surface-water bodies (creeks). The stilling wells were installed using a 2-in. diameter, 5-ft long stainless-steel slotted screen with a conical drive shoe. The drive shoe was used to insert the screen approximately 2 to 3 feet into the surface-water sediments. Once the steel screen was secured, a 2-in. diameter, 5-ft long PVC slotted screen was added to the steel screen to ensure that the top of the stilling well was above creek water levels during high tides. The top of the PVC casing was surveyed by a New Jersey-licensed surveyor. The data collected are presented in Appendix B, along with the stream bed elevations. The data were collected from the stilling wells using pressure transducers with an electronic data logger (In-Situ Model SE-1000C) and were then compared to the subsequent site monitor wells to gauge the influence of the tides on water levels in the monitor wells. Water-level fluctuations in the monitor wells were collected using pressure transducers (In-Situ Model SE 1000C) and well sentinels (Model LTM 3000). Appendix E presents the results (hydrographs) and conductivity and salinity measurements collected during the individual tidal monitoring tests. The stilling wells were located in accordance with the CDAP.

SECTION 4
RESULTS OF INVESTIGATION

SECTION 4

RESULTS OF INVESTIGATION

4.1 COMPARISON WITH NEW JERSEY STANDARDS AND BACKGROUND

The results of the sampling effort were evaluated by comparing them with the results of background samples and with NJDEP regulatory standards. In general, for each compound of each environmental sample, the analytical results were compared against the NJDEP regulatory criteria. If the analytical result exceeded the regulatory criteria, then it was compared against the maximum background concentration. Those compounds that exceeded the regulatory standard and established background at a particular site were classified as a compound of concern.

The concentration of each compound was first compared with NJDEP standards. The New Jersey regulatory standards used for this evaluation are summarized in the following paragraphs:

- Groundwater — NJAC 7:9-6, *Groundwater Quality Standards*, establishes groundwater criteria for different classes of groundwater. Class II-A, which is defined as all groundwater that is not classified as one of the other special classes, is the class for groundwater at Fort Monmouth. Table 1 of this regulation presents the regulatory limit as the higher of the groundwater quality criteria and the practical quantitation levels (PQL). The PQL is the lowest concentration that can be reliably measured in a laboratory analysis. These values are presented in Table 4.1-1.

- Soil — NJDEP currently uses the Soil Cleanup Criteria (SCC) that have been published as an interim regulation and in the NJDEP publication, *Site Remediation News*. Criteria have been developed for future residential and nonresidential uses, and potential impacts to groundwater. The residential direct contact soil criteria were used to evaluate soil analytical results. Although soil criteria exist that are based on potential impacts to groundwater, it is more appropriate to use actual groundwater monitoring results, which exist for most of the sites in this investigation. The criteria for residential direct contact and impact to groundwater are presented in Table 4.1-2. They were published in March 1994, except for lead, which was revised in the winter 1995 *Site Remediation News*.

Table 4.1-1
Ft. Monmouth - Main Post and Charles Wood
NJDEP Groundwater Quality Criteria - Class II - A and Practical Quantitation Levels
February 1993

ANALYSIS	STANDARD		
	GROUND WATER QUALITY CRITERIA (µg/L)	PRACTICAL QUANTITATION LEVELS (PQLs) (µg/L)	HIGHER OF PQL AND GW CRITERIA (µg/L)
1,1,1-Trichloroethane	30	1	30
1,1,2,2-Tetrachloroethane	2	1	2
1,1,2-Trichloroethane	3	2	3
1,1-Dichloroethane	70	NA	70
1,1-Dichloroethene	-	-	-
1,2,4-Trichlorobenzene	9	1	9
1,2-Dichlorobenzene	600	5	600
1,2-Dichloroethane	0.3	2	2
1,2-Dichloroethene (total)	-	-	-
1,2-Dichloropropane	0.5	1	1
1,3-Dichlorobenzene	600	5	600
1,4-Dichlorobenzene	75	5	75
2,2'-oxybis(1-Chloropropane)	-	-	-
2,4,5-Trichlorophenol	700	10	700
2,4,6-Trichlorophenol	-	-	-
2,4-Dichlorophenol	20	10	20
2,4-Dimethylphenol	100	20	100
2,4-Dinitrophenol	10	40	40
2,4-Dinitrotoluene	0.05	10	10
2,6-Dinitrotoluene	NA	10	10
2-Butanone	-	-	-
2-Chloronaphthalene	-	-	-
2-Chlorophenol	40	20	40
2-Hexanone	-	-	-
2-Methylnaphthalene	-	-	-
2-Methylphenol	-	-	-
2-Nitroaniline	-	-	-
2-Nitrophenol	-	-	-
3,3'-Dichlorobenzidine	0.08	60	60
3-Nitroaniline	-	-	-
4,4'-DDD	0.1	0.04	0.1
4,4'-DDE	0.1	0.04	0.1
4,4'-DDT	0.1	0.06	0.1
4,6-Dinitro-2-methylphenol	-	-	-
4-Bromophenyl-phenylether	-	-	-
4-Chloro-3-methylphenol	NA	20	20
4-Chloroaniline	-	-	-
4-Chlorophenyl-phenylether	-	-	-
4-Methyl-2-pentanone	400	NA	400
4-Methylphenol	-	-	-
4-Nitroaniline	-	-	-
4-Nitrophenol	-	-	-
Acenaphthene	400	10	400
Acenapthylene	NA	10	10
Acetone	700	NA	700
Aldrin	0.002	0.04	0.04
alpha-BHC	0.006	0.02	0.02
alpha-Chlordane	-	-	-

Table 4.1-1
Ft. Monmouth - Main Post and Charles Wood
NJDEP Groundwater Quality Criteria - Class II - A and Practical Quantitation Levels
February 1993

ANALYSIS	STANDARD		
	GROUND WATER QUALITY CRITERIA (µg/L)	PRACTICAL QUANTITATION LEVELS (PQLs) (µg/L)	HIGHER OF PQL AND GW CRITERIA (µg/L)
Aluminum	200	200	200
Anthracene	2000	10	2000
Antimony	2	20	20
Aroclor-1016	0.43	2	2
Aroclor-1221	0.43	2	2
Aroclor-1232	0.43	2	2
Aroclor-1242	0.43	2	2
Aroclor-1248	0.43	2	2
Aroclor-1254	0.43	2	2
Aroclor-1260	0.43	2	2
Arsenic	0.02	8	8
Barium	2000	200	2000
Benzene	0.2	1	1
Benzo(a)anthracene	0.03	10	10
Benzo(a)pyrene	0.003	20	20
Benzo(b)fluoranthene	0.03	2	2
Benzo(g,h,i)perylene	NA	20	20
Benzo(k)fluoranthene	0.03	2	2
Beryllium	0.008	20	20
beta-BHC	0.2	0.04	0.2
bis(2-Chloroethoxy) methane	-	-	-
bis(2-Chloroethyl) ether	0.03	10	10
bis(2-Ethylhexyl)phthalate	3	30	30
Bromodichloromethane	0.3	1	1
Bromoform	4	0.8	4
Bromomethane	-	-	-
Butylbenzylphthalate	100	20	100
Cadmium	4	2	4
Calcium	-	-	-
Carbazole	-	-	-
Carbon Disulfide	-	-	-
Carbon Tetrachloride	0.4	2	2
Chlordane	0.01	0.5	0.5
Chlorobenzene	4	2	4
Chloroethane	-	-	-
Chloroform	6	1	6
Chloromethane	-	-	-
Chromium (total)	100	10	100
Chrysene	0.03	20	20
cis-1,3-Dichloropropene	0.2	NA	0.2
Cobalt	-	-	-
Copper	1000	1000	1000
Cyanide	200	40	200
delta-BHC	-	-	-
Di-n-butylphthalate	900	20	900
Di-n-octyl phthalate	100	NA	100
Dibenzo(a,h)anthracene	0.003	20	20
Dibenzofuran	-	-	-

Table 4.1-1
Ft. Monmouth - Main Post and Charles Wood
NJDEP Groundwater Quality Criteria - Class II - A and Practical Quantitation Levels
February 1993

ANALYSIS	STANDARD		
	GROUND WATER QUALITY CRITERIA (µg/L)	PRACTICAL QUANTITATION LEVELS (PQLs) (µg/L)	HIGHER OF PQL AND GW CRITERIA (µg/L)
Dibromochloromethane	10	1	10
Dieldrin	0.002	0.03	0.03
Diethylphthalate	5000	10	5000
Dimethylphthalate	7000	10	7000
Endosulfan I	0.4	0.02	0.4
Endosulfan II	0.4	0.04	0.4
Endosulfan sulfate	0.4	0.08	0.4
Endrin	2	0.04	2
Endrin aldehyde	-	-	-
Endrin ketone	-	-	-
Ethylbenzene	700	5	700
Fluoranthene	300	10	300
Fluorene	300	10	300
gamma-BHC (Lindane)	0.2	0.2	0.2
gamma-Chlordane	0.01	0.5	0.5
Heptachlor	0.008	0.4	0.4
Heptachlor epoxide	0.004	0.2	0.2
Hexachlorobenzene	0.02	10	10
Hexachlorobutadiene	1	1	1
Hexachlorocyclopentadiene	50	10	50
Hexachloroethane	0.7	10	10
Indeno(1,2,3-cd)pyrene	0.03	20	20
Iron	300	100	300
Isophorone	100	10	100
Lead (total)	5	10	10
Magnesium	-	-	-
Manganese	50	6	50
Mercury	2	0.5	2
Methoxychlor	40	10	40
Methylene Chloride	2	2	2
N-Nitrosodi-n-propylamine	0.005	20	20
N-Nitrosodiphenylamine (1)	7	20	20
Naphthalene	-	-	-
Nickel (soluble salts)	100	10	100
Nitrobenzene	3	10	10
Pentachlorophenol	0.3	1	1
Phenanthrene	NA	10	10
Phenol	4000	10	4000
Potassium	-	-	-
Pyrene	200	20	200
Selenium (total)	50	10	50
Silver	20	2	20
Sodium	50000	400	50000
Styrene	100	5	100
Tetrachloroethene	0.4	1	1
Thallium	0.5	10	10
Toluene	1000	5	1000
Toxaphene	0.03	3	3

Table 4.1-1
Ft. Monmouth - Main Post and Charles Wood
NJDEP Groundwater Quality Criteria - Class II - A and Practical Quantitation Levels
February 1993

ANALYSIS	STANDARD		
	GROUND WATER QUALITY CRITERIA (µg/L)	PRACTICAL QUANTITATION LEVELS (PQLs) (µg/L)	HIGHER OF PQL AND GW CRITERIA (µg/L)
trans-1,3-Dichloropropene	0.2	NA	0.2
Trichloroethene	1	1	1
Vanadium	-	-	-
Vinyl Chloride	0.08	5	5
Xylene (total)	40	2	40
Zinc	5000	30	5000

- = No level established

Table 4.1-2

Forth Monmouth - Main Post and Charles Wood
NJDEP Soil Cleanup Criteria
February 1994

ANALYSIS	STANDARD	
	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	IMPACT TO GROUND WATER SOIL CLEANUP CRITERIA (mg/kg)
1,1,1-Trichloroethane	210	50
1,1,2,2-Tetrachloroethane	34	1
1,1,2-Trichloroethane	22	1
1,1-Dichloroethane	570	10(i)
1,1-Dichloroethene	8	10
1,2,4-Trichlorobenzene	68	100
1,2-Dichlorobenzene	5100	50
1,2-Dichloroethane	6	1
1,2-Dichloroethene (trans)	1000(d)	50
1,2-Dichloroethene (cis)	79	1(i)
1,2-Dichloropropane	10	(r)
1,3-Dichlorobenzene	5100	100
1,4-Dichlorobenzene	570	100
2,2'-oxybis(1-Chloropropane)	-	-
2,4,5-Trichlorophenol	5600	50
2,4,6-Trichlorophenol	62	10(i)
2,4-Dichlorophenol	170	10
2,4-Dimethylphenol	1100	10
2,4-Dinitrophenol	110	10
2,4-Dinitrotoluene	1(l)	10(l)
2,6-Dinitrotoluene	1(l)	10(l)
2-Butanone (MEK)	1000 (d)	50
2-Chloronaphthalene	-	-
2-Chlorophenol	280	10 (j)
2-Hexanone	-	-
2-Methylnaphthalene	-	-
2-Methylphenol	2800	(r)
2-Nitroaniline	-	-
2-Nitrophenol	-	-
3,3'-Dichlorobenzidine	2	100
3-Nitroaniline	-	-
4,4'-DDD	3	50(i)
4,4'-DDE	2	50(i)
4,4'-DDT	2	500(i)
4,6-Dinitro-2-methylphenol	-	-
4-Bromophenyl-phenylether	-	-
4-Chloro-3-methylphenol	10000(c)	100
4-Chloroaniline	230	(r)
4-Chlorophenyl-phenylether	-	-
4-Methyl-2-pentanone	1000(d)	50
4-Methylphenol	2800	(r)
4-Nitroaniline	-	-
4-Nitrophenol	-	-
Acenaphthene	3400	100
Acenaphthylene	-	-
Acetone	1000(d)	100(i)

Table 4.1-2 (continued)

Forth Monmouth - Main Post and Charles Wood
NJDEP Soil Cleanup Criteria
February 1994

ANALYSIS	STANDARD	
	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	IMPACT TO GROUND WATER SOIL CLEANUP CRITERIA (mg/kg)
Aldrin	0.040	50
alpha-BHC	-	-
alpha-Chlordane	-	-
Aluminum	-	-
Anthracene	10000(c)	100(i)
Antimony	14	(h)
Aroclor-1016	0.49	50(i)
Aroclor-1221	0.49	50(i)
Aroclor-1232	0.49	50(i)
Aroclor-1242	0.49	50(i)
Aroclor-1248	0.49	50(i)
Aroclor-1254	0.49	50(i)
Aroclor-1260	0.49	50(i)
Arsenic	20(e)	(h)
Barium	700	(h)
Benzene	3	1
Benzo(a)anthracene	0.9	500
Benzo(a)pyrene	0.66(f)	100
Benzo(b)fluoranthene	0.9	50(i)
Benzo(g,h,i)perylene	-	-
Benzo(k)fluoranthene	0.9	500
Beryllium	1(f)	(h)
beta-BHC	-	-
bis(2-Chloroethoxy) methane	-	-
bis(2-Chloroethyl) ether	0.66(f)	10(j)
bis(2-Ethylhexyl)phthalate	49	100
Bromodichloromethane	11(g)	1
Bromoform	86	1
Bromomethane	79	1
Butylbenzylphthalate	1100	100
Cadmium	1	(h)
Calcium	-	-
Carbazole	-	-
Carbon Disulfide	-	-
Carbon Tetrachloride	2(k)	1
Chlorobenzene	37	1
Chloroethane	-	-
Chloroform	19(k)	1
Chloromethane	520	10
Chromium	-	-
Chrysene	9	500
cis-1,3-Dichloropropene	4	1
Cobalt	-	-
Copper	600(m)	(h)
Cyanide	1100	(h)
delta-BHC	-	-

Table 4.1-2 (continued)

Forth Monmouth - Main Post and Charles Wood
NJDEP Soil Cleanup Criteria
February 1994

ANALYSIS	STANDARD	
	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	IMPACT TO GROUND WATER SOIL CLEANUP CRITERIA (mg/kg)
Di-n-butylphthalate	5700	100
Di-n-octyl phthalate	1100	100
Dibenzo(a,h)anthracene	0.66(f)	100(j)
Dibenzofuran	-	-
Dibromochloromethane	110	1
Dieldrin	0.042	50
Diethylphthalate	10000(c)	50
Dimethylphthalate	10000(c)	50
Endosulfan	340(g)	50
Endosulfan sulfate	-	-
Endrin	17	50
Endrin aldehyde	-	-
Endrin ketone	-	-
Ethylbenzene	1000(d)	100
Fluoranthene	2300	100(i)
Fluorene	2300	100
gamma-BHC (Lindane)	0.52	50(j)
gamma-Chlordane	-	-
Heptachlor	0.15	50(j)
Heptachlor epoxide	-	-
Hexachlorobenzene	0.66(f)	100(i)
Hexachlorobutadiene	1(g)	100(g)
Hexachlorocyclopentadiene	400	100
Hexachloroethane	6	100
Indeno(1,2,3-cd)pyrene	0.9	500
Iron	-	-
Isophorone	1100	50(j)
Lead	400	(h)
Magnesium	-	-
Manganese	-	-
Mercury	14	(h)
Methoxychlor	280	50(j)
Methylene Chloride	49	1(j)
N-Nitroso-di-n-propylamine	0.66(f)	10(j)
N-Nitrosodiphenylamine (1)	140	100
Naphthalene	230	100
Nickel	250	(h)
Nitrobenzene	28	10(i)
Pentachlorophenol	6	100
Phenanthrene	-	-
Phenol	10000(c)	50
Potassium	-	-
Pyrene	1700	100(j)
Selenium	63	(h)
Silver	110	(h)
Sodium	-	-

Table 4.1-2 (continued)

Forth Monmouth - Main Post and Charles Wood
NJDEP Soil Cleanup Criteria
February 1994

ANALYSIS	STANDARD	
	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	IMPACT TO GROUND WATER SOIL CLEANUP CRITERIA (mg/kg)
Trichloroethene	23	1
Vanadium	370	(h)
Vinyl Chloride	2	10(i)
Xylene (total)	410	10
Zinc	1500(m)	(h)

(c) Health based criterion exceeds the 10000 mg/kg maximum for total organic contaminants.
(d) Health based criterion exceeds the 1000 mg/kg maximum for total volatile organic contaminants.
(e) Cleanup standard proposal was based on natural background.
(f) Health based criterion is lower than analytical limits; cleanup criterion based on practical quantitation level.
(g) Criterion has been recalculated based on new toxicological data.
(h) The impact to ground water values for inorganics will be developed based upon site specific chemical and physical parameters.
(i) Original criterion was incorrectly calculated and has been recalculated.
(j) Typographical error.
(k) Criterion based on inhalation exposure pathway which yielded a more stringent criterion than the incidental ingestion exposure pathway.
(l) New criterion derived using methodology in the basis and background document.
(m) Criterion based on ecological (phytotoxicity) effects.
(p) criterion based on the goal that children should be exposed to the minimal amount of lead that is practicable and is reflective of natural background as altered by diffuse anthropogenic pollution. Criterion corresponds to both a median value for urban land which has not been impacted by any local point source of lead and a 90th percentile value for similar suburban land.
- = No level established.
[1] = NJDEP criteria as referenced in Site Remediation News, Winter 1995.
NJDEP criteria for Total Volatile Organics and Total Organics is 1,000 mg/kg and 10,000 mg/kg, respectively.

- Surface water — NJAC 7:9-1, *Surface Water Quality Standards,* contains surface-water quality criteria for chemicals detected at the Main Post and Charles Wood. Surface water is classified based on the designated uses of the surface water, the biota present, and the type of aquatic system (e.g., freshwater or saltwater). Generally, separate criteria were established for freshwater and saltwater. Although the classifications of some surface waters are defined in the regulation, the surface water at Fort Monmouth has not been classified. Based on observations by field personnel during this investigation, the on-site surface water has been designated as either freshwater or saltwater. The sample-specific designation is discussed in Subsections 4.2 and 4.3. Surface-water criteria are presented in Table 4.1-3.

- Sediment — The NJDEP *Guidance for Sediment Quality Evaluations* (1991), which references National Oceanic and Atmospheric Administration (NOAA) biological effects screening criteria, and ERL guideline values from Long et al. (1995), were used to evaluate sediment concentrations at the Main Post and Charles Wood. The use of these criteria is discussed in Subsection 4.1.2. The sediment quality criteria are presented in Table 4.1-4.

- PCB transformers — The proposed NJDEP rule NJAC 7:26D, *Cleanup Standards for Contaminated Sites,* was used for PCB cleanup criteria in soil and interior surfaces. These criteria are presented in Table 4.1-5.

Two groundwater sampling rounds were conducted at the Main Post and Charles Wood areas. As specified in the NJDEP regulation *Technical Requirements for Site Remediation* (NJAC 7:26E), the results of the two groundwater sampling rounds were averaged since the samples were collected within a 30-day period. The averaged concentrations were compared with the NJDEP criteria and then with the maximum background concentrations. If the concentration in only one of the samples was above the detection limit, then that result was averaged with half of the quantitation limit.

Analytical results that were reported as a "J," i.e., below the quantitation limit but above the method detection limit, were still compared against NJDEP criteria to determine if the criteria were exceeded. The laboratory quantitation limit is the lowest concentration of an analyte determined by a given method in a given matrix that the laboratory feels can be reported with acceptable quantitative error. The method detection limit is the lowest concentration that can be seen for a given analytical method and sample matrix with 99% confidence that the analyte is present. Laboratory quantitation limits are typically about three times the value of the method

Table 4.1-3
Fort Monmouth - Main Post and Charles Wood
Surface Water Quality Standards for Fresh and Saline Waters

ANALYSIS	STANDARD	
	FRESH WATER (µg/L)	SALT WATER (µg/L)
1,1,1-Trichloroethane	127(h)	-
1,1,2,2-Tetrachloroethane	1.72(hcc)	-
1,1,2-Trichloroethane	13.5(h)	-
1,1-Dichloroethane	-	-
1,1-Dichloroethene	4.81(h)	-
1,2,4-Trichlorobenzene	30.6(h)	113(h)
1,2-Dichlorobenzene	2,520(h)	16,500(h)
1,2-Dichloroethane	0.291(hc)	99(hc)
1,2-Dichloroethene (total)	-	-
1,2-Dichloropropane	-	-
1,3-Dichlorobenzene	2,620(h)	22,200(h)
1,4-Dichlorobenzene	343(h)	3,159(h)
2,2'-oxybis(1-Chloropropane)	-	-
2,4,5-Trichlorophenol	2,580(h)	9,790(h)
2,4,6-Trichlorophenol	2.14(hc)	6.53(hc)
2,4-Dichlorophenol	92.7(h)	794(h)
2,4-Dimethylphenol	-	-
2,4-Dinitrophenol	69.7(h)	14,000(h)
2,4-Dinitrotoluene	0.11(hc)	9.1(hc)
2,6-Dinitrotoluene	-	-
2-Butanone	-	-
2-Chloronaphthalene	-	-
2-Chlorophenol	122(h)	402(h)
2-Hexanone	-	-
2-Methylnaphthalene	-	-
2-Methylphenol	-	-
2-Nitroaniline	-	-
2-Nitrophenol	-	-
3,3'-Dichlorobenzidine	0.0386(hc)	0.0767(hc)
3-Nitroaniline	-	-
4,4'-DDD	0.000832(hc)	0.000837(hc)
4,4'-DDE	0.000588(hc)	0.000591(hc)
4,4'-DDT	1.1(a); 0.0010(c); 0.000588(hc)	0.13(a); 0.0010(c); 0.000591(hc)
4,6-Dinitro-2-methylphenol	-	-
4-Bromophenyl-phenylether	-	-
4-Chloro-3-methylphenol	-	-
4-Chloroaniline	-	-
4-Chlorophenyl-phenylether	-	-
4-Methyl-2-pentanone	-	-
4-Methylphenol	-	-
4-Nitroaniline	-	-
4-Nitrophenol	-	-
Acenaphthene	-	-
Acenaphthylene	-	*Reserved*

Table 4.1-3 (continued)
Fort Monmouth - Main Post and Charles Wood
Surface Water Quality Standards for Fresh and Saline Waters

ANALYSIS	STANDARD	
	FRESH WATER (µg/L)	SALT WATER (µg/L)
Acetone	-	-
Aldrin	3.0(a); 0.000135(hc)	1.3(a) 0.000144(hc)
alpha-BHC	0.00391(hc)	0.0131(hc)
alpha-Chlordane	2.4(a); 0.0043(c); 0.000277(hc)	0.09(a); 0.0040(c); 0.000283(hc)
Aluminum	-	*Reserved*
Anthracene	9,570(h)	108,000(h)
Antimony	12.2(h)	4,300(h)
Aroclor-1016	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1221	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1232	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1242	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1248	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1254	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1260	.014(c); .000244(hc)	.30(c); .000247(hc)
Arsenic	0.0170(hc)	0.136(hc)
Barium	2,000(h)	-
Benzene	0.150(hc)	71(hc)
Benzo(a)anthracene	0.0028(hc)	0.031(hc)
Benzo(a)pyrene	0.0028(hc)	0.031(hc)
Benzo(b)fluoranthene	0.0028(hc)	0.031(hc)
Benzo(g,h,i)perylene	-	*Reserved*
Benzo(k)fluoranthene	0.0028(hc)	0.031(hc)
Beryllium	-	*Reserved*
beta-BHC	0.137(hcc)	0.460(hcc)
bis(2-Chloroethoxy) methane	-	-
bis(2-Chloroethyl) ether	.0311(hc)	1.4(hc)
bis(2-Ethylhexyl)phthalate	1.76(hc)	5.92(hc)
Bromodichloromethane	.266(hc)	22(hc)
Bromoform	4.38(hc)	360(hc)
Bromomethane	48.4(h)	4,000(h)
Butylbenzylphthalate	239(h)	416(h)
Cadmium	10(h)	-
Calcium	-	-
Carbazole	-	-
Carbon Disulfide	-	-
Carbon Tetrachloride	0.363(hc)	6.31(hc)
Chlorobenzene	22.0(h)	21,000(h)
Chloroethane	-	-
Chloroform	5.67(hc)	470(hc)
Chloromethane	5.7(hc); 470(hc)	*Reserved*
Chromium	160(h)	3,230(h)
Chrysene	0.0028(hc)	0.031(hc)
cis-1,3-Dichloropropene	-	-
Cobalt	-	-

Table 4.1-3 (continued)
Fort Monmouth - Main Post and Charles Wood
Surface Water Quality Standards for Fresh and Saline Waters

ANALYSIS	STANDARD	
	FRESH WATER (µg/L)	SALT WATER (µg/L)
Copper	-	*Reserved*
Cyanide	22(a); 5.2(c) 768(h)	1.0(a); 1.0(c); 220,000(h)
delta-BHC	-	-
Di-n-butylphthalate	3,530(h)	15,700(h)
Di-n-octyl phthalate	-	-
Dibenzo(a,h)anthracene	0.0028(hc)	0.031(hc)
Dibenzofuran	-	-
Dibromochloromethane	72.6(h)	-
Dieldrin	2.5(a) 0.0019(c); 0.000135(hc)	0.71(a); 0.0019(c); 0.000144(hc)
Diethylphthalate	21,200(h)	111,000(h)
Dimethylphthalate	313,000(h)	2,900,000(h)
Endosulfan I	-	-
Endosulfan II	-	-
Endosulfan sulfate	0.93(h)	2.0(h)
Endrin	0.18(a); 0.0023(c); 0.629(h)	0.037(a); 0.0023(c) 0.678(h)
Endrin aldehyde	0.76(h)	0.081(h)
Endrin ketone	-	-
Ethylbenzene	3,030(h)	27,900(h)
Fluoranthene	310(h)	393(h)
Fluorene	1,340(h)	
gamma-BHC (Lindane)	2.0(a); 0.080(c)	0.16(a)
gamma-Chlordane	-	-
Heptachlor	0.52(a); 0.0038(c); 0.000208(hc)	0.053(a); 0.0036(c); 0.000214(hc)
Heptachlor epoxide	0.52(a); 0.0038(c); 0.000103(hc)	0.053(a); 0.0036(c); 0.000106(hc)
Hexachlorobenzene	0.000748(hc)	0.000775(hc)
Hexachlorobutadiene	6.94(h)	
Hexachlorocyclopentadiene	245(h)	17,000(h)
Hexachloroethane	2.73(h)	12.4(h)
Indeno(1,2,3-cd)pyrene	0.0028(hc)	0.031(hc)
Iron	-	*Reserved*
Isophorone	552(h)	-
Lead	5(h)	-
Magnesium	-	-
Manganese	100(h)	-
Mercury	0.144(h)	0.146(h)
Methoxychlor	0.03(c); 40(h)	0.03(c)
Methylene Chloride	2.49(hc)	1,600(hc)
N-Nitroso-di-n-propylamine	-	-
N-Nitrosodiphenylamine (1)	-	-
Naphthalene	-	-
Nickel	516(h)	3,900(h)

Table 4.1-3 (continued)
Fort Monmouth - Main Post and Charles Wood
Surface Water Quality Standards for Fresh and Saline Waters

ANALYSIS	STANDARD	
	FRESH WATER (µg/L)	SALT WATER (µg/L)
Nitrobenzene	16.0(h)	1,900(h)
Pentachlorophenol	e(1.005(pH)-4.830)(a); e(1.005(pH)-5.290)(c); 0.282(c)	13(a); 7.9(c); 8.2(hc)
Phenanthrene	-	*Reserved*
Phenol	20,900(h)	4,600,000(h)
Potassium	-	-
Pyrene	797(h)	8,970(h)
Selenium	10(h)	300(a); 71(c); 6,800(h)
Silver	164(h)	-
Sodium	-	-
Styrene	-	-
Tetrachloroethene	0.388(hc)	4.29(hc)
Thallium	1.70(h)	6.22(h)
Toluene	7,440(h)	200,000(h)
Toxaphene	0.73(a); 0.0002(c); 0.000730(hc)	0.21(a); 0.0002(c); 0.000747(hc)
trans-1,3-Dichloropropene	.193(hc)	1,700(h)
Trichloroethene	1.09(hc)	81(hc)
Vanadium	-	-
Vinyl Chloride	0.0830(hc)	525(hc)
Xylene (total)	-	-
Zinc	-	*Reserved*

NOTE: Except as noted, aquatic life criteria followed by an (a) represent acute aquatic life protection criteria as a one-hour average and aquatic life criteria followed by (C) represent chronic aquatic life protection criteria as a four-day average. No exceedance of aquatic life criteria shall be permitted at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c) 2. Criteria followed by an (h) are noncarcinogenic effect-based human health criteria as a 30-day average with no frequency of exceedance at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2. Criteria followed by an (hc) are carcinogenic effect-based human health criteria as a 70-year average with no frequency of exceedance at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2 and are based on a risk level of one-in-one-million. Criteria followed by an (hcc) are for toxic substances considered to be possible human carcinogens as a 70-year average with no frequency of exceedance at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2 and are based on a risk level of one-in-one hundred thousand Criteria followed by and (OL) are organoleptic effect-based criteria and are maximum concentrations.

- = No level established

Table 4.1-4
Fort Monmouth - Main Post and Charles Wood
Sediment Guidance Values for Detected Contaminants

COMPOUND	NJDEP SEDIMENT GUIDANCE [a] (mg/kg)	MARINE/ESTUARINE BIOLOGICAL EFFECTS LEVEL (ERL) [b] (mg/kg)
VOC's (mg/kg)		
Acetone	NLE	NLE
2-Butanone	NLE	NLE
1,2-Dichloroethene (total)	NLE	NLE
Vinyl Chloride	NLE	NLE
SVOCs (mg/kg)		
bis-(2-Ethylhexyl)phthalate	NLE	NLE
Dimethylphthalate	NLE	NLE
Di-n-butylphthalate	NLE	NLE
Di-n-octyl phthalate	NLE	NLE
2,2'-oxybis(1-Chloropropane)	NLE	NLE
PAHs (mg/kg)		
Benzo (a)anthracene	0.23	0.261
Benzo(a)pyrene	0.4	0.43
Benzo (b)fluoranthene	NLE	NLE
Chrysene	0.4	0.984
Fluoranthene	0.6	0.6
Phenanthrene *	0.225, 0.326	0.74
Pyrene	0.35	0.665
PESTICIDES/PCBs (mg/kg)		
4,4'-DDD	0.002	NLE
4,4'-DDE	0.002	0.0022
4,4'-DDT *	0.003, 0.00183	0.00158
Heptachlor epoxide	NLE	NLE
METALS TOTAL (mg/kg)		
Aluminum	NLE	NLE
Arsenic	33	8.2
Barium	NLE	NLE
Beryllium	NLE	NLE
Cadmium	5	1.2
Calcium	NLE	NLE
Chromium	80	81
Cobalt	NLE	NLE
Copper	70	34
Iron	NLE	NLE
Lead	35	46.7
Magnesium	NLE	NLE
Manganese	NLE	NLE
Mercury	0.15	0.15
Nickel	30	20.9
Potassium	NLE	NLE
Selenium	NLE	NLE
Silver	1	1
Sodium	NLE	NLE
Vanadium	NLE	NLE
Zinc	120	150

a NJDEP Sediment Guidance (1991), based on NOAA (1990) ER-L guidance. Values provided are for freshwater sediments. Criteria for DDE and DDD are not presented in NJDEP Sediment Quality Evaluations (1991).

b Long et. al (1995).

* - Standards developed using equilibrium partioning approach in accordance with NJDEP Guidance for Sediment Quality Evaluation (1991). Total organic carbon concentrations of 1% assumed based on organic carbon content detected in adjacent sample.

NLE - No Level Established

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Table 4.1-5

Potentially Applicable PCB Cleanup Levels

New Jersey (Proposed 7:26D)

- Building interior:
  - Porous surface (from floor to 6 feet): chip sample < 0.055 µg/g
  - Porous surface (higher than 6 feet): chip sample < 0.11 mg/g
  - Nonporous surface (from floor to 6 feet): wipe sample < 0.27 mg/m^2 (2.7 mg/100 cm^2)
  - Nonporous surface (higher than 6 feet): wipe sample < 0.54 mg/m^2 (5.4 µg/100 cm^2)
- Soil:
  - Surface soil*: Soil sample < 0.49 mg/kg (ppm)
  - Subsurface soil: Soil sample < 100 mg/kg (ppm)

*Surface soil is top 2 feet of soil.

detection limit to ensure the confidence of the value reported. When a concentration is detected below the laboratory quantitation limit but above the method detection limit, the letter "J" is assigned to that concentration. The J indicates that the concentration is estimated due to detection at or below the laboratory quantitation limit (but above the method detection limit). The method detection limits are reported in the summary tables in Section 4 and Appendix D, but the quantitation limits are reported only in Appendix D.

Many of the inorganic compounds in soil and groundwater that were analyzed for occur in nature or commonly exist because of human activities. For example, naturally occurring inorganic compounds are always present in groundwater and soil samples. Lead is generally found at elevated levels near heavily traveled roads because it was formerly used in gasoline. Pesticides and herbicides are commonly found in suburban settings because of past applications of these substances.

The background concentration, therefore, is the concentration of a compound in the environment that occurs naturally or as the result of unrelated base activities. The estimate of background is based on analytical results of sampling at background locations and a review of published material.

There is no generally accepted method for determining the background concentration. For this investigation, a total of 10 groundwater and soil background samples and 2 sediment and surface-water background samples were taken on both Charles Wood and Main Post. Background sampling locations were selected as specified in the document *Investigations of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey* (WESTON, 1993), which was approved by NJDEP. The U.S. Environmental Protection Agency (EPA) has provided some guidance in its document *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities.* It provides a number of scenarios for comparing groundwater analytical data against background well data. In discussing the tolerance interval method, the document suggests that the groundwater data be compared with the 95% confidence limit for the 95th percentile of the background data; however, the method specified can be strictly applied only when the data have a normal distribution or a log normal distribution. Neither of these is true for the background data collected at Fort Monmouth. Nonparametric methods that are similar to the tolerance interval method involve simply selecting the data value that is at the 95th percentile of the data set. Since there are 10 data points, the equivalent method for the background samples at Fort Monmouth is to use the maximum background value. Each environmental sample concentration was compared against the maximum value that was measured in the background samples. If a compound was not detected in the background samples, then any measurement above the detection limit for that compound in an environmental sample was considered to be above background. This practice was followed at other New Jersey sites.

An outlier screening was conducted to identify background concentrations that were not consistent with other background concentrations. Based on the screening, outliers were rejected for beryllium, chromium, cobalt, lead, vanadium, and zinc in groundwater on the Main Post, and manganese in soil on Charles Wood.

The Monmouth County and site-specific background concentrations for total metals at Fort Monmouth were determined using literature values and on-site background data. The values in Tables 4.1-6 and 4.1-7 are based on the maximum concentrations of inorganic analytes in background wells and soil borings at Main Post and Charles Wood. These data are compared with the maximum Monmouth County background values, based on published data. The Monmouth County values for soil are from Fields et al., 1992, and the Monmouth County background values for groundwater are from Harriman and Sargent, 1985.

The Monmouth County background concentrations for soils are based on the analyses of samples from the vicinity of Fort Monmouth (see Table 9 and the locations of samples 35 and 36 in Figure 1 in Fields et al., 1992). Sample 36 (Fields et al., 1992) was collected near Charles Wood and sample 35 (Fields et al., 1992) was collected northeast of the Main Post. The site-specific background concentrations are based on samples from the two areas collected during this investigation. Most of the soil samples were from landscaping fill and natural deposits in Fort Monmouth. The screened intervals in the background monitor wells are also in landscaping fill

Table 4.1-6

Fort Monmouth - Main Post

Summary of Site-Specific and Monmouth County

Soil and Groundwater Maximum Background Concentrations

COMPOUNDS	SOILS		GROUNDWATER	
	Site Specific (maximum)	Monmouth County[1] (maximum)	Site Specific (maximum)	Monmouth County[2] (maximum)
SVOC'S	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Phenol	0.420 J	-	ND	-
Acenaphthylene	0.041 J	-	ND	-
Acenaphthene	0.100 J	-	ND	-
Dibenzofuran	0.060 J	-	ND	-
Diethylphthalate	ND	-	ND	-
Fluorene	0.074 J	-	ND	-
Phenanthrene	0.39	-	ND	-
Anthracene	0.100 J	-	ND	-
Di-n-butylphthalate	2.2 B	-	ND	-
Fluoranthene	0.46	-	ND	-
Pyrene	1.5	-	ND	-
Benzo(a)anthracene	0.65	-	ND	-
Chrysene	0.65	-	3 J	-
bis(2-Ethylhexyl)phthalate	.19 J	-	5 J	-
Benzo(b)fluoranthene	0.9	-	ND	-
Benzo(k)fluoranthene	0.43	-	ND	-
Benzo(a)pyrene	0.6	-	ND	-
Indeno(1,2,3-cd)pyrene	0.46	-	ND	-
Dibenzo(a,h)anthracene	0.079 JB	-	ND	-
Benzo(g,h,i)perylene	0.64 B	-	ND	-
PESTICIDE / PCB	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Heptachlor epoxide	ND	-	0.041 J	-
4,4-DDD	0.0096 P	-	ND	-
4,4'-DDE	0.0096 P	-	ND	-
4,4'-DDT	0.11	-	ND	-
METALS TOTAL	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Aluminum	15200	NLE	121000	NLE
Antimony	ND	NLE	20.7	NLE
Arsenic	22.9	4.56	89.3	NLE
Barium	32.3	NLE	699	400
Beryllium	2	0.09	2.1	7
Calcium	921	NLE	45400	7300
Cadmium	ND	0.116	9.5	6
Cobalt	2.5	NLE	18.3	NLE
Chromium	269	0.104	191	< 50
Copper	8	6.05	65.6	730
Cyanide	ND	NLE	ND	NLE
Iron	55800	11	431000	27000
Lead	19.5	25.9	22.7	< 100
Magnesium	7230	NLE	62700	25000
Mercury	ND	NLE	0.26	NLE
Manganese	90.7	59	331	480
Nickel	8.4	3.2	187	NLE
Potassium	15400	NLE	137000	10000
Silver	1.1	0.21	ND	< 10
Sodium	51.6	NLE	21500	197000
Selenium	1.9	0.11	29.6	NLE
Thallium	ND	NLE	5.5	NLE
Vanadium	94.1	1.3	108	NLE
Zinc	81.4	44.6	233	60

ND - Not detected at the quantification limits

NLE - No level established

[1] - Sample 35 in Fields et al., 1992

[2] - From Table 9 in Harriman and Sargent, 1985

- Literature search was not completed for SVOC and Pest/PCB compounds.

Table 4.1-7

Fort Monmouth - Charles Wood

Summary of Site Specific and Monmouth County

Soil and Groundwater Maximum Background Concentrations

COMPOUNDS	SOILS		GROUNDWATER	
	Site Specific (maximum)	Monmouth County[1] (maximum)	Site Specific (maximum)	Monmouth County[2] (maximum)
SVOC'S	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Phenol	ND	-	ND	-
Acenaphthylene	ND	-	ND	-
Acenaphthene	ND	-	ND	-
Dibenzofuran	ND	-	ND	-
Diethylphthalate	ND	-	1 J	-
Fluorene	ND	-	ND	-
Phenanthrene	ND	-	ND	-
Anthracene	ND	-	ND	-
Di-n-butylphthalate	2 B	-	ND	-
Fluoranthene	0.042 J	-	ND	-
Pyrene	0.048 J	-	ND	-
Benzo(a)anthracene	0.046 J	-	ND	-
Chrysene	0.083 J	-	ND	-
bis(2-Ethylhexyl)phthalate	0.170 J	-	600	-
Benzo(b)fluoranthene	0.078 J	-	ND	-
Benzo(k)fluoranthene	0.041 J	-	ND	-
Benzo(a)pyrene	0.047 J	-	ND	-
Indeno(1,2,3-cd)pyrene	ND	-	ND	-
Dibenzo(a,h)anthracene	ND	-	ND	-
Benzo(g,h,i)perylene	0.042 J	-	ND	-
PESTICIDE / PCB	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Heptachlor epoxide	ND	-	ND	-
4,4-DDD	ND	-	ND	-
4,4'-DDE	0.071	-	ND	-
4,4'-DDT	0.053	-	ND	-
METALS TOTAL	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Aluminum	15700	NLE	8210	NLE
Antimony	ND	NLE	ND	NLE
Arsenic	31.6	10.7	25.1	NLE
Barium	26	NLE	192	400
Beryllium	1.7	0.88	2.8	7
Calcium	653	NLE	8700	7300
Cadmium	ND	0.135	3.7	6
Cobalt	4.5	NLE	30.6	NLE
Chromium	128	0.14	49.6	< 50
Copper	6.6	7.27	9.8	730
Cyanide	0.41	NLE	ND	NLE
Iron	45500	23.7	19600	27000
Lead	11.1	15.1	7.3	< 100
Magnesium	3960	NLE	7160	25000
Mercury	ND	NLE	ND	NLE
Manganese	48.7	120	232	480
Nickel	8.3	8.3	48.3	NLE
Potassium	10600	NLE	4630	10000
Silver	ND	0.26	ND	< 10
Sodium	56.8	NLE	36400	197000
Selenium	0.85	0.17	3.8	NLE
Thallium	ND	NLE	ND	NLE
Vanadium	59.6	14	28.9	NLE
Zinc	55.6	28.1	133	60

ND - Not detected at the quantification limits

NLE - No level established

1 - Sample 36 in Fields et al., 1992

2 - From Table 9 in Harriman and Sargent, 1985

- Literature search was not completed for SVOC and Pest/PCB compounds.

and natural deposits. The Monmouth County and site-specific background concentrations are provided in Tables 4.1-6 and 4.1-7.

Table 4.1-6 summarizes the Monmouth County and site-specific background concentrations for the Main Post area. The background concentrations of metals in soils at the Main Post site are generally below regional concentrations, except for arsenic, chromium, beryllium, selenium, iron, manganese, nickel, zinc, silver, and vanadium.

Nine analytes exceeded maximum Monmouth County values for groundwater in the Main Post area: barium, beryllium, calcium, cadmium, chromium, iron, magnesium, potassium, and zinc (Table 4.1-6).

Table 4.1-7 summarizes the Monmouth County and site-specific background concentrations for the Charles Wood area. The background concentrations in soils at Charles Wood are generally below Monmouth County concentrations, except for arsenic, beryllium, chromium, iron, selenium, vanadium, and zinc.

For the background groundwater concentration established for this investigation, two analytes exceeded the maximum values established for Monmouth County: calcium and zinc (Table 4.1-7). Calcium concentrations in groundwater at Charles Wood are 12% higher than the Monmouth County concentrations. Zinc concentrations are twice as high as the Monmouth County concentrations.

Several factors, both natural and anthropogenic, contribute to the wide range in the concentrations of metals in the soils at the Main Post and Charles Wood areas. The primary natural influence on the chemical characteristics of the overburden at Fort Monmouth is parent material. The parent material is glauconitic quartzose sands of the Tinton and Red Bank sands and their fluvially- and tidally-reworked equivalents. The mineral glauconite is a potassium-, sodium-, calcium-, iron-, aluminum-, magnesium-rich hydrosilicate (Klein et al., 1985). Soils derived from the glauconitic sands contain abundant iron, aluminum, calcium, magnesium, manganese, and potassium (Tedrow, 1986). The tidal sediments probably contained iron and manganese concretions. As noted by Fields et al. (1992, p. 19), manganese is a highly variable soil constituent. Groundwater flowing through glauconitic formations contains calcium and magnesium (Meisler et al., 1988, p. 215).

An additional natural influence on background groundwater chemistry is saltwater intrusion. As noted in Section 2, the Main Post and Charles Wood areas are underlain by dissected unconsolidated Coastal Plain sediments. The Coastal Plain aquifers are susceptible to saltwater encroachment, particularly near the coast and along tidal rivers and streams (Gill, 1962; Harriman et al., 1989; Harriman and Sargent, 1985).

Saltwater encroaches several miles inland on tidal streams, particularly during periods of low flow (Gill, 1962). Saltwater encroachment will lead to saltwater intrusion into the adjacent aquifers. Husky Brook and Lafetra Creek are tributary estuaries to the estuaries of Oceanport and Parkers Creeks. Saltwater will encroach several miles up these estuaries.

The area of Monmouth County where Fort Monmouth is located is underlain by groundwater with relatively high manganese and iron concentrations. The manganese and iron concentrations reported for eastern Monmouth County in Harriman et al. (1989) range from 110 to 200 µg/L for manganese and 7,900 to 14,000 µg/L for iron. These concentrations are reported for the Upper Potomac Raritan-Magothy aquifer, but the concentrations are expected to be comparable in the shallower, lithologically similar Tinton and Red Bank sands.

Anthropogenic influences on the background metals include deposition of airborne dust, and fertilizers, pesticides, and herbicides (Fields et al., 1992). The Fort Monmouth area is located downwind from farms (Jablonski, 1989). Vanadium can be a result of oil burning (Fields et al., 1992, p. 20). Arsenic was a common constituent of herbicides and pesticides in the past.

Concentrations detected in surface-water samples collected at Fort Monmouth (Main Post and Charles Wood) in December 1994 were compared to fresh and saltwater NJDEP Surface Water Standards (NJDEP, 1993). Based on observations by field personnel, sample locations were designated as saltwater if the area was tidally influenced. All surface-water and sediment sampling locations at the Main Post were determined to be saltwater, with the exception of site M-2 (M2SW-1 and M2SW-2) and background locations (SS-B1 and SS-B2). However, all sampling locations at Charles Wood were designated as freshwater. Detected concentrations were also compared to maximum background concentrations for surface water collected at each site. Because many contaminants are readily sorbed to sediment and particles suspended in the water column, and may significantly augment concentrations of contaminants detected in surface water, total (unfiltered) as well as soluble (filtered) surface-water concentrations were compared to criteria and background. Note, however, that the criteria are developed based on the total concentration in surface-water. Surface-water locations sampled at the Main Post were M-2, M-3, and M-14: background surface-water samples were collected at two areas (SS-B1 and SS-B2). Only background surface-water samples were collected at Charles Wood (CW-2 and CW-5). Surface-water criteria are presented in Table 4.1-4. Maximum background concentrations are presented in Table 4.1-8 for the Main Post and in Table 4.1-9 for Charles Wood.

Concentrations of chemicals detected in freshwater and saltwater sediment samples collected at Fort Monmouth, NJ (Main Post and Charles Wood) in December 1994 were compared to NJDEP freshwater sediment guidance values (NJDEP, 1991), or marine/estuarine biological effects screening levels for saltwater (Long et al., 1995), as well as maximum detected background concentrations detected from each site. Concentrations from two sediment sample locations at the Main Post, AOC-3 and the pre-1941 STP, and one location at Charles Wood, CW-5, were compared to the appropriate sediment criteria and background. Sediment criteria are presented in Table 4.1-4. No background sediment samples were collected at saltwater locations on the Main Post. Maximum background concentrations are presented in Tables 4.1-8 and 4.1-9.

NJDEP sediment guidance values incorporate National Oceanic and Atmospheric Administration (NOAA) sediment guidance values (NOAA, 1990) and NJDEP's equilibrium partitioning (EqP) approach for evaluating toxicity and bioavailability of sediment-bound, nonionic organic chemicals. For this screening evaluation, concentrations in sediment were compared to sediment NOAA Effects Range-Low (ER-L) levels (i.e., the lower 10th percentile of the chemical concentration associated with toxicity) and EqP-based criteria, which are adjusted to reflect site-specific total organic carbon (TOC) content (Table 4.1-4).

Background sediment samples were collected from two areas at the Main Post (SS-B1 and SS-B2), and two areas at Charles Wood (CW-2 and CW-5).

Table 4.1-8
Fort Monmouth - Main Post
Surface Water and Sediment Maximum Background Concentrations

COMPOUND	SEDIMENTS (mg/kg)	SURFACE WATER	
		Total	Soluable
VOCs			
Acetone	0.47 B	ND	ND
2-Butanone	0.1	ND	ND
SVOCs			
Phenanthrene	0.39 J	ND	ND
Anthracene	0.061 J	ND	ND
Carbazole	0.051 J	ND	ND
Di-n-butylphthalate	0.26 JB	ND	ND
Fluoranthene	1.5	ND	ND
Pyrene	2	ND	ND
Benzo(a)anthracene	1.3	ND	ND
Chrysene	0.37 J	ND	ND
bis(2-Ethylhexyl)phthalate	0.43 J	ND	ND
Benzo(b)fluoranthene	1.8	ND	ND
Benzo(k)fluoranthene	0.58	ND	ND
Benzo(a)pyrene	1.2	ND	ND
Indeno(1,2,3-cd)pyrene	0.7	ND	ND
Dibenzo(a,h)anthracene	0.12 J	ND	ND
Benzo(g,h,i)perylene	0.67	ND	ND
Total Organic Carbon	5.7	ND	ND
PESTICIDES/PCBs			
Heptachlor epoxide	0.014 P	ND	ND
Endosulfan I	0.0024 J	ND	ND
4,4'-DDE	0.0092 J	ND	ND
4,4'-DDD	0.013	ND	ND
4,4'-DDT	0.0057 JP	ND	ND
alpha-Chlordane	0.011 P	ND	ND
gamma-Chlordane	0.0092 P	ND	ND
METALS			
Aluminum	9060	748	ND
Arsenic	14.5	2.6	ND
Barium	87.6	44.7	39.4
Beryllium	3.2	ND	ND
Calcium	3180	31600	30900
Cobalt	119	8.1	4.1
Chromium	88.1	7.5	ND
Copper	48.4	3.2	4
Iron	61900	6210	405
Mercury	1.7	ND	ND
Potassium	10200	5060	4280
Magnesium	3280	5440	5120
Manganese	70.2	113	98.6
Sodium	189	26700	26200
Nickel	131	22.9	16.1
Lead	64.1	10	ND
Selenium	1.7	ND	ND
Vanadium	49.1	5.8	ND
Zinc	162	35.1	23.8
Cyanide	3.1	ND	ND

 J - Estimated Concentrations

Table 4.1-9
Fort Monmouth - Charles Wood
Surface Water and Sediment Maximum Background Concentrations

COMPOUND	SEDIMENT	SURFACE WATER	
		(Total)	(Soluble)
SVOCs (mg/kg)			
bis-(2-Ethylhexy)phthalate	0.23 J	1 J	ND
Di-n-butylphthalate	0.12 J	ND	ND
PAHs (mg/kg)			
Benzo (a)anthracene	0.09 J	ND	ND
Benzo (a)pyrene	0.1 J	ND	ND
Benzo (b)fluoranthene	0.16 J	ND	ND
Benzo (g,h,i)perylene	0.21 J	ND	ND
Chrysene	0.14 J	ND	ND
Fluoranthene	0.12 J	ND	ND
Indeno (1,2,3-cd)perylene	0.19 J	ND	ND
Phenanthrene	0.079 J	ND	ND
Pyrene	0.41 J	ND	ND
PESTICIDES/PCBs (mg/kg)			
4,4'-DDD	0.015 PD	ND	ND
4,4'-DDE	0.096	ND	ND
4,4'-DDT	0.11	ND	ND
METALS TOTAL (mg/kg)			
Aluminum	6660	265	160
Antimony	ND	26.8	ND
Arsenic	5.8	ND	ND
Barium	45.7	77.1	78.2
Calcium	2960	22900	24000
Chromium	36.9	ND	ND
Cobalt	4.2	2.8	ND
Copper	24.5	8	10.2
Iron	19600	715	435
Lead	142	5.3	65.9
Magnesium	2560	7050	7390
Manganese	65.1	97.4	100
Nickel	11.3	ND	ND
Potassium	1700	3590	4040
Selenium	0.68	ND	ND
Sodium	271	156000	164000
Vanadium	39.5	ND	ND
Zinc	126	204	215

J - Estimated Concentrations
D - Diluted Analysis
P - Percent difference between two columns, the smaller of two is reported
ND - Compound was not detected at or above the quantification limit.

Main Post
Background Samples

4.2 MAIN POST

Subsection 4.2 presents a description of each Main Post site, the sampling rationale, and the results of sampling activities. The sites and the sampling effort are summarized in Table 4.2-1. Additional historical information on each site may be obtained from the *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey*, 1993.

This subsection also summarizes the results of the sediment, surface-water, soil, and groundwater sampling program that was implemented to characterize site conditions on the Main Post, as identified in the WESTON report titled *Site Investigation, Chemical Data Acquisition Plan* (CDAP). A total of 4 sediment and 8 surface-water samples were taken on the Main Post. In addition, a total of 15 soil borings and 29 monitor wells were installed on Main Post sites. Soil and groundwater samples were collected from the borings and monitor wells and were analyzed for compounds determined to be characteristic of the wastes associated with each area, i.e., TCL and TAL analytes (Tables 3.6-1 and 3.8-1).

The field effort was conducted in accordance with the scope and procedures outlined in the CDAP. However, there were slight differences, which are summarized in Table 4.2-2. Appendix D presents the analytical results of the Main Post sampling activities. Detailed information regarding the specific sampling protocols for each site is provided in the subsections that follow. In addition to the results of groundwater and soil analyses, the lithologic descriptions and water-level information are used to provide a hydrogeologic interpretation of the site, where appropriate.

Figure 4.2-1 shows the location of the 13 Main Post sites discussed in this subsection.

4.2.1 Background Samples

The background sample locations were selected prior to the initiation of field activities in areas believed to be unaffected by base activities. These locations were as specified in the

Table 4.2-1

Site Investigation Summary — Main Post

Site Number	Site Type	Description	Potential Waste/ Contaminants	Previous Sampling Activities[a]	Investigation Activities
M-2	Landfill	Operated 1964-1968. Currently used for leaf composting and to store wood chips. Debris protrudes from bank of Mill Creek. Was unfenced — covered with soil and gravel from Earle.	Domestic and industrial waste, oil in cans, filters, soot, and building rubble.	NJPDES sampling upstream (SW-1) and downstream (SW-2) on Mill Creek. Detected VOCs, metals, and inorganics.	Installed and sampled 3 monitor wells. Sampled surface water at the NJPDES locations (M2SW-1 and M2SW-2) and a new upstream surface-water location (SS-B1). Analyzed for TCL +30[b]/TAL/CN. Tidal water-level monitoring.
M-3	Landfill	Operated 1959-1964. Was fenced; had skeet shooting range. Burned wood debris. Had tear gas training in tent. Currently grass-covered; no visible debris.	Domestic and industrial waste. Wood and coal ash from stoves, boiler.	NJPDES sampling locations SS-3, SS-4. Detected VOCs, metals, and inorganics.	Sampled surface water at the NJPDES locations (M10SW-1 and M6SW-1) and upstream surface-water sampling location (SS-B2). Used GPR and magnetics to define extent of landfill. Installed and sampled 3 monitor wells. Analyzed for TCL +30/TAL/CN.
M-4	Landfill	Operated 1956 only. Currently grass-covered; no visible debris.	Building rubble.	None.	Installed and sampled 3 monitor wells. Analyzed for TCL +30/TAL/CN.
M-5	Landfill	Operated 1952-1959. Currently grass-covered; no visible debris.	Domestic and industrial waste.	NJPDES sampling locations SS-5, SS-6. Detected VOCs, metals, and inorganics.	Installed and sampled 2 monitor wells. Analyzed for TCL +30/TAL/CN/sulfate.
M-6	Burning area	Located on Landfill M-3. Operated until 1970s. Burned general trash. Currently no visible contamination.	General trash.	None.	See M-3.
M-8	Landfill	Operated 1962-1981. Currently has leaf-composting operation. Was fenced and controlled during operation.	Domestic and industrial waste including pesticide/herbicide cans, batteries, asbestos, sludge from STP, and miscellaneous chemicals.	Four monitor wells, NJPDES sampling location SS-7.	Abandoned existing wells and piezometers; installed 4 new monitor wells. Analyzed for TCL +30/TAL/CN/NH_3/sulfate. Tidal water-level monitoring.
M-12	Landfill	Date of operation unknown. Located across Husky Brook from M-14.	Domestic and industrial waste, automobiles, oil, and building rubble.	NJPDES sampling locations SS-8, SS-9, and SS-10.	Used GPR and magnetics to locate landfill and define boundaries. Installed 3 monitor wells. Analyzed for TCL +30/TAL/CN. Tidal monitoring with M-14.
M-14	Landfill	Operated from 1965-1966. Has NJPDES permit.	Building rubble and dredgings from Husky Brook Lake.	NJPDES sampling upstream and downstream on Husky Brook Creek, SS-8, SS-9, and SS-10.	Used GPR and magnetics in western area. Installed and sampled 3 monitor wells for TCL +30/TAL/CN. Tidal monitoring with M-12. Sampled M14SW-8 and M14SW-9 surface-water locations.

Table 4.2-1

Site Investigation Summary — Main Post (Continued)

Site Number	Site Type	Description	Potential Waste/ Contaminants	Previous Sampling Activities[a]	Investigation Activities
M-15	Water tank	Used for fire-fighting water. Built in 1940s. Paint chips on ground surrounding tank. Stressed vegetation around base of tank.	Lead.	None.	Collected 2 surface soil samples. Analyzed for TCL SVOCs, TAL, and pesticides.
M-16	Former Pesticide Storage Bldg. 498	Misidentified as Bldg. 167 in 1980 report. Building 498 used for pesticide control shop in the 1940s and 1950s: disposal to sink, which discharged to sanitary sewer. No apparent outside disposal.	Pesticides and herbicides.	None.	Collected 4 soil samples from 0 to 6 inches bgs. Installed soil boring and 1 monitor well. Analyzed for TCL +30. Analyzed for TAL in SB-01.
M-18	Former training area	Army Signal School. Diesel and gasoline generators.	Diesel and oil spilled on ground. PAHs, VOCs, TPHs, lead.	None.	Conducted geophysical surveys, completed 9 soil borings, sampled 6 to 12 inches or 12 to 18 inches, stained areas, and/or just above water table. Installed 2 monitor wells in soil borings. Sampled soil for VOCs and TPHs. In addition, sampled for SVOCs and TAL at SB-06 only. Sampled groundwater for TCL +30/TAL/TPHs.
AOC-3	Former sewage treatment plant	Operated 1941-1975. Sludge drying bed located on concrete base. Sludge transported to golf course and landfills. 1935 map shows pistol range on this location.	Heavy metals, cyanide, and pesticides.	Monitor wells installed west of site. Sludge sampled in 1981; no heavy metals detected.	Sampled outfall sediments and 2 soil borings in sludge bed area for TCL + 30/TAL/CN.
New Site, Not Noted in IA Report	Former treatment plant	Operated until 1941. Located approximately where Bldg. 250 is today. Labeled on 1935 map.	Heavy metals.	None.	Sampled outfall sediment for metals.
PCB Trans-formers	Buildings (see Table 4.2-22)	Several transformers in this area were tested for PCBs in 1990. Those with PCBs >500 ppm were removed or remediated.	PCBs	Transformers sampled — several > 500 ppm. See Table 4.2-22.	Sampled PCB transformer locations.

[a]Results of previous investigation were presented on the report titled *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey* (1993).
[b]TCL +30 = Target Compound List; includes volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs).

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Table 4.2-2

Differences Between the Proposed and Actual Work at Main Post

Site	Differences
M-15	Soil samples from SS-01 and SS-02 were collected and analyzed for TCL SVOCs; however, TCL SVOC analyses were not proposed in the CDAP.
M-16	Soil samples from SB-01 were collected and analyzed for TAL metals; however, TAL metals analyses were not proposed in the CDAP.
M-18	Installed 9 soil borings instead of 12, and 2 monitor wells instead of 3 because marshy conditions made some of the planned sampling locations inaccessible. Sampled one existing monitor well in addition to the 2 newly installed wells. In eight of nine soil borings, no soil staining was observed so no SVOC analysis was performed as per the CDAP.

Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey, 1993, which was approved by NJDEP. Background characterization data were collected to evaluate soil, groundwater, surface water, and sediment in areas of the base considered to be representative of natural materials or upgradient conditions.

Sediment and surface-water samples were taken upgradient of the Main Post on Lafetra Creek and Mill Creek. Five background soil borings, which were converted into monitor wells, were installed and two discrete soil intervals were sampled from each boring. Two rounds of groundwater samples were collected from each location. Soil and groundwater samples were analyzed for the parameters listed in Section 3, Tables 3.6-1 and 3.8-1. Background monitor wells were labeled as "B" wells, i.e., MW-01B. Main Post background locations are shown in Figure 4.2-2 and labeled B-1, B-2, etc. Monitor well MW-01B was installed at background location B-1 and a similar practice was followed at the other background locations.

4.2.1.1 Hydrogeologic Interpretation

The five monitor wells installed at the Main Post were installed to depths ranging from 14 ft below ground surface (bgs) to 26 ft bgs. Total depths were determined during drilling and were based on the depth at which water was encountered. The lithology and depth to water varied between background locations, as presented on the lithologic logs in Appendix A. Monitor wells were screened across the water table.

4.2.1.2 Soil Sampling Results

As outlined in the CDAP, soil samples were collected from two discrete intervals: 0 to 2 ft bgs and between 2 and 10 ft bgs or to groundwater. Soil-boring depths varied among the background locations, depending on the depth to groundwater. The compounds detected in background soil samples at the specific sampling intervals, with the corresponding sample identifications, are presented in Appendix D. Table 4.1-6 summarizes the maximum concentrations detected in background soil at the Main Post and presents published maximum concentrations for Monmouth County.

VOCs

VOCs were analyzed for but were not detected in Main Post background soil samples.

SVOCs

A total of 19 SVOCs were detected in Main Post background soil samples (Table 4.1-6).

Pesticides/PCBs

Three pesticides (4,4'-DDE, 4,4-DDD, and 4,4'-DDT) were detected above the laboratory quantitation limit in Main Post background soils.

Metals

A total of 19 metals were detected above laboratory quantitation limits in Main Post background soils.

Cyanide

Cyanide was not detected in any of the Main Post background soil samples.

4.2.1.3 Groundwater Sampling Results

Two rounds of groundwater samples were collected at the Main Post. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.1-6 summarizes the maximum background concentrations detected in groundwater at the Main Post.

VOCs

VOCs were not detected in any of the background samples from the Main Post.

SVOCs

Two SVOCs [bis(2-ethylhexyl) phthalate and chrysene] were detected in concentrations above or below the laboratory quantitation limits. However, bis(2-ethylhexyl) phthalate is a common laboratory contaminant.

Pesticides/PCBs

One pesticide (heptachlor epoxide) was detected in the background groundwater samples in a concentration below the laboratory quantitation limit. PCBs were not detected at the background locations.

Metals

As indicated in Table 4.1-6, 22 metals (total) were detected in concentrations above laboratory quantitation limits in background groundwater at the Main Post.

Cyanide

Cyanide was not detected in the background groundwater at the Main Post.

4.2.1.4 Surface-Water Sampling Results

Two surface-water samples collected at locations upgradient from on-site drainage (SS-B1 and SS-B2) were selected as background samples (Figure 4.2-2). The analytes detected in background surface water and corresponding sample identifications are presented in Appendix D.

Table 4.1-8 summarizes the maximum detected concentrations in total and soluble background surface water at the Main Post.

VOCs

VOCs were analyzed for but not detected in background surface water (total) at the Main Post. VOC analysis was not performed for the soluble background surface-water samples.

SVOCs

SVOCs were analyzed for but not detected in background surface water (total) at the Main Post. SVOC analysis was not performed for the soluble background surface-water samples.

Metals

A total of 13 metals were detected above laboratory quantitation limits at the Main Post. Similarly, 11 metals were detected above laboratory quantitation limits in the filtered (soluble) background surface-water samples (Table 4.1-8).

4.2.1.5 Sediment Sampling Results

Two sediment sampling locations at the Main Post, SS-B1 and SS-B2, were selected as background because they are located upgradient of on-site drainage (Figure 4.2-2). Analytes detected in background sediment and corresponding sample identifications are presented in Appendix D. Table 4.1-8 summarizes the maximum detected concentrations in background sediment at the Main Post.

VOCs

Four VOCs (acetone, 2-butanone, 1,2-dichloroethene, and vinyl chloride) were detected above the laboratory quantitation limits in Main Post background sediments. However, acetone and 2-butanone are common laboratory contaminants.

SVOCs

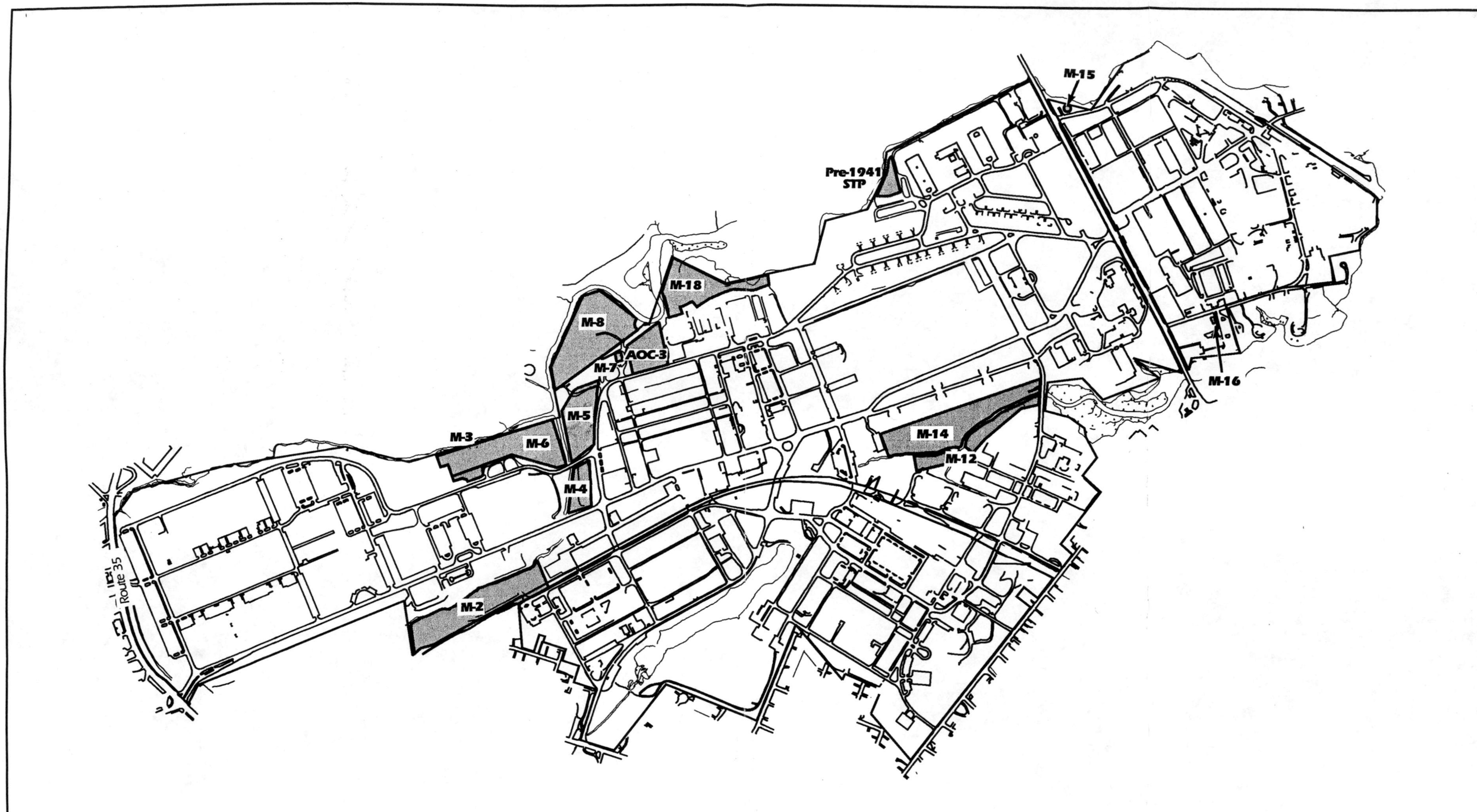
One SVOC, di-n-butyl phthalate, was detected in concentrations above the laboratory quantitation limits in Main Post background sediment. Benzo(a)pyrene was the only polyaromatic hydrocarbon (PAH) compound detected in concentrations above the laboratory quantitation limits in Main Post background sediment.

Pesticides

Pesticides were analyzed for but not detected in background sediments at the Main Post.

Metals

A total of 19 metals in background sediment at the Main Post were detected above laboratory quantitation limits (see Table 4.1-8).



LEGEND

Road (paved)

Building

Site

Lake

Marshy Area

/usr3/fort/main/newmain.dgn Sep. 26, 1995 10:07:01

0 800 1600

SCALE IN FEET

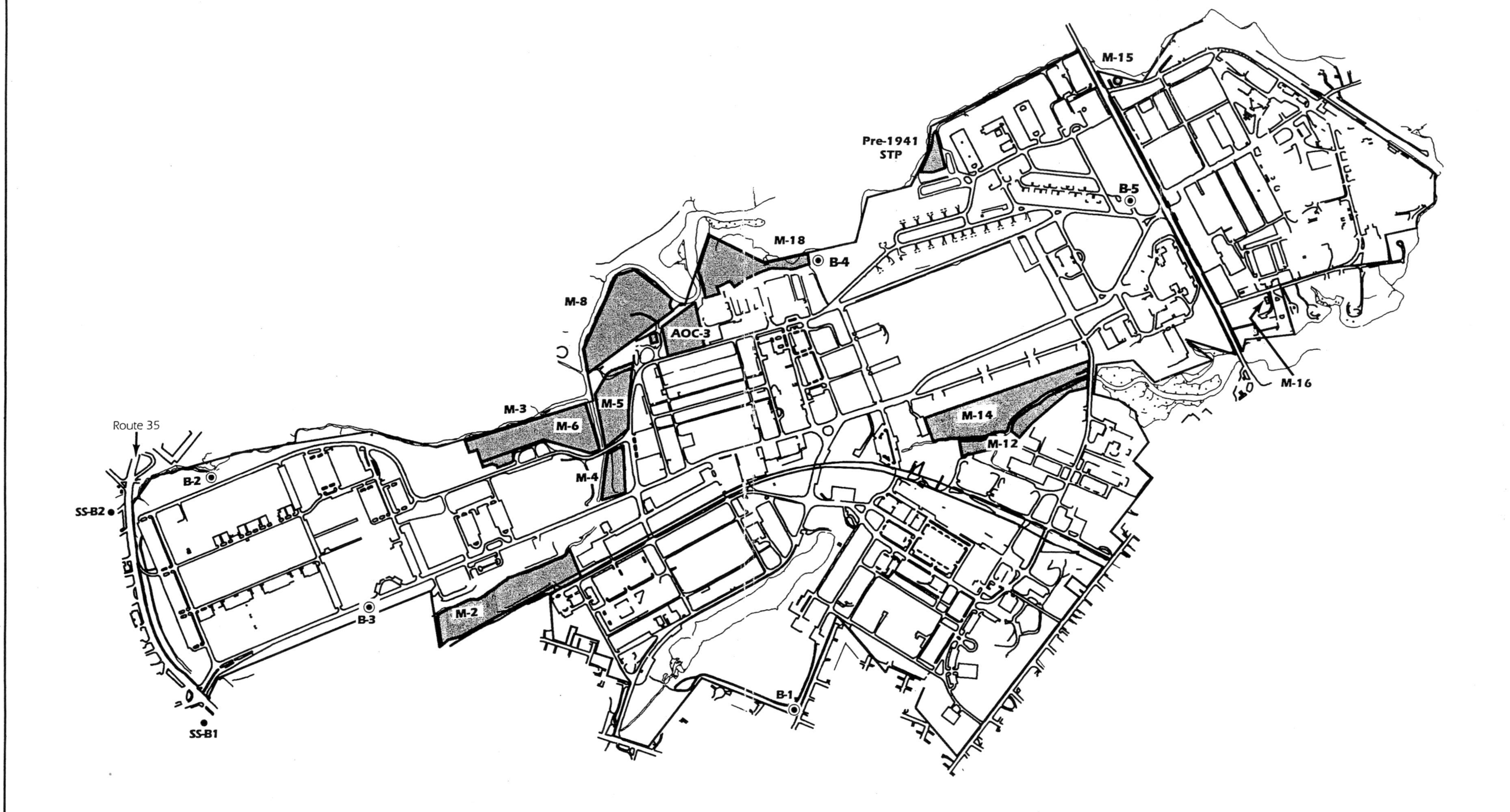
95P-3194

9/28.95

Fort Monmouth, Main Post

FIGURE 4.2-1
MAIN POST SITE LOCATION MAP

/FORT/MAIN/MAINSITE.DGN



LEGEND

Road (paved)
Building
Site
Lake
Marshy Area
Background Soil Boring/Monitor Well
Upgradient Surface Water and Sediment

0 800 1600
SCALE IN FEET

95P-3194
6/23/94

Fort Monmouth, Main Post

FIGURE 4.2-2
MAIN POST BACKGROUND SAMPLE LOCATIONS

Site M-2

95P-4674

4.2.2 Landfill 2 (M-2)

4.2.2.1 Site Location

Landfill 2 (M-2) is located in the southwestern corner of the Main Post, on the south bank of Mill Creek (Figures 4.2-1 and 4.2-3). The approximate area of Landfill 2 is 280,400 ft^2 (6.5 acres).

4.2.2.2 Site History

According to the Installation Assessment (IA) (USATHAMA, 1980), Landfill 2 was in use between 1964 and 1968. A review of aerial photographs suggests that the landfill was still in use in 1969. The 1969 aerial photograph shows that the western three-quarters of the site is mostly bare ground with abundant wheel tracks; a 50- by 300-ft area in the center of this western area is covered with small piles of debris; vegetation is visible between some of the piles, suggesting that the piles had been there for some time. The eastern quarter of the site is vegetated; a small square building and a steel storage igloo were located near the entrance to the landfill. At present, the Landfill 2 area is used for storage of wood chips.

Materials generally found in Main Post landfills include unwashed pesticide/herbicide cans, batteries, fluorescent tubes, electronic components, garbage, asbestos wrappings from pipes, soot and boiler scale, sludge from sanitary treatment plants (STPs), small quantities of outdated drugs, outdated photographic chemicals in glass bottles, building rubble [including asbestos-containing materials (ACM)], incinerator ash, sand from oil spill cleanups, and other debris (IA). According to the IA, specific wastes known to have been put in Landfill 2 include oil in cans, oil burner filters (with approximately 0.5 liter of oil in each), and soot. The banks along Mill Creek near the west end of Landfill 2 were reportedly covered with building rubble (concrete, cinder blocks, etc.) to stabilize the bank. Metal and concrete protrude from the banks of Mill Creek.

As part of a New Jersey Pollutant Discharge Elimination System (NJPDES) permit (permit No. 0057274), surface-water samples have been taken at two locations in Mill Creek since February 1986. The results are summarized in the recent report (WESTON, 1993). Two VOCs (tetrachloroethene and trichloroethene) were detected in concentrations above the NJDEP surface-water criteria.

4.2.2.3 Sampling Effort

To identify the source of the halogenated hydrocarbons (HHCs) detected in surface-water samples collected from a previous investigation (WESTON, 1993), two new surface-water samples (M2SW-1 and M2SW-2) were collected (Figures 4.2-2 and 4.2-3). In addition, three shallow monitor wells (MW-1, MW-2, and MW-3) were installed. Monitor well locations (MW-1 through MW-3) and surface-water locations are presented in Figure 4.2-3. Tidal water-level monitoring was conducted for a minimum of 72 hours in the three monitor wells and at stilling well-1 and stilling well-2 prior to the collection of analytical samples. Two rounds of groundwater samples and one round of surface-water samples were analyzed for TCL +30 parameters (which include VOCs, SVOCs, pesticides, and PCBs), TAL metals, and cyanide.

4.2.2.4 Hydrogeologic Interpretation

Lithologic logs from MW-2 and MW-3 indicate that the lithology consists of a thin soil cover (0.2 ft) underlain by fill material. The components of the filled materials observed in both borings consist of coal and wood fragments, roof shingles, paper, and miscellaneous debris. Natural quartz sand, silt, and clays were intermixed with the manmade materials. Monitor well MW-1, located upgradient of the landfill boundary, indicates a lithology consisting primarily of silty medium-fine-grained sand that overlies a fine-medium-grained sandy silt.

Groundwater saturation was observed at approximately 8 ft bgs at all of the well locations. The three monitor wells were screened across the water table, with total depths of 23, 18, and 16 feet bgs in MW-1, MW-2, and MW-3, respectively. Water-level elevation data, measured on 6 March 1995, indicate that local groundwater flow is north toward Mill Creek (Figure 4.2-4). Based on groundwater elevation measurements, monitor wells MW-2 and MW-3 are downgradient of the M-2 area.

4.2.2.5 Groundwater Sampling Results

Monitor wells at site M-2 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results in groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-3 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP Groundwater Quality Criteria (GWQC), and then compares the results to the subsequent site-specific maximum background and/or Monmouth County background concentrations, where appropriate. Figure 4.2-5 presents the locations and averaged concentrations of compounds detected above both the NJDEP GWQC and the background concentrations established for the Main Post.

VOCs

Chlorobenzene was the only VOC detected in site M-2 groundwater (Figure 4.2-5). However, chlorobenzene was detected in concentrations exceeding the NJDEP GWQC from both sampling rounds in MW-2 and MW-3. Chlorobenzene was not detected in the February sampling round in MW-1, but was detected in the March sampling round in exceedance of the NJDEP GWQC.

SVOCs

SVOCs were not detected in site monitor wells above laboratory quantitation limits from either sampling round.

Pesticides/PCBs

Pesticides/PCBs were not detected in site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-3, of the 20 metals detected in site groundwater, only 5 (aluminum, arsenic, iron, manganese, and lead) were found in concentrations exceeding the NJDEP GWQC.

Table 4.2-3
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected Compounds in Groundwater - Site M-2

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATIONS (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE MW1 2/15/95, 3/8/95 (avg.)	MW2 2/15/95, 3/8/95 (avg.)	MW3 2/15/95, 3/8/95 (avg.)
VOC's (µg/L)						
Chlorobenzene	2.7	4	ND	**17.5**	**29**	**10**
SVOCs (µg/L)						
1,4-Dichlorobenzene	4.8	75	ND	ND	3J	ND
4-Methylphenol	12.9	NLE	ND	ND	4J	ND
Naphthalene	8.4	NLE	ND	ND	3J	ND
2-Methylnaphthalene	8.7	NLE	ND	ND	2J	ND
METALS TOTAL (µg/L)						
Aluminum	24	200	121000	**5355 R**	**2061.5**	**1616.5**
Arsenic	1.9	8*	89.3	**8.95**	4.325	3.4
Barium	1.7	2000	699	135	440.5	105.55
Beryllium	0.9	20*	7[1]	0.775	ND	ND
Calcium	10.4	NLE	45400	14150	89350	64550
Cadmium	2.8	4	9.5	ND	2.7	ND
Cobalt	2.3	NLE	18.3	6.75	3.85	2.5
Chromium	2.9	100	191	66 R	22.5	15.25
Copper	1.9	1000	730[1]	5.3	6.575	5.85
Iron	6.4	300	431000	**15900 R**	**61250**	**20450**
Mercury	0.2	2	0.26	ND	0.25	0.195
Potassium	685	NLE	137000	7195	12000	11150
Magnesium	18.3	NLE	62700	8315	11400	5570
Manganese	1.8	50	480[1]	**78.55**	**286.5**	**483.5**
Sodium	30.5	50000	197000[1]	13100	10390	9170
Nickel	10.8	100	187	19.8	ND	ND
Lead	1.1	10*	22.7	4.4	**11.55**	**14.8**
Selenium	1.5	50	29.6	1.9	ND	ND
Vanadium	2.3	NLE	108	21.25	13.65	9.7
Zinc	3.8	5000	233	472	47.35	79.3

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL -Practical Quantitation Limit was used as the NJDEP groundwater quality criteria
NLE - No Level Established
ND - Indicates that the compound was not detected at the noted quantification limit
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
[1] - Monmouth County maximum background concentration.
R - Data rejected, URS the Data Validator

However, all five metals, with the exception of iron in MW-2 and manganese in MW-3, were found in concentrations below those determined for both site-specific and Monmouth County background at the Main Post. Although iron was found in samples collected from MW-2 in concentrations greater than the range established in the Monmouth County study, the concentrations were well below the site-specific maximum background concentration established at Main Post. Manganese was found in MW-3 in a concentration only slightly greater than the site-specific and Monmouth County background concentrations. As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern.

Cyanide

Cyanide was not detected in site monitor wells from either sampling round.

4.2.2.6 Surface-Water Sampling Results

Figure 4.2-6 presents the Main Post surface-water and sediment sampling locations. Surface-water samples were collected from two locations at M-2: M2SW-1 and M2SW-2 (Figures 4.2-3 and 4.2-6). M2SW-1 is upgradient of M2SW-2. Both samples were determined to be freshwater, based on conductivity data, salinity data, and field observations. Total (unfiltered) and soluble (filtered) concentrations were compared to NJDEP freshwater criteria and background and are presented in Table 4.2-4.

VOCs

Two VOCs (tetrachloroethene and trichloroethene) were found in concentrations in the unfiltered samples greater than the NJDEP freshwater criteria and background at locations SW-1 and SW-2. Figure 4.2-5 presents the locations of the compounds detected above the established criteria and maximum background.

Table 4.2-4
Fort Monmouth - Main Post
Summary of Detected Compounds in Site Surface Water
Total and Soluble - Site M-2

COMPOUND	METHOD DETECTION LIMIT	NJDEP SURFACE WATER CRITERIA[a] FRESH WATER	MAXIMUM BACKGROUND CONCENTRATION (TOTAL)	MAXIMUM BACKGROUND CONCENTRATION (SOLUBLE)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE - 12/1/1994 M2 (Total) SW-1	M2 (Total) SW-2	M2 (Soluble) SW-1	M2 (Soluble) SW-2
VOC's (µg/L)								
1,2-Dichloroethene (total)	4.4	592 (h)	ND	ND	3 J	2 J	NA	NA
Tetrachloroethene (PCE)	4.0	0.388 (hc)	ND	ND	**5 J**	**5 J**	NA	NA
Trichloroethene[1]	2.0	1.09 (hc)	ND	ND	**2 J**	**2 J**	NA	NA
SVOCs (µg/L)								
bis-(2-Ethylhexyl)phthalate	9.7	1.76 (hc)	ND	ND	ND	**4 J**	NA	NA
METALS TOTAL (µg/L)								
Aluminum	26.7	NLE	748	ND	258	263	ND	ND
Barium	2.1	2000 (h)	44.7	39.4	42.7	47	38.2	41.8
Calcium	12	NLE	31600	30900	18000	19400	17700	19000
Cobalt	2.4	NLE	8.1	4.1	4.5	4.8	4.1	ND
Copper	2.4	NLE	3.2	4	3.1	2.9	4.2	4.9
Iron	4.7	NLE	6210	405	2760	3020	493	681
Lead	1.6	5 (h)	10	ND	3.1	2.3	**7.6**	ND
Magnesium	38.2	NLE	5440	5120	2930	2860	2860	3070
Manganese	2.0	NLE	113	98.6	89.9	97.6	86.1	92.8
Nickel	12.8	516 (h)	22.9	16.1	ND	ND	14.7	ND
Potassium	821	NLE	5060	4280	2840	2860	2860	3180
Sodium	15.4	NLE	26700	26200	25400	27500	25200	26900
Zinc	2.8	NLE	35.1	23.8	29.1	19.4	19.4	21.1

[1] - Same compound as listed by NJDEP tetrachloroethylene.
[a] - NJDEP Surface Water Quality Standards (1993).
h -Non carcinogen effect-based human health criteria as a 30 day average.
hc - Carcinogen effect-based human health criteria as 70 year average.
ND - Indicates that the compound was not detected at the noted quantification limit.
J - Indicates that the concentration value was estimated due to detection at or near the quantification limit.
NLE - No Level Established.
NA - Not Analyzed.
Compounds detected above NJDEP Surface Water Criteria are noted by bold numbers.

SVOCs

Bis(2-ethylhexyl) phthalate was the only SVOC detected in site M-2 surface water. In addition, the compound was found in a concentration greater than the NJDEP freshwater criteria and background at location SW-2. Bis(2-ethylhexyl) phthalate is a common laboratory contaminant and can be attributed to sampling or laboratory contamination.

Pesticides/PCBs

Pesticides/PCBs were analyzed for but were not detected in site surface water.

Metals

Of the 13 metals detected in site surface water, only one (lead) was found in a concentration greater than the NJDEP freshwater criteria and maximum background. The compound exceeded the criteria in the filtered sample, but was not detected above criteria in the unfiltered sample (Figure 4.2-5).

4.2.2.7 Tidal Monitoring

Appendix E presents hydrographs of the comparisons between the monitor wells (MW-1 though MW-3) and the stilling wells (1 and 2) during the tidal monitoring tests.

Tidal fluctuations in Mill Creek and in site monitor wells were monitored at upstream tidal monitoring station (stilling well-2), downstream tidal monitoring station (stilling well-1), and site monitor wells (MW-1 through MW-3) (Figure 4.2-3). (Hydrographs are presented in Appendix E.) The tidal monitoring stations are approximately 2,400 ft apart. Changes in creek levels at the upstream location were compared to changes in water levels measured at well MW-2, and changes in creek levels at the downstream location were compared to changes in water levels measured at well MW-3. Wells MW-2 and MW-3 are approximately 150 feet from the creek.

Tidal fluctuations in the creek were also compared to water levels measured at well MW-1, approximately 1,100 feet from the creek. Monitor wells were screened below sea level.

The tidal monitoring data collected at Landfill 2 (M-2) suggest that the stream is influenced by incoming tides. Peaks representing the high tides at stilling well-1 and stilling well-2 are observed, but low tide peaks are not apparent because the elevation of the stream bed at Landfill 2 (M-2) is higher than the elevation of sea level at low tide. The streambed elevation is 1.37 feet above mean sea level (ft msl) at stilling well-1 and 1.28 ft msl at stilling well-2. The maximum change in creek stage at Landfill 2 (M-2) was 1.2 feet, and the maximum change in water level in the monitor wells was 0.2 foot.

Data collected from well MW-1 were useful as baseline data during the tidal monitoring study at Landfill 2 (M-2). The data suggest that there is no apparent tidal effect on the water levels at well MW-1 and creek levels measured at stilling well-1 or -2. Well MW-1 is approximately 1,100 feet from the creek and is too distant to be influenced by changing creek stage. Water levels in the water-bearing unit and creek levels declined by about 0.1 foot over the course of the monitoring study in March 1995.

The water levels recorded at MW-2 and MW-3 appear to be tidally influenced (see Appendix E). Water levels measured at both wells respond almost instantaneously to rising creek levels. The peak in water levels measured at both wells occurs approximately 20 to 40 minutes after the peak in creek stage. At both monitoring locations (stilling well-1, MW-2 and stilling well-2, MW-3) water-level peaks at each well are approximately 15% to 20% of the tidal peak in creek levels.

4.2.2.7.1 Conductivity and Salinity Results

Conductivity and salinity were measured in surface-water and groundwater samples at Landfill 2 (M-2) in January and March 1995, and are presented in tables in Appendix E. Measurements were collected at low tide and high tide each month to evaluate the extent of saltwater intrusion at each site. High conductivity and salinity readings indicate salty or brackish water, whereas low readings indicate freshwater.

The data indicate the presence of freshwater in the creek at Landfill 2 (M-2). Specific conductance measured in the creek at Landfill 2 (M-2) is consistently less than 240 μmhos. In addition, salinity measured in the creek at Landfill 2 (M-2) is consistently less than 0.2 parts per thousand (ppth). The results are consistent with the higher streambed elevation at Landfill 2 (M-2) when compared to Landfill 8 (M-8) and Landfills 12 and 14 (M-12, M-14).

Groundwater sampled from monitor wells MW-1 and MW-3 generally exhibits low conductivity and zero salinity, except well MW-2 at Landfill 2 (M-2). The moderate to high specific conductance at well MW-2 at Landfill 2 (M-2) is unexplained, but is likely caused by saltwater intrusion from Parkers Creek.

4.2.2.8 Recommendations

The surface-water sampling results indicate that two VOCs were detected at the two surface-water locations at concentrations greater than NJDEP surface-water criteria, and above maximum background concentrations. In addition, soluble lead was detected at a concentration greater than NJDEP criteria and the maximum background concentrations. Because the site formerly had an NJPDES permit (permit No. 0057274), surface water has been sampled since 1986. The results from the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

Chlorobenzene was detected in the groundwater at concentrations exceeding the NJDEP GWQC and background in both downgradient monitor wells from both sampling rounds and in the upgradient well during one sampling round.

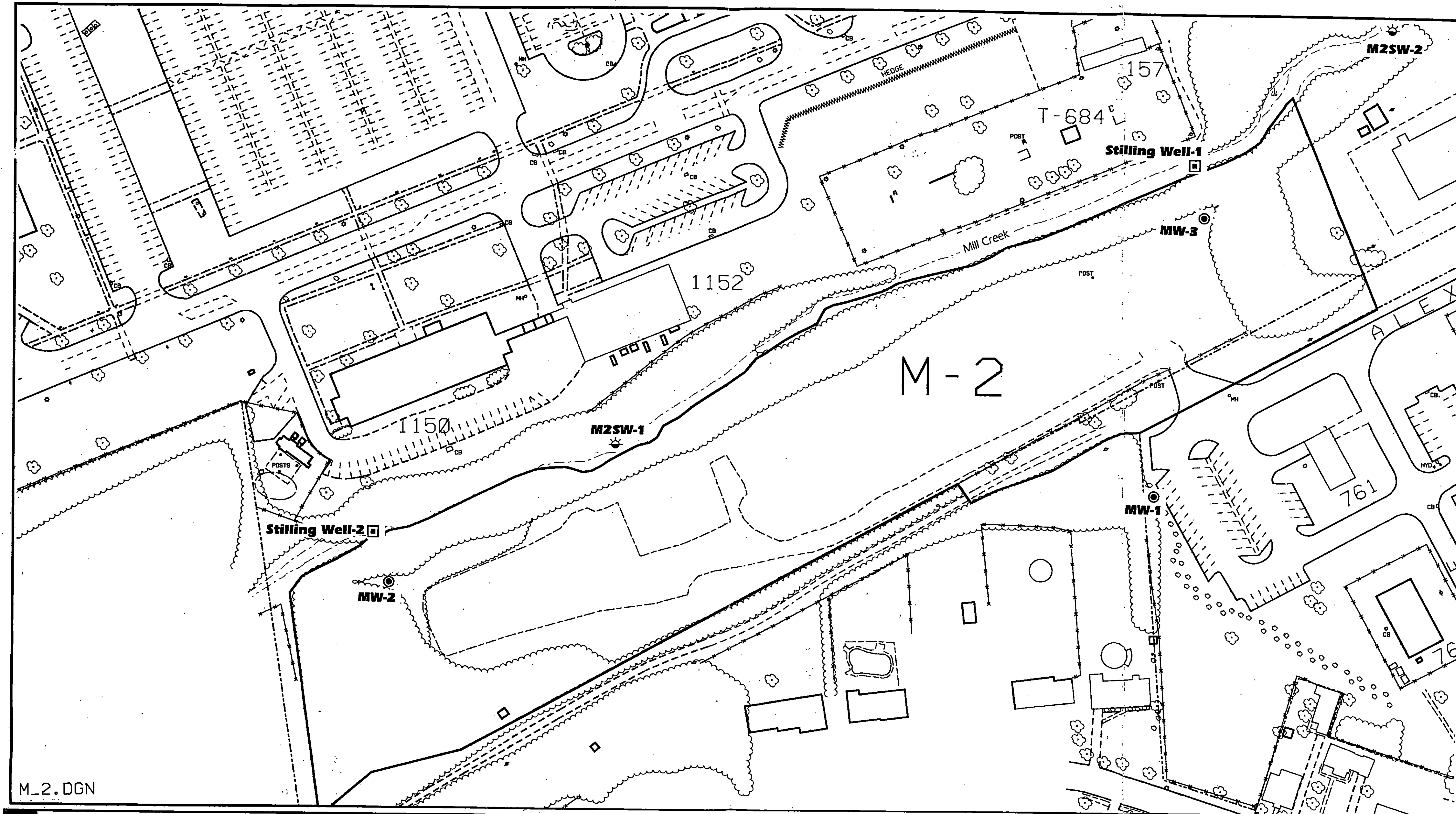
The results of the tidal monitoring indicate that there is no apparent relationship between the changing creek levels and the water levels in upgradient monitor well MW-1; however, a direct relationship was observed between changing creek levels and the water levels in downgradient monitor wells MW-2 and MW-3. Conductivity and salinity results indicate the presence of freshwater in the creek at site M-2. Freshwater was indicated at monitor wells MW-1 and

MW-3. A moderate to high specific conductance was measured at monitor well MW-2, which is unexplained.

Although groundwater sample results at site M-2 exceeded NJDEP criteria for one VOC, and surface-water results were slightly exceeded by two VOCs, immediate remedial action is not required for several reasons. Immediate remedial action is usually based on an immediate threat to human health. At this site, shallow groundwater flows toward and discharges to Mill Creek, as indicated by water-level measurements in site monitor wells. Also, there are no known uses of groundwater at or downgradient of the site. Although there is slight VOC contamination in Mill Creek, there is no use of this water for human consumption. In fact, Mill Creek becomes saline immediately downgradient of site M-2. Therefore, the groundwater and surface waters are not used for drinking water.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future. Although downgradient surface-water samples were not taken during this round, previous sampling at site M-8 indicated that NJDEP surface-water criteria were not exceeded for VOCs. Therefore, the only portion of Mill Creek for which NJDEP surface-water criteria are exceeded is the portion between sites M-2 and M-8. All of this portion is on Fort Monmouth property and, therefore, access to it is restricted.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, the Fort Monmouth Directorate of Public Works (DPW) proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells, and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.



LEGEND

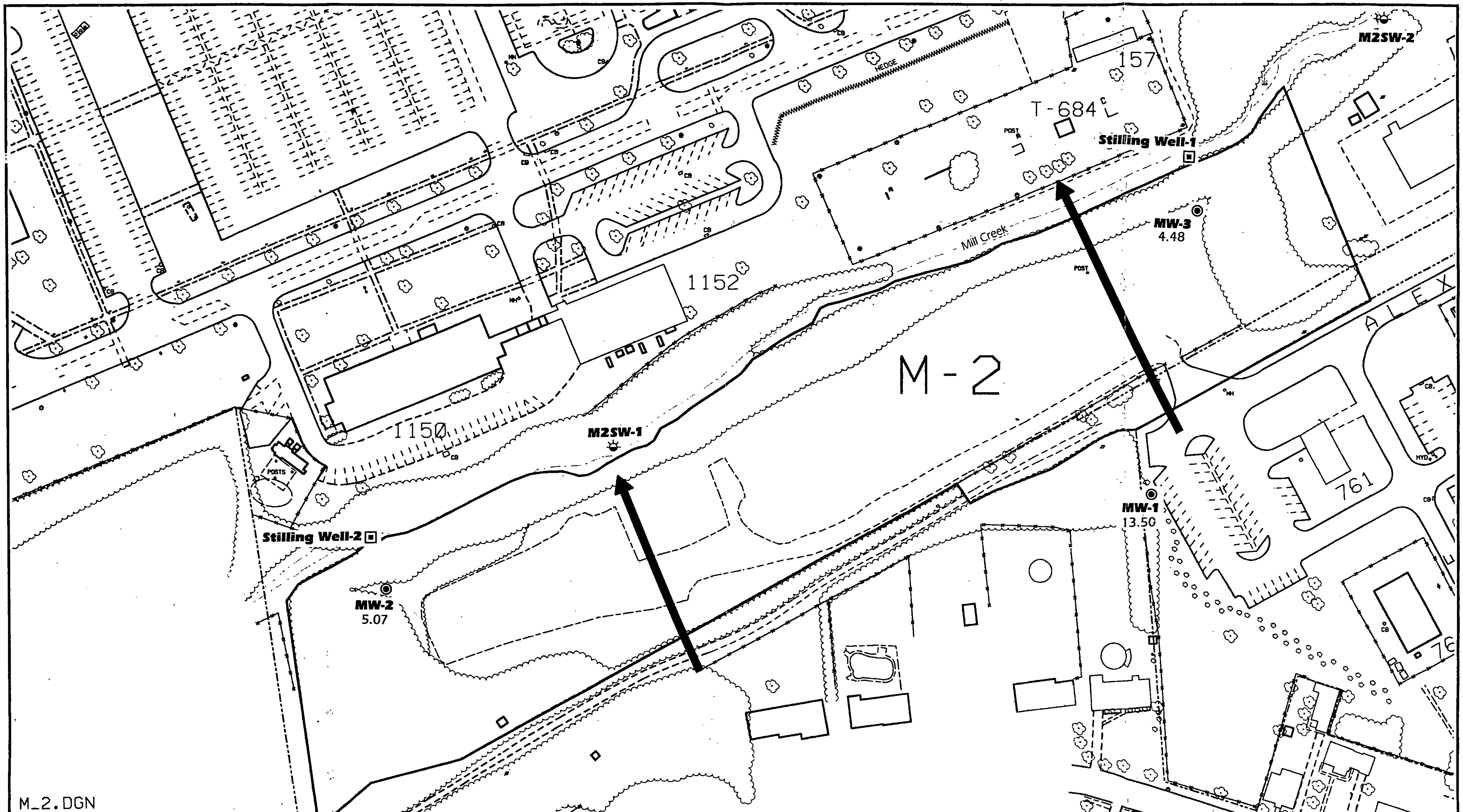
- Monitor Well
- Existing Surface Water Sampling Location
- Stilling Well
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary

0 100 200
SCALE IN FEET

95P-3183
6/23/95

Fort Monmouth, Main Post

FIGURE 4.2-3
LANDFILL 2 (M-2)
SAMPLING LOCATIONS



LEGEND

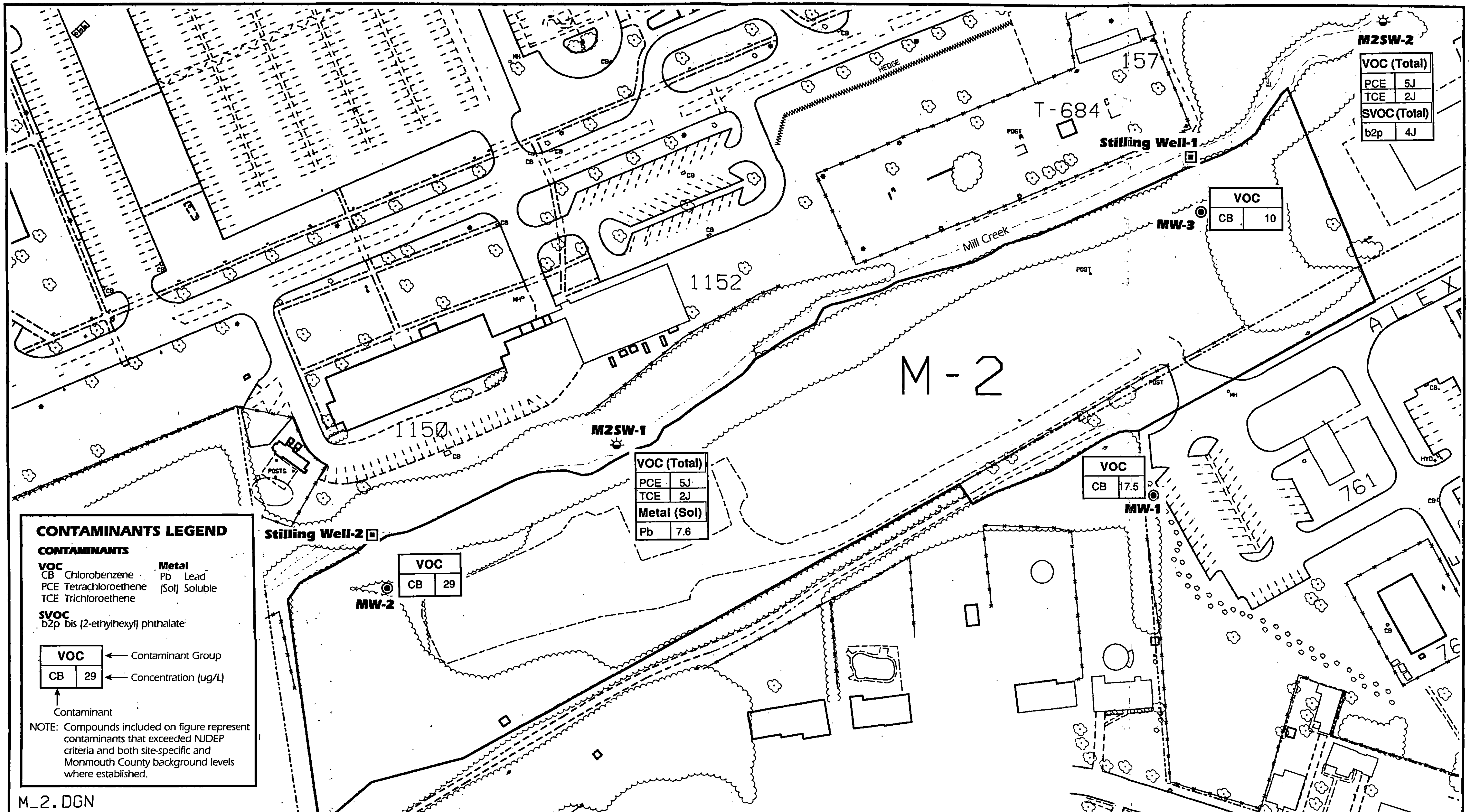
MW-07 Monitor Well; 5.07 ← Groundwater Elevation (FT/MSL)	Stilling Well	Wooded Area	Site
Existing Surface Water Sampling Location	Road (paved)	Tree/Bush	Brook/Creek
Groundwater Flow Direction	Road/Trails (unpaved)	Light Pole	Base Boundary
	Fence	Utility Pole	Marshy Area
	Building		Approximate Boundary

0 100 200
SCALE IN FEET

95P-3183 5/95

Fort Monmouth, Main Post

FIGURE 4.2-4
LANDFILL 2 (M-2)
APPROXIMATE GROUNDWATER FLOW DIRECTIONS
(Groundwater Elevations Recorded from March 1995 Sampling Round)



LEGEND

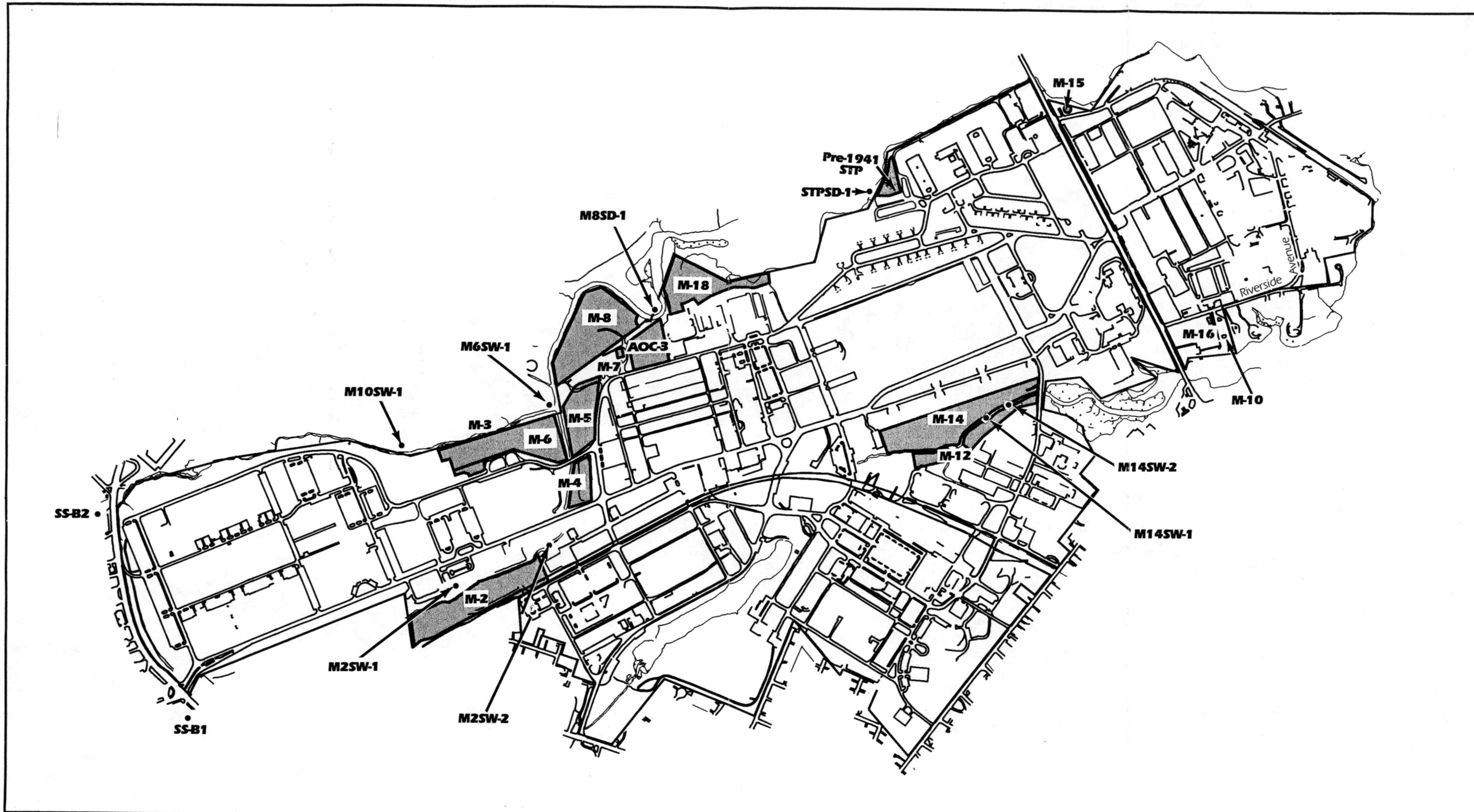
Monitor Well
Existing Surface Water Sampling Location
Stilling Well
Road (paved)
Road/Trails (unpaved)
Fence
Building
Wooded Area
Tree/Bush
Light Pole
Utility Pole
Site
Brook/Creek
Base Boundary
Marshy Area
Approximate Boundary

0 100 200
SCALE IN FEET

95P-3183 6/23/95

Fort Monmouth, Main Post

FIGURE 4.2-5
DISTRIBUTION OF CONTAMINANTS IN SITE GROUNDWATER AND SURFACE WATER SAMPLES



LEGEND

Road (paved)

Building

Site

Lake

Marshy Area

● Surface Water and/or Sediment Location
SW = Surface Water
SD = Sediment

Note: SS-B1 and SS-B2 are background locations. Samples for both surface water and sediment were collected.

N

0 800 1600

SCALE IN FEET

95P-3194

9/28/95

Fort Monmouth, Main Post

FIGURE 4.2-6
MAIN POST SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS

Site M-3

95P-4674

4.2.3 Landfill 3 (M-3)

4.2.3.1 Site Location

Landfill 3 (M-3) is located between North Drive and Lafetra Creek in the west-central part of the Main Post. The actual boundaries of the landfill are not clear, but have been approximated in Figure 4.2-7. The approximate area of site M-3 is 257,890 ft^2 (5.9 acres). Burning Area M-6, which is discussed later, is located within Landfill 3.

4.2.3.2 Site History

According to the IA, Landfill 3 was in use between 1959 and 1964, and was used for general purpose disposal of domestic and industrial wastes. The 1969 aerial photograph shows that, with the exception of a few areas with vehicle tracks, this area was covered with vegetation. At present, the surface is hummocky and covered with grass.

Landfill 3 (M-3) most likely contained materials similar to those generally found in other Main Post landfills. According to long-term Fort Monmouth employees, this landfill also contains wood and coal ash from furnaces and boilers.

As part of an NJPDES permit (permit No. 0057274), surface-water samples have been taken at two locations in Lafetra Creek since February 1986. The results are summarized in the recent report (WESTON, 1993). One VOC (tetrachloroethene) was detected in concentrations above the NJDEP surface-water criteria.

4.2.3.3 Sampling Effort

Surface geophysics surveys were conducted to confirm the location and investigate the extent of the former landfill. First, a magnetometer survey, including both vertical magnetic gradient and total magnetic field, was conducted. After completion of the magnetometer survey, GPR was used in accessible areas to provide additional definition of landfill boundaries.

The source of the HHCs detected in surface-water samples from a previous investigation could not be determined (WESTON, 1993). Therefore, surface-water locations M6SW-1 and M10SW-1 on Lafetra Creek were sampled (Figure 4.2-6). In addition, three monitor well locations (MW-4 through MW-6), as shown in Figure 4.2-7, were installed. The location of monitor well M-6 was slightly adjusted based on the geophysical interpretations. The well was repositioned to monitor groundwater quality downgradient of the exposed drum area. The monitor wells were sampled twice and surface-water locations were sampled once for TCL +30 parameters, TAL metals, and cyanide.

4.2.3.4 Geophysical Results

The magnetometer survey performed at M-3 indicated buried ferrous material, as depicted in Figures 4.2-8 and 4.2-9, within the suspected boundary of the landfill. The total magnetic field contour plot (Figure 4.2-8) shows background readings of approximately 54,000 nT and is represented by the green contour interval. High and low excursions from this value, represented by the violet and blue contour intervals, respectively, reveal anomalous magnetic signatures indicative of buried ferrous objects. The boundary between the background and anomalous magnetic readings is interpreted as the landfill boundary. Cultural features along the north side of the site include buried and overhead power lines and a chainlink fence. These features limited the magnetic data acquisition and anomalous magnetic influences that could be seen on the magnetic gradient plot (shown in Figure 4.2-9). The northern edge of the plot shows these cultural anomalies as a "low" reading from background, and is represented by the blue contour interval.

The GPR survey performed at M-3 confirmed the potential landfill boundary and expanded the geophysical survey underneath the overhead power lines and up to the northern fenceline. The GPR system is not heavily influenced by these types of cultural features like magnetometer methods. A typical radar profile, such as along the 600E traverse, reveals "normal" horizontal reflectors, indicative of nonfill areas, from 100S to approximately 100N (Figure 4.2-9A). Continuing from 65N to 160N the radar waveform becomes very chaotic in nature. This chaotic waveform is typical of buried waste material.

Hyperbolic radar signatures, typical of buried drums, were observed in the vicinity of grid coordinate 160N/800E. This was confirmed visually by observing a partially exposed drum at the surface at approximately 160N/800E. As shown on the radar profile in Figure 4.2-9B, the hyperbolic waveforms are found within chaotic radar reflectors. With the exception of these hyperbolic radar signatures, the geophysical surveys indicate that the waste material is within the suspected landfill boundary. Monitor wells have been installed in appropriate locations to monitor groundwater quality upgradient and downgradient of the site.

4.2.3.5 Hydrogeologic Interpretation

Lithologic logs from MW-5 and MW-6 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by fill material. The components of the filled materials observed in both borings consisted of a black slag material with camera film, rebar, and paper debris. Natural quartz sand, gravel, silt, and clay were intermixed with the manmade materials. MW-4 is located upgradient of the fill locations and consists of tight olive-green silty fine-grained sand with a clay matrix.

Groundwater saturation was observed in the borehole during drilling activities between 8 and 10 ft bgs. Monitor wells were screened across the water table, and total depths varied from approximately 23, 16, and 15 ft bgs in MW-4, MW-5, and MW-6, respectively. Water-level elevation data measured on 6 March 1995, indicate that local groundwater flow is to the north in the direction of Lafetra Creek (Figure 4.2-10). Based on groundwater elevation measurements, monitor wells MW-5 and MW-6 are downgradient of the site M-3 area.

4.2.3.6 Groundwater Sampling Results

Monitor wells at site M-3 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-5 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to subsequent site-specific maximum background and/or Monmouth County background

Table 4.2-5
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected Compounds in Groundwater - Site M-3

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE		
				MW4 2/16/95, 3/8/95 (avg.)	MW5 2/16/95, 3/9/95 (avg.)	MW6 2/16/95, 3/9/95 (avg.)
VOC's (µg/L)						
Chlorobenzene	2.7	4	ND	ND	**5 J**	ND
Toluene	2.7	1000	ND	ND	4.5 J	4 J
SVOCs (µg/L)						
4-Methylphenol	12.9	NLE	ND	ND	4 J	ND
Naphthalene	8.4	NLE	ND	ND	3 J	ND
2-Methylnaphthalene	8.7	NLE	ND	ND	1.5 J	ND
Acenaphthene	6.0	400	ND	ND	2 J	ND
Fluorene	6.3	300	ND	ND	1.5 J	ND
Phenanthrene	5.0	NLE	ND	ND	3 J	ND
Anthracene	4.6	2000	ND	ND	3 J	ND
Pyrene	5.4	200	ND	ND	3 J	ND
bis-(2-Ethylhexyl)phthalate	9.7	30*	100B	ND	ND	4 J
Carbazol	4.4	NLE	ND	ND	3 J	ND
METALS TOTAL (µg/L)						
Aluminum	24.0	200	121000	**705**	**2494**	**474**
Arsenic	1.9	8*	89.3	1.425	2.625	ND
Barium	1.7	2000	699	47.4	584	124
Calcium	10.4	NLE	45400	33750	95600	122500
Cadmium	2.8	4	9.5	ND	2.825	ND
Cobalt	3.0	NLE	18.3	ND	2.075	ND
Chromium	2.9	100	191	9.05	20.1	7.75
Copper	1.9	1000	730[1]	2	22.7	ND
Iron	6.4	300	431000	**2965**	**89850**	**20500**
Mercury	0.2	2	0.26	ND	0.365	ND
Potassium	685	NLE	137000	7825	13300	10300
Magnesium	18.3	NLE	62700	4590	17950	28800
Manganese	1.8	50	480[1]	34.3	**1115**	**686**
Sodium	30.5	50000	197000[1]	13150	15800	34300
Nickel	10.8	100	187	4	ND	ND
Lead	1.6	10*	22.7	ND	**78.3**	**21.2**
Vanadium	2.3	NLE	108	3.3	12	3.625
Zinc	3.8	5000	233	17.85	234.05	62.05

Compounds exceding NJDEP groundwater quality criteria are noted by bold numbers
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit was used as the NJDEP groundwater quality criteria.
NLE - No Level Established
ND - Indicates that the compound was not detected at the noted quantification limit
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
[1] - Monmouth County maximum background concentration.

concentrations, where appropriate. Figure 4.2-11 presents the locations and average concentrations of compounds detected above the NJDEP GWQC, and above both site-specific and Monmouth County background concentrations established at the Main Post.

VOCs

Although chlorobenzene was detected below the laboratory quantitation limit but above the method detection limit in a sample collected at MW-5 from the March sampling round, the value slightly exceeds the NJDEP GWQC. As discussed in Subsection 4.1, the analytical results that are reported with a "J" are estimated values that are below the quantitation limit but above the method detection limit.

SVOCs

SVOCs were not detected above laboratory quantitation limits in the site monitor wells from either sampling round. The levels of compounds that could be estimated (below the laboratory quantitation limit) were well below the NJDEP GWQC, where established.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-5, of the 18 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and lead) were found in concentrations exceeding the NJDEP GWQC. However, aluminum and iron were found in concentrations below those determined for site-specific and/or Monmouth County background. Manganese was detected (at MW-5 and MW-6) in concentrations greater than the site-specific and Monmouth County background levels. In addition, lead was found in concentrations greater than those determined for maximum background in MW-5 (Figure 4.2-11), but below background in MW-6. However, lead was not detected in the filtered sample above NJDEP GWQC. As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern. The relatively high sodium concentrations in groundwater samples from site M-3 are from saltwater intrusion from the Parkers Creek estuary via Lafetra Creek.

Cyanide

Cyanide was analyzed for but not detected in the site monitor wells from either sampling round.

4.2.3.7 Surface-Water Sampling Results

Two surface-water samples were collected at M-3: M10SW-1 and M6SW-1 (Figures 4.2-6 and 4.2-7). M10SW-1 is upgradient of M-3 and M6SW-1 is downgradient. Both samples were determined to be saltwater, based on conductivity results and field observations. Total (unfiltered) and soluble (filtered) concentrations were compared to NJDEP saltwater criteria and background and are presented in Table 4.2-6.

VOCs

VOCs were analyzed for but were not detected in site surface-water samples.

SVOCs

SVOCs were analyzed for but were not detected in site surface-water samples.

Pesticides/PCBs

Pesticides/PCBs were analyzed for but were not detected in site surface-water samples.

Table 4.2-6
Summary of Detected Compounds in Site Surface Water
Total and Soluble - Site M-3

COMPOUND	METHOD DETECTION LIMIT	NJDEP SURFACE WATER CRITERIA[a] SALINE WATER	MAXIMUM BACKGROUND CONCENTRATION (TOTAL)	MAXIMUM BACKGROUND CONCENTRATION (SOLUBLE)	ANALYTICAL RESULTS (µg/L) 12/1/94			
					MP6SW-1 (Total)	MP6SW-1 (Soluble)	M10SW-1 (Total)	M10SW-1 (Soluble)
METALS TOTAL (µg/L)								
Aluminum	26.7	NLE	748	ND	179	ND	69	ND
Barium	2.1	NLE	44.7	39.4	33.3	27.7	34.6	29.1
Calcium	12	NLE	31600	30900	32100	30400	30000	29400
Copper	2.4	NLE	32	4	ND	4.3	ND	3.9
Iron	4.7	NLE	6210	405	2940	465	2180	355
Lead	1.6	NLE	10	ND	4.8	ND	1.6	ND
Magnesium	38.2	NLE	5440	5120	9790	9030	5340	5160
Manganese	2.0	100 (h)	113	98.6	**102**	94.3	98.7	96.2
Potassium	821	NLE	5060	4280	6260	5840	4320	4280
Selenium	0.9	NLE	ND	ND	1.1	ND	ND	ND
Sodium	15.4	NLE	26700	26200	56500	52300	18200	17700
Zinc	2.8	NLE	35.1	23.8	12.2	7.8	16	7.9

[a] - NJDEP Surface Water Quality Standards (1993).
h -Non carcinogen effect-based human health criteria as a 30 day average.
ND - Indicates that the compound was not detected at the noted quantification limit.
NLE - No Level Established
Compounds dectected above NJDEP Surface Water Criteria are bolded.

Metals

As indicated in Table 4.2-6, of the 12 metals detected in site surface water, only one (manganese, unfiltered) was found in a concentration slightly exceeding the NJDEP surface-water criteria (saline) in sample MP6SW1. However, the concentration of manganese was detected below the maximum background levels established at the Main Post for total metals. In addition, manganese was found in a concentration below the established criteria and background in the filtered sample.

As presented in Table 4.2-6 (soluble), no soluble concentrations of contaminants detected in M6SW-1 surface-water were greater than NJDEP surface-water criteria.

None of the total or soluble concentrations of chemicals detected in M10SW-1 surface water exceeded NJDEP surface-water guidance (Table 4.2-6 total and soluble).

4.2.3.8 Recommendations

The geophysical surveys indicate that the extent of the identified waste material is within the suspected boundaries of the landfill and the monitor wells have been installed in appropriate locations to monitor shallow groundwater quality upgradient and downgradient of the site. In an isolated area of the site the GPR results indicated hyperbolic radar signatures typical of a buried drum or drums. A partially exposed drum was also observed at this location.

Groundwater quality results indicate that chlorobenzene was detected in one downgradient well below laboratory quantitation limits, but just above NJDEP GWQC and background from one sampling round. Lead was also detected at levels above NJDEP GWQC and background.

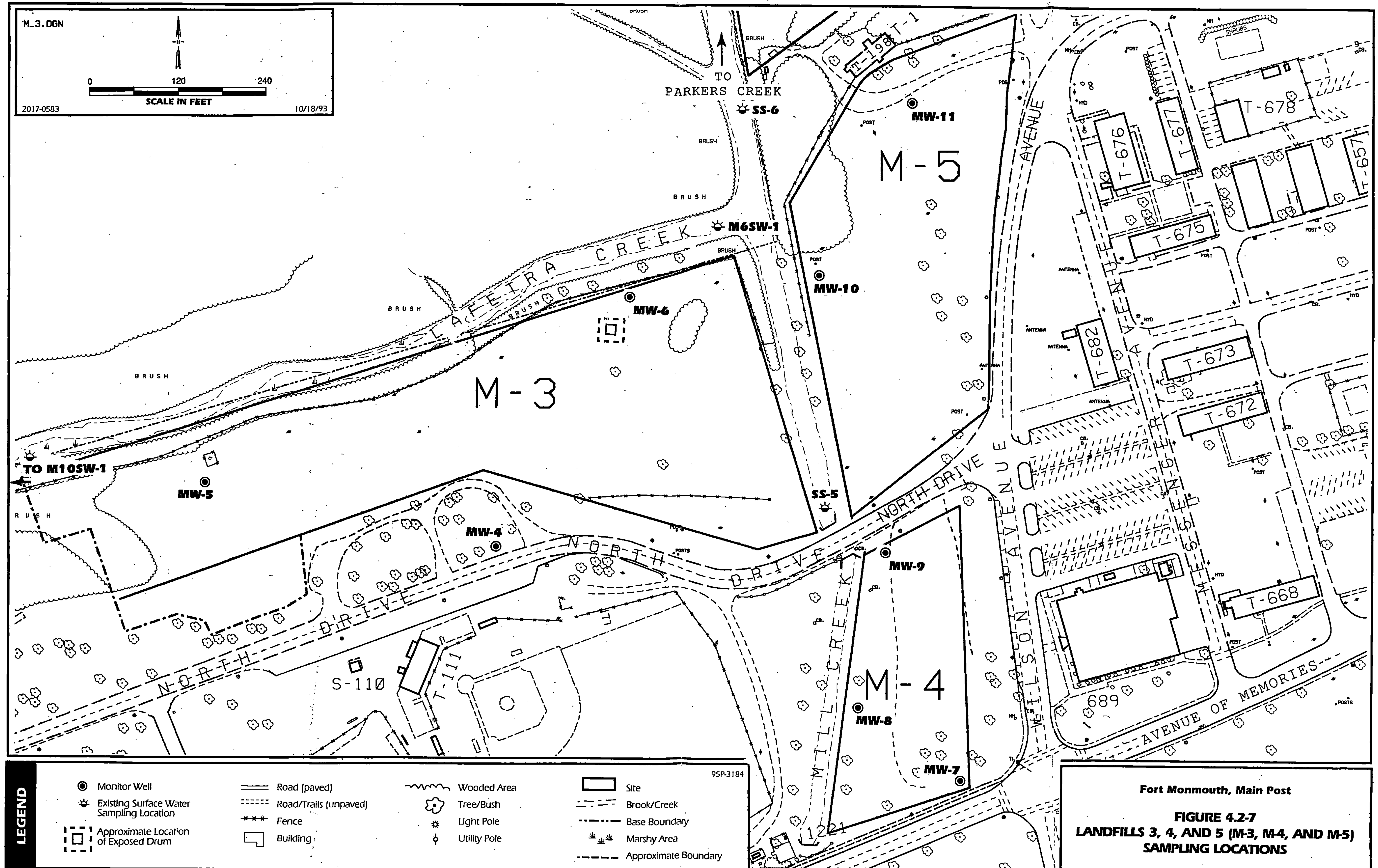
The surface-water quality results indicate that no organic or inorganic concentrations exceeded both NJDEP surface-water criteria and the maximum background concentration. Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. The results from the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

Although NJDEP groundwater criteria were exceeded for one VOC, immediate remedial action is not required for several reasons. First, the measured value for the VOC was below the quantitation limit and just slightly above the GWQC. In addition, the groundwater flows toward Lafetra Creek, and since the water table is higher than the creek bed and groundwater flow tends to follow surface topography, the shallow groundwater probably flows into Lafetra Creek. There are no uses of groundwater between the source and Lafetra Creek. Surface-water samples did not exceed NJDEP surface-water criteria. Therefore, there is no immediate threat to human health.

In addition, because surface-water sampling has been performed at this site since 1986, and the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

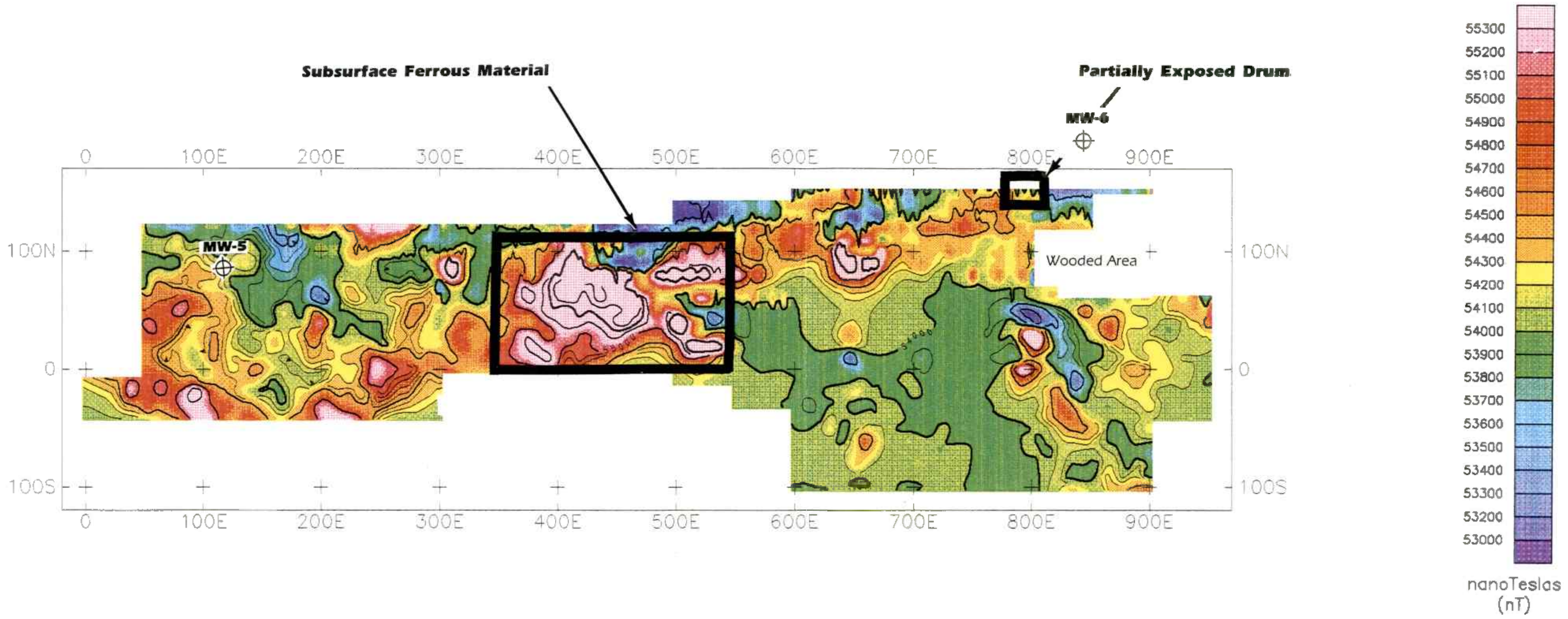
Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells, and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be the targeted for the monitoring program.

The partially exposed drum will be excavated. The area immediately around and under the drum will be investigated for additional drums. Any excavated drums will be examined to determine if hazardous materials were present or still exist. The drum and the excavation will be monitored with a photoionization detector (PID). NJDEP will be requested to send a representative to monitor the excavation. If there is no indication that the drum contained, or still contains, hazardous materials and if elevated readings are not observed on the PID, the excavation will be backfilled and no further action will be taken. If contamination is identified, additional sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993).



Fort Monmouth, Main Post

FIGURE 4.2-7
LANDFILLS 3, 4, AND 5 (M-3, M-4, AND M-5) SAMPLING LOCATIONS



LEGEND

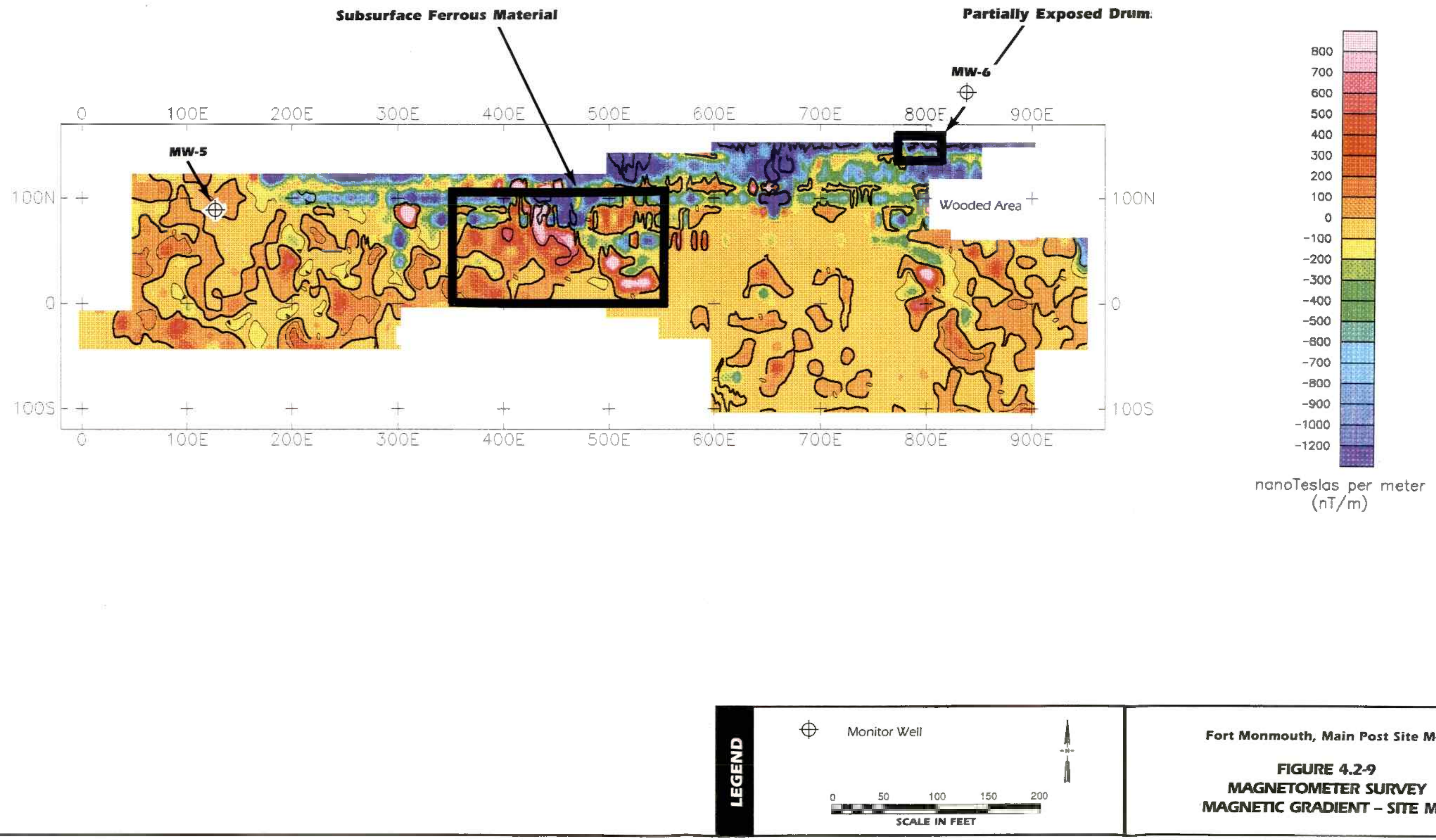
Monitor Well

0 50 100 150 200
SCALE IN FEET

Fort Monmouth, Main Post Site M-3

FIGURE 4.2-8
MAGNETOMETER SURVEY
TOTAL MAGNETIC FIELD – SITE M-3

95P-3233 6/26/95



95P-3234 6/27/95

Fort Monmouth, Main Post Site M-3

FIGURE 4.2-9
MAGNETOMETER SURVEY
MAGNETIC GRADIENT – SITE M-3

WESTON

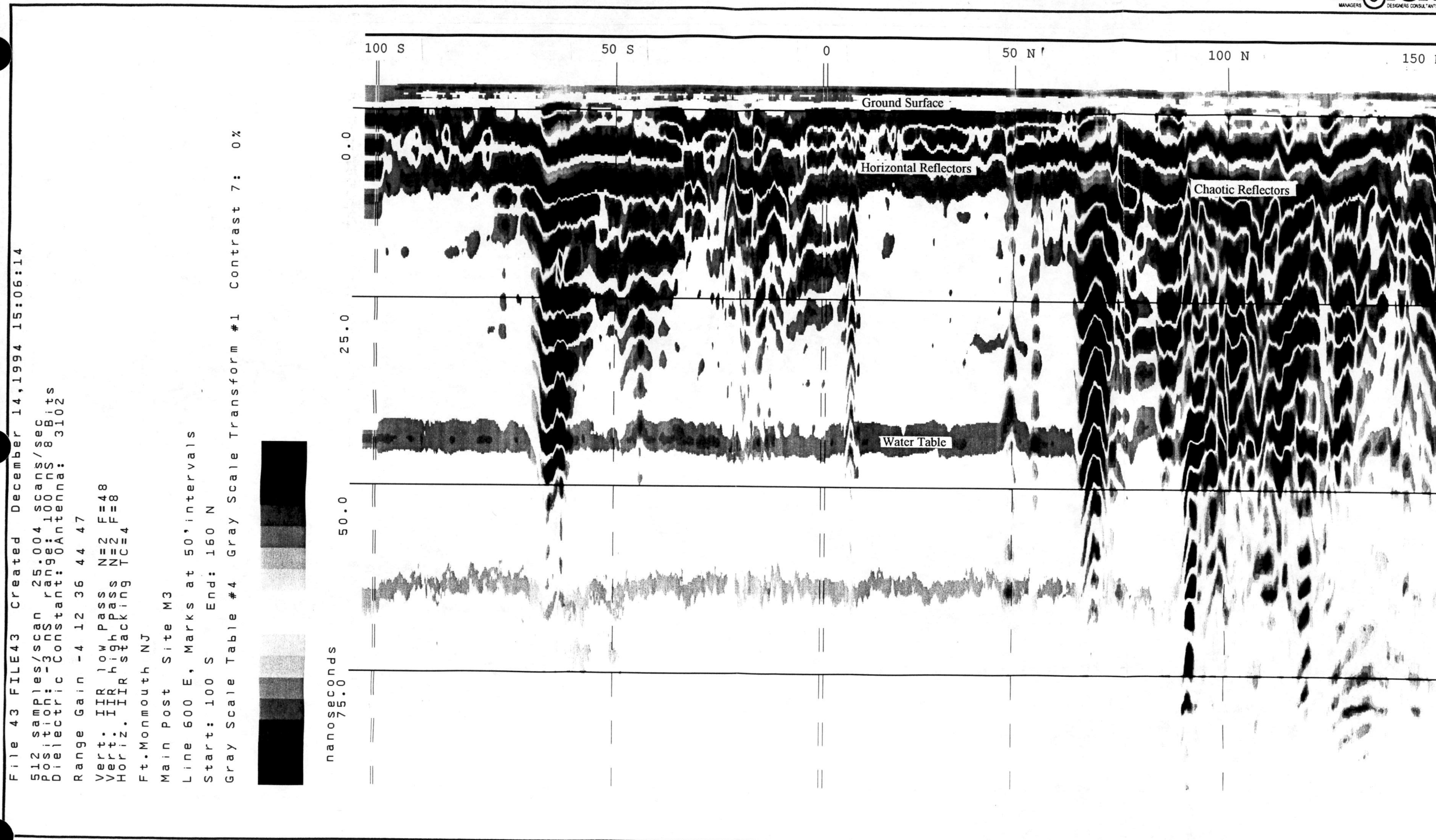


FIGURE 4.2-9A REPRESENTATIVE RADAR PROFILE DEPICTING LANDFILL BOUNDARY AT SITE M-3

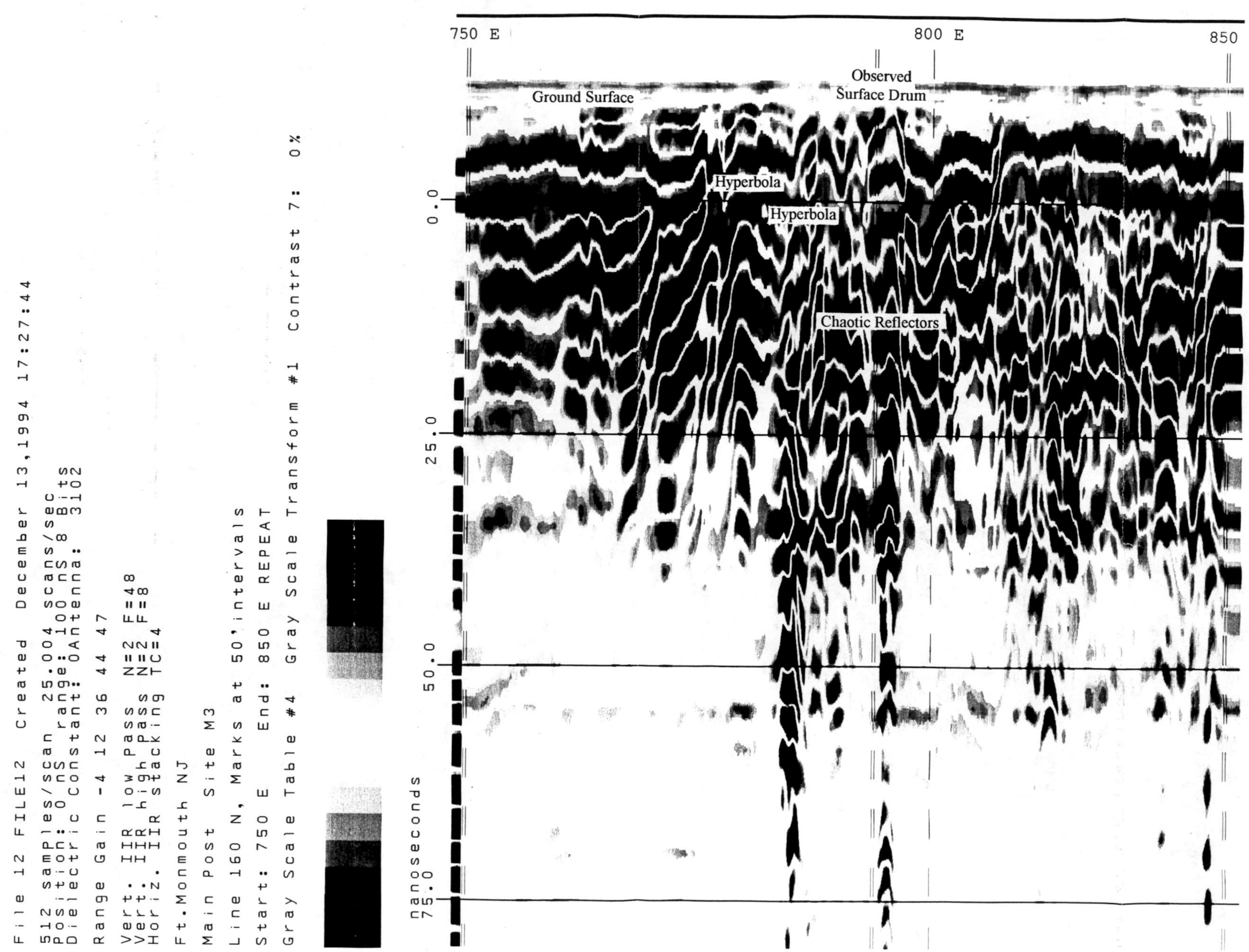
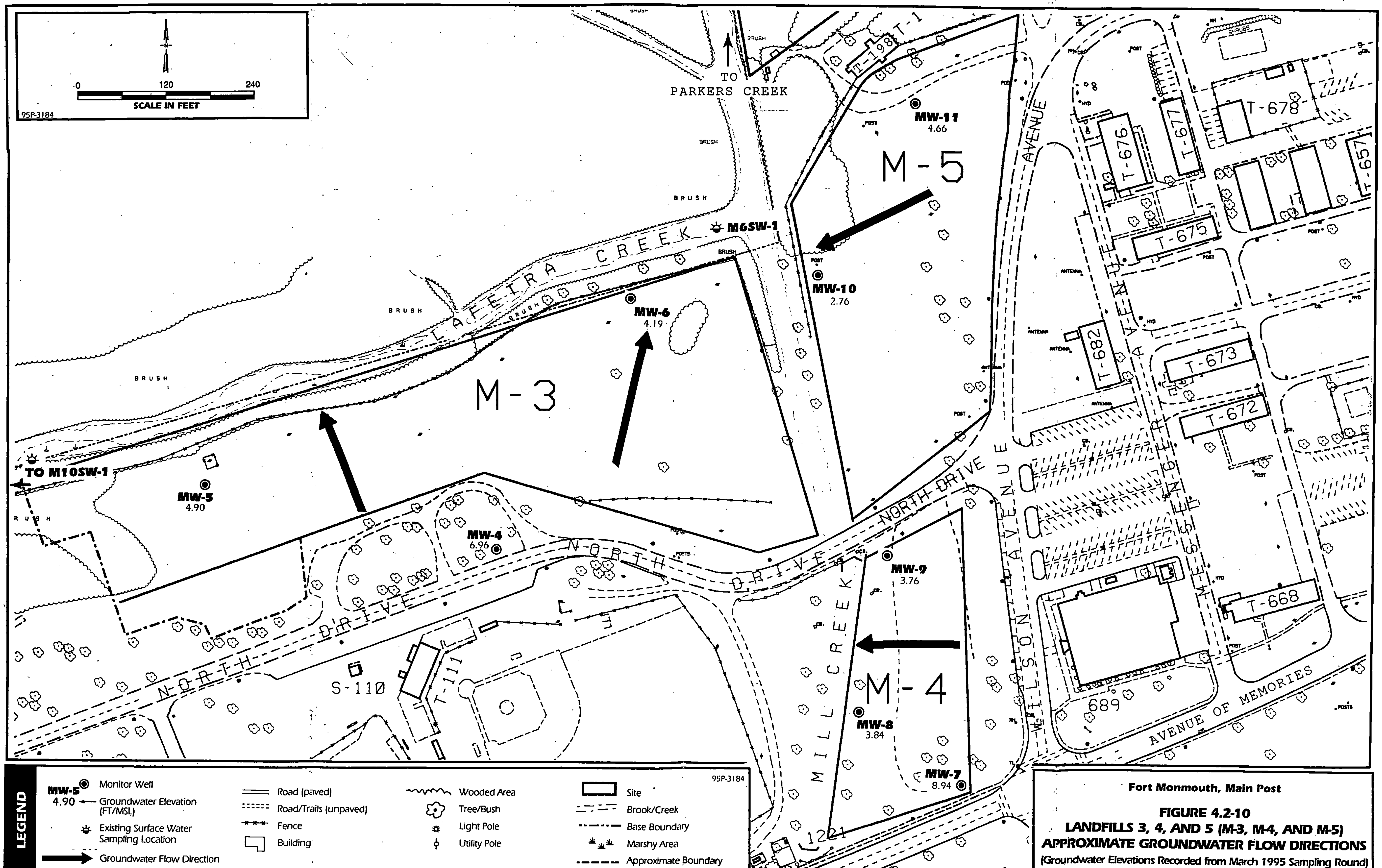
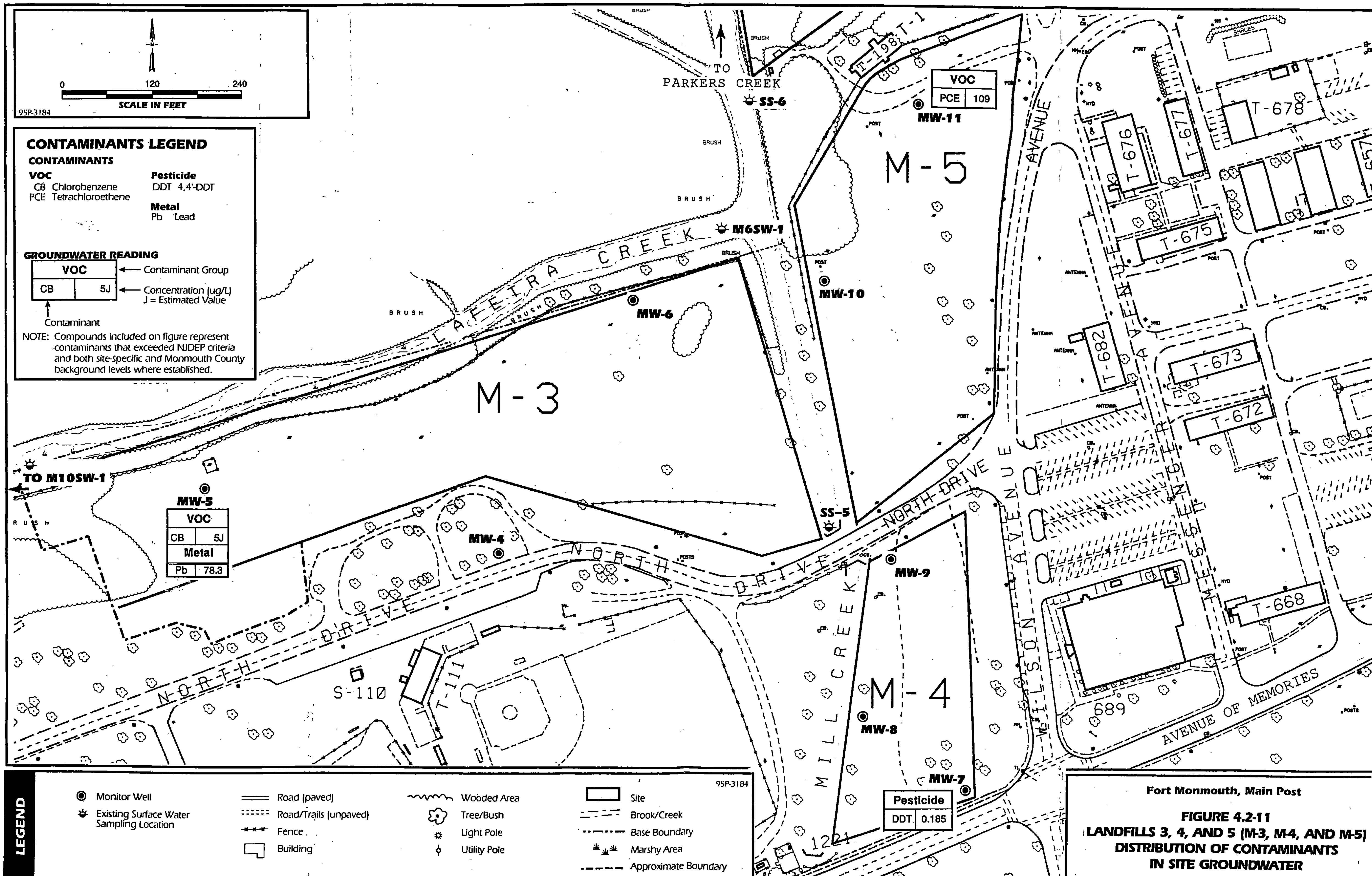


FIGURE 4.2-9B RADAR PROFILE SHOWING SURFACE DRUM AND HYPERBOLIC RADAR SIGNATURES AT SITE M-3



Fort Monmouth, Main Post

FIGURE 4.2-10
LANDFILLS 3, 4, AND 5 (M-3, M-4, AND M-5)
APPROXIMATE GROUNDWATER FLOW DIRECTIONS
(Groundwater Elevations Recorded from March 1995 Sampling Round)



Fort Monmouth, Main Post

FIGURE 4.2-11
LANDFILLS 3, 4, AND 5 (M-3, M-4, AND M-5) DISTRIBUTION OF CONTAMINANTS IN SITE GROUNDWATER

Site M-4

95P-4674

4.2.4 Landfill 4 (M-4)

4.2.4.1 Site Location

Landfill 4 (M-4) is located in the area bounded by the Avenue of Memories to the south, North Drive to the north, Mill Creek to the west, and Wilson Avenue to the east (Figure 4.2-7). The approximate area of site M-4 is 61,800 ft^2 (1.4 acres).

4.2.4.2 Site History

Landfill 4 was used in 1956 for the disposal of building demolition debris. The 1940 aerial photograph shows a swamp at this location. In the latter part of 1955 and during 1956, 72 World War II buildings were demolished on Main Post (*Concise History; History and Place Names*). Potential contaminants associated with demolition debris include lead from paints and piping and asbestos. At present, the surface is flat and grass covered. There are trees in the southeast corner.

As part of an NJPDES permit, surface-water samples have been taken upstream and downstream of this site on Mill Creek. The results are discussed in Subsection 4.2.2 (site M-2) and 4.2.5 (site M-5).

4.2.4.3 Sampling Effort

Three shallow monitor wells (MW-7 through MW-9) were installed around the landfill, and two rounds of groundwater sampling were conducted to evaluate groundwater quality. Monitor well MW-7 is an upgradient well and monitor wells MW-8 and MW-9 are downgradient wells. The monitor wells were sampled twice for TCL +30 parameters, TAL metals, and cyanide.

4.2.4.4 Hydrogeologic Interpretation

Lithologic logs from MW-8 and MW-9 indicate that the lithology consists of a thin soil cover (0.4 ft) underlain by alternating layers of reworked sand, silt, and broken concrete gravel pieces, with interbeds of plant-root fragments. Borehole logs from MW-7 indicate a lithology consisting of an orange-olive-brown fine-coarse sand with little silt.

Groundwater saturation was observed at approximately 7 ft bgs at each well location. The three monitor wells were screened across the unconfined water table, at total depths of 16, 18, and 22 ft bgs in MW-7, MW-8, and MW-9, respectively. Water elevation data, measured on 6 March 1995, indicate that local groundwater flow is west toward Mill Creek (Figure 4.2-10). Based on groundwater elevation measurements, monitor wells MW-8 and MW-9 are downgradient of the M-4 area.

4.2.4.5 Groundwater Sampling Results

Monitor wells at site M-4 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-7 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the subsequent site-specific background and/or Monmouth County background concentrations, where appropriate. Figure 4.2-11 presents the locations and average concentrations of compounds detected above the NJDEP GWQC and the established maximum background concentrations at the Main Post.

<u>VOCs</u>

VOCs were not detected in the site monitor wells from either sampling round.

<u>SVOCs</u>

SVOCs were not detected above laboratory quantitation limits in the site monitor wells from either sampling round. The levels of compounds that could be estimated (below the laboratory quantitation limit) were well below the NJDEP GWQC.

Table 4.2-7
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected Compounds in Groundwater - Site M-4

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE		
				MW7 2/16/95, 3/9/95 (avg.)	MW8 2/16/95, 3/8/95 (avg.)	MW9 2/16/95, 3/9/95 (avg.)
SVOC's (µg/L)						
bis-(2-Ethylhexyl)phthalate	9.7	30*	5 J	ND	4J	ND
Pesticides/PCBs (µg/L)						
4,4'-DDT	0.1**	0.1	ND	**0.185**	ND	ND
METALS TOTAL (µg/L)						
Aluminum	24.0	200	121000	**6550**	**1605**	129.1
Arsenic	1.9	8*	89.3	5.1	1.525	ND
Barium	1.7	2000	699	80.95	39.9	57.9
Beryllium	0.9	20*	7[1]	0.84	ND	ND
Calcium	10.4	NLE	45400	18800	33100	46500
Cobalt	3.0	NLE	18.3	4.7	3.3	ND
Chromium	2.9	100	191	62.55	17.25	4.175
Copper	1.9	1000	730[1]	5.75	2.5	ND
Iron	6.4	300	431000	**18435**	**17900**	**21700**
Potassium	685	NLE	137000	5020	7585	8925
Magnesium	18.3	NLE	62700	8400	6145	6245
Manganese	1.8	50	480[1]	**61.9**	**110.5**	**85**
Sodium	30.5	50000	197000[1]	**50950**	9500	10280
Nickel	10.8	100	187	7.9	ND	ND
Lead	1.6	10*	22.7	9	7.05	ND
Vanadium	2.3	NLE	108	34.95	6.95	ND
Zinc	3.8	5000	233	49.65	31.75	2.43

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL -Practical Quantitation Limit was used as the NJDEP groundwater quality criteria
NLE - No Level Established
ND - Indicates that the compound was not detected at the noted quantification limit
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
** - Method detection limit equals or exceeds NJDEP groundwater quality criteria.
[1] - Monmouth County maximum background concentration.

Pesticides/PCBs

One pesticide (4-4'-DDT) was detected in a concentration slightly exceeding the NJDEP GWQC in the upgradient well MW-7 from the February sampling round only (Table 4.2-7). This concentration was confirmed in a duplicate sample collected in MW-7 during the same sampling round. However, pesticides were not detected in a downstream surface-water location (SS-5) collected from a previous investigation (Figures 4.2-7 and 4.2-11). The results of that investigation are presented in WESTON, 1993. PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-7, of the 17 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and sodium) were found in concentrations exceeding the NJDEP GWQC. However, aluminum, iron, and manganese were found in concentrations below those determined for site-specific and Monmouth County maximum background levels. Although sodium in MW-7 was detected in a concentration greater than the level established as site-specific background, the concentration was well below the Monmouth County maximum background level.

Cyanide

Cyanide was not detected in the site monitor wells from either sampling round.

4.2.4.6 Recommendations

One pesticide compound was detected at a concentration just above the NJDEP GWQC and background in the upgradient well in both the routine and duplicate samples. The pesticide was not detected in downgradient monitor wells, and also was not detected during previous sampling at downgradient location SS-5 (WESTON, 1993).

Although NJDEP groundwater criteria were exceeded for one pesticide, no immediate remedial action is required. The measured value of the pesticide was just slightly above the GWQC. Shallow groundwater flows toward and discharges into Mill Creek, as indicated by water-level measurements in site monitor wells. Also, there are no known uses of groundwater at or downgradient of the site. No surface-water sampling was performed at this site during this project. The surface water was previously sampled downstream but was not analyzed for pesticides. Since Mill Creek flows on Fort Monmouth property between sites M-4 and M-8, access to this stream is restricted. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor well locations are adequately placed to monitor downgradient groundwater, DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern (including pesticides) identified in the first two rounds of sampling would be targeted for the groundwater and surface-water monitoring program.

Site M-5

95P-4674

4.2.5 Landfill 5 (M-5)

4.2.5.1 Site Location

Landfill 5 (M-5) is located just north of Landfill 4 in the area bounded by North Drive to the south, an unpaved road south of Building T-198 to the north, Wilson Avenue to the east, and Mill and Parkers Creeks to the west (Figure 4.2-7). The approximate area of site M-5 is 138,200 ft^2 (3.2 acres).

4.2.5.2 Site History

According to the IA, Landfill 5 was in use between 1952 and 1959, and was reportedly used for the disposal of automobiles as well as for domestic and industrial wastes similar to those mentioned in Subsection 4.2.2.2. Like Landfill 4, this landfill was also constructed in a former swamp and is presently flat and grass covered.

As part of an NJPDES permit, surface-water samples have been taken at two locations (one upstream on Mill Creek and one downstream on Lafetra Creek) since February 1986. The results are summarized in the recent report (WESTON, 1993). One VOC (tetrachloroethene) was detected in concentrations above the NJDEP surface-water criteria.

4.2.5.3 Sampling Effort

Two shallow monitor wells (MW-10 and MW-11) were installed (Figure 4.2-7), and two rounds of groundwater sampling were conducted in an effort to further evaluate the presence of VOCs, metals, and inorganics detected from samples collected during a previous investigation. Monitor wells MW-10 and MW-11 were sampled twice for TCL +30 parameters, TAL metals, sulfate, and cyanide.

4.2.5.4 Hydrogeologic Interpretation

Borehole logs from MW-10 and MW-11 indicate that the lithology consists of a thin soil cover (0.5 ft) partially underlain by fill and interbedded sand with silt and clay laminae. The components of the fill materials observed in both borings consist of coal, glass, and plastic fragments found interspersed within a silty sand and clay matrix and overlie a dark-green-brown silty/clayey medium-coarse-grained sand with silt and clay laminae.

Groundwater saturation was encountered at approximately 4 ft bgs at both well locations. The two monitor wells were screened across the water table, with total depths of 15 ft bgs. Water-level elevation data, measured on 6 March 1995, indicate that approximate local groundwater flow is west toward Mill Creek (Figure 4.2-10). Based on groundwater elevation measurements, monitor well MW-10 is downgradient of the area under investigation.

4.2.5.5 Groundwater Sampling Results

Monitor wells at site M-5 were sampled for the analytical parameters listed in Table 3.8-1. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.2-8 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the site-specific and Monmouth County maximum background concentrations, where appropriate. Figure 4.2-11 presents the locations and average concentrations of compounds detected above the NJDEP GWQC and the established maximum background concentrations.

<u>VOCs</u>

Tetrachloroethene (PCE) was the only VOC detected in site groundwater. However, the PCE concentrations exceeded the NJDEP GWQC and background from both sampling rounds in MW-11, the upgradient well (Figure 4.2-11). In addition, tetrachloroethene was detected in

Table 4.2-8
Fort Monmouth - Main Post
Summary of Average Concentration of Detected Compounds in Groundwater - Site M-5

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE MW10 2/17/95, 3/9/95 (avg.)	MW11 2/17/95, 3/9/95 (avg.)
VOC's (µg/L)					
Tetrachloroethene (PCE)[1]	4.0**	1*	ND	ND	**109**
SVOCs (µg/L)					
bis-(2-Ethylhexyl)phthalate	9.7	30*	ND	ND	3.5J
METALS TOTAL (µg/L)					
Aluminum	24	200	121000	155.8	**1052.5**
Barium	1.7	2000	699	116	16.05
Calcium	10.4	NLE	45400	16500	11100
Chromium	2.9	100	191	3.925	12.9
Copper	1.9	1000	730[2]	7.05	2.9
Iron	6.4	300	431000	**9205**	**4685**
Potassium	685	NLE	137000	8850	3305
Magnesium	18.3	NLE	62700	13550	4220
Manganese	1.8	50	480[2]	**146.5**	14.5
Sodium	30.5	50000	197000[2]	**82800**	17950
Lead	1.6	10*	22.7	5.65	2.2
Vanadium	2.1	NLE	108	1.825	5.85
Zinc	3.8	5000	233	7.75	173
OTHER INORGANICS (µg/L)					
Sulfate	5.0	250000	NA	14.8	43.75

[1] - same compound as listed by NJDEP tetrachloroethylene
Compounds exceding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria
NLE - No Level Established
ND - Indicates that the compound was not detected above quantification limits
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
NA - Not Analyzed
** - Method detection limit exceeds NJDEP groundwater quality criteria
[2] - Monmouth County maximum background concentration.

exceedance of the established surface-water criteria in a surface-water sample (SS-6) collected downgradient of site M-5 from a previous investigation.

SVOCs

SVOCs were not detected above laboratory quantitation limits in the site monitor wells from either sampling round. The level of bis(2-ethylhexyl) phthalate that could be estimated below the laboratory quantitation limit was well below the NJDEP GWQC.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-8, of the 13 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and sodium) were found in concentrations exceeding the NJDEP GWQC. However, aluminum, iron, and manganese were found in concentrations below those determined for site-specific and Monmouth County maximum background levels. Although sodium was detected in a concentration in MW-10 greater than the level established as site-specific background, the concentration was well below the Monmouth County maximum background level.

Cyanide and Sulfate

Cyanide and sulfate were analyzed in site groundwater samples. Cyanide was not detected in the site monitor wells from either sampling round. Sulfate was detected at low levels in MW-10 and MW-11 from both sampling rounds, well below the NJDEP GWQC.

4.2.5.6 Recommendations

PCE was detected in the upgradient well in concentrations exceeding NJDEP GWQC and background from both sampling rounds. Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. During previous investigations, PCE was also detected at downgradient surface-water sampling location SS-6 (WESTON, 1993). Surface water was not sampled at site M-5 during this investigation because the maximum VOC concentrations at this site during previous rounds of sampling were less than the maximum concentrations at site M-2, which is upgradient. For site M-2, the results of the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

Although groundwater sample results exceeded NJDEP criteria for one VOC, immediate remedial action is not required. Groundwater flows toward and discharges into Mill Creek and Lafetra Creek, as indicated by water-level measurements in site monitor wells. Also, there are no known uses of groundwater between the source and the streams. No surface-water sampling was performed at this site during this project. Previous sampling rounds have indicated that some VOC concentrations exceed NJDEP surface-water criteria in Mill Creek adjacent to site M-5. However, previous rounds of sampling have indicated that VOC concentrations do not exceed surface-water criteria at site M-8, which is downgradient of site M-5. Therefore, there is little immediate threat to human health.

In addition, since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

Site M-6

95P-4674

4.2.6 Burning Area (M-6)

4.2.6.1 Site Location

According to interviews with Fort Monmouth personnel, Burning Area M-6 consisted of open-air wood burning in small pits located on Landfill 3. Specific pit locations could not be discerned from aerial photograph review and site reconnaissance.

4.2.6.2 Site History

It is likely that the burning areas on Landfill 3 were used throughout the period when the landfill was in operation, 1959 through 1964. Specific burn areas have not been identified. At present, the surface in the eastern part of Landfill 3 is hummocky and grass covered.

4.2.6.3 Sampling Effort

This site was included in the Landfill 3 (M-3) investigation (see Subsection 4.3.3).

Site M-8

95P-4674

4.2.7 Landfill 8 (M-8)

4.2.7.1 Site Location

Landfill 8 (M-8) is located north of Buildings T-692 and S-697 in a bend of Parkers Creek (Figure 4.2-12). According to the *Phase I Engineering Study and Compliance Plan, Fort Monmouth Solid Waste Landfill* (Cosulich, 1981), a masonry dike was constructed around the landfill perimeter adjacent to Parkers Creek. The area within the dike is 9.5 acres, of which approximately 7.2 acres contain waste material. The approximate area of site M-8 is 315,000 ft^2 (7.2 acres).

4.2.7.2 Site History

Landfill 8 was operated from 1962 through 1981. In preparation for landfill operations, as mentioned previously, a masonry dike was constructed around the perimeter. According to Cosulich (1981), in the southern part of the landfill area, an approximately 0.9-acre area was excavated to 12 feet below grade prior to filling with solid waste. Waste material was deposited directly on the existing surface over the rest of the site. Cosulich found the bottom of fill to be 3 feet below sea level. The 1969 aerial photographs show an uneven surface with both pit-type disposal and piled-up debris. A number of drums stacked near the entrance just west of the STP are visible in the 1969 photos. The area just west of the stacked drums appears to have randomly strewn drums. In the western half of the site, there were two separate piles of telephone poles. One area in the south-central part of the landfill was used for the disposal of trees and brush.

The photos also show that soil was used to cover the trash. In 1969 part of the area was covered with vegetation.

At present, the landfill is covered with heavy brush and small trees. There is no visible evidence of the drums observed in the 1969 aerial photographs. Four monitor wells and several piezometers of unknown construction were found during the site walkover in 1993.

According to the IA in 1979, materials observed in Landfill 8 and determined from interviews, included unwashed pesticide/herbicide cans, batteries, fluorescent tubes, electronic components, garbage, asbestos wrappings from pipes, soot and boiler scale, sludge from STPs, small quantities of outdated drugs, outdated photographic chemicals in glass bottles, building rubble (including ACM), incinerator ash, sand from oil spill cleanups, and other debris. Cosulich reported that incinerator ash from the classified document incinerator (site M-7) ranging in thickness from 2.5 to 6.5 feet was found along the southern boundary of the landfill. Cosulich also reports that leaves and brush were placed in this landfill. From 1992 through the present, an adjacent area to the southeast of Landfill M-8 has been used for a leaf-composting operation. This operation has an NJDEP permit.

As part of an NJPDES permit, surface-water samples have been taken at two locations in Lafetra Creek since February 1986. The results are summarized in the recent report (WESTON, 1993). No compounds were detected in concentrations above the NJDEP surface-water criteria.

4.2.7.3 Sampling Effort

Because of the poor recovery of the original Landfill 8 monitor wells and the highly turbid conditions in the wells, all existing wells and piezometers were abandoned. Four new monitor wells (MW-12 through MW-15), shown in Figure 4.2-12, were installed and sampled twice for TCL +30 parameters, TAL metals, sulfate, ammonia, and cyanide in an effort to evaluate the impacts of previous site activities on groundwater quality. The new wells were surveyed and tidal water-elevation monitoring was conducted in the four new monitor wells and at stilling well-7 (Figure 4.2-12).

4.2.7.4 Hydrogeologic Interpretation

Lithologic logs from downgradient wells MW-13, MW-14, and MW-15 indicate that the lithology consists of a thin soil cover (0.4 ft) underlain by fill material. The components of the filled materials observed in the borings consisted of large wood chip fragments, amber glass chips, and traces of wires. Natural sandy silt with trace amounts of clay were intermixed with the manmade materials. Monitor well MW-12, located upgradient of the landfill boundary, indicates a lithology consisting of an orange-brown medium-fine-grained sand with trace amounts of silt and clay.

Groundwater saturation observed during drilling operations ranged from 2 to 8 ft bgs, depending on the proximity to Parkers Creek. Monitor wells were screened across the water table and were drilled to 15 ft bgs at all well locations. Water-level elevation data, measured on 6 March 1995, indicate that local groundwater flow is generally north toward Parkers Creek (Figure 4.2-13). Based on groundwater elevation measurements, monitor wells MW-13, MW-14, and MW-15 are downgradient and MW-12 is upgradient of the area under investigation.

4.2.7.5 Groundwater Sampling Results

Monitor wells at site M-8 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-9 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate. Figure 4.2-14 presents the locations and average concentrations of compounds detected above the NJDEP GWQC and established maximum background at the Main Post.

<u>VOCs</u>

Three VOCs (tetrachloroethene, benzene, and chlorobenzene) were detected in site groundwater in one or both sampling rounds in concentrations exceeding the NJDEP GWQC. Tetrachloroethene was detected in MW-12, the upgradient well, from both sampling rounds. Benzene was detected below the laboratory quantitation limit in MW-15 from both sampling rounds; however, the level is estimated to be above the NJDEP GWQC of 1 µg/L. Chlorobenzene was detected in MW-15 from both sampling rounds and in MW-14 below laboratory quantitation limits, from the March sampling round only. VOC compounds were not detected in MW-13.

Table 4.2-9
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected Compounds in Groundwater - Site M-8

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE			
				MW12 2/17/95, 3/15/95 (avg.)	MW13 2/22/95, 3/15/95 (avg.)	MW14 2/16/95, 3/15/95 (avg.)	MW15 2/22/95, 3/15/95 (avg.)
VOC's (µg/L)							
Tetrachloroethene (PCE)[1]	4.0**	1*	ND	**47**	ND	ND	ND
Benzene	3.3**	1*	ND	ND	ND	ND	**4.5J**
Chlorobenzene	2.7	4	ND	ND	ND	**6.5J**	**37.5**
Toluene	2.7	1000	ND	ND	ND	4.5J	ND
SVOCs (µg/L)							
1,4-Dichlorobenzene	4.8	75	ND	ND	ND	3J	4.5J
1,3-Dichlorobenzene	5.3	600	ND	ND	ND	ND	3.5J
1,2-Dichlorobenzene	5.7	600	ND	ND	ND	ND	3J
Naphthalene	8.4	NLE	ND	ND	ND	3J	3J
2-Methylnaphthalene	8.7	NLE	ND	ND	ND	1J	1.5J
Acenaphthene	6.7	400	ND	ND	ND	2J	15.5
Dibenzofuran	6.5	NLE	ND	ND	ND	ND	6J
Fluorene	6.3	300	ND	ND	ND	ND	8J
Carbazol	4.4	NLE	ND	ND	ND	ND	3J
METALS TOTAL (µg/L)							
Aluminum	24.0	200	121000	**738**	**512**	**2350**	**568**
Arsenic	1.9	8*	89.3	ND	ND	3.75	ND
Barium	1.7	2000	699	8.8	232	410	269
Beryllium	0.9	20*	7[1]	ND	ND	0.7	ND
Calcium	10.4	NLE	45400	8980	157500	159500	336000
Cadmium	2.8	4	9.5	ND	ND	2.95	ND
Cobalt	3.0	NLE	18.3	ND	ND	4.3	ND
Chromium	2.9	100	191	8.425	4.2	24	4.25
Copper	1.9	1000	730[2]	2.6	6.5	5.2	ND
Iron	6.4	300	431000	**2979.5**	**40000**	**57350**	**25800**
Mercury	0.2	2	0.26	ND	0.36	ND	ND
Potassium	685	NLE	137000	2815	19950	65150	35450
Magnesium	18.3	NLE	62700	2485	63950	77050	74000
Manganese	1.8	50	480[2]	10.25	**655**	**276**	**381**
Sodium	30.5	50000	197000[2]	21550	**156050**	**383500**	**229000**
Nickel	10.8	100	187	ND	ND	3.5	ND
Lead	1.6	10*	22.7	0.9	3.25	9.75	2.1
Vanadium	2.3	NLE	108	6.225	4.7	14.15	7.7
Zinc	3.8	5000	233	6.55	19.6	53.4	21.1
OTHER INORGANICS (µg/L)							
Ammonia as Nitrogen	0.2	500	NA	ND	2.75	36.3	30.25
Sulfate	5.0	250000	NA	40.9	24.15	11.4	81.35

[1] - same compound as listed by NJDEP tetrachloroethylene
Compounds exceding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria
NLE - No Level Established
ND - Indicates that the compound was not detected at the noted quantification limit
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
** - Method detection limit exceeds NJDEP groundwater quality criteria.
NA - Not Analyzed
[2] - Monmouth County maximum background concentrations.

SVOCs

One SVOC (acenaphthene) was detected above the laboratory quantitation limit in monitor well MW-15. Acenaphthene was detected in a concentration well below the NJDEP GWQC.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-9, of the 19 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and sodium) were found in concentrations exceeding the NJDEP GWQC. However, aluminum was found in concentrations below those determined for site-specific and Monmouth County maximum background levels. Although iron was found in concentrations well below site-specific maximum background levels, iron was detected in concentrations in MW-13 and MW-14 above Monmouth County maximum background levels. The presence of iron in exceedance of the criteria may be attributable to the high concentrations found in site background soils and is not a compound of concern. Manganese in MW-13 and sodium in MW-14 and MW-15 were detected in concentrations greater than both established background levels (Figure 4.2-14). Elevated sodium concentrations may be the result of saline water intrusion into the groundwater. These wells are near the Parkers Creek estuary. Saltwater has invaded the estuary (see Subsection 4.2.7.6.1) and intruded the aquifer monitored by these wells. Sodium is not a compound of concern. As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern.

Cyanide, Sulfate, and Ammonia

Cyanide, sulfate, and ammonia as nitrogen were analyzed for in site M-8 groundwater. Cyanide was not detected in the site monitor wells from either sampling round. Sulfate was detected above the laboratory quantitation limit in both sampling rounds in MW-12, MW-13, MW-14, and MW-15. Ammonia as nitrogen was detected above the laboratory quantitation limit in both sampling rounds in MW-13 and MW-15. Ammonia, not detected from the February sampling round in MW-14, was detected in the March sampling round. Sulfate and ammonia were detected well below the NJDEP GWQC.

4.2.7.6 Tidal Monitoring

Tidal fluctuations in Parkers Creek were monitored at one station (stilling well-7) at Landfill 8 (M-8) (Figure 4.2-12). (Hydrographs are presented in Appendix E.) Changes in creek stage were compared to changes in water levels measured at the following monitor wells: MW-12, MW-13, MW-14, and MW-15. Wells MW-13, MW-14, and MW-15 are located within 100 feet of Parkers Creek, and well MW-12 is approximately 1,300 feet from Parkers Creek. The tidal monitoring station at Landfill 8 (M-8) records incoming and outgoing tides, but the lowest tidal effects are subdued. Peaks in creek levels corresponding to high tides are sharp, but peaks in creek levels corresponding to low tides are rounded because the elevation of the stream bed is higher than the elevation of sea level at low tide. The elevation of the stream bed is -1.02 ft msl at stilling well-7. The maximum change in creek levels at Landfill 8 (M-8) was 3.3 feet, and the maximum change in water level in the monitor well was 1.4 feet during the time of study. All site monitor wells were screened below sea level.

Data collected from well MW-12 are useful as baseline data during the tidal monitoring study conducted at Landfill 8 (M-8). There is no apparent relationship between water levels measured at well MW-12 and creek levels measured at stilling well-7. Well MW-12 is approximately 1,300 feet from the creek and is too distant to be influenced by changing creek levels. Water levels in the water-bearing unit and creek levels were slowly declining by about 0.1 foot during the tidal monitoring study in March 1995.

The response of water levels measured at well MW-14 is dampened, indicating a poor to moderate hydraulic connection between the water-bearing unit at MW-14 and the creek levels. The peak in water levels measured at well MW-14 occurs from 60 to 200 minutes after the peak in creek level at stilling well-7, and the water-level peaks at MW-14 are only about 10% of the tidal peak in creek levels.

There is an apparent hydraulic influence between the water-bearing unit at MW-13 and creek levels. Water levels measured at MW-13 respond quickly to high tides recorded in the creek. The response of water levels at MW-13 to low tides in the creek is subdued probably because low tides have less effect on Parkers Creek in the area of MW-13. This is expected because MW-13 is approximately 2,400 feet upstream from stilling well-7, and tidal changes in the creek diminish in the upstream direction, as documented at Landfill 2 (M-2). The ratio of change in water level in the water-bearing unit to change in creek levels was not calculated for this location because of the distance between the well and the tidal monitoring station.

There is an apparent hydraulic connection between the water-bearing unit at MW-15 and creek levels. Water levels measured at well MW-15 respond quickly to rising and falling creek levels. The peak in water levels measured at well MW-15 occurs at approximately the same time as the peak in creek levels at stilling well-7. The response of water levels at MW-15 to low tides in the creek is slightly subdued. At this location (stilling well-7, MW-15) water-level peaks at MW-15 are approximately 30 to 40% of the tidal peak in creek levels.

4.2.7.6.1 Conductivity and Salinity Results

Conductivity and salinity were measured at Parkers Creek and monitor wells (MW-12 through MW-15) at Landfill 8 (M-8) in January and March 1995. Measurements were collected at low tide and high tide each month to evaluate the extent of saltwater intrusion at each site (see Tables E-1 through E-3 in Appendix E).

The results indicate the presence of brackish to salty water in Parkers Creek at Landfill 8 (M-8). Specific conductance measured in Parkers Creek at Landfill 8 (M-8) is consistently greater than

2,000 μmhos. In addition, salinity measured in Parkers Creek at Landfill 8 (M-8) is consistently greater than 1.5 ppth.

Groundwater sampled from monitor well MW-12 exhibited low conductivity and zero salinity. Monitor wells MW-13, MW-14, and MW-15 indicate possible brackish to saltwater intrusion in an area of the water-bearing unit close to Parkers Creek.

4.2.7.7 Recommendations

Due to highly turbid conditions and poor water-level recovery of the original monitor wells, all original monitor wells and piezometers were abandoned.

Groundwater sampling results indicate low concentrations of benzene and chlorobenzene were detected in two downgradient monitor wells, and PCE concentrations were detected in the upgradient well (MW-12) exceeding NJDEP GWQC. Additionally, PCE and other VOCs were previously detected in surface-water samples at location SS-7, downstream of site M-8.

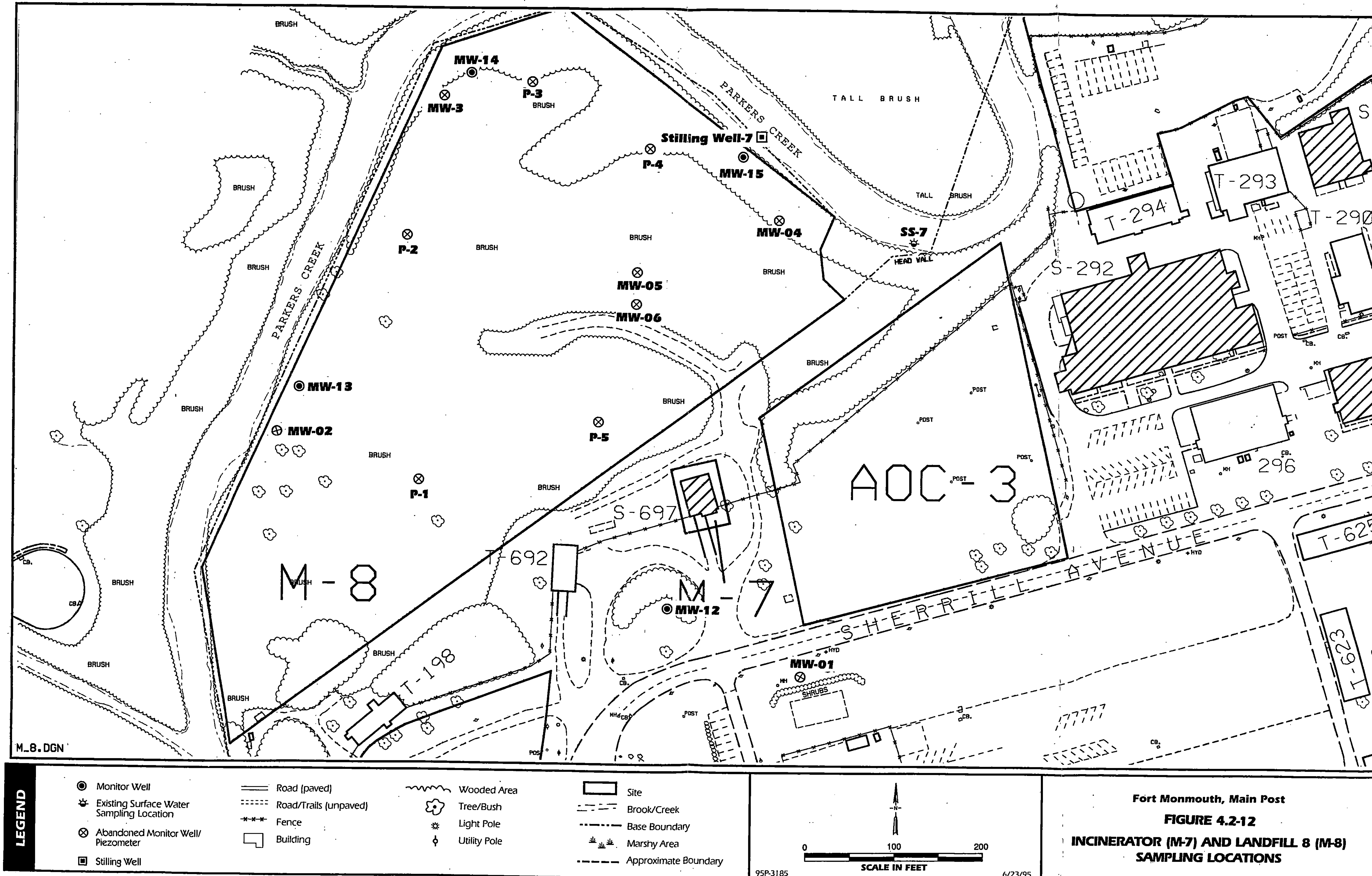
Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. However, surface water was not sampled at site M-8 during this investigation because the maximum VOC concentrations at this site during previous rounds of sampling were less than the maximum concentrations at sites M-2 and M-3, which are upstream. The concentrations of VOCs at site M-8 for previous rounds were less than the NJDEP surface-water criteria.

The results of the tidal monitoring indicate that there is no apparent relationship between creek levels and water levels in MW-12 because of its distance from the creek. A poor to moderate relationship was measured between MW-14 and creek levels. A direct relationship was observed between creek levels and MW-13 and MW-15. The conductivity and salinity measurements in Parkers Creek indicate the presence of brackish to salty water at site M-8. Groundwater sampled from MW-12 indicates freshwater. Monitor wells MW-13, MW-14, and MW-15 indicate brackish to salty water in an area of the water-bearing unit close to Parkers Creek.

Although groundwater sample results exceeded NJDEP criteria for three VOCs, immediate remedial action is not required. Shallow groundwater flows toward and discharges to Lafetra Creek, as indicated by water-level measurements in site monitor wells. There are no known uses of groundwater at or downgradient of the site. In fact, groundwater at three of the four monitor wells is brackish and unsuitable for drinking. No surface-water sampling was performed at this site during this project. Previous sampling rounds have indicated that VOC concentrations did not exceed NJDEP surface-water criteria in the stream. Therefore, there is little immediate threat to human health.

In addition, since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

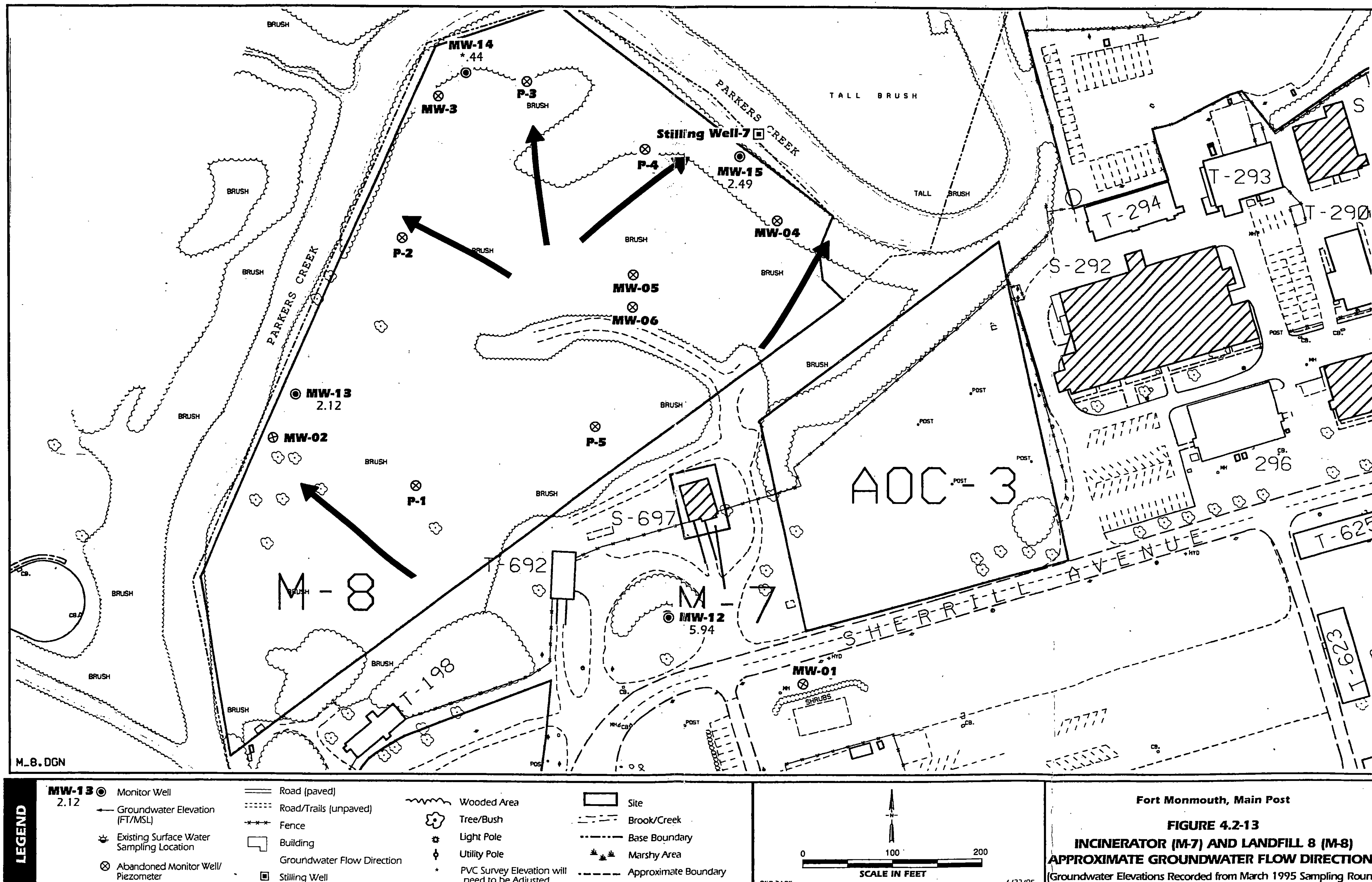
Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.



Fort Monmouth, Main Post

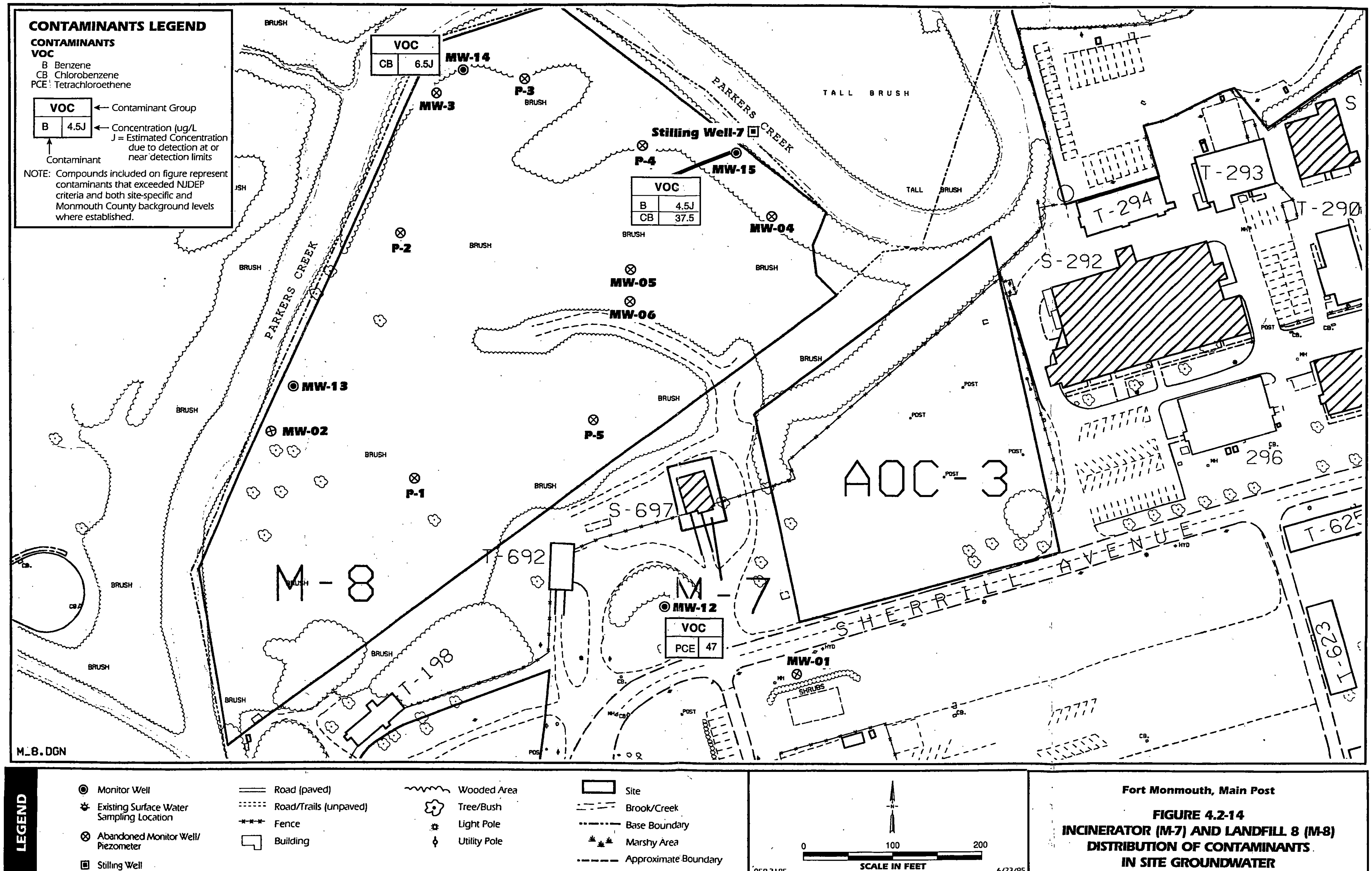
FIGURE 4.2-12

INCINERATOR (M-7) AND LANDFILL 8 (M-8) SAMPLING LOCATIONS



Fort Monmouth, Main Post

FIGURE 4.2-13
INCINERATOR (M-7) AND LANDFILL 8 (M-8) APPROXIMATE GROUNDWATER FLOW DIRECTIONS
(Groundwater Elevations Recorded from March 1995 Sampling Round)



Fort Monmouth, Main Post

FIGURE 4.2-14
INCINERATOR (M-7) AND LANDFILL 8 (M-8)
DISTRIBUTION OF CONTAMINANTS
IN SITE GROUNDWATER

Site M-12

95P-4674

4.2.8 Landfill 12 (M-12)

4.2.8.1 Site Location

Landfill 12 (M-12) is located on the south side of Husky Brook, west of Murphy Drive (Figure 4.2-15). The approximate northwest area of site M-12 is 60,100 ft^2 (1.4 acres) and the approximate southwest area is 29,200 ft^2 (0.7 acre).

4.2.8.2 Site History

The period of operation of Landfill 12 is unknown. Landfill 12 most likely contains domestic and industrial wastes similar to that found in other Main Post landfills. This landfill may also have been used for automobile disposal. At present, the southern bank of Husky Brook is flat and grass covered.

4.2.8.3 Sampling Effort

GPR and magnetometer surveys were conducted to locate the landfill boundaries. Three monitor wells, MW-16, MW-17, and MW-18, were installed at the locations shown in Figure 4.2-15. The original locations of monitor wells MW-16 and MW-18 were repositioned during the field investigation activities. Monitor well MW-16 was moved because of possible accessibility problems (the proposed location of the well was inside the locked boat yard parking lot). Monitor well MW-18 was moved based on geophysical interpretations.

These wells were sampled twice for TCL +30 parameters, TAL metals, and cyanide. Tidal monitoring was conducted at the same time as tidal monitoring for Landfill 14.

4.2.8.4 Geophysical Results

The magnetometer survey conducted at the northeast portion of site M-12, i.e., M-12NE, revealed elevated total magnetic field readings located at relative grid coordinates 40N to 70N/335E to 400E and 70N to 80N/175E to 225E. As shown in Figure 4.2-16, the high magnetometer readings are represented by the violet contour interval and are indicative of buried ferrous material. Another anomalous area indicating ferrous material was revealed at the southwest corner of site M12NE and is located at approximate grid coordinates 0N to 60S/50W to 100E. Cultural features affecting the magnetometer survey are the tower and guy wires centered about coordinate 60N/100E and the chainlink fence to the south of the survey area. As shown in Figure 4.2-17, the magnetic gradient anomalies coincide with the total magnetic field results, also suggesting the presence of buried ferrous material within the suspected landfill boundary.

The GPR survey at M-12NE revealed chaotic radar reflectors throughout the area. These radar waveforms may be indicative of coarse-grained fill material or naturally occurring sands and gravel. However, the radar data collected collaborates the existing magnetometer anomalies at grid coordinates 30N to 70N/335E to 350E and 30N to 70N/390E to 400E, suggesting buried ferrous material within the suspected landfill boundary.

Hyperbolic radar signatures appear traversing the site from approximately 280E to 300E at a depth of 3 ft bgs. These hyperbolic waveforms are interpreted to be an 18-in. diameter drainage pipe that was observed discharging to the stream.

Site M-12SW contained many cultural features scattered throughout the site, including overhead power lines and metallic surface debris, prohibiting total site coverage and producing anomalous magnetic signatures. The magnetometer survey revealed anomalous total magnetic field and gradient anomalies at the northwest portion of the survey area. Located within grid coordinates 0N to 50N and 50E to 120E, the anomalies are probably due to metallic debris observed on the surface. As shown in Figure 4.2-18, total magnetic field anomalies exist at grid coordinates 0N to 20N/140E to 180E and centered about coordinate 10S/200E. The magnetic gradient contour plot (Figure 4.2-19) confirms these anomalous magnetic signatures and reveals smaller discrete high and low gradient readings indicative of buried ferrous material from 10N to 10S and 120E to 240E.

The GPR survey revealed hyperbolic diffraction patterns at 10N/160E and 10S/200E, confirming the presence of the magnetometer anomalies at a depth of approximately 2 ft bgs. These hyperbolic radar signatures are typical of buried manmade metallic cyclindrical objects such as pipe, utilities, and other metallic objects, as well as naturally occurring cobbles and large gravel. Chaotic radar reflectors were also found at the northeast quadrant of the site within grid coordinates 10N to 50N/250E to 300E. These chaotic waveforms are indicative of coarse-grained materials such as sand and gravel or disturbed subsurface conditions.

The results of the geophysical survey at M-12NE and M-12SW indicate that fill and buried ferrous material are present within the suspected boundaries of the landfill. Monitor wells and surface-water sample locations are positioned to adequately monitor groundwater downgradient of these areas.

4.2.8.5 Hydrogeologic Interpretation

Lithologic logs from the wells installed at M-12 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by fill material. The components of the filled materials observed in the borings consisted of organic debris and coal fragments intermixed with a moderate to poorly sorted olive-green-brown silty medium-fine-grained sand with little clay.

Saturation was observed at approximately 2 ft bgs across the site. The three monitor wells were screened across the water table and set at 14.5 ft bgs. Water-level elevation data, measured on 6 March 1995, prior to the March sampling round, indicate that local groundwater flows north toward Husky Brook (Figure 4.2-20). Based on groundwater elevation measurements, monitor wells MW-17 and MW-18 are located downgradient of the M-12 area.

4.2.8.6 Groundwater Sampling Results

Monitor wells at site M-12 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-10 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results

Table 4.2-10
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected Compounds in Groundwater - Site M-12

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE		
				MW16 2/20/95, 3/10/95 (avg.)	MW17 2/20/95, 3/10/95 (avg.)	MW18 2/20/95, 3/10/95 (avg.)
SVOCs (µg/L)						
bis-(2-Ethylhexyl)phthalate	9.7	30*	ND	3 J	2J	4 J
METALS TOTAL (µg/L)						
Aluminum	24.0	200	121000	**961**	173.5	**733**
Arsenic	1.9	8*	89.3	4.05	ND	1.475
Barium	1.7	2000	699	47.1	184	133.5
Calcium	10.4	NLE	45400	7860	50200	6235
Cadmium	2.8	4	9.5	2.475	ND	3.4
Cobalt	3.0	NLE	18.3	2.025	ND	2.675
Chromium	2.9	100	191	12.025	4.425	7.675
Copper	1.9	1000	730[1]	ND	14.1	5.1
Iron	6.4	300	431000	**19650**	**31250**	**1795**
Mercury	0.2	2	0.26	0.205	ND	ND
Potassium	685	NLE	137000	3040	4380	5115
Magnesium	18.3	NLE	62700	6120	4405	3935
Manganese	1.8	50	480[1]	46.05	**256**	16.8
Sodium	30.5	50000	197000[1]	17150	10285	21050
Nickel	10.8	100	187	3.75	ND	7.8
Lead	1.6	10*	22.7	1.1	1.3	3.1
Vanadium	2.3	NLE	108	6.35	ND	2.775
Zinc	3.8	5000	233	20.75	9.6	45.3

Compounds exceding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater criteria
NLE - No Level Established
ND - Indicates that the compound was not detected at noted quantification limit
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
[1] - Monmouth County maximum background concentration.

with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate.

VOCs

VOCs were not detected in the site monitor wells from either sampling round.

SVOCs

SVOCs were not detected in the site monitor wells above laboratory quantitation limits from either sampling round. The estimated value for bis(2-ethylhexyl) phthalate is below NJDEP GWQC.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-10, of the 18 metals detected in site groundwater, 3 (aluminum, iron, and manganese) were found in concentrations exceeding the NJDEP GWQC. However, all metals were found in concentrations below those determined for site-specific or Monmouth County maximum background levels. Although the concentration of aluminum exceeded the Monmouth County background level in MW-17, the concentration was well below the site-specific background level established at the Main Post.

Cyanide

Cyanide was not detected in the site monitor wells from either sampling round.

4.2.8.7 Tidal Monitoring — Landfill 12 and Landfill 14 (M-12 and M-14)

Tidal fluctuations in Husky Brook were monitored at an upstream tidal monitoring station (stilling well-8) and at a downstream tidal monitoring station (stilling well-9) at Landfills 12 and 14 (Figure 4.2-15). The tidal monitoring stations are approximately 400 feet apart and tidal changes at both stations are similar. Changes in creek levels measured at station stilling well-8 were compared to changes in water levels measured at monitor wells MW-16 through MW-21 (see Appendix E).

Monitor wells MW-17, MW-18, MW-19, and MW-21 are located within 150 feet of the creek, and wells MW-16 and MW-20 are located 150 feet or more from the creek. The tidal monitoring station at Landfills 12 and 14 records high and low tides, but the lowest tidal peaks are slightly subdued. The stream bed elevation at Landfills 12 and 14 is the lowest of the three areas studied and is more affected by low tides. Stream bed elevation is -1.71 ft msl at stilling well-8 and -1.63 ft msl at stilling well-9. The maximum change in creek levels during the study was 3.3 feet. The maximum change in water level in the monitor well was approximately 1.6 feet during the time of study.

Data collected from wells MW-19 and MW-20 are useful as baseline data during the tidal monitoring study conducted at Landfills 12 and 14. There is no apparent relationship between water levels measured at wells MW-19 and MW-20 and creek levels measured at stilling well-8. Well MW-19 is approximately 150 feet from the creek, but is about 1,600 feet upgradient from stilling well-8. Well MW-20 is approximately 700 feet from the creek and is too distant to be influenced by changing creek levels. Water levels in the water-bearing unit and creek levels were fluctuating by less than 0.1 foot during the tidal monitoring study in March 1995.

The response of water levels measured at wells MW-16, MW-17, and MW-18 indicates a poor to moderate degree of hydraulic connection between the water-bearing unit in the area around these wells and the creek levels. There is a small lag time between tidal peaks in the creek and water-level peaks in each of the three wells. The magnitude of water-level changes in these three wells is small, between 5% and 15% of the magnitude of tidal changes in the creek.

There is an apparent hydraulic influence between the water-bearing unit at MW-21 and creek levels. Water-level data from monitor well MW-21 were compared with creek level data from station stilling well-8. The peak in water levels measured at well MW-1 occurs approximately 70 to 120 minutes after the peak in creek levels at stilling well-8, but the ratio of change in water level in the water-bearing unit to change in creek levels at this location (stilling well-8, MW-21) is approximately 40% to 50%. This high ratio indicates a high degree of hydraulic influence.

4.2.8.7.1 Conductivity and Salinity Results

Conductivity and salinity were measured in Husky Brook and in the monitor wells at Landfill 12 (M-12) and Landfill 14 (M-14) in January and March 1995 and are presented in Appendix E. Measurements were collected at low tide and high tide each month to evaluate the extent of saltwater intrusion at each site.

The results indicate the presence of brackish to salty water in Husky Brook at Landfills 12 and 14 (M-12, M-14).

Specific conductance measured in Husky Brook at Landfills 12 and 14 (M-12, M-14) is consistently greater than 2,000 μmhos. In addition, salinity measured in Husky Brook at Landfills 12 and 14 (M-12, M-14) is consistently greater than 1.5 ppth. The results are consistent with the higher streambed elevation at Landfill 2 (M-2) compared to Landfill 8 (M-8) and Landfills 12 and 14 (M-12, M-14).

Groundwater sampled from monitor wells at each location generally exhibit low conductivity and zero salinity.

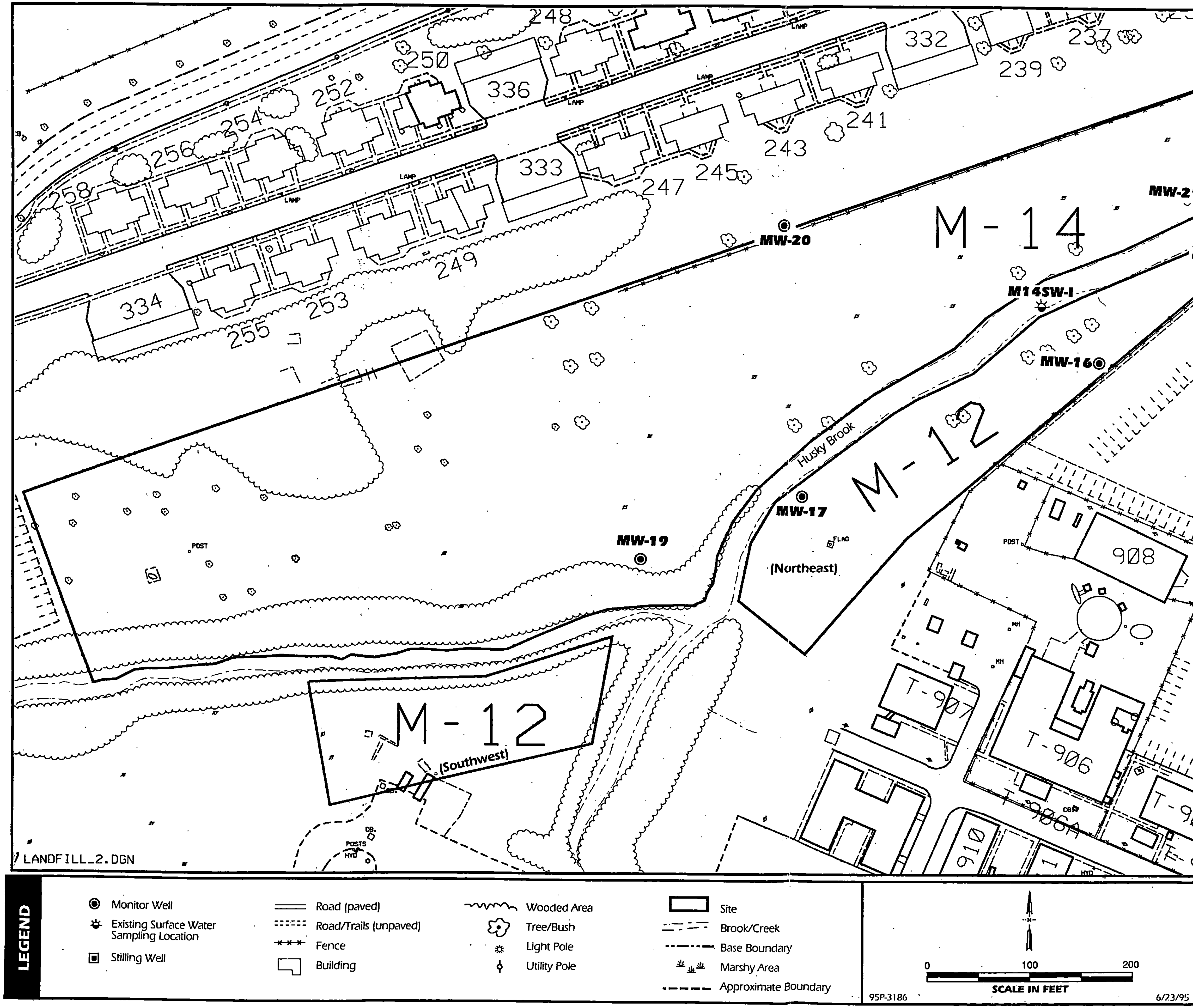
4.2.8.8 Recommendations

The results of the geophysical surveys indicate that the identified fill and buried ferrous material are present within the suspected boundaries of the landfill. Monitor wells are positioned to adequately monitor groundwater downgradient of these areas.

Groundwater sampling results indicate that no compounds of concern exceeded NJDEP GWQC from upgradient and downgradient wells.

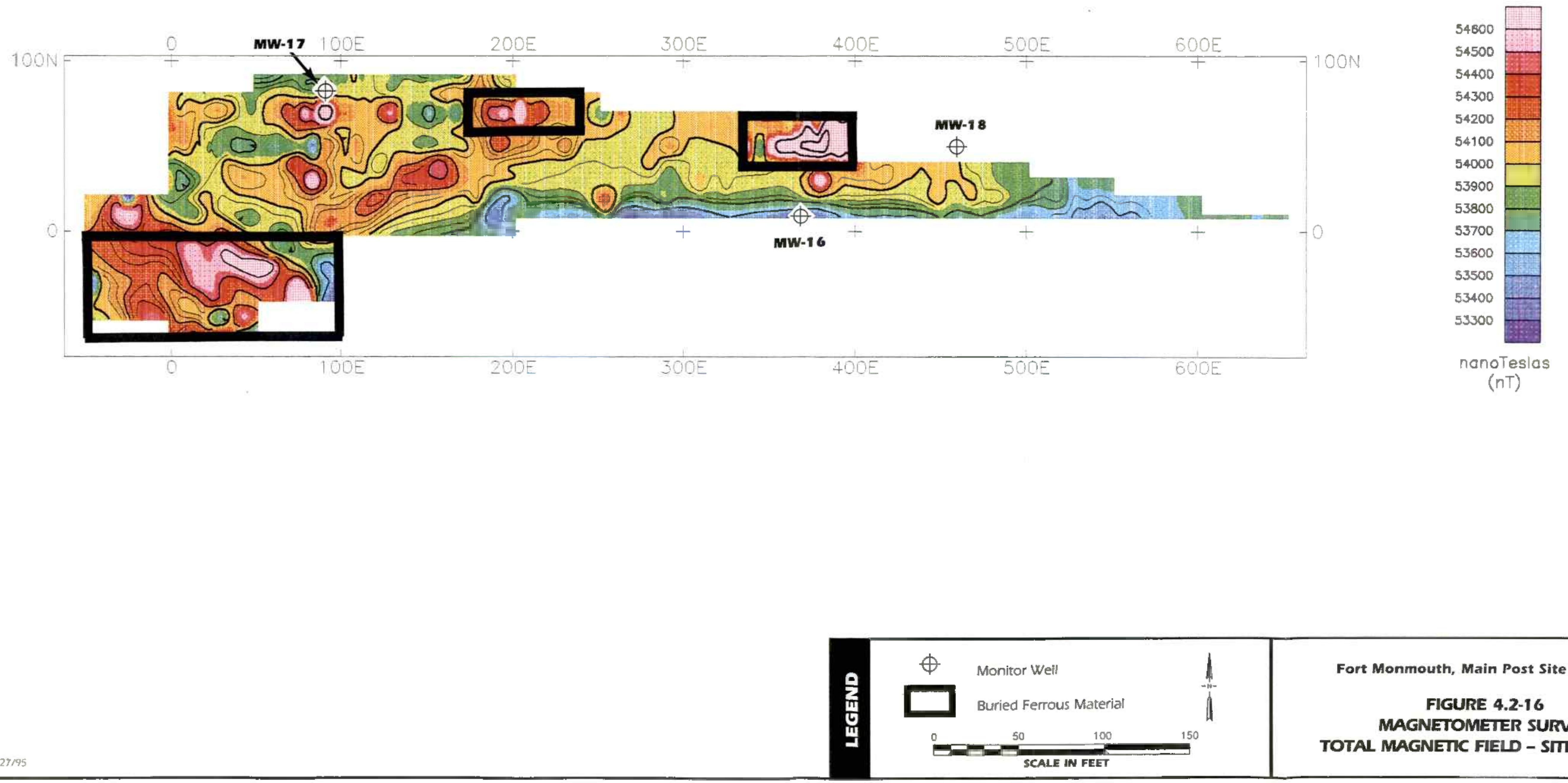
The results of the tidal monitoring relate to both sites M-12 and M-14. The data indicate that there is no apparent relationship between creek levels and water levels in MW-19 and MW-20. A poor to moderate relationship was measured between MW-16, MW-17, and MW-18 and creek levels. A direct relationship was observed between creek levels and MW-21. The conductivity and salinity measurements in Husky Brook indicate the presence of brackish to salty water at sites M-12 and M-14. Groundwater sampled from monitor wells at each location indicates freshwater.

Although no compounds of concern were identified at site M-12, because of the site's history of being used as a landfill, DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Contaminants identified in the first two rounds of sampling would be targeted for the monitoring program.



Fort Monmouth, Main Post

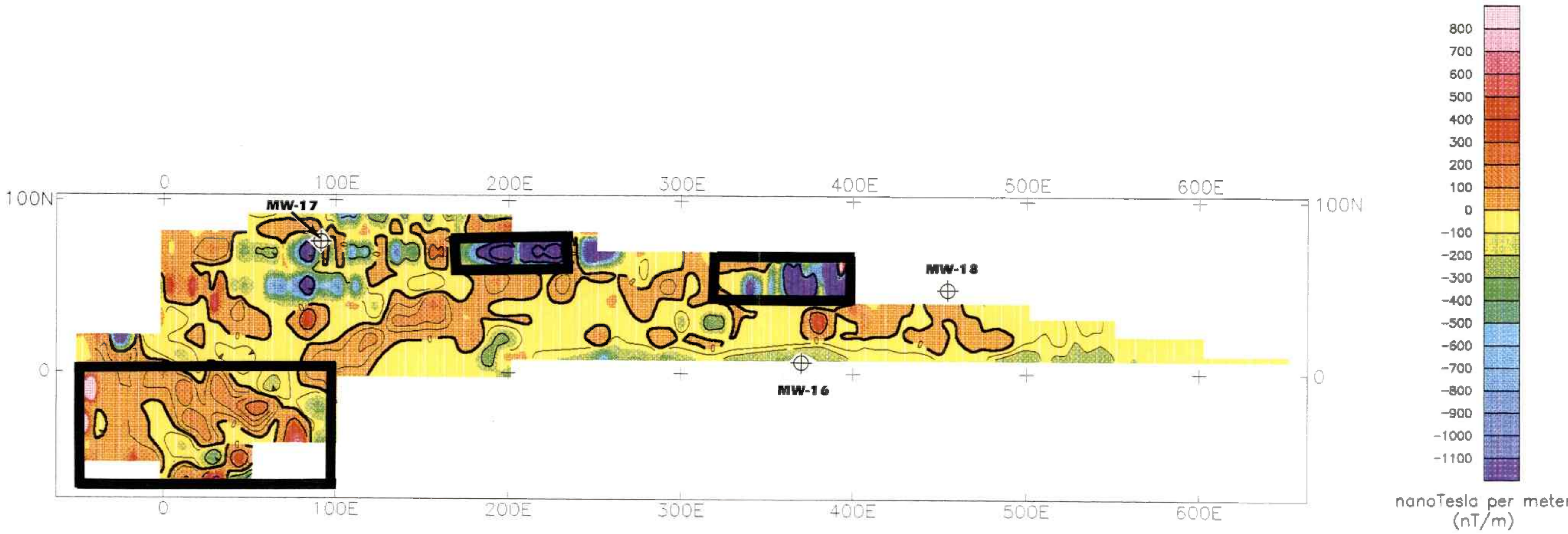
FIGURE 4.2-15
LANDFILLS 12 (M-12) AND 14 (M-14)
SAMPLING LOCATIONS



Fort Monmouth, Main Post Site M-12 NE

FIGURE 4.2-16
MAGNETOMETER SURVEY
TOTAL MAGNETIC FIELD – SITE M-12 NE

95P-3235 6/27/95



LEGEND

Monitor Well

Buried Ferrous Material

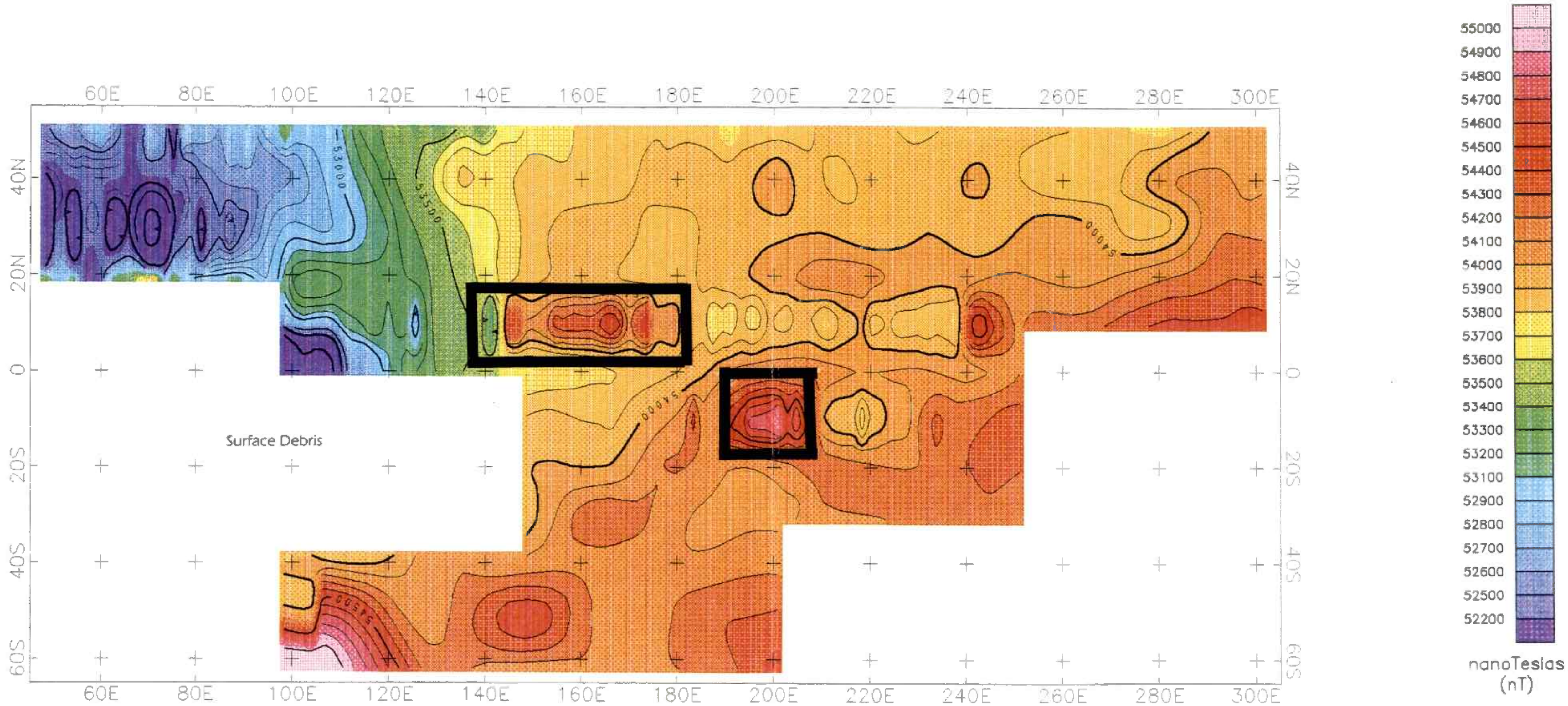
0 50 100 150

SCALE IN FEET

Fort Monmouth, Main Post Site M-12 NE

FIGURE 4.2-17
MAGNETOMETER SURVEY
MAGNETIC GRADIENT – SITE M-12 NE

95P-3236 6/27/95



LEGEND

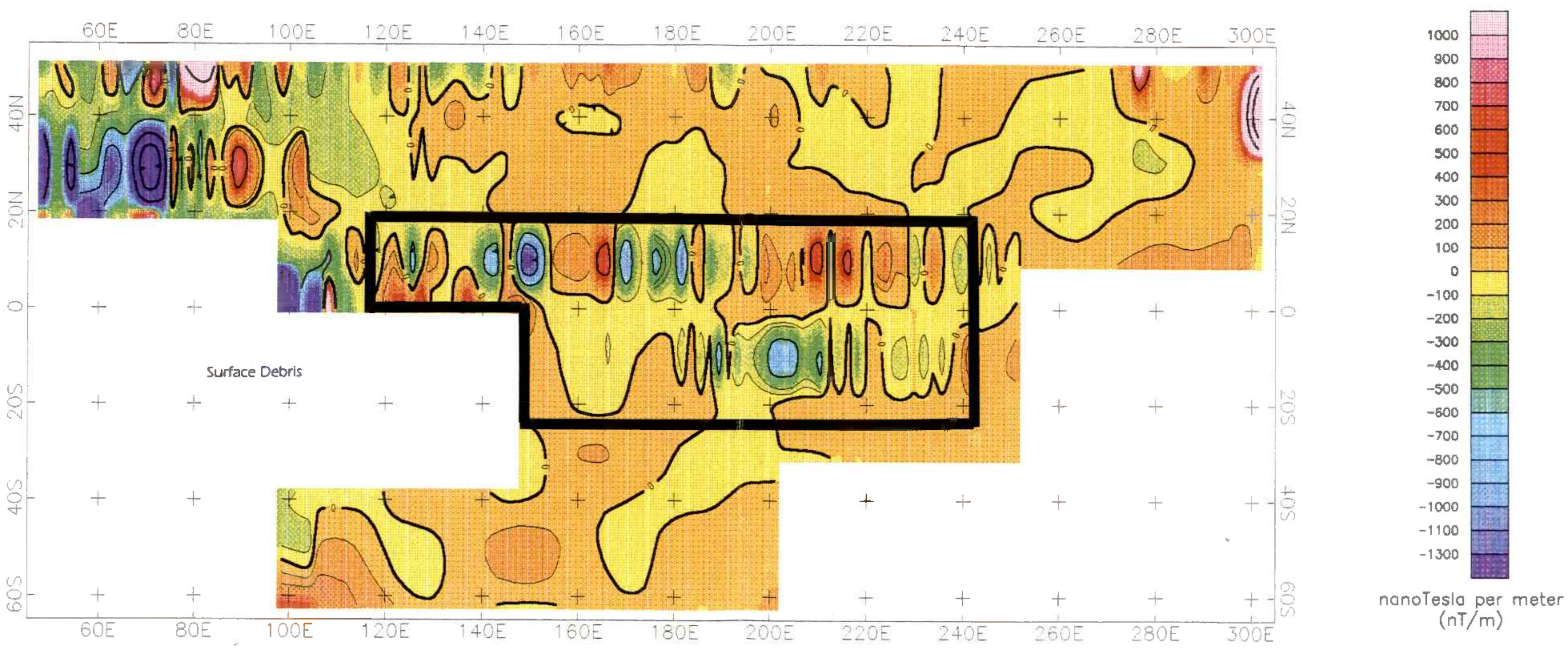
Possible Fill Area Boundary

0 10 20 30 40 50
SCALE IN FEET

Fort Monmouth, Main Post Site M-12 SW

FIGURE 4.2-18
MAGNETOMETER SURVEY
TOTAL MAGNETIC FIELD – SITE M-12 SW

95P-3237 6/27/95



LEGEND

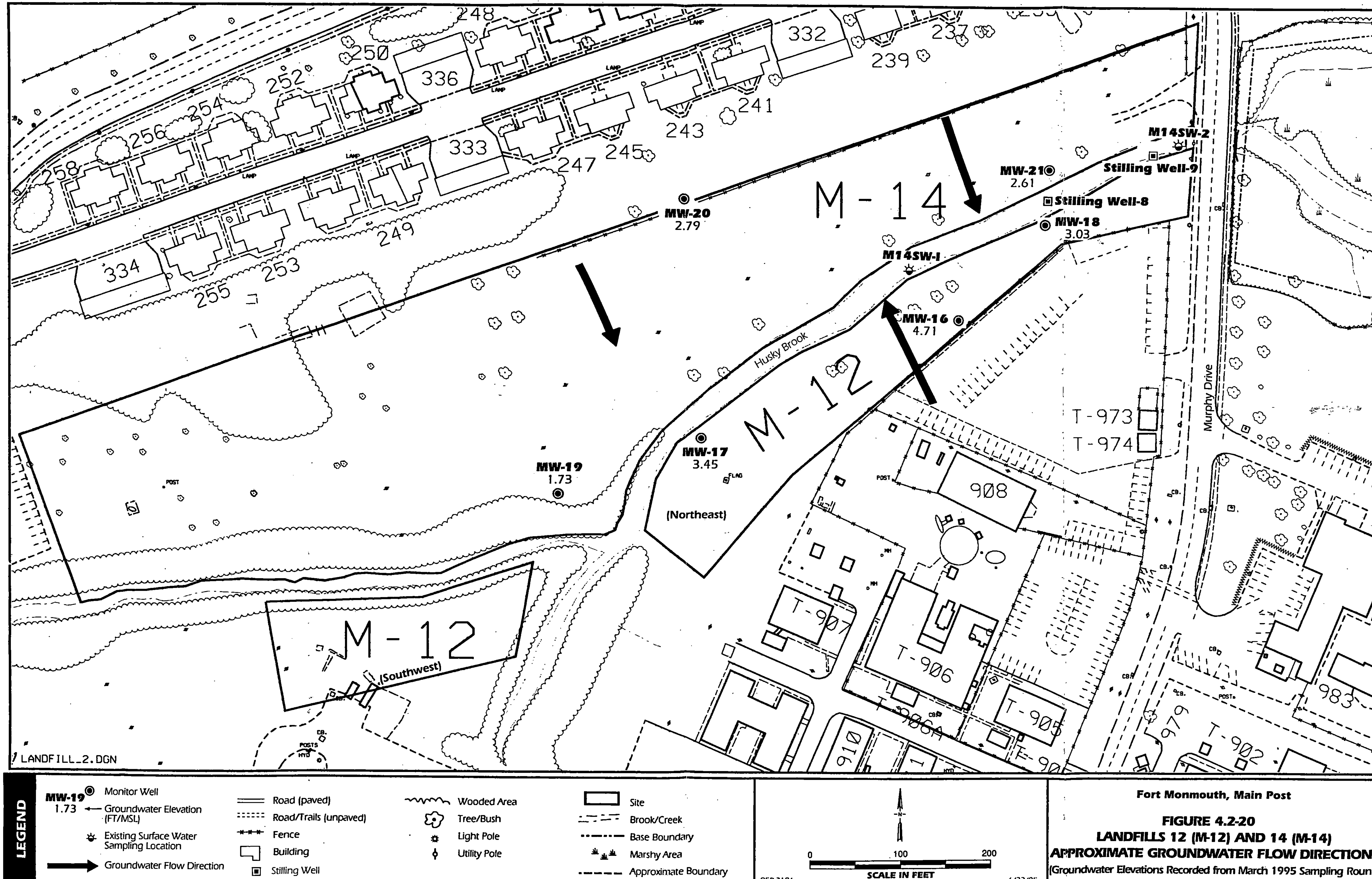
Possible Fill Area Boundary

0 10 20 30 40 50
SCALE IN FEET

Fort Monmouth, Main Post Site M-12 SW

FIGURE 4.2-19
MAGNETOMETER SURVEY
MAGNETIC GRADIENT – SITE M-12 SW

95P-3238 6/27/95



Fort Monmouth, Main Post

FIGURE 4.2-20
LANDFILLS 12 (M-12) AND 14 (M-14)
APPROXIMATE GROUNDWATER FLOW DIRECTIONS
(Groundwater Elevations Recorded from March 1995 Sampling Round)

Site M-14

95P-4674

4.2.9 Landfill 14 (M-14)

4.2.9 1 Site Location

Landfill 14 (M-14) is located on the north bank of Husky Brook in the area west of Murphy Drive (Figure 4.2-15). This area is north of the suspected location of Landfill 12. The approximate area of site M-14 is 300,000 ft^2 (6.9 acres).

4.2.9.2 Site History

Both a 1935 Fort Monmouth map and the 1940s aerial photograph show a marshy area in this location. According to the IA, Landfill 14 was used in 1965 and 1966 for the disposal of building rubble that was covered by dredgings from Husky Brook Lake. A figure in Cosulich shows a 1940s-era landfill in the western part of the area. This 1940s landfill may have contained general domestic and industrial wastes similar to that found in other Main Post landfills.

As part of an NJPDES permit, surface-water samples have been taken at two locations in Husky Brook since February 1986. The results are summarized in the recent report (WESTON, 1993). No compounds were detected in concentrations above the NJDEP surface-water criteria.

4.2.9.3 Sampling Effort

GPR and magnetometer surveys were conducted in the western half of this site to ascertain whether the landfill extends into this area. Three monitor wells (MW-19 through MW-21), shown in Figure 4.2-15, were installed and sampled twice for TCL +30 parameters, TAL metals, and cyanide. Tidal monitoring was conducted at the same time as the tidal monitoring at Landfill 12. Surface-water samples were taken at M14SW-1 and M14SW-2.

4.2.9.4 Geophysical Results

The magnetometer survey at site M-14 shows the majority of the site to have background total magnetic field readings of approximately 54,000 nT, as shown on the total magnetic field contour plot in Figure 4.2-21. However, anomalous readings exist at grid coordinates along the 100N traverse from 0E to 700E, 20N/100E, 40N/760E, 40N/810E, and 0 to 90S/300E to 700E. These anomalies, mostly represented by the blue contour interval or approximately 48,000 nT, can be attributed to cultural features such as a buried gas main, a fence, playground apparatus, and overhead power lines, respectively. The magnetic gradient component confirms the total field anomalies as shown in Figure 4.2-22. A smaller discrete anomaly exists at grid coordinate 40N from 420E to 470E, which is indicative of buried ferrous material.

The overhead power lines could be masking the magnetic response that any potential buried ferrous material may have, however, the GPR survey was conducted to identify any subsurface "disturbances" such as metallic fill material. Chaotic radar reflectors, indicative of fill material, coarse-grained soils, or disturbed soils, were found mainly along the treeline at grid coordinates 0 to 60S/150E to 250E, and 75S to 120S/400E to 475E. Chaotic radar reflectors, corresponding to a magnetic gradient anomaly, exist at 0 to 20N/450E to 575E, and are indicative of ferrous material. Hyperbolic radar signatures, identified as the gas main, were revealed along the 100N traverse at a depth of approximately 3 ft bgs.

While magnetometer and GPR anomalies exist throughout the site, a discrete landfill boundary was not identified at site M-14. This may be due in part to the composition of the fill material, as described in the lithologic logs, and the lack of metallic material.

4.2.9.5 Hydrogeologic Interpretation

Lithologic logs from site monitor wells indicate that the lithology consists of a thin soil cover (0.4 ft) underlain by fill material. The components of the filled materials observed in the borings consisted of concrete rubble, charcoal, wood, and glass fragments intermixed with a gray-green silty fine-coarse-grained sand with little clay and gravel.

Groundwater saturation was observed in the boreholes during activities between 4 and 6 ft bgs. The three monitor wells were screened across the water table, with total depths of 14, 15, and 16 ft bgs in MW-19, MW-20, and MW-21, respectively. Water-level elevation data, measured on 6 March 1995, indicate that local groundwater flow is south toward Husky Brook (Figure 4.2-20). Based on groundwater elevation measurements, monitor wells MW-19 and MW-21 are downgradient of the M-14 area.

4.2.9.6 Groundwater Sampling Results

Monitor wells at site M-14 were sampled for the analytical parameters listed in Table 3.8-1. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.2-11 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the subsequent site-specific and Monmouth County maximum background concentration, where appropriate.

VOCs

VOCs were not detected in the site monitor wells from either sampling round.

SVOCs

SVOCs were not detected in the site monitor wells from either sampling round.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells in either sampling round.

Table 4.2-11
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected
Compounds in Groundwater - Site M-14

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE		
				MW19 2/20/95, 3/10/95 (avg.)	MW20 2/22/95, 3/13/95 (avg.)	MW21 2/22/95, 3/9/95 (avg.)
METALS TOTAL (µg/L)						
Aluminum	24.0	200	121000	**393**	**903.5**	**1380**
Arsenic	1.9	8*	89.3	ND	6.3	2.33
Barium	1.7	2000	699	214.5	48.7	35.2
Beryllium	0.9	20*	7[1]	ND	0.245	ND
Calcium	10.4	NLE	45400	38700	31850	32800
Cobalt	3.0	NLE	18.3	2.03	ND	ND
Chromium	2.9	100	191	4.925	9.625	12.65
Copper	1.9	1000	730[1]	8.15	8.3	2.35
Iron	6.4	300	431000	**41400**	**7960**	**5685**
Potassium	685	NLE	137000	4660	5316	7490
Magnesium	18.3	NLE	62700	5185	4270	4060
Manganese	1.8	50	480[1]	**550.5**	**199.5**	**64.45**
Sodium	30.5	50000	197000[1]	8815	22600	6700
Nickel	10.8	100	187	3.35	5.65	ND
Lead	1.6	10*	22.7	**18.75**	4.65	3.45
Vanadium	2.3	NLE	108	ND	6.25	8.75
Zinc	3.8	5000	233	89.5	14.5	13.5

Compounds exceding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria
ND - Indicates that the compound was not detected at the noted quantification limits
NLE - No Level Established
[1] - Monmouth County maximum background concentration.

Metals

As indicated in Table 4.2-11, of the 17 metals detected in site groundwater, 4 (aluminum, iron, manganese, and lead) were found in concentrations exceeding the NJDEP GWQC. In addition, manganese was found in a concentration greater than both the site-specific and the Monmouth County maximum background level in MW-19 only. As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern. Aluminum and lead were found in concentrations below those determined for site-specific and Monmouth County maximum background levels.

Although the concentration of iron exceeded the Monmouth County background level in MW-19, the concentration was well below the site-specific background level established at the Main Post.

The lower reaches of Husky Brook are tidal. The sodium content of surface water is saline (Subsection 4.2.9.7), suggesting that saltwater has encroached upon this section of Husky Brook. The relatively high sodium content of the monitor wells in the vicinity of Husky Brook is caused by the saltwater encroachment.

Cyanide

Cyanide was not detected in the site monitor wells from either sampling round.

4.2.9.7 Surface-Water Sampling Results

Two surface-water samples, M14SW-1 and M14SW-2 were collected at M-14 (Figure 4.2-15). Both samples were determined to be saltwater based on conductivity and salinity results, and total (unfiltered) and soluble (filtered) concentrations were compared to NJDEP saltwater criteria and background (Table 4.2-12).

Table 4.2-12
Fort Monmouth - Main Post
Summary of Detected Compounds in Surface Water
Total and Soluble - Site M-14

COMPOUND	METHOD DETECTION LIMIT	NJDEP SURFACE WATER CRITERIA[a] SALINE WATER	MAXIMUM BACKGROUND CONCENTRATION (TOTAL)	MAXIMUM BACKGROUND CONCENTRATION (SOLUBLE)	ANALYTICAL RESULTS SAMPLING DATE - 12/1/1994			
					M14 (Total)		M14 (Soluble)	
					SW-1	SW-2	SW-1	SW-2
VOC's (µg/L)								
1,2-Dichloroethene (total)	4.4	NLE	ND	ND	4 J	5 J	NA	NA
SVOCs (µg/L)								
bis-(2-Ethylhexyl)phthalate	9.7	5.92 (hc)	ND	ND	ND	2 J	NA	NA
METALS TOTAL (µg/L)								
Aluminum	26.7	NLE	748	ND	188	205	ND	26.7
Barium	2.1	NLE	44.7	39.4	30	33.1	27.2	31.2
Calcium	12	NLE	31600	30900	16200	20400	16300	20300
Cobalt	2.4	NLE	8.1	4.1	ND	ND	ND	ND
Copper	2.4	NLE	3.2	4	2.9	5.3	5.6	4.9
Iron	4.7	NLE	6210	405	1920	2070	839	999
Lead	1.6	NLE	10	ND	3.4	2.8	3.1	3.2
Magnesium	38.2	NLE	5440	5120	9770	21400	9540	21600
Manganese	2.0	100 (h)	113	98.6	65.6	68.4	63.6	66.1
Nickel	12.8	NLE	22.9	16.1	14.2	ND	ND	ND
Potassium	821	NLE	5060	4280	4840	8320	4240	8220
Sodium	15.4	NLE	26700	26200	70100	168000	69100	171000
Zinc	2.8	NLE	35.1	23.8	23.7	23.4	14.4	13.2

[a] - NJDEP Surface Water Quality Standards (1993).
h -Non carcinogen effect-based human health criteria as a 30 day average.
hc - Carcinogen effect-based human health criteria as 70 year average.
ND - Indicates that the compound was not detected at the noted quantification limit.
J - Indicates that the concentration value was estimated due to detection at or near the quantification limit.
NLE - No Level Established
NA - Not Analyzed.
Compounds dectected above NJDEP Surface Water Criteria are noted by bold numbers.

VOCs

VOCs were analyzed for but were not detected above the laboratory quantitation limit in site surface-water samples.

SVOCs

SVOCs were analyzed for but were not detected above the laboratory quantitation limit in site surface-water samples.

Pesticides/PCBs

Pesticides/PCBs were analyzed for but were not detected in site surface-water samples.

Metals

As indicated in Table 4.2-12, no metals were found in concentrations exceeding the NJDEP surface-water criteria (saline).

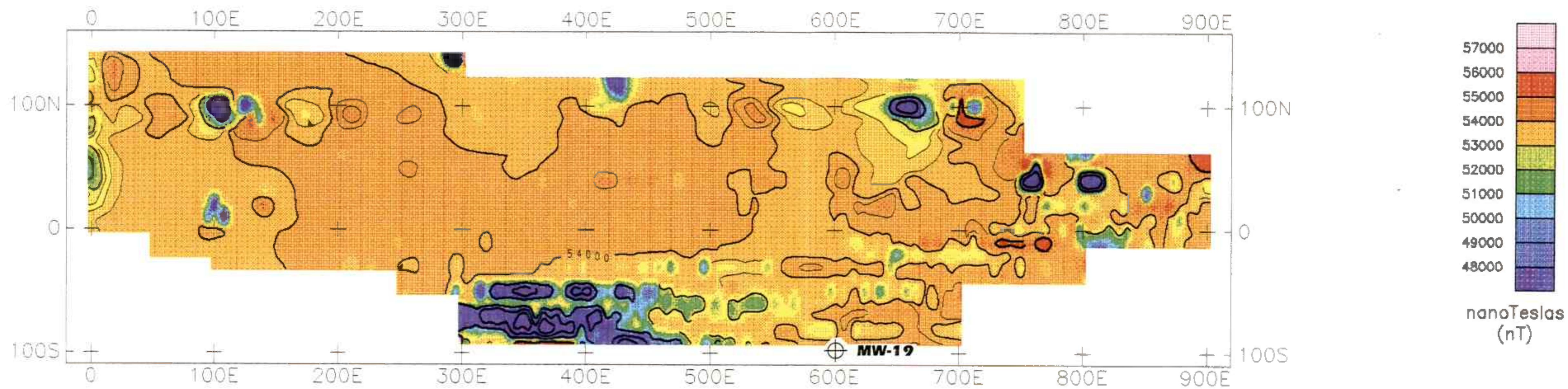
4.2.9.8 Recommendations

The results of the geophysical surveys indicate that fill and some metallic debris exist throughout the site; however, a discrete landfill boundary was not identified at site M-14. This may be due in part to the composition of the fill material and the small amount of subsurface metallic material present at the site.

The groundwater and surface-water sampling results indicate that no compounds of concern were detected above NJDEP GWQC and surface-water criteria.

Tidal monitoring was conducted at site M-12 and site M-14 simultaneously. The results of the tidal monitoring are discussed in Subsection 6.1.6.

Although no compounds of concern were identified at site M-14, because of the site's history of being used as a landfill, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Contaminants identified in the first two rounds of sampling would be targeted for the monitoring program.



LEGEND

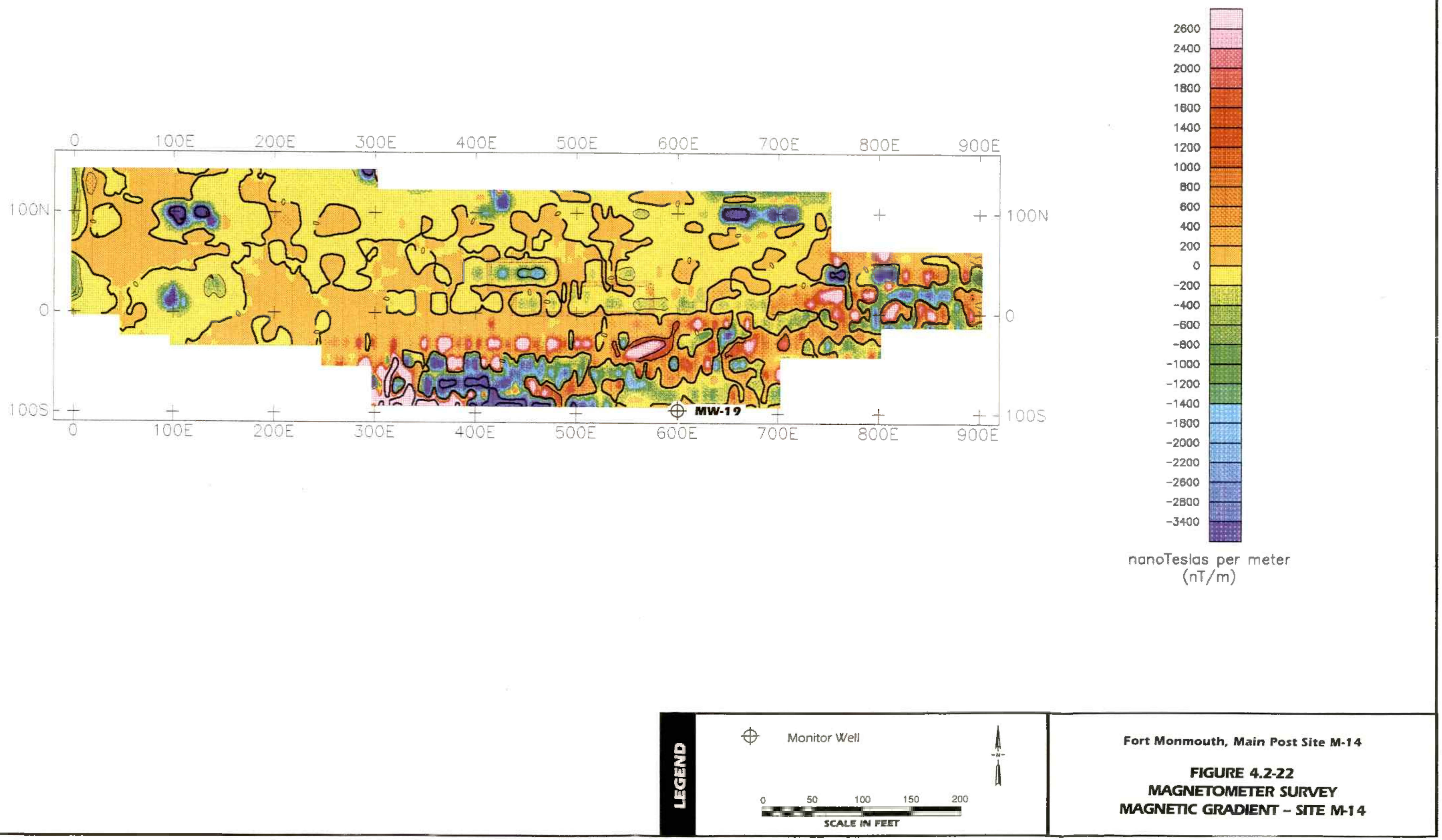
Monitor Well

0 50 100 150 200
SCALE IN FEET

Fort Monmouth, Main Post Site M-14

FIGURE 4.2-21
MAGNETOMETER SURVEY
TOTAL MAGNETIC FIELD – SITE M-14

95P-3239 6/27/95



Fort Monmouth, Main Post Site M-14

FIGURE 4.2-22
MAGNETOMETER SURVEY
MAGNETIC GRADIENT – SITE M-14

95P-3240 6/27/95

Site M-15

95P-4674

4.2.10 Water Tank (M-15)

4.2.10.1 Site Location

The water tank is located on the eastern portion of the Main Post (Figure 4.2-23). The tank is a vertical aboveground tank mounted on a concrete pad. The approximate area of site M-15 is 3,000 ft^2 (0.07 acre). There are soil patches without vegetation along the eastern circumference of the tank and visible paint chips.

4.2.10.2 Site History

Interviews with site personnel indicate that the tank was constructed in the 1940s and was always used as a water tank. The IA described the site as the "Water Tank," but did not discuss why the tank was identified as a hazardous waste site.

4.2.10.3 Sampling Effort

There is no evidence that the water tank or its contents are potential sources of contamination; however, the stressed vegetation may have been caused by the use of herbicides and the paint chips may contain lead. Therefore, two surface soil samples (0 to 6 inches) were collected, one at the bottom of the grade and one halfway up the grade, and were analyzed for TCL SVOCs, TAL metals, and pesticides (Figure 4.2-23). The SVOCs were analyzed for even though this was not proposed in the original scope of work (CDAP).

4.2.10.4 Soil Sampling Results

Two surface soil samples were collected (0 to 0.5 ft bgs), one at the bottom of the grade and one halfway up the grade, and were analyzed for the parameters listed in Table 3.6-1. The analytical results are listed in Appendix D. Table 4.2-13 compares the detected compounds in site soil with the NJDEP Residential Direct Contact Soil Cleanup Criteria (SCC), and then compares the results to the subsequent site-specific and Monmouth County background levels, where appropriate. In

Table 4.2-13
Fort Monmouth - Main Post
Summary of Detected Compounds
In Soils at Site M-15

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS SAMPLE DATE SS01-A01 11/29/94	SS02-A01 11/29/94
SVOCs (mg/kg) - Sample Interval (6" to 12" bgs)					
Anthracene	0.152	10,000	0.1 J	0.041 J	ND
Phenathrene	0.165	NLE	0.39	0.37 J	0.17 J
Fluoranthene	0.198	2300	0.46	0.53	0.36 J
Pyrene	0.178	1700	1.5	0.72	0.43
Benzo(a)anthracene	0.162	0.9	0.65	0.31 J	0.18 J
Chrysene	0.145	0.9	0.65	0.33 J	0.23 J
bis(2-Ethylhexyl)phthalate	0.32	49	0.19 J	.069 J	.077 J
Benzo(b)fluoranthene	0.188	0.9	0.9	0.45	0.35 J
Benzo(k)fluoranthene	0.205	0.9	0.43	0.13 J	0.110 J
Benzo(a)pyrene	0.162	0.66	0.6	0.27 J	0.200 J
Indeno(1,2,3-cd)pyrene	0.234	0.9	0.46	0.16 J	0.120 J
Dibenzo(a,h)anthracene	0.198	0.66	0.079 J B	.041 J	ND
Benzo(g,h,i)perylene	0.224	NLE	0.64 B	0.16 J	0.11 J
PESTICIDES AND PCBs (mg/kg) Sample Interval (0" to 6" bgs)					
4,4'-DDE	0.0038	2	0.096 P	**6.6 CD**	1.0 CD
4,4'-DDT	0.0037	2	.110 D	**7.9 CD**	1.0 CD
METALS TOTAL (mg/kg) Sample Interval (0" to 6"bgs)					
Aluminum	3.9	NLE	15200	5300	5030
Arsenic	0.35	20	22.9	8.3	8.9
Barium	0.17	700	32.3	68.4	101
Beryllium	0.1	1	2	0.6	0.69
Calcium	2.2	NLE	921	815	1860
Cadmium	0.86	1	0.116[1]	**2.9**	**4.5**
Cobalt	0.71	NLE	2.5	6.1	7.8
Chromium	1.6	500	269	109	95.5
Copper	2.2	600	8	34	66.5
Iron	0.58	NLE	55800	33400	37700
Lead	0.49	400[2]	25.9[1]	**5340**	**6130**
Magnesium	9.6	NLE	7230	1560	1600
Manganese	0.18	NLE	90.7	159	187
Nickel	1.4	250	8.4	8.3	6.9
Potassium	(12.3-25.8)	NLE	15400	2990	2770
Sodium	3.8	NLE	51.6	23.4	33.1
Silver	0.54	110	1.1	1.4	1.5
Selenium	0.36	63	1.9	0.45	2.1
Vanadium	0.53	370	94.1	27.5	25.9
Zinc	0.41	1500	81.4	**7750**	**12800**

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.
bgs - Below Ground Surface
J - Indicates that the concentration value was estimated due to detection at or near the detection limits
C- Pesticide identification was confirmed by GC/MS
P - The percent difference between the results from two GC columns is greater than 25%,the lower of the two values is reported
B - Compound was observed in the sample and associated laboratory blank.
D - surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis
ND - Indicates that the compound was not detected at or below the quantification limits
NLE - No Level Established
Note:MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability
[1] Monmouth County maximum background concentration.
[2] NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

addition, compounds that exceed the SCC are subsequently compared to the impact to groundwater SCC because there were no monitor wells installed at the site.

SVOCs

Three SVOCs were detected above laboratory quantitation limits in site soils, but were well below NJDEP SCC. In addition, all other detected compounds with established SCC were found in concentrations below their respective criteria. The detected compounds did not exceed the impact to groundwater SCC.

Pesticides/PCBs

Two pesticides (4,4'-DDE and 4,4'-DDT) were detected in concentrations above NJDEP SCC and background in SS-01. The concentrations of 4,4'-DDE and 4,4'-DDT were well below the respective impact to groundwater criteria (Figure 4.2-24). Pesticides were not detected above criteria in SS-02. PCBs were not detected in site surface soil samples.

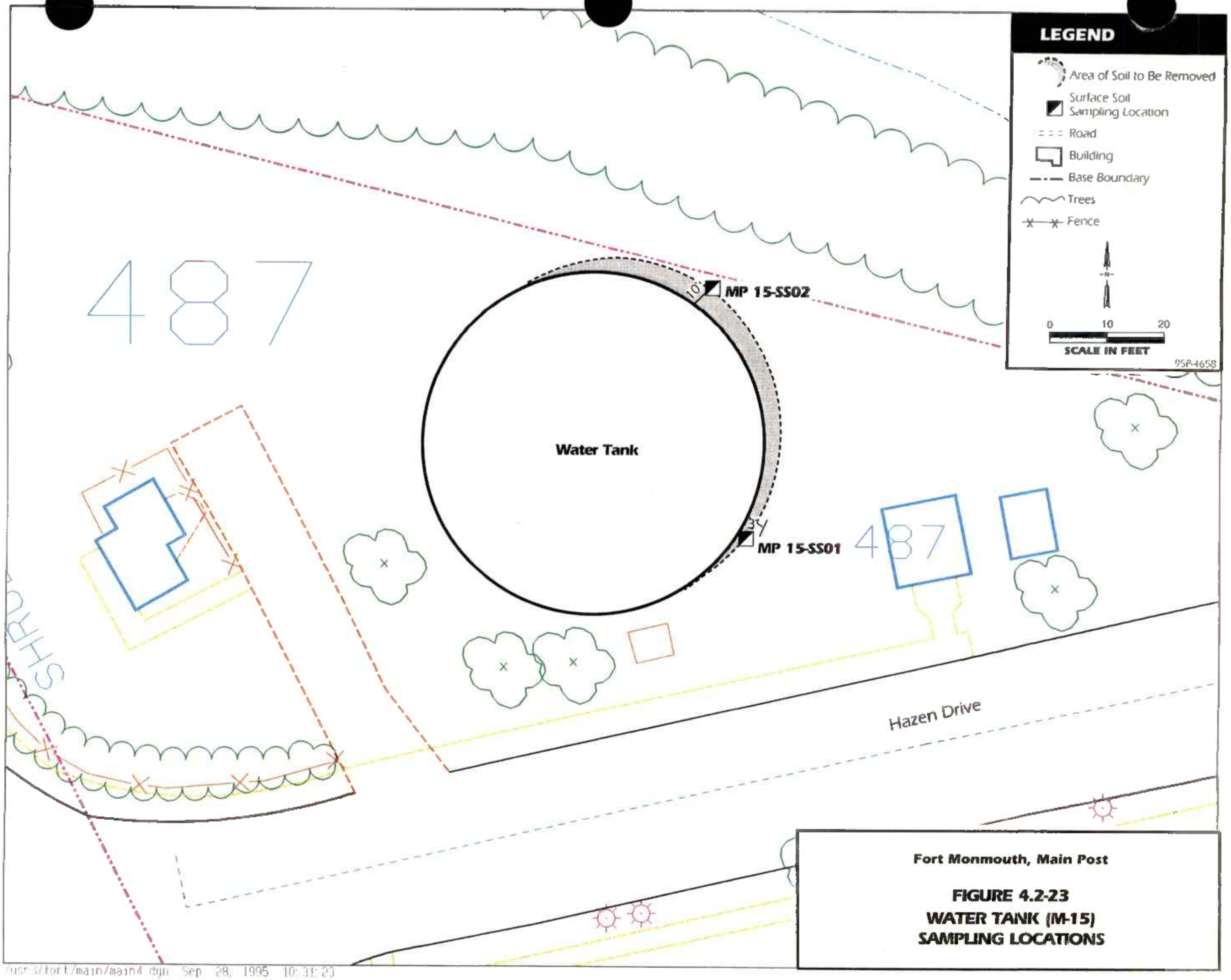
Metals

As indicated in Table 4.2-13, of the 20 metals detected in site soil, 3 (cadmium, lead, and zinc) were found in concentrations exceeding the NJDEP SCC. In addition, these metals were found in concentrations greater than those determined for site-specific and Monmouth County maximum background at the Main Post. Figure 4.2-24 presents the locations of compounds detected above the SCC and the established maximum background concentrations at the Main Post.

4.2.10.5 Recommendations

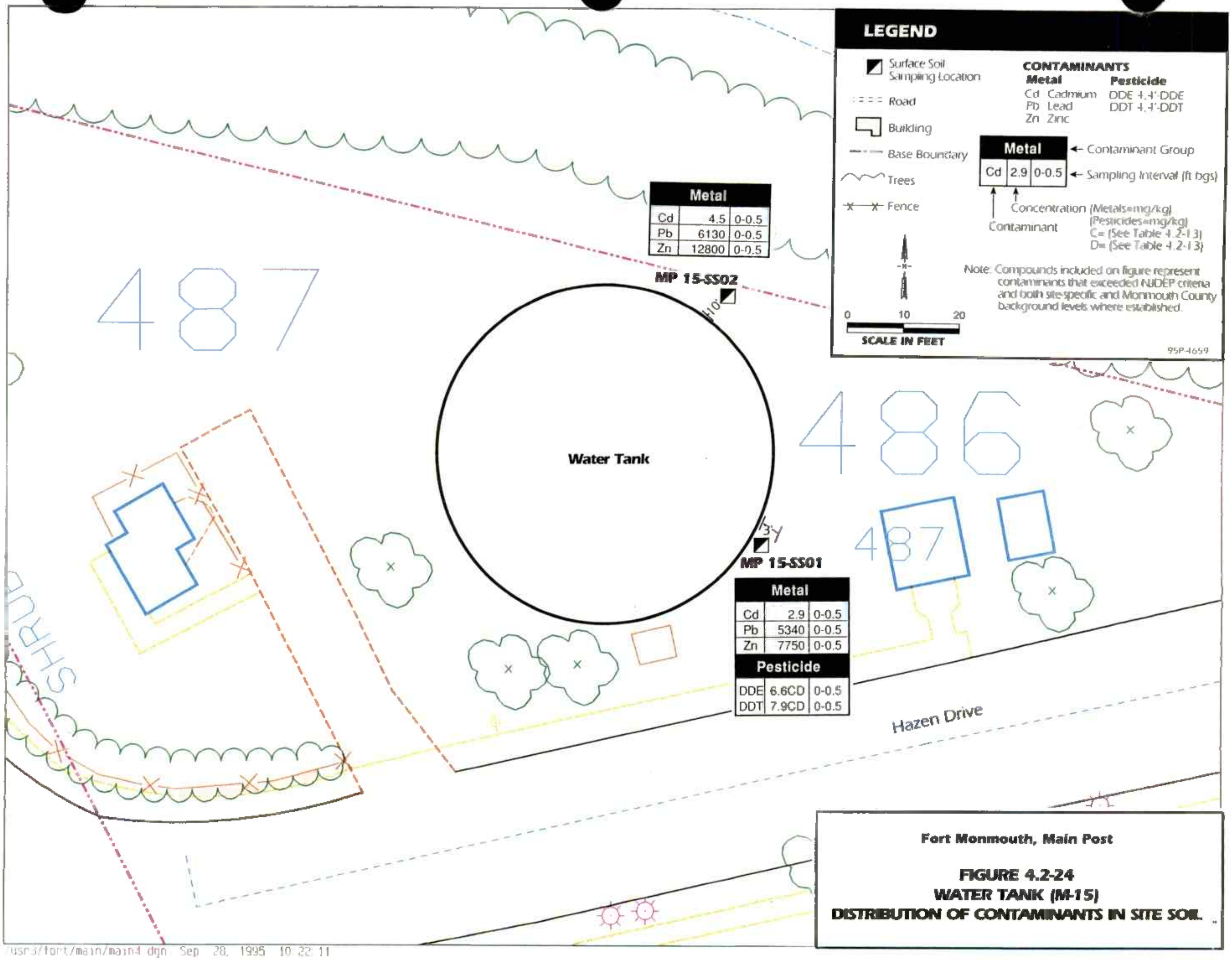
Two pesticide compounds and three metals, cadmium, zinc, and lead, were detected in surface soil at levels that exceeded NJDEP SCC and maximum background.

DPW has submitted the necessary documentation to Headquarters, Army Materiel Command/Army Environmental Center (HQAMC/AEC) to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations. The area of contamination encompasses the perimeter of the tank, about 10 feet at the widest point. The depth of contamination is assumed to be 6 inches. Excavation will be performed in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved. It is estimated that 13 yd^3 of soil will be excavated, assuming that soil is excavated to a depth of 6 inches. NJDEP will be requested to send a representative to observe the excavation.



Fort Monmouth, Main Post

FIGURE 4.2-23
WATER TANK (M-15)
SAMPLING LOCATIONS



Fort Monmouth, Main Post

FIGURE 4.2-24
WATER TANK (M-15)
DISTRIBUTION OF CONTAMINANTS IN SITE SOIL

Site M-16

95P-4674

4.2.11 Former Pesticide Storage Building (M-16)

4.2.11.1 Site Location

The former Pesticide Storage Building (M-16) was misidentified as Building 167 in the IA. The building actually used for pesticide storage was Building S-498, which is located on the south-side of Riverside Avenue, north of the marina (Figure 4.2-25). The approximate area of site M-16 is 1,400 ft^2 (0.03 acre).

4.2.11.2 Site History

Building S-498 was built in 1939. According to long-term Fort Monmouth employees, this building was used as a pesticide control shop in the 1940s and 1950s, before this function was moved to Building T-65. Building S-498 is currently used for miscellaneous storage. During the 1993 site visit, workers were bricking in the windows. The front of the building has a tile floor and was most likely used for office space. The back wing of the building has a cement floor with a centrally located floor drain. The southeast corner of the floor has sunk 2 to 3 inches, breaking away from the foundation and creating a crack in the area of the door. The cracks and floor drain could have allowed the release of spilled pesticides. Pesticide mixing reportedly took place inside the building with rinse water dumped in a sink that went to the sanitary sewer.

4.2.11.3 Sampling Effort

Four soil samples were collected from 6 to 12 inches bgs from areas that are not paved south of the building and analyzed for TCL +30 parameters (Figure 4.2-25). Soil samples were collected from two discrete intervals in the monitor well boring and analyzed for TCL +30 parameters and TAL metals. TAL metal analysis was not proposed in the CDAP but samples were collected at SB-01. One monitor well (MW-22) was south of Building S-498. Two rounds of groundwater samples from the monitor well were analyzed for TCL +30 parameters. In addition, an attempt was made to determine whether the floor drain discharges to the sanitary sewer at Building S-498. However, because the original floor in the building was reconstructed as a result of past flooding problems, the original drainage line was no longer accessible and, consequently, could not be traced from Building S-498 to the sanitary sewer.

4.2.11.4 Hydrogeologic Interpretation

The lithologic log from MW-22 indicates that the lithology consists of a thin (0.4 ft) soil cover with crushed asphalt (to 2 ft bgs) underlain by interbedded green-brown fine-coarse sandy clay and fine-coarse sand with little clay.

Saturation was observed at 1 ft bgs. Monitor well MW-22 was screened in the saturated zone and was completed to a depth of 14.5 ft bgs. The site-specific groundwater flow direction is estimated to be south toward Oceanport Creek (Figure 4.2-26).

4.2.11.5 Soil Sampling Results

One shallow soil boring (SB-01) was installed in the MW-22 borehole to a depth of 6 ft bgs. Soil samples were collected in the borehole from two discrete intervals, i.e., 0 to 2 ft bgs and 2 to 4 ft bgs. In addition, four surface soil samples were collected from the 0 to 0.5 ft bgs interval. Soil samples were sampled for the analytical parameters listed in Table 3.6-1. The analytical results for site soils are listed in Appendix D. Table 4.2-14 compares detected compounds with the NJDEP SCC, and then compares the results to the subsequent site-specific and Monmouth County maximum background levels, where appropriate.

<u>VOCs</u>

VOCs were not detected in site soils.

<u>SVOCs</u>

Three SVOCs were detected slightly above laboratory quantitation limits in site soils. The compounds were detected well below their respective NJDEP SCC. In addition, SVOCs

Table 4.2-14 (1 of 2)
Fort Monmouth - Main Post
Summary of Detected Compounds
In Soil at Site M-16

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS					
				SB01-A01 12/15/94 (0-2 ft bgs)	SB01-A02 12/15/94 (2-4 ft bgs)	SS01-A01 11/29/94 (1)	SS02-A01 11/29/94 (1)	SS03-A01 11/29/94 (1)	SS04-A01 11/29/94 (1)
SVOCs (mg/kg)									
bis(2-ethylhexyl)phthalate	0.32	49	0.19J	ND	0.23J	0.084 J	1.1 J	0.26 J	0.64
Phenathrene	0.165	NLE	0.39	0.140 J	ND	ND	ND	0.045 J	ND
Di-n-octylphthalate	0.185	1100	ND	ND	ND	0.845	1.1 J	0.26 J	0.64
Fluoranthene	0.198	2300	0.46	0.330 J	ND	0.046 J	ND	0.1 J	0.073 J
Pyrene	0.178	1700	1.5	0.220 J	ND	0.060 J	ND	0.14 J	0.096 J
Benzo(a)anthracene	0.162	0.9	0.65	0.092 J	ND	ND	ND	0.069 J	0.039 J
Chrysene	0.145	9	0.65	0.150 J	ND	ND	ND	0.063 J	0.043 J
Benzo(b)fluoranthene	0.188	0.9	0.9	0.150 J	ND	ND	ND	0.12 J	0.065 J
Benzo(k)fluoranthene	0.205	0.9	0.43	0.069 J	ND	ND	ND	ND	ND
Benzo(a)pyrene	0.162	0.66	0.6	0.084 J	0.43	ND	ND	0.575	0.046 J
Indeno(1,2,3-cd)pyrene	0.234	0.9	0.46	0.067 J	ND	ND	ND	0.049 J	0.04 J
Benzo(g,h,i)perylene	0.224	NLE	0.64 B	0.063 J	ND	ND	ND	ND	ND
PESTICIDES AND PCBs (mg/kg)									
Aldrin	0.0021	0.04	ND	ND	ND	ND	**0.17 C**	ND	ND
gamma-BHC (Lindane)	0.0021	0.52	ND	ND	ND	0.0034	0.17	0.0059	ND
Heptachlor	0.0021	0.15	ND	ND	ND	ND	**2.5 CD**	0.0099	ND
Dieldrin	0.0042	0.042	ND	**0.12**	ND	0.017	**2.0 CD**	**0.21 D**	**0.37 C**
4,4'-DDE	0.0037	2	0.091 D	1 C	0.1	0.35 CD	**3.5 CD**	0.48 CD	0.57 CD
4,4'-DDD	0.0037	3	0.0096 P	1.5 C	0.2	0.13 D	ND	0.22 D	1.7 CD
4,4'-DDT	0.00037	2	0.11 D	.71 C	0.072	1.1 CD	**23 CD**	**2.0 C D**	1.6 CD
Endrin Ketone	0.0037	NLE	ND	ND	ND	ND	0.092	ND	ND
alpha-Chlordane	0.0018	NLE	ND	0.042	0.0096	0.05	11 CD	0.2 D	0.86 CD
gamma-Chlordane	0.0018	NLE	ND	0.033 P	0.0088 P	0.05	13 CD	0.2 D	0.92 CD

Note: See page (2 of 2) for Table 4.2-14 Text, etc.

Table 4.2-14 (2 of 2)
Fort Monmouth - Main Post
Summary of Detected Compounds
In Soil at Site M-16

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS					
				SB01-A01 12/15/94 (0-2 ft bgs)	SB01-A02 12/15/94 (2-4 ft bgs)	SS01-A01 11/29/94 (1)	SS02-A01 11/29/94 (1)	SS03-A01 11/29/94 (1)	SS04-A01 11/29/94 (1)
METALS TOTAL (mg/kg)									
Aluminum	3.9	NLE	15200	6840	11900	NA	NA	NA	NA
Arsenic	0.35	20	22.9	8.8	16	NA	NA	NA	NA
Barium	0.17	700	32.3	36.3	29.7	NA	NA	NA	NA
Beryllium	0.1	1	2	0.84	0.8	NA	NA	NA	NA
Calcium	2.2	NLE	921	1500	1200	NA	NA	NA	NA
Cobalt	0.7	NLE	2.5	5.0	2.8	NA	NA	NA	NA
Chromium	1.6	500	269	54.6	59.5	NA	NA	NA	NA
Copper	2.2	600	8	24.2	11.7	NA	NA	NA	NA
Iron	0.58	NLE	55800	21300	36200	NA	NA	NA	NA
Lead	0.4	400[3]	25.9[2]	35.3	16.3	NA	NA	NA	NA
Magnesium	9.6	NLE	7230	1670	2340	NA	NA	NA	NA
Manganese	0.18	NLE	90.7	74.5	37.7	NA	NA	NA	NA
Nickel	1.4	250	8.4	8.0	5.4	NA	NA	NA	NA
Potassium	(12.3-25.8)	NLE	15400	2990	3660	NA	NA	NA	NA
Sodium	3.8	NLE	51.6	283	232	NA	NA	NA	NA
Selenium	0.3	63	1.9	0.67	0.96	NA	NA	NA	NA
Vanadium	0.53	370	94.1	37.6	43.5	NA	NA	NA	NA
Zinc	0.41	1500	81.4	93	42.1	NA	NA	NA	NA

Compounds exceeding NJDEP cleanup criteria are noted by bold numbers.
J - Indicates that the concentration value was estimated due to detection at or near the detection limits
C- Pesticide identification was confirmed by GC/MS
D - Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis.
P - The percent difference between the results from two GC columns is greater than 25%,the lower of the two values is reported
B - Compound was observed in the sample and associated laboratory blank
NA- Not Analyzed - Not Proposed ; NLE - No Levels Established
ND - Indicates that the compound was not detected at or below the quantification limits
ft bgs. - feet below ground surface.
[1] - VOC's/SVOC's were collected from sample interval 6" to 12" bgs; Pesticide/PCB's were collected from sample interval 0.0" to 6" bgs.
Note: Metal analysis was not proposed or analyzed at surface soil locations. Metals analysis was not proposed at SB-01,but was analyzed.
Note: MDL's for metal analysis are actually the highest detection limit with potassium given as a range due to high variability.
[2] Monmouth County maximum background concentration.
[3] NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

detected below laboratory quantitation limits were found in levels well below their respective criteria where established.

Pesticides/PCBs

A total of 10 pesticide compounds were detected above laboratory quantitation limits in site soil. Five pesticides (dieldrin, heptachlor, aldrin, 4,4'-DDE, and 4,4'-DDT) were found in concentrations exceeding the NJDEP SCC. Dieldrin was detected in soil boring SB-01 (0 to 2 ft bgs) and in surface soil samples SS-01 through SS-04. Heptachlor, aldrin, 4,4'-DDE, and 4,4'-DDT were detected at or above criteria in SS-01, SS-02, SS-03, and SS-04. None of the pesticides were detected above their respective impact to groundwater criteria. PCBs were not detected in site soil (Figure 4.2-27).

Metals

As indicated in Table 4.2-14, no metals were detected in concentrations above either the NJDEP SCC or established maximum background concentrations at the Main Post.

4.2.11.6 Groundwater Sampling Results

Monitor well MW-22 was sampled for the analytical parameters listed in Table 3.8-1. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.2-15 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate.

VOCs

VOCs were not detected in MW-22 from either sampling round.

Table 4.2-15
Fort Monmouth -Main Post
Summary of Average Concentrations of Detected Compounds in Groundwater
Site M-16

COMPOUND	METHOD DETECTION LIMIT	NJDEP GW QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE		
				MW22A01 2/17/95	MW22A02 3/9/95	MW22A02 (avg)
SVOCs (µg/L)						
bis-(2-Ethylhexyl)phthalate	9.7	30*	5 J	ND	1J	0.5 J

Compounds detected above NJDEP standards are noted by bold numbers.
GW - Ground water
NJDEP groundwater quality criteria consist of the higher number between the PQL or the STANDARD.
*PQL - Practical Quantitation Limit was used as the NJDEP groundwater quality criteria
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
ND - Indicates that the compound was not detected at or below the quantification limits

SVOCs

SVOCs were not detected above laboratory quantitation limits in MW-22 from either sampling round. The SVOC bis(2-ethylhexyl) phthalate was detected below the laboratory quantitation limit and well below the NJDEP GWQC.

Pesticides/PCBs

Pesticides/PCBs were not detected in MW-22 from either sampling round.

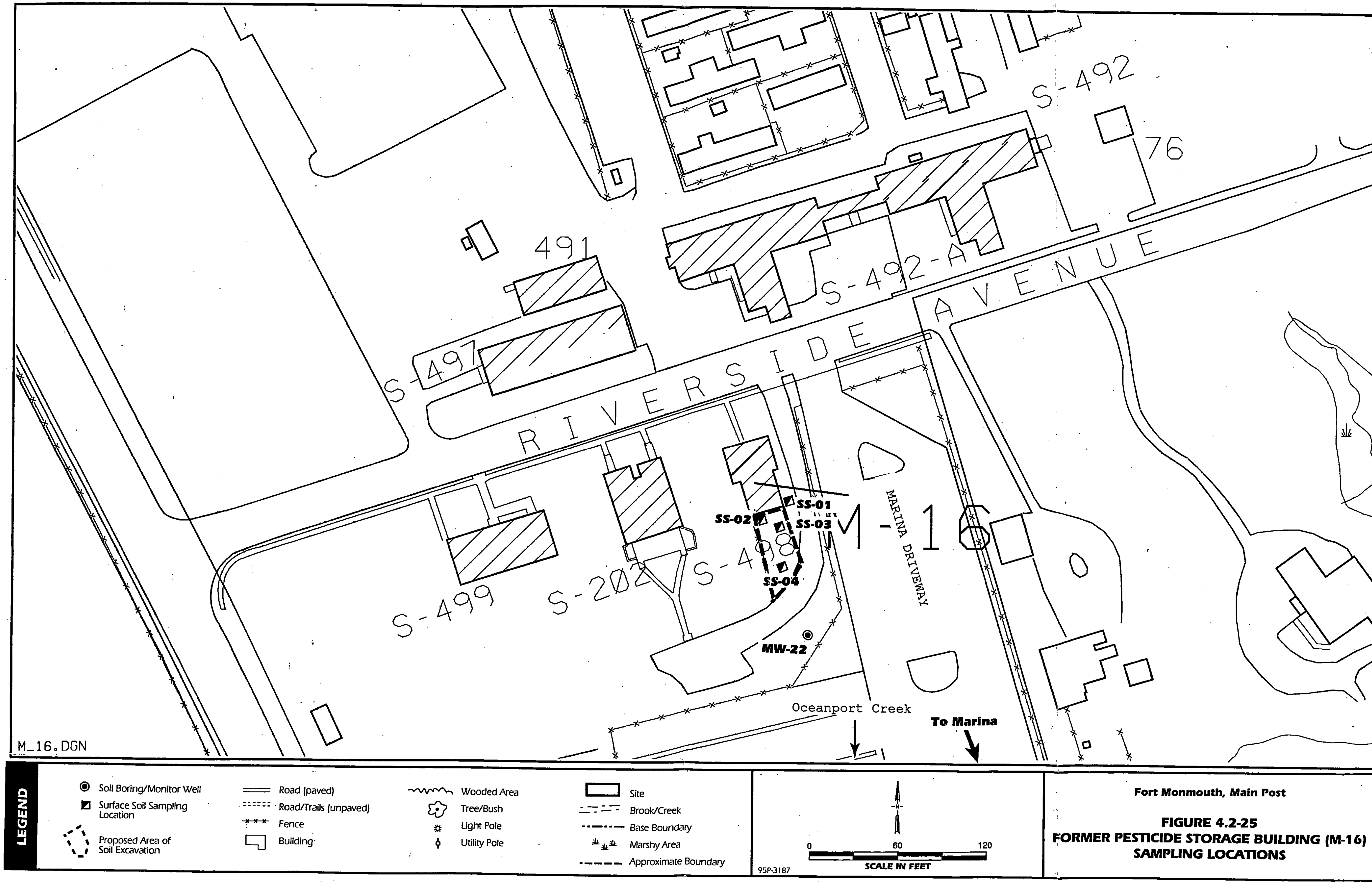
4.2.11.7 Recommendations

Pesticide compounds were detected at four surface soil sampling locations and in one soil boring sample (0 to 2-foot interval) in concentrations above NJDEP criteria and background.

No compounds of concern were detected in the groundwater above NJDEP criteria.

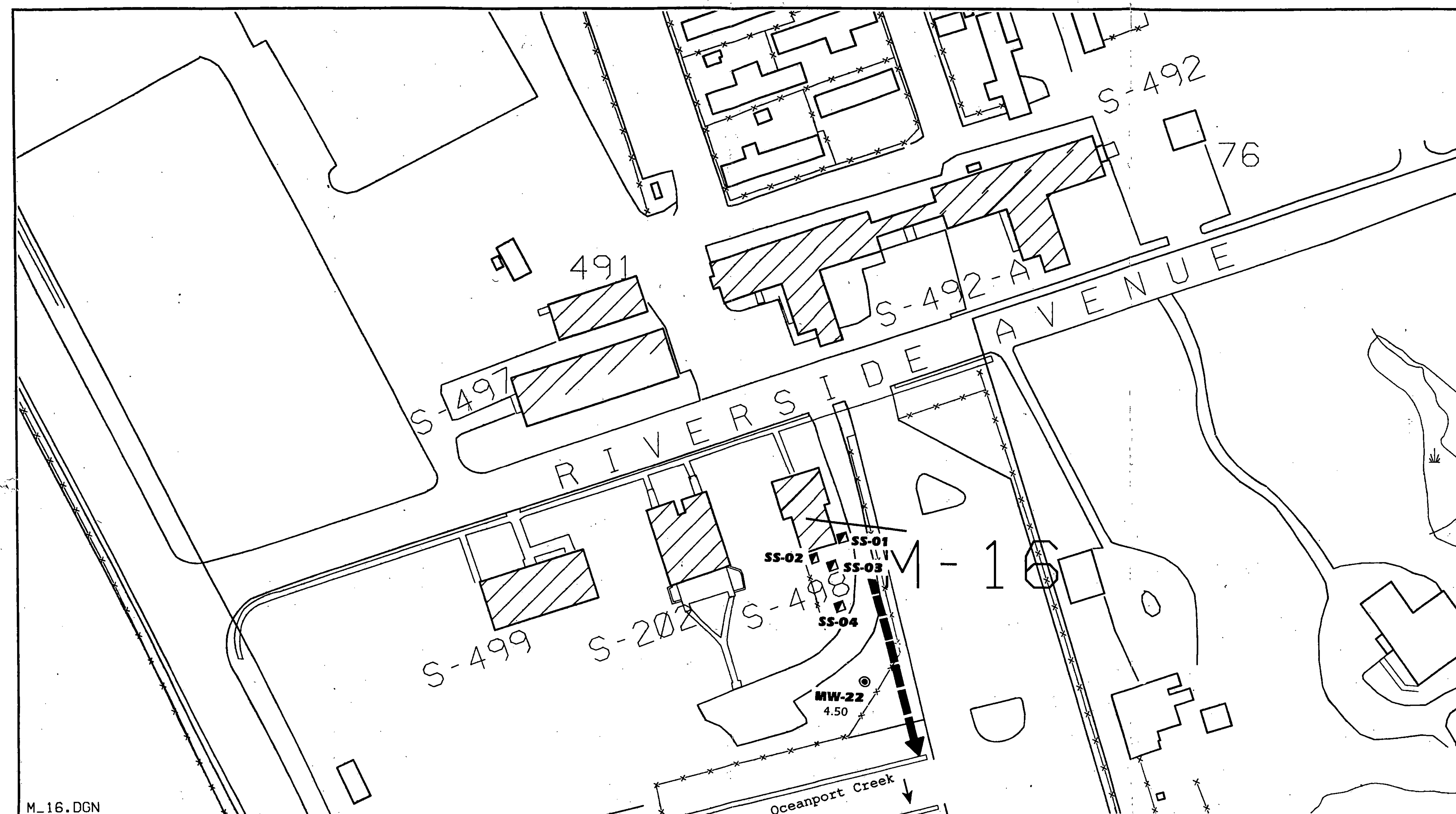
DPW has submitted the necessary documentation to HQAMC/AEC to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations. The area of contamination is approximately 50 feet by 20 feet. The depth of contamination is assumed to be 12 inches. Excavation will be conducted in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved. It is estimated that 56 yd^3 of soil will be excavated, assuming that soil will be excavated to a depth of 12 inches. NJDEP will be requested to send a representative to observe the excavation.

The site monitor well will be properly abandoned due to the nondetection of compounds of concern in groundwater. The remedial activities proposed will remediate potential source areas of pesticides detected in soil.



Fort Monmouth, Main Post

FIGURE 4.2-25
FORMER PESTICIDE STORAGE BUILDING (M-16) SAMPLING LOCATIONS



LEGEND

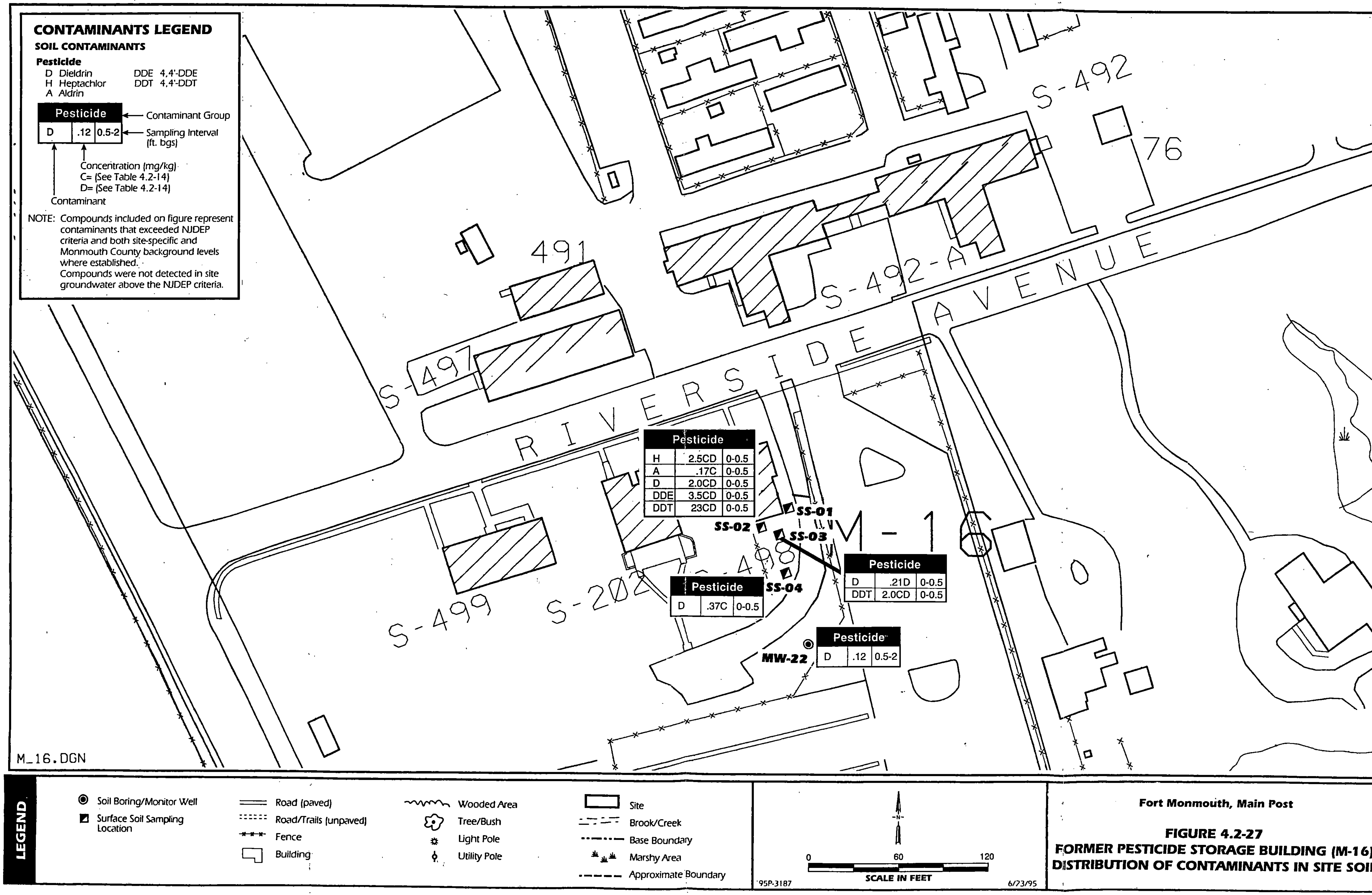
- Soil Boring/Monitor Well
- MW-22 4.50 — Monitor Well; Groundwater Elevation (FT/MSL)
- Surface Soil Sampling Location
- Groundwater Flow Direction (Dashed where Inferred)
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary

0 60 120
SCALE IN FEET

95P-3187 6/23/95

Fort Monmouth, Main Post

FIGURE 4.2-26
FORMER PESTICIDE STORAGE BUILDING (M-16)
APPROXIMATE GROUNDWATER FLOW DIRECTIONS
(Groundwater Elevations Recorded from March 1995 Sampling Round)



Fort Monmouth, Main Post

FIGURE 4.2-27
FORMER PESTICIDE STORAGE BUILDING (M-16)
DISTRIBUTION OF CONTAMINANTS IN SITE SOIL

Site M-18

95P-4674

4.2.12 Former Training Area (M-18)

4.2.12.1 Site Location

The Army Signal School Training Area (M-18) is located in the northern part of the Main Post, between Parkers Creek to the north and Buildings 283, T-294, T-293, S-289, and S-145 to the south (Figure 4.2-28). The approximate area of site M-18 is 177,300 ft^2 (4.1 acres).

4.2.12.2 Site History

The Army Signal School Training Area has been used for military training exercises since 1919. Diesel and gasoline generators used to support these field exercises were reported in the IA to have been used 150 meters from Lafetra Creek, although the location shown in Figure 7 of the IA is closer to Parkers Creek. The IA reports that numerous fuel spills occurred in the generator area. A riot control agent was also used in this area for troop protective mask training for a limited period of time. During the 1993 site inspection, military training area exercises were being conducted in the M-18 area. Part of the area is paved. Based on the presence of concrete at the surface, there is a suspected debris disposal area used for the disposal of building rubble in the area north of Building 289.

4.2.12.3 Sampling Effort

GPR and electromagnetic (EM) surveys were conducted to investigate the extent of debris disposal north of Building 289. Nine soil borings in a grid pattern were drilled in this area (Figure 4.2-28). The original scope of work included the installation of 12 soil borings. However, because of difficult drilling locations in marshy areas, the borings were repositioned and fewer borings were installed. Soil samples were analyzed for VOCs and TPHs and were collected from either 6 to 12 inches or 12 to 18 inches below the bottom of the asphalt (to avoid bias from the asphalt that covers about half of this area) and either from intervals with visible staining or from just above the water table. If staining was observed, samples were collected for SVOC analysis. If staining or high HNu, organic vapor analyzer (OVA), or organic vapor monitor (OVM) readings were recorded, a sample was collected for TCL +30 parameters and

TAL metals. Due to soil staining and elevated PID readings at SB-06, TCL +30 parameters and TAL metals were sampled. No evidence of contamination was present at the other soil sampling locations. Monitor wells were installed in two of the borings (MW-24 and MW-25), and two rounds of groundwater samples were collected for TCL +30 parameters, TAL metals, and TPHs. In addition, two rounds of groundwater samples were collected from previously installed monitor well MW-3.

4.2.12.4 Geophysical Results

The EM survey conducted at site M-18 reveals apparent background conductivities in the range of 25 to 40 mS/m, which are represented by the green to yellow color contour intervals as shown in Figure 4.2-29. These conductivities are indicative of silty soils. High conductivity readings exist toward the north and perimeter of the site (70 + mS/m). This is probably due to marsh deposits and partially to cultural features such as the chainlink fence surrounding the site.

Anomalous conductivity signatures located at 0N to 60S/65E to 95E contain both high conductivity and low conductivity (positive and negative) readings. This may be indicative of buried metallic objects or abrupt changes in subsurface materials.

The in-phase component reveals a strong discrete anomaly located at approximately 0N to 10S/80E to 100E (represented by the blue color contours). This anomaly is adjacent to the quadrature anomalies. Also, discrete in-phase anomalies located within grid coordinates 0N to 60N/170E to 250E are indicative of buried metallic objects (Figure 4.2-30). The strongest of these point source anomalies is located at 15N to 25N/180E to 195E. Other discrete anomalies indicative of buried metallic objects are located at 50N/350E, 30N/360E, and on the east side of the fence at 60N/415E.

The GPR survey at site M-18 revealed anomalous radar signatures (including a hyperbolic diffraction pattern) located at 0N to 10S/100E. Figure 4.2-30A shows this anomaly, which coincides with the EM anomaly in Figure 4.2-30 and may be indicative of an underground storage tank (UST) or UST component (i.e., foundation) at a depth of approximately 5 or 6 ft bgs. The 100E line traverse on Figure 4.2-30A indicates that the suspected UST is approximately 4 feet in length. Figure 4.2-30A reveals that the three areas contain chaotic reflectors, which are indicative of coarse-grained or disturbed subsoil. The areas, centrally located at grid coordinates 50N/250E, 10N/250E, and 50N/350E, coincide with EM anomalies and may contain buried metallic objects. The radar profiles also reveal low amplitude chaotic reflectors, indicative of coarse-grained soils in the area that encompasses low apparent conductivity at the western portion of the site (green contour interval), as shown in Figure 4.2-29.

Although the geophysical survey results indicated areas that may contain buried ferrous material and fill, these areas are within the suspected boundary of the landfill. Monitor wells and soil borings were appropriately located to evaluate subsurface conditions downgradient and within the landfill boundaries.

4.2.12.5 Hydrogeologic Interpretation

Lithologic logs from SB-01 through SB-07 and MW-24 and MW-25 indicate that the lithology consists of fill intermixed with a poorly sorted gray-olive-brown silty fine-coarse-grained sand with trace amounts of clay. The manmade components of the filled materials observed in the borings consisted of asphalt, wood fragments, and roof shingles.

Saturation was observed in monitor wells MW-24 and MW-25 at approximately 6 ft bgs. Both monitor wells were screened across the water table and were completed to 15 ft bgs. Local groundwater flows toward and discharges into Parkers Creek (Figure 4.2-31), as indicated by water-level measurements from site monitor wells and land surface topography. Monitor wells MW-24 and MW-25 are positioned downgradient of the M-18 area.

4.2.12.6 Soil Sampling Results

A total of nine shallow soil borings (Figure 4.2-32) were completed at selected locations at site M-18 to depths ranging from 2 to 10 ft bgs. Two soil borings (SB-24 and SB-25) were completed at the new monitor wells (MW-24 and MW-25) locations. Locations were selected for seven of the borings based on the results of the geophysical surveys. Soil samples were collected from two discrete intervals (1 to 1.5 ft bgs and 2 to 10 ft bgs, depending on the depth to water), and based on field observations, were sampled for the analytical parameters listed in Table 3.6-1. The analytical results for soils at specific sampling intervals are listed in Appendix D. Tables 4.2-16 and 4.2-17 compare the detected compounds with the NJDEP SCC, and then compare the results with the subsequent site-specific and Monmouth County maximum background levels, where appropriate. Stained soil was observed below ground surface, but in the 0 to 2-ft bgs sampling interval at boring SB-06. In accordance with the work plan, samples were also taken for BNAs (SVOCs), pesticides/PCBs, and metals analysis at this location.

VOCs

VOCs were not detected above the laboratory quantitation limit in site soils. VOCs detected below quantitation limits were well below their respective criteria (Table 4.2-16).

SVOCs

A total of 13 SVOCs were detected above laboratory quantitation limits in SB-06. Four of the compounds [benzo(a)anthracene, chrysene, benzo(k)fluoranthene, and ideno(1,2,3-cd)pyrene] were detected in concentrations above laboratory quantitation limits and above the NJDEP SCC at SB-06 in the 2- to 5-ft bgs sampling interval. In addition, two compounds [benzo(b)fluoranthene and benzo(a)pyrene], detected below laboratory quantitation limits in SB-06, were also found in concentrations exceeding the NJDEP SCC from the 2- to 5-ft bgs sampling interval. All other detected SVOCs were found in concentrations below the established criteria. All six of the compounds that exceeded the NJDEP criteria also exceeded the site and Monmouth County background. Although the SVOCs were found in concentrations above NJDEP SCC and maximum background in SB-06, the concentrations were well below the impact to groundwater SCC. Monitor wells downgradient of this location did not detect these particular SVOCs. Figure 4.2-32 presents the locations of the compounds detected above the NJDEP SCC and the established maximum background levels at the Main Post.

Table 4.2-16
Fort Monmouth - Main Post
Summary of Detected Compounds
in Soils from Site M-18
(VOC's and TPH only)

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS							
				SB01-A01 1/12/95 1-1.5 ft bgs	SB01-A02 1/12/95 2 ft bgs	SB02-A01 1/12/95 1-1.5 ft bgs	SB02-A02 1/12/95 4-6 ft bgs	SB03-A01 1/12/95 1-1.5 ft bgs	SB03-A02 1/12/95 4-7.5 ft bgs	SB04-A01 1/11/95 1-1.5 ft bg	SB04-A02 1/11/95 4-6 ft bgs
VOC's (mg/kg)											
Ethylbenzene	0.0031	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	0.0027	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylene	0.0038	410	ND	ND	ND	ND	ND	ND	ND	ND	ND
TPH (mg/kg)	26.8	NLE	NA	367	84.9	188	612	6330*	1100*	ND	ND

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS								
				SB05-A01 1/11/95 1-1.5 ft bgs	SB05-A02 1/11/95 2-5 ft bgs	SB06-A01 1/11/95 1-1.5 ft bgs	SB06-A02 1/11/95 2-5 ft bgs	SB07-A01 1/12/95 1-1.5 ft bgs	SB24-A01 1/12/95 1-1.5 ft bgs	SB24-A02 1/12/95 2-4 ft bgs	SB25-A01 1/13/95 1-1.5 ft bgs	SB25-A02 1/13/95 2-4 ft bgs
VOC's (mg/kg)												
Ethylbenzene	0.0031	1000	ND	ND	ND	ND	0.002 J	ND	ND	ND	ND	ND
Toluene	0.0027	1000	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002 J
Xylene	0.0038	410	ND	ND	ND	ND	0.013 J	ND	ND	ND	ND	0.006 J
TPH (mg/kg)	26.8	NLE	NA	117	ND	221	2300*	29.9	695	993	311	2500*

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.
ND - Indicates that the compound was not detected at or below the quantification limits
J - Indicates that the concentration value was estimated due to detection at or near the detection limits
NA- Not Analyzed
*Quantification limit was increased during analysis for the associated sample
ft bgs. - feet below ground surface.

Table 4.2-17
Fort Monmouth - Main Post
Summary of Detected Compounds in Soils from Site M-18 Sample SB06-A02

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS SB06-A02 1/11/95 2-5 ft bgs
SVOCs (mg/kg)				
Naphthalene	0.277	230	ND	1.2
2-Methylnaphthalene	0.287	NLE	ND	0.18 J
Acenaphthene	0.221	3400	0.1 J	52
Dibenzofuran	0.215	NLE	0.06 J	31
Fluorene	0.208	2300	0.074 J	40
Phenanthrene	0.165	NLE	0.39	140
Anthracene	0.152	10000	0.10 J	16
Carbazole	0.145	NLE	ND	4.8 J
Fluoranthene	0.198	2300	0.46	46
Pyrene	0.178	1700	1.5	48
Butylbenzylphthalate	0.175	1100	ND	0.45 J
Benzo(a)anthracene	0.162	0.9	0.65	**11**
Chrysene	0.145	9	0.65	**10**
bis(2-Ethylhexyl)phthalate	0.32	49	0.19 J	0.17 J
Benzo(b)fluoranthene	0.188	0.9	0.9	**7.6 J**
Benzo(k)fluoranthene	0.205	0.9	0.43	**2.3**
Benzo(a)pyrene	0.162	0.66	0.6	**3.8 J**
Indeno(1,2,3-cd)pyrene	0.234	0.9	0.46	**2.1**
Dibenzo(a,h)anthracene	0.198	0.66	0.079 J B	0.45 J
Benzo(g,h,i)perylene	0.224	NLE	0.079 J B	1.5
TPH (mg/kg)	26.8	NLE	NA	2300
PESTICIDES AND PCBs (mg/kg)				
Heptachlor epoxide	0.0021	NLE	ND	0.030 P
4,4'-DDE	0.0037	2	0.096 P	0.11
4,4'-DDD	0.0037	3	0.096 P	0.46 UX
4,4"-DDT	0.0037	2	0.11 D	0.032
alpha-Chlordane	0.0021	NLE	ND	0.0078
gamma-Chlordane	0.0021	NLE	ND	0.02 P
METALS TOTAL (mg/kg)				
Aluminum	3.9	NLE	15200	6130
Arsenic	0.35	20	22.9	5.8
Barium	0.17	700	32.3	31
Calcium	2.2	NLE	921	11100
Cobalt	0.71	NLE	2.5	6.3
Chromium	1.60	500	269	35.3
Copper	2.2	600	8	218
Iron	0.58	NLE	55800	17700
Lead	0.4	400[2]	25.9[1]	127
Magnesium	9.6	NLE	7230	3380
Manganese	0.18	NLE	90.7	168
Mercury	0.49	14	ND	0.61
Nickel	1.4	250	8.4	12.6
Potassium	(12.3-25.8)	NLE	15400	2190
Sodium	3.8	NLE	51.6	181
Selenium	0.3	63	1.9	0.78
Vanadium	0.53	370	94.1	27.3
Zinc	0.41	1500	81.4	72.6

Compounds exceeding NJDEP cleanup criteria are noted by bold numbers.
ft bgs - Feet below ground surface
NLE - No Level Established
ND - Indicates that the compound was not detected at or below the quantification limits
J - Indicates that the concentration value was estimated due to detection at or near the detection limits
B - Compound was observed in the samples and associated laboratory blank
NA- Not Analyzed
C- Pesticide identification was confirmed by GC/MS
P - The percent difference between the results from two GC columns is greater than 25%,the lower of the two values is reported
U - Compound was not detected at or above the reporting limit.
X - Other specific flags may be required to properly qualify the result.
[1] Monmouth County maximum background concentration.
[2] NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

Pesticides/PCBs

Five pesticides were detected in concentrations above laboratory quantitation limits in SB-06 from the 2- to 5-ft bgs sampling interval. However, all pesticide compounds were detected below the NJDEP SCC. PCBs were analyzed for but were not detected in any of the boring locations.

Metals

As indicated in Table 4.2-17, metals detected in SB-06 were found in concentrations below the NJDEP SCC.

Total Petroleum Hydrocarbons (TPHs)

TPH concentrations were detected above laboratory quantitation limits in one or both sampling intervals in all but soil boring SB-04 in concentrations ranging from 29.9 milligrams per kilogram (mg/kg) to 6,330 mg/kg.

4.2.12.7 Groundwater Sampling Results

Monitor wells at site M-18 were sampled for the analytical parameters listed in Table 3.8-1. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. The existing monitor well, MW-3, was sampled in May 1995. Table 4.2-18 compares the average concentrations from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the subsequent site-specific and Monmouth County maximum background, where appropriate.

VOCs

Acetone was the only VOC detected in site groundwater samples. Acetone was detected in concentrations below the NJDEP GWQC in groundwater samples collected from MW-24 and

Table 4.2-18
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected Compounds in Groundwater - Site M-18

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE MW24 2/17/95, 3/10/95 (avg.)	MW25 2/17/95, 3/10/95 (avg.)	MW03 5/10/95, 5/27/95 (avg.)
VOC's (µg/L)						
Acetone	6.9	700	ND	10 J	12.5	ND
SVOCs (µg/L)						
4-Methylphenol	12.9	NLE	ND	3.5J	ND	ND
PETROLEUM HYDROCARBONS (µg/L)						
Petroleum Hydrocarbons	0.26	NLE	NA	1.12	0.43	ND
PESTICIDES/PCBs (µg/L)						
4,4'-DDD	0.97	0.1	0.050 JP	**0.145P**	ND	ND
METALS TOTAL (µg/L)						
Aluminum	24.0	200	121000	**5615**	**4103**	**8310**
Arsenic	1.9	8*	89.3	**16.8**	**11.4**	4.8
Barium	1.7	2000	699	267	92.9	13.7
Beryllium	0.9	20*	7[1]	1.65	0.53	0.6
Calcium	10.4	NLE	45400	747000	169000	5470
Cadmium	2.8	4	9.5	2.775	3.625	ND
Cobalt	2.3	NLE	18.3	1.975	1.825	4.1
Chromium	2.9	100	191	48.15	23.2	54.2
Copper	1.9	1000	730[1]	8.45	2.6	2.9
Iron	6.4	300	431000	**40000**	**28620**	**39950**
Potassium	685	NLE	137000	19200	29900	10735
Magnesium	18.3	NLE	62700	49750	69050	6145
Manganese	1.8	50	480[1]	**712**	**940**	38.3
Sodium	30.5	50000	197000[1]	42000	**363500**	**55950**
Nickel	10.8	100	187	6.75	8.35	7.3
Lead	1.1	10*	22.7	**34.7**	**11.2**	8.2
Selenium	1.5	50	29.6	1.575	ND	ND
Vanadium	2.3	NLE	108	29.15	24.85	44.8
Zinc	3.8	5000	233	90.75	33.55	88.9

Compounds exceding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria
NLE - No Level Established
ND - Indicates that the compound was not detected at noted quantification limit
NA - Not analyzed
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported.
[1] - Monmouth County maximum background concentration.

MW-25. The source of the acetone is not known, however, acetone is a common laboratory contaminant.

SVOCs

One SVOC (4-methylphenol) was detected in MW-24 below the laboratory quantitation limit. SVOCs were not detected in MW-25 or MW-3.

Pesticides/PCBs

One pesticide (4,4'-DDD) was detected in a concentration that slightly exceeds the NJDEP GWQC in MW-24. 4,4'-DDD was detected in concentrations above the criteria in MW-24 from both sampling rounds. PCB compounds were not detected in site monitor wells from either sampling round (Figure 4.2-32).

Metals

As indicated in Table 4.2-18, of the 19 metals detected in site groundwater, only 6 (aluminum, arsenic, iron, manganese, sodium, and lead) were found in concentrations exceeding the NJDEP GWQC. In addition, manganese in MW-24 and MW-25, lead in MW-24, and sodium in MW-25 were found in concentrations greater than those determined for site-specific and Monmouth County maximum background at the Main Post. Lead was not detected in the filtered sample. However, aluminum and arsenic were found in concentrations below both maximum background levels where established. Although iron was detected in concentrations greater than the regional maximum background, iron was detected well below the site-specific background levels in the Main Post and is not a compound of concern. Sodium in MW-3 was found in a concentration greater than the site-specific background, but was well below the Monmouth County level. The elevated sodium levels in MW-25 may be caused by saline water intrusion from the Parkers Creek estuary. Sodium is not a compound of concern (Figure 4.2-32). As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern.

TPHs

TPH concentrations were detected just above the laboratory quantitation limit in MW-24 and MW-25 from both the February and March sampling rounds.

4.2.12.8 Recommendations

The geophysical surveys identified several anomalies indicative of buried waste and fill material within the suspected boundaries of the site M-18 area. One anomaly was indicative of a UST or storage tank component. The geophysical results indicate that soil borings and monitor wells were appropriately located to evaluate subsurface conditions downgradient and within landfill boundaries.

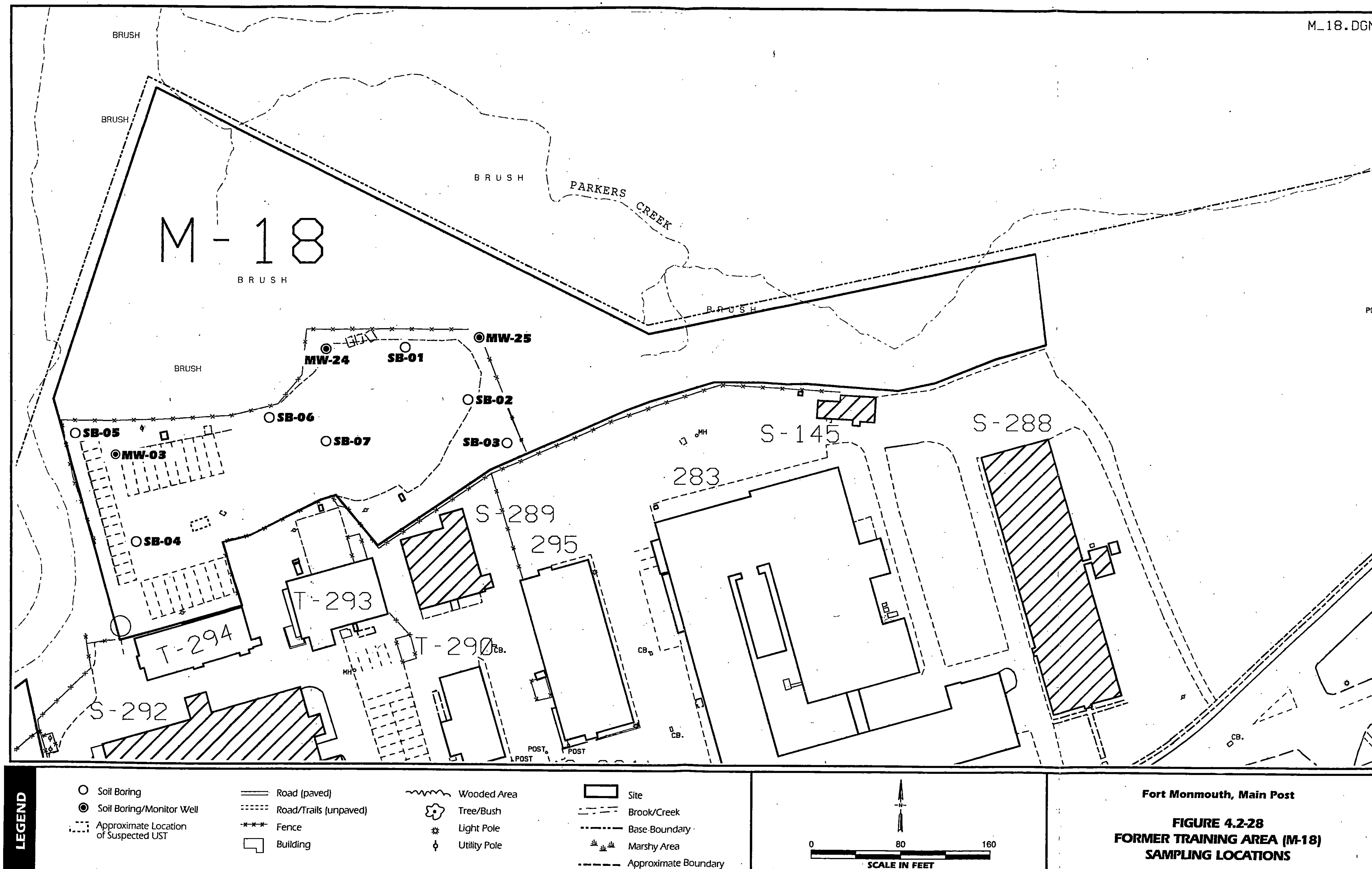
The soil sampling results indicated that six SVOCs were detected at SB-06 in concentrations that exceeded the NJDEP criteria and established background concentrations.

The groundwater sampling results indicate that 4,4-DDD was detected at a concentration just above the NJDEP GWQC in one well (MW-24) from both sampling rounds. Lead was detected in one location above NJDEP GWQC and background. TPH concentrations were also detected just above laboratory quantitation limits in MW-24 and MW-25 in both sampling rounds.

Trenching will be performed at the suspected UST or UST component location to confirm the geophysical results and to excavate if necessary. A PID will be used to conduct field screening during the excavation. The excavation will be performed in conjunction with confirmatory sampling, in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993), if a UST is encountered to ensure that NJDEP SCC are achieved. NJDEP will be requested to send a representative to observe the excavation.

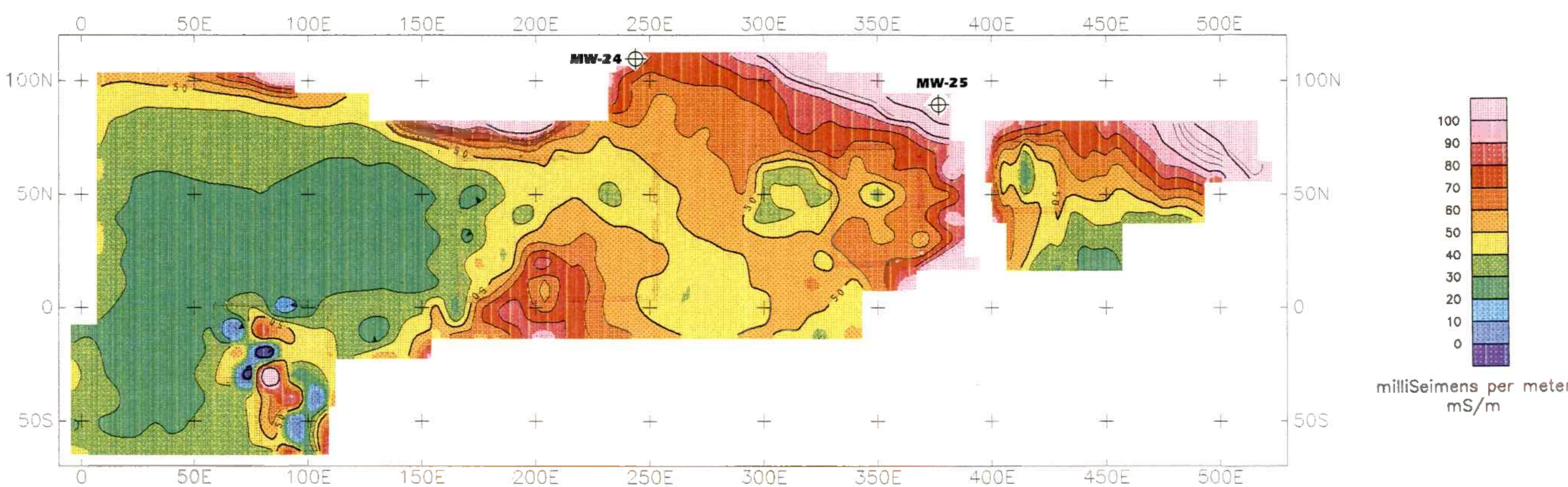
Additionally, soil at soil boring SB-06 will be excavated. If it is determined that the suspected UST is the source of contamination at SB-06, this location will be remediated in conjunction with the UST. Confirmatory sampling will also be conducted.

DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.



Fort Monmouth, Main Post

FIGURE 4.2-28
FORMER TRAINING AREA (M-18)
SAMPLING LOCATIONS



LEGEND

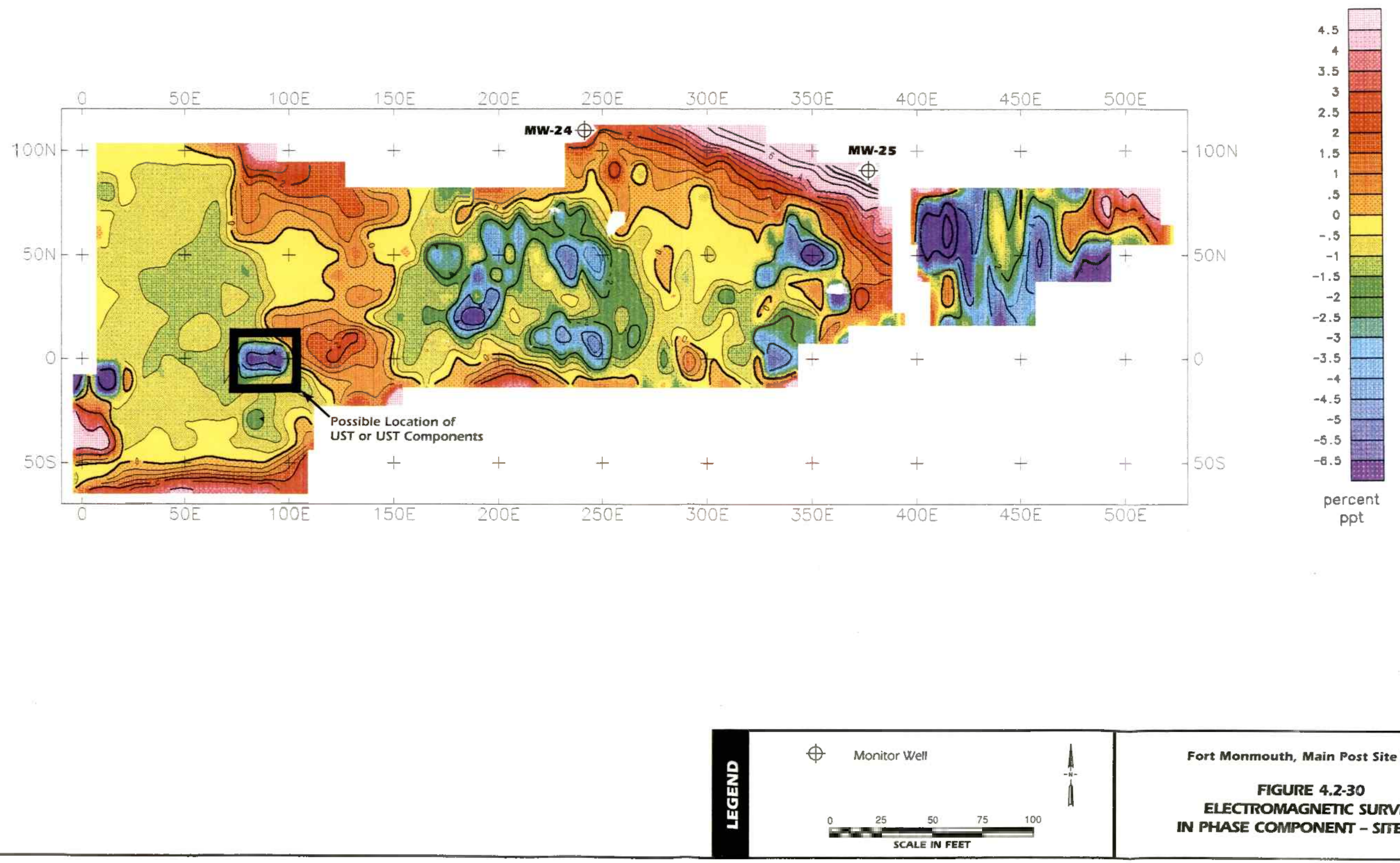
Monitor Well

0 25 50 75 100
SCALE IN FEET

Fort Monmouth, Main Post Site M-18

FIGURE 4.2-29
ELECTROMAGNETIC SURVEY
QUADRATURE COMPONENT – SITE M-18

95P-3241 6/27/95



Fort Monmouth, Main Post Site M-18

FIGURE 4.2-30
ELECTROMAGNETIC SURVEY
IN PHASE COMPONENT – SITE M-18

95P-3242 6/27/95

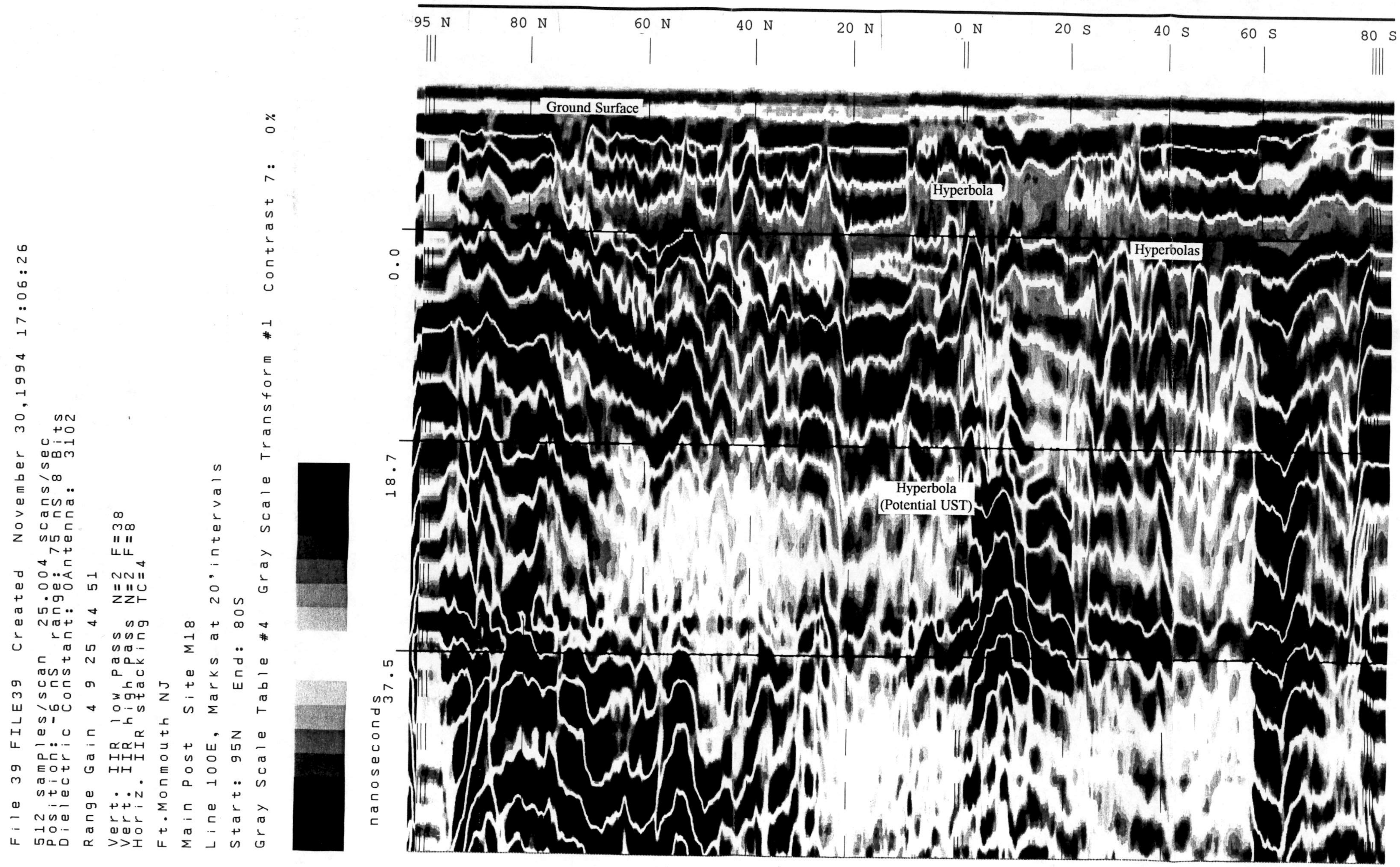
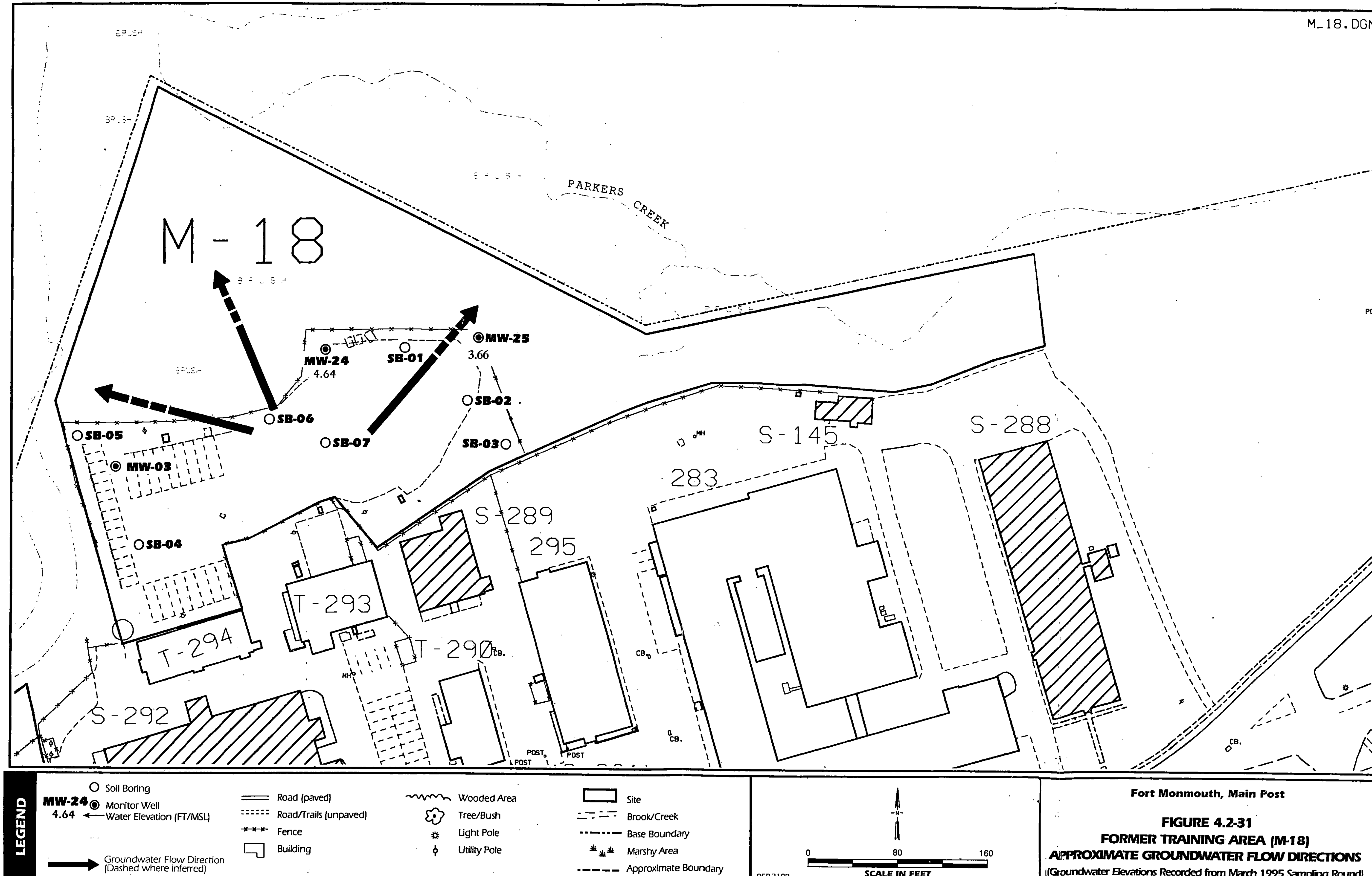
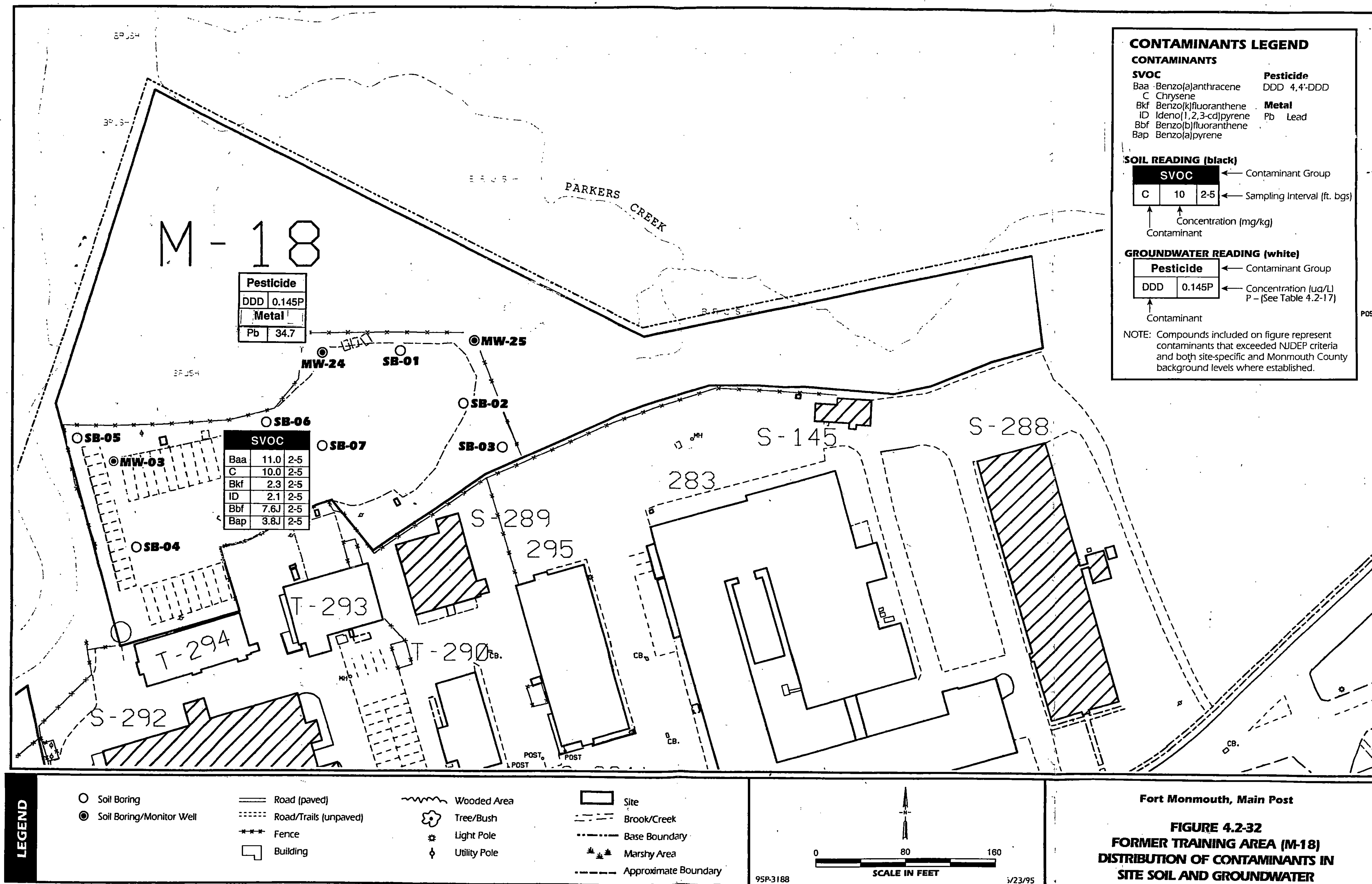


FIGURE 4.2-30A RADAR PROFILE DEPICTING POTENTIAL UST AT SITE M-18



Fort Monmouth, Main Post

FIGURE 4.2-31
FORMER TRAINING AREA (M-18)
APPROXIMATE GROUNDWATER FLOW DIRECTIONS
(Groundwater Elevations Recorded from March 1995 Sampling Round)



Fort Monmouth, Main Post

FIGURE 4.2-32
FORMER TRAINING AREA (M-18)
DISTRIBUTION OF CONTAMINANTS IN SITE SOIL AND GROUNDWATER

Site AOC-3

95P-4674

4.2.13 Former Main Post Sanitary Treatment Plant (AOC-3)

4.2.13.1 Site Location

The former Sanitary Treatment Plant (STP, AOC-3) was located on Parkers Creek north of Sherrill Avenue, between Buildings S-292 to the east and S-697 to the west (Figure 4.2-33). The approximate area of site AOC-3 is 96,000 ft^2 (2.2 acres).

4.2.13.2 Site History

This site was identified by the NJDEP as an area of concern (AOC) in the 8 June 1990 letter. The Main Post STP was built in 1941 to handle 700,000 gallons of sewage per day. As described in the IA, this STP consisted of a bar screen and grit chamber, comminutor, primary and secondary settling tanks, a mixing and aeration tank, and a baffled contact chlorination tank. Effluent from the STP was discharged to Parkers Creek. Sludge was treated in a three-stage anaerobic digester and discharged to underdrained sandbeds for drying. According to the IA and DEH employees, sludge was transported to the Charles Wood golf course and to landfills. This STP was closed on 3 September 1975 when the Main Post sewer system was connected to the Northeast Monmouth County Regional Sewerage Authority (NMCRSA) system. In 1981, all sludges and supernatant liquids were removed from the STP and the facility was cleaned and disinfected. The removal contractor was Modern Transportation Co. of Kearny, New Jersey. The physical facility was demolished in 1983. At present, this area is flat and grass covered.

4.2.13.3 Sampling Effort

Sediments from one location in the Parkers Creek outfall area were analyzed for TCL +30 parameters, TAL metals, and cyanide. Two soil borings were completed in the area of the former sludge-drying beds to identify the original land surface and collect soil samples from an interval just below the original surface for TCL +30 parameters, TAL metals, and cyanide (Figure 4.2-33).

4.2.13.4 Soil Sampling Results

Borings were drilled to depths of 12 ft bgs (depth where saturation was encountered). Samples were collected from one sampling interval (6 to 9.5 ft bgs) and were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soils at specific sampling intervals, with the corresponding sample identifications, are listed in Appendix D. Table 4.2-19 compares the compounds detected in site soils with the NJDEP Residential Direct Contact SCC, and then compares the results to the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate. In addition, compounds were also compared to the impact to groundwater SCC because no monitor wells were installed at the site.

VOCs

VOCs were not detected in site soils from either boring location.

SVOCs

SVOCs were not detected above laboratory quantitation limits in site soils. SVOCs detected below laboratory quantitation limits were found in concentrations well below their respective criteria.

Pesticides/PCBs

Of the six pesticides detected in site soil, none were detected above the NJDEP SCC or the impact to groundwater SCC (Table 4.2-19).

One PCB (Aroclor-1248) was detected in SB-02 above the laboratory quantitation limit. However, Aroclor-1248 was found in a concentration below both the NJDEP residential direct contact and impact to groundwater SCC.

Table 4.2-19
Fort Monmouth - Main Post
Summary of Detected Compounds
In Soils at Site AOC - 3

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS	
				SB01-A02 12/14/94 (6-9.5 ftbgs)	SB02-A02 12/14/94 (6-9.5 ft bgs)
SVOCs (mg/kg)					
Phenanthrene	0.165	NLE	0.39	0.09 J	ND
Fluoranthene	0.198	2300	0.46	0.11 J	ND
Pyrene	0.178	1700	1.5	0.15 J	ND
Benzo(a)anthracene	0.162	0.9	0.65	0.077 J	ND
Chrysene	0.145	9	0.65	0.099 J	ND
bis(2-Ethylhexyl)phthalate	0.32	49	0.19 J	0.057 J	0.053 J
Benzo(b)fluoranthene	0.188	0.9	0.9	0.077 J	ND
Benzo(a)pyrene	0.162	0.66	0.6	0.055 J	ND
Indeno(1,2,3-cd)pyrene	0.234	0.9	0.46	0.046 J	ND
Benzo(g,h,i)perylene	0.224	NLE	0.64 B	0.049 J	ND
PESTICIDES AND PCBs (mg/kg)					
4,4'-DDE	0.0037	2	0.096 P	0.044	0.022
4,4'-DDD	0.0037	3	0.096 P	0.024	0.016
4,4'-DDT	0.0037	2	0.11 D	0.035 P	0.085
alpha-Chlordane	0.0017	NLE	ND	ND	0.0052
gamma-Chlordane	0.0017	NLE	ND	ND	0.0035 P
Aroclor-1248	0.036	0.49	ND	ND	0.2 P
METALS TOTAL (mg/kg)					
Aluminum	3.9	NLE	15200	3000	4020
Arsenic	0.35	20	22.9	2.8	4.2
Barium	0.17	700	32.3	14.4	12.5
Beryllium	0.10	1	2	0.34	0.63
Calcium	2.2	NLE	921	310	226
Cobalt	0.86	NLE	2.5	0.72	1.5
Chromium	0.71	500	269	39.9	61
Copper	2.2	600	8	1.9	1.7
Iron	0.58	NLE	55800	15000	21700
Lead	0.40	400[2]	25.9[1]	8.3	11.5
Magnesium	9.6	NLE	7230	690	1490
Manganese	0.18	NLE	90.7	13.8	15.6
Nickel	1.4	250	8.4	1.9	3
Potassium	(12.3-25.8)	NLE	15400	1760	4240
Sodium	3.8	NLE	51.6	17.4	18.6
Selenium	0.3	63	1.9	ND	ND
Vanadium	0.53	370	94.1	28	32.9
Zinc	0.41	1500	81.4	19.1	30.8

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.
NLE - No Level Established
ND - Indicates that the compound was not detected at or below the quantification limits
J - Indicates that the concentration value was estimated due to detection at or near the detection limits
P - The percent difference between the results from two GC columns is greater than 25%,the lower of the two values is reported
D - Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis
ft bgs. - feet below ground surface.
Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

[1] Monmouth County maximum background concentration.

[2] NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

Metals

As indicated in Table 4.2-19 all of the metals detected in site soil were found in concentrations below the NJDEP SCC.

Cyanide

Cyanide was not detected in site soils from either soil boring.

4.2.13.5 Sediment Sampling Results

Sample location M8SD-1 appears to be tidally influenced, and based on conductivity results and field observations, was determined to be saltwater.

One sediment sample, M8SD-1, was collected at AOC-3 (Figure 4.2-33). Table 4.2-20 presents a comparison of detected sediment concentrations at sampling location M8SD-1 to marine/ estuarine sediment criteria (Long et al., 1995), and maximum detected background concentrations.

VOCs

2-Butanone was the only VOC detected above the laboratory quantitation limit in a site sediment sample. 2-Butanone is a common laboratory contaminant.

SVOCs

Two SVOCs were detected below the laboratory quantitation limit in site sediment from location M8SD1.

Pesticides/PCBs

Pesticides/PCBs were analyzed for but were not detected in the site sediment sample.

Table 4.2-20
Fort Monmouth - Main Post
Summary of Detected Compounds in Sediment
Site AOC-3

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	MARINE/ESTUARINE BIOLOGICAL EFFECTS LEVEL (ERL)[a] (mg/kg)	MAXIMUM DETECTED BACKGROUND CONCENTRATION	ANALYTICAL RESULTS M8SD-1 12/1/94
VOC's (mg/kg)				
2-Butanone	0.0041	NLE	0.1	0.02
SVOCs (mg/kg)				
Di-n-butylphthalate	0.215	NLE	0.26 JB	0.68 J
2,2'-oxybis(1-Chloropropane)	0.231	NLE	ND	0.061 J
PAHs (mg/kg)				
Benzo(a)pyrene	0.162	0.43	1.2	0.079 J
METALS TOTAL (mg/kg)				
Aluminum	18.1	NLE	9060	8830
Arsenic	2.5	8.2	14.5	**13.2**
Barium	1.4	NLE	87.6	13
Beryllium	1.0	NLE	3.2	1.4
Calcium	8.1	NLE	3180	1290
Chromium	4.3	81	88.1	74
Cobalt	1.9	NLE	119	5.5
Copper	1.6	34	48.4	3.1
Iron	3.2	NLE	61900	40300
Lead	9.9	46.7	64.1	6.5
Magnesium	25.8	NLE	3280	3670
Manganese	1.4	NLE	70.2	51.7
Nickel	8.7	20.9	131	14
Potassium	555	NLE	10200	6640
Selenium	0.56	NLE	1.7	0.42
Sodium	10.4	NLE	189	3090
Vanadium	2.0	NLE	49.1	39.3
Zinc	1.9	150	162	68.8

Compounds detected above NJDEP Sediment Guidance are noted by bold numbers.
[a] - Value from Long et al. (1995).
ND - Compound was not detected at or above the quantification limit.
NLE - No Level Established
B - Compound was found in the sample and associated laboratory blank
J - Concentration was estimated due to detection at or below the quantification limit

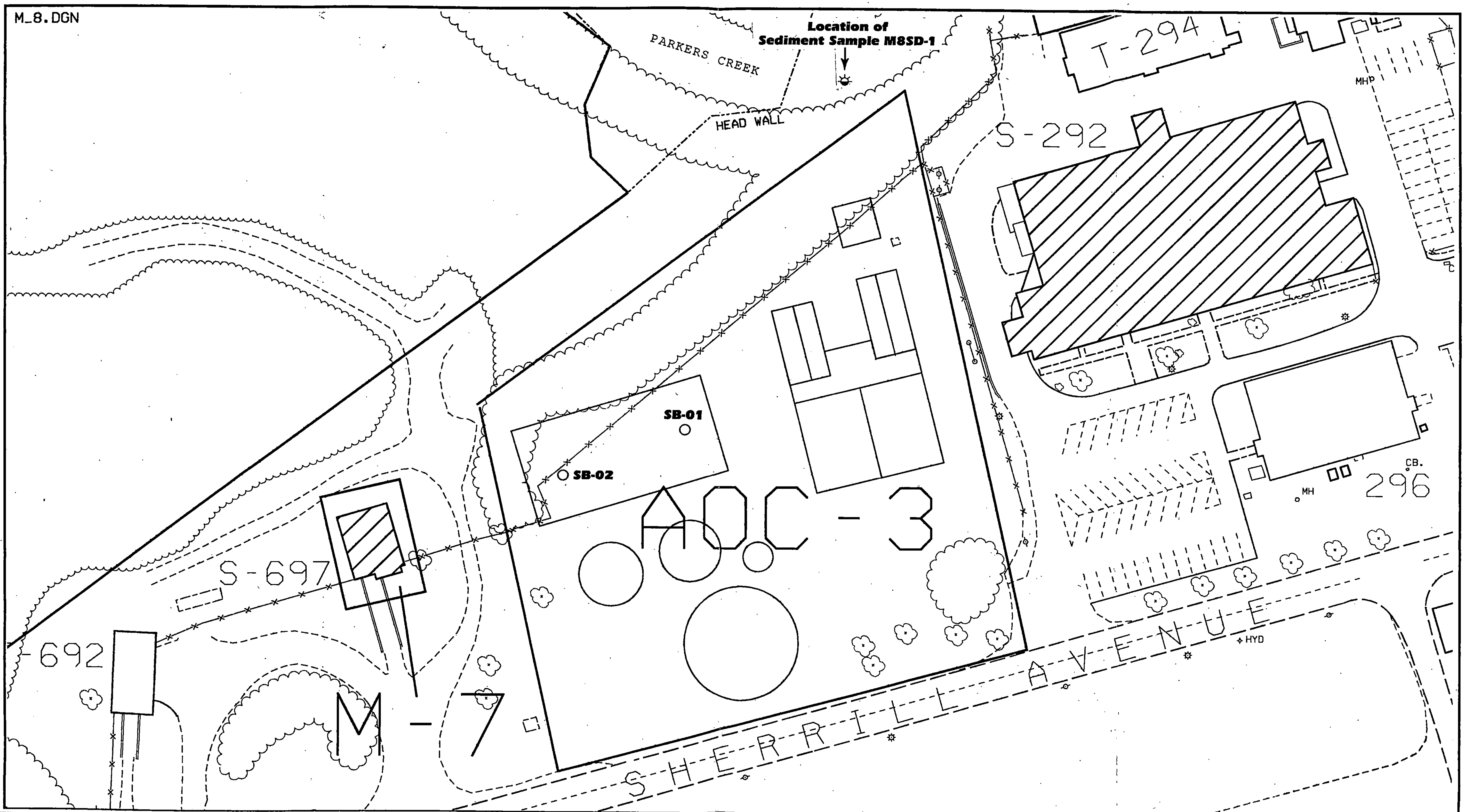
Metals

As indicated in Table 4.2-20, of the 18 metals detected above laboratory quantitation limits, only one (arsenic) was found in a concentration slightly exceeding the established criteria. However, the concentration of arsenic was found at a level below the maximum detected background concentration.

4.2.13.6 Recommendations

The results of the soil and sediment sampling indicated that compounds of concern were not detected above the NJDEP criteria and established background concentrations.

No further action will be taken.



LEGEND

- Soil Boring Location
- Sediment Sampling Location
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary

N

0 100 200

SCALE IN FEET

95P-3189 6/23/95

Fort Monmouth, Main Post

FIGURE 4.2-33
FORMER SANITARY TREATMENT PLANT (AOC-3) SOIL AND SEDIMENT SAMPLING LOCATIONS

Former Sanitary Treatment Plant (STP)

95P-4674

4.2.14 Pre-1941 Sanitary Treatment Plant (STP)

4.2.14.1 Site Location

The pre-1941 STP for the Main Post was located on Parkers Creek in an area north of Allen Avenue in approximately the same location as current Building 259 (Figure 4.2-34). The approximate area of the STP is 130,000 ft^2 (2.9 acres).

4.2.14.2 Site History

This STP is shown on a 1935 Fort Monmouth map. The date of construction and period of operation are unknown, although the STP presumably operated until the Main Post STP (AOC-3) came on line in 1941.

4.2.14.3 Sampling Effort

The former STP is presented in Figure 4.2-34. Sediment coring was conducted at the former outfall and a sample was collected for TAL metals analysis.

4.2.14.4 Sediment Sample Results

Sediment at the STP was determined to be saltwater based on conductivity results and field observations. Therefore, detected concentrations of contaminants in the STP sediment were compared to marine/estuarine biological effects levels (Long et al., 1995) (Table 4.2-21).

One sediment sample, STPSD-1, was collected at the former STP (Figure 4.2-34).

Metals

As indicated in Table 4.2-21, of the 21 metals detected above laboratory quantitation limits, nine (arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc) were found in concentrations exceeding their respective established criteria. In addition, arsenic, cadmium,

Table 4.2-21
Fort Monmouth - Main Post
Summary of Detected Compounds in Sediments
Site - Pre-1941 Sanitary Treatment Plant

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	MARINE/ESTUARINE BIOLOGICAL EFFECTS LEVEL (ERL)[a] (mg/kg)	MAXIMUM DETECTED BACKGROUND CONCENTRATION	ANALYTICAL RESULTS STPSD-1 12/1/94
METALS TOTAL (mg/kg)				
Aluminum	18.1	NLE	9060	9240
Arsenic	2.5	8.2	14.5	**24.2**
Barium	1.4	NLE	87.6	27.6
Beryllium	1.0	NLE	3.2	1.3
Cadmium	2.3	1.2	ND	**4.2**
Calcium	8.1	NLE	3180	1010
Chromium	4.3	81	88.1	**93.5**
Cobalt	1.9	NLE	119	13.5
Copper	1.6	34	48.4	**35.2**
Iron	3.2	NLE	61900	49200
Lead	9.9	46.7	64.1	**59**
Magnesium	25.8	NLE	3280	3390
Manganese	1.4	NLE	70.2	39.5
Mercury	0.32	0.15	1.7	**0.57**
Nickel	8.7	20.9	131	**26.5**
Potassium	555	NLE	10200	6760
Selenium	0.56	NLE	1.7	0.88
Silver	2.1	1	ND	**5.2**
Sodium	10.4	NLE	189	2330
Vanadium	2.0	NLE	49.1	49.5
Zinc	1.9	150	162	**386**

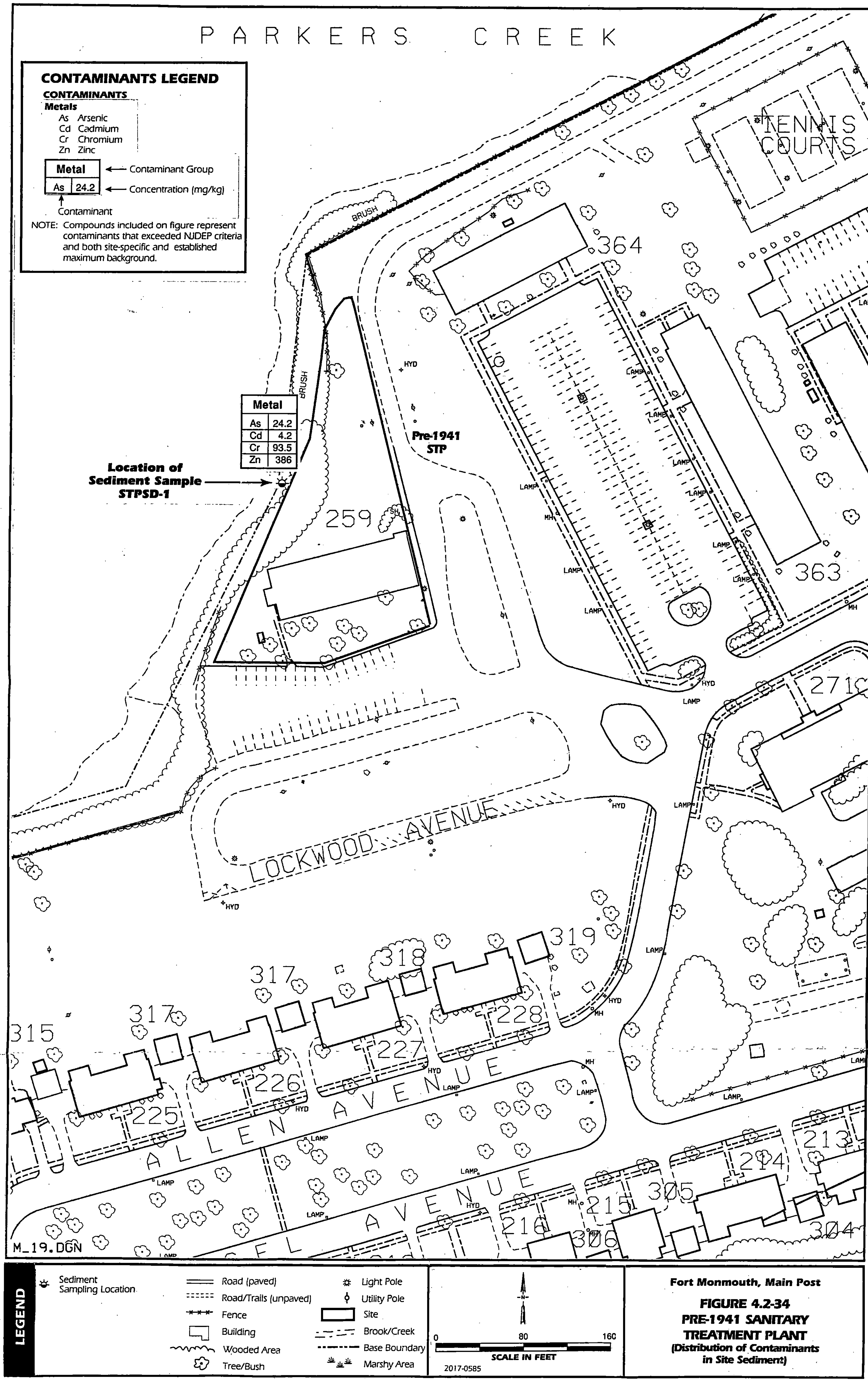
Compounds detected above NJDEP Sediment Guidance are noted by bold numbers.
[a] - Value from Long et al. (1995).
ND - Compound was not detected at or above the quantification limit.
NLE - No Level Established

chromium, and zinc were found in concentrations slightly exceeding their respective background concentrations. However, copper, lead, mercury, and nickel were found in concentrations below their respective maximum background levels.

4.2.14.5 Recommendations

Nine metals were detected above NJDEP criteria in the sediment sample collected at the outfall area. In addition, four metals (arsenic, cadmium, chromium, and zinc) exceeded their respective maximum background concentrations. The other five metals were detected below established background concentrations.

Although four metals were detected in sediment at levels exceeding NJDEP criteria and background, in the worst case the criteria were exceeded by a factor of three. Since the samples was taken at the outfall of the STP, the results are believed to be the worst case and the area of contamination is probably small. Access to this portion of Lafetra Creek is restricted although the stream is on the property boundary. The STP has not been used since 1941, and, presumably, the local ecology has reached an equilibrium. Therefore, since remediation would disrupt the ecology of the site, no further action will be taken.



Fort Monmouth, Main Post

FIGURE 4.2-34
PRE-1941 SANITARY TREATMENT PLANT
(Distribution of Contaminants in Site Sediment)

Main Post
PCB Transformers

4.2.15 PCB Transformers

4.2.15.1 Site Location

During the 1993 investigation (WESTON, 1993) all locations where PCB transformers had formerly been located were inspected for evidence of spills. Eight sites were identified where a PCB transformer was either formerly located over soil and thus evidence of a spill could not be determined visually, or was formerly located on concrete and there was discoloration in the concrete. These locations are listed in Table 3.5-1. Figure 4.2-35 presents the Main Post transformer site sample locations.

4.2.15.2 Site History

All PCB transformers (contain greater than 500 ppm PCBs) have been removed from Fort Monmouth. However, the former locations of these transformers were not previously investigated for spilled PCBs.

4.2.15.3 Sampling Effort

As discussed in Subsection 3.5, soil samples were taken below pole-mounted transformers and on four sides of an outdoor pad-mounted transformer. Concrete samples were taken from stained areas on outdoor concrete pads or in interior vaults with concrete floors. All samples were analyzed for PCBs.

4.2.15.4 PCB Sampling Results

The results of the PCB transformer sampling are presented in Table 4.2-22. Four of the eight transformers sampled at the Main Post area were found to have PCBs in soil or concrete above applicable cleanup criteria.

All other transformers sampled in the Main Post either had results below detection limits, or had detectable levels of PCBs below applicable cleanup criteria.

Table 4.2-22
Results of Transformer Site Sampling on Main Post

Location (Building No.)	Sample ID	Method Detection Limit (mg/kg)	Medium	NJDEP Cleanup Criteria (mg/kg)	Total PCBs (mg/kg)
292	MPT5-TR01	0.24	Soil	0.49	**0.68**
686	MPT6-TR01	0.045	Soil	0.49	0.18
718	MPT4-TR01	0.051	Soil	0.49	0.06
1002	MPT7-CC01	2000*	Concrete	0.055	**8400**
1004	MPT8-TR01	0.45	Soil	0.49	ND
1208	MPT2-CC01	2000*	Concrete	0.055	**19000**
1209	MPT1-CC01	400*	Concrete	0.055	**1500**
1220	MPT3-TR01	0.045	Soil	0.49	ND
1220	MPT3-TR02	0.041	Soil	0.49	ND
1220	MPT3-TR03	0.047	Soil	0.49	0.06
1220	MPT3-TR04	0.045	Soil	0.49	0.09
1220	MPT3-CC01	0.04	Concrete	0.055	ND

Compounds exceeding NJDEP cleanup criteria are noted by bold numbers
ND - Indicates that the compound was not detected at the quantification limit.
* = Method detection limit unit exceeded the NJDEP criteria.

The following transformer sites had PCBs in soil or concrete above applicable cleanup standards:

- MP-062 (Building 292).
- Indoor transformer vault in Building 1002.
- Indoor transformer vault in Building 1208.
- Indoor transformer vault in Building 1209.

PCBs were detected in soils above applicable soil standards in the soil beneath transformer MP-062, which was a pole-mounted transformer on the northwest side of Building 292. The sample beneath the transformer contained PCBs above the NJDEP SCC.

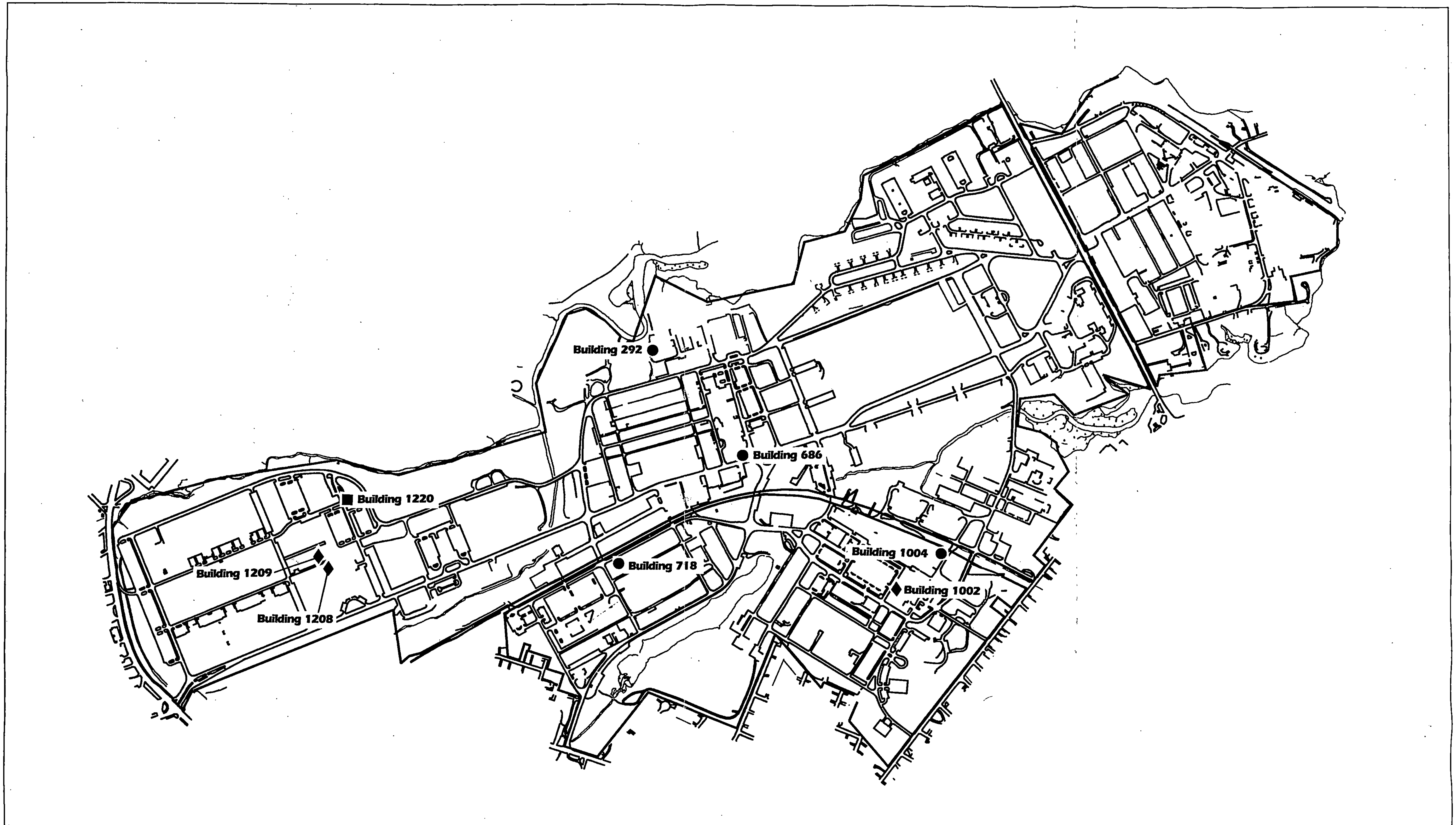
The concrete samples from visibly stained areas in the indoor transformer vaults in Buildings 1002, 1208, and 1209 each contained PCBs above the proposed indoor surface cleanup criteria of 0.055 mg/kg.

4.2.15.5 Recommendations

PCB levels in stained concrete were found to exceed NJDEP guidance levels in indoor vaults at Buildings 1002, 1208, and 1209. PCBs were also detected above applicable soil standards in the soil beneath transformer MP-062 on the northwest side of Building 292.

Since the indoor vaults are normally locked and are accessible by a very limited number of facility personnel, and the stained concrete cannot be removed without significantly disrupting electrical service, remedial work will be performed when the transformers are removed from service and the stained areas are made accessible. A warning sign will be posted, and workers entering the vaults will be trained to take precautions to prevent contamination.

Because the concentration of PCBs is only slightly above the SCC, additional sampling will be conducted beneath the former location of transformer MP-062 to determine the vertical and horizontal extent of PCBs in soil. The soil sampling will be performed in accordance with the NJDEP *Technical Requirements for Site Remediation* (NJDEP, 1993). Personal protective clothing will be worn accordingly.



LEGEND

Road (paved)
Building
Lake
Marshy Area
Pole
Pad
Vault

0 800 1600
SCALE IN FEET

2017-0593
6/30/95

Fort Monmouth, Main Post

FIGURE 4.2-35
MAIN POST TRANSFORMER SITE SAMPLE LOCATIONS

Charles Wood
Background Samples

95P-4674

4.3 CHARLES WOOD

This subsection presents a description of each Charles Wood site and presents the rationale for the sampling activities. The sites and the sampling effort are summarized in Table 4.3-1. Additional historical information on each site may be obtained from the *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey*, 1993.

The following subsections summarize the results of the sampling program that was implemented to characterize site conditions as specified in the report titled, *Site Investigation, Chemical Data Acquisition Plan (CDAP)*. Although the field investigation was generally conducted in accordance with the CDAP, minor changes were made. These changes are summarized in Table 4.3-2. A total of 19 soil borings and 16 monitor wells were installed and 3 sediment and 2 surface-water samples were collected in the Charles Wood area. Soil and groundwater samples were collected from the borings and monitor wells and were analyzed for compounds determined to be characteristic of the wastes associated with each area, i.e., TCL and TAL analytes (see Tables 3.6-1 and 3.8-1). Appendix D presents the results of the Charles Wood sampling activities. Detailed information regarding the specific sampling protocols for each site is provided in the following subsections. In addition to the results of groundwater and soil analyses, the lithologic descriptions and water-level information are used to provide a hydrogeologic interpretation of the site where appropriate.

Figure 4.3-1 shows the location of the nine Charles Wood sites discussed in this subsection.

4.3.1 Background Samples

The locations of background sampling locations were selected in areas believed to be unaffected by past base activities. They were identified in the report *The Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey* (WESTON, 1993), which was approved by NJDEP. The purpose of the collection of background characterization data was to identify levels of chemicals that are naturally occurring.

Table 4.3-1

Site Investigation Summary — Charles Wood

Site Number	Site	Description	Potential Waste/ Contaminants	Past Samples and Analyses	Investigation Activities
			CHARLES WOOD AREA		
CW-1	Wastewater treatment (lime pit)	4-m^3 tank containing limestone for neutralizing liquid waste from Bldg. 2700. Sludge removal periodically. Acid/base drains not currently used. Pit discharge to sewage system. Limestone was replaced in 1992; contractor took limestone off-site. Built with bldg. around 1952.	Solvents and metals.	Analyzed old limestone. Sludge analyzed; found organics and metals.	Installed 4 soil boring/monitor wells, 1 on each side of pit. Collected soil samples (2 to 3 per boring) from 7 to 9 ft. Analyzed for TCL +30/TAL. Sampled groundwater for same parameters.
CW-2	Wastewater treatment (lime pit)	Same as CW-1.	Solvents and metals.	Analyzed old limestone.	Same as CW-1.
CW-3, AOC-4	Landfill	Operated during 1940s. Site identified in IA now used for storage of contractor equipment and debris. Site was cleared in mid-1995.	Administrative waste and wood.	None.	Work postponed. Trenching is planned to evaluate subsurface conditions.
CW-3A	Landfill	Site in west was used for leaves and small debris, and by off-site dumpers. 1969 aerial photo shows disturbed soil at west site. One partially buried drum found. May have been used for demolition debris.	Unknown.	None.	Used geophysics (magnetics, EM-31, and GPR) to evaluate possible subsurface disposal near Pulse Power Building.
CW-4	Range (small arms)	Bldg. 2537. Indoor range. Cleaned and repainted in 1989. Has metal and sand bullet trap and filtered ventilation system. 3-ft diameter bare area to north of building with spent shells and bullet debris. Appears to be clean sand in back of building.	Lead.	None.	Collected 2 soil samples: 1 soil boring and 1 surface soil. Analyzed for TCL +30/TAL/TPH.
CW-5, AOC-3	Heavy metals	Former treatment plant. Discharged to stream. Sludge removed from sludge drying bed and plant cleaned, disinfected, and dismantled.	Heavy metals and cyanide.	Sludge analyzed in 1981 — no heavy metals.	Sampled sludge (see CW-9) for metals. Installed 2 soil borings in area of sludge drying beds. Sampled sediment at outfall. Analyzed for TCL +30/TAL/CN.

Table 4.3-1

Site Investigation Summary — Charles Wood (Continued)

Site Number	Site	Description	Potential Waste/ Contaminants	Past Samples and Analyses	Investigation Activities
CW-6	Pesticide Storage Building T-2044	Pesticides no longer stored in CW area. Use pesticide contractor. Pesticides were stored in steel igloo on concrete base. Was mixed outside of igloo and Bldg. T-2044.	Pesticides and herbicides.	Soil sampled in 1989 for pesticides. High levels of chlordane (up to 595 mg/kg) and trace amounts of others detected.	2 soil borings and installation of MW by Bldg. T-2044. Sampled soil, new well, and existing well MW-1 for TCL +30. Surface soil sample by ditch (TCL +30/TAL).
CW-9, AOC-3	Sludge dump	Sludge was placed on golf course. Sludge temporarily stored south of Bldg. T-2044. Currently has dark gray soil that had been removed near Hole 1.	Heavy metals.	None.	Installed 2 MWs for TCL +30/TAL. 9 surface soil samples for TAL, 1 soil boring for TCL +30/TAL.
AOC-7	Former hazardous waste storage area	Bldg. 2500 area. Has been used as storage area since 1961. Used as temporary hazardous waste storage area in 1987. Security guard overcome by fumes in 1987. Currently open field, no evidence of contamination.	Solvents, oil, and metals.	None.	Installed 6 soil borings. Analyzed for TCL +30.
PCB Transformers	Buildings	Several transformers in this area. All transformers were tested in 1990 for PCBs. Those with PCBs > 500 ppm were removed or remediated.	PCBs.	Transformers sampled — several >500 ppm. See transformer list.	Sampled PCB transformer locations.

WESTON MANAGERS DESIGNERS/CONSULTANTS

Table 4.3-2

Differences Between Proposed and Actual Work at Charles Wood

Site	Differences
CW-1, CW-2	In accordance with work plan, only one sample was taken per soil boring instead of three because no contamination was detected during field efforts.
CW-3	Site had not been cleared prior to field effort; therefore, no investigation was conducted.
CW-4	Because contaminated soil had not been excavated prior to the field effort, one soil boring was installed instead of three surface soil samples.
CW-6, CW-9	The location of the monitor well was moved from site CW-6 to CW-9 because there was an existing well near the proposed location at CW-6. The existing monitor well at CW-6 was sampled. Surface soil sample SS-01 was analyzed for TAL metals, which was not originally proposed in the CDAP.

A total of five background soil borings, which were converted into monitor wells, were installed and two separate soil intervals were sampled from each boring. Two rounds of groundwater samples were collected from each location. Soil and groundwater samples were analyzed for the parameters listed in Tables 3.6-1 and 3.8-1. Background monitor wells were labeled as "B" wells, i.e., MW-06B. Charles Wood background locations are shown in Figure 4.3-2 and are labeled B-6, B-7, etc. Monitor well MW-06B was installed at background location B-6 and a similar practice was followed at the other background locations. Two background surface-water and sediment samples were also collected (Figure 4.3-2).

4.3.1.1 Hydrogeologic Interpretation

The five background monitor wells installed at the Charles Wood area were installed to depths ranging from 14 ft bgs to 15 ft bgs. Total depths were determined during drilling activities and were based on the depth where groundwater was encountered. The lithology and depth to groundwater varied between background locations, and this information is presented on the lithologic logs in Appendix A.

4.3.1.2 Soil Sampling Results

Soil samples were collected from two discrete intervals: 0 to 2 ft bgs and 2 ft bgs to depth to groundwater. Soil boring depths varied between the background locations, depending on the depth where water was encountered. The analytical results for background soil at specific sampling intervals are presented in Appendix D. Table 4.1-7 summarizes the maximum concentrations detected in background soil at Charles Wood.

<u>VOCs</u>

VOCs were not detected in Charles Wood background soil.

SVOCs

A total 10 SVOCs were detected below laboratory quantitation limits in background soil at the Charles Wood area (Table 4.1-7).

Pesticides/PCBs

Two pesticides (4,4'-DDE and 4,4'-DDT) were detected above the laboratory quantitation limit in background soil at the Charles Wood area.

Metals

As indicated in Table 4.1-7, 19 metals were detected in background soil at the Charles Wood area.

Cyanide

Cyanide was not detected in background soil at the Charles Wood area.

4.3.1.3 Groundwater Sampling Results

Two rounds of groundwater sampling were conducted at Charles Wood. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.1-7 summarizes the maximum background concentrations detected in background water at Charles Wood.

VOCs

VOCs were not detected in Charles Wood background groundwater.

SVOCs

Two SVOCs were detected in background groundwater at Charles Wood (Table 4.1-7).

Pesticides/PCBs

Pesticides/PCBs were not detected in background groundwater at Charles Wood.

Metals

As indicated in Table 4.1-7, 19 total metals were detected in background groundwater at Charles Wood.

4.3.1.4 Surface-Water Sampling Results

Two upgradient surface-water samples, SS-B3 and SS-B4, were selected as background at Charles Wood (Figure 4.3-2). Contaminants detected in background surface water and corresponding sample identifications are presented in Appendix D. Table 4.1-9 summarizes the maximum detected concentrations in total and soluble background surface water at Charles Wood.

VOCs

VOCs were not detected in total background surface water. Soluble background surface-water samples at Charles Wood were analyzed for VOCs.

SVOCs

One SVOC, bis(2-ethylhexyl) phthalate, was detected below laboratory quantitation limits in background surface water (total) at Charles Wood. SVOCs were not analyzed for in soluble background surface-water samples at Charles Wood.

Metals

In total background surface water, 13 metals were detected above laboratory quantitation limits at Charles Wood. Similarly, 11 metals in soluble background surface water were detected above laboratory quantitation limits.

4.3.1.5 Sediment Sampling Results

Two upgradient sediment samples, SS-B3 and SS-B4, were selected as background at Charles Wood (Figure 4.3-2). Contaminants detected in background sediment and corresponding sample identifications are presented in Appendix D. Table 4.1-9 summarizes the maximum detected concentrations in background sediment at Charles Wood.

VOCs

VOCs were not detected in background sediment at Charles Wood.

SVOCs

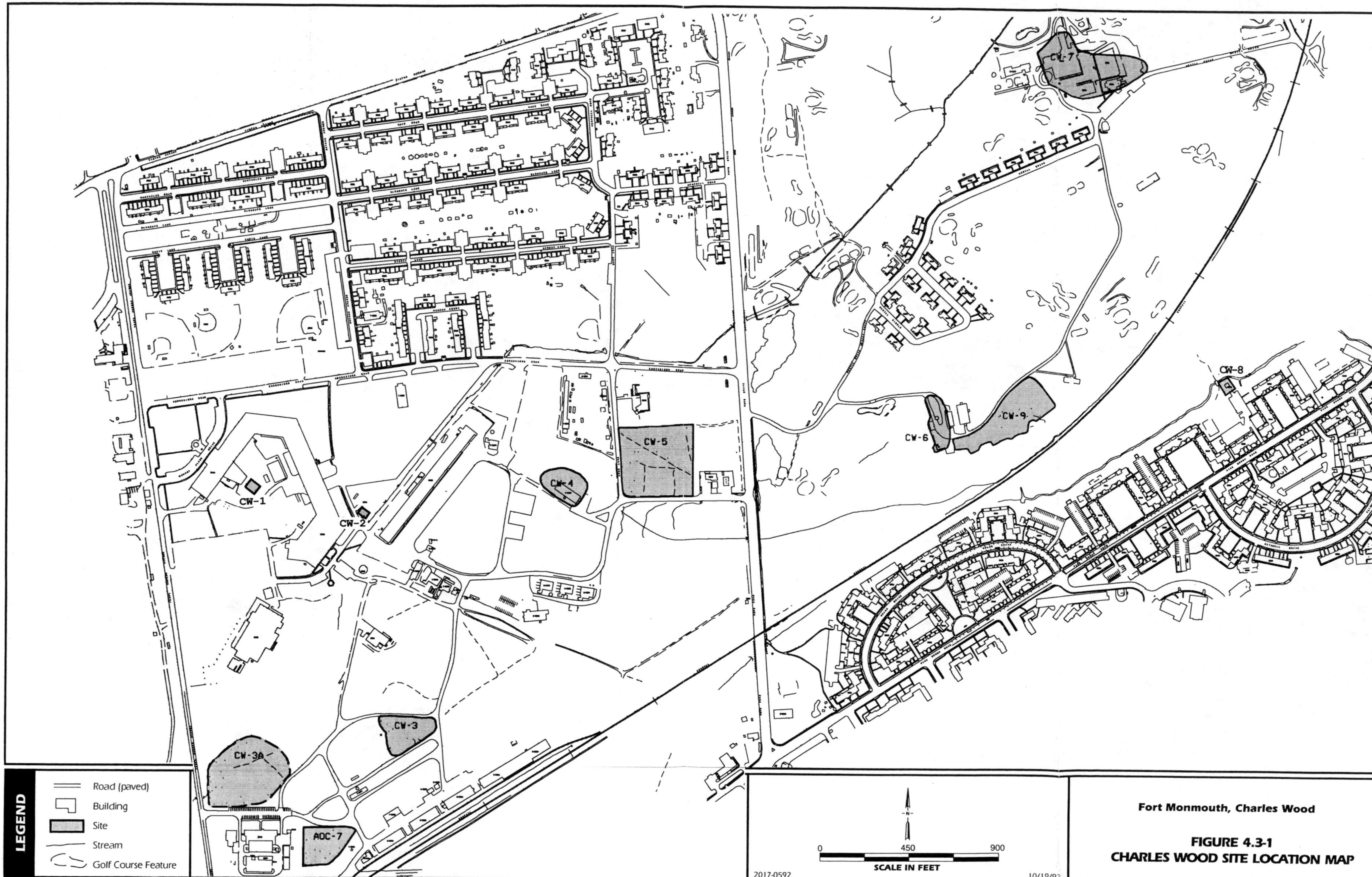
Bis(2-ethylhexyl) phthalate and di-n-butyl phthalate were detected below the laboratory quantitation limits in Charles Wood sediment. Six PAHs were detected below laboratory quantitation limits in Charles Wood sediment.

Pesticides

Three pesticides (4,4′-DDD, 4,4′-DDE, and 4,4′-DDT) were detected in Charles Wood background sediment.

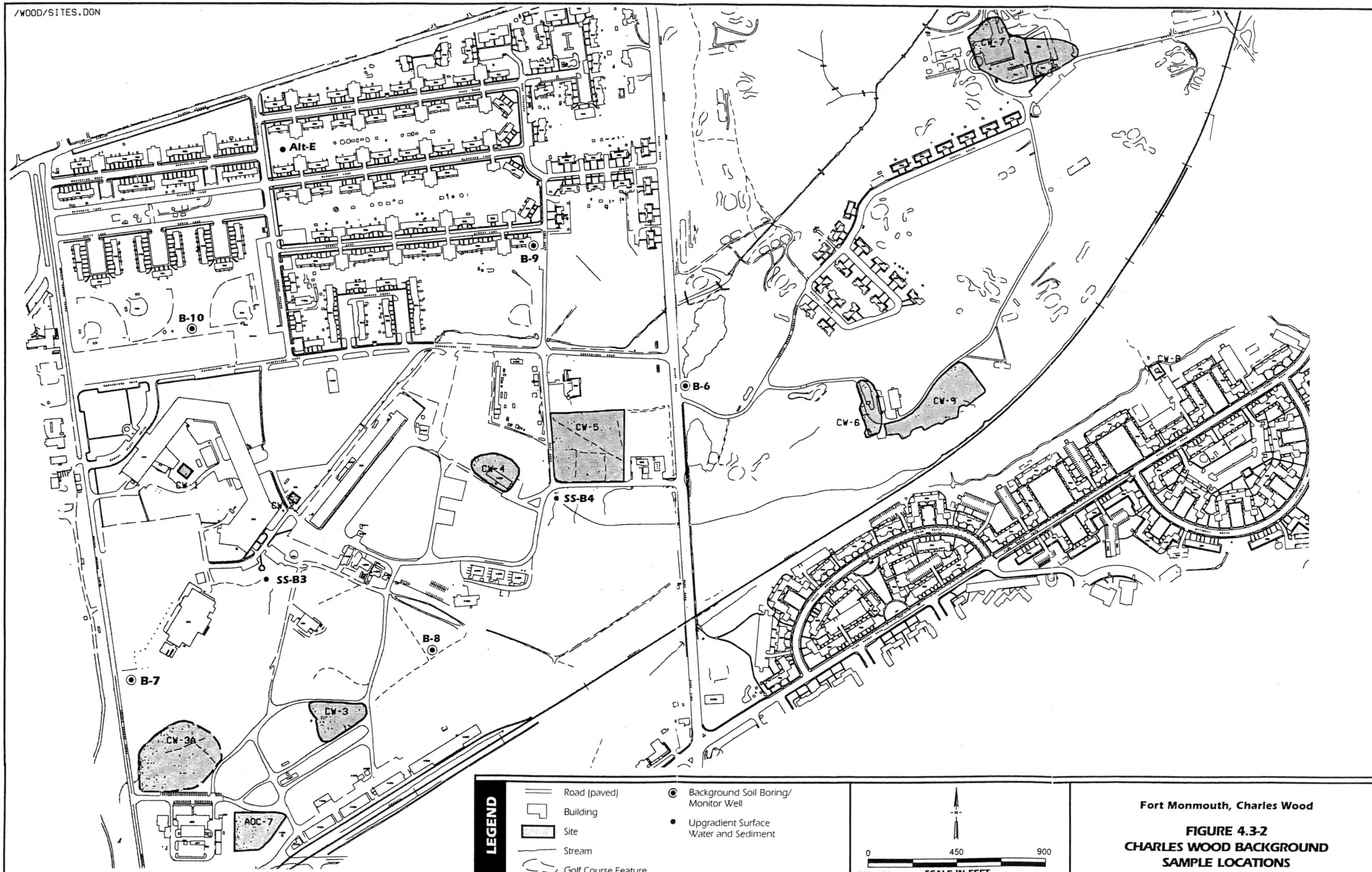
Metals

A total of 17 metals were detected in background sediment at Charles Wood above laboratory quantitation limits.



Fort Monmouth, Charles Wood

FIGURE 4.3-1
CHARLES WOOD SITE LOCATION MAP



Fort Monmouth, Charles Wood

FIGURE 4.3-2
CHARLES WOOD BACKGROUND SAMPLE LOCATIONS

Site CW-1

95P-4674

4.3.2 Wastewater Treatment Lime Pit 1 (CW-1)

4.3.2.1 Site Location

Wastewater Treatment Lime Pit 1 (CW-1) is located in the central area of the Hexagon Building (Building 2,700) at Charles Wood just east of the west wing of the building (Figure 4.3-3). The approximate area of CW-1 is 2,960 ft^2 (0.07 acre).

4.3.2.2 Site History

This lime pit (CW-1) was built concurrently with the Hexagon Building; construction was completed in 1952. This is one of two 4-cubic-meter (m^3) acid neutralization pits that contain limestone chips; the other pit (CW-2) is discussed in Subsection 4.3.3. Liquid wastes from the north and west wings of the Hexagon Building passed through this pit before being discharged to the sanitary sewer. Chemical wastes of up to 150 m^3 per day were generated from the shops and laboratories of the Hexagon Building; this waste output was reduced to 115 m^3 per day in June 1978 (USATHAMA, 1980). According to the IA, a licensed waste hauler was hired to dispose of concentrated wastes, such as etching solutions and organic solvents.

Each neutralization pit has a concrete floor and concrete block and mortar walls, and measures 7 ft by 13 ft wide by 8 ft high. The cover is constructed of concrete with a steel access panel. Several wooden baffles divide the pit into sections.

In October 1992, the pit was cleaned out, inspected, and the limestone chips replaced. A vacuum truck was used to remove the sludge and stones from the pit, after which the pit was rinsed with water. All sludge, stones, and rinse water were placed in drums and disposed of as a hazardous waste. At present, laboratory wastes are managed under the installation hazardous waste program, which forbids the discharge of these wastes to the sewer.

4.3.2.3 Sampling Effort

The elevated concentrations of halogenated hydrocarbons (HHCs) found in samples collected during the 1992 cleanout indicates the possibility that solvents were discharged into the lime pits. Neither concrete nor concrete block is an effective barrier to the migration of halogenated solvents. Halogenated solvents may have migrated from the lime pit into surrounding soils and possibly into groundwater. To investigate this potential, a monitor well was proposed for construction on each side of the lime pit (MW-26 through MW-29, shown in Figure 4.3-3); however, the proposed monitor well locations were slightly adjusted to avoid the buried conduit and underground water and acid lines. The wells were positioned accordingly to investigate the potential of halogenated solvent migration from the lime pit into the surrounding soil and groundwater. Continuous split-spoon samples were screened with an HNu or OVM. According to the CDAP, if any VOCs were detected, soil samples were to be collected from 7 to 9 ft bgs, from the interval with the highest instrument readings, and from just above the water table; otherwise, one sample was to be collected from 7 to 9 ft bgs from each boring. Because no elevated OVM readings were recorded, soil samples were collected from the 7 to 9 ft bgs interval only. Soil samples were analyzed for TCL +30 parameters and TAL metals. Two rounds of groundwater sampling were conducted from each well and analyzed for TCL +30 parameters and TAL metals.

4.3.2.4 Hydrogeologic Interpretation

Lithologic logs from monitor well locations MW-26 through MW-29 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by a well sorted olive-orange-brown medium-coarse-grained quartz sand.

Groundwater saturation was observed at approximately 7.5 ft bgs at all well locations. The four monitor wells were screened across the water table and were completed to 15 ft bgs at each location. Water-level elevation data, measured on 6 March 1995, prior to the March 1995 sampling round, indicate that the local groundwater flow direction is northeast, toward the Hexagon Research and Development Building. Based on groundwater elevation measurements, monitor wells MW-28 and MW-29 are downgradient of the area under investigation (Figure 4.3-4).

4.3.2.5 Soil Sampling Results

Four soil samples, one in each monitor well borehole, were collected between 7 and 9 ft bgs and were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soils, with the corresponding sample identifications, are listed in Appendix D. Table 4.3-3 compares the detected compounds with the NJDEP SCC, and then compares the results with the subsequent site-specific and Monmouth County maximum background limits.

VOCs

VOCs were not detected in site soil.

SVOCs

One SVOC (di-n-butyl phthalate) was detected above laboratory quantitation limits in site soil. However, the concentration of this compound was less than the NJDEP SCC and the maximum site-specific background.

Pesticides/PCBs

Pesticides were not detected above laboratory quantitation limits in site soil. PCBs were not detected in site soil.

Metals

As indicated in Table 4.3-4, all of the metals detected in site soil were found in concentrations below the NJDEP SCC, where established.

Table 4.3-3
Fort Monmouth - Charles Wood
Summary of Detected Compounds
In Soils at Site CW-1

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS			
				SB26-A02 12/19/94 (7-9 ft bgs)	SB27-A02 12/19/94 (7-9 ft bgs)	SB28-A02 12/19/94 (7-9 ft bgs)	SB29-A02 12/19/94 (7-9 ft bgs)
SVOC's (mg/kg)							
Benzo(b)fluoranthene	0.188	0.9	0.078 J	ND	ND	ND	0.070 J
Benzo(a)pyrene	0.162	0.66	ND	ND	ND	ND	0.073 J
bis(2-Ethylhexyl)phthalate	0.32	49	0.17 J	0.075 J	0.090 J	ND	ND
Di-n-butylphthalate	0.215	5700	2.0 B	0.081	0.086	0.077	0.130
PESTICIDES/PCBs (mg/kg)							
4,4'-DDE	0.0037	2	0.071	0.0038 J	ND	ND	ND
METALS TOTAL (mg/kg)							
Aluminum	3.9	NLE	15700	4070	5120	4850	4010
Arsenic	0.35	20	31.6	4.1	4.5	5.6	2.2
Barium	0.17	700	26	3.4	4.4	4.2	2.7
Beryllium	0.10	1	1.7	0.41	0.45	0.84	0.33
Calcium	2.2	NLE	653	236	283	229	669
Cobalt	0.71	NLE	4.5	ND	0.73	0.86	ND
Chromium	1.6	500	128	52.2	71.7	59.7	46.4
Copper	2.2	600	7.27[1]	1.8	2	1.1	1.2
Iron	0.58	NLE	45500	10800	14500	12900	9440
Lead	0.40	400[2]	15.1[1]	3.9	5.9	2	3.3
Potassium	(12.3-25.8)	NLE	10600	2700	3540	3660	2700
Magnesium	9.6	NLE	3960	960	1310	1310	943
Manganese	0.18	NLE	120[1]	7.2	10.6	8	5.4
Mercury	0.49	14	ND	ND	ND	0.21	ND
Sodium	3.8	NLE	56.8	33.4	29.7	20.4	15.5
Nickel	1.4	250	8.3	1.5	3.1	2.7	1.4
Vanadium	0.53	370	59.6	28.8	42.4	31.8	26.7
Zinc	0.41	1500	55.6	12.8	16.2	15.2	11.7

Compounds detected above NJDEP standards are noted by bold numbers
NLE - No Level Estabished
ND - Indicates that the compound was not detected at or below the quantification limits
ft bgs - Feet below ground surface
J - Indicates that the concentration value was estimated due to detection at or near the quatification limits
B- Compound was observed in the sample and associated laboratory blank.
Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

[1] Monmouth County maximum background concentration.

[2] NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

Table 4.3-4
Fort Monmouth - Charles Wood
Summary of Average Concentrations of Detected Compounds in Groundwater - Site CW-1

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE			
				MW-26 2/21/95, 3/14/95 (avg.)	MW-27 2/21/95, 3/14/95 (avg.)	MW-28 2/21/95, 3/14/95 (avg.)	MW-29 2/21/95, 3/14/95 (avg.)
VOC's (µg/L)							
1,2-Dichloroethene (total)	4.4	10	ND	ND	ND	ND	**235**
Trichloroethene (TCE)	2.0**	1	ND	ND	ND	**35.5**	**885**
Tetrachloroethene (PCE)[1]	4.0**	1*	ND	**4.5J**	ND	ND	ND
SVOCs (µg/L)							
1,2,4 Trichlorobenzene	9.6**	9	ND	ND	ND	ND	4J
bis-(2Ethylhexyl)phthalate	9.7	30*	600	3.75J	2J	1.5J	3J
Di-n-butyl phthalate	6.5	900	ND	ND	5.25J	ND	ND
METALS TOTAL (µg/L)							
Aluminum	24	200	8210	**3857.5**	**5695**	**3815**	**2370**
Arsenic	1.9	8*	25.1	4.375	4.7	4	1.625
Barium	1.7	2000	400[2]	98.7	127	53.05	50.8
Beryllium	0.9	20*	7[2]	ND	0.72	ND	ND
Calcium	10.4	NLE	8700	25350	24100	15050	28350
Cadmium	2.8	4	6[2]	ND	2.1	ND	ND
Cobalt	2.3	NLE	30.6	9.6	14.5	6.95	4.8
Chromium	2.9	100	49.6	40.575	55.55	28.15	19.7
Copper	1.9	1000	730[2]	4.525	5.675	2.675	ND
Iron	6.4	300	27000[2]	**7796.65**	**11295**	**6185**	**4555**
Potassium	685	NLE	10000[2]	12450	12950	12900	11000
Magnesium	18.3	NLE	25000[2]	9155	13650	4080	5520
Manganese	1.8	50	480[2]	**91.15**	**125**	46.35	**70.55**
Sodium	30.5	50000	197000[2]	**64550**	**71700**	18100	29400
Nickel	10.8	100	48.3	19.8	20.95	8.75	10.1
Lead	1.1	10*	<100[2]	3.9	8.3	3.15	1.425
Vanadium	2.3	NLE	28.9	29.175	36.075	23.9	15.6
Zinc	3.8	5000	133	35.75	29.25	24.85	22.6

[1] - Same compound as listed by NJDEP Tetrachloroethylene
Compounds exceding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria
ND - Indicates that the compound was not detected at the quantification limit
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
NLE - No Level Established
** - Method detection limit exceeds the NJDEP groundwater quality criteria
[2] - Monmouth County maximum background concentration

4.3.2.6 Groundwater Sampling Results

Monitor wells at site CW-1 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for the individual sampling rounds are listed in Appendix D. Table 4.3-4 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate. Figure 4.3-5 presents the locations of the compounds detected above both NJDEP criteria and maximum background.

VOCs

Three VOCs (tetrachloroethene, trichloroethene, and 1,2-dichloroethene) were detected in site groundwater in concentrations exceeding the NJDEP GWQC. Tetrachloroethene was detected below the laboratory quantitation limit in MW-26 in the March sampling round only; however, the concentration exceeded the NJDEP GWQC. Trichloroethene was detected in MW-28 and MW-29 in both sampling rounds. 1,2-Dichloroethene (total) was detected in MW-29 only in both sampling rounds. VOCs were not detected in MW-27. Figure 4.3-5 presents the locations of the averaged concentration of compounds detected above the NJDEP GWQC and the maximum background levels established at Charles Wood.

SVOCs

SVOCs were not detected in the site monitor wells above laboratory quantitation limits and the NJDEP GWQC from either sampling round.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.3-4, of the 18 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and sodium) were found in concentrations exceeding the NJDEP GWQC; however, aluminum, iron, and manganese were detected in concentrations below the site-specific and Monmouth County maximum background levels. Although sodium was detected in concentrations greater than the site-specific background level, sodium was found in concentrations well below the Monmouth County maximum background level.

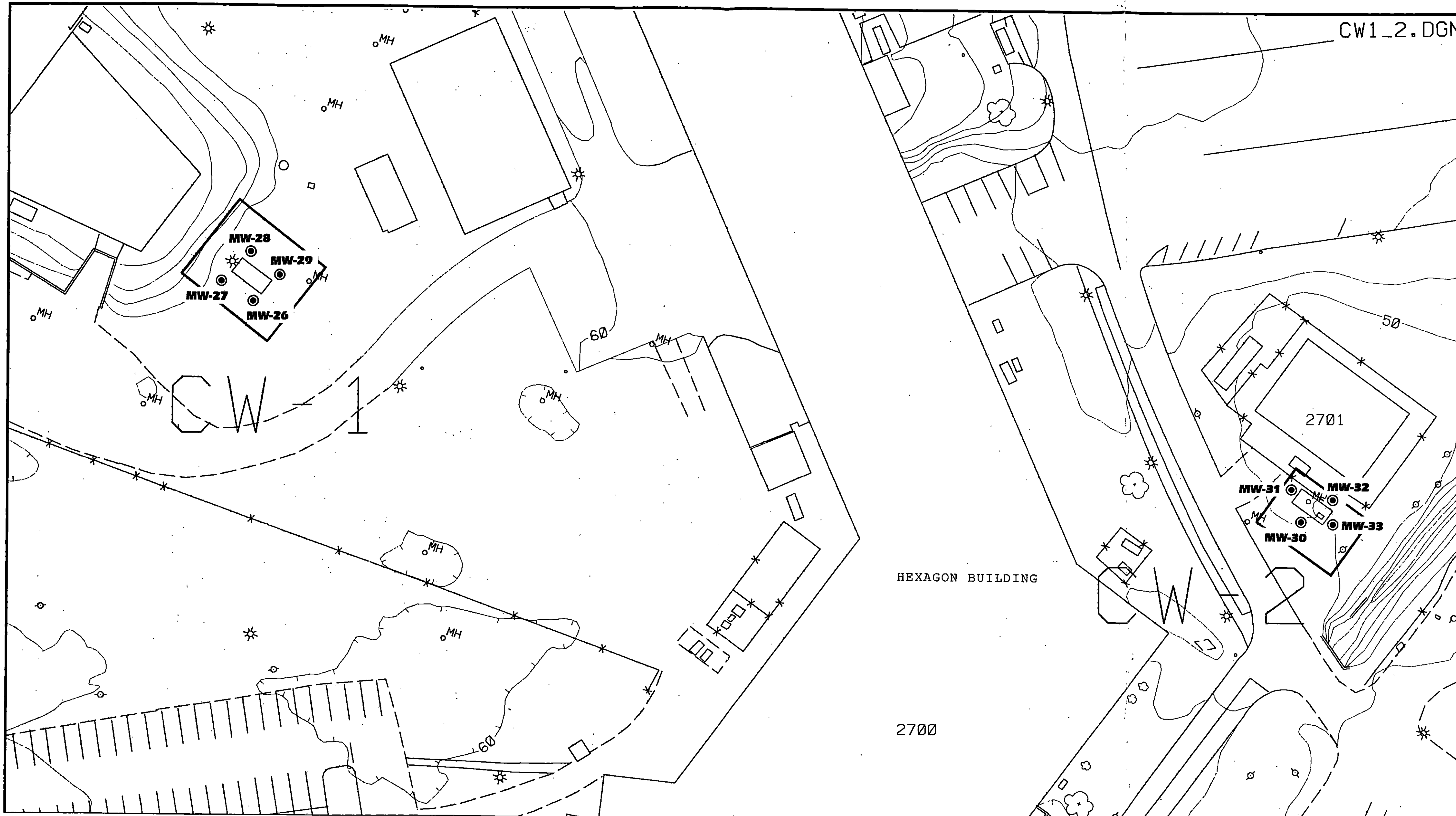
4.3.2.7 Recommendations

The soil sample results indicate that compounds of concern were either not detected or were below laboratory quantitation limits and NJDEP criteria.

The groundwater sampling results indicate that TCE, PCE, and 1,2-dichlorobenzene were detected in the groundwater downgradient of the site at levels that exceeded the NJDEP criteria.

Although NJDEP groundwater criteria were exceeded by three VOCs at this site, immediate remedial action is not required. The probable source of contamination has been eliminated since chemicals are not being disposed of in the pit. The pit was cleaned in October 1992 and the limestone sludge was removed and disposed of as a hazardous waste. Hazardous waste is currently collected for proper disposal off-site and waste is no longer disposed of in the pit. The groundwater is believed to flow toward the headwaters of Wampum Brook, and the shallow groundwater probably flows into Wampum Brook. There is no use of groundwater between the source and Wampum Brook. Surface-water samples were taken in Wampum Brook in the Charles Wood area and Mill Creek (as Wampum Brook is called further to the east) for use as background samples. No VOCs were detected in these samples, therefore, there is no immediate threat to human health.

The extent of VOC concentrations in groundwater will be investigated by soil-gas survey techniques. The soil-gas survey will be performed on an established grid pattern to estimate the lateral extent of VOCs in the vicinity of the neutralization pit. The results of the soil-gas survey will be used to locate two additional monitor wells at the downgradient edge of the plume. DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and the two newly installed monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.



LEGEND

- Soil Boring/Monitor Well
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary

N

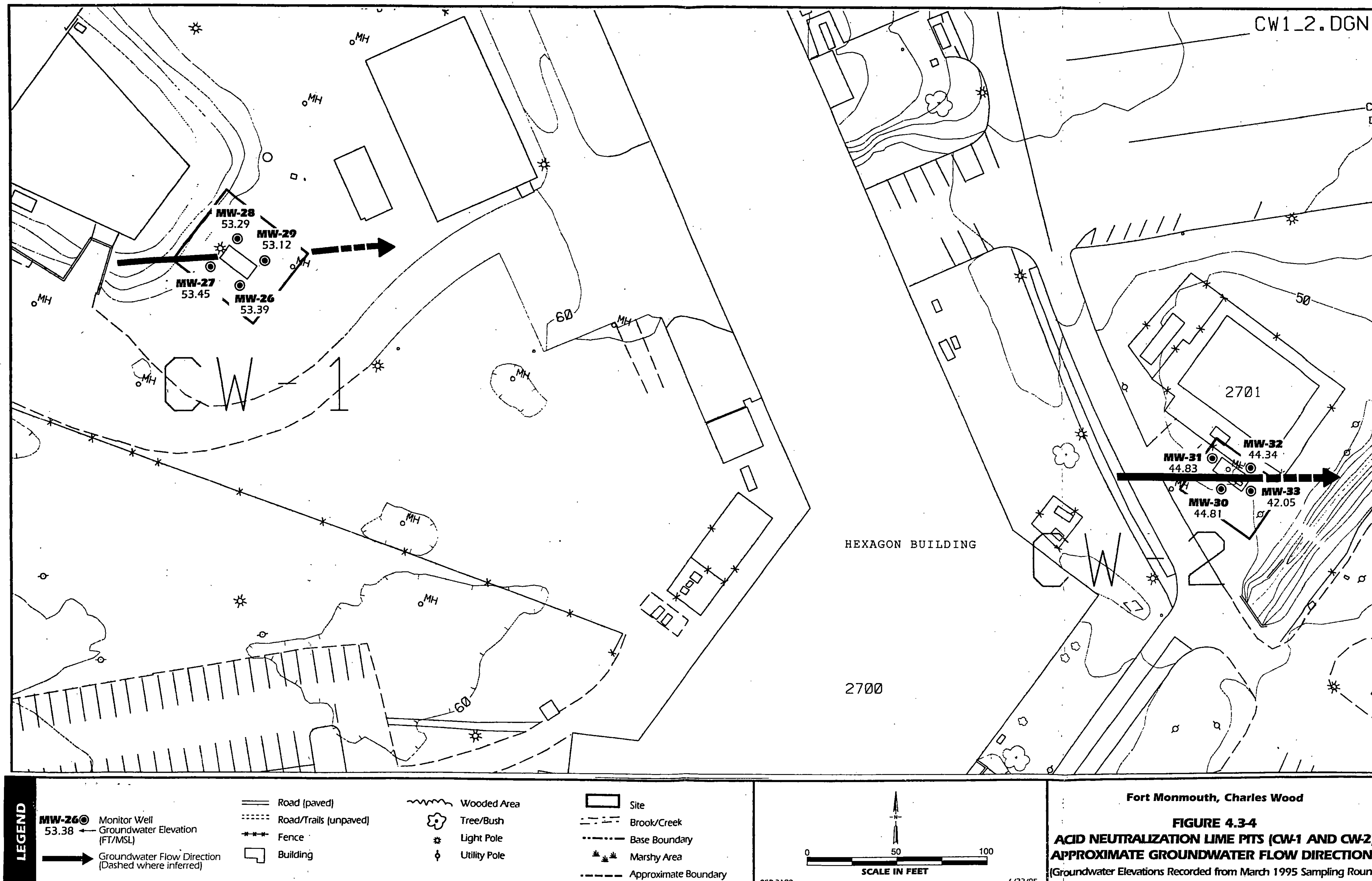
0 50 100

SCALE IN FEET

95P-3190 6/23/95

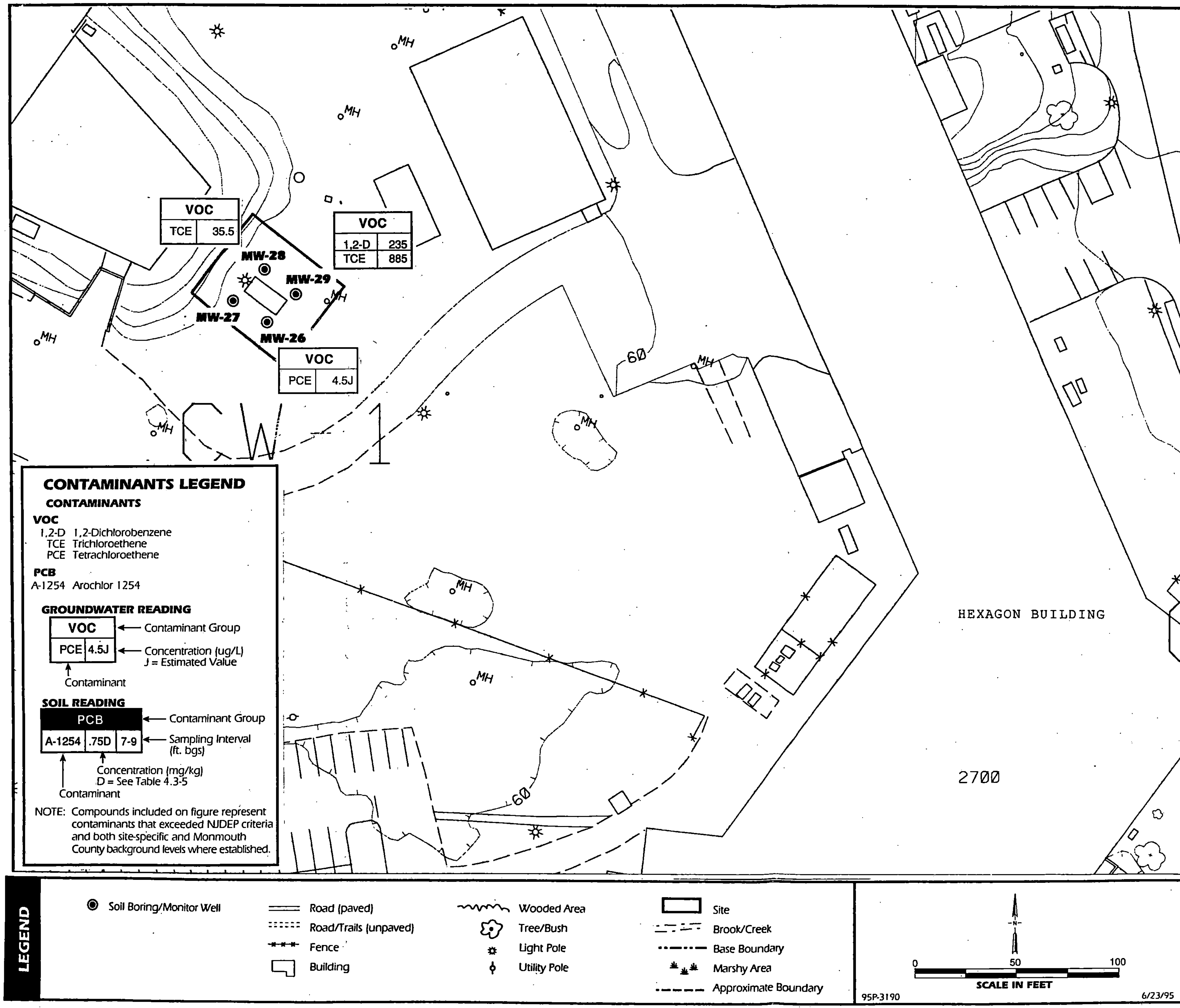
Fort Monmouth, Main Post

FIGURE 4.3-3
ACID NEUTRALIZATION LIME PITS (CW-1 AND CW-2) SAMPLING LOCATIONS



Fort Monmouth, Charles Wood

FIGURE 4.3-4
ACID NEUTRALIZATION LIME PITS (CW-1 AND CW-2) APPROXIMATE GROUNDWATER FLOW DIRECTIONS
(Groundwater Elevations Recorded from March 1995 Sampling Round)



Fort Monmouth, Charles Wood

FIGURE 4.3-5
ACID NEUTRALIZATION LIME PITS (CW-1 AND CW-2) DISTRIBUTION OF CONTAMINANTS IN SITE SOIL AND GROUNDWATER

Site CW-2

95P-4674

4.3.3 Wastewater Treatment Lime Pit 2 (CW-2)

4.3.3.1 Site Location

Wastewater Treatment Lime Pit 2 (CW-2) is located southeast of the Hexagon Building (Building 2700) at Charles Wood near an electrical substation (Figure 4.3-3). The approximate area of site CW-2 is 1,751 ft^2 (0.04 acre).

4.3.3.2 Site History

Like Lime Pit 1, Lime Pit 2 (CW-2) was built concurrently with the Hexagon Building; construction was completed in 1952. Liquid wastes from the east and south wings of the Hexagon Building passed through this pit before being discharged to the sanitary sewer. Additional details, including the estimated quantities of wastes discharged through the lime pits, pit construction, and cleanout and replacement of the limestone, were discussed in Subsection 4.3.2.2.

Unlike Lime Pit 1, during cleanout this pit was found to have received sewage. A dye test was conducted and revealed that toilets from the guard shack and a bathroom for the handicapped near the east entrance were mistakenly connected to this pit. The plumbing has been rerouted to discharge the wastewater from the toilets directly to the sanitary sewer.

In October 1992, the pit was cleaned out, inspected, and the limestone chips replaced. A vacuum truck was used to remove the sludge and stones from the pit, after which the pit was rinsed with water. All sludge, stones, and rinse water were placed in drums and disposed of as a hazardous waste. At present, laboratory wastes are managed under the installation hazardous waste program, which forbids the discharge of these wastes to the sewer.

4.3.3.3 Sampling Effort

As in the case of Lime Pit 1, the elevated concentrations of HHCs in sludge, rinse, and grab samples suggest the possibility that solvents were discharged into the lime pits and that they may have migrated from the lime pits into surrounding soils and possibly into groundwater. To investigate this potential, a monitor well was constructed on each side of the lime pit (MW-30 through MW-33, shown in Figure 4.3-3). Continuous split-spoon samples were screened with an HNu or OVM. According to the CDAP, if any VOCs were detected, soil samples were to be collected from 7- to 9-ft bgs (near the base of the neutralization pit), from the interval with the highest instrument readings, and from just above the water table; otherwise, one sample was to be collected from the 7- to 9-ft interval of each boring. Because no elevated OVM readings were recorded during borehole activities, one sample from the 7- to 9-ft bgs interval was collected for the required parameters. Soil samples were analyzed for TCL +30 parameters and TAL metals. Two rounds of groundwater samples were collected from each well and analyzed for TCL +30 parameters and TAL metals.

4.3.3.4 Hydrogeologic Interpretation

Lithologic logs from site monitor wells MW-30 and MW-31 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by fill material and reworked natural sediments. The components of the manmade materials consisted of quartz gravel and concrete, wood fragments, and pieces of old electrical conduit. The reworked natural sediments consisted of an interbedded green-gray silty fine-grained sand and green-gray fine-grained sandy silt. Lithologic logs from MW-32 and MW-33 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by shallow fill material and probable natural sediments. The filled material consisted of concrete fragments (to 2 ft bgs). The probable natural sediments consisted of an interbedded olive-gray moderately sorted silty fine-grained sand and a green moderately sorted very micaceous fine-grained sandy silt.

Groundwater saturation was observed between 1 and 8 ft bgs. The four monitor wells were screened across the water table and total depths ranged from 15 to 16 ft bgs. Water-level elevation data, measured on 6 March 1995, prior to the March 1995 sampling round, indicate that local groundwater flow is eastward (Figure 4.3-4). Based on groundwater elevation measurements, monitor wells MW-32 and MW-33 are downgradient of the former lime pit.

4.3.3.5 Soil Sampling Results

Four soil samples, one in each monitor well borehole, were collected and analyzed for the parameters listed in Table 3.6-1. Samples were collected between 7 and 9 ft bgs. The compounds detected in site soils, with the corresponding sample identifications, are listed in Appendix D. Table 4.3-5 compares site soil quality with the NJDEP SCC, and then compares the results with the subsequent site-specific and Monmouth County maximum background levels, where appropriate.

VOCs

Two VOCs (methylene chloride and 2-butanone) were detected in concentrations above laboratory quantitation limits. Methylene chloride and 2-butanone are common laboratory contaminants. Both compounds were detected in concentrations well below the NJDEP SCC.

SVOCs

Eight SVOCs were detected above laboratory quantitation limits in soil borings, but in concentrations below the NJDEP SCC. All SVOCs detected below quantitation limits were found in concentrations below the NJDEP SCC where established.

Pesticides/PCBs

Three pesticides (4,4'-DDE, 4,4'-DDD, and 4,4'-DDT) were detected in concentrations above laboratory quantitation limits, but were well below the NJDEP SCC.

One PCB (Aroclor-1254) in SB-30 was detected slightly above the laboratory quantitation limit as well as the NJDEP SCC (Figure 4.3-5). However, the PCB compound was not detected in groundwater samples from the corresponding well location, MW-30. PCBs were not detected in SB-31, SB-32, and SB-33.

Table 4.3-5
Fort Monmouth - Charles Wood
Summary of Detected Compounds in Soils from Site CW-2

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS			
				SB30-A02 12/16/94 (7-9 ft bgs)	SB31-A02 12/16/94 (7-9 ft bgs)	SB32-A02 12/16/94 (7-9 ft bgs)	SB33-A02 12/16/94 (7-9 ft bgs)
VOC's (mg/kg)							
Methylene Chloride	0.0027	49	ND	0.088	0.086	0.017	ND
2-Butanone	0.0041	1000	ND	ND	0.012 J	0.008 J	ND
SVOCs (mg/kg)							
Napthalene	0.277	230	ND	0.15 J	ND	ND	ND
2-Methylnaphthalene	0.287	NLE	ND	0.1 J	ND	ND	ND
Acenaphthene	0.221	3400	ND	0.17 J	ND	ND	ND
Dibenzofuran	0.215	NLE	ND	0.093 J	ND	ND	ND
Fluorene	0.208	2300	ND	0.21 J	ND	ND	ND
Phenanthrene	0.165	NLE	ND	1.3	ND	ND	0.075 J
Anthracene	0.152	10000	ND	0.33 J	ND	ND	ND
Carbazole	0.145	NLE	ND	0.18 J	ND	ND	ND
Fluoranthene	0.198	2300	0.042 J	1.5	ND	ND	0.073 J
Pyrene	0.178	1700	0.048 J	1.1	ND	ND	0.067 J
Benzo(a)anthracene	0.162	0.9	0.046 J	0.69	ND	ND	ND
Chrysene	0.145	9	0.083 J	0.71	ND	ND	0.043 J
bis(2-Ethylhexyl)phthalate	0.32	49	0.170 J	0.16 J	0.1 J	0.059 J	ND
Benzo(b)fluoranthene	0.188	0.9	0.078 J	0.79	ND	ND	ND
Benzo(k)fluoranthene	0.205	0.9	0.041 J	0.28 J	ND	ND	ND
Benzo(a)pyrene	0.162	0.66	0.047 J	0.62	0.13 J	0.053 J	0.094 J
Indeno(1,2,3-cd)pyrene	0.234	0.9	ND	0.37 J	ND	ND	ND
Benzo(g,h,i)perylene	0.224	NLE	0.042 J	0.35 J	ND	ND	ND
Dibenzo(a,h)anthracene	0.198	0.66	ND	.089 J	ND	ND	ND
PESTICIDES (mg/kg)							
Aroclor-1254	0.039	0.49	ND	**0.75 D**	ND	ND	ND
4,4'-DDE	0.0037	2	0.071	0.0035 JP	0.0035 J	ND	0.0083 P
4,4'-DDD	0.0037	3	ND	0.012 P	0.0098	0.0073	0.26
4,4'-DDT	0.0037	2	0.053	0.062 P	0.0058	ND	0.046
METALS TOTAL (mg/kg)							
Aluminum	3.9	NLE	15700	6450	5430	2920	7310
Arsenic	0.35	20	31.6	5.7	8.5	2.6	15.7
Barium	0.17	700	26	36.2	58.6	23.6	326
Beryllium	0.1	1	1.7	0.58	0.51	0.28	**1.5**
Calcium	2.2	NLE	653	655	976	502	1270
Cadmium	0.86	1	ND	ND	ND	ND	0.9
Cobalt	0.71	NLE	4.5	0.95	4.2	0.91	5.9
Chromium	1.6	500	128	69.9	48.6	32.2	56.5
Copper	2.2	600	7.27[1]	2.7	2.9	2.7	5.5
Iron	0.58	NLE	45500	20400	19200	11100	17600
Lead	0.4	400[2]	15.1[1]	8.1	7.5	3.1	5.6
Magnesium	9.6	NLE	3960	1720	1270	776	1880
Manganese	0.18	NLE	120[1]	25.1	24.8	12.5	35.1
Nickel	1.4	250	8.3	4.9	11.2	2.6	23.2
Potassium	(12.3-25.8)	NLE	10600	4210	2610	1980	3350
Selenium	0.3	63	0.85	0.29	0.7	0.2	4.2
Vanadium	0.53	370	59.6	36.6	29.1	19.4	23.6
Zinc	0.41	1500	55.6	27.8	44.2	19.3	63.9

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.
J- Indicates that the concentration value was estimated due to detection at or near the quantification limit
P- The percent difference between the results from two GC cloumns is greater than 25% the lower of the two values is reported
ND - Indicates that the compound was not detected at or below the quantification limits
NLE- No Level Established
ft bgs. - feet below ground surface.
Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.
[1] Monmouth County maximum background concentrations.
[2] NJDEP criteria are referenced in Site Remediation News, Winter 1995.
D - Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis.

Metals

As indicated in Table 4.3-5, of the 18 metals detected in site soil, only beryllium in SB-33 was found at a concentration slightly exceeding the NJDEP SCC. Although beryllium was detected in a concentration greater than the established Monmouth County background level, the metal was detected below the site-specific background level.

4.3.3.6 Groundwater Sampling Results

Monitor wells at site CW-2 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.3-6 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the site-specific and Monmouth County maximum background levels, where appropriate.

VOCs

Tetrachloroethene was the only VOC detected in site groundwater. The compound was detected in a concentration that was below the quantitation limit but slightly exceeding the NJDEP GWQC from the March sampling round only in MW-32 (Figure 4.3-5). Tetrachloroethene was not detected in MW-32 in the February sampling round.

SVOCs

One SVOC (di-n-butyl phthalate) was detected above the laboratory quantitation limit in MW-31 from the March sampling round. Di-n-butyl phthalate was detected well below the NJDEP GWQC. SVOCs detected below the laboratory quantitation limit were also detected below the NJDEP GWQC.

Table 4.3-6
Fort Monmouth - Charles Wood
Summary of Average Concentrations of Detected Compounds in Groundwater - Site CW-2

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE			
				MW30 2/21/95, 3/14/9 (avg.)	MW31 2/21/95, 3/14/9 (avg.)	MW32 2/21/95, 3/14/95 (avg.)	MW33 2/21/95, 3/14/95 (avg.)
VOC's (µg/L)							
Tetrachloroethene (PCE)[1]	2.7**	1*	ND	ND	ND	**4J**	ND
SVOCs (µg/L)							
1,2,4 Trichlorobenzene	9.6**	9	ND	ND	5J	ND	ND
bis-(2ethylhexyl)phthalate	9.7	30*	600	2J	ND	1.5 J	1.5 J
Di-n-butylphthalate	6.5	900	ND	4J	5.5	4J	4J
METALS TOTAL (µg/L)							
Aluminum	24	200	8210	129	17.65	**447.5**	**676**
Arsenic	1.9	8*	25.1	ND	ND	ND	1.5
Barium	1.7	2000	400[1]	233.5	180.5	211	234
Calcium	10.4	NLE	8700	63600	36050	46250	51250
Cobalt	2.3	NLE	30.6	ND	ND	ND	2.9
Chromium	2.9	100	49.6	ND	ND	ND	2.15
Copper	1.9	1000	730[1]	3.8	2.15	2	11.9
Iron	6.4	300	27000[1]	**45750**	**36350**	**48950**	**54450**
Potassium	685	NLE	4630	9980	8710	9580	8455
Magnesium	18.3	NLE	25000[1]	7045	4775	5595	6100
Manganese	1.8	50	480[1]	**365**	**222.5**	**268.5**	**273**
Sodium	30.5	50000	36400	17100	10325	11800	14350
Nickel	10.8	100	48.3	10.65	ND	11.75	2.7
Lead	1.1	10*	<100[1]	ND	ND	0.7	3.3
Vanadium	2.3	NLE	28.9	ND	ND	3.05	5.15
Zinc	3.8	5000	133	5.7	3.9	13.85	25.6

[1] Same compound as listed by NJDEP Tetrachloroethylene
Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria
NLE - No Level Established
J - Indicates that the concentration value was estimated due to detection at or near the quantitation limits
ND - Indicates that the compound was not detected at or below the quantitation limit
** Method detection limit exceeded NJDEP groundwater quality criteria
[1] - Monmouth County maximum background concentrations.

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Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.3-6, of the 16 metals detected in site groundwater, 3 metals (aluminum, iron, and manganese) were found in concentrations exceeding the NJDEP GWQC. In addition, iron was detected in concentrations greater than those determined for site-specific and Monmouth County maximum background at Charles Wood. The presence of iron in exceedence of the NJDEP GWQC may be attributable to the high concentrations of iron present in natural soil found in Monmouth County. Therefore, iron is not identified as a compounds of concern. Although manganese was detected in concentrations above the site-specific background level in MW-30, MW-32, and MW-33, manganese was found in concentrations below the Monmouth County background level. Aluminum was found in concentrations below both the site-specific and Monmouth County maximum background levels.

4.3.3.7 Recommendations

The results of the soil sampling indicate that one PCB compound (Aroclor-1254) was detected in SB-30 at a concentration slightly above the NJDEP SCC. PCB compounds were not detected in the other three soil borings. In addition, PCBs were not detected in groundwater samples in the corresponding well location, MW-30.

Groundwater sampling results indicate that PCE was detected in the groundwater in one of the four wells (MW-32) in one of the two sampling rounds at levels slightly exceeding the NJDEP GWQC.

Although NJDEP groundwater criteria were exceeded by one VOC at this site, immediate remedial action is not required. The source of contamination has been eliminated since chemicals are not being disposed of in the pit. The pit was cleaned in October 1992 and the limestone sludge was removed and disposed of as a hazardous waste. Hazardous waste is currently collected for proper disposal off-site and waste is no longer disposed of in the pit. Shallow groundwater flows toward and discharges to the headwaters of Wampum Brook, as indicated by water-level measurements from site monitor wells. There are no known uses of groundwater at or downgradient of the site. Surface-water samples were taken in Wampum Brook in the Charles Wood area and Mill Creek (as Wampum Brook is called further to the east) for use as background samples. No VOCs were detected in these samples, therefore, there is no immediate threat to human health.

The extent of PCE concentrations in groundwater will be investigated by soil-gas survey techniques. The soil-gas survey will be performed on an established grid pattern to estimate the lateral extent of VOCs in the vicinity of the neutralization pit. The results of the soil-gas survey will be used to locate two additional monitor wells if necessary. DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and from the two newly installed monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program. When the additional monitor wells are installed, soil samples will be collected for PCB analysis because of the detection of PCBs in a soil sample collected from SB-30.

Site CW-3

95P-4674

4.3.4 Landfill 3 (CW-3)

4.3.4.1 Site Location

Landfill 3 is located in the southeastern part of Charles Wood (Figure 4.3-6) and has been designated a construction area. The approximate area of Landfill 3 is 39,758 ft^2 (0.91 acre).

4.3.4.2 Site History

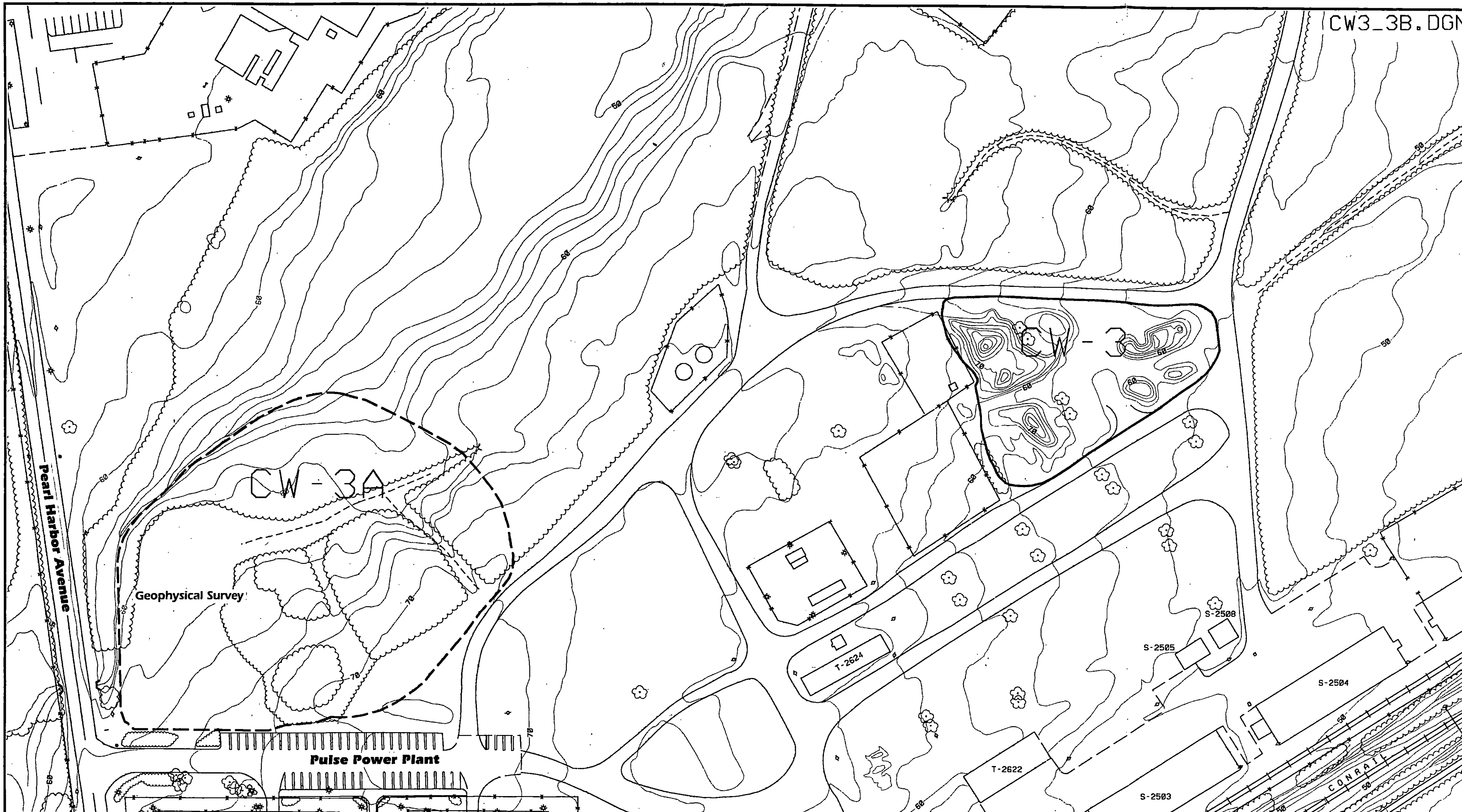
According to the IA, the Army Air Force used this area to dispose of administrative-type wastes and wood in the 1940s. Beginning in 1951, the aerial photographs show a cleared area used for storage. In 1981 and 1986, this area was relatively clear. During the 1993 site visit, the CW-3 area was being used as a construction rubble dump. Material observed included soil piles, brush, concrete, wood demolition debris, wood pallets, metal, and PVC pipe. There is no evidence of a subsurface landfill, and long-term Fort Monmouth employees said that this area was not used as a landfill.

4.3.4.3 Sampling Effort

Landfill 3 is shown in Figure 4.3-6. During the field investigation activities conducted between November 1994 and January 1995 at Fort Monmouth, construction rubble was present at site CW-3. The proposed sampling activities included collecting surface soil samples for TCL +30 parameters and TAL metal analysis if any evidence of soil staining was observed following the removal of the rubble. In addition, if high levels of chemical constituents were found in soils, monitor wells would be installed and sampled twice for TCL +30 parameters and TAL metals. Field sampling activities were postponed until the rubble could be removed. In June 1995, the construction rubble was removed. Exploratory trenches are planned to determine if any subsurface debris or soil staining is evident. However, because the area is believed to not have been used as a landfill, it is not anticipated that subsurface debris and soil staining will be found.

4.3.4.4 Recommendations

Investigation activities were not conducted as part of this investigation because of construction rubble that was present at the site during the field effort, which prohibited sample collection as planned. The rubble was removed and properly disposed of in June 1995 and exploratory trenches are planned to determine if any subsurface debris or soil staining is present. Field screening will be performed during excavation using a PID. NJDEP will be requested to send a representative to observe the investigation. In the absence of any elevated PID readings or evidence of subsurface debris, the excavation will be backfilled and no further action will be taken. If contamination is identified, then sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993). Soil sample analytes will be collected and analyzed for the full range of contaminants.



LEGEND

- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary

N

0 100 200
SCALE IN FEET

2017-0583 10/18/93

Fort Monmouth, Charles Wood

FIGURE 4.3-6
LANDFILLS 3 (CW-3) AND 3A (CW-3A)

Site CW-3A

Site CW-3A

95P-4674

4.3.5 Debris Site (CW-3A)

4.3.5.1 Site Location

Debris Site CW-3A is located west of the CW-3 area, north of Pulse Power, Building 2707 (Figure 4.3-6). The approximate area of site CW-3A is 116,000 ft^2 (2.6 acres).

4.3.5.2 Site History

According to long-term Fort Monmouth employees, the area north of Pulse Power was used as a disposal area. The 1957 aerial photograph shows the CW-3A area with bare ground. According to *Fort Monmouth History and Place Names, 1917-1959*, 90 buildings at Charles Wood were razed in late 1955 and during 1956. It is possible that the demolition debris from these buildings was placed in this area. In the 1974 aerial photo, a steel igloo is visible on this area. By 1986, the western part of this area had not revegetated. During the 1993 site visit, some small debris was observed in the woods.

4.3.5.3 Sampling Effort

Site CW-3A is also presented in Figure 4.3-6. Surface geophysics were conducted in this area because it was not known if subsurface disposal had occurred in this area and in accessible cleared areas to the southeast in the construction areas. Magnetic and electromagnetic (EM-31) measurements were collected on 10-ft centers. GPR was also used to assess the degree of subsurface soil disturbance.

4.3.5.4 Geophysical Results

The geophysical investigation at Charles Wood site CW-3A utilized EM, MAG, and GPR methods to characterize the site. Prior to the investigation, a site walk revealed numerous metallic objects on the surface in the form of pipes, sheet metal, metal cans, and concrete, as well as nonmetallic objects such as asphalt and construction debris. The debris was noted and considered during data interpretation.

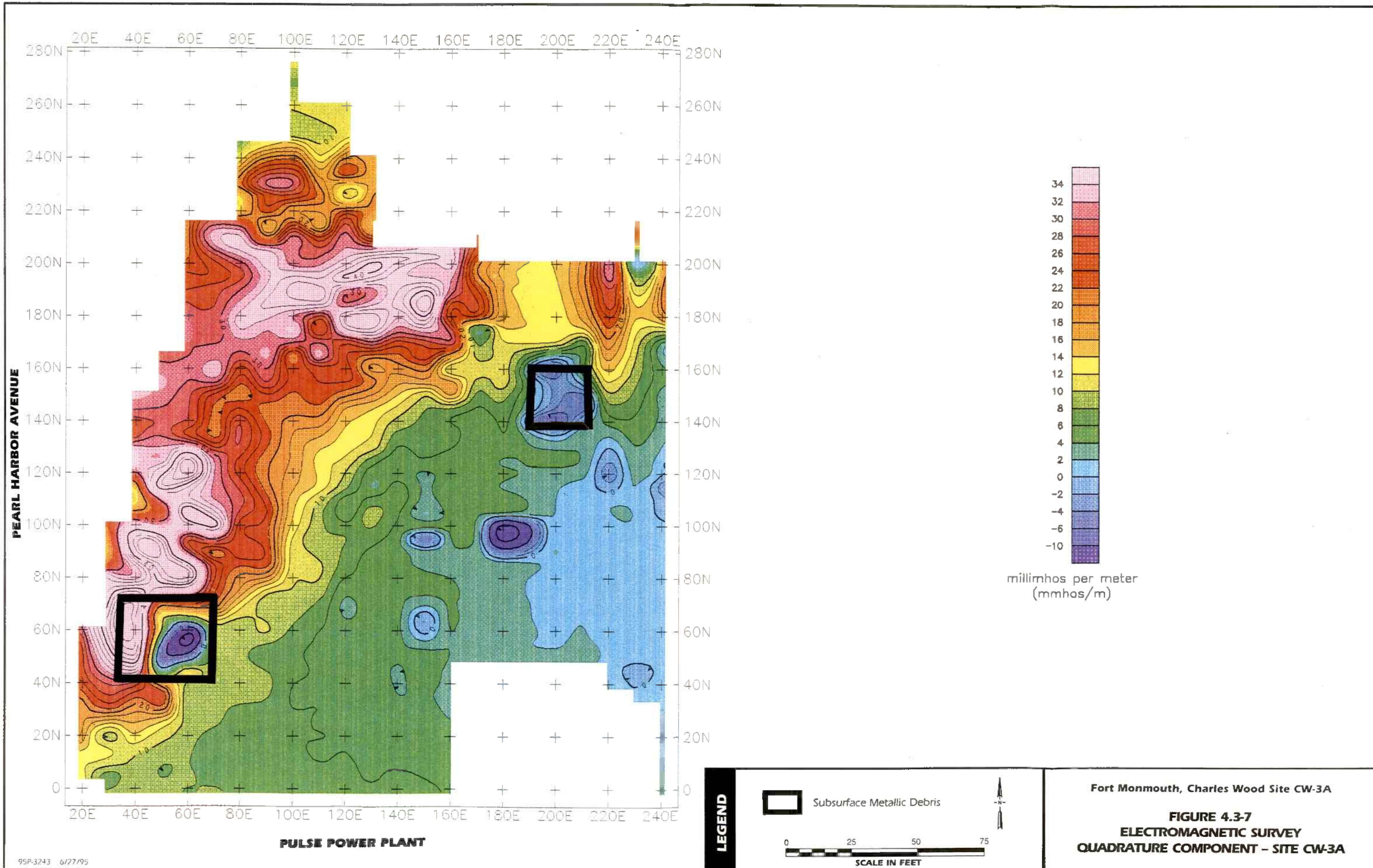
The EM survey revealed prominent anomalous signatures not attributed to surface debris at grid coordinates 40N to 70N/40E to 70E and 140N to 160N/190E to 210E. These anomalies are shown on the EM quadrature and in-phase contour plots, Figures 4.3-7 and 4.3-8, respectively, as either violet or blue contour intervals (high and low conductivity, respectively). These two EM anomalies are confirmed by the magnetometer survey as being ferrous material. As shown on the total magnetic field and magnetic gradient contour plots, Figures 4.3-9 and 4.3-10, respectively, these anomalies are represented as a high and low pair or magnetic dipole with violet and blue contour intervals. Other subtle anomalies exist throughout the area, as depicted on the EM in-phase plot in Figure 4.3-8, which may indicate metallic debris. However, the size and magnitude of these EM signals are negligible. Also, the EM quadrature plot (Figure 4.3-7) shows high apparent conductivity, represented by the violet contour interval, along the north and western borders of the site. This higher conductivity may be due to a subsurface change in lithology.

The GPR survey at CW-3A revealed chaotic reflectors within grid coordinates 40N to 70N/40E to 70E, confirming the EM and MAG anomalies at a depth of approximately 2 to 3 ft bgs. These chaotic reflectors are indicative of buried metallic debris and are shown on the GPR profile along 60N in Figure 4.3-10A.

4.3.5.5 Recommendations

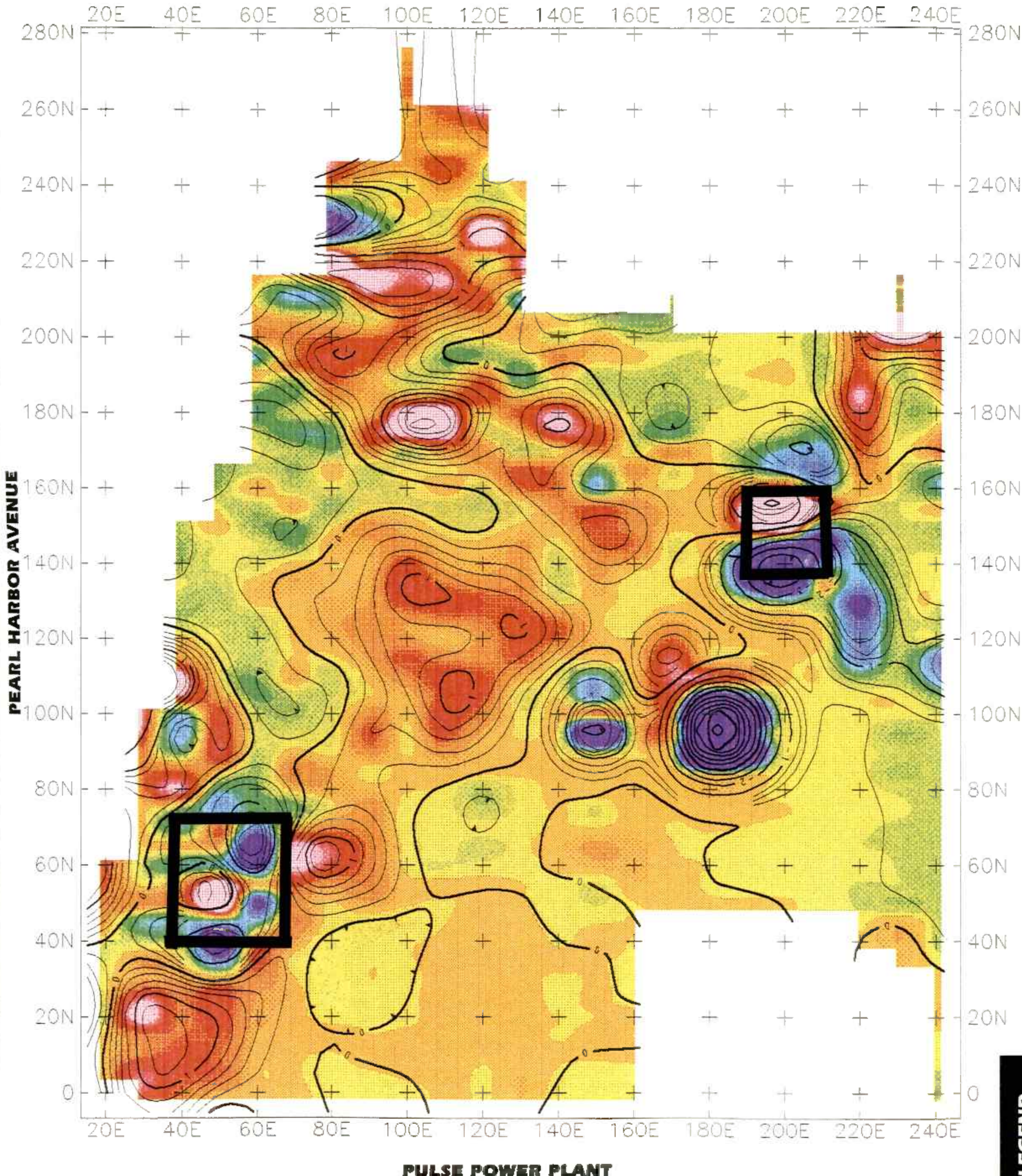
Geophysical surveys indicated two areas where subsurface metallic debris may be present.

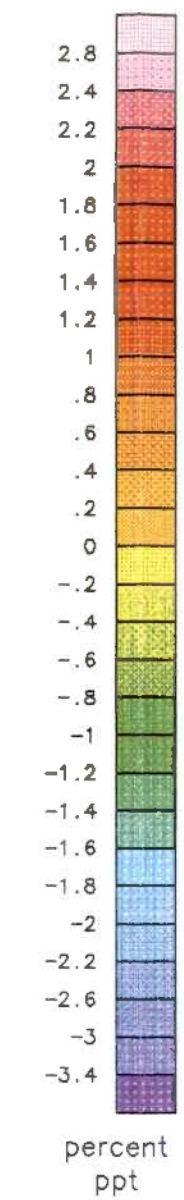
Exploratory trenching will be performed to investigate areas where subsurface metallic debris may be present. Field screening will be conducted with a PID during the excavation. NJDEP will be requested to send a representative to observe the excavation. In the absence of elevated PID readings or evidence of subsurface debris, the excavation will be backfilled and no further action will be taken. If contamination is identified, then sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993). Soil sample analytes will be collected and analyzed for the full range of contaminants.



Fort Monmouth, Charles Wood Site CW-3A

FIGURE 4.3-7
ELECTROMAGNETIC SURVEY
QUADRATURE COMPONENT – SITE CW-3A





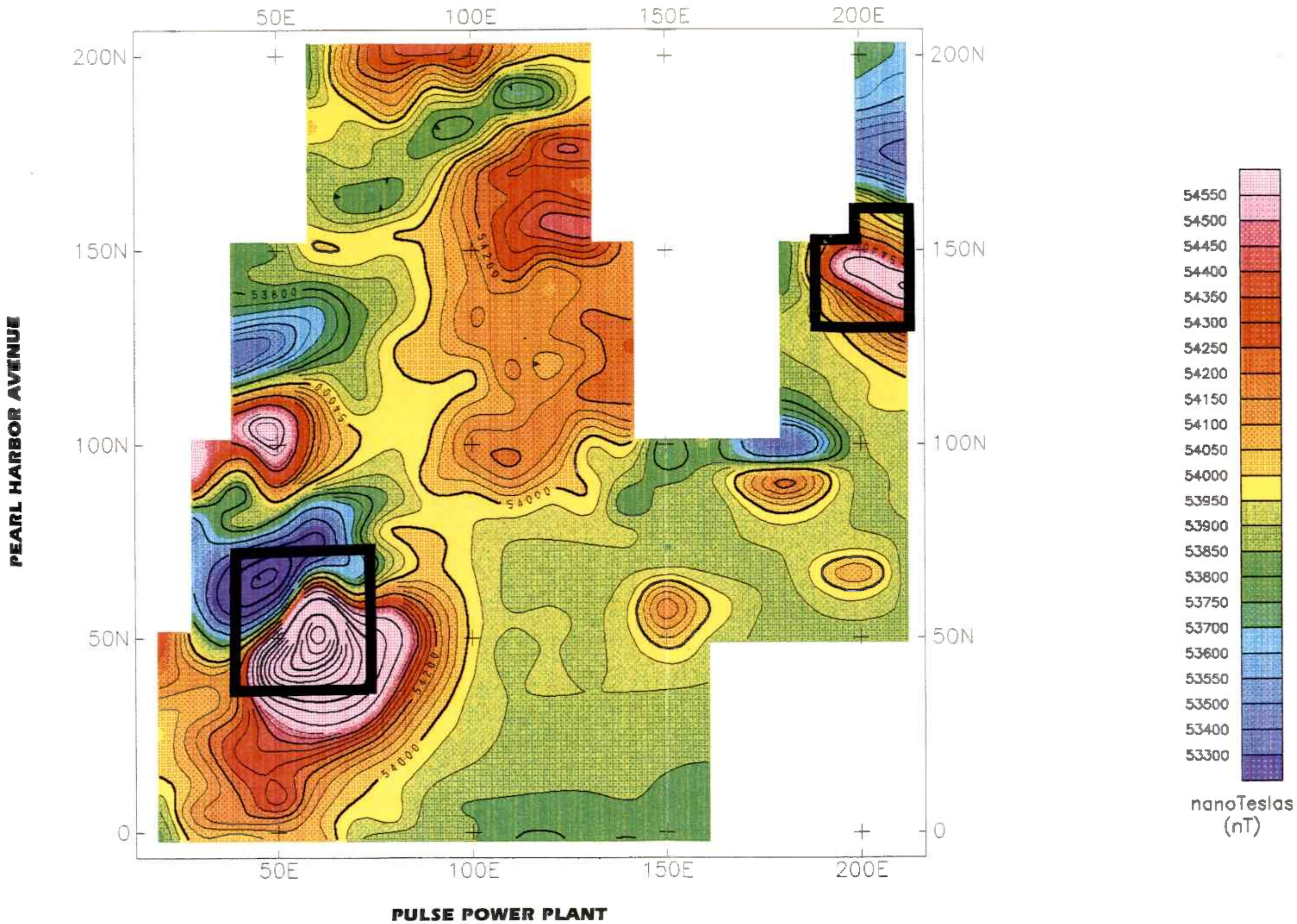
LEGEND

Subsurface Metallic Debris

0 25 50 75
SCALE IN FEET

Fort Monmouth, Charles Wood Site CW-3A

FIGURE 4.3-8
ELECTROMAGNETIC SURVEY
IN PHASE COMPONENT – SITE CW-3A



LEGEND

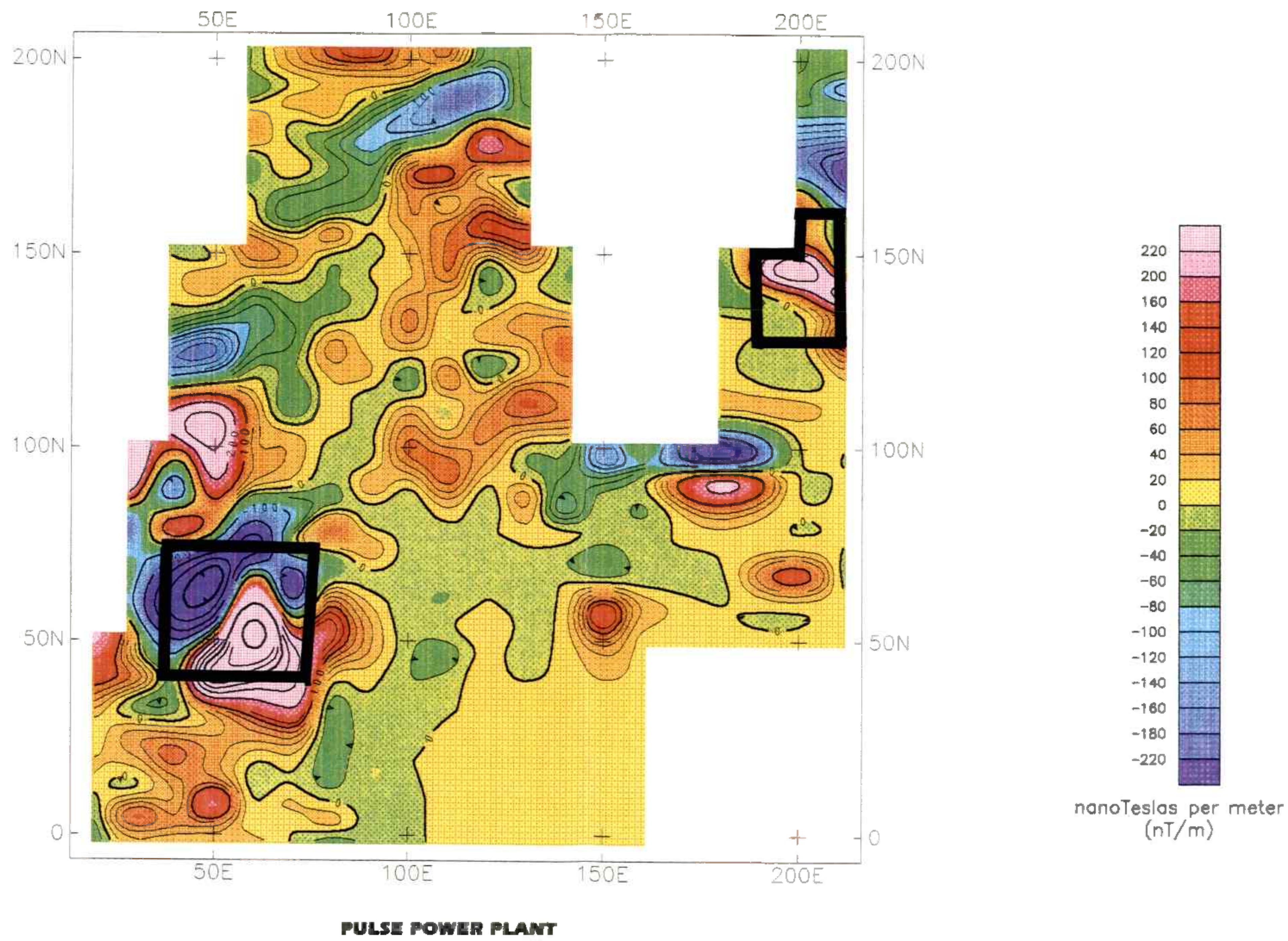
Subsurface Metallic Debris

0 25 50 75
SCALE IN FEET

Fort Monmouth, Charles Wood Site CW-3A

FIGURE 4.3-9
MAGNETOMETER SURVEY
TOTAL MAGNETIC FIELD – SITE CW-3A

95P-3245 6/27/95



LEGEND

Subsurface Metallic Debris

0 25 50 75
SCALE IN FEET

Fort Monmouth, Charles Wood Site CW-3A

FIGURE 4.3-10
MAGNETOMETER SURVEY
MAGNETIC GRADIENT – SITE CW-3A

95P-3246 6/27/95

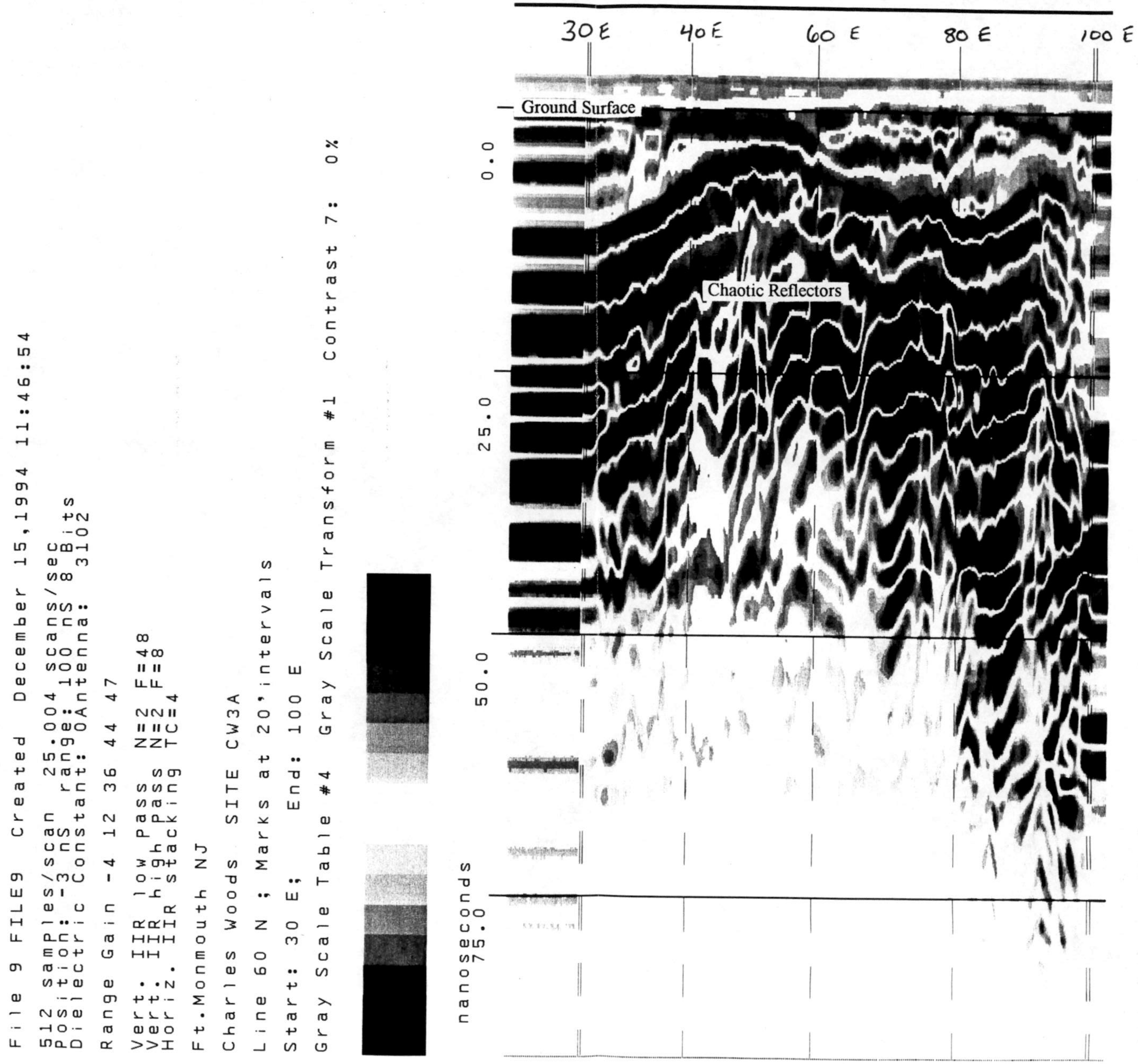


FIGURE 4.3-10A RADAR PROFILES SHOWING SUBSURFACE ANOMALY AT SITE CW-3A

Site CW-4

95P-4674

4.3.6 Range (Small Arms) (CW-4)

4.3.6.1 Site Location

The small arms firing range is a one-story building (Building T-2537) located in the central portion of the Charles Wood area (Figure 4.3-11). The approximate area of site CW-4 is 32,000 ft^2 (0.7 acre). The range is used for indoor firing of small arms. The small arms are fired into a metal baffle that deflects the rounds down into a sand pit. Currently, the sand is sifted and spent rounds and shell-casings are disposed of off-site. The firing range area is ventilated by a blower through a filter. The filter currently used is a Flanders Filters Model No. 0-00J-C-11-00-CL-12-00-GGF. It has an efficiency of 95%, based on a di-octyl-phthalate (DOP) test. A manufacturer's representative stated that he believes this filter would be close to 100% efficient in removing the likely particulates generated in a firing range.

Spend rounds are visible at the surface of a bare patch of soil about 3 ft in diameter northeast of the building. A pile of sand is on the northwest side of the building.

4.3.6.2 Site History

Interviews with facility personnel indicate that the interior of the building is cleaned periodically. The building is currently in use.

4.3.6.3 Sampling Effort

The CW-4 site is presented in Figure 4.3-11. The facility personnel intend to excavate the soil at the bare patch until spent rounds and shell casings are no longer visible. Because contaminated soil had not been excavated prior to the field effort, one soil boring was installed in place of two of the three surface soil samples proposed in the CDAP. The soil boring was drilled near the debris pile to a depth of 8 ft bgs, where saturation was noted at approximately 6.1 ft bgs. The lithology consisted of an orange-brown sand with trace silt. The soil sample from soil boring SB-01 was collected at a depth of 4 to 6 ft bgs and analyzed for TCL +30 parameters, TAL metals, and TPHs. One surface soil sample was collected from the bottom of the sand pile (sample SS-01) using a scoop to dig 6 inches below the bottom of the pile in one location. No firing debris was observed. Surface soil boring SS-01 was analyzed for TAL metals only.

4.3.6.4 Soil Sampling Results

Two soil samples were collected, one sample (SB-01) from the 2- to 6-ft bgs sampling interval in the soil boring at the debris pile, and one sample (SS-01) from the 0 to 0.5-ft bgs interval from the sand pile in the rear of the building. The samples were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soils are listed in Appendix D. Table 4.3-7 compares the detected compound concentrations with the NJDEP SCC, and then compares the results with the subsequent site-specific and Monmouth County maximum background concentrations. In addition, the results were also compared with the impact to groundwater SCC because no monitor wells were installed at this site.

<u>VOCs</u>

VOCs were not detected in site soil.

<u>SVOCs</u>

SVOCs were not detected in site soil.

<u>TPHs</u>

Petroleum hydrocarbons were not detected in site soil.

<u>Pesticides/PCBs</u>

Pesticides/PCBs were not detected in site soil.

Table 4.3-7
Fort Monmouth - Charles Wood
Summary of Detected Compounds
In Soils from Site CW-4

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS	
				SB01-A02 12/21/94 (4-6 ft bgs)	SS01-A01 11/30/95 (0-0.5 ft bgs)
METALS (mg/kg)					
Aluminum	3.9	NLE	15700	5030	687
Arsenic	0.35	20	31.6	1.5	7.8
Antimony	0.3	14	ND	ND	2.5
Barium	0.17	700	26	2.7	17.7
Beryllium	0.1	1	1.7	0.47	0.76
Calcium	2.2	NLE	653	302	699
Chromium	1.6	500	128	63.5	58.3
Cobalt	0.71	NLE	4.5	ND	0.62
Copper	2.2	600	7.27[1]	379	3.2
Iron	0.58	NLE	45500	11500	19700
Lead	0.4	400[2]	15.1[1]	**1440**	8.9
Magnesium	9.6	NLE	3960	1320	1450
Manganese	0.18	NLE	120[1]	8.8	26.2
Nickel	1.4	250	8.3	1.5	2.3
Potassium	(12.3-25.8)	NLE	10600	3490	2720
Silver	0.54	110	0.26[1]	ND	0.76
Selenium	0.3	63	0.85	ND	0.33
Sodium	3.8	NLE	50000	ND	16
Vanadium	0.53	370	59.6	20.6	37.3
Zinc	0.41	1500	55.6	42.6	24.6

Compound exceeding NJDEP soil cleanup criteria are noted by bold numbers.

ND - Indicates that the compound was not detected at or below the quantification limits

NLE - No Level Established

Note: MDL's for metal anaysis is actually the highest detection limit with potassium given as a range due to high variability.

[1] Monmouth County maximum background concentrations.

[2] NJDEP criteria are referenced in Site Remediation News, Winter 1995.

WESTON MANAGERS DESIGNERS/CONSULTANTS

Metals

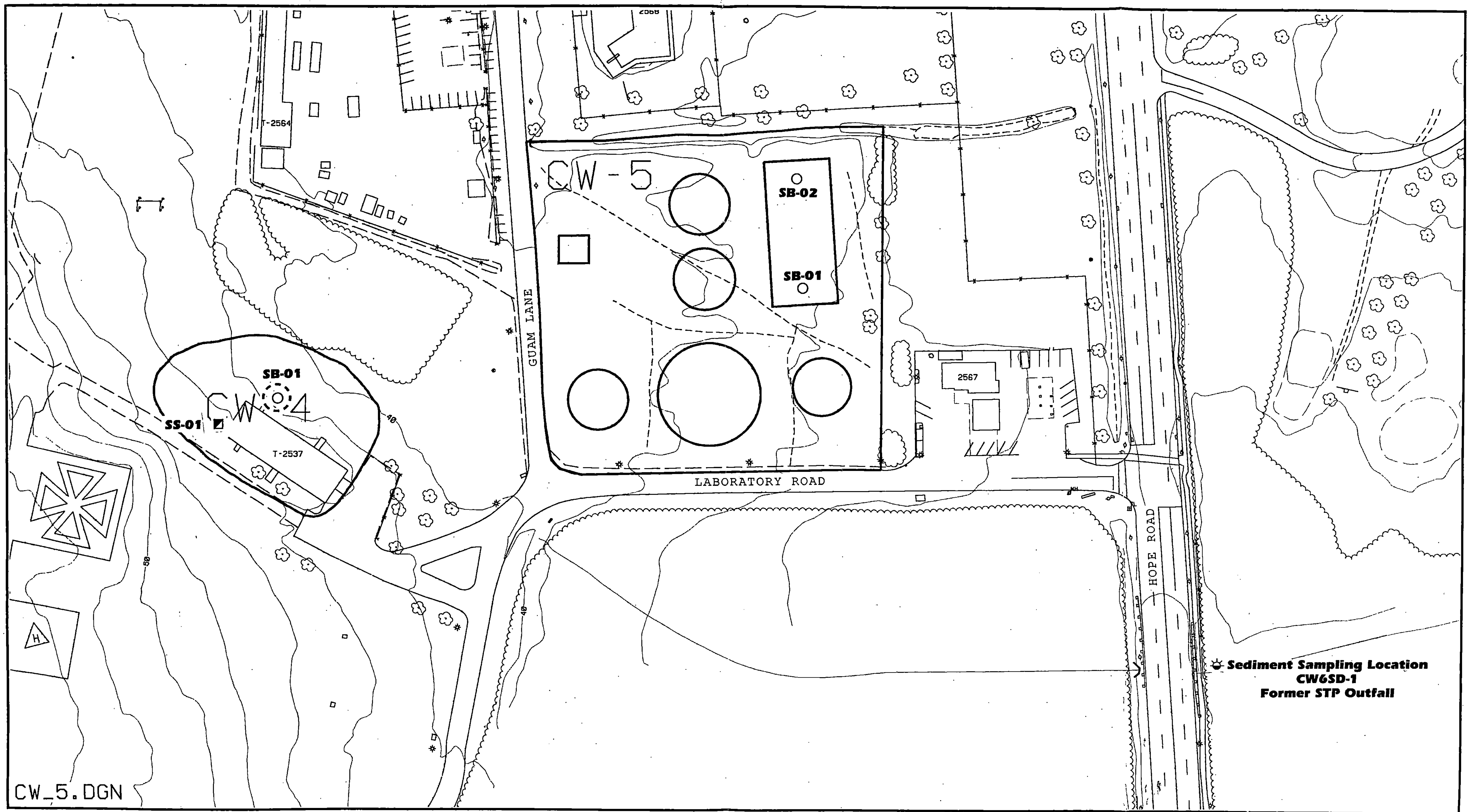
As indicated in Table 4.3-7, of the 20 metals detected in site soil, only lead was found in a concentration exceeding the NJDEP SCC. In addition, lead was detected in a concentration in SB-01 greater than the site-specific and Monmouth County maximum background levels for Charles Wood. The presence of lead in exceedance of criteria in the soil is reflective of the site's use for disposal of spent rounds. Figure 4.3-12 shows the locations of the compounds detected above the NJDEP SCC and above the established background levels for Charles Wood.

4.3.6.5 Recommendations

Soil sampling results indicate that only lead was detected at a concentration exceeding the NJDEP SCC at the spent round disposal area.

DPW has submitted the necessary documentation to HQAMC/AEC to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be removed and confirmation samples will be collected at the base of the excavation.

The contaminated soil will be removed and disposed of in accordance with applicable regulations. The area of contamination is approximately 8 feet in diameter. The estimated depth of excavation is assumed to be 7 feet. Excavation will be performed in conjunction with confirmatory sampling to ensure that NJDEP SCC are achieved. It is estimated that 17 yd^3 of soil will be excavated, assuming that soil is excavated to a depth of 7 feet. NJDEP will be requested to send a representative to observe the excavation.



LEGEND

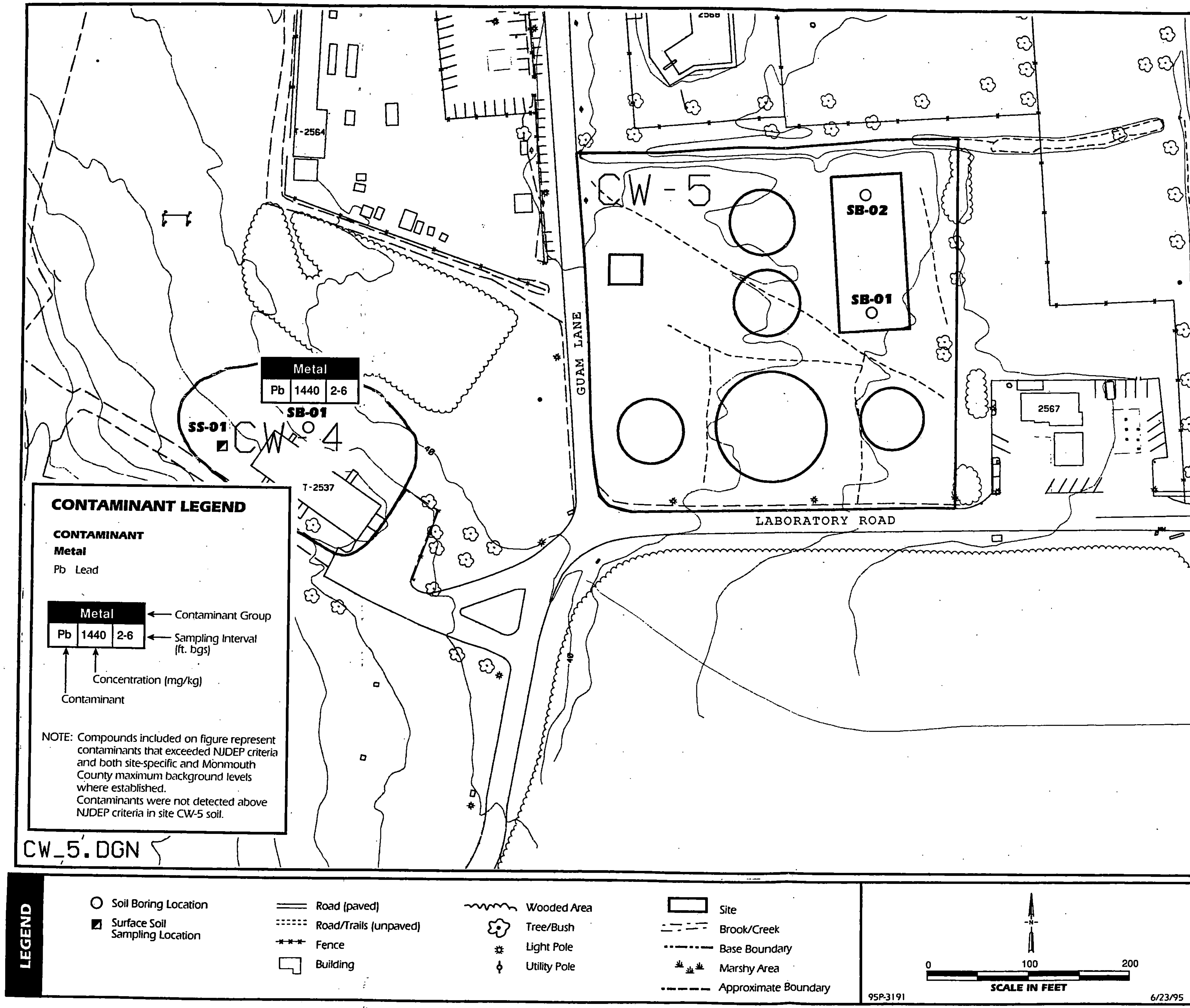
- Soil Boring Location
- Surface Soil Sampling Location
- Proposed Area of Soil Excavation
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary

0 100 200
SCALE IN FEET

95P-3191

Fort Monmouth, Main Post

FIGURE 4.3-11
SMALL ARMS RANGE (CW-4) AND FORMER SANITARY TREATMENT PLANT (CW-5) SAMPLING LOCATIONS



Fort Monmouth, Charles Wood

FIGURE 4.3-12
SMALL ARMS RANGE (CW-4) AND FORMER SANITARY TREATMENT PLANT (CW-5) DISTRIBUTION OF CONTAMINANTS IN SITE SOILS

Site CW-5

95P-4674

4.3.7 Former Sanitary Treatment Plant (CW-5)

4.3.7.1 Site Location

The former STP at Charles Wood was located in the southwest corner of the area bounded by Hope Road to the east, Corregidor Road to the north, Guam Lane to the west, and Laboratory Road to the south (Figure 4.3-11). The approximate area of the STP was 134,080 ft^2 (3.1 acres).

4.3.7.2 Site History

The Charles Wood STP was built in 1942 to handle 800,000 gallons of sewage per day. As described in the IA, this STP consisted of a grit chamber screen, comminutor, primary and secondary settling tanks, biofilters, and a baffled contact chlorination tank. Sludge was treated in two anaerobic digesters and discharged to underdrained sand beds for final drying. Supernatant liquid from digester sludge and drainage from the sand beds were recycled through the STP for additional treatment. The chlorinated effluent was discharged to a tributary of Wampum Brook on the east side of Hope Road. Sludge went to the golf course and to landfills. This STP was closed on 29 October 1975 when the Charles Wood sewer system was connected to the NMCRSA system. In 1981, all sludges and supernatant liquids were removed from the STP, and the facility was cleaned and disinfected. The removal contractor was Modern Transportation Co. of Kearny, New Jersey. Mercury used in the distributor seal on the biofilter was removed and disposed of by the Directorate of Logistics. The physical facility was demolished in 1983. In 1993, a youth center was constructed on this site.

4.3.7.3 Sampling Effort

The CW-5 site is presented in Figure 4.3-11. One sediment sample from the outfall area east of Hope Road was collected and analyzed for TCL +30 parameters, TAL metals, and cyanide. Two soil borings were completed and soil samples collected in an effort to evaluate the impact of the former sludge-drying beds on soil quality in the original land surface. Soil borings SB-01 and SB-02 were completed to 8- and 6-ft bgs, respectively. Saturation was observed between 5.5- and 7-ft bgs. The lithology consisted of a yellow-brown gravelly sand fill underdrain by a greenish-gray silty sand. Soil boring samples were analyzed for TCL +30 parameters, TAL metals, and cyanides.

4.3.7.4 Soil Sampling Results

Two soil samples, one in each borehole, were collected from the 6- to 8-ft bgs sampling interval and were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soils are listed in Appendix D. Table 4.3-8 compares the detected compounds with the NJDEP SCC, and then compares the results with the site-specific and Monmouth County maximum background levels. In addition, the detected compounds were also compared with the impact to groundwater SCC because no monitor wells were installed at this site.

VOCs

One VOC (2-butanone) was detected in SB-01. The concentration was detected well below both applicable SCC (residential and impact to groundwater) and background. 2-Butanone is a common laboratory contaminant.

SVOCs

One SVOC was detected above the laboratory quantitation limit in site soil in SB-01, but below the NJDEP SCC and background. In addition, all compounds detected below quantitation limits were also detected well below both SCCs.

Pesticides/PCBs

Five pesticides and two PCBs were detected in concentrations above laboratory quantitation limits in SB-01 and SB-02, but were detected well below both of their respective SCCs and background.

Table 4.3-8
Fort Monmouth - Charles Wood
Summary of Detected Compounds in
Soil from Site CW-5

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS	
				SB01-A02 12/20/94 6-8 ft bgs	SB02-A02 12/20/94 6-8 ft bgs
VOC's (mg/kg)					
2-Butanone	0.0041	1000	ND	0.013	0.01 J
SVOC's (mg/kg)					
Indeno(1,2,3-cd)pyrene	0.234	0.9	ND	0.066 J	ND
Benzo(a)anthracene	0.162	0.9	0.046 J	0.14 J	ND
bis(2-Ethylhexyl)phthalate	0.32	49	0.17 J	0.21	ND
Benzo(b)fluoranthene	0.188	0.9	0.078 J	0.22 J	ND
Benzo(k)fluoranthene	0.205	0.9	0.041 J	0.084 J	ND
Benzo(a)pyrene	0.162	0.66	0.047 J	0.110 J	ND
Chrysene	0.145	9	0.083 J	0.15 J	ND
Fluoranthene	0.198	2300	0.042 J	0.21 J	ND
Phenanthrene	0.165	NLE	ND	0.085 J	ND
Pyrene	0.178	1700	0.048 J	0.25 J	ND
PESTICIDES (mg/kg)					
Aroclor-1254	0.042	0.49	ND	0.17	ND
Aroclor-1260	0.042	0.49	ND	0.15	ND
alpha-Chlordane	0.002	NLE	ND	0.0084 P	ND
gamma-Chlordane	0.002	NLE	ND	0.0092	ND
4,4'-DDE	0.0037	2	0.071	0.21 P	0.0058
4,4'-DDD	0.0037	3	ND	0.087	0.0035 J
4,4'-DDT	0.0037	2	0.053	0.087	ND
METAL TOTAL (mg/kg)					
Aluminum	3.9	NLE	15700	3920	3400
Arsenic	0.35	20	31.6	3.8	1.5
Barium	0.17	700	26	36.2	21
Beryllium	0.1	1	1.7	0.14	0.32
Calcium	2.2	NLE	653	1000	851
Chromium	1.6	500	128	42.2	38.3
Colbalt	0.71	NLE	4.5	1	ND
Copper	2.2	600	7.27[1]	21.5	2
Iron	0.58	NLE	45500	8950	5930
Lead	0.4	400[2]	15.1[1]	20.7	3.3
Magnesium	9.6	NLE	3960	527	717
Manganese	0.18	NLE	120[1]	19.7	7.2
Mercury	0.49	14	ND	0.63	ND
Nickel	1.4	250	8.3	2.7	1.6
Potassium	(12.3-25.8)	NLE	10600	944	1880
Silver	0.54	110	.26[1]	7.4	ND
Sodium	3.8	NLE	56.8	28.9	13.5
Selenium	0.3	63	0.85	0.4	0.35
Thallium	0.36	2	ND	ND	0.33
Vanadium	0.53	370	59.6	20.7	21.4
Zinc	0.41	1500	55.6	40.4	11.4

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
ND - Indicates that the compound was not detected at or below the quantification limits
NLE - No level established
Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.
P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported
[1] Monmouth County maximum background concentrations.
[2] NJDEP criteria are referenced in Site Remediation News, Winter 1995.

Metals

As indicated in Table 4.3-8, all metals detected in site soils were found in concentrations below the NJDEP SCC, where established.

4.3.7.5 Sediment Sampling Results

The STP sediment sampling location was determined to be freshwater because the area is not tidally influenced. One sediment sample, CW6SD-1, was collected at the former outfall of the STP (Figure 4.3-11).

VOCs

VOCs were analyzed for but were not detected in site sediment samples.

SVOCs

One SVOC [bis(2-ethylhexyl) phthalate] was detected above the laboratory quantitation limit from location C6SD1. NJDEP sediment guidance values are not established for this compound. This compound is a common laboratory contaminant.

Pesticides/PCBs

Three pesticide compounds (4,4'-DDD, 4,4'-DDT, and 4,4'-DDE) were detected in concentrations exceeding the NJDEP sediment guidance criteria. However, the concentrations were found in levels below their respective background concentrations. PCBs were not detected in site sediment samples.

Metals

As indicated in Table 4.3-9, no metals were detected in concentrations greater than the NJDEP sediment guidance criteria.

4.3.7.6 Recommendations

Three compounds (4,4'-DDT, 4,4'-DDD, and 4,4'-DDE) were detected in the sediment at levels that were above the NJDEP sediment guidance criteria but below background. Soil results were below the NJDEP SCC and established maximum background.

No further action will be taken.

Table 4.3-9
Fort Monmouth - Charles Wood
Summary of Detected Compounds in Sediment
Site CW-5

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	NJDEP SEDIMENT GUIDANCE * (mg/kg)	MAXIMUM DETECTED BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS GIVEN BY WESTON SAMPLE LOCATION C6SD-1 12/1/94
SVOCs (mg/kg)				
bis-(2-Ethylhexy)phthalate	0.32	NLE	0.23	0.45
Dimethylphthalate	0.145	NLE	ND	0.40 J
Di-n-butylphthalate	0.215	NLE	0.12	0.081 J
Di-n-octyl phthalate	0.185	NLE	ND	0.11 J
PAHs (mg/kg)				
Benzo (a)anthracene	0.162	0.23	0.09	0.079 J
Benzo (b)fluoranthene	0.188	NLE	0.16	0.1 J
Chrysene	0.145	0.4	0.14	0.087
Fluoranthene	0.198	0.6	0.12	0.16 J
Phenanthrene **	0.165	0.225, 0.326	0.079	0.098 J
Pyrene	0.178	0.35	0.41	0.19 J
PESTICIDES/PCBs (mg/kg)				
4,4'-DDD	0.0042	0.002	0.015	**0.005 P**
4,4'-DDE	0.0042	0.002	0.096	**0.0067**
4,4'-DDT **	0.0042	0.003, 0.00183	0.11	**0.0029 JP**
Heptachlor epoxide	0.0021	NLE	ND	0.0042 P
METALS TOTAL (mg/kg)				
Aluminum	6.1	NLE	6660	866
Arsenic	0.35	33	5.8	0.74
Barium	0.48	NLE	45.7	9.6
Calcium	2.7	NLE	2960	509
Chromium	1.5	80	36.9	7.8
Cobalt	0.64	NLE	4.2	1.3
Copper	0.55	70	24.5	7.4
Iron	1.1	NLE	19600	6910
Lead	1.8	35	142	9.3
Magnesium	8.7	NLE	2560	320
Manganese	0.45	NLE	65.1	25.8
Potassium	186	NLE	1700	256
Sodium	3.5	NLE	271	54
Vanadium	0.66	NLE	39.5	5.4
Zinc	0.64	120	126	22.5

Compounds detected above NJDEP Sediment Guidance are bolded.

*- NOAA (1990) ER-L guidance. Values for DDE and DDD are not presented in NJDEP Sediment Quality Evaluations (1991).

** - Standards developed using equilibrium partioning approach in accordance with NJDEP Guidance for Sediment Quality Evaluation (1991). Total organic carbon concentrations of 1% assumed based on organic carbon content detected in adjacent sample.

ND - Compound was not detected at or above the quantification limit.

NLE - No Level Established

J - Concentration was estimated due to detection at or below the quantification limit

P - The percent difference between the results from the two GC columns is greater than 25%, the lower of the two values is reported

Site CW-6

95P-4674

4.3.8 Pesticide Storage Building T-2044 (CW-6)

4.3.8.1 Site Location

Building T-2044 is part of a small complex of buildings in the south-central portion of the Charles Wood area. The complex consists of Building T-2044, Building T-2070, and two metal igloos. The buildings are currently used to store golf course maintenance and landscaping equipment, such as mowers and tractors. The approximate area of site CW-6 is 25,000 ft^2 (0.6 acre).

4.3.8.2 Site History

The golf course maintenance complex may predate the purchase of the golf course by the Army. Pesticides and herbicides were formerly stored and mixed in this area. The IA contains a 1979 inventory of pesticides and herbicides that were used on the golf course and stored in Building T-2044. Some of the pesticides that were present in significant quantities are malathion, floriable sevin, resmithrin, Borocel IV, chlordane, and Dibrom. The IA also discusses a pest control program that was in effect in 1979. The compounds that were used in large quantities include carbaryl (sevin), malathion, chlordane, and diazinon. Some of the herbicides mentioned in the IA include 2,4-D, Dacthal, 2,4,5-T, and sodium arsenite.

The course groundskeeper, who has been part of the grounds crew for 33 years (1960 to 1993), said pesticides and herbicides were kept in a metal igloo and were mixed in two areas marked A and B in Figure 4.3-13. Area A is on a currently grass-covered area south of the igloo. At area A two USTs were excavated and the chlordane-contaminated soil was disposed of in spring 1995. Area B is on pavement near the office door in T-2044. This paved area has a drain that empties into a ditch in the woods immediately behind T-2044. The supervisor said that pesticide containers were not rinsed, but were disposed of to the landfill as is. Prior to 1980, the containers would have been disposed of at a landfill on the Main Post, such as site M-8.

Pesticides and herbicides are not currently stored or mixed on-site. The facility has hired an outside contractor to come in and apply pesticides and herbicides.

4.3.8.3 Sampling Effort

Limited sampling in 1989 determined that NJDEP SCC were exceeded in one soil sample. The sampling report did not clearly identify the location of the sample.

To confirm the existence of contamination and evaluate the effect on groundwater, two soil borings were completed at locations where pesticides mixing was believed to have occurred. These locations are just north of Building T-2044 (SB-02) and just south of the pavement that extends in front of Building T-2044 (SB-34). The borings were advanced to the water table and soil samples were taken at 6 to 12 inches and at 2 feet and analyzed for TCL +30 parameters. One surface soil sample was taken in the runoff ditch that runs into the woods southwest of Building T-2044 (Figure 4.3-13).

One monitor well was installed in these borings (MW-34), shown in Figure 4.3-13, and groundwater samples were collected in two sampling rounds and analyzed for TCL +30 parameters. Furthermore, a pre-existing monitor well (MW-01) was sampled twice for TCL +30 parameters in an effort to further evaluate the nature and extent of contamination on site groundwater quality.

The location of the monitor well proposed in the CDAP (MW-35) at site CW-6 was moved to site CW-9 because an existing monitor well was located near the proposed well location.

4.3.8.4 Hydrogeologic Interpretation

The lithologic logs from MW-34 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by a brown fine-medium-grained sand with olive-brown sand laminae. Saturation was observed at approximately 4 ft bgs. Monitor well MW-34 was screened across the water table and was drilled to 14.5 ft bgs. Water-level elevation data, measured on 6 March 1995, prior to the March sampling round, indicate that local groundwater flow is east toward site CW-9 (Figure 4.3-14).

The following subsections summarize the soil and groundwater analytical results for site CW-6.

4.3.8.5 Soil Sampling Results

A total of four soil samples were collected: two in the MW-34 borehole, one in SB-02, and one in SS-01. The soil samples were analyzed for the parameters listed in Table 3.6-1. Sample depths of soil borings were 0 to 2 and 2 to 4 ft bgs in SB-34 and 0.5 to 1 ft bgs in SB-02. The surface soil sample was collected from 0 to 0.5 ft bgs. The analytical results for site soils at specific sampling intervals are listed in Appendix D. Table 4.3-10 compares the detected compounds with the NJDEP SCC, and then compares the results with the site-specific and Monmouth County maximum background concentrations, where appropriate.

<u>VOCs</u>

VOCs were not detected in site soil.

<u>SVOCs</u>

SVOCs were not detected above laboratory quantitation limits in site soil.

<u>Pesticides/PCBs</u>

Seven pesticides were detected above laboratory quantitation limits in either SB-34, SB-02, and SS-01 from predominantly the 0- to 2-ft bgs sampling interval. In addition, one compound (dieldrin) was detected in a concentration exceeding the NJDEP SCC and background in SB-34 (0 to 2 ft bgs). Subsequently, dieldrin was not detected in groundwater samples from MW-34. Three of the compounds detected were below the NJDEP SCC and three do not have established criteria. PCBs were not detected in site soil. Figure 4.3-15 presents the locations of compounds detected above maximum background and the NJDEP criteria.

Table 4.3-10
Fort Monmouth - Charles Wood
Summary of Detected Compounds
In Soil at Site CW-6

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS			
				SB34-A01 1/3/95 (0-2 ft bgs)	SB34-A02 1/3/95 (2-4 ft bgs)	SB02-A01 5/10/95 (0.5-1 ft bgs)	SS01-A01 11/30/94 (1)
SVOC's (mg/kg)							
Phenanthrene	0.165	NLE	ND	ND	0.24 J	ND	ND
Fluoranthene	0.198	2300	0.042 J	0.049 J	0.18 J	ND	ND
Pyrene	0.178	1700	0.048 J	0.056 J	0.270 J	ND	ND
Benzo(a)anthracene	0.162	0.9	0.046 J	ND	0.160 J	ND	ND
Chrysene	0.145	9	0.083 J	ND	0.15 J	ND	ND
Benzo(b)fluoranthene	0.188	0.9	0.078 J	ND	0.11 J	ND	ND
Benzo(a)pyrene	0.162	0.66	0.047 J	ND	0.087 J	ND	ND
Indeno(1,2,3-cd)pyrene	0.234	0.9	ND	ND	0.054 J	ND	ND
Benzo(g,h,i)perylene	0.224	NLE	0.042 J	0.057	0.066	ND	ND
PESTICIDES (mg/kg)							
Heptachlor epoxide	0.002	NLE	ND	0.018 P	ND	0.0078 P	0.032 R
Dieldrin	0.0039	0.042	ND	**0.061 DP**	ND	ND	ND
alpha-Chlordane	0.002	NLE	ND	0.14 P	0.0034 P	.07 JD	0.870 CD
gamma-Chlordane	0.002	NLE	ND	0.11 P	0.0027 P	.068 JD	0.800 CD
4,4'-DDE	0.0037	2	0.071	0.074 P	ND	0.34 JCD	0.13
4,4'-DDD	0.0037	3	0.053	0.0095 P	ND	2.9 CD	0.86 C
4,4'-DDT	0.0037	2	ND	0.180 P	.011 P	ND	0.81 C
METALS TOTAL (mg/kg)							
Aluminum	3.9	NLE	15700	NS	NS	NS	5130
Arsenic	0.35	20	31.6	NS	NS	NS	11.6
Barium	0.17	700	26	NS	NS	NS	72.2
Calcium	2.2	NLE	653	NS	NS	NS	4430
Cadmium	0.86	1	0.135[2]	NS	NS	NS	**4.4**
Chromium	1.6	500	128	NS	NS	NS	65.8
Copper	2.2	600	7.27[2]	NS	NS	NS	69.8
Iron	0.58	NLE	45500	NS	NS	NS	10900
Lead	0.4	400[3]	15.1[2]	NS	NS	NS	203
Magnesium	9.6	NLE	3960	NS	NS	NS	1260
Manganese	0.18	NLE	120[2]	NS	NS	NS	78.8
Mercury	0.49	14	ND	NS	NS	NS	6
Potassium	(12.3-25.8)	NLE	10600	NS	NS	NS	1420
Silver	0.54	110	0.26[2]	NS	NS	NS	1.5
Sodium	3.8	NLE	56.8	NS	NS	NS	103
Selenium	0.3	63	0.85	NS	NS	NS	0.7
Vanadium	0.53	370	59.6	NS	NS	NS	21.8
Zinc	0.41	1500	55.6	NS	NS	NS	463

Compounds exceeding NJDEP soil cleanup criteria are bolded
NA - Not Analyzed; NS - Not Sampled
ND - Compound was not detected at or below the quantification limits
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
NLE - No Level Established
C - Pesticide identification was confirmed by GC/MS
D - Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis
P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported
R - Data rejected; URS The Data Validator
Note: MDL's for metal anaysis is actually the highest detection limit with potassium given as a range due to high variability.
Note: Metals were analyzed (SS-01), but were not proposed in the scope of work.
(1) - VOC/SVOC's were collected from 6" to 12" bgs, pesticides and metals were collected from 0"-6" bgs.
[2] Monmouth County maximum background concentrations.
[3] NJDEP criteria are referenced in Site Remediation News, Winter 1995.

Metals

As indicated in Table 4.3-10, of the 18 metals detected in site soils, only cadmium was found in a concentration exceeding the NJDEP SCC in SS-01. In addition, cadmium was detected in a concentration greater than that determined for site-specific and Monmouth County maximum background at Charles Wood. However, in accordance with the NJDEP *Cleanup Standards for Contaminated Sites* (NJDEP, 1992), the arithmetic mean of cadmium was calculated from the 10 surface soil samples at sites CW-6 and CW-9, since the samples were collected within the same sampling interval (0 to 6 inches). The arithmetic mean or concentration was then compared with the NJDEP SCC and established background. The arithmetic mean (1 mg/kg) was found at a level equal to the NJDEP SCC (1 mg/kg). However, sites CW-06 and CW-09 are located on a golf course. *A Summary of Selected Soil Constituents and Contaminants at Background Locations in New Jersey*, 1993, provides a separate background concentration level for cadmium in golf course areas. When comparing the arithmetic mean of the analytical results at the two sites with the arithmetic mean for cadmium on golf courses in Table 9 of that document (2.26 mg/kg), the analytical result is found in a concentration below established background. Cadmium is reported in higher concentrations on golf courses due to the direct application of fertilizers, herbicides, and pesticides (Field et al., 1993). Therefore, cadmium is not considered a compounds of concern. Although metals were sampled for in surface soil location SS-01, a metals analysis was not proposed in the original scope of work.

4.3.8.6 Groundwater Sampling Results

Monitor wells MW-34 and MW-1 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.3-11 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate.

Table 4.3-11
Fort Monmouth - Charles Wood
Summary of Average Concentrations of Detected Compounds in Groundwater - Site CW-6

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE	
				MW34 2/10/95, 3/13/95 (avg.)	MW01 5/10/95, 5/27/95 (avg.)
VOC (µg/L)					
Benzene	2.4**	1*	ND	ND	**8**
Ethylbenzene	3.1	700	ND	ND	1J
Xylene (total)	3.8	40	ND	ND	2J
Pesticide and PCB's (µg/L)					
4,4'-DDD	0.097	0.1	ND	ND	0.086J
gamma-chlordane	0.046	NLE	ND	ND	.035JP
alpha-chlordane	0.046	NLE	ND	ND	0.0545

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria
ND - Indicates that the compound was not detected
J - Indicates that the concentration value was estimated due to detection at or near the detection limits
** - Method detection limit exceeded NJDEP groundwater quality criteria
P - Percent difference between the results from the GC columns is greater than 25%, the lower of the two values is reported

VOCs

One VOC (benzene) was detected above the laboratory quantitation limit in MW-1 from the February sampling round only. In addition, benzene was found in a concentration exceeding the NJDEP GWQC. Figure 4.3-15 presents the locations of the compounds detected above both background and criteria.

SVOCs

SVOCs were not detected above laboratory quantitation limits in site monitor wells MW-34 and MW-1 from either sampling round. In addition, SVOCs were detected below the NJDEP GWQC.

Pesticides/PCBs

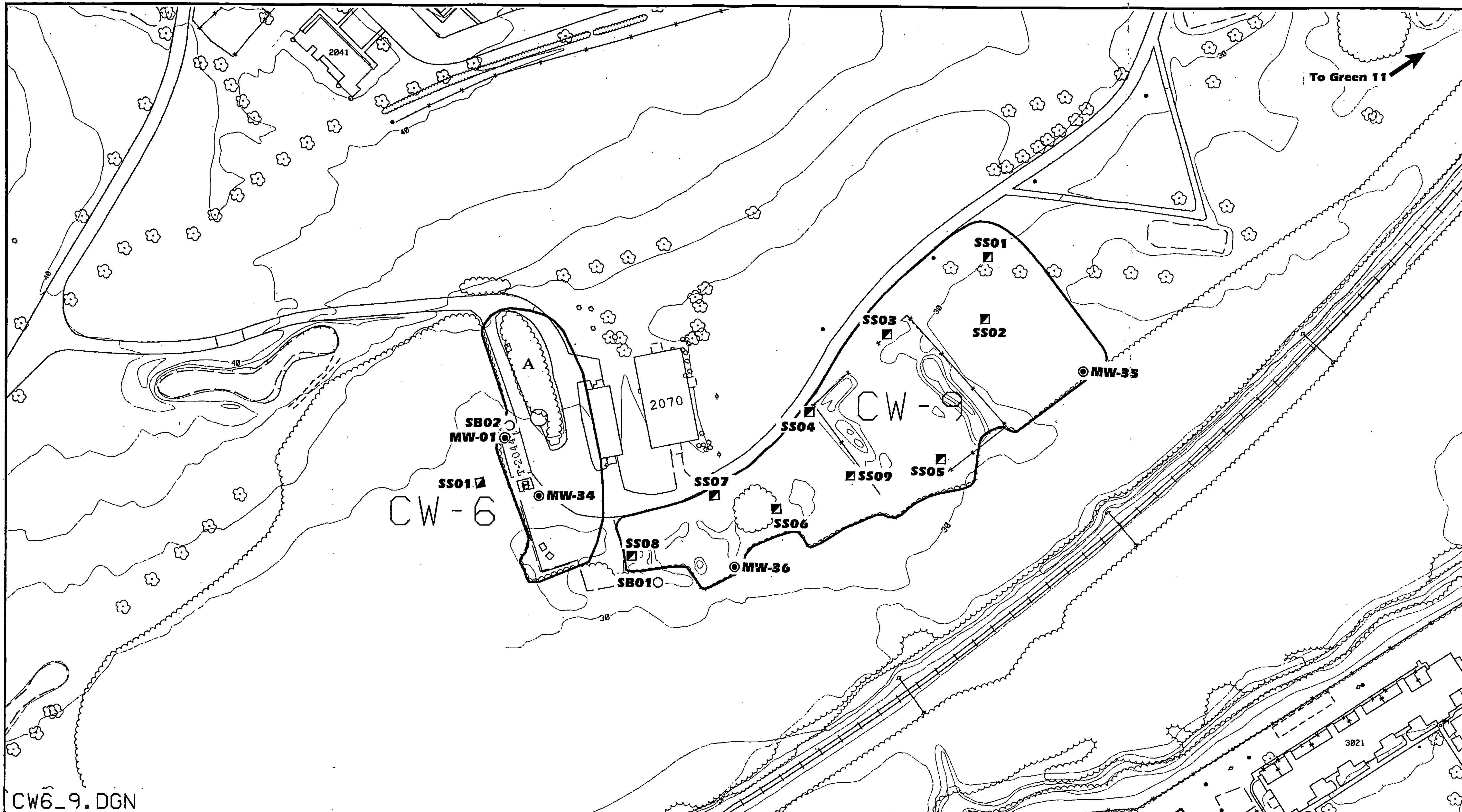
One pesticide (alpha-chlordane) was detected in a concentration slightly above the laboratory quantitation limit in MW-1; however, NJDEP GWQCs are not established for alpha-chlordane. PCBs were not detected in site monitor wells from either sampling round.

4.3.8.7 Recommendations

The pesticide dieldrin and the metal cadmium were detected in the soil at two different locations, each at levels that exceeded NJDEP SCC and background. However, the average concentrations of dieldrin and cadmium in surface soil samples at CW-6 and CW-9 did not exceed the NJDEP SCC. Cadmium is typically present at elevated levels at golf courses. Groundwater samples indicated that benzene was detected in the existing monitor well (MW-1), which is attributed to a previously removed UST. Benzene was not detected in downgradient wells. Pesticides were not detected in any groundwater samples above NJDEP criteria.

NJDEP groundwater criteria were exceeded for one VOC, but the measured value was just slightly above the GWQC. Therefore, no immediate remedial action is necessary.

DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.



LEGEND

- Soil Boring
- Monitor Well
- Surface Soil Sampling Location
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary

N

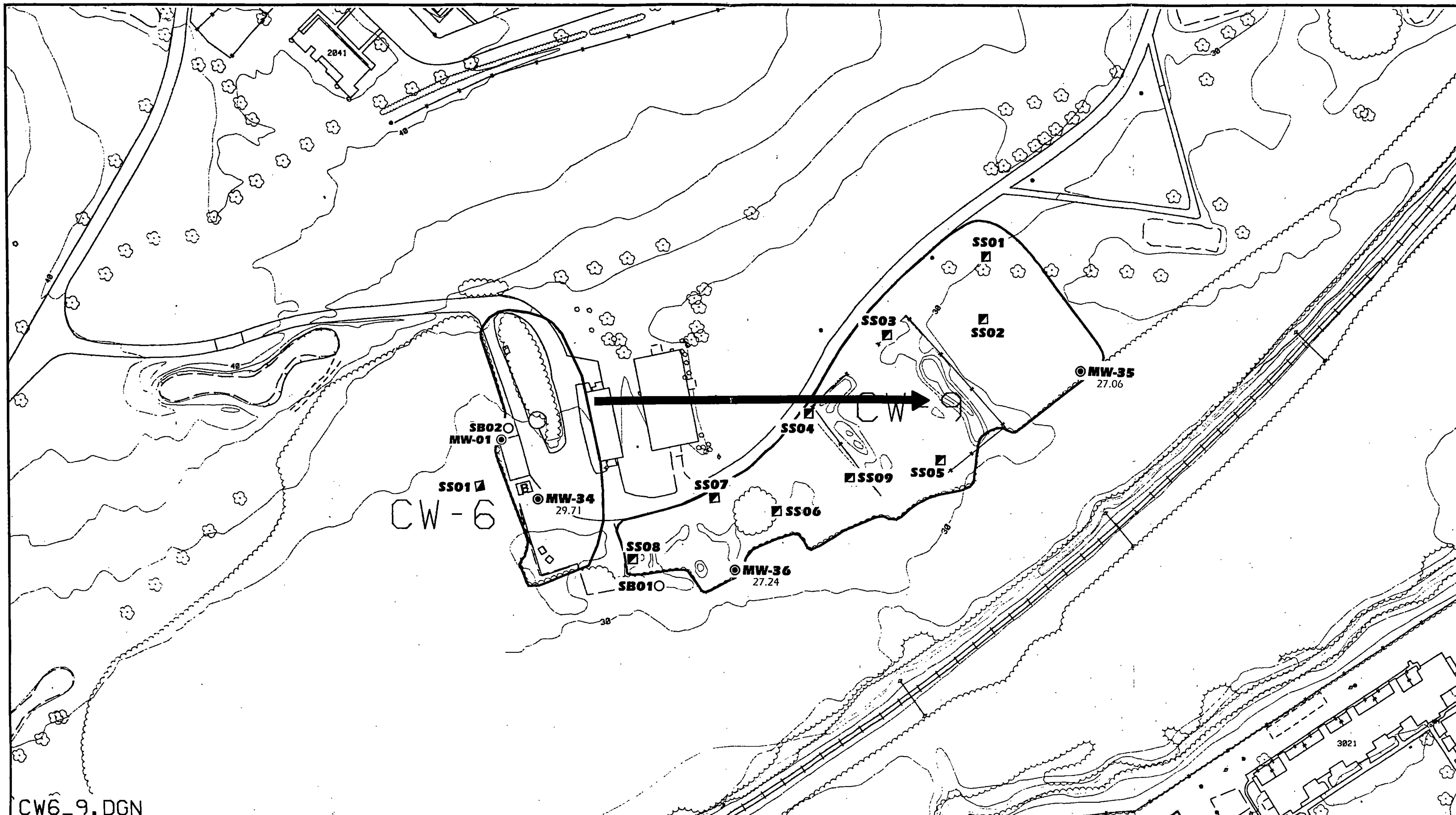
0 100 200

SCALE IN FEET

95P-3192 6/23/95

Fort Monmouth, Charles Wood

FIGURE 4.3-13
PESTICIDE STORAGE BUILDING (CW-6) AND SLUDGE DUMP (CW-9) SAMPLING LOCATIONS



LEGEND

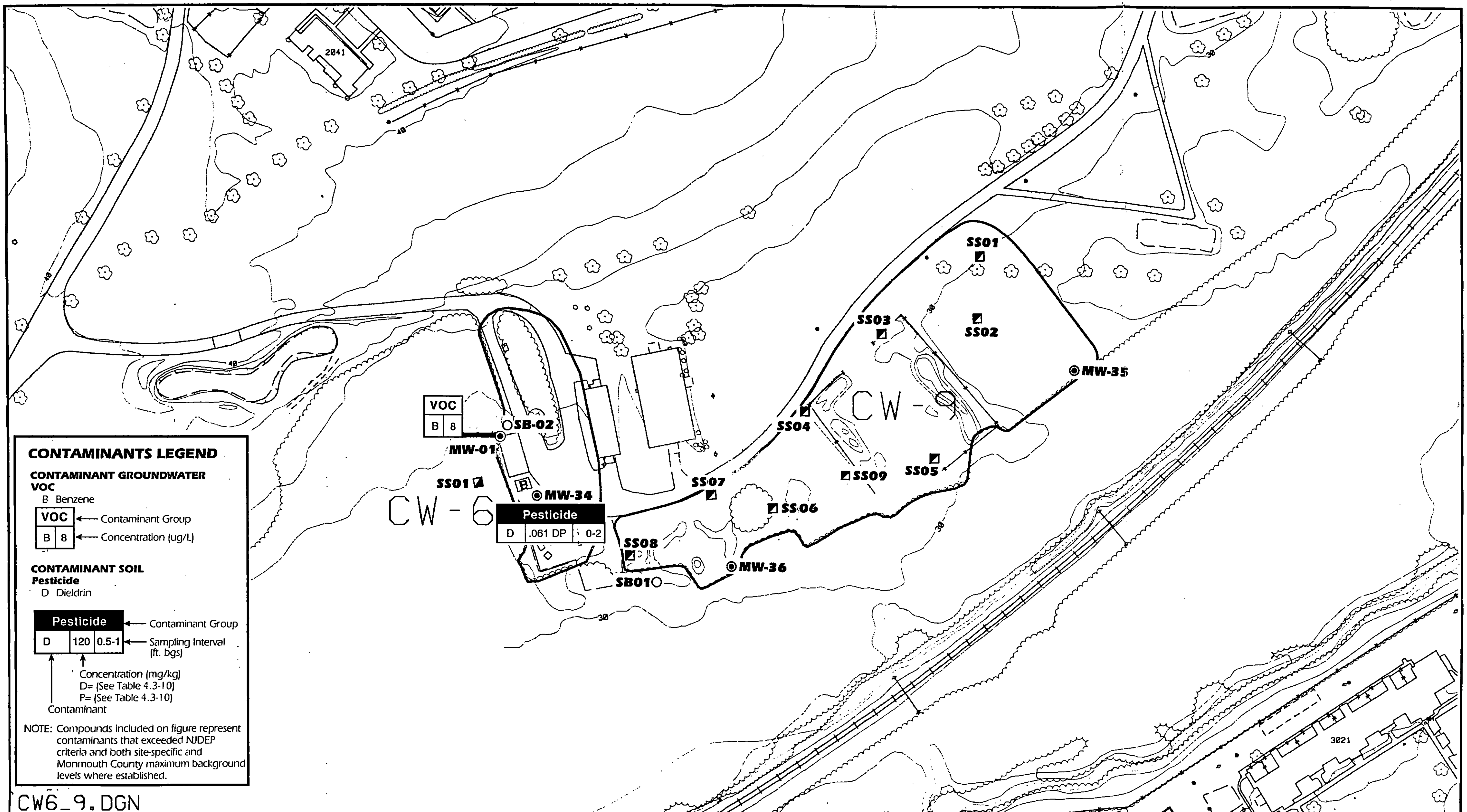
Soil Boring	Road (paved)	Wooded Area	Site
MW-36 Monitor Well; 27.24 ← Water Elevation (FT/MSL)	Road/Trails (unpaved)	Tree/Bush	Brook/Creek
Surface Soil Sampling Location	Fence	Light Pole	Base Boundary
Groundwater Flow Direction	Building	Utility Pole	Marshy Area
			Approximate Boundary

SCALE IN FEET: 0 100 200

95P-3197 6/23/9

Fort Monmouth, Charles Wood

FIGURE 4.3-14
PESTICIDE STORAGE BUILDING (CW-6) AND SLUDGE DUMP (CW-9) APPROXIMATE GROUNDWATER FLOW DIRECTIONS
(Groundwater Elevations Recorded from March 1995 Sampling Round)



LEGEND

- ○ Soil Boring
- ◉ Monitor Well
- Surface Soil Sampling Location
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary

N

0 100 200

SCALE IN FEET

95P-3187 6/23/95

Fort Monmouth, Charles Wood

FIGURE 4.3-15
PESTICIDE STORAGE BUILDING (CW-6) AND SLUDGE DUMP (CW-9)
DISTRIBUTION OF CONTAMINANTS IN SITE SOIL

Site CW-9

95P-4674

4.3.9 Sludge Dump (CW-9)

4.3.9.1 Site Location

The sludge dump (CW-9) as identified in the IA is located in the southern part of Charles Wood, south and southeast of Building 2070 and west of green 11 and tee 12 of the golf course (Figure 4.3-13). The approximate area of site CW-9 is 79,933 ft^2 (1.8 acres).

4.3.9.2 Site History

Since the 1940s, sludge generated at the STPs has been stored in this area before being used as a soil conditioner and fertilizer on the golf course. Sludge piles are visible in the 1957, 1961, 1974, and 1981 aerial photographs. During the 1993 site visit, a pile of sludge removed from fairway 1 on the golf course was observed south of Building 2070. According to long-term Fort Monmouth employees, at least three other fairways (8, 10, and 11) have 4 to 5 inches of sludge over the native sand; sludge may have been used to fill in low areas.

4.3.9.3 Sampling Effort

Two monitor wells were installed (MW-35 and MW-36), one soil sample from soil boring SB-01 and nine from surface soil locations SS-01 through SS-09 were collected, and two rounds of groundwater sampling were conducted in an effort to evaluate the impact of past site activities on soil and groundwater quality. Monitor wells MW-35 and MW-36 and soil boring SB-01 were analyzed for TCL +30 parameters and TAL metals. Surface soil locations SS-01 through SS-09 were analyzed for TAL metals only. The sampling locations are presented in Figure 4.3-13. MW-35 was relocated from site CW-6 because an existing monitor well was located at the proposed well location. The monitor well (MW-35) was then relocated to a downgradient location at CW-9 to monitor groundwater quality downgradient of the area under investigation.

4.3.9.4 Hydrogeologic Interpretation

Lithologic logs from MW-35 and MW-36 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by an orange-olive-brown predominantly medium-grained quartz sand with silt laminae. Saturation was observed at 4 ft bgs. Monitor wells were screened across the water table, with total depths of 14.5 and 14 ft bgs in MW-35 and MW-36, respectively. Water-level elevation data, measured on 6 March 1995, prior to the March 1995 sampling round, indicate that the local groundwater flow direction is east (Figure 4.3-14). Based on groundwater elevation measurements, monitor wells MW-35 and MW-36 are downgradient of the area under investigation.

4.3.9.5 Soil Sampling Results

One soil sample was collected from the 2- to 4-ft bgs sampling interval in a boring installed to a depth of 6 ft bgs. One sample from each surface soil location was collected from the 0- to 0.5-ft bgs interval. The soil samples collected were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soil are listed in Appendix D. Tables 4.3-12 and 4.3-13 compare the compounds detected with the NJDEP SCC, and then compare the results with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate.

<u>VOCs</u>

VOCs were not detected in site soil.

<u>SVOCs</u>

SVOCs were not detected above laboratory quantitation limits in site soil.

Table 4.3-12
Fort Monmouth - Charles Wood
Summary of Detected Compounds in Soil from Boring Location SB-01
Site CW-9

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS SB01-A02 1/4/95 (2-4 ft bgs)
SVOCs (mg/kg)				
Di-n-butylphthalate	0.215	5700	ND	0.076
PESTICIDES (mg/kg)				
4,4'-DDE	0.0037	2	0.071	0.0076 P
4,4'-DDT	0.0037	2	0.053	0.008 P
METALS TOTAL (mg/kg)				
Aluminum	3.9	NLE	15700	3830
Arsenic	0.35	20	31.6	2.6
Barium	0.17	700	26	6.6
Beryllium	0.1	1	1.7	0.39
Calcium	2.2	NLE	653	366
Cobalt	0.71	NLE	4.5	1
Chromium	1.6	500	128	44
Copper	2.2	600	7.27[1]	2.3
Iron	0.58	NLE	45500	9720
Lead	0.4	400[2]	15.1[1]	3.9
Magnesium	9.6	NLE	3960	698
Manganese	0.18	NLE	120[1]	11.9
Mercury	0.49	14	ND	0.12
Nickel	1.4	250	8.3	2.8
Potassium	(12.3-25.8)	NLE	10600	1480
Sodium	3.8	NLE	56.8	21.4
Vanadium	0.53	370	59.6	27.4
Zinc	0.41	1500	55.6	12.8

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.
ND - Compound was not detected at or below the quantification limits
NLE - No Level Established
P- the percent difference between the results from the two GC columns is greater than 25%, the lower of the two values is reported
Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.
[1] Monmouth County maximum background concentrations.
[2] NJDEP criteria are referenced in Site Remediation News, Winter 1995.

Table 4.3-13
Fort Monmouth - Charles Wood
Summary of Detected Compounds in Soil from Surface Locations
Site CW-9

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS 11/30/94								
				SS01-A01	SS02-A01	SS03-A01	SS04-A01	SS05-A01	SS06-A01	SS07-A01	SS08-A01	SS09-A01
METALS TOTAL (mg/kg) Sample Interval :0"-6" ft bgs												
Aluminum	3.9	NLE	15700	7350	5730	3600	4380	6930	5450	3910	4070	7700
Arsenic	0.35	20	31.6	13.6	12.1	6.9	6.3	15.6	9.3	10.5	7.2	7.7
Barium	0.17	700	26	23.4	28.9	65.4	51.2	32.5	33	40.7	19.2	40.8
Beryllium	0.1	1	1.7	0.73	0.68	0.57	0.55	0.9	0.72	0.58	0.56	1
Calcium	2.2	NLE	653	2680	2650	1960	19600	3570	3610	4370	1630	3440
Cadmium	0.86	1	0.135[1]	ND	ND	ND	ND	ND	ND	2.6	ND	ND
Cobalt	0.71	NLE	4.5	ND	ND	ND	1.3	1.9	1.7	ND	ND	1.8
Chromium	1.6	500	128	56.7	57.2	24.9	28.3	60.5	46.9	164	56.2	70
Copper	2.2	600	7.27[1]	9.6	10.3	5	17.7	8.8	11.1	17.4	9	9.6
Iron	0.58	NLE	45500	20600	18200	10800	12200	22200	17900	9880	11300	25600
Lead	0.49	400[2]	15.1[1]	19.9	30.1	13.5	56.8	27.4	17	82.3	35.5	20.1
Magnesium	9.6	NLE	3960	1910	2010	815	2260	2280	1720	1620	893	2590
Manganese	0.18	NLE	120[1]	85.1	46.8	22.3	106	59.2	56	140	37	69.5
Mercury	0.49	14	ND	0.2	0.23	ND	ND	0.14	ND	7.9	0.69	ND
Nickel	1.4	250	8.3	6	3.3	ND	5.7	6.9	4.9	4.3	2.4	5.8
Potassium	(12.3-25.8)	NLE	10600	1600	2620	1460	2060	3950	3180	1720	1250	5130
Silver	0.54	110	0.26[1]	2.5	2.8	ND	ND	0.77	0.71	1.2	3.3	1.3
Sodium	3.8	NLE	56.8	35.6	33.9	77.4	118	49.7	49.7	40.6	34.5	60.9
Selenium	0.30	63	0.85	0.56	0.62	0.75	0.28	0.63	0.41	0.57	0.6	0.48
Vanadium	0.53	370	59.6	45.7	34	15.7	22.9	33.1	30.3	15.6	29.3	32
Zinc	0.41	1500	55.6	53.7	61.2	25.8	92.5	47.8	62.3	77	36	48.1

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.
ND - Compound was not detected at or below the quantitation limits
NLE - No Level Established
Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.
[1] Monmouth County maximum background concentrations.
[2] NJDEP criteria are referenced in Site Remediation News, Winter 1995.
Note: Metals detected in a duplicate sample from SS-01 were detected below the NJDEP SCC.

Pesticides/PCBs

Two pesticides (4,4'-DDE and 4,4'-DDT) were detected above laboratory quantitation limits in SB-01. Both compounds were detected well below their respective SCCs. PCBs were not detected in site soil.

Metals

As indicated in Tables 4.3-12 and 4.3-13, of the 21 metals detected in site soil, only beryllium and cadmium were found in concentrations equal to or greater than the NJDEP SCC. In addition, cadmium was detected in SS-07 at a concentration (Table 4.3-13) greater than the site-specific and Monmouth County maximum background levels established at Charles Wood. However, in accordance with NJDEP *Cleanup Standards for Contaminated Sites* (NJDEP, 1992), the concentration of cadmium at sites CW-06 and CW-09 were averaged and then compared to the NJDEP SCC and established background. The average concentration of cadmium was found to be equal to the SCC when compared with the soil sampling results in the area. Cadmium was not considered to be of a high concentration (see "Metals" in Subsection 4.3.8.5). Cadmium was not detected at any other surface soil location. Although beryllium was found in a concentration greater than the Monmouth County maximum background level, beryllium was detected in a concentration below the site-specific level. Beryllium was found at only one location (SS-09) at a concentration equal to the NJDEP SCC. The concentration of beryllium was also averaged and when compared to the NJDEP SCC, was found at a concentration below the NJDEP SCC and maximum background.

4.3.9.6 Groundwater Sampling Results

Monitor wells at site CW-9 were sampled for the analytical parameters listed in Table 3.8-1. Table 4.3-14 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the subsequent site-specific and Monmouth County maximum background levels, where appropriate.

Table 4.3-14
Fort Monmouth - Charles Wood
Summary of Average Concentrations of Detected Compounds in Groundwater - Site CW-9

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L) SAMPLING DATE MW35 2/20/95, 3/13/95 (avg.)	MW36 2/20/95, 3/13/95 (avg.)
SVOCs (µg/L)					
bis-(2ethylhexyl)phthalate	9.7	30*	600	ND	4 J
METALS TOTAL (µg/L)					
Aluminum	24	200	8210	**226**	**575**
Barium	1.7	2000	400[1]	37.25	31.3
Beryllium	0.9	20*	2.8	0.175	ND
Calcium	10.4	NLE	8700	23400	35050
Cobalt	2.3	NLE	30.6	2.45	2.85
Chromium	2.9	100	49.6	ND	5.7
Iron	6.4	300	27000[1]	104.2	**1250**
Lead	1.1	10*	<100[1]	ND	2
Magnesium	18.3	NLE	25000[1]	5875	7835
Manganese	1.8	50	480[1]	40.1	**217**
Nickel	10.8	100	48.3	5.65	5.65
Potassium	685	NLE	10000[1]	2035	4000
Sodium	30.5	50000	197000[1]	4480	5900
Vanadium	2.3	NLE	28.9	ND	3.85
Zinc	3.8	5000	133	26.75	27

Compounds exceding NJDEP groundwater quality criteria are noted by bold numbers.
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria
ND - Indicates that the compound was not detected
J - Indicates that the concentration value was estimated due to detection at or near the detection limits
[1] - Monmouth County maximum background concentration.

VOCs

VOCs were not detected in site monitor wells from either sampling round.

SVOCs

SVOCs were not detected above laboratory quantitation limits in site monitor wells from either sampling round.

Pesticides/PCBs

Pesticides/PCBs were not detected in site monitor wells from either sampling round.

Metals

As indicated in Table 4.3-14, of the 15 metals detected in site groundwater, only 3 (aluminum, iron, and magnesium) were found in concentrations exceeding the NJDEP GWQC; however, all three metals were detected in concentrations below the site-specific and Monmouth County maximum background levels.

4.3.9.7 Recommendations

The average concentrations of cadmium and beryllium in surface soil samples at CW-6 and CW-9 do not exceed the NJDEP SCC. Cadmium is typically present at elevated levels at golf courses. No compounds of concern were detected in site groundwater above NJDEP criteria.

No further action will be taken.

Site AOC-7

4.3.10 Former Hazardous Waste Storage Area (AOC-7)

4.3.10.1 Site Location

NJDEP identified this site as an area of concern (AOC) (NJDEP, 1990). A temporary hazardous waste storage area was located in an approximately 1-acre fenced site to the east of Building 2708 (Figure 4.3-16). The site is currently a grassy field surrounded by a 7-ft high fence. A former gas station (Building T-2500) is located to the east of the site. The approximate area of site AOC-7 is 41,000 ft^2 (0.9 acre).

4.3.10.2 Site History

Reviews of aerial photographs from 1961 to 1986 show that this site was a fenced storage area. The 1961 photographs show that the fenced area extended about 50 feet farther to the west than it does today. This western area is now part of the fenced area around Building 2708, which is part of the Pulse Power Laboratory. Large rectangular objects are visible next to the fence on all four sides. These may be cargo or truck vans. The 1969 photograph is similar, but there are three irregular groups of objects at the northwest corner of the lot. The 1974 photograph is similar, except there are five circular igloos along the west fence. In 1986, the site is smaller because the Pulse Power Laboratory is in the western portion of the site. There are objects that appear to be drums along the fence on the south and southeast of the site. The objects are densely packed in a 10- to 20-ft band next to the fence. There are additional objects along the north fence and possibly along the west fence. Personnel interviews indicate that the site was used for a 6-month period in 1987 for temporary storage of hazardous waste (in drums). As part of a program to remove all improperly labeled drums from Fort Monmouth, the facility collected the drums and staged them at this site.

The drums were stored on wood pallets, generally along the fence line. The pallets were not usually stored on a plastic ground cover. Clean Venture, Inc. sampled the drums, labeled them, completed manifests, and arranged for disposal. For the most part, the drums contained solvents, degreasers, and oils. The drums were screened for external radiation and none was detected. Clean Venture did not characterize the drums to the extent of identifying specific compounds, but some of the solvents that were used at Fort Monmouth at that time are 1,1,2-trichloroethane, 1,1,1-trichloroethane, and benzene.

The only known release of material during the operation occurred on 7 October 1987. A pallet of 5-gallon containers of malathion, a pesticide, was picked up at Sandy Hook. The containers were deteriorated, so the pallet was placed on a plastic ground cover. During the night, the top popped off one of the containers. A security guard became temporarily nauseated from the fumes. The next day the containers were repacked in a drum. The quantity of material that was released is considered small, and it is believed that little, if any, material was spilled on the ground.

4.3.10.3 Sampling Effort

Six soil borings were completed and soil samples collected in an effort to identify the nature and extent of past site activities on soil quality. Soil borings were drilled to groundwater and the soil cuttings were screened with a photoionization detector (PID). Since no elevated PID readings were recorded, soil samples were collected from the interval just above the water table. The total depths of the borings varied from 12 to 14 ft bgs. Lithologic logs from the site borings indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by coarsening downward olive-brown silty medium-grained sand to olive-brown medium-grained sand sequence. The locations of the soil borings were biased toward the fence line, as shown in Figure 4.3-16, because an examination of aerial photographs showed that materials were stored next to the fence. Soil samples were analyzed for TCL +30 parameters and TAL metals.

4.3.10.4 Soil Sampling Results

Six soil samples, one from each boring, were collected from intervals ranging from 8 to 14 ft bgs. Site soil samples were analyzed for the parameters listed in Table 3.6-1. Table 4.3-15 compares the detected compounds in site soil with the NJDEP SCC, and then compares the results with the site-specific and Monmouth County maximum background levels, where

Table 4.3-15
Fort Monmouth - Charles Wood
Summary of Detected Compounds in
Soil from Site AOC- 7 (CW-7)

COMPOUND	METHOD DETECTION LIMIT (mg/kg)	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	MAXIMUM BACKGROUND CONCENTRATION (mg/kg)	ANALYTICAL RESULTS					
				SB01-A02 12/21/95 (10-12 ft bgs)	SB02-A02 12/21/95 (10-12 ft bgs)	SB03-A02 12/21/95 (6-8 ft bgs)	SB04-A02 12/21/95 (8-10 ft bgs)	SB05-A02 12/21/95 (8-10 ft bgs)	SB06-A03 12/21/95 (12-14 ft bgs)
VOC's (mg/kg)									
2 - Butanone	0.0041	1000	ND	ND	0.002 J	ND	ND	ND	ND
SVOCs (mg/kg)									
bis(2-Ethylhexyl)phthalate	0.32	49	0.17 J	0.075 J	ND	0.34 J	ND	ND	ND
PESTICIDES (mg/kg)									
4,4'-DDT	0.0037	2	0.053	ND	ND	0.004	ND	ND	ND
METALS TOTAL (mg/kg)									
Aluminum	3.9	NLE	15700	3650	4340	3820	5170	3490	3610
Arsenic	0.35	20	31.6	8.6	1.7	8.4	12.7	2.8	5.9
Barium	0.17	700	26	2.5	4.5	4.5	6.2	3.6	2.4
Beryllium	0.1	1	1.7	0.31	0.29	0.28	0.45	0.3	0.26
Calcium	2.2	NLE	653	69	91.9	134	275	63.9	43.7
Cobalt	0.7	NLE	4.5	ND	0.94	0.68	ND	ND	ND
Chromium	1.6	500	128	61.1	61.6	73.6	83.4	64.7	61.1
Copper	2.2	600	7.27[1]	1.6	1.6	1.8	2.2	1.4	1.3
Iron	0.58	NLE	45500	10800	12400	11100	15900	11400	11000
Lead	0.4	400[2]	15.1[1]	6.3	6.9	4.5	8.5	6.3	4.9
Magnesium	9.6	NLE	3960	694	852	602	919	720	766
Manganese	0.18	NLE	120[1]	3.6	8.2	12.7	11.3	2.8	1.8
Nickel	1.4	250	8.3	1.8	2.6	1.9	2.1	1.6	1.3
Potassium	(12.3-25.8)	NLE	10600	2060	2360	1740	2570	2200	2280
Sodium	3.8	NLE	56.8	18.8	12	11.7	13.8	14.7	11.5
Selenium	0.3	63	0.85	0.26	0.2	ND	0.3	0.26	ND
Zinc	0.41	1500	55.6	8.9	12	10.5	15.8	9	9.1

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
NLE - No Level Established
ND - Indicates that the compound was not detected at or below the quantification limits
[1] Monmouth County maximum background concentrations.
[2] NJDEP criteria are referenced in Site Remediation News, Winter 1995.

appropriate. In addition, the results were compared with the impact to groundwater SCC because no monitor wells were installed at the site.

VOCs

VOCs were not detected above laboratory quantitation limits in site soil.

SVOCs

SVOCs were not detected above laboratory quantitation limits in site soil.

Pesticides/PCBs

One pesticide (4,4'-DDT) was detected above the laboratory quantitation limit in SB-02; however, 4,4'-DDT was detected in a concentration well below both the NJDEP residential direct contact SCCs and impact to groundwater SCC. PCBs were not detected in site soil from any boring location.

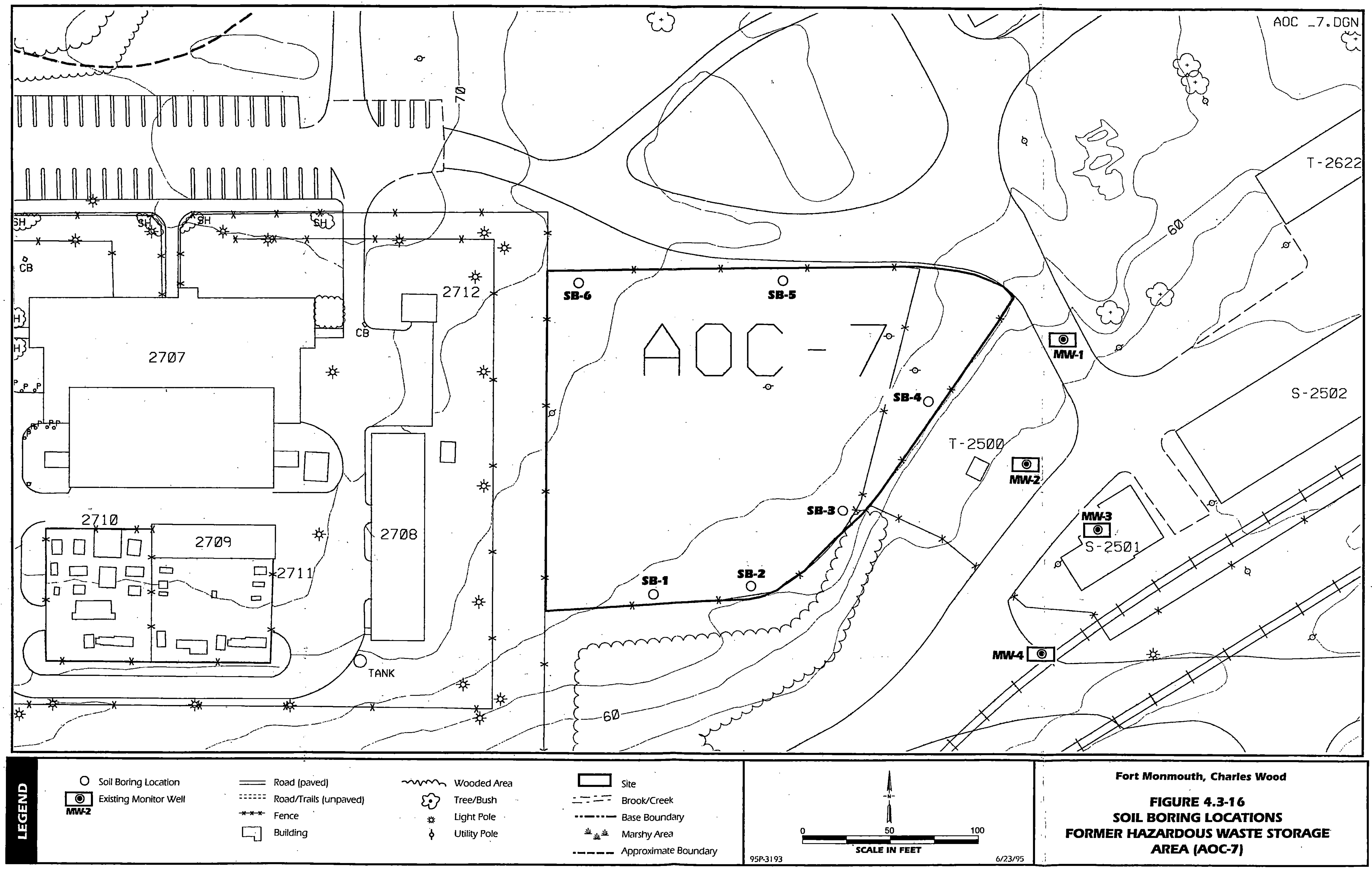
Metals

As indicated in Table 4.3-15, all metals detected in site soil were found in concentrations below the NJDEP SCC.

4.3.10.5 Recommendations

No compounds of concern were detected at this site at levels that exceeded NJDEP criteria.

No further action will be taken.



Fort Monmouth, Charles Wood

FIGURE 4.3-16
SOIL BORING LOCATIONS
FORMER HAZARDOUS WASTE STORAGE AREA (AOC-7)

Charles Wood
PCB Transformers

95P-4674

4.3.11 PCB Transformers

4.3.11.1 Site Location

During the 1993 investigation (WESTON, 1993), all locations where PCB transformers had formerly been located were inspected for evidence of spills. Three sites were identified where a PCB transformer was either formerly located over soil and thus evidence of a spill could not be determined visually, or formerly located on concrete and there was discoloration in the concrete. These locations are listed in Table 3.5-1 and identified in Figure 4.3-17.

4.3.11.2 Site History

All PCB transformers (contain greater than 500 ppm PCBs) have been removed from Fort Monmouth; however, the former locations of these transformers were not previously investigated for spilled PCBs. The concrete pad outside Building 2000 was removed between the time of the 1993 investigation and the current field effort.

4.3.11.3 Sampling Effort

As discussed in Subsection 3.5, soil samples were taken from below pole-mounted transformers. Because the concrete pad near Building 2000 had been removed, four soil samples were taken downgradient of the former pad location, as indicated in Figure 4.3-18.

4.3.11.4 PCB Sampling Results

The results of the PCB transformer sampling are presented in Table 4.3-16. One of the four transformer sites sampled at the Charles Wood area was found to have PCBs in soil or concrete above NJDEP SCC.

PCBs were detected in four discrete soil samples above NJDEP SCC. The soil samples were collected downslope of the former location of transformer CW035, which was an exterior pad transformer northeast of Building 2000. This pad had been removed prior to sampling.

Table 4.3-16
Results of Transformer Site Sampling on Charles Wood

Location (Building No.)	Sample ID	Method Detection Limt (mg/kg)	Medium	NJDEP Soil Criteria (mg/kg)	Total PCBs (mg/kg)
2000	CW07-TR01	23*	Soil	0.49	**100**
2000	CW07-TR02	4.4*	Soil	0.49	**27**
2000	CW07-TR03	4.4*	Soil	0.49	**26**
2000	CW07-TR04	.91*	Soil	0.49	**6**
2018	CW07-TR05	4.5*	Soil	0.49	ND
2018	CW07-TR06	0.47	Soil	0.49	ND
2276	CW-AE-TR01	0.21	Soil	0.49	ND

Compounds exceeding NJDEP cleanup criteria are noted by bold numbers
ND - Indicates that the compound was not detected at the quantification limit.
* = Method Detection Limit exceeded NJDEP criteria.

All other transformers sampled in the Charles Wood area either had results below detection limits, or had detectable levels of PCBs below applicable cleanup criteria.

4.3.11.5 Recommendations

PCBs were detected above the NJDEP criteria in each of the four soil samples collected downgradient of the former transformer location northeast of Building 2000 (transformer CW-035). PCBs were not detected above NJDEP criteria in samples collected from the other three sampling locations.

Additional samples will be taken to further delineate the extent of contamination and the contaminated soil will be removed and disposed of in accordance with applicable regulations. The depth of contamination is assumed to be 6 inches. Excavation will be performed in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved.

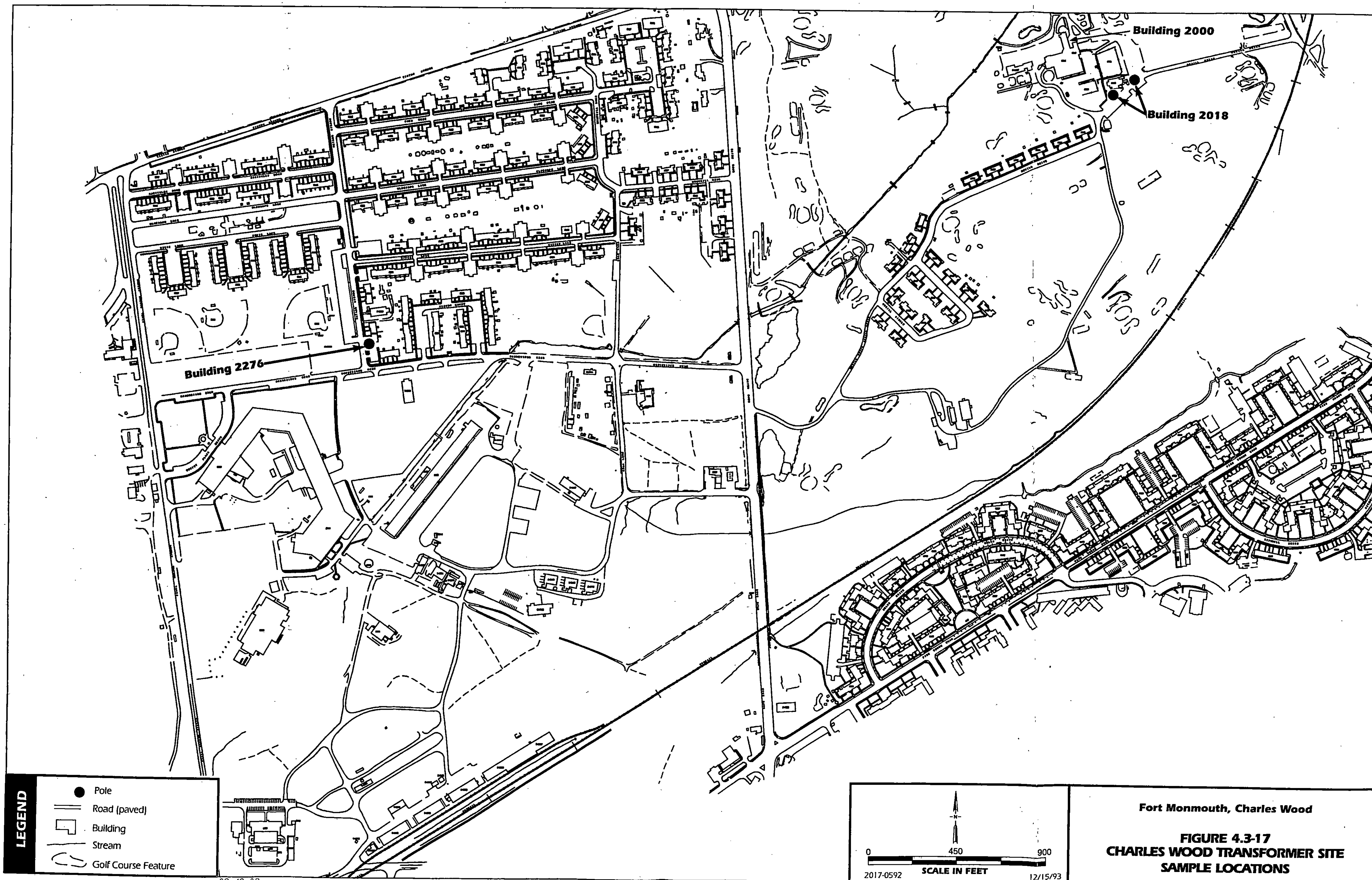
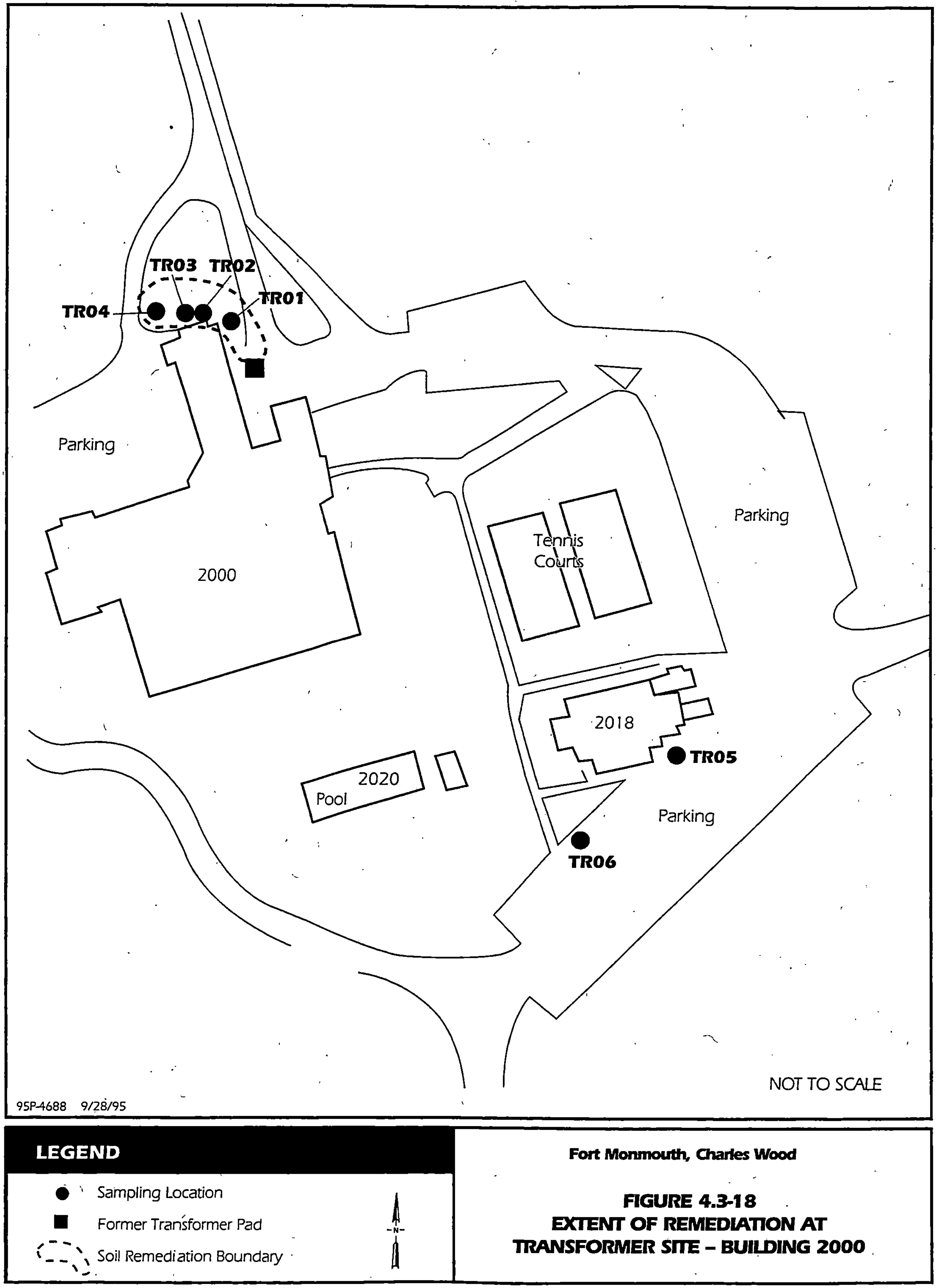


FIGURE 4.3-17
CHARLES WOOD TRANSFORMER SITE SAMPLE LOCATIONS



Fort Monmouth, Charles Wood

FIGURE 4.3-18
EXTENT OF REMEDIATION AT TRANSFORMER SITE – BUILDING 2000

SECTION 5
DATA QUALITY

WESTON MANAGERS DESIGNERS/CONSULTANTS

SECTION 5
DATA QUALITY

5.1 INTRODUCTION

Quality assurance/quality control (QA/QC) procedures were incorporated into the Fort Monmouth site investigation program to ensure collection of quality data for each area of the site investigated. Additionally, such QA/QC procedures were employed to ensure that all information, data, and resulting decisions of the site investigation are technically sound, statistically valid (accurate and precise), properly documented, and ensure the completeness of the data. The mechanism for employing the project QA/QC procedures was the CDAP. Procedures in the CDAP facilitated identifying and monitoring the proper sample collection, handling, and laboratory protocols to be used during the site investigation.

Chemical analyses were conducted to determine the type and concentration of contaminants present in the various media at the site and to provide environmental data, as was discussed in Section 2 of this report. Overall, analyses or tests were chosen based on the compounds produced or used within the specific area or the environmental data needed.

The analytical methods that were used for sample analysis are listed in Table 5.1-1. Information on sample containers, preservation, and holding times is presented in Table 5.1-2.

All analytical work completed for the site investigation was performed or administered by WESTON's Environmental Metrics Division. WESTON's Gulf Coast Laboratory, located in University Park, IL, performed all analytical analyses. This laboratory is certified by NJDEP (certification number 54669).

WESTON MANAGERS DESIGNERS/CONSULTANTS

Table 5.1-1

Analytical Methods for Sample Analysis

Matrix	Parameter*
Sediment	TCL Volatiles TCL Semivolatiles TCL Pesticides/PCBs TAL Metals Cyanide
Surface Water	TCL Volatiles TCL Semivolatiles TCL Pesticides/PCBs TAL Metals (Filtered) TAL Metals (Unfiltered) Cyanide
Soil	TCL Volatiles TCL Semivolatiles TCL Pesticides/PCBs TCL Pesticides PCBs (SW 8080) TAL Metals Cyanide TPH (EPA 418.1)
Concrete	PCBs (SW 8080)
Groundwater	TCL Volatiles TCL Semivolatiles TCL Pesticides/PCBs TAL Metals (Unfiltered) TAL Metals (Filtered) Cyanide TPH (EPA 418.1) Sulfate (EPA 375.4) Ammonia (EPA 350.2)

* All analytical methods derived from *Test Methods for Evaluation of Solid Waste,* SW-846, Third Edition, 1992; EPA CLP Document Nos. OLM01.8 and ILM02.1; "Methods for Chemical Analysis of Water and Waste," EPA 600/4-79-020.

Table 5.1-2

Summary of Sample Containers, Volume, Preservation, and Maximum Holding Times

Parameter	Sample Container	Container Volume	Preservation	Maximum Holding Time
Nonaqueous				
Cyanide	Flint glass bottle, black phenolic cap, polyethylene liner	4, 8, 16, or 32 oz	4°C until analysis	12 days
Metals	Flint glass bottle, black phenolic cap, polyethylene liner	4, 8, 16, or 32 oz	4°C until analysis	180 days except for Hg, which is 26 days
Pesticides/PCBs	Amber glass, Teflon-lined cap	1,000 mL	Cool, 4°C, dark	Extraction must be started within 14 days. Analysis - 40 days from VTSR.
Semivolatile Organics	Amber glass, Teflon-lined cap	1,000 mL	Cool, 4°C, dark	Extraction must be started within 14 days. Analysis - 40 days from VTSR.
Sulfates	Plastic, glass	100 mL	Cool, 4°C	28 days
TPH	Glass	4 oz	Cool, 4°C	28 days; gasoline in soil, 7 days
Volatile Organics	Glass, polypropylene cap, white teflon liner	120 mL	Cool, 4°C	10 days
Aqueous				
Cyanide	Plastic bottle, plastic cap, plastic liner	1,000 mL	0.6 g ascorbic acid if residual Cl_2, NaOH to pH>12, cool, 4°C until analysis. $CaCO_3$ in presence of sulfide.	12 days
Metals	Plastic bottle, plastic cap, plastic liner	1,000 mL	HNO_3 to pH<2	180 days
Pesticide/PCBs	Amber glass, Teflon-lined cap	1,000 mL	Cool, 4°C, dark	Extraction aqueous continuous liquid-liquid extraction must be started within 7 days. Analysis - 40 days from VTSR.

Table 5.1-2
Summary of Sample Containers, Volume, Preservation, and Maximum Holding Time (Continued)

Parameter	Sample Container	Container Volume	Preservation	Maximum Holding Time
Semivolatile Organics	Amber glass, Teflon-lined cap	1,000 mL	Cool, 4°C, dark	Extraction aqueous continuous liquid-liquid extraction must be started within 7 days. Analysis - 40 days from VTSR.
Sulfates	Plastic, glass	100 mL	Cool, 4°C	28 days
TPH	Glass	1 liter	Cool, 4°C	7 days
Volatile Organics	Glass, black phenolic plastic screw cap, Teflon-lined septum	40 mL	Cool, 4°C, dark, 0.08% $Na_2S_2O_3$ if residual Cl_2	10 days

TPH - Total Petroleum Hydrocarbons
VTSR - Validated time of sample receipt (at the laboratory)

5.2 QUALITY CONTROL PROCEDURES

To meet the QA/QC objectives of the project, the field work and laboratory analyses followed the standardized methods or procedures that were described in the CDAP and are summarized in the subsections that follow.

5.2.1 Field and Laboratory Quality Control Samples

Standard analytical QC checks instituted by field and laboratory personnel included (but were not limited to):

- Field/rinsate blanks — Samples prepared using analyte-free water supplied by the laboratory or purchased from commercial sources that certify the quality of the water. Field/rinsate blanks were routed through decontaminated sampling equipment prior to collection. Preservatives or additives were added as required, and the blank sample was then sealed. The field/rinsate blank was shipped with real samples collected for the same parameter group. During field sampling, a field/rinsate blank was collected and analyzed from each group of water or soil/solid samples for every 10 samples received daily.

- Trip blanks — Volatile organic sample containers prepared in the laboratory using analyte-free water. The trip blanks accompanied the field samples during transport to the site; during collection, packaging, and transport to the laboratory; and during analysis, and were contained in the same type of sample container as those used in the specific sampling effort. One trip blank sample was included with each shipment of aqueous samples designated for VOC analysis.

- Duplicate samples — Samples collected from the same sampling location at the same time. Soil duplicates were homogenized (with the exception of VOC samples). At least one duplicate sample was analyzed from each group of samples of a similar matrix type for every 20 samples received.

- Matrix spike/matrix spike duplicate (MS/MSD) — Samples in which compounds are added before extraction and analysis. The recoveries for spiked compounds can be used to assess how well the method used for analysis recovers target compounds (i.e., a measure of matrix interference in the sample). When reviewed in conjunction with other QC data, MS/MSDs may indicate reanalysis using a more appropriate method. At least one spiked sample analysis was performed on each group of samples of a similar matrix type and concentration for each batch of samples or for every 20 samples received, whichever was more frequent.

- Surrogate spiking — Samples in which surrogate compounds are added before sample preparation for organics analysis. The review for spiked surrogate compounds can be used to assess method accuracy for each sample matrix.

5.2.2 Field Activities

The accuracy of field measurements obtained from site instruments was maintained on-site by appropriate calibration procedures, as described in detail in the CDAP.

The field investigation procedures used to perform the site investigation were presented in the Fort Monmouth CDAP. The field procedures included:

- Surface and subsurface soil sampling.
- Installation of monitor wells.
- Groundwater sampling.
- Monitor well casing elevation surveying.
- Surface-water and sediment sampling.
- Concrete pad sampling.
- Ancillary field activities, such as decontamination, field measurements, and fluids management.

Sample identification and documentation procedures were followed in the field as specified in the CDAP, including:

- Sample containers were labeled with the appropriate information.
- The sample was entered into the chain-of-custody record.
- A unique sample code was assigned to each sample collected.
- Signed custody seals were applied on opposite sides of the container lid.
- Samples were shipped to WESTON's laboratories as environmental samples and complied with all DOT requirements for such shipment.

A bound field notebook was maintained by the Field Team Leader at the site to record daily activities, including sample collection and tracking information. Quantitative field data, such as water-level measurements, were recorded in bound field notebooks. Qualitative or descriptive field data (such as soil textures) obtained from soil borings and monitor wells were recorded in the field in field notebooks, reduced using a standardized lithologic coding system.

5.2.3 Laboratory Activities

5.2.3.1 Laboratory Equipment Quality Control

The reliability and credibility of laboratory analytical instruments and QA of analytical results were ensured by documented calibration procedures and QC samples (such as method blanks and method spikes). A review of the calibration procedures and the calibration frequencies that are standard operating procedures (SOPs) employed by WESTON's Environmental Metrics Division is provided in the CDAP. The following instruments were used to analyze environmental samples:

- Gas chromatograph (GC).
- Gas chromatograph/mass spectrometer (GC/MS).
- Atomic absorption spectrophotometer: furnace (AA).
- Inductively coupled plasma spectrometer (ICP).
- Cold vapor mercury analyzer: flameless AA.
- Spectrophotometer.

Certain TCL VOCs, such as methylene chloride, acetone, 2-butanone, and toluene, are commonly detected as laboratory contaminants. In order to ensure that the data reported are not biased by potential laboratory contamination, certain QA procedures, including reagent blank analysis, were taken. Assessment of the reagent blanks is discussed in Subsection 5.3.2.

5.2.3.2 Laboratory Data

In addition to the data collected in the field and recorded on the chain-of-custody forms, data describing the processing of samples were accumulated in the laboratory and recorded in laboratory notebooks.

Data reduction was performed by the individual analysts and consisted of calculating concentrations in samples from the raw data obtained from the measuring instruments. The complexity of the data reduction was dependent on the specific analytical method and the number of discrete operations (e.g., extractions, dilutions, and concentrations) involved in obtaining a sample that could be measured.

System reviews were performed at all levels. The individual analyst constantly reviewed the quality of data through calibration checks, QC sample results, and performance evaluation (PE) samples. The Section Manager and/or the Analytical Project Manager reviewed data for consistency and reasonableness with other generated data and to determine if program requirements had been satisfied. Selected hard copy output of data (e.g., chromatograms, spectra, etc.) was reviewed to ensure that results were interpreted correctly. The Quality Assurance Officer independently conducted a review of selected projects to determine if laboratory and client QA/QC requirements had been met. The final routine review was performed by the Laboratory Manager prior to reporting the results to the client.

5.3 DATA QUALITY

5.3.1 Data Reporting

Laboratory reports contain final results, methods of analysis, levels of detection, surrogate recovery data, and method blank data. In addition, special analytical problems and/or any modifications of referenced methods were noted.

5.3.2 Data Validation/Usability Review

Separate from the laboratory's internal data review/data validation, an independent review of the final analytical data packages was performed to validate results and to determine usability. The validation was performed by URS Consultants, Inc. (URS) as a subcontractor to Malcolm Pirnie, Inc.

The data validation was performed in accordance with U.S. Environmental Protection Agency (EPA) *Region II Modifications to the National Functional Guidelines for Organic Data Review, Multimedia, Multiconcentration* (January 1992) and *Region II Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analysis* (January 1992). For non-CLP procedures, the data were validated following the intent of the National Functional Guidelines.

5.3.3 Results of Data Validation/Usability Review

Malcolm Pirnie issued a Data Validation Report (June 1995) that gave the results of their validation. URS performed data validation services on 84 environmental samples. The matrix type and number of samples were as follows:

Matrix	No. of Samples
Groundwater	33
Surface water	5
Sediment	6
Surface soil	10
Soil boring	24
Transformer soil	4
Concrete	2

URS reported that a majority of the analytical results were usable as reported, despite minor deviations from EPA CLP criteria, which do not jeopardize the chemical representativeness of the data.

There were several instances, however, where compounds or whole fractions were rejected by URS based on deviations from CLP methodologies and/or data validation criteria.

Sample ID	Compound or Fraction
B9-SB01-A02	Acetone
B9-SB01-C02	Acetone
MPA3-SB01-A02	Acetone
MP08-SD01-A01	Semivolatiles, pesticides/PCBs
MP16-SS01-A01	Dieldrin
CW06-SS01-A01	Heptachlor epoxide
MP02-MW01-A01	Total and dissolved aluminum, chromium, and iron

The results for these samples are provided in this report, but are flagged in the Results summary tables. The Data Validation Report includes a discussion of the data quality and completeness.

5.3.4 Results of Field and Trip Blanks

During the Fort Monmouth site investigation, field/rinsate blanks and trip blanks were submitted for analysis (numbers of samples are shown in Tables 5.3-1 and 5.3-2), as discussed in Section 3 of this report. The results of the analyses of the field/rinsate blanks were used to assess the efficiency of the equipment decontamination procedures in preventing cross-contamination between samples, and to determine if the compounds detected in the characterization samples were attributable to the sampling equipment or to the site. The results of trip blank analyses were used to determine if compounds detected in samples analyzed for volatile organics were introduced during shipment or from containers and were not attributable to the site. A discussion of the difference between the samples contracted in the scope of work and the actual effort is included in Section 4.

A summary of the compounds detected in field/rinsate blanks is provided in Table 5.3-3. Inorganics, VOCs, and SVOCs were each detected in at least one field/rinsate blank collected during field activities. All of the organic compounds detected are common laboratory contaminants and were likely introduced into the samples during laboratory analysis.

Table 5.3-1
Main Post Samples Collected

MEDIA/PARAMETER	INVESTIGATION SAMPLES		QA/QC SAMPLES *		TOTAL SAMPLES	
	Scope of Work	Taken	Scope of Work	Taken	Scope of Work	Taken
Surface and shallow soil						
TCL VOA	4	4	1	2	5	6
TCL BNA	4	6	1	0	5	6
TCL pesticide/PCB	6	6	1	0	7	6
TCL PCB	8	8	1	0	9	8
TAL Metals	2	2	1	0	3	2
Soil Borings						
TCL VOA	38	31	2	2	40	33
TCL BNA	26	15	1	1	27	16
Pesticide/PCB	15	15	1	1	16	16
TAL Metal	13	16	1	1	14	17
TAL Cyanide	12	11	1	1	13	12
TPH	24	15	2	0	26	15
Sediment						
TCL VOA	3	3	1	3	4	6
TCL BNA	3	3	1	1	4	4
Pesticide/PCB	3	3	1	1	4	4
TAL Metal	4	6	1	1	5	7
TAL Cyanide	3	4	1	1	4	5
Concrete						
TCL PCB	6	4	1	1	7	5
Surface Water						
TCL VOA	8	8	1	1	9	9
TCL BNA	8	8	1	1	9	9
Pesticide/PCB	8	8	1	1	9	9
TAL Metal (Total)	8	8	1	1	9	9
TAL Metals (Dissolved)	8	8	1	1	9	9
TAL Cyanide	8	8	1	1	9	9
Groundwater						
TCL VOA	60	60	25	38	85	98
TCL BNA	60	60	9	16	69	76
Pesticide/PCB	60	60	9	16	69	76
TAL Metal (Total)	58	56	9	15	67	71
TAL Metals (Dissolved)	58	56	9	15	67	71
TAL Cyanide	52	52	9	10	61	62
Sulfate	12	12	2	4	14	15
Ammonia	8	8	2	4	10	13
TPH	6	6	2	5	8	11

* QA/QC samples are trip blanks, field blanks, and duplicates.

Table 5.3-2
Charles Wood Samples Collected

MEDIA/PARAMETER	INVESTIGATION SAMPLES			QA/QC SAMPLES *			TOTAL SAMPLES		
	Scope of Work	Taken	Analyzed	Scope of Work	Taken	Analyzed	Scope of Work	Taken	Analyzed
Surface and shallow soil									
TCL VOA	1	1	1	1	2	2	2	3	3
TCL BNA	1	1	1	1	0	0	2	1	1
TCL pesticide/PCB	1	1	1	1	0	0	2	1	1
TCL PCB	6	7	7	1	1	1	7	8	8
TAL Metals	13	11	11	1	1	1	14	12	12
Soil Borings									
TCL VOA	52	32	32	3	1	1	55	33	33
TCL BNA	52	31	31	3	1	1	55	32	32
Pesticide/PCB	52	31	31	3	1	1	55	32	32
TAL Metal	48	31	31	3	2	2	51	33	33
TAL Cyanide	12	12	12	1	1	1	13	13	13
TPH	0	1	1	0	0	0	0	1	1
Sediment									
TCL VOA	3	3	3	1	0	0	4	3	3
TCL BNA	3	3	3	1	0	0	4	3	3
Pesticide/PCB	3	3	3	1	0	0	4	3	3
TAL Metal	3	4	4	1	0	0	4	4	4
TAL Cyanide	3	3	3	1	0	0	4	3	3
Concrete									
TCL PCB	1	0	0	1	0	0	2	0	0
Surface Water									
TCL VOA	2	2	2	1	0	0	3	2	2
TCL BNA	2	2	2	1	0	0	3	2	2
Pesticide/PCB	2	2	2	1	0	0	3	2	2
TAL Metal (Total)	2	2	2	1	0	0	3	2	2
TAL Metals (Dissolved)	2	2	2	1	0	0	3	2	2
TAL Cyanide	2	2	2	1	0	0	3	2	2
Groundwater									
TCL VOA	38	34	34	22	25	25	60	59	59
TCL BNA	38	34	34	6	6	6	44	40	40
Pesticide/PCB	38	34	34	6	6	6	44	40	40
TAL Metal (Total)	34	30	30	6	4	4	40	34	34
TAL Metals (Dissolved)	34	30	30	6	4	4	40	34	34
TAL Cyanide	10	10	10	2	2	2	12	12	12

* QA/QC samples are trip blanks, field blanks, and duplicates.

Table 5.3-3
Summary of Field/Rinsate and Trip Blanks (µg/l)

Sample ID	Inorganics	VOC's	SVOC's	Pesticides/ PCBs
Trip Blanks				
CW01-SB26-D02	N/A	ND	N/A	N/A
CW01-SB31-D02	N/A	ND	N/A	N/A
CW02-SB31-D02	N/A	ND	N/A	N/A
CW02-SB33-D02	N/A	ND	N/A	N/A
CW05-SB01-D02	N/A	ND	N/A	N/A
CW06-SB34-D02	N/A	ND	N/A	N/A
CW09-SB01-D02	silver (.93), aluminum (3830), arsenic (2.6), barium (6.6), beryllium (.39), calcium (366), cobalt (1.0), chromium (44), copper (2.3), iron (9720), mercury (.12), manganese (11.9), lead (3.9), vanadium (27.4), zinc (12.8), sodium (21.4), nickel (2.8), potassium (1480)	ND	N/A	N/A
CWA7-SB04-D02	N/A	ND	N/A	N/A
MPA-SB01-D02	N/A	ND	N/A	N/A
MPA-SB02-D02	N/A	ND	N/A	N/A
MP18-SB07-D01	N/A	ND	N/A	N/A
MP18-SB25-D02	N/A	acetone (30), chloroform (3J)	N/A	N/A
B3-SB01-D03	N/A	ND	N/A	N/A
B4-SB01-D01	N/A	ND	N/A	N/A
B5-SB01-D02	N/A	ND	N/A	N/A
B9-SB01-D02	N/A	acetone (8,300,000), benzene (6J)	N/A	N/A
B10-SB01-D02	N/A	acetone (22)	N/A	N/A
CW09-SS01-D01	N/A	ND	N/A	N/A
MP16-SS01-D01	N/A	ND	N/A	N/A
MP08-SD01-D01	N/A	ND	N/A	N/A
CW01-MW26-D02	N/A	ND	N/A	N/A
CW01-MW29-D01	N/A	acetone (20), 2-butanone (36)	N/A	N/A
CW06-MW01-D02	N/A	ND	N/A	N/A
CW06-MW34-D01	N/A	2-butanone (30)	N/A	N/A
MP04-MW07-D01	N/A	acetone (13), 2-butanone (27)	N/A	N/A
MP05-MW11-D02	ND	ND	ND	ND
MP08-MW12-D02	ND	ND	ND	ND
MP08-MW15-D01	ND	acetone (20), 2-butanone (37)	ND	ND
MP14-MW20-D02	ND	ND	ND	ND
B3-MW03B-D01	N/A	2-butanone (15)	ND	ND
B3-MW03B-D02	N/A	ND	ND	ND
B10-MW10B-D01	N/A	2-butanone (14)	ND	ND
B10-MW10B-D02	N/A	ND	ND	ND

Table 5.3-3
Summary of Field/Rinsate and Trip Blanks (µg/l)
(continued)

Sample ID	Inorganics	VOC's	SVOC's	Pesticides/ PCBs
Field/Rinsate Blanks				
CW01-SB31-E02	N/A	ND	N/A	N/A
CW09-SB01-E02 SOL	N/A	acetone (5200), chloroform (3J)	N/A	N/A
MPA-SB01-E02	N/A	acetone (240 B), chloroform (6J)	N/A	N/A
B9-SB01-E02	N/A	acetone (130)	N/A	N/A
CW09-SS01-E01	N/A	ND	N/A	N/A
MP16-SS01-E01	N/A	ND	N/A	N/A
MP08-SD01-E01	N/A	ND	N/A	N/A
CW01-MW26-E02	aluminum (20.2), calcium (105), iron (12.0), potassium (67.9), magnesium (34.3), sodium (132), lead (2.6)	ND	N/A	N/A
CW01-MW26-E02 SOL	aluminum (18.4), calcium (115), iron (16.8), potassium (119), magnesium (47.6), sodium (156), lead (1.5), antimony (13.2)	N/A	N/A	N/A
CW01-MW29-E01	calcium (113), sodium (321)	ND	N/A	N/A
CW01-MW29-E01 SOL	calcium (72.3), sodium (137), nickel (12.9)	ND	N/A	N/A
CW06-MW01-E02	N/A	N/A	N/A	N/A
CW09-MW35-E01	aluminum (231), barium (40.8), calcium (21100), cobalt (4.0), iron (85.8), potassium (2090), magnesium (5580), manganese (43.9), sodium (7230), nickel (10.8), zinc (60.7)	acetone (12), 2-butanone (25)	ND	ND
CW09-MW35-E01 SOL	calcium (191), iron (3.8), potassium (82.5), sodium (654), vanadium (2.8), zinc (2.6)	N/A	N/A	N/A
MP04-MW07-E01	aluminum (18.1), barium (.81), calcium (57.4), iron (62.7), sodium (116), zinc (3.8)	acetone (10), 2-butanone (27)	ND	ND
MP04-MW07-E01 SOL	beryllium (.31), calcium (82.6), iron (4.3), potassium (68.8), sodium (81.4), zinc (2.4)	N/A	N/A	N/A
MP05-MW11-E02	calcium (289), potassium (737), sodium (165)	chloroform (33)	ND	ND
MP05-MW11-E02 SOL	sodium (147), calcium (55.4)	N/A	N/A	N/A
MP08-MW12-E02	aluminum (27), calcium (109), iron (13.2), sodium (87.3), vanadium (3.0), copper (2.1)	ND	bis (2-Ethylhexyl) phthalate (2J)	ND
MP08-MW12-E02 SOL	calcium (95.7), iron (7.4), sodium (120), zinc (4.1)	N/A	N/A	N/A
MP08-MW15-E01	calcium (107), sodium (140), nickel (11.4)	2-butanone (38)	bis (2-Ethylhexyl) phthalate (3JB)	ND
MP08-MW15-E01 SOL	calcium (57.1), sodium (156)	N/A	N/A	N/A
MP14-MW20-E02	calcium (103), iron (9.6), sodium (56.3), lead (1.5), zinc (3.9)	ND	ND	ND
MP14-MW20-E02 SOL	barium (1.2), calcium (102), iron (9.2), sodium (142), zinc (4.2)	N/A	N/A	N/A
MP18-MW03-E01	aluminum(33.2), barium(.92), calcium(65.6), cobalt(2.2), chromium(2.2), iron(19.3), manganese(1.1),sodium(101),			

Table 5.3-3
Summary of Field/Rinsate and Trip Blanks (µg/l)
(continued)

Sample ID	Inorganics	VOC's	SVOC's	Pesticides/ PCBs
MP18-MW03-E01 SOL	aluminum(20.5), calcium(45.4), cobalt(2.2), chromium(4.1), iron(13.1), manganese(.72), sodium(94.1)			
MP18-MW24-E01	alumnium (25), calcium (282), iron (13.4), magnesium (20), sodium (160), antimony (21)	2-butanone (21)	ND	ND
MP18-MW24-E01 SOL	alumnium (28.4), calcium (161), copper (2.7), iron (13.5), magnesium (23.9), sodium(118)	N/A	N/A	N/A
MP18-MW24-E02	alumnium (20), calcium (460), copper (5.4), iron (24.5), sodium (75.8)	ND	bis (2-Ethylhexyl) pthalate (140)	ND
MP18-MW24-E02 SOL	calcium (106), copper (4), iron (15.7), sodium (97.2)	N/A	N/A	N/A
B3-MW03B-E01	aluminum (26.2), barium (1.0), calcium (123), iron (16.5), sodium (820), zinc (2.0)	2-butanone (17)	ND	ND
B3-MW03B-E01 SOL	aluminum (173), barium (113), calcium (25400), cobalt (7.3), iron (109), potassium (13200), magnesium (5790), manganese (90.1), sodium (20800), nickel (61.5), antimony (16.7), zinc (27)	N/A	N/A	N/A
B3-MW03B-E02	aluminum(27.1), calcium(368), iron(10.1), magnesium(46), sodium(296)	1,1,1-trichloroethane (8J)	ND	ND
B3-MW03B-E02 SOL	aluminum (17.2), calcium (163), iron (9.3), magnesium (61.3), sodium (179)	N/A	N/A	N/A
B10-MW10B-E01	calcium (33.6), manganese (2.7), sodium (95)	2-butanone (15)	ND	ND
B10-MW10B-E01 SOL	calcium (111), sodium (70.4)	N/A	N/A	N/A
B10-MW10B-E02	calcium (141), iron (9.3), magnesium (24), sodium (170), zinc (6.5)	ND	diethylphthalate (2JB)	ND
B10-MW10B-E02 SOL	calcium (130), iron (9.8), zinc (6.4), sodium (231)	N/A	N/A	N/A

Note: Numbers in () represent the concentration.
N/A - Not Applicable/No Sample
ND - Not Detected

Additionally, the low contaminant concentrations detected in the field blanks indicate that significant cross-contamination between samples did not occur. VOCs were detected in several of the trip blanks submitted for laboratory analysis. All of the VOCs detected are common laboratory contaminants and, similar to the field/rinsate blanks, were likely introduced into the samples during laboratory analysis. A summary of the analytical results for trip blanks is provided in Table 5.3-3.

5.3.5 <u>Duplicates</u>

Duplicate samples for groundwater, surface water, sediment, and soil were collected following the protocols in the *Site Investigation Fort Monmouth, NJ, Main Post and Charles Wood Areas, Chemical Data Acquisition Plan* (WESTON, December 1994) and are discussed in the subsections that follow. The degree of variation between the sample values (not including values below the quantitation limit) is presented in Table 5.3-4 by media.

5.3.5.1 Groundwater

Of the groundwater duplicate results, 70% were within 10% of the routine sample value and only 16% were not within 20% of the routine sample value. These data indicate reasonable agreement among the groundwater results. Groundwater sample results generally exhibit slight variation due to the homogeneous characteristics of liquid samples.

5.3.5.2 Surface Water

Of the surface-water duplicate results, 63% were within 10% of the routine sample and only 1 sample result was not within 20% of the routine sample. These data indicate reasonable agreement among the surface-water results. Surface-water sample results generally exhibit little variation due to the homogeneous characteristics of liquid samples.

Table 5.3-4
Duplicate Sample Data Within Given Ranges of Percent Variation

Medium	Variation in Duplicate Results										
	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80	80-90	90-100	>100
Soil Borings and Surface Soils	31	11	7	4	1	3	7	7	1		3
Sediment	9	7		2							
Surface Water	12	6					1				
Groundwater	106	20	12	5	1	3		1	1	1	1

5.3.5.3 Sediments

Of the sediment duplicate results, 50% were within 10% of the routine sample and only 11% were not within 30% of the routine sample. These data indicate reasonable agreement among the sediment sample results. Sediment sample results tend to show more variation due to the heterogeneity of solid samples.

5.3.5.4 Soils

Of the soil duplicate results, 41% (surface soil and soil boring samples) were within 10% of the routine sample and 35% were not within 30% of the routine sample. These data indicate reasonable agreement among the soil sample results. Soil sample results tend to show more variation, in general, due to the nonhomogeneous nature of solid samples.

5.4 TENTATIVELY IDENTIFIED COMPOUNDS (TICs)

Tentatively identified compounds (TICs) were identified for volatile and semivolatile analyses. The sum of all TICs for every sample is provided in the data tables in Appendix D. In general, the sum of the TICs was small, less than 1 mg/kg for most solids and less than 600 µg/L for water. Significant amounts of TICs occurred in the sediment samples and the soil boring samples. The highest concentration of TICs for any sediment sample was 72 mg/kg, and the highest concentration for any soil sample was 18 mg/kg, both for semivolatile samples. By comparison, the proposed NJDEP cleanup criteria have a limit for total organics of 10,000 mg/kg. The highest concentration of volatile TICs for any solid sample was 1.1 mg/kg. By comparison, the proposed NJDEP limit for total volatile compounds is 1,000 mg/kg. Therefore, the concentration of TICs in solid samples will have no impact on whether it is less than the NJDEP cleanup criteria.

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5.5 COMPARISON OF ANALYTICAL DETECTION LIMITS AND REMEDIATION STANDARDS

For certain compounds, the analytical method detection limits exceeded the NJDEP remediation standards. The compounds for which this occurred, along with the most stringent NJDEP remediation standard values and laboratory detection limits, are presented in Table 5.5-1.

The laboratory performed the analysis using the EPA Contract Laboratory Program (CLP) Statement of Work, "Organics Analysis, Multimedia, Multiconcentration," and "Inorganics Analysis, Multimedia, Multiconcentration," for TCL/TAL analyses as specified in the report *Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey*, and as approved by NJDEP in a letter dated 20 April 1994. The detection limits are generally in accordance with the method standards.

The detection limits for many surface-water analyses, including VOCs, SVOCs, and pesticides/PCBs, exceeded the most stringent NJDEP criteria. However, additional sampling is proposed at all surface-water sites.

For groundwater, 19 compounds, including VOCs, SVOCs, and pesticides, exceeded the NJDEP criteria. However, additional sampling is proposed for all monitor wells.

Only one compound exceeded NJDEP criteria in soil samples; i.e., toxaphene. Toxaphene was not present in significant quantities in the 1979 inventory of pesticides contained in the IA. Remedial action or additional sampling is proposed for the two pesticide storage areas, i.e., M-16 at the Main Post and CW-6 at Charles Wood.

For sediment, 13 compounds exceeded NJDEP criteria, including SVOCs, pesticides/PCBs, and 2 metals. Because sediment samples were taken at former locations of STP outfalls (STP had not been operating for at least 20 years), metals are the compounds that are of most concern. The detection limit of mercury was generally only slightly above the NJDEP criteria. The detection limit for antimony was generally close to the regulatory limit. Antimony is not believed to have been used in significant quantities at Fort Monmouth because the major activities have been training and research in electronics.

Table 5.5-1
COMPOUNDS FOR WHICH THE ANALYTICAL DETECTION LIMIT EXCEEDS NJDEP REMEDIATION STANDARDS

COMPOUND	NJDEP STANDARD	METHOD DETECTION LIMIT
SURFACE WATER (µg/L)		
1,2-Dichloroethane	0.291	2.4
2,4,6-Trichlorophenol	2.14	5.6
2,4-Dinitrotoluene	0.11	5.8
3,3'-Dichlorobenzidine	0.0386	2.8
4,4'-DDE	0.000588	0.1
4,4'-DDT	0.000588	0.1
Aldrin	0.000135	0.05
alpha-BHC	0.00391	0.05
alph-Chlordane	0.000277	0.05
Aroclor-1016	0.000244	1
Aroclor-1221	0.000244	2
Aroclor-1232	0.000244	1
Aroclor-1242	0.000244	1
Aroclor-1248	0.000244	1
Aroclor-1254	0.000244	1
Aroclor-1260	0.000244	1
Benzene	0.15	3.3
Benzo(a)anthracene	0.0028	4.9
Benzo(a)pyrene	0.0028	4.9
Benzo(b)fluoranthene	0.0028	5.7
Benzo(k)fluoranthene	0.0028	6.2
bis(2-Chloroethyl) ether	0.0311	9.7
bis(2-Ethylhexy)phthalate	1.76	9.7
Carbon Tetrachloride	0.363	1.5
Chrysene	0.0028	4.4
cis-1,3-Dichloropropene		3
Dibenz(a,h)anthracene	0.0028	6
Dieldrin	0.0019	0.1
Endosulfan sulfate	0.93	0.1
Endrin	0.0023	0.1
gamma-Chlordane		0.05
Heptachlor	0.000208	0.05
Heptachlor epoxide	0.000103	0.05
Hexachlorobenzene	0.000748	5.5
Hexachloroethane	2.73	5.3
Indeno(1,2,3-cd)pyrene	0.0028	7.1
Methoxychlor	0.03	0.5
Methylene Chloride	2.49	2.7
Toxaphene	0.0002	5
Vinyl Chloride	0.083	7.9
GOUNDWATER (µg/L)		
1,1,2,2-Tetrachloroethene	2	4.2
1,1,2-Trichloroethane	3	4.3

Table 5.5-1
(Continued)

1,2,4-Trichlorobenzene	9	9.6
1,2-Dichloroethane	0.3	2.4
1,2-Dichloropropane	0.5	1.7
Aldrin	0.002	0.05
alpha-BHC	0.006	0.05
Benzene	0.2	3.3
Bromodichloromethane	0.3	2
cis-1,3-Dichloropropene	0.2	3
Dieldrin	0.002	0.1
Hexachlorobutadiene	1	4.6
Methylene Chloride	2	2.7
Pentachlorophenol	0.3	4
Toxaphene	0.03	5
trans-1,3-Dichloropropene	0.2	2.4
SOIL (mg/kg)		
Toxaphene	0.1	210
SEDIMENT (mg/kg)		
2-Methylnaphthalene	65	580
Acenaphthene	150	580
Anthracene	85	580
Dibenzo (a,h) anthracene	60	580
Mercury	0.15	0.13
Antimony	2	5.4
2-BHC	0.394	2.9
Heptachlor	0.148	2.9
Endrin	0.0654	5.9
4,4' DDT	1.83	5.9
alpha-Chlordane	0.5	2.9
gamma-Chlordane	0.5	2.9
Aroclor	38.7	59

SECTION 6
CONCLUSIONS AND RECOMMENDATIONS

95P-4674

SECTION 6

CONCLUSIONS AND RECOMMENDATIONS

6.1 MAIN POST

The conclusions and recommendations discussed in the following subsections are for the Main Post area of Fort Monmouth, and are based on the results of the site investigation activities. These conclusions and recommendations are also presented with the site-specific discussions in Section 4 and are summarized in Table 6.1-1.

6.1.1 Landfill 2 (M-2)

Investigation activities performed at site M-2 included the following:

- Sampling of two surface-water locations.
- Installation and sampling of three monitor wells.
- Tidal monitoring.

6.1.1.1 Conclusions

The surface-water sampling results indicate that two VOCs were detected at the two surface-water locations at concentrations greater than NJDEP surface-water criteria, and above maximum background concentrations. In addition, soluble lead was detected at a concentration greater than NJDEP criteria and the maximum background concentrations. Because the site formerly had a New Jersey Pollutant Discharge Elimination System (NJPDES) permit (permit No. 0057274), surface water has been sampled since 1985. The results from the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

Chlorobenzene was detected in the groundwater at concentrations exceeding the NJDEP GWQC and background in both downgradient monitor wells from both sampling rounds and in the upgradient well during one sampling round.

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Table 6.1-1

Main Post Site Summary and Recommendations

Site	Compounds that Exceed NJDEP Criteria and Maximum Background	Recommendations
M-2 Landfill	Groundwater: Chlorobenzene in 3 wells Surface water: Tetrachloroethene Trichloroethene	Conduct groundwater and surface-water monitoring on a long-term basis.
M-3 Landfill	Groundwater: Chlorobenzene (low value) in 1 well Lead in 1 sample Surface water: None	Conduct groundwater and surface-water monitoring on a long-term basis. Excavate partially exposed drum and conduct confirmatory sampling.
M-4 Landfill	Groundwater: DDT (low value) in 1 well	Conduct groundwater monitoring on a long-term basis.
M-5 Landfill	Groundwater: Tetrachloroethene in 1 well	Conduct groundwater monitoring and sampling of surface-water location SS-6 on a long-term basis.
M-8 Landfill	Groundwater: Tetrachloroethene in 1 well Benzene in 1 well Chlorobenzene in 2 wells	Conduct groundwater monitoring and sampling of surface-water location SS-7 on a long-term basis.
M-12 Landfill	Groundwater: None	Conduct groundwater monitoring on a long-term basis.
M-14 Landfill	Groundwater: None Surface water: None	Conduct groundwater and surface-water monitoring on a long-term basis.
M-15 Water Tank	Soil: DDT DDE Lead Cadmium Zinc	Excavate contaminated soil and perform confirmatory sampling.
M-16 Former Pesticide Bldg.	Soil: Aldrin in 1 sample Dieldrin in 4 samples Heptachlor in 1 sample DDE in 1 sample DDT in 2 samples Groundwater: None	Excavate contaminated soil and perform confirmatory sampling. Abandon site monitor well.
M-18 Former Training Area	Soil: Chrysene (all SVOCs in 1 sample) Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Groundwater: DDD in 1 well Lead in 1 well	Locate and excavate possible UST and any contaminated soil and perform confirmatory sampling. Excavate stained soil at SB-06 and conduct confirmatory sampling. Conduct groundwater monitoring on a long-term basis.

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Table 6.1-1

Main Post Site Summary and Recommendations (Continued)

Site	Compounds that Exceed NJDEP Criteria and Maximum Background	Recommendations
AOC-3 Former Sewage Treatment Plant	Soil: None Sediment: None	No further action.
Pre-1941 Treatment Plant	Sediment: Arsenic Cadmium Chromium Zinc	No further action.
PCB Transformers	Soil: Building 292 Concrete: Buildings 1002, 1208, 1209	Remediate stained concrete when transformers are removed. Conduct confirmatory sampling. Sample soil at Bldg. 292 to determine extent of contamination.

The results of the tidal monitoring indicate that there is no apparent relationship between the changing creek levels and the water levels in upgradient monitor well MW-1; however, a direct relationship was observed between changing creek levels and the water levels in downgradient monitor wells MW-2 and MW-3. Conductivity and salinity results indicate the presence of freshwater in the creek at site M-2. Freshwater was indicated at monitor wells MW-1 and MW-3. A moderate to high specific conductance was measured at monitor well MW-2, which is unexplained.

6.1.1.2 Recommendations

Although groundwater sample results at site M-2 exceeded NJDEP criteria for one VOC, and surface-water results were slightly exceeded by two VOCs, immediate remedial action is not required for several reasons. Immediate remedial action is usually based on an immediate threat to human health. Shallow groundwater flows toward Mill Creek, as indicated by water-level measurements in site monitor wells, and there are no known uses of groundwater at or downgradient of the site. Although there is slight VOC contamination in Mill Creek, there is no use of this water for human consumption. In fact, Mill Creek becomes saline immediately downgradient of site M-2. Therefore, the groundwater and surface waters are not used for drinking water.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future. Although downgradient surface-water samples were not taken during this round, previous sampling at site M-8 indicated that NJDEP surface-water criteria were not exceeded for VOCs. Therefore, the only portion of Mill Creek for which NJDEP surface-water criteria are exceeded is the portion between sites M-2 and M-8. All of this portion is on Fort Monmouth property and, therefore, access to it is restricted.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, the Fort Monmouth Directorate of Public Works (DPW) proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells, and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

6.1.2 Landfill 3 (M-3)

Investigation activities performed at site M-3 included the following:

- Geophysical surveys.
- Installation and sampling of three monitor wells.
- Sampling of three surface-water locations.

6.1.2.1 Conclusions

The geophysical surveys indicate that the extent of the identified waste material is within the suspected boundaries of the landfill. Site monitor wells have been installed in appropriate locations to monitor groundwater quality upgradient and downgradient of the waste material. In an isolated area of the site the GPR results indicated hyperbolic radar signatures typical of a buried drum or drums. A partially exposed drum was also observed at this location.

Groundwater quality results indicate that chlorobenzene was detected in one downgradient well below laboratory quantitation limits, but just above NJDEP GWQC and background from one sampling round. Lead was also detected at levels above NJDEP GWQC and background.

The surface-water quality results indicate that no organic or inorganic concentrations exceeded both NJDEP surface-water criteria and the maximum background concentration. Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. The results from the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

6.1.2.2 Recommendations

Although NJDEP groundwater criteria were exceeded for one VOC, immediate remedial action is not required for several reasons. First, the measured value for the VOC was below the quantitation limit and just slightly above the GWQC. In addition, the shallow groundwater flows toward Lafetra Creek, as indicated by water-level measurements in site monitor wells, and there are no known uses of groundwater at or downgradient of the site. Surface-water samples did not exceed NJDEP surface-water criteria. Therefore, there is no immediate threat to human health.

In addition, because surface-water sampling has been performed at this site since 1986, and the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells, and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be the targeted for the monitoring program.

The partially exposed drum will be excavated. The area immediately around and under the drum will be investigated for additional drums. Any excavated drums will be examined to determine if hazardous materials were present or still exist. The drum and the excavation will be monitored with a photoionization detector (PID). NJDEP will be requested to send a representative to monitor the excavation. If there is no indication that the drum contained, or still contains, hazardous materials and elevated readings are not observed on the PID, the excavation will be backfilled and no further action will be taken. If contamination is identified, additional sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993).

6.1.3 <u>Landfill 4 (M-4)</u>

Investigation activities performed at site M-4 included the following:

- Installation and sampling of three monitor wells.

6.1.3.1 Conclusions

One pesticide compound was detected at a concentration just above the NJDEP GWQC and background in the upgradient well in both the routine and duplicate samples. The pesticide was not detected in downgradient monitor wells, and also was not detected during previous sampling at downgradient location SS-5 (WESTON, 1993).

6.1.3.2 Recommendations

Although NJDEP groundwater criteria were exceeded for one pesticide, no immediate remedial action is required. The measured value of the pesticide was just slightly above the GWQC. Shallow groundwater flows toward Mill Creek, as indicated by water-level measurements in site monitor wells, and there are no known uses of groundwater at or downgradient of the site. No surface-water sampling was performed at this site during this project. The surface water was previously sampled downstream, but was not analyzed for pesticides. Since Mill Creek flows on Fort Monmouth property between sites M-4 and M-8, access to this stream is restricted.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor well locations are adequately placed to monitor downgradient groundwater, DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern (including pesticides) identified in the first two rounds of sampling would be targeted for the long-term groundwater and surface-water monitoring program.

6.1.4 Landfill 5 (M-5)

Investigation activities performed at site M-5 included the following:

- Installation and sampling of two monitor wells.

6.1.4.1 Conclusions

PCE was detected in the upgradient well in concentrations exceeding NJDEP GWQC and background from both sampling rounds. Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. During previous investigations, PCE was also detected at downgradient surface-water sampling location SS-6 (WESTON, 1993). Surface water was not sampled at site M-5 during this investigation because the maximum VOC concentrations at this site during previous rounds of sampling were less than the maximum concentrations at site M-2, which is upgradient. For site M-2, the results of the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

6.1.4.2 Recommendations

Although groundwater sample results exceeded NJDEP criteria for one VOC, immediate remedial action is not required. Shallow groundwater at the site flows toward Mill Creek and Lafetra Creek, and there are no known uses of groundwater at or downgradient of the site. No surface-water sampling was performed at this site during this project. Previous sampling rounds have indicated that some VOC concentrations exceed NJDEP surface-water criteria in Mill Creek adjacent to site M-5. However, previous rounds of sampling have indicated that VOC concentrations do not exceed surface-water criteria at site M-8, which is downgradient of site M-5. Therefore, there is little immediate threat to human health.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

6.1.5 <u>Landfill 8 (M-8)</u>

Investigation activities performed at site M-8 included the following:

- Abandonment of previously installed monitor wells and piezometers.
- Installation and sampling of four monitor wells.

- Tidal monitoring.

6.1.5.1 Conclusions

Due to highly turbid conditions and poor water-level recovery of the original monitor wells, all original monitor wells and piezometers were abandoned.

Groundwater sampling results indicate low concentrations of benzene and chlorobenzene were detected in two downgradient monitor wells, and PCE concentrations were detected in the upgradient well (MW-12) exceeding NJDEP GWQC. Additionally, PCE and other VOCs were previously detected at location SS-7, downgradient of site M-8.

Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. However, surface water was not sampled at site M-8 during this investigation because the maximum VOC concentrations at this site during previous rounds of sampling were less than the maximum concentrations at sites M-2 and M-3, which are upstream. The concentrations of VOCs at site M-8 for previous rounds were less than the NJDEP surface-water criteria.

The results of the tidal monitoring indicate that there is no apparent relationship between creek levels and water levels in MW-12 because of its distance from the creek. A poor to moderate relationship was measured between MW-14 and creek levels. A direct relationship was observed between creek levels and MW-13 and MW-15. The conductivity and salinity measurements in Parkers Creek indicate the presence of brackish to salty water at site M-8. Groundwater sampled from MW-12 indicates freshwater. Monitor wells MW-13, MW-14, and MW-15 indicate brackish to salty water in an area of the water-bearing unit close to Parkers Creek.

6.1.5.2 Recommendations

Although groundwater sample results exceeded NJDEP criteria for three VOCs, immediate remedial action is not required. Groundwater flows toward Lafetra Creek, as indicated by water-level measurements in site monitor wells, and there are no known uses of groundwater at or downgradient of the site. In fact, groundwater at three of the four monitor wells is brackish and unsuitable for drinking. The brackish water is a result of the proximity of the wells to Parkers Creek, and the direct relationship of tidal fluctuations and site groundwater levels. No surface-water sampling was performed at this site during this project. Previous sampling rounds have indicated that VOC concentrations did not exceed NJDEP surface-water criteria in the stream. Therefore, there is little immediate threat to human health.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

6.1.6 <u>Landfill 12 (M-12)</u>

Investigation activities performed at site M-12 included the following:

- Geophysical surveys.
- Installation and sampling of three monitor wells.
- Tidal monitoring.

6.1.6.1 Conclusions

The results of the geophysical surveys indicate that the identified fill and buried ferrous material are present within the suspected boundaries of the landfill. Monitor wells are positioned to adequately monitor groundwater downgradient of these areas.

Groundwater sampling results indicate that no compounds of concern exceeded NJDEP GWQC from upgradient and downgradient wells.

The results of the tidal monitoring relate to both sites M-12 and M-14. The data indicate that there is no apparent relationship between creek levels and water levels in MW-19 and MW-20. A poor to moderate relationship was measured between MW-16, MW-17, and MW-18 and creek levels. A direct relationship was observed between creek levels and MW-21. The conductivity and salinity measurements in Husky Brook indicate the presence of brackish to salty water at sites M-12 and M-14. Groundwater sampled from monitor wells at each location indicates freshwater.

6.1.6.2 Recommendations

Although no compounds of concern were identified at site M-12, because of the site's history of being used as a landfill, DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a long-term basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Contaminants identified in the first two rounds of sampling would be targeted for the monitoring program.

6.1.7 Landfill 14 (M-14)

Investigation activities performed at site M-14 included the following:

- Geophysical surveys.
- Installation and sampling of three monitor wells.

- Sampling of two surface-water locations.
- Tidal monitoring.

6.1.7.1 Conclusions

The results of the geophysical surveys indicate that fill and some metallic debris exist throughout the site; however, a discrete landfill boundary was not identified at site M-14. This may be due in part to the composition of the fill material and the small amount of subsurface metallic material present at the site.

The groundwater and surface-water sampling results indicate that no compounds of concern were detected above NJDEP GWQC and surface-water criteria.

Tidal monitoring was conducted at site M-12 and site M-14 simultaneously. The results of the tidal monitoring are discussed in Subsection 6.1.6.

6.1.7.2 Recommendations

Although no compounds of concern were identified at site M-14, because of the site's history of being used as a landfill, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Contaminants identified in the first two rounds of sampling would be targeted for the monitoring program.

6.1.8 Water Tank (M-15)

Investigation activities performed at site M-15 included the following:

- Collection of two surface soil samples near the water tank.

6.1.8.1 Conclusions

Two pesticide compounds and three metals, cadmium, zinc, and lead, were detected in surface soil at levels that exceeded NJDEP residential SCC and maximum background.

6.1.8.2 Recommendations

DPW has submitted the necessary documentation to Headquarters, Army Materiel Command/Army Environmental Center (HQAMC/AEC) to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations. The area of contamination encompasses the perimeter of the tank, about 10 feet at the widest point. The depth of contamination is assumed to be 6 inches. Excavation will be performed in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved. It is estimated that 13 yd^3 of soil will be excavated, assuming that soil is excavated to a depth of 6 inches. NJDEP will be requested to send a representative to observe the excavation.

6.1.9 Former Pesticide Storage Building (M-16)

Investigation activities performed at site M-16 included the following:

- Collection of four surface soil samples.
- Collection of two soil samples from discrete depth intervals at one soil boring location.
- Installation and sampling of one monitor well.

6.1.9.1 Conclusions

Pesticide compounds were detected at four surface soil sampling locations and in one soil boring sample (0 to 2-foot interval) in concentrations above NJDEP criteria and background.

No compounds of concern were detected in the groundwater above NJDEP criteria.

6.1.9.2 Recommendations

DPW has submitted the necessary documentation to HQAMC/AEC to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations. The area of contamination is approximately 50 feet by 20 feet. The depth of contamination is assumed to be 12 inches. Excavation will be conducted in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved. It is estimated that 56 yd^3 of soil will be excavated, assuming that soil will be excavated to a depth of 12 inches. NJDEP will be requested to send a representative to observe the excavation.

The site monitor well will be properly abandoned due to the nondetection of compounds of concern in groundwater. The remedial activities proposed will remediate potential source areas of pesticides detected in soil.

6.1.10 Former Training Area (M-18)

Investigation activities performed at site M-18 included the following:

- Geophysical surveys.
- Soil sampling at nine soil boring locations.
- Installation and sampling of two monitor wells.

6.1.10.1 Conclusions

The geophysical surveys identified several anomalies indicative of buried waste and fill material within the suspected boundaries of the site M-18 area. One anomaly was indicative of a UST or storage tank component. The geophysical results indicate that soil borings and monitor wells were appropriately located to evaluate subsurface conditions downgradient and within landfill boundaries.

The soil sampling results indicated that six SVOCs were detected at SB-06 in concentrations that exceeded the NJDEP criteria and established background concentrations.

The groundwater sampling results indicate that 4,4-DDD was detected at a concentration just above the NJDEP GWQC in one well (MW-24) from both sampling rounds. Lead was detected in one location above NJDEP GWQC and background. TPH concentrations were also detected just above laboratory quantitation limits in MW-24 and MW-25 in both sampling rounds.

6.1.10.2 Recommendations

Trenching will be performed at the suspected UST or UST component location to confirm the geophysical results and to excavate if necessary. A PID will be used to conduct field screening during the excavation. The excavation will be performed in conjunction with confirmatory sampling, in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993), if a UST is encountered to ensure that NJDEP SCC are achieved. NJDEP will be requested to send a representative to observe the excavation.

Additionally, soil at soil boring SB-06 will be excavated. If it is determined that the suspected UST is the source of contamination at SB-06, this location will be remediated in conjunction with the UST. Confirmatory sampling will also be conducted.

DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

6.1.11 Former Main Post Sanitary Treatment Plant (AOC-3)

Investigation activities performed at site AOC-3 included the following:

- Collection of two soil samples from two soil boring locations.
- Collection of one sediment sample from one location in the Parkers Creek outfall area.

6.1.11.1 Conclusions

The results of the soil and sediment sampling indicated that compounds of concern were not detected above the NJDEP criteria and established background concentrations.

6.1.11.2 Recommendations

No further action will be taken.

6.1.12 Pre-1941 Sanitary Treatment Plant

Investigation activities performed at the former STP included the following:

- Collection of one sediment sample from the outfall area.

6.1.12.1 Conclusions

Nine metals were detected above NJDEP criteria in the sediment sample collected at the outfall area. In addition, four metals (arsenic, cadmium, chromium, and zinc) exceeded their respective maximum background concentrations. The other five metals were detected below established background concentrations.

6.1.12.2 Recommendations

Although four metals were detected in sediment at levels exceeding NJDEP criteria and background, in the worst case the criteria were exceeded by a factor of three. Since the samples was taken at the outfall of the STP, the results are believed to be the worst case and the area of contamination is probably small. Access to this portion of Lafetra Creek is restricted although the stream is on the property boundary. The STP has not been used since 1941, and, presumably, the local ecology has reached an equilibrium. Therefore, since remediation would disrupt the ecology of the site, no further action will be taken.

6.1.13 PCB Transformers — Main Post

Investigation activities relative to the former location of PCB transformers included the following:

- Collection of soil and concrete samples for PCB analysis.

6.1.13.1 Conclusions

PCB levels in stained concrete were found to exceed NJDEP guidance levels in indoor vaults at Buildings 1002, 1208, and 1209. PCBs were also detected above applicable soil standards in the soil beneath transformer MP-062 on the northwest side of Building 292.

6.1.13.2 Recommendations

Since the indoor vaults are normally locked and are accessible by a very limited number of facility personnel, and the stained concrete cannot be removed without significantly disrupting electrical service, remedial work will be performed when the transformers are removed from service and the stained areas are made accessible. A warning sign will be posted, and workers entering the vaults will be trained to take precautions to prevent contamination.

Because the concentration of PCBs is only slightly above the SCC, additional sampling will be conducted beneath the former location of transformer MP-062 to determine the vertical and horizontal extent of PCBs in soil. The soil sampling will be performed in accordance with the NJDEP *Technical Requirements for Site Remediation* (NJDEP, 1993).

6.2 CHARLES WOOD

The conclusions and recommendations discussed in the following subsections are for the Charles Wood area of Fort Monmouth, and are based on the results of the site investigation activities.

These conclusions and recommendations are also presented with the site-specific discussions in Section 4 and are summarized in Table 6.2-1.

6.2.1 Wastewater Treatment Lime Pit 1 (CW-1)

Investigation activities performed at site CW-1 included the following:

- Collection of soil samples from four soil borings.
- Installation and sampling of four monitor wells at each of the soil boring locations.

6.2.1.1 Conclusions

The soil sample results indicate that compounds of concern were either not detected or were below laboratory quantitation limits and NJDEP criteria.

The groundwater sampling results indicate that TCE, PCE, and 1,2-dichlorobenzene were detected in the groundwater downgradient of the site at levels that exceeded the NJDEP criteria.

6.2.1.2 Recommendations

Although NJDEP groundwater criteria were exceeded by three VOCs at this site, immediate remedial action is not required. The probable source of contamination has been eliminated since chemicals are not being disposed of in the pit. The pit was cleaned in October 1992 and the limestone sludge was removed and disposed of as a hazardous waste. Hazardous waste is

Table 6.2-1

Charles Wood Site Summary and Recommendations

Site	Compounds that Exceed NJDEP Criteria and Maximum Background	Recommendations
CW-1 Acid Pit	Soil: None Groundwater: 1,2-Dichloroethene in 1 well Trichloroethene in 2 wells Tetrachloroethene in 1 well	Conduct soil-gas survey. Based on the results of the survey, install and sample two additional monitor wells. Conduct groundwater monitoring on a long-term basis for existing and newly installed monitor wells.
CW-2 Acid Pit	Soil: PCBs in 1 sample Groundwater: Tetrachloroethene in 1 well	Conduct soil-gas survey. Based on the results of the survey, install and sample two additional monitor wells. Collect soil samples for PCBs from monitor well borings. Conduct groundwater monitoring on a long-term basis for existing and newly installed monitor wells.
CW-3	No samples collected.	Facility will perform trenching to investigate site. If there is no indication of subsurface contamination, then no further action will be taken.
CW-3A Debris Site	Geophysics survey	Facility will investigate geophysics anomalies by backhoe trenching. If there is no indication of subsurface contamination, no further action will be taken.
CW-4 Indoor Firing Range	Soil: Lead	The contaminated soil will be excavated and confirmatory sampling will be performed.
CW-5 Former Sewage Treatment Plant	Soil: None Sediment: None	No further action.
CW-6 Pesticide Storage Building	Soil: Cadmium in 1 sample Dieldrin in 1 sample Groundwater: Benzene in 1 sample	Conduct groundwater monitoring on a long-term basis.
CW-9 Sludge Dump	Soil: Cadmium in 1 sample Groundwater: None	No further action.
AOC-7 Former Drum Storage Area	Soil: None	No further action.
PCB Transformers	Soil: Building 2000 (4 samples)	Excavate contaminated soil and conduct confirmatory sampling.

currently collected for proper disposal off-site and waste is no longer disposed of in the pit. Shallow groundwater flows toward and discharges to the headwaters of Wampum Brook, as indicated by water-level measurements in site monitor wells. There are no known uses of groundwater between the acid neutralization pit and Wampum Brook. Surface-water samples were taken in Wampum Brook in the Charles Wood area and Mill Creek (as Wampum Brook is called further to the east) for use as background samples. No VOCs were detected in these samples, therefore, there is no immediate threat to human health.

The extent of VOC concentrations in groundwater will be investigated by soil-gas survey techniques. The soil-gas survey will be performed on an established grid pattern to estimate the lateral extent of VOCs in the vicinity of the neutralization pit. The results of the soil-gas survey will be used to locate two additional monitor wells, if necessary, at the downgradient edge of the plume. DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and the two newly installed monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

6.2.2 Wastewater Treatment Lime Pit 2 (CW-2)

Investigation activities performed at site CW-2 included the following:

- Collection of soil samples from four soil borings.
- Installation and sampling of four monitor wells at each of the soil boring locations.

6.2.2.1 Conclusions

The results of the soil sampling indicate that one PCB compound (Aroclor-1254) was detected in SB-30 at a concentration slightly above the NJDEP SCC. PCB compounds were not detected in the other three soil borings. In addition, PCBs were not detected in groundwater samples in the corresponding well location, MW-30.

Groundwater sampling results indicate that PCE was detected in the groundwater in one of the four wells (MW-32) in one of the two sampling rounds at levels slightly exceeding the NJDEP GWQC.

6.2.2.2 Recommendations

Although NJDEP groundwater criteria were exceeded by one VOC at this site, immediate remedial action is not required. The source of contamination has been eliminated since chemicals are not being disposed of in the pit. The pit was cleaned in October 1992 and the limestone sludge was removed and disposed of as a hazardous waste. Hazardous waste is currently collected for proper disposal off-site and waste is no longer disposed of in the pit. Shallow groundwater flows toward and discharges to the headwaters of Wampum Brook, as indicated by water-level measurements in site monitor wells. There are no known uses of groundwater between the acid neutralization pit and Wampum Brook. Surface-water samples were taken in Wampum Brook in the Charles Wood area and Mill Creek (as Wampum Brook is called further to the east) for use as background samples. No VOCs were detected in these samples, therefore, there is no immediate threat to human health.

The extent of PCE concentrations in groundwater will be investigated by soil-gas survey techniques. The soil-gas survey will be performed on an established grid pattern to estimate the lateral extent of VOCs in the vicinity of the neutralization pit. The results of the soil-gas survey will be used to locate two additional monitor wells if necessary. DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and from the two newly installed monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program. When the additional monitor wells are installed, soil samples will be collected for PCB analysis because of the detection of PCBs in a soil sample collected from SB-30.

6.2.3 Landfill 3 (CW-3)

Investigation activities were not conducted as part of this investigation because of construction rubble that was present at the site during the field effort, which prohibited sample collection as planned. The rubble was removed and properly disposed of in June 1995 and exploratory trenches are planned to determine if any subsurface debris or soil staining is present. Field screening will be performed during excavation using a PID. NJDEP will be requested to send a representative to observe the investigation. In the absence of any elevated PID readings or evidence of subsurface debris, the excavation will be backfilled and no further action will be taken. If contamination is identified, then sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993). Soil sample analytes will be collected and analyzed for the full range of contaminants.

6.2.4 Debris Site (CW-3A)

Investigation activities performed at site CW-3A included only geophysical surveys to evaluate accessible areas for potential subsurface waste.

6.2.4.1 Conclusions

Geophysical surveys indicated two areas where subsurface metallic debris may be present.

6.2.4.2 Recommendations

Exploratory trenching will be performed to investigate areas where subsurface metallic debris may be present. Field screening will be conducted with a PID during the excavation. NJDEP will be requested to send a representative to observe the excavation. In the absence of elevated PID readings or evidence of subsurface debris, the excavation will be backfilled and no further action will be taken. If contamination is identified, then sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993). Soil sample analytes will be collected and analyzed for the full range of contaminants.

6.2.5 Range (Small Arms) (CW-4)

Investigation activities performed at site CW-4 included the following:

- Collection of one surface soil sample.
- Collection of one soil boring sample.

6.2.5.1 Conclusions

Soil sampling results indicate that only lead was detected at a concentration exceeding the NJDEP SCC at the spent round disposal area.

6.2.5.2 Recommendations

DPW has submitted the necessary documentation to HQAMC/AEC to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations.

The contaminated soil will be removed and disposed of in accordance with applicable regulations. The area of contamination is approximately 8 feet in diameter. The estimated depth of excavation is assumed to be 7 feet. Excavation will be performed in conjunction with confirmatory sampling to ensure that NJDEP SCC are achieved. It is estimated that 17 yd^3 of soil will be excavated, assuming that soil is excavated to a depth of 7 feet. NJDEP will be requested to send a representative to observe the excavation.

6.2.6 Former Sanitary Treatment Plant (CW-5)

Investigation activities performed at site CW-5 included the following:

- Collection of one sediment sample from the outfall area east of Hope Road.
- Installation of two soil borings and collection of two soil samples, one from each boring.

6.2.6.1 Conclusions

Three compounds (4,4′-DDT, 4,4′-DDD, and 4,4′-DDE) were detected in the sediment at levels that were above the NJDEP sediment guidance criteria but below background. Soil results were below the NJDEP SCC and established maximum background.

6.2.6.2 Recommendations

No further action will be taken.

6.2.7 Pesticide Storage Building T-2044 (CW-6)

Investigation activities performed at site CW-6 included the following:

- Installation of two soil borings and collection of two samples from SB-34 and one from SB-01.
- Installation and sampling of one monitor well.
- Sampling of existing monitor well MW-1.
- Collection of one surface soil sample from a drainage ditch.

6.2.7.1 Conclusions

The pesticide dieldrin and the metal cadmium were detected in the soil at two different locations, each at levels that exceeded NJDEP SCC and background. However, the average concentrations of dieldrin and cadmium in surface soil samples at CW-6 and CW-9 did not exceed the NJDEP SCC. Cadmium is typically present at elevated levels at golf courses. Groundwater samples indicated that benzene was detected in the existing monitor well (MW-1), which is attributed to a previously removed UST. Benzene was not detected in downgradient wells. Pesticides were not detected in any groundwater samples above NJDEP criteria.

6.2.7.2 Recommendations

NJDEP groundwater criteria were exceeded for one VOC, but the measured value was just slightly above the GWQC. In addition, one pesticide was detected in soils at a level above criteria and background, but was just slightly above the SCC. Therefore, no immediate remedial action is necessary.

DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

6.2.8 Sludge Dump (CW-9)

Investigation activities performed at site CW-9 included the following:

- Installation and sampling of two monitor wells.
- Collection of one soil sample from a soil boring.
- Collection of nine surface soil samples.

6.2.8.1 Conclusions

The average concentration of cadmium in surface soil samples at CW-6 and CW-9 and beryllium in surface soil location SS-09 at site CW-9 do not exceed the NJDEP SCC. Cadmium is typically present at elevated levels at golf courses. No compounds of concern were detected in site groundwater above NJDEP criteria.

6.2.8.2 Recommendations

No further action will be taken.

6.2.9 Former Hazardous Waste Storage Area (AOC-7)

Investigation activities performed at site AOC-7 included the installation of six soil borings. One soil sample was collected from each boring at depths ranging from 8 to 14 feet.

6.2.9.1 Conclusions

No compounds of concern were detected at this site at levels that exceeded NJDEP criteria.

6.2.9.2 Recommendations

No further action will be taken.

6.2.10 PCB Transformers — Charles Wood

Investigation activities performed at the former PCB transformer locations included the collection of seven surface soil samples for PCB analysis.

6.2.10.1 Conclusions

PCBs were detected above the NJDEP criteria in each of the four soil samples collected downgradient of the former transformer location northeast of Building 2000 (transformer CW-035). PCBs were not detected above NJDEP criteria in samples collected from the other three sampling locations.

6.2.10.2 Recommendations

Additional samples will be taken to further delineate the extent of contamination and the contaminated soil will be removed and disposed of in accordance with applicable regulations. The depth of contamination is assumed to be 6 inches. Excavation will be performed in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved.

ACRONYMS/REFERENCES

95P-4674

WESTON

LIST OF ACRONYMS

AA	atomic absorption spectrophotometer
ACM	asbestos-containing material
AMC	U.S. Army Materiel Command
AOC	area of concern
ASTM	American Society for Testing and Materials
ATV	all terrain vehicle
AVRADA	U.S. Army Aviation Research and Development Activity
AWQC	ambient water quality criteria
bgs	below ground surface
BNA	base/neutral/acid
BRAC	Base Realignment and Closure Program
CDAP	Chemical Data Acquisition Plan
CECOM	U.S. Army Communications and Electronics Command
CFR	Code of Federal Regulations
CLP	Contract Laboratory Program
DCAA	Defense Contract Audit Agency
DENTAC	U.S. Army Dental Activity
DIS	Defense Investigation Services
DOI	U.S. Department of the Interior
DOP	di-octyl-phthalate
DOT	U.S. Department of Transportation
DPW	Directorate of Public Works, Fort Monmouth, New Jersey
DQOs	data quality objectives
EM	electromagnetic
EPA	U.S. Environmental Protection Agency
EqP	equilibrium partitioning
ER-L	Effects Range-Low (NOAA)
FSP	Field Sampling Plan
ft^2	square feet
ft msl	feet above mean sea level
FWS	U.S. Fish and Wildlife Service
GC/MS	gas chromatograph/mass spectrometer
GC	gas chromatograph
GOGO	government-owned, government-operated
gpm	gallons per minute
GPR	ground penetrating radar
GWQC	NJDEP Groundwater Quality Criteria
HHCs	halogenated hydrocarbons
HQAMC/AEC	Headquarters, Army Materiel Command/Army Environmental Center
IA	Installation Assessment
IATA	International Air Transport Association
ICP	inductively coupled plasma spectrometer
ID	inside diameter
ISC	U.S. Army Information Systems Command

LIST OF ACRONYMS (Continued)

ISMA	U.S. Army Information System Management Agency
kHz	kiloHertz
LABCOM	U.S. Army Laboratory Command
m^3	cubic meter
MAG	magnetometry
MCSS	Monmouth County Soil Survey
MEDDAC	U.S. Army Medical Department Activities
mg/cm^2	milligrams per square centimeter
mg/g	milligrams per gram
mg/kg	milligrams per kilogram
mg/m^3	milligrams per cubic meter
MHz	megaHertz
mS/m	milliSiemens per meter
MS	matrix spike
MSD	matrix spike duplicate
msl	mean sea level
µg/g	microgram per gram
µg/kg	microgram per kilogram
µg/L	microgram per liter
NJAC	New Jersey Administrative Code
NJDEP	New Jersey Department of Environmental Protection
NMCRSA	Northeast Monmouth County Regional Sewerage Authority
NOAA	National Oceanic and Atmospheric Administration
nT	nanoTesla
OVA	organic vapor analyzer
OVM	organic vapor monitor
PAH	polyaromatic hydrocarbon
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PE	performance evaluation
PID	photoionization detector
ppm	parts per million
ppth	parts per thousand
PQL	practical quantitation levels
PVC	polyvinyl chloride pipe
QA/QC	quality assurance/quality control
QC	quality control
R&D	research and development
SBA	Small Business Administration
SCC	Soil Cleanup Criteria
SHERP	Safety, Health and Emergency Response Plan
SI	site investigation
SIR	Subsurface Interface Radar™

LIST OF ACRONYMS
(Continued)

SOP	standard operating procedure
STP	sanitary treatment plant
SVOC	semivolatile organic compound
TAL	Target Analyte List
TCL	Target Compound List
TIC	tentatively identified compound
TOC	site-specific organic carbon
TPH	total petroleum hydrocarbons
TRI-TAC	Joint Tactical Communications Office
TSCA	Toxic Substances Control Act
URS	URS Consultants, Inc.
USACE	U.S. Army Corps of Engineers
USACHCS	U.S. Army Chaplain Center and School
USAMPS	U.S. Army Military Preparatory School
USATHAMA	U.S. Army Toxic and Hazardous Materials Agency
USC	Unified Soil Classification
UST	underground storage tank
vac	vacuum
VOA	volatile organic analysis
VOC	volatile organic compound
WESTON®	Roy F. Weston, Inc.
yd^3	cubic yard

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APPENDICES

APPENDIX A

MAIN POST AND CHARLES WOOD BOREHOLE LOGS AND WELL COMPLETION SUMMARIES

MAIN POST
BOREHOLE LOGS AND WELL COMPLETION SUMMARIES

BOREHOLE ID : MP2-MW1 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/14/94 END DATE : 12/14/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 22.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 22.75 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLINGTON REEVES
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	19.440
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32584

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 33.1"
Longitude-West: 74 deg 03' 08.8"

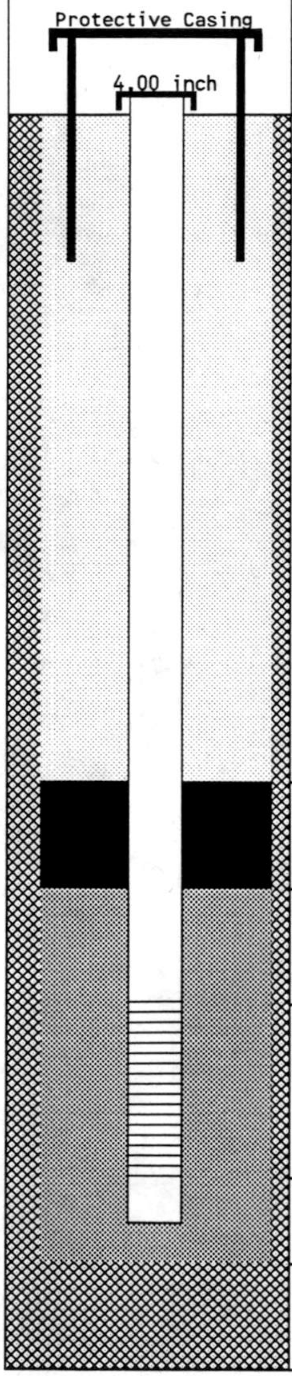
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 2
DRILLING FIRM J.C. ANDERSON
INSPECTOR K. VALENTI

WELL ID MP2-MW1
START DATE 12/14/94
COMPLETION DATE 12/14/94

WATER LEVELS



DEPTH		ELEV.
1.60	TC	21.04
0.00	GS	19.44
3.75	BN	15.69
5.75	SP	13.69
7.00	SC	12.44
22.29	BS	-2.85
22.00	TD	-2.56

DRILLING SUMMARY

Driller WELLINGTON REEVES
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 7.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.60 **ft.** **Protective Casing:** 1.98 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 3.00 **ft.**

Seal Type: BENTONITE **Interval:** 3.75 to 5.75 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 5.75 to 22.75 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 7.00 to 22.29 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 22.29 to 22.75 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 12/22/94
Method Surge blocking,overpump
Yield <1 gpm **Purged Volume** 9 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	22.00
SITE NAME	:	MAIN POST 2	LOGGER	:	K. VALENTI
BORING ID	:	MP2-MW1	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	12/14/94
ELEVATION	:	19.440 surveyed	DATE COMPLETED	:	12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			75	Silty sand, SM	DK BROWN	LSE	MST	4 6	HNU 0.0	Fill. Topsoil-organics.
				Poorly graded sand, SP	LT BROWN	LSE	MST	5 6	HNU 0.0	Fill, M-F sand (parking lot fill) with some rounded stones.
18	1									
				No Sample Recovered						
17	2		100	Poorly graded sand, SP	LT BROWN	LSE	MST	5 5 4 4	HNU 0.0	Uncert./Fill? Mostly sand (m-f) little gravel, lit. silt, some small rounded stones, same as above.
16	3									
15	4		100	Silty sand, SM	GRAYISH BROWN	SFT	WET	5 7 10	HNU 0.0	Same as above interval, Mottling noted in matrix.
				Sandy lean clay, CL	LT ORANGE BROWN	FRM	WET	8	HNU 0.0	Orange-brown sand, some silt, clay. Gray mottling noted throughout matrix in spoon.
14	5									
				Poorly graded sand, SP	ORANGE-BROWN	LSE	WET		HNU 0.0	4" layer of dark orange to brown coarse to medium sand.
				Silty sand, SM	GRAYISH BROWN	FRM	MST		HNU 0.0	Mottling noted some small sub-angular to sub-rounded.
13	6		100	Silty sand, SM	GRAYISH-BROWN	LSE	WET	7 13 11	HNU 0.0	Slight mottling, silty sand (wet)
				Sandy lean clay, CL	LT GRAYISH BRN	FRM	WET	12	HNU 0.0	Wet, mottled sandy clay (with silt)
12	7									
				Well-graded sand, SW	ORANGE-BROWN	LSE	WET		HNU 0.0	2" coarse to medium sand.
				Sandy lean clay, CL	BROWN LT GRAY	SFT	WET		HNU 0.0	Wet, mottled sandy clay with silt.
11	8		100	Silty sand, SM	LT GRAY-BROWN	LSE	WET	6 7 7 9	HNU 0.0	sharp contact.
				Silty sand, SM	BROWNISH DK GRY	SFT	WET		HNU 0.0	
10	9									
9	10		100	Silty sand, SM	BRN-DK GRY/BLK	SFT	SAT	7 9 10 9	HNU 0.0	Mostly silty sand. Mottle noted w/streaks of yellow & orange periodically throughout sps.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 22.00
SITE NAME	: MAIN POST 2	LOGGER	: K. VALENTI
BORING ID	: MP2-MW1	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/14/94
ELEVATION	: 19.440 surveyed	DATE COMPLETED	: 12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	BRN-DK GRY/BLK	SFT	SAT		HNU 0.0	Mostly silty sand, Mottle noted w/streaks of yellow & orange periodically throughout sps.
8	11									
7	12		100	Silty sand, SM	LT GRAYISH BRN	LSE	SAT	3 5 7 8	HNU 0.0	
				Sandy silt, ML	DK GRAY TO BLK	LSE	MST		HNU 0.0	
6	13									
5	14		100	Sandy silt, ML	LT BROWN	SFT	WET	4 4 4 4	HNU 0.0	
				Elastic silt, MH	DK GRAY-BLACK	SFT	MST		HNU 0.0	Color is dk gray to black with green tint.
4	15									
3	16		100	Elastic silt, MH	DK GRAY - BLACK	SFT	MST	7 8 8 9	HNU 0.0	Same lithology as above interval.
2	17			Silt, ML	DK GRAY-BLACK	FRM	MST		HNU 0.0	Dk gray to black. More consoidated. W.L. at 15' bgs.
1	18		100	Elastic silt, MH	DK GRAY	FRM	SAT	3 3 5 10	HNU 0.0	Saturated 18-19.6. Clayey texture, very little sand
0	19									
				Silt with sand, ML	GREEN - DK GRAY	SFT	MST		HNU 0.0	
-1	20		100	Silt with sand, ML	GREEN-DK GRAY	LSE	WET	7 7 9 13	HNU 0.0	

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 22.00
SITE NAME	: MAIN POST 2	LOGGER	: K. VALENTI
BORING ID	: MP2-MW1	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/14/94
ELEVATION	: 19.440 surveyed	DATE COMPLETED	: 12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silt with sand, ML	GREEN-DK GRAY	LSE	WET		HNU 0.0	
-1	21									
-2	22			Interval Not Sampled						Augered interval. TD of borehole 22.75.
-3	23									
-4	24									
-5	25									
-6	26									
-7	27									
-8	28									
-9	29									
-10	30									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP2-MW1	1	1	0.00	0.20	SPS		0	MF	80	20	0	0		NON	MOD	LSE	MST	
MP2-MW1	1	2	0.20	1.50	SPS		0	MF	100	0	0	0		NON	MOD	LSE	MST	
MP2-MW1	1	3	1.50	2.00	SPS		0		0	0	0	0						
MP2-MW1	2	1	2.00	4.00	SPS	F	10	MF	85	5	0	0		NON	MOD	LSE	MST	
MP2-MW1	3	1	4.00	4.40	SPS	F	5	MF	80	15	0	0		LOW	MOD	SFT	WET	
MP2-MW1	3	2	4.40	5.20	SPS		0	F	30	20	50	0		MOD	MOD	FRM	WET	
MP2-MW1	3	3	5.20	5.60	SPS		0	CM	100	0	0	0		NON	MOD	LSE	WET	
MP2-MW1	3	4	5.60	6.00	SPS		0	MF	70	20	10	0		LOW	POR	FRM	MST	
MP2-MW1	4	1	6.00	6.40	SPS	F	5	F	70	25	0	0		NON	POR	LSE	WET	
MP2-MW1	4	2	6.40	7.60	SPS		0		30	20	50	0		LOW	MOD	FRM	WET	
MP2-MW1	4	3	7.60	7.80	SPS		0	CM	100	0	0	0		NON	POR	LSE	WET	
MP2-MW1	4	4	7.80	8.00	SPS		0		30	20	50	0		MOD	MOD	SFT	WET	
MP2-MW1	5	1	8.00	8.80	SPS		0	MF	85	15	0	0		NON	MOD	LSE	WET	
MP2-MW1	5	2	8.80	10.00	SPS		0		50	40	10	0		LOW	POR	SFT	WET	
MP2-MW1	6	1	10.00	12.00	SPS		5		65	30	0	0		NON	POR	SFT	SAT	
MP2-MW1	7	1	12.00	12.60	SPS		0	FM	85	15	0	0		NON	MOD	LSE	SAT	
MP2-MW1	7	2	12.60	14.00	SPS		0		30	60	10	0		NON	MOD	LSE	MST	
MP2-MW1	8	1	14.00	14.60	SPS		0		40	50	10	0		LOW	POR	SFT	WET	
MP2-MW1	8	2	14.60	16.00	SPS		0	F	10	60	30	0		MOD	WEL	SFT	MST	
MP2-MW1	9	1	16.00	16.80	SPS		0		10	60	30	0		MOD	MOD	SFT	MST	
MP2-MW1	9	2	16.80	18.00	SPS		0		5	55	40	0		LOW	POR	FRM	MST	
MP2-MW1	10	1	18.00	19.60	SPS		0		10	45	45	0		MOD	WEL	FRM	SAT	
MP2-MW1	10	2	19.60	20.00	SPS		0		25	50	25	0		LOW	MOD	SFT	MST	
MP2-MW1	11	1	20.00	22.00	SPS		0		25	50	25	0		LOW	MOD	LSE	WET	
MP2-MW1	12	1	22.00	22.75	NS		0		0	0	0	0						

BOREHOLE ID : MP2-MW2   PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/13/94   END DATE : 12/13/94

LOGGER/COMPANY : K. VALENTE

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 18.00   DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 18.00 ft. BGS
METHOD : HSA   FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD :   FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD :   FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	13.360
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N   PERMIT # : NJ 29 32585

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N   No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N   No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

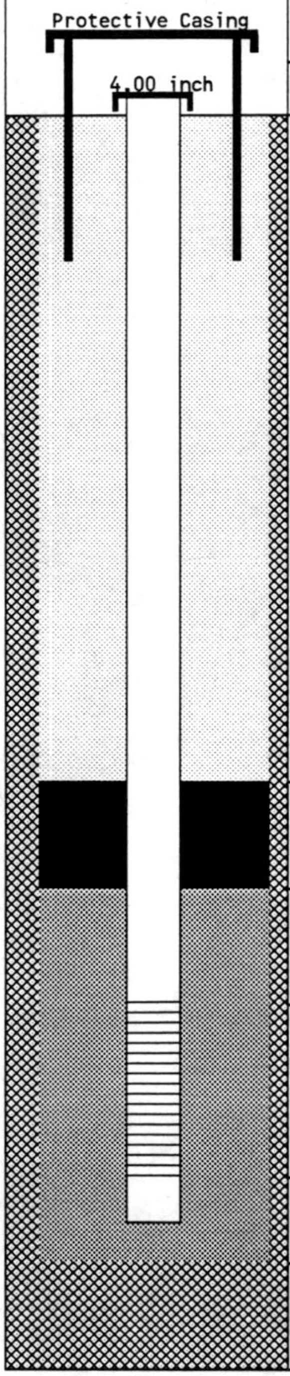
COMMENTS :
Moved original well location approx. 5' due S.E. of original staked location. MP2-MW-02 is a stickup well. Latitude-North 40 deg 18' 31.8"/Longitude-West: 74 deg 03' 18.9"

Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	DRILLING FIRM	J.C. ANDERSON
SITE NAME	MAIN POST AREA 2	INSPECTOR	K. VALENTE

WELL ID	MP2-MW2	WATER LEVELS
START DATE	12/13/94	
COMPLETION DATE	12/13/94	



DEPTH		ELEV.
2.14	TC	15.50
0.00	GS	13.36
3.46	BN	9.90
5.46	SP	7.90
7.46	SC	5.90
17.00	BS	-3.64
17.00	TD	-3.64

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 7.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.14 **ft.** **Protective Casing:** 2.36 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 3.46 **ft.**

Seal Type: BENTONITE **Interval:** 3.46 to 5.46 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 5.46 to 18.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 7.46 to 17.00 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 17.00 to 17.46 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 12/22/94
Method Surge blocking/overpump
Yield 2.5 gpm **Purged Volume** 90 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 18.00
SITE NAME	: MAIN POST AREA 2	LOGGER	: K. VALENTE
BORING ID	: MP2-MW2	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/13/94
ELEVATION	: 13.360 surveyed	DATE COMPLETED	: 12/13/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			75	Sandy silt, ML	BROWN/DK BROWN	LSE	MST	7 13 19 15	HNU 0.0	0-1.1' topsoil/organics plant & root fragments
12	1			Sandy silt, ML	BROWN/DK BROWN	LSE	MST		HNU 0.0	Fill. Coal fragments present.
				No Sample Recovered						
11	2		50	Sandy silt, ML	GREEN GRAY	SFT	MST	13 8 6 7	HNU 0.0	Contents sharp based on color changes. Slight organic odor. Downward coarsening sequence.
10	3			No Sample Recovered						
9	4			No Sample Recovered				13 5 2 1		
8	5									
7	6		50	Fill	GREEN & BLACK			34 9 5 5	HNU 1.1	Fill. Possible roof shingles. Slight odor @ Approx. 6.5' bgs. Sample appears saturated.
6	7			No Sample Recovered						
5	8		50	Silty sand, SM	BROWN-GRAY	SFT	WET	23 12 8 10	HNU 0.0	Fill and debris with silty sand. Wood and paper debris present.
4	9			No Sample Recovered						
3	10			No Sample Recovered			WET	2 2 5 9	HNU 0.0	Organic odor in empty spoon. Water entering borehole at 8'10" bgs.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 18.00
SITE NAME	: MAIN POST AREA 2	LOGGER	: K. VALENTE
BORING ID	: MP2-MW2	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/13/94
ELEVATION	: 13.360 surveyed	DATE COMPLETED	: 12/13/94

ELEVATION	DEPTH	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			No Sample Recovered			WET		HNU 0.0	Organic odor in empty spoon. Water entering borehole at 8'10" bgs.
2	11								
1	12	50	Elastic silt, MH	BROWN/DK GRAY	SFT	WET	5 3 2 2	HNU 0.0	Fill/uncertain. SPS filled with water.
0	13		No Sample Recovered						
-1	14	25	Silty sand, SM	GRAY BROWN	LSE	SAT	8 6 3 3	HNU 0.0	Fill. Recovery is slough.
			No Sample Recovered						
-2	15								
-3	16	100	Silty sand, SM	GRAY	LSE	SAT	4 5 9 14	HNU 0.0	16-17' slough.
-4	17		Other	TURQUOIS-GRAY	SFT	WET		HNU 0.0	Very soft silt clay material. Turquois-gray in color. Well set at 17' bgs. TD of borehole 18'bgs
-5	18								
-6	19								
-7	20								

BOREHOLE ID : MP2-MW3 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/13/94 END DATE : 12/13/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 16.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 15.60 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2: 2.00
INTERVAL: 15.60 ft. to 16.00 ft. BGS
METHOD : SPLIT SPOON FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLINGTON REEVES
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	10.980
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32586

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS......(Y)es (N)o: N
SLUG TESTS...............(Y)es (N)o: N
PACKER TESTS.............(Y)es (N)o: N
PUMPING TESTS............(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 35.5"
Longitude-West: 74 deg 03' 08.6"

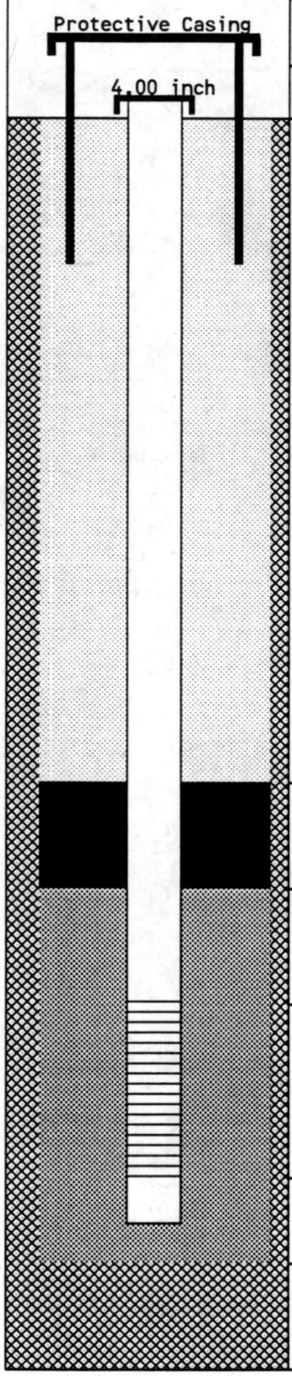
BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP2-MW2	1	1	0.00	1.10	SPS		0	MF	30	60	2	8		NON	MOD	LSE	MST	
MP2-MW2	1	2	1.10	1.50	SPS	F	10		35	48	2	5		NON	POR	LSE	MST	
MP2-MW2	1	3	1.50	2.00	SPS		0		0	0	0	0						
MP2-MW2	2	1	2.00	3.00	SPS		5		25	60	10	0		NON	MOD	SFT	MST	
MP2-MW2	2	2	3.00	4.00	SPS		0		0	0	0	0						
MP2-MW2	3	1	4.00	6.00	SPS		0		0	0	0	0						
MP2-MW2	4	1	6.00	7.00	SPS		0		0	0	0	0						
MP2-MW2	4	2	7.00	8.00	SPS		0		0	0	0	0						
MP2-MW2	5	1	8.00	9.00	SPS		0	MF	60	40	0	0		NON	MOD	SFT	WET	
MP2-MW2	5	2	9.00	10.00	SPS		0		0	0	0	0						
MP2-MW2	6	1	10.00	12.00	SPS		0		0	0	0	0					WET	
MP2-MW2	7	1	12.00	13.00	SPS		0	F	10	70	20	0		MOD	WEL	SFT	WET	
MP2-MW2	7	2	13.00	14.00	SPS		0		0	0	0	0						
MP2-MW2	8	1	14.00	14.50	SPS		10		60	20	8	2		NON	POR	LSE	SAT	
MP2-MW2	8	2	14.50	16.00	SPS		0		0	0	0	0						
MP2-MW2	9	1	16.00	17.00	SPS		10		60	20	5	5		NON	POR	LSE	SAT	
MP2-MW2	9	2	17.00	18.00	SPS		0		20	20	60	0		LOW	MOD	SFT	WET	

Well Completion Summary **Roy F. WESTON, Inc.**

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST AREA 3	**INSPECTOR**	K. VALENTE

WELL ID	MP2-MW3
START DATE	12/13/94
COMPLETION DATE	12/13/94

WATER LEVELS



DEPTH		ELEV.
1.70	TC	12.63
0.00	GS	10.93
2.00	BN	8.93
4.60	SP	6.33
5.00	SC	5.93
15.14	BS	-4.21
15.00	TD	-4.07

DRILLING SUMMARY

Driller	WELLS REEVE
Drilling Fluid	NONE
Well Type	SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.70 **ft.** **Protective Casing:** 2.12 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 2.60 to 4.60 **ft.**

Seal Type: BENTONITE **Interval:** 2.00 to 4.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 4.60 to 15.60 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 15.14 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 15.14 to 15.60 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date	12/22/94
Method	Surge blocking/overpump
Yield	2-3 gpm
Purged Volume	225 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale **Elevations are feet above mean sea level**

 06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 16.00
SITE NAME	: MAIN POST AREA 3	LOGGER	: K. VALENTI
BORING ID	: MP2-MW3	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/13/94
ELEVATION	: 10.980 surveyed	DATE COMPLETED	: 12/13/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			75	Poorly graded sand, SP	LT BROWN	LSE	MST	11 9 10 10	HNU 0.0	Fill. Medium to fine sand
9	1			Silty sand, SM	GRAYISH BROWN	FRM	MST		HNU 0.0	Fill. Slight organic odor Contains some organic debris and fragments of coal chips.
				No Sample Recovered						
8	2		50	Silty sand with gravel, SM	GRAYISH GREEN	FRM	MST	8 11 9 10	HNU 0.0	Fill with some organic debris, gravels and wood chips. Slight organic odor.
7	3			Organic soil with sand	GRAYISH WHITE	LSE	MST		HNU 0.0	Fill. Organic debris & trash.
				No Sample Recovered						
6	4		10	Fill		NA	NA	3 15 6 6	HNU 0.0	Fill with 2" of a few rock and wood, some trash
				No Sample Recovered						
5	5									
4	6		10	Fill	WHITE TAN	NA	NA	3 2 1 2	HNU 0.0	Fill includes 2" of trash debris & gravels (white-tan). Outside of spoon is dry.
				No Sample Recovered						
3	7									
2	8		20	Poorly graded sand, SP	GRAYISH GREEN	LSE	SAT	3 2 2 2	HNU 0.0	Fill. Organic odor present. Trash debris. Water at 8' bgs.
				No Sample Recovered						
1	9									
0	10		100	Fat clay, CH	DK BROWN	FRM	SAT	2 3 2 2	HNU 0.0	Fill/uncertain. Dk brown silty clay with organic debris, mild organic odor Recovery is saturated.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 16.00
SITE NAME	: MAIN POST AREA 3		LOGGER	: K. VALENTI
BORING ID	: MP2-MW3		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated		DATE STARTED	: 12/13/94
ELEVATION	: 10.980 surveyed		DATE COMPLETED	: 12/13/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Fat clay, CH	DK BROWN	FRM	SAT		HNU 0.0	Fill/uncertain. Dk brown silty clay with organic debris, mild organic odor Recovery is saturated.
-1	11									
-2	12		50	Lean clay with sand, CL	GREENISH-GRAY	SFT	SAT	1 1 1 1	HNU 0.0	Mild organic odor. Very soft silt clay material.
-3	13			No Sample Recovered						
-4	14		75	Silty sand, SM	DK GRAY	SFT	SAT	4 3 4 6		Soft silty sand, dk gray. Similar lithology to previous spoon - more sand.
-5	15									
				No Sample Recovered						TD of borehole 16' bgs.
-6	16									
-7	17									
-8	18									
-9	19									
-10	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP2-MW3	1	1	0.00	1.00	SPS		0	MF	100	0	0	0		NON	WEL	LSE	MST	
MP2-MW3	1	2	1.00	1.50	SPS		0	F	80	20	0	0		NON	POR	FRM	MST	
MP2-MW3	1	3	1.50	2.00	SPS		0		0	0	0	0						
MP2-MW3	2	1	2.00	2.80	SPS		20		60	15	5	0		NON	POR	FRM	MST	
MP2-MW3	2	2	2.80	3.00	SPS		0		20	0	0	80		NON	POR	LSE	MST	
MP2-MW3	2	3	3.00	4.00	SPS		0		0	0	0	0						
MP2-MW3	3	1	4.00	4.20	SPS		0		0	0	0	0		NA	NA	NA	NA	
MP2-MW3	3	2	4.20	6.00	SPS		0		0	0	0	0						
MP2-MW3	4	1	6.00	6.20	SPS		0		0	0	0	0		NA	NA	NA	NA	
MP2-MW3	4	2	6.20	8.00	SPS		0		0	0	0	0						
MP2-MW3	5	1	8.00	8.40	SPS	C	5	F	95	0	0	0		NON	MOD	LSE	SAT	
MP2-MW3	5	2	8.40	10.00	SPS		0		0	0	0	0						
MP2-MW3	6	1	10.00	12.00	SPS		0		5	10	70	15		HGH	WEL	FRM	SAT	
MP2-MW3	7	1	12.00	13.00	SPS		0		20	20	60	0		LOW	MOD	SFT	SAT	
MP2-MW3	7	2	13.00	14.00	SPS		0		0	0	0	0						
MP2-MW3	8	1	14.00	15.50	SPS		0		60	35	5	0		NON	POR	SFT	SAT	
MP2-MW3	8	2	15.50	16.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP3-MW4 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/05/95 END DATE : 01/05/95

LOGGER/COMPANY :

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 23.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 23.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	17.340
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : 29 32568

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

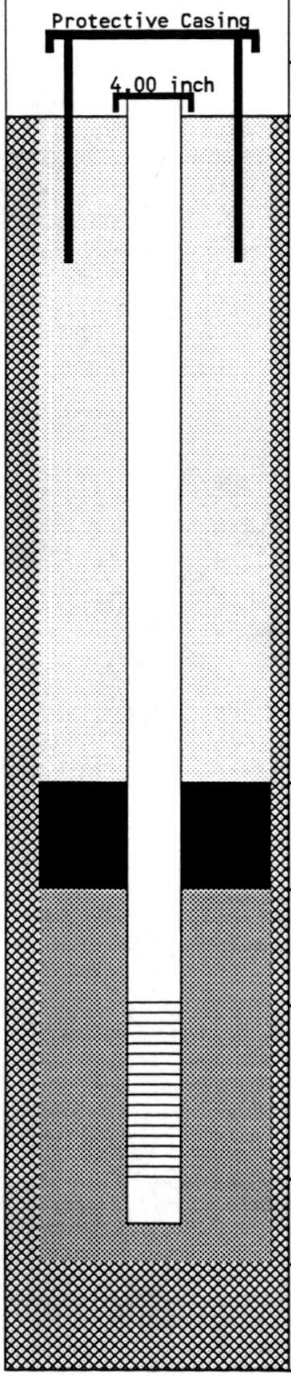
COMMENTS :
Latitude-North: 40 deg 18' 45.2"
Longitude-West: 74 deg 03' 09.3"

Well Completion Summary — **Roy F. WESTON, Inc.**

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 3
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID MP3-MW4
START DATE 01/05/95
COMPLETION DATE 01/05/95

WATER LEVELS



DEPTH		ELEV.
1.68	TC	19.02
0.00	GS	17.34
3.72	BN	13.62
6.72	SP	10.62
8.72	SC	8.62
23.26	BS	-5.92
23.00	TD	-5.66

DRILLING SUMMARY

Driller WELLINGTON REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 8.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.68 **ft.** **Protective Casing:** 2.36 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 3.72 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 3.72 to 6.72 **ft.**

Sand Pack Type : NO. 1 SAND MORIE **Interval:** 6.72 to 23.72 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 8.72 to 23.26 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 23.26 to 23.72 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/12/95
Method Bailing/overpumping
Yield ~2 gpm **Purged Volume** 154 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	23.00
SITE NAME	: MAIN POST 3		LOGGER	:	
BORING ID	: MP3-MW4		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	:	01/05/95
ELEVATION	: 17.340 surveyed		DATE COMPLETED	:	01/05/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0			Silty sand, SM	OLIVE GREEN	SFT	MST		OVM 0.0	0-0.2' bgs topsoil - grass and plant fragments
16	1			No Sample Recovered						
15	2		80	Silty sand, SM	OLIVE GREEN	SFT	MST		OVM 0.0	Coarsens downward.
14	3									
				No Sample Recovered						
13	4		60	Silty sand, SM	OLIVE GREEN	FRM	MST	16 19 38 31	OVM 0.0	Trace clay/gravel fragments.
12	5									
				No Sample Recovered						
11	6		75	Silty sand, SM	OLIVE GREEN	FRM	MST	5 12 14 15	OVM 0.0	
10	7									
				No Sample Recovered						
9	8		85	Silty sand, SM	OLIVE GREEN	FRM	MST	10 11 12 15	OVM 0.0	Trace gravel.
				Silty sand, SM	BROWN/OLIVE GRN	SFT	MST		OVM 0.0	Slightly more clayey and moister than above. Dk olive green w/lt Fe color sediments.
8	9									
				No Sample Recovered						
7	10		75	Silty sand, SM	DK OLIVE GREEN	SFT	WET	11 13 17 20	OVM 0.0	Sand w/clay matrix (similar to soils, found at M5 locations)

PROJECT	FT. MONMOUTH	TOTAL DEPTH	23.00
SITE NAME	MAIN POST 3	LOGGER	
BORING ID	MP3-MW4	DRILLING COMPANY	J.C. ANDERSON
NORTHING	0.0000 estimated	DRILLING RIG	MOBILE B-57
EASTING	0.0000 estimated	DATE STARTED	01/05/95
ELEVATION	17.340 surveyed	DATE COMPLETED	01/05/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	DK OLIVE GREEN	SFT	WET		OVM 0.0	Sand w/clay matrix (similar to soils, found at M5 locations)
6	11									
				No Sample Recovered						
5	12		80	Silty sand, SM	DK OLIVE GREEN	LSE	WET	12 15 18 14	OVM 0.0	Sand w/clay matrix, slightly more sandy.
4	13									
				No Sample Recovered						
3	14		65	Silty sand, SM	DK OLIVE GREEN	LSE	WET	11 16 19 22	OVM 0.0	Water is apparant, but soil is not permeable. Sand in silt/clay matrix.
2	15									
				No Sample Recovered						
1	16		85	Silty sand, SM	DK OLIVE GREEN	LSE	SAT	9 10 15 20	OVM 0.0	Sat 16' bgs. Interval above is wet during low tide.
0	17									
				No Sample Recovered						
-1	18		95	Silty sand, SM	DK OLIVE GREEN	LSE	SAT	11 22 26 30	OVM 0.0	
-2	19									
-3	20			No Sample Recovered						

PROJECT :	FT. MONMOUTH	TOTAL DEPTH :	23.00
SITE NAME :	MAIN POST 3	LOGGER :	
BORING ID :	MP3-MW4	DRILLING COMPANY :	J.C. ANDERSON
NORTHING :	0.0000 estimated	DRILLING RIG :	MOBILE B-57
EASTING :	0.0000 estimated	DATE STARTED :	01/05/95
ELEVATION :	17.340 surveyed	DATE COMPLETED :	01/05/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			95	Silty sand, SM	DK OLIVE GREEN	LSE	SAT	12 19 29 31	OVM 0.0	
-3	21									
-4	22			No Sample Recovered						
				Interval Not Sampled						Augered interval. Set well at 23' bgs.
-5	23									
-6	24									
-7	25									
-8	26									
-9	27									
-10	28									
-11	29									
-12	30									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP3-MW4	1	1	0.00	1.00	SPS		0	FM	50	40	5	5		NON	MOD	SFT	MST	
MP3-MW4	1	2	1.00	2.00	SPS		0		0	0	0	0						
MP3-MW4	2	1	2.00	3.60	SPS		0	MF	70	25	5	0		NON	MOD	SFT	MST	
MP3-MW4	2	2	3.60	4.00	SPS		0		0	0	0	0						
MP3-MW4	3	1	4.00	5.20	SPS		0	FM	70	25	5	0		NON	MOD	FRM	MST	
MP3-MW4	3	2	5.20	6.00	SPS		0		0	0	0	0						
MP3-MW4	4	1	6.00	7.50	SPS		0	FM	70	25	5	0		NON	MOD	FRM	MST	
MP3-MW4	4	2	7.50	8.00	SPS		0		0	0	0	0						
MP3-MW4	5	1	8.00	8.60	SPS		0	FM	70	25	5	0		NON	MOD	FRM	MST	
MP3-MW4	5	2	8.60	9.70	SPS		0	MF	55	40	5	0		NON	MOD	SFT	MST	
MP3-MW4	5	3	9.70	10.00	SPS		0		0	0	0	0						
MP3-MW4	6	1	10.00	11.50	SPS		0	MF	55	35	10	0		NON	MOD	SFT	WET	
MP3-MW4	6	2	11.50	12.00	SPS		0		0	0	0	0						
MP3-MW4	7	1	12.00	13.60	SPS		0	M	60	30	10	0		NON	MOD	LSE	WET	
MP3-MW4	7	2	13.60	14.00	SPS		0		0	0	0	0						
MP3-MW4	8	1	14.00	15.30	SPS		0	M	60	30	10	0		NON	MOD	LSE	WET	
MP3-MW4	8	2	15.30	16.00	SPS		0		0	0	0	0						
MP3-MW4	9	1	16.00	17.70	SPS		0	MF	60	30	10	0		NON	MOD	LSE	SAT	
MP3-MW4	9	2	17.70	18.00	SPS		0		0	0	0	0						
MP3-MW4	10	1	18.00	19.90	SPS		0	MF	60	30	10	0		NON	MOD	LSE	SAT	
MP3-MW4	10	2	19.90	20.00	SPS		0		0	0	0	0						
MP3-MW4	11	1	20.00	21.90	SPS		0		60	30	10	0		NON	MOD	LSE	SAT	
MP3-MW4	11	2	21.90	22.00	SPS		0		0	0	0	0						
MP3-MW4	12	1	22.00	23.00	NS		0		0	0	0	0						

Borehole Location Data — Roy F. WESTON, Inc.

BOREHOLE ID : MP3-MW5 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/09/95 END DATE : 01/09/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 16.43 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 16.43 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	11.280
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : 2932569

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Moved location due to high tension subsurface lines directly beneath original location. Latitude-North: 40 deg 18' 45.8"/Longitude-West: 74 deg 03' 14.6"

Well Completion Summary

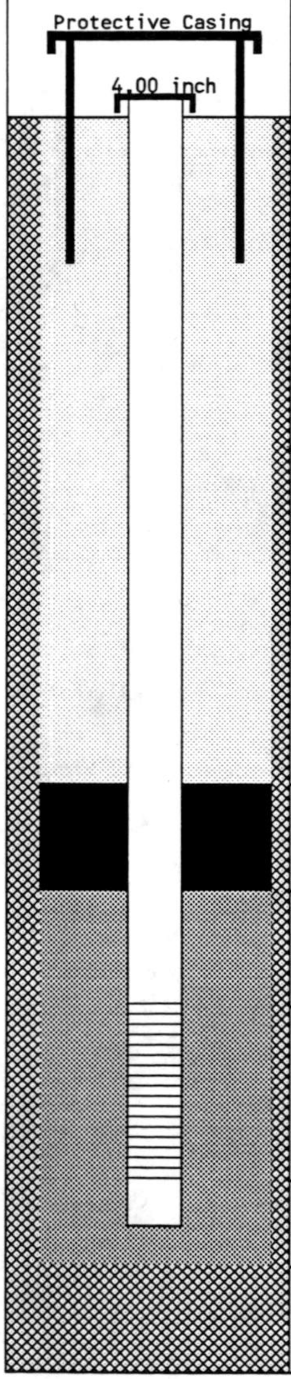
Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 3

DRILLING FIRM J.C. ANDERSON
INSPECTOR K. VALENTI

WELL ID MP3-MW5
START DATE 01/09/95
COMPLETION DATE 01/09/95

WATER LEVELS



DEPTH		ELEV.
2.02	TC	13.30
0.00	GS	11.28
2.43	BN	8.85
4.43	SP	6.85
6.43	SC	4.85
15.97	BS	-4.69
16.00	TD	-4.72

DRILLING SUMMARY

Driller WELLINGTON REEVES
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 16.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.02 **ft.** **Protective Casing:** 2.14 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 2.43 **ft.**

Seal Type: BENTONITE **Interval:** 2.43 to 4.43 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 4.43 to 16.43 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 6.43 to 15.97 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 15.97 to 16.43 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/12/95
Method Bailing/overpumping
Yield ~5 gpm **Purged Volume** 70 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	16.43
SITE NAME	:	MAIN POST 3	LOGGER	:	K. VALENTI
BORING ID	:	MP3-MW5	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	01/09/95
ELEVATION	:	11.280 surveyed	DATE COMPLETED	:	01/09/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Silty sand, SM	BROWN	SFT	MST	3 6 14 14	HNU 0.0	Top 4" bgs=topsoil. Cuttings @1.5' bgs black with v. slight petroleum odor (fill?).
10	1			No Sample Recovered						
9	2		50	Silty sand with gravel, SM	BLACK	LSE	MST	9 11 13 8	HNU 0.0	Uncertain/Fill? Black soil - very light petroleum product odor.
8	3			No Sample Recovered						
7	4			No Sample Recovered				9 2 1 2	HNU 0.0	Spoon was wet upon removal from borehole.
6	5									
5	6			No Sample Recovered				3 4 4 3		Spoon was wet. Cuttings wet at ~7' bgs. Fill consisted of film (for camera).
4	7									
3	8		20	Silty sand with gravel, SM	BLACK	LSE	SAT	4 3 2 3	HNU 0.0	Fill, Film coming up as cuttings. Very slight odor of petroleum products.
				No Sample Recovered						
2	9									
1	10			No Sample Recovered				2 2 2 2	HNU 0.0	

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	16.43
SITE NAME	: MAIN POST 3		LOGGER	:	K. VALENTI
BORING ID	: MP3-MW5		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	CME-55
EASTING	: 0.0000 estimated		DATE STARTED	:	01/09/95
ELEVATION	: 11.280 surveyed		DATE COMPLETED	:	01/09/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				No Sample Recovered					HNU 0.0	
0	11									
-1	12		15	Silty sand with gravel, SM	BLACK	LSE	SAT	5 4 6 8	HNU 0.0	Used 3" SPS. Same lith. as interval from 8-8.4' bgs.
				No Sample Recovered						
-2	13									
-3	14		15	Elastic silt, MH	BLACK	FRM	SAT	4 4 4 4	HNU 0.0	Used 3" sps. Set well at 16.43' bgs.
				No Sample Recovered						
-4	15									
-5	16			Interval Not Sampled						Augered interval. TD of borehole 16.43'.
-6	17									
-7	18									
-8	19									
-9	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP3-MW5	1	1	0.00	1.00	SPS		0		50	40	10	0		LOW	POR	SFT	MST	
MP3-MW5	1	2	1.00	2.00	SPS		0		0	0	0	0						
MP3-MW5	2	1	2.00	3.00	SPS		15		45	40	0	0		NON	POR	LSE	MST	
MP3-MW5	2	2	3.00	4.00	SPS		0		0	0	0	0						
MP3-MW5	3	1	4.00	6.00	SPS		0		0	0	0	0						
MP3-MW5	4	1	6.00	8.00	SPS		0		0	0	0	0						
MP3-MW5	5	1	8.00	8.40	SPS		20		50	30	0	0		NON	POR	LSE	SAT	
MP3-MW5	5	2	8.40	10.00	SPS		0		0	0	0	0						
MP3-MW5	6	1	10.00	12.00	SPS		0		0	0	0	0						
MP3-MW5	7	1	12.00	12.30	SPS		25		40	30	5	0		LOW	POR	LSE	SAT	
MP3-MW5	7	2	12.30	14.00	SPS		0		0	0	0	0						
MP3-MW5	8	1	14.00	14.30	SPS		0		0	65	35	0		HGH	WEL	FRM	SAT	
MP3-MW5	8	2	14.30	16.00	SPS		0		0	0	0	0						
MP3-MW5	9	1	16.00	16.43	NS		0		0	0	0	0						

BOREHOLE ID : MP3-MW6 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/11/95 *END DATE :* 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	10.250
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32570

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
No sampling, only installed well. Latitude-North: 40 deg 18' 48.4"/Longitude-West: 74 deg 03' 06.9".

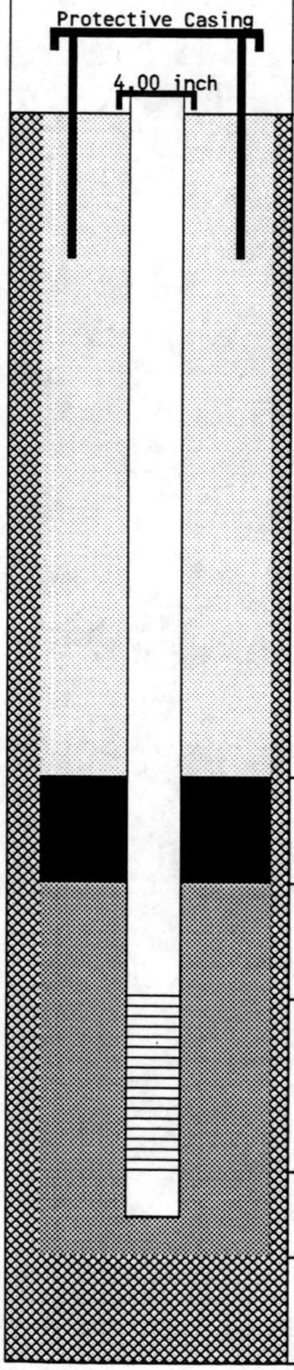
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 3
DRILLING FIRM J.C. ANDERSON
INSPECTOR K. VALENTI

WELL ID MP3-MW6
START DATE 01/11/95
COMPLETION DATE 01/11/95

WATER LEVELS



DEPTH		ELEV.
2.17	TC	12.42
0.00	GS	10.25
1.33	BN	8.92
3.33	SP	6.92
5.33	SC	4.92
14.87	BS	-4.62
15.00	TD	-4.75

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 15.00 **ft.**
Type :

Stick Up Inner Casing: 2.17 **ft.** **Protective Casing:** 2.36 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.33 **ft.**

Seal Type: BENTONITE **Interval:** 1.33 to 3.33 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 3.33 to 15.33 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.33 to 14.87 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.87 to 15.33 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/18/95
Method Surge blocking/overpump
Yield <.5 gpm **Purged Volume** 45 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: MAIN POST 3	LOGGER	: K. VALENTI
BORING ID	: MP3-MW6	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME
EASTING	: 0.0000 estimated	DATE STARTED	: 01/11/95
ELEVATION	: 10.250 surveyed	DATE COMPLETED	: 01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		20	Not Classified - Incomplete Data	BLACK	LSE	NA	8 6 5 5	HNU 0.0	Top 3" bgs consists of topsoil organics and landfill materials.
				No Sample Recovered						
9	1									
8	2			No Sample Recovered				2 2 3 3	HNU 0.0	
7	3									
6	4			No Sample Recovered				2 2 2 2	HNU 0.0	Switching to 3" dia. sps. Wood in SPS heal & spoon shoe. Cutting consists of wet blk gravelly sand ~6'
5	5									
4	6		50	Silty sand, SM	BROWN TO BLACK	FRM	WET	6 8 9 7	HNU 1.0	Fill 3" SPS used. Some orange (lt) Fe staining Water level at 6'4" bgs.
3	7			No Sample Recovered						
2	8		100	Silty sand, SM	GREEN	SFT	SAT	2 4 2 3	HNU 0.0	Fill.
1	9									
0	10		30	Silty sand, SM	GREEN	LSE	WET	1 1 2 3	HNU 0.0	Fill. Saturated sand & silt with fill material.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	15.00
SITE NAME	: MAIN POST 3		LOGGER	:	K. VALENTI
BORING ID	: MP3-MW6		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	CME
EASTING	: 0.0000 estimated		DATE STARTED	:	01/11/95
ELEVATION	: 10.250 surveyed		DATE COMPLETED	:	01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GREEN	LSE	WET		HNU 0.0	Fill. Saturated sand & silt with fill material.
				No Sample Recovered						
-1	11									
-2	12		50	Silty sand, SM	GREEN	FRM	WET	11 11 13 15	HNU 0.0	Auger to 15' set well.
-3	13			No Sample Recovered						
-4	14			Interval Not Sampled						Augered interval.
-5	15									
-6	16									
-7	17									
-8	18									
-9	19									
-10	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP3-MW6	1	1	0.00	0.40	SPS		90		10	0	0	0		NA	NA	LSE	NA	
MP3-MW6	1	2	0.40	2.00	SPS		0		0	0	0	0						
MP3-MW6	2	1	2.00	4.00	SPS		0		0	0	0	0						
MP3-MW6	3	1	4.00	6.00	SPS		0		0	0	0	0						
MP3-MW6	4	1	6.00	7.00	SPS		10		50	40	0	0		NON	POR	FRM	WET	
MP3-MW6	4	2	7.00	8.00	SPS		0		0	0	0	0						
MP3-MW6	5	1	8.00	10.00	SPS		0		50	35	15	0		LOW	MOD	SFT	SAT	
MP3-MW6	6	1	10.00	10.60	SPS		0		50	50	0	0		LOW	MOD	LSE	WET	
MP3-MW6	6	2	10.60	12.00	SPS		0		0	0	0	0						
MP3-MW6	7	1	12.00	13.00	SPS		0	MF	75	25	0	0		LOW	MOD	FRM	WET	
MP3-MW6	7	2	13.00	14.00	SPS		0		0	0	0	0						
MP3-MW6	8	1	14.00	15.00	NS		0		0	0	0	0						

BOREHOLE ID : MP4-MW7
PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/14/94
END DATE : 12/14/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 16.00
DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 16.00 ft. BGS
METHOD : HSA
FLUID : NONE

BOREHOLE DIAMETER #2:
INTERVAL:
METHOD :
FLUID :

BOREHOLE DIAMETER #3:
INTERVAL:
METHOD :
FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	14.830
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N
PERMIT # : NJ 029 32571

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 17' 55.3"
Longitude-West: 74 deg 04' 54.5"

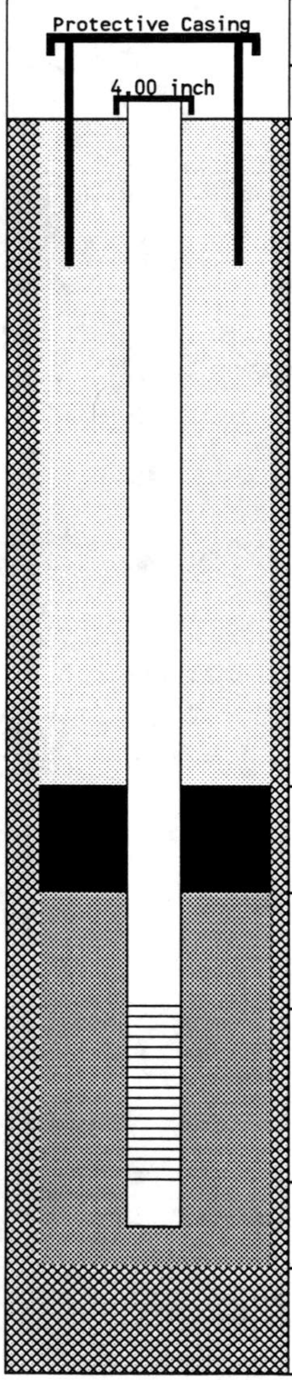
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST AREA 4	**INSPECTOR**	P. THOMAS

WELL ID	MP4-MW7
START DATE	12/14/94
COMPLETION DATE	12/14/94

WATER LEVELS



DEPTH		ELEV.
1.92	TC	16.75
0.00	GS	14.83
1.51	BN	13.32
4.01	SP	10.82
6.01	SC	8.82
15.55	BS	-0.72
15.50	TD	-0.67

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 6.01 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.92 **ft.** **Protective Casing:** 2.33 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 1.51 to 4.01 **ft.**

Sand Pack Type : NO. 1 **Interval:** 4.01 to 16.01 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 6.01 to 15.55 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 15.55 to 16.01 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 12/22/94
Method Surge block/overpumping
Yield ~4 gpm **Purged Volume** 400 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	16.00
SITE NAME	:	MAIN POST AREA 4	LOGGER	:	P. THOMAS
BORING ID	:	MP4-MW7	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	12/14/94
ELEVATION	:	14.830 surveyed	DATE COMPLETED	:	12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			55	Sandy silt, ML	DK BROWN	SFT	MST	4 4 7 5	HNU 0.0	Topsoil.
				Poorly graded sand with silt, SP-SM	BROWN-RED	LSE	MST		HNU 0.0	Fine gravel to 0.5 feet bgs.
13	1			No Sample Recovered						
12	2		70	Poorly graded sand with silt, SP-SM	PALE BROWN	LSE	MST	8 8 8 10	HNU 0.0	
11	3			Silty sand, SM	ORANGE BROWN	SFT	MST		HNU 0.0	
				No Sample Recovered						
10	4		45	Silty sand, SM	OLIVE BROWN	SFT	MST	14 16 18 14	HNU 0.1	Sand with silt/clay lamina
9	5			No Sample Recovered						
8	6		75	Silty sand, SM	OLIVE & IRON BR	LSE	WET	10 17 16 12	HNU 0.0	SAT noted in cuttings ~7' bgs, sand w/silt and clay lamina; 7.1-7.3' (90% sand 10% silt) wet.
7	7									
				No Sample Recovered						
6	8		90	Silty sand, SM	OLIVE & FE BROW	SFT	SAT	8 5 9 7	HNU 1.0	Sand with silt/clay laminae.
5	9									
				No Sample Recovered						
4	10		45	Silty sand, SM	OLIVE BROWN	SFT	SAT	7 8 9 9	HNU 3.0	Small gravel laminae ~10.4' bgs.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 16.00
SITE NAME	: MAIN POST AREA 4	LOGGER	: P. THOMAS
BORING ID	: MP4-MW7	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/14/94
ELEVATION	: 14.830 surveyed	DATE COMPLETED	: 12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	OLIVE BROWN	SFT	SAT		HNU 3.0	Small gravel laminae ~10.4' bgs.
3	11			No Sample Recovered						
2	12		100	Silty sand, SM	OLIVE BROWN	SFT	SAT	11 20 17 14	HNU 1.0	Coarsening downward sequence into next spoon interval.
				Silty sand, SM	ST. BRN/OLV BRN	LSE	SAT		HNU 1.0	Sharp color change betw/ strong Fe oxide laminae (c. sand) interbedded w/ olive brown silt/clay.
1	13									
0	14		50	Poorly graded sand with silt, SP-SM	OLIVE BRN/FE BR	LSE	SAT	12 15 15 14	HNU 5.0	Set well 15.5' bgs.
-1	15			No Sample Recovered						
-2	16									
-3	17									
-4	18									
-5	19									
-6	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP4-MW7	1	1	0.00	0.45	SPS		0	FM	40	35	5	20		NON	NA	SFT	MST	
MP4-MW7	1	2	0.45	1.10	SPS	F	2	MF	85	13	0	0		NA	WEL	LSE	MST	
MP4-MW7	1	3	1.10	2.00	SPS		0		0	0	0	0						
MP4-MW7	2	1	2.00	3.00	SPS	F	2	MF	85	13	0	0		NA	WEL	LSE	MST	
MP4-MW7	2	2	3.00	3.40	SPS		0	MF	60	30	10	0		NON	WEL	SFT	MST	
MP4-MW7	2	3	3.40	4.00	SPS		0		0	0	0	0						
MP4-MW7	3	1	4.00	4.90	SPS		0	MF	80	15	5	0		NON	MOD	SFT	MST	
MP4-MW7	3	2	4.90	6.00	SPS		0		0	0	0	0						
MP4-MW7	4	1	6.00	7.50	SPS		0	MF	75	20	5	0		NON	MOD	LSE	WET	
MP4-MW7	4	2	7.50	8.00	SPS		0		0	0	0	0						
MP4-MW7	5	1	8.00	9.80	SPS		0	MF	80	15	5	0		NON	MOD	SFT	SAT	
MP4-MW7	5	2	9.80	10.00	SPS		0		0	0	0	0						
MP4-MW7	6	1	10.00	10.90	SPS	F	5	MF	75	15	5	0		NON	MOD	SFT	SAT	
MP4-MW7	6	2	10.90	12.00	SPS		0		0	0	0	0						
MP4-MW7	7	1	12.00	12.50	SPS		0	MF	80	15	5	0		NON	MOD	SFT	SAT	
MP4-MW7	7	2	12.50	14.00	SPS		0	MFC	80	15	5	0		NON	POR	LSE	SAT	
MP4-MW7	8	1	14.00	15.00	SPS		0	MCF	90	10	0	0		NA	MOD	LSE	SAT	
MP4-MW7	8	2	15.00	16.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP4-MW8 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/13/94 *END DATE :* 12/13/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 19.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 19.00 ft. BGS
METHOD : HSA *FLUID :* NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : CME-55

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	9.020
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32572

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

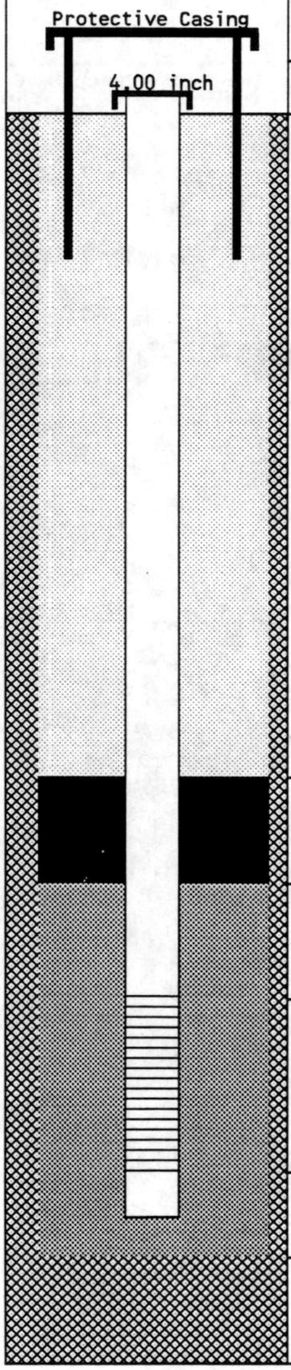
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 42.8"
Longitude-West: 74 deg 03' 02.9"

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST AREA 4	**INSPECTOR**	P. THOMAS

WELL ID MP4-MW8
START DATE 12/13/94
COMPLETION DATE 12/13/94

WATER LEVELS



DEPTH		ELEV.
1.66	TC	10.68
0.00	GS	9.02
0.20	BN	8.82
1.64	SP	7.38
3.64	SC	5.38
18.18	BS	-9.16
19.00	TD	-9.98

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 3.64 **ft.**
Type :

Stick Up Inner Casing: 1.66 **ft.** **Protective Casing:** 2.03 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.20 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.20 to 1.64 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 1.64 to 19.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 3.64 to 18.18 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 18.18 to 18.64 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 12/20/94
Method Surge block/overpumping
Yield 1 gpm **Purged Volume** 90 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	19.00
SITE NAME	: MAIN POST AREA 4		LOGGER	:	P. THOMAS
BORING ID	: MP4-MW8		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	CME-55
EASTING	: 0.0000 estimated		DATE STARTED	:	12/13/94
ELEVATION	: 9.020 surveyed		DATE COMPLETED	:	12/13/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			20	Organic soil, OL/OH	BROWN	SFT	MST	3 7 8 8	HNU 0.0	Topsoil grass roots/plant fragments.
				No Sample Recovered						
8	1									
7	2		27	Silt with sand, ML	RED BROWN	SFT	MST	8 8 14 18	HNU 0.0	Appears to be fill - bulk fragments 2-2.5' bgs (red)- rough drilling.
				No Sample Recovered						
6	3									
5	4		32	Silt with sand, ML	DK BRN/GRN BRN	SFT	MST	17 19 5 6	HNU 0.0	Appears to be fill. Plant root fragments.
				Well-graded gravel, GW	BROWN	LSE	DRY		HNU 0.0	Fill?
				No Sample Recovered						
4	5									
3	6		45	Poorly-graded gravel with sand, GP	BROWN-BEIGE	LSE	SAT	16 16 8 7	HNU 0.0	Uncertain - fill?
				No Sample Recovered						
2	7									
1	8			No Sample Recovered				9 4 3 3	HNU 0.0	Slough from above intervals.
0	9									
-1	10		95	Silty gravel with sand, GM	BROWN			4 2 1 6	HNU 0.0	

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 19.00
SITE NAME	: MAIN POST AREA 4	LOGGER	: P. THOMAS
BORING ID	: MP4-MW8	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/13/94
ELEVATION	: 9.020 surveyed	DATE COMPLETED	: 12/13/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty gravel with sand, GM	BROWN				HNU 0.0	
				Organic soil, OL/OH	BROWN	SFT	MST		HNU 0.0	Plant/grass/root fragment
-1	11									
-2	12			No Sample Recovered						
			70	Organic soil, OL/OH	BROWN	SFT	MST	3 2 2 5	HNU 0.0	
				Sandy silt, ML	GRAY	SFT	MST		HNU 0.0	
-3	13			Silty sand, SM	LT GREEN	LSE	WET		HNU 0.0	
				No Sample Recovered						
-4	14		10	Well-graded gravel, GW	GRAY	LSE	SAT	6 5 5 6	HNU 0.0	Appears to be crushed concrete.
				No Sample Recovered						
-5	15									
-6	16		50	Silty sand, SM	GREEN	SFT	SAT	5 4 4 3	HNU 0.0	Sand and gravel (sat); gravel is rounded - augered to 19'.
-7	17			No Sample Recovered						
-8	18			Interval Not Sampled						Interval not sampled - set well at 19' bgs.
-9	19									
-10	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP4-MW8	1	1	0.00	0.40	SPS		0	F	10	35	5	50		NON	NA	SFT	MST	
MP4-MW8	1	2	0.40	2.00	SPS		0		0	0	0	0						
MP4-MW8	2	1	2.00	2.50	SPS		5	F	15	55	20	5		NON	POR	SFT	MST	
MP4-MW8	2	2	2.50	4.00	SPS		0		0	0	0	0						
MP4-MW8	3	1	4.00	4.50	SPS	F	5		15	70	10	0		NON	MOD	SFT	MST	
MP4-MW8	3	2	4.50	4.65	SPS	MCF	90	C	10	0	0	0		NA	POR	LSE	DRY	
MP4-MW8	3	3	4.65	6.00	SPS		0		0	0	0	0						
MP4-MW8	4	1	6.00	6.90	SPS	MFC	80	M	20	0	0	0		NA	MOD	LSE	SAT	
MP4-MW8	4	2	6.90	8.00	SPS		0		0	0	0	0						
MP4-MW8	5	1	8.00	10.00	SPS		0		0	0	0	0						
MP4-MW8	6	1	10.00	10.50	SPS	MFC	45	M	40	15	0	0						
MP4-MW8	6	2	10.50	11.90	SPS		0	F	10	25	5	60		NON	POR	SFT	MST	
MP4-MW8	6	3	11.90	12.00	SPS		0		0	0	0	0						
MP4-MW8	7	1	12.00	12.60	SPS		0	F	10	25	5	60		NON	POR	SFT	MST	
MP4-MW8	7	2	12.60	13.10	SPS		0	F	30	50	10	10		LOW	MOD	SFT	MST	
MP4-MW8	7	3	13.10	13.40	SPS		0	MF	70	25	5	0		NON	MOD	LSE	WET	
MP4-MW8	7	4	13.40	14.00	SPS		0		0	0	0	0						
MP4-MW8	8	1	14.00	14.20	SPS	MCF	90	CM	10	0	0	0		NA	POR	LSE	SAT	
MP4-MW8	8	2	14.20	16.00	SPS		0		0	0	0	0						
MP4-MW8	9	1	16.00	17.00	SPS	F	10	MCF	60	20	10	0		NON	MOD	SFT	SAT	
MP4-MW8	9	2	17.00	18.00	SPS		0		0	0	0	0						
MP4-MW8	10	1	18.00	19.00	NS		0		0	0	0	0						

BOREHOLE ID : MP4-MW9 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/13/94 END DATE : 12/13/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 24.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 24.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2: 2.00
INTERVAL: 22.00 ft. to 24.00 ft. BGS
METHOD : SPLIT SPOON SAMPLER FLUID : NONE
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	7.770
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32573

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

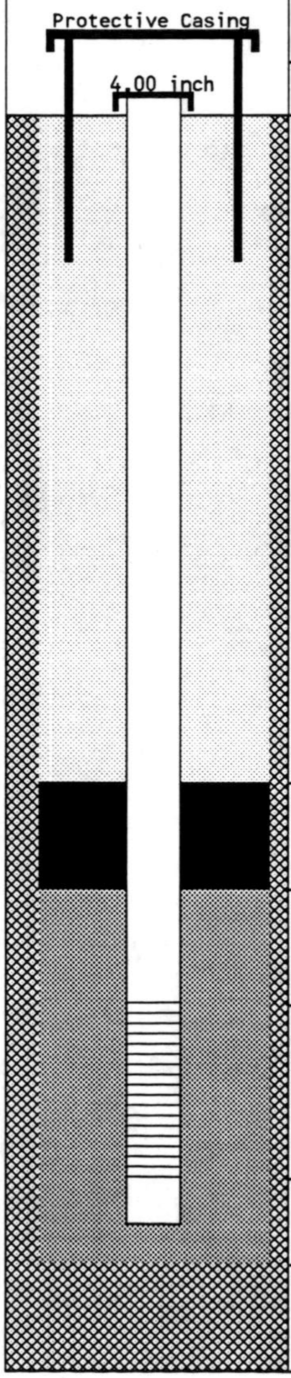
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 44.7"
Longitude-West: 74 deg 03' 02.6"

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST AREA 4	**INSPECTOR**	P. THOMAS

WELL ID	MP4-MW9
START DATE	12/13/94
COMPLETION DATE	12/13/94

WATER LEVELS



DEPTH		ELEV.
1.92	TC	9.69
0.00	GS	7.77
3.19	BN	4.58
5.69	SP	2.08
7.69	SC	0.08
22.23	BS	-14.46
22.00	TD	-14.23

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 7.76 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.92 **ft.** **Protective Casing:** 2.14 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 3.19 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 3.19 to 5.69 **ft.**

Sand Pack Type : NO. 1 **Interval:** 5.69 to 24.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 7.69 to 22.23 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 22.23 to 22.69 **ft.**
Backfill Type : NO. 1 SAND **Interval:** 22.69 to 24.00 **ft.**

WELL DEVELOPMENT

Date 12/20/94
Method Surge block/overpumping
Yield 5 gpm **Purged Volume** 550 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface. Purge volume not measured.

***NOTE:* Well Diagram not to Scale**

Elevations are feet above mean sea level

Borehole Log

Roy F. WESTON, Inc.

PROJECT :	FT. MONMOUTH	TOTAL DEPTH :	24.00
SITE NAME :	MAIN POST AREA 4	LOGGER :	P. THOMAS
BORING ID :	MP4-MW9	DRILLING COMPANY :	J.C. ANDERSON
NORTHING :	0.0000 estimated	DRILLING RIG :	CME-55
EASTING :	0.0000 estimated	DATE STARTED :	12/13/94
ELEVATION :	7.770 surveyed	DATE COMPLETED :	12/13/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Silt with sand, ML	BROWN	SFT	MST	8 4 7 8	HNU 0.0	0-0.4 (topsoil), highly organic with plant/root fragments; 0.4-1.0 bgs - s. silt with tr. gravel
6	1			No Sample Recovered						
5	2		25	Silty sand with gravel, SM	BROWN	LSE	DRY	12 15 17 16	HNU 0.0	2-2.2 (same lithology as above interval).
				No Sample Recovered						
4	3									
3	4			No Sample Recovered				100 0 0 0		100/5" Split spoon refusal; no recovery.
2	5									
1	6			Interval Not Sampled						Interval not sampled due to refusal, redrilled at new location; resumed samp. 8-10 bgs, aug. 6-8'
0	7									
-1	8		100	Sandy silt, ML	GREEN GRAY	LSE	SAT	4 4 4 5	HNU 0.0	Perched water (?)
				Not Classified - Incomplete Data	BROWN	SFT	MST		HNU 0.0	Grass roots/fragments throughout interval.
				Sandy silt, ML	GRAY	SFT	MST		HNU 0.0	Silt organic.
-2	9									
-3	10		30	Silt with sand, ML	DK GRAY	SFT	MST	6 4 5 6	HNU 0.0	

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 24.00
SITE NAME	: MAIN POST AREA 4	LOGGER	: P. THOMAS
BORING ID	: MP4-MW9	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/13/94
ELEVATION	: 7.770 surveyed	DATE COMPLETED	: 12/13/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silt with sand, ML	DK GRAY	SFT	MST		HNU 0.0	
				No Sample Recovered						
-3	11									
-4	12		70	Elastic silt, MH	GRAY	SFT	MST	2 3 4 4	HNU 0.0	Moist to wet with more clay.
-5	13			Silty gravel with sand, GM	GRAY	NA	SAT		HNU 0.0	
				No Sample Recovered						
-6	14		40	Silty sand, SM	GRAY	SFT	SAT	3 2 3 4	HNU 0.0	
				Silt with sand, ML	BROWN	SFT	WET		HNU 0.0	16.7-16.8 same as 16-16.4 The c.s. silt appears to be softer, possibly due to sat, moisture content.
				No Sample Recovered						
-7	15									
-8	16		15	Silty sand, SM	GRAY GREEN	LSE	MST	4 4 5 7	HNU 4.0	
				No Sample Recovered						
-9	17									
-10	18			No Sample Recovered					HNU 0.0	2' sat slough from above intervals.
-11	19									
-12	20		20	Silty sand, SM	FOREST GREEN	LSE	MST	3 4 5 5	HNU 5.0	

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 24.00
SITE NAME	: MAIN POST AREA 4	LOGGER	: P. THOMAS
BORING ID	: MP4-MW9	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/13/94
ELEVATION	: 7.770 surveyed	DATE COMPLETED	: 12/13/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	FOREST GREEN	LSE	MST		HNU 5.0	
				No Sample Recovered						
-13	21									
-14	22		55	Sandy silt, ML	FOREST GREEN	SFT	SAT	3 4 4 5	HNU 4.5	Slt more compact; SAT in parts tight medium. Set well at 22' bgs. TD=24' bgs.
-15	23			No Sample Recovered						
-16	24									
-17	25									
-18	26									
-19	27									
-20	28									
-21	29									
-22	30									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP4-MW9	1	1	0.00	1.00	SPS	F	5	F	15	30	15	35		NON	MOD	SFT	MST	
MP4-MW9	1	2	1.00	2.00	SPS		0		0	0	0	0						
MP4-MW9	2	1	2.00	2.50	SPS	FM	35	MCF	45	20	0	0		NA	POR	LSE	DRY	
MP4-MW9	2	2	2.50	4.00	SPS		0		0	0	0	0						
MP4-MW9	3	1	4.00	6.00	SPS		0		0	0	0	0						
MP4-MW9	4	1	6.00	8.00	NS		0		0	0	0	0						
MP4-MW9	5	1	8.00	8.40	SPS		0	FM	30	45	25	0		LOW	MOD	LSE	SAT	
MP4-MW9	5	2	8.40	8.80	SPS		0	F	15	20	5	60		NA	POR	SFT	MST	
MP4-MW9	5	3	8.80	10.00	SPS		0	F	30	50	10	10		LOW	MOD	SFT	MST	
MP4-MW9	6	1	10.00	10.60	SPS		0	F	20	50	20	10		LOW	MOD	SFT	MST	
MP4-MW9	6	2	10.60	12.00	SPS		0		0	0	0	0						
MP4-MW9	7	1	12.00	13.00	SPS		0	F	10	50	40	0		HGH	MOD	SFT	MST	
MP4-MW9	7	2	13.00	13.40	SPS	MFC	45	MFC	35	15	5	0		NA	POR	NA	SAT	
MP4-MW9	7	3	13.40	14.00	SPS		0		0	0	0	0						
MP4-MW9	8	1	14.00	14.40	SPS	FM	10	FM	45	35	10	0		LOW	POR	SFT	SAT	
MP4-MW9	8	2	14.40	14.80	SPS		0	F	20	30	10	40		LOW	POR	SFT	WET	
MP4-MW9	8	3	14.80	16.00	SPS		0		0	0	0	0						
MP4-MW9	9	1	16.00	16.30	SPS		0	MFC	75	20	5	0		NON	MOD	LSE	MST	
MP4-MW9	9	2	16.30	18.00	SPS		0		0	0	0	0						
MP4-MW9	10	1	18.00	20.00	SPS		0		0	0	0	0						
MP4-MW9	11	1	20.00	20.40	SPS		0	MF	50	45	5	0		NA	WEL	LSE	MST	
MP4-MW9	11	2	20.40	22.00	SPS		0		0	0	0	0						
MP4-MW9	12	1	22.00	23.10	SPS		0	MF	35	45	20	0		LOW	WEL	SFT	SAT	
MP4-MW9	12	2	23.10	24.00	SPS		0		0	0	0	0						

Borehole Location Data **Roy F. WESTON, Inc.**

BOREHOLE ID : MP5-MW10 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/14/94 END DATE : 12/14/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 16.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 16.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON, INC.
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	5.130
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32574

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 48.6"
Longitude-West: 74 deg 03' 03.7"

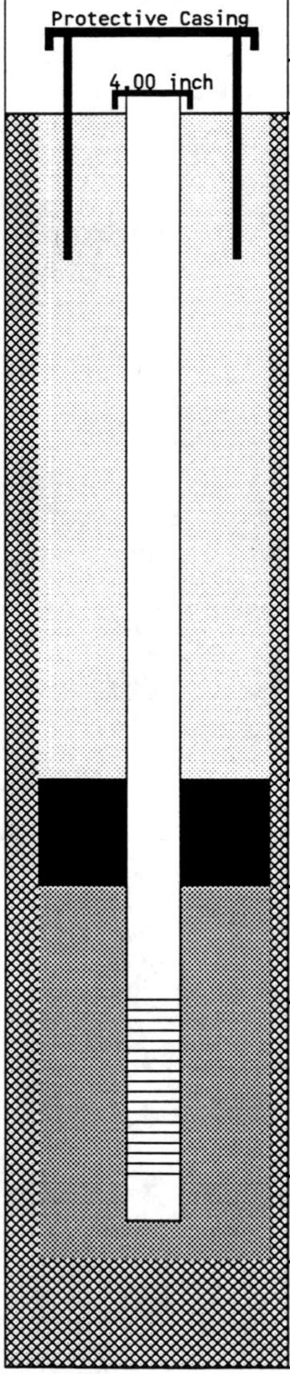
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME MAIN POST AREA 5
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID MP5-MW10
START DATE 12/14/94
COMPLETION DATE 12/14/94

WATER LEVELS



DEPTH		ELEV.
1.78	TC	6.91
0.00	GS	5.13
0.80	BN	4.33
3.00	SP	2.13
5.00	SC	0.13
14.54	BS	-9.41
15.00	TD	-9.87

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.78 **ft.** **Protective Casing:** 2.40 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.80 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.80 to 3.00 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 3.00 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 12/14/94
Method Surge blocking, bailing
Yield 5 gpm **Purged Volume**

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	16.00
SITE NAME	:	MAIN POST AREA 5	LOGGER	:	P. THOMAS
BORING ID	:	MP5-MW10	DRILLING COMPANY	:	J.C. ANDERSON, INC.
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B-57
EASTING	:	0.0000 estimated	DATE STARTED	:	12/14/94
ELEVATION	:	5.130 surveyed	DATE COMPLETED	:	12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			60	Sandy silt, ML	BROWN	SFT	MST	1 2 4 3	HNU 0.0	Topsoil
				Silty sand with gravel, SM					HNU 0.0	VAR orange-brown, black, charcoal fragments.
4	1									
				No Sample Recovered						
3	2		30	Fill		LSE	MST	2 1 1 1	HNU 0.0	Glass fragments/plastic cuttings, VAR - orange brown-black 2-2.4 2.4-2.6 blk sand.
				No Sample Recovered						
2	3									
1	4			No Sample Recovered					HNU 0.0	No recovery. Slough is SAT.
0	5									
-1	6			No Sample Recovered				1 1 1 1	HNU 0.0	Spoon sunk under weight of hammer. No recovery. SAT silty clay (organic rich) in spoon shoe.
-2	7									
-3	8		20	Silty sand, SM	GREEN (DKK)	LSE	SAT	1 1 2 1	HNU 0.1	Coarsens downward.
				No Sample Recovered						
-4	9									
-5	10		95	Silty sand with gravel, SM	DK GREEN	LSE	SAT	1 2 2 1	HNU 1.0	Gravel at 10.4 bgs.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 16.00
SITE NAME	: MAIN POST AREA 5	LOGGER	: P. THOMAS
BORING ID	: MP5-MW10	DRILLING COMPANY	: J.C. ANDERSON, INC.
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 12/14/94
ELEVATION	: 5.130 surveyed	DATE COMPLETED	: 12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand with gravel, SM	DK GREEN	LSE	SAT		HNU 1.0	Gravel at 10.4 bgs.
				Sandy elastic silt, MH	BROWN (GREEN)	SFT	SAT		HNU 1.0	Interbedded sand and clayey silt lamina - trace organics.
-5	11									
				Silty sand, SM	DK GREEN	LSE	SAT		HNU 1.0	
-6	12			No Sample Recovered						
			80	Clayey sand, SC	DK GREEN	SFT	SAT	2 1 1 1	HNU 1.0	Silt/clayey sand, qtz gravel.
-7	13									
				No Sample Recovered						
-8	14		90	Silty sand, SM	DK GREEN	SFT	SAT	2 1 2 1	HNU 0.1	Silt less clayey than above interval.
-9	15			Sandy silt, ML	BROWN-GREEN	SFT	SAT		HNU 0.1	Interbedded sand with silt/clay laninae. Set well at 15' bgs.
				No Sample Recovered						
-10	16									
-11	17									
-12	18									
-13	19									
-14	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP5-MW10	1	1	0.00	0.50	SPS		0	F	35	40	5	20		NON	MOD	SFT	MST	
MP5-MW10	1	2	0.50	1.20	SPS	F	15	MCF	50	30	5	0			POR			
MP5-MW10	1	3	1.20	2.00	SPS		0		0	0	0	0						
MP5-MW10	2	1	2.00	2.60	SPS	F	5	MCF	55	35	5	0		NON	POR	LSE	MST	
MP5-MW10	2	2	2.60	4.00	SPS		0		0	0	0	0						
MP5-MW10	3	1	4.00	6.00	SPS		0		0	0	0	0						
MP5-MW10	4	1	6.00	8.00	SPS		0		0	0	0	0						
MP5-MW10	5	1	8.00	8.40	SPS	M	5	MCF	70	20	5	0		NON	MOD	LSE	SAT	
MP5-MW10	5	2	8.40	10.00	SPS		0		0	0	0	0						
MP5-MW10	6	1	10.00	10.50	SPS	FM	15	FCM	70	10	5	0		NON	POR	LSE	SAT	
MP5-MW10	6	2	10.50	11.30	SPS		0	MCF	45	35	18	2		MOD	POR	SFT	SAT	
MP5-MW10	6	3	11.30	11.90	SPS	F	5	MCF	50	35	10	0		NON	POR	LSE	SAT	
MP5-MW10	6	4	11.90	12.00	SPS		0		0	0	0	0						
MP5-MW10	7	1	12.00	13.60	SPS	F	10	MCF	60	10	20	0		LOW	MOD	SFT	SAT	
MP5-MW10	7	2	13.60	14.00	SPS		0		0	0	0	0						
MP5-MW10	8	1	14.00	14.95	SPS	F	10	MCF	60	20	10	0		LOW	MOD	SFT	SAT	
MP5-MW10	8	2	14.95	15.80	SPS	F	5	MCF	35	30	20	10		LOW	POR	SFT	SAT	
MP5-MW10	8	3	15.80	16.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP5-MW11 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/15/94 END DATE : 12/15/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	9.770
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32575

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 50.9"
Longitude-West: 74 deg 03' 01.8"

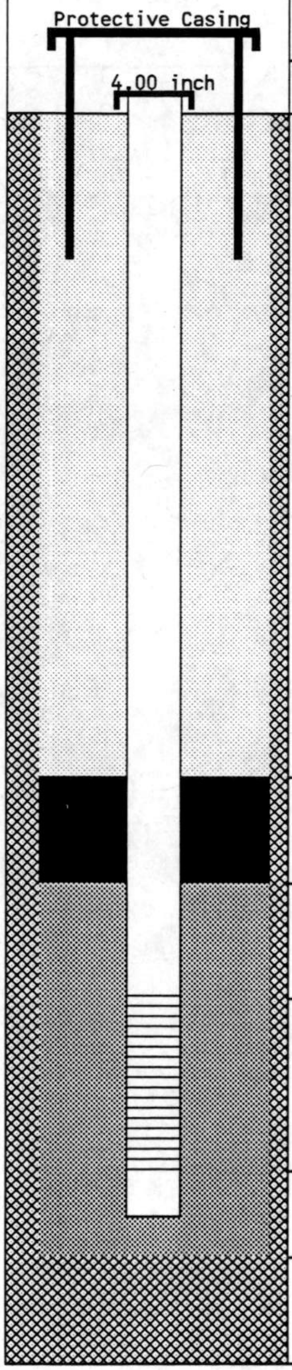
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST AREA 5	**INSPECTOR**	P. THOMAS

WELL ID	MP5-MW11
START DATE	12/15/94
COMPLETION DATE	12/15/94

WATER LEVELS



DEPTH		ELEV.
1.93	TC	11.70
0.00	GS	9.77
0.80	BN	8.97
3.00	SP	6.77
5.00	SC	4.77
14.54	BS	-4.77
15.00	TD	-5.23

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.93 **ft.** **Protective Casing:** 2.44 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.80 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.80 to 3.00 **ft.**

Sand Pack Type : NO. 1 SLURRY MORIE **Interval:** 3.00 to 5.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.85 to 15.00 **ft.**
Backfill Type : **Interval:** 14.54 to 15.00 **ft.**

WELL DEVELOPMENT

Date 12/15/94
Method Surge blocking/overpump
Yield 1.5 gpm **Purged Volume** 128 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	15.00
SITE NAME	: MAIN POST AREA 5		LOGGER	:	P. THOMAS
BORING ID	: MP5-MW11		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	:	12/15/94
ELEVATION	: 9.770 surveyed		DATE COMPLETED	:	12/15/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			70	Silt with sand, ML	BROWN	SFT	MST	11 9	HNU 0.0	Topsoil
				Silty sand, SM	ORANGE	LSE	MST	10 12	HNU 0.0	
8	1			Sandy silt, ML	GRAY-BROWN	SFT	MST		HNU 0.0	Black mottles; charcoal fragments (?)- qtz gravel slt. micaceous.
				No Sample Recovered						
7	2		50	Poorly graded sand with silt, SP-SM	BROWN	LSE	MST	11 11 11 10	HNU 0.0	
6	3			No Sample Recovered						
5	4		60	Poorly graded sand with silt, SP-SM	OLIVE BROWN	LSE	SAT	6 7 10 10	HNU 0.0	
4	5									
				No Sample Recovered						
3	6		85	Silty sand, SM	OLIVE BROWN/GRN	LSE	SAT	8 6 10 17	HNU 0.0	
				Sandy silt, ML	GREEN/BROWN	SFT	SAT		HNU 0.0	
2	7									
				No Sample Recovered						
1	8		90	Sandy silt, ML	GREEN/BROWN	SFT	SAT	10 15 18 20	HNU 0.0	Sand lenses (mottles) SAT clay mst/wet.
0	9									
				No Sample Recovered						
-1	10		80	Silty sand, SM	BROWN/GREEN	LSE	SAT	10 15 15 17	HNU 0.0	Interbedded sand - silt/ clay laninae.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: MAIN POST AREA 5	LOGGER	: P. THOMAS
BORING ID	: MP5-MW11	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 12/15/94
ELEVATION	: 9.770 surveyed	DATE COMPLETED	: 12/15/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	BROWN/GREEN	LSE	SAT		HNU 0.0	Interbedded sand - silt/ clay laminae.
-1	11									
				No Sample Recovered						
-2	12		95	Silty sand, SM	BROWN/GREEN	LSE	SAT	15 25 35 32	HNU 0.0	Interbedded sand/silt-clay laminae.
-3	13									
				Silty sand, SM	GREEN/BROWN	SFT	WET		HNU 0.0	Sharp content - compact (set) material.
-4	14			No Sample Recovered						
				Interval Not Sampled						Interval not sampled; set well at 15' bgs.
-5	15									
-6	16									
-7	17									
-8	18									
-9	19									
-10	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP5-MW11	1	1	0.00	0.20	SPS		0	F	15	40	5	40		NON	POR	SFT	MST	
MP5-MW11	1	2	0.20	0.90	SPS		0	MFC	80	15	0	0		NA	MOD	LSE	MST	
MP5-MW11	1	3	0.90	1.40	SPS		5	F	25	60	10	0		LOW	POR	SFT	MST	
MP5-MW11	1	4	1.40	2.00	SPS		0		0	0	0	0						
MP5-MW11	2	1	2.00	3.00	SPS		10	MFC	80	10	0	0		NA	MOD	LSE	MST	
MP5-MW11	2	2	3.00	4.00	SPS		0		0	0	0	0						
MP5-MW11	3	1	4.00	5.20	SPS		5	MFC	85	10	0	0		NA	MOD	LSE	SAT	
MP5-MW11	3	2	5.20	6.00	SPS		0		0	0	0	0						
MP5-MW11	4	1	6.00	6.70	SPS		5	MFC	85	15	0	0		NA	MOD	LSE	SAT	
MP5-MW11	4	2	6.70	7.70	SPS		0	F	40	35	25	0		LOW	WEL	SFT	SAT	
MP5-MW11	4	3	7.70	8.00	SPS		0		0	0	0	0						
MP5-MW11	5	1	8.00	9.80	SPS		0	F	40	35	25	0		LOW	WEL	SFT	SAT	
MP5-MW11	5	2	9.80	10.00	SPS		0		0	0	0	0						
MP5-MW11	6	1	10.00	11.60	SPS		0	MFC	50	35	15	0		NON	MOD	LSE	SAT	
MP5-MW11	6	2	11.60	12.00	SPS		0		0	0	0	0						
MP5-MW11	7	1	12.00	13.50	SPS		0	MFC	65	25	10	0		NON	MOD	LSE	SAT	
MP5-MW11	7	2	13.50	13.90	SPS		0	MF	55	30	15	0		NON	MOD	SFT	WET	
MP5-MW11	7	3	13.90	14.00	SPS		0		0	0	0	0						
MP5-MW11	8	1	14.00	15.00	NS		0		0	0	0	0						

BOREHOLE ID : MP8-MW12 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/20/94 END DATE : 12/20/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 16.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 16.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	13.470
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32560

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

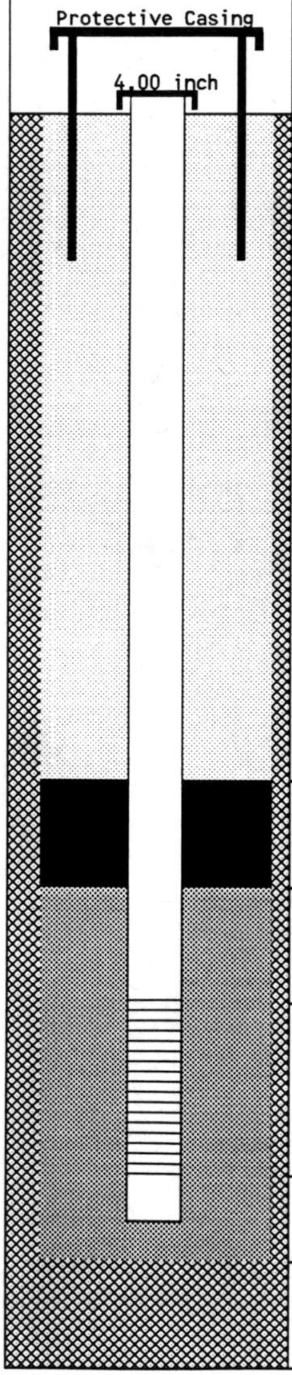
COMMENTS :
Latitude-North: 40 deg 18' 52.9"
Longitude-West: 74 deg 02' 58.3"

Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST 8	**INSPECTOR**	P. THOMAS

WELL ID	MP8-MW12	**WATER LEVELS**
START DATE	12/20/94	
COMPLETION DATE	12/20/94	



DEPTH		ELEV.
1.73	TC	15.20
0.00	GS	13.47
0.50	BN	12.97
3.00	SP	10.47
5.00	SC	8.47
14.54	BS	-1.07
15.00	TD	-1.53

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.73 **ft.** **Protective Casing:** 2.41 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO. 1 SAND MORIE **Interval:** 3.00 to 5.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : SAND NO. 1 **Interval:** 15.00 to 16.00 **ft.**

WELL DEVELOPMENT

Date 01/05/95
Method Bailing/overpumping
Yield 3.5 gpm **Purged Volume** 115 gal

COMMENTS

TC = Top of Casing	SP = Top Sand Pack	= Grout
GS = Ground Surface	SC = Top Screen	= Seal
BN = Top Seal	BS = Bottom Screen	= Sand Pack
	TD = Total Depth	= Formation

Additional Comments:

Depths are measured below ground surface

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 16.00
SITE NAME	: MAIN POST 8		LOGGER	: P. THOMAS
BORING ID	: MP8-MW12		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	: 12/20/94
ELEVATION	: 13.470 surveyed		DATE COMPLETED	: 12/20/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			30	Silt with sand, ML	BROWN	SFT	MST	3 5 5 6	HNU 0.0	Topsoil.
				No Sample Recovered						
12	1									
11	2		45	Silty sand, SM	BROWN	SFT	MST	5 7 7 9	HNU 0.0	
				Poorly graded sand, SP	BROWN (FE)	LSE	DRY		HNU 0.0	
10	3			No Sample Recovered						
9	4		55	Poorly graded sand, SP	ORANGE BROWN	LSE	DRY	7 9 9 10	HNU 0.0	Trace qtz. gravel 4.9-5.1
8	5			No Sample Recovered						
7	6		55	Poorly graded sand, SP		LSE	WET	10 10 15 22	HNU 0.0	Wet at 7.0' bgs.
6	7			No Sample Recovered						
5	8		70	Poorly graded sand with silt, SP-SM	RED BROWN	LSE	SAT	12 15 16 19	HNU 0.0	
				Poorly graded sand, SP	GREEN	LSE	SAT		HNU 0.0	Trace qtz. gravel.
4	9			Poorly graded gravel, GP	FE BROWN	LSE	SAT		HNU 0.0	
				No Sample Recovered						
3	10		27	Poorly graded sand with silt, SP-SM	FE BROWN	LSE	SAT	23 28 29 28	HNU 0.0	Trace quartz gravel, fining downward sequence.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 16.00	
SITE NAME	: MAIN POST 8		LOGGER	: P. THOMAS	
BORING ID	: MP8-MW12		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B-57	
EASTING	: 0.0000 estimated		DATE STARTED	: 12/20/94	
ELEVATION	: 13.470 surveyed		DATE COMPLETED	: 12/20/94	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand with silt, SP-SM	FE BROWN	LSE	SAT		HNU 0.0	Trace quartz gravel, fining downward sequence.
				No Sample Recovered						
2	11									
1	12		75	Poorly graded sand, SP	BROWN (OLIVE)	LSE	SAT	8 18 22 19	HNU 0.0	Note: 12.5-12.65 blk/brn var. lamina.
0	13									
				No Sample Recovered						
-1	14		47	Poorly graded sand with silt, SP-SM	FE BROWN	LSE	SAT	20 23 21 25	HNU 0.0	Trace qtz. gravel.
				Elastic silt with sand, MH	GREEN (DK)	SFT	WET		HNU 0.0	Fines downward into clay, well set at 15' bgs.
-2	15			No Sample Recovered						
-3	16									
-4	17									
-5	18									
-6	19									
-7	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP8-MW12	1	1	0.00	0.60	SPS		0	FM	25	40	5	30		NON	MOD	SFT	MST	
MP8-MW12	1	2	0.60	2.00	SPS		0		0	0	0	0						
MP8-MW12	2	1	2.00	2.70	SPS		0	FM	50	40	10	0		NON	MOD	SFT	MST	
MP8-MW12	2	2	2.70	2.90	SPS		0	M	95	5	0	0		NON	WEL	LSE	DRY	
MP8-MW12	2	3	2.90	4.00	SPS		0		0	0	0	0						
MP8-MW12	3	1	4.00	5.10	SPS		5	MF	90	5	0	0		NA	WEL	LSE	DRY	
MP8-MW12	3	2	5.10	6.00	SPS		0		0	0	0	0						
MP8-MW12	4	1	6.00	7.10	SPS		10	MF	85	5	0	0		NA	MOD	LSE	WET	
MP8-MW12	4	2	7.10	8.00	SPS		0		0	0	0	0						
MP8-MW12	5	1	8.00	8.40	SPS		0	MF	90	10	0	0		NON	WEL	LSE	SAT	
MP8-MW12	5	2	8.40	9.30	SPS		0	MF	95	5	0	0		NA	MOD	LSE	SAT	
MP8-MW12	5	3	9.30	9.50	SPS		0	MF	90	10	0	0		NON	MOD	LSE	SAT	
MP8-MW12	5	4	9.50	10.00	SPS		0		0	0	0	0						
MP8-MW12	6	1	10.00	10.55	SPS		0	MF	90	10	0	0		NON	MOD	LSE	SAT	
MP8-MW12	6	2	10.55	12.00	SPS		0		0	0	0	0						
MP8-MW12	7	1	12.00	13.50	SPS		5	MCF	90	5	0	0		NA	MOD	LSE	SAT	
MP8-MW12	7	2	13.50	14.00	SPS		0		0	0	0	0						
MP8-MW12	8	1	14.00	14.50	SPS		0	MCF	90	10	0	0		NON	MOD	LSE	SAT	
MP8-MW12	8	2	14.50	14.95	SPS		0	MCF	25	45	30	0		MOD	MOD	SFT	WET	
MP8-MW12	8	3	14.95	16.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP8-MW13 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/17/95 END DATE : 01/17/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLINGTON REEVES
DRILL RIG TYPE : ATV

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	6.020
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32561

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

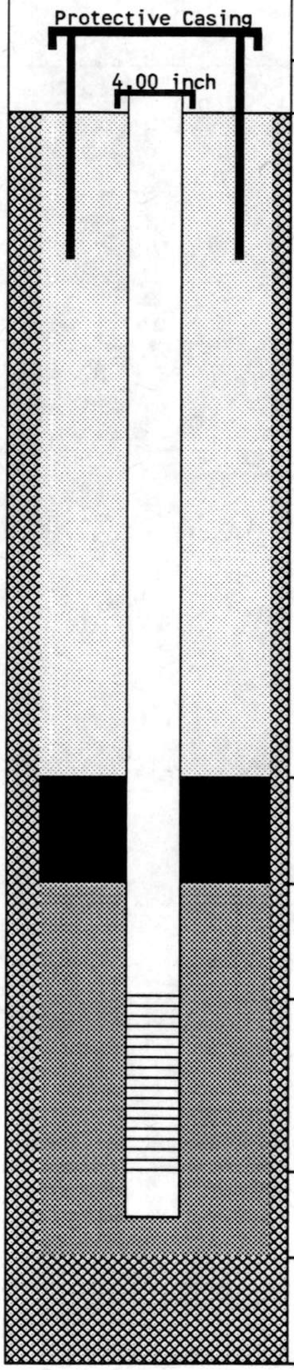
COMMENTS :
Latitude-North: 40 deg 18' 54.0"
Longitude-West: 74 deg 03' 04.8"

Well Completion Summary **Roy F. WESTON, Inc.**

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST AREA	**INSPECTOR**	P. THOMAS

WELL ID	MP8-MW13
START DATE	01/17/95
COMPLETION DATE	01/17/95

WATER LEVELS



DEPTH		ELEV.
1.78	TC	7.80
0.00	GS	6.02
1.00	BN	5.02
3.50	SP	2.52
5.00	SC	1.02
14.54	BS	-8.52
15.00	TD	-8.98

DRILLING SUMMARY

Driller WELLS REEVES
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type :

Stick Up Inner Casing: 1.78 **ft.** **Protective Casing:** 2.21 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 1.00 to 3.50 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 3.50 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/25/95
Method Surge blocking,bailing
Yield 4 gpm **Purged Volume** 250 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

Depths are measured below ground surface.

NOTE: Well Diagram not to Scale **Elevations are feet above mean sea level**

 06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: MAIN POST AREA	LOGGER	: P. THOMAS
BORING ID	: MP8-MW13	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: ATV
EASTING	: 0.0000 estimated	DATE STARTED	: 01/17/95
ELEVATION	: 6.020 surveyed	DATE COMPLETED	: 01/17/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			40	Silty sand, SM	BROWN	LSE	WET	2 1 5 11	OVM 0.0	Fill. Large wood fragments; wires in drill cutting.
5	1			No Sample Recovered						
4	2		70	Sandy silt, ML	GRAY/BROWN	SFT	SAT	7 7 4 4	OVM 0.0	Fill. Coarsens downward; amber glass fragments throughout interval.
3	3			No Sample Recovered						
2	4			Sandy silt, ML	GRAY	SFT	SAT		OVM 0.0	Augered interval. Logged cuttings only - Fill.
1	5									
0	6									
-1	7									
-2	8		10	Sandy silt, ML	GRAY	SFT	SAT	2 1 3 2	OVM 0.0	Fill(?) Natural(?); slightly more gravelly.
				No Sample Recovered						
-3	9									
-4	10			Sandy silt, ML	GRAY	SFT	SAT		OVM 0.0	Fill(?) Natural(?) Augered interval. Logged cuttings only.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: MAIN POST AREA	LOGGER	: P. THOMAS
BORING ID	: MP8-MW13	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: ATV
EASTING	: 0.0000 estimated	DATE STARTED	: 01/17/95
ELEVATION	: 6.020 surveyed	DATE COMPLETED	: 01/17/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Sandy silt, ML	GRAY	SFT	SAT		OVM 0.0	Fill(?) Natural(?) Augered interval. Logged cuttings only.
-4	11									
-5	12									
-6	13		60	Elastic silt with sand, MH	GRAYISH BROWN	SFT	SAT	8 5 3 2	OVM 0.0	Set well at 15' bgs. interval appeared to be natural material.
-7	14			No Sample Recovered						
-8	15									
-9	16									
-10	17									
-11	18									
-12	19									
-13	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP8-MW13	1	1	0.00	0.80	SPS	M	10	MF	50	15	5	20		NON	POR	LSE	WET	
MP8-MW13	1	2	0.80	2.00	SPS		0		0	0	0	0						
MP8-MW13	2	1	2.00	3.40	SPS	F	5	F	30	45	15	5		LOW	POR	SFT	SAT	
MP8-MW13	2	2	3.40	4.00	SPS		0		0	0	0	0						
MP8-MW13	3	1	4.00	8.00	CUT	F	5	F	30	45	15	5		LOW	POR	SFT	SAT	
MP8-MW13	4	1	8.00	8.20	SPS	F	10	F	25	45	15	5		LOW	POR	SFT	SAT	
MP8-MW13	4	2	8.20	10.00	SPS		0		0	0	0	0						
MP8-MW13	5	1	10.00	13.00	CUT	F	10	F	25	45	15	5		LOW	POR	SFT	SAT	
MP8-MW13	6	1	13.00	14.20	SPS		0	F	25	50	20	5		MOD	MOD	SFT	SAT	
MP8-MW13	6	2	14.20	15.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP8-MW14
PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/16/95
END DATE : 01/16/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00
DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA
FLUID : WATER

BOREHOLE DIAMETER #2:
INTERVAL:
METHOD :
FLUID :

BOREHOLE DIAMETER #3:
INTERVAL:
METHOD :
FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLINGTON REEVES
DRILL RIG TYPE : ATV

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	12.880
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N
PERMIT # : NJ 29 32562

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

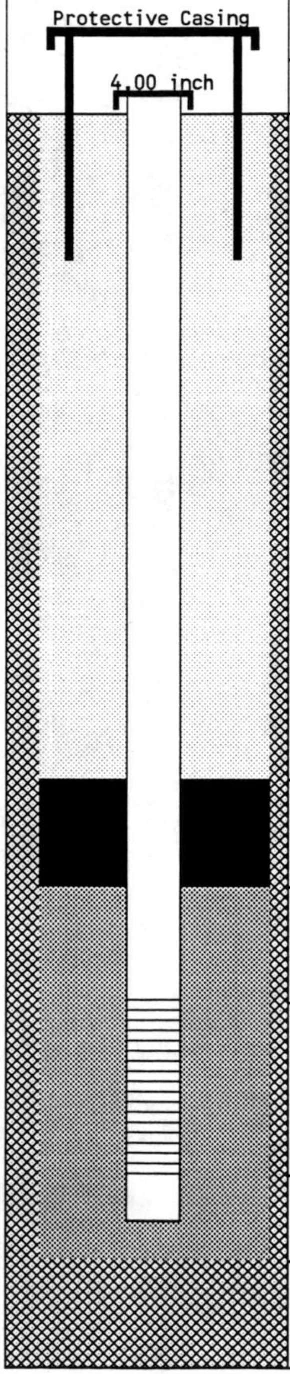
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 58.3"
Longitude-West: 74 deg 03' 02.2"

CLIENT	FT. MONMOUTH	***DRILLING FIRM***	J.C. ANDERSON
SITE NAME	MAIN POST AREA	***INSPECTOR***	P. THOMAS

WELL ID	MP8-MW14
START DATE	01/16/95
COMPLETION DATE	01/16/95

WATER LEVELS



DEPTH		ELEV.
2.03	TC	14.91
0.00	GS	12.88
0.50	BN	12.38
3.00	SP	9.88
5.00	SC	7.88
14.54	BS	-1.66
15.00	TD	12.88

DRILLING SUMMARY

Driller WELLS REEVES
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 ***inch*** ***Interval:*** 0.00 to 5.00 ***ft.***
Type : PVC SCH 40

Stick Up Inner Casing: 2.03 ***ft.*** ***Protective Casing:*** 2.43 ***ft.***

Casing Grout: CEMT/BENT ***Interval:*** 0.00 to 0.50 ***ft.***

Seal Type: BENTONITE SLURRY ***Interval:*** 0.50 to 3.00 ***ft.***

Sand Pack Type : NO. 1 MORIE ***Interval:*** 3.00 to 15.00 ***ft.***
Grain Size : UNIFORM ***Median Diameter:***
Screen Diameter: 4.00 ***Interval:*** 5.00 to 14.54 ***ft.***
Type : PVC ***Slots:*** 0.010 ***inches***

Silt Trap Interval: 14.54 to 15.00 ***ft.***
Backfill Type : ***Interval:*** 0.00 to 0.00 ***ft.***

WELL DEVELOPMENT

Date 01/25/95
Method Surge Block, Bailing
Yield .5 gpm ***Purged Volume*** 41 gal

COMMENTS

TC = Top of Casing	SP = Top Sand Pack	= Grout
GS = Ground Surface	SC = Top Screen	= Seal
BN = Top Seal	BS = Bottom Screen	= Sand Pack
	TD = Total Depth	= Formation

Additional Comments:

Depths are measured below ground surface.

NOTE: Well Diagram not to Scale ***Elevations are feet above mean sea level***

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	15.00
SITE NAME	:	MAIN POST AREA	LOGGER	:	P. THOMAS
BORING ID	:	MP8-MW14	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	ATV
EASTING	:	0.0000 estimated	DATE STARTED	:	01/16/95
ELEVATION	:	12.880 surveyed	DATE COMPLETED	:	01/16/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			75	Silty sand, SM	BROWN	LSE	MST	13 11 8 8	OVM 0.0	Fill.
11	1									
				Sandy silt, ML	GRAY	SFT	MST		OVM 0.0	Fill. Large wood chip fragments.
				No Sample Recovered						
10	2		55	Sandy silt, ML	GRAY/OLIVE GRN	SFT	MST	8 7 8 6	OVM 0.0	Fill. Strong odor.
9	3			No Sample Recovered						
8	4			No Sample Recovered				4 1 2 1		
7	5									
6	6		40	Sandy silt, ML	GRAY	SFT	SAT	4 5 5 6	OVM 0.0	Fill. Large fragments of glass and wood found throughout interval.
5	7			Interval Not Sampled						
4	8		90	Sandy silt, ML	GRAY	SFT	SAT	4 3 4 2	OVM 0.0	
				Elastic silt with sand, MH	BROWN	SFT	SAT		OVM 0.0	
				Silty sand, SM	FOREST GREEN	LSE	SAT		OVM 0.0	
3	9			Silt with sand, ML	BROWN	SFT	SAT		OVM 0.0	
				No Sample Recovered						
2	10		50	Sandy silt, ML	GREY	SFT	SAT		OVM 0.0	

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: MAIN POST AREA	LOGGER	: P. THOMAS
BORING ID	: MP8-MW14	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: ATV
EASTING	: 0.0000 estimated	DATE STARTED	: 01/16/95
ELEVATION	: 12.880 surveyed	DATE COMPLETED	: 01/16/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Sandy silt, ML	GREY	SFT	SAT		OVM 0.0	
1	11			Interval Not Sampled						
0	12		95	Silt with sand, ML	BROWN	SFT	SAT	4 3 5 5	OVM 0.0	
-1	13			Silty sand, SM	GREEN	LSE	SAT		OVM 0.0	Backfill?
-2	14			Interval Not Sampled						
				Interval Not Sampled						Augered interval. Set well at 15' bgs. TD of borehole is 15' bgs.
-3	15									
-4	16									
-5	17									
-6	18									
-7	19									
-8	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP8-MW14	1	1	0.00	1.20	SPS	M	5	MF	65	25	0	5		NA	MOD	LSE	MST	
MP8-MW14	1	2	1.20	1.50	SPS	M	5	FM	25	40	10	20		NON	MOD	SFT	MST	
MP8-MW14	1	3	1.50	2.00	SPS		0		0	0	0	0						
MP8-MW14	2	1	2.00	3.10	SPS		0	FM	40	45	15	0		NON	MOD	SFT	MST	
MP8-MW14	2	2	3.10	4.00	SPS		0		0	0	0	0						
MP8-MW14	3	1	4.00	6.00	SPS		0		0	0	0	0						
MP8-MW14	4	1	6.00	6.80	SPS		0	FM	30	45	15	10		LOW	POR	SFT	SAT	
MP8-MW14	4	2	6.80	8.00	NS		0		0	0	0	0						
MP8-MW14	5	1	8.00	8.40	SPS		0		30	45	15	10		NON	POR	SFT	SAT	
MP8-MW14	5	2	8.40	8.70	SPS		0	F	20	50	20	10		MOD	MOD	SFT	SAT	
MP8-MW14	5	3	8.70	9.30	SPS	M	5	MFC	80	15	0	0		NA	POR	LSE	SAT	
MP8-MW14	5	4	9.30	9.80	SPS		0	F	20	50	20	10		LOW	MOD	SFT	SAT	
MP8-MW14	5	5	9.80	10.00	SPS		0		0	0	0	0						
MP8-MW14	6	1	10.00	11.00	SPS		0	FM	30	50	15	5		LOW	MOD	SFT	SAT	
MP8-MW14	6	2	11.00	12.00	NS		0		0	0	0	0						
MP8-MW14	7	1	12.00	13.20	SPS		0	MF	25	50	20	5		LOW	MOD	SFT	SAT	
MP8-MW14	7	2	13.20	13.90	SPS	M	5	MFC	60	30	5	5		NON	MOD	LSE	SAT	
MP8-MW14	7	3	13.90	14.00	NS		0		0	0	0	0						
MP8-MW14	8	1	14.00	15.00	NS		0		0	0	0	0						

BOREHOLE ID : MP8-MW15 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/17/95 END DATE : 01/17/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 18.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVES
DRILL RIG TYPE : ATV

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	5.010
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32563

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 57.9"
Longitude-West: 74 deg 02' 56.7"

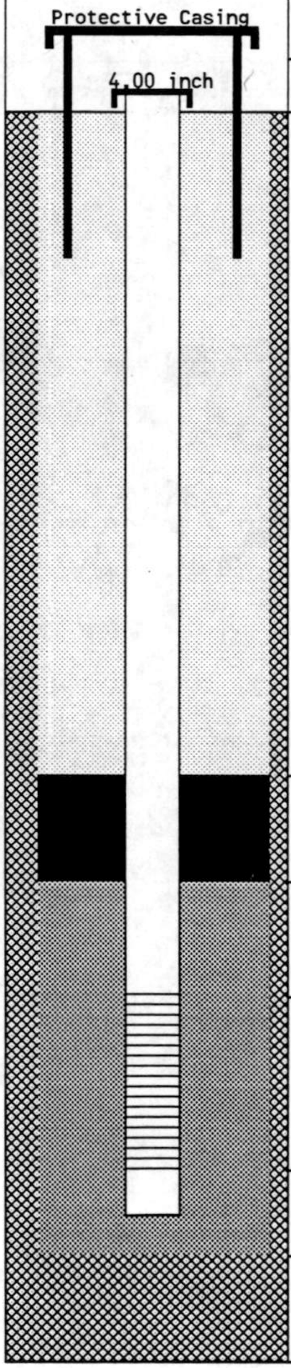
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME MAIN POST AREA
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID MP8-MW15
START DATE 01/17/95
COMPLETION DATE 01/17/95

WATER LEVELS



DEPTH		ELEV.
2.00	TC	7.01
0.00	GS	5.01
1.00	BN	4.01
3.50	SP	1.51
5.00	SC	0.01
14.54	BS	-9.53
15.00	TD	-9.99

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.00 **ft.** **Protective Casing:** 2.34 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 1.00 to 3.50 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 3.50 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/25/95
Method Surge Blocking Overpump
Yield 2 gpm **Purged Volume** 120 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 18.00
SITE NAME	: MAIN POST AREA	LOGGER	: P. THOMAS
BORING ID	: MP8-MW15	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: ATV
EASTING	: 0.0000 estimated	DATE STARTED	: 01/17/95
ELEVATION	: 5.010 surveyed	DATE COMPLETED	: 01/17/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			30	Silty sand, SM	BROWN/BLACK	LSE	MST	7 9 18 11	OVM 0.0	Fill. Black mottles, concrete rubble bottom of spoon.
				No Sample Recovered						
4	1									
3	2			Interval Not Sampled					OVM 0.0	Auger refusal at 2' bgs. Moved location up 5' from original hole. Began spooning at 3' bgs.
2	3		30	Silty sand, SM	GRAY/BROWN	SFT	WET	7 5 50 0	OVM 0.0	Fill. Sat ~3.5-4' bgs, spoon refusal at 3.6' bgs Large wood fragments in bottom of spoon.
			30	Not Classified - Incomplete Data						Interval not sampled - Augered to 5' bgs.
1	4									
0	5			No Sample Recovered				18 5 1 1		Spoon is saturated.
-1	6									
-2	7		15	Silty sand, SM	GRAY	SFT	SAT	1 2 1 0	OVM 0.0	Fill(?) Gray sand with silt/clay and organics.
				No Sample Recovered						
-3	8									
-4	9			Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	Fill. Logged cuttings only. Silty/clayey sand with trace gravel and organics.
-5	10									

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 18.00
SITE NAME	: MAIN POST AREA	LOGGER	: P. THOMAS
BORING ID	: MP8-MW15	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: ATV
EASTING	: 0.0000 estimated	DATE STARTED	: 01/17/95
ELEVATION	: 5.010 surveyed	DATE COMPLETED	: 01/17/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	Fill. Logged cuttings only. Silty/clayey sand with trace gravel and organics.
-5	11									
-6	12									
-7	13		50	Silty sand, SM	DK GREEN	LSE	SAT	2 2 2 2	OVM 0.0	Set well at 15' bgs.
-8	14			No Sample Recovered						TD of hole 15' bgs.
-9	15									
-10	16									
-11	17									
-12	18									
-13	19									
-14	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP8-MW15	1	1	0.00	0.60	SPS	F	10	MF	55	20	5	10		NON	POR	LSE	MST	
MP8-MW15	1	2	0.60	2.00	SPS		0		0	0	0	0						
MP8-MW15	2	1	2.00	3.00	NS		0		0	0	0	0						
MP8-MW15	3	1	3.00	3.60	SPS	F	10	FM	50	25	10	5		NON	POR	SFT	WET	
MP8-MW15	4	1	3.60	5.00	SPS		0		0	0	0	0						
MP8-MW15	5	1	5.00	7.00	SPS		0		0	0	0	0						
MP8-MW15	5	1	7.00	7.30	SPS	F	5	MF	50	25	10	10		NON	POR	SFT	SAT	
MP8-MW15	5	2	7.30	9.00	SPS		0		0	0	0	0						
MP8-MW15	6	1	9.00	13.00	CUT	F	5	FM	55	25	10	5		NON	POR	SFT	SAT	
MP8-MW15	7	1	13.00	14.00	SPS		10	MF	70	20	0	0		NA	MOD	LSE	SAT	
MP8-MW15	7	2	14.00	15.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP12MW16 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/04/95 *END DATE :* 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	6.330
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32576

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 48.7"
Longitude-West: 74 deg 02' 15.6"

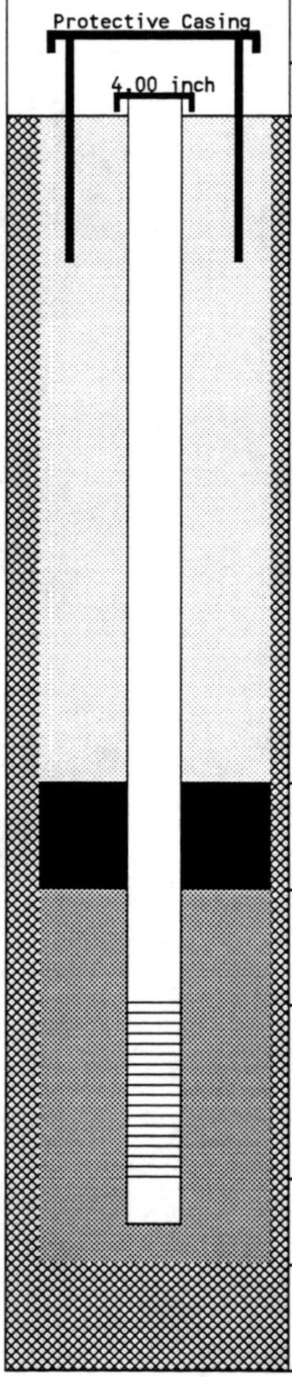
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST 12	**INSPECTOR**	P. THOMAS

WELL ID	MP12MW16
START DATE	01/04/95
COMPLETION DATE	01/04/95

WATER LEVELS



DEPTH		ELEV.
2.02	TC	8.35
0.00	GS	6.33
0.50	BN	5.83
3.00	SP	3.33
4.50	SC	1.83
14.01	BS	-7.68
14.50	TD	-8.17

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 4.50 **ft.**
Type :

Stick Up Inner Casing: 2.02 **ft.** **Protective Casing:** 2.41 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO. 1 SAND MORIE **Interval:** 3.00 to 14.50 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.50 to 14.01 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.01 to 14.50 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/16/95
Method Bailing, overpumping
Yield 0.5 gpm **Purged Volume** 59 gal

COMMENTS

TC = Top of Casing	SP = Top Sand Pack	= Grout
GS = Ground Surface	SC = Top Screen	= Seal
BN = Top Seal	BS = Bottom Screen	= Sand Pack
	TD = Total Depth	= Formation

Additional Comments:
Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	14.50
SITE NAME	:	MAIN POST 12	LOGGER	:	P. THOMAS
BORING ID	:	MP12MW16	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B-57
EASTING	:	0.0000 estimated	DATE STARTED	:	01/04/95
ELEVATION	:	6.330 surveyed	DATE COMPLETED	:	01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			90	Silty sand, SM	OLIVE BROWN	LSE	WET	6 5 7 5	HNU 0.0	Fill, 0-0.2 topsoil, 0.2-0.3' dk brown charcoal gravel; sat. observed 1.5' bgs.
5	1									
				No Sample Recovered						
4	2		90	Silty sand, SM	OLIVE BROWN/BRN	LSE	SAT	3 3 3 3	HNU 0.0	
3	3									
				No Sample Recovered						
2	4		100	Silty sand, SM	BROWN	SFT	SAT	4 2 2 2	HNU 0.0	Interbedded sand with silt/and organics. differing % compositions.
1	5									
				Poorly graded sand with silt, SP-SM	STRONG PALE GRE	LSE	SAT		HNU 0.0	
0	6		65	Poorly graded sand with silt, SP-SM	GREEN	LSE	SAT	4 3 1 1	HNU 0.0	
-1	7									
				No Sample Recovered						
-2	8		50	Silty sand, SM	GREEN/BROWN/OLV	LSE	SAT	2 1 1 2	HNU 0.0	(Fill?) Iron stained with olive gray/green sand; 8-8.3 silt and organic zone.
-3	9			No Sample Recovered						
-4	10		60	Silty sand, SM	ORNG/FE DK BRN	SFT	SAT	5 5 5 4	HNU 0.0	Uncertain (fill?)

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 14.50	
SITE NAME	: MAIN POST 12		LOGGER	: P. THOMAS	
BORING ID	: MP12MW16		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B-57	
EASTING	: 0.0000 estimated		DATE STARTED	: 01/04/95	
ELEVATION	: 6.330 surveyed		DATE COMPLETED	: 01/04/95	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	ORNG/FE DK BRN	SFT	SAT		HNU 0.0	Uncertain (fill?)
-4	11									
				No Sample Recovered						
-5	12		85	Silty sand, SM	ORG/FE DK BRN	SFT	SAT	6 6 7 8	HNU 0.0	Fining downward interval. (Uncertain/fill).
-6	13			Silty sand, SM	DK BROWN	SFT	WET		HNU 0.0	Fill?
				No Sample Recovered						
-7	14			Interval Not Sampled						Augered interval. Set well at 14.5' bgs. TD of borehole 145' bgs.
-8	15									
-9	16									
-10	17									
-11	18									
-12	19									
-13	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP12MW16	1	1	0.00	1.80	SPS		0	MFC	85	15	0	0		NA	MOD	LSE	WET	
MP12MW16	1	2	1.80	2.00	SPS		0		0	0	0	0						
MP12MW16	2	1	2.00	3.80	SPS		0	MFC	85	15	0	0		NA	MOD	LSE	SAT	
MP12MW16	2	2	3.80	4.00	SPS		0		0	0	0	0						
MP12MW16	3	1	4.00	5.50	SPS		0	MFC	80	20	0	0		NA	MOD	SFT	SAT	
MP12MW16	3	2	5.50	6.00	SPS		0	MFC	90	10	0	0		NA	MOD	LSE	SAT	
MP12MW16	4	1	6.00	7.30	SPS		0	MFC	90	10	0	0		NA	MOD	LSE	SAT	
MP12MW16	4	2	7.30	8.00	SPS		0		0	0	0	0						
MP12MW16	5	1	8.00	9.00	SPS		5	MFC	75	20	0	0		NA	MOD	LSE	SAT	
MP12MW16	5	2	9.00	10.00	SPS		0		0	0	0	0						
MP12MW16	6	1	10.00	11.20	SPS		0	MFC	78	20	2	0		NON	MOD	SFT	SAT	
MP12MW16	6	2	11.20	12.00	SPS		0		0	0	0	0						
MP12MW16	7	1	12.00	13.10	SPS		0	MF	70	25	5	0		NON	MOD	SFT	SAT	
MP12MW16	7	2	13.10	13.70	SPS		0	MF	60	30	10	0		NON	MOD	SFT	WET	
MP12MW16	7	3	13.70	14.00	SPS		0		0	0	0	0						
MP12MW16	8	1	14.00	14.50	NS		0		0	0	0	0						

BOREHOLE ID : MP12MW17 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/11/95 END DATE : 01/11/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	5.900
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32577

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 47.4"
Longitude-West: 74 deg 02' 19.2"

Well Completion Summary

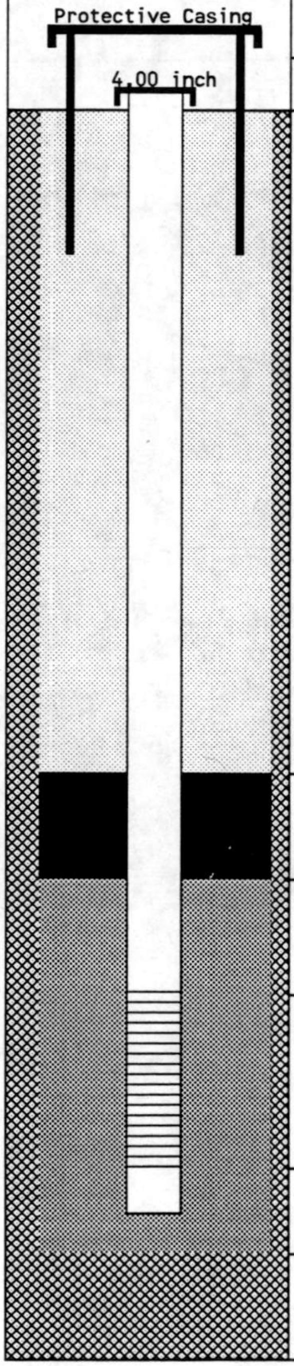
Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 12

DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID MP12MW17
START DATE 01/11/95
COMPLETION DATE 01/11/95

WATER LEVELS



DEPTH		ELEV.
1.97	TC	7.87
0.00	GS	5.90
0.50	BN	5.40
3.00	SP	2.90
4.50	SC	1.40
14.35	BS	-8.45
14.50	TD	-8.60

DRILLING SUMMARY

Driller WELLINGTON REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 4.50 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.97 **ft.** **Protective Casing:** 2.34 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 3.00 to 14.50 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.50 to 14.35 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.35 to 14.50 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/17/95
Method Bailing, overpumping
Yield 1.5 gpm **Purged Volume** 120 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log *Roy F. WESTON, Inc.*

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 14.50
SITE NAME	: MAIN POST 12		LOGGER	: P. THOMAS
BORING ID	: MP12MW17		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	: 01/11/95
ELEVATION	: 5.900 surveyed		DATE COMPLETED	: 01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			10	Sandy silt, ML	DK BRN/FE BRN	SFT	MST	2 2 3 2	OVM 0.0	Poor recovery - appears to be fill.
				No Sample Recovered						
4	1									
3	2			No Sample Recovered			SAT	2 1 1 1	OVM 0.0	Spoon was wet - possible fill recovered wood in drive shoe.
2	3									
1	4			No Sample Recovered				3 3 4 7		Recovered slough in spoon Possible saturated fill with fill gray roots (sat).
0	5									
-1	6		15	Sandy silt, ML	GREEN/BROWN	SFT	SAT	3 4 4 4	OVM 0.0	Slough (?). Sand with grass/tree roots.
				No Sample Recovered						
-2	7									
-3	8		25	Silty sand, SM	GRAY	SFT	SAT	8 10 4 3	OVM 0.0	Fill - grass roots etc. Poor recovery, slough.
				No Sample Recovered						
-4	9									
-5	10		20	Silty sand, SM	GRAY	SFT	SAT	2 2 4 4		Fill/slough?

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 14.50
SITE NAME	: MAIN POST 12	LOGGER	: P. THOMAS
BORING ID	: MP12MW17	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/11/95
ELEVATION	: 5.900 surveyed	DATE COMPLETED	: 01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY	SFT	SAT			Fill/slough?
				No Sample Recovered						
-5	11									
-6	12		100	Clayey sand, SC	GRAY	SFT	SAT	4 4 5 3		Sand with beds of clay/ silt organics.
-7	13									
-8	14			Interval Not Sampled						Augered interval - TD and set well 14.5' bgs.
-9	15									
-10	16									
-11	17									
-12	18									
-13	19									
-14	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP12MW17	1	1	0.00	0.20	SPS		10	FM	30	40	10	10		NON	POR	SFT	MST	
MP12MW17	1	2	0.20	2.00	SPS		0		0	0	0	0						
MP12MW17	2	1	2.00	4.00	SPS		0		0	0	0	0					SAT	
MP12MW17	3	1	4.00	6.00	SPS		0		0	0	0	0						
MP12MW17	4	1	6.00	6.30	SPS		10	MF	20	25	5	10		NON	POR	SFT	SAT	
MP12MW17	4	2	6.30	8.00	SPS		0		0	0	0	0						
MP12MW17	5	1	8.00	8.50	SPS		0	MF	50	20	20	10		LOW	POR	SFT	SAT	
MP12MW17	5	2	8.50	10.00	SPS		0		0	0	0	0						
MP12MW17	6	1	10.00	10.40	SPS		0	MF	50	20	20	10		NON	POR	SFT	SAT	
MP12MW17	6	2	10.40	12.00	SPS		0		0	0	0	0						
MP12MW17	7	1	12.00	14.00	SPS		0	MF	50	15	30	5		MOD	MOD	SFT	SAT	
MP12MW17	8	1	14.00	14.50	NS		0		0	0	0	0						

BOREHOLE ID : MP12MW18 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/11/95 END DATE : 01/11/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	4.780
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32578

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 49.7"
Longitude-West: 74 deg 02' 14.5"

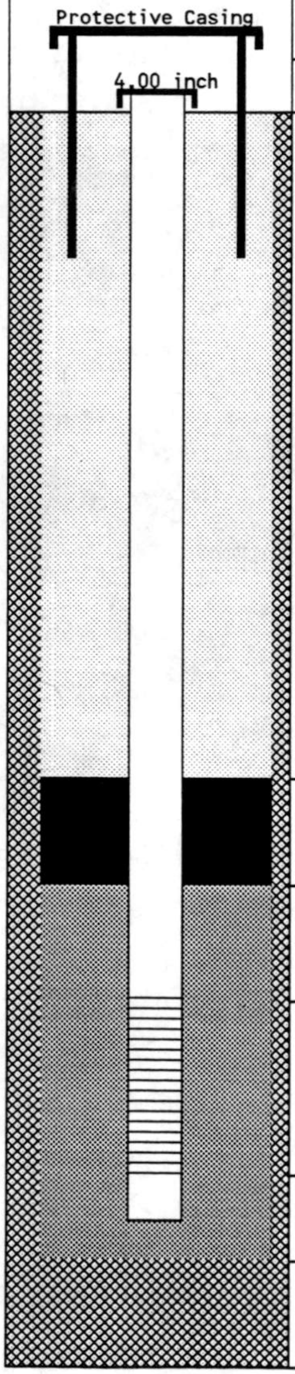
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST 12	**INSPECTOR**	P. THOMAS

WELL ID	MP12MW18
START DATE	01/11/95
COMPLETION DATE	01/11/95

WATER LEVELS



DEPTH		ELEV.
1.84	TC	6.62
0.00	GS	4.78
0.50	BN	4.28
3.00	SP	1.78
4.50	SC	0.28
14.04	BS	-9.26
14.50	TD	-9.72

DRILLING SUMMARY

Driller	WELLINGTON REEVE
Drilling Fluid	WATER
Well Type	SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 4.50 **ft.**
Type :

Stick Up Inner Casing: 1.84 **ft.** **Protective Casing:** 2.26 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 3.00 to 14.50 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.50 to 14.04 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.04 to 14.50 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/17/95
Method Surge blocking/bailing
Yield 0.5 gpm **Purged Volume** 45 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 14.50	
SITE NAME	: MAIN POST 12		LOGGER	: P. THOMAS	
BORING ID	: MP12MW18		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B-57	
EASTING	: 0.0000 estimated		DATE STARTED	: 01/11/95	
ELEVATION	: 4.780 surveyed		DATE COMPLETED	: 01/11/95	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			45	Sandy silt, ML	FE BROWN/GRAY	SFT	MST	3 2 3 4	OVM 1.0	Fill. Note: 0-0.2 topsoil
3	1			No Sample Recovered						
2	2		30	Silty sand, SM	GRAY/OLIVE GRN	LSE	SAT	3 4 3 3	OVM 0.0	Fill. Top 0-3' same lithology as noted above. Sheen observed in spoon.
				No Sample Recovered						
1	3									
0	4		50	Silty sand, SM	OLIVE GREEN	SFT	SAT	1 2 1 1	OVM 0.0	Sharp color change. Trace roots and plant fragments Sheen observed.
-1	5			No Sample Recovered						
-2	6		60	Silty sand, SM	OLIVE GREEN	LSE	SAT	1 1 2 4	OVM 0.0	
				Silty sand, SM	FE BROWN/GRAY	SFT	SAT		OVM 0.0	Iron (Fe) brown/gray interbedded laminae.
-3	7			No Sample Recovered						
-4	8		70	Silty sand, SM	FE BROWN/GRAY	SFT	SAT	4 2 4 5	OVM 0.0	Iron (Fe) brown/grey interbedded laminae.
-5	9			No Sample Recovered						
-6	10		80	Silty sand, SM	FE BROWN/GRAY	SFT	SAT	7 5 4 3	OVM 0.0	Slightly more clayey than above lithology. Clay pockets found throughout interval.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 14.50
SITE NAME	: MAIN POST 12	LOGGER	: P. THOMAS
BORING ID	: MP12MW18	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/11/95
ELEVATION	: 4.780 surveyed	DATE COMPLETED	: 01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	FE BROWN/GRAY	SFT	SAT		OVM 0.0	Slightly more clayey than above lithology. Clay pockets found throughout interval.
-6	11									
				No Sample Recovered						
-7	12		85	Silty sand, SM	FE BROWN/GRAY	SFT	SAT	5 2 5 4	OVM 0.0	
-8	13									
				No Sample Recovered						
-9	14			Interval Not Sampled						Augered interval. Set well at 14.5' bgs.
-10	15									
-11	16									
-12	17									
-13	18									
-14	19									
-15	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP12MW18	1	1	0.00	0.90	SPS		5	FM	25	50	10	10		NON	POR	SFT	MST	
MP12MW18	1	2	0.90	2.00	SPS		0		0	0	0	0						
MP12MW18	2	1	2.00	2.60	SPS		0	MF	85	15	0	0		NA	MOD	LSE	SAT	
MP12MW18	2	2	2.60	4.00	SPS		0		0	0	0	0						
MP12MW18	3	1	4.00	5.00	SPS		5	MF	70	20	0	5		NA	MOD	SFT	SAT	
MP12MW18	3	2	5.00	6.00	SPS		0		0	0	0	0						
MP12MW18	4	1	6.00	6.70	SPS		5	MF	70	20	0	5		NA	MOD	LSE	SAT	
MP12MW18	4	2	6.70	7.20	SPS		0	MF	70	25	5	0		NON	WEL	SFT	SAT	
MP12MW18	4	3	7.20	8.00	SPS		0		0	0	0	0						
MP12MW18	5	1	8.00	9.40	SPS		0	MF	70	25	5	0		NON	MOD	SFT	SAT	
MP12MW18	5	2	9.40	10.00	SPS		0		0	0	0	0						
MP12MW18	6	1	10.00	11.60	SPS		0	MF	70	20	10	0		NON	MOD	SFT	SAT	
MP12MW18	6	2	11.60	12.00	SPS		0		0	0	0	0						
MP12MW18	7	1	12.00	13.70	SPS		0	MF	70	20	10	0		NON	MOD	SFT	SAT	
MP12MW18	7	2	13.70	14.00	SPS		0		0	0	0	0						
MP12MW18	8	1	14.00	14.50	NS		0		0	0	0	0						

BOREHOLE ID : MP14MW19 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/04/95 *END DATE :* 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 16.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2: 2.00
INTERVAL: 15.00 ft. to 16.00 ft. BGS
METHOD : SPLIT SPOON *FLUID :* NONE
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	7.980
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32579

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude North: 40 deg 18' 47.3"
Longitude West: 74 deg 02' 20.7"

Well Completion Summary

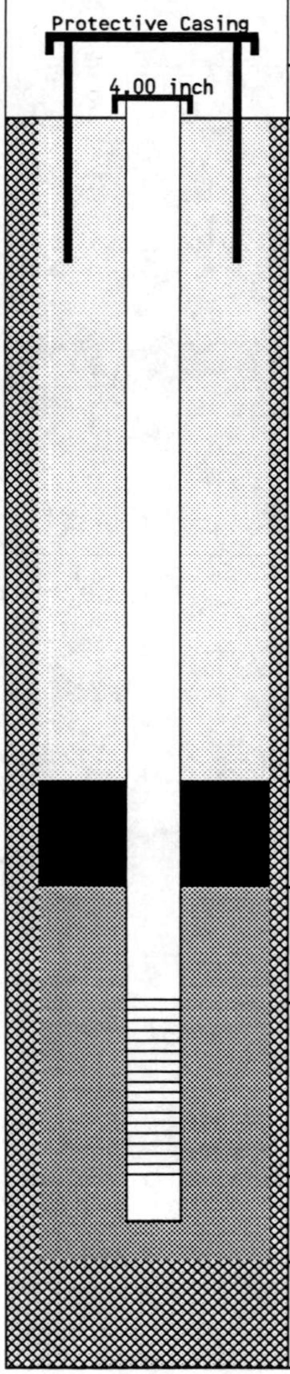
Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 14

DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID MP14MW19
START DATE 01/04/95
COMPLETION DATE 01/04/95

WATER LEVELS



DEPTH		ELEV.
1.70	TC	9.68
0.00	GS	7.98
0.50	BN	7.48
3.50	SP	4.48
5.00	SC	2.98
14.54	BS	-6.56
15.00	TD	-7.02

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.70 **ft.** **Protective Casing:** 2.49 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.50 **ft.**

Sand Pack Type : NO. 1 SAND MORIE **Interval:** 3.50 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/16/95
Method Bailing, overpumping
Yield 7 gpm **Purged Volume** 345 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 16.00
SITE NAME	: MAIN POST 14	LOGGER	: P. THOMAS
BORING ID	: MP14MW19	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/04/95
ELEVATION	: 7.980 surveyed	DATE COMPLETED	: 01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			70	Silty sand, SM	OLIVE BROWN	LSE	MST	4 5 3 4	HNU 0.0	Fill. 0-0.4 topsoil.
6	1									
				No Sample Recovered						
5	2		30	Fill	GRAY		WET	10 11 8 9		Broken charcoal fragments (?).
				No Sample Recovered						
4	3									
3	4		10	Silty sand, SM	GRAY	SFT	SAT	3 2 2 5	HNU 0.0	Slough (?).
				No Sample Recovered						
2	5									
1	6		25	Fill	GRAY/WHITE			5 5 6 9	HNU 0.0	Fill with glass fragments
				No Sample Recovered						
0	7									
-1	8			No Sample Recovered						No recovery. Spoon sat.
-2	9									
-3	10		100	Silty sand, SM	GRAY		SAT	2 1 1 2	HNU 0.0	Uncertain/fill?

Borehole Log

Roy F. WESTON, Inc.

PROJECT :	FT. MONMOUTH	TOTAL DEPTH :	16.00
SITE NAME :	MAIN POST 14	LOGGER :	P. THOMAS
BORING ID :	MP14MW19	DRILLING COMPANY :	J.C. ANDERSON
NORTHING :	0.0000 estimated	DRILLING RIG :	MOBILE B-57
EASTING :	0.0000 estimated	DATE STARTED :	01/04/95
ELEVATION :	7.980 surveyed	DATE COMPLETED :	01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY		SAT		HNU 0.0	Uncertain/fill?
-3	11									
-4	12		100	Silty sand, SM	GRAY	SFT	SAT	1 1 1 1	HNU 0.0	Probably fill.
-5	13									
-6	14		100	Silty sand, SM	GRAY	SFT	SAT		HNU 0.0	Probably fill. Set well at 15' bgs; wood fragments found in drive shoe.
-7	15									
-8	16									
-9	17									
-10	18									
-11	19									
-12	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP14MW19	1	1	0.00	1.40	SPS		0	MF	60	30	0	10		NA	POR	LSE	MST	
MP14MW19	1	2	1.40	2.00	SPS		0		0	0	0	0						
MP14MW19	2	1	2.00	2.60	SPS		0		0	0	0	0					WET	
MP14MW19	2	2	2.60	4.00	SPS		0		0	0	0	0						
MP14MW19	3	1	4.00	4.20	SPS		5	MF	55	30	10	0		NON	POR	SFT	SAT	
MP14MW19	3	2	4.20	6.00	SPS		0		0	0	0	0						
MP14MW19	4	1	6.00	6.50	SPS		0		0	0	0	0						
MP14MW19	4	2	6.50	8.00	SPS		0		0	0	0	0						
MP14MW19	5	1	8.00	10.00	SPS		0		0	0	0	0						
MP14MW19	6	1	10.00	12.00	SPS		0	MFC	60	30	10	0					SAT	
MP14MW19	7	1	12.00	14.00	SPS		0	MFC	60	30	10	0		NON	MOD	SFT	SAT	
MP14MW19	8	1	14.00	16.00	SPS		0	MFC	60	30	10	0		NON	MOD	SFT	SAT	

BOREHOLE ID : MP14MW20
PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/04/94
END DATE : 01/04/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) :

TOTAL DEPTH : 14.00
DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA
FLUID : WATER

BOREHOLE DIAMETER #2:
INTERVAL:
METHOD :
FLUID :

BOREHOLE DIAMETER #3:
INTERVAL:
METHOD :
FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	7.430
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32580

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

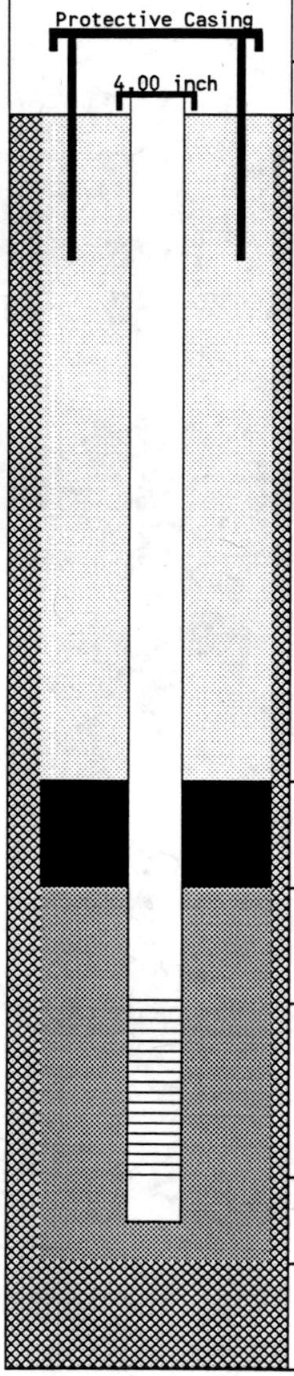
	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18′ 50.2"
Longitude-West: 74 deg 02′ 19.8"

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST 14	**INSPECTOR**	K. VALENTI

WELL ID	MP14MW20	**WATER LEVELS**
START DATE	01/04/95	
COMPLETION DATE	01/04/95	



DEPTH		ELEV.
1.86	TC	9.29
0.00	GS	7.43
1.00	BN	6.43
3.00	SP	4.43
4.50	SC	2.93
14.04	BS	-6.61
14.50	TD	-7.07

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 14.50 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.86 **ft.** **Protective Casing:** 2.34 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 3.00 to 14.50 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.50 to 14.04 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.05 to 14.50 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/13/95
Method Surge blocking/bailing
Yield .5 gpm **Purged Volume** 61 gal

COMMENTS

TC = Top of Casing	SP = Top Sand Pack	= Grout
GS = Ground Surface	SC = Top Screen	= Seal
BN = Top Seal	BS = Bottom Screen	= Sand Pack
	TD = Total Depth	= Formation

Additional Comments:

NOTE: Well Diagram not to Scale **Elevations are feet above mean sea level**

 06/20/95

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 14.00
SITE NAME	: MAIN POST 14	LOGGER	: K. VALENTI
BORING ID	: MP14MW20	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 01/04/94
ELEVATION	: 7.430 surveyed	DATE COMPLETED	: 01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Sandy silt, ML	DK BROWN	SFT	DRY	3 5 6 5	HNU 2.0	Dk brown to black sandy silt. 1st 3" topsoil.
6	1			No Sample Recovered						
5	2		40	Silty sand with gravel, SM	BLACK	LSE	DRY	3 3 3 4	HNU 0.0	Sand & gravel, little silt.
4	3			No Sample Recovered						
3	4		100	Elastic silt, MH	BLACK	FRM	WET	1 1 1 1	HNU 0.0	Uncertain, Wet outside of spoon at 4.5' bgs. Clayey silt containing roots.
2	5									
1	6		100	Elastic silt, MH	GREEN	FRM	SAT		HNU 0.0	Uncertain.
0	7									
-1	8		30	Elastic silt, MH	GREEN	SFT	SAT	1 1 2 1	HNU 0.0	Uncertain
				No Sample Recovered						
-2	9									
-3	10		100	Elastic silt with sand, MH	GREEN	SFT	SAT	1 1 1 1	HNU 0.0	Uncertain

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	14.00
SITE NAME	:	MAIN POST 14	LOGGER	:	K. VALENTI
BORING ID	:	MP14MW20	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	01/04/94
ELEVATION	:	7.430 surveyed	DATE COMPLETED	:	01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Elastic silt with sand, MH	GREEN	SFT	SAT		HNU 0.0	Uncertain
-3	11									
-4	12		100	Silt with sand, ML	DK GREEN BLK	FRM	SAT	3 6 6 7	HNU 0.0	Possible confining layer. TD of borehole 14' bgs.
-5	13									
-6	14									
-7	15									
-8	16									
-9	17									
-10	18									
-11	19									
-12	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP14MW20	1	1	0.00	1.00	SPS		0		40	60	0	0		NON	POR	SFT	DRY	
MP14MW20	1	2	1.00	2.00	SPS		0		0	0	0	0						
MP14MW20	2	1	2.00	2.80	SPS		40		40	20	0	0		NA	POR	LSE	DRY	
MP14MW20	2	2	2.80	4.00	SPS		0		0	0	0	0						
MP14MW20	3	1	4.00	6.00	SPS		0		0	50	20	30		HGH	NA	FRM	WET	
MP14MW20	4	1	6.00	8.00	SPS		0		0	40	30	30		HGH	NA	FRM	SAT	
MP14MW20	5	1	8.00	8.60	SPS		0		10	75	15	0		MOD	NA	SFT	SAT	
MP14MW20	5	2	8.60	10.00	SPS		0		0	0	0	0						
MP14MW20	6	1	10.00	12.00	SPS		0		25	60	15	0		HGH	NA	SFT	SAT	
MP14MW20	7	1	12.00	14.00	SPS		0		20	80	0	0		NON	POR	FRM	SAT	

BOREHOLE ID :	MP14MW21	*PROJECT NAME:*	FT. MONMOUTH
BEGIN DATE :	01/04/95	*END DATE :*	01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 18.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 16.00 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2: 2.00
INTERVAL: 16.00 ft. to 18.00 ft. BGS
METHOD : SPLIT SPOON *FLUID :* NONE
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	7.500
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32581

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

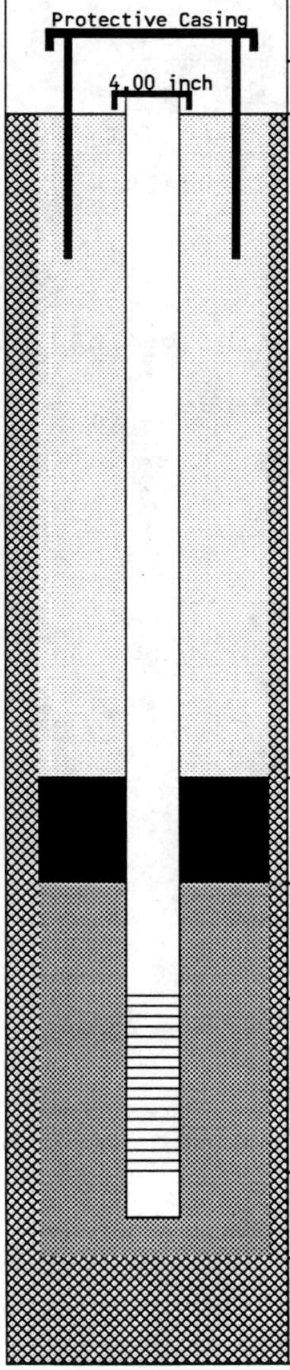
COMMENTS :
Latitude-North: 40 deg 18' 50.6"
Longitude-West: 74 deg 02' 14.0"

 06/20/95

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 14
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID MP14MW21
START DATE 01/04/95
COMPLETION DATE 01/04/95

WATER LEVELS



DEPTH		ELEV.
2.07	TC	9.57
0.00	GS	7.50
1.00	BN	6.50
4.00	SP	3.50
6.00	SC	1.50
15.54	BS	-8.04
16.00	TD	-8.50

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 6.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.07 **ft.** **Protective Casing:** 2.28 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 1.00 to 4.00 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 4.00 to 16.00 **ft.**
Grain Size : **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 6.00 to 15.54 **ft.**
Type : **Slots:** 0.010 **inches**

Silt Trap Interval: 15.54 to 16.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/13/95
Method Surge blocking/overpump
Yield 0.5 gpm **Purged Volume** 78 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 18.00
SITE NAME	: MAIN POST 14	LOGGER	: P. THOMAS
BORING ID	: MP14MW21	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/04/95
ELEVATION	: 7.500 surveyed	DATE COMPLETED	: 01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			65	Silty sand, SM	BROWN	SFT	MST	3 17 19 20	HNU 0.0	Fill, 0-0.4' bgs. consists of grass root fragments.
6	1									
				No Sample Recovered						
5	2		45	Silty sand, SM	BROWN	SFT	MST	12 100 0 0	HNU 0.0	Concrete rubble at 2.2' bgs.
				Fill	BROWN				HNU 0.0	
4	3		45	Interval Not Sampled						Augered interval.
3	4			Interval Not Sampled						Augered interval, Out of concrete interval @-8-9' bgs, next spoon 10-12'bgs Sat. observed 6'bgs ctngs
2	5									
1	6									
0	7									
-1	8									
-2	9									
-3	10		70	Poorly graded sand, SP	GREY	SFT	SAT	2 3 2 4	HNU 0.0	Uncertain/fill?

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 18.00
SITE NAME	: MAIN POST 14		LOGGER	: P. THOMAS
BORING ID	: MP14MW21		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	: 01/04/95
ELEVATION	: 7.500 surveyed		DATE COMPLETED	: 01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	GREY	SFT	SAT		HNU 0.0	Uncertain/fill?
-3	11			Sandy elastic silt, MH	GRAY	SFT	WET		HNU 0.0	Fill? Trace plant/root fragments.
				No Sample Recovered						
-4	12		80	Silty sand, SM	GRAY	SFT	SAT	6 1 2 1	HNU 0.0	Uncertain/fill?
-5	13									
				No Sample Recovered						
-6	14		60	Silty sand, SM	GRAY	SFT	SAT	2 2 2 2	HNU 0.0	Uncertain/fill?
-7	15									
				No Sample Recovered						
-8	16		90	Silty sand, SM	GRAY	SFT	SAT	2 3 1 2	HNU 0.0	Uncertain/fill? Note: 16.4-16.6 wet silt layer Well set at 16' bgs. TD of borehole 18'.
-9	17									
-10	18			No Sample Recovered						
-11	19									
-12	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP14MW21	1	1	0.00	1.30	SPS		5	M	60	25	0	10		NA	MOD	SFT	MST	
MP14MW21	1	2	1.30	2.00	SPS		0		0	0	0	0						
MP14MW21	2	1	2.00	2.20	SPS		5	MF	60	25	0	10		NA	MOD	SFT	MST	
MP14MW21	2	2	2.20	2.90	SPS		0		0	0	0	0						
MP14MW21	3	1	2.90	4.00	NS		0		0	0	0	0						
MP14MW21	4	1	4.00	10.00	NS		0		0	0	0	0						
MP14MW21	5	1	10.00	10.80	SPS		0		0	0	0	0		NON	MOD	SFT	SAT	
MP14MW21	5	2	10.80	11.40	SPS		0	F	30	50	20	0		MOD	WEL	SFT	WET	
MP14MW21	5	3	11.40	12.00	SPS		0		0	0	0	0						
MP14MW21	6	1	12.00	13.40	SPS		0	MF	60	30	10	0		NON	MOD	SFT	SAT	
MP14MW21	6	2	13.40	14.00	SPS		0		0	0	0	0						
MP14MW21	7	1	14.00	15.20	SPS		0	MF	60	30	10	0		NON	MOD	SFT	SAT	
MP14MW21	7	2	15.20	16.00	SPS		0		0	0	0	0						
MP14MW21	8	1	16.00	17.80	SPS		0		60	30	10	0		NON	MOD	SFT	SAT	
MP14MW21	8	2	17.80	18.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP16MW22 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/15/94 *END DATE :* 12/15/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2: 2.00
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : SPS *FLUID :* NONE
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	5.500
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32582

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

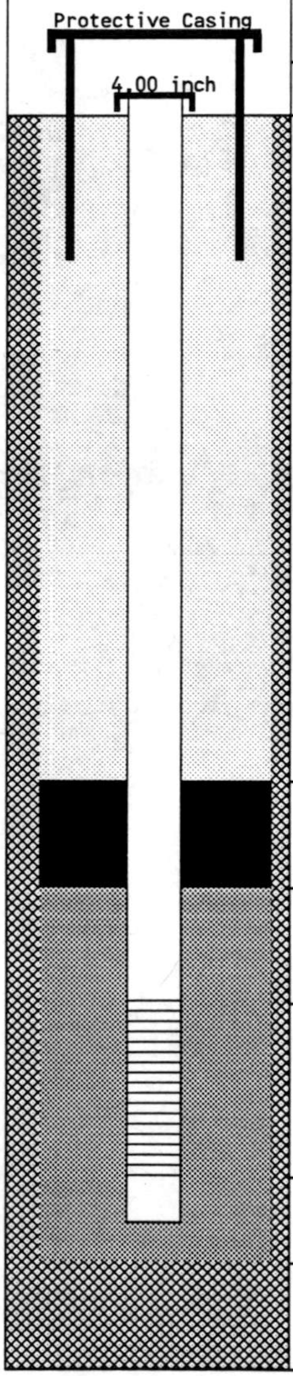
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
0-2' sampled @1425 for VOC,BNA,TCL,Pest/PCB,Tal metals. VOC @approx. 6-12" bgs. 2"-10' int. same for parameters. VOC taken from 2-4'. Lat. 40 deg 18' 56.1"/Long. 74 deg 01'52.3"

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST 16	**INSPECTOR**	K. VALENTI

WELL ID	MP16MW22
START DATE	12/15/94
COMPLETION DATE	12/15/94

WATER LEVELS



DEPTH		ELEV.
1.75	TC	7.25
0.00	GS	5.50
1.00	BN	4.50
3.00	SP	2.50
4.50	SC	1.00
14.04	BS	-8.54
14.50	TD	-9.00

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 4.50 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.75 **ft.** **Protective Casing:** 2.04 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : MORIE #1 **Interval:** 3.00 to 14.50 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.50 to 14.04 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.04 to 14.50 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/05/95
Method Bailing, surge blocking
Yield 1 gpm **Purged Volume** 31 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

 06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	14.50
SITE NAME	:	MAIN POST 16	LOGGER	:	K. VALENTI
BORING ID	:	MP16MW22	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	12/15/94
ELEVATION	:	5.500 surveyed	DATE COMPLETED	:	12/15/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Other	BROWN	LSE	MST	13 11 7 7	HNU 0.0	Top 3" topsoil. Matrix contains a few subrounded small stones.
				Other	BLACK	LSE	NA		HNU 0.0	Asphalt gravel.
4	1			No Sample Recovered						
3	2		100	Lean clay with sand, CL	GREEN-DK GRAY	FRM	SAT	3 2 2 3	HNU 0.0	Water in the hole at 1' bgs. SPS saturated. Sandy saturated clay.
2	3									
1	4		75	Sandy lean clay with grav el, CL	DK GREEN-DK GRY	SFT	SAT	2 2 4 9	HNU 0.0	5.5-6 no recovery. Saturated.
0	5									
				No Sample Recovered						
-1	6		50	Clayey sand, SC	GREENISH BROWN	SFT	SAT	5 6 8 10	HNU 0.0	Saturated sample. Mostly sands some semi-rounded cobbles.
-2	7			No Sample Recovered						
-3	8		100	Poorly graded sand, SP	GREENISH-BROWN	SFT	SAT	5 4 2 1	HNU 0.0	Sands get finer w/depth all fine sands towards bottom of spoon. Few small cobbles.
-4	9									
-5	10		100	Poorly graded sand, SP	GREENISH-BROWN	LSE	SAT	1 1 1 2	HNU 0.0	Same lithology as previous interval.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	14.50
SITE NAME	:	MAIN POST 16	LOGGER	:	K. VALENTI
BORING ID	:	MP16MW22	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	12/15/94
ELEVATION	:	5.500 surveyed	DATE COMPLETED	:	12/15/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	GREENISH-BROWN	LSE	SAT		HNU 0.0	Same lithology as previous interval.
-5	11									
				Fat clay, CH	GREENISH-GRAY	SFT	SAT		HNU 0.0	Some slight yellow staining observed.
-6	12		100	Fat clay, CH	GREENISH-GRAY	SFT	SAT	2 1 1 5	HNU 0.0	Some yellow staining. Same lithology as previous interval.
-7	13									
				Poorly graded sand, SP	GREENISH-WHITE	LSE	SAT		HNU 0.0	3" layer-sharp contact.
				Lean clay, CL	DK BROWN	FRM	MST		HNU 0.0	
-8	14		100	Fat clay, CH	DK BROWN	FRM	MST		HNU 0.0	Same lithology as previous interval. TD of borehole 14.5' bgs.
-9	15									
-10	16									
-11	17									
-12	18									
-13	19									
-14	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP16MW22	1	1	0.00	0.50	SPS	MC	20	FM	50	30	0	0		LOW	MOD	LSE	MST	
MP16MW22	1	2	0.50	1.00	SPS	C	100		0	0	0	0		NON	NA	LSE	NA	
MP16MW22	1	3	1.00	2.00	SPS		0		0	0	0	0						
MP16MW22	2	1	2.00	4.00	SPS		0	M	25	0	75	0		MOD	MOD	FRM	SAT	
MP16MW22	3	1	4.00	5.50	SPS		15		30	10	45	0		MOD	POR	SFT	SAT	
MP16MW22	3	2	5.50	6.00	SPS		0		0	0	0	0						
MP16MW22	4	1	6.00	7.00	SPS	C	10	CF	75	0	15	0		LOW	POR	SFT	SAT	
MP16MW22	4	2	7.00	8.00	SPS		0		0	0	0	0						
MP16MW22	5	1	8.00	10.00	SPS		5	MF	95	0	0	0		NON	MOD	SFT	SAT	
MP16MW22	6	1	10.00	11.50	SPS		5		95	0	0	0		NON	MOD	LSE	SAT	
MP16MW22	6	2	11.50	12.00	SPS		0		0	15	85	0		HGH	WEL	SFT	SAT	
MP16MW22	7	1	12.00	13.20	SPS		0		0	10	90	0		HGH	WEL	SFT	SAT	
MP16MW22	7	2	13.20	13.50	SPS		0	F	100	0	0	0		NON	WEL	LSE	SAT	
MP16MW22	7	3	13.50	14.00	SPS		0		0	40	60	0		MOD	WEL	FRM	MST	
MP16MW22	8	1	14.00	14.50	SPS		0		0	40	60	0		HGH	WEL	FRM	MST	

BOREHOLE ID : MP18MW24 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/12/95 END DATE : 01/12/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLINGTON REEVES
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	6.780
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32565

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

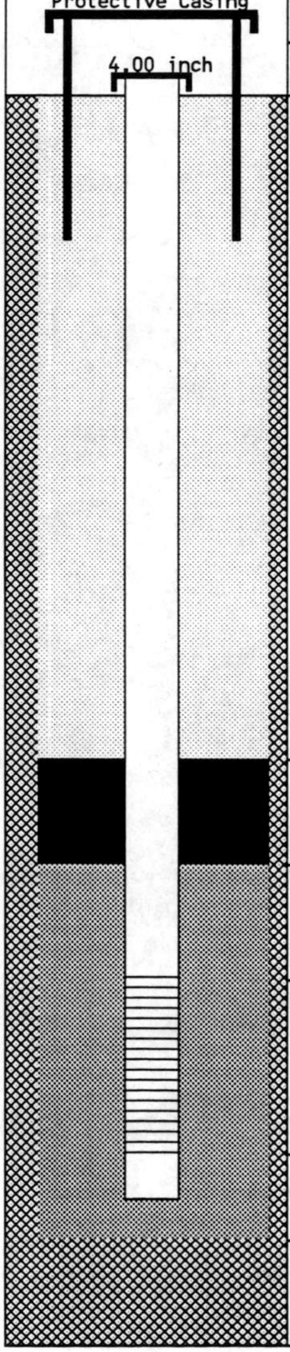
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 19' 00.2"
Longitude-West: 74 deg 02' 49.7"

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 18
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID MP18MW24
START DATE 01/12/95
COMPLETION DATE 01/13/95

WATER LEVELS



DEPTH		ELEV.
1.38	TC	8.16
0.00	GS	6.78
1.00	BN	5.78
3.50	SP	3.28
5.00	SC	1.78
14.54	BS	-7.76
15.00	TD	-8.22

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.38 **ft.** **Protective Casing:** 2.26 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 1.00 to 3.50 **ft.**

Sand Pack Type : NO. 1 SAND MORIE **Interval:** 3.50 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/18/95
Method surge blocking/overpump
Yield .25 gpm **Purged Volume** 20 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

 06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	15.00
SITE NAME	: MAIN POST 18		LOGGER	:	P. THOMAS
BORING ID	: MP18MW24		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	:	01/12/95
ELEVATION	: 6.780 surveyed		DATE COMPLETED	:	01/12/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			70	Silty gravel with sand, GM	ORANGE	LSE	MST	7	OVM 0.0	Fill.
				Silty sand, SM	BROWN	LSE	MST	5 6 8	OVM 0.0	Sampled interval, MP18-SB24-A01.)VOA collected soil sample MP18-SB24-A01
5	1									
				No Sample Recovered						
4	2		100	Silty sand, SM	BROWN	LSE	MST	5 5 6 6	OVM 0.0	Fill.
3	3			Fill	BLACK		WET		OVM 0.0	Fill. Shingles.
2	4		45	Silty sand, SM	DK GRAY	LSE	SAT	2 4 4 3	OVM 0.0	Fill. Collected soil sample. MP18-SB24-A02.
				No Sample Recovered						
1	5									
0	6		20	Silty sand, SM	GRAY	SFT	SAT	9 100 0 0	OVM 0.0	Offset hole 3'; augered to 7' bgs resume SPS; more clay in interval.
				No Sample Recovered						
-1	7		50	Silty sand, SM	GRAY	SFT	SAT	10 15 20 21	OVM 0.0	
-2	8			No Sample Recovered						
-3	9		60	Silty sand, SM	GRAY	SFT	SAT	20 15 14 100	OVM 0.0	Fill. Refusal ~10.5-11' bgs. Offset hole again, 5' to east.
-4	10									

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: MAIN POST 18	LOGGER	: P. THOMAS
BORING ID	: MP18MW24	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/12/95
ELEVATION	: 6.780 surveyed	DATE COMPLETED	: 01/12/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	Fill. Refusal ~10.5-11' bgs. Offset hole again, 5' to east.
				No Sample Recovered						
-4	11			Interval Not Sampled						Augered interval in new borehole locations.
-5	12			Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	Fill. Augered to 15' bgs; sanded cuttings. Same as above, set well at 15' bgs.
-6	13									
-7	14									
-8	15									
-9	16									
-10	17									
-11	18									
-12	19									
-13	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18MW24	1	1	0.00	0.20	SPS	MF	40	M	35	20	5	0		NON	POR	LSE	MST	
MP18MW24	1	2	0.20	1.40	SPS		10	MF	50	20	0	20		NA	POR	LSE	MST	
MP18MW24	1	3	1.40	2.00	SPS		0		0	0	0	0						
MP18MW24	2	1	2.00	2.90	SPS		10	MF	50	20	0	20		NA	POR	LSE	MST	
MP18MW24	2	2	2.90	4.00	SPS		0		0	0	0	0					WET	
MP18MW24	3	1	4.00	4.90	SPS		10	MF	50	25	5	10		NON	POR	LSE	SAT	
MP18MW24	3	2	4.90	6.00	SPS		0		0	0	0	0						
MP18MW24	4	1	6.00	6.40	SPS		5	MF	45	25	15	10		LOW	POR	SFT	SAT	
MP18MW24	4	2	6.40	7.00	SPS		0		0	0	0	0						
MP18MW24	5	1	7.00	8.00	SPS	M	10	MF	50	30	10	0		NON	POR	SFT	SAT	
MP18MW24	5	2	8.00	9.00	SPS		0		0	0	0	0						
MP18MW24	6	1	9.00	10.20	SPS		10		50	30	10	0		NON	POR	SFT	SAT	
MP18MW24	6	2	10.20	11.00	SPS		0		0	0	0	0						
MP18MW24	7	1	11.00	12.00	NS		0		0	0	0	0						
MP18MW24	8	1	12.00	15.00	CUT		10	MF	50	30	10	0		NON	POR	SFT	SAT	

BOREHOLE ID : MP18MW25 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/13/95 END DATE : 01/13/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELL REEVE
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	6.350
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32566

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

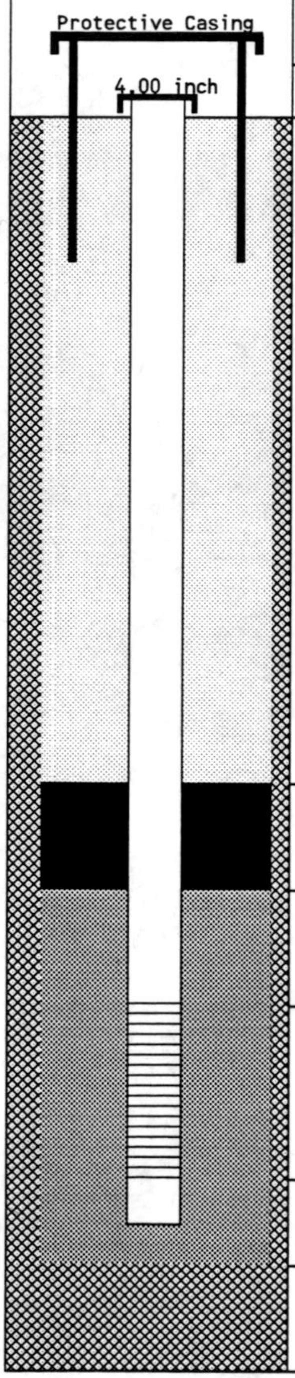
COMMENTS :
Latitude-North: 40 deg 19' 00.2"
Longitude-West: 74 deg 02' 48.1"

CLIENT FT. MONMOUTH
SITE NAME MAIN POST 18

DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID MP18MW25
START DATE 01/13/95
COMPLETION DATE 01/13/95

WATER LEVELS



DEPTH		ELEV.
1.93	TC	8.28
0.00	GS	6.35
0.50	BN	5.85
3.00	SP	3.35
5.00	SC	1.35
14.54	BS	-8.19
15.00	TD	-8.65

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type :

Stick Up Inner Casing: 1.93 **ft.** **Protective Casing:** 2.29 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 30.00 **ft.**

Sand Pack Type : NO 1 MORIE SAND **Interval:** 3.00 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/19/95
Method Surge Blocking/Bailing
Yield ~5 gpm **Purged Volume** 18 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

 06/20/95

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	15.00
SITE NAME	: MAIN POST 18		LOGGER	:	P. THOMAS
BORING ID	: MP18MW25		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	:	01/13/95
ELEVATION	: 6.350 surveyed		DATE COMPLETED	:	01/13/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		90	Silty sand, SM	BROWN	SFT	MST	4 5 5 6	OVM 0.0	Fill. Collected sample MP18-SB25-A01
5	1									
				No Sample Recovered						
4	2		50	Silty sand with gravel, SM	BROWN	SFT	WET	7 9 11 14	OVM 0.0	Fill. Collected sample MP18-SB25-A02. Slightly more gravelly than above interval.
3	3			No Sample Recovered						
2	4		50	Silty sand, SM	OLIVE GREEN/GRY	SFT	SAT		OVM 0.0	Fill. Sat ~4.5' bgs, large wood fragments ~4.5 ft. bgs.
1	5			No Sample Recovered						
0	6			Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	Fill, Logged drill cuttings.
-1	7									
-2	8									
-3	9									
-4	10									

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 15.00
SITE NAME	: MAIN POST 18		LOGGER	: P. THOMAS
BORING ID	: MP18MW25		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	: 01/13/95
ELEVATION	: 6.350 surveyed		DATE COMPLETED	: 01/13/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	Fill, Logged drill cuttings.
-4	11									
-5	12									
-6	13									
-7	14									
-8	15									
-9	16									
-10	17									
-11	18									
-12	19									
-13	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18MW25	1	1	0.00	1.80	SPS	M	10	MF	50	25	5	10		NON	POR	SFT	MST	
MP18MW25	1	2	1.80	2.00	SPS		0		0	0	0	0						
MP18MW25	2	1	2.00	3.00	SPS	M	20	MF	40	25	5	10		NON	POR	SFT	WET	
MP18MW25	2	2	3.00	4.00	SPS		0		0	0	0	0						
MP18MW25	3	1	4.00	5.00	SPS	M	10	MF	50	25	5	10		NON	POR	SFT	SAT	
MP18MW25	3	2	5.00	6.00	SPS		0		0	0	0	0						
MP18MW25	4	1	6.00	15.00	CUT	M	10	MF	50	25	5	10		NON	POR	SFT	SAT	

Borehole Location Data

Roy F. WESTON, Inc.

BOREHOLE ID : B1-MW1B   PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/09/95   END DATE : 01/09/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50   DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA   FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD :   FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD :   FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	22.480
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N   PERMIT # : NJ 29 32587

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N   No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N   No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

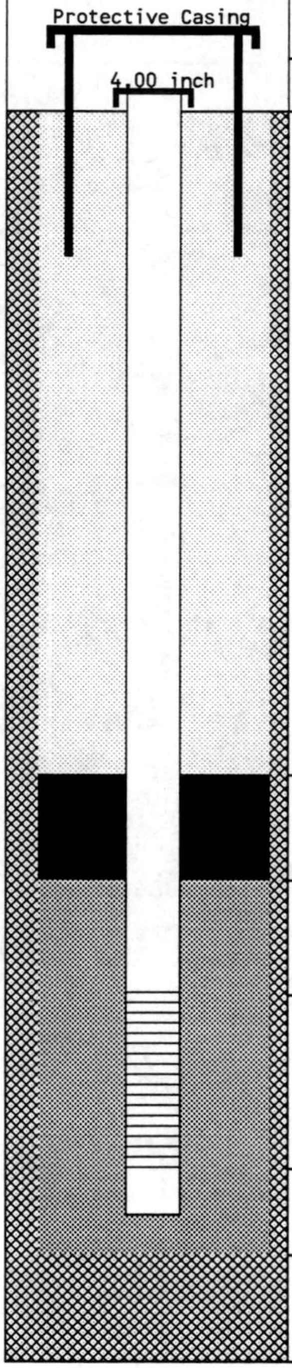
COMMENTS :
Longitude-West: 74 deg 02' 43.3"
Latitude-North: 40 deg 18' 24.1"
Well developed on 1/19/95.

CLIENT FT. MONMOUTH
SITE NAME BACKGROUND 1

DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID B1-MW1B
START DATE 01/01/95
COMPLETION DATE 01/09/95

WATER LEVELS



DEPTH		ELEV.
2.11	TC	24.59
0.00	GS	22.48
0.50	BN	21.98
3.00	SP	19.48
4.00	SC	18.48
13.54	BS	8.94
14.00	TD	8.48

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 4.00 **ft.**
Type :

Stick Up Inner Casing: 2.11 **ft.** **Protective Casing:** 2.68 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO #1 MORIE **Interval:** 3.00 to 14.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.00 to 13.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 13.54 to 14.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/19/95
Method Surge blocking/overpump
Yield 1.5 gpm **Purged Volume** 85 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface.

NOTE: Well Diagram not to Scale **Elevations are feet above mean sea level**

 06/20/95

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 14.50
SITE NAME	: BACKGROUND 1	LOGGER	: P. THOMAS
BORING ID	: B1-MW1B	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/09/95
ELEVATION	: 22.480 surveyed	DATE COMPLETED	: 01/09/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			75	Silty sand, SM	BROWN	SFT	WET	5 7 15	OVM 0.0	Topsoil
				Poorly graded sand, SP	YELLOW BROWN	LSE	WET	13	OVM 0.0	Soil sample from 1-2' bgs B1-SB01-A01
21	1									
				No Sample Recovered						
20	2		100	Poorly graded sand, SP	OLIVE YLW BROWN	LSE	SAT	13 12 16 14	OVM 0.0	Sharp color change to org brn ~3.9' bgs. Sat ~2.5' bgs. Composite sand sample collected.
19	3									
18	4		100	Poorly graded sand, SP	ORANGE-BROWN	LSE	SAT	9 9 11 12	OVM 0.0	Iron stained (orange brown color), dark heavy minerals throughout.
17	5									
16	6		50	Poorly graded sand with silt, SP-SM	FE BROWN (ORG)	LSE	SAT	10 11 11 12	OVM 0.0	Black heavy minerals throughout matrix.
15	7			No Sample Recovered						
14	8		65	Poorly graded sand with silt, SP-SM	FE BROWN/ORANGE	LSE	SAT	6 12 14 18	OVM 0.0	Str. presence of black heavy minerals.
13	9									
				No Sample Recovered						
12	10		60	Poorly graded sand with silt, SP-SM	FE BROWN	LSE	SAT	6 5 8 12	OVM 0.0	Dk heavy mineral throughout.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	14.50
SITE NAME	: BACKGROUND 1		LOGGER	:	P. THOMAS
BORING ID	: B1-MW1B		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	:	01/09/95
ELEVATION	: 22.480 surveyed		DATE COMPLETED	:	01/09/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand with silt, SP-SM	FE BROWN	LSE	SAT		OVM 0.0	Dk heavy mineral throughout.
11	11									
				No Sample Recovered						
10	12		45	Silty sand, SM	STRONG FE BROWN	LSE	SAT	8 11 17 14	OVM 0.0	
9	13			No Sample Recovered						
8	14			Interval Not Sampled						Interval not sampled, set well at 14.5' bgs; Note: Well set at 14' bgs. due to running sands.
7	15									
6	16									
5	17									
4	18									
3	19									
2	20									

DATE: 06/20/95 **** Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 *** PAGE: 1

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B1-MW1B	1	1	0.00	0.40	SPS		5	MF	50	25	0	20		NA	MOD	SFT	WET	
B1-MW1B	1	2	0.40	1.50	SPS		0	MF	95	5	0	0		NON	WEL	LSE	WET	
B1-MW1B	1	3	1.50	2.00	SPS		0		0	0	0	0						
B1-MW1B	2	1	2.00	4.00	SPS		0	MF	95	5	0	0		NA	WEL	LSE	SAT	
B1-MW1B	3	1	4.00	6.00	SPS		0	MF	95	5	0	0		NA	WEL	LSE	SAT	
B1-MW1B	4	1	6.00	7.00	SPS		0	MF	90	10	0	0		NA	MOD	LSE	SAT	
B1-MW1B	4	2	7.00	8.00	SPS		0		0	0	0	0						
B1-MW1B	5	1	8.00	9.30	SPS		0	MF	90	10	0	0		NA	MOD	LSE	SAT	
B1-MW1B	5	2	9.30	10.00	SPS		0		0	0	0	0						
B1-MW1B	6	1	10.00	11.20	SPS		0	MF	90	10	0	0		NA	MOD	LSE	SAT	
B1-MW1B	6	2	11.20	12.00	SPS		0		0	0	0	0						
B1-MW1B	7	1	12.00	12.90	SPS		0	MF	85	15	0	0		NA	MOD	LSE	SAT	
B1-MW1B	7	2	12.90	14.00	SPS		0		0	0	0	0						
B1-MW1B	8	1	14.00	14.50	NS		0		0	0	0	0						

BOREHOLE ID : B2-MW2B *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/05/95 *END DATE* : 01/06/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00 *DEPTH TO BEDROCK* : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 20.00 ft. BGS
METHOD : HSA *FLUID* : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID* :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID* :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : VINCE BORELLI

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	19.440
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT #* : NJ 29 32588

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS* : 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS* : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 42.7"
Longitude-West: 74 deg 03' 45.5"

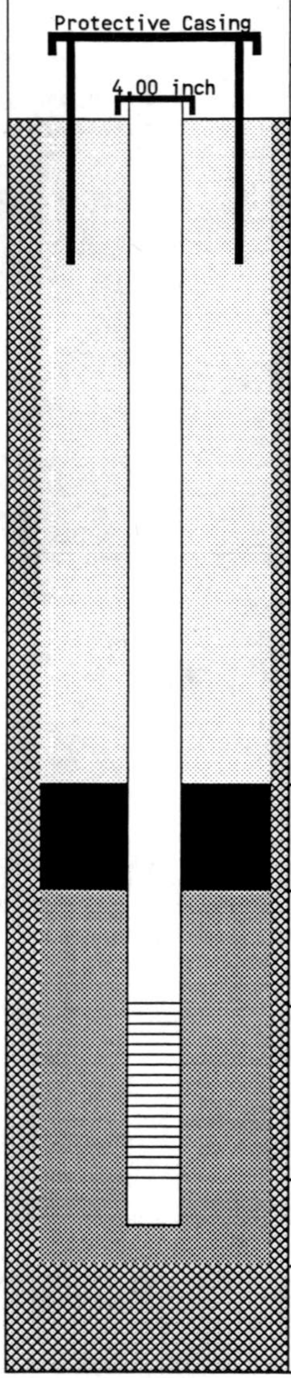
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	BACKGROUND 1	**INSPECTOR**	P. THOMAS

WELL ID	B2-MW2B
START DATE	01/06/95
COMPLETION DATE	01/06/95

WATER LEVELS



DEPTH		ELEV.
0.79	TC	20.23
0.00	GS	19.44
5.00	BN	14.44
8.00	SP	11.44
10.00	SC	9.44
19.54	BS	-0.10
20.00	TD	-0.56

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 8.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 0.79 **ft.** **Protective Casing:** 1.01 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 5.00 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 5.00 to 8.00 **ft.**

Sand Pack Type : NO. 1 SAND MORIE **Interval:** 8.00 to 20.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 10.00 to 19.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 19.54 to 20.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/19/95
Method Surge blocking/bailing
Yield 2.5 gpm **Purged Volume** 250 gal

COMMENTS

TC = Top of Casing	SP = Top Sand Pack	= Grout
GS = Ground Surface	SC = Top Screen	= Seal
BN = Top Seal	BS = Bottom Screen	= Sand Pack
	TD = Total Depth	= Formation

Additional Comments:

Depths are measured below ground surface

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/27/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	0.00
SITE NAME	: BACKGROUND 1		LOGGER	:	P. THOMAS
BORING ID	: B2-MW2B		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	VINCE BORELLI
EASTING	: 0.0000 estimated		DATE STARTED	:	01/05/95
ELEVATION	: 19.440 surveyed		DATE COMPLETED	:	01/06/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Sandy silt, ML	BROWN	FRM	MST	5 5 10 10	OVM 0.0	Possible backfill material sampled 1-2'bgs B1-SB01-A01.
18	1			No Sample Recovered						
17	2		60	Sandy elastic silt, MH	BROWN	SFT	MST	10 15 16 14	OVM 0.0	Progressively getting more clay.
16	3			No Sample Recovered						
15	4		50	Fat clay with sand, CH	BROWN/OLIVE	SFT	MST	12 12 15 20	OVM 0.0	Backfilled material; grass roots & fragments.
14	5			No Sample Recovered						
13	6		100	Fat clay with sand, CH	GREEN/GREY BRN	SFT	MST	4 3 5 7	OVM 0.0	Backfilled material - sat observed in coarser intervals, grass roots, fragments.
12	7									
11	8		70	Elastic silt with sand, MH	FE BRN/OLV BRN	SFT	SAT	2 3 7 5	OVM 0.0	Sat, observed in coarse intervals, backfill mat. graded into gray clayey silt. Micaceous @9' bgs.
10	9			No Sample Recovered						
9	10		90	Silty sand, SM	GRAY	FRM	MST	4 3 5 7	OVM 0.0	Very micaceous.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 0.00	
SITE NAME	: BACKGROUND 1		LOGGER	: P. THOMAS	
BORING ID	: B2-MW2B		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: VINCE BORELLI	
EASTING	: 0.0000 estimated		DATE STARTED	: 01/05/95	
ELEVATION	: 19.440 surveyed		DATE COMPLETED	: 01/06/95	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY	FRM	MST		OVM 0.0	Very micaceous.
8	11									
				No Sample Recovered						
7	12		70	Silty sand, SM	GRAY	SFT	MST	5 5 7 5	OVM 0.0	V. micaceous.
6	13									
				No Sample Recovered						
5	14		90	Silty sand, SM	GRAY	LSE	SAT	6 5 9 10	OVM 0.0	V. micacous - green elongated, reflective "mineral" found through-out interval.
4	15									
				No Sample Recovered						
3	16		75	Silty sand, SM	GRAY	SFT	SAT	6 12 18 14	OVM 0.0	V. micacous very high; green mineral throughout interval.
2	17									
				No Sample Recovered						
1	18		100	Silty sand, SM	GRAY	SFT	SAT	10 15 10 9	OVM 0.0	V. micacous, set well 20' bgs.
0	19									
-1	20									

DATE: 06/27/95 **** Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 *** PAGE: 1

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B2-MW2B	1	1	0.00	1.00	SPS	F	5	FM	40	35	15	5		NON	MOD	FRM	MST	
B2-MW2B	1	2	1.00	2.00	SPS		0		0	0	0	0						
B2-MW2B	2	1	2.00	3.20	SPS	F	5	FM	30	35	30	0		HGH	MOD	SFT	MST	
B2-MW2B	2	2	3.20	4.00	SPS		0		0	0	0	0						
B2-MW2B	3	1	4.00	5.00	SPS	F	5	FM	20	30	35	10		HGH	MOD	SFT	MST	
B2-MW2B	3	2	5.00	6.00	SPS		0		0	0	0	0						
B2-MW2B	4	1	6.00	8.00	SPS		5	FM	20	30	35	10		HGH	MOD	SFT	MST	
B2-MW2B	5	1	8.00	9.40	SPS		5	F	20	40	30	5		MOD	MOD	SFT	SAT	
B2-MW2B	5	2	9.40	10.00	SPS		0		0	0	0	0						
B2-MW2B	6	1	10.00	11.80	SPS		0	F	50	40	10	0		NON	MOD	FRM	MST	
B2-MW2B	6	2	11.80	12.00	SPS		0		0	0	0	0						
B2-MW2B	7	1	12.00	13.40	SPS		0	FM	50	40	10	0		NON	MOD	SFT	MST	
B2-MW2B	7	2	13.40	14.00	SPS		0		0	0	0	0						
B2-MW2B	8	1	14.00	15.80	SPS		0	FM	50	40	10	0		NON	MOD	LSE	SAT	
B2-MW2B	8	2	15.80	16.00	SPS		0		0	0	0	0						
B2-MW2B	9	1	16.00	17.50	SPS		0	F	50	40	10	0		NON	MOD	SFT	SAT	
B2-MW2B	9	2	17.50	18.00	SPS		0		0	0	0	0						
B2-MW2B	10	1	18.00	20.00	SPS		0	F	50	40	10	0		NON	MOD	SFT	SAT	

Borehole Location Data **Roy F. WESTON, Inc.**

BOREHOLE ID : B3-MW3B *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/06/95 *END DATE :* 01/09/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 26.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 26.00 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	19.200
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32589

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 18' 32.4"
Longitude-West: 74 deg 03' 27.7"

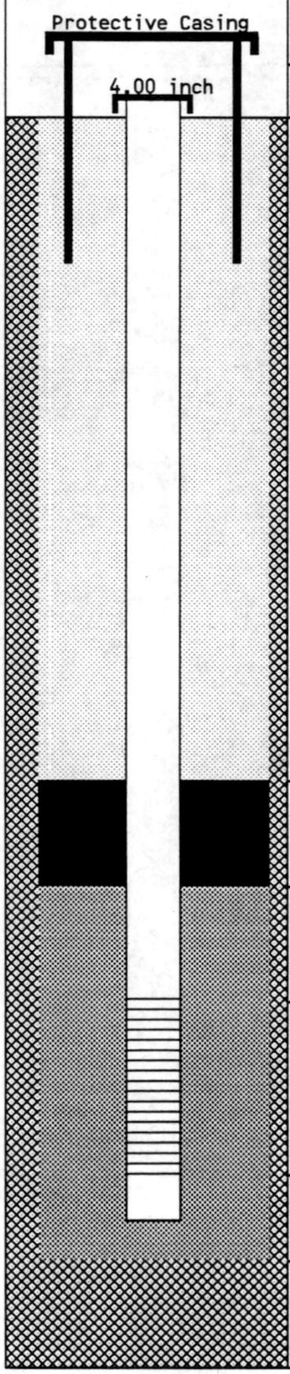
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST AREA	**INSPECTOR**	P. THOMAS

WELL ID	B3-MW3B
START DATE	01/06/95
COMPLETION DATE	01/09/95

WATER LEVELS



DEPTH		ELEV.
1.89	TC	21.18
0.00	GS	19.29
11.00	BN	8.29
14.00	SP	5.29
16.00	SC	3.29
25.54	BS	-6.25
26.00	TD	-6.71

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 16.00 **ft.**
Type :

Stick Up Inner Casing: 1.89 **ft.** **Protective Casing:** 2.33 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 11.00 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 11.00 to 14.00 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 14.00 to 26.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 16.00 to 25.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 25.54 to 26.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/19/95
Method Surge Blocking/Bailing
Yield <1 gpm **Purged Volume** 192 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

Depths are measured below ground surface. High turbidity at end of well development. Well is very slow to recharge.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 26.00
SITE NAME	: MAIN POST AREA	LOGGER	: P. THOMAS
BORING ID	: B3-MW3B	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/06/95
ELEVATION	: 19.200 surveyed	DATE COMPLETED	: 01/09/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			70	Silty sand, SM	BROWN	SFT	MST	11 15 21 17	OVM 0.0	Lt med Fe stained mottles sampled (B3-SB1-A01) for respective parameters.
18	1									
				No Sample Recovered						
17	2		70	Silty sand, SM	BRN-YELLOW FE	SFT	MST	5 7 10 14	OVM 0.0	Fill?
16	3									
				No Sample Recovered						
15	4		80	Silty sand, SM	OLIVE YELLOW BR	SFT	WET	6 7 10 13	OVM 0.0	Fill? Fe stained mottles irregular cohesion. Gravel layer ~5' bgs.
14	5									
				No Sample Recovered						
13	6		100	Silty sand, SM	ORG BRN/GRN GRY	SFT	WET	10 10 20 15	OVM 0.0	Fill, Fe, green/gray mottles; clay stringers.
12	7									
11	8		100	Silty sand, SM	FE BRN/GRN GRY	SFT	WET	12 15 19 22	OVM 0.0	Very tight matrix.
10	9									
9	10		100	Silty sand, SM	FE BRN/GRN GRY	SFT	WET	10 12 14 12	OVM 0.0	Sampled B3-SB1-A03

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 26.00
SITE NAME	: MAIN POST AREA	LOGGER	: P. THOMAS
BORING ID	: B3-MW3B	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/06/95
ELEVATION	: 19.200 surveyed	DATE COMPLETED	: 01/09/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	FE BRN/GRN GRY	SFT	WET		OVM 0.0	Sampled B3-SB1-A03
8	11									
7	12		75	Silty sand, SM	GRAY	SFT	MST	4 6 9 12	OVM 0.0	
6	13									
				No Sample Recovered						
5	14		90	Silty sand, SM	GRAY	SFT	WET	12 12 10 11	OVM 0.0	Quartz sand with silt/ clay matrix, wet at bottom of spoon.
4	15									
				No Sample Recovered						
3	16		60	Silty sand, SM	GRAY	LSE	WET	3 5 9 9	OVM 0.0	Coarser than above int.
2	17									
				No Sample Recovered						
1	18		90	Silty sand, SM	GRAY	SFT	SAT	8 5 7 9	OVM 0.0	
0	19									
				No Sample Recovered						
-1	20		75	Silty sand, SM	GRAY	SFT	SAT	5 4 9 5	OVM 0.0	

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	26.00
SITE NAME	:	MAIN POST AREA	LOGGER	:	P. THOMAS
BORING ID	:	B3-MW3B	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B-57
EASTING	:	0.0000 estimated	DATE STARTED	:	01/06/95
ELEVATION	:	19.200 surveyed	DATE COMPLETED	:	01/09/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	
-1	21									
				No Sample Recovered						
-2	22			Interval Not Sampled						Augered interval.
-3	23									
-4	24		100	Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	
-5	25									
-6	26									
-7	27									
-8	28									
-9	29									
-10	30									

DATE: 06/20/95 **** Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 *** PAGE: 1

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B3-MW3B	1	1	0.00	1.40	SPS	F	5	FM	50	35	5	5		NON	MOD	SFT	MST	
B3-MW3B	1	2	1.40	2.00	SPS		0		0	0	0	0						
B3-MW3B	2	1	2.00	3.40	SPS	F	5		50	35	10	0		NON	MOD	SFT	MST	
B3-MW3B	2	2	3.40	4.00	SPS		0		0	0	0	0						
B3-MW3B	3	1	4.00	5.60	SPS	F	10	MFC	40	30	20	0		MOD	MOD	SFT	WET	
B3-MW3B	3	2	5.60	6.00	SPS		0		0	0	0	0						
B3-MW3B	4	1	6.00	8.00	SPS		5	MF	45	35	15	0		LOW	MOD	SFT	WET	
B3-MW3B	5	1	8.00	10.00	SPS		5	FM	45	35	15	0		LOW	MOD	SFT	WET	
B3-MW3B	6	1	10.00	12.00	SPS	F	5	FM	45	35	15	0		LOW	MOD	SFT	WET	
B3-MW3B	7	1	12.00	13.50	SPS		0	FM	50	40	10	0		NON	MOD	SFT	MST	
B3-MW3B	7	2	13.50	14.00	SPS		0		0	0	0	0						
B3-MW3B	8	1	14.00	15.80	SPS		0	FM	50	40	10	0		NON	MOD	SFT	WET	
B3-MW3B	8	2	15.80	16.00	SPS		0		0	0	0	0						
B3-MW3B	9	1	16.00	17.20	SPS		0	MF	60	30	10	0		NON	MOD	LSE	WET	
B3-MW3B	9	2	17.20	18.00	SPS		0		0	0	0	0						
B3-MW3B	10	1	18.00	19.80	SPS		0	MF	55	35	10	0		NON	MOD	SFT	SAT	
B3-MW3B	10	2	19.80	20.00	SPS		0		0	0	0	0						
B3-MW3B	11	1	20.00	21.50	SPS		0	MF	55	35	10	0		NON	MOD	SFT	SAT	
B3-MW3B	11	2	21.50	22.00	SPS		0		0	0	0	0						
B3-MW3B	12	1	22.00	24.00	NS		0		0	0	0	0						
B3-MW3B	13	1	24.00	26.00	SPS		0	FM	50	40	10	0		NON	MOD	SFT	SAT	

BOREHOLE ID : B4-MW4B   *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/09/95   *END DATE* : 01/09/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00   *DEPTH TO BEDROCK* : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 16.00 ft. BGS
METHOD : HSA   *FLUID* : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD :   *FLUID* :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD :   *FLUID* :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	9.780
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N   *PERMIT #* : NJ 29 32567

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N   *No. OF WELLS* : 0
WELL NEST........(Y)es (N)o: N   *No. OF WELLS* : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

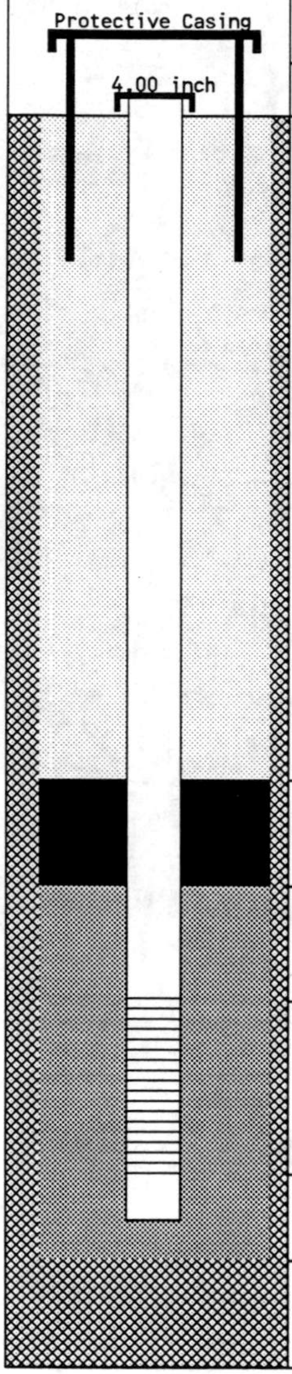
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Sample I.D. 1-2' B4-SB01-A01 Dup. B4-SB4-001 Sample I.D. 6'-6" to 7'-2" B4SB01-A02. All parameters: TCL+30 VOA, BNA,PEST /PCB, TAL met.,Cn. Lat: 40 deg 19' 0"/Long: 74 deg 02' 40.3"

CLIENT FT. MONMOUTH
SITE NAME BACKGROUND 4
DRILLING FIRM J.C. ANDERSON
INSPECTOR K. VALENTI

WELL ID B4-MW4B
START DATE 01/09/95
COMPLETION DATE 01/09/95

WATER LEVELS



DEPTH		ELEV.
2.30	TC	12.08
0.00	GS	9.78
1.00	BN	8.78
3.00	SP	6.78
5.00	SC	4.78
14.54	BS	-4.76
15.00	TD	-5.22

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 15.00 **ft.**
Type :

Stick Up Inner Casing: 2.30 **ft.** **Protective Casing:** 2.66 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 3.00 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/19/95
Method Surge Blocking/Overpump
Yield ~.5 gpm **Purged Volume** 45 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

 06/20/95

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	15.00
SITE NAME	:	BACKGROUND 4	LOGGER	:	K. VALENTI
BORING ID	:	B4-MW4B	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	01/09/95
ELEVATION	:	9.780 surveyed	DATE COMPLETED	:	01/09/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Silty sand, SM	BROWN	NA	MST	4 4 3 8	HNU 0.0	Used 3" spoon.
				Silty sand, SM	BROWN					Fill/uncertain. Gradual change to drive brn color w/more sand & little silt
				Silty sand, SM	OLIVE BROWN					Fill/uncertain. Used 3" split spoon for sample collection.
8	1									
7	2		100	Poorly graded sand with silt, SP-SM	OLIVE	LSE	MST	6 7 8 9	HNU 0.0	3" sps used.
6	3			Sandy silt, ML	OLIVE	FRM	MST		HNU 0.0	Fill/uncertain with orange staining - mod. gray mottling noted from 3-4' (3" sps used).
5	4		100	Silty sand, SM	OLIVE	FRM	WET	10 11 11 14	HNU 0.0	V. firm, moist to wet (tightly packed). Heavy orange (lt.) staining, gray mottling (3" sps)
4	5									
3	6		100	Silty sand, SM	OLIVE	SFT	WET	4 7 7 11	HNU 0.0	Heavy dk. orange and gray staining. Wet at 7.2' bgs Sampled B4-SB01-A02.
2	7									
1	8		100	Silty sand, SM	OLIVE GREEN	SFT	SAT	8 10 11 11	HNU 0.0	Outside of sps sat. Rod wet to 6' bgs. 1st water at 7'-2" bgs. 3" sps used.
0	9									
-1	10		100	Silty sand, SM	GREEN (FOREST)	LSE	SAT	4 5 6 6	HNU 0.0	2" sps used hereafter to td. Thin bands of pale orange to orange color throughout. sps sat-wet.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 15.00	
SITE NAME	: BACKGROUND 4		LOGGER	: K. VALENTI	
BORING ID	: B4-MW4B		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: CME-55	
EASTING	: 0.0000 estimated		DATE STARTED	: 01/09/95	
ELEVATION	: 9.780 surveyed		DATE COMPLETED	: 01/09/95	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GREEN (FOREST)	LSE	SAT		HNU 0.0	2" sps used hereafter to td. Thin bands of pale orange to orange color throughout. sps sat-wet.
-1	11									
-2	12		100	Poorly graded sand with silt, SP-SM	GREEN-FOREST	LSE	SAT	3 4 8 9	HNU 0.0	
-3	13									
-4	14		100	Poorly graded sand, SP	DK GREEN	LSE	SAT	4 8 16 15	HNU 0.0	End of borehole.
-5	15									
-6	16									
-7	17									
-8	18									
-9	19									
-10	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B4-MW4B	1	1	0.00	0.20	SPS		0	M	85	15	0	0		NON	MOD	NA	MST	
B4-MW4B	1	2	0.20	0.50	SPS		0	M	85	15	0	0						
B4-MW4B	1	3	0.50	2.00	SPS		0	M	85	15	0	0						
B4-MW4B	2	1	2.00	3.00	SPS		0	MF	90	10	0	0		NON	MOD	LSE	MST	
B4-MW4B	2	2	3.00	4.00	SPS		0		30	60	10	0		LOW	MOD	FRM	MST	
B4-MW4B	3	1	4.00	6.00	SPS		0		55	25	20	0		MOD	POR	FRM	WET	
B4-MW4B	4	1	6.00	8.00	SPS		0		60	25	15	0		LOW	POR	SFT	WET	
B4-MW4B	5	1	8.00	10.00	SPS		0		85	10	5	0		LOW	MOD	SFT	SAT	
B4-MW4B	6	1	10.00	12.00	SPS		0	F	85	10	5	0		NON	MOD	LSE	SAT	
B4-MW4B	7	1	12.00	14.00	SPS		0	F	90	10	0	0		LOW	MOD	LSE	SAT	
B4-MW4B	8	1	14.00	16.00	SPS		0	F	95	5	0	0		NON	WEL	LSE	SAT	

BOREHOLE ID : B5-MW5B *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/11/95 *END DATE :* 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 0.00 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	13.400
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32583

HOLE ABANDONED....(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 19' 04.7"
Longitude-West: 74 deg 02' 07.6"

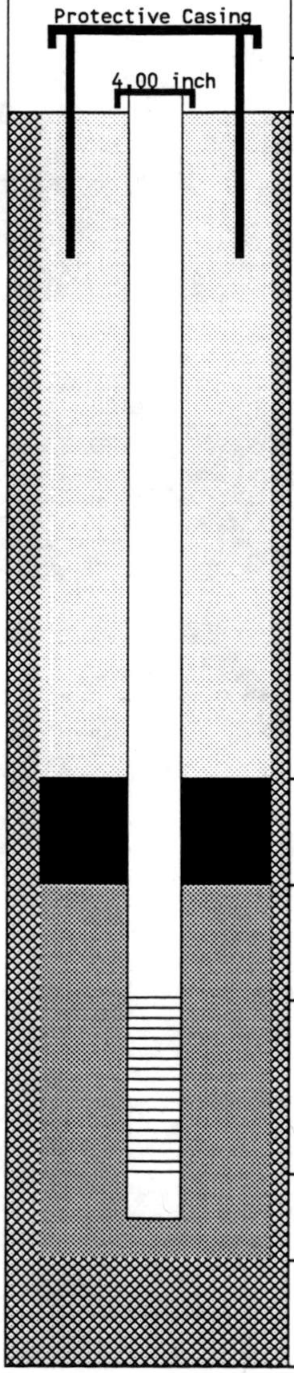
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	MAIN POST AREA	**INSPECTOR**	K. VALENTI

WELL ID	B5-MW5B
START DATE	01/11/95
COMPLETION DATE	01/11/95

WATER LEVELS



DEPTH		ELEV.
2.00	TC	15.40
0.00	GS	13.40
1.00	BN	12.40
3.00	SP	10.40
4.50	SC	8.90
14.04	BS	-0.64
14.50	TD	-1.10

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 14.80 **ft.**
Type :

Stick Up Inner Casing: 2.00 **ft.** **Protective Casing:** 2.14 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 3.00 to 14.50 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.50 to 14.04 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.04 to 14.50 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/19/95
Method Bailing
Yield 1 gpm **Purged Volume** 18 gal

COMMENTS

TC = Top of Casing	SP = Top Sand Pack	= Grout
GS = Ground Surface	SC = Top Screen	= Seal
BN = Top Seal	BS = Bottom Screen	= Sand Pack
	TD = Total Depth	= Formation

Additional Comments:

Well during development remained turbid.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 0.00
SITE NAME	: MAIN POST AREA		LOGGER	: K. VALENTI
BORING ID	: B5-MW5B		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated		DATE STARTED	: 01/11/95
ELEVATION	: 13.400 surveyed		DATE COMPLETED	: 01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Sandy silt, ML	BROWN	LSE	DRY	7 8 9 8	HNU 0.0	3" SPS used. Uncertain fill or natural. Sample collected B5-SB01-A01. Topsoil at 0-0.3' bgs.
12	1									
11	2		100	Sandy elastic silt, MH	OLIVE BROWN	STF	MST	9 8 13 15	HNU 0.0	Fill. 2" SPS used. Mottle orange Fe stains. More sand towards spoon bottom Sample col.B5-SB01-A02
10	3									
9	4		100	Fill	OLIVE BROWN	LSE	SAT	9 9 8 8	HNU 0.0	Fill. 2" SPS used. Wet at 4' bgs. Few gray bands at ~5' bgs. Heavy Fe staining @5.8'
8	5									
7	6		50	Silty sand, SM	OLIVE BROWN	LSE	SAT	4 4 5 5	HNU 0.0	2" sps used here to T.D.
6	7			No Sample Recovered						
5	8		50	Silty sand, SM	OLIVE BROWN	SFT	SAT	2 1 2 1	HNU 0.0	Mild gray and lt. orange staining in SPS.
4	9			No Sample Recovered						
3	10		100	Silt with sand, ML	DK BROWN TO BLK	SFT	SAT	2 2 2 3	HNU 0.0	SPS is wet to saturated.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	0.00
SITE NAME	:	MAIN POST AREA	LOGGER	:	K. VALENTI
BORING ID	:	B5-MW5B	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	01/11/95
ELEVATION	:	13.400 surveyed	DATE COMPLETED	:	01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silt with sand, ML	DK BROWN TO BLK	SFT	SAT		HNU 0.0	SPS is wet to saturated.
2	11									
1	12		100	Elastic silt with sand, MH	BLACK	FRM	SAT	5 4 8 9	HNU 0.0	Sps gets sandier towards bottom (20%). Auger to 14.5 to set well.
0	13									
-1	14			Interval Not Sampled						
-2	15									
-3	16									
-4	17									
-5	18									
-6	19									
-7	20									

DATE: 06/20/95 **** Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 *** PAGE: 3

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B5-MW5B	1	1	0.00	2.00	SPS		0		35	65	0	0		NON	POR	LSE	DRY	
B5-MW5B	2	1	2.00	4.00	SPS		0		30	55	15	0		MOD	POR	STF	MST	
B5-MW5B	3	1	4.00	6.00	SPS		0	MF	95	5	0	0		NA	WEL	LSE	SAT	
B5-MW5B	4	1	6.00	7.00	SPS		0	MF	85	15	0	0		NON	WEL	LSE	SAT	
B5-MW5B	4	2	7.00	8.00	SPS		0		0	0	0	0						
B5-MW5B	5	1	8.00	9.00	SPS		0	F	75	20	5	0		LOW	WEL	SFT	SAT	
B5-MW5B	5	2	9.00	10.00	SPS		0		0	0	0	0						
B5-MW5B	6	1	10.00	12.00	SPS		0		20	75	5	0		LOW	MOD	SFT	SAT	
B5-MW5B	7	1	12.00	14.00	SPS		0		15	75	10	0		MOD	WEL	FRM	SAT	
B5-MW5B	8	1	14.00	14.50	NS		0		0	0	0	0						

MAIN POST
SOIL BORING LOGS

Borehole Location Data

Roy F. WESTON, Inc.

BOREHOLE ID : MP18-SB1 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/12/95 *END DATE :* 01/12/95

LOGGER/COMPANY : K. VALENTI/P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 8.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 3.00
INTERVAL: 0.00 ft. to 8.00 ft. BGS
METHOD : HSA *FLUID :* NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55 MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :*

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Boreholes were grouted with cement/bentonite mixture from bottom to ground surface.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	8.00
SITE NAME	: MAIN POST 18		LOGGER	:	K. VALENTI/P. THOMAS
BORING ID	: MP18-SB1		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	CME-55 MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	:	01/12/95
ELEVATION	: 0.000 estimated		DATE COMPLETED	:	01/12/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		85	Silty gravel with sand, GM	ORANGE	LSE	MST	13 15 19 21	HNU 0.0 CGI 100.0	Fill.
-1	1			Silty sand, SM	OLIVE GREEN/GRY	SFT	MST		HNU 0.0	Fill. Collected sample MP18-SB01-A01.
				No Sample Recovered						
-2	2		70	Silty sand, SM	GRAY	SFT	MST	15 10 15 15	HNU 0.0	Fill with gray shingles
-3	3									
				No Sample Recovered						
-4	4		60	Silty sand, SM	GRAY	SFT	WET	12 14 14 13	OVM 0.0	Fill. Collected sample MP18-SB01-A02. Soils wet at ~4' bgs.
-5	5			No Sample Recovered						
-6	6		100	Silty sand, SM	GRAY	SFT	SAT	12 14 12 13	OVM 0.0	Fill. Soils saturated at 6' bgs.
-7	7									
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18-SB1	1	1	0.00	0.90	SPS	MF	45		40	15	0	0		NON	POR	LSE	MST	
MP18-SB1	1	2	0.90	1.70	SPS		10	MF	50	25	5	10		NON	POR	SFT	MST	
MP18-SB1	1	3	1.70	2.00	SPS		0		0	0	0	0						
MP18-SB1	2	1	2.00	3.40	SPS	MF	10	MF	50	25	5	10		NON	POR	SFT	MST	
MP18-SB1	2	2	3.40	4.00	SPS		0		0	0	0	0						
MP18-SB1	3	1	4.00	5.20	SPS	MF	10	MF	50	25	5	10		NON	POR	SFT	WET	
MP18-SB1	3	2	5.20	6.00	SPS		0		0	0	0	0						
MP18-SB1	4	1	6.00	8.00	SPS		10	MF	50	25	5	10		NON	POR	SFT	SAT	

Borehole Location Data **Roy F. WESTON, Inc.**

BOREHOLE ID : MP18-SB2 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/12/95 END DATE : 01/12/95

LOGGER/COMPANY : K. VALENTI/P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 6.00
INTERVAL: 0.00 ft. to 6.00 ft. BGS
METHOD : HSA FLUID : AIR
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55 MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS...............(Y)es (N)o: N
PACKER TESTS.............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	0.00
SITE NAME	: MAIN POST 18		LOGGER	:	K. VALENTI/P. THOMAS
BORING ID	: MP18-SB2		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	CME-55 MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	:	01/12/95
ELEVATION	: 0.000 estimated		DATE COMPLETED	:	01/12/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			60	Silty gravel with sand, GM	ORANGE	LSE	MST	9 10 18 13	OVM 0.0	Fill.
-1	1			Silty sand, SM	OLIVE GREEN/GRY	SFT	MST		OVM 0.0	Fill.
				No Sample Recovered						
-2	2		70	Silty sand, SM	GRAY	SFT	WET	10 14 15 14	OVM 0.0	Soils are finer than previous interval.
-3	3									
				No Sample Recovered						
-4	4		90	Silty sand, SM	GRAY	SFT	WET	10 11 15 14	OVM 0.0	Fill. Saturated at bottom of spoon. Collected sample MP18-SB02-A02 from 4-6' bgs. Water @6-7' bgs
-5	5									
				No Sample Recovered						
-6	6									
-7	7									
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18-SB2	1	1	0.00	0.90	SPS	FM	45	MF	40	15	0	0		NON	POR	LSE	MST	
MP18-SB2	1	2	0.90	1.20	SPS	FM	10	MF	50	25	5	10		NON	POR	SFT	MST	
MP18-SB2	1	3	1.20	2.00	SPS		0		0	0	0	0						
MP18-SB2	2	1	2.00	3.40	SPS		10	FM	50	20	10	10		NON	POR	SFT	WET	
MP18-SB2	2	2	3.40	4.00	SPS		0		0	0	0	0						
MP18-SB2	3	1	4.00	5.80	SPS	MF	10	FM	50	20	10	10		NON	POR	SFT	WET	
MP18-SB2	3	2	5.80	6.00	SPS		0		0	0	0	0						

Borehole Location Data — *Roy F. WESTON, Inc.*

BOREHOLE ID : MP18-SB3 — *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/12/95 — *END DATE :* 01/12/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 8.00 — *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 3.00
INTERVAL: 0.00 ft. to 8.00 ft. BGS
METHOD : HSA — *FLUID :* NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : — *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : — *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELL REEVES
DRILL RIG TYPE : MOBILE B57

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N — *PERMIT # :*

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N — *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N — *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Boreholes were backfilled with cement/bentonite mixture from bottom to ground surface.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 8.00	
SITE NAME	: MAIN POST 18		LOGGER	: P. THOMAS	
BORING ID	: MP18-SB3		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B57	
EASTING	: 0.0000 estimated		DATE STARTED	: 01/12/95	
ELEVATION	: 0.000 estimated		DATE COMPLETED	: 01/12/95	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			60	Silty gravel with sand, GM	ORANGE	LSE	MST	6 9 8 9	OVM 0.0	Fill
				Silty sand, SM	GRAY	SFT	MST		OVM 0.0	Fill. Collected sample MP18-SB03-A01
-1	1									
				No Sample Recovered						
-2	2		80	Silty sand, SM	GRAY	SFT	MST	2 10 10 8	OVM 0.0	Fill. Wood fragments (large) ~3' bgs.
-3	3									
				No Sample Recovered						
-4	4		55	Silty sand, SM	GRAY	SFT	WET	18 23 25 29	OVM 0.0	Fill. Large wood fragments; wet throughout interval.
-5	5									
				No Sample Recovered						
-6	6		82	Silty sand, SM	GRAY	SFT	WET	13 11 11 9	OVM 0.0	Fill. Large wood fragments. TD of borehole 8 ft. bgs.
-7	7									
				No Sample Recovered						
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18-SB3	1	1	0.00	0.50	SPS	FM	45	MF	40	15	0	0		NON	POR	LSE	MST	
MP18-SB3	1	2	0.50	1.20	SPS	F	10	MF	50	25	5	10		NON	POR	SFT	MST	
MP18-SB3	1	3	1.20	2.00	SPS		0		0	0	0	0						
MP18-SB3	2	1	2.00	3.60	SPS	M	10	FM	45	25	10	10		NON	POR	SFT	MST	
MP18-SB3	2	2	3.60	4.00	SPS		0		0	0	0	0						
MP18-SB3	3	1	4.00	5.40	SPS		10		40	25	5	20		NON	POR	SFT	WET	
MP18-SB3	3	2	5.40	6.00	SPS		0		0	0	0	0						
MP18-SB3	4	1	6.00	7.50	SPS	M	10	FM	40	25	5	20		NON	POR	SFT	WET	
MP18-SB3	4	2	7.50	8.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP18-SB4 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/11/95 END DATE : 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 6.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 6.00 ft. BGS
METHOD : HSA FLUID :
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Sampled I.D. boring SB04-A01/A02 5'-6" 1st water T.D.=6'

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 6.00
SITE NAME	: MAIN POST 18	LOGGER	: K. VALENTI
BORING ID	: MP18-SB4	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 01/11/95
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		100	Poorly graded sand, SP	ORANGE-BROWN	LSE	DRY	7 7 9 11	OVM 0.0	Fill. Sample M18-SB04-A01 collected. 3" SPS used. Top 2" were asphalt.
-1	1									
-2	2		100	Well-graded sand with gravel, SW	ORANGE-BROWN	LSE	DRY	15 17 21 25	OVM 0.0	Sand & gravel. 8" from 2'8" to 3'4" int. (2'8"-3'4") of sand & gravels (subang) (small cobbles).
-3	3									
-4	4		100	Well-graded sand, SW	REDDISH BROWN	LSE	WET	27 23 25 29	OVM 0.0	3" sps used. Sample M18-SB04-A02 collected water at 5.5' bgs.
-5	5									
-6	6									
-7	7									
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18-SB4	1	1	0.00	2.00	SPS		0		100	0	0	0		NA	MOD	LSE	DRY	
MP18-SB4	2	1	2.00	4.00	SPS		20		80	0	0	0		NA	POR	LSE	DRY	
MP18-SB4	3	1	4.00	6.00	SPS		5		95	0	0	0		NA	POR	LSE	WET	

BOREHOLE ID : MP18-SB5 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/11/95 *END DATE :* 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 4.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 4.00 ft. BGS
METHOD : HSA *FLUID :*
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :*

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Sampled I.D. boring SB05-A01/A02 3'-8" 1st water T.D.=4'

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	4.00
SITE NAME	:	MAIN POST 18	LOGGER	:	K. VALENTI
BORING ID	:	MP18-SB5	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	01/11/95
ELEVATION	:	0.000 estimated	DATE COMPLETED	:	01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0–2		100	Well-graded sand, SW	BROWN	LSE	DRY	3 4 4 4	OVM 0.0	Fill. Top 3" asphalt. Sands mild Fe staining. Sample M18-SB04-A01 collected.
	2–4		100	Poorly graded sand, SP	BROWN	LSE	SAT	8 9 11 8	OVM 0.0	Fill iron (Fe) staining present. Water at 3.75' bgs. TD of borehole 4'bgs Sample M18SB05-A02 coll.

Elevation / depth scale: -1 / 1, -2 / 2, -3 / 3, -4 / 4, -5 / 5, -6 / 6, -7 / 7, -8 / 8, -9 / 9, -10 / 10

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18-SB5	1	1	0.00	2.00	SPS		5		95	0	0	0		NA	POR	LSE	DRY	
MP18-SB5	2	1	2.00	4.00	SPS		0		100	0	0	0		NA	MOD	LSE	SAT	

BOREHOLE ID : MP18-SB6 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/11/95 END DATE : 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 6.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 6.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Sampled I.D. Borings SB06-A01/A02 4' 2st water TD=6'

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	6.00
SITE NAME	:	MAIN POST 18	LOGGER	:	K. VALENTI
BORING ID	:	MP18-SB6	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	01/11/95
ELEVATION	:	0.000 estimated	DATE COMPLETED	:	01/11/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Silty sand with gravel, SM	GRAY-BROWN	LSE	MST	17 18 21	OVM 0.0	Fill. Top 2" are topsoil (orange/yellow). Used 3" spoon. Cement present.
				Silty sand with gravel, SM	LT YELLOW BROWN	LSE	MST	25	OVM 0.0	Sample M18-SB06-A01 collected.
-1	1			Silty sand, SM	DK GRAY	LSE	MST		OVM 0.0	Sample M18SB01-A01 collected.
				No Sample Recovered						
-2	2		50	Silty sand with gravel, SM	BLACK	LSE	WET	9 13 13 17	OVM 0.0	Fill. 4" broken concrete in top SPS. Sharp change to little silty sand and gravel. Fuel oil staining
-3	3			No Sample Recovered						
-4	4			Sandy silt, ML	BLACK	FRM	SAT	6 6 5 4		Fill. Sheen/odor of fuel present. TD of borehole 6.
-5	5									
-6	6									
-7	7									
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18-SB6	1	1	0.00	0.40	SPS		15		70	15	0	0		NA	POR	LSE	MST	
MP18-SB6	1	2	0.40	0.80	SPS		15		70	15	0	0		NA	POR	LSE	MST	
MP18-SB6	1	3	0.80	1.00	SPS		5		80	15	0	0		NON	POR	LSE	MST	
MP18-SB6	1	4	1.00	2.00	SPS		0		0	0	0	0						
MP18-SB6	2	1	2.00	3.00	SPS		20		60	20	0	0		NON	POR	LSE	WET	
MP18-SB6	2	2	3.00	4.00	SPS		0		0	0	0	0						
MP18-SB6	3	1	4.00	6.00	SPS		10		25	65	0	0		LOW	MOD	FRM	SAT	

BOREHOLE ID : MP18-SB7 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/12/95 END DATE : 01/12/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 6.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 3.00
INTERVAL: 0.00 ft. to 6.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELL REEVES
DRILL RIG TYPE : MOBILE B57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	6.00
SITE NAME	: MAIN POST AREA 18		LOGGER	:	P. THOMAS
BORING ID	: MP18-SB7		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	MOBILE B57
EASTING	: 0.0000 estimated		DATE STARTED	:	01/12/95
ELEVATION	: 0.000 estimated		DATE COMPLETED	:	01/12/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		90	Poorly graded sand with silt, SP-SM	OLIVE/YELL BRN	LSE	MST	6 5 5 4	OVM 0.0	Fill. Collected sample MP18-SB07-A01.
-1	1									
	1.75			No Sample Recovered						
-2	2		50	Not Classified - Incomplete Data	GRAY	NA	SAT	6 11 12 13	OVM 0.0	Fill. No sample collected due to all gravel and saturated.
-3	3			No Sample Recovered						
-4	4		50	Not Classified - Incomplete Data	GRAY	NA	SAT	5 10 15 12	OVM 0.0	Could not sample interval gravel and saturated. TD of borehole at 6' bgs.
-5	5			No Sample Recovered						
-6	6									
-7	7									
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP18-SB7	1	1	0.00	1.80	SPS		0	MF	90	10	0	0		NA	WEL	LSE	MST	
MP18-SB7	1	2	1.80	2.00	SPS		0		0	0	0	0						
MP18-SB7	2	1	2.00	3.00	SPS	M	100		0	0	0	0		NA	NA	NA	SAT	
MP18-SB7	2	2	3.00	4.00	SPS		0		0	0	0	0						
MP18-SB7	3	1	4.00	5.00	SPS	M	100		0	0	0	0		NA	NA	NA	SAT	
MP18-SB7	3	2	5.00	6.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP3-SB1 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/14/94 *END DATE :* 12/14/94

LOGGER/COMPANY : K. VALENTE

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 12.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 12.00 ft. BGS
METHOD : HSA *FLUID :*
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :*

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
MPAOC3-SB01 performed, once completed was backfilled to surface with grout. Sample collected MPA3-SB01A02, MPA3-SB01C02 (dup). MPA3-SB01--2 (field blanks)

Borehole Log — *Roy F. WESTON, Inc.*

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 12.00
SITE NAME	: MAIN POST AREA 3	LOGGER	: K. VALENTE
BORING ID	: MP3-SB1	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/14/94
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			75	Silty sand, SM	LT BROWN	SFT	DRY	4 5 5 7	HNU 15.0	Top 3" of soil in spoon is brown sandy silt topsoil/organic.
-1	1									
				No Sample Recovered						
-2	2		50	Well-graded sand with gravel, SW	WHITISH TAN	LSE	MST	14 13 7 7	HNU 8.0	Beach sand (coarse) & gravel.
-3	3			No Sample Recovered						
-4	4		50	Silt, ML	ORANGE BROWN	LSE	MST	7 8 9 11	HNU 17.0	1st 2" of recovery slough from borehole.
-5	5			No Sample Recovered						
-6	6		50	Poorly graded sand with silt, SP-SM	ORANGE-BROWN	LSE	MST	6 8 8 10	HNU 8.0	Same lithology as previous spoon.
-7	7			No Sample Recovered						
-8	8		75	Silty sand, SM	BROWN	LSE	MST	6 6 9 11	HNU 40.0	
				Poorly graded sand with silt, SP-SM	ORANGE BROWN	LSE	MST		HNU 40.0	Same lithology as 4-6'bgs
-9	9									
				No Sample Recovered						
-10	10		50	Poorly graded sand with silt, SP-SM	ORANGE BROWN	LSE	MST	9 9 10 11	HNU 9.0	Orange brown sand. Same lithology as above interval.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 12.00
SITE NAME	: MAIN POST AREA 3	LOGGER	: K. VALENTE
BORING ID	: MP3-SB1	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/14/94
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 12/14/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand with silt, SP-SM	ORANGE BROWN	LSE	MST		HNU 9.0	Orange brown sand. Same lithology as above interval.
				Poorly graded sand, SP	BROWN	LSE	WET		HNU 0.0	11.6' wet sand. End of borehole. Borehole grouted to surface.
-11	11			No Sample Recovered						
-12	12									
-13	13									
-14	14									
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP3-SB1	1	1	0.00	1.50	SPS		0	F	75	25	0	0		NON	MOD	SFT	DRY	
MP3-SB1	1	2	1.50	2.00	SPS		0		0	0	0	0						
MP3-SB1	2	1	2.00	3.00	SPS	C	20	CM	80	0	0	0		NON	POR	LSE	MST	
MP3-SB1	2	2	3.00	4.00	SPS		0		0	0	0	0						
MP3-SB1	3	1	4.00	5.00	SPS		0		0	90	10	0		NON	WEL	LSE	MST	
MP3-SB1	3	2	5.00	6.00	SPS		0		0	0	0	0						
MP3-SB1	4	1	6.00	7.00	SPS		0	F	90	10	0	0		NON	WEL	LSE	MST	
MP3-SB1	4	2	7.00	8.00	SPS		0		0	0	0	0						
MP3-SB1	5	1	8.00	8.70	SPS		0	M-F	80	20	0	0		NON	MOD	LSE	MST	
MP3-SB1	5	2	8.70	9.50	SPS		0	MF	90	10	0	0		NON	WEL	LSE	MST	
MP3-SB1	5	3	9.50	10.00	SPS		0		0	0	0	0						
MP3-SB1	6	1	10.00	10.50	SPS		0	F	90	10	0	0		NON	WEL	LSE	MST	
MP3-SB1	6	2	10.50	11.00	SPS		0	MF	100	0	0	0		NON	MOD	LSE	WET	
MP3-SB1	6	3	11.00	12.00	SPS		0		0	0	0	0						

BOREHOLE ID : MP3-SB2 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/15/94 END DATE : 12/15/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 4.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2: 2.00
INTERVAL: 4.00 ft. to 14.00 ft. BGS
METHOD : SPS FLUID : NONE
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Augered to 4'. SPS to 14' bgs. SB02 grouted to ground surface level. Groundwater @12' bgs (w.l. used). Sampled 2-10' composite sample int. Routine sample - MPA3-SB02-A02.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 14.00
SITE NAME	: MAIN POST AREA 3	LOGGER	: K. VALENTI
BORING ID	: MP3-SB2	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/15/94
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 12/15/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Silty sand, SM	LT BROWN	LSE	MST	8 9 21 26	HNU 0.0	Topsoils/organics.
				Silty sand, SM	BROWN					
				Silty sand, SM	LT BROWN					Sharp color change at 1' from brown to lt. brown.
-1	1									
				Well-graded gravel with sand, GW	TANNISH WHITE	LSE	DRY		HNU 0.0	Rock fragments and sand. Some small sub-rounded stones in sps (lower 1' of sps) of white quartz.
-2	2		40	Well-graded gravel with sand, GW	TANNISH WHITE	LSE	MST	1 1 14 16	HNU 3.0	Same as above interval. Rock fragments and sand (white quartzite).
				No Sample Recovered						
-3	3									
-4	4		75	Silty sand, SM	GRAYISH BROWN	FRM	MST	13 15 19 18	HNU 3.0	Silt and sand mottled.
-5	5			Poorly graded sand, SP	ORANGE BROWN	LSE	MST		HNU 3.0	
				No Sample Recovered						
-6	6		100	Poorly graded sand, SP	ORANGE BROWN	LSE	MST	11 6 5 5	HNU 3.0	Same lithology as above interval.
-7	7									
-8	8		100	Poorly graded sand, SP	BROWN	LSE	MST	10 7 8 5	HNU 3.0	
-9	9									
-10	10		100	Poorly graded sand, SP	BROWN	LSE	MST	13 15 8 3	HNU 3.0	Iron oxide banding. Uniform bands from lt. orange to dk org. Some bands highly distinct.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 14.00
SITE NAME	: MAIN POST AREA 3	LOGGER	: K. VALENTI
BORING ID	: MP3-SB2	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/15/94
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 12/15/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	BROWN	LSE	MST		HNU 3.0	Iron oxide banding. Uniform bands from lt. orange to dk org. Some bands highly distinct.
-11	11									
-12	12		50	Silty sand, SM	BROWNISH GRAY	FRM	SAT	11 11 13 14	HNU 0.0	Gray mottles noted. Water at 12' bgs. TD of borehole.
-13	13									
-14	14									
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
MP3-SB2	1	1	0.00	0.20	SPS		0	FM	65	35	0	0		NON	MOD	LSE	MST	
MP3-SB2	1	2	0.20	0.50	SPS		0	FM	65	35	0	0						
MP3-SB2	1	3	0.50	1.50	SPS		0	FM	65	35	0	0						
MP3-SB2	1	4	1.50	2.00	SPS	CM	80	MC	20	0	0	0		NON	POR	LSE	DRY	
MP3-SB2	2	1	2.00	2.80	SPS	C	70	CM	30	0	0	0		NON	POR	LSE	MST	
MP3-SB2	2	2	2.80	4.00	SPS		0		0	0	0	0						
MP3-SB2	3	1	4.00	5.00	SPS		0	MF	60	40	0	0		LOW	MOD	FRM	MST	
MP3-SB2	3	2	5.00	5.50	SPS		0	FM	100	0	0	0		NON	WEL	LSE	MST	
MP3-SB2	3	3	5.50	6.00	SPS		0		0	0	0	0						
MP3-SB2	4	1	6.00	8.00	SPS		0	MF	100	0	0	0		NON	WEL	LSE	MST	
MP3-SB2	5	1	8.00	10.00	SPS		0	FM	100	0	0	0		NON	WEL	LSE	MST	
MP3-SB2	6	1	10.00	12.00	SPS		0	MF	100	0	0	0		NON	WEL	LSE	MST	
MP3-SB2	7	1	12.00	13.00	SPS		0		60	35	5	0		LOW	MOD	FRM	SAT	

CHARLES WOOD
BOREHOLE LOGS AND WELL COMPLETION SUMMARIES

Borehole Location Data **Roy F. WESTON, Inc.**

BOREHOLE ID : CW1-MW26 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/19/94 END DATE : 12/19/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 16.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	60.540
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32591

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Sampled soils for TCE+30; TAL
Latitude-North: 40 degrees 17' 44.5"
Longitude-West: 74 degrees 05' 17.7"

Well Completion Summary

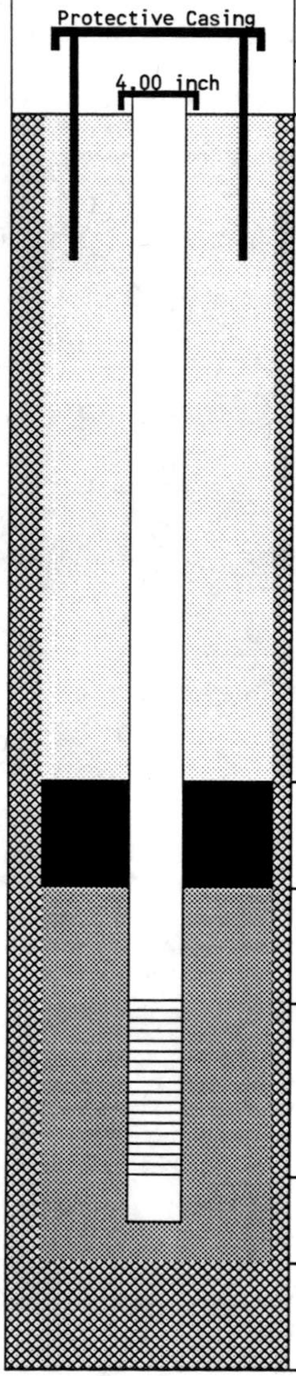
Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME CHARLES WOOD AREA

DRILLING FIRM J.C. ANDERSON
INSPECTOR K. VALENTI

WELL ID CW1-MW26
START DATE 12/19/94
COMPLETION DATE 12/19/94

WATER LEVELS



DEPTH		ELEV.
1.92	TC	62.46
0.00	GS	60.54
2.00	BN	58.54
4.00	SP	56.54
5.00	SC	55.54
14.54	BS	46.00
15.00	TD	45.54

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.92 **ft.** **Protective Casing:** 2.08 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 2.00 **ft.**

Seal Type: BENTONITE **Interval:** 2.00 to 4.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 4.00 to 16.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/20/95
Method Surge block/overpumping
Yield 1 gpm **Purged Volume** 85 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	15.00
SITE NAME	: CHARLES WOOD AREA		LOGGER	:	K. VALENTI
BORING ID	: CW1-MW26		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	CME-55
EASTING	: 0.0000 estimated		DATE STARTED	:	12/19/94
ELEVATION	: 60.540 surveyed		DATE COMPLETED	:	12/19/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Poorly graded sand, SP	YLLWSH LT BROWN	SFT	MST	3 4 7 9	HNU 0.0	Top 3" consist of topsoil with organics.
59	1									
58	2		100	Poorly graded sand, SP	YLLWSH LT BROWN	SFT	MST	6 6 7 8	HNU 0.0	
57	3									
56	4		100	Poorly graded sand, SP	YLLWSH LT BROWN	SFT	MST	5 3 2 4	HNU 0.0	Mild iron (Fe) banding throughout spoon.
55	5									
54	6		100	Poorly graded sand, SP	YELLOW LT BROWN	LSE	SAT	5 3 1 1	HNU 0.0	3" spoon used. Water at 6.1' bgs. Sample CW01-SB06-A02 collected. Mild mottling noted.
53	7									
52	8		100	Poorly graded sand, SP	YELLOW LT BROWN	LSE	SAT	1 2 5 6	HNU 0.0	Collected sample CW01-SB26-A02.
51	9									
50	10		100	Poorly graded sand, SP	YLLWSH LT BROWN	SFT	SAT	1 1 2 2	HNU 0.0	

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: K. VALENTI
BORING ID	: CW1-MW26	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/19/94
ELEVATION	: 60.540 surveyed	DATE COMPLETED	: 12/19/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	YLLWSH LT BROWN	SFT	SAT		HNU 0.0	
49	11									
48	12		100	Poorly graded sand, SP	YLLWSH LT BROWN	LSE	SAT	2 4 4 6	HNU 0.0	Some gray mottles noted.
47	13									
46	14			Interval Not Sampled						Augered interval. Set well at 15' bgs. TD of borehole 16' bgs.
45	15									
44	16									
43	17									
42	18									
41	19									
40	20									

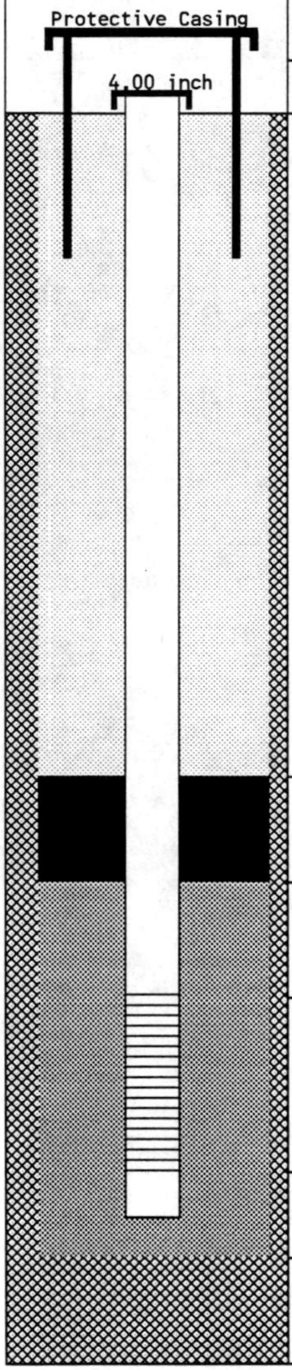
BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW1-MW26	1	1	0.00	2.00	SPS		0	F	100	0	0	0		NON	WEL	SFT	MST	
CW1-MW26	2	1	2.00	4.00	SPS		0	F	95	5	0	0		NON	WEL	SFT	MST	
CW1-MW26	3	1	4.00	6.00	SPS		0		95	5	0	0		NON	WEL	SFT	MST	
CW1-MW26	4	1	6.00	8.00	SPS		0	F	98	2	0	0		NON	WEL	LSE	SAT	
CW1-MW26	5	1	8.00	10.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	SAT	
CW1-MW26	6	1	10.00	12.00	SPS		0	F	100	0	0	0		NON	WEL	SFT	SAT	
CW1-MW26	7	1	12.00	14.00	SPS		0	F	95	5	0	0		NON	WEL	LSE	SAT	
CW1-MW26	8	1	14.00	16.00	NS		0		0	0	0	0						

```
BOREHOLE ID :  CW1-MW27              PROJECT NAME: FT. MONMOUTH
BEGIN DATE  :  12/19/94              END DATE     : 12/19/94

LOGGER/COMPANY :  K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) :  O

TOTAL DEPTH :  16.00                 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1:  12.00
            INTERVAL:  0.00 ft. to 16.00 ft. BGS
            METHOD   :  HSA                      FLUID : WATER
BOREHOLE DIAMETER #2:  2.00
            INTERVAL:  0.00 ft. to 16.00 ft. BGS
            METHOD   :  SPS                      FLUID :
BOREHOLE DIAMETER #3:
            INTERVAL:
            METHOD   :                           FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER          : WELLS REEVE
DRILL RIG TYPE   : CME-55


                         ESTIMATED                 SURVEYED
    SURFACE
    ELEVATION :          0.000                     60.810

N. COORDINATE :          0.0000

E. COORDINATE :          0.0000

WELL PERMIT......(Y)es (N)o: N     PERMIT # :  NJ 29 32592

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N  No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N  No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N            TYPE            DEPTH
                                PURGE  :                   0.00
                                SAMPLE :                   0.00
BOREHOLE TESTING
   BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
   SLUG TESTS..............(Y)es (N)o: N
   PACKER TESTS............(Y)es (N)o: N
   PUMPING TESTS...........(Y)es (N)o: N
COMMENTS :
   Sampled TCE+30, TAL
   Latitude-North:  40 deg 17' 44.6"
   Longitude-West:  74 deg 05' 17.8"
```


CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA	**INSPECTOR**	K. VALENTI

WELL ID CW1-MW27
START DATE 12/19/94
COMPLETION DATE 12/19/94

WATER LEVELS



DEPTH		ELEV.
1.75	TC	62.56
0.00	GS	60.81
2.00	BN	58.81
4.00	SP	56.81
5.00	SC	55.81
14.54	BS	46.27
15.00	TD	45.81

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.75 **ft.** **Protective Casing:** 1.95 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 2.00 **ft.**

Seal Type: BENTONITE **Interval:** 2.00 to 4.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 4.00 to 16.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/20/95
Method Surge Blocking/Overdril
Yield 1-2 gpm **Purged Volume** 128 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 16.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: K. VALENTI
BORING ID	: CW1-MW27	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/19/94
ELEVATION	: 60.810 surveyed	DATE COMPLETED	: 12/19/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Poorly graded sand, SP	YELLOW BROWN	LSE	MST	6 5 4 4	HNU 0.0	Top 2" of SPS is topsoil and organics.
59	1									
58	2		100	Poorly graded sand, SP	YELLOW BROWN	LSE	MST	3 2 1 1	HNU 4.0	Same lithology as above interval.
57	3									
56	4		100	Poorly graded sand, SP	YELLOW BROWN	LSE	SAT	1 2 1 2	HNU 6.0	First occurance of water at 5.8" bgs. Same lithology as above interval.
55	5									
54	6		100	Poorly graded sand, SP	YELLOW LT BROWN	LSE	SAT	3 2 2 3	HNU 0.0	3" SPS used. Collected sample CW1-SP27 (MW27) A02 at 7' bgs.
53	7									
52	8		100	Poorly graded sand, SP	YLLWSH LT BROWN	LSE	SAT	3 3 4 5	HNU 0.0	Same lithology as last spoon. 9-10' bgs pieces of wood and sharp change in color to lt. grysh brn
51	9									
50	10		100	Poorly graded sand, SP	LT GRY YLW-LT B	LSE	SAT	1 1 2 2	HNU 0.0	Gray mottles, some slight yellow-orange banding.

Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH		TOTAL DEPTH	: 16.00
SITE NAME : CHARLES WOOD AREA		LOGGER	: K. VALENTI
BORING ID : CW1-MW27		DRILLING COMPANY	: J.C. ANDERSON
NORTHING : 0.0000 estimated		DRILLING RIG	: CME-55
EASTING : 0.0000 estimated		DATE STARTED	: 12/19/94
ELEVATION : 60.810 surveyed		DATE COMPLETED	: 12/19/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	LT GRY YLW-LT B	LSE	SAT		HNU 0.0	Gray mottles, some slight yellow-orange banding.
49	11									
48	12		100	Poorly graded sand, SP	LT YLLWSH BROWN	LSE	SAT	3 4 3 4	HNU 0.0	Gray mottles, some banding.
47	13									
46	14		100	Poorly graded sand, SP	YLLWSH LT BROWN	LSE	SAT	3 4 4 6	HNU 0.0	Mottles, Fe banding (orange) towards bottom of sps. TD of hole 16'bgs
45	15									
44	16									
43	17									
42	18									
41	19									
40	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW1-MW27	1	1	0.00	2.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	MST	
CW1-MW27	2	1	2.00	4.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	MST	
CW1-MW27	3	1	4.00	6.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	SAT	
CW1-MW27	4	1	6.00	8.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	SAT	
CW1-MW27	5	1	8.00	10.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	SAT	
CW1-MW27	6	1	10.00	12.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	SAT	
CW1-MW27	7	1	12.00	14.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	SAT	
CW1-MW27	8	1	14.00	16.00	SPS		0	F	100	0	0	0		NON	WEL	LSE	SAT	

BOREHOLE ID : CW1-MW28 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/19/94 *END DATE :* 12/19/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA *FLUID :* NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	60.730
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32593

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

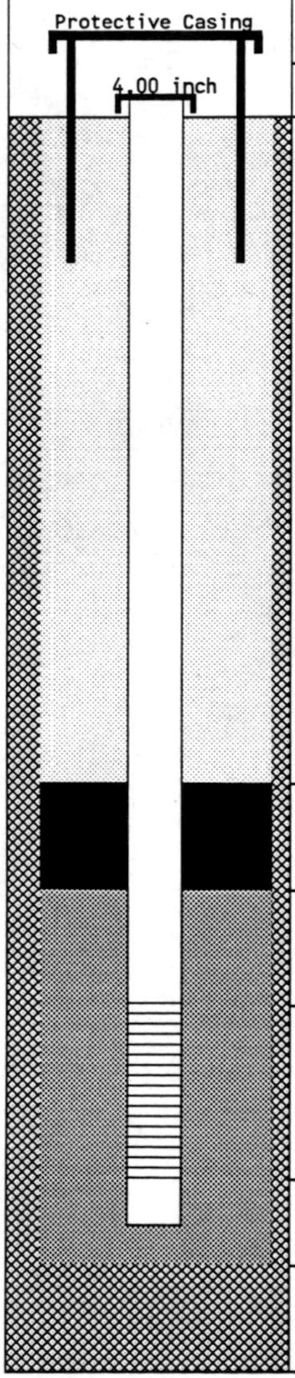
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 degrees 17' 44.8"
Longitude-West: 74 degrees 05' 17.7"

CLIENT FT. MONMOUTH
SITE NAME CHARLES WOOD AREA
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID CW1-MW28
START DATE 12/19/94
COMPLETION DATE 12/19/94

WATER LEVELS



DEPTH		ELEV.
2.16	TC	62.89
0.00	GS	60.73
0.50	BN	60.23
3.00	SP	57.73
5.00	SC	55.73
14.54	BS	46.19
15.00	TD	45.73

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.16 **ft.** **Protective Casing:** 2.44 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 3.00 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/20/95
Method Surge blocking/overpump
Yield ~2 gpm **Purged Volume** 147 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: P. THOMAS
BORING ID	: CW1-MW28	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 12/19/94
ELEVATION	: 60.730 surveyed	DATE COMPLETED	: 12/19/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		70	Sandy silt, ML	BROWN	SFT	MST	4 3 4 5	HNU 0.0	Fill. Topsoil.
				Poorly graded sand, SP	ORANGE BROWN	LSE	MST		HNU 0.0	Fill.
59	1									
				No Sample Recovered						
58	2		60	Poorly graded sand, SP	ORG/OLV BRN	LSE	MST	3 5 4 3	HNU 0.0	Fill.
57	3									
				No Sample Recovered						
56	4		50	Poorly graded sand, SP	OLV/ORG BROWN	LSE	MST	3 4 3 3	HNU 0.0	Fill.
55	5			No Sample Recovered						
54	6		100	Poorly graded sand, SP	OLIVE	LSE	MST	3 4 3 4	HNU 0.0	Fill. Saturation observed at 7.8' bgs.
53	7									
52	8		100	Poorly graded sand, SP	OLV/ORG BROWN	LSE	SAT	2 3 5 5	HNU 0.0	Fill.
51	9									
50	10		100	Poorly graded sand, SP	YELLOW BROWN	LSE	SAT	3 4 3 4	HNU 0.0	Fill.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: P. THOMAS
BORING ID	: CW1-MW28	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 12/19/94
ELEVATION	: 60.730 surveyed	DATE COMPLETED	: 12/19/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	YELLOW BROWN	LSE	SAT		HNU 0.0	Fill.
49	11									
48	12		100	Poorly graded sand, SP	YELLOW BROWN	LSE	SAT	4 4 3 4	HNU 0.0	Fill.
47	13									
46	14			Interval Not Sampled						Augered interval.
45	15									
44	16									
43	17									
42	18									
41	19									
40	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW1-MW28	1	1	0.00	0.50	SPS		0	MF	40	35	0	25		NA	POR	SFT	MST	
CW1-MW28	1	2	0.50	1.40	SPS		0	MF	95	5	0	0		NON	WEL	LSE	MST	
CW1-MW28	1	3	1.40	2.00	SPS		0		0	0	0	0						
CW1-MW28	2	1	2.00	3.20	SPS		0	MF	95	5	0	0		NON	WEL	LSE	MST	
CW1-MW28	2	2	3.20	4.00	SPS		0		0	0	0	0						
CW1-MW28	3	1	4.00	5.00	SPS		0	MF	95	5	0	0		NON	WEL	LSE	MST	
CW1-MW28	3	2	5.00	6.00	SPS		0		0	0	0	0						
CW1-MW28	4	1	6.00	8.00	SPS		0	MF	95	5	0	0		NON	WEL	LSE	MST	
CW1-MW28	5	1	8.00	10.00	SPS		0	MF	95	5	0	0		NON	MOD	LSE	SAT	
CW1-MW28	6	1	10.00	12.00	SPS		0	MF	95	5	0	0		NON	WEL	LSE	SAT	
CW1-MW28	7	1	12.00	14.00	SPS		0	MF	95	5	0	0		NON	WEL	LSE	SAT	
CW1-MW28	8	1	14.00	15.00	NS		0		0	0	0	0						

Borehole Location Data — **Roy F. WESTON, Inc.**

BOREHOLE ID : CW1-MW29 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/19/94 *END DATE :* 12/19/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA *FLUID :* NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	60.410
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32590

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS......(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

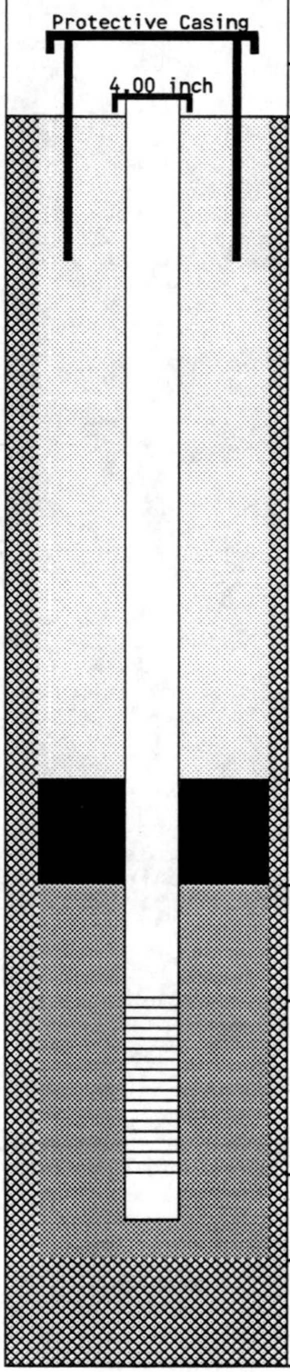
COMMENTS :
Latitude North: 40 degrees 17' 44.7"
Longitude West: 74 degrees 05' 17.4"

Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	***DRILLING FIRM***	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA	***INSPECTOR***	K. VALENTI

WELL ID	CW1-MW29	***WATER LEVELS***
START DATE	12/19/94	
COMPLETION DATE	12/19/94	



DEPTH		ELEV.
2.03	TC	62.44
0.00	GS	60.41
0.50	BN	59.91
3.00	SP	57.41
5.00	SC	55.41
14.54	BS	45.87
15.00	TD	45.41

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 ***inch*** ***Interval:*** 0.00 to 5.00 ***ft.***
Type : PVC SCH 40

Stick Up Inner Casing: 2.03 ***ft.*** ***Protective Casing:*** 2.32 ***ft.***

Casing Grout: CEMT/BENT ***Interval:*** 0.00 to 3.00 ***ft.***

Seal Type: BENTONITE SLURRY ***Interval:*** 0.50 to 3.00 ***ft.***

Sand Pack Type : NO. 1 MORIE ***Interval:*** 3.00 to 5.00 ***ft.***
Grain Size : UNIFORM ***Median Diameter:***
Screen Diameter: 4.00 ***Interval:*** 5.00 to 14.54 ***ft.***
Type : PVC ***Slots:*** 0.010 ***inches***

Silt Trap Interval: 14.54 to 15.00 ***ft.***
Backfill Type : ***Interval:*** 0.00 to 0.00 ***ft.***

WELL DEVELOPMENT

Date 01/20/95
Method Surge blocking/overpump
Yield 2 gpm ***Purged Volume*** 158 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

Depths are measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	15.00
SITE NAME	:	CHARLES WOOD AREA	LOGGER	:	P. THOMAS
BORING ID	:	CW1-MW29	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B-57
EASTING	:	0.0000 estimated	DATE STARTED	:	12/19/94
ELEVATION	:	60.410 surveyed	DATE COMPLETED	:	12/19/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Sandy silt, ML	BROWN	SFT	MST	12 12 15	HNU 0.0	Fill and topsoil.
				Poorly graded sand, SP	OLIVE BROWN	LSE	MST	7	HNU 0.0	Fill.
59	1									
58	2		90	Poorly graded sand, SP	ORANGE/OLIVE BR	LSE	MST	12 10 5 6	HNU 0.0	
57	3									
				No Sample Recovered						
56	4		100	Poorly graded sand, SP	ORANGE/OLIVE BR	LSE	WET	6 4 5 3	HNU 0.0	Fill.
55	5									
54	6		100	Poorly graded sand, SP	ORANGE/OLIVE BR	LSE	SAT	3 1 1 4	HNU 2.0	Saturated conditions observed at ~6.4' bgs.
53	7									
				Poorly graded sand with silt, SP-SM	GRAY	LSE	SAT		HNU 0.0	Fe stained lamine at bottom of interval; sharp color change.
52	8		100	Poorly graded sand with silt, SP-SM	GRAY	LSE	SAT	3 6 6 9	HNU 0.1	Fill.
				Poorly graded sand, SP	BROWN	LSE	SAT		HNU 1.0	Fill.
51	9									
50	10		100	Poorly graded sand, SP	OLIVE BROWN	LSE	SAT	2 2 6 10	HNU 0.0	Fill.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: P. THOMAS
BORING ID	: CW1-MW29	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 12/19/94
ELEVATION	: 60.410 surveyed	DATE COMPLETED	: 12/19/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	OLIVE BROWN	LSE	SAT		HNU 0.0	Fill.
49	11									
48	12		100	Poorly graded sand, SP	OLIVE BROWN	LSE	SAT	3 4 3 4	HNU 0.0	Fill.
47	13									
46	14		75	Poorly graded sand, SP	OLIVE BROWN	LSE	SAT	10 14 16 10	HNU 0.5	Fill.
45	15			Silty sand, SM	OLIVE BROWN	LSE	SAT		HNU 0.5	Fill, Fe stained lamina. TD of borehole 16' bgs.
				No Sample Recovered						
44	16									
43	17									
42	18									
41	19									
40	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW1-MW29	1	1	0.00	0.40	SPS		0	MF	45	35	0	20		NA	POR	SFT	MST	
CW1-MW29	1	2	0.40	2.00	SPS		0	MF	95	5	0	0		NON	WEL	LSE	MST	
CW1-MW29	2	1	2.00	3.80	SPS		0	MF	95	5	0	0		NA	WEL	LSE	MST	
CW1-MW29	2	2	3.80	4.00	SPS		0		0	0	0	0						
CW1-MW29	3	1	4.00	6.00	SPS		0	MF	95	5	0	0		NON	WEL	LSE	WET	
CW1-MW29	4	1	6.00	7.60	SPS		0	MF	95	5	0	0		NON	WEL	LSE	SAT	
CW1-MW29	4	2	7.60	8.00	SPS		0	MF	90	10	0	0		NA	WEL	LSE	SAT	
CW1-MW29	5	1	8.00	8.40	SPS		0	MF	90	10	0	0		NON	WEL	LSE	SAT	
CW1-MW29	5	2	8.40	10.00	SPS		0	MF	95	5	0	0		NA	WEL	LSE	SAT	
CW1-MW29	6	1	10.00	12.00	SPS		0	MF	95	5	0	0		NA	WEL	LSE	SAT	
CW1-MW29	7	1	12.00	14.00	SPS		0	MF	95	5	0	0		NON	WEL	LSE	SAT	
CW1-MW29	8	1	14.00	15.00	SPS		0	MF	95	5	0	0		NON	WEL	LSE	SAT	
CW1-MW29	8	2	15.00	15.50	SPS		0	F	85	13	2	0		NON	WEL	LSE	SAT	
CW1-MW29	8	3	15.50	16.00	SPS		0		0	0	0	0						

BOREHOLE ID : CW2-MW30 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/16/94 *END DATE :* 12/16/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) :

TOTAL DEPTH : 16.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 16.00 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2: 3.00
INTERVAL: 12.00 ft. to 14.00 ft. BGS
METHOD : SPS *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	49.470
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32594

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
1st location moved after collecting one spoon with no rec.
Latitude-North: 40 deg 17' 43.3"
Longitude-West: 74 deg 05' 10.4"

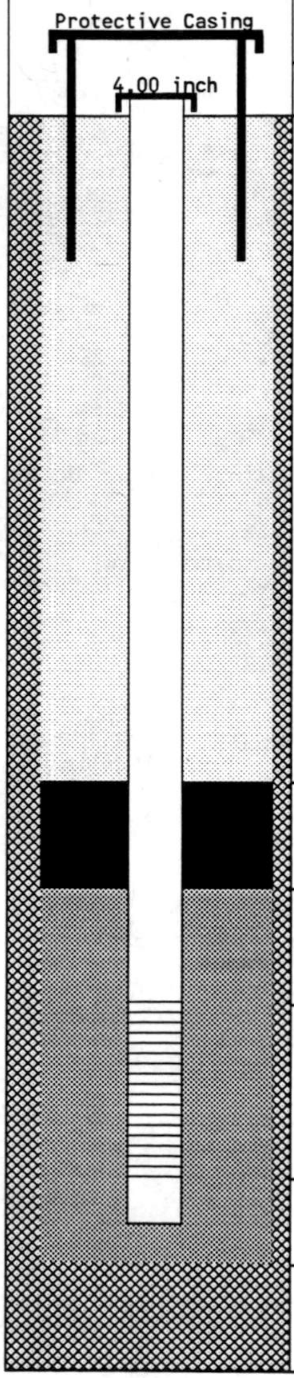
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME CHARLES WOOD AREA
DRILLING FIRM J.C. ANDERSON
INSPECTOR K. VALENTI

WELL ID CW2-MW30
START DATE 12/16/94
COMPLETION DATE 12/16/94

WATER LEVELS



DEPTH		ELEV.
2.24	TC	51.71
0.00	GS	49.47
2.00	BN	47.47
4.00	SP	45.47
6.00	SC	43.47
15.54	BS	33.93
16.00	TD	33.47

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 6.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.24 **ft.** **Protective Casing:** 2.68 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 2.00 **ft.**

Seal Type: BENTONITE **Interval:** 2.00 to 4.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 4.00 to 16.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 6.00 to 15.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 15.54 to 16.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/08/95
Method Bailing/surge blocking
Yield 1 gpm **Purged Volume** 68 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 16.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: K. VALENTI
BORING ID	: CW2-MW30	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/16/94
ELEVATION	: 49.470 surveyed	DATE COMPLETED	: 12/16/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			65	Silty sand, SM	BROWN	LSE	MST	10 11 10 12	HNU 2.0	Top 3" bgs = topsoil. Some organics-roots. 1st hole abandoned with HNu=10.0.
48	1			Poorly graded sand with silt, SP-SM	LT BROWN	LSE	MST		HNU 0.0	Lt brown sand (little silt, mottles noted.)
				No Sample Recovered						
47	2		65	Silty sand, SM	DK GRAY TO BRN	LSE	WET	8 9 13 11	HNU 20.0	Noted mottling with iron (Fe) staining.
46	3			Silty sand, SM	DK GRAY	SFT	WET		HNU 20.0	Fine silt (some) finer sands. SPS is wet.
				No Sample Recovered						
45	4		75	Silty sand, SM	GRAY BROWN	SFT	WET	15 17 11 7	HNU 7.0	Gray mottles noted.
44	5			Sandy elastic silt, MH	GREENISH GRAY	SFT	WET		HNU 0.0	6" piece of wood noted at bottom of spoon/
				No Sample Recovered						
43	6		20	Sandy elastic silt, MH	GRAYISH GREEN	SFT	WET	5 6 5 4	HNU 3.0	Same as above interval. Wood pieces.
42	7			No Sample Recovered						
41	8		50	Sandy silt, ML	GREENISH GRAY	SFT	WET	5 4 4 3	HNU 150.0	3" SPS used. Same lith. as noted in previous interval. Sampled W2-SB30
40	9			No Sample Recovered						
39	10		80	Silty sand, SM	GREENISH GRAY	LSE	WET		HNU 0.0	3" SPS used. Fine sands little silt.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	16.00
SITE NAME	:	CHARLES WOOD AREA	LOGGER	:	K. VALENTI
BORING ID	:	CW2-MW30	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	12/16/94
ELEVATION	:	49.470 surveyed	DATE COMPLETED	:	12/16/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GREENISH GRAY	LSE	WET		HNU 0.0	3" SPS used. Fine sands little silt.
38	11									
				No Sample Recovered						
37	12		100	Silty sand, SM	GREENISH GRAY	SFT	WET	4 8 4 3	HNU 0.0	Mostly quartz sand.
36	13									
35	14		50	Well-graded sand, SW	GREENISH GRAY	LSE	MST	3 3 2 3	HNU 0.0	Some white quartz stones.
				Elastic silt, MH	DK GRAY BLACK	FRM	MST		HNU 0.0	Set well at 16' bgs. TD of borehole 16' bgs.
34	15			No Sample Recovered						
33	16									
32	17									
31	18									
30	19									
29	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW2-MW30	1	1	0.00	0.80	SPS		1		60	35	0	4		NON	MOD	LSE	MST	
CW2-MW30	1	2	0.80	1.30	SPS		0		90	10	0	0		NON	MOD	LSE	MST	
CW2-MW30	1	3	1.30	2.00	SPS		0		0	0	0	0						
CW2-MW30	2	1	2.00	2.80	SPS		1		55	39	5	0		LOW	MOD	LSE	WET	
CW2-MW30	2	2	2.80	3.30	SPS		0		70	30	0	0		LOW	WEL	SFT	WET	
CW2-MW30	2	3	3.30	4.00	SPS		0		0	0	0	0						
CW2-MW30	3	1	4.00	4.50	SPS		0		65	35	0	0		LOW	POR	SFT	WET	
CW2-MW30	3	2	4.50	5.50	SPS		0		35	60	5	0		MOD	MOD	SFT	WET	
CW2-MW30	3	3	5.50	6.00	SPS		0		0	0	0	0						
CW2-MW30	4	1	6.00	6.40	SPS		0		40	60	0	0		MOD	WEL	SFT	WET	
CW2-MW30	4	2	6.40	8.00	SPS		0		0	0	0	0						
CW2-MW30	5	1	8.00	9.00	SPS		0		40	60	0	0		LOW	MOD	SFT	WET	
CW2-MW30	5	2	9.00	10.00	SPS		0		0	0	0	0						
CW2-MW30	6	1	10.00	11.60	SPS		0	F	85	15	0	0		LOW	WEL	LSE	WET	
CW2-MW30	6	2	11.60	12.00	SPS		0		0	0	0	0						
CW2-MW30	7	1	12.00	14.00	SPS		5		80	15	0	0		NON	MOD	SFT	WET	
CW2-MW30	8	1	14.00	14.30	SPS		10		80	5	0	0		NON	POR	LSE	MST	
CW2-MW30	8	2	14.30	15.00	SPS		0		0	90	10	0		MOD	WEL	FRM	MST	
CW2-MW30	8	3	15.00	16.00	SPS		0		0	0	0	0						

BOREHOLE ID : CW2-MW31 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/16/94 END DATE : 12/16/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 16.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 16.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	49.670
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32595

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
SPS/augered to 8' bgs. Severed wire (subsurface) @approx. 2' bgs. Abandoned location. Moved location 1'. Latitude-North: 40 deg 17' 43.6"/Longitude-West: 74 deg 05' 10.5"

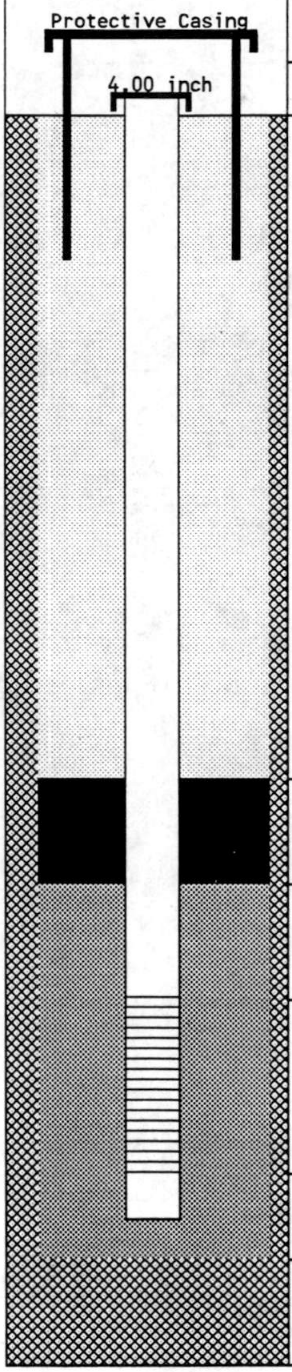
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA	**INSPECTOR**	K. VALENTI

WELL ID CW2-MW31
START DATE 12/16/94
COMPLETION DATE 12/16/94

WATER LEVELS



DEPTH		ELEV.
1.91	TC	51.58
0.00	GS	49.67
1.00	BN	48.67
3.00	SP	46.67
5.00	SC	44.67
14.54	BS	35.13
15.00	TD	34.67

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.91 **ft.** **Protective Casing:** 2.51 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 3.00 to 16.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.45 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/05/95
Method Bailing
Yield <1 gpm **Purged Volume** 25 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

PROJECT :	FT. MONMOUTH	TOTAL DEPTH :	16.00
SITE NAME :	CHARLES WOOD AREA	LOGGER :	K. VALENTI
BORING ID :	CW2-MW31	DRILLING COMPANY :	J.C. ANDERSON
NORTHING :	0.0000 estimated	DRILLING RIG :	MOBILE B-57
EASTING :	0.0000 estimated	DATE STARTED :	12/16/94
ELEVATION :	49.670 surveyed	DATE COMPLETED :	12/16/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Silty sand, SM	BROWN	LSE	MST	5 9 6 7	HNU 3.0	Fill. Top 3" organics/ topsoil. Brown little silt, mostly sand.
48	1									
47	2		75	Silty sand, SM	BROWN	SFT	MST	10 10 10 11	HNU 1.0	Fill, Same lithology as previous interval. Some orange iron (Fe) staining noted throughout spoon.
46	3			Silty sand, SM	GRAY	FRM	MST	5 9 6 7	HNU 1.0	Fill. More silt than above interval. Firm but able to crush between fingers.
				No Sample Recovered						
45	4		50	Sandy elastic silt, MH	DK GRAY	FRM	MST	7 7 9 5	HNU 0.0	Fill. Same as previous interval. More silt/clay texture. Water present at 5' bgs.
44	5			No Sample Recovered						
43	6		75	Sandy elastic silt, MH	DK GRAY	SFT	WET	4 4 7 9	HNU 2.0	Same lithology as previous interval.
42	7			Silty sand, SM	GRAYISH GREEN	SFT	WET		HNU 2.0	Uncertain. Mostly fine sands. Sample CW2-SB31 collected. Wine at depth noted by auger cuttings.
				No Sample Recovered						
41	8		60	Silty sand, SM	GRAYISH GREEN	SFT	SAT	2 2 2 6	HNU 0.0	Same lithology previous interval. Sample CW2-SB31 collected.
40	9			No Sample Recovered						
39	10		75	Silty sand, SM	GRAY GREEN	SFT	SAT	2 2 4 3	HNU 0.0	Uncertain.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 16.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: K. VALENTI
BORING ID	: CW2-MW31	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 12/16/94
ELEVATION	: 49.670 surveyed	DATE COMPLETED	: 12/16/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY GREEN	SFT	SAT		HNU 0.0	Uncertain.
38	11									
				No Sample Recovered						
37	12		75	Poorly graded sand with silt, SP-SM	DK GREEN GRAY	LSE	SAT	2 3 2 6	HNU 0.0	Mostly sand with little silt.
36	13			Elastic silt, MH	DK GRAY	FRM	MST		HNU 0.0	
				No Sample Recovered						
35	14		50	Elastic silt, MH	DK GRAY	FRM	MST	5 5 10 7	HNU 0.0	Same lithology as previous interval.
34	15			No Sample Recovered						
33	16									
32	17									
31	18									
30	19									
29	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW2-MW31	1	1	0.00	2.00	SPS		0		80	20	0	0		LOW	MOD	LSE	MST	
CW2-MW31	2	1	2.00	3.00	SPS		0		85	15	0	0		LOW	MOD	SFT	MST	
CW2-MW31	2	2	3.00	3.50	SPS		0		60	40	0	0		LOW	WEL	FRM	MST	
CW2-MW31	2	3	3.50	4.00	SPS		0		0	0	0	0						
CW2-MW31	3	1	4.00	5.00	SPS		0	F	40	55	5	0		MOD	WEL	FRM	MST	
CW2-MW31	3	2	5.00	6.00	SPS		0		0	0	0	0						
CW2-MW31	4	1	6.00	7.00	SPS		0		40	55	5	0		MOD	MOD	SFT	WET	
CW2-MW31	4	2	7.00	7.50	SPS		0	F	80	20	0	0		LOW	WEL	SFT	WET	
CW2-MW31	4	3	7.50	8.00	SPS		0		0	0	0	0						
CW2-MW31	5	1	8.00	9.20	SPS		0		80	20	0	0		LOW	WEL	SFT	SAT	
CW2-MW31	5	2	9.20	10.00	SPS		0		0	0	0	0						
CW2-MW31	6	1	10.00	11.50	SPS		0		80	20	0	0		LOW	WEL	SFT	SAT	
CW2-MW31	6	2	11.50	12.00	SPS		0		0	0	0	0						
CW2-MW31	7	1	12.00	13.00	SPS		0		90	10	0	0		NON	WEL	LSE	SAT	
CW2-MW31	7	2	13.00	13.50	SPS		0		0	80	20	0		MOD	WEL	FRM	MST	
CW2-MW31	7	3	13.50	14.00	SPS		0		0	0	0	0						
CW2-MW31	8	1	14.00	15.00	SPS		0		0	80	20	0		MOD	WEL	FRM	MST	
CW2-MW31	8	2	15.00	16.00	SPS		0		0	0	0	0						

BOREHOLE ID : CW2-MW32 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/16/94 *END DATE :* 12/16/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA *FLUID :* NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	49.470
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32596

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

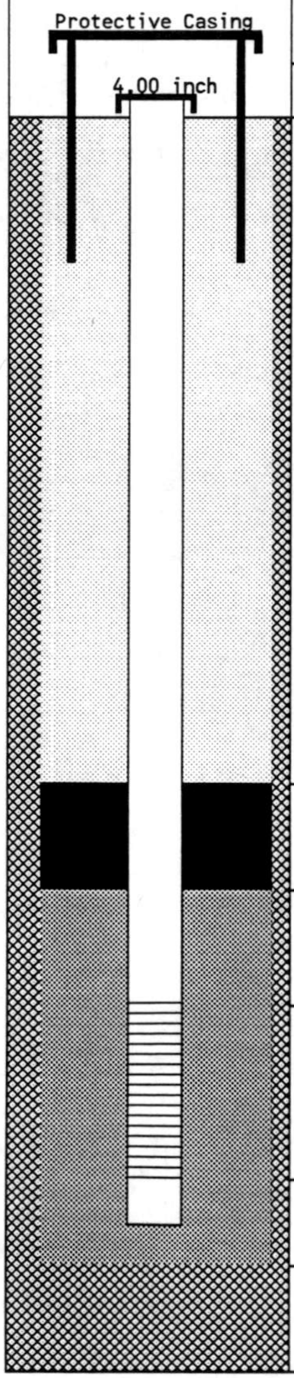
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude North: 40 deg 17′ 43.6"
Longitude West: 74 deg 05′ 10.3"

CLIENT FT. MONMOUTH
SITE NAME CHARLES WOOD AREA
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID CW2-MW32
START DATE 12/16/94
COMPLETION DATE 12/16/94

WATER LEVELS



DEPTH		ELEV.
1.91	TC	51.38
0.00	GS	49.47
0.80	BN	48.67
3.00	SP	46.47
5.00	SC	44.47
14.54	BS	34.93
15.00	TD	34.47

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.91 **ft.** **Protective Casing:** 2.61 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.80 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.80 to 3.00 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 3.00 to 5.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/05/95
Method Bailing/surge blocking
Yield 1 gpm **Purged Volume** 46 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	15.00
SITE NAME	:	CHARLES WOOD AREA	LOGGER	:	P. THOMAS
BORING ID	:	CW2-MW32	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B-57
EASTING	:	0.0000 estimated	DATE STARTED	:	12/16/94
ELEVATION	:	49.470 surveyed	DATE COMPLETED	:	12/16/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			40	Silty sand, SM	BROWN	SFT	SAT	5 5 10 12	HNU 0.0	0-0.4 topsoil.
48	1			No Sample Recovered						
47	2		20	Silty sand with gravel, SM	BROWN	LSE	SAT	13 20 10 10	HNU 0.0	Note: Top 4-4.1 - gravel (concrete?)
				No Sample Recovered						
46	3									
45	4		20	Silty sand, SM	GRAY	SFT	SAT	5 3 3 5	HNU 0.0	
				No Sample Recovered						
44	5									
43	6		60	Silty sand, SM	BROWN/GRAY	LSE	SAT	3 5 7 14	HNU 0.0	
42	7			No Sample Recovered						
41	8		65	Silty sand, SM	OLIVE/GRAY	LSE	SAT	4 7 9 7	HNU 0.0	
40	9			Silty sand with gravel, SM	BROWN	LSE	SAT		HNU 0.0	
				No Sample Recovered						
39	10		75	Sandy silt, ML	GRAY	SFT	WET	5 4 5 5	HNU 0.0	v. micaceous

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	15.00
SITE NAME	:	CHARLES WOOD AREA	LOGGER	:	P. THOMAS
BORING ID	:	CW2-MW32	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B-57
EASTING	:	0.0000 estimated	DATE STARTED	:	12/16/94
ELEVATION	:	49.470 surveyed	DATE COMPLETED	:	12/16/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Sandy silt, ML	GRAY	SFT	WET		HNU 0.0	v. micaceous
38	11									
				No Sample Recovered						
37	12		60	Sandy silt, ML	GRAY	SFT	WET	3 3 6 12	HNU 0.0	
36	13									
				No Sample Recovered						
35	14			Interval Not Sampled						Set well at 15' bgs.
34	15									
33	16									
32	17									
31	18									
30	19									
29	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW2-MW32	1	1	0.00	0.80	SPS	C	10	MF	45	25	5	15		NON	POR	SFT	SAT	
CW2-MW32	1	2	0.80	2.00	SPS		0		0	0	0	0						
CW2-MW32	2	1	2.00	2.40	SPS	MF	15	MF	55	25	5	0		NON	POR	LSE	SAT	
CW2-MW32	2	2	2.40	4.00	SPS		0		0	0	0	0						
CW2-MW32	3	1	4.00	4.40	SPS		0	MF	60	30	10	0		LOW	MOD	SFT	SAT	
CW2-MW32	3	2	4.40	6.00	SPS		0		0	0	0	0						
CW2-MW32	4	1	6.00	7.20	SPS		0	MFC	75	20	5	0		NON	MOD	LSE	SAT	
CW2-MW32	4	2	7.20	8.00	SPS		0		0	0	0	0						
CW2-MW32	5	1	8.00	9.00	SPS		0	MF	75	20	5	0		NON	MOD	LSE	SAT	
CW2-MW32	5	2	9.00	9.30	SPS	MCF	35	MF	50	15	0	0		NA	POR	LSE	SAT	
CW2-MW32	5	3	9.30	10.00	SPS		0		0	0	0	0						
CW2-MW32	6	1	10.00	11.50	SPS		0	F	40	55	5	0		NON	MOD	SFT	WET	
CW2-MW32	6	2	11.50	12.00	SPS		0		0	0	0	0						
CW2-MW32	7	1	12.00	13.20	SPS		0	F	40	55	5	0		NON	WEL	SFT	WET	
CW2-MW32	7	2	13.20	14.00	SPS		0		0	0	0	0						
CW2-MW32	8	1	14.00	15.00	NS		0		0	0	0	0						

BOREHOLE ID : CW2-MW33 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/15/94 *END DATE :* 12/15/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA *FLUID :* NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	49.180
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32597

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 17' 43.3"
Longitude-West: 74 deg 05' 10.2"

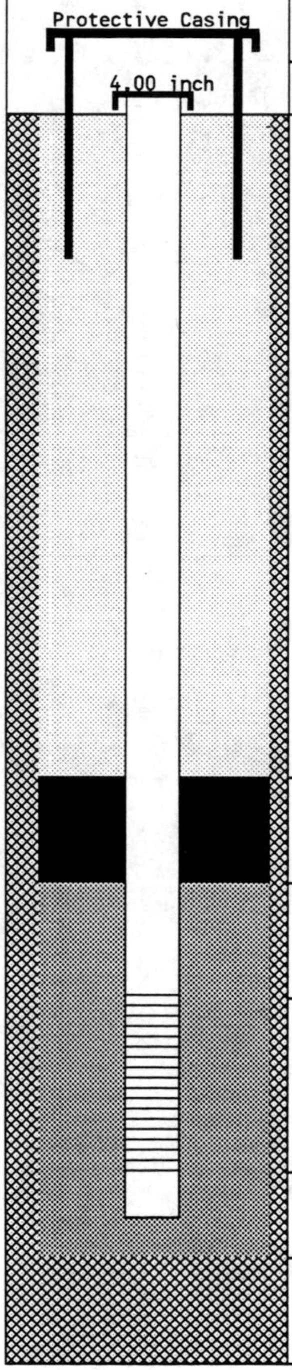
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA	**INSPECTOR**	P. THOMAS

WELL ID	CW2-MW33
START DATE	12/15/94
COMPLETION DATE	12/15/94

WATER LEVELS



DEPTH		ELEV.
1.91	TC	51.09
0.00	GS	49.18
0.50	BN	48.68
3.00	SP	46.18
5.00	SC	44.18
14.54	BS	34.64
15.00	TD	34.18

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.91 **ft.** **Protective Casing:** 1.99 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO. 3 MORIE **Interval:** 3.00 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/24/95
Method Surge Blocking/Bailing
Yield 1 gpm **Purged Volume** 60 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: P. THOMAS
BORING ID	: CW2-MW33	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 12/15/94
ELEVATION	: 49.180 surveyed	DATE COMPLETED	: 12/15/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			70	Silt with sand, ML	BROWN	SFT	MST	6 9 11 12	HNU 0.0	Topsoil; plant/grass fragments.
				Silty sand, SM	BROWN	SFT	MST		HNU 0.0	
48	1									
				No Sample Recovered						
47	2		60	Silty sand, SM	BROWN	SFT	MST	11 10 9 9	HNU 0.0	
46	3									
				No Sample Recovered						
45	4		80	Silty sand, SM	GRAY	SFT	SAT	3 3 3 4	HNU 0.1	
44	5									
				No Sample Recovered						
43	6		75	Silty sand, SM	GRAY	SFT	SAT	3 4 5 5	HNU 0.0	Note at 7.3 to 7.5' bgs occurrance of green sand layer (75% sand/25% silt)
42	7									
				Silty sand, SM	GREEN	LSE	SAT		HNU 0.0	
				No Sample Recovered						
41	8		60	Silty sand, SM	GREEN	LSE	SAT	6 5 5 6	HNU 0.0	
40	9									
				No Sample Recovered						
39	10		45	Silty sand, SM	GREEN	LSE	SAT	5 10 9 8	HNU 0.0	

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: P. THOMAS
BORING ID	: CW2-MW33	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 12/15/94
ELEVATION	: 49.180 surveyed	DATE COMPLETED	: 12/15/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GREEN	LSE	SAT		HNU 0.0	
38	11			No Sample Recovered						
37	12			No Sample Recovered				3 3 5 8		
36	13									
35	14			Interval Not Sampled						Augered interval.
34	15									
33	16									
32	17									
31	18									
30	19									
29	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW2-MW33	1	1	0.00	0.60	SPS		0	FM	15	30	15	40		NON	POR	SFT	MST	
CW2-MW33	1	2	0.60	1.40	SPS	FM	10	MFC	60	20	5	5		NON	MOD	SFT	MST	
CW2-MW33	1	3	1.40	2.00	SPS		0		0	0	0	0						
CW2-MW33	2	1	2.00	3.20	SPS		0	MFC	60	35	5	0		NON	MOD	SFT	MST	
CW2-MW33	2	2	3.20	4.00	SPS		0		0	0	0	0						
CW2-MW33	3	1	4.00	5.60	SPS		0	MFC	55	35	10	0		NON	MOD	SFT	SAT	
CW2-MW33	3	2	5.60	6.00	SPS		0		0	0	0	0						
CW2-MW33	4	1	6.00	7.30	SPS		0	MFC	55	35	10	0		NON	MOD	SFT	SAT	
CW2-MW33	4	2	7.30	7.50	SPS		0	MF	75	25	0	0		NA	MOD	LSE	SAT	
CW2-MW33	4	3	7.50	8.00	SPS		0		0	0	0	0						
CW2-MW33	5	1	8.00	9.20	SPS	F	10	MF	70	20	0	0		NA	MOD	LSE	SAT	
CW2-MW33	5	2	9.20	10.00	SPS		0		0	0	0	0						
CW2-MW33	6	1	10.00	10.90	SPS	F	10	MF	70	20	0	0		NON	MOD	LSE	SAT	
CW2-MW33	6	2	10.90	12.00	SPS		0		0	0	0	0						
CW2-MW33	7	1	12.00	14.00	SPS		0		0	0	0	0						
CW2-MW33	8	1	14.00	15.00	NS		0		0	0	0	0						

BOREHOLE ID : CW6-MW34 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/03/95 END DATE : 01/03/95

LOGGER/COMPANY : K VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :

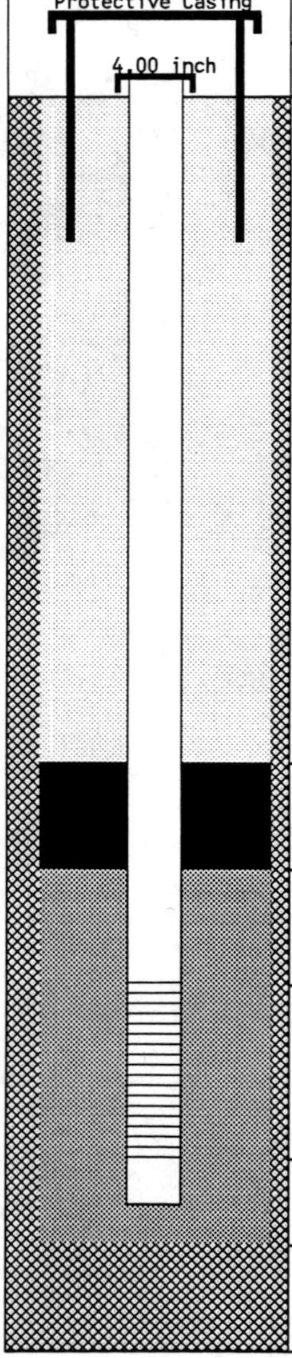
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA 6	**INSPECTOR**	K. VALENTI

WELL ID CW6-MW34
START DATE 01/03/95
COMPLETION DATE 01/03/95

WATER LEVELS



DEPTH		ELEV.
1.79	TC	33.76
0.00	GS	31.97
1.00	BN	30.97
3.00	SP	28.97
4.50	SC	27.47
14.04	BS	17.93
14.50	TD	17.47

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 14.50 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.79 **ft.** **Protective Casing:** 2.20 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : MORIE #1 **Interval:** 3.00 to 14.50 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.50 to 14.04 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.04 to 14.50 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/06/95
Method Bailing/overpumping
Yield 3 gpm **Purged Volume** 150 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 14.50
SITE NAME	: CHARLES WOOD AREA 6	LOGGER	: K VALENTI
BORING ID	: CW6-MW34	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 01/03/95
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 01/03/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		25	Silty sand with gravel, SM	BROWN	LSE	MST	10 10 13 11	HNU 0.0	Fill(?) Collected sample CW06-SB34-A01. 3" SPS used.
				No Sample Recovered						
-1	1									
-2	2		100	Poorly graded sand, SP	GRAYISH BROWN	LSE	WET	15 18 17 21	HNU 0.0	Fill(?). 3" SPS used. Collected samp. CW06-SB34 A02. Wet @2'bgs. Sands coarsens down. Fe stain.
-3	3									
-4	4		100	Poorly graded sand, SP	OLIVE GREEN-BRO	LSE	SAT	3 3 4 4	HNU 0.0	Colors: 4-5' olive green, 5-5.6' pale brown. 5.5-6' orange brown.
-5	5									
-6	6		100	Poorly graded sand, SP	BROWN	LSE	SAT	4 5 5 5		Colors: 6-6.5 brown, 6.9-7.6 orange, 7.5-8' greenish brown.
-7	7									
-8	8		100	Poorly graded sand, SP	BROWN	LSE	SAT	6 7 7 7	HNU 0.0	Color: 8-8.5' orange 8.5-10' greenish brown more olive/brown towards bottom of spoon.
-9	9									
-10	10		25	Poorly graded sand, SP	LT BROWN	LSE	SAT	10 10 13 15	HNU 0.0	

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	14.50
SITE NAME	: CHARLES WOOD AREA 6		LOGGER	:	K VALENTI
BORING ID	: CW6-MW34		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	CME-55
EASTING	: 0.0000 estimated		DATE STARTED	:	01/03/95
ELEVATION	: 0.000 estimated		DATE COMPLETED	:	01/03/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	LT BROWN	LSE	SAT		HNU 0.0	
				No Sample Recovered						
-11	11									
-12	12		100	Poorly graded sand, SP	LT BROWN	LSE	SAT	10 13 15 15	HNU 0.0	TD of borehole 14.5'. Lt orange banding from 13-13.8. 13-8-14 heavy Fe banding.
-13	13									
-14	14			Interval Not Sampled						Augered interval.
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY (FT BGS)	INT.	SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW6-MW34	1	1	0.00	0.50	SPS		20		65	15	0	0		NON	POR	LSE	MST	
CW6-MW34	1	2	0.50	2.00	SPS		0		0	0	0	0						
CW6-MW34	2	1	2.00	4.00	SPS		0		100	0	0	0		NON	MOD	LSE	WET	
CW6-MW34	3	1	4.00	6.00	SPS		0		100	0	0	0		NON	MOD	LSE	SAT	
CW6-MW34	4	1	6.00	8.00	SPS		0	F	100	0	0	0		NON	MOD	LSE	SAT	
CW6-MW34	5	1	8.00	10.00	SPS		0		100	0	0	0		NON	MOD	LSE	SAT	
CW6-MW34	6	1	10.00	10.50	SPS		0	MF	100	0	0	0		NON	MOD	LSE	SAT	
CW6-MW34	6	2	10.50	12.00	SPS		0		0	0	0	0						
CW6-MW34	7	1	12.00	14.00	SPS		0		100	0	0	0		NON	MOD	LSE	SAT	
CW6-MW34	8	1	14.00	14.50	NS		0		0	0	0	0						

BOREHOLE ID : CW9-MW35 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/03/95 END DATE : 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLINGTON REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	29.270
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32600

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 17' 48.9"
Longitude-West: 74 deg 04' 25.2"

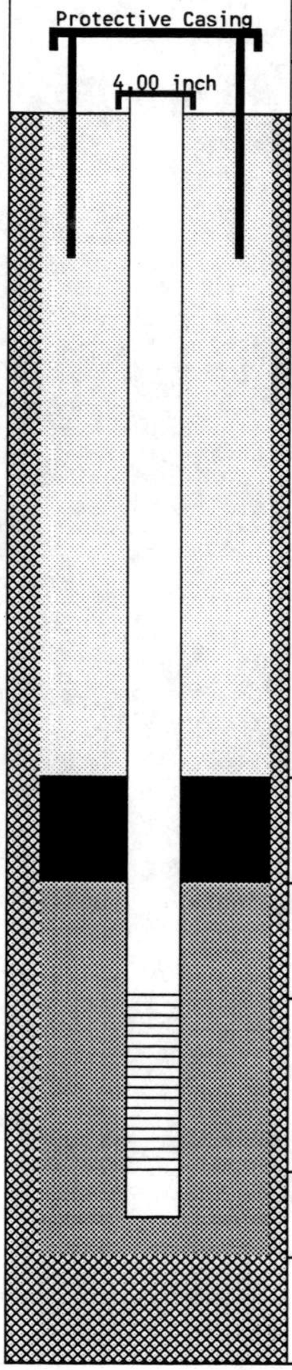
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME CHARLES WOOD AREA 9
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID CW9-MW35
START DATE 01/03/95
COMPLETION DATE 01/04/95

WATER LEVELS



DEPTH		ELEV.
2.16	TC	31.43
0.00	GS	29.27
0.50	BN	28.77
3.00	SP	26.27
4.50	SC	24.77
14.01	BS	15.26
14.50	TD	14.77

DRILLING SUMMARY

Driller WELLINGTON REEVE
Drilling Fluid NONE
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 4.50 **ft.**
Type :

Stick Up Inner Casing: 2.16 **ft.** **Protective Casing:** 2.46 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO. 1 SAND PACK **Interval:** 3.00 to 14.50 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.50 to 14.01 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.01 to 14.50 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/06/95
Method Surge blocking/bailing
Yield 5 gpm **Purged Volume** 225 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths measured below ground surface.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

06/20/95

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 0.00
SITE NAME	: CHARLES WOOD AREA 9	LOGGER	: P. THOMAS
BORING ID	: CW9-MW35	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 01/03/95
ELEVATION	: 29.270 surveyed	DATE COMPLETED	: 01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			65	Silty sand, SM	DK BROWN	SFT	MST	6 8 9 11	HNU 0.0	Fill. Topsoil; plant/ grass fragments. M. qtz gravel ~0.9-1.0 bgs.
28	1			Poorly graded sand with silt, SP-SM	GRAY BROWN	LSE	WET		HNU 0.0	
				No Sample Recovered						
27	2		80	Silty sand, SM	OLV/GRAY/ORG/BR	LSE	WET	36 22 18 11	HNU 0.0	Color change from gray brown 2-2.45; to olive brown 2.45-2.7 bgs, and orange brown 2.7-3.6.
26	3									
				No Sample Recovered						
25	4		55	Poorly graded sand with silt and gravel,SP-SM	ORANGE BROWN	LSE	SAT	7 7 7 7	HNU 0.0	
				Silty sand, SM	OLIVE BROWN	LSE	SAT		HNU 0.0	
24	5			No Sample Recovered						
23	6		80	Silty sand, SM	OLIVE BROWN	SFT	SAT	8 6 7 6	HNU 0.0	Iron (Fe) stained laminae 6-7' bgs. 7-7.6' bgs. color change to gray brown, fining downward.
22	7									
				No Sample Recovered						
21	8		50	Silty sand, SM	OLIVE BROWN	SFT	SAT	6 6 6 7	HNU 0.0	Sand with silt laminae
20	9			No Sample Recovered						
19	10		30	Silty sand, SM	OLIVE BROWN	SFT	SAT	3 5 8 8	HNU 0.0	Strong presence of dark heavy minerals.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 0.00
SITE NAME	: CHARLES WOOD AREA 9	LOGGER	: P. THOMAS
BORING ID	: CW9-MW35	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 01/03/95
ELEVATION	: 29.270 surveyed	DATE COMPLETED	: 01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	OLIVE BROWN	SFT	SAT		HNU 0.0	Strong presence of dark heavy minerals.
				No Sample Recovered						
18	11									
17	12		50	Silty sand, SM	OLIVE BROWN	SFT	SAT	4 6 8 9	HNU 0.0	Strong presence of dark heavy minerals.
16	13			No Sample Recovered						
15	14			Interval Not Sampled						Interval not sampled, augered interval; set well at 14.5 bgs.
14	15									
13	16									
12	17									
11	18									
10	19									
9	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW9-MW35	1	1	0.00	1.00	SPS	M	10		45	30	5	10		NON	MOD	SFT	MST	
CW9-MW35	1	2	1.00	1.30	SPS		0	MFC	90	10	0	0		NA	MOD	LSE	WET	
CW9-MW35	1	3	1.30	2.00	SPS		0		0	0	0	0						
CW9-MW35	2	1	2.00	3.60	SPS		0	MCF	85	15	0	0		NA	MOD	LSE	WET	
CW9-MW35	2	2	3.60	4.00	SPS		0		0	0	0	0						
CW9-MW35	3	1	4.00	4.70	SPS	M	30	MCF	60	10	0	0		NA	MOD	LSE	SAT	
CW9-MW35	3	2	4.70	5.10	SPS		0	MCF	85	15	0	0		NA	MOD	LSE	SAT	
CW9-MW35	3	3	5.10	6.00	SPS		0		0	0	0	0						
CW9-MW35	4	1	6.00	7.60	SPS		0	MF	70	30	0	0		NA	MOD	SFT	SAT	
CW9-MW35	4	2	7.60	8.00	SPS		0		0	0	0	0						
CW9-MW35	5	1	8.00	9.00	SPS		0	FM	80	20	0	0		NON	MOD	SFT	SAT	
CW9-MW35	5	2	9.00	10.00	SPS		0		0	0	0	0						
CW9-MW35	6	1	10.00	10.60	SPS		0	FM	80	20	0	0		NA	MOD	SFT	SAT	
CW9-MW35	6	2	10.60	12.00	SPS		0		0	0	0	0						
CW9-MW35	7	1	12.00	13.00	SPS		0	MF	80	20	0	0		NA	MOD	SFT	SAT	
CW9-MW35	7	2	13.00	14.00	SPS		0		0	0	0	0						
CW9-MW35	8	1	14.00	14.50	NS		0		0	0	0	0						

BOREHOLE ID : CW9-MW36
PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/04/94
END DATE : 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.00
DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 14.00 ft. BGS
METHOD :
FLUID :

BOREHOLE DIAMETER #2:
INTERVAL:
METHOD :
FLUID :

BOREHOLE DIAMETER #3:
INTERVAL:
METHOD :
FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : ATV-SKID RIG

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	31.220
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N   PERMIT # :

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N   No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N   No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

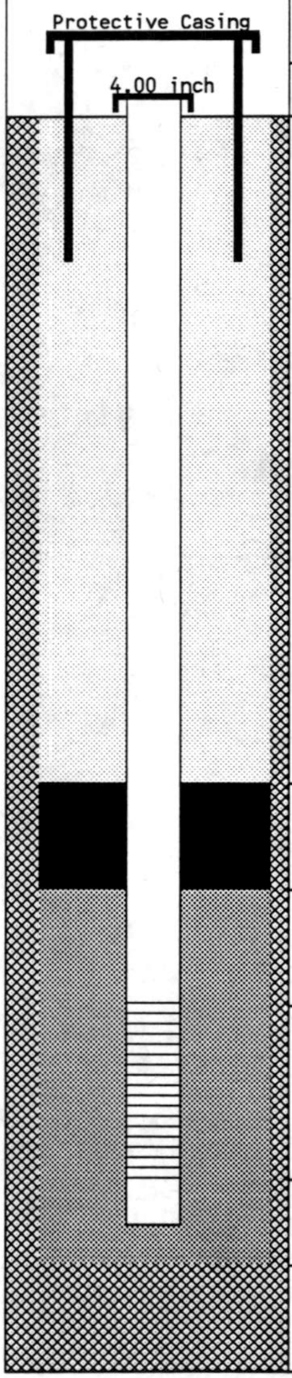
	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Lat. N. 40 deg. 17'47"
Long. W. 74 deg. 4'28"

CLIENT FT. MONMOUTH
SITE NAME
DRILLING FIRM J.C. ANDERSON
INSPECTOR P. THOMAS

WELL ID CW9MW36
START DATE 01/03/95
COMPLETION DATE 01/04/95
WATER LEVELS



DEPTH		ELEV.
1.99	TC	33.21
0.00	GS	31.22
1.00	BN	30.22
3.00	SP	28.22
4.00	SC	27.22
13.54	BS	17.68
14.00	TD	17.22

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 14.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.99 **ft.** **Protective Casing:** 2.38 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : NO. 1 MORIE **Interval:** 3.00 to 14.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.00 to 13.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 13.54 to 14.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/06/95
Method Bailed, surge blocking
Yield 4 gpm **Purged Volume** 175 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log — **Roy F. WESTON, Inc.**

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 14.00
SITE NAME	: CHARLES WOOD AREA 9		LOGGER	: P. THOMAS
BORING ID	: CW9-MW36		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: ATV-SKID RIG
EASTING	: 0.0000 estimated		DATE STARTED	: 01/04/94
ELEVATION	: 31.220 surveyed		DATE COMPLETED	: 01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		100	Well graded sand with silt, SW-SM	BROWN TO BLACK	LSE	MST	4 3 3 4	HNU 0.0	Fill/topsoil.
30	1									
29	2		100	Well-graded sand, SW	LT BROWN	LSE	WET	5 6 3 6	HNU 0.0	Moderate lt. gray mottling. SPS wet @3' bgs
28	3									
27	4		100	Other	LT BROWN	LSE	SAT	5 8 8 7	HNU 0.0	Saturated at 5' bgs. Lt. iron (Fe) staining at bottom of SPS.
26	5									
25	6		50	Other	LT ORANGE-BROWN	LSE	SAT	7 10 11 12	HNU 4.0	
24	7			No Sample Recovered						
23	8		100	Poorly graded sand, SP	LT ORANGE-BROWN	LSE	SAT	3 2 3 4	HNU 5.0	Lt (orange/red) iron (Fe) staining in lower half of SPS.
22	9									
21	10		100	Poorly graded sand, SP	YELLOWISH BROWN	LSE	SAT	2 4 4 5	HNU 5.0	Some iron (Fe) staining.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 14.00
SITE NAME	: CHARLES WOOD AREA 9	LOGGER	: P. THOMAS
BORING ID	: CW9-MW36	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: ATV-SKID RIG
EASTING	: 0.0000 estimated	DATE STARTED	: 01/04/94
ELEVATION	: 31.220 surveyed	DATE COMPLETED	: 01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	YELLOWISH BROWN	LSE	SAT		HNU 5.0	Some iron (Fe) staining.
20	11									
19	12		100	Poorly graded sand, SP	LT BROWN	LSE	SAT	3 8 8 8	HNU 6.0	Fe staining throughout SPS. End SPS. To auger to 15. Set well TD 14.
18	13									
17	14									
16	15									
15	16									
14	17									
13	18									
12	19									
11	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW9-MW36	1	1	0.00	2.00	SPS	M	5	CM	55	10	0	0		NA	POR	LSE	MST	
CW9-MW36	2	1	2.00	4.00	SPS		0	CM	100	0	0	0		NA	POR	LSE	WET	
CW9-MW36	3	1	4.00	6.00	SPS		0	CM	100	0	0	0		NA	MOD	LSE	SAT	
CW9-MW36	4	1	6.00	7.00	SPS		0	CM	100	0	0	0		NA	POR	LSE	SAT	
CW9-MW36	4	2	7.00	8.00	SPS		0		0	0	0	0						
CW9-MW36	5	1	8.00	10.00	SPS		0	MF	100	0	0	0		NA	MOD	LSE	SAT	
CW9-MW36	6	1	10.00	12.00	SPS		0	MF	100	0	0	0		NA	MOD	LSE	SAT	
CW9-MW36	7	1	12.00	14.00	SPS		0	MF	100	0	0	0		NA	MOD	LSE	SAT	

BOREHOLE ID : B6-MW6B *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/10/95 *END DATE* : 01/10/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00 *DEPTH TO BEDROCK* : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 14.00 ft. BGS
METHOD : HSA *FLUID* : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID* :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID* :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	35.190
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT #* : NJ 29 32602

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS* : 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS* : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

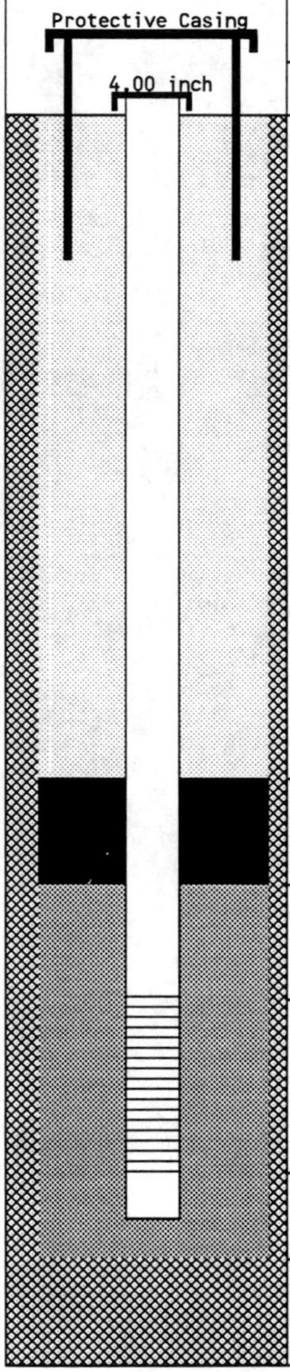
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 17' 48.4"
Longitude-West: 74 deg 04' 43.8"

Well Completion Summary **Roy F. WESTON, Inc.**

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA	**INSPECTOR**	K. VALENTI

WELL ID	B6-MW6B	**WATER LEVELS**
START DATE	01/10/95	
COMPLETION DATE	01/10/95	



DEPTH		ELEV.
2.18	TC	37.37
0.00	GS	35.19
1.00	BN	34.19
3.00	SP	32.19
4.00	SC	31.19
13.54	BS	21.65
14.00	TD	21.19

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 14.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.18 **ft.** **Protective Casing:** 2.33 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 3.00 to 14.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 4.00 to 13.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 13.54 to 14.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/24/95
Method Surge Block/Overpumping
Yield ~.5 gpm **Purged Volume** 260 gal

COMMENTS

TC = Top of Casing	SP = Top Sand Pack	= Grout
GS = Ground Surface	SC = Top Screen	= Seal
BN = Top Seal	BS = Bottom Screen	= Sand Pack
	TD = Total Depth	= Formation

Additional Comments:

NOTE: Well Diagram not to Scale **Elevations are feet above mean sea level**

 06/20/95

Borehole Log **Roy F. WESTON, Inc.**

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 0.00	
SITE NAME	: CHARLES WOOD AREA		LOGGER	: K. VALENTI	
BORING ID	: B6-MW6B		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: CME-55	
EASTING	: 0.0000 estimated		DATE STARTED	: 01/10/95	
ELEVATION	: 35.190 surveyed		DATE COMPLETED	: 01/10/95	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0			Poorly graded sand, SP	YELLOW LT BROWN	LSE	MST	14 11 9 11	HNU 2.0	Uncertain/fill? Used 3" spoon. Collected sample B6-SB01-A01. Top of spoon 3 inches was topsoil.
34	1									
33	2		100	Poorly graded sand, SP	YELLOW LT BROWN	LSE	WET	6 7 7 10	HNU 2.5	Uncertain/fill? Drove 2" and 3" SPS. Some Fe (orange) staining. Sample B6-SB01-A02 collected.
32	3									
31	4		100	Poorly graded sand with silt, SP-SM	YLLWSH LT BROWN	LSE	SAT	3 3 4 5	HNU 0.0	Uncertain/fill? 2" sps here to TD, Sps wet. Mild orange staining. Soil brown towards bottom.
30	5									
29	6		100	Poorly graded sand with silt, SP-SM	BROWN	LSE	SAT	3 4 5 6	HNU 0.0	
28	7									
27	8		100	Elastic silt, MH	BLACK	FRM	DRY	3 4 4 9	HNU 0.0	Top 2" of SPS is same as above interval. Sharp interval change.
26	9									
25	10		100	Elastic silt, MH	BLACK	FRM	MST	4 4 5 6	HNU 0.0	Same as above. Top 4" of sps was wet.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 0.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: K. VALENTI
BORING ID	: B6-MW6B	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 01/10/95
ELEVATION	: 35.190 surveyed	DATE COMPLETED	: 01/10/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Elastic silt, MH	BLACK	FRM	MST		HNU 0.0	Same as above. Top 4" of sps was wet.
24	11									
23	12		100	Elastic silt, MH	BLACK	FRM	WET	3 3 5 5	HNU 0.0	TD of borehole.
22	13									
21	14									
20	15									
19	16									
18	17									
17	18									
16	19									
15	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B6-MW6B	1	1	0.00	2.00	SPS		0	MF	100	0	0	0		NON	WEL	LSE	MST	
B6-MW6B	2	1	2.00	4.00	SPS		0		95	5	0	0		NON	WEL	LSE	WET	
B6-MW6B	3	1	4.00	6.00	SPS		0	MF	90	10	0	0		NON	WEL	LSE	SAT	
B6-MW6B	4	1	6.00	8.00	SPS		0	MF	90	10	0	0		NON	WEL	LSE	SAT	
B6-MW6B	5	1	8.00	10.00	SPS		0		5	65	30	0		MOD	MOD	FRM	DRY	
B6-MW6B	6	1	10.00	12.00	SPS		0		2	70	28	0		MOD	WEL	FRM	MST	
B6-MW6B	7	1	12.00	14.00	SPS		0		0	90	10	0		MOD	WEL	FRM	WET	

BOREHOLE ID : B7-MW7B PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/10/95 END DATE : 01/10/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	64.270
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32604

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

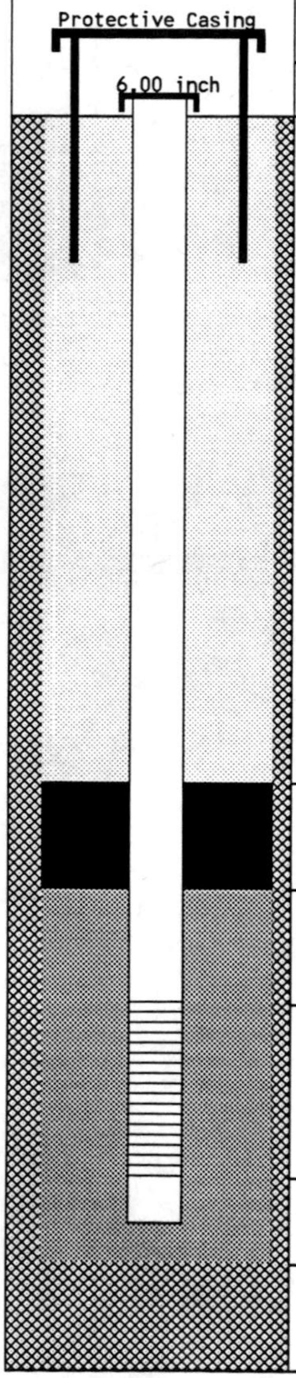
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Sample B7-SB01-A01 collected at 1-2' bgs. Sample B7-SB01-A02 collected at 5-6' bgs. Top of water table ~6' bgs. Latitude-North: 40 deg 17' 32.5"/Longitude-West: 74 deg 05' 21.3"

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA	**INSPECTOR**	K. VALENTI

WELL ID	B7-MW7B
START DATE	01/10/95
COMPLETION DATE	01/10/95

WATER LEVELS



DEPTH		ELEV.
2.04	TC	66.31
0.00	GS	64.27
1.00	BN	63.27
3.00	SP	61.27
5.00	SC	59.27
14.54	BS	49.73
15.00	TD	49.27

DRILLING SUMMARY

Driller WELLS REEVE
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 6.00 **inch** **Interval:** 0.00 to 15.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.04 **ft.** **Protective Casing:** 2.47 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 3.00 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/24/95
Method Surge Block/Overpumping
Yield 2 gpm **Purged Volume** 122 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: K. VALENTI
BORING ID	: B7-MW7B	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 01/10/95
ELEVATION	: 64.270 surveyed	DATE COMPLETED	: 01/10/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		100	Silt with sand, ML	BROWN	STF	DRY	3 3 4 6	HNU 2.0	Fill/uncertain. 3" SPS Sampled B7-SB01-A01 from tightly packed silt.
63	1									
62	2		100	Silt with sand, ML	BROWN	STF	DRY	3 3 5 5	HNU 1.0	Fill/uncertain. 3" sps used.
				Poorly graded sand, SP	YELLOW BROWN	LSE	MST		HNU 1.0	Fill/uncertain. Brown sand 2.4-2.9' Grades into lt brown-yellowish sand w/few cobbles to 4' bgs.
61	3									
60	4		100	Poorly graded sand, SP	OLIVE	LSE	WET	5 5 6 7	HNU 5.0	Fill/uncertain. 3" SPS used. Sample B7-SB01-A02.
59	5									
58	6		100	Poorly graded sand, SP	OLIVE GRAY	LSE	SAT	2 2 4 5	HNU 0.0	SPS 2" used. Saturated at 6' bgs.
57	7									
56	8		50	Poorly graded sand, SP		LSE	SAT	5 5 8 9	HNU 0.0	SPS saturated.
55	9			No Sample Recovered						
54	10		100	Poorly graded sand, SP	LT BROWN	LSE	SAT	2 3 5 7	HNU 0.0	

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	15.00
SITE NAME	:	CHARLES WOOD AREA	LOGGER	:	K. VALENTI
BORING ID	:	B7-MW7B	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	01/10/95
ELEVATION	:	64.270 surveyed	DATE COMPLETED	:	01/10/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	LT BROWN	LSE	SAT		HNU 0.0	
53	11									
52	12		100	Poorly graded sand, SP	LT BROWN	LSE	SAT	6 5 6 9	HNU 0.0	Some lt orange banding. Auger to 15' bgs to set well.
51	13									
50	14			Interval Not Sampled						Augered interval TD at 15' bgs.
49	15									
48	16									
47	17									
46	18									
45	19									
44	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B7-MW7B	1	1	0.00	2.00	SPS		0		15	80	0	5		LOW	POR	STF	DRY	
B7-MW7B	2	1	2.00	2.40	SPS		0		15	85	0	0		LOW	NA	STF	DRY	
B7-MW7B	2	2	2.40	4.00	SPS		5	MF	95	0	0	0		NON	MOD	LSE	MST	
B7-MW7B	3	1	4.00	6.00	SPS		0	MF	100	0	0	0		NON	MOD	LSE	WET	
B7-MW7B	4	1	6.00	8.00	SPS		0	M	100	0	0	0		NON	MOD	LSE	SAT	
B7-MW7B	5	1	8.00	9.00	SPS		0		100	0	0	0		NA	MOD	LSE	SAT	
B7-MW7B	5	2	9.00	10.00	SPS		0		0	0	0	0						
B7-MW7B	6	1	10.00	12.00	SPS		0		100	0	0	0		NON	MOD	LSE	SAT	
B7-MW7B	7	1	12.00	14.00	SPS		0	MF	100	0	0	0		NA	WEL	LSE	SAT	
B7-MW7B	8	1	14.00	15.00	NS		0		0	0	0	0						

BOREHOLE ID : B8-MW8B *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 01/10/95 *END DATE :* 01/10/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA *FLUID :* WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	47.040
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :* NJ 29 32598

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

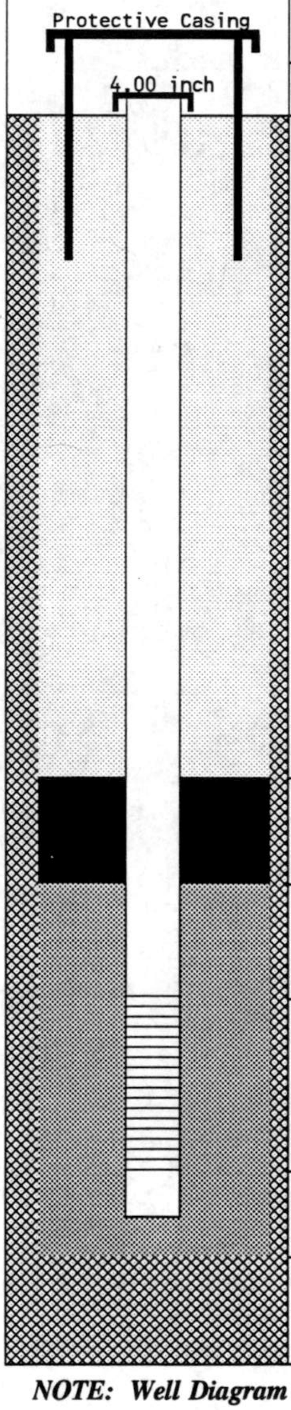
BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 17' 35.3"
Longitude-West: 74 deg 05' 01.4"

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA	**INSPECTOR**	P. THOMAS

WELL ID	B8-MW8B
START DATE	01/10/95
COMPLETION DATE	01/10/95

WATER LEVELS



DEPTH		ELEV.
1.86	TC	48.90
0.00	GS	47.04
0.50	BN	46.54
3.00	SP	44.04
5.00	SC	42.04
14.54	BS	32.50
15.00	TD	47.04

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 5.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 1.86 **ft.** **Protective Casing:** 2.37 **ft.**

Casing Grout: CEMT/BENT **Interval:** 0.00 to 0.50 **ft.**

Seal Type: BENTONITE SLURRY **Interval:** 0.50 to 3.00 **ft.**

Sand Pack Type : NO. 1 SAND MORIE **Interval:** 3.00 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/24/95
Method Surge Blocking/Overpump
Yield 1-4 gpm **Purged Volume** 210 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

Depths are measured below ground surface.

NOTE: Well Diagram not to Scale   **Elevations are feet above mean sea level**

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 15.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: P. THOMAS
BORING ID	: B8-MW8B	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated	DATE STARTED	: 01/10/95
ELEVATION	: 47.040 surveyed	DATE COMPLETED	: 01/10/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Sandy silt, ML	BROWN	SFT	MST	14 15 12	OVM 0.0	Topsoil.
				Poorly graded sand, SP	YELLOW BROWN	LSE	MST	10	OVM 0.0	Sharp contact. Sampled 1-2' bgs B8-SB01-A01.
46	1									
				No Sample Recovered						
45	2		100	Poorly graded sand, SP	YELLOW BROWN	LSE	MST	15 10 15 10	OVM 0.0	Same unit as above.
44	3									
43	4		70	Poorly graded sand with silt, SP-SM	YELLOW BROWN	LSE	WET	11 16 17 14	OVM 0.0	Sat ~5' bgs; Iron (Fe) stained zones throughout. Sampled B8-SB01-A02
42	5									
				No Sample Recovered						
41	6		60	Silty sand, SM	YELLOW BROWN	LSE	SAT	16 10 15 14	OVM 0.0	
40	7									
				No Sample Recovered						
39	8		75	Silty sand, SM	YELLOW BROWN	LSE	SAT	15 10 15 16	OVM 0.0	
38	9									
				No Sample Recovered						
37	10			Interval Not Sampled					OVM 0.0	Augered interval to keep sands out of hole. Cutting same lithology as above.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	15.00
SITE NAME	:	CHARLES WOOD AREA	LOGGER	:	P. THOMAS
BORING ID	:	B8-MW8B	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B-57
EASTING	:	0.0000 estimated	DATE STARTED	:	01/10/95
ELEVATION	:	47.040 surveyed	DATE COMPLETED	:	01/10/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Interval Not Sampled					OVM 0.0	Augered interval to keep sands out of hole. Cutting same lithology as above.
36	11									
35	12		80	Silty sand, SM	YELLOW BROWN	LSE	SAT	6 4 5 9	OVM 0.0	Iron (Fe) stained zones throughout - dark heavy minerals throughout spoon
34	13									
				No Sample Recovered						
33	14			Interval Not Sampled					OVM 0.0	Augered interval. Set well at 15' bgs. TD=15' bgs.
32	15									
31	16									
30	17									
29	18									
28	19									
27	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B8-MW8B	1	1	0.00	0.40	SPS		0	MF	40	30	5	25		NON	POR	SFT	MST	
B8-MW8B	1	2	0.40	1.50	SPS		0	MF	95	5	0	0		NA	WEL	LSE	MST	
B8-MW8B	1	3	1.50	2.00	SPS		0		0	0	0	0						
B8-MW8B	2	1	2.00	4.00	SPS		0	MF	95	5	0	0		NA	WEL	LSE	MST	
B8-MW8B	3	1	4.00	5.40	SPS		0	MF	90	10	0	0		NA	MOD	LSE	WET	
B8-MW8B	3	2	5.40	6.00	SPS		0		0	0	0	0						
B8-MW8B	4	1	6.00	7.20	SPS		0	MF	85	15	0	0		NA	MOD	LSE	SAT	
B8-MW8B	4	2	7.20	8.00	SPS		0		0	0	0	0						
B8-MW8B	5	1	8.00	9.50	SPS		0	MF	85	15	0	0		NA	MOD	LSE	SAT	
B8-MW8B	5	2	9.50	10.00	SPS		0		0	0	0	0						
B8-MW8B	6	1	10.00	12.00	NS		0		0	0	0	0						
B8-MW8B	7	1	12.00	13.60	SPS		0	MF	85	15	0	0		NA	MOD	LSE	SAT	
B8-MW8B	7	2	13.60	14.00	SPS		0		0	0	0	0						
B8-MW8B	8	1	14.00	15.00	NS		0		0	0	0	0						

BOREHOLE ID : B9-MW9B PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/23/95 END DATE : 01/23/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 15.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : ATV

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	43.130
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32603

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Water @5'-4" Sampled at 6"-12" B9-SB01/B9-SB01-A01 MS/MSD and 4' to 5'4" B9-SB01-A02/B9-SB01-002 Dup. Latitude-North: 40 deg 17' 55.3"/Longitude-West: 74 deg 04' 54.5".

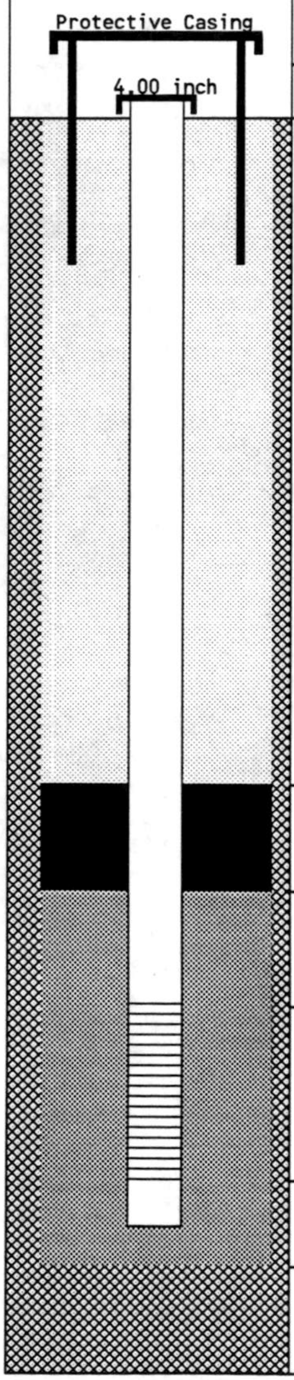
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH
SITE NAME CHARLES WOOD AREA
DRILLING FIRM J.C. ANDERSON
INSPECTOR K. VALENTI

WELL ID B9-MW9B
START DATE 01/23/95
COMPLETION DATE 01/23/95

WATER LEVELS



DEPTH		ELEV.
2.18	TC	45.31
0.00	GS	43.13
1.00	BN	42.13
3.00	SP	40.13
5.00	SC	38.13
14.54	BS	28.59
15.00	TD	28.13

DRILLING SUMMARY

Driller STEVE BURGER
Drilling Fluid WATER
Well Type SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 **inch** **Interval:** 0.00 to 15.00 **ft.**
Type : PVC SCH 40

Stick Up Inner Casing: 2.18 **ft.** **Protective Casing:** 2.52 **ft.**

Casing Grout: PORTLAND CEMENT **Interval:** 0.00 to 1.00 **ft.**

Seal Type: BENTONITE **Interval:** 1.00 to 3.00 **ft.**

Sand Pack Type : #1 MORIE **Interval:** 3.00 to 15.00 **ft.**
Grain Size : UNIFORM **Median Diameter:**
Screen Diameter: 4.00 **Interval:** 5.00 to 14.54 **ft.**
Type : PVC **Slots:** 0.010 **inches**

Silt Trap Interval: 14.54 to 15.00 **ft.**
Backfill Type : **Interval:** 0.00 to 0.00 **ft.**

WELL DEVELOPMENT

Date 01/25/95
Method Surge Blocking/Bailing
Yield <1 gpm **Purged Volume** 290 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth

= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

 06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	0.00
SITE NAME	: CHARLES WOOD AREA		LOGGER	:	K. VALENTI
BORING ID	: B9-MW9B		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	ATV
EASTING	: 0.0000 estimated		DATE STARTED	:	01/23/95
ELEVATION	: 43.130 surveyed		DATE COMPLETED	:	01/23/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Silty sand with gravel, SM	BROWN	SFT	MST	11 12 12 14	OVM 0.0	Fill-3" SPS used. Top 3"= topsoil. Sampled B-9SB01-A01/B-9SB01-E02.
42	1									
41	2		100	Poorly graded sand with silt, SP-SM	OLIVE BROWN	SFT	WET	7 9 11 12	OVM 0.0	Fill. 3" sps used. Heavy iron staining throughout SPS.
40	3									
39	4		100	Poorly graded sand, SP	FOREST GRN-BRN	SFT	WET	5 9 11 14	OVM 0.0	Fill. Heavy iron staining throughout SPS (3" sps). Sampled B9-SB01-A02/ B9-SB01-C02 Dup.
38	5									
37	6		100	Silty sand, SM	GREENISH BROWN	SFT	WET	4 3 4 5	OVM 0.0	Fill. 2" SPS to TD of well. SPS saturated. Less sand w/depth, org iron (Fe) banding throughout.
36	7									
35	8		100	Silty sand, SM	GREEN BROWN	SFT	SAT	5 6 5 8	OVM 0.0	Fill w/heavy iron (Fe) staining bottom 6" of SPS. Sand size black minerals with silt.
34	9									
				Elastic silt, MH	DK BROWN-BLACK	FRM	WET		OVM 0.0	6" of sand size dk to black minerals w/silt moist to wet throughout spoon.
33	10		100	Elastic silt, MH	DK GRAY-BLACK	SFT	WET	1 2 1 1	OVM 0.0	

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 0.00
SITE NAME	: CHARLES WOOD AREA	LOGGER	: K. VALENTI
BORING ID	: B9-MW9B	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: ATV
EASTING	: 0.0000 estimated	DATE STARTED	: 01/23/95
ELEVATION	: 43.130 surveyed	DATE COMPLETED	: 01/23/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Elastic silt, MH	DK GRAY-BLACK	SFT	WET		OVM 0.0	
32	11									
31	12		100	Elastic silt, MH	DK GRAY TO BLK	FRM	WET	3 5 7 7	OVM 0.0	End B.H. Auger to 15. Wet well at 15'.
30	13									
29	14			Interval Not Sampled						Augered interval. Set well at 15', TD of borehole 15' bgs.
28	15									
27	16									
26	17									
25	18									
24	19									
23	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
B9-MW9B	1	1	0.00	2.00	SPS		15		60	25	0	0		NON	POR	SFT	MST	
B9-MW9B	2	1	2.00	4.00	SPS		0	MF	90	10	0	0		NON	MOD	SFT	WET	
B9-MW9B	3	1	4.00	6.00	SPS		0	F	95	5	0	0		NON	WEL	SFT	WET	
B9-MW9B	4	1	6.00	8.00	SPS		0		65	30	5	0		LOW	MOD	SFT	WET	
B9-MW9B	5	1	8.00	9.50	SPS		0	F	75	25	0	0		LOW	MOD	SFT	SAT	
B9-MW9B	5	2	9.50	10.00	SPS		0		5	90	5	0		MOD	WEL	FRM	WET	
B9-MW9B	6	1	10.00	12.00	SPS		0		10	80	10	0		MOD	WEL	SFT	WET	
B9-MW9B	7	1	12.00	14.00	SPS		0		10	80	10	0		MOD	WEL	FRM	WET	
B9-MW9B	8	1	14.00	15.00	NS		0		0	0	0	0						

BOREHOLE ID : B10MW10B PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/10/95 END DATE : 01/10/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25
INTERVAL: 0.00 ft. to 14.50 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	51.360
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32605

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Latitude-North: 40 deg 17' 52.0"
Longitude-West: 74 deg 05' 16.0"

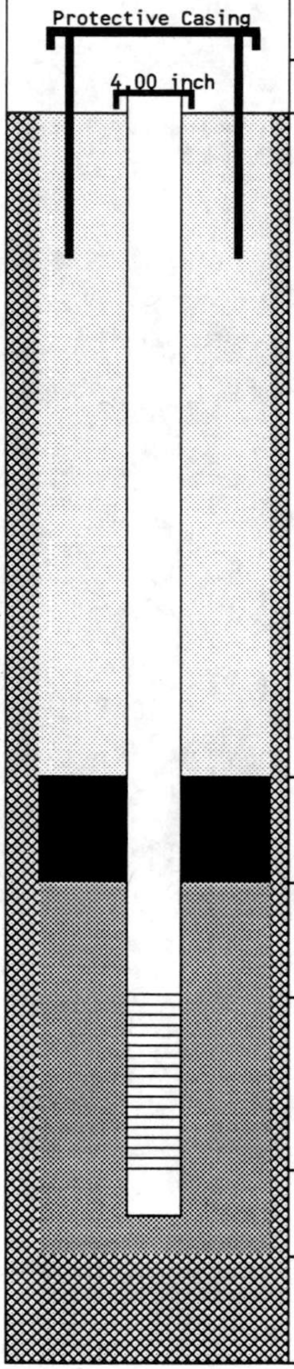
Well Completion Summary

Roy F. WESTON, Inc.

CLIENT	FT. MONMOUTH	**DRILLING FIRM**	J.C. ANDERSON
SITE NAME	CHARLES WOOD AREA	**INSPECTOR**	P. THOMAS

WELL ID	B10MW10B
START DATE	01/10/95
COMPLETION DATE	01/10/95

WATER LEVELS
4.36 FT (TOC) ON 01/24/95



DEPTH		ELEV.
1.78	TC	53.14
0.00	GS	51.36
0.50	BN	50.86
3.00	SP	48.36
4.50	SC	46.86
14.04	BS	37.32
14.50	TD	36.86

DRILLING SUMMARY

Driller	STEVE BURGER
Drilling Fluid	WATER
Well Type	SINGLE CASED SCREENED

WELL DESIGN CONSTRUCTION

Casing #1 Diameter: 4.00 *inch* *Interval:* 0.00 to 4.50 *ft.*
Type :

Stick Up Inner Casing: 1.78 *ft.* *Protective Casing:* 2.07 *ft.*

Casing Grout: CEMT/BENT *Interval:* 0.00 to 0.50 *ft.*

Seal Type: BENTONITE SLURRY *Interval:* 0.50 to 3.00 *ft.*

Sand Pack Type : NO. 1 MORIE *Interval:* 3.00 to 14.50 *ft.*
Grain Size : UNIFORM *Median Diameter:*
Screen Diameter: 4.00 *Interval:* 4.50 to 14.04 *ft.*
Type : PVC *Slots:* 0.010 *inches*

Silt Trap Interval: 14.04 to 14.50 *ft.*
Backfill Type : *Interval:* 0.00 to 0.00 *ft.*

WELL DEVELOPMENT

Date	01/24/95
Method	Surge/Overpumping
Yield	0.5 gpm
Purged Volume	469 gal

COMMENTS

TC = Top of Casing
GS = Ground Surface
BN = Top Seal
SP = Top Sand Pack
SC = Top Screen
BS = Bottom Screen
TD = Total Depth
= Grout
= Seal
= Sand Pack
= Formation

Additional Comments:
Depths are measured below ground surface. Well developed for approximately 2 hours.

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	14.50
SITE NAME	: CHARLES WOOD AREA		LOGGER	:	P. THOMAS
BORING ID	: B10MW10B		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	:	01/10/95
ELEVATION	: 51.360 surveyed		DATE COMPLETED	:	01/10/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			75	Sandy silt, ML	BROWN	SFT	MST	3 10 14	OVM 0.0	Topsoil; collected sample
				Silty sand, SM	OLIVE BROWN	SFT	MST	15	OVM 0.0	Collected sample 1-2' bgs TCL+3/TAL/CN B10-SB01-A01
50	1									
				No Sample Recovered						
49	2		100	Silty sand, SM	FE BRN/OLV BRN	LSE	WET	14 19 22 14	OVM 0.0	Fill? Collected TCL+30/TAL/CN
48	3									
47	4		100	Silty sand, SM	FE BRN/YLW BRN	SFT	SAT	10 6 6 6	OVM 0.0	Fill? Sat ~4.5' bgs.
46	5			Silty sand, SM	FE BRN/YLW BRN	SFT	SAT		OVM 0.0	Fill? Fines downward. Sharp contact due to sand texture, m-f.
45	6		50	Silty sand, SM	GRAY	SFT	SAT	2 3 3 5	OVM 0.0	V. micaeous
44	7			No Sample Recovered						
43	8		75	Silty sand, SM	GRAY	SFT	SAT	5 6 5 5	OVM 0.0	V. micaceous.
42	9									
				No Sample Recovered						
41	10		70	Silty sand, SM	GRAY	SFT	SAT	5 4 5 5	OVM 0.0	Slightly coarser than previous interval.

PROJECT	FT. MONMOUTH	TOTAL DEPTH	14.50
SITE NAME	CHARLES WOOD AREA	LOGGER	P. THOMAS
BORING ID	B10MW10B	DRILLING COMPANY	J.C. ANDERSON
NORTHING	0.0000 estimated	DRILLING RIG	MOBILE B-57
EASTING	0.0000 estimated	DATE STARTED	01/10/95
ELEVATION	51.360 surveyed	DATE COMPLETED	01/10/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Silty sand, SM	GRAY	SFT	SAT		OVM 0.0	Slightly coarser than previous interval.
40	11									
				No Sample Recovered						
39	12		45	Silty sand, SM	GRAY	SFT	SAT	5 9 8 6	OVM 0.0	
38	13			No Sample Recovered						
37	14			No Sample Recovered					OVM 0.0	Augered interval. Set well at 14.5' bgs.
36	15									
35	16									
34	17									
33	18									
32	19									
31	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT. UNIT
B10MW10B	1	1	0.00	0.40	SPS		5	MF	40	30	5	20		NON	MOD	SFT	MST	
B10MW10B	1	2	0.40	1.50	SPS		0	MF	60	30	5	5		NON	MOD	SFT	MST	
B10MW10B	1	3	1.50	2.00	SPS		0		0	0	0	0						
B10MW10B	2	1	2.00	4.00	SPS		0	MF	65	30	5	0		NON	MOD	LSE	WET	
B10MW10B	3	1	4.00	5.00	SPS		0	MF	65	30	5	0		NON	MOD	SFT	SAT	
B10MW10B	3	2	5.00	6.00	SPS		0	F	60	35	5	0		NON	MOD	SFT	SAT	
B10MW10B	4	1	6.00	7.00	SPS		0	FM	55	35	10	0		NON	MOD	SFT	SAT	
B10MW10B	4	2	7.00	8.00	SPS		0		0	0	0	0						
B10MW10B	5	1	8.00	9.50	SPS		0	FM	55	35	10	0		NON	MOD	SFT	SAT	
B10MW10B	5	2	9.50	10.00	SPS		0		0	0	0	0						
B10MW10B	6	1	10.00	11.40	SPS		0	F	60	35	5	0		NON	MOD	SFT	SAT	
B10MW10B	6	2	11.40	12.00	SPS		0		0	0	0	0						
B10MW10B	7	1	12.00	12.90	SPS		0	F	55	35	10	0		NON	MOD	SFT	SAT	
B10MW10B	7	2	12.90	14.00	SPS		0		0	0	0	0						
B10MW10B	8	1	14.00	14.50	SPS		0		0	0	0	0						

CHARLES WOOD
SOIL BORING LOGS

BOREHOLE ID : CW4-SB1 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/21/94 END DATE : 12/21/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 8.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 8.00 ft. BGS
METHOD : HSA FLUID : AIR
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon completion borehole was abandoned by grouting from TD to ground surface.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	8.00
SITE NAME	:	CHARLES WOOD AREA 4	LOGGER	:	K. VALENTI
BORING ID	:	CW4-SB1	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	12/21/94
ELEVATION	:	0.000 estimated	DATE COMPLETED	:	12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			75	Silty sand, SM	BROWN	SFT	MST	8 13 15 11	HNU 3.0	Fill(?)
-1	1			Poorly graded sand, SP	LT BROWN	LSE	MST		HNU 0.0	Fill(?) Mild iron (Fe) staining in lower portion of SPS.
				No Sample Recovered						
-2	2		50	Poorly graded sand, SP	FOREST GREEN	LSE	MST	9 7 7 5	HNU 1.0	Fill(?).
				Silty sand, SM	DK BRN - BLACK	SFT	MST		HNU 1.0	Fill(?) Bottom 2" of SPS Soils in spoon are wet.
-3	3			No Sample Recovered						
-4	4		50	Poorly graded sand, SP	GREEN	SFT	MST	8 9 16 13	HNU 1.0	
-5	5			No Sample Recovered						
-6	6		50	Poorly graded sand, SP	GREEN	LSE	WET	9 11 8 5	HNU 0.0	Water occurred at 6.1'bgs Collected soil sample CW04-SB01-A02.
-7	7			No Sample Recovered						
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW4-SB1	1	1	0.00	1.00	SPS		10		40	50	0	0		NON	POR	SFT	MST	
CW4-SB1	1	2	1.00	1.50	SPS		0		95	5	0	0		NON	MOD	LSE	MST	
CW4-SB1	1	3	1.50	2.00	SPS		0		0	0	0	0						
CW4-SB1	2	1	2.00	2.60	SPS		0		95	5	0	0		NON	WEL	LSE	MST	
CW4-SB1	2	2	2.60	3.00	SPS		0		60	40	0	0		LOW	WEL	SFT	MST	
CW4-SB1	2	3	3.00	4.00	SPS		0		0	0	0	0						
CW4-SB1	3	1	4.00	5.00	SPS		0		95	5	0	0		LOW	MOD	SFT	MST	
CW4-SB1	3	2	5.00	6.00	SPS		0		0	0	0	0						
CW4-SB1	4	1	6.00	7.00	SPS		0		95	5	0	0		LOW	MOD	LSE	WET	
CW4-SB1	4	2	7.00	8.00	SPS		0		0	0	0	0						

BOREHOLE ID : CW5-SB1 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/20/94 *END DATE :* 12/20/94

LOGGER/COMPANY : K. VALENTE

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 8.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 8.00 ft. BGS
METHOD : HSA *FLUID :* AIR
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :*

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon completion borehole was abandoned by grouting from TD to ground surface.

Borehole Log

Roy F. WESTON, Inc.

PROJECT :	FT. MONMOUTH	TOTAL DEPTH :	8.00
SITE NAME :	CHARLES WOOD AREA 5	LOGGER :	K. VALENTE
BORING ID :	CW5-SB1	DRILLING COMPANY :	J.C. ANDERSON
NORTHING :	0.0000 estimated	DRILLING RIG :	CME-55
EASTING :	0.0000 estimated	DATE STARTED :	12/20/94
ELEVATION :	0.000 estimated	DATE COMPLETED :	12/20/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Silty sand, SM	BROWN	LSE	MST	12 10 8 8	HNU 0.0	Fill. Top 3" is topsoil. Some gravels(med.-coarse) Color changing at bottom of SPS to grey-brown.
-1	1			No Sample Recovered						
-2	2		75	Silty sand with gravel, SM	GRAY BROWN	LSE	MST	12 11 10 11	HNU 0.0	Fill. Gray brown silty sand, some medium gravels
-3	3			Well-graded sand with gravel, SW	YELLOW-BROWN	LSE	MST		HNU 0.0	Fill. Sand, medium to coarse gravels. Some fragments of quartzite.
				No Sample Recovered						
-4	4		100	Well-graded sand with gravel, SW	YELLOWISH BROWN	LSE	MST	12 7 6 7	HNU 0.0	Same lithology as previous interval.
-5	5									
-6	6		100	Silty sand with gravel, SM	DK BROWN	FRM	MST	9 12 6 8	HNU 0.0	3" SPS used. Mottles noted. 1" of silty sand with organics at 6.6-6.7' bgs. Collected soil samp
-7	7			Poorly graded sand, SP	GREENISH GRAY	LSE	SAT		HNU 0.0	3" SPS used. Collected soil sample CW05-SB01-A02
-8	8									
-9	9									
-10	10									

06/02/95

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW5-SB1	1	1	0.00	1.00	SPS		10		50	40	0	0		NON	POR	LSE	MST	
CW5-SB1	1	2	1.00	2.00	SPS		0		0	0	0	0						
CW5-SB1	2	1	2.00	3.00	SPS		15		60	25	0	0		NON	MOD	LSE	MST	
CW5-SB1	2	2	3.00	3.50	SPS		30		65	5	0	0		NON	POR	LSE	MST	
CW5-SB1	2	3	3.50	4.00	SPS		0		0	0	0	0						
CW5-SB1	3	1	4.00	6.00	SPS		25		70	5	0	0		NON	POR	LSE	MST	
CW5-SB1	4	1	6.00	6.80	SPS		20		40	35	5	0		LOW	POR	FRM	MST	
CW5-SB1	4	2	6.80	8.00	SPS		5		95	0	0	0		NON	MOD	LSE	SAT	

BOREHOLE ID : CW5-SB2 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/20/94 END DATE : 12/20/94

LOGGER/COMPANY : K. VALENTE

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 6.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 6.00 ft. BGS
METHOD : HSA FLUID : AIR
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon completion the borehole was abandoned by grouting from TD to ground surface.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	6.00
SITE NAME	: CHARLES WOOD AREA 5		LOGGER	:	K. VALENTE
BORING ID	: CW5-SB2		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	CME-55
EASTING	: 0.0000 estimated		DATE STARTED	:	12/20/94
ELEVATION	: 0.000 estimated		DATE COMPLETED	:	12/20/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Sandy silt, ML	ORANGE-DK BROWN	FRM	MST	7 5 6 6	HNU 0.0	Fill. Top 4" consists of topsoil. Minor clay content.
-1	1			Silty sand, SM	GRAY BROWN	SFT	MST		HNU 0.0	Fill(?)
				No Sample Recovered						
-2	2		75	Silty sand, SM	DK GRAY - BROWN	SFT	MST	10 9 7 8	HNU 0.0	Some sub-rounded to fragmented quartz sands.
-3	3									
				No Sample Recovered						
-4	4		100	Silty sand, SM	DK BROWN	SFT	MST	4 5 11 12	HNU 0.0	Fill. Sandy silt. 3 or 4 pieces of broken bricks (red-orange in color).
-5	5			Elastic silt, MH	DK BROWN BLACK	SFT	MST		HNU 0.0	Fill. Silt w/some clay.
				Silty sand, SM	GREENISH GRAY	LSE	SAT		HNU 0.0	Collected sample CW05-SB02-A02. Water at 5.2' bgs. TD of borehole 6' bgs
-6	6									
-7	7									
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW5-SB2	1	1	0.00	0.90	SPS		5		25	60	10	0		LOW	POR	FRM	MST	
CW5-SB2	1	2	0.90	1.00	SPS		0		85	15	0	0		NON	MOD	SFT	MST	
CW5-SB2	1	3	1.00	2.00	SPS		0		0	0	0	0						
CW5-SB2	2	1	2.00	3.50	SPS		5		75	20	0	0		LOW	MOD	SFT	MST	
CW5-SB2	2	2	3.50	4.00	SPS		0		0	0	0	0						
CW5-SB2	3	1	4.00	5.00	SPS		5		45	50	0	0		NON	MOD	SFT	MST	
CW5-SB2	3	2	5.00	5.20	SPS		0		0	65	35	0		MOD	WEL	SFT	MST	
CW5-SB2	3	3	5.20	6.00	SPS		0		85	15	0	0		NON	WEL	LSE	SAT	

BOREHOLE ID : CW7-SB1 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/21/94 END DATE : 12/21/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.25
INTERVAL: 0.00 ft. to 12.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2: 3.00
INTERVAL: 12.00 ft. to 14.00 ft. BGS
METHOD : SPLIT SPOON SAMPLER FLUID : NONE
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B-57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon completion borehole was grouted with portland cement and bentonite from TD to ground surface.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	14.00
SITE NAME	:	CHARLES WOOD AREA 7	LOGGER	:	P. THOMAS
BORING ID	:	CW7-SB1	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B-57
EASTING	:	0.0000 estimated	DATE STARTED	:	12/21/94
ELEVATION	:	0.000 estimated	DATE COMPLETED	:	12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			90	Sandy silt, ML	BROWN	SFT	MST	4 5	HNU 25.9	Topsoil; HNU/OVM readings may be from decon solut. no cutting readings for entire boring.
				Silty sand, SM	BROWN ORANGE	SFT	MST	6 5	HNU 29.0	
-1	1									
				No Sample Recovered						
-2	2		75	Silty sand, SM	BROWN	SFT	MST	10 10 12 10	HNU 25.2	
-3	3									
				No Sample Recovered						
-4	4		75	Silty sand, SM	BROWN	SFT	WET	18 22 28 30	HNU 5.2	
-5	5									
				No Sample Recovered				18 22 23 30		
-6	6		100	Poorly graded sand, SP	OLIVE BROWN	LSE	MST	6 7 10 10	HNU 0.8	
-7	7									
-8	8		100	Poorly graded sand, SP	OLIVE BROWN	LSE	MST	10 15 10 10	HNU 0.0	Fe stained laminae.
-9	9									
-10	10		100	Poorly graded sand with silt, SP-SM	OLIVE BROWN	LSE	MST	12 12 10 5	HNU 0.1	

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 14.00
SITE NAME	: CHARLES WOOD AREA 7		LOGGER	: P. THOMAS
BORING ID	: CW7-SB1		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: MOBILE B-57
EASTING	: 0.0000 estimated		DATE STARTED	: 12/21/94
ELEVATION	: 0.000 estimated		DATE COMPLETED	: 12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand with silt, SP-SM	OLIVE BROWN	LSE	MST		HNU 0.1	
-11	11									
-12	12		100	Poorly graded sand, SP	OLIVE	LSE	WET	10 12 14 10	HNU 0.0	Fe stained laminae, sat from ~12.5-13' bgs.
-13	13									
-14	14									
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW7-SB1	1	1	0.00	0.40	SPS		0	MF	40	30	0	30		NON	POR	SFT	MST	
CW7-SB1	1	2	0.40	1.80	SPS	F	5	MF	60	35	0	0		NA	MOD	SFT	MST	
CW7-SB1	1	3	1.80	2.00	SPS		0		0	0	0	0						
CW7-SB1	2	1	2.00	3.50	SPS		0	MF	50	35	15	0		LOW	WEL	SFT	MST	
CW7-SB1	2	2	3.50	4.00	SPS		0		0	0	0	0						
CW7-SB1	3	1	4.00	5.50	SPS		0	MF	75	20	5	0		NON	WEL	SFT	WET	
CW7-SB1	3	2	5.50	6.00	SPS		0		0	0	0	0						
CW7-SB1	4	1	6.00	8.00	SPS		0	MFC	95	5	0	0		NA	MOD	LSE	MST	
CW7-SB1	5	1	8.00	10.00	SPS		0	MF	95	5	0	0		NA	MOD	LSE	MST	
CW7-SB1	6	1	10.00	12.00	SPS		0	MF	90	10	0	0		NA	MOD	LSE	MST	
CW7-SB1	7	1	12.00	14.00	SPS		0	MF	95	5	0	0		NA	MOD	LSE	WET	

BOREHOLE ID : CW7-SB2 PROJECT NAME : FT. MONMOUTH
BEGIN DATE : 12/21/94 END DATE : 12/21/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.25
INTERVAL: 0.00 ft. to 12.00 ft. BGS
METHOD : HSA FLUID : NONE
BOREHOLE DIAMETER #2: 3.00
INTERVAL: 12.00 ft. to 14.00 ft. BGS
METHOD : SPLIT SPOON FLUID : NONE
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : MOBILE B57

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon completion borehole was abandoned by grouting from TD to ground surface.

Borehole Log **Roy F. WESTON, Inc.**

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	14.00
SITE NAME	: CHARLES WOOD AREA 7		LOGGER	:	P. THOMAS
BORING ID	: CW7-SB2		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	MOBILE B57
EASTING	: 0.0000 estimated		DATE STARTED	:	12/21/94
ELEVATION	: 0.000 estimated		DATE COMPLETED	:	12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			60	Silty sand, SM	BROWN	SFT	WET	2 10 5 7	OVM 0.5	Topsoil
				Silty sand, SM	RED YELLOW BRN	LSE	WET		OVM 0.5	
-1	1									
				No Sample Recovered						
-2	2		85	Silty sand, SM	BROWN	SFT	WET	6 10 15 21	OVM 0.5	
				Silty sand, SM	BROWN	SFT	MST		OVM 0.0	
-3	3			Silty sand, SM	BROWN	LSE	WET		OVM 0.0	
				No Sample Recovered						
-4	4		90	Silty sand, SM	BROWN	LSE	MST	14 15 15 18	OVM 0.0	
-5	5									
				No Sample Recovered						
-6	6		80	Poorly graded sand, SP	OLIVE/FE BROWN	LSE	MST	9 9 8 9	OVM 0.0	Iron (Fe) colored with olive to brown sand laminae.
-7	7									
				No Sample Recovered						
-8	8		100	Poorly graded sand, SP	OLIVE BROWN	LSE	MST	7 7 10 12	OVM 0.0	
-9	9									
-10	10		100	Poorly graded sand with silt, SP-SM	OLIVE BROWN	LSE	MST	11 17 13 15	OVM 0.0	

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	14.00
SITE NAME	:	CHARLES WOOD AREA 7	LOGGER	:	P. THOMAS
BORING ID	:	CW7-SB2	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	MOBILE B57
EASTING	:	0.0000 estimated	DATE STARTED	:	12/21/94
ELEVATION	:	0.000 estimated	DATE COMPLETED	:	12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand with silt, SP-SM	OLIVE BROWN	LSE	MST		OVM 0.0	
-11	11									
-12	12		100	Poorly graded sand, SP	OLIVE BROWN	LSE	SAT	6 10 10 6	OVM 0.0	Collected soil sample. TD of borehole 14' bgs.
-13	13									
-14	14									
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW7-SB2	1	1	0.00	0.40	SPS		10	MF	40	20	0	30		NA	POR	SFT	WET	
CW7-SB2	1	2	0.40	1.20	SPS		0	MF	80	18	2	0		NON	MOD	LSE	WET	
CW7-SB2	1	3	1.20	2.00	SPS		0		0	0	0	0						
CW7-SB2	2	1	2.00	2.30	SPS		0	MF	80	18	2	0		NON	MOD	SFT	WET	
CW7-SB2	2	2	2.30	2.95	SPS		0	MF	55	30	15	0		LOW	MOD	SFT	MST	
CW7-SB2	2	3	2.95	3.70	SPS		10		60	28	2	0		NON	MOD	LSE	WET	
CW7-SB2	2	4	3.70	4.00	SPS		0		0	0	0	0						
CW7-SB2	3	1	4.00	5.80	SPS		0	MF	75	25	0	0		NA	MOD	LSE	MST	
CW7-SB2	3	2	5.80	6.00	SPS		0		0	0	0	0						
CW7-SB2	4	1	6.00	7.60	SPS		0	MFC	95	5	0	0		NA	MOD	LSE	MST	
CW7-SB2	4	2	7.60	8.00	SPS		0		0	0	0	0						
CW7-SB2	5	1	8.00	10.00	SPS		0	MF	95	5	0	0		NA	WEL	LSE	MST	
CW7-SB2	6	1	10.00	12.00	SPS		0	MF	90	10	0	0		NON	MOD	LSE	MST	
CW7-SB2	7	1	12.00	14.00	SPS		0	MF	95	5	0	0		NA	MOD	LSE	SAT	

BOREHOLE ID : CW7-SB3 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/21/94 *END DATE :* 12/21/94

LOGGER/COMPANY : K. VALENTZ

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 12.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 12.00 ft. BGS
METHOD : HSA *FLUID :* NONE
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	*SURVEYED*
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :*

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	*DEPTH*
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Borehole location grouted to surface level.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	12.00
SITE NAME	:	CHARLES WOOD AREA 7	LOGGER	:	K. VALENTZ
BORING ID	:	CW7-SB3	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	12/21/94
ELEVATION	:	0.000 estimated	DATE COMPLETED	:	12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		50	Silty sand, SM	ORANGE BROWN	LSE	DRY	6 5 8 9	OVM 116.0	Fill. Some semi-rounded stones, little gravel silty sands.
-1	1			No Sample Recovered						
-2	2		100	Silty sand, SM	ORANGE-BROWN	LSE	MST	4 5 4 5	OVM 98.4	Same lithology as noted above with less gravel.
-3	3									
-4	4		50	Silty sand, SM	OLIVE BROWN	SFT	MST	6 7 4 4	OVM 84.3	
-5	5			No Sample Recovered						
-6	6		100	Poorly graded sand, SP	OLIVE	LSE	MST	8 11 13 9	OVM 12.3	Top of spoon (4") silt with sand, all sand in rest of spoon. 3" sps used.
-7	7									
-8	8		100	Poorly graded sand, SP		LSE	MST	6 7 9 7	OVM 2.4	3" sps used. Light orange mottles. Sample CWA7-SB03 A02 collected.
-9	9									
-10	10		100	Not Classified - Incomplete Data				5 6 6 7	HNU 0.0	Water noted at 10'-6" bgs Wet sands. Heavier mottling at 11'-2" to 12'

PROJECT :	FT. MONMOUTH	TOTAL DEPTH :	12.00
SITE NAME :	CHARLES WOOD AREA 7	LOGGER :	K. VALENTZ
BORING ID :	CW7-SB3	DRILLING COMPANY :	J.C. ANDERSON
NORTHING :	0.0000 estimated	DRILLING RIG :	CME-55
EASTING :	0.0000 estimated	DATE STARTED :	12/21/94
ELEVATION :	0.000 estimated	DATE COMPLETED :	12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Not Classified - Incomplete Data					HNU 0.0	Water noted at 10'-6" bgs Wet sands. Heavier mottling at 11'-2" to 12'
-11	11									
-12	12									
-13	13									
-14	14									
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW7-SB3	1	1	0.00	1.00	SPS		10		50	40	0	0		NON	POR	LSE	DRY	
CW7-SB3	1	2	1.00	2.00	SPS		0		0	0	0	0						
CW7-SB3	2	1	2.00	4.00	SPS		0		70	30	0	0		NON	MOD	LSE	MST	
CW7-SB3	3	1	4.00	5.00	SPS		0	F	85	15	0	0		NON	WEL	SFT	MST	
CW7-SB3	3	2	5.00	6.00	SPS		0		0	0	0	0						
CW7-SB3	4	1	6.00	8.00	SPS		0		100	0	0	0		NON	MOD	LSE	MST	
CW7-SB3	5	1	8.00	10.00	SPS		0		100	0	0	0		NON	MOD	LSE	MST	
CW7-SB3	6	1	10.00	12.00	SPS		0		0	0	0	0						

BOREHOLE ID : CW7-SB4 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 12/21/94 END DATE : 12/21/94

LOGGER/COMPANY : K. VALELNTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 12.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 12.00 ft. BGS
METHOD : HSA FLUID : AIR
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon completion borehole was abandoned by grouting from TD to ground surface.

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 12.00
SITE NAME	: CHARLES WOOD AREA 7	LOGGER	: K. VALELNTI
BORING ID	: CW7-SB4	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/21/94
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Well-graded sand with gravel, SW	YELLOW BROWN	LSE	DRY	6 4 5 5	HNU 0.0	Fill(?). Top 2" consist of topsoil.
				Silty sand, SM	BROWN	LSE	MST		HNU 0.0	
-1	1			No Sample Recovered						
-2	2		100	Silty sand, SM	OLIVE BROWN	SFT	MST	6 6 7 5	HNU 0.0	Fill(?) Sandier with depth.
-3	3									
-4	4		100	Silty sand, SM	OLIVE BROWN	SFT	MST	4 5 7 7	HNU 0.0	
-5	5									
-6	6		100	Poorly graded sand, SP	OLIVE	LSE	MST		HNU 0.5	
-7	7									
-8	8		100	Poorly graded sand, SP	OLIVE LT BROWN	LSE	MST	7 8 10 11	HNU 0.0	3" sps used. Color becomes olive sand color towards bottom of SPS. Iron (Fe) staining.
-9	9									
-10	10		100	Poorly graded sand, SP	OLIVE - LT BRN	LSE	WET	6 7 5 5	HNU 0.0	3" sps used. 1st Water wet sands at 10.2' bgs. TD of borehole

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 12.00
SITE NAME	: CHARLES WOOD AREA 7		LOGGER	: K. VALELNTI
BORING ID	: CW7-SB4		DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated		DATE STARTED	: 12/21/94
ELEVATION	: 0.000 estimated		DATE COMPLETED	: 12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	OLIVE - LT BRN	LSE	WET		HNU 0.0	3" sps used. 1st Water wet sands at 10.2' bgs. TD of borehole
-11	11									
-12	12									
-13	13									
-14	14									
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW7-SB4	1	1	0.00	0.40	SPS		30		70	0	0	0		NON	POR	LSE	DRY	
CW7-SB4	1	2	0.40	1.00	SPS		0		80	20	0	0		NON	MOD	LSE	MST	
CW7-SB4	1	3	1.00	2.00	SPS		0		0	0	0	0						
CW7-SB4	2	1	2.00	4.00	SPS		0	F	85	15	0	0		NON	WEL	SFT	MST	
CW7-SB4	3	1	4.00	6.00	SPS		0		85	15	0	0		NON	WEL	SFT	MST	
CW7-SB4	4	1	6.00	8.00	SPS		0		100	0	0	0		NON	WEL	LSE	MST	
CW7-SB4	5	1	8.00	10.00	SPS		0		100	0	0	0		NON	WEL	LSE	MST	
CW7-SB4	6	1	10.00	12.00	SPS		0		100	0	0	0		NON	WEL	LSE	WET	

BOREHOLE ID : CW7-SB5 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/21/94 *END DATE :* 12/21/94

LOGGER/COMPANY : K. VALENTI

BORROW COMPLETED IN

TOTAL DEPTH : 12.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 12.00 ft. BGS
METHOD : HSA *FLUID :* AIR
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :*

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon completion the borehole was grouted to surface level.

 06/20/95

Borehole Log

Roy F. WESTON, Inc.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 12.00	
SITE NAME	: CHARLES WOOD AREA 7		LOGGER	: K. VALENTI	
BORING ID	: CW7-SB5		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: CME-55	
EASTING	: 0.0000 estimated		DATE STARTED	: 12/21/94	
ELEVATION	: 0.000 estimated		DATE COMPLETED	: 12/21/94	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			100	Silty sand, SM	LT ORANGE BROWN	LSE	DRY	4 7 9 9	OVM 18.1	Top 2" sps was topsoil/ organics. Some small cobbles noted throughout interval.
-1	1									
-2	2		100	Sandy silt, ML	BROWN	FRM	MST	5 7 9 4	OVM 12.9	Some sand with little clay texture.
-3	3									
-4	4		100	Silty sand, SM	OLIVE BROWN	FRM	MST	8 7 9 13	OVM 2.5	Mottling noted in bottom 4" of SPS. Increase in sand % towards bottom of SPS.
-5	5									
-6	6		100	Poorly graded sand with silt, SP-SM	OLIVE	LSE	MST	5 7 7 9	OVM 3.7	Top of sps olive brown color, bottom sps olive color.
-7	7									
-8	8		100	Poorly graded sand, SP	LT BROWN	LSE	MST	15 19 16 14	OVM 1.9	3" SPS used. Heavy mottling towards bottom of SPS. Collected sample CWA7-SB05-A02.
-9	9									
-10	10		100	Poorly graded sand, SP	LT BROWN OLIVE	LSE	WET	7 6 4 4	OVM 0.0	3" SPS used. Water at 11'-7" bgs. Fe lamina staining. Collected sample CWA7-SB05-A02.

PROJECT	: FT. MONMOUTH	TOTAL DEPTH	: 12.00
SITE NAME	: CHARLES WOOD AREA 7	LOGGER	: K. VALENTI
BORING ID	: CW7--SB5	DRILLING COMPANY	: J.C. ANDERSON
NORTHING	: 0.0000 estimated	DRILLING RIG	: CME-55
EASTING	: 0.0000 estimated	DATE STARTED	: 12/21/94
ELEVATION	: 0.000 estimated	DATE COMPLETED	: 12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	LT BROWN OLIVE	LSE	WET		OVM 0.0	3" SPS used. Water at 11'-7" bgs. Fe lamina staining. Collected sample CWA7-SB05-A02.
-11	11									
-12	12									
-13	13									
-14	14									
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW7-SB5	1	1	0.00	2.00	SPS		5		70	25	0	0		NON	MOD	LSE	DRY	
CW7-SB5	2	1	2.00	4.00	SPS		0		35	60	5	0		LOW	MOD	FRM	MST	
CW7-SB5	3	1	4.00	6.00	SPS		0		60	40	0	0		NON	MOD	FRM	MST	
CW7-SB5	4	1	6.00	8.00	SPS		0		90	10	0	0		NON	MOD	LSE	MST	
CW7-SB5	5	1	8.00	10.00	SPS		0		100	0	0	0		NON	MOD	LSE	MST	
CW7-SB5	6	1	10.00	12.00	SPS		0		100	0	0	0		NON	MOD	LSE	WET	

BOREHOLE ID : CW7-SB6 *PROJECT NAME:* FT. MONMOUTH
BEGIN DATE : 12/21/94 *END DATE :* 12/21/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.00 *DEPTH TO BEDROCK :* 0.00

BOREHOLE DIAMETER #1: 8.00
INTERVAL: 0.00 ft. to 14.00 ft. BGS
METHOD : HSA *FLUID :* AIR
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : *FLUID :*
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : *FLUID :*

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE : CME-55

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N *PERMIT # :*

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N *No. OF WELLS :* 0
WELL NEST........(Y)es (N)o: N *No. OF WELLS :* 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
The borehole was abandoned then grouted to surface level.

Borehole Log **Roy F. WESTON, Inc.**

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	: 14.00	
SITE NAME	: CHARLES WOOD AREA 7		LOGGER	: K. VALENTI	
BORING ID	: CW7-SB6		DRILLING COMPANY	: J.C. ANDERSON	
NORTHING	: 0.0000 estimated		DRILLING RIG	: CME-55	
EASTING	: 0.0000 estimated		DATE STARTED	: 12/21/94	
ELEVATION	: 0.000 estimated		DATE COMPLETED	: 12/21/94	

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
0	0		100	Poorly graded sand with silt, SP-SM	ORANGE-BROWN	LSE	DRY	4 5 6 5	OVM 1.5	Fill(?)
-2	2		100	Silty sand, SM	ORANGE-BROWN	FRM	MST	5 5 6 5	OVM 0.0	
-4	4		50	Poorly graded sand with silt, SP-SM	OLIVE BROWN	LSE	MST	11 13 15 17	OVM 0.0	Fill(?)
-5	5			No Sample Recovered						
-6	6		100	Silty sand, SM	ORANGE-BROWN	FRM	MST	12 12 14 17	OVM 0.0	Fill(?)
-8	8		100	Well graded sand with silt, SW-SM	OLIVE ORANGE/BR	LSE	MST	18 18 15 14	OVM 0.0	3" sps used. Iron (Fe) laminae staining. Mostly sands towards bottom of sps. More sand with depth
-10	10		100	Poorly graded sand, SP	ORANGE LT BROWN	LSE	MST	11 12 12 9	OVM 0.0	3" sps used. Olive in color at top of sps 10-5" color change to orange-lt brown.

PROJECT	:	FT. MONMOUTH	TOTAL DEPTH	:	14.00
SITE NAME	:	CHARLES WOOD AREA 7	LOGGER	:	K. VALENTI
BORING ID	:	CW7-SB6	DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	:	0.0000 estimated	DRILLING RIG	:	CME-55
EASTING	:	0.0000 estimated	DATE STARTED	:	12/21/94
ELEVATION	:	0.000 estimated	DATE COMPLETED	:	12/21/94

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
				Poorly graded sand, SP	ORANGE LT BROWN	LSE	MST		OVM 0.0	3" sps used. Olive in color at top of sps 10-5" color change to orange-lt brown.
-11	11									
-12	12		100	Poorly graded sand, SP	OLIVE BROWN	LSE	WET	8 11 13 12	OVM 0.0	3" SPS used. Sample CWA7-SB06-A03 collected. TD of borehole 14' bgs.
-13	13									
-14	14									
-15	15									
-16	16									
-17	17									
-18	18									
-19	19									
-20	20									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW7-SB6	1	1	0.00	2.00	SPS		0		90	10	0	0		NON	MOD	LSE	DRY	
CW7-SB6	2	1	2.00	4.00	SPS		0		60	40	0	0		NON	MOD	FRM	MST	
CW7-SB6	3	1	4.00	5.00	SPS		0		90	10	0	0		NON	MOD	LSE	MST	
CW7-SB6	3	2	5.00	6.00	SPS		0		0	0	0	0						
CW7-SB6	4	1	6.00	8.00	SPS		0		70	30	0	0		LOW	MOD	FRM	MST	
CW7-SB6	5	1	8.00	10.00	SPS		0		90	10	0	0		NON	POR	LSE	MST	
CW7-SB6	6	1	10.00	12.00	SPS		0		100	0	0	0		NON	MOD	LSE	MST	
CW7-SB6	7	1	12.00	14.00	SPS		0		100	0	0	0		NON	MOD	LSE	WET	

Borehole Location Data **Roy F. WESTON, Inc.**

BOREHOLE ID : CW9-SB1 PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/04/95 END DATE : 01/04/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 4.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 2.00
INTERVAL: 0.00 ft. to 4.00 ft. BGS
METHOD : FLUID : AIR
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : WELLS REEVE
DRILL RIG TYPE :

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # :

HOLE ABANDONED...(Y)es (N)o: Y
WELL INSTALLED...(Y)es (N)o: N
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon completion the borehole was grouted from TD to ground surface.

PROJECT	: FT. MONMOUTH		TOTAL DEPTH	:	4.00
SITE NAME	: CHARLES WOOD AREA 9		LOGGER	:	K. VALENTI
BORING ID	: CW9-SB1		DRILLING COMPANY	:	J.C. ANDERSON
NORTHING	: 0.0000 estimated		DRILLING RIG	:	
EASTING	: 0.0000 estimated		DATE STARTED	:	01/04/95
ELEVATION	: 0.000 estimated		DATE COMPLETED	:	01/04/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
	0		100	Poorly graded sand, SP	BROWN	LSE	MST		HNU 0.0	2" sps driven by sledge hammer. No access for rig olive in color towards bottom tip of sps.
-1	1									
-2	2		100	Well-graded sand, SW	OLIVE BROWN	LSE	SAT		HNU 0.0	Water occurred at 2.1' bgs. Collected sample, CW09-SB01-A02.
-3	3									
-4	4									
-5	5									
-6	6									
-7	7									
-8	8									
-9	9									
-10	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW9-SB1	1	1	0.00	2.00	SPS		0	MF	100	0	0	0		NA	MOD	LSE	MST	
CW9-SB1	2	1	2.00	4.00	SPS		0	CF	100	0	0	0		NA	POR	LSE	SAT	

BOREHOLE ID : CW9MW36A PROJECT NAME: FT. MONMOUTH
BEGIN DATE : 01/03/95 END DATE : 01/03/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) :

TOTAL DEPTH : 6.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00
INTERVAL: 0.00 ft. to 6.00 ft. BGS
METHOD : HSA FLUID : WATER
BOREHOLE DIAMETER #2:
INTERVAL:
METHOD : FLUID :
BOREHOLE DIAMETER #3:
INTERVAL:
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON
DRILLER : STEVE BURGER
DRILL RIG TYPE : ATV-SKID RIG

	ESTIMATED	SURVEYED
SURFACE ELEVATION :	0.000	31.220
N. COORDINATE :	0.0000	
E. COORDINATE :	0.0000	

WELL PERMIT......(Y)es (N)o: N PERMIT # : NJ 29 32601

HOLE ABANDONED...(Y)es (N)o: N
WELL INSTALLED...(Y)es (N)o: Y
WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0
WELL NEST........(Y)es (N)o: N No. OF WELLS : 0
PUMPS INSTALLED..(Y)es (N)o: N

	TYPE	DEPTH
PURGE :		0.00
SAMPLE :		0.00

BOREHOLE TESTING
BOREHOLE GEOPHYSICS.....(Y)es (N)o: N
SLUG TESTS..............(Y)es (N)o: N
PACKER TESTS............(Y)es (N)o: N
PUMPING TESTS...........(Y)es (N)o: N

COMMENTS :
Upon finishing with CW09-MW36A (1-3-95) a test borehole, the borehole was abandoned by grouting from TD to ground surface Hole CW09-MW36. Lat.N: 40 deg 17' 47" Long.W: 74 deg 4' 28"

PROJECT :	FT. MONMOUTH	TOTAL DEPTH :	6.00
SITE NAME :	CHARLES WOOD AREA 9	LOGGER :	P. THOMAS
BORING ID :	CW9MW36A	DRILLING COMPANY :	J.C. ANDERSON
NORTHING :	0.0000 estimated	DRILLING RIG :	ATV-SKID RIG
EASTING :	0.0000 estimated	DATE STARTED :	01/03/95
ELEVATION :	31.220 surveyed	DATE COMPLETED :	01/03/95

ELEVATION	DEPTH	MATERIAL	% RECOVERY	CLASSIFICATION	COLOR	STRENGTH	MOISTURE	BLOW COUNT	FIELD INSTRUMENT READING	COMMENTS
			50	Silty sand, SM	BROWN	SFT	MST	2 4 4 4	HNU 0.0	Fill and topsoil.
30	1			No Sample Recovered						
29	2		55	Silty sand, SM	BROWN	LSE	WET	7 10	HNU 0.0	Fill/topsoil
				Poorly graded sand with silt, SP-SM	OLIVE BROWN	LSE	WET	12 13	HNU 3.0	Sat ~2.8' bgs.
28	3			No Sample Recovered						
27	4		75	Silty sand, SM	OLV/GRN/BRN	LSE	SAT	7 12 16 18	HNU 3.0	Note: strong color change to lt Fe brown at 5.2'5.5 bgs-trace round gravel qtz fragments.
26	5									
				No Sample Recovered						
25	6									
24	7									
23	8									
22	9									
21	10									

BOREHOLE /WELL ID	SMP NUM	LTH NUM	LITHOLOGY INT. (FT BGS)		SAMPLING METHOD	SIZE GRAVEL	GRAVEL PCT.	SIZE SAND	SAND PCT	SILT PCT	CLAY PCT	ORGANIC PCT	ROCK TYPE	PLAST	SORT	STRENGTH	MOISTURE	STRAT UNIT
CW9MW36A	1	1	0.00	1.00	SPS	CM	5	FM	45	30	10	10		NA	POR	SFT	MST	
CW9MW36A	1	2	1.00	2.00	SPS		0		0	0	0	0						
CW9MW36A	2	1	2.00	2.30	SPS	M	5	MFC	70	20	0	5		NA	MOD	LSE	WET	
CW9MW36A	2	2	2.30	3.10	SPS		0	MCF	90	10	0	0			MOD	LSE	WET	
CW9MW36A	2	3	3.10	4.00	SPS		0		0	0	0	0						
CW9MW36A	3	1	4.00	5.50	SPS		0	MCF	85	15	0	0		NA	MOD	LSE	SAT	
CW9MW36A	3	2	5.50	6.00	SPS		0		0	0	0	0						

APPENDIX B

SURVEY DATA

Monitoring Well and Tidal Gauge Table
Fort Monmouth, New Jersey
(Continued)

Monitoring Well Designation	Outer Casing Elevation	PVC Elevation	Ground Elevation	Point Number
MP2-MW2	15.72	15.50	13.36	129
MP2-MW3	13.10	12.63	10.98	130
MP2-MW1	21.42	21.04	19.44	131
B2-MW02B	20.45	20.23	18.07	132
B1-MW01B	25.16	24.59	22.48	133
B5-MW05B	15.54	15.40	13.40	135
MP16-MW22	7.54	7.25	5.50	136
B9-MW09B	45.65	45.31	43.13	137
CW2-MW31	52.18	51.58	49.67	138
CW2-MW32	52.08	51.38	49.47	139
CW2-MW33	51.17	51.09	49.18	140
CW2-MW30	52.15	51.71	49.47	141
B10-MW10B	53.43	33.14	51.36	142
B8-MW08B	49.41	48.09	47.04	143
CW9-MW35	31.73	31.43	29.27	144
CW9-MW36	33.60	33.21	31.22	145
CW6-MW34	34.17	33.76	31.97	146
B6-MW06B	37.52	37.37	35.19	147
	Stream Bed Eelvation	**Distance to Top of Gauge**	**Top Elevation**	
Stilling Well-2	1.28	+9.00	10.28	148
Stilling Well-1	1.37	+9.26	10.63	150
Stilling Well-7	-1.02	+8.85	7.83	151
Stilling Well-9	-1.63	+8.80	7.17	152
Stilling Well-8	-1.71	+8.20	6.49	153

Monitoring Well and Tidal Gauge Table
Fort Monmouth, New Jersey

Monitoring Well Designation	Outer Casing Elevation	PVC Elevation	Ground Elevation	Point Number
MP4-MW7	17.16	16.75	14.83	100
MP4-MW8	11.05	10.68	9.02	101
MP4-MW9	9.91	9.69	7.77	102
MP5-MW11	12.21	11.70	9.77	103
MP3-MW4	19.70	19.02	17.34	104
MP3-MW5	13.42	13.30	11.28	106
MP3-MW6	12.61	12.42	10.25	107
MP3-MW12	15.88	15.20	13.47	108
MP5-MW10	7.53	6.91	5.13	109
MP8-MW14	8.62	8.22	6.19	110
MP8-MW13	8.23	7.80	6.02	111
MP8-MW15	7.35	7.01	5.01	112
MP18-MW24	9.04	8.16	6.78	113
MP18-MW25	8.64	8.28	6.35	115
B4-MW04B	12.44	12.08	9.78	116
B7-MW07B	66.74	66.31	64.27	117
CW1-MW-29	62.73	62.44	60.41	118
CW1-MW-26	62.62	62.46	60.54	119
CW1-MW-27	62.76	62.56	60.81	120
CW1-MW-28	63.17	62.89	60.73	121
MP14-MW19	10.47	9.68	7.98	122
MP14-MW20	9.77	9.29	7.43	123
MP14-MW21	9.78	9.57	7.50	124
MP12-MW18	7.04	6.62	4.78	125
MP12-MW16	8.74	8.35	6.33	126
MP12-MW17	8.24	7.87	5.90	127
B3-MW03B	21.53	21.09	19.20	128

APPENDIX C

WELL DEVELOPMENT LOGS

T.D.
- W.L.
A

A
X .65 - (4" WELL)
B → 1-WELL VOLUME

GEOLIS Well Development Form

COMPANY: Weston
CLIENT: USACE
PROJECT: Ft. Monmouth
SITE: M-2

WELL NO.: MP2-MW01
DATE: 12/22/94
LOGGER: P. Thomas
SIGNATURE: Thomas

ONE WELL VOLUME: ______ gallons WELL TD: 24.5' ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: AIC MPH	MV MSL	OC MTP	MV MEH	MCL	MPD		TURBIDITY	COMMENTS
1100	DSB	9.83											
1105	DSE												
1110	DBC/DOB		~4										
1115	DOE/DSB		~4		4.91	345	15.0	.223	TURBID				V. silty gray 1.5 ppm U
1130	DSE	22.5	N/A		N/A								
1145		20.0	N/A		N/A								
1150	DOB	19.0	~1		5.22	333	15.3	.231	TURBID				1 ppm U
1200	DOE	DRY	N/A										
1215		19.90	N/A										
1230		20.00	N/A										
	FINAL												

* Well Yield too low to Pump - will redevelop with bailer / surge block ~~in order to increase yield rate~~

Next Page

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

DSE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: MP2

WELL NO.: MW-1
DATE: 1-17-93
LOGGER: K. Valenti
SIGNATURE: K. Valenti

ONE WELL VOLUME: ~10.4 gallons WELL TD: 24.25' ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS							TURBIDITY	COMMENTS
					MPH	MTP	MSC	MV	HNU				
STA	1405	8.25											
1405	DSB	8.25											
1425	DSE/DBB												
1430	DBB	14.60	BAILED	5.0	6.08	11.9	.271	106	1.0			H	DK. GRAY SILTY WATER!
1435	DBE/DSB	23.41	Dry	12.0	6.17	12.7	.277	097	0.0			H	" " "
1515	DSE	16.20											Recharging slowly
1520	DBB	15.20	BAILED	15.0	5.07	12.7	.262	204	0.0			H	
1525	DBB	21.00	BAILED	18.0	5.08	12.7	.263	196	0.0			H	
1530	DBE/DSB		Dry	20.0								H	
1545	DSE	21.24											Recharging Slow
	FINAL												

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNU)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW02
CLIENT:	USACE	DATE:	12-22-94
PROJECT:	03886-076-038	LOGGER:	K. Valent
SITE:	MR.MW02	SIGNATURE:	K.V

ONE WELL VOLUME: ~5.7 gallons WELL TD: 19.26 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS							TURBIDITY	COMMENTS
					ATC MPH	MSC	°C MTP	MV MEH	MCL	MPD			
0805	DSB START	10.52	—	—	—	—	—	—	—	—	—	—	—
0815	DSE												
0820	DBB												
0830	DBE												
0833													Problems with generator won't start
0835	FMT	12.12											
0855	DOB								Dk Green				
0955	FMT		2½ gpm	1	6.57	.427	13.30	0.64	Cloudy	.01			Clear/Little Cloudy
1005	FMT		2½	2	6.45	.416	13.50	046	Dk Green	.01			
1015	FMT		2½	3	1.0	.417	13.80	105	Clear	2.0			
1020	FMT		2½		1	.419	14.00	103	Clear	2.0			
1025	FMT		2½		1	.415	13.80	106	Clear	2.0			
1030	FMT		2½		1	.412	13.90	105	Clear	2.0			No real odor
	FINAL												

Headspace HNU = 3.0

FINAL WELL YIELD: 2.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method:
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other:
MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038-0020-00
SITE: MP2

WELL NO.: MW03
DATE: 12-22-94
LOGGER: K. VALENTI / N. LEWIS
SIGNATURE: K. Valenti

ONE WELL VOLUME: ~5.5 gallons   WELL TD: 16.87 ft TOC   Well Volume (gallons/foot) 2-inch = 0.16   4-inch = 0.65   6-inch = 1.47   8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS ATC MPH	MSC	°C MTP	MV MEH	MCL	MPD		TURBIDITY	COMMENTS
1100	STA	8.30											
1100	DSB												
1105	DSE												
1105	DBB												
1115	DBE	1235	2gal										
1115	DOB		2gal						Silty Green				
1130	DOB		2gal		6.70	.429	16.2	098	S.G.	4.3			
1145	DOB	11.10	2.5gal		6.90	.412	16.6	095	S.G	4.0			
1215	DOB		3gal	1	6.91	.457	16.8	112	Clear	4.0			Ken surging pump
1225	DOB		3gal	2	6.75	.488	16.50	101	S.G	4.0			
1235	DOB		3gal	3	6.76	.470	17.0	119	Cloudy	4.0			
1240	DOB		3gal	4	6.88	.432	17.10	100	S.G	4.0			Ken surged pump
~~1250~~ 1250	DOB		3gal	5	6.91	.479	16.60	.098	Clear	4.0			
1250	DOE												
	FINAL												

1235

FINAL WELL YIELD: 2.3 GPM   PUMP RATE - ESTIMATED   CORRESPONDING DRAWDOWN: 4 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method:
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other:
MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: MP 3

WELL NO.: MW04
DATE: 1-6-95
LOGGER: K. VALENTI
SIGNATURE: K. V

ONE WELL VOLUME: ~ 8.1 gallons WELL TD: 25.10 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1245	STATIC	12.70	–	–	–	–	–	–	–				
1245	DSE	12.70											
1255	DBB	12.70	–	13.0								H	GREENISH-GRAY WATER
1320	DOB	14.00	~0.5	14.0	7.38	12.1	.396	013	2.0			H	GRAYISH-GREEN SILTY
1330	DOB	15.83	~1.0	19.0	6.55	11.8	.466	074	1.0			H	INCREASE FLOW
1340	DOB	17.05	1.0	29.0	5.82	14.6	.380	146	2.0			H	CLEARING BUT STILL SILTY
1350	DOB	17.30	1.0	39.0	5.56	15.0	.374	167	2.0			H	SAME
1400	DOB	17.48	1.0	49.0	5.78	14.9	.363	160	1.0			M	CLEARING - INCREASE FLOW TO 1.5
1410	DOB	18.16	2.0	59.0	5.76	14.7	.386	159	1.5			M	INCREASED FLOW TO 2.0 GPM
1420	DOB	18.90	2.5	69.0	5.81	14.6	.378	159	1.0			M	INCREASED FLOW TO 2.5 GPM.
1425	DOB	21.80	2.0	74.0		~~14.5~~						M	FLOW BACK TO 2.0 GPM
1430	DOB	24.23	2.0	94.0	5.76	14.6	.361	169	2.0			M	
1440	DOB	20.10	2.0	114.0	5.71	14.5	.342	198	1.0			M	
1450	DOB	20.12	2.0	134.0	5.68	14.5	.356	179	–			M	
1500	DBE	20.10	2.0	154.0	5.72	14.5	.353	181	–			L	CLEARED A LITTLE MORE, STILL CLOUDY
1505		16.10											RECHARGE
	FINAL												

FINAL WELL YIELD: 1-2 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 8 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: MA3

WELL NO.: MW05
DATE: 1-12-95
LOGGER: K. VALENTA
SIGNATURE: K. V[illegible]

ONE WELL VOLUME: 6.40 gallons WELL TD: 18.15 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
													Top of Pump is at 15.3'
0850	STATIC	8.30	~~[illegible]~~	—	—	—	—	-	-				Began Surge Blocking. 0905
0915	DBB	8.30											Began Bailing.
0925	DBE	17.40		20									Bailed Dry.
0930	—	15.00											Recharge ~1.0' per 2 minutes
0945	DOB	9.20	0.5	20	6.58	12.2	1.054	-039	5.0			H	Dk. Gray Silty Water. Mild Odor.
0955	DOB	13.40	0.5	25	6.65	15.2	1.057	-063	6.5			H	" " "
1005	DOB	13.76	~0.5	~30	6.60	17.2	1.06	-079	7.0			H	" " "
1010	DOB	13.70	~0.5	~32	6.66	17.8	1.076	-090	8.0			M	Clearing But Still Dk. Gray
1015	DOB	13.79	~0.5	~35	6.68	18.8	1.057	-093	8.0			M	" " "
1025	DBE	Dry	1.0	~37									Increased Flow Rate Well went Dry.
1035	DOB	10.20	~0.5	~38	6.60	16.7	1.084	-087	9.0			L	Clearing - Heavy Clearing. (and Good)
1040	DOB	12.05	~0.3	~40	6.60	15.6	1.081	-080	8.5			M	Increased Flow To ~0.5
1050	DOB	14.57	~0.5	~45	6.65	17.0	1.055	-087	8.0			L	
1100	DOB	14.51	~0.5	~50	6.62	17.7	1.084	-088	8.0			L	Clearing
1110	DOB	14.57	~0.5	~55	6.62	17.0	1.090	-088	8.0			L	Same as Above
1120	DOB	14.59	~0.5	~60	6.60	17.1	1.060	-086	8.0			L	Clearing
1130	DOB	~~[illegible]~~	~0.5	~65	6.63	16.8	1.091	-083	8.0			L	W.L. Hard to Determine
1140	DBE	—	~0.5	~70	6.58	16.8	1.078	-080	8.0			L	
	FINAL												

FINAL WELL YIELD: ~0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: MP3-MW06

WELL NO.: MW06
DATE: 1-18-95
LOGGER: K. VALENTI
SIGNATURE: K. V[illegible]

ONE WELL VOLUME: ~5.8 gallons WELL TD: 17.15 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
0830	STATIC	8.25	–	–									
0845	DSB												
0900	DSE												
0910	[illegible]	7.71											
1110	DBB	8.50	BAILED	5.0	5.79	15.1	1.340	190	0.5			H	GREENISH GRAY SILTY WATER
1115	DBE	DRY	BAILED	7.0	5.43	14.8	1.261	179	0.0			H	" " "
1119	–	15.80											
1145	DBB	10.20	~~BAILED~~	8.0 ~~[illegible]~~	6.06	13.6	1.120	040	1.0			H	TRASH ODOR
1153	DBE	DRY		13.0	6.17	13.7	1.124	053	1.0			H	
1200	DSE												
1210	DBB	11.00	BAILED	14.0	6.01	12.8	1.013	050	0.0			H	
1215	DBE	16.87		20.0	6.03	13.0	1.024	049	0.0			H	
1330	DOB	8.53	~~[illegible]~~	28.0	6.36	14.0	1.097	019	0.0			H	
1335	DOE	DRY		28.0								H	
1400	DOB	10.60	~~[illegible]~~	30.0	6.51	13.2	.947	002	0.0			H	CLEARING BUT STILL GREENISH SILTY WATER
1405	DOE	–		34.0								H	W.L. BELOW LEVEL OF PUMP = 14.95
1430	DOB	11.00	~~[illegible]~~	35.0	6.54	11.2	1.037	-005	0.0			M	WATER CLEARING BUT STILL SILTY / MURKY
1455	DOB	13.25	<0.5	41.0	6.48	16.6	.958	-005	0.0			M	CLEARING
1510	DOB	14.00	<0.5	45.0	6.61	16.4	1.001	-016	0.0			L	CLEARED UP
	FINAL												

CONTINUED ON NEXT PAGE →

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES

- DBB - Begin Bailing
- DBE - End Bailing
- DOB - Begin Overpumping
- DOE - End Overpumping
- DRB - Begin Rawhiding
- DRE - End Rawhiding
- DCB - Begin Recirculation
- DCE - End Recirculation
- DHB - Begin Hydraulic Jetting
- DHE - End Hydraulic Jetting
- DAB - Begin Air Surging
- DAE - End Air Surging
- DSB - Begin Surge Blocking
- DSE - End Surge Blocking
- DXB - Begin Other
- DXE - End Other
- Specify other method: ____
- FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

- MTP - Temperature
- MSC - Specific Conductance
- MPD - Photoionizer (e.g., HNu)
- MFD - Flame Ionizer (e.g., OVA)
- MDO - Dissolved Oxygen
- MPH - pH
- MEH - Eh
- MMC - Imhoff Cone
- MO1 - Other: ____
- MO2 - Other: ____

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

- H - High: Opaque/Muddy/Silty
- M - Medium: Translucent/Cloudy
- L - Low: Transparent/Some Silt
- N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: IAAP3 [unclear]

WELL NO.: MW06
DATE: 1-18-95
LOGGER: K. Valenti [unclear]
SIGNATURE: [illegible]

ONE WELL VOLUME: ~ 5.8 gallons WELL TD: 17.15 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
CONTINUED FROM PREVIOUS PAGE													
1510	DOB	14.00	<0.5	45.0	6.61	16.4	1.001	-016	0.0			L	clear
1530	DOB	14.85	<0.5	49.0	6.49	17.9	.776	-013	0.0			L	
1540	DOB	—	<0.5	52.0	6.36	17.1	.763	-004	0.0			L	W.L. AT LOWER pumping.
1550	DOB	—	<0.5	55.0	6.35	16.1	.772	006	0.0			L	clear!
1600	DOB	—	<0.5	~58.0	6.35	16.1	.769	004	0.0			L	clear
1600	DOE												
	FINAL												

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method: ____
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ____
MO2 - Other: ____

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY: Weston
CLIENT: USACE
PROJECT: Ft. Monmouth
SITE: M-4

WELL NO.: M4-MW07
DATE: 12/22/94
LOGGER: D. Thomas
SIGNATURE: Thomas

ONE WELL VOLUME: ______ gallons WELL TD: ______ ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: ATC MPH	MV MEH	MV/cm MSC	oC MTP	MCL	MOD		TURBIDITY	COMMENTS
0820	DBB	8.39											
0835	DBB												
0845	DOB	8.39											V. Silty Brown
0855		13.90	~4		5.20	194	.3dd	14.4	V. silty brown	BKG			
0905		14.10	~4		5.53	185	.229	15.9	Cloudy	BKG			Cloudy
0915		14.21	~4		5.67	203	.228	15.9	Cloudy	BKG			
0930		14.32	~4		5.31	215	.218	16.9	CLOUDY	BKG			SLIGHTLY CLOUDY
0945		14.37	~4		5.65	221	.225	16.5	CLEAR	BKG			CLEAR
1000		14.37	~4		5.62	2198	.221	16.5	CLEAR	BKG			SLIGHTLY CLOUDY
1005		14.37	~4		5.65	204	.225	16.7	CLEAR	BKG			SLIGHTLY CLOUDY
1010		14.37	~4		5.77	204	.220	16.3	CLOUDY	BKG			CLOUDY
1015		14.37	~4		5.64	195	.220	17.0	CLEAR	BKG			SLIGHTLY CLOUDY
1025		14.37	~4		5.61	213	.219	17.0	CLEAR	BKG			CLEAR
1035	DOE	14.40	~4		5.64	215	.223	16.3	CLEAR	BKG			SLIGHTLY CLOUDY
	FINAL												

FINAL WELL YIELD: ~4 GPM PUMP RATE ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

DEVELOPMENT ACTIVITY CODES

- DBB - Begin Bailing
- DOB - Begin Overpumping
- DRB - Begin Rawhiding
- DCB - Begin Recirculation
- DHB - Begin Hydraulic Jetting
- DAB - Begin Air Surging
- DSB - Begin Surge Blocking
- DXB - Begin Other
- Specify other method: ______
- FMT - Field Measurements (select from codes at right)
- DBE - End Bailing
- DOE - End Overpumping
- DRE - End Rawhiding
- DCE - End Recirculation
- DHE - End Hydraulic Jetting
- DAE - End Air Surging
- DSE - End Surge Blocking
- DXE - End Other

FIELD MEASUREMENT CODES

- MTP - Temperature
- MSC - Specific Conductance
- MPD - Photoionizer (e.g., HNu)
- MFD - Flame Ionizer (e.g., OVA)
- MDO - Dissolved Oxygen
- MPH - pH
- MEH - Eh
- MMC - Imhoff Cone
- MO1 - Other: ______
- MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

- H - High: Opaque/Muddy/Silty
- M - Medium: Translucent/Cloudy
- L - Low: Transparent/Some Silt
- N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

MW08

COMPANY:	Weston	WELL NO.:	~~MP5-MW-12~~
CLIENT:	USACE	DATE:	12/20/94
PROJECT:	Ft. Monm	LOGGER:	F. Thomas
SITE:	M-5	SIGNATURE:	Thomas

ONE WELL VOLUME: ______ gallons WELL TD: ______ ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: ATC MPH	MU/cm MSC	OC MTP	mV MEH	MCI	MPD		TURBIDITY	COMMENTS
~~1400~~	1355												
~~1415~~	DSB	6.92											
1410	DBB												
1415	DSB												
1420	DOE									BKG			Dry x 1
1427	DSB	11.29	1.0										Y. Cloudy
1435		13.5	1.0		6.79	371	15.6	042	V. cldy green	BKG			
1445					6.87	325	15.9	-033	V. cl. green	BKG			
1500					6.68	375	16.1	-034	Sl. cloudy	BKG			
1505		14.70	1.0		6.09	374	15.8	-038	Sl. cloudy	BKG			
1525					6.32	372	16.1	-024	Clear	BKG			
1545	DOE	14.05	1.0		6.31	386	16.2	-002	Clear	BKG			
	FINAL												

* Well Purged clear after approx 1½ hours of pumping *

FINAL WELL YIELD: 1.0 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: - DRY - FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method: ______		MO1 - Other: ______	
FMT - Field Measurements (select from codes at right)		MO2 - Other: ______	

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GEOLIS Well Development Form

COMPANY: Weston
CLIENT: USACE
PROJECT: Ft. Monmouth
SITE: M-5

WELL NO.: MP5-MW-09
DATE: 12/20/94
LOGGER: P. Thomas
SIGNATURE: Thomas

ONE WELL VOLUME: ______ gallons WELL TD: 24.35 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS							TURBIDITY	COMMENTS
					ATC MPH	MEH	DC MTP	mS/cm MSC	MCL	MPD			
1130	DBB	5.5											
1200	DSE												green/gray -
1215	DBS			-									lower pump
1225	DOB		3-7										green/gray v silty
1235					6.23	242	14.9	.436	V. silty	BKG			
1245		5	19.72		6.61	023	14.6	.445	V. silty	BKG			
1300		5	19.72		6.70	-042	15.0	.435	cloudy	BKG			lt. green/gr
1305		5			6.79	-056	15.0	.446	sl-clear	BKG			
1310		5	19.72		6.82	-055	14.8	.418	clear	BKG			clear
1320		5	19.72		6.91	-065	14.8	.440	clear	BKG			
	FINAL												

* Well Pumped Clear after approx 1¼ hours of Purging *

FINAL WELL YIELD: ~5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 14 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method: ______		MO1 - Other: ______	
FMT - Field Measurements (select from codes at right)		MO2 - Other: ______	

GEOLIS Well Development Form

COMPANY:	Weston	WELL NO.:	MPS-MW-10
CLIENT:	USACE	DATE:	12/14/94
PROJECT:	Ft. Monmouth	LOGGER:	P. Thomas
SITE:	M-5	SIGNATURE:	Thomas

ONE WELL VOLUME: ______ gallons WELL TD: ~17 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS ATC MPH	mS/cm MSC	mV MEH	°C MTP	MCL	MAD		TURBIDITY	COMMENTS
1340	DSB	4.05											
1410	DBB												
1415	DOB		~5		6.12	.391	260	15.1	v. silty	Brt			V. dark grey/sur
1440					6.58	.433	084	15.6	v. silty	Brt			
1455					6.93	[illegible]33	080	15.7	cloudy	Brt			
1505		6.95	~5		6.72	.438	002	15.3	cloudy	Brt			
1510		7.01	~5		6.96	.445	043	15.4	cloudy	Brt			
1525			~5		6.81	.440	026	15.7	cloudy	Brt			
1600								13.6					
	FINAL												

FINAL WELL YIELD: ~5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be ≤ 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

GEOLIS Well Development Form

COMPANY: Weston
CLIENT: USACE
PROJECT: Ft. Monmouth
SITE: M-5

WELL NO.: MP5-MW-10
DATE: 12/21/94
LOGGER: P. Thomas
SIGNATURE: Thomas

ONE WELL VOLUME: ______ gallons WELL TD: ______ ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS ATC MPH	℃ MTP	mV/cm MSC	MEH	MCI	MPD		TURBIDITY	COMMENTS
1345	DSB	7.10											Alt surgblocking
1410	DBB												
1415	DOB												V. dirt seen
1435			~1.5		6.07	14.2	.249	109	filter seen	BKG			
1455			~1.5		6.50	13.7	.25	048	cloudy	BKG			
1505		10.30			6.55	14.1	.252	020	cloudy	BKG			
1510					6.58	14.4	.253	016	cloudy	BKG			
1525					6.52	14.1	.249	007	cloudy	BKG			
1545					6.57	13.1	.246	062	clear	BKG			
1600					6.17	13.6	.246	H1	clear	BKG			
	FINAL												

FINAL WELL YIELD: ~1.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

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7.60
.65
3800
4560

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: MP-8
WELL NO.: MW-12
DATE: 01-05-95
LOGGER: K. VALENTE
SIGNATURE: K. Valente

ONE WELL VOLUME: ~5.0 gallons WELL TD: 17.30' ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	pH	°C Temp	Cond	MV	MPD			TURBIDITY	COMMENTS
0915	STATIC	9.70	–	–	–	–	–	–	–	–	–	–	—
0920	DBB	–	–	1.0	5.16	14.4	.183	256					Hand Bail - Silty
0930	DBE												
0930	DOB		5gpm	1.0									Pump at 1' off Bottom
0945	DXE												Pump silted up
0950	DOB		5gpm	6.0									
0955	DOB	12.65	2gpm	31.0									
1000	DOB	10.95	2gpm	41.0	6.2	11.7	.171	271	.01				
1015	DOB	11.2	3gpm	51.0	5.68	14.1	.170	264	.01				Pump lowered to 0.5' from Bottom
1035	DOB	11.38	3gpm	111.0	5.78	13.9	.171	262	.01				Water clearing
1100	DOB	11.20	3.5		6.00	10.7	.165	228	.01				Water clear
1125	DOE	11.50	3.5		5.80	14.5	.164	229	.01				Water clear
1128	~~DOE~~	10.60	3.5	–	–	–	–	–	–	–	–	–	W.L. Raising slowly
Reference Log Book Notes For This Day.													
	FINAL												

FINAL WELL YIELD: 2-3.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FM1 - Field Measurements (select from codes at right)		MO2 - Other:	

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886
SITE: M-8
WELL NO.: MW-13
DATE: 1/25/95
LOGGER: J. SACCOMANDI
SIGNATURE: [signature]

ONE WELL VOLUME: ______ gallons WELL TD: 16.86 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
1145	DSB	6.01	—	—									
1150	DBB	—	—										
1155	DOB	*13.90		10	5.38	11.0	5.28	130	BKG			H	DK GRAY VERY SILTY
1200	DOB	8.45	6	40	6.07	11.7	5.24	013	BKG			H	DK GRAY CLEARING
1205	DOB	9.01	6	70	6.41	11.3	5.33	-047	BKG			M	"
1210	DOB	7.09	4	90	6.57	11.7	5.28	-069	BKG			L	HAZY
1215	DOB	7.49	4	110	6.68	11.7	5.17	-081	BKG			N	CLEAR
1220	DOB	7.50	4	130	6.72	11.7	5.17	-084	BKG			N	"
1225	DOB	7.51	4	150	6.75	11.5	5.17	-087	BKG			N	"
1230	DOB	7.52	4	170	6.75	11.6	5.13	-086	BKG			N	"
1235	DOB	7.53	4	190	6.73	11.8	5.10	-087	BKG			N	"
1240	DOB	7.54	4	210	6.72	11.8	5.09	-088	BKG			N	"
1245	DOB	7.55	4	230	6.74	11.8	5.02	-088	BKG			N	"
1250	DOE	7.56	4	250	6.76	11.8	5.01	-088	BKG	12		N	"
	FINAL												

SLIGHT ODOR AND SLIGHTLY SUDSY DURING DEVELOPEMENT

FINAL WELL YIELD: 4 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 1.3 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

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*13.90 IS THE TOP OF PUMP

LOW TIDE

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: M-8

WELL NO.: MW-14
DATE: 1/25/95
LOGGER: J. SACCOMANDI
SIGNATURE: John W. Sa

ONE WELL VOLUME: ________ gallons WELL TD: 16.82 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MSC	MTP	MEH	MPD			TURBIDITY	COMMENTS
0920	DSB	7.80	—	—									
0925	DBB	—	—	6	BAILED		DRY					H	GREEN BROWN SILTY
0930	DBE	—	—	—								H	"
0945	DOB	11.56	~0.5	6	6.40	4.68	10.9	001	BKG			H	"
0955	DOB	9.95	~0.5	11	6.61	4.63	14.2	-077	BKG			H	"
1005	DOB	13.62	~1	21	6.47	4.72	19.4	-083	BKG			H	"
1010	DOE	*											
1025	DOB	8.92	~0.5	21	6.89	4.57	14.6	-106	BKG			H	"
1030	DOB	11.85	~0.5	23.5	6.92	4.65	13.2	-102	BKG			H	"
1035	DOB	11.57	~0.5	25	6.76	4.67	15.2	-101	BKG			H	" CLEARING
1040	DOB	11.28	~0.5	27.5	6.75	4.59	16.5	-102	BKG			H	" "
1045	DOB	11.62	~0.5	29	6.70	4.64	19.3	-104	BKG			H	" "
1050	DOB	11.86	~0.5	31.5	6.69	4.70	19.9	-104	BKG			H	" "
1055	DOB	12.11	~0.5	33	6.71	4.62	17.2	-105	BKG			M	" "
1100	DOB	12.43	~0.5	35.5	6.82	4.51	18.2	-108	BKG			L	LT GREEN BROWN VERY CLOUDY
1105	DOB	12.65	~0.5	37	6.72	4.46	18.7	-105	BKG			L	CLOUDY
1110	DOB	12.85	~0.5	39.5	6.69	4.53	18.9	-106	BKG			L	CLOUDY
1115	DOE	13.05	~0.5	41	6.74	4.42	19.6	-103	BKG			L	HAZY
	* WATER LEVEL DROPPED TO TOP OF PUMP/PUMP IS ABOVE BOW												
	FINAL												

FINAL WELL YIELD: ~0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method: ________		MO1 - Other: ________	
FMT - Field Measurements (select from codes at right)		MO2 - Other: ________	

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LOW TIDE

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-03B
SITE: M-8

WELL NO.: MW-15
DATE: 1/25/95
LOGGER: J SACCOMANDI
SIGNATURE: [illegible]

ONE WELL VOLUME: ____________ gallons WELL TD: 16.65 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS							TURBIDITY	COMMENTS
					MPH	MTP	MSC	MEH	MPD				
1345	DSB	5.00	—	—									
1350	DBB	—	—	10									
1358	DBE	—	—	10								H	DK GREEN GRAY SILTY
1405	DOB	8.61	2	10	5.69	9.7	3.77	133	BKG			H	"
1410	DOB	8.36	2	20	6.37	11.4	3.74	-032	BKG			H	" CLEARING
1415	DOB	8.24	2	30	6.63	11.6	3.79	-083	BKG			M	GRAY VERY CLOUDY
1420	DOB	8.95	2	40	6.68	11.7	3.80	-092	BKG			M	"
1425	DOB	8.93	2	50	6.75	10.9	3.77	-091	BKG			M	" CLEARING
1430	DOB	8.97	2	60	6.73	11.9	3.81	-089	BKG			M	" "
1435	DOB	9.01	2	70	6.75	12.2	3.81	-095	BKG			M	" "
1440	DOB	9.03	2	80	6.75	12.2	3.82	-096	BKG			M	" "
1445	DOB	9.05	2	90	6.76	12.4	3.77	-095	BKG			L	CLOUDY
1450	DOB	9.04	2	100	6.77	12.4	3.80	-098	BKG			N	CLEAR
1455	DOB	9.04	2	110	6.78	12.3	3.79	-099	BKG			N	CLEAR
1500	DOE	9.03	2	120	6.82	12.2	3.74	-098	BKG			N	CLEAR
	FINAL												

SEWAGE ODOR AND SUDSY WATER THROUGHOUT DEVELOPMENT

FINAL WELL YIELD: ~2 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 4 FT

DEVELOPMENT ACTIVITY CODES

DBS - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method: ____________
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ____________
MO2 - Other: ____________

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

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ALMOST HIGH TIDE

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: MP12

WELL NO.: MW-16
DATE: 1-16-95
LOGGER: V. Valente
SIGNATURE: V. Valente

ONE WELL VOLUME: ~8.6 gallons WELL TD: 16.76 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1320	STATIC	3.45	–	–	–	–	–	–	–				
1325	DBB	3.45	Bailer										3" PVC Bailer used.
1340	DBE	9.47											
1345	DOB	8.70	0.5	1.0	7.15	21.7	.283	-052	0.0			L	Clear-Hazy - Detergent odor
1350	DOB	9.40	0.5	3.5	7.12	20.1	.289	-046	0.0			H	olive-green silty
1400	DOB	11.11	0.5	9.0	6.11	16.2	.262	-018	0.0			H	" " "
1410	DOB	12.25	0.5	14.0	5.86	16.2	.289	008	0.0			H	Draw Down
1420	DOB	14.25	0.5	19.0	5.94	16.4	.287	012	0.0			H	Slowed Flow
1430	DOB	12.90	0.5	24.0	5.87	17.8	.278	022	–			H	Water clearing. Flow up again)
1440	DOB	12.60	0.5	29.0	5.94	17.1	.262	020	–			M	clearing But silty
1450	DOB	12.33	0.5	34.0	5.84	17.4	.283	026	–			L	clear - Hazy
1500	DOB	12.25	0.5	39.0	5.90	17.7	.288	023	–			L	Haze
1505	DOB	12.28	0.5	44.0	5.87	17.6	.288	018	–			L	clearing
1510	DOB	12.22	0.5	49.0	5.95	17.9	.288	028	–			N	cleared
1515	DOB	12.22	0.5	54.0	5.94	17.9	.288	029	–			N	
1520	DBE	12.22	0.5	59.0	5.91	17.6	.288	030	–			N	
	FINAL												

FINAL WELL YIELD: 0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 9 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method: ___
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ___
MO2 - Other: ___

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USAEE
PROJECT: 03886-076-038
SITE: MP12

WELL NO.: MW-12
DATE: 1-17-95
LOGGER: V. VALENTI
SIGNATURE: V. Valenti

ONE WELL VOLUME: ~8.3 gallons WELL TD: 16.85 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1100	STATIC	4.15	–	–	–	–	–	–	0				
1115	DBB	4.15	BAILED										MILD H2S ODOR ON WATER.
1125	DBE	10.10	BAILED	15.0									DEPTH TO TOP OF PUMP = 14.25
1130	DOB	6.10	0.5	16.0	5.82	12.0	.276	142	3.0			H	DK. GRAY SILTY WATER
1140	DOB	6.02	0.5	20.0	5.82	11.9	.275	140	3.0			H	
1150	DOB	5.70	0.5	25.0	6.58	19.1	.265	054	2.0			H	
1200	DOB	6.15	0.5	30.0	6.54	16.6	.380	-054	1.0			M	CLEARING BUT STILL A LITTLE SILTY - GPM TO 1.0 GPM.
1210	DOB	6.80	1.0	40.0	6.61	17.9	.362	-068	1.0			M	CLEARING - HAZY
1215	DOB	7.36	1.0	~~45.0~~	6.59	17.1	.407	-076	2.0			M	" " "
1220	DOB	7.38	1.0	50.0	6.56	17.4	.359	-079	1.0			M	
1230	DOB	7.87	1.0	60.0	6.56	16.5	.408	-085	2.0			M	
1235	DOB	8.00	1.0	65.0	6.59	16.1	.411	-083	2.0			M	CLEAR BUT LT. HAZE
1240	DOB	8.13	1.0	70.0	6.57	16.1	.413	-083	4.0			L	SEPTIC ODOR NOW
1245	DOB	8.24	1.5	75.0	6.57	14.9	.422	-077	3.0			L	INCREASED FLOW TO 1.5 GPM
1250	DOB	9.51	1.5	85	6.54	15.9	.411	-092	2.0			L	CLEAR BUT HAZY
1255	DOB	9.88	1.5	90.0	6.59	16.0	.382	-098	–			L	
1300	DBE	9.96	1.5	~98.0	6.55	16.0	.391	-096	–			L	CLEAR & HAZY
	FINAL												

FINAL WELL YIELD: ~1 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 5 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: FT MONMOUTH
SITE: MP-12

WELL NO.: MP-12-MW-18
DATE: 1/17/95
LOGGER: SACCOMANDI/VALENTE
SIGNATURE: [signature]

ONE WELL VOLUME: ≈ 9.0 gallons WELL TD: 17.20 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
0840	STATIC	3.45											
0845	DSB												
0855	DSE												
0855	DBB											H	WATER OLIVE-GRAY SILTY
0900	DBE	DRY	—	RECHARGE RATE APPROX. 0.5' A MINUTE								—	WELL DRY AFTER BAILING 13 GAL.
0915	DOB	9.10	0.5	0					0.0			H	DK. GRAY SILTY WATER
0917	DOB	9.80	0.5	1.0	4.44	11.1	.229	247	0.0			H	" " "
0930	DOB	10.03	0.5	7.0	4.41	17.6	.241	245	0.0			H	-
0940	DOB	10.08	0.5	12.0	4.39	14.8	.243	245	1.0			H	CLEARING BUT STILL SILTY
0950	DOB	10.30	0.5	17.0	4.54	17.7	.251	254	9.0			M	CLEARED UP A LITTLE
1000	DOB	10.32	0.5	22.0	4.97	17.1	.230	211	2.0			H	SOME YELLOW-BROWN SILTY WATER AGAIN
1010	DOB	10.35	0.5	27.0	5.00	16.9	.231	216	2.0			M	CLEARED MORE
1020	DOB	10.20	0.5	32.0	4.44	18.8	.229	258	4.0			M	CLEARING BUT HEAVY HAZE
1025	DOB	10.09	0.5	34.5	4.71	18.9	.225	254	3.0			L	Clearing - Hazy
1030	DOB	10.07	0.5	37.0	4.69	18.6	.225	254	3.0			L	
1035	DOB	10.03	0.5	39.5	4.68	18.3	.231	252	2.0			L	CLEARED - LITTLE HAZE
1040	DOB	9.97	0.5	42.0	4.69	18.1	.233	252	0.0			L	" " "
1045	DOE	9.95	0.5	45.0	4.72	18.2	.229	243	1.0			L	" " "
	FINAL												

FINAL WELL YIELD: 0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: MP14

WELL NO.: MW-19
DATE: 1-16-95
LOGGER: K. VALENTI
SIGNATURE: K. V[illegible]

ONE WELL VOLUME: ~ 7.0 gallons WELL TD: 17.60 ft TOC

Well Volume (gallons/foot) 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1020	STATIC	6.95	–	–	–	-	-	-	–				
1020	DBB	6.95	BAILED	1.0					0.0				3" PVC Bailer - MILD SEPTIC ODOR AND SHEEN ON WATER
1035	DBE	7.15		15.0									PUMP SET 6" off BOTTOM.
1040	DOB	7.15	0.5	16.0	5.54	13.0	.366	060	2.5			H	DK. GRAY SILTY WATER
1050	DOB	7.30	0.5	20.0	5.43	13.4	.369	057	2.0			H	PUMP AT 3' off BOTTOM of WELL.
1100	DOB	7.30	0.5	25.0	5.63	16.2	.457	-009	1.0			H	FLOW RATE TO 1.0 GPM
1110	DOB	7.49	1.0	35.0	5.80	16.8	.500	-030	2.0			H	BEGINNING TO CLEAR BUT STILL SILTY.
1120	DOB	7.41	1.0	45.0	5.86	15.3	.518	-036	2.0			M	CLEARING - INCREASED GPM TO 1.5 GPM
1130	DOB	7.45	1.5	60.0	5.95	14.8	.534	-043	1.0			H	INCREASE FLOW TO 2 GPM.
1140	DOB	7.52	2.0	80.0	5.90	14.5	.540	-047	4.0			M	PUMP 1' off BOTTOM of WELL. CLEARED A LITTLE.
1150	DOB	7.65	2.5	105.0	5.93	14.0	.555	-049	2.0			L	INCREASE FLOW TO 2.5 GPM - CLEARED BUT HAZY
1200	DOB	8.10	4.0	145.0	5.96	13.5	.569	-033	2.0			L	FLOW TO 4.0 GPM
1205	DOB	9.15	6.0	205.0	5.94	13.2	.580	-030	1.0			L	FLOW TO 6.0 GPM
1210	DOB	9.70	7.0	275.0	5.97	13.3	.591	-033	1.0			L	FLOW TO 7.0 GPM
1215	DBE	9.72	7.0	345.0	5.98	13.3	.590	-027	1.0			L	GOOD RECHARGE RATE
	FINAL												

FINAL WELL YIELD: 6-7 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-096-038
SITE: MP14

WELL NO.: MW20
DATE: 1-13-95
LOGGER: K. V.
SIGNATURE: K. V.

ONE WELL VOLUME: ~6.5 gallons WELL TD: 16.87 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1250	STATIC	6.85	-	-	-	-	-	-	-	-			
1255	DSB												
1300	DSE/DBB												
1305	DBE	12.00		10.0								H	DK. GRAY SILTY WATER BAILED SINCE WELL CONTROL.
1310	DOB	7.45	0.5	11.0	7.18	17.3	.246	-005	0.0			H	W.L. WITH PUMP IN WELL.
1320	DOB	8.47	0.5	16.0	6.99	17.3	.242	-010	0.0			H	" " "
1330	DOB	9.40	0.5	21.0	6.50	15.5	.386	-009	2.0			H	CLEARING, SILT STILL DK. GRAY SILT. LANDFILL ODOR ON WATER.
1340	DOB	10.45	0.5	26.0	6.50	15.7	.378	-018	2.0			M	
1350	DOB	11.17	0.5	31.0	6.56	15.6	.363	-015	-			M	MILD SEPTIC ODOR
1355	DOB	12.00	0.5	33.5	6.50	15.7	.356	-015	-			M	
1400	DOB	12.43	0.5	36.0	6.47	15.8	.354	-014	-			M	
1405	DOB	12.38	0.5	38.5	6.53	16.6	.352	-020	-			H	SILTY AGAIN
1410	DOB	12.39	0.5	41.0	6.51	16.5	.344	-008	-			H	MILD SEPTIC ODOR
1415	DOB	12.21	0.5	43.5	6.48	15.8	.364	-014	-			M	CLEARING A LITTLE
1420	DOB	12.19	0.5	46.0	6.45	15.8	.364	-013	-			M	
1425	DOB	11.91	0.5	48.5	6.46	16.1	.360	-016	-			L	CLEAR BUT HAZY
1430	DOB	11.58	0.5	51.0	6.45	16.1	.360	-016	-			L	
1440	DOB	10.87	0.5	56.0	6.48	16.0	.358	-016	-			L	
1450	DOE	10.10	0.5	61.0	6.44	15.9	.356	-015	-			L	CLEAR BUT HAZY. MODERATE SEPTIC ODOR.
	FINAL												

FINAL WELL YIELD: 0.5 GPM . PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 4 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method:
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other:
MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW21
CLIENT:	USACE	DATE:	1-13-95
PROJECT:	03886-036-038-~~0?~~	LOGGER:	V. Valiente
SITE:	MP-12	SIGNATURE:	V. Valiente

ONE WELL VOLUME: ~7.8 gallons WELL TD: 19.28 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS: Top of Pump At 16'-6".
0900	START	7.26	-	-	-	-	-	-	-				
0910	DSB	7.26											Mild landfill odor
0920	DBB	7.26	Bailed										3" PVC Bailer used
0930	DSE	13.24	Bailed	7.0									W.L. Rising; Pump at 1' off Bottom
0950	DOB	7.26	0.5	8.0	6.60	14.7	.375	170	0.0			H	Dk. Gray Silty Water
1000	DOB	13.20	0.5	13.0	6.82	16.5	.409	111	0.0			H	" " "
1010	DOB	13.30	0.5	18.0	6.73	19.1	.359	041	0.0			H	" " "
1020	DOB	13.35	0.5	23.0	6.67	19.5	.348	-002	—			H	Beginning to clear but still dk. gray silty
1030	DOB	13.38	0.5	28.0	6.66	19.5	.350	-037	—			M	Clearing More
1040	DOB	16.40	~1.0	38.0	6.60	18.1	.464	-013	—			H	Silty Again
1050	DOB	—	~1.0	48.0	6.64	18.1	.320	-005	—			H	" " "
1100	DOB	—	0.5	53.0	6.61	19.6	.302	-026	—			H	Water cleared up a little again - W.L. below pump level.
1110	DOB	—	0.5	58.0	6.65	18.4	.341	-047	—			H	" " "
1120	DOB	—	0.5	63.0	6.55	17.6	.324	-052	—			M	Mild landfill odor on water still.
1130	DOB	—	0.5	68.0	6.54	17.6	.336	-054	—			L	Cleared up - cloudy
1140	DOB	—	0.5	73.0	6.53	17.7	.346	-053	—			N	Clear
1150	DOB	—	0.5	78.0	6.50	17.7	.355	-055	—			N	" "
	DOE												
	FINAL												

FINAL WELL YIELD: 0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 10 (FT)

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW-22
CLIENT:	USACE	DATE:	1-19-95
PROJECT:	03886-076-038	LOGGER:	V. Valente
SITE:	MP16	SIGNATURE:	~~VAL~~ K[illegible]

ONE WELL VOLUME: ~8.64 gallons WELL TD: 16.72 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1400	2.46	STATIC											
1410	DOB	1.95	1.0	1.0	5.54	11.9	1.454	067	0.0			H	Brown silty water.
1415	DOB	—	5.0	1.0	6.07	11.7	1.294	001	0.0			H	N.L. probe malfunction
1420	DOB	—	10.0	1.0	6.14	11.7	1.247	016	0.0			H	Clearing but still heavy silt
1425	DOB	—	15.0	1.0	6.06	12.4	1.328	003	0.0			H	
1430	DOB	—	20.0	1.0	6.13	12.2	1.297	012	0.0			H	
1435	DOB	—	25.0	1.0	6.07	12.4	1.315	006	0.0			H	
1440	DOB	—	30.0	1.0	6.06	12.4	1.319	008	0.0			M	Beginning to clear Cloudy
1445	DOB	—	35.0	1.0	6.09	12.6	1.301	007	0.0			M	
1450	DOB	—	40.0	1.0	6.08	12.6	1.297	006	0.0			M	
1455	DOB	—	45.0	1.0	6.09	12.7	1.298	008	0.0			M	
1500	DOE	—	50.0	1.0	6.09	12.6	1.298	008	0.0			M/L	Still cloudy Almost clear.
	FINAL												

FINAL WELL YIELD: 1 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: — FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBS - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

16.72
3.43
13.29
.65
66.45

66.45
79.74
863.85

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-078
SITE: MP16

WELL NO.: MW22
DATE: 01-05-95
LOGGER: [illegible] / [illegible]
SIGNATURE: [illegible]

ONE WELL VOLUME: ~8.64 gallons WELL TD: 16.72 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS (MPH) PH	(MTP) Temp	(MSC) Cond.	MV					TURBIDITY	COMMENTS
0840	STATIC	3.43	—											
					~~5.16~~	~~14.4~~	~~.183~~	~~256~~ 48V						
0855	DBE	16.15	—	3.0	6.31	10.6	.547	035						Silty - Slow Recharge. Dry.
1500	STATIC	3.45												
1505	DSB													
1518	DBB			10.0										
1515	DBE	15.2												
1522	DSB													
1525	DSE	6.75												
1525	DBB			17.0										Water is muddy Brown
1530	DBE													Let Recharge
1535	DBB													
1537	DBE	~~1~~8.40												
1620	DOB		2.0	~~1~~7.0										
1627	DOB		1.0	31.0										
1645	DOE	~~1~~4.80	1											Pump cut off
1650	DOB	9.80												Pump Dry
1700	DOE													
	Recommend Further Development - Getting Dark - No Daylight													
	FINAL													

FINAL WELL YIELD: ______ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: ______ FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY:	Weston	WELL NO.:	MW-24
CLIENT:	USACE	DATE:	1/18/95
PROJECT:	Ft. Monmouth	LOGGER:	P. Thomas
SITE:	M-18	SIGNATURE:	Thomas

ONE WELL VOLUME: ______ gallons WELL TD: ______ ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	ATC MPH	mV/cm MSC	°C MTP	mV MEH	MPD	MU		TURBIDITY	COMMENTS
0835	~~BHG~~ DSB	3.16											Begin Surge Blocking
0855	DBB			Bailed		Dry		x I		V. sl. grey			Begin Bailing
0920	DOE	*											Generator Not working
0935	DBB	10.12			5.94	72	10.5	030	BKG			7200	Begin Bailing
0939		17.16	Bailed			Dry		x I		V. sl. grey			Move to 25 Allow Recovery
1040		8.91											
1110	DBE	17.16	Bailed			Dry							~ 20.25 gallons TOTAL
1147	DBB	12.40											
1159	DBE	15.75		6	6.58	72	11.0	-015	BKG	V. sl. grey		7200	Bailed ~6 gallons
1335		8.92											
1413	DOE												
1424		10.35	0.25	0.5	[illegible]	72	13.3	-00	[illegible]	same		7200	Inwhite?
1433		12.08	0.25	0.5								7200	
1440		13.47	0.25	0.5	7.27	72	16.6	-085	BKG	clear same		7200	Turned Flow up randy at pump intake valve
1441	DOB												
1527		10.04	.25		7.3	72	8.7	-014	BKG	[illegible]		7200	
1540		11.51	0.25	.5	7.20	72	14.2	-100	BKG	clear same		7200	
1547		13.35	0.25	.5	7.28	72	10.5	-100	BKG	same		7200	
	FINAL												

= 1335 8.92

1433 12.08

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method: ______		MO1 - Other: ______	
FMT - Field Measurements (select from codes at right)		MO2 - Other: ______	

G061291T

Recovery ≥ 1.5' every 10 minutes

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GEOLIS Well Development Form

COMPANY: Weston
CLIENT: USAF
PROJECT: [illegible]
SITE: [illegible]

WELL NO.: MW-25
DATE: 01/19/95
LOGGER: P. Thomas
SIGNATURE: Thomas

ONE WELL VOLUME: ______ gallons WELL TD: 17.00 ft TOC Well Volume (gallons/foot) 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS ATL MPH	MV MEH	mV/um MSC	°C MTP	MPO	MU		TURBIDITY	COMMENTS
0948	DSB	4.21	Bailed										
1005	DBB		Bailed										Begin Bailing
1025	DBE		Bailed		6.59	1002	72	11.6	BK	V silty gray	DRY		Bailed ~2 volumes 10.15
1133	DBB	11.99	Bailed										
1141	DBE	15.90	Bailed	5	6.50	186	72	11.5	BK	V silty gray			
1204	DBB	14.75											
1345	DBB	10.97											Begin Bailing
1357	DBE	16.15	Bailed	8	6.08	182	72	11.9	BK	same	DRY		Bailed Dry [illegible]
1430 1445		14.62											
15.16 1533	DBB	[illegible]											
1537		16.15	Bailed	5	7.57	234	72	BK	11.1	same	DRY		[illegible]
	FINAL												

FINAL WELL YIELD: 0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 12 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

Recovery ≈ 0.4' every 10 minutes

G061291T

#26

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW26
CLIENT:	USACE	DATE:	1/20/95
PROJECT:	03886-076-037	LOGGER:	S. SACCOMANDI
SITE:	CW01	SIGNATURE:	S W-S

ONE WELL VOLUME: ________ gallons WELL TD: 16.85 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	~~MSC~~ MEH	MTP	~~MEH~~ MSC	MPD			TURBIDITY	COMMENTS
0915													
~~1130~~	~~DSB~~	9.25											
~~1140~~	~~DBB~~	~~NR~~		~~BAILED~~	~~DRY~~								~~10 GALS~~
~~1145~~	~~DOB~~	~~10.35~~	~~1.5~~		~~4.46~~	~~377~~	~~12.5~~	~~258~~	~~BKG~~			~~29~~	~~HIGH BROWN SILTY~~
1250	DSB			gals									
1300	DBB	NR		~~7~~ 10	BAILED	DRY	(7)	BAILERS				H	YELLOW CLOUDY
1315	DOB	11.98	≈1	≈10	4.92	280	12.1	.610	BKG			H	"
1320	DOB	12.25	≈1	15	4.75	298	13.8	.637	BKG			H	"
1325	DOB	12.73	≈1	20	4.72	321	15.0	.642	BKG			H	"
1330	DOB	13.70	≈1	25	4.82	332	14.6	.677	BKG			H	" CLEARING
1335	DOB	13.35	≈1	30	4.86	332	14.5	.758	BKG			H	" STILL CLEARING
1340	DOB	14.15	≈1	35	4.83	336	14.0	.655	BKG			H	" "
1345	DOB	<14.40	≈1	40	4.86	338	14.3	.757	BKG			H	" "
1350	DOB	<14.40	.5-1	42.5	4.92	343	14.7	.741	BKG			M	VERY CLOUDY
1351	DOE	<14.40	WATER	LEVEL	AT	PUMP	WAIT	FOR	RECHARGE				
1400	DOB	10.10	≈1	42.5	4.93	341	13.7	.738	BKG			L	HAZY
1405	DOB	14.20	≈1	47.5	4.90	345	14.1	.646	BKG			M	VERY CLOUDY
1410	DOE	<14.40	≈1	52.5	4.94	346	14.3	.755	BKG			L	HAZY
1414	DOB	12.60	≈1	52.5	4.97	350	14.5	.768	BKG			L	CLOUDY
OVER		14.40	TOP	OF	PUMP								
	FINAL												

FINAL WELL YIELD: ~1 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: ______ FT

DEVELOPMENT ACTIVITY CODES

- DBB - Begin Bailing
- DOB - Begin Overpumping
- DRB - Begin Rawhiding
- DCB - Begin Recirculation
- DHB - Begin Hydraulic Jetting
- DAB - Begin Air Surging
- DSB - Begin Surge Blocking
- DXB - Begin Other
- DBE - End Bailing
- DOE - End Overpumping
- DRE - End Rawhiding
- DCE - End Recirculation
- DHE - End Hydraulic Jetting
- DAE - End Air Surging
- DSE - End Surge Blocking
- DXE - End Other

Specify other method: ________

FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

- MTP - Temperature
- MSC - Specific Conductance
- MPD - Photoionizer (e.g., HNu)
- MFD - Flame Ionizer (e.g., OVA)
- MDO - Dissolved Oxygen
- MPH - pH
- MEH - Eh
- MMC - Imhoff Cone
- MO1 - Other: ________
- MO2 - Other: ________

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

- H - High: Opaque/Muddy/Silty
- M - Medium: Translucent/Cloudy
- L - Low: Transparent/Some Silt
- N - None: Clear/No Visible Silt

#26 CONTINUED

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW 26
CLIENT:	USACE	DATE:	1/20/95
PROJECT:	02886-076-037	LOGGER:	J SACCOMANDI
SITE:	CW01	SIGNATURE:	[signature]

ONE WELL VOLUME: ______ gallons WELL TD: 16.85 ft TOC Well Volume (gallons/foot) 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MEH	MTP	MSC	MPD			TURBIDITY	COMMENTS
1420	DOB	14.2	~1	58.5	4.94	353	14.8	.659	BKG			L	VERY HAZY
1425	DOE	<14.40	~1	63.5	4.94	356	14.2	.751	BKG			L	HAZY
1428	DOB	12.80	~1	63.5	4.98	352	14.2	.770	BKG			L	HAZY
1430	DOB	13.50	~1	65.5	4.96	356	15.0	.712	BKG			L	SLIGHT HAZE
1435	DOB	<14.40	~1	70.5	4.93	358	14.6	.672	BKG			L	SLIGHT HAZE
1440	DOB	<14.40	~1	75.5	5.00	360	15.1	.773	BKG			L	SLIGHT HAZE
1445	DOB	<14.40	~1	80.5	4.97	347	15.2	.733	BKG			N	CLEAR
1450	DOE	<14.40	~1	85.5	4.95	353	15.1	.731	BKG			N	CLEAR
	FINAL												

FINAL WELL YIELD: 1.0 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 5 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

#27

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: CW01

WELL NO.: MW 27
DATE: 1/20/95
LOGGER: J. SACCOMANDI
SIGNATURE: [signature]

ONE WELL VOLUME: ______ gallons WELL TD: 16.90 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: MPH	~~MEH~~ MSC	MTP	~~MSC~~ MEH	MPD			TURBIDITY	COMMENTS
0915		9.31											
1310	DBB	9.39											
1315	DBB	NR		≈10		BAILED DRY (7) BAILERS							
1325	DOB	10.41	≈1	≈10	4.9	311	11.0	.361	BKG			H	YELLOW/BROWN SILTY
1330	DOB	10.46	≈1	15	4.86	325	13.8	.725	BKG			M	"
1335	DOB	10.46	≈1	20	4.80	333	15.7	.777	BKG			H	"
1340	DOB	10.56	≈1	25	4.82	339	16.4	.830	BKG			H	"
1345	DOB	11.25	≈1.25	32.5	4.81	342	16.8	.815	BKG			H	" CLEARING
1350	DOB	11.35	≈1.25	39.5	4.85	343	15.9	.774	BKG			H	" STILL CLEARING
1355	DOB	11.40	≈1.25	47	4.87	341	16.2	.815	BKG			H	" "
1400	DOB	11.44	≈1.25	54.5	4.77	349	16.8	[illegible]	BKG			M	VERY CLOUDY
1405	DOB	11.45	≈1.25	62.0	4.79	351	16.8	.836	BKG			L	HAZY
1410	DOB	11.45	≈1.25	69.5	4.82	353	16.8	.837	BKG			N	CLEAR
1415	DOB	11.47	≈1.25	75.5	4.83	355	16.9	.838	BKG			N	CLEAR
1420	DOB	11.47	≈1.25	83	4.82	357	17.0	.834	BKG			N	CLEAR
1425	DOB	11.47	≈1.25	90.5	4.84	359	16.9	.836	BKG			N	CLEAR
1430	DOB	11.50	≈1.25	98	4.82	358	17.3	.833	BKG			N	CLEAR
1435	DOB	11.50	≈1.25	105.5	4.81	361	17.3	.840	BKG			N	CLEAR
1440	DOB	11.50	≈1.25	113	4.83	364	16.9	.837	BKG			N	CLEAR
OVER	FINAL												

FINAL WELL YIELD: ~1.25 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

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GEOLIS Well Development Form

#27 CONTINUED

COMPANY:	RFW	WELL NO.:	MW27
CLIENT:	USACE	DATE:	1/20/95
PROJECT:	03886-076-037	LOGGER:	J. SACCOMANDI
SITE:	LW01	SIGNATURE:	[illegible]

ONE WELL VOLUME: ______ gallons WELL TD: 16.90 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16 | 4-inch = 0.65 | 6-inch = 1.47 | 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MEH	MTP	MSC	MPD			TURBIDITY	COMMENTS
1445	DOB	11.50	1.25	120.5	4.81	366	17.3	.842	BKG			N	CLEAR
1450	DOE	11.50	1.25	128	4.82	356	17.6	.828	BKG			N	CLEAR
	FINAL												

FINAL WELL YIELD: 20.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method: ______
FM1 - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

GEOLIS Well Development Form

#28

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: CW01

WELL NO.: MW 28
DATE: 1/20/95
LOGGER: J. SACCOMANDI
SIGNATURE: [illegible]

ONE WELL VOLUME: ________ gallons WELL TD: 16.86 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MFH	MPD			TURBIDITY	COMMENTS
0915	DSB	9.48	STOP DUE TO HEAVY DOWNPOUR										
1130	DBB	NR	BAILED DRY										10 GALS
1145	DOB	9.81	1.5	17.5	5.60	8.9	1.272	097	BKG		H		~~28~~ ~~MEDIUM~~ BROWN SILTY / CLEARING
1200	DOB	10.50	1.5	32.5	4.60	15.6	.348	168	BKG		H		HIGH/SILTY
1205	DOB	10.45	1.5	46.5	4.72	15.0	.349	237	BKG		H		CLEARING / VERY CLOUDY
1215	DOB	11.00	2.0	66.5	4.81	15.5	.342	279	BKG			M	VERY CLOUDY
1225	DOB	11.07	2.0	86.5	4.81	14.9	.345	290	BKG			N	CLEAR
1235	DOB	11.05	2.0	106.5	4.73	15.5	.342	301	BKG			N-L	CLEAR TO HAZY
1240	DOB	11.05	2.0	116.5	4.77	15.4	.336	299	BKG			L	VERY HAZY
1245	DOB	11.05	2.0	126.5	4.84	15.2	.343	307	BKG			L	VERY HAZY
1250	DOB	10.95	2.0	136.5	4.92	15.6	.335	296	BKG			L	VERY HAZY
1255	DOE	11.05	2.0	GENERATOR QUIT TEMPORARILLY									
1300	DOE	11.10	2.0	146.5	4.82	15.3	.337	302	BKG			L	VERY HAZY
		WATER LEVEL WAS NOT DRAWN DOWN ANY											
		FURTHER DUE TO THE PUMP LEVEL											
	FINAL												

FINAL WELL YIELD: 1.52 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 2 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

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GEOLIS Well Development Form

#29

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: CW01

WELL NO.: MW29
DATE: 1/20/95
LOGGER: J. SACCOMANDI
SIGNATURE: John W. S[illegible]

ONE WELL VOLUME: ______ gallons WELL TD: 16.90 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
1130	DSB	9.52											
1140	DBB	NR		10	BAILED DRY		.377	258					10 GALS
1145	DOB	10.35	1.5	17.5	~~5.60~~ 4.40	~~8.~~ 12.5	~~1802~~	~~8~~	BKG			H	29 HIGH BROWN SILTY
1155	DOB	10.60	1.5	32.5	5.72	13.3	.400	070	BKG			H	CLEARING/HIGH SILTY
1205	DOB	11.05	1.5	~~30~~ 47.5	5.08	13.7	.392	202	BKG			M	CLEARING/MEDIUM/VERY CLOUDY
1215	DOB	11.51	≈2.0	~~60~~ 67.5	5.07	12.8	.395	264	BKG			M	VERY CLOUDY
1225	DOB	11.29	2.0	87.5	5.24	13.9	.395	255	BKG			N	CLEAR
1235	DOB	11.30	2.0	107.5	5.21	14.4	.399	276	BKG			N	CLEAR
1240	DOB	11.30	2.0	117.5	5.23	12.8	.402	275	BKG			N	CLEAR
1245	DOB	11.30	2.0	127.5	5.09	13.9	.404	288	BKG			N	CLEAR
1250	DOB	11.30	2.0	137.5	5.18	14.2	.401	275	BKG			N	CLEAR
1255	DOB	11.32	2.0	147.5	5.26	14.3	.403	277	BKG			N	CLEAR
1300	DOE	11.31	2.0	157.5	5.29	14.3	.399	272	BKG			N	
FINAL													

WATER LEVEL WAS NOT DRAWN DOWN ANY FURTHER DUE TO THE PUMP LEVEL

FINAL WELL YIELD: 1.5-2 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 2 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method:
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other:
MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

=30

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: [illegible]
WELL NO.: MW30
DATE: 01-08-95
LOGGER: V. Valente
SIGNATURE: V. [illegible]

ONE WELL VOLUME: ~6.9 gallons WELL TD: 17.92 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MEH	HNU			TURBIDITY	COMMENTS
1330	Static	7.34	-	-	-	-	-	-	0.0			-	MODERATE ROTTEN ODOR IN WELL
1400	DBB	7.34	-									H	
1410	DBE		-										
1420	DBS		-	25.0									
1430	DRB												
1440	DBD				6.0	16.8	.635	015	0.0			H	WATER STILL SILTY.
1445	DBE			30.0									
1510	DBB			32.0	6.12	15.0	.623	005	0.0			H	WATER CLEARING BUT STILL SILTY
1530	DBB			35.5	6.06	15.0	.632	008	0.0			H	
1550	DOB			38.0	5.98	15.6	.641	012	0.0			H	
1600	DBE	Dry		40.0	6.03	15.1	.630	-004				L	WATER CLEARED JUST SLIGHTLY SILTY
1625	DBE												
1/24/95 0940	DSB	6.90	—										
0945	DBB	DRY	—	12.0									
1000	DBB	15.6	—	16.0	5.63	13.0	1.010	040	BKG			H	GRAY BROWN SILTY
1010	DBS	14.89	—	20	6.02	14.0	.917	-026	BKG			H	"
1015	DBB	15.02	—	22	6.15	14.1	.895	-32	BKG			H	"
	OVER												
Performed Log Book DATA													
	FINAL												

FINAL WELL YIELD: ______ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: ______ FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW 30
CLIENT:	USACE	DATE:	1/24/95
PROJECT:	03886-076-037	LOGGER:	J SACCOMANDI
SITE:	CW02	SIGNATURE:	John L. SC

ONE WELL VOLUME: ~6.9 gallons WELL TD: 17.92 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
1020	DBB	15.85	—	24	6.05	14.2	.873	-021	BKG			H	GRAY BROWN SILTY
1025	DBB	15.69	—	25	6.09	14.7	.861	-023	BKG			H	"
1030	DBB	15.65	—	26	6.14	15.0	.846	-021	BKG			H	"
1040	DBB	15.70	—	27	6.12	15.1	.837	-019	BKG			H	"
1045	DBE	15.68	—	28	6.12	15.1	.841	-018	BKG			M	"
	FINAL												

FINAL WELL YIELD: Bailed <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing; DBE - End Bailing
DOB - Begin Overpumping; DOE - End Overpumping
DRB - Begin Rawhiding; DRE - End Rawhiding
DCB - Begin Recirculation; DCE - End Recirculation
DHB - Begin Hydraulic Jetting; DHE - End Hydraulic Jetting
DAB - Begin Air Surging; DAE - End Air Surging
DSB - Begin Surge Blocking; DSE - End Surge Blocking
DXB - Begin Other; DXE - End Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: CW02
WELL NO.: MW-31
DATE: 01-05-95
LOGGER: K. VALENTI
SIGNATURE: K. V[illegible]

ONE WELL VOLUME: ~6.4 gallons WELL TD: 16.90 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1150	STATIC	7.00	–	–	–	–	–	–	0.0			–	BEGAN HAND BAILING - 3"-DIA. BAILER
1200	DBB	16.00	BAILED	6	6.32	12.2	.412	-017	0.0			H	
	DBE	16.00											RECHARGE = 2/10 of A FOOT EVERY MINUTE.
1300	DSB	8.70'											
1305	DBB	8.70'										H	BEGINNING TO CLEAR BUT STILL SILTY
1340	DBB	16.35	–	31	5.90	16.2	.395	040	0.0			H	BEGAN SURGING.
1350	DBB												
1355	DBB			32.5	6.04	15.9	.395	013	0.0			N	
1400	DBE	14.30											
1420		11.20	BAILED DRY										POOR RECOVERY
1055	DBB	6.75	–	14	6.08	13.7	.533	-013	BKG			H	GRAY BROWN SILTY
1100	DBB	12.02	–	18	6.16	14.2	.533	-21	BKG			H	"
1105	DBB	14.30	–	19	6.21	14.4	.531	-020	BKG			H	"
1110	DBB	14.12	–	20	6.21	13.9	.518	-018	BKG			H	"
1115	DBB	13.40	–	22	6.21	13.7	.517	-014	BKG			M	"
1120	DBB	13.24	–	24	6.18	13.6	.525	-010	BKG			M	"
1125	DBB	13.16	–	25	6.21	13.8	.507	-008	BKG			M	"
REFERENCE LOG BOOK ON THIS DATE FOR DETAILED NOTES.													
	FINAL												

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: * FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: CW02

WELL NO.: MN31
DATE: 1/24/95
LOGGER: J. SACCOMANDI
SIGNATURE: [illegible]

ONE WELL VOLUME: 2.64 gallons WELL TD: 16.90 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: MPH	MTP	MSC	MEH	MFD			TURBIDITY	COMMENTS
1130	DBB	13.20	—	26	6.11	13.2	.505	000	BKG			M	BROWN GRAY SILTY
1135	DBB	13.79	—	27	6.13	13.4	.513	-001	BKG			L	LT GRAY BROWN CLOUDY
1140	DBE	13.60	—	28	6.15	13.8	.511	-003	BKG			L	"
	FINAL												

FINAL WELL YIELD: ______ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: ______ FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-031
SITE: Cuca
WELL NO.: MW 32
DATE: 01-05-95
LOGGER: K. Valente
SIGNATURE: K.V.

ONE WELL VOLUME: ~5.5 ~~7.45~~ gallons WELL TD: 16.90 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1155	Static	7.45	–	–	–	–	–	–	–				3" dia Bailer used to Bail
1200	DBB	7.45	–	2.0	6.31	15.1	.521	002	0.0			H	Dk. Gray Silty water
1205	DBE		Recharge	~	2/10	of a	foot	per	minute				
1300	DSB	8.00											
1310	DBB	8.00											
1345	DBE	16.45	–	27.0	5.91	15.2	.459	038	0.0			H	Water clearing but still heavy silt
1350	DSB												
1355	DBB												
1400	DBE	16.30		28.0	5.92	16.6	.492	020	0.0			H	Water still silty
1425	DBE	13.25											Poor Recovery
	This well should be further bailed / developed												
1220	DBB	7.15	–	Bailed dry									
1225	DBB	14.12	–	10	5.09	13.9	.647	160	BKG			H	Gray Brown Silty
1230	DBB	13.83	–	11	5.56	14.3	.667	051	BKG			H	"
1235	DBB	13.76	–	13	6.03	14.6	.645	014	BKG			H	"
1240	DBB	14.39	–	14	6.13	14.7	.657	-003	BKG			H	"
1245	DBB	14.67	–	15	6.17	14.8	.652	-009	BKG			H	"
1250	DBB	14.25	–	16	6.20	15.2	.651	-02	BKG			H	"
				OVER									
	FINAL												

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: X Dry /FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method:
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other:
MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW32
CLIENT:	USACE	DATE:	1/24/95
PROJECT:	03886-076-037	LOGGER:	J. SACCOMANDI
SITE:	CV02	SIGNATURE:	[illegible]

ONE WELL VOLUME: 25.5 gallons WELL TD: 16.90 ft TOC

Well Volume (gallons/foot) 2-inch = 0.16 4-inch = 0.65 6-inch = 1.4 8-inch = 2.6

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
1255	DBB	14.30	—	17	6.22	14.0	.659	-008	BKG			H	GRAY BROWN SILTY
1300	DBE	14.24	—	18	6.17	14.8	.647	-005	BKG			H	GRAY BROWN SILTY
	FINAL												

FINAL WELL YIELD: ______ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: ______ F

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	(Final should be < 5 NTU)
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	OR
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	Enter Qualitative Observation
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	H - High: Opaque/Muddy/Silty
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	M - Medium: Translucent/Clou
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	L - Low: Transparent/Some Sil
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	N - None: Clear/No Visible Sil
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G0612

Protech co L

grout

bent Sl

No. 1 san

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW-33
CLIENT:	USACE	DATE:	01-05-95
PROJECT:	03886.076.037	LOGGER:	Y. VALENTI
SITE:	Fewc2	SIGNATURE:	Y. V[illegible]

ONE WELL VOLUME: ~5.0 gallons WELL TD: 16.07 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MU	HNU			TURBIDITY	COMMENTS
1335	STATIC	8.53	–	–	–	–	–	–	0.0				
1405	DSB	8.53											SWAB-SURGE
1410	DBB	8.53	–	–	–	–	–	–	–			H	HAND BAILED-3" DIA.
1420	DBE	15.00	–	13.0									
1425	DBB	DRY	–	16.0								H	
1430	DSB	–	–										SWAB SURGE
1435	DBB	DRY	–	18.0								H	
1440	DBB	DRY		19.0	6.14	15.7	.557	-.021	0.0			H	WATER BEGINNING TO CLEAR
1530	DBB			22.0	6.04	14.0	.460	010	0.0			H	BEGINNING TO CLEAR BUT STILL SILTY
1550	DBE	DRY											
1600	DBB			25.0	6.23	14.8	.478	-.021	0.0			M	
1625	DBB			27.5	6.10	14.0	.468	-.014	0.0			L	
1630	DBE			BAILED	DRY								WATER CLEARED. LAST BAILER A LITTLE SILTY.
1305	DBB	8.69		9	6.15	14.5	.941	-.002	BKG			H	GRAY BROWN SILTY
1310	DBB	10.85		12	6.19	14.1	.863	-.013	BKG			H	" CLEARING
1315	DBB	12.41		14	6.18	14.5	.861	-.012	BKG			H	"
1320	DBB	11.42		17	6.21	13.8	.821	-.012	BKG			M	"
		OVER											
Reference Log Book.													
	FINAL												

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method: ____
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ____
MO2 - Other: ____

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

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GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW33
CLIENT:	USACE	DATE:	1/24/95
PROJECT:	03886-076-037	LOGGER:	J. SACCOMANO
SITE:	CW02	SIGNATURE:	[illegible]

ONE WELL VOLUME: ~5.0 gallons WELL TD: 16.07 ft TOC Well Volume (gallons/foot) 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
1325	DBB	11.79	—	20	6.22	14.4	.776	-008	BKG			M	BROWN GRAY VERY CLOUDY
1330	DBB	12.21	—	22	6.25	14.5	.728	-011	BKG			M	" CLEARING
1335	DBB	10.74	—	27	6.25	13.9	.691	-003	BKG			M	BROWN GRAY CLOUDY
1340	DBB	15.18	—	29	6.19	15.1	.740	-003	BKG			M	"
1345	DBB	12.42	—	31	6.21	14.7	.696	-005	BKG			L	"
1350	DBE	12.34	—	33	6.43	14.3	.681	-008	BKG			L	LT BROWN GRAY SLIGHTLY CLOUDY
	FINAL												

FINAL WELL YIELD: ~0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

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GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW34
CLIENT:	USACE	DATE:	01-06-95
PROJECT:	03886-076-037	LOGGER:	K. LaLente
SITE:	CD06-MW34	SIGNATURE:	K. L[illegible]

ONE WELL VOLUME: ~7.8 gallons WELL TD: 16.85 ft TOC

Well Volume (gallons/foot) 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS PH	Temp	Cond	MV	Hnu			TURBIDITY	COMMENTS
													4" WELL
1035	STATIC	4.82	-	-	-	-	-	-	0.0	-	-		MEASUREMENTS FROM TOP OF PVC
1040	DSB	4.82	-	-	-	-	-	-	-	-	-		BEGAN SWAB SURGING
1055	DBB	4.82	BAILED	5.0	4.72	11.5	.154	221	0.0				Hand Bail. Greenish Brown Silty Water
1155	↓	7.50	BAILED	48.0	5.16	11.9	.143	177	0.0				WATER STILL GREENISH BROWN
1215	↓	6.96	Bailed	60.0	5.17	11.7	.143	186	0.0				WATER STILL GREENISH-BROWN
1322	DOB	8.78	3gpm		5.45	12.7	.130	163	0.0			N	
1340	DOB	9.50	3gpm		5.43	12.5	.133	154	0.0			N	
1355	DOB	9.60	3gpm		5.36	13.0	.132	157	0.0			N	
1415	DOB	9.60	3gpm		5.35	13.6	.133	162	0.0			N	
1430	DOB	9.45	3gpm		5.31	13.6	.133	166	0.0			N	
1435	DOE												
	FINAL												

FINAL WELL YIELD: ~3 GPM PUMP RATE ESTIMATED CORRESPONDING DRAWDOWN: 5 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: Awc 9-

WELL NO.: MW 35
DATE: 01-06-95
LOGGER: K. Vallavi
SIGNATURE: K. Val[illegible]

ONE WELL VOLUME: ______ gallons WELL TD: 16.80 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
1235	DSB	4.97											
1245	DSE												
1245	DBB												
1300	DBB	7.49		22gal	5.18	8.7	.158	.196				H	DK Greenish brown color
1330	DBB			100	5.20	10.0	.161	.210				H	" "
1330	DBE												
1400	DBB	5.01										H	Greenish brown
1410	DBB			115								H	" "
1430	DSE			160								M	
1435	DOB	5.05	3gal		~~5.18~~	11.20	150	.222	0			M	Lt greenish brown
1455	DOB	6.26	4gal		5.38	10.80	148	.219	0			M	" " "
1505	DOB	10.4	5.5gal		5.44	11.80	146	.216	0			M	" " "
1515	DOB	8.00	4gal		5.40	12.70	145	.218	0			L	
1530	DOB	9.16	5.0		5.14	12.0	.140	252	0			N	
1535	DOB	9.04	5.0		5.10	12.50	.140	268	0			N	Clear
1545	DOB	9.05	5.0		4.93	12.70	.141	264	0			N	
1550	DOB	9.04	5.0		4.88	12.9	.141	274	0			N	
1550	DDE												
	FINAL												

8.5 DTW

FINAL WELL YIELD: 4.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 4 (FT)

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method: ______		MO1 - Other: ______	
FMT - Field Measurements (select from codes at right)		MO2 - Other: ______	

GEOLIS Well Development Form

COMPANY: Roy F. Weston
CLIENT: USAE
PROJECT: Ft. Monmouth
SITE: CW9
WELL NO.: MW-36
DATE: 1-6-95
LOGGER: [illegible]
SIGNATURE:

ONE WELL VOLUME: ______ gallons WELL TD: 16.69 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MSC	MTP	MPD	MEH			TURBIDITY	COMMENTS
1035	DSB	6.43	[illegible]										
1045	DSE												
1045	DBB		Bailing									H	Recharging quickly
1055	DBE											H	
1055	DSB												
1056	DSE												
1056	DBB		Bailed	30gal								H	
1059	DBE			+5gal								H	
1059	DSB												
1102	DSE	6.30			5.7	.189	10.4	0	175			M	
1140	DOB	10.2	4gal		5.8	.147	13.0	0	161			L	
1155	DOB	9.84	4gal		5.8	.141	11.9	0	168			N	
1215	DOB	9.86	4gal		5.9	.142	10.6	0	171			N	Clear-
1220	DCE												Pump shut down no gas
	FINAL												

FINAL WELL YIELD: 3-4 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3.5 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

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GEOLIS Well Development Form

COMPANY: Weston
CLIENT: USACE
PROJECT: Ft. Monmouth
SITE: B-1

WELL NO.: MW-01B
DATE: 1/19/95
LOGGER: R. Thomas
SIGNATURE: Thomas

ONE WELL VOLUME: ______ gallons WELL TD: 16.30 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS ATC MPH	mS/cm MSC	mV MEH	°C MTP	MPD	MCL		TURBIDITY	COMMENTS
0845	DSB	4.35											
0905	DBB												
0920	DOB		1gpm										Pumped well Dry - Allow Recovery
0935	DOE												
0942	DOB	4.9	1gpm		4.36	.187	299	9	BKG	Orange brown		>200	
1005		7.65	1gpm		4.45	.180	308	12.9	BKG	clear		>200	Cloudy
1015		7.65	1gpm		5.10	.177	275	13.5	BKG	Clear			Clear
1020		8.61	1.5gpm		5.28	.179	267	13.1	BKG	Clear			Clear
1025		7.62	1.5gpm		5.21	.179	269	14.0	BKG	Clear			Clear
1030		7.62	1.5gpm		5.32	.170	266	14.1	BKG	Clear			Clear
1035		7.61	1.5gpm		4.96	.180	284	14.5	BKG	Clear			Clear
1040	DOE	7.61	1.5gpm		5.35	.179	270	13.6	BKG	CLEAR			CLEAR
	FINAL												

FINAL WELL YIELD: 1.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: B2
WELL NO.: MW02B
DATE: 1/19/95
LOGGER: J. SACCOMANDI
SIGNATURE: [signature]

ONE WELL VOLUME: ______ gallons WELL TD: 22.0 ft TOC Well Volume (gallons/foot) 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1105	DSB	12.7											
1125	DBB												
1135	DOB	12.90	1.5		5.89	15.2	.424	080	BKG			TURBID	
1150		12.95	1.5		6.16	15.9	.422	014	BKG			TURBID	
1205		13.26	2.0		6.30	15.0	.413	016	BKG			TURBID	
1220		13.15	2.0		6.33	16.0	.428	000	BKG			TURBID	
1240		12.20	2.0		6.37	15.9	.412	011	BKG			TURBID	
1255		13.05	2.0		6.45	15.4	.424	-011	BKG			VERY CLOUDY	
1305		13.05	2.0		6.57	14.5	.447	-023	BKG			VERY CLOUDY	
1315		13.45	2.5		6.39	15.2	.422	-026	BKG			VERY CLOUDY	
1325		13.45	2.5		6.49	15.3	.419	-025	BKG			CLOUDY / SLIGHT SEPTIC ODOR	
1340		13.47	2.5		6.44	14.9	.423	-029	BKG			"	
1350		13.51	2.5		6.42	14.7	.422	-030	BKG			SLIGHTLY CLOUDY	
1400	DOE	13.53	2.5		6.37	15.4	.416	-030	BKG				CLEAR
3 TIMES I PUMPED WELL DOWN TO 16 FT BY INCREASING FLOW RATE TO 12 GPM THEN CUT BACK TO 2 GPM TO ALLOW WELL TO RECHARGE.													
	FINAL												

FINAL WELL YIELD: 2 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 2 FT

DEVELOPMENT ACTIVITY CODES

- DBB - Begin Bailing
- DOB - Begin Overpumping
- DRB - Begin Rawhiding
- DCB - Begin Recirculation
- DHB - Begin Hydraulic Jetting
- DAB - Begin Air Surging
- DSB - Begin Surge Blocking
- DXB - Begin Other
- DBE - End Bailing
- DOE - End Overpumping
- DRE - End Rawhiding
- DCE - End Recirculation
- DHE - End Hydraulic Jetting
- DAE - End Air Surging
- DSE - End Surge Blocking
- DXE - End Other

Specify other method: ______

FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

- MTP - Temperature
- MSC - Specific Conductance
- MPD - Photoionizer (e.g., HNu)
- MFD - Flame Ionizer (e.g., OVA)
- MDO - Dissolved Oxygen
- MPH - pH
- MEH - Eh
- MMC - Imhoff Cone
- MO1 - Other: ______
- MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

- H - High: Opaque/Muddy/Silty
- M - Medium: Translucent/Cloudy
- L - Low: Transparent/Some Silt
- N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-036-038
SITE: B3
WELL NO.: MW03B
DATE: 1-19-95
LOGGER: V.Nalanti
SIGNATURE: [signature]

ONE WELL VOLUME: ~11.1 gallons WELL TD: 28.55 ft TOC

Well Volume (gallons/foot) 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
1215	STATIC	11.50	-	-	-	-	-	-	-				
1220	DSB												
1235	DSE/DBB		Bailed	14.0					0.0			H	Greenish-Dk. gray silty water
1245	DBE	27.91											Let Recharge
1248	-	23.00											
1254	-	22.00											
1315	DBB	21.11	Bailed	15.0	4.84	13.3	.388	204	0.0			H	Green to Dk. gray silty water
1335	DSB	27.14	-	24.0	5.28	13.7	.420	155	0.0			H	" " "
1350	DBB	25.12	-	27.0	5.35	13.3	.416	137	0.0			H	
1355	DBE	27.94	-	27.0		—						H	Let Recharge
1510	DSB	25.40											
1535	DBB	27.98	Bailed	29.0	5.75	13.2	.448	059	0.0			H	very slow Recharge
	DBE												
	FINAL												

Continued on Next Page →

FINAL WELL YIELD: ______ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: ______ FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing / DBE - End Bailing
DOB - Begin Overpumping / DOE - End Overpumping
DRB - Begin Rawhiding / DRE - End Rawhiding
DCB - Begin Recirculation / DCE - End Recirculation
DHB - Begin Hydraulic Jetting / DHE - End Hydraulic Jetting
DAB - Begin Air Surging / DAE - End Air Surging
DSB - Begin Surge Blocking / DSE - End Surge Blocking
DXB - Begin Other / DXE - End Other
Specify other method: ______
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other: ______
MO2 - Other: ______

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

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GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: B3

WELL NO.: MW03B
DATE: 1-24-95
LOGGER: Kvalcik
SIGNATURE: K.V.

ONE WELL VOLUME: ~11.1 gallons WELL TD: 28.55 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	MPH	MTP	MSC	MEH	OVM			TURBIDITY	COMMENTS
1500	DBB STATIC	11.05											
1510	DSF/DBB	11.05	Bailed	1.0	5.39	12.2	.432	226	0.0			H	Dk. Green to Gray.
1512	DBB	-	Bailed	3.0	5.51	12.6	.447	224	0.0			H	
1515	DBB	-	Bailed	5.0	5.51	12.7	.444	220	0.0			H	
1517	DBB	-	Bailed	7.0	5.59	12.8	.446	214	0.0			H	
1520	DBB	—	Bailed	10.0	5.38	13.1	.441	238	0.0			H	
1525	DBB	—	Bailed	14.0	5.16	13.5	.418	255	0.0			H	very slow Recharge
1530	DBE	Dry	Bailed	15.5	5.04	13.4	.422	250	0.0			H	
	FINAL												

FINAL WELL YIELD: <0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: -Dry- FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
Specify other method:
FMT - Field Measurements (select from codes at right)

DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other:
MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be <5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

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GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW04B
CLIENT:	USACE	DATE:	1-19-95
PROJECT:	03886-076-038	LOGGER:	K. Valente
SITE:	B4	SIGNATURE:	[signature]

ONE WELL VOLUME: ~6.8 gallons WELL TD: 17.10 ft TOC Well Volume (gallons/foot) 2-inch = 0.16 ~~4-inch = 0.65~~ 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
0900	STATIC	6.71	–	–	–	–	–	–	–				
09Ø0	DSB												
0920	DSE/DBB	6.71	BAILED									H	GREENISH SILTY WATER.
0927	DBE	DRY	–	~12.0									WELL WENT DRY.
0929	–	13.10											LET RECHARGE
0930	–	11.40											
0935		10.10											SET PUMP DOWN WELL 6" OFF BOTTOM
0940	DOB	8.00	~0.5	13.0	4.09	8.2	.271	316	0.0			H	GREENISH SILTY WATER
0950	DOB	14.31	~0.5	~20.0	3.85	11.7	.285	335	0.0			H	LOWERED FLOW RATE
1000	DOB	10.80	<0.5	22.5	4.11	12.2	.285	339	0.0			H	W.L. COMING BACK UP.
1010	DOB	9.14	<0.5	25.0	3.91	13.1	.282	359	0.0			H	CLEARING BUT STILL SILTY
1020	DOB	8.80	<0.5	27.5	4.35	13.2	.287	331	0.0			M	INCREASED FLOW RATE. WATER BEGINNING TO CLEAR
1030	DOB	9.32	~0.5	33.0	3.80	14.5	.285	363	0.0			M	
1035	DOB	9.91	~0.5	~35.5	4.00	14.3	.280	359	0.0			M	
1040	DOB	10.40	~0.5	38.0	4.35	13.0	.270	335	0.0			M	
1045	DOB	11.08	~0.5	~40.5	4.39	12.0	.276	337	0.0			M	
1050	DOB	11.50	~0.5	43.0	4.27	13.7	.296	351	0.0			M	
1055	DOB	11.91	~0.5	45.5	4.17	13.3	.288	353	0.0			M	
					CONTINUED ON FOLLOWING PAGE →								
	FINAL												

FINAL WELL YIELD: ______ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: ______ FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU) OR Enter Qualitative Observations
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	H - High: Opaque/Muddy/Silty
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	M - Medium: Translucent/Cloudy
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	L - Low: Transparent/Some Silt
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	N - None: Clear/No Visible Silt
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method: ______		MO1 - Other: ______	
FMT - Field Measurements (select from codes at right)		MO2 - Other: ______	

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: RH

WELL NO.: MW04B
DATE: 1-19-95
LOGGER: K. Valente
SIGNATURE: K. Valente

ONE WELL VOLUME: 6.71 gallons WELL TD: 17.10 ft TOC

Well Volume (gallons/foot) 2-inch = 0.16 4-inch = 0.65 6-inch = 1.47 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MV	HNU			TURBIDITY	COMMENTS
Continued From Previous Page													
1100	DOB	12.17	~0.5	48.0	4.24	13.1	.301	354	0.0			M	Pump Dry / Let Recharge
1110	DOB	8.89	—	~55.0	4.11	12.6	.297	371	0.0			M	Pump Dry
1111	DOE	Dry											Let Recharge
1120	DOB	9.04	—	~61.0	4.05	12.7	.268	366	0.0			M	Pump DRY
1121	DOE	Dry											
	DOE												
	FINAL												

FINAL WELL YIELD: ~0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: -DRY- FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method:
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other:
MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

G06129

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-038
SITE: B5

WELL NO.: MW05B
DATE: 1/19/95
LOGGER: Jim SACCOMANDI
SIGNATURE: [signature]

ONE WELL VOLUME: ________ gallons   WELL TD: 17.31 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MEH	MSC	MPD	MCL	MTP		TURBIDITY	COMMENTS
1425	DSB	5.01											
1430	DBB	"	BAILED DRY								TURBID		8 GAL
1500	DBB	12.00	BAILED DRY								TURBID		3 GAL
1530	DBB	14.00			4.83	214	.291	BKG	TURBID	11.9			3 GAL
1535	DBB	15.30			5.11	196	.292	BKG	TURBID	12.3	TURBID		1.5 GAL
1540	DBB	15.85			5.18	193	.294	BKG	TURBID	12.5			1 GAL
1545	DBB	16.40			5.20	190	.296	BKG	TURBID	12.7			1 GAL
1550	DBB	16.65			5.23	189	.303	BKG	TURBID	12.6			1 GAL
1555	DBB	16.71			5.26	183	.310	BKG	TURBID	12.5			1 GAL
1600	DBB	16.80			5.26	183	.310	BKG	TURBID	12.7			½ GAL
1605	DBB	16.74			5.34	178	.310	BKG	TURBID	12.5			½ GAL
1610	DBB	16.80			5.41	175	.303	BKG	TURBID	12.4			½ GAL
1615	DBB	17.0			5.36	176	.307	BKG	LIGHT TURBID	12.4			½ GAL
~~1620~~	~~DSB~~	[illegible]											
	FINAL												

FINAL WELL YIELD: Bailed - <0.5 GPM   PUMP RATE - ESTIMATED   CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method: ________		MO1 - Other: ________	
FMT - Field Measurements (select from codes at right)		MO2 - Other: ________	

G061291T

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW06B
CLIENT:	USACE	DATE:	1/24/95
PROJECT:	03886-037	LOGGER:	J. SACCOMANDI
SITE:	B-6	SIGNATURE:	[illegible]

ONE WELL VOLUME: ~7 gallons WELL TD: 16.66 ft TOC Well Volume (gallons/foot) 2-inch = 0.16 6-inch = 1.47 4-inch = 0.65 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
1605	DSB	4.64	—	—					BKG				
1610	DBB	N/R	—	9								H	GRAY GREEN VERY SILTY
1615	DBE	8.47	—	9								H	"
1620	DOB	8.47	0.5	9	5.25	5.1	.160	274	BKG			H	"
1625	DOB	8.97	0.5	11.5	5.02	6.2	.194	272	BKG			H	"
1630	DOB	9.18	0.5	13	4.88	7.0	.204	257	BKG			H	"
1635	DOB	9.21	~0.5	15.5	4.86	8.5	.204	249	BKG			H	"
1640	DOB	9.26	~0.5	17.0	5.00	10.3	.203	245	BKG			H	"
1645	DOB	9.30	~0.5	19.5	5.00	11.7	.201	244	BKG			H	" CLEARING
1650	DOB	9.33	~0.5	21.0	5.08	12.6	.197	229	BKG			H	" "
1655	DOB	9.36	~0.5	23.5	5.13	13.0	.197	223	BKG			M	DK BROWN CLOUDY
1700	DOB	9.39	~0.5	25.0	5.15	13.7	.196	221	BKG			M	BROWN CLOUDY
1705	DOB	9.42	~0.5	27.5	5.26	14.4	.192	218	BKG			L	CLOUDY
1710	DOB	9.48	~0.5	30.0	5.20	14.4	.194	217	BKG			L	SLIGHTLY CLOUDY
1715	DOB	9.53	~0.5	32.5	5.17	14.6	.192	217	BKG			N	CLEAR
1720	DOB	9.61	~0.5	35.0	5.22	14.7	.194	216	BKG			N	CLEAR
1730	DOE	10.29	~0.5	37.5	5.28	14.5	.197	216	BKG			N	CLEAR
	13.40 IS DEPTH TO TOP OF PUMP/PUMP IS .5' OFF BOTTOM												
	FINAL												

FINAL WELL YIELD: ~0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: B-7
WELL NO.: MWC7B
DATE: 1/24/95
LOGGER: J. SACCOMANDI
SIGNATURE: [illegible]

ONE WELL VOLUME: ______ gallons WELL TD: 16.90 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
1400	DSB	9.01	—	—									
1410	DSB	N/R	—	17								H	BROWN SILTY
1415	DOB	N/R	1	22	4.54	11.7	.380	269	BKG			H	"
1420	DOB	12.81	2	32	4.67	12.3	.396	262	BKG			M	"
1420-1430	PUT GAS IN GENERATOR												
1430	DOB	10.41	3.0	32	4.86	12.2	.372	271	BKG			H	"
1435	DOB	13.07	2	42	4.89	12.5	.403	273	BKG			L	SLIGHTLY CLOUDY
1440	DOB	11.95	2	52	4.91	12.3	.420	277	BKG			N	CLEAR
1445	DOB	11.99	2	62	4.93	12.5	.426	279	BKG			N	CLEAR
1450	DOB	11.99	2	72	4.91	12.7	.420	284	BKG			N	CLEAR
1455	DOB	12.01	2	82	4.89	12.8	.428	285	BKG			N	CLEAR
1500	DOB	12.03	2	92	4.89	12.8	.427	290	BKG			N	CLEAR
1505	DOB	12.05	2	102	4.88	13.0	.426	290	BKG			N	CLEAR
1510	DOB	12.07	2	112	4.87	12.9	.429	298	BKG			N	CLEAR
1515	DOB	12.07	2	122	4.86	12.8	.431	301	BKG			N	CLEAR
1517	DOE	N/R											
	FINAL												

FINAL WELL YIELD: ~2 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method: ______		MO1 - Other: ______	
FMT - Field Measurements (select from codes at right)		MO2 - Other: ______	

G061291T

GEOLIS Well Development Form

COMPANY:	RFW	WELL NO.:	MW08B
CLIENT:	USAF	DATE:	1-24-95
PROJECT:	03886-076-037	LOGGER:	K. Valentz
SITE:	B-8	SIGNATURE:	[illegible]

ONE WELL VOLUME: 8.0 gallons WELL TD: 17.10 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS MPH	MTP	MSC	MEH	OVM			TURBIDITY	COMMENTS
0945	STATIC	4.82							0.0				
0950	DSB	4.82											
0955	DSE/DBB	4.82							←	0.0		H	YELLOW-BROWN SILTY WATER
1000	DBE	7.30	BAILED	15.0					←	0.0		H	WELL RECHARGE'S DECENT
1005	DOB	4.74	1.0	16.0	4.26	9.70	.148	267	←	0.0		H	PUMP 6" OFF BOTTOM OF WELL
1010	DOB	5.45	1.0	20.0	4.27	9.60	.140	278	←	0.0		H	SURGE PUMP
1015	DOB	5.69	1.0	25.0	4.34	9.90	.159	274	←	0.0		H	SURGED PUMP
1020	DOB	5.55	1.0	30.0	4.23	13.8	.133	336	←	0.0		H	INCREASED FLOW TO 1.5 GPM
1030	DOB	6.20	1.5	45.0	4.57	12.4	.137	334	0.0			H	
1040	DOB	6.13	1.5	60.0	4.69	13.0	.135	336	0.0			H	BEGINNING TO CLEAR BUT STILL SILTY
1045	DOB	6.71	2.0	70.0	4.84	12.7	.133	338	0.0			M	FLOW TO 2 GPM
1055	DOB	6.72	2.0	90.0	4.87	12.9	.134	338	0.0			M	FLOW TO 2.5 GPM
1105	DOB	7.09	2.5	~103.0	4.98	12.2	.131	335	0.0			M	FLOW TO 3.0 GPM SURGE PUMP.
1110	DOB	8.21	3.0	~133.0	4.98	11.4	.130	337	0.0			M	FLOW TO 3.5 GPM
1115	DOB	8.70	3.5	~151.0	4.94	10.7	.132	347	0.0			M	
1120	DOB	8.70	3.5	~169.0	4.96	11.6	.129	349	0.0			N	FLOW TO 4 GPM CLEARED UP.
1125	DOB	9.68	4.0	189.0	4.96	11.5	.128	350	0.0			N	
1130	DOE	9.70	4.0	209.0	4.95	11.6	.128	351	0.0			N	
	FINAL												

FINAL WELL YIELD: 1-4 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 5 FT

DEVELOPMENT ACTIVITY CODES		FIELD MEASUREMENT CODES	TURBIDITY
DBB - Begin Bailing	DBE - End Bailing	MTP - Temperature	Enter Turbidity Meter Reading (Final should be < 5 NTU)
DOB - Begin Overpumping	DOE - End Overpumping	MSC - Specific Conductance	OR
DRB - Begin Rawhiding	DRE - End Rawhiding	MPD - Photoionizer (e.g., HNu)	Enter Qualitative Observations
DCB - Begin Recirculation	DCE - End Recirculation	MFD - Flame Ionizer (e.g., OVA)	H - High: Opaque/Muddy/Silty
DHB - Begin Hydraulic Jetting	DHE - End Hydraulic Jetting	MDO - Dissolved Oxygen	M - Medium: Translucent/Cloudy
DAB - Begin Air Surging	DAE - End Air Surging	MPH - pH	L - Low: Transparent/Some Silt
DSB - Begin Surge Blocking	DSE - End Surge Blocking	MEH - Eh	N - None: Clear/No Visible Silt
DXB - Begin Other	DXE - End Other	MMC - Imhoff Cone	
Specify other method:		MO1 - Other:	
FMT - Field Measurements (select from codes at right)		MO2 - Other:	

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-037
SITE: R-9

WELL NO.: MW07B
DATE: 1-25-95
LOGGER: B. Thomas
SIGNATURE: [signature]

ONE WELL VOLUME: 3 gallons WELL TD: 13.34 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16; 4-inch = 0.65; 6-inch = 1.47; 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS: MPH	MTP	MSC	MEH	MPD			TURBIDITY	COMMENTS
0921	DSB	6.38											
0930	DSE		1.4	3 Gallon								H	13.13 13.34
0930	DBB	8.90			4.15	8.6	.171	293	BLK			+	-6.38
0950	DOB	8.12										-	6.96
10 00	DBB	B	BAIL	5 Gallon	4.10	8.6	.083	278	BLK			-	6.96
[illegible]30	DBB	9.58		[illegible]	4.75	10.4	.161	240	BLK			-	~~x.65~~ 3480
[illegible]	DBB	12.41	BAIL	[illegible]	4.91	11.2	.162	221	BLK			-	4176
1042	DBE											-	45240
[illegible]	DSB	11.54										-	w/ pump DTW - 8.12
[illegible]55	DSE											-	DT top of pump 11.25
[illegible]	DCB	10.[illegible]	BAIL	18 gal	4.84	10.1	.126	270	BLK			+	
1110	DBB	9.50	BAIL	[illegible]	4.77	10.[illegible]	.103	232	BLK			+	
1115	DBB	[illegible]	BAIL	[illegible]	4.78	10.5	.134	232	BLK			H	
1120	DBB	11.68	BAIL	29 gal	4.78	[illegible]	.122	270	BLK			H	
1130	DBB	11.52	BAIL	34 gal	4.83	10.1	.171	204	BLK			H	[illegible]
1140	DBB	12.[illegible]	BAIL	[illegible]	4.89	10.1	[illegible]	22[illegible]	BLK			+	[illegible]
1150	DBB	[illegible]	BAIL	[illegible]	4.8[illegible]	10.3	.171	22[illegible]	BLK			H	[illegible]
12[illegible]	DBE	10.6	BAIL	[illegible]	4.85	10.3	.171	221	BLK			-	[illegible]
		[illegible]											[illegible]
	FINAL	[illegible]											[illegible]

FINAL WELL YIELD: LOW GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

DEVELOPMENT ACTIVITY CODES

- DBB - Begin Bailing
- DOB - Begin Overpumping
- DRB - Begin Rawhiding
- DCB - Begin Recirculation
- DHB - Begin Hydraulic Jetting
- DAB - Begin Air Surging
- DSB - Begin Surge Blocking
- DXB - Begin Other
- DBE - End Bailing
- DOE - End Overpumping
- DRE - End Rawhiding
- DCE - End Recirculation
- DHE - End Hydraulic Jetting
- DAE - End Air Surging
- DSE - End Surge Blocking
- DXE - End Other

Specify other method:

FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

- MTP - Temperature
- MSC - Specific Conductance
- MPD - Photoionizer (e.g., HNu)
- MFD - Flame Ionizer (e.g., OVA)
- MDO - Dissolved Oxygen
- MPH - pH
- MEH - Eh
- MMC - Imhoff Cone
- MO1 - Other:
- MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)

OR

Enter Qualitative Observations

- H - High: Opaque/Muddy/Silty
- M - Medium: Translucent/Cloudy
- L - Low: Transparent/Some Silt
- N - None: Clear/No Visible Silt

G061291T

GEOLIS Well Development Form

COMPANY: RFW
CLIENT: USACE
PROJECT: 03886-076-03
SITE: B-10
WELL NO.: MW10B
DATE: 1-24-95
LOGGER: K.VALLETT
SIGNATURE: K. V[illegible]

ONE WELL VOLUME: ~8.0 gallons WELL TD: 16.45 ft TOC

Well Volume (gallons/foot): 2-inch = 0.16, 4-inch = 0.65, 6-inch = 1.47, 8-inch = 2.61

TIME	ACTIVITY CODE	DEPTH TO WATER (ft)	PURGE RATE (gpm)	PURGE VOLUME (gal)	FIELD MEASUREMENTS							TURBIDITY	COMMENTS
					MPH	MTP	MSC	MEH	OVM				
1215	STATIC	4.36											
1215	DSB	4.36											
1225	DSE/DBB	4.36											
1230	DBE	15.85	Bailed	12.0		8.7			0.0			H	Dk. Gray Silty water
1240	DOB	5.55	0.5	13.0	5.01	9.9	.128	351	0.0			H	
1245	DOB	6.49	0.5	14.5	4.94	8.1	.130	350	0.0			H	Cleared up some.
1255	DOB	6.50	0.5	17.0	5.00	10.0	.150	314	0.0			H	Silty again Surged pump
1300	DOB	6.64	0.5	~19.5	5.01	10.4	.155	307	0.0			H	
1305	DOB	6.87	0.5	~22.0	5.12	11.9	.151	295	0.0			H	Surged pump.
1315	DOB	7.62	0.5	~27.0	5.21	10.6	.158	286	0.0			H	
1320	DOB	8.22	0.5	~29.5	5.32	11.0	.161	284	0.0			H	
1330	DOB	9.14	0.5	~35.0	5.29	11.5	.159	279	0.0			H	Surged pump. Cleared a little.
1340	DOB	9.21	0.5	~40.0	5.26	12.8	.150	278	0.0			M	
1350	DOB	9.40	0.5	~45.0	5.17	12.9	.150	275	0.0			L	Clear but slightly cloudy
1355	DOB	9.39	0.5	~47.5	5.46	13.0	.152	257	0.0			L	
1400	DOB	9.39	0.5	~50.0	5.41	13.0	.152	263	0.0			L	
1405	DOB	9.34	0.5	~52.5	5.57	11.9	.155	250	0.0			N	clear
1410	DOE	9.33	0.5	~55.0	5.59	12.4	.153	255	0.0			N	clear
	FINAL												

FINAL WELL YIELD: 0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 5 FT

DEVELOPMENT ACTIVITY CODES

DBB - Begin Bailing
DOB - Begin Overpumping
DRB - Begin Rawhiding
DCB - Begin Recirculation
DHB - Begin Hydraulic Jetting
DAB - Begin Air Surging
DSB - Begin Surge Blocking
DXB - Begin Other
DBE - End Bailing
DOE - End Overpumping
DRE - End Rawhiding
DCE - End Recirculation
DHE - End Hydraulic Jetting
DAE - End Air Surging
DSE - End Surge Blocking
DXE - End Other
Specify other method:
FMT - Field Measurements (select from codes at right)

FIELD MEASUREMENT CODES

MTP - Temperature
MSC - Specific Conductance
MPD - Photoionizer (e.g., HNu)
MFD - Flame Ionizer (e.g., OVA)
MDO - Dissolved Oxygen
MPH - pH
MEH - Eh
MMC - Imhoff Cone
MO1 - Other:
MO2 - Other:

TURBIDITY

Enter Turbidity Meter Reading (Final should be < 5 NTU)
OR
Enter Qualitative Observations
H - High: Opaque/Muddy/Silty
M - Medium: Translucent/Cloudy
L - Low: Transparent/Some Silt
N - None: Clear/No Visible Silt

C-1
Groundwater Elevation Summary
Main Post
March, 1995

Well ID	Total Dept (ft)	Depth to Water (TOIC)	(TOIC) Elevation (ft, MSL	Water Level Elevation (ft, MSL)
Site- M2				
MW-01	24.60	7.54	21.04	13.50
MW-02	19.64	10.43	15.50	5.07
MW-03	17.28	8.15	12.63	4.48
Site- M3				
MW-04	25.43	12.06	19.02	6.96
MW-05	18.50	8.40	13.30	4.90
MW-06	17.50	8.23	12.42	4.19
Site- M4				
MW-07	17.97	7.81	16.75	8.94
MW-08	20.30	6.84	10.68	3.84
MW-09	24.63	5.93	9.69	3.76
Site- M5				
MW-10	17.62	4.15	6.91	2.76
MW-11	17.12	7.04	11.70	4.66
Site- M8				
MW-12	17.67	9.26	15.20	5.94
MW-13	17.20	5.68	7.80	2.12
MW-14	17.23	7.78	14.91	7.13
MW-15	17.01	4.52	7.01	2.49
Site- M12				
MW-16	17.14	3.64	8.35	4.71
MW-17	17.21	4.42	7.87	3.45
MW-18	17.10	3.59	6.62	3.03
Site- M14				
MW-19	17.96	7.95	9.68	1.73
MW-20	17.25	6.78	9.29	2.51
MW-21	19.68	6.68	9.57	2.89
Site- M16				
MW-22	17.02	2.75	7.25	4.50
Site- M18				
MW-24	17.25	3.52	8.16	4.64
MW-25	17.06	4.62	8.28	3.66
Background Locations				
MW-01B	16.35	4.13	24.59	20.46
MW-02B	22.30	12.49	20.23	7.74
MW-03B	28.87	11.88	21.09	9.21
MW-04B	17.45	6.57	12.08	5.51
MW-05B	17.62	5.11	15.40	10.29

(TOIC) - Top of inner casing
MSL - Mean Sea Level

C-2
Groundwater Elevation Summary
Charles Wood
March, 1995

Well ID	Total Dept (ft)	Depth to Water (TOIC)	(TOIC) Elevation (ft, MSL	Water Level Elevation (ft, MSL)
Site- CW-1				
MW-26	17.18	9.08	62.46	53.38
MW-27	17.19	9.11	62.56	53.45
MW-28	17.19	9.60	62.89	53.29
MW-29	17.17	9.32	62.44	53.12
Site- CW-2				
MW-30	18.22	6.90	51.71	44.81
MW-31	17.20	6.75	51.58	44.83
MW-32	17.17	7.04	51.38	44.34
MW-33	16.36	8.64	51.09	42.45
Site- CW-6				
MW-34	17.19	4.05	33.76	29.71
Site- CW-9				
MW-35	17.17	4.37	31.43	27.06
MW-36	16.96	5.97	33.21	27.24
Background Locations				
MW-06B	16.94	4.67	37.37	32.70
MW-07B	17.21	9.21	66.31	57.10
MW-08B	17.37	4.79	48.90	44.11
MW-09B	14.18	6.63	45.31	38.68
MW-10B	16.75	4.60	53.14	48.54

(TOIC) - Top of Inner Casing
MSL - Mean Sea Level

APPENDIX D

SAMPLING RESULTS

ORGANIC GLOSSARY OF DATA QUALIFIERS AND ABBREVIATIONS

Organic Data Qualifiers

A	TIC is a suspected aldol-condensation product
B	Compound was found in the blank and the sample
C	Pesticide identification was confirmed by GC/MS
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis
E	Concentration exceeds the instrument calibration range and was subsequently diluted
I	Appears on the "results spreadsheet" and "quant reports" to indicate an interference, or it appears on pesticide Form 8 to indicate an instrument blank without a surrogate
J	Result is an estimated value below the reporting limit or a tenatively identified compound (TIC)
NQ	Result was qualitatively confirmed, but not quantified
P	The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported
SP	Blank Spike, Blank Spike Duplicate, Matrix Spike or Matrix Spike Duplicate
T	Compound was found in the TCLP extraction blank and the sample
U	Compound was not detected at or above the reporting limit
X	Other specific flags may be required to properly qualify the result
*	QC result was outside the laboratory control limits

Abbreviations

BS	Blank Spike analysis was conducted on reagent grade water or a matrix free from the analyte(s) of interest
BSD	Blank Spike Duplicate
BRL	Below Reporting Limit
Batch	Identifies a specific extraction, digestion or preparation set (equivalent to Prep Batch)
CD	Calculation Factor used by the laboratory's Information Management System (LIMS)
Contract	Contract Laboratory Identification Code
DF	Dilution Factor
DL	Appears in the sample ID to indicate a secondary dilution
LCS/LC	Denotes Laboratory Control Standard
LAB ID	The full 12 character WESTON Laboratory Identification Number (equivalent to RFW#)
MB	Method Blank or (PB) preparation blank
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
NR	Not Required
NS	Not Spiked
RE	Appears in the sample ID to indicate a Re-analysis
REP	Replicate analysis
Reprep	Sample was reprepared and then reanalyzed
RFW#	The full 12 character WESTON Laboratory Identification Number (equivalent to LAB ID)
RFW Lot	The first 8 characters of the RFW#
RPD	Relative Percent Difference of duplicate analyses
RRF	Relative Response Factor
RT	Retention Time/Retention Time Window
WO#	Work Order No. Weston Code used to define a specific clinet, job phase and task

NOTES:

- One or a combination of these data qualifiers and abbreviations may appear in the analytical report.
- Soil, sediment and sludge results are reported on a dry weight basis except when analyzed for landfill disposal or incineration parameters. All other results on a solid matrix are reported on an "as received" basis unless noted differently.
- Reporting limits are adjusted for preparation sample size, sample dilutions, and sample moisture content if analyzed on a dry weight basis.

Revised 12/09/94

INORGANIC GLOSSARY OF DATA QUALIFIERS AND ABBREVIATIONS

Inorganic Data Qualifiers

B	Result is less than the CRDL, but greater than or equal to the instrument detection limit
E	Result is estimated due to interference
M	Analyte concentrations are greater than the CRDL, and the RSD of duplicate injections was greater than 20%
N	Matrix Spike recovery was outside the control limits
S	Result was determined by the Method of Standard Additions (MSA)
T	Analyte was found in the TCLP extraction blank and sample
U	Analyte was not detected at or above the reporting limit
W	Post-digestion spike was outside 85-115% control limits, sample absorbance is less than 50% of spike absorbance
+	MSA correlation coefficient is less than 0.995
*	Duplicate analysis was outside the control limits

Abbreviations

A	Analyzed by flame A.A. direct aspiration
Batch	Identifies a specific extraction, digestion or preparation set (equivalent to Prep Batch)
BS	Blank Spike analysis was conducted on reagent grade water or a matrix free from the analyte(s) of interest
BSD	Blank Spike Duplicate
BRL	Below Reporting Limit
C	Cyanide analyte flag on CLP forms
CCV	Continuing Calibration Verification
CCB	Continuing Calibration Blank
CD	Calculation Factor used by the laboratory's Information Management System (LIMS)
CV	Analyzed by the cold vapor generation method for Mercury
Contract	Contract Laboratory Identification Code
DF	Dilution Factor
F	Analyzed by graphite furnace atomic absorption spectroscopy
ICV	Initial Calibration Verification
ICB	Initial Calibration Blank
LCS/LC	Denotes Laboratory Control Standard
LAB ID	The full 12 character WESTON Laboratory Identification Number (equivalent to RFW#)
MB	Method Blank or (PB) for Preparation Blank
MS	Matrix Spike
MSD	Matrix Spike Duplicate
NA	Not Applicable
NC	Non-calculable precision due to insufficient concentration of analyte present in the sample
NR	Not Required
NS	Not Spiked
P	Analyzed by inductively coupled argon plasma
REP	Replicate analysis
RFW#	The full 12 character WESTON Laboratory Idenficiation number (equivalent to LAB ID)
RFW Lot	The first 8 characters of the RFW#
RPD	Relative Percent Difference of duplicate analyses
X	Result obtained indirectly through calculation based on results from other analyses
WO#	Work Order No. Weston Code used to define a specific clinet, job phase and task

NOTES:

- One or a combination of these data qualifiers and abbreviations may appear in the analytical report.
- Soil, sediment and sludge results are reported on a dry weight basis except when analyzed for landfill disposal or incineration parameters. All other results on a solid matrix are reported on an "as received" basis unless noted differently.
- Reporting limits are adjusted for preparation sample size, sample dilutions, and sample moisture content if analyzed on a dry weight basis.

Revised 12/09/94

MAIN POST

MAIN POST
SEDIMENT VOLATILES

Geographical Location				AOC3		AOC3		AOC3		AOC3	
Sample				MP08-SD01-A01		MP08-SD01-C01		MP08-SD01-D01		MP08-SD01-E01	
Sample Type						Duplicate		Trip Blank		Field Rinsate Blank	
Batch#				9412G921		9412G921		9412G921		9412G921	
Prep#				94GVT028		94GVT028		94GVE348		94GVE348	
RFW#				013		014		016		017	
Sample Depth				0-6"		0-6"		0-6"		0-6"	
Dilution Factor				1.00		1.00		1.00		1.00	
Matrix				soil		soil		water		water	
Units	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg		mg/l		mg/l	
Sampling Date				12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date				12/6/94		12/6/94		12/9/94		12/9/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane			0.0073	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Bromomethane			0.0067	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Vinyl Chloride			0.0079	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Chloroethane			0.0091	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Methylene Chloride			0.0027	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Acetone			0.0069	0.1 B	0.018	0.14 B	0.017	0.01 U	0.01	0.01 U	0.01
Carbon Disulfide			0.0044	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
1,1-Dichloroethene			0.0049	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
1,1-Dichloroethane			0.003	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
1,2-Dichloroethene (total)			0.0044	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Chloroform			0.0029	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
1,2-Dichloroethane			0.0024	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
2-Butanone			0.0041	0.02	0.018	0.014 J	0.017	0.01 U	0.01	0.01 U	0.01
1,1,1-Trichloroethane			0.0017	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Carbon Tetrachloride			0.0015	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Bromodichloromethane			0.002	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
1,2-Dichloropropane			0.0017	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
cis-1,3-Dichloropropene			0.003	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Trichloroethene			0.002	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Dibromochloromethane			0.0024	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
1,1,2-Trichloroethane			0.0043	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Benzene			0.0033	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
trans-1,3-Dichloropropene			0.0024	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Bromoform			0.0031	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
4-Methyl-2-pentanone			0.0055	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
2-Hexanone			0.0039	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Tetrachloroethene			0.004	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
1,1,2,2-Tetrachloroethane			0.0042	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Toluene			0.0027	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Chlorobenzene			0.0027	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Ethylbenzene			0.0031	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Styrene			0.0038	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Xylene (total)			0.0038	0.018 U	0.018	0.017 U	0.017	0.01 U	0.01	0.01 U	0.01
Method:TCL Volatiles											

MAIN POST
SEDIMENT VOLATILES (OFFSITE DATA)

Geographical Location				Background SS01		Background SS01		Background SS02	
Sample				SS01-SD02-A01		SS01-SD01-A01DL		SS01-SD02-A01	
Batch#				9412G922		9412G922		9412G922	
Prep#				94GVT028 & 29		94GVT029		94GVT028 & 29	
RFW#				005		005		005	
Sample Depth				0-6"		0-6"		0-6"	
Dilution Factor				1.00		1.00		1.00	
Matrix				soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date				12/1/94		12/1/94		12/1/94	
Analysis Date				12/6/94		12/17/94		12/6/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane			0.0073	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Bromomethane			0.0067	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Vinyl Chloride			0.0079	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Chloroethane			0.0091	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Methylene Chloride			0.0027	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Acetone			0.0069	0.47 B	.074 *	0.17 B	0.035	0.47 B	.074 *
Carbon Disulfide			0.0044	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
1,1-Dichloroethene			0.0049	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
1,1-Dichloroethane			0.003	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
1,2-Dichloroethene (total)			0.0044	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Chloroform			0.0029	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
1,2-Dichloroethane			0.0024	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
2-Butanone			0.0041	0.1	0.015	0.041	0.035	0.1	0.015
1,1,1-Trichloroethane			0.0017	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Carbon Tetrachloride			0.0015	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Bromodichloromethane			0.002	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
1,2-Dichloropropane			0.0017	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
cis-1,3-Dichloropropene			0.003	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Trichloroethene			0.002	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Dibromochloromethane			0.0024	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
1,1,2-Trichloroethane			0.0043	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Benzene			0.0033	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
trans-1,3-Dichloropropene			0.0024	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Bromoform			0.0031	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
4-Methyl-2-pentanone			0.0055	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
2-Hexanone			0.0039	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Tetrachloroethene			0.004	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
1,1,2,2-Tetrachloroethane			0.0042	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Toluene			0.0027	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Chlorobenzene			0.0027	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Ethylbenzene			0.0031	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Styrene			0.0038	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Xylene (total)			0.0038	0.015 U	0.015	0.035 U	0.035	0.015 U	0.015
Total Est. Conc. of TIC.				.05 *				.05 *	
Dilution Factor				* = 5.00				* = 5.00	
Method:TCL Volatiles									

MAIN POST
SEDIMENT SEMIVOLATILES

Geographical Location				AOC3		AOC3		AOC3	
Sample				MP08-SD01-A01		MP08-SD01-A01RE		MP08-SD01-C01	
Sample Type								Duplicate	
Batch#				9412G921		9412G921		941G9213	
Prep#				94GBO809		94GBO809		94GBO809	
RFW#				013		013RE		014	
Sample Depth				0-6"		0-6"		0-6"	
Dilution Factor				1.00		1.00		1.00	
Matrix				soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date				12/1/94		12/1/94		12/1/94	
Analysis Date				12/22/94		12/22/94		12/22/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol			0.234	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
bis(2-Chloroethyl) ether			0.32	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2-Chlorophenol			0.241	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
1,3-Dichlorobenzene			0.175	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
1,4-Dichlorobenzene			0.158	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
1,2-Dichlorobenzene			0.188	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2-Methylphenol			0.221	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2,2'-oxybis(1-Chloropropane)			0.231	0.58 U	0.58	0.57 U	0.57	0.061 J	0.54
4-Methylphenol			0.426	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
N-Nitroso-di-n-propylamine			0.264	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Hexachloroethane			0.175	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Nitrobenzene			0.244	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Isophorone			0.129	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2-Nitrophenol			0.231	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2,4-Dimethylphenol			0.158	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
bis(2-Chloroethoxy) methane			0.201	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2,4-Dichlorophenol			0.145	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
1,2,4-Trichlorobenzene			0.317	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Naphthalene			0.277	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
4-Chloroaniline			0.096	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Hexachlorobutadiene			0.152	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
4-Chloro-3-methylphenol			0.102	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2-Methylnaphthalene			0.287	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Hexachlorocyclopentadiene			0.119	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2,4,6-Trichlorophenol			0.185	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2,4,5-Trichlorophenol			0.155	1.5 U	1.5	1.4 U	1.4	1.4 U	1.4
2-Chloronaphthalene			0.271	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2-Nitroaniline			0.201	1.5 U	1.5	1.4 U	1.4	1.4 U	1.4
Dimethylphthalate			0.145	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Acenaphthylene			0.198	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2,6-Dinitrotoluene			0.172	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
3-Nitroaniline			0.172	1.5 U	1.5	1.4 U	1.4	1.4 U	1.4
Acenaphthene			0.221	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2,4-Dinitrophenol			0.152	1.5 U	1.5	1.4 U	1.4	1.4 U	1.4
4-Nitrophenol			0.248	1.5 U	1.5	1.4 U	1.4	1.4 U	1.4

MAIN POST
SEDIMENT SEMIVOLATILES

Geographical Location				AOC3		AOC3		AOC3	
Sample				MP08-SD01-A01		MP08-SD01-A01RE		MP08-SD01-C01	
Sample Type								Duplicate	
Batch#				9412G921		9412G921		941G9213	
Prep#				94GBO809		94GBO809		94GBO809	
RFW#				013		013RE		014	
Sample Depth				0-6"		0-6"		0-6"	
Dilution Factor				1.00		1.00		1.00	
Matrix				soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date				12/1/94		12/1/94		12/1/94	
Analysis Date				12/22/94		12/22/94		12/22/94	
Analysis	Standard	Standard	MDL	Analytical	CRQL	Analytical	CRQL	Analytical	CRQL
	fresh water	salt water		Result		Result		Result	
Dibenzofuran			0.215	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
2,4-Dinitrotoluene			0.191	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Diethylphthalate			0.178	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
4-Chlorophenyl-phenylether			0.231	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Fluorene			0.208	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
4-Nitroaniline			0.211	1.5 U	1.5	1.4 U	1.4	1.4 U	1.4
4,6-Dinitro-2-methylphenol			0.175	1.5 U	1.5	1.4 U	1.4	1.4 U	1.4
N-Nitrosodiphenylamine (1)			0.139	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
4-Bromophenyl-phenylether			0.175	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Hexachlorobenzene			0.182	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Pentachlorophenol			0.132	1.5 U	1.5	1.4 U	1.4	1.4 U	1.4
Phenanthrene	0.225	0.74	0.165	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Anthracene			0.152	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Carbazole			0.145	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Di-n-butylphthalate			0.215	0.098 J	0.58	0.68 J	0.57	0.1 J	0.54
Fluoranthene	0.6	0.6	0.198	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Pyrene	0.35	0.665	0.178	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Butylbenzylphthalate			0.175	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
3,3'-Dichlorobenzidine			0.092	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Benzo(a)anthracene	0.23	0.261	0.162	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Chrysene	0.4	0.984	0.145	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
bis(2-Ethylhexy)phthalate			0.32	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Di-n-octyl phthalate			0.185	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Benzo(b)fluoranthene			0.188	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Benzo(k)fluoranthene			0.205	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Benzo(a)pyrene	0.4	0.43	0.162	0.58 U	0.58	0.57 U	0.57	0.079 J	0.54
Indeno(1,2,3-cd)pyrene			0.234	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Dibenzo(a,h)anthracene			0.198	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Benzo(g,h,i)perylene			0.224	0.58 U	0.58	0.57 U	0.57	0.54 U	0.54
Petroleum hydrocarbons									
Total Est. Conc. of TIC				21.4 J		23.5 J		16.2 J	
Method:TCL Semivolatiles									

MAIN POST
SEDIMENT SEMIVOLATILES (OFFSITE DATA)

Geographical Location				Background SS01		Background SS02	
Sample				SS01-SD01-A01		SS01-SD02-A01	
Batch#				9412G922		9412G922	
Prep#				94GBO809		94GBO809	
RFW#				006		005	
Sample Depth				0-6"		0-6"	
Dilution Factor				1.00		1.00	
Matrix				soil		soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	
Sampling Date				12/2/94		12/2/94	
Analysis Date				12/22/94		12/22/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol			0.234	1.1 U	1.1	0.48 U	0.48
bis(2-Chloroethyl) ether			0.32	1.1 U	1.1	0.48 U	0.48
2-Chlorophenol			0.241	1.1 U	1.1	0.48 U	0.48
1,3-Dichlorobenzene			0.175	1.1 U	1.1	0.48 U	0.48
1,4-Dichlorobenzene			0.158	1.1 U	1.1	0.48 U	0.48
1,2-Dichlorobenzene			0.188	1.1 U	1.1	0.48 U	0.48
2-Methylphenol			0.221	1.1 U	1.1	0.48 U	0.48
2,2'-oxybis(1-Chloropropane)			0.231	1.1 U	1.1	0.48 U	0.48
4-Methylphenol			0.426	1.1 U	1.1	0.48 U	0.48
N-Nitroso-di-n-propylamine			0.264	1.1 U	1.1	0.48 U	0.48
Hexachloroethane			0.175	1.1 U	1.1	0.48 U	0.48
Nitrobenzene			0.244	1.1 U	1.1	0.48 U	0.48
Isophorone			0.129	1.1 U	1.1	0.48 U	0.48
2-Nitrophenol			0.231	1.1 U	1.1	0.48 U	0.48
2,4-Dimethylphenol			0.158	1.1 U	1.1	0.48 U	0.48
bis(2-Chloroethoxy) methane			0.201	1.1 U	1.1	0.48 U	0.48
2,4-Dichlorophenol			0.145	1.1 U	1.1	0.48 U	0.48
1,2,4-Trichlorobenzene			0.317	1.1 U	1.1	0.48 U	0.48
Naphthalene			0.277	1.1 U	1.1	0.48 U	0.48
4-Chloroaniline			0.096	1.1 U	1.1	0.48 U	0.48
Hexachlorobutadiene			0.152	1.1 U	1.1	0.48 U	0.48
4-Chloro-3-methylphenol			0.102	1.1 U	1.1	0.48 U	0.48
2-Methylnaphthalene			0.287	1.1 U	1.1	0.48 U	0.48
Hexachlorocyclopentadiene			0.119	1.1 U	1.1	0.48 U	0.48
2,4,6-Trichlorophenol			0.185	1.1 U	1.1	0.48 U	0.48
2,4,5-Trichlorophenol			0.155	2.9 U	2.9	1.2 U	1.2
2-Chloronaphthalene			0.271	1.1 U	1.1	0.48 U	0.48
2-Nitroaniline			0.201	2.9 U	2.9	1.2 U	1.2
Dimethylphthalate			0.145	1.1 U	1.1	0.48 U	0.48
Acenaphthylene			0.198	1.1 U	1.1	0.48 U	0.48
2,6-Dinitrotoluene			0.172	1.1 U	1.1	0.48 U	0.48
3-Nitroaniline			0.172	2.9 U	2.9	1.2 U	1.2
Acenaphthene			0.221	1.1 U	1.1	0.48 U	0.48
2,4-Dinitrophenol			0.152	2.9 U	2.9	1.2 U	1.2
4-Nitrophenol			0.248	2.9 U	2.9	1.2 U	1.2

MAIN POST
SEDIMENT SEMIVOLATILES (OFFSITE DATA)

Geographical Location				Background SS01		Background SS02	
Sample				SS01-SD01-A01		SS01-SD02-A01	
Batch#				9412G922		9412G922	
Prep#				94GBO809		94GBO809	
RFW#				006		005	
Sample Depth				0-6"		0-6"	
Dilution Factor				1.00		1.00	
Matrix				soil		soil	
Units	mg/kg	mg/kg	mg/kg	mg/kg		mg/kg	
Sampling Date				12/2/94		12/2/94	
Analysis Date				12/22/94		12/22/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran			0.215	1.1 U	1.1	0.48 U	0.48
2,4-Dinitrotoluene			0.191	1.1 U	1.1	0.48 U	0.48
Diethylphthalate			0.178	1.1 U	1.1	0.48 U	0.48
4-Chlorophenyl-phenylether			0.231	1.1 U	1.1	0.48 U	0.48
Fluorene			0.208	1.1 U	1.1	0.48 U	0.48
4-Nitroaniline			0.211	2.9 U	2.9	1.2 U	1.2
4,6-Dinitro-2-methylphenol			0.175	2.9 U	2.9	1.2 U	1.2
N-Nitrosodiphenylamine (1)			0.139	1.1 U	1.1	0.48 U	0.48
4-Bromophenyl-phenylether			0.175	1.1 U	1.1	0.48 U	0.48
Hexachlorobenzene			0.182	1.1 U	1.1	0.48 U	0.48
Pentachlorophenol			0.132	2.9 U	2.9	1.2 U	1.2
Phenanthrene	0.225	0.74	0.165	1.1 U	1.1	0.39 J	0.48
Anthracene			0.152	1.1 U	1.1	0.061 J	0.48
Carbazole			0.145	1.1 U	1.1	0.051 J	0.48
Di-n-butylphthalate			0.215	0.26 JB	1.1	0.086 JB	0.48
Fluoranthene	0.6	0.6	0.198	0.44 J	1.1	1.5	0.48
Pyrene	0.35	0.665	0.178	0.66 J	1.1	2	0.48
Butylbenzylphthalate			0.175	1.1 U	1.1	0.48 U	0.48
3,3'-Dichlorobenzidine			0.092	1.1 U	1.1	0.48 U	0.48
Benzo(a)anthracene	0.23	0.261	0.162	0.34 J	1.1	1.3	0.48
Chrysene	0.4	0.984	0.145	0.37 J	1.1	0.13 J	0.48
bis(2-Ethylhexy)phthalate			0.32	0.43 J	1.1	0.23 J	0.48
Di-n-octyl phthalate			0.185	1.1 U	1.1	0.48 U	0.48
Benzo(b)fluoranthene			0.188	0.59 J	1.1	1.8	0.48
Benzo(k)fluoranthene			0.205	0.21 J	1.1	0.58	0.48
Benzo(a)pyrene	0.4	0.43	0.162	0.27 J	1.1	1.2	0.48
Indeno(1,2,3-cd)pyrene			0.234	0.19 J	1.1	0.7	0.48
Dibenzo(a,h)anthracene			0.198	1.1 U	1.1	0.12 J	0.48
Benzo(g,h,i)perylene			0.224	0.19 J	1.1	0.67	0.48
Petroleum hydrocarbons							
Total Organic Carbon				5.7	0.10	3.7	0.11
Total Est. Conc. of TIC				71.5		15.9	
Method:TCL Semivolatiles							

MAIN POST
SEDIMENT INORGANICS

Geographical Location			Pre-1941 STP		AOC3		AOC3	
Sample			MPST-SD01-A01		MP08-SD01-A01		MP08-SD01-C01	
Sample Type							Duplicate	
Batch#			9412G921		9412G921		9412G921	
Prep#			94GTS473		94GTS473		94GTS473	
RFW#			015		013		014	
Sample Depth			0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00	
Matrix			soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date			12/1/94		12/1/94		12/1/94	
Analysis Date			12/19/94		12/19/94		12/19/94	
Analysis	Standard fresh water	Standard salt water	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids			50.4	0.10	56.5	0.10	60.1	0.10
Silver	1	1	5.2	0.97	0.78 U	0.78	0.96 U	0.96
Aluminum			9240	8.3	8830	6.7	8170	8.2
Arsenic	33	8.2	24.2	2.5 *	13.2	1.1 *	14.3	0.87 *
Barium			27.6	0.66	13.0	0.53	12.6	0.65
Beryllium			1.3	0.47	1.4	0.38	1.3	0.46
Calcium			1010	3.8	1290	3.0	1240	3.7
Cadmium	5	1.2	4.2	1.1	0.86 U	0.86	1.0 U	1.0
Cobalt			13.5	0.88	5.5	0.71	4.7	0.86
Chromium	80	81	93.5	2.0	74.0	1.6	66.3	2.0
Copper	70	34	35.2	0.75	3.1	0.61	3.2	0.74
Iron			49200	1.5	40300	1.2	37600	1.4
Mercury	0.15	0.15	0.57	0.20	0.13 U	0.13	0.17 U	0.17
Potassium			6760	256	6640	207	5550	253
Magnesium			3390	11.9	3670	9.7	3070	11.8
Manganese			39.5	0.62	51.7	0.51	46.6	0.62
Sodium			2330	4.8	3090	3.9	2160	4.7
Nickel	30	20.9	26.5	4.0	14.0	3.2	11.8	3.9
Lead	35	46.7	59.0	9.9 **	6.5	2.1 **	5.7	1.7 **
Antimony			6.7 U	6.7	5.4 U	5.4	6.6 U	6.6
Selenium			0.88	0.28	0.42	0.30	0.58	0.25
Thallium			0.34 U	0.34	0.37 U	0.37	0.30 U	0.30
Vanadium			49.5	0.91	39.3	0.73	38.2	0.89
Zinc	120	150	386	0.88	68.8	0.71	57.8	0.86
Cyanide			0.96	0.59	0.81 U	0.81	0.71 U	0.71
Dilution Factor			* = 5.0, ** = 20.0		* = 2.00, ** = 4.00		* = 2.00, ** = 4.00	
Method:TAL Metals, Cyanide								

MAIN POST
SEDIMENT INORGANICS (OFFSITE DATA)

Geographical Location			Background SS01		Background SS02	
Sample			SS01-SD01-A01		SS01-SD02-A01	
Batch#			9412G922		9412G922	
Prep#			94GTS473		94GTS473	
RFW#			006		005	
Sample Depth			0-6"		0-6"	
Dilution Factor			1.00		1.00	
Matrix			soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg	
Sampling Date			12/1/94		12/1/94	
Analysis Date			12/9/94		12/9/94	
Analysis	Standard	Standard	Analytical	Reporting	Analytical	Reporting
	fresh water	salt water	Result	Limit	Result	Limit
% Solids			28.7	0.10	68.1	0.10
Silver	1	1	2.1 U	2.1	0.80 U	0.80
Aluminum			9060	18.1	8200	6.9
Arsenic	33	8.2	13.6	2.0 *	14.5	1.8 *
Barium			87.6	1.4	76.6	0.54
Beryllium			3.2	1.0	1.4	0.39
Calcium			2060	8.1	3180	3.1
Cadmium	5	1.2	2.3 U	2.3	0.88 U	0.88
Cobalt			119	1.9	5.7	0.72
Chromium	80	81	88.1	4.3	85.8	1.6
Copper	70	34	48.4	1.6	5.5	0.62
Iron			26500	3.2	61900	1.2
Mercury	0.15	0.15	1.7	0.32	0.14 U	0.14
Potassium			3410	555	10200	211
Magnesium			1470	25.8	3280	9.8
Manganese			67.4	1.4	70.2	0.52
Sodium			189	10.4	77.5	4.0
Nickel	30	20.9	131	8.7	11.8	3.3
Lead	35	46.7	64.1	5.0 **	21.2	3.6 **
Antimony			14.5 U	14.5	5.5 U	5.5
Selenium			1.7	0.56	0.21	0.20
Thallium			0.68 U	0.68	0.25 U	0.25
Vanadium			49.1	2.0	47.0	0.75
Zinc	120	150	162	1.9	117	0.72
Cyanide			3.1	1.7	0.49 U	0.49
Dilution Factor			* = 2.00, ** = 5.00		* = 5.00, ** = 10.0	
Method:TAL Metals, Cyanide						

MAIN POST
SEDIMENT PESTICIDES/PCBS

Geographical Location			AOC3		AOC3		AOC3	
Sample			MP08-SD01-A01		MP08-SD01-A01RE		MP08-SD01-C01	
Sample Type							Duplicate	
Batch#			9412G921		9412G921		9412G921	
Prep#			94GP1049		95GP0044		94GP1049	
RFW#			013		013RE		014	
Sample Depth			0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00	
Matrix			soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date			12/1/94		12/1/94		12/1/94	
Analysis Date			1/11/95		1/17/95		1/11/95	
Analysis	Standard	Standard	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting
	fresh water	salt water	Result	Limit	Result	Limit	Result	Limit
alpha-BHC			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
beta-BHC			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
delta-BHC			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
gamma-BHC (Lindane)			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
Heptachlor			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
Aldrin			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
Heptachlor epoxide			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
Endosulfan I			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
Dieldrin			0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
4,4'-DDE	0.002	0.0022	0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
Endrin			0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
Endosulfan II			0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
4,4'-DDD	0.002		0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
Endosulfan sulfate			0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
4,4'-DDT	0.00183	0.00158	0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
Methoxychlor			0.029 U	0.029	0.029 U	0.029	0.028 U	0.028
Endrin ketone			0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
Endrin aldehyde			0.0059 U	0.0059	0.0058 U	0.0058	0.0055 U	0.0055
alpha-Chlordane			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
gamma-Chlordane			0.0029 U	0.0029	0.0029 U	0.0029	0.0028 U	0.0028
Toxaphene			0.29 U	0.29	0.29 U	0.29	0.28 U	0.28
Aroclor-1016			0.059 U	0.059	0.058 U	0.058	0.055 U	0.055
Aroclor-1221			0.12 U	0.12	0.12 U	0.12	0.11 U	0.11
Aroclor-1232			0.059 U	0.059	0.058 U	0.058	0.055 U	0.055
Aroclor-1242			0.059 U	0.059	0.058 U	0.058	0.055 U	0.055
Aroclor-1248			0.059 U	0.059	0.058 U	0.058	0.055 U	0.055
Aroclor-1254			0.059 U	0.059	0.058 U	0.058	0.055 U	0.055
Aroclor-1260			0.059 U	0.059	0.058 U	0.058	0.055 U	0.055
Method:TCL Pesticides/PCBs								

MAIN POST
SEDIMENT PESTICIDES/PCBS (OFFSITE DATA)

Geographical Location			Background SS01		Background SS02	
Sample			SS01-SD01-A01		SS01-SD02-A01	
Batch#			9412G922		9412G922	
Prep#			94GP1049		94GP1049	
RFW#			006		005	
Sample Depth			0-6"		0-6"	
Dilution Factor			1.00		1.00	
Matrix			soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg	
Sampling Date			12/2/94		12/2/94	
Analysis Date			1/12/95		1/12/95	
Analysis	Standard fresh water	Standard salt water	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC			0.0057 U	0.0057	0.0024 U	0.0024
beta-BHC			0.0057 U	0.0057	0.0024 U	0.0024
delta-BHC			0.0057 U	0.0057	0.0024 U	0.0024
gamma-BHC (Lindane)			0.0057 U	0.0057	0.0024 U	0.0024
Heptachlor			0.0057 U	0.0057	0.0024 U	0.0024
Aldrin			0.0057 U	0.0057	0.0024 U	0.0024
Heptachlor epoxide			0.0057 U	0.0057	0.014 P	0.0024
Endosulfan I			0.0057 U	0.0057	0.0024 J	0.0024
Dieldrin			0.011 U	0.011	0.0049 U	0.0049
4,4'-DDE	0.002	0.0022	0.0092 J	0.011	0.002 JP	0.0049
Endrin			0.011 U	0.011	0.0049 U	0.0049
Endosulfan II			0.011 U	0.011	0.0049 U	0.0049
4,4'-DDD	0.002		0.013	0.011	0.0049 U	0.0049
Endosulfan sulfate			0.011 U	0.011	0.0049 U	0.0049
4,4'-DDT	0.00183	0.00158	0.0057 JP	0.011	0.0024 JP	0.0049
Methoxychlor			0.057 U	0.057	0.024 U	0.024
Endrin ketone			0.011 U	0.011	0.0049 U	0.0049
Endrin aldehyde			0.011 U	0.011	0.0049 U	0.0049
alpha-Chlordane			0.011 P	0.0057	0.0024 P	0.0024
gamma-Chlordane			0.0092 P	0.0057	0.0015 JP	0.0024
Toxaphene			0.57 U	0.57	0.24 U	0.24
Aroclor-1016			0.11 U	0.11	0.049 U	0.049
Aroclor-1221			0.23 U	0.23	0.098 U	0.098
Aroclor-1232			0.11 U	0.11	0.049 U	0.049
Aroclor-1242			0.11 U	0.11	0.049 U	0.049
Aroclor-1248			0.11 U	0.11	0.049 U	0.049
Aroclor-1254			0.11 U	0.11	0.049 U	0.049
Aroclor-1260			0.11 U	0.11	0.049 U	0.049
Method:TCL Pesticides/PCBs						

MAIN POST
SURFACE WATER VOLATILES

Geographical Location				M2		M2		M3		M3		M3		M14		M14	
Sample				MP02-SW01-A01		MP02-SW02-A01		MP06-SW01-A01		MP06-SW01-C01		MP10-SW01-A01		MP14-SW01-A01		MP14-SW02-A01	
Sample Type										Duplicate							
Batch#				9412G921		9412G921		9412G921		9412G921		9412G922		9412G921		9412G921	
Prep#				94GVE343		94GVE343		94GVE343		94GVE343		94GVE348		94GVE348		94GVE343	
RFW#				007		009		003		005		001		018		011	
Dilution Factor				1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix				water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date				12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date				12/7/94		12/7/94		12/7/94		12/7/94		12/9/94		12/9/94		12/7/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	5.7		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane	48.4	4000	6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	0.083	525	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane			9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2.49	1600	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone			6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide			4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene	4.81		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane			3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)			4.4	3 J	10	2 J	10	10 U	10	10 U	10	10 U	10	4 J	10	5 J	10
Chloroform	5.67	470	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	0.291	99	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone			4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	127		1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	0.363	6.31	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	0.266	22	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane			1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene			3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1.09	81	2.0	2 J	10	2 J	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	72.6		2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	13.5		4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	0.15	71	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.193	1700	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4.38	360	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone			5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone			3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	0.388	4.29	4.0	5 J	10	5 J	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	1.72		4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	7440	200000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	22	21000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	3030	27900	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene			3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)			3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Method:TCL Volatiles																	

MAIN POST
SURFACE WATER VOLATILES (OFFSITE DATA)

Geographical Location				Background SS01		Background SS02	
Sample				SS01-SW01-A01		SS01-SW02-A01	
Batch#				9412G922		9412G922	
Prep#				94GGVE348		94GGVE348	
RFW#				001		003	
Dilution Factor				1.00		1.00	
Matrix				water		water	
Units	ug/l	ug/l	ug/l	ug/l		ug/l	
Sampling Date				12/1/94		12/1/94	
Analysis Date				12/9/94		12/9/94	
Analysis	Standard	Standard	MDL	Analytical	CRQL	Analytical	CRQL
	fresh water	salt water		Result		Result	
Chloromethane	5.7		7.3	10 U	10	10 U	10
Bromomethane	48.4	4000	6.7	10 U	10	10 U	10
Vinyl Chloride	0.083	525	7.9	10 U	10	10 U	10
Chloroethane			9.1	10 U	10	10 U	10
Methylene Chloride	2.49	1600	2.7	10 U	10	10 U	10
Acetone			6.9	10 U	10	10 U	10
Carbon Disulfide			4.4	10 U	10	10 U	10
1,1-Dichloroethene	4.81		4.9	10 U	10	10 U	10
1,1-Dichloroethane			3.0	10 U	10	10 U	10
1,2-Dichloroethene (total)			4.4	10 U	10	10 U	10
Chloroform	5.67	470	2.9	10 U	10	10 U	10
1,2-Dichloroethane	0.291	99	2.4	10 U	10	10 U	10
2-Butanone			4.1	10 U	10	10 U	10
1,1,1-Trichloroethane	127		1.7	10 U	10	10 U	10
Carbon Tetrachloride	0.363	6.31	1.5	10 U	10	10 U	10
Bromodichloromethane	0.266	22	2.0	10 U	10	10 U	10
1,2-Dichloropropane			1.7	10 U	10	10 U	10
cis-1,3-Dichloropropene			3.0	10 U	10	10 U	10
Trichloroethene	1.09	81	2.0	10 U	10	10 U	10
Dibromochloromethane	72.6		2.4	10 U	10	10 U	10
1,1,2-Trichloroethane	13.5		4.3	10 U	10	10 U	10
Benzene	0.15	71	3.3	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.193	1700	2.4	10 U	10	10 U	10
Bromoform	4.38	360	3.1	10 U	10	10 U	10
4-Methyl-2-pentanone			5.5	10 U	10	10 U	10
2-Hexanone			3.9	10 U	10	10 U	10
Tetrachloroethene	0.388	4.29	4.0	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	1.72		4.2	10 U	10	10 U	10
Toluene	7440	200000	2.7	10 U	10	10 U	10
Chlorobenzene	22	21000	2.7	10 U	10	10 U	10
Ethylbenzene	3030	27900	3.1	10 U	10	10 U	10
Styrene			3.8	10 U	10	10 U	10
Xylene (total)			3.8	10 U	10	10 U	10
Total Est. Conc. of TIC.							
Method:TCL Volatiles							

MAIN POST
SURFACE WATER SEMIVOLATILES

Geographical Location				M2		M2		M3		M3		M3		M14		M14	
Sample				MP02-SW01-A01		MP02-SW02-A01		MP06-SW01-A01		MP06-SW01-C01		MP10-SW01-A01		MP14-SW01-A01		MP14-SW02-A01	
Sample Type										Duplicate							
Batch#				9412G921		9412G921		9412G921		9412G921		9412G922		9412G921		9412G921	
Prep#				94GBO800		94GBO800		94GBO800		94GBO800		94GBO800		94GBO809		94GBO800	
RFW#				007		009		003		005		001		018		011	
Dilution Factor				1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix				water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date				12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date				12/22/94		12/22/94		12/22/94		12/22/94		12/22/94		12/22/94		12/22/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	20900	4600000	7.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
bis(2-Chloroethyl) ether	0.0311	1.4	9.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Chlorophenol	122	402	7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,3-Dichlorobenzene	2620	22200	5.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,4-Dichlorobenzene	343	3159	4.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichlorobenzene	2520	16500	5.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Methylphenol			6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2,2'-oxybis(1-Chloropropane)			7.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methylphenol			12.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
N-Nitroso-di-n-propylamine			8.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Hexachloroethane	2.73	12.4	5.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Nitrobenzene	16	1900	7.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Isophorone	552		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Nitrophenol			7.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2,4-Dimethylphenol			4.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
bis(2-Chloroethoxy) methane			6.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2,4-Dichlorophenol	92.7	794	4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2,4-Trichlorobenzene	30.6	113	9.6	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Naphthalene			8.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Chloroaniline			2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Hexachlorobutadiene	6.94		4.6	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Chloro-3-methylphenol			3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Methylnaphthalene			8.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Hexachlorocyclopentadiene	245	17000	3.6	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2,4,6-Trichlorophenol	2.14	6.53	5.6	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2,4,5-Trichlorophenol	2580	9790	4.7	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25
2-Chloronaphthalene			8.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Nitroaniline			6.1	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25
Dimethyl phthalate	313000	2900000	4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acenaphthylene			6.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2,6-Dinitrotoluene			5.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
3-Nitroaniline			5.2	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25
Acenaphthene			6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2,4-Dinitrophenol	69.7	14000	4.6	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25
4-Nitrophenol			7.5	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25

MAIN POST
SURFACE WATER SEMIVOLATILES

Geographical Location				M2		M2		M3		M3		M3		M14		M14	
Sample				MP02-SW01-A01		MP02-SW02-A01		MP06-SW01-A01		MP06-SW01-C01		MP10-SW01-A01		MP14-SW01-A01		MP14-SW02-A01	
Sample Type										Duplicate							
Batch#				9412G921		9412G921		9412G921		9412G921		9412G922		9412G921		9412G921	
Prep#				94GBO800		94GBO800		94GBO800		94GBO800		94GBO800		94GBO809		94GBO800	
RFW#				007		009		003		005		001		018		011	
Dilution Factor				1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix				water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date				12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date				12/22/94		12/22/94		12/22/94		12/22/94		12/22/94		12/22/94		12/22/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran			6.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2,4-Dinitrotoluene	0.11	9.1	5.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Diethyl phthalate	21200	111000	5.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Chlorophenyl-phenylether			7.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Fluorene	1340		6.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Nitroaniline			6.4	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25
4,6-Dinitro-2-methylphenol			5.3	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25
N-Nitrosodiphenylamine (1)			4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Bromophenyl-phenylether			5.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Hexachlorobenzene	0.000748	0.000775	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Pentachlorophenol	0.282	7.9	4.0	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25	25 U	25
Phenanthrene			5.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Anthracene	9570	108000	4.6	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbazole			4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Di-n-butylphthalate	3530	15700	6.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Fluoranthene	310	393	6.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Pyrene	797	8970	5.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Butylbenzylphthalate	239	416	5.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
3,3'-Dichlorobenzidine	0.0386	0.0767	2.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(a)anthracene	0.0028	0.031	4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chrysene	0.0028	0.031	4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
bis(2-Ethylhexy)phthalate	1.76	5.92	9.7	10 U	10	4 J	10	10 U	10	10 U	10	10 U	10	10 U	10	2 J	10
Di-n-octyl phthalate			5.6	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(b)fluoranthene	0.0028	0.031	5.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(k)fluoranthene	0.0028	0.031	6.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(a)pyrene	0.0028	0.031	4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Indeno(1,2,3-cd)pyrene	0.0028	0.031	7.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibenz(a,h)anthracene	0.0028	0.031	6.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(g,h,i)perylene			6.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC				11		17		28		3		10		11		2	
Method:TCL Semivolatiles																	

MAIN POST
SURFACE WATER SEMIVOLATILES (OFFSITE DATA)

Geographical Location				Background SS01		Background SS02	
Sample				SS01-SW01-A01		SS01-SW02-A01	
Batch#				9412G921		9412G922	
Prep#				94GBO800		94GBO800	
RFW#				001		003	
Dilution Factor				1.00		1.00	
Matrix				water		water	
Units	ug/l	ug/l	ug/l	ug/l		ug/l	
Sampling Date				12/1/94		12/1/94	
Analysis Date				12/22/94		12/22/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	20900	4600000	7.1	10 U	10	10 U	10
bis(2-Chloroethyl) ether	0.0311	1.4	9.7	10 U	10	10 U	10
2-Chlorophenol	122	402	7.3	10 U	10	10 U	10
1,3-Dichlorobenzene	2620	22200	5.3	10 U	10	10 U	10
1,4-Dichlorobenzene	343	3159	4.8	10 U	10	10 U	10
1,2-Dichlorobenzene	2520	16500	5.7	10 U	10	10 U	10
2-Methylphenol			6.7	10 U	10	10 U	10
2,2'-oxybis(1-Chloropropane)			7.0	10 U	10	10 U	10
4-Methylphenol			12.9	10 U	10	10 U	10
N-Nitroso-di-n-propylamine			8.0	10 U	10	10 U	10
Hexachloroethane	2.73	12.4	5.3	10 U	10	10 U	10
Nitrobenzene	16	1900	7.4	10 U	10	10 U	10
Isophorone	552		3.9	10 U	10	10 U	10
2-Nitrophenol			7.0	10 U	10	10 U	10
2,4-Dimethylphenol			4.8	10 U	10	10 U	10
bis(2-Chloroethoxy) methane			6.1	10 U	10	10 U	10
2,4-Dichlorophenol	92.7	794	4.4	10 U	10	10 U	10
1,2,4-Trichlorobenzene	30.6	113	9.6	10 U	10	10 U	10
Naphthalene			8.4	10 U	10	10 U	10
4-Chloroaniline			2.9	10 U	10	10 U	10
Hexachlorobutadiene	6.94		4.6	10 U	10	10 U	10
4-Chloro-3-methylphenol			3.1	10 U	10	10 U	10
2-Methylnaphthalene			8.7	10 U	10	10 U	10
Hexachlorocyclopentadiene	245	17000	3.6	10 U	10	10 U	10
2,4,6-Trichlorophenol	2.14	6.53	5.6	10 U	10	10 U	10
2,4,5-Trichlorophenol	2580	9790	4.7	25 U	25	25 U	25
2-Chloronaphthalene			8.2	10 U	10	10 U	10
2-Nitroaniline			6.1	25 U	25	25 U	25
Dimethylphthalate	313000	2900000	4.4	10 U	10	10 U	10
Acenaphthylene			6.0	10 U	10	10 U	10
2,6-Dinitrotoluene			5.2	10 U	10	10 U	10
3-Nitroaniline			5.2	25 U	25	25 U	25
Acenaphthene			6.7	10 U	10	10 U	10
2,4-Dinitrophenol	69.7	14000	4.6	25 U	25	25 U	25
4-Nitrophenol			7.5	25 U	25	25 U	25

MAIN POST
SURFACE WATER SEMIVOLATILES (OFFSITE DATA)

Geographical Location				Background SS01		Background SS02	
Sample				SS01-SW01-A01		SS01-SW02-A01	
Batch#				9412G921		9412G922	
Prep#				94GBO800		94GBO800	
RFW#				001		003	
Dilution Factor				1.00		1.00	
Matrix				water		water	
Units	ug/l	ug/l	ug/l	ug/l		ug/l	
Sampling Date				12/1/94		12/1/94	
Analysis Date				12/22/94		12/22/94	
Analysis	Standard fresh water	Standard salt water	MDL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran			6.5	10 U	10	10 U	10
2,4-Dinitrotoluene	0.11	9.1	5.8	10 U	10	10 U	10
Diethylphthalate	21200	111000	5.4	10 U	10	10 U	10
4-Chlorophenyl-phenylether			7.0	10 U	10	10 U	10
Fluorene	1340		6.3	10 U	10	10 U	10
4-Nitroaniline			6.4	25 U	25	25 U	25
4,6-Dinitro-2-methylphenol			5.3	25 U	25	25 U	25
N-Nitrosodiphenylamine (1)			4.2	10 U	10	10 U	10
4-Bromophenyl-phenylether			5.3	10 U	10	10 U	10
Hexachlorobenzene	0.000748	0.000775	5.5	10 U	10	10 U	10
Pentachlorophenol	0.282	7.9	4.0	25 U	25	25 U	25
Phenanthrene			5.0	10 U	10	10 U	10
Anthracene	9570	108000	4.6	10 U	10	10 U	10
Carbazole			4.4	10 U	10	10 U	10
Di-n-butylphthalate	3530	15700	6.5	10 U	10	10 U	10
Fluoranthene	310	393	6.0	10 U	10	10 U	10
Pyrene	797	8970	5.4	10 U	10	10 U	10
Butylbenzylphthalate	239	416	5.3	10 U	10	10 U	10
3,3'-Dichlorobenzidine	0.0386	0.0767	2.8	10 U	10	10 U	10
Benzo(a)anthracene	0.0028	0.031	4.9	10 U	10	10 U	10
Chrysene	0.0028	0.031	4.4	10 U	10	10 U	10
bis(2-Ethylhexy)phthalate	1.76	5.92	9.7	10 U	10	10 U	10
Di-n-octyl phthalate			5.6	10 U	10	10 U	10
Benzo(b)fluoranthene	0.0028	0.031	5.7	10 U	10	10 U	10
Benzo(k)fluoranthene	0.0028	0.031	6.2	10 U	10	10 U	10
Benzo(a)pyrene	0.0028	0.031	4.9	10 U	10	10 U	10
Indeno(1,2,3-cd)pyrene	0.0028	0.031	7.1	10 U	10	10 U	10
Dibenz(a,h)anthracene	0.0028	0.031	6.0	10 U	10	10 U	10
Benzo(g,h,i)perylene			6.8	10 U	10	10 U	10
Petroleum hydrocarbons				0.26 U	0.26	0.27 U	0.27
Total Est. Conc. of TIC				13		15	
Method:TCL Semivolatiles							

MAIN POST
SURFACE WATER INORGANICS

Geographical Location			M2		M2		M2		M2		M3		M3	
Sample			MP02-SW01-A01		MP02-SW01-A01 SOL		MP02-SW02-A01		MP02-SW02-A01SOL		MP06-SW01-A01		MP06-SW01-A01 SOL	
Sample Type														
Batch#			9412G921		9412G921		9412G921		9412G921		9412G921		9412G921	
Prep#			94GCN260		94GI180		94GCN260		94GI180		94GCN264		94GI180	
RFW#			007		008		009		010		003		004	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date			12/13/94		12/19/94		12/13/94		12/19/94		12/14/94		12/19/94	
Analysis	Standard fresh water	Standard salt water	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	164		3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1
Aluminum			258	26.7	26.7 U	26.7	263	26.7	26.7 U	26.7	155	26.7	26.7 U	26.7
Arsenic	0.017	0.136	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6
Barium	2000		42.7	2.1	38.2	2.1	47	2.1	41.8	2.1	32.6	2.1	27.7	2.1
Beryllium			1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Calcium			18000	12.0	17700	12.0	19400	12.0	19000	12.0	32100	12.0	30400	12.0
Cadmium	10		3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4
Cobalt			4.5	2.8	4.1	2.8	4.8	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Chromium	160	3230	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4
Copper			3.1	2.4	4.2	2.4	2.9	2.4	4.9	2.4	2.4 U	2.4	2.4 U	2.4
Iron			2760	4.7	493	4.7	3020	4.7	681	4.7	2850	4.7	412	4.7
Mercury	0.144	0.146	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20 U	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium			2840	821	2860	821	2980	821	3180	821	5630	821	5170	821
Magnesium			2930	38.2	2860	38.2	3170	38.2	3070	38.2	9360	38.2	8840	38.2
Manganese	100		89.9	2.0	86.1	2.0	97.6	2.0	92.8	2.0	101	2.0	94.3	2.0
Sodium			25400	15.4	25200	15.4	27500	15.4	26900	15.4	52800	15.4	49800	15.4
Nickel	516	3900	12.8 U	12.8	14.7	12.8	12.8 U	12.8	12.8 U	12.8	12.8 U	12.8	12.8 U	12.8
Lead	5		3.1	1.6	7.6	1.6	2.3	1.6	1.6 U	1.6	4	1.6	1.6 U	1.6
Antimony	12.2	4300	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5
Selenium	10	71	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90 U	0.90 U	0.90	1.1	0.90	0.90 U	0.90
Thallium	1.7	6.22	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1
Vanadium			2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Zinc			29.1	2.8	19.4	2.8	32.9	2.8	21.1	2.8	12.1	2.8	7.8	2.8
Cyanide	5.2	1	10 U	10			10 U	10			10 U	10.0		
Method:TAL Metals, Cyanide														

MAIN POST
SURFACE WATER INORGANICS

Geographical Location			M3		M3		M3		M3		M14		M14	
Sample			MP06-SW01-C01		MP06-SW01-C01 SOL		MP10-SW01-A01		MP10-SW01-A01 SOL		MP14-SW01-A01		MP14-SW01-A01 SOL	
Sample Type			Duplicate		Duplicate									
Batch#			9412G921		9412G921		9412G922		9412G922		9412G921		9412G921	
Prep#			94GCN260		94GI180		94GCN264		94GI186		94GCN260		94GI180	
RFW#			005		006		001		002		018		019	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water, filtered		water		water, filtered		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date			12/13/94		12/13/94		12/14/94		12/21/94		12/13/94		12/19/94	
Analysis	Standard fresh water	Standard salt water	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	164		3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1
Aluminum			179	26.7	26.7 U	26.7	69.0	26.7	26.7 U	26.7	188	26.7	26.7 U	26.7
Arsenic	0.017	0.136	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6
Barium	2000		33.3	2.1	27.6	2.1	34.6	2.1	29.1	2.1	30.0	2.1	27.2	2.1
Beryllium			1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Calcium			32100	12.0	30300	12.0	30000	12.0	29400	12.0	16200	12.0	16300	12.0
Cadmium	10		3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4
Cobalt			2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Chromium	160	3230	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4
Copper			2.4 U	2.4	4.3	2.4	2.4 U	2.4	3.9	2.4	2.9	2.4	5.6	2.4
Iron			2940	4.7	465	4.7	2180	4.7	355	4.7	1920	4.7	839	4.7
Mercury	0.144	0.146	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium			6260	821	5840	821	4320	821	4280	821	4840	821	4240	821
Magnesium			9790	38.2	9030	38.2	5340	38.2	5160	38.2	9770	38.2	9540	38.2
Manganese	100		102	2.0	94.1	2.0	98.7	2.0	96.2	2.0	65.6	2.0	63.6	2.0
Sodium			56500	15.4	52300	15.4	18200	15.4	17700	15.4	70100	15.4	69100	15.4
Nickel	516	3900	12.8 U	12.8	12.8 U	12.8	12.8 U	12.8	12.8 U	12.8	14.2	12.8	12.8 U	12.8
Lead	5		4.8	1.6	1.6 U	1.6	1.6	1.6	1.6 U	1.6	3.4	1.6	3.1	1.6
Antimony	12.2	4300	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5
Selenium	10	71	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Thallium	1.7	6.22	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1
Vanadium			2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Zinc			12.2	2.8	2.8	2.8	16	2.8	7.9	2.8	23.7	2.8	14.4	2.8
Cyanide	5.2	1	10 U	10			10 U	10			10 U	10		
Method:TAL Metals, Cyanide														

MAIN POST
SURFACE WATER INORGANICS

Geographical Location			M14		M14	
Sample			MP14-SW02-A01		MP14-SW02-A01SOL	
Sample Type						
Batch#			9412G921		9412G921	
Prep#			94GCN260		94GI180	
RFW#			011		012	
Dilution Factor			1.00		1.00	
Matrix			water		water, filtered	
Units	ug/l	ug/l	ug/l		ug/l	
Sampling Date			12/1/94		12/1/94	
Analysis Date			12/13/94		12/19/94	
Analysis	Standard fresh water	Standard salt water	Analytical Result	MDL	Analytical Result	MDL
Silver	164		3.1 U	3.1	3.1 U	3.1
Aluminum			205	26.7	26.7	26.7
Arsenic	0.017	0.136	1.6 U	1.6	1.6 U	1.6
Barium	2000		33.1	2.1	31.2	2.1
Beryllium			1.5 U	1.5	1.5 U	1.5
Calcium			20400	12.0	20300	12.0
Cadmium	10		3.4 U	3.4	3.4 U	3.4
Cobalt			2.8 U	2.8	2.8 U	2.8
Chromium	160	3230	6.4 U	6.4	6.4 U	6.4
Copper			5.3	2.4	4.9	2.4
Iron			2070	4.7	999	4.7
Mercury	0.144	0.146	0.20 U	0.20	0.20 U	0.20
Potassium			8320	821	8220	821
Magnesium			21400	38.2	21600	38.2
Manganese	100		68.4	2.0	66.1	2.0
Sodium			168000	15.4	171000	15.4
Nickel	516	3900	12.8 U	12.8	12.8 U	12.8
Lead	5		2.8	1.6	3.2	1.6
Antimony	12.2	4300	21.5 U	21.5	21.5 U	21.5
Selenium	10	71	0.90 U	0.90	0.90 U	0.90
Thallium	1.7	6.22	1.1 U	1.1	1.1 U	1.1
Vanadium			2.9 U	2.9	2.9 U	2.9
Zinc			23.4	2.8	13.2	2.8
Cyanide	5.2	1	10 U	10		
Method:TAL Metals, Cyanide						

MAIN POST
SURFACE WATER INORGANICS (OFFSITE DATA)

Geographical Location			Background SS01		Background SS01		Background SS02		Background SS02	
Sample			SS01-SW01-A01		SS01-SW01-A01 SOL		SS01-SW02-A01		SS01-SW02-A01 SOL	
Batch#			9412G921		9412G921		9412G922		9412G922	
Prep#			94GCN260		94GI180		94GCN264		94GI186	
RFW#			001		002		003		004	
Dilution Factor			1.00		1.00		1.00		1.00	
Matrix			water		water, filtered		water		water, filtered	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l	
Sampling Date			12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date			12/13/94		12/19/94		12/14/94		12/21/94	
Analysis	Standard fresh water	Standard salt water	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	164		3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1
Aluminum			388	26.7	26.7 U	26.7	748	26.7	26.7 U	26.7
Arsenic	0.017	0.136	1.6 U	1.6	1.6 U	1.6	2.6	1.6	1.6 U	1.6
Barium	2000		44.7	2.1	39.4	2.1	42.3	2.1	31.3	2.1
Beryllium			1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Calcium			17300	12.0	17400	12.0	31600	12.0	30900	12.0
Cadmium	10		3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4
Cobalt			8.1	2.8	4.1	2.8	2.8 U	2.8	2.8 U	2.8
Chromium	160	3230	6.4 U	6.4	6.4 U	6.4	7.5	6.4	6.4 U	6.4
Copper			3.2	2.4	4	2.4	3.1	2.4	3.1	2.4
Iron			3010	4.7	405	4.7	6210	4.7	335	4.7
Mercury	0.144	0.146	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium			2990	821	2670	821	5060	821	4280	821
Magnesium			2880	38.2	2860	38.2	5440	38.2	5120	38.2
Manganese	100		93.3	2.0	90.7	2.0	113	2.0	98.6	2.0
Sodium			26700	15.4	26200	15.4	17600	15.4	17400	15.4
Nickel	516	3900	22.9	12.8	16.1	12.8	12.8	12.8	12.8 U	12.8
Lead	5		2.4	1.6	1.6 U	1.6	10.0	1.6	1.6 U	1.6
Antimony	12.2	4300	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5
Selenium	10	71	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Thallium	1.7	6.22	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1
Vanadium			2.9 U	2.8	2.9 U	2.8	5.8	2.9	2.9 U	2.9
Zinc			35.1	2.9	23.8	2.9	31.8	2.8	8.8	2.8
Cyanide	5.2	1	10 U	10.0			10 U	10		
Method:TAL Metals, Cyanide										

MAIN POST
SURFACE WATER PESTICIDES/PCBS

Geographical Location			M2		M2		M3		M3		M3		M14		M14	
Sample			MP02-SW01-A01		MP02-SW02-A01		MP06-SW01-A02		MP06-SW01-C01		MP10-SW01-A01		MP14-SW01-A01		MP14-SW02-A01	
Sample Type									Duplicate							
Batch#			9412G921		9412G921		9412G921		9412G921		9412G922		9412G921		9412G921	
Prep#			94GP1038		94GP1038		94GP1038		94GP1038		94GP1038		94GP1038		94GP1038	
RFW#			007		009		003		005		001		018		011	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date			12/16/94		12/16/94		12/16/94		12/16/94		12/16/94		12/16/94		12/16/94	
Analysis	Standard	Standard	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting
	fresh water	salt water	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
alpha-BHC	0.00391	0.0131	0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
beta-BHC	0.137	0.460	0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
delta-BHC			0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
gamma-BHC (Lindane)	0.08	0.16	0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
Heptachlor	0.000208	0.000214	0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
Aldrin	0.000135	0.000144	0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
Heptachlor epoxide	0.000103	0.000106	0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
Endosulfan I			0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
Dieldrin	0.000135	0.000144	0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
4,4'-DDE	0.000588	0.000591	0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
Endrin	0.0023	0.0023	0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
Endosulfan II			0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
4,4'-DDD	0.000832	0.000837	0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
Endosulfan sulfate	0.93	2.0	0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
4,4'-DDT	0.000588	0.000591	0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
Methoxychlor	0.03	0.03	0.50 U	0.50	0.50 U	0.50	0.05 U	0.05	0.50 U	0.50	0.54 U	0.54	0.49 U	0.49	0.53 U	0.53
Endrin ketone			0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
Endrin aldehyde	0.76	0.81	0.10 U	0.10	0.099 U	0.099	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.098 U	0.098	0.11 U	0.11
alpha-Chlordane	0.000277	0.000283	0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
gamma-Chlordane			0.050 U	0.050	0.050 U	0.050	0.054 U	0.054	0.050 U	0.050	0.054 U	0.054	0.049 U	0.049	0.053 U	0.053
Toxaphene	0.00073	0.000747	5.0 U	5.0	5.0 U	5.0	5.4 U	5.4	5.0 U	5.0	5.4 U	5.4	4.9 U	4.9	5.3 U	5.3
Aroclor-1016	0.000244	0.000247	1.0 U	1.0	0.99 U	0.10	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1
Aroclor-1221	0.000244	0.000247	2.0 U	2.0	2.0 U	2.0	2.2 U	2.2	2.0 U	2.0	2.2 U	2.2	2.0 U	2.0 U	2.1 U	2.1
Aroclor-1232	0.000244	0.000247	1.0 U	1.0	0.99 U	0.10	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1
Aroclor-1242	0.000244	0.000247	1.0 U	1.0	0.99 U	0.10	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1
Aroclor-1248	0.000244	0.000247	1.0 U	1.0	0.99 U	0.10	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1
Aroclor-1254	0.000244	0.000247	1.0 U	1.0	0.99 U	0.10	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1
Aroclor-1260	0.000244	0.000247	1.0 U	1.0	0.99 U	0.10	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1
Method:TCL Pesticides/PCBs																

MAIN POST
SURFACE WATER PESTICIDES/PCBS (OFFSITE DATA)

Geographical Location			Background SS01		Background SS02	
Sample			SS01-SW01-A01		SS01-SW02-A01	
Batch#			9412G921		9412G922	
Prep#			94GP1038		94GP1038	
RFW#			001		003	
Dilution Factor			1.00		1.00	
Matrix			water		water	
Units	ug/l	ug/l	ug/l		ug/l	
Sampling Date			12/1/94		12/1/94	
Analysis Date			12/16/94		1/17/95	
Analysis	Standard	Standard	Analytical	Reporting	Analytical	Reporting
	fresh water	salt water	Result	Limit	Result	Limit
alpha-BHC	0.00391	0.0131	0.046 U	0.046	0.053 U	0.053
beta-BHC	0.137	0.460	0.046 U	0.046	0.053 U	0.053
delta-BHC			0.046 U	0.046	0.053 U	0.053
gamma-BHC (Lindane)	0.08	0.16	0.046 U	0.046	0.053 U	0.053
Heptachlor	0.000208	0.000214	0.046 U	0.046	0.053 U	0.053
Aldrin	0.000135	0.000144	0.046 U	0.046	0.053 U	0.053
Heptachlor epoxide	0.000103	0.000106	0.046 U	0.046	0.053 U	0.053
Endosulfan I			0.046 U	0.046	0.053 U	0.053
Dieldrin	0.000135	0.000144	0.091 U	0.091	0.11 U	0.11
4,4'-DDE	0.000588	0.000591	0.091 U	0.091	0.11 U	0.11
Endrin	0.0023	0.0023	0.091 U	0.091	0.11 U	0.11
Endosulfan II			0.091 U	0.091	0.11 U	0.11
4,4'-DDD	0.000832	0.000837	0.091 U	0.091	0.11 U	0.11
Endosulfan sulfate	0.93	2.0	0.091 U	0.091	0.11 U	0.11
4,4'-DDT	0.000588	0.000591	0.091 U	0.091	0.11 U	0.11
Methoxychlor	0.03	0.03	0.46 U	0.46	0.53 U	0.53
Endrin ketone			0.091 U	0.091	0.11 U	0.11
Endrin aldehyde	0.76	0.81	0.091 U	0.091	0.11 U	0.11
alpha-Chlordane	0.000277	0.000283	0.046 U	0.046	0.053 U	0.053
gamma-Chlordane			0.046 U	0.046	0.053 U	0.053
Toxaphene	0.00073	0.000747	4.6 U	4.6	5.3 U	5.3
Aroclor-1016	0.000244	0.000247	0.91 U	0.09	1.1 U	1.1
Aroclor-1221	0.000244	0.000247	1.8 U	1.8	2.1 U	2.1
Aroclor-1232	0.000244	0.000247	0.91 U	0.09	1.1 U	1.1
Aroclor-1242	0.000244	0.000247	0.91 U	0.09	1.1 U	1.1
Aroclor-1248	0.000244	0.000247	0.91 U	0.09	1.1 U	1.1
Aroclor-1254	0.000244	0.000247	0.91 U	0.09	1.1 U	1.1
Aroclor-1260	0.000244	0.000247	0.91 U	0.09	1.1 U	1.1
Method:TCL Semivolatiles						

MAIN POST
SURFACE SOIL VOLATILES

Geographical Location			M16		M16		M16		M16		M16		M16	
Sample			MP16-SS01-A01		MP16-SS01-D01		MP16-SS01-E01		MP16-SS02-A01		MP16-SS03-A01		MP16-SS04-A01	
Sample Type					Trip Blank		Field Rinsate Blank							
Batch#			9411G832		9411G832		9411G832		9411G832		9411G832		9411G832	
Prep#			94GVT027		94GVE343		94GVE343		94GVT028		94GVT027		94GVT027	
RFW#			012		016		017		013		015		014	
Sample Depth			0-6"		0-6"		0-6"		0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		water		water		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/l		mg/l		mg/kg		mg/kg		mg/kg	
Sampling Date			11/29/94		11/29/94		11/29/94		11/29/94		11/29/94		11/29/94	
Analysis Date			12/5/94		12/6/94		12/6/94		12/6/94		12/5/94		12/5/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Bromomethane	79	0.0067	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Vinyl Chloride	2	0.0079	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Chloroethane		0.0091	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Methylene Chloride	49	0.0027	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Acetone	1000	0.0069	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.018 B		0.011 U	0.011	0.012 U	0.012
Carbon Disulfide		0.0044	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
1,1-Dichloroethene	8	0.0049	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
1,1-Dichloroethane	570	0.003	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
1,2-Dichloroethene (total)	79	0.0044	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Chloroform	19	0.0029	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
1,2-Dichloroethane	6	0.0024	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
2-Butanone	1000	0.0041	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
1,1,1-Trichloroethane	210	0.0017	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Carbon Tetrachloride	2	0.0015	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Bromodichloromethane	11	0.002	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
1,2-Dichloropropane	10	0.0017	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
cis-1,3-Dichloropropene	4	0.003	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Trichloroethene	23	0.002	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Dibromochloromethane	110	0.0024	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
1,1,2-Trichloroethane	22	0.0043	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Benzene	3	0.0033	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
trans-1,3-Dichloropropene	4	0.0024	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Bromoform	86	0.0031	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
4-Methyl-2-pentanone	1000	0.0055	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
2-Hexanone		0.0039	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Tetrachloroethene	4	0.004	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
1,1,2,2-Tetrachloroethane	34	0.0042	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Toluene	1000	0.0027	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Chlorobenzene	37	0.0027	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Ethylbenzene	1000	0.0031	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Styrene	23	0.0038	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Xylene (total)	410	0.0038	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012
Method:TCL Volatiles														

MAIN POST
SURFACE SOIL SEMIVOLATILES

Geographical Location			M15		M15		M16		M16		M16		M16	
Sample			MP15-SS01-A01		MP15-SS02-A01		MP16-SS01-A01		MP16-SS02-A01		MP16-SS03-A01		MP16-SS04-A01	
Batch#			9411G832		9411G832		9411G832		9411G832		9411G832		9411G832	
Prep#			94GB0796		94GB0796		94GB0796		94GB0796		94GB0796		94GB0796	
RFW#			010		011		012		013		015		014	
Sample Depth			0-6"		0-6"		0-6"		0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00		25.0		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			11/29/94		11/29/94		11/29/94		11/29/94		11/29/94		11/29/94	
Analysis Date			12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
bis(2-Chloroethyl) ether	0.66	0.32	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2-Chlorophenol	280	0.241	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
1,3-Dichlorobenzene	5100	0.175	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
1,4-Dichlorobenzene	570	0.158	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
1,2-Dichlorobenzene	5100	0.188	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2-Methylphenol	2800	0.221	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2,2'-oxybis(1-Chloropropane)		0.231	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
4-Methylphenol	2800	0.426	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
N-Nitroso-di-n-propylamine	0.66	0.264	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Hexachloroethane	6	0.175	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Nitrobenzene	28	0.244	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Isophorone	1100	0.129	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2-Nitrophenol		0.231	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2,4-Dimethylphenol	1100	0.158	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
bis(2-Chloroethoxy) methane		0.201	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2,4-Dichlorophenol	170	0.145	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
1,2,4-Trichlorobenzene	68	0.317	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Naphthalene	230	0.277	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
4-Chloroaniline	230	0.096	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Hexachlorobutadiene	1	0.152	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
4-Chloro-3-methylphenol	10000	0.102	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2-Methylnaphthalene		0.287	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Hexachlorocyclopentadiene	400	0.119	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2,4,6-Trichlorophenol	62	0.185	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2,4,5-Trichlorophenol	5600	0.155	0.96 U	0.96	1 U	1	0.92 U	0.92	25 U	25	0.92 U	0.92	0.94 U	0.94
2-Chloronaphthalene		0.271	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2-Nitroaniline		0.201	0.96 U	0.96	1 U	1	0.92 U	0.92	25 U	25	0.92 U	0.92	0.94 U	0.94
Dimethylphthalate	10000	0.145	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Acenaphthylene		0.198	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2,6-Dinitrotoluene	1	0.172	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
3-Nitroaniline		0.172	0.96 U	0.96	1 U	1	0.92 U	0.92	25 U	25	0.92 U	0.92	0.94 U	0.94
Acenaphthene	3400	0.221	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
2,4-Dinitrophenol	110	0.152	0.96 U	0.96	1 U	1	0.92 U	0.92	25 U	25	0.92 U	0.92	0.94 U	0.94
4-Nitrophenol		0.248	0.96 U	0.96	1 U	1	0.92 U	0.92	25 U	25	0.92 U	0.92	0.94 U	0.94
Dibenzofuran		0.215	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38

MAIN POST
SURFACE SOIL SEMIVOLATILES

Geographical Location			M15		M15		M16		M16		M16		M16	
Sample			MP15-SS01-A01		MP15-SS02-A01		MP16-SS01-A01		MP16-SS02-A01		MP16-SS03-A01		MP16-SS04-A01	
Batch#			9411G832		9411G832		9411G832		9411G832		9411G832		9411G832	
Prep#			94GB0796		94GB0796		94GB0796		94GB0796		94GB0796		94GB0796	
RFW#			010		011		012		013		015		014	
Sample Depth			0-6"		0-6"		0-6"		0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00		25.0		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			11/29/94		11/29/94		11/29/94		11/29/94		11/29/94		11/29/94	
Analysis Date			12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
2,4-Dinitrotoluene	1	0.191	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Diethylphthalate	10000	0.178	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
4-Chlorophenyl-phenylether		0.231	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Fluorene	2300	0.208	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
4-Nitroaniline		0.211	0.96 U	0.96	1 U	1	0.92 U	0.92	25 U	25	0.92 U	0.92	0.94 U	0.94
4,6-Dinitro-2-methylphenol		0.175	0.96 U	0.96	1 U	1	0.92 U	0.92	25 U	25	0.92 U	0.92	0.94 U	0.94
N-Nitrosodiphenylamine (1)	140	0.139	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
4-Bromophenyl-phenylether		0.175	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Hexachlorobenzene	0.66	0.182	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Pentachlorophenol	6	0.132	0.96 U	0.96	1 U	1	0.92 U	0.92	25 U	25	0.92 U	0.92	0.94 U	0.94
Phenanthrene		0.165	0.37 J		0.17 J		0.37 U	0.37	9.9 U	9.9	0.045 J		0.38 U	0.38
Anthracene	10000	0.152	0.041 J		0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Carbazole		0.145	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Di-n-butylphthalate	5700	0.215	0.1 JB		0.13 JB		0.086 JB		9.9 U	9.9	0.088 JB		0 JB	
Fluoranthene	2300	0.198	0.53		0.36 J		0.046 J		9.9 U	9.9	0.1 J		0.073 J	
Pyrene	1700	0.178	0.72		0.43		0.06 J		9.9 U	9.9	0.14 J		0.096 J	
Butylbenzylphthalate	1100	0.175	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
3,3'-Dichlorobenzidine	2	0.092	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Benzo(a)anthracene	0.9	0.162	0.31 J		0.18 J		0.37 U	0.37	9.9 U	9.9	0.069 J		0.039 J	
Chrysene	9	0.145	0.33 J		0.23 J		0.37 U	0.37	9.9 U	9.9	0.063 J		0.043 J	
bis(2-Ethylhexy)phthalate	49	0.32	0.069 J		0.077 J		0.084 J		1.1 J		0.26 J		0.64	
Di-n-octyl phthalate	1100	0.185	0.39 U	0.39	0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Benzo(b)fluoranthene	0.9	0.188	0.45		0.35 J		0.37 U	0.37	9.9 U	9.9	0.12 J		0.065 J	
Benzo(k)fluoranthene	0.9	0.205	0.13 J		0.11 J		0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Benzo(a)pyrene	0.66	0.162	0.27 J		0.2 J		0.37 U	0.37	9.9 U	9.9	0.057 J		0.046 J	
Indeno(1,2,3-cd)pyrene	0.9	0.234	0.16 J		0.12 J		0.37 U	0.37	9.9 U	9.9	0.049 J		0.04 J	
Dibenzo(a,h)anthracene	0.66	0.198	0.041 J		0.41 U	0.41	0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Benzo(g,h,i)perylene		0.224	0.16 J		0.11 J		0.37 U	0.37	9.9 U	9.9	0.37 U	0.37	0.38 U	0.38
Method:TCL Semivolatiles														

MAIN POST
SURFACE SOIL INORGANICS

Geographical Location		MP15		MP15	
Sample		MP15-SS01-A01		MP15-SS02-A01	
Batch#		9411G832		9411G832	
Prep#		94GTS468		94GTS468	
RFW#		010		011	
Sample Depth		0-6"		0-6"	
Dilution Factor		1.00		1.00	
Matrix		soil		soil	
Units	mg/kg	mg/kg		mg/kg	
Sampling Date		11/29/94		11/29/94	
Analysis Date		12/6/94		12/6/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		86.2	0.10	81.3	0.10
Silver	110	1.4	0.56	1.5	0.61
Aluminum		5300	4.8	5030	5.2
Arsenic	20	8.3	0.6 *	8.9	0.38
Barium	700	68.4	0.38	101	0.41
Beryllium	1	0.6	0.27	0.69	0.29
Calcium		815	2.2	1860	2.4
Cadmium	1	2.9	0.51	4.5	0.55
Cobalt		6.1	0.49	7.8	0.53
Chromium		109	0.54	95.5	0.59
Copper	600	34	0.42	66.5	0.45
Iron		33400	0.85	37700	0.92
Mercury	14	0.11 U	0.11	0.12 U	0.12
Potassium		2990	149	2770	160
Magnesium		1560	4.4	1600	4.8
Manganese		159	0.36	187	0.39
Sodium		23.4	2.8	33.1	3
Nickel	250	8.3	2.3	6.9	2.5
Lead	400	5340	4.6	6130	4.9
Antimony	14	3.9 U	3.9	4.2 U	4.2
Selenium	63	0.45	0.17	2.1	0.21
Thallium	2	0.21 U	0.21	0.26 U	0.26
Vanadium	370	27.5	0.53	25.9	0.57
Zinc	1500	7750	0.51	12800	0.55
Dilution Factor		* = 2.00			
Method:TAL Metals					

MAIN POST
SURFACE SOIL PESTICIDES/PCBS

Geographical Location		M15		M15		M15		M15		M16		M16	
Sample		MP15-SS01-A01		MP15-SS01-A01		MP15-SS02-A01		MP15-SS02-A01		MP16-SS01-A01		MP16-SS01-A01	
Batch#		9411G832		9411G832		9411G832		9411G832		9411G832		9411G832	
Prep#		94GP1033		94GP1033		94GP1033		94GP1033		94GP1033		94GP1033	
RFW#		010		010 DL		011		011 DL		012		012 DL	
Sample Depth		0-6"		0-6"		0-6"		0-6"		0-6"		0-6"	
Dilution Factor		10.0		500		1.00		20.0		1.00		20.0	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		11/29/94		11/29/94		11/29/94		11/29/94		11/29/94		11/29/94	
Analysis Date		12/17/94		12/14/94		12/17/94		12/14/94		12/17/94		12/13/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.0019 U	0.0019	0.037 U	0.037
beta-BHC		0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.0019 U	0.0019	0.037 U	0.037
delta-BHC		0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.0019 U	0.0019	0.037 U	0.037
gamma-BHC (Lindane)	0.52	0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.0034		0.037 U	0.037
Heptachlor	0.15	0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.0019 U	0.0019	0.037 U	0.037
Aldrin	0.04	0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.0019 U	0.0019	0.037 U	0.037
Heptachlor epoxide		0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.0019 U	0.0019	0.037 U	0.037
Endosulfan I	340	0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.0019 U	0.0019	0.037 U	0.037
Dieldrin	0.042	0.038 U	0.038	1.9 U	1.9	0.004 U	0.004	0.081 U	0.081	0.017		0.075 U	0.075
4,4'-DDE	2	3.1 C		6.6 CD		0.32 C		1 CD		0.27 C		.35 CD	
Endrin	17	0.038 U	0.038	1.9 U	1.9	0.004 U	0.004	0.081 U	0.081	0.0037 U	0.0037	0.075 U	0.075
Endosulfan II	340	0.038 U	0.038	1.9 U	1.9	0.004 U	0.004	0.081 U	0.081	0.0037 U	0.0037	0.075 U	0.075
4,4'-DDD	3	0.038 U	0.038	1.9 U	1.9	0.004 U	0.004	0.081 U	0.081	0.078		.13 D	
Endosulfan sulfate		0.038 U	0.038	1.9 U	1.9	0.004 U	0.004	0.081 U	0.081	0.0037 U	0.0037	0.075 U	0.075
4,4'-DDT	2	3.4 C		7.9 CD		0.35 C		1 CD		0.33 C		1.1 CD	
Methoxychlor	280	0.19 U	0.19	9.5 U	9.5	0.02 U	0.02	0.4 U	0.4	0.019 U	0.019	0.37 U	0.37
Endrin ketone		0.038 U	0.038	1.9 U	1.9	0.004 U	0.004	0.081 U	0.081	0.0037 U	0.0037	0.075 U	0.075
Endrin aldehyde		0.038 U	0.038	1.9 U	1.9	0.004 U	0.004	0.081 U	0.081	0.0037 U	0.0037	0.075 U	0.075
alpha-Chlordane		0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.043		.05 D	
gamma-Chlordane		0.019 U	0.019	0.95 U	0.95	0.002 U	0.002	0.04 U	0.04	0.046		.05 D	
Toxaphene	0.1	1.9 U	1.9	95 U	95	0.2 U	0.2	4 U	4	0.19 U	0.19	3.7 U	3.7
Aroclor-1016	0.49	0.38 U	0.38	19 U	19	0.04 U	0.04	0.81 U	0.81	0.037 U	0.037	0.75 U	0.75
Aroclor-1221	0.49	0.76 U	0.76	38 U	38	0.081 U	0.081	1.6 U	1.6	0.075 U	0.075	1.5 U	1.5
Aroclor-1232	0.49	0.38 U	0.38	19 U	19	0.04 U	0.04	0.81 U	0.81	0.037 U	0.037	0.75 U	0.75
Aroclor-1242	0.49	0.38 U	0.38	19 U	19	0.04 U	0.04	0.81 U	0.81	0.037 U	0.037	0.75 U	0.75
Aroclor-1248	0.49	0.38 U	0.38	19 U	19	0.04 U	0.04	0.81 U	0.81	0.037 U	0.037	0.75 U	0.75
Aroclor-1254	0.49	0.38 U	0.38	19 U	19	0.04 U	0.04	0.81 U	0.81	0.037 U	0.037	0.75 U	0.75
Aroclor-1260	0.49	0.38 U	0.38	19 U	19	0.04 U	0.04	0.81 U	0.81	0.037 U	0.037	0.75 U	0.75
Method:Pesticides/PCBs													

MAIN POST
SURFACE SOIL PESTICIDES/PCBS

Geographical Location		M16		M16		M16		M16		M16		M16	
Sample		MP16-SS02-A01		MP16-SS02-A01		MP16-SS03-A01		MP16-SS03-A01		MP16-SS04-A01		MP16-SS04-A01	
Batch#		9411G832		9411G832		9411G832		9411G832		9411G832		9411G832	
Prep#		94GP1033		94GP1033		94GP1033		94GP1033		94GP1033		94GP1033	
RFW#		013		013 DL		015		015 DL		014		014 DL	
Sample Depth		0-6"		0-6"		0-6"		0-6"		0-6"		0-6"	
Dilution Factor		10.0		500		1.00		50.0		2.00		50.0	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		11/29/94		11/29/94		11/29/94		11/29/94		11/29/94		11/29/94	
Analysis Date		12/17/94		12/14/94		12/17/94		12/13/94		12/17/94		12/14/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.02 U	0.02	1 U	1	0.0018 U	0.0018	0.092 U	0.092	0.0038 U	0.0038	0.095 U	0.095
beta-BHC		0.02 U	0.02	1 U	1	0.0018 U	0.0018	0.092 U	0.092	0.0038 U	0.0038	0.095 U	0.095
delta-BHC		0.02 U	0.02	1 U	1	0.0018 U	0.0018	0.092 U	0.092	0.0038 U	0.0038	0.095 U	0.095
gamma-BHC (Lindane)	0.52	0.17		1 U	1	0.0059		0.092 U	0.092	0.0038 U	0.0038	0.095 U	0.095
Heptachlor	0.15	2 C		2.5 CD		0.0099		0.092 U	0.092	0.0038 U	0.0038	0.095 U	0.095
Aldrin	0.04	0.17 C		1 U	1	0.0018 U	0.0018	0.092 U	0.092	0.0038 U	0.0038	0.095 U	0.095
Heptachlor epoxide		0.02 U	0.02	1 U	1	0.0018 U	0.0018	0.092 U	0.092	0.0038 U	0.0038	0.095 U	0.095
Endosulfan I	340	0.02 U	0.02	1 U	1	0.0018 U	0.0018	0.092 U	0.092	0.0038 U	0.0038	0.095 U	0.095
Dieldrin	0.042	1.9 C		2 CD		0.15		.21 D		0.37 C		.37 CD	
4,4'-DDE	2	2 C		3.5 CD		0.11 C		.48 CD		0.46 C		.57 CD	
Endrin	17	0.04 U	0.04	2 U	2	0.0037 U	0.0037	0.18 U	0.18	0.0076 U	0.0076	0.19 U	0.19
Endosulfan II	340	0.04 U	0.04	2 U	2	0.0037 U	0.0037	0.18 U	0.18	0.0076 U	0.0076	0.19 U	0.19
4,4'-DDD	3	0.04 U	0.04	2 U	2	0.13		.22 D		0.68 C		1.6 CD	
Endosulfan sulfate		0.04 U	0.04	2 U	2	0.0037 U	0.0037	0.18 U	0.18	0.0076 U	0.0076	0.19 U	0.19
4,4'-DDT	2	3.3 C		23 CD		0.31 C		2 CD		0.66 C		1.7 CD	
Methoxychlor	280	0.2 U	0.2	10 U	10	0.018 U	0.018	0.92 U	0.92	0.038 U	0.038	0.95 U	0.95
Endrin ketone		0.092		2 U	2	0.0037 U	0.0037	0.18 U	0.18	0.0076 U	0.0076	0.19 U	0.19
Endrin aldehyde		0.04 U	0.04	2 U	2	0.0037 U	0.0037	0.18 U	0.18	0.0076 U	.0.0076	0.19 U	0.19
alpha-Chlordane		1.9 C		11 CD		0.18		.2 D		0.45 C		.86 CD	
gamma-Chlordane		2 C		13 CD		0.19		.2 D		0.45 C		.92 CD	
Toxaphene	0.1	2 U	2	100 U	100	0.18 U	0.18	9.2 U	9.2	0.38 U	0.38	9.5 U	9.5
Aroclor-1016	0.49	0.4 U	0.4	20 U	20	0.037 U	0.037	1.8 U	1.8	0.076 U	0.076	1.9 U	1.9
Aroclor-1221	0.49	0.8 U	0.8	40 U	40	0.073 U	0.073	3.7 U	3.7	0.15 U	0.15	3.8 U	3.8
Aroclor-1232	0.49	0.4 U	0.4	20 U	20	0.037 U	0.037	1.8 U	1.8	0.076 U	0.076	1.9 U	1.9
Aroclor-1242	0.49	0.4 U	0.4	20 U	20	0.037 U	0.037	1.8 U	1.8	0.076 U	0.076	1.9 U	1.9
Aroclor-1248	0.49	0.4 U	0.4	20 U	20	0.037 U	0.037	1.8 U	1.8	0.076 U	0.076	1.9 U	1.9
Aroclor-1254	0.49	0.4 U	0.4	20 U	20	0.037 U	0.037	1.8 U	1.8	0.076 U	0.076	1.9 U	1.9
Aroclor-1260	0.49	0.4 U	0.4	20 U	20	0.037 U	0.037	1.8 U	1.8	0.076 U	0.076	1.9 U	1.9
Method:Pesticides/PCBs													

MAIN POST
SOIL BORING VOLATILES

Geographical Location			M-AOC3		M-AOC3		M-AOC3		M-AOC3		M-AOC3		M-AOC3		M-AOC3		M16	
Sample			MPA3-SB01-A02		MPA3-SB01-C02		MPA3-SB01-D02		MPA3-SB01-E02		MPA3-SB02-A02		MPA3-SB02-D02		MPA3-SB03-E02		MP16-SB01-A01	
Sample Type					Duplicate		Trip Blank		Field Rinsate Blank				Trip Blank		Field Rinsate Blank			
Batch#			9412G130		9412G130		9412G155		9412G130		9412G155		9412G155		9505G825		9412G155	
Prep#			94GVT030 & 31		94GVT030 & 31		94GVB439		94GVB439		94GVT030		94GVB439		95GVC137		94GVT031	
RFW#			001		002		005		003		003		004		007		001	
Sample Depth (bgs)			6 - 9.5'		6 - 9.5'						6 - 9.5'						0 - 2'	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		water		water		soil		water		water		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/l		mg/l		mg/kg		mg/l		mg/l		mg/kg	
Sampling Date			12/14/94		12/14/94		12/15/94		12/14/94		12/15/94		12/15/94		5/10/95		12/15/94	
Analysis Date			12/19/94		12/19/94		12/20/94		12/19/94		12/19/94		12/20/94		5/20/95		12/20/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Bromomethane	79	0.0067	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Vinyl Chloride	2	0.0079	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Chloroethane		0.0091	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Methylene Chloride	49	0.0027	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Acetone	1000	0.0069	0.68 B	.056 *	2 B	110 *	0.01 U	0.01	0.24 B	0.01	0.19 B	0.011	0.01 U	0.01	0.01 U	0.01	0.076 B	0.012
Carbon Disulfide		0.0044	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
1,1-Dichloroethene	8	0.0049	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
1,1-Dichloroethane	570	0.003	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
1,2-Dichloroethene (total)	79	0.0044	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Chloroform	19	0.0029	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.006 J	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
1,2-Dichloroethane	6	0.0024	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
2-Butanone	1000	0.0041	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
1,1,1-Trichloroethane	210	0.0017	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Carbon Tetrachloride	2	0.0015	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Bromodichloromethane	11	0.002	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
1,2-Dichloropropane	10	0.0017	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
cis-1,3-Dichloropropene	4	0.003	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Trichloroethene	23	0.002	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Dibromochloromethane	110	0.0024	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
1,1,2-Trichloroethane	22	0.0043	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Benzene	3	0.0033	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
trans-1,3-Dichloropropene	4	0.0024	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Bromoform	86	0.0031	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
4-Methyl-2-pentanone	1000	0.0055	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
2-Hexanone		0.0039	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Tetrachloroethene	4	0.004	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
1,1,2,2-Tetrachloroethane	34	0.0042	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Toluene	1000	0.0027	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Chlorobenzene	37	0.0027	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Ethylbenzene	1000	0.0031	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Styrene	23	0.0038	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Xylene (total)	410	0.0038	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.011 U	0.011	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012
Total Est. Conc. of TIC.			0.009 J		.060 J*													
Dilution Factor			* = 5.0		* = 10.0													
Method:TCL Volatiles																		

MAIN POST
SOIL BORING VOLATILES

Geographical Location			M16		M18		M18		M18		M18		M18		M18		M18	
Sample			MP16-SB01-A02		MP18-SB01-A01		MP18-SB01-A02		MP18-SB02-A01		MP18-SB02-A02		MP18-SB03-A01		MP18-SB03-A02		M18-SB04-A01	
Sample Type																		
Batch#			9412G155		9501G632		9501G632		9501G632		9501G632		9501G632		9501G632		9501G587	
Prep#			94GVT030		95GVT016 & 8		95GVT016 & 9		95GVT008		95GVT016 & 9		95GVT008 & 9		95GVT008		95GVF013	
RFW#			002		003		004		005		006		007		008		003	
Sample Depth (bgs)			2 - 4'		1 - 1.5'		2'		1 - 1.5'		4 - 6'		1 - 1.5'		4 - 7.5'		1 - 1.5'	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			12/15/94		1/12/95		1/12/95		1/12/95		1/12/95		1/12/95		1/12/95		1/11/95	
Analysis Date			12/19/94		1/18/95		1/18/95		1/19/95		1/18/95		1/19/95		1/19/95		1/16/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Bromomethane	79	0.0067	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Vinyl Chloride	2	0.0079	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Chloroethane		0.0091	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Methylene Chloride	49	0.0027	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Acetone	1000	0.0069	0.027 B	0.013	0.59 B	.12 *	2.3 B	1.2 *	0.13 B	0.011	0.63 B	.62 *	0.34 B	0.06	0.074 B	0.012	0.011 U	0.011
Carbon Disulfide		0.0044	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
1,1-Dichloroethene	8	0.0049	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
1,1-Dichloroethane	570	0.003	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
1,2-Dichloroethene (total)	79	0.0044	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Chloroform	19	0.0029	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
1,2-Dichloroethane	6	0.0024	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
2-Butanone	1000	0.0041	0.013 U	0.013	0.039	0.012	0.054 B	12	0.023	0.011	0.14	0.012	0.13	0.012	0.013	0.012	0.011 U	0.011
1,1,1-Trichloroethane	210	0.0017	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Carbon Tetrachloride	2	0.0015	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Bromodichloromethane	11	0.002	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
1,2-Dichloropropane	10	0.0017	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
cis-1,3-Dichloropropene	4	0.003	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Trichloroethene	23	0.002	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Dibromochloromethane	110	0.0024	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
1,1,2-Trichloroethane	22	0.0043	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Benzene	3	0.0033	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
trans-1,3-Dichloropropene	4	0.0024	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Bromoform	86	0.0031	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
4-Methyl-2-pentanone	1000	0.0055	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
2-Hexanone		0.0039	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Tetrachloroethene	4	0.004	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
1,1,2,2-Tetrachloroethane	34	0.0042	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Toluene	1000	0.0027	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Chlorobenzene	37	0.0027	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Ethylbenzene	1000	0.0031	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Styrene	23	0.0038	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Xylene (total)	410	0.0038	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011
Total Est. Conc. of TIC.							.008 J, .6 J *				.009 J, .3 J *		0.068 J		0.06 J			
Dilution Factor					* = 10.00		* = 100				* = 50.0		* = 5.00					
Method:TCL Volatiles																		

MAIN POST
SOIL BORING VOLATILES

Geographical Location			M18		M18		M18		M18		M18		M18		M18		M18	
Sample			M18-SB04-A02		M18-SB05-A01		M18-SB05-A02		M18-SB06-A01		M18-SB06-A02		MP18-SB07-A01		MP18-SB07-D01		MP18-SB24-A01	
Sample Type															Trip Blank			
Batch#			9401G587		9501G587		9501G587		9501G587		9501G587		9501G632		9501G632		9501G632	
Prep#			95GVF013		95GVF014		95GVF013		95GVF013		95GVT008		95GVT008		95GVC008		95GVT009	
RFW#			004		001		002		005		006		009		010		001	
Sample Depth (bgs)			4 - 6'		1 - 1.5'		2 - 5'		1 - 1.5'		2 - 5'		1 - 1.5'				1 - 1.5'	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/11/95		1/11/95		1/11/95		1/11/95		1/11/95		1/12/95		1/12/95		1/12/95	
Analysis Date			1/16/95		1/17/95		1/16/95		1/16/95		1/18/95		1/19/95		1/23/95		1/19/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Bromomethane	79	0.0067	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Vinyl Chloride	2	0.0079	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Chloroethane		0.0091	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Methylene Chloride	49	0.0027	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Acetone	1000	0.0069	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.03 B	0.012	0.049 B	0.014	0.24	0.011	0.01 U	0.01	0.012 U	0.012
Carbon Disulfide		0.0044	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1-Dichloroethene	8	0.0049	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1-Dichloroethane	570	0.003	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,2-Dichloroethene (total)	79	0.0044	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Chloroform	19	0.0029	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,2-Dichloroethane	6	0.0024	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
2-Butanone	1000	0.0041	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.013 J	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1,1-Trichloroethane	210	0.0017	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Carbon Tetrachloride	2	0.0015	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Bromodichloromethane	11	0.002	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,2-Dichloropropane	10	0.0017	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
cis-1,3-Dichloropropene	4	0.003	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Trichloroethene	23	0.002	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Dibromochloromethane	110	0.0024	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1,2-Trichloroethane	22	0.0043	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Benzene	3	0.0033	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
trans-1,3-Dichloropropene	4	0.0024	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Bromoform	86	0.0031	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
4-Methyl-2-pentanone	1000	0.0055	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
2-Hexanone		0.0039	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Tetrachloroethene	4	0.004	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1,2,2-Tetrachloroethane	34	0.0042	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Toluene	1000	0.0027	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Chlorobenzene	37	0.0027	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Ethylbenzene	1000	0.0031	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.002 J	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Styrene	23	0.0038	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Xylene (total)	410	0.0038	0.011 U	0.011	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.013 J	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Total Est. Conc. of TIC.											1.15 J		0.006 J				0.007 J	
Dilution Factor																		
Method:TCL Volatiles																		

MAIN POST
SOIL BORING VOLATILES

Geographical Location			M18		M18		M18		M18		B1		B1		B2		B2	
Sample			MP18-SB24-A02		MP18-SB25-A01		MP18-SB25-A02		MP18-SB25-D02		B1-SB01-A01		B1-SB01-A02		B2-SB01-A01		B2-SB01-A02	
Sample Type									Trip Blank									
Batch#			9501G632		9501G656		9501G656		9501G656		9501G527		9501G527		9501G500		9501G500	
Prep#			95GVT016		95GVT010		95GVT010		95GVC007		95GVF012		95GVF011		95GVF011 & 13		95GVF011	
RFW#			002		001		002		003		001		002		001		002	
Sample Depth (bgs)			2 - 4'		1 - 1.5'		2 - 4'				1 - 2'		2 - 4'		1 - 2'		6 - 8'	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		water		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/l		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/12/95		1/13/95		1/13/95		1/13/95		1/9/94		1/9/94		1/6/95		1/6/95	
Analysis Date			1/18/95		1/20/95		1/20/95		1/21/95		1/15/94		1/13/94		1/13/95		1/13/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Bromomethane	79	0.0067	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Vinyl Chloride	2	0.0079	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Chloroethane		0.0091	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Methylene Chloride	49	0.0027	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.015 B	0.012
Acetone	1000	0.0069	0.095 B	0.012	0.012 U	0.012	0.066 B	0.011	0.03	0.01	0.011 U	0.011	0.001 J	0.013	0.61 B	*	0.53	*
Carbon Disulfide		0.0044	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
1,1-Dichloroethene	8	0.0049	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
1,1-Dichloroethane	570	0.003	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
1,2-Dichloroethene (total)	79	0.0044	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Chloroform	19	0.0029	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.003 J	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
1,2-Dichloroethane	6	0.0024	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
2-Butanone	1000	0.0041	0.014	0.012	0.012 U	0.012	0.011	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
1,1,1-Trichloroethane	210	0.0017	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Carbon Tetrachloride	2	0.0015	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Bromodichloromethane	11	0.002	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
1,2-Dichloropropane	10	0.0017	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
cis-1,3-Dichloropropene	4	0.003	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Trichloroethene	23	0.002	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Dibromochloromethane	110	0.0024	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
1,1,2-Trichloroethane	22	0.0043	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Benzene	3	0.0033	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
trans-1,3-Dichloropropene	4	0.0024	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Bromoform	86	0.0031	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
4-Methyl-2-pentanone	1000	0.0055	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
2-Hexanone		0.0039	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Tetrachloroethene	4	0.004	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
1,1,2,2-Tetrachloroethane	34	0.0042	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Toluene	1000	0.0027	0.012 U	0.012	0.012 U	0.012	0.002 J	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Chlorobenzene	37	0.0027	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Ethylbenzene	1000	0.0031	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Styrene	23	0.0038	0.012 U	0.012	0.012 U	0.012	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Xylene (total)	410	0.0038	0.012 U	0.012	0.012 U	0.012	0.006 J	0.011	0.01 U	0.01	0.011 U	0.011	0.013 U	0.013	0.012 U	0.012	0.012 U	0.012
Total Est. Conc. of TIC.			0.064 J				0.118 J		0.008 J									
Dilution Factor															* = ?		* = 10.0	
Method:TCL Volatiles																		

MAIN POST
SOIL BORING VOLATILES

Geographical Location			B3		B3		B3		B4		B4		B4		B4		B5	
Sample			B3-SB01-A01		B3-SB01-A03		B3-SB01-D03		B4-SB01-A01		B4-SB01-A02		B4-SB01-C01		B4-SB01-D01		B5-SB01-A01	
Sample Type							Trip Blank						Duplicate		Trip Blank			
Batch#			9501G500		9501G500		9401G500		9501G527		9501G527		9501G527		9501G527		9501G587	
Prep#			95GVF011		95GVF011		95GB0012		95GVF012		95GVF012 & 13		95GVF012		95GVE012		95GVF016	
RFW#			003		004		005		003		004		005		006		007	
Sample Depth (bgs)			1 - 2'		16 - 18'				1 - 2'		6 - 8'						1 - 2'	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		water		soil		soil		soil		water		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/l		mg/kg		mg/kg		mg/kg		mg/l		mg/kg	
Sampling Date			1/6/95		1/6/95		1/6/95		1/9/95		1/9/95		1/9/95		1/9/95		1/11/95	
Analysis Date			1/13/95		1/12/95		1/13/95		1/15/95		1/15/95		1/15/95		1/12/95		1/18/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Bromomethane	79	0.0067	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Vinyl Chloride	2	0.0079	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Chloroethane		0.0091	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Methylene Chloride	49	0.0027	0.011 U	0.011	0.032 B	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Acetone	1000	0.0069	0.011 U	0.011	0.036	0.014	0.01 U	0.01	0.011 U	0.011	0.83 B	.27 *	0.016	0.011	0.01 U	0.01	0.012 U	0.012
Carbon Disulfide		0.0044	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1-Dichloroethene	8	0.0049	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1-Dichloroethane	570	0.003	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,2-Dichloroethene (total)	79	0.0044	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Chloroform	19	0.0029	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,2-Dichloroethane	6	0.0024	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
2-Butanone	1000	0.0041	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1,1-Trichloroethane	210	0.0017	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Carbon Tetrachloride	2	0.0015	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Bromodichloromethane	11	0.002	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,2-Dichloropropane	10	0.0017	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
cis-1,3-Dichloropropene	4	0.003	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Trichloroethene	23	0.002	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Dibromochloromethane	110	0.0024	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1,2-Trichloroethane	22	0.0043	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Benzene	3	0.0033	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
trans-1,3-Dichloropropene	4	0.0024	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Bromoform	86	0.0031	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
4-Methyl-2-pentanone	1000	0.0055	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
2-Hexanone		0.0039	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Tetrachloroethene	4	0.004	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
1,1,2,2-Tetrachloroethane	34	0.0042	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Toluene	1000	0.0027	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.004 J	0.011	0.01 U	0.01	0.012 U	0.012
Chlorobenzene	37	0.0027	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Ethylbenzene	1000	0.0031	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Styrene	23	0.0038	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.011 U	0.011	0.01 U	0.01	0.012 U	0.012
Xylene (total)	410	0.0038	0.011 U	0.011	0.014 U	0.014	0.01 U	0.01	0.011 U	0.011	0.014 U	0.014	0.004 J	0.011	0.01 U	0.01	0.012 U	0.012
Total Est. Conc. of TIC.																	0.023 J	
Dilution Factor											* = 20.0							
Method:TCL Volatiles																		

MAIN POST
SOIL BORING VOLATILES

Geographical Location			B5		B5	
Sample			B5-SB01-A02		B5-SB01-D02	
Sample Type					Trip Blank	
Batch#			9501G587		9501G587	
Prep#			95GVF014		95GVC005	
RFW#			008		009	
Sample Depth (bgs)			2 - 4'			
Dilution Factor			1.00		1.00	
Matrix			soil		water	
Units	mg/kg	mg/kg	mg/kg		mg/l	
Sampling Date			1/11/95		1/11/95	
Analysis Date			1/17/95		1/16/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.012 U	0.012	0.01 U	0.01
Bromomethane	79	0.0067	0.012 U	0.012	0.01 U	0.01
Vinyl Chloride	2	0.0079	0.012 U	0.012	0.01 U	0.01
Chloroethane		0.0091	0.012 U	0.012	0.01 U	0.01
Methylene Chloride	49	0.0027	0.012 U	0.012	0.01 U	0.01
Acetone	1000	0.0069	0.012 U	0.012	0.01 U	0.01
Carbon Disulfide		0.0044	0.012 U	0.012	0.01 U	0.01
1,1-Dichloroethene	8	0.0049	0.012 U	0.012	0.01 U	0.01
1,1-Dichloroethane	570	0.003	0.012 U	0.012	0.01 U	0.01
1,2-Dichloroethene (total)	79	0.0044	0.012 U	0.012	0.01 U	0.01
Chloroform	19	0.0029	0.012 U	0.012	0.01 U	0.01
1,2-Dichloroethane	6	0.0024	0.012 U	0.012	0.01 U	0.01
2-Butanone	1000	0.0041	0.012 U	0.012	0.01 U	0.01
1,1,1-Trichloroethane	210	0.0017	0.012 U	0.012	0.01 U	0.01
Carbon Tetrachloride	2	0.0015	0.012 U	0.012	0.01 U	0.01
Bromodichloromethane	11	0.002	0.012 U	0.012	0.01 U	0.01
1,2-Dichloropropane	10	0.0017	0.012 U	0.012	0.01 U	0.01
cis-1,3-Dichloropropene	4	0.003	0.012 U	0.012	0.01 U	0.01
Trichloroethene	23	0.002	0.012 U	0.012	0.01 U	0.01
Dibromochloromethane	110	0.0024	0.012 U	0.012	0.01 U	0.01
1,1,2-Trichloroethane	22	0.0043	0.012 U	0.012	0.01 U	0.01
Benzene	3	0.0033	0.012 U	0.012	0.01 U	0.01
trans-1,3-Dichloropropene	4	0.0024	0.012 U	0.012	0.01 U	0.01
Bromoform	86	0.0031	0.012 U	0.012	0.01 U	0.01
4-Methyl-2-pentanone	1000	0.0055	0.012 U	0.012	0.01 U	0.01
2-Hexanone		0.0039	0.012 U	0.012	0.01 U	0.01
Tetrachloroethene	4	0.004	0.012 U	0.012	0.01 U	0.01
1,1,2,2-Tetrachloroethane	34	0.0042	0.012 U	0.012	0.01 U	0.01
Toluene	1000	0.0027	0.012 U	0.012	0.01 U	0.01
Chlorobenzene	37	0.0027	0.012 U	0.012	0.01 U	0.01
Ethylbenzene	1000	0.0031	0.012 U	0.012	0.01 U	0.01
Styrene	23	0.0038	0.012 U	0.012	0.01 U	0.01
Xylene (total)	410	0.0038	0.012 U	0.012	0.01 U	0.01
Total Est. Conc. of TIC.						
Dilution Factor						
Method:TCL Volatiles						

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			AOC3		AOC3		AOC3		M16		M16	
Sample			MPA3-SB01-A02		MPA3-SB01-C02		MPA3-SB02-A02		MP16-SB01-A01		MP16-SB01-A02	
Sample Type					Duplicate							
Batch#			9412G130		9412G130		9412G155		9412G155		9412G155	
Prep#			94GBO835		94GBO835		94GBO835		94GB0835		94GB0835	
RFW#			001		002		003		001		002	
Sample Depth (bgs)												
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			12/14/94		12/14/94		12/15/94		12/15/94		12/15/94	
Analysis Date			12/27/94		12/27/94		12/23/94		12/23/94		12/27/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
bis(2-Chloroethyl) ether	0.66	0.32	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2-Chlorophenol	280	0.241	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
1,3-Dichlorobenzene	5100	0.175	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
1,4-Dichlorobenzene	570	0.158	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
1,2-Dichlorobenzene	5100	0.188	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2-Methylphenol	2800	0.221	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2,2'-oxybis(1-Chloropropane)		0.231	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
4-Methylphenol	2800	0.426	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
N-Nitroso-di-n-propylamine	0.66	0.264	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Hexachloroethane	6	0.175	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Nitrobenzene	28	0.244	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Isophorone	1100	0.129	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2-Nitrophenol		0.231	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2,4-Dimethylphenol	1100	0.158	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
bis(2-Chloroethoxy) methane		0.201	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2,4-Dichlorophenol	170	0.145	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
1,2,4-Trichlorobenzene	68	0.317	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Naphthalene	230	0.277	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
4-Chloroaniline	230	0.096	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Hexachlorobutadiene	1	0.152	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
4-Chloro-3-methylphenol	10000	0.102	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2-Methylnaphthalene		0.287	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Hexachlorocyclopentadiene	400	0.119	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2,4,6-Trichlorophenol	62	0.185	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2,4,5-Trichlorophenol	5600	0.155	0.92 U	0.92	0.89 U	0.89	0.88 U	0.88	0.96 U	0.96	1 U	1
2-Chloronaphthalene		0.271	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2-Nitroaniline		0.201	0.92 U	0.92	0.89 U	0.89	0.88 U	0.88	0.96 U	0.96	1 U	1
Dimethylphthalate	10000	0.145	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Acenaphthylene		0.198	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2,6-Dinitrotoluene	1	0.172	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
3-Nitroaniline		0.172	0.92 U	0.92	0.89 U	0.89	0.88 U	0.88	0.96 U	0.96	1 U	1
Acenaphthene	3400	0.221	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2,4-Dinitrophenol	110	0.152	0.92 U	0.92	0.89 U	0.89	0.88 U	0.88	0.96 U	0.96	1 U	1
4-Nitrophenol		0.248	0.92 U	0.92	0.89 U	0.89	0.88 U	0.88	0.96 U	0.96	1 U	1

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			AOC3		AOC3		AOC3		M16		M16	
Sample			MPA3-SB01-A02		MPA3-SB01-C02		MPA3-SB02-A02		MP16-SB01-A01		MP16-SB01-A02	
Sample Type					Duplicate							
Batch#			9412G130		9412G130		9412G155		9412G155		9412G155	
Prep#			94GBO835		94GBO835		94GBO835		94GB0835		94GB0835	
RFW#			001		002		003		001		002	
Sample Depth (bgs)												
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			12/14/94		12/14/94		12/15/94		12/15/94		12/15/94	
Analysis Date			12/27/94		12/27/94		12/23/94		12/23/94		12/27/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.215	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
2,4-Dinitrotoluene	1	0.191	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Diethylphthalate	10000	0.178	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
4-Chlorophenyl-phenylether		0.231	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Fluorene	2300	0.208	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
4-Nitroaniline		0.211	0.92 U	0.92	0.89 U	0.89	0.88 U	0.88	0.96 U	0.96	1 U	1
4,6-Dinitro-2-methylphenol		0.175	0.92 U	0.92	0.89 U	0.89	0.88 U	0.88	0.96 U	0.96	1 U	1
N-Nitrosodiphenylamine (1)	140	0.139	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
4-Bromophenyl-phenylether		0.175	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Hexachlorobenzene	0.66	0.182	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Pentachlorophenol	6	0.132	0.92 U	0.92	0.89 U	0.89	0.88 U	0.88	0.96 U	0.96	1 U	1
Phenanthrene		0.165	0.09 J	0.37	0.078 J	0.36	0.35 U	0.35	0.14 J	0.38	0.42 U	0.42
Anthracene	10000	0.152	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Carbazole		0.145	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Di-n-butylphthalate	5700	0.215	0.093 JB	0.37	0.17 JB	0.36	0.084 JB	0.35	0.092 JB	0.38	0.094 JB	0.42
Fluoranthene	2300	0.198	0.11 J	0.37	0.11 J	0.36	0.35 U	0.35	0.33 J	0.38	0.42 U	0.42
Pyrene	1700	0.178	0.15 J	0.37	0.14 J	0.36	0.35 U	0.35	0.22 J	0.38	0.42 U	0.42
Butylbenzylphthalate	1100	0.175	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
3,3'-Dichlorobenzidine	2	0.092	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Benzo(a)anthracene	0.9	0.162	0.077 J	0.37	0.078 J	0.36	0.35 U	0.35	0.092 J	0.38	0.42 U	0.42
Chrysene	9	0.145	0.099 J	0.37	0.11 J	0.36	0.35 U	0.35	0.15 J	0.38	0.42 U	0.42
bis(2-Ethylhexy)phthalate	49	0.32	0.057 J	0.37	0.11 J	0.36	0.053 J	0.35	0.38 U	0.38	0.23 J	0.42
Di-n-octyl phthalate	1100	0.185	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Benzo(b)fluoranthene	0.9	0.188	0.077 J	0.37	0.093 J	0.36	0.35 U	0.35	0.15 J	0.38	0.42 U	0.42
Benzo(k)fluoranthene	0.9	0.205	0.37 U	0.37	0.037 J	0.36	0.35 U	0.35	0.069 J	0.38	0.42 U	0.42
Benzo(a)pyrene	0.66	0.162	0.055 J	0.37	0.069 J	0.36	0.35 U	0.35	0.084 J	0.38	0.43	0.42
Indeno(1,2,3-cd)pyrene	0.9	0.234	0.046 J	0.37	0.057 J	0.36	0.35 U	0.35	0.067 J	0.38	0.42 U	0.42
Dibenzo(a,h)anthracene	0.66	0.198	0.37 U	0.37	0.36 U	0.36	0.35 U	0.35	0.38 U	0.38	0.42 U	0.42
Benzo(g,h,i)perylene		0.224	0.049 J	0.37	0.055 J	0.36	0.35 U	0.35	0.063 J	0.38	0.42 U	0.42
Petroleum hydrocarbons												
Total Est. Conc. of TIC			17.3		17.3		.18 J, 10.28 JB		14.8		14.2	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			M16		M18		M18		M18		M18		M18		M18	
Sample			MP16-SB02-A02		M18-SB04-A01		M18-SB04-A02		M18-SB05-A01		M18-SB05-A02		M18-SB06-A01		M18-SB06-A02	
Sample Type																
Batch#			9412G155		9501G587		9501G587		9501G587		9501G587		9501G587		9501G587	
Prep#			94GB0835		95GTS014		95GTS014		95GTS014		95GTS014		95GTS014		95GP0035	
RFW#			003		003		004		001		002		005		006	
Sample Depth (bgs)																
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			12/15/94		1/11/95		1/11/95		1/11/95		1/11/95		1/11/95		1/11/95	
Analysis Date			12/28/94		1/20/95		1/20/95		1/20/95		1/20/95		1/20/95		2/22/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234	0.35 U	0.35											0.46 U	0.46
bis(2-Chloroethyl) ether	0.66	0.32	0.35 U	0.35											0.46 U	0.46
2-Chlorophenol	280	0.241	0.35 U	0.35											0.46 U	0.46
1,3-Dichlorobenzene	5100	0.175	0.35 U	0.35											0.46 U	0.46
1,4-Dichlorobenzene	570	0.158	0.35 U	0.35											0.46 U	0.46
1,2-Dichlorobenzene	5100	0.188	0.35 U	0.35											0.46 U	0.46
2-Methylphenol	2800	0.221	0.35 U	0.35											0.46 U	0.46
2,2'-oxybis(1-Chloropropane)		0.231	0.35 U	0.35											0.46 U	0.46
4-Methylphenol	2800	0.426	0.35 U	0.35											0.46 U	0.46
N-Nitroso-di-n-propylamine	0.66	0.264	0.35 U	0.35											0.46 U	0.46
Hexachloroethane	6	0.175	0.35 U	0.35											0.46 U	0.46
Nitrobenzene	28	0.244	0.35 U	0.35											0.46 U	0.46
Isophorone	1100	0.129	0.35 U	0.35											0.46 U	0.46
2-Nitrophenol		0.231	0.35 U	0.35											0.46 U	0.46
2,4-Dimethylphenol	1100	0.158	0.35 U	0.35											0.46 U	0.46
bis(2-Chloroethoxy) methane		0.201	0.35 U	0.35											0.46 U	0.46
2,4-Dichlorophenol	170	0.145	0.35 U	0.35											0.46 U	0.46
1,2,4-Trichlorobenzene	68	0.317	0.35 U	0.35											0.46 U	0.46
Naphthalene	230	0.277	0.35 U	0.35											1.2	0.46
4-Chloroaniline	230	0.096	0.35 U	0.35											0.46 U	0.46
Hexachlorobutadiene	1	0.152	0.35 U	0.35											0.46 U	0.46
4-Chloro-3-methylphenol	10000	0.102	0.35 U	0.35											0.46 U	0.46
2-Methylnaphthalene		0.287	0.35 U	0.35											0.46 U	0.46
Hexachlorocyclopentadiene	400	0.119	0.35 U	0.35											0.27 U	0.46
2,4,6-Trichlorophenol	62	0.185	0.35 U	0.35											0.46 U	0.46
2,4,5-Trichlorophenol	5600	0.155	0.88 U	0.88											1.1 U	1.1
2-Chloronaphthalene		0.271	0.35 U	0.35											0.46 U	0.46
2-Nitroaniline		0.201	0.88 U	0.88											1.1 U	1.1
Dimethylphthalate	10000	0.145	0.35 U	0.35											0.46 U	0.46
Acenaphthylene		0.198	0.35 U	0.35											0.46 U	0.46
2,6-Dinitrotoluene	1	0.172	0.35 U	0.35											0.46 U	0.46
3-Nitroaniline		0.172	0.88 U	0.88											1.1 U	1.1
Acenaphthene	3400	0.221	0.35 U	0.35											52	9.2 *
2,4-Dinitrophenol	110	0.152	0.88 U	0.88											1.1 U	1.1
4-Nitrophenol		0.248	0.88 U	0.88											1.1 U	1.1

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			M16		M18		M18		M18		M18		M18		M18	
Sample			MP16-SB02-A02		M18-SB04-A01		M18-SB04-A02		M18-SB05-A01		M18-SB05-A02		M18-SB06-A01		M18-SB06-A02	
Sample Type																
Batch#			9412G155		9501G587		9501G587		9501G587		9501G587		9501G587		9501G587	
Prep#			94GB0835		95GTS014		95GTS014		95GTS014		95GTS014		95GTS014		95GP0035	
RFW#			003		003		004		001		002		005		006	
Sample Depth (bgs)																
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			12/15/94		1/11/95		1/11/95		1/11/95		1/11/95		1/11/95		1/11/95	
Analysis Date			12/28/94		1/20/95		1/20/95		1/20/95		1/20/95		1/20/95		2/22/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.215	0.35 U	0.35											31	9.2 *
2,4-Dinitrotoluene	1	0.191	0.35 U	0.35											0.460 U	0.46
Diethylphthalate	10000	0.178	0.35 U	0.35											0.460 U	0.46
4-Chlorophenyl-phenylether		0.231	0.35 U	0.35											0.460 U	0.46
Fluorene	2300	0.208	0.35 U	0.35											40	9.2 *
4-Nitroaniline		0.211	0.88 U	0.88											1.1 U	1.1
4,6-Dinitro-2-methylphenol		0.175	0.88 U	0.88											1.1 U	1.1
N-Nitrosodiphenylamine (1)	140	0.139	0.35 U	0.35											0.46 U	0.46
4-Bromophenyl-phenylether		0.175	0.35 U	0.35											0.46 U	0.46
Hexachlorobenzene	0.66	0.182	0.35 U	0.35											0.46 U	0.46
Pentachlorophenol	6	0.132	0.88 U	0.88											1.1 U	1.1
Phenanthrene		0.165	0.35 U	0.35											140	46 **
Anthracene	10000	0.152	0.35 U	0.35											16	9.2 *
Carbazole		0.145	0.35 U	0.35											4.8 J	9.2 *
Di-n-butylphthalate	5700	0.215	0.084 JB	0.35											0.36 JB	0.46
Fluoranthene	2300	0.198	0.35 U	0.35											46	9.2 *
Pyrene	1700	0.178	0.35 U	0.35											48	9.2 *
Butylbenzylphthalate	1100	0.175	0.35 U	0.35											0.45 J	0.46
3,3'-Dichlorobenzidine	2	0.092	0.35 U	0.35											0.46 U	0.46
Benzo(a)anthracene	0.9	0.162	0.35 U	0.35											11	9.2 *
Chrysene	9	0.145	0.35 U	0.35											10	9.2 *
bis(2-Ethylhexy)phthalate	49	0.32	0.053 J	0.35											0.17 J	0.46
Di-n-octyl phthalate	1100	0.185	0.35 U	0.35											0.46 U	0.46
Benzo(b)fluoranthene	0.9	0.188	0.35 U	0.35											7.6 J	9.2 *
Benzo(k)fluoranthene	0.9	0.205	0.35 U	0.35											2.3	0.46
Benzo(a)pyrene	0.66	0.162	0.35 U	0.35											3.8 J	9.2 *
Indeno(1,2,3-cd)pyrene	0.9	0.234	0.35 U	0.35											2.1	0.46
Dibenzo(a,h)anthracene	0.66	0.198	0.35 U	0.35											0.45 J	0.46
Benzo(g,h,i)perylene		0.224	0.35 U	0.35											0.21 J	0.46
Petroleum hydrocarbons					27.8 U	27.8	26.8 U	26.8	117	28.7	30.0 U	30.0	221	28.6	2300	348
Total Est. Conc. of TIC			10.46												17.8	
Dilution Factor															* = 20.0, ** = 100	
Method:TCL Semivolatiles																

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			M18		M18		M18		M18		M18		M18	
Sample			M18-SB06-A02RE		MP18-SB01-A01		MP18-SB01-A02		MP18-SB02-A01		MP18-SB02-A02		MP18-SB03-A01	
Sample Type														
Batch#			9501G587		9412G632		9412G632		9412G632		9412G632		9412G632	
Prep#			95GP0083		94GTS038		94GTS038		94GTS038		94GTS038		94GTS038	
RFW#			006		003		004		005		006		006	
Sample Depth (bgs)														
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/11/95		1/12/95		1/12/95		1/12/95		1/12/95		1/12/95	
Analysis Date			2/11/95		1/30/95		1/30/95		1/30/95		1/30/95		1/30/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234	0.46 U	0.46										
bis(2-Chloroethyl) ether	0.66	0.32	0.46 U	0.46										
2-Chlorophenol	280	0.241	0.46 U	0.46										
1,3-Dichlorobenzene	5100	0.175	0.46 U	0.46										
1,4-Dichlorobenzene	570	0.158	0.46 U	0.46										
1,2-Dichlorobenzene	5100	0.188	0.46 U	0.46										
2-Methylphenol	2800	0.221	0.46 U	0.46										
2,2'-oxybis(1-Chloropropane)		0.231	0.46 U	0.46										
4-Methylphenol	2800	0.426	0.46 U	0.46										
N-Nitroso-di-n-propylamine	0.66	0.264	0.46 U	0.46										
Hexachloroethane	6	0.175	0.46 U	0.46										
Nitrobenzene	28	0.244	0.46 U	0.46										
Isophorone	1100	0.129	0.46 U	0.46										
2-Nitrophenol		0.231	0.46 U	0.46										
2,4-Dimethylphenol	1100	0.158	0.46 U	0.46										
bis(2-Chloroethoxy) methane		0.201	0.46 U	0.46										
2,4-Dichlorophenol	170	0.145	0.46 U	0.46										
1,2,4-Trichlorobenzene	68	0.317	0.46 U	0.46										
Naphthalene	230	0.277	0.94	0.46										
4-Chloroaniline	230	0.096	0.46 U	0.46										
Hexachlorobutadiene	1	0.152	0.46 U	0.46										
4-Chloro-3-methylphenol	10000	0.102	0.46 U	0.46										
2-Methylnaphthalene		0.287	0.18 J	0.46										
Hexachlorocyclopentadiene	400	0.119	0.46 U	0.46										
2,4,6-Trichlorophenol	62	0.185	0.46 U	0.46										
2,4,5-Trichlorophenol	5600	0.155	1.2 U	1.2										
2-Chloronaphthalene		0.271	0.46 U	0.46										
2-Nitroaniline		0.201	1.2 U	1.2										
Dimethylphthalate	10000	0.145	0.46 U	0.46										
Acenaphthylene		0.198	0.46 U	0.46										
2,6-Dinitrotoluene	1	0.172	0.46 U	0.46										
3-Nitroaniline		0.172	1.2 U	1.2										
Acenaphthene	3400	0.221	E	0.46										
2,4-Dinitrophenol	110	0.152	1.2 U	1.2										
4-Nitrophenol		0.248	1.2 U	1.2										

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			M18		M18		M18		M18		M18		M18	
Sample			M18-SB06-A02RE		MP18-SB01-A01		MP18-SB01-A02		MP18-SB02-A01		MP18-SB02-A02		MP18-SB03-A01	
Sample Type														
Batch#			9501G587		9412G632		9412G632		9412G632		9412G632		9412G632	
Prep#			95GP0083		94GTS038		94GTS038		94GTS038		94GTS038		94GTS038	
RFW#			006		003		004		005		006		006	
Sample Depth (bgs)														
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/11/95		1/12/95		1/12/95		1/12/95		1/12/95		1/12/95	
Analysis Date			2/11/95		1/30/95		1/30/95		1/30/95		1/30/95		1/30/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.215	E	0.46										
2,4-Dinitrotoluene	1	0.191	0.46 U	0.46										
Diethylphthalate	10000	0.178	0.46 U	0.46										
4-Chlorophenyl-phenylether		0.231	0.46 U	0.46										
Fluorene	2300	0.208	E	0.46										
4-Nitroaniline		0.211	1.2 U	1.2										
4,6-Dinitro-2-methylphenol		0.175	1.2 U	1.2										
N-Nitrosodiphenylamine (1)	140	0.139	0.46 U	0.46										
4-Bromophenyl-phenylether		0.175	0.46 U	0.46										
Hexachlorobenzene	0.66	0.182	0.46 U	0.46										
Pentachlorophenol	6	0.132	1.2 U	1.2										
Phenanthrene		0.165	E	0.46										
Anthracene	10000	0.152	E	0.46										
Carbazole		0.145	E	0.46										
Di-n-butylphthalate	5700	0.215	1.6 B	0.46										
Fluoranthene	2300	0.198	E	0.46										
Pyrene	1700	0.178	E	0.46										
Butylbenzylphthalate	1100	0.175	0.46 U	0.46										
3,3'-Dichlorobenzidine	2	0.092	0.46 U	0.46										
Benzo(a)anthracene	0.9	0.162	E	0.46										
Chrysene	9	0.145	E	0.46										
bis(2-Ethylhexy)phthalate	49	0.32	0.18 J	0.46										
Di-n-octyl phthalate	1100	0.185	0.46 U	0.46										
Benzo(b)fluoranthene	0.9	0.188	E	0.46										
Benzo(k)fluoranthene	0.9	0.205	1.3	0.46										
Benzo(a)pyrene	0.66	0.162	3.1	0.46										
Indeno(1,2,3-cd)pyrene	0.9	0.234	1.7	0.46										
Dibenzo(a,h)anthracene	0.66	0.198	0.46 U	0.46										
Benzo(g,h,i)perylene		0.224	1.5	0.46										
Petroleum hydrocarbons					367	27.5	84.9	28.5	188	27.8	612	30.6	6330	719
Total Est. Conc. of TIC			21.2											
Dilution Factor														
Method:TCL Semivolatiles														

Geographical Location			M18		M18		M18		M18		M18	
Sample			MP18-SB03-A01		MP18-SB07-A02		MP18-SB24-A01		MP18-SB24-A02		MP18-SB25-A01	
Sample Type												
Batch#			9412G632		9412G632		9412G632		9412G632		9501G656	
Prep#			94GTS038		94GTS038		94GTS038		94GTS038		95GTS038	
RFW#			007		008		001		002		001	
Sample Depth (bgs)												
Dilution Factor			1.00		1.00		1.00		1.00		10.0	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/12/95		1/12/95		1/12/95		1/12/95		1/11/95	
Analysis Date			1/30/95		1/30/95		1/30/95		1/30/95		1/13/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234										
bis(2-Chloroethyl) ether	0.66	0.32										
2-Chlorophenol	280	0.241										
1,3-Dichlorobenzene	5100	0.175										
1,4-Dichlorobenzene	570	0.158										
1,2-Dichlorobenzene	5100	0.188										
2-Methylphenol	2800	0.221										
2,2'-oxybis(1-Chloropropane)		0.231										
4-Methylphenol	2800	0.426										
N-Nitroso-di-n-propylamine	0.66	0.264										
Hexachloroethane	6	0.175										
Nitrobenzene	28	0.244										
Isophorone	1100	0.129										
2-Nitrophenol		0.231										
2,4-Dimethylphenol	1100	0.158										
bis(2-Chloroethoxy) methane		0.201										
2,4-Dichlorophenol	170	0.145										
1,2,4-Trichlorobenzene	68	0.317										
Naphthalene	230	0.277										
4-Chloroaniline	230	0.096										
Hexachlorobutadiene	1	0.152										
4-Chloro-3-methylphenol	10000	0.102										
2-Methylnaphthalene		0.287										
Hexachlorocyclopentadiene	400	0.119										
2,4,6-Trichlorophenol	62	0.185										
2,4,5-Trichlorophenol	5600	0.155										
2-Chloronaphthalene		0.271										
2-Nitroaniline		0.201										
Dimethylphthalate	10000	0.145										
Acenaphthylene		0.198										
2,6-Dinitrotoluene	1	0.172										
3-Nitroaniline		0.172										
Acenaphthene	3400	0.221										
2,4-Dinitrophenol	110	0.152										
4-Nitrophenol		0.248										

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			M18		M18		M18		M18		M18	
Sample			MP18-SB03-A01		MP18-SB07-A02		MP18-SB24-A01		MP18-SB24-A02		MP18-SB25-A01	
Sample Type												
Batch#			9412G632		9412G632		9412G632		9412G632		9501G656	
Prep#			94GTS038		94GTS038		94GTS038		94GTS038		95GTS038	
RFW#			007		008		001		002		001	
Sample Depth (bgs)												
Dilution Factor			1.00		1.00		1.00		1.00		10.0	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/12/95		1/12/95		1/12/95		1/12/95		1/11/95	
Analysis Date			1/30/95		1/30/95		1/30/95		1/30/95		1/13/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran	-	0.215										
2,4-Dinitrotoluene	1	0.191										
Diethylphthalate	10000	0.178										
4-Chlorophenyl-phenylether		0.231										
Fluorene	2300	0.208										
4-Nitroaniline		0.211										
4,6-Dinitro-2-methylphenol		0.175										
N-Nitrosodiphenylamine (1)	140	0.139										
4-Bromophenyl-phenylether		0.175										
Hexachlorobenzene	0.66	0.182										
Pentachlorophenol	6	0.132										
Phenanthrene		0.165										
Anthracene	10000	0.152										
Carbazole		0.145										
Di-n-butylphthalate	5700	0.215										
Fluoranthene	2300	0.198										
Pyrene	1700	0.178										
Butylbenzylphthalate	1100	0.175										
3,3'-Dichlorobenzidine	2	0.092										
Benzo(a)anthracene	0.9	0.162										
Chrysene	9	0.145										
bis(2-Ethylhexy)phthalate	49	0.32										
Di-n-octyl phthalate	1100	0.185										
Benzo(b)fluoranthene	0.9	0.188										
Benzo(k)fluoranthene	0.9	0.205										
Benzo(a)pyrene	0.66	0.162										
Indeno(1,2,3-cd)pyrene	0.9	0.234										
Dibenzo(a,h)anthracene	0.66	0.198										
Benzo(g,h,i)perylene		0.224										
Petroleum hydrocarbons			1100	29.0	29.9	28.6	695	28.8	993	31.1	311	29.6
Total Est. Conc. of TIC												
Dilution Factor					These can be found in the Inorganics data packages.							
Method:TCL Semivolatiles												

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			M18		B1		B1		B1		B2	
Sample			MP18-SB25-A02		B1-SB01-A01		B1-SB01-A01RE		B1-SB01-A02		B2-SB01-A01	
Sample Type												
Batch#			9501G656		9401G527		9401G527		9401G527		9401G500	
Prep#			95GTS038		95GB0017		95GB0017		95GB0017		95GB0017	
RFW#			002		001		001		002		001	
Sample Depth (bgs)												
Dilution Factor			10.0		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/11/95		1/9/95		1/9/95		1/9/95		1/6/95	
Analysis Date			1/13/95		1/21/94		2/8/94		2/8/94		1/21/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
bis(2-Chloroethyl) ether	0.66	0.32			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2-Chlorophenol	280	0.241			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
1,3-Dichlorobenzene	5100	0.175			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
1,4-Dichlorobenzene	570	0.158			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
1,2-Dichlorobenzene	5100	0.188			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2-Methylphenol	2800	0.221			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2,2'-oxybis(1-Chloropropane)		0.231			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
4-Methylphenol	2800	0.426			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
N-Nitroso-di-n-propylamine	0.66	0.264			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Hexachloroethane	6	0.175			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Nitrobenzene	28	0.244			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Isophorone	1100	0.129			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2-Nitrophenol		0.231			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2,4-Dimethylphenol	1100	0.158			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
bis(2-Chloroethoxy) methane		0.201			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2,4-Dichlorophenol	170	0.145			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
1,2,4-Trichlorobenzene	68	0.317			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Naphthalene	230	0.277			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
4-Chloroaniline	230	0.096			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Hexachlorobutadiene	1	0.152			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
4-Chloro-3-methylphenol	10000	0.102			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2-Methylnaphthalene		0.287			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Hexachlorocyclopentadiene	400	0.119			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2,4,6-Trichlorophenol	62	0.185			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2,4,5-Trichlorophenol	5600	0.155			0.94 U	0.94	0.94 U	0.94	1 U	1	1 U	1
2-Chloronaphthalene		0.271			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2-Nitroaniline		0.201			0.94 U	0.94	0.94 U	0.94	1 U	1	1 U	1
Dimethylphthalate	10000	0.145			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Acenaphthylene		0.198			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2,6-Dinitrotoluene	1	0.172			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
3-Nitroaniline		0.172			0.94 U	0.94	0.94 U	0.94	1 U	1	1 U	1
Acenaphthene	3400	0.221			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2,4-Dinitrophenol	110	0.152			0.94 U	0.94	0.94 U	0.94	1 U	1	1 U	1
4-Nitrophenol		0.248			0.94 U	0.94	0.94 U	0.94	1 U	1	1 U	1

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			M18		B1		B1		B1		B2	
Sample			MP18-SB25-A02		B1-SB01-A01		B1-SB01-A01RE		B1-SB01-A02		B2-SB01-A01	
Sample Type												
Batch#			9501G656		9401G527		9401G527		9401G527		9401G500	
Prep#			95GTS038		95GB0017		95GB0017		95GB0017		95GB0017	
RFW#			002		001		001		002		001	
Sample Depth (bgs)												
Dilution Factor			10.0		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/11/95		1/9/95		1/9/95		1/9/95		1/6/95	
Analysis Date			1/13/95		1/21/94		2/8/94		2/8/94		1/21/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.215			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
2,4-Dinitrotoluene	1	0.191			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Diethylphthalate	10000	0.178			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
4-Chlorophenyl-phenylether		0.231			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Fluorene	2300	0.208			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
4-Nitroaniline		0.211			0.94 U	0.94	0.94 U	0.94	1 U	1	1 U	1
4,6-Dinitro-2-methylphenol		0.175			0.94 U	0.94	0.94 U	0.94	1 U	1	1 U	1
N-Nitrosodiphenylamine (1)	140	0.139			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
4-Bromophenyl-phenylether		0.175			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Hexachlorobenzene	0.66	0.182			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Pentachlorophenol	6	0.132			0.94 U	0.94	0.94 U	0.94	1 U	1	1 U	1
Phenanthrene		0.165			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.067 J	0.41
Anthracene	10000	0.152			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Carbazole		0.145			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Di-n-butylphthalate	5700	0.215			0.16 JB	0.38	0.11 JB	0.38	0.078 JB	0.42	0.068 JB	0.41
Fluoranthene	2300	0.198			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.042 J	0.41
Pyrene	1700	0.178			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.081 J	0.41
Butylbenzylphthalate	1100	0.175			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
3,3'-Dichlorobenzidine	2	0.092			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Benzo(a)anthracene	0.9	0.162			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Chrysene	9	0.145			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
bis(2-Ethylhexy)phthalate	49	0.32			0.041 J	0.38	0.083 J	0.38	0.42 U	0.42	0.067 J	0.41
Di-n-octyl phthalate	1100	0.185			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Benzo(b)fluoranthene	0.9	0.188			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Benzo(k)fluoranthene	0.9	0.205			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Benzo(a)pyrene	0.66	0.162			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Indeno(1,2,3-cd)pyrene	0.9	0.234			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Dibenzo(a,h)anthracene	0.66	0.198			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Benzo(g,h,i)perylene		0.224			0.38 U	0.38	0.38 U	0.38	0.42 U	0.42	0.41 U	0.41
Petroleum hydrocarbons			2500	141								
Total Est. Conc. of TIC					12.1		5.15		5.58		11.5	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			B2		B3		B3		B4		B4	
Sample			B2-SB01-A02		B3-SB01-A01		B3-SB01-A03		B4-SB01-A01		B4-SB01-A01RE	
Sample Type												
Batch#			9401G500		9401G500		9401G500		9401G527		9401G527	
Prep#			95GB0017		95GB0017		95GB0017		95GB0017		95GB0017	
RFW#			002		003		004		003		003	
Sample Depth (bgs)												
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/6/95		1/6/95		1/6/95		1/9/95		1/9/95	
Analysis Date			1/21/95		1/21/95		1/21/95		2/8/94		2/9/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
bis(2-Chloroethyl) ether	0.66	0.32	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2-Chlorophenol	280	0.241	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
1,3-Dichlorobenzene	5100	0.175	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
1,4-Dichlorobenzene	570	0.158	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
1,2-Dichlorobenzene	5100	0.188	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2-Methylphenol	2800	0.221	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2,2'-oxybis(1-Chloropropane)		0.231	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
4-Methylphenol	2800	0.426	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
N-Nitroso-di-n-propylamine	0.66	0.264	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Hexachloroethane	6	0.175	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Nitrobenzene	28	0.244	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Isophorone	1100	0.129	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2-Nitrophenol		0.231	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2,4-Dimethylphenol	1100	0.158	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
bis(2-Chloroethoxy) methane		0.201	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2,4-Dichlorophenol	170	0.145	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
1,2,4-Trichlorobenzene	68	0.317	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Naphthalene	230	0.277	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
4-Chloroaniline	230	0.096	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Hexachlorobutadiene	1	0.152	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
4-Chloro-3-methylphenol	10000	0.102	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2-Methylnaphthalene		0.287	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Hexachlorocyclopentadiene	400	0.119	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2,4,6-Trichlorophenol	62	0.185	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2,4,5-Trichlorophenol	5600	0.155	1 U	1	0.94 U	0.94	1.1 U	1.1	0.94 U	0.94	0.94 U	0.94
2-Chloronaphthalene		0.271	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2-Nitroaniline		0.201	1 U	1	0.94 U	0.94	1.1 U	1.1	0.94 U	0.94	0.94 U	0.94
Dimethylphthalate	10000	0.145	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Acenaphthylene		0.198	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.039 J	0.38	0.38 U	0.38
2,6-Dinitrotoluene	1	0.172	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
3-Nitroaniline		0.172	1 U	1	0.94 U	0.94	1.1 U	1.1	0.94 U	0.94	0.94 U	0.94
Acenaphthene	3400	0.221	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2,4-Dinitrophenol	110	0.152	1 U	1	0.94 U	0.94	1.1 U	1.1	0.94 U	0.94	0.94 U	0.94
4-Nitrophenol		0.248	1 U	1	0.94 U	0.94	1.1 U	1.1	0.94 U	0.94	0.94 U	0.94

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			B2		B3		B3		B4		B4	
Sample			B2-SB01-A02		B3-SB01-A01		B3-SB01-A03		B4-SB01-A01		B4-SB01-A01RE	
Sample Type												
Batch#			9401G500		9401G500		9401G500		9401G527		9401G527	
Prep#			95GB0017		95GB0017		95GB0017		95GB0017		95GB0017	
RFW#			002		003		004		003		003	
Sample Depth (bgs)												
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/6/95		1/6/95		1/6/95		1/9/95		1/9/95	
Analysis Date			1/21/95		1/21/95		1/21/95		2/8/94		2/9/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.215	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
2,4-Dinitrotoluene	1	0.191	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Diethylphthalate	10000	0.178	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
4-Chlorophenyl-phenylether		0.231	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Fluorene	2300	0.208	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
4-Nitroaniline		0.211	1 U	1	0.94 U	0.94	1.1 U	1.1	0.94 U	0.94	0.94 U	0.94
4,6-Dinitro-2-methylphenol		0.175	1 U	1	0.94 U	0.94	1.1 U	1.1	0.94 U	0.94	0.94 U	0.94
N-Nitrosodiphenylamine (1)	140	0.139	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
4-Bromophenyl-phenylether		0.175	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Hexachlorobenzene	0.66	0.182	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Pentachlorophenol	6	0.132	1 U	1	0.94 U	0.94	1.1 U	1.1	0.94 U	0.94	0.94 U	0.94
Phenanthrene		0.165	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.39	0.38	0.37 J	0.38
Anthracene	10000	0.152	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.092 J	0.38	0.071 J	0.38
Carbazole		0.145	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Di-n-butylphthalate	5700	0.215	0.073 JB	0.41	0.058 JB	0.38	0.071 JB	0.45	0.056 JB	0.38	0.057 JB	0.38
Fluoranthene	2300	0.198	0.41 U	0.41	0.07 J	0.38	0.45 U	0.45	0.44	0.38	0.46	0.38
Pyrene	1700	0.178	0.41 U	0.41	0.062 J	0.38	0.45 U	0.45	1.5	0.38	1.1	0.38
Butylbenzylphthalate	1100	0.175	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
3,3'-Dichlorobenzidine	2	0.092	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Benzo(a)anthracene	0.9	0.162	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.54	0.38	0.65	0.38
Chrysene	9	0.145	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.64	0.38	0.58	0.38
bis(2-Ethylhexy)phthalate	49	0.32	0.047 J	0.41	0.38 U	0.38	0.078 J	0.45	0.069 J	0.38	0.064 J	0.38
Di-n-octyl phthalate	1100	0.185	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.38 U	0.38	0.38 U	0.38
Benzo(b)fluoranthene	0.9	0.188	0.41 U	0.41	0.055 J	0.38	0.45 U	0.45	0.83	0.38	0.83	0.38
Benzo(k)fluoranthene	0.9	0.205	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.37 J	0.38	0.43	0.38
Benzo(a)pyrene	0.66	0.162	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.51	0.38	0.57	0.38
Indeno(1,2,3-cd)pyrene	0.9	0.234	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.3 J	0.38	0.46	0.38
Dibenzo(a,h)anthracene	0.66	0.198	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.05 JB	0.38	0.38 U	0.38
Benzo(g,h,i)perylene		0.224	0.41 U	0.41	0.38 U	0.38	0.45 U	0.45	0.33 JB	0.38	0.54 B	0.38
Petroleum hydrocarbons												
Total Est. Conc. of TIC			11.58		10.47				4.53		0.86	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			B4		B4		B4		B4		B5	
Sample			B4-SB01-A02		B4-SB01-A02RE		B4-SB01-C01		B4-SB01-C01RE		B5-SB01-A01	
Sample Type							Duplicate		Duplicate			
Batch#			9401G527		9401G527		9401G527		9401G527		9501G587	
Prep#			95GB0017		95GB0017		95GB0017		95GB0017		95GP0035	
RFW#			004		004		005		005		007	
Sample Depth (bgs)												
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/9/95		1/9/95		1/9/95		1/9/95		1/11/95	
Analysis Date			2/8/94		2/9/94		2/8/95		2/9/95		2/10/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234	0.42 J	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
bis(2-Chloroethyl) ether	0.66	0.32	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2-Chlorophenol	280	0.241	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
1,3-Dichlorobenzene	5100	0.175	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
1,4-Dichlorobenzene	570	0.158	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
1,2-Dichlorobenzene	5100	0.188	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2-Methylphenol	2800	0.221	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2,2'-oxybis(1-Chloropropane)		0.231	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
4-Methylphenol	2800	0.426	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
N-Nitroso-di-n-propylamine	0.66	0.264	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Hexachloroethane	6	0.175	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Nitrobenzene	28	0.244	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Isophorone	1100	0.129	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2-Nitrophenol		0.231	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2,4-Dimethylphenol	1100	0.158	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
bis(2-Chloroethoxy) methane		0.201	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2,4-Dichlorophenol	170	0.145	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
1,2,4-Trichlorobenzene	68	0.317	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Naphthalene	230	0.277	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
4-Chloroaniline	230	0.096	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Hexachlorobutadiene	1	0.152	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
4-Chloro-3-methylphenol	10000	0.102	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2-Methylnaphthalene		0.287	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Hexachlorocyclopentadiene	400	0.119	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2,4,6-Trichlorophenol	62	0.185	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2,4,5-Trichlorophenol	5600	0.155	1.1 U	1.1	1.1 U	1.1	0.93 U	0.93	0.93 U	0.93	0.98 U	0.98
2-Chloronaphthalene		0.271	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2-Nitroaniline		0.201	1.1 U	1.1	1.1 U	1.1	0.93 U	0.93	0.93 U	0.93	0.98 U	0.98
Dimethylphthalate	10000	0.145	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Acenaphthylene		0.198	0.45 U	0.45	0.45 U	0.45	0.041 J	0.37	0.37 U	0.37	0.39 U	0.39
2,6-Dinitrotoluene	1	0.172	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
3-Nitroaniline		0.172	1.1 U	1.1	1.1 U	1.1	0.93 U	0.93	0.93 U	0.93	0.98 U	0.98
Acenaphthene	3400	0.221	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2,4-Dinitrophenol	110	0.152	1.1 U	1.1	1.1 U	1.1	0.93 U	0.93	0.93 U	0.93	0.98 U	0.98
4-Nitrophenol		0.248	1.1 U	1.1	1.1 U	1.1	0.93 U	0.93	0.93 U	0.93	0.98 U	0.98

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			B4		B4		B4		B4		B5	
Sample			B4-SB01-A02		B4-SB01-A02RE		B4-SB01-C01		B4-SB01-C01RE		B5-SB01-A01	
Sample Type							Duplicate		Duplicate			
Batch#			9401G527		9401G527		9401G527		9401G527		9501G587	
Prep#			95GB0017		95GB0017		95GB0017		95GB0017		95GP0035	
RFW#			004		004		005		005		007	
Sample Depth (bgs)												
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			1/9/95		1/9/95		1/9/95		1/9/95		1/11/95	
Analysis Date			2/8/94		2/9/94		2/8/95		2/9/95		2/10/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.215	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
2,4-Dinitrotoluene	1	0.191	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Diethylphthalate	10000	0.178	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
4-Chlorophenyl-phenylether		0.231	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Fluorene	2300	0.208	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
4-Nitroaniline		0.211	1.1 U	1.1	1.1 U	1.1	0.93 U	0.93	0.93 U	0.93	0.98 U	0.98
4,6-Dinitro-2-methylphenol		0.175	1.1 U	1.1	1.1 U	1.1	0.93 U	0.93	0.93 U	0.93	0.98 U	0.98
N-Nitrosodiphenylamine (1)	140	0.139	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
4-Bromophenyl-phenylether		0.175	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Hexachlorobenzene	0.66	0.182	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Pentachlorophenol	6	0.132	1.1 U	1.1	1.1 U	1.1	0.93 U	0.93	0.93 U	0.93	0.98 U	0.98
Phenanthrene		0.165	0.45 U	0.45	0.45 U	0.45	0.11 J	0.37	0.1 J	0.37	0.39 U	0.39
Anthracene	10000	0.152	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.04 J	0.37	0.39 U	0.39
Carbazole		0.145	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Di-n-butylphthalate	5700	0.215	0.22 JB	0.45	0.22 JB	0.45	0.062 JB	0.37	0.067 JB	0.37	0.082 JB	0.39
Fluoranthene	2300	0.198	0.45 U	0.45	0.45 U	0.45	0.3 J	0.37	0.36 J	0.37	0.046 J	0.39
Pyrene	1700	0.178	0.45 U	0.45	0.45 U	0.45	1.1	0.37	0.81	0.37	0.041 J	0.39
Butylbenzylphthalate	1100	0.175	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
3,3'-Dichlorobenzidine	2	0.092	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Benzo(a)anthracene	0.9	0.162	0.45 U	0.45	0.45 U	0.45	0.54	0.37	0.58	0.37	0.39 U	0.39
Chrysene	9	0.145	0.45 U	0.45	0.45 U	0.45	0.61	0.37	0.65	0.37	0.39 U	0.39
bis(2-Ethylhexy)phthalate	49	0.32	0.45 U	0.45	0.45 U	0.45	0.04 J	0.37	0.37 U	0.37	0.39 U	0.39
Di-n-octyl phthalate	1100	0.185	0.45 U	0.45	0.45 U	0.45	0.37 U	0.37	0.37 U	0.37	0.39 U	0.39
Benzo(b)fluoranthene	0.9	0.188	0.45 U	0.45	0.45 U	0.45	0.75	0.37	0.9	0.37	0.056 J	0.39
Benzo(k)fluoranthene	0.9	0.205	0.45 U	0.45	0.45 U	0.45	0.23 J	0.37	0.26 J	0.37	0.39 U	0.39
Benzo(a)pyrene	0.66	0.162	0.45 U	0.45	0.45 U	0.45	0.59	0.37	0.6	0.37	0.39 U	0.39
Indeno(1,2,3-cd)pyrene	0.9	0.234	0.45 U	0.45	0.45 U	0.45	0.26 J	0.37	0.44	0.37	0.39 U	0.39
Dibenzo(a,h)anthracene	0.66	0.198	0.45 U	0.45	0.45 U	0.45	0.058 JB	0.37	0.079 JB	0.37	0.39 U	0.39
Benzo(g,h,i)perylene		0.224	0.45 U	0.45	0.45 U	0.45	0.39 B	0.37	0.64 B	0.37	0.39 U	0.39
Petroleum hydrocarbons												
Total Est. Conc. of TIC			4.88		5.18		5.6		5.02		6.35	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			B5		B5		B5	
Sample			B5-SB01-A01RE		B5-SB01-A01RE		B5-SB01-A02	
Sample Type								
Batch#			9501G587		9501G587		9501G587	
Prep#			95GP0035		95GP0035		95GP0035	
RFW#			007		008		008	
Sample Depth (bgs)								
Dilution Factor			1.00		1.00		1.00	
Matrix			soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date			1/11/95		1/11/95		1/11/95	
Analysis Date			2/10/95		2/11/95		2/10/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.234	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
bis(2-Chloroethyl) ether	0.66	0.32	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Chlorophenol	280	0.241	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
1,3-Dichlorobenzene	5100	0.175	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
1,4-Dichlorobenzene	570	0.158	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
1,2-Dichlorobenzene	5100	0.188	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Methylphenol	2800	0.221	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,2'-oxybis(1-Chloropropane)		0.231	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Methylphenol	2800	0.426	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
N-Nitroso-di-n-propylamine	0.66	0.264	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Hexachloroethane	6	0.175	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Nitrobenzene	28	0.244	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Isophorone	1100	0.129	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Nitrophenol		0.231	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4-Dimethylphenol	1100	0.158	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
bis(2-Chloroethoxy) methane		0.201	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4-Dichlorophenol	170	0.145	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
1,2,4-Trichlorobenzene	68	0.317	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Naphthalene	230	0.277	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Chloroaniline	230	0.096	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Hexachlorobutadiene	1	0.152	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Chloro-3-methylphenol	10000	0.102	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Methylnaphthalene		0.287	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Hexachlorocyclopentadiene	400	0.119	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4,6-Trichlorophenol	62	0.185	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4,5-Trichlorophenol	5600	0.155	0.98 U	0.98	0.99 U	0.99	0.98 U	0.98
2-Chloronaphthalene		0.271	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Nitroaniline		0.201	0.98 U	0.98	0.99 U	0.99	0.98 U	0.98
Dimethylphthalate	10000	0.145	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Acenaphthylene		0.198	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,6-Dinitrotoluene	1	0.172	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
3-Nitroaniline		0.172	0.98 U	0.98	0.99 U	0.99	0.98 U	0.98
Acenaphthene	3400	0.221	0.1 J	0.39	0.4 U	0.4	0.39 U	0.39
2,4-Dinitrophenol	110	0.152	0.98 U	0.98	0.99 U	0.99	0.98 U	0.98
4-Nitrophenol		0.248	0.98 U	0.98	0.99 U	0.99	0.98 U	0.98

MAIN POST
SOIL BORING SEMIVOLATILES

Geographical Location			B5		B5		B5	
Sample			B5-SB01-A01RE		B5-SB01-A01RE		B5-SB01-A02	
Sample Type								
Batch#			9501G587		9501G587		9501G587	
Prep#			95GP0035		95GP0035		95GP0035	
RFW#			007		008		008	
Sample Depth (bgs)								
Dilution Factor			1.00		1.00		1.00	
Matrix			soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date			1/11/95		1/11/95		1/11/95	
Analysis Date			2/10/95		2/11/95		2/10/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.215	0.06 J	0.39	0.4 U	0.4	0.39 U	0.39
2,4-Dinitrotoluene	1	0.191	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Diethylphthalate	10000	0.178	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Chlorophenyl-phenylether		0.231	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Fluorene	2300	0.208	0.074 J	0.39	0.4 U	0.4	0.39 U	0.39
4-Nitroaniline		0.211	0.98 U	0.98	0.99 U	0.99	0.98 U	0.98
4,6-Dinitro-2-methylphenol		0.175	0.98 U	0.98	0.99 U	0.99	0.98 U	0.98
N-Nitrosodiphenylamine (1)	140	0.139	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Bromophenyl-phenylether		0.175	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Hexachlorobenzene	0.66	0.182	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Pentachlorophenol	6	0.132	0.98 U	0.98	0.99 U	0.99	0.98 U	0.98
Phenanthrene		0.165	0.3 J	0.39	0.4 U	0.4	0.39 U	0.39
Anthracene	10000	0.152	0.1 J	0.39	0.4 U	0.4	0.39 U	0.39
Carbazole		0.145	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Di-n-butylphthalate	5700	0.215	1.8 B	0.39	2.2 B	0.4	0.094 JB	0.39
Fluoranthene	2300	0.198	0.21 J	0.39	0.4 U	0.4	0.39 U	0.39
Pyrene	1700	0.178	0.2 J	0.39	0.4 U	0.4	0.39 U	0.39
Butylbenzylphthalate	1100	0.175	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
3,3'-Dichlorobenzidine	2	0.092	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(a)anthracene	0.9	0.162	0.047 J	0.39	0.4 U	0.4	0.39 U	0.39
Chrysene	9	0.145	0.056 J	0.39	0.4 U	0.4	0.39 U	0.39
bis(2-Ethylhexy)phthalate	49	0.32	0.39 U	0.39	0.19 J	0.4	0.39 U	0.39
Di-n-octyl phthalate	1100	0.185	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(b)fluoranthene	0.9	0.188	0.12 J	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(k)fluoranthene	0.9	0.205	0.12 J	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(a)pyrene	0.66	0.162	0.08 J	0.39	0.4 U	0.4	0.39 U	0.39
Indeno(1,2,3-cd)pyrene	0.9	0.234	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Dibenzo(a,h)anthracene	0.66	0.198	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(g,h,i)perylene		0.224	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Petroleum hydrocarbons								
Total Est. Conc. of TIC			10.68		12.2		4.85	
Dilution Factor								
Method:TCL Semivolatiles								

MAIN POST
SOIL BORING INORGANICS

Geographical Location		M-AOC3		M-AOC3		M-AOC3		M16		M16	
Sample		MPA3-SB01-A02		MPA3-SB01-C02		MPA3-SB02-A02		MP16-SB01-A01		MP16-SB01-A02	
Sample Type				Duplicate							
Batch#		9412G130		9412G130		9412G155		9412G155		9412G155	
Prep#		94GTS484		94GTS484		94GTS484		94GTS484		94GTS484	
RFW#		001		002		003		001		002	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/14/94		12/14/94		12/15/94		12/15/94		12/15/94	
Analysis Date		12/22/94		12/22/94		12/22/94		12/22/94		12/22/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		90.1	0.10	90.1	0.10	93.0	0.1	86.1	0.10	77.9	0.10
Silver	110	0.43 U	0.43	0.52 U	0.52	0.69	0.42	0.40 U	0.40	0.60 U	0.60
Aluminum		3000	1.8	3580	2.2	4020	1.8	6840	1.7	11900	2.6
Arsenic	20	2.8	0.31	3.4	0.27	4.2	0.33	8.8	0.31	16.0	2.0 *
Barium	700	14.4	0.14	11.6	0.17	12.5	0.14	36.3	0.13	29.7	0.20
Beryllium	1	0.34	0.072	0.39	0.087	0.63	0.069	0.84	0.067	0.80	0.10
Calcium		310	1.6	406	1.9	226	1.5	1500	1.5	1200	2.2
Cadmium	1	0.61 U	0.61	0.74 U	0.74	0.59 U	0.59	0.57 U	0.57	0.86 U	0.86
Cobalt		0.72	0.51	1.4	0.61	1.5	0.49	5.0	0.47	2.8	0.70
Chromium		39.9	1.2	45.2	1.4	61.0	1.1	54.6	1.1	59.5	1.6
Copper	600	1.9	0.43	1.9	0.52	1.7	0.42	24.2	0.40	11.7	0.60
Iron		15000	0.42	18900	0.50	21700	0.40	21300	0.39	36200	0.58
Mercury	14	0.09 U	0.09	0.073 U	0.073	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
Potassium		1760	18.5	1950	22.3	4240	17.7	2990	17.2	3660	25.7
Magnesium		690	6.9	760	8.3	1490	6.6	1670	6.4	2340	9.6
Manganese		13.8	0.11	19.6	0.13	15.6	0.10	74.5	0.10	37.7	0.15
Sodium		17.4	2.4	21.6	2.9	18.6	2.3	283	2.2	232	3.3
Nickel	250	1.9	0.58	2.5	0.70	3.0	0.55	8.0	0.54	5.4	0.81
Lead	400	8.3	2.7 *	28.6	2.4 *	11.5	2.9	35.3	5.4 *	16.3	1.7
Antimony	14	2.1 U	2.1	2.5 U	2.5	2.0 U	2.0	1.9 U	1.9	2.9 U	2.9 *
Selenium	63	0.17 U	0.17	0.18	0.15	0.19 U	0.19	0.67	0.17	0.96	0.22
Thallium	2	0.21 U	0.21	0.19 U	0.19	0.23 U	0.23	0.21 U	0.21	0.27 U	0.27
Vanadium	370	28.0	0.38	28.4	0.46	32.9	0.36	37.6	0.35	43.5	0.53
Zinc	1500	19.1	0.38	25.3	0.46	30.8	0.36	93.0	0.35	42.1	0.53
Cyanide	1100	0.48 U	0.48	0.45 U	0.45						
Dilution Factor		* = 10.0		* = 10.0				* = 20.0		* = 5.00	
Method:TAL Metals, Cyanide											

MAIN POST
SOIL BORING INORGANICS

Geographical Location		M18		M18		M18		M18		M18	
Sample		M18-SB06-A02		MP18-SB01-A01		MP18-SB01-A02		MP18-SB02-A01		MP18-SB02-A02	
Sample Type											
Batch#		9501G587		9501G632		9501G632		9501G632		9501G632	
Prep#		95GTS013		95GTS038		95GTS038		95GTS038		95GTS038	
RFW#		006		003		004		005		006	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/11/95		1/12/95		1/12/95		1/12/95		1/12/95	
Analysis Date		1/13/95		1/30/95		1/30/95		1/30/95		1/30/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		72.1	0.10	86.0	0.10	84.0	0.10	87.6	0.10	80.5	0.10
Silver	110	0.57 U	0.57								
Aluminum		6130	3.9								
Arsenic	20	5.8	0.44								
Barium	700	31.0	0.18								
Beryllium	1	0.07 U	0.07								
Calcium		11100	1.9								
Cadmium	1	0.66 U	0.66								
Cobalt		6.3	0.53								
Chromium		35.3	1.1								
Copper	600	218	0.92								
Iron		17700	0.57								
Mercury	14	0.61	0.11								
Potassium		2190	15.6								
Magnesium		3380	7.9								
Manganese		168	0.21								
Sodium		181	4.4								
Nickel	250	12.6	0.96								
Lead	400	127	4.6 *								
Antimony	14	2.5 U	2.5								
Selenium	63	0.78	0.35								
Thallium	2	0.16 U	0.16								
Vanadium	370	27.3	0.48								
Zinc	1500	72.6	0.44								
Cyanide	1100										
Dilution Factor		* = 20.0									
Method:TAL Metals, Cyanide											

MAIN POST
SOIL BORING INORGANICS

Geographical Location		M18		M18		M18		M18		M18	
Sample		MP18-SB03-A01		MP18-SB03-A02		MP18-SB07-A01		MP18-SB24-A01		MP18-SB24-A02	
Sample Type											
Batch#		9501G632		9501G632		9501G632		950IG632		9501G632	
Prep#		95GTS038		95GTS038		95GTS038		95GTS038		95GTS038	
RFW#		007		008		009		001		002	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/12/95		1/12/95		1/12/95		1/12/95		1/12/95	
Analysis Date		1/30/95		1/30/95		1/30/95		1/30/95		1/30/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		83.1	0.10	85.0	0.10	87.7	0.10	86.3	0.10	80.8	0.10
Silver	110										
Aluminum											
Arsenic	20										
Barium	700										
Beryllium	1										
Calcium											
Cadmium	1										
Cobalt											
Chromium											
Copper	600										
Iron											
Mercury	14										
Potassium											
Magnesium											
Manganese											
Sodium											
Nickel	250										
Lead	400										
Antimony	14										
Selenium	63										
Thallium	2										
Vanadium	370										
Zinc	1500										
Cyanide	1100										
Dilution Factor											
Method:TAL Metals, Cyanide											

MAIN POST
SOIL BORING INORGANICS

Geographical Location		M18		M18		M18		M18		M18	
Sample		MP18-SB25-A01		MP18-SB25-A02		M18-SB04-A01		M18-SB04-A02		M18-SB05-A01	
Sample Type											
Batch#		9501GG656		9501GG656		9501G587		9501G587		9501G587	
Prep#		95GTS038		95GTS038		95GTS013		95GTS013		95GTS013	
RFW#		001		002		003		004		001	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/13/95		1/13/95		1/11/95		1/11/95		1/11/95	
Analysis Date		1/30/95		1/30/95		1/13/95		1/13/95		1/13/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		83.0	0.10	88.4	0.10	92.7	0.10	90.8	0.10	87.4	0.10
Silver	110										
Aluminum											
Arsenic	20										
Barium	700										
Beryllium	1										
Calcium											
Cadmium	1										
Cobalt											
Chromium											
Copper	600										
Iron											
Mercury	14										
Potassium											
Magnesium											
Manganese											
Sodium											
Nickel	250										
Lead	400										
Antimony	14										
Selenium	63										
Thallium	2										
Vanadium	370										
Zinc	1500										
Cyanide	1100										
Dilution Factor											
Method:TAL Metals, Cyanide											

MAIN POST
SOIL BORING INORGANICS

Geographical Location		M18		M18		M18		B1		B1	
Sample		M18-SB05-A02		M18-SB06-A01		MP18-MW03-A01		B1-SB01-A01		B1-SB01-A02	
Sample Type											
Batch#		9501G587		9501G587		9505G825		9512G527		9512G527	
Prep#		95GTS013		95GTS013		95GI713		95GTS007		95GTS007	
RFW#		002		005		006		001		002	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		water		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/11/95		1/11/95		5/10/95		1/9/95		1/9/95	
Analysis Date		1/13/95		1/13/95		5/24/95		1/11/95		1/11/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		79.8	0.10	87.0	0.10	85.9	0.10	88.0	0.10	79.0	0.10
Silver	110							0.51 U	0.51	0.53 U	0.53
Aluminum								4780	3.4	4680	3.5
Arsenic	20							5.8	0.31	4.7	0.32
Barium	700							6.5	0.16	6.3	0.17
Beryllium	1							0.54	0.061	0.75	0.063
Calcium								170	1.7	96.1	1.8
Cadmium	1							0.59 U	0.59	0.61 U	0.61
Cobalt								0.79	0.47	1.4	0.49
Chromium								64.6	0.96	84.8	0.99
Copper	600							2.0	0.82	2.0	0.84
Iron								14700	0.51	17400	0.53
Mercury	14							0.095 U	0.095	0.094 U	0.094
Potassium								3110	13.9	2730	14.3
Magnesium								1130	7.0	1070	7.2
Manganese								9.4	0.18	8.2	0.19
Sodium								15.1	3.9	12.6	4.0
Nickel	250							2.0	0.86	3.2	0.89
Lead	400							7.7	0.54 *	8.4	0.56 *
Antimony	14							2.2 U	2.2	2.3 U	2.3
Selenium	63							0.17 U	0.17	0.18 U	0.18
Thallium	2							0.21 U	0.21	0.22 U	0.22
Vanadium	370							43.9	0.43	94.1	0.44
Zinc	1500							20.2	0.39	19.6	0.40
Cyanide	1100					0.53 U	0.53	0.32 U	0.32	0.63 U	0.63
Dilution Factor								* = 2.00		* = 2.00	
Method:TAL Metals, Cyanide											

MAIN POST
SOIL BORING INORGANICS

Geographical Location		B2		B2		B3		B3		B4	
Sample		B2-SB01-A01		B2-SB01-A02		B3-SB01-A01		B3-SB01-A03		B4-SB01-A01	
Sample Type											
Batch#		9501G500		9501G500		9501G500		9501G500		9512G527	
Prep#		95GTS007		95GTS007		95GTS007		95GTS007		95GTS007	
RFW#		001		002		003		004		003	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/6/95		1/6/95		1/6/95		1/6/95		1/9/95	
Analysis Date		1/10/95		1/10/95		1/10/95		1/10/95		1/11/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		81.2	0.10	80.1	0.10	88.1	0.1	73.3	0.10	88.8	0.10
Silver	110	0.88	0.64	0.86	0.66	0.73	0.59	1.1	0.70	0.52 U	0.52
Aluminum		9900	0.55	12700	5.7	7630	5.1	15200	6.0	4290	3.5
Arsenic	20	21.7	3.2 *	22.9	3.3 *	6.2	0.60 *	9.8	0.72 *	4.5	0.32
Barium	700	23.7	0.43	20.1	0.45	28.0	0.40	26.0	0.47	22.7	0.17
Beryllium	1	0.99	0.31	1.4	0.32	0.78	0.29	2.0	0.34	0.53	0.063
Calcium		427	2.5	343	2.6	921	2.3	511	2.7	642	1.8
Cadmium	1	0.57 U	0.57	0.60 U	0.60	0.53 U	0.53	0.63 U	0.63	0.60 U	0.60
Cobalt		1.6	0.55	1.1	0.58	1.0	0.52	0.97	0.61	0.98	0.48
Chromium		109	0.62	154	0.64	48.4	0.57	269	0.68	39.9	0.98
Copper	600	6.4	0.47	5.7	0.49	4.1	0.44	7.8	0.52	4.0	0.83
Iron		36800	0.96	39800	1.0	19700	0.90	55800	1.1	12900	0.52
Mercury	14	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11	0.13 U	0.13	0.11 U	0.11
Potassium		5840	169	9290	175	3090	157	15400	185	2580	14.2
Magnesium		3030	5.0	4400	5.2	1920	4.7	7320	5.5	1290	7.2
Manganese		34.2	0.41	29.9	0.43	90.7	0.38	9.9	0.45	18.4	0.19
Sodium		24.9	3.2	23.8	3.3	22.3	2.9	51.6	3.5	18.7	4.0
Nickel	250	8.4	2.6	5.5	2.7	5.1	2.4	6.6	2.9	2.8	0.88
Lead	400	6.8	0.20	5.9	0.21	15.2	0.94 **	4.2	0.23	19.5	2.8 *
Antimony	14	4.4 U	4.4	4.6 U	4.6	4.1 U	4.1	4.8 U	4.8	2.3 U	2.3
Selenium	63	1.8	0.18	1.7	0.19	0.64	0.17	1.9	0.20	0.25	0.18
Thallium	2	0.22 U	0.22	0.23 U	0.23	0.21 U	0.21	0.25 U	0.25	0.22 U	0.22
Vanadium	370	39.4	0.60	53.9	0.62	29.1	0.55	50.3	0.65	19.9	0.44
Zinc	1500	39.9	0.57	39.1	0.60	35.0	0.53	81.4	0.63	24.1	0.40
Cyanide	1100	0.51 U	0.51	0.39 U	0.39	0.35 U	0.35	0.59 U	0.59	0.35 U	0.35
Dilution Factor		* = 10.0		* = 10.0		* = 2.00, ** = 5.00		* = 2.00		* = 10.0	
Method:TAL Metals, Cyanide											

MAIN POST
SOIL BORING INORGANICS

Geographical Location		B4		B4		B5		B5	
Sample		B4-SB01-A02		B4-SB01-C01		B5-SB01-A01		B5-SB01-A02	
Sample Type				Duplicate					
Batch#		9512G527		9512G527		9501G587		9501G587	
Prep#		95GTS007		95GTS007		95GTS013		95GTS013	
RFW#		004		005		007		008	
Sample Depth (bgs)									
Dilution Factor		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/9/95		1/9/95		1/11/95		1/11/95	
Analysis Date		1/11/95		1/11/95		1/13/95		1/13/95	
Analysis	Standard	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting
		Result	Limit	Result	Limit	Result	Limit	Result	Limit
% Solids		74.3	0.10	89.3	0.10	84.4	0.10	83.1	0.10
Silver	110	0.45 U	0.45	0.47 U	0.47	0.49 U	0.49	0.50 U	0.50
Aluminum		11700	3.1	4570	3.2	8020	3.3	8450	3.3
Arsenic	20	10	0.72 *	3.7	0.27	7.4	0.74 *	8.0	{0.76}
Barium	700	32.3	0.15	21.9	0.15	28.3	0.16	21.7	0.16
Beryllium	1	1.7	0.055	0.53	0.056	0.76	0.059	0.89	0.060
Calcium		104	1.5	601	1.6	738	1.7	517	1.7
Cadmium	1	0.53 U	0.53	0.55 U	0.55	0.57 U	0.57	0.58 U	0.58
Cobalt		2.5	0.42	0.58	0.43	2	0.45	1.5	0.46
Chromium		143	0.85	42.8	0.88	54.8	0.93	80.4	0.93
Copper	600	8.0	0.73	2.7	0.75	6.2	0.79	3.4	0.80
Iron		41400	0.45	13800	0.47	21200	0.49	25700	0.50
Mercury	14	0.13 U	0.13	0.083 U	0.083	0.09 U	0.09	0.09 U	0.09
Potassium		11800	12.4	2940	12.8	3770	13.4	3990	13.5
Magnesium		5430	6.2	1440	6.5	1840	6.8	1880	6.8
Manganese		9.5	0.16	16.7	0.17	46	0.18	14.0	0.18
Sodium		40.5	3.5	13.7	3.6	33.9	3.8	22.9	3.8
Nickel	250	5.0	0.76	2.4	0.79	3.7	0.83	3.5	0.84
Lead	400	3.8	0.32	9.7	1.2 *	19.0	2.0 **	5.7	0.20
Antimony	14	2.0 U	2.0	2.1 U	2.1	2.2 U	2.2	2.2 U	2.2
Selenium	63	0.20 U	0.20	0.28	0.15	0.67	0.29	1.2	0.30
Thallium	2	0.25 U	0.25	0.18 U	0.18	0.14 U	0.14	0.14 U	0.14
Vanadium	370	23.7	0.38	19.0	0.40	35.1	0.41	46.9	0.42
Zinc	1500	60.2	0.35	24.0	0.36	38.1	0.38	30.3	0.38
Cyanide	1100	0.45 U	0.45	0.49 U	0.49	0.35 U	0.35	0.39 U	0.39
Dilution Factor		* = 2.00		* = 5.00		* = 2.00, ** = 10.0		* = 2.00	
Method:TAL Metals, Cyanide									

MAIN POST
SOIL BORING PESTICIDES/PCBS

Geographical Location		M-AOC3		M-AOC3		M-AOC3		M-AOC3		M16		M16	
Sample		MPA3-SB01-A02		MPA3-SB01-C02		MPA3-SB02-A02		MPA3-SB02-A02DL		MP16-SB01-A01		MP16-SB01-A01DL	
Sample Type				Duplicate									
Batch#		9412G130		9412G130		9401G155		9401G155		9401G155		9401G155	
Prep#		94GP1090		94GP1090		94GP1090		94GP1090		94GP1090		94GP1090	
RFW#		001		002		003		003		001		001DL	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		10.0		10.0		100	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/14/94		12/14/94		12/15/94		12/15/94		12/15/94		12/15/94	
Analysis Date		1/3/95		1/3/95		1/3/95		1/3/95		1/3/95		1/4/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.0018 U	0.0018	0.0018 U	0.0018	0.0017 U	0.0017	0.017 U	0.017	0.019 U	0.019	0.19 U	0.19
beta-BHC		0.0018 U	0.0018	0.0018 U	0.0018	0.0017 U	0.0017	0.017 U	0.017	0.019 U	0.019	0.19 U	0.19
delta-BHC		0.0018 U	0.0018	0.0018 U	0.0018	0.0017 U	0.0017	0.017 U	0.017	0.019 U	0.019	0.19 U	0.19
gamma-BHC (Lindane)	0.52	0.0018 U	0.0018	0.0018 U	0.0018	0.0017 U	0.0017	0.017 U	0.017	0.019 U	0.019	0.19 U	0.19
Heptachlor	0.15	0.0018 U	0.0018	0.0018 U	0.0018	0.0017 U	0.0017	0.017 U	0.017	0.019 U	0.019	0.19 U	0.19
Aldrin	0.04	0.0018 U	0.0018	0.0018 U	0.0018	0.0017 U	0.0017	0.017 U	0.017	0.019 U	0.019	0.19 U	0.19
Heptachlor epoxide		0.0018 U	0.0018	0.0018 U	0.0018	0.0017 U	0.0017	0.017 U	0.017	0.019 U	0.019	0.19 U	0.19
Endosulfan I	340	0.0018 U	0.0018	0.0018 U	0.0018	0.0017 U	0.0017	0.017 U	0.017	0.019 U	0.019	0.19 U	0.19
Dieldrin	0.042	0.0037 U	0.0037	0.0036 U	0.0036	0.0035 U	0.0035	0.035 U	0.035	0.12	0.038	0.38 U	0.38
4,4'-DDE	2	0.044	0.0037	0.011	0.0036	0.022	0.0035	0.035 U	0.035	1 C	0.038	0.65 CD	0.38
Endrin	17	0.0037 U	0.0037	0.0036 U	0.0036	0.0035 U	0.0035	0.035 U	0.035	0.038 U	0.038	0.38 U	0.38
Endosulfan II	340	0.0037 U	0.0037	0.0036 U	0.0036	0.0035 U	0.0035	0.035 U	0.035	0.038 U	0.038	0.38 U	0.38
4,4'-DDD	3	0.024	0.0037	0.0097	0.0036	0.016	0.0035	0.035 U	0.035	1.5 C	0.038	1.1 CD	0.38
Endosulfan sulfate		0.0037 U	0.0037	0.0036 U	0.0036	0.0035 U	0.0035	0.035 U	0.035	0.04 U	0.038	0.38 U	0.38
4,4'-DDT	2	0.035 P	0.0037	0.017	0.0036	0.085	0.0035	.073 P	0.035	0.71 C	0.038	.62 D	0.38
Methoxychlor	280	0.018 U	0.018	0.018 U	0.018	0.02 U	0.017	0.17 U	0.17	0.19 U	0.19	1.9 U	0.38
Endrin ketone		0.0037 U	0.0037	0.0036 U	0.0036	0.0035 U	0.0035	0.035 U	0.035	0.038 U	0.038	0.38 U	0.38
Endrin aldehyde		0.0037 U	0.0037	0.0036 U	0.0036	0.0035 U	0.0035	0.035 U	0.035	0.038 U	0.038	0.38 U	0.38
alpha-Chlordane		0.0018 U	0.0018	0.0018 U	0.0018	0.0052	0.0017	0.017 U	0.017	0.042	0.019	0.19 U	0.19
gamma-Chlordane		0.0018 U	0.0018	0.0014 JP	0.0018	0.0035 P	0.0017	0.017 U	0.017	0.033 P	0.019	0.19 U	0.19
Toxaphene	0.1	0.18 U	0.18	0.18 U	0.18	0.17 U	0.17	1.7 U	1.7	1.9 U	1.9	19 U	19
Aroclor-1016	0.49	0.037 U	0.037	0.036 U	0.036	0.035 U	0.035	0.35 U	0.35	0.38 U	0.38	3.8 U	3.8
Aroclor-1221	0.49	0.073 U	0.073	0.072 U	0.072	0.07 U	0.07	0.7 U	0.7	0.77 U	0.77	7.7 U	7.7
Aroclor-1232	0.49	0.037 U	0.037	0.036 U	0.036	0.035 U	0.035	0.35 U	0.35	0.38 U	0.38	3.8 U	3.8
Aroclor-1242	0.49	0.037 U	0.037	0.036 U	0.036	0.035 U	0.035	0.35 U	0.35	0.38 U	0.38	3.8 U	3.8
Aroclor-1248	0.49	0.037 U	0.037	0.036 U	0.036	0.2 P	0.035	.25 JDP	0.35	0.38 U	0.38	3.8 U	3.8
Aroclor-1254	0.49	0.037 U	0.037	0.036 U	0.036	0.035 U	0.035	0.35 U	0.35	0.38 U	0.38	3.8 U	3.8
Aroclor-1260	0.49	0.037 U	0.037	0.036 U	0.036	0.035 U	0.035	0.35 U	0.35	0.38 U	0.38	3.8 U	3.8
Method:TCL Pesticides/PCBs													

MAIN POST
SOIL BORING PESTICIDES/PCBS

Geographical Location		M16		M16		M18		M18		B1		B1	
Sample		MP16-SB01-A02		MP16-SB01-A02DL		M18-SB06-A02		M18-SB06-A02DL		B1-SB01-A01		B1-SB01-A02	
Sample Type													
Batch#		9401G155		9401G155		9501G587		9501G587		9501G527		9501G527	
Prep#		94GP1090		94GP1090		95GP0050		95GP0050		95GP0028		95GP0028	
RFW#		002		002DL		006		006DL		001		002	
Sample Depth (bgs)													
Dilution Factor		1.00		10.0		1.00		10.0		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/15/94		12/15/94		1/11/95		1/11/95		1/9/95		1/9/95	
Analysis Date		1/3/95		1/3/95		2/2/95		2/2/95		1/18/95		1/18/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.0021 U	0.0021	0.021 U	0.021	0.0023 U	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
beta-BHC		0.0021 U	0.0021	0.021 U	0.021	0.0023 U	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
delta-BHC		0.0021 U	0.0021	0.021 U	0.021	0.0023 U	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
gamma-BHC (Lindane)	0.52	0.0021 U	0.0021	0.021 U	0.021	0.0023 U	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
Heptachlor	0.15	0.0021 U	0.0021	0.021 U	0.021	0.0023 U	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
Aldrin	0.04	0.0021 U	0.0021	0.021 U	0.021	0.0023 U	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
Heptachlor epoxide		0.0021 U	0.0021	0.021 U	0.021	0.03 P	0.0023	.038 DP	0.023	0.0019 U	0.0019	0.0021 U	0.0021
Endosulfan I	340	0.0021 U	0.0021	0.021 U	0.021	0.0023 U	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
Dieldrin	0.042	0.0042 U	0.0042	0.042 U	0.042	0.0046 U	0.0046	0.046 U	0.046	0.0038 U	0.0038	0.0042 U	0.0042
4,4'-DDE	2	0.1	0.0042	.07 D	0.042	0.11	0.0046	.077 D	0.046	0.0038 U	0.0038	0.0042 U	0.0042
Endrin	17	0.0042 U	0.0042	0.042 U	0.042	0.0046 U	0.0046	0.046 U	0.046	0.0038 U	0.0038	0.0042 U	0.0042
Endosulfan II	340	0.0042 U	0.0042	0.042 U	0.042	0.0046 U	0.0046	0.046 U	0.046	0.0038 U	0.0038	0.0042 U	0.0042
4,4'-DDD	3	0.2	0.0042	.16 D	0.042	0.46 UX	0.0046	4.6 UX	0.046	0.0038 U	0.0038	0.0042 U	0.0042
Endosulfan sulfate		0.0042 U	0.0042	0.042 U	0.042	0.0046 U	0.0046	0.046 U	0.046	0.0038 U	0.0038	0.0042 U	0.0042
4,4'-DDT	2	0.072	0.0042	.063 D	0.042	0.032	0.0046	.038 JDP	0.046	0.0038 U	0.0038	0.0042 U	0.0042
Methoxychlor	280	0.021 U	0.021	0.21 U	0.21	0.023 U	0.023	0.23 U	0.23	0.019 U	0.019	0.021 U	0.021
Endrin ketone		0.0042 U	0.0042	0.042 U	0.042	0.0046 U	0.0046	0.046 U	0.046	0.0038 U	0.0038	0.0042 U	0.0042
Endrin aldehyde		0.0042 U	0.0042	0.042 U	0.042	0.0046 U	0.0046	0.046 U	0.046	0.0038 U	0.0038	0.0042 U	0.0042
alpha-Chlordane		0.0096	0.0021	0.021 U	0.021	0.0078	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
gamma-Chlordane		0.0088 P	0.0021	0.021 U	0.021	0.02 P	0.0023	0.023 U	0.023	0.0019 U	0.0019	0.0021 U	0.0021
Toxaphene	0.1	0.21 U	0.21	2.1 U	2.1	0.23 U	0.23	2.3 U	2.3	0.19 U	0.19	0.21 U	0.21
Aroclor-1016	0.49	0.042 U	0.042	0.42 U	0.42	0.046 U	0.046	0.46 U	0.46	0.038 U	0.038	0.042 U	0.042
Aroclor-1221	0.49	0.083 U	0.083	0.83 U	0.83	0.092 U	0.092	0.92 U	0.92	0.076 U	0.076	0.084 U	0.084
Aroclor-1232	0.49	0.042 U	0.042	0.42 U	0.42	0.046 U	0.046	0.46 U	0.46	0.038 U	0.038	0.042 U	0.042
Aroclor-1242	0.49	0.042 U	0.042	0.42 U	0.42	0.046 U	0.046	0.46 U	0.46	0.038 U	0.038	0.042 U	0.042
Aroclor-1248	0.49	0.042 U	0.042	0.42 U	0.42	0.046 U	0.046	0.46 U	0.46	0.038 U	0.038	0.042 U	0.042
Aroclor-1254	0.49	0.042 U	0.042	0.42 U	0.42	0.046 U	0.046	0.46 U	0.46	0.038 U	0.038	0.042 U	0.042
Aroclor-1260	0.49	0.042 U	0.042	0.42 U	0.42	0.046 U	0.046	0.46 U	0.46	0.038 U	0.038	0.042 U	0.042
Method:TCL Pesticides/PCBs													

MAIN POST
SOIL BORING PESTICIDES/PCBS

Geographical Location		B2		B2		B3		B3		B4		B4	
Sample		B2-SB01-A01		B2-SB01-A02		B3-SB01-A01		B3-SB01-A03		B4-SB01-A01		B4-SB01-A01DL	
Sample Type													
Batch#		9501G500		9501G500		9501G500		9501G500		9501G527		9501G527	
Prep#		95GP0028		95GP0028		95GP0028		95GP0028		95GP0028		95GP0028	
RFW#		001		002		003		004		003		003	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		10.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/6/95		1/6/95		1/6/95		1/6/95		1/9/95		1/9/95	
Analysis Date		1/18/95		1/18/95		1/18/95		1/18/95		1/18/95		1/18/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.018 U	0.018
beta-BHC		0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.018 U	0.018
delta-BHC		0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.018 U	0.018
gamma-BHC (Lindane)	0.52	0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.018 U	0.018
Heptachlor	0.15	0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.018 U	0.018
Aldrin	0.04	0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.018 U	0.018
Heptachlor epoxide		0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.037 U	0.037
Endosulfan I	340	0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.037 U	0.037
Dieldrin	0.042	0.004 U	0.004	0.0041 U	0.0041	0.0037 U	0.0037	0.0045 U	0.0045	0.0037 U	0.0037	0.037 U	0.037
4,4'-DDE	2	0.004 U	0.004	0.0041 U	0.0041	0.0048 P	0.0037	0.0045 U	0.0045	0.086 P	0.0037	.097 D	0.037
Endrin	17	0.004 U	0.004	0.0041 U	0.0041	0.0037 U	0.0037	0.0045 U	0.0045	0.0037 U	0.0037	0.037 U	0.037
Endosulfan II	340	0.004 U	0.004	0.0041 U	0.0041	0.0037 U	0.0037	0.0045 U	0.0045	0.0037 U	0.0037	0.037 U	0.037
4,4'-DDD	3	0.0028 JP	0.004	0.0041 U	0.0041	0.0037 U	0.0037	0.0045 U	0.0045	0.0096 P	0.0037	0.037 U	0.037
Endosulfan sulfate		0.004 U	0.004	0.0041 U	0.0041	0.0037 U	0.0037	0.0045 U	0.0045	0.0037 U	0.0037	0.037 U	0.037
4,4'-DDT	2	0.0028 JP	0.004	0.0041 U	0.0041	0.0033 JP	0.0037	0.0045 U	0.0045	0.1 P	0.0037	.11 D	0.037
Methoxychlor	280	0.02 U	0.02	0.02 U	0.02	0.018 U	0.018	0.023 U	0.023	0.018 U	0.018	0.18 U	0.18
Endrin ketone		0.004 U	0.004	0.0041 U	0.0041	0.0037 U	0.0037	0.0045 U	0.0045	0.0037 U	0.0037	0.037 U	0.037
Endrin aldehyde		0.004 U	0.004	0.0041 U	0.0041	0.0037 U	0.0037	0.0045 U	0.0045	0.0037 U	0.0037	0.037 U	0.037
alpha-Chlordane		0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.018 U	0.018
gamma-Chlordane		0.002 U	0.002	0.002 U	0.002	0.0018 U	0.0018	0.0023 U	0.0023	0.0018 U	0.0018	0.018 U	0.018
Toxaphene	0.1	0.2 U	0.2	0.2 U	0.2	0.18 U	0.18	0.23 U	0.23	0.18 U	0.18	1.8 U	1.8
Aroclor-1016	0.49	0.04 U	0.04	0.041 U	0.041	0.04 U	0.037	0.045 U	0.045	0.037 U	0.037	0.37 U	0.37
Aroclor-1221	0.49	0.08 U	0.08	0.082 U	0.082	0.07 U	0.074	0.09 U	0.09	0.074 U	0.074	0.74 U	0.74
Aroclor-1232	0.49	0.04 U	0.04	0.041 U	0.041	0.04 U	0.037	0.045 U	0.045	0.037 U	0.037	0.37 U	0.37
Aroclor-1242	0.49	0.04 U	0.04	0.041 U	0.041	0.04 U	0.037	0.045 U	0.045	0.037 U	0.037	0.37 U	0.37
Aroclor-1248	0.49	0.04 U	0.04	0.041 U	0.041	0.04 U	0.037	0.045 U	0.045	0.037 U	0.037	0.37 U	0.37
Aroclor-1254	0.49	0.04 U	0.04	0.041 U	0.041	0.04 U	0.037	0.045 U	0.045	0.037 U	0.037	0.37 U	0.37
Aroclor-1260	0.49	0.04 U	0.04	0.041 U	0.041	0.04 U	0.037	0.045 U	0.045	0.037 U	0.037	0.37 U	0.37
Method:TCL Pesticides/PCBs													

MAIN POST
SOIL BORING PESTICIDES/PCBS

Geographical Location		B4		B4		B4		B5		B5	
Sample		B4-SB01-A02		B4-SB01-C01		B4-SB01-C01DL		B5-SB01-A01		B5-SB01-A02	
Sample Type				Duplicate		Duplicate					
Batch#		9501G527		9501G527		9501G527		9501G587		9501G587	
Prep#		95GP0028		95GP0028		95GP0028		95GP0050		95GP0050	
RFW#		004		005		005		007		008	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		5.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/9/95		1/9/95		1/9/95		1/11/95		1/11/95	
Analysis Date		1/18/95		1/18/95		1/18/95		2/3/95		2/3/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
beta-BHC		0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
delta-BHC		0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
gamma-BHC (Lindane)	0.52	0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
Heptachlor	0.15	0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
Aldrin	0.04	0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
Heptachlor epoxide		0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
Endosulfan I	340	0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
Dieldrin	0.042	0.0044 U	0.0044	0.0037 U	0.0037	0.018 U	0.018	0.0039 U	0.0039	0.004 U	0.004
4,4'-DDE	2	0.0044 U	0.0044	0.072 P	0.0037	.085 D	0.018	0.028	0.0039	0.004 U	0.004
Endrin	17	0.0044 U	0.0044	0.0037 U	0.0037	0.018 U	0.018	0.0039 U	0.0039	0.004 U	0.004
Endosulfan II	340	0.0044 U	0.0044	0.0037 U	0.0037	0.018 U	0.018	0.0039 U	0.0039	0.004 U	0.004
4,4'-DDD	3	0.0044 U	0.0044	0.0037 U	0.0037	0.018 U	0.018	0.0039 U	0.0039	0.004 U	0.004
Endosulfan sulfate		0.0044 U	0.0044	0.0037 U	0.0037	0.018 U	0.018	0.0039 U	0.0039	0.004 U	0.004
4,4'-DDT	2	0.0044 U	0.0044	0.078 P	0.0037	.092 DP	0.018	0.043	0.0039	0.004 U	0.004
Methoxychlor	280	0.022 U	0.022	0.018 U	0.018	0.092 U	0.092	0.02 U	0.02	0.02 U	0.02
Endrin ketone		0.0044 U	0.0044	0.0037 U	0.0037	0.018 U	0.018	0.0039 U	0.0039	0.004 U	0.004
Endrin aldehyde		0.0044 U	0.0044	0.0037 U	0.0037	0.018 U	0.018	0.0039 U	0.0039	0.004 U	0.004
alpha-Chlordane		0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
gamma-Chlordane		0.0022 U	0.0022	0.0018 U	0.0018	0.0092 U	0.0092	0.002 U	0.002	0.002 U	0.002
Toxaphene	0.1	0.22 U	0.22	0.18 U	0.18	0.92 U	0.92	0.2 U	0.2	0.2 U	0.2
Aroclor-1016	0.49	0.044 U	0.044	0.037 U	0.037	0.18 U	0.18	0.039 U	0.039	0.04 U	0.04
Aroclor-1221	0.49	0.087 U	0.087	0.074 U	0.074	0.37 U	0.37	0.078 U	0.078	0.079 U	0.079
Aroclor-1232	0.49	0.044 U	0.044	0.037 U	0.037	0.18 U	0.18	0.039 U	0.039	0.04 U	0.04
Aroclor-1242	0.49	0.044 U	0.044	0.037 U	0.037	0.18 U	0.18	0.039 U	0.039	0.04 U	0.04
Aroclor-1248	0.49	0.044 U	0.044	0.037 U	0.037	0.18 U	0.18	0.039 U	0.039	0.04 U	0.04
Aroclor-1254	0.49	0.044 U	0.044	0.037 U	0.037	0.18 U	0.18	0.039 U	0.039	0.04 U	0.04
Aroclor-1260	0.49	0.044 U	0.044	0.037 U	0.037	0.18 U	0.18	0.039 U	0.039	0.04 U	0.04
Method:TCL Pesticides/PCBs											

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M2		M2		M2		M2		M2		M2		M3	
Sample			MP02-MW01-A01		MP02-MW01-A02		MP02-MW02-A01		MP02-MW02-A02		MP02-MW03-A01		MP02-MW03-A02		MP03-MW04-A01	
Sample Type																
Batch#			9502G197		9503G642		9502G197		9503G642		9502G197		9503G642		9502G219	
Prep#			95GVC034		95GVC054		95GVF029		95GVC054		95GVF029		95GVC054		95GVC030	
RFW#			001		001		003		003		005		005		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/15/95		3/8/95		2/15/95		3/8/95		2/15/95		3/8/95		2/16/95	
Analysis Date			2/22/95		3/10/95		2/20/95		3/10/95		2/21/95		3/10/95		2/21/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	25	10	33	10	25	10	10	10	10	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.					20 J		10 J		20 J							
Method:TCL Volatiles																

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M3		M3		M3		M3		M3		M4		M4	
Sample			MP03-MW04-A02		MP03-MW05-A01		MP03-MW05-A02		MP03-MW06-A01		MP03-MW06-A02		MP04-MW07-A01		MP04-MW07-A02	
Sample Type																
Batch#			9503G642		9502G219		9503G660		9502G219		9503G660		9502G219		9503G660	
Prep#			95GVC054		95GVC030		95GVC055		95GVC030		95GVC055		95GVC030		95GVC055	
RFW#			009		003		003		005		001		007		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/8/95		2/16/95		3/9/95		2/16/95		3/9/95		2/16/95		3/9/95	
Analysis Date			3/10/95		2/21/95		3/10/95		2/21/95		3/10/95		2/21/95		3/10/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	4 J	10	10 U	10	3 J	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	5 J	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.					30 J		30 J		30 J		30 J					
Method:TCL Volatiles																

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M4		M4		M4		M4		M4		M4		M4	
Sample			MP04-MW07-C01		MP04-MW07-C02		MP04-MW07-D01		MP04-MW07-E01		MP04-MW08-A01		MP04-MW08-A02		MP04-MW09-A01	
Sample Type			Duplicate		Duplicate		Trip Blank		Field Rinsate Blank							
Batch#			9502G219		9503G660		9502G219		9502G219		9502G219		9503G642		9502G219	
Prep#			95GVC030		95GVC055		95GVC030		95GVC031		95GVC031		95GVC054		95GVC031	
RFW#			009		007		011		012		014		007		016	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/16/95		3/9/95		2/16/95		2/16/95		2/16/95		3/8/95		2/16/95	
Analysis Date			2/21/95		3/10/95		2/21/95		2/21/95		2/21/95		3/10/95		2/21/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	13	10	10	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	27	10	27	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.																
Method:TCL Volatiles																

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M4		M5		M5		M5		M5		M5		M5	
Sample			MP04-MW09-A02		MP05-MW10-A01		MP05-MW10-A02		MP05-MW11-A01		MP05-MW11-A02		MP05-MW11-D02		MP05-MW11-E02	
Sample Type													Trip Blank		Field Rinsate Blank	
Batch#			9503G660		9502G238		9503G660		9502G238		9503G660		9503G660		9503G660	
Prep#			95GVC055		95GVC032		95GVC055		95GVC032		95GVC055		95GVC055		95GVC055	
RFW#			009		010		011		012		013		015		016	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/9/95		2/17/95		3/9/95		2/17/95		3/9/95		3/9/95		3/9/95	
Analysis Date			3/11/95		2/22/95		3/11/95		2/22/95		3/11/95		3/11/95		3/11/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	33	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	130	10	88	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.																
Method:TCL Volatiles																

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M8		M8		M8		M8		M8		M8	
Sample			MP08-MW12-A01		MP08-MW12-A02		MP08-MW12-C02		MP08-MW12-D02		MP08-MW12-E02		MP08-MW13-A01	
Sample Type							Duplicate		Trip Blank		Field Rinsate Blank			
Batch#			9502G238		9503G767		9503G767		9503G767		9503G767		9502G403	
Prep#			95GVC033		95GVE072		95GVE072		95GVE072		95GVE072		95GVC041	
RFW#			014		001		003		005		006		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/17/95		3/15/95		3/15/95		3/15/95		3/15/95		2/22/95	
Analysis Date			2/22/95		3/20/95		3/20/95		3/20/95		3/20/95		3/1/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	40	10	52	10	54	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.														
Method:TCL Volatiles														

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M8		M8		M8		M8		M8		M8		M8	
Sample			MP08-MW13-A02		MP08-MW14-A01		MP08-MW14-A02		MP08-MW15-A01		MP08-MW15-A02		MP08-MW15-C01		MP08-MW15-D01	
Sample Type													Duplicate		Trip Blank	
Batch#			9503G767		9502G219		9503G767		9502G403		9503G767		9502G403		9502G403	
Prep#			95GVE072		95GVC031		95GVE072		95GVC041		95GVE072		95GVC042		95GVC042	
RFW#			008		018		010		003		012		005		007	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/15/95		2/16/95		3/15/95		2/22/95		3/15/95		2/22/95		2/22/95	
Analysis Date			3/21/95		2/21/95		3/20/95		3/1/95		3/20/95		3/1/95		3/1/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	20	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	37	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	3 J	10	5 J	10	4 J	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	4 J	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	8 J	10	33	10	39	10	36	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.							5 J		10 J		15 J		10 J			
Method:TCL Volatiles																

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M8		M12		M12		M12		M12		M12		M12	
Sample			MP08-MW15-E01		MP12-MW16-A01		MP12-MW16-A02		MP12-MW17-A01		MP12-MW17-A02		MP12-MW18-A01		MP12-MW18-A02	
Sample Type			Field Rinsate Blank													
Batch#			9502G403		9502G299		9503G681		9502G299		9503G681		9502G299		9503G681	
Prep#			95GVC042		95GVC034		95GVE063		95GVC034		95GVE063		95GVC034		95GVE063	
RFW#			008		001		001		003		003		005		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/22/95		2/20/95		3/10/95		2/20/95		3/10/95		2/20/95		3/10/95	
Analysis Date			3/1/95		2/23/95		3/14/95		2/23/95		3/14/95		2/23/95		3/14/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	38	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.																
Method:TCL Volatiles																

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M14		M14		M14		M14		M14		M14	
Sample			MP14-MW19-A01		MP14-MW19-A02		MP14-MW20-A01		MP14-MW20-A02		MP14-MW20-D02		MP14-MW20-E02	
Sample Type											Trip Blank		Field Rinsate Blank	
Batch#			9502G299		9503G681		9502G403		9503G722		9503G767		9503G722	
Prep#			95GVC034		95GVE063		95GVC042		95GVE071		95GVE072		95GVE071	
RFW#			007		007		010		1		014		3	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/20/95		3/10/95		2/22/95		3/13/95		3/15/95		3/13/95	
Analysis Date			2/23/95		3/14/95		3/1/95		3/19/95		3/21/95		3/19/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.														
Method:TCL Volatiles														

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M14		M14		M16		M16		M18		M18		M18	
Sample			MP14-MW21-A01		MP14-MW21-A02		MP16-MW22-A01		MP16-MW22-A02		MP18-MW03-A01		MP18-MW03-A02		MP18-MW03-D01	
Sample Type															Trip Blank	
Batch#			9502G403		9503G660		9502G238		9503G660		9505G825		9505G139		9505G825	
Prep#			95GVC042		95GVC055		95GVC033		95GVC055		95GVC137		95GVB148		95GVC137	
RFW#			012		019		016		018		001		001		003	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/22/95		3/9/95		2/17/95		3/9/95		5/10/95		5/27/95		5/10/95	
Analysis Date			3/1/95		3/11/95		2/22/95		3/11/95		5/20/95		6/1/95		5/20/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.																
Method:TCL Volatiles																

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M18		M18		M18		M18		M18		M18	
Sample			MP18-MW03-E01		MP18-MW24-A01		MP18-MW24-A02		MP18-MW24-C02		MP18-MW24-D01		MP18-MW24-D02	
Sample Type			Field Rinsate Blank						Duplicate		Trip Blank		Trip Blank	
Batch#			9505G825		9502G238		9503G681		9503G681		9502G238		9503G681	
Prep#			95GVC137		95GVC032		95GVE063		95GVE063		95GVC031		95GVE063	
RFW#			004		001		009		011		003		013	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			5/10/95		2/17/95		3/10/95		3/10/95		2/17/95		3/10/95	
Analysis Date			5/20/95		2/21/95		3/14/95		3/14/95		2/21/95		3/14/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	12	10	7 J	10	8 J	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	23	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.														
Method:TCL Volatiles														

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			M18		M18		M18		M18		M18		B1	
Sample			MP18-MW24-E01		MP18-MW24-E02		MP18-MW25-A01		MP18-MW25-A02		MP18-MW25-C01		B1-MW01B-A01	
Sample Type			Field Rinsate Blank		Field Rinsate Blank						Duplicate			
Batch#			9502G238		9503G681		9502G238		9503G681		9502G238		9502G169	
Prep#			95GVC031		95GVE063		95GVC031		95GVE063		95GVC032		95GVC028	
RFW#			004		014		006		016		008		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/17/95		3/10/95		2/17/95		3/10/95		2/17/95		2/14/95	
Analysis Date			2/21/95		3/14/95		2/21/95		3/14/95		2/22/95		2/19/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10	10	15	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	21	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.														
Method:TCL Volatiles														

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			B1		B2		B2		B3		B3		B3		B3	
Sample			B1-MW01B-A02		B2-MW02B-A01		B2-MW02B-A02		B3-MW03B-A01		B3-MW03B-A02		B3-MW03B-D01		B3-MW03B-D02	
Sample Type													Trip Blank		Trip Blank	
Batch#			9503G616		9502G169		9503G616		9502G169		9503G740		9502G169		9503G616	
Prep#			95GVC053		95GVC028		95GVC053		95GVC028		95GVE072		95GVC028		95GVC053	
RFW#			008		003		010		005		001		007		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/7/95		2/14/95		3/7/95		2/14/95		3/14/95		2/13/95		3/7/95	
Analysis Date			3/10/95		2/19/95		3/10/95		2/19/95		3/20/95		2/19/95		3/9/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	15	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.																
Method:TCL Volatiles																

MAIN POST
GROUNDWATER VOLATILES

Geographical Location			B3		B3		B4		B4		B5		B5	
Sample			B3-MW03B-E01		B3-MW03B-E02		B4-MW04B-A01		B4-MW04B-A02		B5-MW05B-A01		B5-MW05B-A02	
Sample Type			Field Rinsate Blank		Field Rinsate Blank									
Batch#			9502G169		9503G616		9502G169		9503G616		9502G169		9503G616	
Prep#			95GVC028		95GVC053		95GVC028		95GVC053		95GVC028		95GVC053	
RFW#			008		006		010		012		012		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/13/95		3/7/95		2/13/95		3/7/95		2/13/95		3/7/95	
Analysis Date			2/19/95		3/9/95		2/19/95		3/10/95		2/19/95		3/9/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	17	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	8 J	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Total Est. Conc. of TIC.														
Method:TCL Volatiles														

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M2		M2		M2		M2		M2	
Sample			MP02-MW01-A01		MP02-MW01-A02		MP02-MW02-A01		MP02-MW02-A02		MP02-MW03-A01	
Sample Type												
Batch#			9502G197		9503G642		9502G197		9503G642		9502G197	
Prep#			95GB0108		95GB0172		95GB0108		95GB0172		95GB0108	
RFW#			001		001		003		003		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/15/95		3/8/95		2/15/95		3/8/95		2/15/95	
Analysis Date			3/4/95		3/24/95		3/4/95		3/24/95		3/10/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2-Chlorophenol	40	7.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
1,4-Dichlorobenzene	75	4.8	10 U	10	10 U	10	4 J	10	2 J	10	12 U	12
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2-Methylphenol		6.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
4-Methylphenol		12.9	10 U	10	10 U	10	3 J	10	10 U	10	12 U	12
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Hexachloroethane	10	5.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Nitrobenzene	10	7.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Isophorone	100	3.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2-Nitrophenol		7.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
1,2,4-Trichlorobenzene	9	9.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Naphthalene		8.4	10 U	10	10 U	10	1 J	10	10 U	10	12 U	12
4-Chloroaniline		2.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2-Methylnaphthalene		8.7	10 U	10	10 U	10	2 J	10	2 J	10	12 U	12
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2,4,5-Trichlorophenol	700	4.7	25 U	25	25 U	25	24 U	24	24 U	24	30 U	30
2-Chloronaphthalene		8.2	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2-Nitroaniline		6.1	25 U	25	25 U	25	24 U	24	24 U	24	30 U	30
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Acenaphthylene	10	6.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
3-Nitroaniline		5.2	25 U	25	25 U	25	24 U	24	24 U	24	30 U	30
Acenaphthene	400	6.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2,4-Dinitrophenol	40	4.6	25 U	25	25 U	25	24 U	24	24 U	24	30 U	30

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M2		M2		M2		M2		M2	
Sample			MP02-MW01-A01		MP02-MW01-A02		MP02-MW02-A01		MP02-MW02-A02		MP02-MW03-A01	
Sample Type												
Batch#			9502G197		9503G642		9502G197		9503G642		9502G197	
Prep#			95GB0108		95GB0172		95GB0108		95GB0172		95GB0108	
RFW#			001		001		003		003		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/15/95		3/8/95		2/15/95		3/8/95		2/15/95	
Analysis Date			3/4/95		3/24/95		3/4/95		3/24/95		3/10/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	25 U	25	25 U	25	24 U	24	24 U	24	30 U	30
Dibenzofuran		6.5	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Diethylphthalate	5000	5.4	1 J	10	1 JB	10	1 J	10	1 JB	10	12 U	12
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Fluorene	300	6.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
4-Nitroaniline		6.4	25 U	25	25 U	25	24 U	24	24 U	24	30 U	30
4,6-Dinitro-2-methylphenol		5.3	25 U	25	25 U	25	24 U	24	24 U	24	30 U	30
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Pentachlorophenol	1	4.0	25 U	25	25 U	25	24 U	24	24 U	24	30 U	30
Phenanthrene	10	5.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Anthracene	2000	4.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Carbazole		4.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Fluoranthene	300	6.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Pyrene	200	5.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Chrysene	20	4.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
bis(2-Ethylhexy)phthalate	30	9.7	2 J	10	1 J	10	10 U	10	10 U	10	12 U	12
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12
Petroleum hydrocarbons												
Total Est. Conc. of TIC			47				63				9	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M2		M3		M3		M3		M3		M3	
Sample			MP02-MW03-A02		MP03-MW04-A01		MP03-MW04-A02		MP03-MW05-A01		MP03-MW05-A02		MP03-MW06-A01	
Sample Type														
Batch#			9503G642		9502G219		9503G642		9502G219		9503G660		9502G219	
Prep#			95GB0172		95GB0111		95GB0172		95GB0111		95GB0174		95GB0111	
RFW#			005		001		009		003		003		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/8/95		2/16/95		3/8/95		2/16/95		3/9/95		2/16/95	
Analysis Date			3/24/95		3/7/95		3/24/95		3/8/95		3/25/95		3/8/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
bis(2-Chloroethyl) ether	10	9.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2-Chlorophenol	40	7.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
1,3-Dichlorobenzene	600	5.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
1,4-Dichlorobenzene	75	4.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
1,2-Dichlorobenzene	600	5.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2-Methylphenol		6.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
4-Methylphenol		12.9	10 U	10	11 U	11	11 U	11	3 J	10	10 U	10	10 U	10
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Hexachloroethane	10	5.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Nitrobenzene	10	7.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Isophorone	100	3.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2-Nitrophenol		7.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2,4-Dimethylphenol	100	4.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
bis(2-Chloroethoxy) methane		6.1	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2,4-Dichlorophenol	20	4.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
1,2,4-Trichlorobenzene	9	9.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Naphthalene		8.4	10 U	10	11 U	11	11 U	11	1 J	10	10 U	10	10 U	10
4-Chloroaniline		2.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Hexachlorobutadiene	1	4.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
4-Chloro-3-methylphenol	20	3.1	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2-Methylnaphthalene		8.7	10 U	10	11 U	11	11 U	11	2 J	10	1 J	10	10 U	10
Hexachlorocyclopentadiene	50	3.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2,4,6-Trichlorophenol		5.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2,4,5-Trichlorophenol	700	4.7	24 U	24	28 U	28	26 U	26	24 U	24	25 U	25	24 U	24
2-Chloronaphthalene		8.2	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2-Nitroaniline		6.1	24 U	24	28 U	28	26 U	26	24 U	24	25 U	25	24 U	24
Dimethylphthalate	7000	4.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Acenaphthylene	10	6.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2,6-Dinitrotoluene	10	5.2	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
3-Nitroaniline		5.2	24 U	24	28 U	28	26 U	26	24 U	24	25 U	25	24 U	24
Acenaphthene	400	6.7	10 U	10	11 U	11	11 U	11	2 J	10	2 J	10	10 U	10
2,4-Dinitrophenol	40	4.6	24 U	24	28 U	28	26 U	26	24 U	24	25 U	25	24 U	24

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M2		M3		M3		M3		M3		M3	
Sample			MP02-MW03-A02		MP03-MW04-A01		MP03-MW04-A02		MP03-MW05-A01		MP03-MW05-A02		MP03-MW06-A01	
Sample Type														
Batch#			9503G642		9502G219		9503G642		9502G219		9503G660		9502G219	
Prep#			95GB0172		95GB0111		95GB0172		95GB0111		95GB0174		95GB0111	
RFW#			005		001		009		003		003		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/8/95		2/16/95		3/8/95		2/16/95		3/9/95		2/16/95	
Analysis Date			3/24/95		3/7/95		3/24/95		3/8/95		3/25/95		3/8/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	24 U	24	28 U	28	26 U	26	24 U	24	25 U	25	24 U	24
Dibenzofuran		6.5	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
2,4-Dinitrotoluene	10	5.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Diethylphthalate	5000	5.4	10 U	10	11 U	11	1 JB	11	10 U	10	10 U	10	10 U	10
4-Chlorophenyl-phenylether		7.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Fluorene	300	6.3	10 U	10	11 U	11	11 U	11	2 J	10	1 J	10	10 U	10
4-Nitroaniline		6.4	24 U	24	28 U	28	26 U	26	24 U	24	25 U	25	24 U	24
4,6-Dinitro-2-methylphenol		5.3	24 U	24	28 U	28	26 U	26	24 U	24	25 U	25	24 U	24
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
4-Bromophenyl-phenylether		5.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Hexachlorobenzene	10	5.5	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Pentachlorophenol	1	4.0	24 U	24	28 U	28	26 U	26	24 U	24	25 U	25	24 U	24
Phenanthrene	10	5.0	10 U	10	11 U	11	11 U	11	3 J	10	3 J	10	10 U	10
Anthracene	2000	4.6	10 U	10	11 U	11	11 U	11	10 U	10	1 J	10	10 U	10
Carbazole		4.4	10 U	10	11 U	11	11 U	11	1 J	10	10 U	10	10 U	10
Di-n-butylphthalate	900	6.5	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Fluoranthene	300	6.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Pyrene	200	5.4	10 U	10	11 U	11	11 U	11	10 U	10	1 J	10	10 U	10
Butylbenzylphthalate	100	5.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
3,3'-Dichlorobenzidine	60	2.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Benzo(a)anthracene	10	4.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Chrysene	20	4.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
bis(2-Ethylhexy)phthalate	30	9.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	3 J	10
Di-n-octyl phthalate	100	5.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Benzo(b)fluoranthene	2	5.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Benzo(k)fluoranthene	2	6.2	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Benzo(a)pyrene	20	4.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Dibenzo(a,h)anthracene	20	6.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Benzo(g,h,i)perylene	20	6.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	10 U	10
Petroleum hydrocarbons														
Total Est. Conc. of TIC					4 J				38 J		43 J		18 J	
Dilution Factor														
Method:TCL Semivolatiles														

Geographical Location			M3		M4		M4		M4		M4		M4	
Sample			MP03-MW06-A02		MP04-MW07-A01		MP04-MW07-A02		MP04-MW07-C01		MP04-MW07-C02		MP04-MW07-E01	
Sample Type									Duplicate		Duplicate		Field Rinsate Blank	
Batch#			9503G660		9502G219		9503G660		9502G219		9503G660		9502G219	
Prep#			95GB0174		95GB0111		95GB0174		95GB0111		95GB0174		95GB0111	
RFW#			001		007		005		009		007		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/9/95		2/16/95		3/9/95		2/16/95		3/9/95		2/16/95	
Analysis Date			3/25/95		3/9/95		3/25/95		3/8/95		3/26/95		3/8/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2-Chlorophenol	40	7.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
1,4-Dichlorobenzene	75	4.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2-Methylphenol		6.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
4-Methylphenol		12.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Hexachloroethane	10	5.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Nitrobenzene	10	7.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Isophorone	100	3.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2-Nitrophenol		7.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
1,2,4-Trichlorobenzene	9	9.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Naphthalene		8.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
4-Chloroaniline		2.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2-Methylnaphthalene		8.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2,4,5-Trichlorophenol	700	4.7	24 U	24	26 U	26	26 U	26	26 U	26	26 U	26	30 U	30
2-Chloronaphthalene		8.2	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2-Nitroaniline		6.1	24 U	24	26 U	26	26 U	26	26 U	26	26 U	26	30 U	30
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Acenaphthylene	10	6.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
3-Nitroaniline		5.2	24 U	24	26 U	26	26 U	26	26 U	26	26 U	26	30 U	30
Acenaphthene	400	6.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2,4-Dinitrophenol	40	4.6	24 U	24	26 U	26	26 U	26	26 U	26	26 U	26	30 U	30

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M3		M4		M4		M4		M4		M4	
Sample			MP03-MW06-A02		MP04-MW07-A01		MP04-MW07-A02		MP04-MW07-C01		MP04-MW07-C02		MP04-MW07-E01	
Sample Type									Duplicate		Duplicate		Field Rinsate Blank	
Batch#			9503G660		9502G219		9503G660		9502G219		9503G660		9502G219	
Prep#			95GB0174		95GB0111		95GB0174		95GB0111		95GB0174		95GB0111	
RFW#			001		007		005		009		007		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/9/95		2/16/95		3/9/95		2/16/95		3/9/95		2/16/95	
Analysis Date			3/25/95		3/9/95		3/25/95		3/8/95		3/26/95		3/8/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	24 U	24	26 U	26	26 U	26	26 U	26	26 U	26	30 U	30
Dibenzofuran		6.5	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Diethylphthalate	5000	5.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Fluorene	300	6.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
4-Nitroaniline		6.4	24 U	24	26 U	26	26 U	26	26 U	26	26 U	26	30 U	30
4,6-Dinitro-2-methylphenol		5.3	24 U	24	26 U	26	26 U	26	26 U	26	26 U	26	30 U	30
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Pentachlorophenol	1	4.0	24 U	24	26 U	26	26 U	26	26 U	26	26 U	26	30 U	30
Phenanthrene	10	5.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Anthracene	2000	4.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Carbazole		4.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Fluoranthene	300	6.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Pyrene	200	5.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Chrysene	20	4.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
bis(2-Ethylhexy)phthalate	30	9.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11	12 U	12
Petroleum hydrocarbons														
Total Est. Conc. of TIC			17 J						2 JA				11 JA	
Dilution Factor														
Method:TCL Semivolatiles														

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M4		M4		M4		M4		M5		M5	
Sample			MP04-MW08-A01		MP04-MW08-A02		MP04-MW09-A01		MP04-MW09-A02		MP05-MW10-A01		MP05-MW10-A02	
Sample Type														
Batch#			9502G219		9503G642		9502G219		9503G660		9502G238		9503G660	
Prep#			95GB0111		95GB0172		95GB0111		95GB0174		95GB0112		95GB0174	
RFW#			014		007		016		009		010		011	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/16/95		3/8/95		2/16/95		3/9/95		2/17/95		3/9/95	
Analysis Date			3/9/95		3/24/95		3/9/95		3/26/95		2/27/95		3/26/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
bis(2-Chloroethyl) ether	10	9.7	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2-Chlorophenol	40	7.3	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
1,3-Dichlorobenzene	600	5.3	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
1,4-Dichlorobenzene	75	4.8	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
1,2-Dichlorobenzene	600	5.7	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2-Methylphenol		6.7	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
4-Methylphenol		12.9	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Hexachloroethane	10	5.3	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Nitrobenzene	10	7.4	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Isophorone	100	3.9	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2-Nitrophenol		7.0	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2,4-Dimethylphenol	100	4.8	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
bis(2-Chloroethoxy) methane		6.1	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2,4-Dichlorophenol	20	4.4	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
1,2,4-Trichlorobenzene	9	9.6	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Naphthalene		8.4	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
4-Chloroaniline		2.9	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Hexachlorobutadiene	1	4.6	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
4-Chloro-3-methylphenol	20	3.1	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2-Methylnaphthalene		8.7	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Hexachlorocyclopentadiene	50	3.6	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2,4,6-Trichlorophenol		5.6	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2,4,5-Trichlorophenol	700	4.7	26 U	26	26 U	26	28 U	28	26 U	26	27 U	27	27 U	27
2-Chloronaphthalene		8.2	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2-Nitroaniline		6.1	26 U	26	26 U	26	28 U	28	26 U	26	27 U	27	27 U	27
Dimethylphthalate	7000	4.4	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Acenaphthylene	10	6.0	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2,6-Dinitrotoluene	10	5.2	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
3-Nitroaniline		5.2	26 U	26	26 U	26	28 U	28	26 U	26	27 U	27	27 U	27
Acenaphthene	400	6.7	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2,4-Dinitrophenol	40	4.6	26 U	26	26 U	26	28 U	28	26 U	26	27 U	27	27 U	27

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M4		M4		M4		M4		M5		M5	
Sample			MP04-MW08-A01		MP04-MW08-A02		MP04-MW09-A01		MP04-MW09-A02		MP05-MW10-A01		MP05-MW10-A02	
Sample Type														
Batch#			9502G219		9503G642		9502G219		9503G660		9502G238		9503G660	
Prep#			95GB0111		95GB0172		95GB0111		95GB0174		95GB0112		95GB0174	
RFW#			014		007		016		009		010		011	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/16/95		3/8/95		2/16/95		3/9/95		2/17/95		3/9/95	
Analysis Date			3/9/95		3/24/95		3/9/95		3/26/95		2/27/95		3/26/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	26 U	26	28 U	28	26 U	26	27 U	27	27 U	27
Dibenzofuran		6.5	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
2,4-Dinitrotoluene	10	5.8	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Diethylphthalate	5000	5.4	10 U	10	2 JB	11	11 U	11	11 U	11	11 U	11	11 U	11
4-Chlorophenyl-phenylether		7.0	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Fluorene	300	6.3	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
4-Nitroaniline		6.4	26 U	26	26 U	26	28 U	28	26 U	26	27 U	27	27 U	27
4,6-Dinitro-2-methylphenol		5.3	26 U	26	26 U	26	28 U	28	26 U	26	27 U	27	27 U	27
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
4-Bromophenyl-phenylether		5.3	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Hexachlorobenzene	10	5.5	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Pentachlorophenol	1	4.0	26 U	26	26 U	26	28 U	28	26 U	26	27 U	27	27 U	27
Phenanthrene	10	5.0	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Anthracene	2000	4.6	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Carbazole		4.4	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Di-n-butylphthalate	900	6.5	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Fluoranthene	300	6.0	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Pyrene	200	5.4	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Butylbenzylphthalate	100	5.3	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
3,3'-Dichlorobenzidine	60	2.8	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(a)anthracene	10	4.9	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Chrysene	20	4.4	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
bis(2-Ethylhexy)phthalate	30	9.7	10 U	10	3 J	11	11 U	11	11 U	11	11 U	11	11 U	11
Di-n-octyl phthalate	100	5.6	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(b)fluoranthene	2	5.7	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(k)fluoranthene	2	6.2	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(a)pyrene	20	4.9	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Dibenzo(a,h)anthracene	20	6.0	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(g,h,i)perylene	20	6.8	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11	11 U	11
Petroleum hydrocarbons														
Total Est. Conc. of TIC			5 J				4 J				4 J		8 J	
Dilution Factor														
Method:TCL Semivolatiles														

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M5		M5		M5		M8		M8	
Sample			MP05-MW11-A01		MP05-MW11-A02		MP05-MW11-E02		MP08-MW12-A01		MP08-MW12-A02	
Sample Type							Field Rinsate Blank					
Batch#			9502G238		9503G660		9503G660		9502G238		9503G767	
Prep#			95GB0112		95GB0174		95GB0174		95GB0112		95GP0263	
RFW#			012		013		016		014		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/17/95		3/9/95		3/9/95		2/17/95		3/15/95	
Analysis Date			2/27/95		3/26/95		3/27/95		2/28/95		4/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
bis(2-Chloroethyl) ether	10	9.7	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2-Chlorophenol	40	7.3	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
1,3-Dichlorobenzene	600	5.3	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
1,4-Dichlorobenzene	75	4.8	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
1,2-Dichlorobenzene	600	5.7	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2-Methylphenol		6.7	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
4-Methylphenol		12.9	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Hexachloroethane	10	5.3	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Nitrobenzene	10	7.4	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Isophorone	100	3.9	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2-Nitrophenol		7.0	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2,4-Dimethylphenol	100	4.8	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
bis(2-Chloroethoxy) methane		6.1	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2,4-Dichlorophenol	20	4.4	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
1,2,4-Trichlorobenzene	9	9.6	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Naphthalene		8.4	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
4-Chloroaniline		2.9	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Hexachlorobutadiene	1	4.6	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
4-Chloro-3-methylphenol	20	3.1	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2-Methylnaphthalene		8.7	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Hexachlorocyclopentadiene	50	3.6	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2,4,6-Trichlorophenol		5.6	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2,4,5-Trichlorophenol	700	4.7	26 U	26	31 U	31	26 U	26	26 U	26	26 U	26
2-Chloronaphthalene		8.2	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2-Nitroaniline		6.1	26 U	26	31 U	31	26 U	26	26 U	26	26 U	26
Dimethylphthalate	7000	4.4	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Acenaphthylene	10	6.0	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2,6-Dinitrotoluene	10	5.2	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
3-Nitroaniline		5.2	26 U	26	31 U	31	26 U	26	26 U	26	26 U	26
Acenaphthene	400	6.7	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2,4-Dinitrophenol	40	4.6	26 U	26	31 U	31	26 U	26	26 U	26	26 U	26

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M5		M5		M5		M8		M8	
Sample			MP05-MW11-A01		MP05-MW11-A02		MP05-MW11-E02		MP08-MW12-A01		MP08-MW12-A02	
Sample Type							Field Rinsate Blank					
Batch#			9502G238		9503G660		9503G660		9502G238		9503G767	
Prep#			95GB0112		95GB0174		95GB0174		95GB0112		95GP0263	
RFW#			012		013		016		014		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/17/95		3/9/95		3/9/95		2/17/95		3/15/95	
Analysis Date			2/27/95		3/26/95		3/27/95		2/28/95		4/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	31 U	31	26 U	26	26 U	26	26 U	26
Dibenzofuran		6.5	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
2,4-Dinitrotoluene	10	5.8	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Diethylphthalate	5000	5.4	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
4-Chlorophenyl-phenylether		7.0	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Fluorene	300	6.3	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
4-Nitroaniline		6.4	26 U	26	31 U	31	26 U	26	26 U	26	26 U	26
4,6-Dinitro-2-methylphenol		5.3	26 U	26	31 U	31	26 U	26	26 U	26	26 U	26
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
4-Bromophenyl-phenylether		5.3	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Hexachlorobenzene	10	5.5	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Pentachlorophenol	1	4.0	26 U	26	31 U	31	26 U	26	26 U	26	26 U	26
Phenanthrene	10	5.0	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Anthracene	2000	4.6	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Carbazole		4.4	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Di-n-butylphthalate	900	6.5	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Fluoranthene	300	6.0	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Pyrene	200	5.4	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Butylbenzylphthalate	100	5.3	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
3,3'-Dichlorobenzidine	60	2.8	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Benzo(a)anthracene	10	4.9	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Chrysene	20	4.4	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
bis(2-Ethylhexy)phthalate	30	9.7	2 J	10	12 U	12	10 U	10	11 U	11	11 U	11
Di-n-octyl phthalate	100	5.6	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Benzo(b)fluoranthene	2	5.7	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Benzo(k)fluoranthene	2	6.2	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Benzo(a)pyrene	20	4.9	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Dibenzo(a,h)anthracene	20	6.0	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Benzo(g,h,i)perylene	20	6.8	10 U	10	12 U	12	10 U	10	11 U	11	11 U	11
Petroleum hydrocarbons												
Total Est. Conc. of TIC			35 J		37 J		9 J		18 J		20 J	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M8		M8		M8		M8		M8	
Sample			MP08-MW12-C02		MP08-MW12-E02		MP08-MW13-A01		MP08-MW13-A01RE		MP08-MW13-A02	
Sample Type			Duplicate		Field Rinsate Blank							
Batch#			9503G767		9503G767		9502G403		9502G403		9503G767	
Prep#			95GP0263		95GP0263		95GB0129		95GB0129		95GP0263	
RFW#			003		006		001		001 RE		008	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/15/95		3/15/95		2/22/95		2/22/95		3/15/95	
Analysis Date			4/15/95		4/15/95		3/15/95		3/16/95		4/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2-Chlorophenol	40	7.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
1,4-Dichlorobenzene	75	4.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2-Methylphenol		6.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
4-Methylphenol		12.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Hexachloroethane	10	5.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Nitrobenzene	10	7.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Isophorone	100	3.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2-Nitrophenol		7.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
1,2,4-Trichlorobenzene	9	9.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Naphthalene		8.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
4-Chloroaniline		2.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2-Methylnaphthalene		8.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2,4,5-Trichlorophenol	700	4.7	26 U	26	26 U	26	26 U	26	26 U	26	26 U	26
2-Chloronaphthalene		8.2	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2-Nitroaniline		6.1	26 U	26	26 U	26	26 U	26	26 U	26	26 U	26
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Acenaphthylene	10	6.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
3-Nitroaniline		5.2	26 U	26	26 U	26	26 U	26	26 U	26	26 U	26
Acenaphthene	400	6.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2,4-Dinitrophenol	40	4.6	26 U	26	26 U	26	26 U	26	26 U	26	26 U	26

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M8		M8		M8		M8		M8	
Sample			MP08-MW12-C02		MP08-MW12-E02		MP08-MW13-A01		MP08-MW13-A01RE		MP08-MW13-A02	
Sample Type			Duplicate		Field Rinsate Blank							
Batch#			9503G767		9503G767		9502G403		9502G403		9503G767	
Prep#			95GP0263		95GP0263		95GB0129		95GB0129		95GP0263	
RFW#			003		006		001		001 RE		008	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/15/95		3/15/95		2/22/95		2/22/95		3/15/95	
Analysis Date			4/15/95		4/15/95		3/15/95		3/16/95		4/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	26 U	26	26 U	26	26 U	26	26 U	26
Dibenzofuran		6.5	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Diethylphthalate	5000	5.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Fluorene	300	6.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
4-Nitroaniline		6.4	26 U	26	26 U	26	26 U	26	26 U	26	26 U	26
4,6-Dinitro-2-methylphenol		5.3	26 U	26	26 U	26	26 U	26	26 U	26	26 U	26
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Pentachlorophenol	1	4.0	26 U	26	26 U	26	26 U	26	26 U	26	26 U	26
Phenanthrene	10	5.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Anthracene	2000	4.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Carbazole		4.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Fluoranthene	300	6.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Pyrene	200	5.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Chrysene	20	4.4	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
bis(2-Ethylhexy)phthalate	30	9.7	10 U	10	2 J	10	2 JB	11	1 JB	11	11 U	11
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	11 U	11	11 U	11	11 U	11
Petroleum hydrocarbons												
Total Est. Conc. of TIC			22 J		10 J		17 JA		20 JA			
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M8		M8		M8		M8		M8	
Sample			MP08-MW14-A01		MP08-MW14-A02		MP08-MW14-A02RE		MP08-MW15-A01		MP08-MW15-A02	
Sample Type												
Batch#			9502G219		9503G767		9503G767		9502G403		9503G767	
Prep#			95GB0111		95GP0263		95GP0263		95GB0129		95GP0263	
RFW#			018		010		010		003		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/16/95		3/15/95		3/15/95		2/22/95		3/15/95	
Analysis Date			3/13/95		4/15/95		4/15/95		3/16/95		4/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Chlorophenol	40	7.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	10 U	10	2 J	11	12 U	12
1,4-Dichlorobenzene	75	4.8	3 J	10	3 J	10	3 J	10	5 J	11	4 J	12
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	10 U	10	1 J	11	12 U	12
2-Methylphenol		6.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Methylphenol		12.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Hexachloroethane	10	5.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Nitrobenzene	10	7.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Isophorone	100	3.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Nitrophenol		7.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
1,2,4-Trichlorobenzene	9	9.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Naphthalene		8.4	10 U	10	10 U	10	1 J	10	1 J	11	12 U	12
4-Chloroaniline		2.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Methylnaphthalene		8.7	1 J	10	1 J	10	10 U	10	2 J	11	1 J	12
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4,5-Trichlorophenol	700	4.7	24 U	24	25 U	25	24 U	24	26 U	26	30 U	30
2-Chloronaphthalene		8.2	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Nitroaniline		6.1	24 U	24	25 U	25	24 U	24	26 U	26	30 U	30
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Acenaphthylene	10	6.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
3-Nitroaniline		5.2	24 U	24	25 U	25	24 U	24	26 U	26	30 U	30
Acenaphthene	400	6.7	2 J	10	2 J	10	2 J	10	17	11	14	12
2,4-Dinitrophenol	40	4.6	24 U	24	25 U	25	24 U	24	26 U	26	30 U	30

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M8		M8		M8		M8		M8	
Sample			MP08-MW14-A01		MP08-MW14-A02		MP08-MW14-A02RE		MP08-MW15-A01		MP08-MW15-A02	
Sample Type												
Batch#			9502G219		9503G767		9503G767		9502G403		9503G767	
Prep#			95GB0111		95GP0263		95GP0263		95GB0129		95GP0263	
RFW#			018		010		010		003		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/16/95		3/15/95		3/15/95		2/22/95		3/15/95	
Analysis Date			3/13/95		4/15/95		4/15/95		3/16/95		4/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	24 U	24	25 U	25	24 U	24	26 U	26	30 U	30
Dibenzofuran		6.5	10 U	10	10 U	10	10 U	10	7 J	11	5 J	12
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Diethylphthalate	5000	5.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Fluorene	300	6.3	10 U	10	10 U	10	10 U	10	9 J	11	7 J	12
4-Nitroaniline		6.4	24 U	24	25 U	25	24 U	24	26 U	26	30 U	30
4,6-Dinitro-2-methylphenol		5.3	24 U	24	25 U	25	24 U	24	26 U	26	30 U	30
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Pentachlorophenol	1	4.0	24 U	24	25 U	25	24 U	24	26 U	26	30 U	30
Phenanthrene	10	5.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Anthracene	2000	4.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Carbazole		4.4	10 U	10	10 U	10	10 U	10	1 J	11	12 U	12
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Fluoranthene	300	6.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Pyrene	200	5.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Chrysene	20	4.4	10 U	10	10 U	10	10 U	10	1 JB	11	12 U	12
bis(2-Ethylhexy)phthalate	30	9.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Petroleum hydrocarbons												
Total Est. Conc. of TIC			143 J		142 J		170 J		205 JA		89 J	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M8		M8		M8		M8		M12	
Sample			MP08-MW15-C01		MP08-MW15-C01RE		MP08-MW15-E01		MP08-MW15-E01RE		MP12-MW16-A01	
Sample Type			Duplicate		Duplicate		Field Rinsate Blank		Field Rinsate Blank			
Batch#			9502G403		9502G403		9502G403		9502G403		9502G299	
Prep#			95GB0129		95GB0129		95GB0129		95GB0129		95GB0118	
RFW#			005		005 RE		008		008 RE		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/22/95		2/22/95		2/22/95		2/22/95		2/20/95	
Analysis Date			3/16/95		3/16/95		3/16/95		3/16/95		3/11/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2-Chlorophenol	40	7.3	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
1,3-Dichlorobenzene	600	5.3	2 J	10	2 J	10	12 U	12	12 U	12	11 U	11
1,4-Dichlorobenzene	75	4.8	4 J	10	5 J	10	12 U	12	12 U	12	11 U	11
1,2-Dichlorobenzene	600	5.7	10 U	10	1 J	10	12 U	12	12 U	12	11 U	11
2-Methylphenol		6.7	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
4-Methylphenol		12.9	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Hexachloroethane	10	5.3	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Nitrobenzene	10	7.4	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Isophorone	100	3.9	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2-Nitrophenol		7.0	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
1,2,4-Trichlorobenzene	9	9.6	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Naphthalene		8.4	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
4-Chloroaniline		2.9	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2-Methylnaphthalene		8.7	10 U	10	2 J	10	12 U	12	12 U	12	11 U	11
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2,4,5-Trichlorophenol	700	4.7	26 U	26	26 U	26	30 U	30	30 U	30	26 U	26
2-Chloronaphthalene		8.2	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2-Nitroaniline		6.1	26 U	26	26 U	26	30 U	30	30 U	30	26 U	26
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Acenaphthylene	10	6.0	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
3-Nitroaniline		5.2	26 U	26	26 U	26	30 U	30	30 U	30	26 U	26
Acenaphthene	400	6.7	16	10	14	10	12 U	12	12 U	12	11 U	11
2,4-Dinitrophenol	40	4.6	26 U	26	26 U	26	30 U	30	30 U	30	26 U	26

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M8		M8		M8		M8		M12	
Sample			MP08-MW15-C01		MP08-MW15-C01RE		MP08-MW15-E01		MP08-MW15-E01RE		MP12-MW16-A01	
Sample Type			Duplicate		Duplicate		Field Rinsate Blank		Field Rinsate Blank			
Batch#			9502G403		9502G403		9502G403		9502G403		9502G299	
Prep#			95GB0129		95GB0129		95GB0129		95GB0129		95GB0118	
RFW#			005		005 RE		008		008 RE		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/22/95		2/22/95		2/22/95		2/22/95		2/20/95	
Analysis Date			3/16/95		3/16/95		3/16/95		3/16/95		3/11/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	26 U	26	30 U	30	30 U	30	26 U	26
Dibenzofuran		6.5	6 J	10	6 J	10	12 U	12	12 U	12	11 U	11
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Diethylphthalate	5000	5.4	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Fluorene	300	6.3	8 J	10	8 J	10	12 U	12	12 U	12	11 U	11
4-Nitroaniline		6.4	26 U	26	26 U	26	30 U	30	30 U	30	26 U	26
4,6-Dinitro-2-methylphenol		5.3	26 U	26	26 U	26	30 U	30	30 U	30	26 U	26
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Pentachlorophenol	1	4.0	26 U	26	26 U	26	30 U	30	30 U	30	26 U	26
Phenanthrene	10	5.0	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Anthracene	2000	4.6	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Carbazole		4.4	1 J	10	1 J	10	12 U	12	12 U	12	11 U	11
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Fluoranthene	300	6.0	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Pyrene	200	5.4	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Chrysene	20	4.4	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
bis(2-Ethylhexy)phthalate	30	9.7	1 JB	10	10 U	10	3 JB	12	3 JB	12	4 J	11
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	12 U	12	12 U	12	11 U	11
Petroleum hydrocarbons												
Total Est. Conc. of TIC			189 J		143 J		17 JA		15 JA		8 J	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M12		M12		M12		M12		M12	
Sample			MP12-MW16-A02		MP12-MW17-A01		MP12-MW17-A01RE		MP12-MW17-A02		MP12-MW18-A01	
Sample Type												
Batch#			9502G681		9502G299		9502G299		9502G681		9502G299	
Prep#			95GB0175		95GB0118		95GB0175		95GB0175		95GB0118	
RFW#			001		003		003		003		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/10/95		2/20/95		2/20/95		3/10/95		2/20/95	
Analysis Date			3/28/95		3/11/95		3/16/95		3/26/95		3/11/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
bis(2-Chloroethyl) ether	10	9.7	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2-Chlorophenol	40	7.3	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
1,3-Dichlorobenzene	600	5.3	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
1,4-Dichlorobenzene	75	4.8	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
1,2-Dichlorobenzene	600	5.7	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2-Methylphenol		6.7	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2,2'-oxybis(1-Chloropropane)		7.0	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
4-Methylphenol		12.9	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
N-Nitroso-di-n-propylamine	20	8.0	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Hexachloroethane	10	5.3	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Nitrobenzene	10	7.4	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Isophorone	100	3.9	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2-Nitrophenol		7.0	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2,4-Dimethylphenol	100	4.8	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
bis(2-Chloroethoxy) methane		6.1	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2,4-Dichlorophenol	20	4.4	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
1,2,4-Trichlorobenzene	9	9.6	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Naphthalene		8.4	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
4-Chloroaniline		2.9	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Hexachlorobutadiene	1	4.6	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
4-Chloro-3-methylphenol	20	3.1	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2-Methylnaphthalene		8.7	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Hexachlorocyclopentadiene	50	3.6	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2,4,6-Trichlorophenol		5.6	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2,4,5-Trichlorophenol	700	4.7	26 U	26	31 U	31	26 U	26	31 U	31	28 U	28
2-Chloronaphthalene		8.2	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2-Nitroaniline		6.1	26 U	26	31 U	31	26 U	26	31 U	31	28 U	28
Dimethylphthalate	7000	4.4	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Acenaphthylene	10	6.0	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2,6-Dinitrotoluene	10	5.2	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
3-Nitroaniline		5.2	26 U	26	31 U	31	26 U	26	31 U	31	28 U	28
Acenaphthene	400	6.7	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2,4-Dinitrophenol	40	4.6	26 U	26	31 U	31	26 U	26	31 U	31	28 U	28

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M12		M12		M12		M12		M12	
Sample			MP12-MW16-A02		MP12-MW17-A01		MP12-MW17-A01RE		MP12-MW17-A02		MP12-MW18-A01	
Sample Type												
Batch#			9502G681		9502G299		9502G299		9502G681		9502G299	
Prep#			95GB0175		95GB0118		95GB0175		95GB0175		95GB0118	
RFW#			001		003		003		003		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/10/95		2/20/95		2/20/95		3/10/95		2/20/95	
Analysis Date			3/28/95		3/11/95		3/16/95		3/26/95		3/11/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	31 U	31	26 U	26	31 U	31	28 U	28
Dibenzofuran		6.5	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
2,4-Dinitrotoluene	10	5.8	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Diethylphthalate	5000	5.4	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
4-Chlorophenyl-phenylether		7.0	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Fluorene	300	6.3	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
4-Nitroaniline		6.4	26 U	26	31 U	31	26 U	26	31 U	31	28 U	28
4,6-Dinitro-2-methylphenol		5.3	26 U	26	31 U	31	26 U	26	31 U	31	28 U	28
N-Nitrosodiphenylamine (1)	20	4.2	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
4-Bromophenyl-phenylether		5.3	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Hexachlorobenzene	10	5.5	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Pentachlorophenol	1	4.0	26 U	26	31 U	31	26 U	26	31 U	31	28 U	28
Phenanthrene	10	5.0	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Anthracene	2000	4.6	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Carbazole		4.4	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Di-n-butylphthalate	900	6.5	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Fluoranthene	300	6.0	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Pyrene	200	5.4	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Butylbenzylphthalate	100	5.3	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
3,3'-Dichlorobenzidine	60	2.8	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Benzo(a)anthracene	10	4.9	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Chrysene	20	4.4	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
bis(2-Ethylhexy)phthalate	30	9.7	2 J	11	12 U	12	3 J	11	1 J	12	3 J	11
Di-n-octyl phthalate	100	5.6	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Benzo(b)fluoranthene	2	5.7	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Benzo(k)fluoranthene	2	6.2	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Benzo(a)pyrene	20	4.9	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Indeno(1,2,3-cd)pyrene	20	7.1	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Dibenzo(a,h)anthracene	20	6.0	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Benzo(g,h,i)perylene	20	6.8	11 U	11	12 U	12	11 U	11	12 U	12	11 U	11
Petroleum hydrocarbons												
Total Est. Conc. of TIC			5 J		52 J		22 J		10 J		3 J	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M12		M14		M14		M14		M14	
Sample			MP12-MW18-A02		MP14-MW19-A01		MP14-MW19-A02		MP14-MW20-A01		MP14-MW20-A02	
Sample Type												
Batch#			9502G681		9502G299		9502G681		9502G403		9503G722	
Prep#			95GB0175		95GB0118		95GB0175		95GB0129		95GB0181	
RFW#			005		007		007		010		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/10/95		2/20/95		3/10/95		2/22/95		3/13/95	
Analysis Date			3/26/95		3/12/95		3/27/95		3/16/95		3/29/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
bis(2-Chloroethyl) ether	10	9.7	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2-Chlorophenol	40	7.3	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
1,3-Dichlorobenzene	600	5.3	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
1,4-Dichlorobenzene	75	4.8	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
1,2-Dichlorobenzene	600	5.7	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2-Methylphenol		6.7	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
4-Methylphenol		12.9	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
N-Nitroso-di-n-propylamine	20	8.0	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Hexachloroethane	10	5.3	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Nitrobenzene	10	7.4	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Isophorone	100	3.9	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2-Nitrophenol		7.0	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2,4-Dimethylphenol	100	4.8	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
bis(2-Chloroethoxy) methane		6.1	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2,4-Dichlorophenol	20	4.4	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
1,2,4-Trichlorobenzene	9	9.6	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Naphthalene		8.4	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
4-Chloroaniline		2.9	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Hexachlorobutadiene	1	4.6	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
4-Chloro-3-methylphenol	20	3.1	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2-Methylnaphthalene		8.7	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Hexachlorocyclopentadiene	50	3.6	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2,4,6-Trichlorophenol		5.6	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2,4,5-Trichlorophenol	700	4.7	31 U	31	26 U	26	31 U	31	24 U	24	26 U	26
2-Chloronaphthalene		8.2	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2-Nitroaniline		6.1	31 U	31	26 U	26	31 U	31	24 U	24	26 U	26
Dimethylphthalate	7000	4.4	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Acenaphthylene	10	6.0	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2,6-Dinitrotoluene	10	5.2	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
3-Nitroaniline		5.2	31 U	31	26 U	26	31 U	31	24 U	24	26 U	26
Acenaphthene	400	6.7	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2,4-Dinitrophenol	40	4.6	31 U	31	26 U	26	31 U	31	24 U	24	26 U	26

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M12		M14		M14		M14		M14	
Sample			MP12-MW18-A02		MP14-MW19-A01		MP14-MW19-A02		MP14-MW20-A01		MP14-MW20-A02	
Sample Type												
Batch#			9502G681		9502G299		9502G681		9502G403		9503G722	
Prep#			95GB0175		95GB0118		95GB0175		95GB0129		95GB0181	
RFW#			005		007		007		010		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/10/95		2/20/95		3/10/95		2/22/95		3/13/95	
Analysis Date			3/26/95		3/12/95		3/27/95		3/16/95		3/29/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	31 U	31	26 U	26	31 U	31	24 U	24	26 U	26
Dibenzofuran		6.5	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
2,4-Dinitrotoluene	10	5.8	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Diethylphthalate	5000	5.4	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
4-Chlorophenyl-phenylether		7.0	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Fluorene	300	6.3	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
4-Nitroaniline		6.4	31 U	31	26 U	26	31 U	31	24 U	24	26 U	26
4,6-Dinitro-2-methylphenol		5.3	31 U	31	26 U	26	31 U	31	24 U	24	26 U	26
N-Nitrosodiphenylamine (1)	20	4.2	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
4-Bromophenyl-phenylether		5.3	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Hexachlorobenzene	10	5.5	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Pentachlorophenol	1	4.0	31 U	31	26 U	26	31 U	31	24 U	24	26 U	26
Phenanthrene	10	5.0	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Anthracene	2000	4.6	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Carbazole		4.4	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Di-n-butylphthalate	900	6.5	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Fluoranthene	300	6.0	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Pyrene	200	5.4	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Butylbenzylphthalate	100	5.3	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
3,3'-Dichlorobenzidine	60	2.8	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Benzo(a)anthracene	10	4.9	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Chrysene	20	4.4	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
bis(2-Ethylhexy)phthalate	30	9.7	12 U	12	3 J	11	12 U	12	1 JB	10	10 U	10
Di-n-octyl phthalate	100	5.6	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Benzo(b)fluoranthene	2	5.7	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Benzo(k)fluoranthene	2	6.2	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Benzo(a)pyrene	20	4.9	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Indeno(1,2,3-cd)pyrene	20	7.1	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Dibenzo(a,h)anthracene	20	6.0	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Benzo(g,h,i)perylene	20	6.8	12 U	12	11 U	11	12 U	12	10 U	10	10 U	10
Petroleum hydrocarbons												
Total Est. Conc. of TIC					22 J		5 J		12 J		28 J	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M14		M14		M14		M14		M16	
Sample			MP14-MW20-E02		MP14-MW21-A01		MP14-MW21-A02		MP14-MW21-A01RE		MP16-MW22-A01	
Sample Type			Field Rinsate Blank									
Batch#			9503G722		9502G403		9503G660		9502G403		9502G238	
Prep#			95GB0181		95GB0129		95GB0174		95GB0129		95GB0112	
RFW#			003		012		019		012 RE		016	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/13/95		2/22/95		3/9/95		2/22/95		2/17/95	
Analysis Date			3/18/95		3/16/95		3/27/95		3/5/95		2/28/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
bis(2-Chloroethyl) ether	10	9.7	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2-Chlorophenol	40	7.3	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
1,3-Dichlorobenzene	600	5.3	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
1,4-Dichlorobenzene	75	4.8	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichlorobenzene	600	5.7	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2-Methylphenol		6.7	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
4-Methylphenol		12.9	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
N-Nitroso-di-n-propylamine	20	8.0	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Hexachloroethane	10	5.3	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Nitrobenzene	10	7.4	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Isophorone	100	3.9	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2-Nitrophenol		7.0	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2,4-Dimethylphenol	100	4.8	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
bis(2-Chloroethoxy) methane		6.1	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2,4-Dichlorophenol	20	4.4	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
1,2,4-Trichlorobenzene	9	9.6	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Naphthalene		8.4	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
4-Chloroaniline		2.9	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Hexachlorobutadiene	1	4.6	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
4-Chloro-3-methylphenol	20	3.1	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2-Methylnaphthalene		8.7	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Hexachlorocyclopentadiene	50	3.6	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2,4,6-Trichlorophenol		5.6	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2,4,5-Trichlorophenol	700	4.7	27 U	27	24 U	24	24 U	24	24 U	24	25 U	25
2-Chloronaphthalene		8.2	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2-Nitroaniline		6.1	27 U	27	24 U	24	24 U	24	24 U	24	25 U	25
Dimethylphthalate	7000	4.4	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Acenaphthylene	10	6.0	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2,6-Dinitrotoluene	10	5.2	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
3-Nitroaniline		5.2	27 U	27	24 U	24	24 U	24	24 U	24	25 U	25
Acenaphthene	400	6.7	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2,4-Dinitrophenol	40	4.6	27 U	27	24 U	24	24 U	24	24 U	24	25 U	25

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M14		M14		M14		M14		M16	
Sample			MP14-MW20-E02		MP14-MW21-A01		MP14-MW21-A02		MP14-MW21-A01RE		MP16-MW22-A01	
Sample Type			Field Rinsate Blank									
Batch#			9503G722		9502G403		9503G660		9502G403		9502G238	
Prep#			95GB0181		95GB0129		95GB0174		95GB0129		95GB0112	
RFW#			003		012		019		012 RE		016	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/13/95		2/22/95		3/9/95		2/22/95		2/17/95	
Analysis Date			3/18/95		3/16/95		3/27/95		3/5/95		2/28/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	27 U	27	24 U	24	24 U	24	24 U	24	25 U	25
Dibenzofuran		6.5	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
2,4-Dinitrotoluene	10	5.8	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Diethylphthalate	5000	5.4	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
4-Chlorophenyl-phenylether		7.0	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Fluorene	300	6.3	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
4-Nitroaniline		6.4	27 U	27	24 U	24	24 U	24	24 U	24	25 U	25
4,6-Dinitro-2-methylphenol		5.3	27 U	27	24 U	24	24 U	24	24 U	24	25 U	25
N-Nitrosodiphenylamine (1)	20	4.2	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
4-Bromophenyl-phenylether		5.3	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Hexachlorobenzene	10	6.6	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Pentachlorophenol	1	4.0	27 U	27	24 U	24	24 U	24	24 U	24	25 U	25
Phenanthrene	10	5.0	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Anthracene	2000	4.6	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Carbazole		4.4	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Di-n-butylphthalate	900	6.5	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Fluoranthene	300	6.0	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Pyrene	200	5.4	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Butylbenzylphthalate	100	5.3	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
3,3'-Dichlorobenzidine	60	2.8	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(a)anthracene	10	4.9	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Chrysene	20	4.4	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
bis(2-Ethylhexy)phthalate	30	9.7	11 U	11	1 JB	10	10 U	10	10 U	10	10 U	10
Di-n-octyl phthalate	100	5.6	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(b)fluoranthene	2	5.7	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(k)fluoranthene	2	6.2	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(a)pyrene	20	4.9	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Indeno(1,2,3-cd)pyrene	20	7.1	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Dibenzo(a,h)anthracene	20	6.0	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Benzo(g,h,i)perylene	20	6.8	11 U	11	10 U	10	10 U	10	10 U	10	10 U	10
Petroleum hydrocarbons												
Total Est. Conc. of TIC					7 J				6 J		83 J	
Dilution Factor												
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M16		M18		M18		M18		M18		M18	
Sample			MP16-MW22-A02		MP18-MW03-A01		MP18-MW03-E01		MP18-MW03-A02		MP18-MW24-A01		MP18-MW24-A02	
Sample Type							Field Rinsate Blank							
Batch#			9503G660		9505G825		9505G825		9505G139		9502G238		9502G681	
Prep#			95GB0174		95GIR081		95GIR081		95GB0112		95GB0112		95GB0175	
RFW#			018		001		004		001		001		009	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/9/95		5/10/95		5/10/95		2/17/95		2/17/95		3/10/95	
Analysis Date			3/27/95		5/30/95		5/29/95		3/1/95		3/1/95		3/28/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
bis(2-Chloroethyl) ether	10	9.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2-Chlorophenol	40	7.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
1,3-Dichlorobenzene	600	5.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
1,4-Dichlorobenzene	75	4.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
1,2-Dichlorobenzene	600	5.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2-Methylphenol		6.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
4-Methylphenol		12.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	2 J	11
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Hexachloroethane	10	5.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Nitrobenzene	10	7.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Isophorone	100	3.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2-Nitrophenol		7.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2,4-Dimethylphenol	100	4.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
bis(2-Chloroethoxy) methane		6.1	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2,4-Dichlorophenol	20	4.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
1,2,4-Trichlorobenzene	9	9.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Naphthalene		8.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
4-Chloroaniline		2.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Hexachlorobutadiene	1	4.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
4-Chloro-3-methylphenol	20	3.1	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2-Methylnaphthalene		8.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Hexachlorocyclopentadiene	50	3.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2,4,6-Trichlorophenol		5.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2,4,5-Trichlorophenol	700	4.7	24 U	24	27 U	27	28 U	28	24 U	24	24 U	24	26 U	26
2-Chloronaphthalene		8.2	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2-Nitroaniline		6.1	24 U	24	27 U	27	28 U	28	24 U	24	24 U	24	26 U	26
Dimethylphthalate	7000	4.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Acenaphthylene	10	6.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2,6-Dinitrotoluene	10	5.2	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
3-Nitroaniline		5.2	24 U	24	27 U	27	28 U	28	24 U	24	24 U	24	26 U	26
Acenaphthene	400	6.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2,4-Dinitrophenol	40	4.6	24 U	24	27 U	27	28 U	28	24 U	24	24 U	24	26 U	26

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M16		M18		M18		M18		M18		M18	
Sample			MP16-MW22-A02		MP18-MW03-A01		MP18-MW03-E01		MP18-MW03-A02		MP18-MW24-A01		MP18-MW24-A02	
Sample Type							Field Rinsate Blank							
Batch#			9503G660		9505G825		9505G825		9505G139		9502G238		9502G681	
Prep#			95GB0174		95GIR081		95GIR081		95GB0112		95GB0112		95GB0175	
RFW#			018		001		004		001		001		009	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/9/95		5/10/95		5/10/95		2/17/95		2/17/95		3/10/95	
Analysis Date			3/27/95		5/30/95		5/29/95		3/1/95		3/1/95		3/28/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	24 U	24	27 U	27	28 U	28	24 U	24	24 U	24	26 U	26
Dibenzofuran		6.5	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
2,4-Dinitrotoluene	10	5.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Diethylphthalate	5000	5.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
4-Chlorophenyl-phenylether		7.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Fluorene	300	6.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
4-Nitroaniline		6.4	24 U	24	27 U	27	28 U	28	24 U	24	24 U	24	26 U	26
4,6-Dinitro-2-methylphenol		5.3	24 U	24	27 U	27	28 U	28	24 U	24	24 U	24	26 U	26
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
4-Bromophenyl-phenylether		5.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Hexachlorobenzene	10	5.5	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Pentachlorophenol	1	4.0	24 U	24	27 U	27	28 U	28	24 U	24	24 U	24	26 U	26
Phenanthrene	10	5.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Anthracene	2000	4.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Carbazole		4.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Di-n-butylphthalate	900	6.5	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Fluoranthene	300	6.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Pyrene	200	5.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Butylbenzylphthalate	100	5.3	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
3,3'-Dichlorobenzidine	60	2.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Benzo(a)anthracene	10	4.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Chrysene	20	4.4	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
bis(2-Ethylhexy)phthalate	30	9.7	1 J	10	90 B	43	2 JB	43	2 JB	10	4	10	1 J	11
Di-n-octyl phthalate	100	5.6	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Benzo(b)fluoranthene	2	5.7	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Benzo(k)fluoranthene	2	6.2	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Benzo(a)pyrene	20	4.9	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Dibenzo(a,h)anthracene	20	6.0	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Benzo(g,h,i)perylene	20	6.8	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10	11 U	11
Petroleum hydrocarbons					0.26 U	0.26	0.27 U	0.27	0.26 U	0.26	1.3	0.27	0.62	0.26
Total Est. Conc. of TIC			88 J		5 JB		10 J		29 J		12 J		29 J	
Dilution Factor														
Method:TCL Semivolatiles														

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M18		M18		M18		M18		M18		M18	
Sample			MP18-MW24-C02		MP18-MW24-C02RE		MP18-MW24-E01		MP18-MW24-E02		MP18-MW25-A01		MP18-MW25-A02	
Sample Type			Duplicate		Duplicate		Field Rinsate Blank		Field Rinsate Blank					
Batch#			9502G681		9502G681		9502G238		9502G681		9502G238		9502G681	
Prep#			95GB0175		95GB0175		95GB0112		95GB0175		95GB0112		95GB0175	
RFW#			011		011 RE		004		014		006		016	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/10/95		3/10/95		2/17/95		3/10/95		2/17/95		3/10/95	
Analysis Date			3/27/95		3/28/95		2/27/95		3/27/95		2/28/95		3/28/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
bis(2-Chloroethyl) ether	10	9.7	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2-Chlorophenol	40	7.3	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
1,3-Dichlorobenzene	600	5.3	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
1,4-Dichlorobenzene	75	4.8	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
1,2-Dichlorobenzene	600	5.7	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2-Methylphenol		6.7	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2,2'-oxybis(1-Chloropropane)		7.0	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
4-Methylphenol		12.9	2 J	11	2 J	11	10 U	10	11 U	11	10 U	10	12 U	12
N-Nitroso-di-n-propylamine	20	8.0	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Hexachloroethane	10	5.3	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Nitrobenzene	10	7.4	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Isophorone	100	3.9	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2-Nitrophenol		7.0	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2,4-Dimethylphenol	100	4.8	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
bis(2-Chloroethoxy) methane		6.1	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2,4-Dichlorophenol	20	4.4	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
1,2,4-Trichlorobenzene	9	9.6	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Naphthalene		8.4	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
4-Chloroaniline		2.9	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Hexachlorobutadiene	1	4.6	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
4-Chloro-3-methylphenol	20	3.1	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2-Methylnaphthalene		8.7	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Hexachlorocyclopentadiene	50	3.6	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2,4,6-Trichlorophenol		5.6	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2,4,5-Trichlorophenol	700	4.7	26 U	26	26 U	26	26 U	26	28 U	28	26 U	26	31 U	31
2-Chloronaphthalene		8.2	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2-Nitroaniline		6.1	26 U	26	26 U	26	26 U	26	28 U	28	26 U	26	31 U	31
Dimethylphthalate	7000	4.4	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Acenaphthylene	10	6.0	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2,6-Dinitrotoluene	10	5.2	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
3-Nitroaniline		5.2	26 U	26	26 U	26	26 U	26	28 U	28	26 U	26	31 U	31
Acenaphthene	400	6.7	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2,4-Dinitrophenol	40	4.6	26 U	26	26 U	26	26 U	26	28 U	28	26 U	26	31 U	31

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M18		M18		M18		M18		M18		M18	
Sample			MP18-MW24-C02		MP18-MW24-C02RE		MP18-MW24-E01		MP18-MW24-E02		MP18-MW25-A01		MP18-MW25-A02	
Sample Type			Duplicate		Duplicate		Field Rinsate Blank		Field Rinsate Blank					
Batch#			9502G681		9502G681		9502G238		9502G681		9502G238		9502G681	
Prep#			95GB0175		95GB0175		95GB0112		95GB0175		95GB0112		95GB0175	
RFW#			011		011 RE		004		014		006		016	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/10/95		3/10/95		2/17/95		3/10/95		2/17/95		3/10/95	
Analysis Date			3/27/95		3/28/95		2/27/95		3/27/95		2/28/95		3/28/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	26 U	26	26 U	26	28 U	28	26 U	26	31 U	31
Dibenzofuran		6.5	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
2,4-Dinitrotoluene	10	5.8	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Diethylphthalate	5000	5.4	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
4-Chlorophenyl-phenylether		7.0	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Fluorene	300	6.3	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
4-Nitroaniline		6.4	26 U	26	26 U	26	26 U	26	28 U	28	26 U	26	31 U	31
4,6-Dinitro-2-methylphenol		5.3	26 U	26	26 U	26	26 U	26	28 U	28	26 U	26	31 U	31
N-Nitrosodiphenylamine (1)	20	4.2	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
4-Bromophenyl-phenylether		5.3	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Hexachlorobenzene	10	5.5	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Pentachlorophenol	1	4.0	26 U	26	26 U	26	26 U	26	28 U	28	26 U	26	31 U	31
Phenanthrene	10	5.0	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Anthracene	2000	4.6	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Carbazole		4.4	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Di-n-butylphthalate	900	6.5	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Fluoranthene	300	6.0	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Pyrene	200	5.4	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Butylbenzylphthalate	100	5.3	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
3,3'-Dichlorobenzidine	60	2.8	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Benzo(a)anthracene	10	4.9	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Chrysene	20	4.4	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
bis(2-Ethylhexy)phthalate	30	9.7	11 U	11	11 U	11	10 U	10	140	22 *	10 U	10	12 U	12
Di-n-octyl phthalate	100	5.6	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Benzo(b)fluoranthene	2	5.7	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Benzo(k)fluoranthene	2	6.2	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Benzo(a)pyrene	20	4.9	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Indeno(1,2,3-cd)pyrene	20	7.1	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Dibenzo(a,h)anthracene	20	6.0	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Benzo(g,h,i)perylene	20	6.8	11 U	11	11 U	11	10 U	10	11 U	11	10 U	10	12 U	12
Petroleum hydrocarbons			0.94	0.27	0.94	0.27	0.28	0.26	0.29 U	0.29	0.28	0.27	0.58	0.27
Total Est. Conc. of TIC			38 J		24 J		4 J		7 J		72 J		59 J	
Dilution Factor									* = 2.00					
Method:TCL Semivolatiles														

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M18		B1		B1		B2		B2		B3	
Sample			MP18-MW25-C01		B1-MW01B-A01		B1-MW01B-A02		B2-MW02B-A01		B2-MW02B-A02		B3-MW03B-A01	
Sample Type			Duplicate											
Batch#			9502G238		9502G169		9503G616		9502G169		9503G616		9502G169	
Prep#			95GB0112		95GB0103		95GB0166		95GB0103		95GB0166		95GB0103	
RFW#			008		001		008		003		010		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/17/95		2/14/95		3/7/95		2/14/95		3/7/95		2/14/95	
Analysis Date			2/28/95		3/7/95		3/26/95		3/7/95		3/30/95		3/7/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
bis(2-Chloroethyl) ether	10	9.7	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2-Chlorophenol	40	7.3	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
1,3-Dichlorobenzene	600	5.3	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
1,4-Dichlorobenzene	75	4.8	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
1,2-Dichlorobenzene	600	5.7	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2-Methylphenol		6.7	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
4-Methylphenol		12.9	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
N-Nitroso-di-n-propylamine	20	8.0	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Hexachloroethane	10	5.3	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Nitrobenzene	10	7.4	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Isophorone	100	3.9	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2-Nitrophenol		7.0	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2,4-Dimethylphenol	100	4.8	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
bis(2-Chloroethoxy) methane		6.1	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2,4-Dichlorophenol	20	4.4	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
1,2,4-Trichlorobenzene	9	9.6	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Naphthalene		8.4	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
4-Chloroaniline		2.9	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Hexachlorobutadiene	1	4.6	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
4-Chloro-3-methylphenol	20	3.1	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2-Methylnaphthalene		8.7	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Hexachlorocyclopentadiene	50	3.6	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2,4,6-Trichlorophenol		5.6	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2,4,5-Trichlorophenol	700	4.7	26 U	26	30 U	30	30 U	30	24 U	24	31 U	31	25 U	25
2-Chloronaphthalene		8.2	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2-Nitroaniline		6.1	26 U	26	30 U	30	30 U	30	24 U	24	31 U	31	25 U	25
Dimethylphthalate	7000	4.4	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Acenaphthylene	10	6.0	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2,6-Dinitrotoluene	10	5.2	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
3-Nitroaniline		5.2	26 U	26	30 U	30	30 U	30	24 U	24	31 U	31	25 U	25
Acenaphthene	400	6.7	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2,4-Dinitrophenol	40	4.6	26 U	26	30 U	30	30 U	30	24 U	24	31 U	31	25 U	25

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			M18		B1		B1		B2		B2		B3	
Sample			MP18-MW25-C01		B1-MW01B-A01		B1-MW01B-A02		B2-MW02B-A01		B2-MW02B-A02		B3-MW03B-A01	
Sample Type			Duplicate											
Batch#			9502G238		9502G169		9503G616		9502G169		9503G616		9502G169	
Prep#			95GB0112		95GB0103		95GB0166		95GB0103		95GB0166		95GB0103	
RFW#			008		001		008		003		010		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/17/95		2/14/95		3/7/95		2/14/95		3/7/95		2/14/95	
Analysis Date			2/28/95		3/7/95		3/26/95		3/7/95		3/30/95		3/7/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	30 U	30	30 U	30	24 U	24	31 U	31	25 U	25
Dibenzofuran		6.5	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
2,4-Dinitrotoluene	10	5.8	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Diethylphthalate	5000	5.4	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
4-Chlorophenyl-phenylether		7.0	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Fluorene	300	6.3	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
4-Nitroaniline		6.4	26 U	26	30 U	30	30 U	30	24 U	24	31 U	31	25 U	25
4,6-Dinitro-2-methylphenol		5.3	26 U	26	30 U	30	30 U	30	24 U	24	31 U	31	25 U	25
N-Nitrosodiphenylamine (1)	20	4.2	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
4-Bromophenyl-phenylether		5.3	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Hexachlorobenzene	10	5.5	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Pentachlorophenol	1	4.0	26 U	26	30 U	30	30 U	30	24 U	24	31 U	31	25 U	25
Phenanthrene	10	5.0	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Anthracene	2000	4.6	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Carbazole		4.4	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Di-n-butylphthalate	900	6.5	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Fluoranthene	300	6.0	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Pyrene	200	5.4	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Butylbenzylphthalate	100	5.3	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
3,3'-Dichlorobenzidine	60	2.8	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Benzo(a)anthracene	10	4.9	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Chrysene	20	4.4	3 J	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
bis(2-Ethylhexy)phthalate	30	9.7	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	100 B	20 *
Di-n-octyl phthalate	100	5.6	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Benzo(b)fluoranthene	2	5.7	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Benzo(k)fluoranthene	2	6.2	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Benzo(a)pyrene	20	4.9	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Indeno(1,2,3-cd)pyrene	20	7.1	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Dibenzo(a,h)anthracene	20	6.0	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Benzo(g,h,i)perylene	20	6.8	11 U	11	12 U	12	12 U	12	10 U	10	12 U	12	10 U	10
Petroleum hydrocarbons			0.30	0.27										
Total Est. Conc. of TIC			114 J		4		5 J		6		7 J		10	
Dilution Factor														
Method:TCL Semivolatiles														

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			B3		B3		B3		B4		B4	
Sample			B3-MW03B-A02		B3-MW03B-E01		B3-MW03B-E02		B4-MW04B-A01		B4-MW04B-A02	
Sample Type					Field Rinsate Blank		Field Rinsate Blank					
Batch#			9503G740		9502G169		9503G616		9502G169		9503G616	
Prep#			95GB0181		95GB0103		95GB0166		95GB0103		95GB0166	
RFW#			001		008		006		010		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/14/95		2/13/95		3/7/95		2/13/95		3/7/95	
Analysis Date			3/29/95		3/7/95		3/25/95		3/7/95		3/26/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Chlorophenol	40	7.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
1,4-Dichlorobenzene	75	4.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Methylphenol		6.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Methylphenol		12.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Hexachloroethane	10	5.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Nitrobenzene	10	7.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Isophorone	100	3.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Nitrophenol		7.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
1,2,4-Trichlorobenzene	9	9.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Naphthalene		8.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Chloroaniline		2.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Methylnaphthalene		8.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4,5-Trichlorophenol	700	4.7	25 U	25	26 U	26	24 U	24	27 U	27	31 U	31
2-Chloronaphthalene		8.2	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2-Nitroaniline		6.1	25 U	25	26 U	26	24 U	24	27 U	27	31 U	31
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Acenaphthylene	10	6.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
3-Nitroaniline		5.2	25 U	25	26 U	26	24 U	24	27 U	27	31 U	31
Acenaphthene	400	6.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4-Dinitrophenol	40	4.6	25 U	25	26 U	26	24 U	24	27 U	27	31 U	31

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			B3		B3		B3		B4		B4	
Sample			B3-MW03B-A02		B3-MW03B-E01		B3-MW03B-E02		B4-MW04B-A01		B4-MW04B-A02	
Sample Type					Field Rinsate Blank		Field Rinsate Blank					
Batch#			9503G740		9502G169		9503G616		9502G169		9503G616	
Prep#			95GB0181		95GB0103		95GB0166		95GB0103		95GB0166	
RFW#			001		008		006		010		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/14/95		2/13/95		3/7/95		2/13/95		3/7/95	
Analysis Date			3/29/95		3/7/95		3/25/95		3/7/95		3/26/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	25 U	25	26 U	26	24 U	24	27 U	27	31 U	31
Dibenzofuran		6.5	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Diethylphthalate	5000	5.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Fluorene	300	6.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Nitroaniline		6.4	25 U	25	26 U	26	24 U	24	27 U	27	31 U	31
4,6-Dinitro-2-methylphenol		5.3	25 U	25	26 U	26	24 U	24	27 U	27	31 U	31
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Pentachlorophenol	1	4.0	25 U	25	26 U	26	24 U	24	27 U	27	31 U	31
Phenanthrene	10	5.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Anthracene	2000	4.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Carbazole		4.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Fluoranthene	300	6.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Pyrene	200	5.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Chrysene	20	4.4	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
bis(2-Ethylhexy)phthalate	30	9.7	5 J	10	10 U	10	10 U	10	11 U	11	12 U	12
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	10 U	10	11 U	11	12 U	12
Petroleum hydrocarbons												
Total Est. Conc. of TIC			52 J		8		10 J		6		6 J	
Dilution Factor									* = 2.00			
Method:TCL Semivolatiles												

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			B5		B5	
Sample			B5-MW05B-A01		B5-MW05B-A02	
Sample Type						
Batch#			9502G169		9503G616	
Prep#			95GB0103		95GB0166	
RFW#			012		001	
Dilution Factor			1.00		1.00	
Matrix			water		water	
Units	ug/l	ug/l	ug/l		ug/l	
Sampling Date			2/13/95		3/7/95	
Analysis Date			3/7/95		3/25/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	11 U	11	10 U	10
bis(2-Chloroethyl) ether	10	9.7	11 U	11	10 U	10
2-Chlorophenol	40	7.3	11 U	11	10 U	10
1,3-Dichlorobenzene	600	5.3	11 U	11	10 U	10
1,4-Dichlorobenzene	75	4.8	11 U	11	10 U	10
1,2-Dichlorobenzene	600	5.7	11 U	11	10 U	10
2-Methylphenol		6.7	11 U	11	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	11 U	11	10 U	10
4-Methylphenol		12.9	11 U	11	10 U	10
N-Nitroso-di-n-propylamine	20	8.0	11 U	11	10 U	10
Hexachloroethane	10	5.3	11 U	11	10 U	10
Nitrobenzene	10	7.4	11 U	11	10 U	10
Isophorone	100	3.9	11 U	11	10 U	10
2-Nitrophenol		7.0	11 U	11	10 U	10
2,4-Dimethylphenol	100	4.8	11 U	11	10 U	10
bis(2-Chloroethoxy) methane		6.1	11 U	11	10 U	10
2,4-Dichlorophenol	20	4.4	11 U	11	10 U	10
1,2,4-Trichlorobenzene	9	9.6	11 U	11	10 U	10
Naphthalene		8.4	11 U	11	10 U	10
4-Chloroaniline		2.9	11 U	11	10 U	10
Hexachlorobutadiene	1	4.6	11 U	11	10 U	10
4-Chloro-3-methylphenol	20	3.1	11 U	11	10 U	10
2-Methylnaphthalene		8.7	11 U	11	10 U	10
Hexachlorocyclopentadiene	50	3.6	11 U	11	10 U	10
2,4,6-Trichlorophenol		5.6	11 U	11	10 U	10
2,4,5-Trichlorophenol	700	4.7	26 U	26	25 U	25
2-Chloronaphthalene		8.2	11 U	11	10 U	10
2-Nitroaniline		6.1	26 U	26	25 U	25
Dimethylphthalate	7000	4.4	11 U	11	10 U	10
Acenaphthylene	10	6.0	11 U	11	10 U	10
2,6-Dinitrotoluene	10	5.2	11 U	11	10 U	10
3-Nitroaniline		5.2	26 U	26	25 U	25
Acenaphthene	400	6.7	11 U	11	10 U	10
2,4-Dinitrophenol	40	4.6	26 U	26	25 U	25

MAIN POST
GROUNDWATER SEMIVOLATILES

Geographical Location			B5		B5	
Sample			B5-MW05B-A01		B5-MW05B-A02	
Sample Type						
Batch#			9502G169		9503G616	
Prep#			95GB0103		95GB0166	
RFW#			012		001	
Dilution Factor			1.00		1.00	
Matrix			water		water	
Units	ug/l	ug/l	ug/l		ug/l	
Sampling Date			2/13/95		3/7/95	
Analysis Date			3/7/95		3/25/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	25 U	25
Dibenzofuran		6.5	11 U	11	10 U	10
2,4-Dinitrotoluene	10	5.8	11 U	11	10 U	10
Diethylphthalate	5000	5.4	11 U	11	10 U	10
4-Chlorophenyl-phenylether		7.0	11 U	11	10 U	10
Fluorene	300	6.3	11 U	11	10 U	10
4-Nitroaniline		6.4	26 U	26	25 U	25
4,6-Dinitro-2-methylphenol		5.3	26 U	26	25 U	25
N-Nitrosodiphenylamine (1)	20	4.2	11 U	11	10 U	10
4-Bromophenyl-phenylether		5.3	11 U	11	10 U	10
Hexachlorobenzene	10	5.5	11 U	11	10 U	10
Pentachlorophenol	1	4.0	26 U	26	25 U	25
Phenanthrene	10	5.0	11 U	11	10 U	10
Anthracene	2000	4.6	11 U	11	10 U	10
Carbazole		4.4	11 U	11	10 U	10
Di-n-butylphthalate	900	6.5	11 U	11	10 U	10
Fluoranthene	300	6.0	11 U	11	10 U	10
Pyrene	200	5.4	11 U	11	10 U	10
Butylbenzylphthalate	100	5.3	11 U	11	10 U	10
3,3'-Dichlorobenzidine	60	2.8	11 U	11	10 U	10
Benzo(a)anthracene	10	4.9	11 U	11	10 U	10
Chrysene	20	4.4	11 U	11	10 U	10
bis(2-Ethylhexy)phthalate	30	9.7	11 U	11	10 U	10
Di-n-octyl phthalate	100	5.6	11 U	11	10 U	10
Benzo(b)fluoranthene	2	5.7	11 U	11	10 U	10
Benzo(k)fluoranthene	2	6.2	11 U	11	10 U	10
Benzo(a)pyrene	20	4.9	11 U	11	10 U	10
Indeno(1,2,3-cd)pyrene	20	7.1	11 U	11	10 U	10
Dibenzo(a,h)anthracene	20	6.0	11 U	11	10 U	10
Benzo(g,h,i)perylene	20	6.8	11 U	11	10 U	10
Petroleum hydrocarbons						
Total Est. Conc. of TIC			5		4 J	
Dilution Factor						
Method:TCL Semivolatiles						

GROUNDWATER INORGANICS

Geographical Location		M2		M2		M2		M2		M2		M2		M2	
Sample		MP02-MW01-A01		MP02-MW01-A01 SOL		MP02-MW01-A02		MP02-MW01-A02 SOL		MP02-MW02-A01		MP02-MW02-A01 SOL		MP02-MW02-A02	
Sample Type		Total		Soluble		Total		Soluble		Total		Soluble		Total	
Batch#		9502G197		9502G197		9503G642		9503G642		9502G197		9502G197		9503G642	
Prep#		95GI426		95GI426		95GI479		95GI479		95GI426		95GI426		95GI479	
RFW#		001		002		001		002		003		004		003	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/15/95		2/15/95		3/8/95		3/8/95		2/15/95		2/15/95		3/8/95	
Analysis Date		2/23/95		2/28/95		3/10/95		3/10/95		2/23/95		2/28/95		3/10/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	5400	24.0	310	24.0	5310	24.0	379	24.0	633	24.0	40.2	24.0	3490	24.0
Arsenic	8	9.3	1.9	1.9 U	1.9	8.6	1.6	1.6 U	1.6	1.9 U	1.9	1.9 U	1.9	7.7	1.6
Barium	2000	141	1.7	104	1.7	129	1.7	88.5	1.7	484	1.7	436	1.7	397	1.7
Beryllium	20	1.1	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Calcium		14000	10.4	13800	10.4	14300	10.4	14100	10.4	98600	10.4	94800	10.4	80100	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	4.0	2.8
Cobalt		7.9	3.0	5.8	3.0	5.6	3.0	6.9	3.0	3.0 U	3.0	3.0 U	3.0	6.2	3.0
Chromium	100	68.4	2.9	2.9 U	2.9	63.6	2.9	2.9 U	2.9	7.5	2.9	2.9 U	2.9	37.5	2.9
Copper	1000	4.3	1.9	2.8	1.9	6.3	1.9	1.9	1.9	1.9 U	1.9	1.9 U	1.9	12.2	1.9
Iron	300	16600	6.4	39.8	6.4	15200	6.4	33.7	6.4	64700	6.4	58900	6.4	57800	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.29	0.20	0.20 U	0.20	0.21	0.20
Potassium		6710	685	3680	685	7680	685	4050	685	12000	685	11400	685	12000	685
Magnesium		8370	18.3	6290	18.3	8260	18.3	6250	18.3	12100	18.3	11400	18.3	10700	18.3
Manganese	50	79.5	1.8	67.0	1.8	77.6	1.8	66.4	1.8	314	1.8	301	1.8	259	1.8
Sodium	50000	12600	30.5	13500	30.5	13600	30.5	13900	30.5	11200	30.5	10900	30.5	9580	30.5
Nickel	100	19.1	10.8	16.6	10.8	20.5	10.8	14.0	10.8	10.8 U	10.8	20.0	10.8	10.8 U	10.8
Lead	10	4.9	1.1	1.1 U	1.1	3.9	1.2	1.2 U	1.2	4.4	1.1	1.1 U	1.1	18.7	1.2
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	22.6	20.7	20.7 U	20.7
Selenium	50	1.8	1.5	1.5 U	1.5	2.0	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8
Thallium	10	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1
Vanadium		21.6	2.3	2.3 U	2.3	20.9	2.3	2.4	2.3	6.2	2.3	2.3 U	2.3	21.1	2.3
Zinc	5000	455	3.8	402	3.8	489	3.8	463	3.8	15.7	3.8	5.1	3.8	79.0	3.8
Cyanide	200	10 U	10			10 U	10			10 U	10			10 U	10
Ammonia as Nitrogen															
Sulfate															
Dilution Factor															
Method:TAL Metals, Cyanide															

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M2		M2		M2		M2		M2		M3		M3	
Sample		MP02-MW02-A02 SOL		MP02-MW03-A01		MP02-MW03-A01 SOL		MP02-MW03-A02		MP02-MW03-A02 SOL		MP03-MW04-A01		MP03-MW04-A01 SOL	
Sample Type		Soluble		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9503G642		9502G197		9502G197		9503G642		9503G642		9502G219		9502G219	
Prep#		95GI479		95GI426		95GI426		95GI479		95GI479		95GI439		95GI439	
RFW#		004		005		006		005		006		001		002	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/8/95		2/15/95		2/15/95		3/8/95		3/8/95		2/16/95		2/16/95	
Analysis Date		3/10/95		2/23/95		2/28/95		3/10/95		3/10/95		3/1/95		3/3/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5
Aluminum	200	30.9	24.0	693	24.0	28.3	24.0	2540	24.0	24.0 U	24.0	611	16.8	29.3	16.8
Arsenic	8	1.8	1.6	1.9 U	1.9	1.9 U	1.9	3.4	1.6	1.6 U	1.6	1.9 U	1.9	1.9 U	1.9
Barium	2000	298	1.7	79.1	1.7	64.8	1.7	132	1.7	55.9	1.7	43.6	0.80	39.7	0.80
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30
Calcium		80000	10.4	63300	10.4	63800	10.4	65800	10.4	60600	10.4	32300	8.4	32300	8.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.5	3.0	3.0 U	3.0	2.3 U	2.3	2.3 U	2.3
Chromium	100	2.9 U	2.9	5.6	2.9	2.9 U	2.9	24.9	2.9	2.9 U	2.9	8.1	4.7	4.7 U	4.7
Copper	1000	4.2	1.9	2.1	1.9	1.9 U	1.9	9.6	1.9	2.8	1.9	4.0 U	4.0	4.0 U	4.0
Iron	300	42500	6.4	15500	6.4	12000	6.4	25400	6.4	11800	6.4	2610	2.5	1030	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.29	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		10000	685	10400	685	10200	685	11900	685	9540	685	7540	67.9	6730	67.9
Magnesium		9600	18.3	5180	18.3	5090	18.3	5960	18.3	4940	18.3	4210	34.3	3920	34.3
Manganese	50	248	1.8	455	1.8	453	1.8	512	1.8	455	1.8	32.7	0.90	34.1	0.90
Sodium	50000	9710	30.5	8940	30.5	8990	30.5	9400	30.5	8770	30.5	12600	19.1	12600	19.1
Nickel	100	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	5.9	4.2	4.2 U	4.2
Lead	10	1.2 U	1.2	8.0	1.1	1.1 U	1.1	21.6	1.2	3.9	1.2	1.6 U	1.6	1.6 U	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5
Thallium	10	5.5 U	5.5 *	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70
Vanadium		2.3 U	2.3	5.1	2.3	2.3 U	2.3	14.3	2.3	2.3 U	2.3	4.0	2.1	2.6	2.1
Zinc	5000	6.6	3.8	36.6	3.8	4.1	3.8	122	3.8	9.3	3.8	17.9	1.9	8.5	1.9
Cyanide	200			10 U	10			10 U	10			10 U	10		
Ammonia as Nitrogen															
Sulfate															
Dilution Factor		* = 5.0													
Method:TAL Metals, Cyanide															

GROUNDWATER INORGANICS

Geographical Location		M3		M3		M3		M3		M3		M3		M3	
Sample		MP03-MW04-A02		MP03-MW04-A02 SOL		MP03-MW05-A01		MP03-MW05-A01 SOL		MP03-MW05-A02		MP03-MW05-A02 SOL		MP03-MW06-A01	
Sample Type		Total		Soluble		Total		Soluble		Total		Soluble		Total	
Batch#		9503G642		9503G642		9502G219		9502G219		9503G660		9503G660		9502G219	
Prep#		95GI479		95GI479		95GI439		95GI439		95GI488		95GI488		95GI439	
RFW#		009		010		003		004		003		004		005	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/8/95		3/8/95		2/16/95		2/16/95		3/9/95		3/9/95		2/16/95	
Analysis Date		3/10/95		3/10/95		3/1/95		3/3/95		3/13/95		3/13/95		3/1/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5
Aluminum	200	799	24.0	24.0 U	24.0	768	16.8	16.8 U	16.8	4220	24.0	24.0 U	24.0	132	16.8
Arsenic	8	1.9	1.6	2.0	1.6	1.9 U	1.9	1.9 U	1.9	4.3	1.3	1.3 U	1.3	1.9 U	1.9
Barium	2000	51.2	1.7	42.8	1.7	520.0	0.80	466	0.80	648	1.7	536	1.7	119	0.80
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30
Calcium		35200	10.4	32400	10.4	93200	8.4	90000	8.4	98000	10.4	97900	10.4	119000	8.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	4.2	2.8	2.8 U	2.8	2.9 U	2.9
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0	2.3	3.6	2.3	3.0 U	3.0	3.0 U	3.0	2.3 U	2.3
Chromium	100	10	2.9	2.9 U	2.9	7.3	4.7	4.7 U	4.7	32.9	2.9	2.9 U	2.9	7.3	4.7
Copper	1000	2.0	1.9	3.0	1.9	8.5	4.0	4.0 U	4.0	36.9	1.9	1.9 U	1.9	4.0 U	4.0
Iron	300	3320	6.4	48.7	6.4	79700	2.5	71300	2.5	100000	6.4	78700	6.4	17800	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.63	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		8110	685	6450	685	12900	67.9	12300	67.9	13700	685	11700	685	10100	67.9
Magnesium		4970	18.3	4170	18.3	17800	34.3	17200	34.3	18100	18.3	17100	18.3	28100	34.3
Manganese	50	35.9	1.8	32.1	1.8	1150	0.90	1100	0.90	1080	1.8	1030	1.8	659	0.90
Sodium	50000	13700	30.5	12500	30.5	16300	19.1	16200	19.1	15300	30.5	15800	30.5	35000	19.1
Nickel	100	10.8 U	10.8	10.8 U	10.8	4.2 U	4.2	4.2 U	4.2	10.8 U	10.8	10.8 U	10.8	4.2 U	4.2
Lead	10	1.2 U	1.2	1.2 U	1.2	26.6	3.2	1.6 U	1.6	130	16.0 *	1.6 U	1.6	1.6 U	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5
Thallium	10	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.7 U	1.7	1.7 U	1.7	0.70 U	0.70
Vanadium		2.6	2.3	2.3 U	2.3	4.9	2.1	2.1 U	2.1	19.1	2.3	2.3 U	2.3	2.1 U	2.1
Zinc	5000	17.8	3.8	10.2	3.8	86.1	1.9	12.5	1.9	382	3.8	11.4	3.8	64.2	1.9
Cyanide	200	10 U	10			10 U	10			10 U	10			10 U	10
Ammonia as Nitrogen															
Sulfate															
Dilution Factor										* = 10					
Method:TAL Metals, Cyanide															

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M3		M3		M3		M4		M4		M4		M4	
Sample		MP03-MW06-A01 SOL		MP03-MW06-A02		MP03-MW06-A02 SOL		MP04-MW07-A01		MP04-MW07-A01 SOL		MP04-MW07-A02		MP04-MW07-A02 SOL	
Sample Type		Soluble		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9502G219		9503G660		9503G660		9502G219		9502G219		9503G660		9503G660	
Prep#		95GI439		95GI488		95GI488		95GI439		95GI439		95GI488		95GI488	
RFW#		006		001		002		007		008		005		006	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/16/95		3/9/95		3/9/95		2/16/95		2/16/95		3/9/95		3/9/95	
Analysis Date		3/3/95		3/13/95		3/13/95		3/1/95		3/3/95		3/13/95		3/13/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0
Aluminum	200	16.8 U	16.8	816	24.0	24.0 U	24.0	9440	16.8	823	16.8	3150	24.0	851	24.0
Arsenic	8	1.9 U	1.9	1.3 U	1.3	1.3 U	1.3	8.0	1.9	1.9 U	1.9	2.2	1.3	1.3 U	1.3
Barium	2000	112	0.80	129	1.7	113	1.7	91.6	0.80	60.5	0.80	68.5	1.7	62.3	1.7
Beryllium	20	0.30 U	0.30	0.90 U	0.90	0.90 U	0.90	0.69	0.30	0.40	0.30	0.90 U	0.90	0.90 U	0.90
Calcium		117000	8.4	126000	10.4	126000	10.4	18600	8.4	18100	8.4	18100	10.4	18600	10.4
Cadmium	4	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8
Cobalt		2.3 U	2.3	3.0 U	3.0	3.0 U	3.0	6.0	2.3	3.5	2.3	3.0 U	3.0	3.0 U	3.0
Chromium	100	4.7 U	4.7	8.2	2.9	2.9 U	2.9	94.9	4.7	4.7 U	4.7	22.1	2.9	2.9 U	2.9
Copper	1000	4.0 U	4.0	1.9 U	1.9	1.9 U	1.9	9.5	4.0	4.0 U	4.0	1.9 U	1.9	1.9 U	1.9
Iron	300	15900	2.5	23200	6.4	17200	6.4	29000	2.5	57.2	2.5	6870	6.4	169	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		9750	67.9	10500	685	10200	685	6810	67.9	1970	67.9	3150	685	2420	685
Magnesium		27400	34.3	29500	18.3	29100	18.3	9020	34.3	7090	34.3	7550	18.3	7290	18.3
Manganese	50	643	0.90	713	1.8	703	1.8	65.6	0.90	51.5	0.90	57.0	1.8	55.3	1.8
Sodium	50000	34400	19.1	33600	30.5	33400	30.5	54300	19.1	53000	19.1	46100	30.5	47400	30.5
Nickel	100	4.2 U	4.2	10.8 U	10.8	10.8 U	10.8	13.7	4.2	10.0	4.2	10.8 U	10.8	10.8 U	10.8
Lead	10	1.6 U	1.6	4.1	1.6	1.6 U	1.6	15.8	1.6	1.6 U	1.6	1.8	1.6	1.6 U	1.6
Antimony	20	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	1.7 U	1.7	1.7 U	1.7	0.70 U	0.70	0.70 U	0.70	1.7 U	1.7	1.7 U	1.7
Vanadium		2.1 U	2.1	6.2	2.3	2.3 U	2.3	54.1	2.1	2.8	2.1	13.8	2.3	2.3 U	2.3
Zinc	5000	53.3	1.9	59.9	3.8	34.4	3.8	60.1	1.9	34.2	1.9	38.4	3.8	34.6	3.8
Cyanide	200			10 U	10			10 U	10			10 U	10		
Ammonia as Nitrogen															
Sulfate															
Dilution Factor															
Method:TAL Metals, Cyanide															

POST

GROUNDWATER INORGANICS

Geographical Location		M4		M4		M4		M4		M4		M4		M4	
Sample		MP04-MW07-C01		MP04-MW07-C01 SOL		MP04-MW07-C02		MP04-MW07-C02 SOL		MP04-MW07-E01		MP04-MW07-E01 SOL		MP04-MW08-A01	
Sample Type		Duplicate - Total		Duplicate - Soluble		Duplicate - Total		Duplicate - Soluble		Field Rinsate - Total		Field Rinsate - Soluble		Total	
Batch#		9502G219		9502G219		9503G660		9503G660		9502G219		9502G219		9502G219	
Prep#		95GI439		95GI439		95GI488		95GI488		95GI439		95GI439		95GI439	
RFW#		009		010		007		008		012		013		014	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/16/95		2/16/95		3/9/95		3/9/95		2/16/95		2/16/95		2/16/95	
Analysis Date		3/1/95		3/3/95		3/13/95		3/13/95		3/1/95		3/1/95		3/1/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	9950	16.8	807	16.8	2890	24.0	856	24.0	18.1	16.8	16.8 U	16.8	1570	16.8
Arsenic	8	7.2	1.9	1.9 U	1.9	2.2	1.3	1.3 U	1.3	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	89.7	0.80	60.1	0.80	70.3	1.7	61.6	1.7	0.81	0.80	0.80 U	0.80	38.8	0.80
Beryllium	20	0.69	0.30	0.51	0.30	0.99	0.90	0.90 U	0.90	0.30 U	0.30	0.31	0.30	0.30 U	0.30
Calcium		18200	8.4	17900	8.4	19000	10.4	18900	10.4	57.4	8.4	82.6	8.4	32700	8.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Cobalt		5.8	2.3	5.3	2.3	3.4	3.0	3.0 U	3.0	2.3 U	2.3	2.3 U	2.3	2.8	2.3
Chromium	100	103	4.7	4.7 U	4.7	18.2	2.9	2.9 U	2.9	4.7 U	4.7	4.7 U	4.7	17.9	4.7
Copper	1000	6.3	4.0	4.0 U	4.0	1.9 U	1.9	1.9 U	1.9	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0
Iron	300	30000	2.5	62.3	2.5	6420	6.4	131	6.4	62.7	2.5	4.3	2.5	17700	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		6690	67.9	1990	67.9	3230	685	2240	685	67.9 U	67.9	68.8	67.9	7500	67.9
Magnesium		9110	34.3	6990	34.3	7690	18.3	7430	18.3	34.3 U	34.3	34.3 U	34.3	5970	34.3
Manganese	50	64.6	0.90	51.0	0.90	58.2	1.8	55.2	1.8	0.90 U	0.90	0.90 U	0.90	110	0.90
Sodium	50000	52700	19.1	52100	19.1	47600	30.5	48600	30.5	116	19.1	81.4	19.1	9450	19.1
Nickel	100	12.0	4.2	9.2	4.2	10.8 U	10.8	10.8 U	10.8	4.2 U	4.2	4.2 U	4.2	4.2 U	4.2
Lead	10	15.8	1.6	1.6 U	1.6	2.2	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	7.4	1.6
Antimony	20	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	1.7 U	1.7	1.7 U	1.7	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		56.1	2.1	2.1 U	2.1	12.2	2.3	2.3 U	2.3	2.1 U	2.1	2.1 U	2.1	6.0	2.1
Zinc	5000	59.6	1.9	34.0	1.9	39.2	3.8	33.2	3.8	3.8	1.9	2.4	1.9	30.0	1.9
Cyanide	200	10 U	10			10 U	10			10 U	10			10 U	10
Ammonia as Nitrogen															
Sulfate															
Dilution Factor															
Method:TAL Metals, Cyanide															

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M4		M4		M4		M4		M4		M4		M4	
Sample		MP04-MW08-A01 SOL		MP04-MW08-A02		MP04-MW08-A02 SOL		MP04-MW09-A01		MP04-MW09-A01 SOL		MP04-MW09-A02		MP04-MW09-A02 SOL	
Sample Type		Soluble		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9502G219		9503G642		9503G642		9502G219		9502G219		9503G660		9503G660	
Prep#		95GI439		95GI479		95GI479		95GCN045		95GI439		95GI488		95GI488	
RFW#		015		007		008		016		017		009		010	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/16/95		3/8/95		3/8/95		2/16/95		2/16/95		3/9/95		3/9/95	
Analysis Date		3/3/95		3/10/95		3/10/95		3/1/95		3/3/95		3/13/95		3/13/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0
Aluminum	200	16.8 U	16.8	1640	24.0	24.0 U	24.0	182	16.8	16.8 U	16.8	76.2	24.0	24.0 U	24.0
Arsenic	8	1.9 U	1.9	2.1	1.6	1.6 U	1.6	1.9 U	1.9	1.9 U	1.9	1.3 U	1.3	1.3 U	1.3
Barium	2000	27.7	0.80	41.0	1.7	28.0	1.7	60.0	0.80	39.3	0.80	55.8	1.7	38.8	1.7
Beryllium	20	0.30 U	0.30	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90	0.90 U	0.90
Calcium		31900	8.4	33500	10.4	33100	10.4	45300	8.4	44000	8.4	47700	10.4	46300	10.4
Cadmium	4	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8
Cobalt		2.3 U	2.3	3.8	3.0	3.0 U	3.0	2.3 U	2.3	2.3 U	2.3	3.0 U	3.0	3.0 U	3.0
Chromium	100	4.7 U	4.7	16.6	2.9	2.9 U	2.9	6.0	4.7	4.7 U	4.7	2.9 U	2.9	2.9 U	2.9
Copper	1000	4.0 U	4.0	3.0	1.9	2.6	1.9	4.0 U	4.0	4.0 U	4.0	1.9 U	1.9	1.9 U	1.9
Iron	300	10900	2.5	18100	6.4	10600	6.4	21500	2.5	12500	2.5	21900	6.4	13500	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		6150	67.9	7670	685	6570	685	8640	67.9	8350	67.9	9210	685	8010	685
Magnesium		5290	34.3	6320	18.3	5760	18.3	6070	34.3	5870	34.3	6420	18.3	6170	18.3
Manganese	50	101	0.90	111	1.8	104	1.8	81.3	0.90	77.2	0.90	88.7	1.8	85.5	1.8
Sodium	50000	9230	19.1	9550	30.5	9580	30.5	9760	19.1	9580	19.1	10800	30.5	10500	30.5
Nickel	100	4.2 U	4.2	10.8 U	10.8	10.8 U	10.8	4.2 U	4.2	4.2 U	4.2	10.8 U	10.8	10.8 U	10.8
Lead	10	1.6 U	1.6	6.7	1.2	1.2 U	1.2	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6
Antimony	20	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.7 U	1.7	1.7 U	1.7
Vanadium		2.1 U	2.1	7.9	2.3	2.3 U	2.3	2.1 U	2.1	2.1 U	2.1	2.3 U	2.3	2.3 U	2.3
Zinc	5000	3.0	1.9	33.5	3.8	5.7	3.8	3.9	1.9	1.9 U	1.9	3.8 U	3.8	4.5	3.8
Cyanide	200			10 U	10			10 U	10			10 U	10		
Ammonia as Nitrogen															
Sulfate															
Dilution Factor															
Method:TAL Metals, Cyanide															

POST
GROUNDWATER INORGANICS

Geographical Location		M5		M5		M5		M5		M5		M5		M5	
Sample		MP05-MW10-A01		MP05-MW10-A01 SOL		MP05-MW10-A02		MP05-MW10-A02 SOL		MP05-MW11-A01		MP05-MW11-A01 SOL		MP05-MW11-A02	
Sample Type		Total		Soluble		Total		Soluble		Total		Soluble		Total	
Batch#		9502G238		9502G238		9503G660		9503G660		9502G238		9502G238		9503G660	
Prep#		95GCN045		95GI397		95GI488		95GI488		95GCN045		95GI397		95GI488	
RFW#		010		011		011		012		012		013		013	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/17/95		2/17/95		3/9/95		3/9/95		2/17/95		2/17/95		3/9/95	
Analysis Date		3/1/95		2/22/95		3/13/95		3/13/95		3/1/95		2/22/95		3/13/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	212	24.0	30.7	24.0	99.6	24.0	24.0 U	24.0	1160	24.0	57.4	24.0	945	24.0
Arsenic	8	1.9 U	1.9	1.9 U	1.9	1.3 U	1.3	1.3 U	1.3	1.9 U	1.9	1.9 U	1.9	1.3 U	1.3
Barium	2000	101	1.7	36.7	1.7	131	1.7	44.9	1.7	16.8	1.7	13.2	1.7	15.3	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Calcium		16000	10.4	15400	10.4	17000	10.4	15900	10.4	11100	10.4	11100	10.4	11100	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Chromium	100	5.5	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	15.4	2.9	2.9 U	2.9	10.4	2.9
Copper	1000	10.9	1.9	2.5	1.9	3.2	1.9	1.9 U	1.9	2.9	1.9	2.0	1.9	1.9 U	1.9
Iron	300	8310	6.4	4200	6.4	10100	6.4	4490	6.4	5150	6.4	19.3	6.4	4220	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		10100	685	10000	685	7600	685	7430	685	3590	685	2230	685	3020	685
Magnesium		14100	18.3	14100	18.3	13000	18.3	12400	18.3	4260	18.3	3760	18.3	4180	18.3
Manganese	50	127	1.8	117	1.8	166	1.8	148	1.8	14.8	1.8	12.0	1.8	14.2	1.8
Sodium	50000	85400	30.5	85100	30.5	80200	30.5	77000	30.5	18400	30.5	18500	30.5	17500	30.5
Nickel	100	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	12.4	10.8	10.8 U	10.8
Lead	10	5.4	1.6	1.6 U	1.6	5.9	1.6	1.6 U	1.6	2.2	1.6	1.6 U	1.6	1.6 U	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.8	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8
Thallium	10	0.70 U	0.70	0.70 U	0.70	1.7 U	1.7	1.7 U	1.7	0.70 U	0.70	0.70 U	0.70	1.7 U	1.7
Vanadium		2.3 U	2.3	2.3 U	2.3	2.6	2.3	2.3 U	2.3	5.5	2.3	2.3 U	2.3	6.2	2.3
Zinc	5000	10.5	3.8	5.9	3.8	5.0	3.8	4.3	3.8	168	3.8	160	3.8	178.0	3.8
Cyanide	200	10 U	10			10 U	10			10 U	10			10 U	10
Ammonia as Nitrogen															
Sulfate		18.8	5.0			10.8	5.0			49.2	10.0*			38.3	10.0
Dilution Factor										*=2					
Method:TAL Metals, Cyanide															

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M5		M5		M5		M8		M8		M8	
Sample		MP05-MW11-A02 SOL		MP05-MW11-E02		MP05-MW11-E02 SOL		MP08-MW12-A01		MP08-MW12-A01 SOL		MP08-MW12-A02	
Sample Type		Soluble		Field Rinsate - Total		Field Rinsate - Soluble		Total		Soluble		Total	
Batch#		9503G660		9503G660		9503G660		9502G238		9502G238		9503G767	
Prep#		95GI488		95GI488		95GI488		95GCN045		95GI397		95GI509	
RFW#		014		016		017		014		015		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/9/95		3/9/95		3/9/95		2/17/95		2/17/95		3/15/95	
Analysis Date		3/13/95		3/13/95		3/13/95		3/1/95		2/22/95		3/21/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	45.8	24.0	24.0 U	24.0	24.0 U	24.0	186	24.0	25.8	24.0	1290	24.0
Arsenic	8	1.3 U	1.3	1.3 U	1.3	1.3 U	1.3	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	11.7	1.7	1.7 U	1.7	1.7 U	1.7	6.8	1.7	4.6	1.7	10.8	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Calcium		10900	10.4	289	10.4	55.4	10.4	9210	10.4	8940	10.4	8580	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Chromium	100	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	14.5	2.9
Copper	1000	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	3.2	1.9	2.4	1.9	1.9 U	1.9
Iron	300	17.3	6.4	6.4 U	6.4	6.4 U	6.4	529	6.4	23.6	6.4	5430	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		2320	685	737	685	685 U	685	2540	685	2460	685	3090	685
Magnesium		3670	18.3	18.3 U	18.3	18.3 U	18.3	2400	18.3	2290	18.3	2570	18.3
Manganese	50	9.5	1.8	1.8 U	1.8	1.8 U	1.8	9.9	1.8	8.0	1.8	10.6	1.8
Sodium	50000	17200	30.5	165	30.5	147	30.5	22000	30.5	21200	30.5	20500	30.5
Nickel	100	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8
Lead	10	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.0	1.0
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	1.7 U	1.7	1.7 U	1.7	1.7 U	1.7	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1
Vanadium		2.3 U	2.3	2.3 U	2.3	2.3 U	2.3	2.3 U	2.3	2.3 U	2.3	11.4	2.3
Zinc	5000	165	3.8	3.8 U	3.8	3.8 U	3.8	4.4	3.8	3.8 U	3.8	7.7	3.8
Cyanide	200			10 U	10			10 U	10			10 U	10
Ammonia as Nitrogen								0.20 U	0.20			0.20 U	0.20
Sulfate				5.0 U	5.0			40.4	10.0			35.9	5.0
Dilution Factor								*=2					
Method:TAL Metals, Cyanide													

POST
GROUNDWATER INORGANICS

Geographical Location		M8		M8		M8		M8		M8		M8		M8	
Sample		MP08-MW12-A02 SOL		MP08-MW12-C02		MP08-MW12-C02 SOL		MP08-MW12-E02		MP08-MW12-E02 SOL		MP08-MW13-A01		MP08-MW13-A01 SOL	
Sample Type		Soluble		Duplicate - Total		Duplicate - Soluble		Field Rinsate - Total		Field Rinsate - Soluble		Total		Soluble	
Batch#		9503G767		9503G767		9503G767		9503G767		9503G767		9502G403		9502G403	
Prep#		95GI510		95GI511		95GI512		95GI513		95GI514		95GCN053		95GI460	
RFW#		002		003		004		006		007		001		002	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/15/95		3/15/95		3/15/95		3/15/95		3/15/95		2/22/95		2/22/95	
Analysis Date		3/21/95		3/21/95		3/21/95		3/21/95		3/21/95		3/7/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	24.0 U	24.0	1090	24.0	36.1	24.0	27.0	24.0	24.0 U	24.0	363	24.0	24.0 U	24.0
Arsenic	8	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	4.0	1.7	10.8	1.7	3.9	1.7	1.7 U	1.7	1.7 U	1.7	204	1.7	174	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Calcium		7980	10.4	8750	10.4	8550	10.4	109	10.4	95.7	10.4	144000	10.4	139000	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Chromium	100	2.9 U	2.9	11.1	2.9	3.3	2.9	2.9 U	2.9	2.9 U	2.9	4.1	2.9	2.9 U	2.9
Copper	1000	2.5	1.9	1.9 U	1.9	2.3	1.9	2.1	1.9	1.9 U	1.9	7.9	1.9	1.9 U	1.9
Iron	300	26.6	6.4	4780	6.4	21.3	6.4	13.2	6.4	7.4	6.4	31900	6.4	25600	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.62	0.20	0.20 U	0.20
Potassium		1980	685	2920	685	2660	685	685 U	685	685 U	685	22100	685	21300	685
Magnesium		1960	18.3	2450	18.3	2160	18.3	18.3 U	18.3	18.3 U	18.3	69600	18.3	67900	18.3
Manganese	50	7.9	1.8	10.6	1.8	7.0	1.8	1.8 U	1.8	1.8 U	1.8	573	1.8	550	1.8
Sodium	50000	19500	30.5	21100	30.5	20900	30.5	87.3	30.5	120	30.5	295000	30.5	288000	30.5
Nickel	100	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8
Lead	10	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	2.8	1.6	1.6 U	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70
Vanadium		3.2	2.3	8.6	2.3	3.8	2.3	3.0	2.3	2.3 U	2.3	5.6	2.3	3.4	2.3
Zinc	5000	8.6	3.8	8.7	3.8	4.2	3.8	3.8 U	3.8	4.1	3.8	11.9	3.8	3.8 U	3.8
Cyanide	200			10 U	10			10 U	10			10 U	10		
Ammonia as Nitrogen				0.20 U	0.20			0.20 U	0.20			2.6	0.20		
Sulfate				41.4	10.0 *			5.0 U	5.0			14.0	5.0		
Dilution Factor				*=2											
Method:TAL Metals, Cyanide															

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M8		M8		M8		M8		M8		M8	
Sample		MP08-MW13-A02		MP08-MW13-A02 SOL		MP08-MW14-A01		MP08-MW14-A01 SOL		MP08-MW14-A02		MP08-MW14-A02 SOL	
Sample Type		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9503G767		9503G767		9502G219		9502G219		9503G767		9503G767	
Prep#		95GI515		95GI516		95GCN045		95GI439		95GI517		95GI518	
RFW#		008		009		018		019		010		011	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/15/95		3/15/95		2/16/95		2/16/95		3/15/95		3/15/95	
Analysis Date		3/21/95		3/21/95		3/1/95		3/3/95		3/21/95		3/21/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0
Aluminum	200	661	24.0	44.4	24.0	2220	16.8	30.4	16.8	2480	24.0	46.9	24.0
Arsenic	8	1.9 U	1.9	1.9 U	1.9	4.3	1.9	1.9 U	1.9	3.2	1.9	1.9 U	1.9
Barium	2000	260	1.7	180	1.7	372	0.80	304	0.80	448	1.7	356	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.70	0.30	0.39	0.30	0.90 U	0.90	0.90 U	0.90
Calcium		171000	10.4	165000	10.4	162000	8.4	165000	8.4	157000	10.4	164000	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	3.0	2.9	2.9 U	2.9	2.9	2.8	2.8 U	2.8
Cobalt		3.0 U	3.0	3.0 U	3.0	4.8	2.3	2.5	2.3	3.8	3.0	3.0 U	3.0
Chromium	100	4.3	2.9	2.9 U	2.9	23.1	4.7	4.7 U	4.7	24.9	2.9	3.1	2.9
Copper	1000	5.1	1.9	1.9 U	1.9	4.0 U	4.0	4.0 U	4.0	5.2	1.9	4.4	1.9
Iron	300	48100	6.4	27900	6.4	57700	2.5	41400	2.5	57000	6.4	35100	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		17800	685	17200	685	65100	67.9	64300	67.9	65200	685	67500	685
Magnesium		58300	18.3	57500	18.3	79000	34.3	78700	34.3	75100	18.3	78200	18.3
Manganese	50	737	1.8	703	1.8	277	0.90	263	0.90	275	1.8	271	1.8
Sodium	50000	171000	30.5	172000	30.5	421000	19.1	424000	19.1	346000	762 *	365000	762 *
Nickel	100	10.8 U	10.8	10.8 U	10.8	4.9	4.2	4.2 U	4.2	10.8 U	10.8	10.8 U	10.8
Lead	10	3.7	1.0	1.0 U	1.0	9.3	1.6	1.6 U	1.6	10.2	1.0	1.0 U	1.0
Antimony	20	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1
Vanadium		3.8	2.3	2.3 U	2.3	12.9	2.1	2.1 U	2.1	15.4	2.3	4.6	2.3
Zinc	5000	27.3	3.8	3.9	3.8	49.6	1.9	3.8	1.9	57.2	3.8	4.8	3.8
Cyanide	200	10 U	10			10 U	10			10 U	10		
Ammonia as Nitrogen		2.9	0.20			75.2	20.0 *			72.6	4.0 **		
Sulfate		34.3	10.0 *			6.8	5.0			22.8	5.0		
Dilution Factor		*=2				*=100				*=25,**=20		*=25	
Method:TAL Metals, Cyanide													

I POST
GROUNDWATER INORGANICS

Geographical Location		M8		M8		M8		M8		M8		M8	
Sample		MP08-MW15-A01		MP08-MW15-A01 SOL		MP08-MW15-C01		MP08-MW15-C01 SOL		MP08-MW15-E01		MP08-MW15-E01 SOL	
Sample Type		Total		Soluble		Duplicate - Total		Duplicate - Soluble		Field Rinsate - Total		Field Rinsate - Soluble	
Batch#		9502G403		9502G403		9502G403		9502G403		9502G403		9502G403	
Prep#		95GCN053		95GI460		95GCN053		95GI460		95GCN053		95GI460	
RFW#		003		004		005		006		008		009	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/22/95		2/22/95		2/22/95		2/22/95		2/22/95		2/22/95	
Analysis Date		3/7/95		3/8/95		3/7/95		3/8/95		3/7/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	540	24.0	24.0 U	24.0	515	24.0	24.0 U	24.0	24.0 U	24.0	24.0 U	24.0
Arsenic	8	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	260	1.7	173	1.7	261	1.7	174	1.7	1.7 U	1.7	1.7 U	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Calcium		310000	10.4	305000	10.4	315000	10.4	315000	10.4	107	10.4	57.1	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Chromium	100	3.9	2.9	2.9 U	2.9	4.3	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Copper	1000	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Iron	300	27200	6.4	18100	6.4	27300	6.4	18200	6.4	6.4 U	6.4	6.4 U	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		34700	685	33500	685	34900	685	34000	685	685 U	685	685 U	685
Magnesium		71500	18.3	71000	18.3	73000	18.3	73000	18.3	18.3 U	18.3	18.3 U	18.3
Manganese	50	375	1.8	363	1.8	380	1.8	375	1.8	1.8 U	1.8	1.8 U	1.8
Sodium	50000	226000	30.5	225000	30.5	230000	30.5	231000	30.5	140	30.5	156	30.5
Nickel	100	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	11.4	10.8	10.8 U	10.8
Lead	10	2.9	1.6	1.6 U	1.6	2.6	1.6	11.1	1.6	1.6 U	1.6	1.6 U	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		7.4	2.3	3.4	2.3	6.0	2.3	3.1	2.3	2.3 U	2.3	2.3 U	2.3
Zinc	5000	13.5	3.8	3.8 U	3.8	13.9	3.8	3.8 U	3.8	3.8 U	3.8	3.8 U	3.8
Cyanide	200	10 U	10			10 U	10			10 U	10		
Ammonia as Nitrogen		31.8	0.20			31.9	0.20			0.20 U	0.20		
Sulfate		71.5	5.0			72.7	5.0			5.0 U	5.0		
Dilution Factor													
Method:TAL Metals, Cyanide													

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M8		M8		M12		M12		M12		M12	
Sample		MP08-MW15-A02		MP08-MW15-A02 SOL		MP12-MW16-A01		MP12-MW16-A01 SOL		MP12-MW16-A02		MP12-MW16-A02 SOL	
Sample Type		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9503G767		9503G767		9502G299		9502G299		9503G681		9503G681	
Prep#		95GI519		95GI519		95GI450		95GI450		95GI494		95GI494	
RFW#		012		013		001		002		001		002	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/15/95		3/15/95		2/20/95		2/20/95		3/10/95		3/10/95	
Analysis Date		3/21/95		3/21/95		3/6/95		3/6/95		3/15/95		3/15/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	596	24.0	28.9	24.0	1460	16.8	73.3	16.8	462	16.8	32.9	16.8
Arsenic	8	1.9 U	1.9	1.9 U	1.9	4.8	1.3	2.7	1.3	3.3	1.7	1.9	1.7
Barium	2000	277	1.7	190	1.7	50.3	0.80	40.7	0.80	43.9	0.80	38.6	0.80
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30
Calcium		357000	10.4	328000	10.4	7840	8.4	7720	8.4	7880	8.4	8040	8.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	3.5	2.9	3.3	2.9
Cobalt		3.0 U	3.0	3.0 U	3.0	2.9	2.3	2.9	2.3	2.3 U	2.3	2.3 U	2.3
Chromium	100	4.2	2.9	2.9 U	2.9	21.7	4.7	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7
Copper	1000	1.9 U	1.9	1.9 U	1.9	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0
Iron	300	24300	6.4	15100	6.4	21000	2.5	15700	2.5	18300	2.5	15500	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.31	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		36000	685	32700	685	3360	67.9	2660	67.9	2720	67.9	2600	67.9
Magnesium		75000	18.3	69100	18.3	6320	34.3	5900	34.3	5920	34.3	5780	34.3
Manganese	50	382	1.8	345	1.8	47.0	0.90	44.3	0.90	45.1	0.90	43.7	0.90
Sodium	50000	228000	30.5	210000	30.5	17300	19.1	17500	19.1	17000	19.1	17000	19.1
Nickel	100	10.8 U	10.8	10.8 U	10.8	5.4	4.2	6.0	4.2	4.2 U	4.2	4.2 U	4.2
Lead	10	1.3	1.0	1.0 U	1.0	1.6 U	1.6	1.6 U	1.6	1.4	1.2	1.2 U	1.2
Antimony	20	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8
Thallium	10	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		8.0	2.3	3.3	2.3	8.8	2.1	2.1 U	2.1	3.9	2.1	2.1 U	2.1
Zinc	5000	28.3	3.8	3.8 U	3.8	22.4	1.9	18.2	1.9	19.1	1.9	19.2	1.9
Cyanide	200	10 U	10			10 U	10			10 U	10		
Ammonia as Nitrogen		28.6	2.0 *										
Sulfate		90.0	25.0 **										
Dilution Factor		*=10,**=5											
Method:TAL Metals, Cyanide													

[illegible]POST
GROUNDWATER INORGANICS

Geographical Location		M12		M12		M12		M12		M12		M12	
Sample		MP12-MW17-A01		MP12-MW17-A01 SOL		MP12-MW17-A02		MP12-MW17-A02 SOL		MP12-MW18-A01		MP12-MW18-A01 SOL	
Sample Type		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9502G299		9502G299		9503G681		9503G681		9502G299		9502G299	
Prep#		95GI450		95GI450		95GI494		95GI494		95GI450		95GI450	
RFW#		003		004		003		004		005		006	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/20/95		2/20/95		3/10/95		3/10/95		2/20/95		2/20/95	
Analysis Date		3/6/95		3/6/95		3/15/95		3/15/95		3/6/95		3/6/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	161	16.8	16.8 U	16.8	186	16.8	16.8 U	16.8	903	16.8	206	16.8
Arsenic	8	1.3 U	1.3	1.3 U	1.3	1.7 U	1.7	1.7 U	1.7	2.0	1.3	1.3 U	1.3
Barium	2000	111	0.80	108	0.80	257	0.80	258	0.80	136	0.80	113	0.80
Beryllium	20	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30
Calcium		48500	8.4	48600	8.4	51900	8.4	51300	8.4	6360	8.4	6250	8.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Cobalt		2.3 U	2.3	2.3 U	2.3	2.3 U	2.3	2.3 U	2.3	4.2	2.3	2.3 U	2.3
Chromium	100	6.5	4.7	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7	13.0	4.7	4.7 U	4.7
Copper	1000	21.6	4.0	4.0 U	4.0	6.6	4.0	4.0 U	4.0	5.9	4.0	4.0 U	4.0
Iron	300	21700	2.5	21200	2.5	40800	2.5	40200	2.5	2370	2.5	140	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		4580	67.9	4440	67.9	4180	67.9	4100	67.9	5400	67.9	4950	67.9
Magnesium		3770	34.3	3760	34.3	5040	34.3	5040	34.3	3990	34.3	3770	34.3
Manganese	50	173	0.90	174	0.90	339	0.90	341	0.90	17.7	0.90	16.2	0.90
Sodium	50000	8670	19.1	8690	19.1	11900	19.1	12100	19.1	21200	19.1	21200	19.1
Nickel	100	4.2 U	4.2	4.2 U	4.2	4.2 U	4.2	4.2 U	4.2	9.2	4.2	8.4	4.2
Lead	10	1.6 U	1.6	1.6 U	1.6	1.8	1.2	1.2 U	1.2	1.6 U	1.6	1.6 U	1.6
Antimony	20	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	4.5	2.1	2.1 U	2.1
Zinc	5000	6.8	1.9	1.9 U	1.9	12.4	1.9	3.5	1.9	46.6	1.9	44.7	1.9
Cyanide	200	10 U	10			10.0 U	10.0			10 U	10		
Ammonia as Nitrogen													
Sulfate													
Dilution Factor													
Method:TAL Metals, Cyanide													

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M12		M12		M14		M14		M14		M14	
Sample		MP12-MW18-A02		MP12-MW18-A02 SOL		MP14-MW19-A01		MP14-MW19-A01 SOL		MP14-MW19-A02		MP14-MW19-A02 SOL	
Sample Type		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9503G681		9503G681		9502G299		9502G299		9503G681		9503G681	
Prep#		95GI494		95GI494		95GI450		95GI450		95GI494		95GI494	
RFW#		005		006		007		008		007		008	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/10/95		3/10/95		2/20/95		2/20/95		3/10/95		3/10/95	
Analysis Date		3/15/95		3/15/95		3/6/95		3/6/95		3/15/95		3/15/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	563	16.8	195	16.8	266	16.8	27.2	16.8	520	16.8	16.8 U	16.8
Arsenic	8	1.7 U	1.7	1.7 U	1.7	1.3 U	1.3	1.3 U	1.3	1.7 U	1.7	1.7 U	1.7
Barium	2000	131	0.80	114	0.80	223	0.80	215	0.80	206	0.80	182	0.80
Beryllium	20	0.30 U	0.30	0.34	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30
Calcium		6110	8.4	6250	8.4	37900	8.4	37700	8.4	39500	8.4	39000	8.4
Cadmium	4	3.4	2.9	3.5	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Cobalt		2.3 U	2.3	2.3 U	2.3	2.9	2.3	2.3 U	2.3	2.3 U	2.3	2.3 U	2.3
Chromium	100	4.7 U	4.7	4.7 U	4.7	7.5	4.7	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7
Copper	1000	4.3	4.0	4.8	4.0	8.6	4.0	4.0 U	4.0	7.7	4.0	4.0 U	4.0
Iron	300	1220	2.5	55.9	2.5	40900	2.5	38800	2.5	41900	2.5	37600	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		4830	67.9	4700	67.9	4640	67.9	4460	67.9	4680	67.9	4480	67.9
Magnesium		3880	34.3	3810	34.3	5240	34.3	5160	34.3	5130	34.3	4980	34.3
Manganese	50	15.9	0.90	15.0	0.90	547	0.90	543	0.90	554	0.90	538	0.90
Sodium	50000	20900	19.1	20900	19.1	8900	19.1	8940	19.1	8730	19.1	8440	19.1
Nickel	100	6.4	4.2	4.7	4.2	4.6	4.2	4.2 U	4.2	4.2 U	4.2	4.2 U	4.2
Lead	10	5.4	1.2	1.2 U	1.2	13.8	1.6	1.6 U	1.6	23.7	1.2	1.2 U	1.2
Antimony	20	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1
Zinc	5000	44.0	1.9	42.5	1.9	66.9	1.9	1.9 U	1.9	112	1.9	3.3	1.9
Cyanide	200	10.0 U	10.0			10 U	10			10.0 U	10.0		
Ammonia as Nitrogen													
Sulfate													
Dilution Factor													
Method:TAL Metals, Cyanide													

[illegible]POST
GROUNDWATER INORGANICS

Geographical Location		M14		M14		M14		M14		M14		M14		M14	
Sample		MP14-MW20-A01		MP14-MW20-A01 SOL		MP14-MW20-A02		MP14-MW20-A02 SOL		MP14-MW20-E02		MP14-MW20-E02 SOL		MP14-MW21-A01	
Sample Type		Total		Soluble		Total		Soluble		Field Rinsate - Total		Field Rinsate - Soluble		Total	
Batch#		9502G403		9502G403		9503G722		9503G722		9503G722		9503G722		9502G403	
Prep#		95GCN053		95GI460		95GI503		95GI503		95GI503		95GI503		95GCN053	
RFW#		010		011		001		002		003		004		012	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/22/95		2/22/95		3/13/95		3/13/95		3/13/95		3/13/95		2/22/95	
Analysis Date		3/7/95		3/8/95		3/15/95		3/15/95		3/15/95		3/15/95		3/7/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0
Aluminum	200	1290	24.0	63.0	24.0	517	16.8	85	16.8	16.8 U	16.8	16.8 U	16.8	1130	24.0
Arsenic	8	2.4	1.9	1.9 U	1.9	10.2	1.3	8.8	1.3	1.3 U	1.3	1.3 U	1.3	1.9 U	1.9
Barium	2000	53.4	1.7	25.6	1.7	44.0	0.80	31.1	0.80	0.80 U	0.80	1.2	0.80	27.0	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.34	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90
Calcium		30400	10.4	28300	10.4	33300	8.4	32500	8.4	103	8.4	102	8.4	32400	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8
Cobalt		3.0 U	3.0	3.0 U	3.0	2.3 U	2.3	2.3 U	2.3	2.3 U	2.3	2.3 U	2.3	3.0 U	3.0
Chromium	100	16.9	2.9	2.9 U	2.9	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7	10.8	2.9
Copper	1000	4.7	1.9	1.9 U	1.9	11.9	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	1.9 U	1.9
Iron	300	8890	6.4	4480	6.4	7030	2.5	5350	2.5	9.6	2.5	9.2	2.5	4880	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		5340	685	4230	685	5292	67.9	3800	67.9	67.9 U	67.9	67.9 U	67.9	6920	685
Magnesium		4330	18.3	3720	18.3	4210	34.3	4010	34.3	34.3 U	34.3	34.3 U	34.3	3930	18.3
Manganese	50	186	1.8	171	1.8	213	0.90	209	0.90	0.90 U	0.90	0.90 U	0.90	62.5	1.8
Sodium	50000	23300	30.5	22100	30.5	21900	19.1	20600	19.1	56.3	19.1	142	19.1	6360	30.5
Nickel	100	10.8 U	10.8	10.8 U	10.8	9.2	4.2	4.2 U	4.2	4.2 U	4.2	4.2 U	4.2	10.8 U	10.8
Lead	10	3.8	1.6	1.6 U	1.6	5.5	1.1	1.1 U	1.1	1.5	1.1	1.1 U	1.1	3.1	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		8.5	2.3	4.0	2.3	4.0	2.1	3.1	2.1	2.1 U	2.1	2.1 U	2.1	7.1	2.3
Zinc	5000	7.2	3.8	3.8 U	3.8	21.8	1.9	10.1	1.9	3.9	1.9	4.2	1.9	11.1	3.8
Cyanide	200	10 U	10			10 U	10			10 U	10			10 U	10
Ammonia as Nitrogen															
Sulfate															
Dilution Factor															
Method:TAL Metals, Cyanide															

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M14		M14		M14		M18		M18		M18		M18	
Sample		MP14-MW21-A01 SOL		MP14-MW21-A02		MP14-MW21-A02 SOL		MP18-MW03-A01		MP18-MW03-A01 SOL		MP18-MW03-A02		MP18-MW03-A02 SOL	
Sample Type		Soluble		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9502G403		9503G660		9503G660		9505G825		9505G825		9505G139		9505G139	
Prep#		95GI460		95GI488		95GI488		95GI713		95GI713		95GI761		95GI761	
RFW#		013		019		020		001		002		001		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/22/95		3/9/95		3/9/95		5/10/95		5/10/95		5/25/95		5/25/95	
Analysis Date		3/8/95		3/13/95		3/13/95		5/24/95		5/24/95		6/7/95		6/7/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Aluminum	200	24.0 U	24.0	1630	24.0	24.0 U	24.0	6410	15.7	368	15.7	8980	15.7	251	15.7
Arsenic	8	1.9 U	1.9	3.7	1.3	1.8	1.3	4.5	1.4	1.4 U	1.4	5.1	1.7	1.7 U	1.7
Barium	2000	23.3	1.7	43.4	1.7	22.4	1.7	12.1	0.80	2.3	0.80	15.2	0.80	1.5	0.80
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.77 U	0.30	0.30 U	0.30	1.2	0.30	0.30 U	0.30
Calcium		32600	10.4	33200	10.4	33900	10.4	5650	13.4	5270	13.4	5290	13.4	4320	13.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	3.9 U	3.9	3.9 U	3.9	3.9 U	3.9	4.7	3.9
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.3	1.4	2.5	1.4	5.0	1.4	3.1	1.4
Chromium	100	36.6	2.9	14.5	2.9	2.9 U	2.9	75.7 U	3.8	7.9	3.8	107.0	3.8	12.5	3.8
Copper	1000	1.9 U	1.9	2.7	1.9	1.9 U	1.9	2.7	1.8	3.1	1.8	3	1.8	1.8 U	1.8
Iron	300	625	6.4	6490	6.4	407	6.4	33000	3.6	2110	3.6	46900	3.6	1500	3.6
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		6610	685	8060	685	7110	685	9770	81.2	3340	81.2	11700	81.2	3280	81.2
Magnesium		3600	18.3	4190	18.3	3780	18.3	5850	37.2	3170	37.2	6440	37.2	2600	37.2
Manganese	50	56.4	1.8	66.4	1.8	56.7	1.8	32.6	0.70	18.6	0.70	44.0	0.70	16.7	0.70
Sodium	50000	6460	30.5	7040	30.5	7850	30.5	58700	11.8	58600	11.8	53200	11.8	53500	11.8
Nickel	100	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8	6.4	5.4	5.4	5.4	8.2	5.4	6.0	5.4
Lead	10	1.6 U	1.6	3.8	1.6	1.6	1.6	6.1	0.80	0.80 U	0.80	10.3	0.90	0.90 U	0.90
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	12.0 U	12.0	12.0 U	12.0	12.0 U	12.0	14.6	12.0
Selenium	50	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	1.7 U	1.7	1.7 U	1.7	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		2.3 U	2.3	10.4	2.3	4.6	2.3	35.9	1.5	2.2	1.5	53.6	1.5	5.3	1.5
Zinc	5000	3.8 U	3.8	15.9	3.8	3.8 U	3.8	78.2	2.2	33.9	2.2	99.6	2.2	28.4	2.2
Cyanide	200			10 U	10										
Ammonia as Nitrogen															
Sulfate															
Dilution Factor															
Method:TAL Metals, Cyanide															

POST
GROUNDWATER INORGANICS

Geographical Location		M18		M18		M18		M18		M18		M18	
Sample		MP18-MW03-E01		MP18-MW03-E01 SOL		MP18-MW24-A01		MP18-MW24-A01 SOL		MP18-MW24-A02		MP18-MW24-A02 SOL	
Sample Type		Field Rinsate - Total		Field Rinsate - Soluble		Total		Soluble		Total		Soluble	
Batch#		9505G825		9505G825		9502G238		9502G238		9503G681		9503G681	
Prep#		95GI713		95GI713		95GI397		95GI397		95GI494		95GI494	
RFW#		004		005		001		002		009		010	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		5/10/95		5/10/95		2/17/95		2/17/95		3/10/95		3/10/95	
Analysis Date		5/24/95		5/24/95		2/22/95		2/22/95		3/15/95		3/15/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	1.9 U	1.9	1.9 U	1.9	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5
Aluminum	200	33.2	15.7	20.5	15.7	3790	24.0	46.2	24.0	7440	16.8	50.2	16.8
Arsenic	8	1.4 U	1.4	1.4 U	1.4	13.0	1.9	3.7	1.9	20.3	1.7	4.9	1.7
Barium	2000	0.92	0.80	0.80 U	0.80	272	1.7	183	1.7	262	0.80	169	0.80
Beryllium	20	0.30 U	0.30	0.30 U	0.30	1.6	0.90	1.2	0.90	1.4	0.30	0.56	0.30
Calcium		65.6	13.4	45.4	13.4	714000	10.4	680000	10.4	787000	42.0 *	748000	42.0 *
Cadmium	4	3.9 U	3.9	3.9 U	3.9	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9
Cobalt		2.2	1.4	2.2	1.4	3.0 U	3.0	3.0 U	3.0	2.3 U	2.3	2.3 U	2.3
Chromium	100	3.8 U	3.8	4.1	3.8	33.8	2.9	3.6	2.9	62.5	4.7	4.7 U	4.7
Copper	1000	2.9	1.8	1.8 U	1.8	9.4	1.9	4.6	1.9	7.5	4.0	4.0 U	4.0
Iron	300	19.3	3.6	13.1	3.6	37900	6.4	15300	6.4	42100	2.5	16300	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		81.2 U	81.2	81.2 U	81.2	18900	685	16800	685	19500	67.9	16200	67.9
Magnesium		37.2 U	37.2	37.2 U	37.2	54300	18.3	51400	18.3	45200	34.3	47900	34.3
Manganese	50	1.1	0.70	0.72	0.70	756	1.8	697	1.8	668	0.90	666	0.90
Sodium	50000	101	11.8	94.1	11.8	47100	30.5	45700	30.5	36900	19.1	38400	19.1
Nickel	100	5.4 U	5.4	5.4 U	5.4	10.8 U	10.8	10.8 U	10.8	11.4	4.2	4.2 U	4.2
Lead	10	0.80 U	0.80	0.80 U	0.80	28.6	1.6	1.6 U	1.6	40.8	2.4 **	1.2 U	1.2
Antimony	20	12.0 U	12.0	12.0 U	12.0	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	2.4	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		1.5 U	1.5	1.5 U	1.5	22.3	2.3	2.3 U	2.3	36.0	2.1	2.4	2.1
Zinc	5000	2.2 U	2.2	2.2 U	2.2	80.5	3.8	4.2	3.8	101	1.9	12.6	1.9
Cyanide	200												
Ammonia as Nitrogen													
Sulfate													
Dilution Factor										* = 5, ** = 2		* = 5	
Method:TAL Metals, Cyanide													

MAIN POST
GROUNDWATER INORGANICS

Geographical Location		M18		M18		M18		M18		M18		M18		M18	
Sample		MP18-MW24-C02		MP18-MW24-C02 SOL		MP18-MW24-E01		MP18-MW24-E01 SOL		MP18-MW24-E02		MP18-MW24-E02 SOL		MP18-MW25-A01	
Sample Type		Duplicate - Total		Duplicate - Soluble		Field Rinsate - Total		Field Rinsate - Soluble		Field Rinsate - Total		Field Rinsate - Soluble		Total	
Batch#		9503G681		9503G681		9502G238		9502G238		9503G681		9503G681		9502G238	
Prep#		95GI494		95GI494		95GI397		95GI397		95GI494		95GI494		95GI397	
RFW#		011		012		004		005		014		015		006	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/10/95		3/10/95		2/17/95		2/17/95		3/10/95		3/10/95		2/17/95	
Analysis Date		3/15/95		3/15/95		2/22/95		2/22/95		3/15/95		3/15/95		2/22/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0
Aluminum	200	7330	16.8	36.2	16.8	25.0	24.0	28.4	24.0	20.0	16.8	16.8 U	16.8	293	24.0
Arsenic	8	20.6	3.4 **	6.4	1.7	1.9 U	1.9	1.9 U	1.9	1.7 U	1.7	1.7 U	1.7	6.3	1.9
Barium	2000	262	0.80	158	0.80	1.7 U	1.7	1.7 U	1.7	0.80 U	0.80	0.80 U	0.80	64.4	1.7
Beryllium	20	1.7	0.30	0.57	0.30	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90
Calcium		780000	42.0 *	727000	42.0 *	282	10.4	161	10.4	460	8.4	106	8.4	167000	10.4
Cadmium	4	4.1	2.9	2.9	2.9	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8
Cobalt		2.8	2.3	2.3 U	2.3	3.0 U	3.0	3.0 U	3.0	2.3 U	2.3	2.3 U	2.3	3.0 U	3.0
Chromium	100	64.7	4.7	4.7 U	4.7	2.9 U	2.9	2.9 U	2.9	4.7 U	4.7	4.7 U	4.7	3.9	2.9
Copper	1000	9.2	4.0	4.0 U	4.0	1.9 U	1.9	2.7	1.9	5.4	4.0	4.0	4.0	2.1	1.9
Iron	300	43800	2.5	15200	2.5	13.4	6.4	13.5	6.4	24.5	2.5	15.7	2.5	7540	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		19100	67.9	15100	67.9	685 U	685	685 U	685	67.9 U	67.9	67.9 U	67.9	26500	685
Magnesium		45100	34.3	44300	34.3	20.0	18.3	23.9	18.3	34.3 U	34.3	34.3 U	34.3	63100	18.3
Manganese	50	680	0.90	634	0.90	1.8 U	1.8	1.8 U	1.8	0.90 U	0.90	0.90 U	0.90	1050	1.8
Sodium	50000	35800	19.1	35600	19.1	160	30.5	118	30.5	75.8	19.1	97.2	19.1	293000	30.5
Nickel	100	11.3	4.2	4.2 U	4.2	10.8 U	10.8	10.8 U	10.8	4.2 U	4.2	4.2 U	4.2	10.8 U	10.8
Lead	10	44.6	2.4 **	1.2 U	1.2	1.6 U	1.6	1.6 U	1.6	1.2 U	1.2	1.2 U	1.2	1.6 U	1.6
Antimony	20	10.9 U	10.9	10.9 U	10.9	21	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7
Selenium	50	1.8	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		37.1	2.1	2.1 U	2.1	2.3 U	2.3	2.3 U	2.3	2.1 U	2.1	2.1 U	2.1	6.7	2.3
Zinc	5000	103	1.9	13.7	1.9	3.8 U	3.8	3.8 U	3.8	1.9 U	1.9	1.9 U	1.9	4.0	3.8
Cyanide	200														
Ammonia as Nitrogen															
Sulfate															
Dilution Factor		* = 5, ** = 2		* = 5											
Method:TAL Metals, Cyanide															

M[illegible]POST
GROUNDWATER INORGANICS

Geographical Location		M18		M18		M18		M18		M18	
Sample		MP18-MW25-A01 SOL		MP18-MW25-A02		MP18-MW25-A02 SOL		MP18-MW25-C01		MP18-MW25-C01 SOL	
Sample Type		Soluble		Total		Soluble		Duplicate - Total		Duplicate - Soluble	
Batch#		9502G238		9503G681		9503G681		9502G238		9502G238	
Prep#		95GI397		95GI494		95GI494		95GI397		95GI397	
RFW#		007		016		015		008		009	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/17/95		3/10/95		3/10/95		2/17/95		2/17/95	
Analysis Date		2/22/95		3/15/95		3/15/95		2/22/95		2/22/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0
Aluminum	200	30.8	24.0	7640	16.8	16.8 U	16.8	566	24.0	28.3	24.0
Arsenic	8	6.0	1.9	16.5	1.7	4.8	1.7	5.8	1.9	5.3	1.9
Barium	2000	57.3	1.7	117	0.80	60.2	0.80	68.8	1.7	66.1	1.7
Beryllium	20	0.90 U	0.90	0.91	0.30	0.35	0.30	0.90 U	0.90	0.90 U	0.90
Calcium		163000	10.4	162000	8.4	161000	8.4	176000	10.4	159000	10.4
Cadmium	4	2.8 U	2.8	5.8	2.9	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8
Cobalt		3.0 U	3.0	2.5	2.3	2.3 U	2.3	3.0 U	3.0	3.0 U	3.0
Chromium	100	2.9 U	2.9	40.7	4.7	4.7 U	4.7	5.7	2.9	2.9 U	2.9
Copper	1000	2.1	1.9	4.0 U	4.0	4.0 U	4.0	3.2	1.9	2.7	1.9
Iron	300	5100	6.4	49700	2.5	11700	2.5	6650	6.4	11000	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		25000	685	33300	67.9	29400	67.9	26300	685	34700	685
Magnesium		60600	18.3	75000	34.3	70100	34.3	63100	18.3	81000	18.3
Manganese	50	1030	1.8	830	0.90	730	0.90	1030	1.8	874	1.8
Sodium	50000	277000	30.5	434000	19.1	412000	19.1	284000	30.5	488000	30.5
Nickel	100	10.8 U	10.8	14.6	4.2	4.2 U	4.2	10.8 U	10.8	10.8 U	10.8
Lead	10	1.6 U	1.6	21.6	6.0 *	1.2 U	1.2	1.7	1.6	1.6 U	1.6
Antimony	20	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		2.4	2.3	41.6	2.1	5.3	2.1	8.1	2.3	4.4	2.3
Zinc	5000	3.8 U	3.8	62.4	1.9	3.4	1.9	4.7	3.8	3.8 U	3.8
Cyanide	200										
Ammonia as Nitrogen											
Sulfate											
Dilution Factor				*=5							
Method:TAL Metals, Cyanide											

MAIN POST
GROUND WATER INORGANICS

Geographical Location		B1		B1		B1		B1		B2		B2	
Sample		B1-MW01B-A01		B1-MW01B-A01 SOL		B1-MW01B-A02		B1-MW01B-A02 SOL		B2-MW02B-A01		B2-MW02B-A01 SOL	
Sample Type		Total		Soluble		Total		Soluble		Total		Soluble	
Batch#		9502G169		9502G169		9503G616		9503G616		9502G169		9502G169	
Prep#		95GI422		95GI422		95GI475		95GI475		95GI422		95GI422	
RFW#		001		002		008		009		003		004	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/14/95		2/14/95		3/7/95		3/7/95		2/15/95		2/15/95	
Analysis Date		2/23/95		2/27/95		3/13/95		3/13/95		2/23/95		2/27/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	2430	16.8	146	16.8	634	16.8	116	16.8	1070	16.8	40.9	16.8
Arsenic	8	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	4.8	1.9	1.9 U	1.9
Barium	2000	68.5	0.80	62.5	0.80	62.9	0.80	60.2	0.80	73.9	0.80	67.3	0.80
Beryllium	20	0.43	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30
Calcium		5130	8.4	5090	8.4	4910	8.4	5040	8.4	40300	8.4	40200	8.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Cobalt		6.4	2.3	4.6	2.3	4.5	2.3	4.9	2.3	4.0	2.3	2.3 U	2.3
Chromium	100	43.8	4.7	4.7 U	4.7	12.9	4.7	4.7 U	4.7	7.4	4.7	4.7 U	4.7
Copper	1000	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0
Iron	300	12300	2.5	18.0	2.5	2430	2.5	20.9	2.5	40100	2.5	26600	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		3640	67.9	2880	67.9	3110	67.9	2910	67.9	9100	67.9	8790	67.9
Magnesium		9050	34.3	8640	34.3	8880	34.3	8850	34.3	7250	34.3	6730	34.3
Manganese	50	56.7	0.90	46.6	0.90	47.2	0.90	45.4	0.90	148	0.90	118	0.90
Sodium	50000	7070	19.1	7120	19.1	7020	19.1	7110	19.1	6170	19.1	6270	19.1
Nickel	100	40.1	4.2	35.4	4.2	32.0	4.2	33.2	4.2	5.8	4.2	6.4	4.2
Lead	10	2.8	1.6	1.6 U	1.6	1.2 U	1.2	1.2 U	1.2	2.7	1.6	1.6 U	1.6
Antimony	20	16.7	10.9	10.9 U	10.9	10.9 U	10.9	11.0	10.9	12	10.9	15.1	10.9
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	3.5 U	3.5	0.70 U	0.70
Vanadium		50.4	2.1	2.1 U	2.1	10.6	2.1	2.1 U	2.1	13.6	2.1	2.1 U	2.1
Zinc	5000	35.8	1.9	24.4	1.9	24.5	1.9	23.4	1.9	13.6	1.9	8.4	1.9
Cyanide	200	10 U	10			10 U	10			10 U	10		
Dilution Factor													
Method:TAL Metals, Cyanide													

MAIN POST
GROUND WATER INORGANICS

Geographical Location		B2		B2		B3		B3		B3	
Sample		B2-MW02B-A02		B2-MW02B-A02 SOL		B3-MW03B-A01		B3-MW03B-A01 SOL		B3-MW03B-A02	
Sample Type		Total		Soluble		Total		Soluble		Total	
Batch#		9503G616		9503G616		9502G169		9502G169		9503G740	
Prep#		95GI475		95GI475		95GI422		95GI422		95GI519	
RFW#		010		011		005		009		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/7/95		3/7/95		2/15/95		2/13/95		3/14/95	
Analysis Date		3/13/95		3/13/95		2/23/95		2/27/95		3/21/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0
Aluminum	200	454	16.8	16.8 U	16.8	5010	16.8	16.8 U	16.8	121000	24.0
Arsenic	8	3.9	1.9	1.9 U	1.9	7.1	1.9	1.9 U	1.9	89.3	9.5 *
Barium	2000	75.2	0.80	72.3	0.80	144	0.80	0.80 U	0.80	556	1.7
Beryllium	20	0.30 U	0.30	0.30 U	0.30	0.78	0.30	0.30 U	0.30	15.1	0.90
Calcium		41000	8.4	41100	8.4	27600	8.4	83.8	8.4	45400	10.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	9.5	2.8
Cobalt		2.3 U	2.3	2.3 U	2.3	9.4	2.3	2.3 U	2.3	50.0	3.0
Chromium	100	4.7 U	4.7	4.7 U	4.7	61.6	4.7	4.7 U	4.7	1600	2.9
Copper	1000	4.0 U	4.0	4.0 U	4.0	5.2	4.0	4.0 U	4.0	65.6	1.9
Iron	300	35000	2.5	28000	2.5	18800	2.5	9.4	2.5	431000	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		9180	67.9	9300	67.9	18400	67.9	67.9 U	67.9	137000	685
Magnesium		7300	34.3	7200	34.3	8230	34.3	34.3 U	34.3	62700	18.3
Manganese	50	129	0.90	119	0.90	106	0.90	0.90 U	0.90	331	1.8
Sodium	50000	6660	19.1	6820	19.1	21500	19.1	93.3	19.1	19600	30.5
Nickel	100	4.2 U	4.2	4.2 U	4.2	66.3	4.2	4.2 U	4.2	187	10.8
Lead	10	1.2 U	1.2	2.1	1.2	2.9	1.6	1.6 U	1.6	76.6	5.0 *
Antimony	20	10.9	10.9	10.9 U	10.9	14.1	10.9	16.8	10.9	20.7 U	20.7
Selenium	50	1.8 U	1.8	1.8 U	1.8	4.2	1.5	1.5 U	1.5	22	3.0 **
Thallium	10	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	5.5	5.5 *
Vanadium		4.7	2.1	2.1 U	2.1	23.1	2.1	2.1 U	2.1	452	2.3
Zinc	5000	9.7	1.9	5.8	1.9	63.0	1.9	4.0	1.9	801	3.8
Cyanide	200	10 U	10			10 U	10			10 U	10.0
Dilution Factor										* = 5, ** = 2	
Method:TAL Metals, Cyanide											

MAIN POST
GROUND WATER INORGANICS

Geographical Location		B3		B3		B3		B3		B3		B4	
Sample		B3-MW03B-A02 SOL		B3-MW03B-E01		B3-MW03B-E01 SOL		B3-MW03B-E02		B3-MW03B-E02 SOL		B4-MW04B-A01	
Sample Type		Soluble		Field Rinsate - Total		Field Rinsate - Soluble		Field Rinsate - Total		Field Rinsate - Soluble		Total	
Batch#		9503G740		9502G169		9502G169		9503G616		9503G616		9502G169	
Prep#		95GI519		95GI422		95GI422		95GI475		95GI475		95GI422	
RFW#		002		008		006		006		007		010	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/14/95		2/14/95		2/14/95		3/7/95		3/7/95		2/13/95	
Analysis Date		3/21/95		2/23/95		2/27/95		3/13/95		3/13/95		2/23/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	84.1	24.0	26.2	16.8	173	16.8	27.1	16.8	17.2	16.8	1890	16.8
Arsenic	8	2.1	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	93.1	1.7	1.0	0.80	113	0.80	0.80 U	0.80	0.80 U	0.80	56.8	0.80
Beryllium	20	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.36	0.30
Calcium		24900	10.4	123	8.4	25400	8.4	368	8.4	163	8.4	4460	8.4
Cadmium	4	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Cobalt		4.4	3.0	2.3 U	2.3	7.3	2.3	2.3 U	2.3	2.3 U	2.3	2.7	2.3
Chromium	100	2.9 U	2.9	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7	18.4	4.7
Copper	1000	2.9	1.9	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0
Iron	300	10000	6.4	16.5	2.5	109	2.5	10.1	2.5	9.3	2.5	4510	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.26	0.20
Potassium		8400	685	67.9 U	67.9	13200	67.9	67.9 U	67.9	67.9 U	67.9	4690	67.9
Magnesium		6390	18.3	34.3 U	34.3	5790	34.3	46.0	34.3	61.3	34.3	7430	34.3
Manganese	50	104	1.8	0.90 U	0.90	90.1	0.90	0.90 U	0.90	0.90 U	0.90	11.8	0.90
Sodium	50000	20100	30.5	820	19.1	20800	19.1	296	19.1	179	19.1	12600	19.1
Nickel	100	33.3	10.8	4.2 U	4.2	61.5	4.2	4.2 U	4.2	4.2 U	4.2	8.5	4.2
Lead	10	1.0 U	1.0	1.6 U	1.6	1.6 U	1.6	1.2 U	1.2	1.2 U	1.2	1.6 U	1.6
Antimony	20	20.7 U	20.7	10.9 U	10.9	16.7	10.9	10.9 U	10.9	10.9 U	10.9	12.1	10.9
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5
Thallium	10	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70
Vanadium		2.3 U	2.3	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	6.6	2.1
Zinc	5000	39.4	3.8	2.0	1.9	27.0	1.9	1.9 U	1.9	1.9 U	1.9	51.4	1.9
Cyanide	200			10 U	10			10 U	10			10 U	10
Dilution Factor													
Method:TAL Metals, Cyanide													

MAIN POST
GROUND WATER INORGANICS

Geographical Location		B4		B4		B4		B5		B5		B5	
Sample		B4-MW04B-A01 SOL		B4-MW04B-A02		B4-MW04B-A02 SOL		B5-MW05B-A01		B5-MW05B-A01 SOL		B5-MW05B-A02	
Sample Type		Soluble		Total		Soluble		Total		Soluble		Total	
Batch#		9502G169		9503G616		9503G616		9502G169		9502G169		9503G616	
Prep#		95GI422		95GI475		95GI475		95GI422		95GI422		95GI475	
RFW#		011		012		013		012		013		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water, filtered		water		water, filtered		water		water, filtered		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/13/95		3/7/95		3/7/95		2/13/95		2/13/95		3/7/95	
Analysis Date		2/27/95		3/13/95		3/13/95		2/23/95		2/27/95		3/13/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	605	16.8	3700	16.8	673	16.8	5630	16.8	113	16.8	26000	16.8
Arsenic	8	1.9 U	1.9	2.1	1.9	1.9 U	1.9	15.8	1.9	1.9 U	1.9	56	9.5 *
Barium	2000	43.9	0.80	71.5	0.80	48.2	0.80	299	0.80	147	0.80	699	0.80
Beryllium	20	0.30 U	0.30	0.35	0.30	0.30 U	0.30	0.67	0.30	0.30 U	0.30	2.1	0.30
Calcium		4540	8.4	5160	8.4	5040	8.4	13800	8.4	13600	8.4	16400	8.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	3.8	2.9	2.9 U	2.9	4.6	2.9
Cobalt		2.3 U	2.3	3.5	2.3	2.3 U	2.3	15.6	2.3	13.3	2.3	18.3	2.3
Chromium	100	4.7 U	4.7	42.2	4.7	4.7 U	4.7	33.9	4.7	4.7 U	4.7	191	4.7
Copper	1000	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	10.0	4.0	4.0 U	4.0	43.0	4.0
Iron	300	18.5	2.5	10500	2.5	19.3	2.5	15500	2.5	277	2.5	72100	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		3580	67.9	6830	67.9	3810	67.9	8730	67.9	6910	67.9	16800	67.9
Magnesium		7030	34.3	9460	34.3	8120	34.3	7050	34.3	5900	34.3	12400	34.3
Manganese	50	10.8	0.90	14.5	0.90	11.0	0.90	166	0.90	145	0.90	233	0.90
Sodium	50000	12900	19.1	13900	19.1	14300	19.1	15900	19.1	16200	19.1	17900	19.1
Nickel	100	9.2	4.2	5.4	4.2	6.2	4.2	96.7	4.2	89.8	4.2	120	4.2
Lead	10	1.6 U	1.6	2.4	1.2	1.2 U	1.2	5.8	1.6	1.6 U	1.6	22.7	1.2
Antimony	20	12.9	10.9	10.9 U	10.9	12.3	10.9	14.5	10.9	15.8	10.9	12.1	10.9
Selenium	50	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	8.0	1.5	4.1	1.5	29.6	3.6 **
Thallium	10	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	5.5 U	5.5 *
Vanadium		2.1 U	2.1	14.8	2.1	2.1 U	2.1	22.8	2.1	2.1 U	2.1	108	2.1
Zinc	5000	44.8	1.9	63.7	1.9	55.5	1.9	115	1.9	74.3	1.9	233	1.9
Cyanide	200			10 U	10			10 U	10			10 U	10
Dilution Factor												* = 5.0, ** = 2.0	
Method:TAL Metals, Cyanide													

MAIN POST
GROUND WATER INORGANICS

Geographical Location		B5	
Sample		B5-MW05B-A02 SOL	
Sample Type		Soluble	
Batch#		9503G616	
Prep#		95GI475	
RFW#		002	
Dilution Factor		1.00	
Matrix		water, filtered	
Units	ug/l	ug/l	
Sampling Date		3/7/95	
Analysis Date		3/13/95	
Analysis	Standard	Analytical Result	MDL
Silver	20	2.5 U	2.5
Aluminum	200	108	16.8
Arsenic	8	1.9 U	1.9
Barium	2000	99.6	0.80
Beryllium	20	0.30 U	0.30
Calcium		14100	8.4
Cadmium	4	3.7	2.9
Cobalt		11.6	2.3
Chromium	100	4.7 U	4.7
Copper	1000	4.0 U	4.0
Iron	300	300	2.5
Mercury	2	0.20 U	0.20
Potassium		6280	67.9
Magnesium		6420	34.3
Manganese	50	146	0.90
Sodium	50000	17200	19.1
Nickel	100	76.9	4.2
Lead	10	1.2 U	1.2
Antimony	20	10.9 U	10.9
Selenium	50	4.4	1.8
Thallium	10	1.1 U	1.1
Vanadium		2.1 U	2.1
Zinc	5000	82.4	1.9
Cyanide	200		
Dilution Factor			
Method:TAL Metals, Cyanide			

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M2		M2		M2		M2		M2		M2	
Sample		MP02-MW01-A01		MP02-MW01-A02		MP02-MW02-A01		MP02-MW02-A02		MP02-MW03-A01		MP02-MW03-A02	
Sample Type													
Batch#		9502G197		9503G642		9502G197		9503G642		9502G197		9503G642	
Prep#		95GP0119		95GP0229		95GP0119		95GP0229		95GP0119		95GP0229	
RFW#		001		001		002		003		003		005	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/15/95		3/8/95		2/15/95		3/8/95		2/15/95		3/8/95	
Analysis Date		3/4/95		3/19/95		3/4/95		3/19/95		3/4/95		3/19/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
beta-BHC	0.2	0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
delta-BHC		0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
gamma-BHC (Lindane)	0.2	0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
Heptachlor	0.4	0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
Aldrin	0.04	0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
Heptachlor epoxide	0.2	0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
Endosulfan I	0.4	0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
Dieldrin	0.03	0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
4,4'-DDE	0.1	0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
Endrin	2	0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
Endosulfan II	0.4	0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
4,4'-DDD	0.1	0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
Endosulfan sulfate	0.4	0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
4,4'-DDT	0.1	0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
Methoxychlor	40	0.50 U	0.50	0.48 U	0.48	0.47 U	0.47	0.48 U	0.48	0.52 U	0.52	0.56 U	0.56
Endrin ketone		0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
Endrin aldehyde		0.10 U	0.10	0.095 U	0.095	0.094 U	0.094	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11
alpha-Chlordane		0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
gamma-Chlordane	0.5	0.050 U	0.050	0.048 U	0.048	0.047 U	0.047	0.048 U	0.048	0.052 U	0.052	0.056 U	0.056
Toxaphene	3	5.0 U	5.0	4.8 U	4.8	4.7 U	4.7	4.8 U	4.8	5.2 U	5.2	5.6 U	5.6
Aroclor-1016	2	1.0 U	1.0	0.95 U	0.95	0.94 U	0.94	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1
Aroclor-1221	2	2.0 U	2.0	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	2.1 U	2.1	2.2 U	2.2
Aroclor-1232	2	1.0 U	1.0	0.95 U	0.95	0.94 U	0.94	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1
Aroclor-1242	2	1.0 U	1.0	0.95 U	0.95	0.94 U	0.94	0.95 U	0.95	1.8 P	1.0	1.1 U	1.1
Aroclor-1248	2	1.0 U	1.0	0.95 U	0.95	0.94 U	0.94	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1
Aroclor-1254	2	1.0 U	1.0	0.95 U	0.95	0.94 U	0.94	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1
Aroclor-1260	2	1.0 U	1.0	0.95 U	0.95	0.94 U	0.94	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M3		M3		M3		M3		M3		M3	
Sample		MP03-MW04-A01		MP03-MW04-A02		MP03-MW05-A01		MP03-MW05-A02		MP03-MW06-A01		MP03-MW06-A02	
Sample Type													
Batch#		9502G219		9503G642		9502G219		9503G660		9502G219		9503G660	
Prep#		95GP0127		95GP0229		95GP0127		95GP0233		95GP0127		95GP0233	
RFW#		001		009		003		003		005		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/16/95		3/8/95		2/16/95		3/9/95		2/16/95		3/9/95	
Analysis Date		3/14/95		3/20/95		3/14/95		3/20/95		3/14/95		3/20/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
beta-BHC	0.2	0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
delta-BHC		0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
gamma-BHC (Lindane)	0.2	0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
Heptachlor	0.4	0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
Aldrin	0.04	0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
Heptachlor epoxide	0.2	0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
Endosulfan I	0.4	0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
Dieldrin	0.03	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
4,4'-DDE	0.1	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
Endrin	2	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
Endosulfan II	0.4	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
4,4'-DDD	0.1	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
Endosulfan sulfate	0.4	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
4,4'-DDT	0.1	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
Methoxychlor	40	0.54 U	0.54	0.52 U	0.52	0.47 U	0.47	0.56 U	0.56	0.49 U	0.49	0.48 U	0.48
Endrin ketone		0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
Endrin aldehyde		0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.098 U	0.098	0.096 U	0.096
alpha-Chlordane		0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
gamma-Chlordane	0.5	0.054 U	0.054	0.052 U	0.052	0.047 U	0.047	0.056 U	0.056	0.049 U	0.049	0.048 U	0.048
Toxaphene	3	5.4 U	5.4	5.2 U	5.2	4.7 U	4.7	5.6 U	5.6	4.9 U	4.9	4.8 U	4.8
Aroclor-1016	2	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.98 U	0.98	0.96 U	0.96
Aroclor-1221	2	2.2 U	2.2	2.1 U	2.1	1.9 U	1.9	2.2 U	2.2	2.0 U	2.0 U	1.9 U	1.9
Aroclor-1232	2	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.98 U	0.98	0.96 U	0.96
Aroclor-1242	2	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.98 U	0.98	0.96 U	0.96
Aroclor-1248	2	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.98 U	0.98	0.96 U	0.96
Aroclor-1254	2	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.98 U	0.98	0.96 U	0.96
Aroclor-1260	2	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.98 U	0.98	0.96 U	0.96
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M4		M4		M4		M4		M4		M4	
Sample		MP04-MW07-A01		MP04-MW07-A02		MP04-MW07-C01		MP04-MW07-C02		MP04-MW07-E01		MP04-MW08-A01	
Sample Type						Duplicate		Duplicate		Field Rinsate Blank			
Batch#		9502G219		9503G660		9502G219		9503G660		9502G219		9502G219	
Prep#		95GP0127		95GP0233		95GP0127		95GP0233		95GP0127		95GP0127	
RFW#		007		005		009		007		012		014	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/16/95		3/9/95		2/16/95		3/9/95		2/16/95		2/16/95	
Analysis Date		3/14/95		3/20/95		3/14/95		3/20/95		3/14/95		3/14/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
beta-BHC	0.2	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
delta-BHC		0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
gamma-BHC (Lindane)	0.2	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
Heptachlor	0.4	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
Aldrin	0.04	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
Heptachlor epoxide	0.2	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
Endosulfan I	0.4	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
Dieldrin	0.03	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
4,4'-DDE	0.1	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
Endrin	2	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
Endosulfan II	0.4	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
4,4'-DDD	0.1	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
Endosulfan sulfate	0.4	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
4,4'-DDT	0.1	0.19	0.10	0.11 U	0.11	0.32	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
Methoxychlor	40	0.52 U	0.52	0.53 U	0.53	0.52 U	0.52	0.53 U	0.53	0.52 U	0.52	0.62 U	0.62
Endrin ketone		0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
Endrin aldehyde		0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12
alpha-Chlordane		0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
gamma-Chlordane	0.5	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.053 U	0.053	0.052 U	0.052	0.062 U	0.062
Toxaphene	3	5.2 U	5.2	5.3 U	5.3	5.2 U	5.2	5.3 U	5.3	5.2 U	5.2	6.2 U	6.2
Aroclor-1016	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2
Aroclor-1221	2	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.5 U	2.5
Aroclor-1232	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2
Aroclor-1242	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.1 U	1:1	1.0 U	1.0	1.2 U	1.2
Aroclor-1248	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2
Aroclor-1254	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2
Aroclor-1260	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M4		M4		M4		M5		M5		M5	
Sample		MP04-MW08-A02		MP04-MW09-A01		MP04-MW09-A02		MP05-MW10-A01		MP05-MW10-A02		MP05-MW11-A01	
Sample Type													
Batch#		9503G642		9502G219		9503G660		9502G238		9503G660		9502G238	
Prep#		95GP0229		95GP0127		95GP0233		95GP0135		95GP0233		95GP0135	
RFW#		007		016		009		010		011		012	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/8/95		2/16/95		3/9/95		2/17/95		3/9/95		2/17/95	
Analysis Date		3/20/95		3/14/95		3/26/95		3/11/95		3/26/95		3/11/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
beta-BHC	0.2	0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
delta-BHC		0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
gamma-BHC (Lindane)	0.2	0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Heptachlor	0.4	0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Aldrin	0.04	0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Heptachlor epoxide	0.2	0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Endosulfan I	0.4	0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Dieldrin	0.03	0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDE	0.1	0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endrin	2	0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endosulfan II	0.4	0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDD	0.1	0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endosulfan sulfate	0.4	0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDT	0.1	0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Methoxychlor	40	0.53 U	0.53	0.62 U	0.62	0.52 U	0.52	0.51 U	0.51	0.52 U	0.52	0.52 U	0.52
Endrin ketone		0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endrin aldehyde		0.11 U	0.11	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
alpha-Chlordane		0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
gamma-Chlordane	0.5	0.053 U	0.053	0.062 U	0.062	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Toxaphene	3	5.3 U	5.3	6.2 U	6.2	5.2 U	5.2	5.1 U	5.1	5.2 U	5.2	5.2 U	5.2
Aroclor-1016	2	1.1 U	1.1	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1221	2	2.1 U	2.1	2.5 U	2.5	2.1 U	2.1	2.0 U	2.0	2.1 U	2.1	2.1 U	2.1
Aroclor-1232	2	1.1 U	1.1	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1242	2	1.1 U	1.1	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1248	2	1.1 U	1.1	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1254	2	1.1 U	1.1	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1260	2	1.1 U	1.1	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M5		M5		M8		M8		M8		M8	
Sample		MP05-MW11-A02		MP05-MW11-E02		MP08-MW12-A01		MP08-MW12-A02		MP08-MW12-C02		MP08-MW12-E02	
Sample Type				Field Rinsate Blank						Duplicate		Field Rinsate Blank	
Batch#		9503G660		9503G660		9502G238		9503G767		9503G767		9503G767	
Prep#		95GP0233		95GP0233		95GP0135		94GP0262		94GP0262		94GP0262	
RFW#		013		016		014		001		003		006	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/9/95		3/9/95		2/17/95		3/15/95		3/15/95		3/15/95	
Analysis Date		3/26/95		3/28/95		3/11/95		4/15/95		4/15/95		4/15/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
beta-BHC	0.2	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
delta-BHC		0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
gamma-BHC (Lindane)	0.2	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
Heptachlor	0.4	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
Aldrin	0.04	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
Heptachlor epoxide	0.2	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
Endosulfan I	0.4	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
Dieldrin	0.03	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDE	0.1	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endrin	2	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endosulfan II	0.4	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDD	0.1	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endosulfan sulfate	0.4	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDT	0.1	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Methoxychlor	40	0.52 U	0.52	0.51 U	0.51	0.52 U	0.52	0.52 U	0.52	0.52 U	0.52	0.52 U	0.52
Endrin ketone		0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endrin aldehyde		0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
alpha-Chlordane		0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
gamma-Chlordane	0.5	0.052 U	0.052	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052
Toxaphene	3	5.2 U	5.2	5.1 U	5.1	5.2 U	5.2	5.2 U	5.2	5.2 U	5.2	5.2 U	5.2
Aroclor-1016	2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1221	2	2.1 U	2.1	2.0 U	2.0	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1
Aroclor-1232	2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1242	2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1248	2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1254	2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1260	2	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M8		M8		M8		M8		M8		M8	
Sample		MP08-MW13-A01		MP08-MW13-A02		MP08-MW14-A01		MP08-MW14-A02		MP08-MW15-A01		MP08-MW15-A02	
Sample Type													
Batch#		9502G403		9503G767		9502G219		9503G767		9502G403		9503G767	
Prep#		95GP0164		94GP0262		95GP0127		94GP0262		95GP0164		94GP0262	
RFW#		001		008		018		010		003		012	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/22/95		3/15/95		2/16/95		3/15/95		2/22/95		3/15/95	
Analysis Date		3/14/95		4/15/95		3/14/95		4/15/95		3/14/95		4/15/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
beta-BHC	0.2	0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
delta-BHC		0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
gamma-BHC (Lindane)	0.2	0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
Heptachlor	0.4	0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
Aldrin	0.04	0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
Heptachlor epoxide	0.2	0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
Endosulfan I	0.4	0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
Dieldrin	0.03	0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
4,4'-DDE	0.1	0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
Endrin	2	0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
Endosulfan II	0.4	0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
4,4'-DDD	0.1	0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
Endosulfan sulfate	0.4	0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
4,4'-DDT	0.1	0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
Methoxychlor	40	0.52 U	0.52	0.52 U	0.52	0.48 U	0.48	0.46 U	0.46	0.52 U	0.52	0.53 U	0.53
Endrin ketone		0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
Endrin aldehyde		0.10 U	0.10	0.10 U	0.10	0.097 U	0.097	0.092 U	0.092	0.10 U	0.10	0.11 U	0.11
alpha-Chlordane		0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
gamma-Chlordane	0.5	0.052 U	0.052	0.052 U	0.052	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.053 U	0.053
Toxaphene	3	5.2 U	5.2	5.2 U	5.2	4.8 U	4.8	4.6 U	4.6	5.2 U	5.2	5.3 U	5.3
Aroclor-1016	2	1.0 U	1.0	1.0 U	1.0	0.97 U	0.97	0.92 U	0.92	1.0 U	1.0	1.1 U	1.1
Aroclor-1221	2	2.1 U	2.1	2.1 U	2.1	1.9 U	1.9	1.8 U	1.8	2.1 U	2.1	2.1 U	2.1
Aroclor-1232	2	1.0 U	1.0	1.0 U	1.0	0.97 U	0.97	0.92 U	0.92	1.0 U	1.0	1.1 U	1.1
Aroclor-1242	2	1.0 U	1.0	1.0 U	1.0	0.97 U	0.97	0.92 U	0.92	1.0 U	1.0	1.1 U	1.1
Aroclor-1248	2	1.0 U	1.0	1.0 U	1.0	0.97 U	0.97	0.92 U	0.92	1.0 U	1.0	1.1 U	1.1
Aroclor-1254	2	1.0 U	1.0	1.0 U	1.0	0.97 U	0.97	0.92 U	0.92	1.0 U	1.0	1.1 U	1.1
Aroclor-1260	2	1.0 U	1.0	1.0 U	1.0	0.97 U	0.97	0.92 U	0.92	1.0 U	1.0	1.1 U	1.1
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M8		M8		M12		M12		M12		M12	
Sample		MP08-MW15-C01		MP08-MW15-E01		MP12-MW16-A01		MP12-MW16-A02		MP12-MW17-A01		MP12-MW17-A02	
Sample Type		Duplicate		Field Rinsate Blank									
Batch#		9502G403		9502G403		9503G299		9503G681		9503G299		9503G681	
Prep#		95GP0164		95GP0164		95GP0154		95GP0247		95GP0154		95GP0247	
RFW#		005		008		001		001		003		003	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/22/95		2/22/95		2/20/95		3/10/95		2/20/95		3/10/95	
Analysis Date		3/14/95		3/15/95		3/15/95		3/29/95		3/15/95		3/29/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
beta-BHC	0.2	0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
delta-BHC		0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
gamma-BHC (Lindane)	0.2	0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
Heptachlor	0.4	0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
Aldrin	0.04	0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
Heptachlor epoxide	0.2	0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
Endosulfan I	0.4	0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
Dieldrin	0.03	0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
4,4'-DDE	0.1	0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Endrin	2	0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Endosulfan II	0.4	0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
4,4'-DDD	0.1	0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Endosulfan sulfate	0.4	0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
4,4'-DDT	0.1	0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Methoxychlor	40	0.52 U	0.52	0.54 U	0.54	0.53 U	0.53	0.53 U	0.53	0.52 U	0.52	0.52 U	0.52
Endrin ketone		0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Endrin aldehyde		0.10 U	0.10	0.11 U	0.11	0.11 U	0.11	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
alpha-Chlordane		0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
gamma-Chlordane	0.5	0.052 U	0.052	0.054 U	0.054	0.053 U	0.053	0.053 U	0.053	0.052 U	0.052	0.052 U	0.052
Toxaphene	3	5.2 U	5.2	5.4 U	5.4	5.3 U	5.3	5.3 U	5.3	5.2 U	5.2	5.2 U	5.2
Aroclor-1016	2	1.0 U	1.0	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1221	2	2.1 U	2.1	2.2 U	2.2	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1
Aroclor-1232	2	1.0 U	1.0	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1242	2	1.0 U	1.0	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1248	2	1.0 U	1.0	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1254	2	1.0 U	1.0	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1260	2	1.0 U	1.0	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M12		M12		M14		M14		M14		M14	
Sample		MP12-MW18-A01		MP12-MW18-A02		MP14-MW19-A01		MP14-MW19-A02		MP14-MW20-A01		MP14-MW20-A02	
Sample Type													
Batch#		9503G299		9503G681		9503G299		9503G681		9502G403		9503G722	
Prep#		95GP0154		95GP0247		95GP0154		95GP0247		95GP0164		95GP0247	
RFW#		005		005		007		007		010		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/20/95		3/10/95		2/20/95		3/10/95		2/22/95		3/13/95	
Analysis Date		3/15/95		3/29/95		3/15/95		3/29/95		3/15/95		3/29/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
beta-BHC	0.2	0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
delta-BHC		0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
gamma-BHC (Lindane)	0.2	0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
Heptachlor	0.4	0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
Aldrin	0.04	0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
Heptachlor epoxide	0.2	0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
Endosulfan I	0.4	0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
Dieldrin	0.03	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
4,4'-DDE	0.1	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
Endrin	2	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
Endosulfan II	0.4	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
4,4'-DDD	0.1	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
Endosulfan sulfate	0.4	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
4,4'-DDT	0.1	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
Methoxychlor	40	0.56 U	0.56	0.52 U	0.52	0.52 U	0.52	0.52 U	0.52	0.46 U	0.46	0.60 U	0.60
Endrin ketone		0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
Endrin aldehyde		0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.093 U	0.093	0.12 U	0.12
alpha-Chlordane		0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
gamma-Chlordane	0.5	0.056 U	0.056	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.046 U	0.046	0.060 U	0.060
Toxaphene	3	5.6 U	5.6	5.2 U	5.2	5.2 U	5.2	5.2 U	5.2	4.6 U	4.6	6.0 U	6.0
Aroclor-1016	2	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	0.93 U	0.93	1.2 U	1.2
Aroclor-1221	2	2.2 U	2.2	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	1.9 U	1.9	2.4 U	2.4
Aroclor-1232	2	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	0.93 U	0.93	1.2 U	1.2
Aroclor-1242	2	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	0.93 U	0.93	1.2 U	1.2
Aroclor-1248	2	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	0.93 U	0.93	1.2 U	1.2
Aroclor-1254	2	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	0.93 U	0.93	1.2 U	1.2
Aroclor-1260	2	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	0.93 U	0.93	1.2 U	1.2
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M14		M14		M14		M16		M16		M18	
Sample		MP14-MW20-E02		MP14-MW21-A01		MP14-MW21-A02		MP16-MW22-A01		MP16-MW22-A02		MP18-MW03-A01	
Sample Type		Field Rinsate Blank											
Batch#		9503G722		9502G403		9503G660		9502G238		9503G660		9505G825	
Prep#		95GP0247		95GP0164		95GP0233		95GP0135		95GP0233		95GP0510	
RFW#		003		012		019		016		018		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/13/95		2/22/95		3/9/95		2/17/95		3/9/95		5/10/95	
Analysis Date		3/29/95		3/15/95		3/28/95		3/11/95		3/28/95		5/19/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
beta-BHC	0.2	0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
delta-BHC		0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
gamma-BHC (Lindane)	0.2	0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
Heptachlor	0.4	0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
Aldrin	0.04	0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
Heptachlor epoxide	0.2	0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
Endosulfan I	0.4	0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
Dieldrin	0.03	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
4,4'-DDE	0.1	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
Endrin	2	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
Endosulfan II	0.4	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
4,4'-DDD	0.1	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
Endosulfan sulfate	0.4	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
4,4'-DDT	0.1	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
Methoxychlor	40	0.52 U	0.52	0.47 U	0.47	0.54 U	0.54	0.48 U	0.48	0.52 U	0.52	0.54 U	0.54
Endrin ketone		0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
Endrin aldehyde		0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.095 U	0.095	0.10 U	0.10	0.11 U	0.11 U
alpha-Chlordane		0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
gamma-Chlordane	0.5	0.052 U	0.052	0.047 U	0.047	0.054 U	0.054	0.048 U	0.048	0.052 U	0.052	0.054 U	0.054
Toxaphene	3	5.2 U	5.2	4.7 U	4.7	5.4 U	5.4	4.8 U	4.8	5.2 U	5.2	5.4 U	5.4
Aroclor-1016	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1 U
Aroclor-1221	2	2.1 U	2.1	1.9 U	1.9	2.2 U	2.2	1.9 U	1.9	2.1 U	2.1	2.2 U	2.2
Aroclor-1232	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1 U
Aroclor-1242	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1 U
Aroclor-1248	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1 U
Aroclor-1254	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1 U
Aroclor-1260	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	0.95 U	0.95	1.0 U	1.0	1.1 U	1.1 U
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M18		M18		M18		M18		M18		M18	
Sample		MP18-MW03-E01		MP18-MW03-A02		MP18-MW24-A01		MP18-MW24-A02		MP18-MW24-C02		MP18-MW24-E01	
Sample Type		Field Rinsate Blank								Duplicate		Field Rinsate Blank	
Batch#		9505G825		9505G139		9502G238		9503G681		9503G681		9502G238	
Prep#		95GP0510		95GP0580		95GP0135		95GP0247		95GP0248		95GP0135	
RFW#		001		001		001		009		011		004	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		5/10/95		5/25/95		2/17/95		3/10/95		3/10/95		2/17/95	
Analysis Date		5/19/95		6/1/95		3/10/95		3/29/95		3/29/95		3/10/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
beta-BHC	0.2	0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
delta-BHC		0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
gamma-BHC (Lindane)	0.2	0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
Heptachlor	0.4	0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
Aldrin	0.04	0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
Heptachlor epoxide	0.2	0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
Endosulfan I	0.4	0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
Dieldrin	0.03	0.11 U	0.11 U	0.095 U	0.095	0.093 U	0.093	0.10 U	0.10	0.10 U	0.10	0.094 U	0.094
4,4'-DDE	0.1	0.11 U	0.11 U	0.095 U	0.095	0.093 U	0.093	0.10 U	0.10	0.10 U	0.10	0.094 U	0.094
Endrin	2	0.11 U	0.11 U	0.095 U	0.095	0.093 U	0.093	0.10 U	0.10	0.10 U	0.10	0.094 U	0.094
Endosulfan II	0.4	0.11 U	0.11 U	0.095 U	0.095	0.093 U	0.093	0.10 U	0.10	0.10 U	0.10	0.094 U	0.094
4,4'-DDD	0.1	0.11 U	0.11 U	0.095 U	0.095	0.18	0.093	0.10 U	0.10	0.11 P	0.10	0.094 U	0.094
Endosulfan sulfate	0.4	0.11 U	0.11 U	0.095 U	0.095	0.093 U	0.093	0.10 U	0.10	0.10 U	0.10	0.094 U	0.094
4,4'-DDT	0.1	0.11 U	0.11 U	0.095 U	0.095	0.093 U	0.093	0.10 U	0.10	0.10 U	0.10	0.094 U	0.094
Methoxychlor	40	0.54 U	0.54	0.48 U	0.48	0.46 U	0.46	0.52 U	0.52	0.52 U	0.52	0.47 U	0.47
Endrin ketone		0.11 U	0.11 U	0.095 U	0.095	0.093 U	0.093	0.10 U	0.10	0.10 U	0.10	0.094 U	0.094
Endrin aldehyde		0.11 U	0.11 U	0.095 U	0.095	0.093 U	0.093	0.10 U	0.10	0.10 U	0.10	0.094 U	0.094
alpha-Chlordane		0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
gamma-Chlordane	0.5	0.054 U	0.054	0.048 U	0.048	0.046 U	0.046	0.052 U	0.052	0.052 U	0.052	0.047 U	0.047
Toxaphene	3	5.4 U	5.4	4.8 U	4.8	4.6 U	4.6	5.2 U	5.2	5.2 U	5.2	4.7 U	4.7
Aroclor-1016	2	1.1 U	1.1 U	0.95 U	0.95	0.93 U	0.93	1.0 U	1.0	1.0 U	1.0	0.94 U	0.94
Aroclor-1221	2	2.2 U	2.2	1.9 U	1.9	1.9 U	1.9	2.1 U	2.1	2.1 U	2.1	1.9 U	1.9
Aroclor-1232	2	1.1 U	1.1 U	0.95 U	0.95	0.93 U	0.93	1.0 U	1.0	1.0 U	1.0	0.94 U	0.94
Aroclor-1242	2	1.1 U	1.1 U	0.95 U	0.95	0.93 U	0.93	1.0 U	1.0	1.0 U	1.0	0.94 U	0.94
Aroclor-1248	2	1.1 U	1.1 U	0.95 U	0.95	0.93 U	0.93	1.0 U	1.0	1.0 U	1.0	0.94 U	0.94
Aroclor-1254	2	1.1 U	1.1 U	0.95 U	0.95	0.93 U	0.93	1.0 U	1.0	1.0 U	1.0	0.94 U	0.94
Aroclor-1260	2	1.1 U	1.1 U	0.95 U	0.95	0.93 U	0.93	1.0 U	1.0	1.0 U	1.0	0.94 U	0.94
Method:TCL Pesticides/PCBs													

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		M18		M18		M18		M18		B1	
Sample		MP18-MW24-E02		MP18-MW25-A01		MP18-MW25-A02		MP18-MW25-C01		B1-MW01B-A01	
Sample Type		Field Rinsate Blank						Duplicate			
Batch#		9503G681		9502G238		9503G681		9502G238		9502G169	
Prep#		95GP0247		95GP0135		95GP0247		95GP0135		95GP0119	
RFW#		014		006		016		008		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/10/95		2/17/95		3/10/95		2/17/95		2/14/95	
Analysis Date		3/29/95		3/10/95		3/29/95		3/11/95		3/4/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
beta-BHC	0.2	0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
delta-BHC		0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
gamma-BHC (Lindane)	0.2	0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
Heptachlor	0.4	0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
Aldrin	0.04	0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
Heptachlor epoxide	0.2	0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.041 J	0.052
Endosulfan I	0.4	0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
Dieldrin	0.03	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
4,4'-DDE	0.1	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Endrin	2	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Endosulfan II	0.4	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
4,4'-DDD	0.1	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Endosulfan sulfate	0.4	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
4,4'-DDT	0.1	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Methoxychlor	40	0.56 U	0.56	0.47 U	0.47	0.53 U	0.53	0.51 U	0.51	0.52 U	0.52
Endrin ketone		0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
Endrin aldehyde		0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10
alpha-Chlordane		0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
gamma-Chlordane	0.5	0.056 U	0.056	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052
Toxaphene	3	5.6 U	5.6	4.7 U	4.7	5.3 U	5.3	5.1 U	5.1	5.2 U	5.2
Aroclor-1016	2	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1221	2	2.2 U	2.2	1.9 U	1.9	2.1 U	2.1	2.0 U	2.0	2.1 U	2.1
Aroclor-1232	2	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1242	2	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1248	2	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1254	2	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Aroclor-1260	2	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0
Method:TCL Pesticides/PCBs											

MAIN POST
GROUNDWATER PESTICIDES/PCBS

Geographical Location		B1		B2		B2		B3		B3	
Sample		B1-MW01B-A02		B2-MW02B-A01		B2-MW02B-A02		B3-MW03B-A01		B3-MW03B-A02	
Sample Type											
Batch#		9503G616		9502G169		9503G616		9502G169		9503G740	
Prep#		95GP0219		95GP0119		95GP0219		95GP0119		95GP0251	
RFW#		008		003		010		005		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/7/95		2/14/95		3/7/95		2/14/95		3/14/95	
Analysis Date		3/17/95		3/4/95		3/17/95		3/4/95		4/12/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
beta-BHC	0.2	0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
delta-BHC		0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
gamma-BHC (Lindane)	0.2	0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
Heptachlor	0.4	0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
Aldrin	0.04	0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
Heptachlor epoxide	0.2	0.041 J	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
Endosulfan I	0.4	0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
Dieldrin	0.03	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.10 U	0.10
4,4'-DDE	0.1	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.050 JP	0.10
Endrin	2	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.10 U	0.10
Endosulfan II	0.4	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.10 U	0.10
4,4'-DDD	0.1	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.10 U	0.10
Endosulfan sulfate	0.4	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.10 U	0.10
4,4'-DDT	0.1	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.10 U	0.10
Methoxychlor	40	0.51 U	0.51	0.56 U	0.56	0.52 U	0.52	0.47 U	0.47	0.50 U	0.5
Endrin ketone		0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.10 U	0.10
Endrin aldehyde		0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.094 U	0.094	0.10 U	0.10
alpha-Chlordane		0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
gamma-Chlordane	0.5	0.051 U	0.051	0.056 U	0.056	0.052 U	0.052	0.047 U	0.047	0.050 U	0.05
Toxaphene	3	5.1 U	5.1	5.6 U	5.6	5.2 U	5.2	4.7 U	4.7	5.0 U	5.0
Aroclor-1016	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.0 U	1.0
Aroclor-1221	2	2.0 U	2.0	2.2 U	2.2	2.1 U	2.1	1.9 U	1.9	2.0 U	2.0
Aroclor-1232	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.0 U	1.0
Aroclor-1242	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.0 U	1.0
Aroclor-1248	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.0 U	1.0
Aroclor-1254	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.0 U	1.0
Aroclor-1260	2	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	0.94 U	0.94	1.0 U	1.0
Method:TCL Pesticides/PCBs											

GROUNDWATER PESTICIDES/PCBS

Geographical Location		B3		B3		B4		B4		B5		B5	
Sample		B3-MW03B-E01		B3-MW03B-E02		B4-MW04B-A01		B4-MW04B-A02		B5-MW05B-A01		B5-MW05B-A02	
Sample Type		Field Rinsate Blank		Field Rinsate Blank									
Batch#		9502G169		9503G616		9502G169		9503G616		9502G169		9503G616	
Prep#		95GP0119		95GP0219		95GP0119		95GP0219		95GP0119		95GP0219	
RFW#		008		006		010		012		012		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/13/95		3/7/95		2/13/95		3/7/95		2/13/95		3/7/95	
Analysis Date		3/4/95		3/17/95		3/4/95		3/17/95		3/4/95		3/17/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
beta-BHC	0.2	0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
delta-BHC		0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
gamma-BHC (Lindane)	0.2	0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
Heptachlor	0.4	0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
Aldrin	0.04	0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
Heptachlor epoxide	0.2	0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
Endosulfan I	0.4	0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
Dieldrin	0.03	0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
4,4'-DDE	0.1	0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
Endrin	2	0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
Endosulfan II	0.4	0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
4,4'-DDD	0.1	0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
Endosulfan sulfate	0.4	0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
4,4'-DDT	0.1	0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
Methoxychlor	40	0.48 U	0.48	0.48 U	0.48	0.62 U	0.62	0.52 U	0.52	0.52 U	0.52	0.58 U	0.58
Endrin ketone		0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
Endrin aldehyde		0.095 U	0.095	0.096 U	0.096	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10	0.12 U	0.12
alpha-Chlordane		0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
gamma-Chlordane	0.5	0.048 U	0.048	0.048 U	0.048	0.062 U	0.062	0.052 U	0.052	0.052 U	0.052	0.058 U	0.058
Toxaphene	3	4.8 U	4.8	4.8 U	4.8	6.2 U	6.2	5.2 U	5.2	5.2 U	5.2	5.8 U	5.8
Aroclor-1016	2	0.95 U	0.95	0.96 U	0.96	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.2 U	1.2
Aroclor-1221	2	1.9 U	1.9	1.9 U	1.9	2.5 U	2.5	2.1 U	2.1	2.1 U	2.1	2.3 U	2.3
Aroclor-1232	2	0.95 U	0.95	0.96 U	0.96	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.2 U	1.2
Aroclor-1242	2	0.95 U	0.95	0.96 U	0.96	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.2 U	1.2
Aroclor-1248	2	0.95 U	0.95	0.96 U	0.96	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.2 U	1.2
Aroclor-1254	2	0.95 U	0.95	0.96 U	0.96	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.2 U	1.2
Aroclor-1260	2	0.95 U	0.95	0.96 U	0.96	1.2 U	1.2	1.0 U	1.0	1.0 U	1.0	1.2 U	1.2
Method:TCL Pesticides/PCBs													

MAIN POST
TRANSFORMERS AND CONCRETE - PCBs

Geographical Location		Building 292		Building 686		Building 718		Building 1002		Building 1002		Building 1004	
Sample		MPT5-TR01-A01		MPT6-TR01-A01		MPT4-TR01-A01		MPT7-CC01-A01		MPT7-CC01-C01		MPT8-TR01-A01	
Sample Type		Transformer		Transformer		Transformer		Concrete		Duplicate		Transformer	
Batch#		9411G832		9411G832		9411G832		9412G922		9412G922		9411G832	
Prep#		94GP1024		94GP1024		94GP1024						94GP1024	
RFW#		007		008		006		010		011		009	
Sample Depth													
Dilution Factor		2.5		0.5		0.5		25000		25000		5.0	
Matrix		soil		soil		soil		Concrete		Concrete		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		11/29/94		11/29/94		11/29/94						11/29/94	
Analysis Date		12/21/94		12/21/94		12/22/94		12/31/94		12/31/94		12/21/94	
Analysis	Standard	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting
		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
% Solids		81.3	0.10	89.4	0.10	77.7	0.10					88.2	0.10
Aroclor-1016	0.055	0.24 U	0.24	0.045 U	0.045	0.051 U	0.051	2000 U	2000	1900 U	1900	0.45 U	0.45
Aroclor-1221	0.055	0.24 U	0.24	0.045 U	0.045	0.051 U	0.051	2000 U	2000	1900 U	1900	0.45 U	0.45
Aroclor-1232	0.055	0.24 U	0.24	0.045 U	0.045	0.051 U	0.051	2000 U	2000	1900 U	1900	0.45 U	0.45
Aroclor-1242	0.055	0.24 U	0.24	0.045 U	0.045	0.051 U	0.051	2000 U	2000	1900 U	1900	0.45 U	0.45
Aroclor-1248	0.055	0.24 U	0.24	0.045 U	0.045	0.051 U	0.051	8400	2000	6300	1900	0.45 U	0.45
Aroclor-1254	0.055	0.48 U	0.48	0.089 U	0.089	0.1 U	0.1	3900 U	3900	3900 U	3900	0.89 U	0.89
Aroclor-1260	0.055	0.68		0.18		0.059 J	0.1	3900 U	3900	3900 U	3900	0.89 U	0.89
Method:TCL PCBs													

MAIN POST
TRANSFORMERS AND CONCRETE - PCBs

Geographical Location		Building 1208		Building 1208		Building 1209		Bulding 1220		Bulding 1220		Bulding 1220	
Sample		MPT2-CC01-A01		MPT2-CC01-A01DL		MPT1-CC01-A01		MPT3-TR01-A01		MPT3-TR02-A01		MPT3-TR03-A01	
Sample Type		Concrete		Concrete		Concrete		Transformer		Transformer		Transformer	
Batch#		9412G922		9412G922		9412G922		9411G832		9411G832		9411G832	
Prep#								94GP1024		94GP1024		94GP1024	
RFW#		009DL		009		008		001		002		003	
Sample Depth													
Dilution Factor		25000		50000		5000		0.5		0.5		0.5	
Matrix		Concrete		Concrete		Concrete		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date						NA		11/29/94		11/29/94		11/29/94	
Analysis Date		12/31/94		12/31/94		12/31/94		12/21/94		12/21/94		12/21/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids								88.3	0.10	96.4	0.10	84.9	0.10
Aroclor-1016	0.055	2000 U	2000	NA	NA	400 U	400	0.045 U	0.045	0.041 U	0.041	0.047 U	0.047
Aroclor-1221	0.055	2000 U	2000	NA	NA	400 U	400	0.045 U	0.045	0.041 U	0.041	0.047 U	0.047
Aroclor-1232	0.055	2000 U	2000	NA	NA	400 U	400	0.045 U	0.045	0.041 U	0.041	0.047 U	0.047
Aroclor-1242	0.055	2000 U	2000	NA	NA	400 U	400	0.045 U	0.045	0.041 U	0.041	0.047 U	0.047
Aroclor-1248	0.055	2000 U	2000	NA	NA	400 U	400	0.045 U	0.045	0.041 U	0.041	0.047 U	0.047
Aroclor-1254	0.055	4000 U	4000	NA	NA	790 U	790	0.089 U	0.089	0.082 U	0.082	0.094 U	0.094
Aroclor-1260	0.055	E		19000	8000	1500	790	0.015 J	0.089	0.082 U	0.082	0.063 J	0.094
Method:TCL PCBs													

MAIN POST
TRANSFORMERS AND CONCRETE - PCBs

Geographical Location		Bulding 1220		Bulding 1220		Building 1220	
Sample		MPT3-TR04-A01		MPT3-TR04-C01		MPT3-CC01-A01	
Sample Type		Transformer		Duplicate		Concrete	
Batch#		9411G832		9411G832		9412G922	
Prep#		94GP1024		94GP1024			
RFW#		004		005		007	
Sample Depth							
Dilution Factor		0.5		0.5		0.50	
Matrix		soil		soil		Concrete	
Units	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date		11/29/94		11/29/94		NA	
Analysis Date		12/21/94		12/22/94		12/31/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		87.9	0.10	88.0	0.10		
Aroclor-1016	0.055	0.045 U	0.045	0.045 U	0.045	0.04 U	0.04
Aroclor-1221	0.055	0.045 U	0.045	0.045 U	0.045	0.04 U	0.04
Aroclor-1232	0.055	0.045 U	0.045	0.045 U	0.045	0.04 U	0.04
Aroclor-1242	0.055	0.045 U	0.045	0.045 U	0.045	0.04 U	0.04
Aroclor-1248	0.055	0.045 U	0.045	0.045 U	0.045	0.04 U	0.04
Aroclor-1254	0.055	0.090 U	0.09	0.089 U	0.089	0.08 U	0.079
Aroclor-1260	0.055	0.087 J	0.09	0.07 J	0.089	0.026	0.079
Method:TCL PCBs							

CHARLES WOOD

CHARLES WOOD
SEDIMENT VOLATILES

Geographical Location			Background		Background		CW5	
Sample			CW02-SD01-A01		CW05-SD01-A01		CW06-SD01-A01	
Batch#			9412G923		9412G923		9412G923	
Prep#			94GVT028		94GVT028		94GVT028	
RFW#			005		006		006	
Sample Depth			0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00	
Matrix			soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date			12/1/94		12/1/94		12/1/94	
Analysis Date			12/9/94		12/9/94		12/9/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane		0.0073	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Bromomethane		0.0067	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Vinyl Chloride		0.0079	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Chloroethane		0.0091	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Methylene Chloride		0.0027	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Acetone		0.0069	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Carbon Disulfide		0.0044	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
1,1-Dichloroethene		0.0049	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
1,1-Dichloroethane		0.003	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
1,2-Dichloroethene (total)		0.0044	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Chloroform		0.0029	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
1,2-Dichloroethane		0.0024	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
2-Butanone		0.0041	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
1,1,1-Trichloroethane		0.0017	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Carbon Tetrachloride		0.0015	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Bromodichloromethane		0.002	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
1,2-Dichloropropane		0.0017	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
cis-1,3-Dichloropropene		0.003	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Trichloroethene		0.002	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Dibromochloromethane		0.0024	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
1,1,2-Trichloroethane		0.0043	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Benzene		0.0033	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
trans-1,3-Dichloropropene		0.0024	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Bromoform		0.0031	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
4-Methyl-2-pentanone		0.0055	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
2-Hexanone		0.0039	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Tetrachloroethene		0.004	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
1,1,2,2-Tetrachloroethane		0.0042	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Toluene		0.0027	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Chlorobenzene		0.0027	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Ethylbenzene		0.0031	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Styrene		0.0038	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Xylene (total)		0.0038	0.014 U	0.014	0.018 U	0.018	0.013 U	0.013
Total Est. Conc. of TIC.					0.02			
Method:TCL Volatiles								

CHARLES WOOD
SEDIMENT SEMIVOLATILES

Geographical Location			Background		Background		Background		CW5	
Sample			CW02-SD01-A01		CW05-SD01-A01		CW05-SD01-A01R		CW06-SD01-A01	
Batch#			9412G923		9412G923		9412G923		9412G923	
Prep#			94GBO800		94GBO800		94GBO800		94GBO800	
RFW#			005		006		006		007	
Sample Depth			0-6"		0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date			12/22/94		12/22/94		12/22/94		12/22/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol		0.234	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
bis(2-Chloroethyl) ether		0.32	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2-Chlorophenol		0.241	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
1,3-Dichlorobenzene		0.175	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
1,4-Dichlorobenzene		0.158	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
1,2-Dichlorobenzene		0.188	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2-Methylphenol		0.221	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2,2'-oxybis(1-Chloropropane)		0.231	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
4-Methylphenol		0.426	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
N-Nitroso-di-n-propylamine		0.264	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Hexachloroethane		0.175	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Nitrobenzene		0.244	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Isophorone		0.129	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2-Nitrophenol		0.231	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2,4-Dimethylphenol		0.158	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
bis(2-Chloroethoxy) methane		0.201	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2,4-Dichlorophenol		0.145	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
1,2,4-Trichlorobenzene		0.317	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Naphthalene		0.277	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
4-Chloroaniline		0.096	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Hexachlorobutadiene		0.152	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
4-Chloro-3-methylphenol		0.102	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2-Methylnaphthalene		0.287	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Hexachlorocyclopentadiene		0.119	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2,4,6-Trichlorophenol		0.185	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2,4,5-Trichlorophenol		0.155	1.2 U	1.2	1.5 U	1.5	1.5 U	1.5	1 U	1
2-Chloronaphthalene		0.271	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2-Nitroaniline		0.201	1.2 U	1.2	1.5 U	1.5	1.5 U	1.5	1 U	1
Dimethylphthalate		0.145	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.4 J	0.42
Acenaphthylene		0.198	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2,6-Dinitrotoluene		0.172	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
3-Nitroaniline		0.172	1.2 U	1.2	1.5 U	1.5	1.5 U	1.5	1 U	1
Acenaphthene		0.221	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2,4-Dinitrophenol		0.152	1.2 U	1.2	1.5 U	1.5	1.5 U	1.5	1 U	1

CHARLES WOOD
SEDIMENT SEMIVOLATILES

Geographical Location			Background		Background		Background		CW5	
Sample			CW02-SD01-A01		CW05-SD01-A01		CW05-SD01-A01R		CW06-SD01-A01	
Batch#			9412G923		9412G923		9412G923		9412G923	
Prep#			94GBO800		94GBO800		94GBO800		94GBO800	
RFW#			005		006		006		007	
Sample Depth			0-6"		0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date			12/22/94		12/22/94		12/22/94		12/22/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		0.248	1.2 U	1.2	1.5 U	1.5	1.5 U	1.5	1 U	1
Dibenzofuran		0.215	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
2,4-Dinitrotoluene		0.191	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Diethylphthalate		0.178	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
4-Chlorophenyl-phenylether		0.231	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Fluorene		0.208	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
4-Nitroaniline		0.211	1.2 U	1.2	1.5 U	1.5	1.5 U	1.5	1 U	1
4,6-Dinitro-2-methylphenol		0.175	1.2 U	1.2	1.5 U	1.5	1.5 U	1.5	1 U	1
N-Nitrosodiphenylamine (1)		0.139	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
4-Bromophenyl-phenylether		0.175	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Hexachlorobenzene		0.182	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Pentachlorophenol		0.132	1.2 U	1.2	1.5 U	1.5	1.5 U	1.5	1 U	1
Phenanthrene	0.225	0.165	0.47 U	0.47	0.079 J	0.61	0.074 J	0.61	0.098 J	0.42
Anthracene		0.152	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Carbazole		0.145	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Di-n-butylphthalate		0.215	0.47 U	0.47	0.12 J	0.61	0.12 JB	0.61	0.081 J	0.42
Fluoranthene	0.6	0.198	0.47 U	0.47	0.12 J	0.61	0.12 J	0.61	0.16 J	0.42
Pyrene	0.35	0.178	0.47 U	0.47	0.24 J	0.61	0.41 J	0.61	0.19 J	0.42
Butylbenzylphthalate		0.175	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
3,3'-Dichlorobenzidine		0.092	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Benzo(a)anthracene	0.23	0.162	0.47 U	0.47	0.09 J	0.61	0.083 J	0.61	0.079 J	0.42
Chrysene	0.4	0.145	0.47 U	0.47	0.11 J	0.61	0.14 J	0.61	0.087 J	0.42
bis(2-Ethylhexy)phthalate		0.32	0.47 U	0.47	0.21 J	0.61	0.23 J	0.61	0.45	0.42
Di-n-octyl phthalate		0.185	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.11 J	0.42
Benzo(b)fluoranthene		0.188	0.47 U	0.47	0.16 J	0.61	0.16 J	0.61	0.1 J	0.42
Benzo(k)fluoranthene		0.205	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Benzo(a)pyrene	0.4	0.162	0.47 U	0.47	0.61 U	0.61	0.1 J	0.61	0.42 U	0.42
Indeno(1,2,3-cd)pyrene		0.234	0.47 U	0.47	0.17 J	0.61	0.19 J	0.61	0.42 U	0.42
Dibenzo(a,h)anthracene		0.198	0.47 U	0.47	0.61 U	0.61	0.61 U	0.61	0.42 U	0.42
Benzo(g,h,i)perylene		0.224	0.47 U	0.47	0.15 J	0.61	0.21 J	0.61	0.42 U	0.42
Organic Carbon %					1.3	0.06				
% solids					76.3	0.10				
Total Est. Conc. of TIC			10.1 J		28.2 J		39.7 J		9.39 J	
Method:TCL Semivolatiles										

CHARLES WOOD
SEDIMENT INORGANICS

Geographical Location		Background		Background		Background		CW5	
Sample		CW02-SD01-A01		CW05-SD01-A01		CW05-SD01-A01		CW06-SD01-A01	
Batch#		9412G923		9505G138		9412G923		9412G923	
Prep#		94GTS473		95GTS327		94GTS473		94GTS473	
RFW#		005		001		006		007	
Sample Depth		0-6"		0-6"		0-6"		0-6"	
Dilution Factor		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/1/94		5/25/95		12/1/94		12/1/94	
Analysis Date		12/9/94		6/1/95		12/9/94		12/9/94	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
% Solids		71.3	0.10	76.3	0.10	54.5	0.10	79.3	0.10
Silver	1	0.63 U	0.63			1.1 U	1.1	0.70 U	0.7
Aluminum		1910	5.5			6660	9.1	866	6.1
Arsenic	33	1.1	0.38			5.8	0.54	0.74	0.35
Barium		8.4	0.43			45.7	0.71	9.6	0.48
Beryllium		0.31 U	0.31			0.51 U	0.51	0.34 U	0.34
Calcium		343	2.5			2960	4.1	509	2.7
Cadmium	5	0.70 U	0.70			1.2 U	1.2	0.77 U	0.77
Cobalt		0.88	0.57			4.2	0.95	1.3	0.64
Chromium	80	24.4	1.3			36.9	2.2	7.8	1.5
Copper	70	2.2	0.49			24.5	0.82	7.4	0.55
Iron		5860	0.96			19600	1.6	6910	1.1
Mercury	0.15	0.10 U	0.10			0.15 U	0.15	0.084 U	0.084
Potassium		1700	168			1410	279	256	186
Magnesium		640	7.8			2560	13.0	320	8.7
Manganese		5.4	0.41			65.1	0.68	25.8	0.45
Sodium		37.4	3.2			271	5.2	54.0	3.5
Nickel	30	2.6 U	2.6			11.3	4.3	2.9 U	2.9
Lead	35	6.4	1.5 *			142	10.8 *	9.3	1.8 *
Antimony		4.4 U	4.4			7.3 U	7.3	4.9 U	4.9
Selenium		0.21 U	0.21			0.68	0.30	0.20 U	0.2
Thallium		0.26 U	0.26			0.37 U	0.37	0.24 U	0.24
Vanadium		11.3	0.59			39.5	0.99	5.4	0.66
Zinc	120	14.3	0.57			126	0.95	22.5	0.64
Cyanide		1.1	0.63			0.87 U	0.87	0.47 U	0.47
Dilution Factor		* = 4.00				* = 20.0		* = 5.00	
Method:TAL Metals, Cyanide									

CHARLES WOOD
SEDIMENT PESTICIDES/PCBS

Geographical Location		Background		Background		Background		CW5	
Sample		CW02-SD01-A01		CW05-SD01-A01		CW05-SD01-A01DL		CW06-SD01-A01	
Batch#		9412G923		9412G923		9412G923		9412G923	
Prep#		94GP1049		94GP1049		94GP1049		94GP1049	
RFW#		005		006		006DL		007	
Sample Depth		0-6"		0-6"		0-6"		0-6"	
Dilution Factor		1.00		1.00		2.00		1.00	
Matrix		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date		1/12/95		1/12/95		1/12/95		1/12/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
alpha-BHC		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
beta-BHC		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
delta-BHC		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
gamma-BHC (Lindane)		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
Heptachlor		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
Aldrin		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
Heptachlor epoxide		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0042 P	0.0021
Endosulfan I		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
Dieldrin		0.0047 U	0.0047	0.006 U	0.006	0.012 U	0.012	0.0042 U	0.0042
4,4'-DDE	0.002	0.0028 J	0.0047	0.096	0.006	.085 D	0.012	0.0067	0.0042
Endrin		0.0047 U	0.0047	0.006 U	0.006	0.012 U	0.012	0.0042 U	0.0042
Endosulfan II		0.0047 U	0.0047	0.006 U	0.006	0.012 U	0.012	0.0042 U	0.0042
4,4'-DDD	0.002	0.0065	0.0047	0.013 P	0.006	.015 PD	0.012	0.005 P	0.0042
Endosulfan sulfate		0.0047 U	0.0047	0.006 U	0.006	0.012 U	0.012	0.0042 U	0.0042
4,4'-DDT	0.00183	0.007	0.0047	0.11	0.006	.11 D	0.012	0.0029 JP	0.0042
Methoxychlor		0.023 U	0.023	0.03 U	0.03	0.06 U	0.06	0.021 U	0.021
Endrin ketone		0.0047 U	0.0047	0.006 U	0.006	0.012 U	0.012	0.0042 U	0.0042
Endrin aldehyde		0.0047 U	0.0047	0.006 U	0.006	0.012 U	0.012	0.0042 U	0.0042
alpha-Chlordane		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
gamma-Chlordane		0.0023 U	0.0023	0.003 U	0.003	0.006 U	0.006	0.0021 U	0.0021
Toxaphene		0.23 U	0.23	0.3 U	0.3	0.6 U	0.6	0.21 U	0.21
Aroclor-1016		0.047 U	0.047	0.06 U	0.06	0.12 U	0.12	0.042 U	0.042
Aroclor-1221		0.093 U	0.093	0.12 U	0.12	0.24 U	0.24	0.084 U	0.084
Aroclor-1232		0.047 U	0.047	0.06 U	0.06	0.12 U	0.12	0.042 U	0.042
Aroclor-1242		0.047 U	0.047	0.06 U	0.06	0.12 U	0.12	0.042 U	0.042
Aroclor-1248		0.047 U	0.047	0.06 U	0.06	0.12 U	0.12	0.042 U	0.042
Aroclor-1254		0.047 U	0.047	0.06 U	0.06	0.12 U	0.12	0.042 U	0.042
Aroclor-1260		0.047 U	0.047	0.06 U	0.06	0.12 U	0.12	0.042 U	0.042
Method:TCL Pesticides/PCBs									

CHARLES WOOD
SURFACE WATER VOLATILES

Geographical Location			Background		Background	
Sample			CW02-SW01-A01		CW05-SW01-A01	
Batch#			9412G923		9412G923	
Prep#			94GVE348		94GVE348	
RFW#			001		003	
Dilution Factor			1.00		1.00	
Matrix			water		water	
Units	ug/l		ug/l		ug/l	
Sampling Date			12/1/94		12/1/94	
Analysis Date			12/9/94		12/9/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	5.7	7.3	10 U	10	10 U	10
Bromomethane	48.4	6.7	10 U	10	10 U	10
Vinyl Chloride	0.083	7.9	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10
Methylene Chloride	2.49	2.7	10 U	10	10 U	10
Acetone		6.9	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10
1,1-Dichloroethene	4.81	4.9	10 U	10	10 U	10
1,1-Dichloroethane		3.0	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10
Chloroform	5.67	2.9	10 U	10	10 U	10
1,2-Dichloroethane	0.291	2.4	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10
1,1,1-Trichloroethane	127	1.7	10 U	10	10 U	10
Carbon Tetrachloride	0.363	1.5	10 U	10	10 U	10
Bromodichloromethane	0.266	2.0	10 U	10	10 U	10
1,2-Dichloropropane		1.7	10 U	10	10 U	10
cis-1,3-Dichloropropene		3.0	10 U	10	10 U	10
Trichloroethene	1.09	2.0	10 U	10	10 U	10
Dibromochloromethane	72.6	2.4	10 U	10	10 U	10
1,1,2-Trichloroethane	13.5	4.3	10 U	10	10 U	10
Benzene	0.15	3.3	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.193	2.4	10 U	10	10 U	10
Bromoform	4.38	3.1	10 U	10	10 U	10
4-Methyl-2-pentanone		5.5	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10
Tetrachloroethene	0.388	4.0	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	1.72	4.2	10 U	10	10 U	10
Toluene	7440	2.7	10 U	10	10 U	10
Chlorobenzene	22	2.7	10 U	10	10 U	10
Ethylbenzene	3030	3.1	10 U	10	10 U	10
Styrene		3.8	10 U	10	10 U	10
Xylene (total)		3.8	10 U	10	10 U	10
Method:TCL Volatiles						

CHARLES WOOD
SURFACE WATER SEMIVOLATILES

Geographical Location			Background		Background	
Sample			CW02-SW01-A01		CW05-SW01-A01	
Batch#			9412G923		9412G923	
Prep#			94GBO800		94GBO800	
RFW#			001		003	
Dilution Factor			1.00		1.00	
Matrix			water		water	
Units	ug/l	ug/l	ug/l		ug/l	
Sampling Date			12/1/94		12/1/94	
Analysis Date			12/22/94		12/22/94	
Analysis	Standard	MDL	Analytical	CRQL	Analytical	CRQL
			Result		Result	
Phenol	20900	7.1	10 U	10	10 U	10
bis(2-Chloroethyl) ether	0.0311	9.7	10 U	10	10 U	10
2-Chlorophenol	122	7.3	10 U	10	10 U	10
1,3-Dichlorobenzene	2620	5.3	10 U	10	10 U	10
1,4-Dichlorobenzene	343	4.8	10 U	10	10 U	10
1,2-Dichlorobenzene	2520	5.7	10 U	10	10 U	10
2-Methylphenol		6.7	10 U	10	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10
4-Methylphenol		12.9	10 U	10	10 U	10
N-Nitroso-di-n-propylamine		8.0	10 U	10	10 U	10
Hexachloroethane	2.73	5.3	10 U	10	10 U	10
Nitrobenzene	16	7.4	10 U	10	10 U	10
Isophorone	552	3.9	10 U	10	10 U	10
2-Nitrophenol		7.0	10 U	10	10 U	10
2,4-Dimethylphenol		4.8	10 U	10	10 U	10
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10
2,4-Dichlorophenol	92.7	4.4	10 U	10	10 U	10
1,2,4-Trichlorobenzene	30.6	9.6	10 U	10	10 U	10
Naphthalene		8.4	10 U	10	10 U	10
4-Chloroaniline		2.9	10 U	10	10 U	10
Hexachlorobutadiene	6.94	4.6	10 U	10	10 U	10
4-Chloro-3-methylphenol		3.1	10 U	10	10 U	10
2-Methylnaphthalene		8.7	10 U	10	10 U	10
Hexachlorocyclopentadiene	245	3.6	10 U	10	10 U	10
2,4,6-Trichlorophenol	2.14	5.6	10 U	10	10 U	10
2,4,5-Trichlorophenol	2580	4.7	25 U	25	25 U	25
2-Chloronaphthalene		8.2	10 U	10	10 U	10
2-Nitroaniline		6.1	25 U	25	25 U	25
Dimethylphthalate	313000	4.4	10 U	10	10 U	10
Acenaphthylene		6.0	10 U	10	10 U	10
2,6-Dinitrotoluene		5.2	10 U	10	10 U	10
3-Nitroaniline		5.2	25 U	25	25 U	25
Acenaphthene		6.7	10 U	10	10 U	10
2,4-Dinitrophenol	69.7	4.6	25 U	25	25 U	25
4-Nitrophenol		7.5	25 U	25	25 U	25

CHARLES WOOD
SURFACE WATER SEMIVOLATILES

Geographical Location			Background		Background	
Sample			CW02-SW01-A01		CW05-SW01-A01	
Batch#			9412G923		9412G923	
Prep#			94GBO800		94GBO800	
RFW#			001		003	
Dilution Factor			1.00		1.00	
Matrix			water		water	
Units	ug/l	ug/l	ug/l		ug/l	
Sampling Date			12/1/94		12/1/94	
Analysis Date			12/22/94		12/22/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		6.5	10 U	10	10 U	10
2,4-Dinitrotoluene	0.11	5.8	10 U	10	10 U	10
Diethylphthalate	21200	5.4	10 U	10	10 U	10
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10
Fluorene	1340	6.3	25 U	25	25 U	25
4-Nitroaniline		6.4	25 U	25	25 U	25
4,6-Dinitro-2-methylphenol		5.3	10 U	10	10 U	10
N-Nitrosodiphenylamine (1)		4.2	10 U	10	10 U	10
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10
Hexachlorobenzene	0.000748	5.5	25 U	25	25 U	25
Pentachlorophenol	0.282	4.0	10 U	10	10 U	10
Phenanthrene		5.0	10 U	10	10 U	10
Anthracene	9570	4.6	10 U	10	10 U	10
Carbazole		4.4	10 U	10	10 U	10
Di-n-butylphthalate	3530	6.5	10 U	10	10 U	10
Fluoranthene	310	6.0	10 U	10	10 U	10
Pyrene	797	5.4	10 U	10	10 U	10
Butylbenzylphthalate	239	5.3	10 U	10	10 U	10
3,3'-Dichlorobenzidine	0.0386	2.8	10 U	10	10 U	10
Benzo(a)anthracene	0.0028	4.9	10 U	10	10 U	10
Chrysene	0.0028	4.4	10 U	10	10 U	10
bis(2-Ethylhexy)phthalate	1.76	9.7	1 J	10	1 J	10 JB
Di-n-octyl phthalate		5.6	10 U	10	10 U	10
Benzo(b)fluoranthene	0.0028	5.7	10 U	10	10 U	10
Benzo(k)fluoranthene	0.0028	6.2	10 U	10	10 U	10
Benzo(a)pyrene	0.0028	4.9	10 U	10	10 U	10
Indeno(1,2,3-cd)pyrene	0.0028	7.1	10 U	10	10 U	10
Dibenzo(a,h)anthracene	0.0028	6.0	10 U	10	10 U	10
Benzo(g,h,i)perylene	-	6.8	10 U	10	10 U	10
Total Est. Conc. of TIC			70			
Method:TCL Semivolatiles						

CHARLES WOOD
SURFACE WATER INORGANICS

Geographical Location		Background		Background		Background		Background	
Sample		CW02-SW01-A01		CW02-SW01-A01 SOL		CW05-SW01-A01		CW05-SW01-A01 SOL	
Sample Type		Total		Soluble		Total		Soluble	
Batch#		9412G923		9412G923		9412G923		9412G923	
Prep#		94GCN264		94GI186		94GCN264		94GI186	
RFW#		001		002		003		004	
Dilution Factor		1.00		1.00		1.00		1.00	
Matrix		water		water, filtered		water		water, filtered	
Units	ug/l	ug/l		ug/l		ug/l		ug/l	
Sampling Date		12/1/94		12/1/94		12/1/94		12/1/94	
Analysis Date		12/14/94		12/21/94		12/14/94		12/21/94	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	164	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1	3.1 U	3.1
Aluminum		134	26.7	86.6	26.7	265	26.7	160	26.7
Arsenic	0.017	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6
Barium	2000	77.1	2.1	78.2	2.1	60.6	2.1	60.3	2.1
Beryllium		1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Calcium		15100	12.0	15700	12.0	22900	12.0	24000	12
Cadmium	10	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4	3.4 U	3.4
Cobalt		2.8	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Chromium	160	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4	6.4 U	6.4
Copper		2.4 U	2.4	4.8	2.4	8.0	2.4	10.2	2.4
Iron		608	4.7	352	4.7	715	4.7	435	4.7
Mercury	0.144	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		3590	821	4040	821	1110	821	1030	821
Magnesium		7050	38.2	7390	38.2	4150	38.2	4280	38.2
Manganese	100	97.4	2.0	100	2.0	43.0	2.0	44.4	2.0
Sodium		156000	15.4	164000	15.4	10700	15.4	11200	15.4
Nickel	516	12.8 U	12.8	12.8 U	12.8	12.8 U	12.8	12.8 U	12.8
Lead	5	2.2	1.6	1.8	1.6	4.7	0.8	3.9	0.8
Antimony	12.2	26.8	21.5	21.5 U	21.5	21.5 U	21.5	21.5 U	21.5
Selenium	10	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Thallium	1.7	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1
Vanadium		2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Zinc		55.1	2.8	58.8	2.8	204	2.8	215	2.8
Cyanide	5.2	10.0 U	10.0			10.0 U	10.0		
Method:TAL Metals, Cyanide									

CHARLES WOOD
SURFACE WATER PESTICIDES/PCBS

Geographical Location		Background		Background	
Sample		CW02-SW01-A01		CW05-SW01-A01	
Batch#		9412G923		9412G923	
Prep#		94GP1038		94GP1038	
RFW#		001		003	
Dilution Factor		1.00		1.00	
Matrix		water		water	
Units	ug/l	ug/l		ug/l	
Sampling Date		12/1/94		12/1/94	
Analysis Date		12/17/94		12/17/94	
Analysis	Standard	Analytical	Reporting	Analytical	Reporting
		Result	Limit	Result	Limit
alpha-BHC	0.00391	0.050 U	0.050	0.040 U	0.040
beta-BHC	0.137	0.050 U	0.050	0.040 U	0.040
delta-BHC		0.050 U	0.050	0.040 U	0.040
gamma-BHC (Lindane)	0.08	0.050 U	0.050	0.040 U	0.040
Heptachlor	0.000208	0.050 U	0.050	0.040 U	0.040
Aldrin	0.000135	0.050 U	0.050	0.040 U	0.040
Heptachlor epoxide	0.000103	0.050 U	0.050	0.040 U	0.040
Endosulfan I		0.050 U	0.050	0.040 U	0.040
Dieldrin	0.000135	0.1 U	0.10	0.080 U	0.080
4,4'-DDE	0.000588	0.1 U	0.10	0.080 U	0.080
Endrin	0.0023	0.1 U	0.10	0.080 U	0.080
Endosulfan II		0.1 U	0.10	0.080 U	0.080
4,4'-DDD	0.000832	0.1 U	0.10	0.080 U	0.080
Endosulfan sulfate	0.93	0.1 U	0.10	0.080 U	0.080
4,4'-DDT	0.000588	0.1 U	0.10	0.080 U	0.080
Methoxychlor	0.03	0.5 U	0.50	0.40 U	0.4
Endrin ketone		0.1 U	0.10	0.080 U	0.080
Endrin aldehyde	0.76	0.1 U	0.10	0.080 U	0.080
alpha-Chlordane	0.000277	0.050 U	0.050	0.040 U	0.040
gamma-Chlordane		0.050 U	0.050	0.040 U	0.040
Toxaphene	0.00073	5 U	5	4 U	4
Aroclor-1016	0.000244	1 U	1	0.80 U	0.8
Aroclor-1221	0.000244	2 U	2	1.6 U	1.6
Aroclor-1232	0.000244	1 U	1	0.80 U	0.80
Aroclor-1242	0.000244	1 U	1	0.80 U	0.80
Aroclor-1248	0.000244	1 U	1	0.80 U	0.80
Aroclor-1254	0.000244	1 U	1	0.80 U	0.80
Aroclor-1260	0.000244	1 U	1	0.80 U	0.80
Method:TCL Pesticides/PCBs					

CHARLES WOOD
SURFACE SOIL VOLATILES

Geographical Location			CW6		CW9		CW9	
Sample			CW06-SS01-A01		CW09-SS01-D01		CW09-SS01-E01	
Sample Type					Duplicate		Field Rinsate Blank	
Batch#			9412G854		9412G854		9412G854	
Prep#			94GVT027		94GVE343		94GVE343	
RFW#			014		001		002	
Sample Depth			0-6"		0-6"		0-6"	
Dilution Factor			1.00		1.00		1.00	
Matrix			soil		water		water	
Units	mg/kg	mg/kg	mg/kg		mg/l		mg/l	
Sampling Date			11/30/94		11/30/94		11/30/94	
Analysis Date			12/5/94		12/7/94		12/7/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Bromomethane	79	0.0067	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Vinyl Chloride	2	0.0079	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Chloroethane		0.0091	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Methylene Chloride	49	0.0027	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Acetone	1000	0.0069	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Carbon Disulfide		0.0044	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
1,1-Dichloroethene	8	0.0049	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
1,1-Dichloroethane	570	0.003	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
1,2-Dichloroethene (total)	79	0.0044	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Chloroform	19	0.0029	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
1,2-Dichloroethane	6	0.0024	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
2-Butanone	1000	0.0041	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
1,1,1-Trichloroethane	210	0.0017	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Carbon Tetrachloride	2	0.0015	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Bromodichloromethane	11	0.002	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
1,2-Dichloropropane	10	0.0017	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
cis-1,3-Dichloropropene	4	0.003	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Trichloroethene	23	0.002	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Dibromochloromethane	110	0.0024	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
1,1,2-Trichloroethane	22	0.0043	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Benzene	3	0.0033	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
trans-1,3-Dichloropropene	4	0.0024	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Bromoform	86	0.0031	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
4-Methyl-2-pentanone	1000	0.0055	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
2-Hexanone		0.0039	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Tetrachloroethene	4	0.004	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
1,1,2,2-Tetrachloroethane	34	0.0042	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Toluene	1000	0.0027	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Chlorobenzene	37	0.0027	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Ethylbenzene	1000	0.0031	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Styrene	23	0.0038	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Xylene (total)	410	0.0038	0.022 U	0.022	0.01 U	0.01	0.01 U	0.01
Method:TCL Volatiles								

CHARLES WOOD
SURFACE SOIL SEMIVOLATILES

Geographical Location			CW6	
Sample			CW06-SS01-A01	
Batch#			9412G854	
Prep#			94GB0796	
RFW#			014	
Sample Depth			0-6"	
Dilution Factor			10.00	
Matrix			soil	
Units	mg/kg	mg/kg	mg/kg	
Sampling Date			11/30/94	
Analysis Date			12/21/94	
Analysis	Standard	MDL	Analytical Result	CRQL
Phenol	10000	0.234	7.2 U	7.2
bis(2-Chloroethyl) ether	0.66	0.32	7.2 U	7.2
2-Chlorophenol	280	0.241	7.2 U	7.2
1,3-Dichlorobenzene	5100	0.175	7.2 U	7.2
1,4-Dichlorobenzene	570	0.158	7.2 U	7.2
1,2-Dichlorobenzene	5100	0.188	7.2 U	7.2
2-Methylphenol	2800	0.221	7.2 U	7.2
2,2'-oxybis(1-Chloropropane)		0.231	7.2 U	7.2
4-Methylphenol	2800	0.426	7.2 U	7.2
N-Nitroso-di-n-propylamine	0.66	0.264	7.2 U	7.2
Hexachloroethane	6	0.175	7.2 U	7.2
Nitrobenzene	28	0.244	7.2 U	7.2
Isophorone	1100	0.129	7.2 U	7.2
2-Nitrophenol		0.231	7.2 U	7.2
2,4-Dimethylphenol	1100	0.158	7.2 U	7.2
bis(2-Chloroethoxy) methane		0.201	7.2 U	7.2
2,4-Dichlorophenol	170	0.145	7.2 U	7.2
1,2,4-Trichlorobenzene	68	0.317	7.2 U	7.2
Naphthalene	230	0.277	7.2 U	7.2
4-Chloroaniline	230	0.096	7.2 U	7.2
Hexachlorobutadiene	1	0.152	7.2 U	7.2
4-Chloro-3-methylphenol	10000	0.102	7.2 U	7.2
2-Methylnaphthalene		0.287	7.2 U	7.2
Hexachlorocyclopentadiene	400	0.119	7.2 U	7.2
2,4,6-Trichlorophenol	62	0.185	7.2 U	7.2
2,4,5-Trichlorophenol	5600	0.155	18 U	18
2-Chloronaphthalene		0.271	7.2 U	7
2-Nitroaniline		0.201	18 U	18
Dimethylphthalate	10000	0.145	7.2 U	7
Acenaphthylene		0.198	7.2 U	7
2,6-Dinitrotoluene	1	0.172	7.2 U	7
3-Nitroaniline		0.172	18 U	18
Acenaphthene	3400	0.221	7.2 U	7
2,4-Dinitrophenol	110	0.152	18 U	18

CHARLES WOOD
SURFACE SOIL SEMIVOLATILES

Geographical Location			CW6	
Sample			CW06-SS01-A01	
Batch#			9412G854	
Prep#			94GB0796	
RFW#			014	
Sample Depth			0-6"	
Dilution Factor			10.00	
Matrix			soil	
Units	mg/kg	mg/kg	mg/kg	
Sampling Date			11/30/94	
Analysis Date			12/21/94	
Analysis	Standard	MDL	Analytical Result	CRQL
4-Nitrophenol		0.248	18 U	18
Dibenzofuran		0.215	7.2 U	7.2
2,4-Dinitrotoluene	1	0.191	7.2 U	7.2
Diethylphthalate	10000	0.178	7.2 U	7.2
4-Chlorophenyl-phenylether		0.231	7.2 U	7.2
Fluorene	2300	0.208	7.2 U	7.2
4-Nitroaniline		0.211	18 U	18
4,6-Dinitro-2-methylphenol		0.175	18 U	18
N-Nitrosodiphenylamine (1)	140	0.139	7.2 U	7.2
4-Bromophenyl-phenylether		0.175	7.2 U	7.2
Hexachlorobenzene	0.66	0.182	7.2 U	7.2
Pentachlorophenol	6	0.132	18 U	18
Phenanthrene		0.165	7.2 U	7.2
Anthracene	10000	0.152	7.2 U	7.2
Carbazole		0.145	7.2 U	7.2
Di-n-butylphthalate	5700	0.215	7.2 U	7.2
Fluoranthene	2300	0.198	7.2 U	7.2
Pyrene	1700	0.178	7.2 U	7.2
Butylbenzylphthalate	1100	0.175	7.2 U	7.2
3,3'-Dichlorobenzidine	2	0.092	7.2 U	7.2
Benzo(a)anthracene	0.9	0.162	7.2 U	7.2
Chrysene	9	0.145	7.2 U	7.2
bis(2-Ethylhexy)phthalate	49	0.32	0.76 J	
Di-n-octyl phthalate	1100	0.185	7.2 U	7.2
Benzo(b)fluoranthene	0.9	0.188	7.2 U	7.2
Benzo(k)fluoranthene	0.9	0.205	7.2 U	7,2
Benzo(a)pyrene	0.66	0.162	7.2 U	7.2
Indeno(1,2,3-cd)pyrene	0.9	0.234	7.2 U	7.2
Dibenzo(a,h)anthracene	0.66	0.198	7.2 U	7.2
Benzo(g,h,i)perylene		0.224	7.2 U	7.2
Method:TCL Semivolatiles				

CHARLES WOOD
SURFACE SOIL INORGANICS

Geographical Location		CW4		CW6		CW9		CW9		CW9		CW9	
Sample		CW04-SS01-A01		CW06-SS01-A01		CW09-SS01-A01		CW09-SS01-C01		CW09-SS02-A01		CW09-SS03-A01	
Sample Type								Duplicate					
Batch#		9412G854		9412G854		9412G854		9412G854		9412G854		9412G854	
Prep#		94GTS467		94GTS467		94GTS467		94GTS467		94GTS467		94GTS467	
RFW#		013		014		003		004		005		006	
Sample Depth		0-6"		0-6"		0-6"		0-6"		0-6"		0-6"	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		11/30/94		11/30/94		11/30/94		11/30/94		11/30/94		11/30/94	
Analysis Date		12/6/94		12/6/94		12/6/94		12/6/94		12/6/94		12/6/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		90.1	0.10	46.0	0.10	77.4	0.10	78.8	0.10	80.5	0.10	78.6	0.10
Silver	110	0.76	0.5	1.5	1.3	2.5	0.72	2.4	0.64	2.8	0.53	0.65 U	0.65
Aluminum		6870	4.3	5130	11	7350	6.2	7470	5.6	5730	4.6	3600	5.6
Arsenic	20	7.8	0.58 *	11.6	0.61	13.6	1.9 *	14.1	0.76 *	12.1	0.69 *	6.9	0.33
Barium	700	17.7	0.34	72.2	0.86	23.4	0.49	24.1	0.44	28.9	0.36	65.4	0.44
Beryllium	1	0.76	0.24	0.62 U	0.62	0.73	0.35	0.91	0.31	0.68	0.26	0.57	0.32
Calcium		699	1.9	4430	5	2680	2.8	2620	2.5	2650	2.1	1960	2.5
Cadmium	1	0.45 U	0.45	4.4	1.1	0.65 U	0.65	0.58 U	0.58	0.48 U	0.48	0.59 U	0.59
Cobalt		0.62	0.43	1.1 U	1.1	0.63 U	0.63	1.2	0.56	0.46 U	0.46	0.57 U	0.57
Chromium		58.3	0.48	65.8	1.2	56.7	0.7	60.6	0.62	57.2	0.51	24.9	0.63
Copper	600	3.2	0.37	69.8	0.94	9.6	0.54	9.7	0.48	10.3	0.39	5	0.48
Iron		19700	0.76	10900	1.9	20600	1.1	22100	0.98	18200	0.81	10800	0.99
Mercury	14	0.10 U	0.1	6	0.35 *	0.2	0.12	0.19	0.091	0.23	0.099	0.094 U	0.094
Potassium		2720	132	1420	337	1600	191	1630	171	2620	141	1460	173
Magnesium		1450	3.9	1260	10	1910	5.7	1920	5.1	2010	4.2	815	5.1
Manganese		26.2	0.32	78.8	0.82	85.1	0.47	91	0.42	46.8	0.34	22.3	0.42
Sodium		16	2.5	103	6.3	35.6	3.6	33.1	3.2	33.9	2.6	77.4	3.2
Nickel	250	2.3	2.1	5.30 U	5.3	6	3	4.6	2.7	3.3	2.2	2.7 U	2.7
Lead	400	8.9	0.58 *	203	10.3	19.9	3.8 **	20.1	3.8 **	30.1	4.3	13.5	1.6 *
Antimony	14	3.50 U	3.5	8.8 U	8.8	5.0 U	5	4.5 U	4.5	3.7 U	3.7	4.5 U	4.5
Selenium	63	0.33	0.16	0.7	0.34	0.56	0.21	0.97	0.21	0.62	0.19	0.75	0.18
Thallium	2	0.20 U	0.2	0.42 U	0.42	0.26 U	0.26	0.26 U	0.26	0.24 U	0.24	0.22 U	0.22
Vanadium	370	37.3	0.47	21.8	1.2	45.7	0.68	48.5	0.6	34	0.5	15.7	0.61
Zinc	1500	24.6	0.45	463	1.1	53.7	0.65	45.9	0.58	61.2	0.48	25.8	0.59
Dilution Factor		* = 2.00		* = 2.00		* = 5.0, ** = 10.0		* = 2.00, ** = 10.0		* = 2.00		* = 5.00	
Method:TAL Metals													

CHARLES WOOD
SURFACE SOIL INORGANICS

Geographical Location		CW9		CW9		CW9		CW9		CW9		CW9	
Sample		CW09-SS04-A01		CW09-SS05-A01		CW09-SS06-A01		CW09-SS07-A01		CW09-SS08-A01		CW09-SS09-A01	
Sample Type													
Batch#		9412G854		9412G854		9412G854		9412G854		9412G854		9412G854	
Prep#		94GTS467		94GTS467		94GTS467		94GTS467		94GTS467		94GTS467	
RFW#		007		008		009		010		011		012	
Sample Depth		0-6"		0-6"		0-6"		0-6"		0-6"		0-6"	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		11/30/94		11/30/94		11/30/94		11/30/94		11/30/94		11/30/94	
Analysis Date		12/6/94		12/6/94		12/6/94		12/6/94		12/6/94		12/6/94	
Analysis	Standard	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting
		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
% Solids		71.9	0.10	79.7	0.10	82.3	0.10	68.5	0.10	83.2	0.10	86.4	0.10
Silver	110	0.58 U	0.58	0.77	0.57	0.71	0.59	1.2	0.85	3.3	0.56	1.3	0.51
Aluminum		4380	5	6930	4.9	5450	5.1	3910	7.4	4070	4.9	7700	4.4
Arsenic	20	6.3	0.52 *	15.6	1.4	9.3	0.62 *	10.5	0.46	7.2	0.67 *	7.7	0.36
Barium	700	51.2	0.39	32.5	0.38	33	0.4	40.7	0.58	19.2	0.38	40.8	0.34
Beryllium	1	0.55	0.28	0.9	0.27	0.72	0.29	0.58	0.41	0.56	0.27	1	0.24
Calcium		19600	2.3	3570	2.2	3610	2.3	4370	3.3	1630	2.2	3440	2
Cadmium	1	0.53 U	0.53	0.51 U	0.51	0.54 U	0.54	2.6	0.77	0.51 U	0.51	0.46 U	0.46
Cobalt		1.3	0.51	1.9	0.49	1.7	0.52	0.74 U	0.74	0.49 U	0.49	1.8	0.44
Chromium		28.3	0.56	60.5	0.55	46.9	0.57	164	0.83	56.2	0.55	70	0.49
Copper	600	17.7	0.43	8.8	0.42	11.1	0.44	17.4	0.63	9	0.42	9.6	0.37
Iron		12200	0.88	22200	0.86	17900	0.9	9880	1.3	11300	0.86	25600	0.77
Mercury	14	0.11 U	0.11	0.14	0.1	0.09 U	0.09	7.9	1.2 *	0.69	0.12	0.093 U	0.093
Potassium		2060	154	3950	150	3180	157	1720	226	1250	149	5130	134
Magnesium		2260	4.6	2280	4.5	1720	4.7	1620	6.7	893	4.4	2590	4
Manganese		106	0.38	59.2	0.37	56	0.38	140	0.55	37	0.36	69.5	0.33
Sodium		118	2.9	49.7	2.8	49.7	2.9	40.6	4.2	34.5	2.8	60.9	2.5
Nickel	250	5.7	2.4	6.9	2.3	4.9	2.4	4.3	3.5	2.4	2.3	5.8	2.1
Lead	400	56.8	4.7	27.4	2.7 *	17	3.1 **	82.3	6.9	35.5	4.6	20.1	3.6 *
Antimony	14	4.0 U	4	3.90 U	3.9	4.10 U	4.1	5.90 U	5.9	3.90 U	3.9	3.5 U	3.5
Selenium	63	0.28	0.15	0.63	0.15	0.41	0.17	0.57	0.26	0.6	0.19	0.48	0.2
Thallium	2	0.18 U	0.18	0.19 U	0.19	0.21 U	0.21	0.32 U	0.32	0.23 U	0.23	0.24 U	0.24
Vanadium	370	22.9	0.54	33.1	0.53	30.3	0.55	15.6	0.8	29.3	0.53	32	0.47
Zinc	1500	92.5	0.53	47.8	0.51	62.3	0.54	77	0.77	36	0.51	48.1	0.46
Dilution Factor		* = 2.00		* = 10.0		* = 2.00, ** = 10.0		* = 10.0		* = 2.00		* = 10.0	
Method:TAL Metals													

CHARLES WOOD
SURFACE SOIL PESTICIDES/PCBS

Geographical Location		CW6		CW6	
Sample		CW06-SS01-A01		CW06-SS01-A01DL	
Batch#		9412G854		9412G854	
Prep#		94GP1033		94GP1033	
RFW#		014		014 DL	
Sample Depth		0-6"		0-6"	
Dilution Factor		5.00		50.00	
Matrix		soil		soil	
Units	mg/kg	mg/kg		mg/kg	
Sampling Date		11/30/94		11/30/94	
Analysis Date		12/18/94		12/14/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.018 U	0.018	0.18 U	0.18
beta-BHC		0.018 U	0.018	0.18 U	0.18
delta-BHC		0.018 U	0.018	0.18 U	0.18
gamma-BHC (Lindane)	0.52	0.018 U	0.018	0.18 U	0.18
Heptachlor	0.15	0.018 U	0.018	0.18 U	0.18
Aldrin	0.04	0.018 U	0.018	0.18 U	0.18
Heptachlor epoxide		0.032		0.18 U	0.18
Endosulfan I	340	0.018 U	0.018	0.18 U	0.18
Dieldrin	0.042	0.036 U	0.036	0.36 U	0.36
4,4'-DDE	2	0.13		0.36 U	0.36
Endrin	17	0.036 U	0.036	0.36 U	0.36
Endosulfan II	340	0.036 U	0.036	0.36 U	0.36
4,4'-DDD	3	0.86 C		.66 CD	
Endosulfan sulfate		0.036 U	0.036	0.36 U	0.36
4,4'-DDT	2	0.81 C		.79 CD	
Methoxychlor	280	0.180 U	0.18	1.8 U	1.8
Endrin ketone		0.036 U	0.036	0.36 U	0.36
Endrin aldehyde		0.036 U	0.036	0.36 U	0.36
alpha-Chlordane		0.85 C		.87 CD	
gamma-Chlordane		0.81 C		.8 CD	
Toxaphene	0.1	1.8 U	1.8	18 U	18
Aroclor-1016	0.49	0.36 U	0.36	3.6 U	3.6
Aroclor-1221	0.49	0.72 U	0.72	7.2 U	7.2
Aroclor-1232	0.49	0.36 U	0.36	3.6 U	3.6
Aroclor-1242	0.49	0.36 U	0.36	3.6 U	3.6
Aroclor-1248	0.49	0.36 U	0.36	3.6 U	3.6
Aroclor-1254	0.49	0.36 U	0.36	3.6 U	3.6
Aroclor-1260	0.49	0.36 U	0.36	3.6 U	3.6
Method:Pesticides/PCBs					

CHARLES WOOD
SOIL BORING VOLATILES

Geographical Location			AOC7		AOC7		AOC7		AOC7		AOC7		AOC7		AOC7	
Sample			CWA7-SB01-A02		CWA7-SB02-A02		CWA7-SB03-A02		CWA7-SB04-A02		CWA7-SB04-D02		CWA7-SB05-A02		CWA7-SB06-A03	
Sample Type											Trip Blank					
Batch#			9412G264		9412G264		9412G264		9412G264		9412G264		9412G264		9412G264	
Prep#			94GVT034 & 35		94GVT034		94GVT034 & 35		94GVT034		94GVB441		94GVT034		94GVT034	
RFW#			001		003		002		006		007		004		005	
Sample Depth (bgs)			10 - 12'		10 - 12'		6 - 8'		8 -10'				8 -10'		12 - 14'	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		water		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/l		mg/kg		mg/kg	
Sampling Date			12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94	
Analysis Date			12/27/94		12/27/94		12/27/94		12/27/94		12/28/94		12/27/94		12/27/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Bromomethane	79	0.0067	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Vinyl Chloride	2	0.0079	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Chloroethane		0.0091	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Methylene Chloride	49	0.0027	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Acetone	1000	0.0069	0.68 B	0.11 *	0.063 B	0.011	0.11 B	0.022	0.019 B	0.011	0.01 U	0.01	0.060 B	0.011	0.043 B	0.011
Carbon Disulfide		0.0044	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
1,1-Dichloroethene	8	0.0049	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
1,1-Dichloroethane	570	0.003	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
1,2-Dichloroethene (total)	79	0.0044	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Chloroform	19	0.0029	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
1,2-Dichloroethane	6	0.0024	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
2-Butanone	1000	0.0041	0.011 U	0.011	0.002 J	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
1,1,1-Trichloroethane	210	0.0017	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Carbon Tetrachloride	2	0.0015	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Bromodichloromethane	11	0.002	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
1,2-Dichloropropane	10	0.0017	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
cis-1,3-Dichloropropene	4	0.003	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Trichloroethene	23	0.002	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Dibromochloromethane	110	0.0024	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
1,1,2-Trichloroethane	22	0.0043	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Benzene	3	0.0033	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
trans-1,3-Dichloropropene	4	0.0024	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Bromoform	86	0.0031	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
4-Methyl-2-pentanone	1000	0.0055	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
2-Hexanone		0.0039	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Tetrachloroethene	4	0.004	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
1,1,2,2-Tetrachloroethane	34	0.0042	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Toluene	1000	0.0027	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Chlorobenzene	37	0.0027	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Ethylbenzene	1000	0.0031	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Styrene	23	0.0038	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Xylene (total)	410	0.0038	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.011 U	0.011	0.01 U	0.01	0.011 U	0.011	0.011 U	0.011
Total Est. Conc. of TIC.			0.006		0.007		.006, .01 *						0.006			
Dilution Factor			* = 10.0				* = 2.00									
Method:TCL Volatiles																

CHARLES WOOD
SOIL BORING VOLATILES

Geographical Location			CW1		CW1		CW1		CW1		CW1		CW2		CW2	
Sample			CW01-SB26-A02		CW01-SB26-D02		CW01-SB27-A02		CW01-SB28-A02		CW01-SB29-A02		CW02-SB30-A02		CW02-SB31-A02	
Sample Type					Trip Blank											
Batch#			9412G922		9412G922		9412G216		9412G216		9412G216		9412G182		9412G182	
Prep#			94GVT033		94GVE365		94GVT033		94GVT033		94GVT033		94GVT031		94GVT031	
RFW#			004		005		002		003		001		002		003	
Sample Depth (bgs)			7 - 9'				7 - 9'		7 - 9'		7 - 9'		7 - 9'		7 - 9'	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		water		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/l		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date			12/19/94		12/19/94		12/19/94		12/19/94		12/19/94		12/16/94		12/16/94	
Analysis Date			12/22/94		12/21/94		12/22/94		12/22/94		12/22/94		12/20/94		12/20/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Bromomethane	79	0.0067	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Vinyl Chloride	2	0.0079	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Chloroethane		0.0091	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Methylene Chloride	49	0.0027	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.088	0.012	0.086	0.014
Acetone	1000	0.0069	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.057 B	0.012	0.120 B	0.013	98 B	12 *	0.74 B	0.68 *
Carbon Disulfide		0.0044	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
1,1-Dichloroethene	8	0.0049	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
1,1-Dichloroethane	570	0.003	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
1,2-Dichloroethene (total)	79	0.0044	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Chloroform	19	0.0029	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
1,2-Dichloroethane	6	0.0024	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
2-Butanone	1000	0.0041	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.012 J	0.014
1,1,1-Trichloroethane	210	0.0017	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Carbon Tetrachloride	2	0.0015	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Bromodichloromethane	11	0.002	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
1,2-Dichloropropane	10	0.0017	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
cis-1,3-Dichloropropene	4	0.003	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Trichloroethene	23	0.002	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Dibromochloromethane	110	0.0024	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
1,1,2-Trichloroethane	22	0.0043	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Benzene	3	0.0033	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
trans-1,3-Dichloropropene	4	0.0024	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Bromoform	86	0.0031	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
4-Methyl-2-pentanone	1000	0.0055	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
2-Hexanone		0.0039	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Tetrachloroethene	4	0.004	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
1,1,2,2-Tetrachloroethane	34	0.0042	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Toluene	1000	0.0027	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Chlorobenzene	37	0.0027	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Ethylbenzene	1000	0.0031	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Styrene	23	0.0038	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Xylene (total)	410	0.0038	0.013 U	0.013	0.01 U	0.01	0.013 U	0.013	0.012 U	0.012	0.013 U	0.013	0.012 U	0.012	0.014 U	0.014
Total Est. Conc. of TIC.							0.007						.008, 6 *		.9 *	
Dilution Factor													* = 1000		* = 50.0	
Method:TCL Volatiles																

CHARLES WOOD
SOIL BORING VOLATILES

Geographical Location			CW2		CW2		CW2		CW2		CW2		CW2		CW4	
Sample			CW02-SB31-D02		CW02-SB31-E02		CW02-SB32-A02		CW02-SB33-A02		CW02-SB33-A02		CW02-SB33-D02		CW04-SB01-A02	
Sample Type			Trip Blank		Field Rinsate Blank								Trip Blank			
Batch#			9412G182		9412G182		9412G182		9412G154		9412G154		9412G154		9412G264	
Prep#			94GVT365		94GVT365		94GVT031		94GVT030 & 31		94GVT030 & 35		94GVB439		94GVT034 & 35	
RFW#			004		005		001		001		002		003		008	
Sample Depth (bgs)							7 - 9'		7 - 9'		7 - 9'				4 -6'	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		soil		soil		soil		water		soil	
Units	mg/kg	mg/kg	mg/l		mg/l		mg/kg		mg/kg		mg/kg		mg/l		mg/kg	
Sampling Date			12/16/94		12/16/94		12/16/94		12/15/94		12/15/94		12/16/94		12/21/94	
Analysis Date			12/21/94		12/12/94		12/20/94		12/19/94		12/19/94		12/20/94		12/27/94	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Bromomethane	79	0.0067	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Vinyl Chloride	2	0.0079	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Chloroethane		0.0091	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Methylene Chloride	49	0.0027	0.01 U	0.01	0.01 U	0.01	0.017	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Acetone	1000	0.0069	0.01 U	0.01	0.11	0.01	5.9 B	1.2	0.98 B	.24 *	2.1 B	0.12	0.01 U	0.01	1.4 B	.12 *
Carbon Disulfide		0.0044	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
1,1-Dichloroethene	8	0.0049	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
1,1-Dichloroethane	570	0.003	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
1,2-Dichloroethene (total)	79	0.0044	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Chloroform	19	0.0029	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
1,2-Dichloroethane	6	0.0024	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
2-Butanone	1000	0.0041	0.01 U	0.01	0.01 U	0.01	0.008 J -	0.012	0.012 U	0.012	0.031	0.012	0.01 U	0.01	0.012 U	0.012
1,1,1-Trichloroethane	210	0.0017	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Carbon Tetrachloride	2	0.0015	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Bromodichloromethane	11	0.002	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
1,2-Dichloropropane	10	0.0017	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
cis-1,3-Dichloropropene	4	0.003	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Trichloroethene	23	0.002	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Dibromochloromethane	110	0.0024	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
1,1,2-Trichloroethane	22	0.0043	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Benzene	3	0.0033	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
trans-1,3-Dichloropropene	4	0.0024	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Bromoform	86	0.0031	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
4-Methyl-2-pentanone	1000	0.0055	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
2-Hexanone		0.0039	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Tetrachloroethene	4	0.004	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
1,1,2,2-Tetrachloroethane	34	0.0042	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Toluene	1000	0.0027	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Chlorobenzene	37	0.0027	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Ethylbenzene	1000	0.0031	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Styrene	23	0.0038	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Xylene (total)	410	0.0038	0.01 U	0.01	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012
Total Est. Conc. of TIC.															.06 *	
Dilution Factor							* = 100.0		* = 20.0		* = 10.0				* = 10.0	
Method:TCL Volatiles																

CHARLES WOOD
SOIL BORING VOLATILES

Geographical Location			CW5		CW5		CW5		CW6		CW6		CW6		CW6	
Sample			CW05-SB01-A02		CW05-SB01-D02		CW05-SB02-A02		CW06-SB02-A01		CW06-SB34-A01		CW06-SB34-A02		CW06-SB34-D02	
Sample Type					Trip Blank										Trip Blank	
Batch#			9412G245		9412G923		9412G245		9505G840		9501G423		9501G423		9501G423	
Prep#			94GVT035 & 99		94GVB441		94GVT035 & 99		95GVB138		95GVT002		95GVT002		95GVT006	
RFW#			001		003		001		001		001		002		003	
Sample Depth (bgs)			6 - 8'				6 - 8'		0.5 - 1'		0-2'		2-4'			
Dilution Factor			1.00		5.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		water		soil		soil		soil		soil		water	
Units	mg/kg	mg/kg	mg/kg		mg/l		mg/kg		mg/kg		mg/kg		mg/kg		mg/l	
Sampling Date			12/20/94		12/20/94		12/20/94		5/10/95		1/3/95		1/3/95		1/3/95	
Analysis Date			12/28/94		12/28/94		12/28/94		5/24/95		1/5/95		1/5/95		1/6/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Bromomethane	79	0.0067	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Vinyl Chloride	2	0.0079	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chloroethane		0.0091	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Methylene Chloride	49	0.0027	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Acetone	1000	0.0069	2.7 B	0.23	0.01 U	0.01	0.57 B	0.06	0.016 B	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Carbon Disulfide		0.0044	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1-Dichloroethene	8	0.0049	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1-Dichloroethane	570	0.003	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloroethene (total)	79	0.0044	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chloroform	19	0.0029	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloroethane	6	0.0024	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
2-Butanone	1000	0.0041	0.013	0.012	0.01 U	0.01	0.01 J	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,1-Trichloroethane	210	0.0017	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Carbon Tetrachloride	2	0.0015	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Bromodichloromethane	11	0.002	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloropropane	10	0.0017	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
cis-1,3-Dichloropropene	4	0.003	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Trichloroethene	23	0.002	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Dibromochloromethane	110	0.0024	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,2-Trichloroethane	22	0.0043	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Benzene	3	0.0033	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
trans-1,3-Dichloropropene	4	0.0024	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Bromoform	86	0.0031	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
4-Methyl-2-pentanone	1000	0.0055	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
2-Hexanone		0.0039	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Tetrachloroethene	4	0.004	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,2,2-Tetrachloroethane	34	0.0042	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Toluene	1000	0.0027	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chlorobenzene	37	0.0027	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Ethylbenzene	1000	0.0031	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Styrene	23	0.0038	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Xylene (total)	410	0.0038	0.012 U	0.012	0.01 U	0.01	0.012 U	0.012	0.014 U	0.014	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Total Est. Conc. of TIC.			0.016				0.007									
Dilution Factor			* = 20.0				* = 5.00									
Method:TCL Volatiles																

CHARLES WOOD
SOIL BORING VOLATILES

Geographical Location			CW9		CW9		CW9		CW9		B6		B6		B7	
Sample			CW09-SB01-A02		CW09-SB01-D02		CW09-SB01-E02		CW09-SB01-E02DL		B6-SB01-A01		B6-SB01-A02		B7-SB01-A01	
Sample Type					Trip Blank		Field Rinsate Blank		Field Rinsate Blank							
Batch#			9501G450		9501G450		9501G450		9501G450		9501G553		9501G553		9501G553	
Prep#			95GVF011		95GVE009		95GVE009		95GVF009		95GVF013		95GVF013		95GVF012	
RFW#			001		003		002DL		002		008		019		006	
Sample Depth (bgs)			2 - 4'								1 - 2'		2 - 4'		1 - 2'	
Dilution Factor			1.00		1.00		50.0		1.00		1.00		1.00		1.00	
Matrix			soil		water		water		water		soil		soil		soil	
Units	mg/kg	mg/kg	mg/kg		mg/l		mg/l		mg/l		mg/kg		mg/kg		mg/kg	
Sampling Date			1/4/95		1/4/95		1/4/95		1/4/95		1/10/95		1/10/95		1/10/95	
Analysis Date			1/13/95		1/10/95		1/10/95		1/10/95		1/16/95		1/16/95		1/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Bromomethane	79	0.0067	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Vinyl Chloride	2	0.0079	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Chloroethane		0.0091	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Methylene Chloride	49	0.0027	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Acetone	1000	0.0069	1.2	*	0.01 U	0.01	E	0.01	5.2		0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Carbon Disulfide		0.0044	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
1,1-Dichloroethene	8	0.0049	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
1,1-Dichloroethane	570	0.003	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
1,2-Dichloroethene (total)	79	0.0044	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Chloroform	19	0.0029	0.012 U	0.012	0.01 U	0.01	0.003 J	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
1,2-Dichloroethane	6	0.0024	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
2-Butanone	1000	0.0041	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
1,1,1-Trichloroethane	210	0.0017	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Carbon Tetrachloride	2	0.0015	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Bromodichloromethane	11	0.002	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
1,2-Dichloropropane	10	0.0017	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
cis-1,3-Dichloropropene	4	0.003	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Trichloroethene	23	0.002	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Dibromochloromethane	110	0.0024	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
1,1,2-Trichloroethane	22	0.0043	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Benzene	3	0.0033	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
trans-1,3-Dichloropropene	4	0.0024	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Bromoform	86	0.0031	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
4-Methyl-2-pentanone	1000	0.0055	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
2-Hexanone		0.0039	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Tetrachloroethene	4	0.004	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
1,1,2,2-Tetrachloroethane	34	0.0042	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Toluene	1000	0.0027	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Chlorobenzene	37	0.0027	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Ethylbenzene	1000	0.0031	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Styrene	23	0.0038	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Xylene (total)	410	0.0038	0.012 U	0.012	0.01 U	0.01	0.01 U	0.01	NA	NA	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012
Total Est. Conc. of TIC.											0.006					
Dilution Factor			* = 10.0													
Method:TCL Volatiles																

CHARLES WOOD
SOIL BORING VOLATILES

Geographical Location			B7		B8		B8		B9		B9		B9		B9	
Sample			B7-SB01-A02		B8-SB01-A01		B8-SB01-A02		B9-SB01-A01		B9-SB01-A02		B9-SB01-C02		B9-SB01-D02	
Sample Type													Duplicate		Trip Blank	
Batch#			9501G553		9501G553		9501G553		9501G831		9501G831		9501G831		9501G831	
Prep#			95GVF013		95GVF012		95GVF012		95GVT020		95GVT020		95GVT020		95GVC014	
RFW#			007		004		005		001		002		003		005	
Sample Depth (bgs)			4 - 6'		1 - 2'		4 - 6'		1 - 2'		6 - 8'					
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			soil		soil		soil		soil		soil		soil		water	
Units	mg/kg	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/l	
Sampling Date			1/10/95		1/10/95		1/10/95		1/23/95		1/23/95		1/23/95		1/23/95	
Analysis Date			1/16/95		1/15/95		1/15/95		2/1/95		2/1/95		2/1/95		2/1/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Bromomethane	79	0.0067	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Vinyl Chloride	2	0.0079	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chloroethane		0.0091	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Methylene Chloride	49	0.0027	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.014 B	0.012	0.012 U	0.012	0.01 U	0.01
Acetone	1000	0.0069	0.015 B	0.012	0.011 U	0.011	0.13	0.012	0.9 B	.3 *	0.012 U	0.012	0.012 U	0.012	8300	1000 *
Carbon Disulfide		0.0044	0.012 U	0.012	0.011 U	0.011	0.002 J	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1-Dichloroethene	8	0.0049	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1-Dichloroethane	570	0.003	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloroethene (total)	79	0.0044	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chloroform	19	0.0029	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloroethane	6	0.0024	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
2-Butanone	1000	0.0041	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,1-Trichloroethane	210	0.0017	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Carbon Tetrachloride	2	0.0015	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Bromodichloromethane	11	0.002	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloropropane	10	0.0017	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
cis-1,3-Dichloropropene	4	0.003	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Trichloroethene	23	0.002	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Dibromochloromethane	110	0.0024	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,2-Trichloroethane	22	0.0043	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Benzene	3	0.0033	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
trans-1,3-Dichloropropene	4	0.0024	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.006 J	0.01
Bromoform	86	0.0031	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
4-Methyl-2-pentanone	1000	0.0055	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
2-Hexanone		0.0039	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Tetrachloroethene	4	0.004	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,2,2-Tetrachloroethane	34	0.0042	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Toluene	1000	0.0027	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chlorobenzene	37	0.0027	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Ethylbenzene	1000	0.0031	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Styrene	23	0.0038	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Xylene (total)	410	0.0038	0.012 U	0.012	0.011 U	0.011	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Total Est. Conc. of TIC.									.008, .8 *							
Dilution Factor									* = 25.0						* = 100000	
Method:TCL Volatiles																

CHARLES WOOD
SOIL BORING VOLATILES

Geographical Location			B9		B10		B10		B10		B10	
Sample			B9-SB01-E02		B10-SB01-A01		B10-SB01-A01RE		B10-SB01-A02		B10-SB01-D02	
Sample Type			Field Rinsate Blank								Trip Blank	
Batch#			9501G831		9501G553		9501G553		9501G553		9501G553	
Prep#			95GVC014		95GVF012		95GVF013		95GVF012		95GVF012	
RFW#			004		001		001RE		002		003	
Sample Depth (bgs)					1 - 2'				2 - 4'			
Dilution Factor			1.00		1.00		1.00		1.00		1.00	
Matrix			water		soil		soil		soil		water	
Units	mg/kg	mg/kg	mg/l		mg/kg		mg/kg		mg/kg		mg/l	
Sampling Date			1/23/95		1/10/95		1/10/95		1/10/95		1/10/95	
Analysis Date			2/1/95		1/15/95		1/16/95		1/15/95		1/12/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Chloromethane	520	0.0073	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Bromomethane	79	0.0067	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Vinyl Chloride	2	0.0079	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chloroethane		0.0091	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Methylene Chloride	49	0.0027	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Acetone	1000	0.0069	0.13	.02 *	0.012 U	0.012	0.016 B	0.012	0.24	0.012	0.022	0.01
Carbon Disulfide		0.0044	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1-Dichloroethene	8	0.0049	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1-Dichloroethane	570	0.003	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloroethene (total)	79	0.0044	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chloroform	19	0.0029	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloroethane	6	0.0024	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
2-Butanone	1000	0.0041	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,1-Trichloroethane	210	0.0017	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Carbon Tetrachloride	2	0.0015	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Bromodichloromethane	11	0.002	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,2-Dichloropropane	10	0.0017	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
cis-1,3-Dichloropropene	4	0.003	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Trichloroethene	23	0.002	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Dibromochloromethane	110	0.0024	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,2-Trichloroethane	22	0.0043	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Benzene	3	0.0033	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
trans-1,3-Dichloropropene	4	0.0024	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Bromoform	86	0.0031	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
4-Methyl-2-pentanone	1000	0.0055	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
2-Hexanone		0.0039	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Tetrachloroethene	4	0.004	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
1,1,2,2-Tetrachloroethane	34	0.0042	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Toluene	1000	0.0027	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Chlorobenzene	37	0.0027	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Ethylbenzene	1000	0.0031	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Styrene	23	0.0038	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Xylene (total)	410	0.0038	0.01 U	0.01	0.012 U	0.012	0.012 U	0.012	0.012 U	0.012	0.01 U	0.01
Total Est. Conc. of TIC.												
Dilution Factor			* = 2.00									
Method:TCL Volatiles												

CHARLES WOOD
SOIL BORING SEMIVOLATILES

Geographical Location		AOC7		AOC7		AOC7		AOC7		AOC7		AOC7		CW1	
Sample		CWA7-SB01-A02		CWA7-SB02-A02		CWA7-SB03-A02		CWA7-SB04-A02		CWA7-SB05-A02		CWA7-SB06-A03		CW01-SB26-A02	
Sample Type															
Batch#		9412G264		9412G264		9412G264		9412G264		9412G264		9412G264		9412G216	
Prep#		94GBO847		94GBO847		94GBO847		94GBO852		94GBO847		94GBO847		94GB0835	
RFW#		001		003		002		006		004		005		004	
Sample Depth (bgs)															
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/19/94	
Analysis Date		1/3/95		1/3/95		1/3/95		1/3/95		1/3/95		1/3/95		1/5/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
bis(2-Chloroethyl) ether	0.66	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2-Chlorophenol	280	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
1,3-Dichlorobenzene	5100	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
1,4-Dichlorobenzene	570	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
1,2-Dichlorobenzene	5100	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2-Methylphenol	2800	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2,2'-oxybis(1-Chloropropane)		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
4-Methylphenol	2800	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
N-Nitroso-di-n-propylamine	0.66	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Hexachloroethane	6	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Nitrobenzene	28	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Isophorone	1100	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2-Nitrophenol		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2,4-Dimethylphenol	1100	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
bis(2-Chloroethoxy) methane		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2,4-Dichlorophenol	170	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
1,2,4-Trichlorobenzene	68	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Naphthalene	230	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
4-Chloroaniline	230	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Hexachlorobutadiene	1	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
4-Chloro-3-methylphenol	10000	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2-Methylnaphthalene		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Hexachlorocyclopentadiene	400	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2,4,6-Trichlorophenol	62	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2,4,5-Trichlorophenol	5600	0.92 U	0.92	0.92 U	0.92	0.91 U	0.91	0.92 U	0.92	0.9 U	0.9	0.9 U	0.9	1.1 U	1.1
2-Chloronaphthalene		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2-Nitroaniline		0.92 U	0.92	0.92 U	0.92	0.91 U	0.91	0.92 U	0.92	0.9 U	0.9	0.9 U	0.9	1.1 U	1.1
Dimethylphthalate	10000	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.40 U	0.42
Acenaphthylene		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2,6-Dinitrotoluene	1	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
3-Nitroaniline		0.92 U	0.92	0.92 U	0.92	0.91 U	0.91	0.92 U	0.92	0.9 U	0.9	0.9 U	0.9	1.1 U	1.1
Acenaphthene	3400	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2,4-Dinitrophenol	110	0.92 U	0.92	0.92 U	0.92	0.91 U	0.91	0.92 U	0.92	0.9 U	0.9	0.9 U	0.9	1.1 U	1.1
4-Nitrophenol		0.92 U	0.92	0.92 U	0.92	0.91 U	0.91	0.92 U	0.92	0.9 U	0.9	0.9 U	0.9	1.1 U	1.1

CHARLES WOOD
SOIL BORING SEMIVOLATILES

Geographical Location		AOC7		AOC7		AOC7		AOC7		AOC7		AOC7		CW1	
Sample		CWA7-SB01-A02		CWA7-SB02-A02		CWA7-SB03-A02		CWA7-SB04-A02		CWA7-SB05-A02		CWA7-SB06-A03		CW01-SB26-A02	
Sample Type															
Batch#		9412G264		9412G264		9412G264		9412G264		9412G264		9412G264		9412G216	
Prep#		94GBO847		94GBO847		94GBO847		94GBO852		94GBO847		94GBO847		94GB0835	
RFW#		001		003		002		006		004		005		004	
Sample Depth (bgs)															
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/19/94	
Analysis Date		1/3/95		1/3/95		1/3/95		1/3/95		1/3/95		1/3/95		1/5/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
2,4-Dinitrotoluene	1	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Diethylphthalate	10000	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
4-Chlorophenyl-phenylether		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Fluorene	2300	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
4-Nitroaniline		0.92 U	0.92	0.92 U	0.92	0.91 U	0.91	0.92 U	0.92	0.9 U	0.9	0.9 U	0.9	1.1 U	1.1
4,6-Dinitro-2-methylphenol		0.92 U	0.92	0.92 U	0.92	0.91 U	0.91	0.92 U	0.92	0.9 U	0.9	0.9 U	0.9	1.1 U	1.1
N-Nitrosodiphenylamine (1)	140	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
4-Bromophenyl-phenylether		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Hexachlorobenzene	0.66	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Pentachlorophenol	6	0.92 U	0.92	0.92 U	0.92	0.91 U	0.91	0.92 U	0.92	0.9 U	0.9	0.9 U	0.9	1.1 U	1.1
Phenanthrene		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Anthracene	10000	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Carbazole		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Di-n-butylphthalate	5700	0.23 JB	0.37	1.5 B	0.37	0.48 B	0.36	0.09 J	0.37	2 B	0.36	1.8 B	0.36	0.081	0.42
Fluoranthene	2300	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Pyrene	1700	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Butylbenzylphthalate	1100	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
3,3'-Dichlorobenzidine	2	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Benzo(a)anthracene	0.9	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Chrysene	9	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
bis(2-Ethylhexy)phthalate	49	0.075 J	0.37	0.37 U	0.37	0.34 J	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.075 J	0.42
Di-n-octyl phthalate	1100	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Benzo(b)fluoranthene	0.9	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Benzo(k)fluoranthene	0.9	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Benzo(a)pyrene	0.66	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Indeno(1,2,3-cd)pyrene	0.9	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Dibenzo(a,h)anthracene	0.66	0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Benzo(g,h,i)perylene		0.37 U	0.37	0.37 U	0.37	0.36 U	0.36	0.37 U	0.37	0.36 U	0.36	0.36 U	0.36	0.42 U	0.42
Petroleum hydrocarbons															
Total Est. Conc. of TIC		6.62		5.44		6.44		5.63		3.68		4.87		6.39	
Method:TCL Semivolatiles															

CHARLES WOOD
SOIL BORING SEMIVOLATILES

Geographical Location		CW1		CW1		CW1		CW2		CW2		CW2	
Sample		CW01-SB27-A02		CW01-SB28-A02		CW01-SB29-A02		CW02-SB30-A02		CW02-SB31-A02		CW02-SB32-A02	
Sample Type													
Batch#		9412G216		9412G216		9412G216		9412G182		9412G182		9412G182	
Prep#		94GB0835		94GB0835		94GBO835		94GBO835		94GBO835		94GBO835	
RFW#		002		003		001		002		003		001	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/19/94		12/19/94		12/19/94		12/16/94		12/16/94		12/16/94	
Analysis Date		1/5/95		1/5/95		1/5/95		12/28/94		12/28/94		12/28/94	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
bis(2-Chloroethyl) ether	0.66	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2-Chlorophenol	280	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
1,3-Dichlorobenzene	5100	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
1,4-Dichlorobenzene	570	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
1,2-Dichlorobenzene	5100	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2-Methylphenol	2800	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2,2'-oxybis(1-Chloropropane)		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
4-Methylphenol	2800	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
N-Nitroso-di-n-propylamine	0.66	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Hexachloroethane	6	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Nitrobenzene	28	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Isophorone	1100	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2-Nitrophenol		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2,4-Dimethylphenol	1100	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
bis(2-Chloroethoxy) methane		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2,4-Dichlorophenol	170	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
1,2,4-Trichlorobenzene	68	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Naphthalene	230	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.15 J	0.39	0.44 U	0.44	0.4 U	0.4
4-Chloroaniline	230	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Hexachlorobutadiene	1	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
4-Chloro-3-methylphenol	10000	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2-Methylnaphthalene		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.1 J	0.39	0.44 U	0.44	0.4 U	0.4
Hexachlorocyclopentadiene	400	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2,4,6-Trichlorophenol	62	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2,4,5-Trichlorophenol	5600	1.1 U	1.1	1 U	1	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1	1 U	1
2-Chloronaphthalene		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2-Nitroaniline		1.1 U	1.1	1 U	1	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1	1 U	1
Dimethylphthalate	10000	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Acenaphthylene		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
2,6-Dinitrotoluene	1	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.98 U	0.39	0.44 U	0.44	0.4 U	0.4
3-Nitroaniline		1.1 U	1.1	1 U	1	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1	1 U	1
Acenaphthene	3400	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.17 J	0.39	0.44 U	0.44	0.4 U	0.4
2,4-Dinitrophenol	110	1.1 U	1.1	1 U	1	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1	1 U	1
4-Nitrophenol		1.1 U	1.1	1 U	1	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1	1 U	1

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SOIL BORING SEMIVOLATILES

Geographical Location		CW1		CW1		CW1		CW2		CW2		CW2	
Sample		CW01-SB27-A02		CW01-SB28-A02		CW01-SB29-A02		CW02-SB30-A02		CW02-SB31-A02		CW02-SB32-A02	
Sample Type													
Batch#		9412G216		9412G216		9412G216		9412G182		9412G182		9412G182	
Prep#		94GB0835		94GB0835		94GBO835		94GBO835		94GBO835		94GBO835	
RFW#		002		003		001		002		003		001	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/19/94		12/19/94		12/19/94		12/16/94		12/16/94		12/16/94	
Analysis Date		1/5/95		1/5/95		1/5/95		12/28/94		12/28/94		12/28/94	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.093 J	0.39	0.44 U	0.44	0.4 U	0.4
2,4-Dinitrotoluene	1	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Diethylphthalate	10000	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
4-Chlorophenyl-phenylether		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Fluorene	2300	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.21 J	0.39	0.44 U	0.44	0.4 U	0.4
4-Nitroaniline		1.1 U	1.1	1 U	1	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1	1 U	1
4,6-Dinitro-2-methylphenol		1.1 U	1.1	1 U	1	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1	1 U	1
N-Nitrosodiphenylamine (1)	140	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
4-Bromophenyl-phenylether		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Hexachlorobenzene	0.66	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Pentachlorophenol	6	1.1 U	1.1	1 U	1	1.1 U	1.1	0.98 U	0.98	1.1 U	1.1	1 U	1
Phenanthrene		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	1.3	0.39	0.44 U	0.44	0.4 U	0.4
Anthracene	10000	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.33 J	0.39	0.44 U	0.44	0.4 U	0.4
Carbazole		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.18 J	0.39	0.44 U	0.44	0.4 U	0.4
Di-n-butylphthalate	5700	0.086	0.44	0.077	0.41	0.13 JB	0.43	0.081	0.39	0.12 JB	0.44	0.079	0.4
Fluoranthene	2300	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	1.5	0.39	0.44 U	0.44	0.4 U	0.4
Pyrene	1700	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	1.1	0.39	0.44 U	0.44	0.4 U	0.4
Butylbenzylphthalate	1100	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
3,3'-Dichlorobenzidine	2	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Benzo(a)anthracene	0.9	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.69	0.39	0.44 U	0.44	0.4 U	0.4
Chrysene	9	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.71	0.39	0.44 U	0.44	0.4 U	0.4
bis(2-Ethylhexy)phthalate	49	0.09 J	0.44	0.41 U	0.41	0.43 U	0.43	0.16 J	0.39	0.1 J	0.44	0.059 J	0.4
Di-n-octyl phthalate	1100	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.39 U	0.39	0.44 U	0.44	0.4 U	0.4
Benzo(b)fluoranthene	0.9	0.44 U	0.44	0.41 U	0.41	0.07 J	0.43	0.79	0.39	0.44 U	0.44	0.4 U	0.4
Benzo(k)fluoranthene	0.9	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.28 J	0.39	0.44 U	0.44	0.4 U	0.4
Benzo(a)pyrene	0.66	0.44 U	0.44	0.41 U	0.41	0.073 J	0.43	0.62	0.39	0.13 J	0.44	0.053 J	0.4
Indeno(1,2,3-cd)pyrene	0.9	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.37 J	0.39	0.44 U	0.44	0.4 U	0.4
Dibenzo(a,h)anthracene	0.66	0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.089 J	0.39	0.44 U	0.44	0.4 U	0.4
Benzo(g,h,i)perylene		0.44 U	0.44	0.41 U	0.41	0.43 U	0.43	0.35 J	0.39	0.44 U	0.44	0.4 U	0.4
Petroleum hydrocarbons													
Total Est. Conc. of TIC		6.7		6.19		9.19		11.4		22.8		18.1	
Method:TCL Semivolatiles													

CHARLES WOOD
SOIL BORING SEMIVOLATILES

Geographical Location		CW2		CW4		CW4		CW5		CW5		CW5	
Sample		CW02-SB33-A02		CW04-SB01-A02		CW04-SB04-A02		CW05-SB01-A02		CW05-SB01-A02RE		CW05-SB02-A02	
Sample Type													
Batch#		9412G154		9412G264		9412G264		9412G245		9412G245		9412G245	
Prep#		94GBS0835		94GBO847		95GIR002		94GBO847		94GBO847		94GBO847	
RFW#		002		008				001		001		001	
Sample Depth (bgs)		7-9'											
Dilution Factor		1.00		1.00				1.00		1.00		1.00	
Matrix		soil		soil		water		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/l		mg/kg		mg/kg		mg/kg	
Sampling Date		12/15/94		12/21/94		NA		12/20/94		12/20/94		12/20/94	
Analysis Date		12/27/94		1/3/95		1/5/95		1/3/95		1/3/95		1/3/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
bis(2-Chloroethyl) ether	0.66	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2-Chlorophenol	280	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
1,3-Dichlorobenzene	5100	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
1,4-Dichlorobenzene	570	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
1,2-Dichlorobenzene	5100	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2-Methylphenol	2800	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2,2'-oxybis(1-Chloropropane)		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
4-Methylphenol	2800	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
N-Nitroso-di-n-propylamine	0.66	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Hexachloroethane	6	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Nitrobenzene	28	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Isophorone	1100	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2-Nitrophenol		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2,4-Dimethylphenol	1100	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
bis(2-Chloroethoxy) methane		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2,4-Dichlorophenol	170	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
1,2,4-Trichlorobenzene	68	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Naphthalene	230	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
4-Chloroaniline	230	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Hexachlorobutadiene	1	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
4-Chloro-3-methylphenol	10000	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2-Methylnaphthalene		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Hexachlorocyclopentadiene	400	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2,4,6-Trichlorophenol	62	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2,4,5-Trichlorophenol	5600	1 U	1	0.98 U	0.98			0.95 U	0.95	0.95 U	0.95	0.98 U	0.98
2-Chloronaphthalene		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2-Nitroaniline		1 U	1	0.98 U	0.98			0.95 U	0.95	0.95 U	0.95	0.98 U	0.98
Dimethylphthalate	10000	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Acenaphthylene		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2,6-Dinitrotoluene	1	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
3-Nitroaniline		1 U	1	0.98 U	0.98			0.95 U	0.95	0.95 U	0.95	0.98 U	0.98
Acenaphthene	3400	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2,4-Dinitrophenol	110	1 U	1	0.98 U	0.98			0.95 U	0.95	0.95 U	0.95	0.98 U	0.98
4-Nitrophenol		1 U	1	0.98 U	0.98			0.95 U	0.95	0.95 U	0.95	0.98 U	0.98

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SOIL BORING SEMIVOLATILES

Geographical Location		CW2		CW4		CW4		CW5		CW5		CW5	
Sample		CW02-SB33-A02		CW04-SB01-A02		CW04-SB04-A02		CW05-SB01-A02		CW05-SB01-A02RE		CW05-SB02-A02	
Sample Type													
Batch#		9412G154		9412G264		9412G264		9412G245		9412G245		9412G245	
Prep#		94GBS0835		94GBO847		95GIR002		94GBO847		94GBO847		94GBO847	
RFW#		002		008				001		001		001	
Sample Depth (bgs)		7-9'											
Dilution Factor		1.00		1.00				1.00		1.00		1.00	
Matrix		soil		soil		water		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/l		mg/kg		mg/kg		mg/kg	
Sampling Date		12/15/94		12/21/94		NA		12/20/94		12/20/94		12/20/94	
Analysis Date		12/27/94		1/3/95		1/5/95		1/3/95		1/3/95		1/3/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
2,4-Dinitrotoluene	1	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Diethylphthalate	10000	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
4-Chlorophenyl-phenylether		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Fluorene	2300	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
4-Nitroaniline		1 U	1	0.98 U	0.98			0.95 U	0.95	0.95 U	0.95	0.98 U	0.98
4,6-Dinitro-2-methylphenol		1 U	1	0.98 U	0.98			0.95 U	0.95	0.95 U	0.95	0.98 U	0.98
N-Nitrosodiphenylamine (1)	140	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
4-Bromophenyl-phenylether		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Hexachlorobenzene	0.66	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Pentachlorophenol	6	1 U	1	0.98 U	0.98			0.95 U	0.95	0.95 U	0.95	0.98 U	0.98
Phenanthrene		0.075 J	0.41	0.39 U	0.39			0.085 J	0.38	0.086 J	0.38	0.39 U	0.39
Anthracene	10000	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Carbazole		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Di-n-butylphthalate	5700	0.42 B	0.41	2.5 B	0.39			0.16 JB	0.38	0.17 JB	0.38	0.18 JB	0.39
Fluoranthene	2300	0.073 J	0.41	0.39 U	0.39			0.21 J	0.38	0.22 J	0.38	0.39 U	0.39
Pyrene	1700	0.067 J	0.41	0.39 U	0.39			0.25 J	0.38	0.24 J	0.38	0.39 U	0.39
Butylbenzylphthalate	1100	0.41 U	0.41	0.23 J	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
3,3'-Dichlorobenzidine	2	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Benzo(a)anthracene	0.9	0.41 U	0.41	0.39 U	0.39			0.14 J	0.38	0.13 J	0.38	0.39 U	0.39
Chrysene	9	0.043 J	0.41	0.39 U	0.39			0.15 J	0.38	0.15 J	0.38	0.39 U	0.39
bis(2-Ethylhexy)phthalate	49	0.41 U	0.41	0.39 U	0.39			0.21 J	0.38	0.21 J	0.38	0.39 U	0.39
Di-n-octyl phthalate	1100	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Benzo(b)fluoranthene	0.9	0.41 U	0.41	0.39 U	0.39			0.2 J	0.38	0.22 J	0.38	0.39 U	0.39
Benzo(k)fluoranthene	0.9	0.41 U	0.41	0.39 U	0.39			0.084 J	0.38	0.089 J	0.38	0.39 U	0.39
Benzo(a)pyrene	0.66	0.094 J	0.41	0.39 U	0.39			0.11 J	0.38	0.1 J	0.38	0.39 U	0.39
Indeno(1,2,3-cd)pyrene	0.9	0.41 U	0.41	0.39 U	0.39			0.066 J	0.38	0.38 U	0.38	0.39 U	0.39
Dibenzo(a,h)anthracene	0.66	0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Benzo(g,h,i)perylene		0.41 U	0.41	0.39 U	0.39			0.38 U	0.38	0.38 U	0.38	0.39 U	0.39
Petroleum hydrocarbons						29 U	29						
Total Est. Conc. of TIC				5				9.38		10.08		10.65	
Method:TCL Semivolatiles						From inorganics list.							

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Geographical Location		CW6		CW6		CW6		CW9		B6		B6	
Sample		CW06-SB02-A01		CW06-SB34-A01		CW06-SB34-A02		CW09-SB01-A02		B6-SB01-A01		B6-SB01-A01RE	
Sample Type													
Batch#		9505G840		9501G423		9501G423		9501G450		9412G553		9412G553	
Prep#		95GB0323		95GB0017		95GB0017		95GB0017		94GTS0035		94GTS0083	
RFW#		001		001		002		001		008		008	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		5/10/95		1/3/95		1/3/95		1/4/95		1/10/95		1/10/95	
Analysis Date		5/30/95		1/20/95		1/20/95		1/21/95		2/9/95		2/9/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
bis(2-Chloroethyl) ether	0.66	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2-Chlorophenol	280	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
1,3-Dichlorobenzene	5100	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
1,4-Dichlorobenzene	570	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
1,2-Dichlorobenzene	5100	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2-Methylphenol	2800	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2,2'-oxybis(1-Chloropropane)		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
4-Methylphenol	2800	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
N-Nitroso-di-n-propylamine	0.66	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Hexachloroethane	6	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Nitrobenzene	28	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Isophorone	1100	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2-Nitrophenol		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2,4-Dimethylphenol	1100	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
bis(2-Chloroethoxy) methane		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2,4-Dichlorophenol	170	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
1,2,4-Trichlorobenzene	68	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Naphthalene	230	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
4-Chloroaniline	230	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Hexachlorobutadiene	1	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
4-Chloro-3-methylphenol	10000	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2-Methylnaphthalene		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Hexachlorocyclopentadiene	400	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2,4,6-Trichlorophenol	62	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2,4,5-Trichlorophenol	5600	1.2 U	1.2	1 U	1	0.96 U	0.96	0.96 U	0.96	0.94 U	0.94	0.94 U	0.94
2-Chloronaphthalene		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2-Nitroaniline		1.2 U	1.2	1 U	1	0.96 U	0.96	0.96 U	0.96	0.94 U	0.94	0.94 U	0.94
Dimethylphthalate	10000	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Acenaphthylene		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2,6-Dinitrotoluene	1	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
3-Nitroaniline		1.2 U	1.2	1 U	1	0.96 U	0.96	0.96 U	0.96	0.94 U	0.94	0.94 U	0.94
Acenaphthene	3400	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2,4-Dinitrophenol	110	1.2 U	1.2	1 U	1	0.96 U	0.96	0.96 U	0.96	0.94 U	0.94	0.94 U	0.94
4-Nitrophenol		1.2 U	1.2	1 U	1	0.96 U	0.96	0.96 U	0.96	0.94 U	0.94	0.94 U	0.94

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SOIL BORING SEMIVOLATILES

Geographical Location		CW6		CW6		CW6		CW9		B6		B6	
Sample		CW06-SB02-A01		CW06-SB34-A01		CW06-SB34-A02		CW09-SB01-A02		B6-SB01-A01		B6-SB01-A01RE	
Sample Type													
Batch#		9505G840		9501G423		9501G423		9501G450		9412G553		9412G553	
Prep#		95GB0323		95GB0017		95GB0017		95GB0017		94GTS0035		94GTS0083	
RFW#		001		001		002		001		008		008	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		5/10/95		1/3/95		1/3/95		1/4/95		1/10/95		1/10/95	
Analysis Date		5/30/95		1/20/95		1/20/95		1/21/95		2/9/95		2/9/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
2,4-Dinitrotoluene	1	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Diethylphthalate	10000	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
4-Chlorophenyl-phenylether		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Fluorene	2300	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
4-Nitroaniline		1.2 U	1.2	1 U	1	0.96 U	0.96	0.96 U	0.96	0.94 U	0.94	0.94 U	0.94
4,6-Dinitro-2-methylphenol		1.2 U	1.2	1 U	1	0.96 U	0.96	0.96 U	0.96	0.94 U	0.94	0.94 U	0.94
N-Nitrosodiphenylamine (1)	140	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
4-Bromophenyl-phenylether		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Hexachlorobenzene	0.66	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Pentachlorophenol	6	1.2 U	1.2	1 U	1	0.96 U	0.96	0.96 U	0.96	0.94 U	0.94	0.94 U	0.94
Phenanthrene		0.47 U	0.47	0.4 U	0.4	0.24 J	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Anthracene	10000	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Carbazole		0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Di-n-butylphthalate	5700	0.55 B	0.47	0.081	0.4	0.066	0.38	0.076	0.38	0.14 JB	0.38	1.2 B	0.38
Fluoranthene	2300	0.47 U	0.47	0.049 J	0.4	0.18 J	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Pyrene	1700	0.47 U	0.47	0.056 J	0.4	0.27 J	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Butylbenzylphthalate	1100	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
3,3'-Dichlorobenzidine	2	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Benzo(a)anthracene	0.9	0.47 U	0.47	0.4 U	0.4	0.16 J	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Chrysene	9	0.47 U	0.47	0.4 U	0.4	0.15 J	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
bis(2-Ethylhexy)phthalate	49	0.07 JB	0.47	0.21 J	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.042 J	0.38
Di-n-octyl phthalate	1100	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Benzo(b)fluoranthene	0.9	0.47 U	0.47	0.4 U	0.4	0.11 J	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Benzo(k)fluoranthene	0.9	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Benzo(a)pyrene	0.66	0.47 U	0.47	0.4 U	0.4	0.087 J	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Indeno(1,2,3-cd)pyrene	0.9	0.47 U	0.47	0.4 U	0.4	0.054 J	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Dibenzo(a,h)anthracene	0.66	0.47 U	0.47	0.4 U	0.4	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Benzo(g,h,i)perylene		0.47 U	0.47	0.057	0.4	0.066	0.38	0.38 U	0.38	0.38 U	0.38	0.38 U	0.38
Petroleum hydrocarbons													
Total Est. Conc. of TIC		35.9		12.2		10.3		9.58		7.02		6.03	
Method:TCL Semivolatiles													

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SOIL BORING SEMIVOLATILES

Geographical Location		B6		B6		B7		B7		B7		B7	
Sample		B6-SB01-A02		B6-SB01-A02RE		B7-SB01-A01		B7-SB01-A01RE		B7-SB01-A02		B7-SB01-A02RE	
Sample Type													
Batch#		9412G553		9412G553		9412G553		9412G553		9412G553		9412G553	
Prep#		94GTS0035		94GTS0083		94GTS0035		94GTS0083		94GTS0035		94GTS0083	
RFW#		009		009		006		006		007		007	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/10/95		1/10/95		1/10/95		1/10/95		1/10/95		1/10/95	
Analysis Date		2/9/95		2/9/95		2/9/95		2/9/95		2/9/95		2/9/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
bis(2-Chloroethyl) ether	0.66	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Chlorophenol	280	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
1,3-Dichlorobenzene	5100	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
1,4-Dichlorobenzene	570	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
1,2-Dichlorobenzene	5100	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Methylphenol	2800	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,2'-oxybis(1-Chloropropane)		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Methylphenol	2800	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
N-Nitroso-di-n-propylamine	0.66	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Hexachloroethane	6	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Nitrobenzene	28	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Isophorone	1100	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Nitrophenol		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4-Dimethylphenol	1100	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
bis(2-Chloroethoxy) methane		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4-Dichlorophenol	170	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
1,2,4-Trichlorobenzene	68	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Naphthalene	230	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Chloroaniline	230	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Hexachlorobutadiene	1	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Chloro-3-methylphenol	10000	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Methylnaphthalene		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Hexachlorocyclopentadiene	400	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4,6-Trichlorophenol	62	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4,5-Trichlorophenol	5600	0.96 U	0.96	0.98 U	0.98	0.97 U	0.97	0.97 U	0.97	1 U	1	0.98 U	0.98
2-Chloronaphthalene		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2-Nitroaniline		0.96 U	0.96	0.98 U	0.98	0.97 U	0.97	0.97 U	0.97	1 U	1	0.98 U	0.98
Dimethylphthalate	10000	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Acenaphthylene		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,6-Dinitrotoluene	1	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
3-Nitroaniline		0.96 U	0.96	0.98 U	0.98	0.97 U	0.97	0.97 U	0.97	1 U	1	0.98 U	0.98
Acenaphthene	3400	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4-Dinitrophenol	110	0.96 U	0.96	0.98 U	0.98	0.97 U	0.97	0.97 U	0.97	1 U	1	0.98 U	0.98
4-Nitrophenol		0.96 U	0.96	0.98 U	0.98	0.97 U	0.97	0.97 U	0.97	1 U	1	0.98 U	0.98

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Geographical Location		B6		B6		B7		B7		B7		B7	
Sample		B6-SB01-A02		B6-SB01-A02RE		B7-SB01-A01		B7-SB01-A01RE		B7-SB01-A02		B7-SB01-A02RE	
Sample Type													
Batch#		9412G553		9412G553		9412G553		9412G553		9412G553		9412G553	
Prep#		94GTS0035		94GTS0083		94GTS0035		94GTS0083		94GTS0035		94GTS0083	
RFW#		009		009		006		006		007		007	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/10/95		1/10/95		1/10/95		1/10/95		1/10/95		1/10/95	
Analysis Date		2/9/95		2/9/95		2/9/95		2/9/95		2/9/95		2/9/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
2,4-Dinitrotoluene	1	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Diethylphthalate	10000	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Chlorophenyl-phenylether		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Fluorene	2300	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Nitroaniline		0.96 U	0.96	0.98 U	0.98	0.97 U	0.97	0.97 U	0.97	1 U	1	0.98 U	0.98
4,6-Dinitro-2-methylphenol		0.96 U	0.96	0.98 U	0.98	0.97 U	0.97	0.97 U	0.97	1 U	1	0.98 U	0.98
N-Nitrosodiphenylamine (1)	140	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
4-Bromophenyl-phenylether		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Hexachlorobenzene	0.66	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Pentachlorophenol	6	0.96 U	0.96	0.98 U	0.98	0.97 U	0.97	0.97 U	0.97	1 U	1	0.98 U	0.98
Phenanthrene		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Anthracene	10000	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Carbazole		0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Di-n-butylphthalate	5700	0.17 JB	0.39	1.7 B	0.39	0.37 JB	0.39	0.75 B	0.39	0.28 JB	0.4	1 B	0.39
Fluoranthene	2300	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.042 J	0.39	0.4 U	0.4	0.39 U	0.39
Pyrene	1700	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.048 J	0.39	0.4 U	0.4	0.39 U	0.39
Butylbenzylphthalate	1100	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
3,3'-Dichlorobenzidine	2	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(a)anthracene	0.9	0.39 U	0.39	0.046 J	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Chrysene	9	0.044 J	0.39	0.083 J	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
bis(2-Ethylhexy)phthalate	49	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.076 J	0.4	0.39 U	0.39
Di-n-octyl phthalate	1100	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(b)fluoranthene	0.9	0.078 J	0.39	0.06 J	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(k)fluoranthene	0.9	0.041 J	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(a)pyrene	0.66	0.39 U	0.39	0.047 J	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Indeno(1,2,3-cd)pyrene	0.9	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Dibenzo(a,h)anthracene	0.66	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Benzo(g,h,i)perylene		0.39 U	0.39	0.042 J	0.39	0.39 U	0.39	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39
Petroleum hydrocarbons													
Total Est. Conc. of TIC		6.19		9.64		6.74		6.59		6.54		7.19	
Method:TCL Semivolatiles													

CHARLES WOOD
SOIL BORING SEMIVOLATILES

Geographical Location		B8		B8		B8		B8		B9		B9	
Sample		B8-SB01-A01		B8-SB01-A01RE		B8-SB01-A02		B8-SB01-A02RE		B9-SB01-A01		B9-SB01-A02	
Sample Type													
Batch#		9412G553		9412G553		9412G553		9412G553		9501G831		9501G831	
Prep#		94GTS0035		94GTS0083		94GTS0035		94GTS0083		95GB0064		95GB0064	
RFW#		004		004		005		005		001		002	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/10/95		1/10/95		1/10/95		1/10/95		1/23/95		1/23/95	
Analysis Date		2/9/95		2/9/95		2/9/95		2/9/95		2/11/95		2/22/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
bis(2-Chloroethyl) ether	0.66	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2-Chlorophenol	280	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
1,3-Dichlorobenzene	5100	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
1,4-Dichlorobenzene	570	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
1,2-Dichlorobenzene	5100	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2-Methylphenol	2800	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2,2'-oxybis(1-Chloropropane)		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
4-Methylphenol	2800	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
N-Nitroso-di-n-propylamine	0.66	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Hexachloroethane	6	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Nitrobenzene	28	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Isophorone	1100	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2-Nitrophenol		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2,4-Dimethylphenol	1100	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
bis(2-Chloroethoxy) methane		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2,4-Dichlorophenol	170	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
1,2,4-Trichlorobenzene	68	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Naphthalene	230	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
4-Chloroaniline	230	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Hexachlorobutadiene	1	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
4-Chloro-3-methylphenol	10000	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2-Methylnaphthalene		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Hexachlorocyclopentadiene	400	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2,4,6-Trichlorophenol	62	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2,4,5-Trichlorophenol	5600	0.9 U	0.9	0.91 U	0.91	1 U	0.96	0.98 U	0.98	0.96 U	0.96	0.99 U	0.99
2-Chloronaphthalene		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2-Nitroaniline		0.9 U	0.9	0.91 U	0.91	1 U	0.96	0.98 U	0.98	0.96 U	0.96	0.99 U	0.99
Dimethylphthalate	10000	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Acenaphthylene		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2,6-Dinitrotoluene	1	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
3-Nitroaniline		0.9 U	0.9	0.91 U	0.91	1 U	0.96	0.98 U	0.98	0.96 U	0.96	0.99 U	0.99
Acenaphthene	3400	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2,4-Dinitrophenol	110	0.9 U	0.9	0.91 U	0.91	1 U	0.96	0.98 U	0.98	0.96 U	0.96	0.99 U	0.99
4-Nitrophenol		0.9 U	0.9	0.91 U	0.91	1 U	0.96	0.98 U	0.98	0.96 U	0.96	0.99 U	0.99

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SOIL BORING SEMIVOLATILES

Geographical Location		B8		B8		B8		B8		B9		B9	
Sample		B8-SB01-A01		B8-SB01-A01RE		B8-SB01-A02		B8-SB01-A02RE		B9-SB01-A01		B9-SB01-A02	
Sample Type													
Batch#		9412G553		9412G553		9412G553		9412G553		9501G831		9501G831	
Prep#		94GTS0035		94GTS0083		94GTS0035		94GTS0083		95GB0064		95GB0064	
RFW#		004		004		005		005		001		002	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/10/95		1/10/95		1/10/95		1/10/95		1/23/95		1/23/95	
Analysis Date		2/9/95		2/9/95		2/9/95		2/9/95		2/11/95		2/22/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
2,4-Dinitrotoluene	1	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Diethylphthalate	10000	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
4-Chlorophenyl-phenylether		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Fluorene	2300	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
4-Nitroaniline		0.9 U	0.9	0.91 U	0.91	1 U	0.96	0.98 U	0.98	0.96 U	0.96	0.99 U	0.99
4,6-Dinitro-2-methylphenol		0.9 U	0.9	0.91 U	0.91	1 U	0.96	0.98 U	0.98	0.96 U	0.96	0.99 U	0.99
N-Nitrosodiphenylamine (1)	140	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
4-Bromophenyl-phenylether		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Hexachlorobenzene	0.66	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Pentachlorophenol	6	0.9 U	0.9	0.91 U	0.91	1 U	0.96	0.98 U	0.98	0.96 U	0.96	0.99 U	0.99
Phenanthrene		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Anthracene	10000	0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Carbazole		0.36 U	0.36	0.36 U	0.36	0 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Di-n-butylphthalate	5700	0.72 B	0.36	0.14 JB	0.36	0.59 B	0.39	0 JB	0.39	0.12 JB	0.38	0.1 JB	0.4
Fluoranthene	2300	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Pyrene	1700	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Butylbenzylphthalate	1100	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
3,3'-Dichlorobenzidine	2	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Benzo(a)anthracene	0.9	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Chrysene	9	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
bis(2-Ethylhexy)phthalate	49	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.11 J	0.38	0.073 J	0.4
Di-n-octyl phthalate	1100	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Benzo(b)fluoranthene	0.9	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Benzo(k)fluoranthene	0.9	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Benzo(a)pyrene	0.66	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Indeno(1,2,3-cd)pyrene	0.9	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Dibenzo(a,h)anthracene	0.66	0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Benzo(g,h,i)perylene		0.36 U	0.36	0.36 U	0.36	0.39 U	0.39	0.39 U	0.39	0.38 U	0.38	0.4 U	0.4
Petroleum hydrocarbons													
Total Est. Conc. of TIC		5.08		11.26		7.06		7.27		0.56		10.09	
Method:TCL Semivolatiles													

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SOIL BORING SEMIVOLATILES

Geographical Location		B9		B10		B10		B10		B10	
Sample		B9-SB01-C02		B10-SB01-A01		B10-SB01-A01RE		B10-SB01-A02		B10-SB01-A02RE	
Sample Type		Duplicate									
Batch#		9501G831		9412G553		9412G553		9412G553		9412G553	
Prep#		95GB0064		94GTS0035		94GTS0083		94GTS0035		94GTS0083	
RFW#		003		001		001		002		002	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/23/95		1/10/95		1/10/95		1/10/95		1/10/95	
Analysis Date		2/22/95		2/9/95		2/9/95		2/9/95		2/9/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	10000	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
bis(2-Chloroethyl) ether	0.66	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2-Chlorophenol	280	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
1,3-Dichlorobenzene	5100	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
1,4-Dichlorobenzene	570	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
1,2-Dichlorobenzene	5100	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2-Methylphenol	2800	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2,2'-oxybis(1-Chloropropane)		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
4-Methylphenol	2800	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
N-Nitroso-di-n-propylamine	0.66	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Hexachloroethane	6	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Nitrobenzene	28	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Isophorone	1100	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2-Nitrophenol		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2,4-Dimethylphenol	1100	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
bis(2-Chloroethoxy) methane		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2,4-Dichlorophenol	170	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
1,2,4-Trichlorobenzene	68	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Naphthalene	230	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
4-Chloroaniline	230	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Hexachlorobutadiene	1	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
4-Chloro-3-methylphenol	10000	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2-Methylnaphthalene		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Hexachlorocyclopentadiene	400	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2,4,6-Trichlorophenol	62	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2,4,5-Trichlorophenol	5600	1 U	1	0.98 U	0.98	0.99 U	0.99	0.97 U	0.97	0.98 U	0.98
2-Chloronaphthalene		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2-Nitroaniline		1 U	1	0.98 U	0.98	0.99 U	0.99	0.97 U	0.97	0.98 U	0.98
Dimethylphthalate	10000	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Acenaphthylene		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2,6-Dinitrotoluene	1	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
3-Nitroaniline		1 U	1	0.98 U	0.98	0.99 U	0.99	0.97 U	0.97	0.98 U	0.98
Acenaphthene	3400	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2,4-Dinitrophenol	110	1 U	1	0.98 U	0.98	0.99 U	0.99	0.97 U	0.97	0.98 U	0.98
4-Nitrophenol		1 U	1	0.98 U	0.98	0.99 U	0.99	0.97 U	0.97	0.98 U	0.98

CHARLES WOOD
SOIL BORING SEMIVOLATILES

Geographical Location		B9		B10		B10		B10		B10	
Sample		B9-SB01-C02		B10-SB01-A01		B10-SB01-A01RE		B10-SB01-A02		B10-SB01-A02RE	
Sample Type		Duplicate									
Batch#		9501G831		9412G553		9412G553		9412G553		9412G553	
Prep#		95GB0064		94GTS0035		94GTS0083		94GTS0035		94GTS0083	
RFW#		003		001		001		002		002	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/23/95		1/10/95		1/10/95		1/10/95		1/10/95	
Analysis Date		2/22/95		2/9/95		2/9/95		2/9/95		2/9/95	
Analysis	Standard	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Dibenzofuran		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
2,4-Dinitrotoluene	1	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Diethylphthalate	10000	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
4-Chlorophenyl-phenylether		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Fluorene	2300	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
4-Nitroaniline		1 U	1	0.98 U	0.98	0.99 U	0.99	0.97 U	0.97	0.98 U	0.98
4,6-Dinitro-2-methylphenol		1 U	1	0.98 U	0.98	0.99 U	0.99	0.97 U	0.97	0.98 U	0.98
N-Nitrosodiphenylamine (1)	140	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
4-Bromophenyl-phenylether		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Hexachlorobenzene	0.66	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Pentachlorophenol	6	1 U	1	0.98 U	0.98	0.99 U	0.99	0.97 U	0.97	0.98 U	0.98
Phenanthrene		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Anthracene	10000	0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Carbazole		0.4 U	0.4	0.39 U	0.39	0.4 U	0.4	0.39 U	0.39	0.39 U	0.39
Di-n-butylphthalate	5700	0.088	0.4	2 B	0.39	0 JB	0.4	1.6 B	0.39	0.2 JB	0.39
Fluoranthene	2300	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Pyrene	1700	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Butylbenzylphthalate	1100	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
3,3'-Dichlorobenzidine	2	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Benzo(a)anthracene	0.9	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Chrysene	9	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
bis(2-Ethylhexy)phthalate	49	0.043 J	0.4	0.057 J	0.39	0 U	0.4	0.39 U	0.39	0.17 J	0.39
Di-n-octyl phthalate	1100	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Benzo(b)fluoranthene	0.9	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Benzo(k)fluoranthene	0.9	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Benzo(a)pyrene	0.66	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Indeno(1,2,3-cd)pyrene	0.9	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Dibenzo(a,h)anthracene	0.66	0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Benzo(g,h,i)perylene		0.4 U	0.4	0.39 U	0.39	0 U	0.4	0.39 U	0.39	0.39 U	0.39
Petroleum hydrocarbons											
Total Est. Conc. of TIC		8.97		4.57		13.06		4.74		9.4	
Method:TCL Semivolatiles											

CHARLES WOOD
SOIL BORING INORGANICS

Geographical Location		AOC7		AOC7		AOC7		AOC7		AOC7		AOC7	
Sample		CWA7-SB01-A02		CWA7-SB02-A02		CWA7-SB03-A02		CWA7-SB04-A02		CWA7-SB05-A02		CWA7-SB06-A03	
Sample Type													
Batch#		9412G264		9412G264		9412G264		9412G264		9412G264		9412G264	
Prep#		94GI211		94GI211		94GI211		94GI211		94GI211		94GI211	
RFW#		001		003		002		006		004		005	
Sample Depth (bgs)		7-9'											
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94	
Analysis Date		1/4/95		1/4/95		1/4/95		1/4/95		1/4/95		1/4/95	
Analysis	Standard	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting
		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
% Solids		90.0	0.10	90.6	0.10	90.8	0.10	89.8	0.10	90.5	0.10	89.8	0.10
Silver	110	0.49 U	0.49	0.50 U	0.50	0.46 U	0.46	0.51 U	0.51	0.47 U	0.47	0.48 U	0.48
Aluminum		3650	2.1	4340	2.1	3820	1.9	5170	2.2	3490	2.0	3610	2.0
Arsenic	20	8.6	1.5 *	1.7	0.29	8.4	0.34	12.7	1.0 *	2.8	0.28	5.9	0.32
Barium	700	2.5	0.16	4.5	0.17	4.5	0.15	6.2	0.17	3.6	0.16	2.4	0.16
Beryllium	1	0.31	0.082	0.29	0.084	0.28	0.076	0.45	0.086	0.30	0.079	0.26	0.080
Calcium		69	1.8	91.9	1.8	134	1.7	275	1.9	63.9	1.7	43.7	1.7
Cadmium	1	0.70 U	0.7	0.71 U	0.71	0.65 U	0.65	0.73 U	0.73	0.67 U	0.67	0.68 U	0.68
Cobalt		0.58 U	0.58	0.94	0.59	0.68	0.53	0.60 U	0.6	0.55 U	0.55	0.56 U	0.56
Chromium		61.1	1.3	61.6	1.3	73.6	1.2	83.4	1.4	64.7	1.3	61.1	1.3
Copper	600	1.6	0.49	1.6	0.5	1.8	0.46	2.2	0.51	1.4	0.47	1.3	0.48
Iron		10800	0.47	12400	0.48	11100	0.44	15900	0.49	11400	0.45	11000	0.46
Mercury	14	0.10 U	0.10	0.085 U	0.085	0.09 U	0.09	0.10 U	0.10	0.10 U	0.10	0.09 U	0.09
Potassium		2060	21.1	2360	21.5	1740	19.4	2570	21.9	2200	20.2	2280	20.5
Magnesium		694	7.9	852	8	602	7.3	919	8.2	720	7.5	766	7.7
Manganese		3.6	0.12	8.2	0.13	12.7	0.11	11.3	0.13	2.8	0.12	1.8	0.12
Sodium		18.8	2.7	12.0	2.8	11.7	2.5	13.8	2.8	14.7	2.6	11.5	2.6
Nickel	250	1.8	0.66	2.6	0.67	1.9	0.61	2.1	0.69	1.6	0.63	1.3	0.64
Lead	400	6.3	0.27	6.9	0.26	4.5	0.3	8.5	1.5 **	6.3	1.2 *	4.9	0.28
Antimony	14	2.3 U	2.3	2.4 U	2.4	2.2 U	2.2	2.4 U	2.4	2.2 U	2.2	2.3 U	2.3
Selenium	63	0.26	0.17	0.18	0.17	0.19 U	0.19	0.3	0.19	0.26	0.16	0.18 U	0.18
Thallium	2	0.21 U	0.21	0.20 U	0.2	0.23 U	0.23	0.23 U	0.23	0.19 U	0.19	0.22 U	0.22
Vanadium	370	93.5	0.43	79.8	0.44	78.4	0.4	95.1	0.45	92.8	0.41	81.7	0.42
Zinc	1500	8.9	0.43	12.0	0.44	10.5	0.4	15.8	0.45	9.0	0.41	9.1	0.42
Cyanide	1100												
Dilution Factor		* = 5.00						* = 3.00, ** = 5.00		* = 5.00			
Method:TAL Metals													

CHARLES WOOD
SOIL BORING INORGANICS

Geographical Location		CW1		CW1		CW1		CW1		CW2		CW2	
Sample		CW01-SB26-A02		CW01-SB27-A02		CW01-SB28-A02		CW01-SB29-A02		CW02-SB30-A02		CW02-SB31-A02	
Sample Type													
Batch#		9412G216		9412G216		9412G216		9412G216		9412G182		9412G182	
Prep#		94GTS484		94GTS484		94GTS484		94GTS484		94GTS484		94GTS484	
RFW#		004		002		003		001		002		003	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/19/94		12/19/94		12/19/94		12/19/94		12/16/94		12/16/94	
Analysis Date		12/22/94		12/22/94		12/22/94		12/22/94		12/22/94		12/22/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		77.9	0.10	75.5	0.10	81.2	0.1	76.7	0.10	83.1	0.1	74.2	0.10
Silver	110	0.46 U	0.46	0.53 U	0.53	0.47 U	0.47	0.50 U	0.50	0.54 U	0.54	0.60 U	0.6
Aluminum		4070	1.9	5120	2.3	4850	2.0	4010	2.1	6450	2.3	5430	2.6
Arsenic	20	4.1	0.30	4.5	0.35	5.6	0.31	2.2	0.36	5.7	0.31	8.5	0.76 *
Barium	700	3.4	0.15	4.4	0.18	4.2	0.16	2.7	0.17	36.2	0.18	58.6	0.20
Beryllium	1	0.41	0.076	0.45	0.088	0.84	0.079	0.33	0.084	0.58	0.090	0.51	0.10
Calcium		236	1.7	283	1.9	229	1.7	669	1.8	655	2.0	976	2.2
Cadmium	1	0.65 U	0.65	0.75 U	0.75	0.67 U	0.67	0.71 U	0.71	0.76 U	0.76	0.86 U	0.86
Cobalt		0.53 U	0.53	0.73	0.62	0.86	0.55	0.59 U	0.59	0.95	0.63	4.20	0.71
Chromium		52.2	1.2	71.7	1.4	59.7	1.3	46.4	1.3	69.9	1.4	48.6	1.6
Copper	600	1.8	0.46	2	0.53	1.1	0.47	1.2	0.50	2.7	0.54	2.9	0.60
Iron		10800	0.44	14500	0.51	12900	0.45	9440	0.48	20400	0.52	19200	0.58
Mercury	14	0.10 U	0.10	0.11 U	0.11	0.21	0.091	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11
Potassium		2700	19.5	3540	22.6	3660	20.2	2700	21.5	4210	23.0	2610	25.8
Magnesium		960	7.3	1310	8.4	1310	7.5	943	8.0	1720	8.6	1270	9.6
Manganese		7.2	0.11	10.6	0.13	8.0	0.12	5.4	0.13	25.1	0.13	24.8	0.15
Sodium		33.4	2.5	29.7	2.9	20.4	2.6	15.5	2.8	34.8	2.9	45.8	3.3
Nickel	250	1.5	0.61	3.1	0.71	2.7	0.63	1.4	0.67	4.9	0.72	11.2	0.81
Lead	400	3.9	0.26	5.9	0.30	3.9	0.27	3.2	0.31	8.1	0.54 *	7.5	0.33
Antimony	14	2.2 U	2.2	2.5 U	2.5	2.2 U	2.2	2.4 U	2.4	2.6 U	2.6	2.9 U	2.9
Selenium	63	0.19	0.17	0.20 U	0.20	0.17 U	0.17	0.20 U	0.20	0.29	0.17	0.70	0.21
Thallium	2	0.20 U	0.20	0.24 U	0.24	0.21 U	0.21	0.25 U	0.25	0.21 U	0.21	0.26 U	0.26
Vanadium	370	28.8	0.40	42.4	0.46	31.8	0.41	26.7	0.44	36.6	0.47	29.1	0.53
Zinc	1500	12.8	0.40	16.2	0.46	15.2	0.41	11.7	0.44	27.8	0.47	44.2	0.53
Cyanide	1100												
Dilution Factor										* = 2.00		* = 2.00	
Method:TAL Metals													

CHARLES WOOD
SOIL BORING INORGANICS

Geographical Location		CW2		CW2		CW2		CW4		CW5		CW5	
Sample		CW02-SB32-A02		CW02-SB33-A02		CW02-SB33-A02		CW04-SB01-A02		CW05-SB01-A02		CW05-SB02-A02	
Sample Type													
Batch#		9412G182		9412G154		9412G154		9412G264		9412G245		9412G245	
Prep#		94GTS484		95GTS001		95GTS001		94GI211					
RFW#		001		001		002		008		001		002	
Sample Depth (bgs)				2-4'		7-9'							
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/16/94		12/15/94		12/15/94		12/21/94					
Analysis Date		12/22/94		1/3/95		1/3/95		1/4/95					
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		80.7	0.1	84.4	0.10	80.0	0.10	83.2	0.10	86.1	0.10	83.9	0.10
Silver	110	0.52 U	0.52			0.5 U	0.5	0.52 U	0.52	7.4	0.47	0.40 U	0.40
Aluminum		2920	2.2			7310	2.1	5030	2.2	3920	2.0	3400	1.7
Arsenic	20	2.6	0.34			15.7	1.9 *	1.5	0.31	3.8	0.34	1.5	0.29
Barium	700	23.6	0.17			326	0.17	2.7	0.17	36.2	0.16	21.0	0.13
Beryllium	1	0.28	0.087			1.5	0.083	0.47	0.087	0.14	0.079	0.32	0.067
Calcium		502	1.9			1270	1.8	302	1.9	1000	1.7	851	1.5
Cadmium	1	0.74 U	0.74			0.9	0.71	0.74 U	0.74	0.67 U	0.67	0.57 U	0.57
Cobalt		0.91	0.61			5.9	0.58	0.61 U	0.61	1.0	0.55	0.47 U	0.47
Chromium		32.2	1.4			56.5	1.3	63.5	1.4	42.2	1.3	38.3	1.1
Copper	600	2.7	0.52			5.5	0.5	379	0.52	21.5	0.47	2.0	0.40
Iron		11100	0.50			17600	0.48	11500	0.50	8950	0.45	5930	0.39
Mercury	14	0.083 U	0.083			0.12 U	0.12	0.09 U	0.09	0.63	0.12	0.09 U	0.09
Potassium		1980	22.2			3350	21.3	3490	22.2	944	20.1	1880	17.2
Magnesium		776	8.3			1880	8	1320	8.3	527	7.5	717	6.4
Manganese		12.5	0.13			35.1	0.12	8.8	0.13	19.7	0.12	7.2	0.10
Sodium		40.8	2.8			42.7	2.7	15.3	2.8	28.9	2.6	13.5	2.2
Nickel	250	2.6	0.70			23.2	0.67	1.5	0.69	2.7	0.63	1.6	0.54
Lead	400	3.1	0.29			5.6	1.7 *	1440	5.8	20.7	3.0 *	3.3	0.25
Antimony	14	2.5 U	2.5			2.4 U	2.4	2.5	2.5	2.2 U	2.2	1.9 U	1.9
Selenium	63	0.20	0.19			4.2	0.44 *	0.17 U	0.17	0.40	0.19	0.35	0.16
Thallium	2	0.23 U	0.23			0.27 U	0.27	0.21 U	0.21	0.24 U	0.24	0.33	0.20
Vanadium	370	19.4	0.46			23.6	0.44	20.6	0.45	20.7	0.41	21.4	0.35
Zinc	1500	19.3	0.46			63.9	0.44	46.2	0.45	40.4	0.41	11.4	0.35
Cyanide	1100									0.43 U	0.43	0.33 U	0.33
Dilution Factor		* = 10.0				* = 5.00				* = 10.0			
Method:TAL Metals													

CHARLES WOOD
SOIL BORING INORGANICS

Geographical Location		CW6		CW6		CW6		CW9		B6	
Sample		CW06-SB34-A01		CW06-SB34-A02		CW06-SB34-A02		CW09-SB01-A02		B6-SB01-A01	
Sample Type											
Batch#		9501G423		9501G423		9505G840		9501G450		9501G553	
Prep#		95GTS006		95GTS006		95GTS285		95GTS006		95GTS013	
RFW#		001		002		001		003		008	
Sample Depth (bgs)											
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/3/95		1/3/95		5/10/95		1/4/95		1/10/95	
Analysis Date		1/9/95		1/9/95		5/16/95		1/9/95		1/13/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		83.8	0.10	86.6	0.10	70.9	0.10	86.9	0.10	88.0	0.1
Silver	110							0.93	0.50	0.45 U	0.45
Aluminum								3830	2.1	4220	3.1
Arsenic	20							2.6	0.33	4.6	0.35
Barium	700							6.6	0.17	6.3	0.15
Beryllium	1							0.39	0.084	0.055 U	0.055
Calcium								366	1.8	303	1.5
Cadmium	1							0.71 U	0.71	0.53 U	0.53
Cobalt								1.0	0.59	0.59	0.42
Chromium								44.0	1.3	51.8	0.85
Copper	600							2.3	0.50	1.4	0.73
Iron								9720	0.48	11000	0.45
Mercury	14							0.12	0.11	0.095 U	0.095
Potassium								1480	21.4	2570	12.3
Magnesium								698	8.0	1040	6.2
Manganese								11.9	0.13	5.6	0.16
Sodium								21.4	2.7	24.2	3.5
Nickel	250							2.8	0.67	1.9	0.76
Lead	400							3.9	0.29	1.9	0.18
Antimony	14							2.4 U	2.4	2.0 U	2.0
Selenium	63							0.19 U	0.19	0.4	0.27
Thallium	2							0.36 U	0.36	0.13 U	0.13
Vanadium	370							27.4	0.44	25.6	0.38
Zinc	1500							12.8	0.44	18.4	0.35
Cyanide	1100									0.42 U	0.42
Dilution Factor											
Method:TAL Metals											

CHARLES WOOD
SOIL BORING INORGANICS

Geographical Location		B6		B7		B7		B8		B8		B9	
Sample		B6-SB01-A02		B7-SB01-A01		B7-SB01-A02		B8-SB01-A01		B8-SB01-A02		B9-SB01-A01	
Sample Type													
Batch#		9501G553		9501G553		9501G553		9501G553		9501G553		9501G831	
Prep#		95GTS013		95GTS013		95GTS013		95GTS013		95GTS013			
RFW#		009		006		007		004		005		001	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/10/95		1/10/95		1/10/95		1/10/95		1/10/95			
Analysis Date		1/13/95		1/13/95		1/13/95		1/13/95		1/13/95			
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		84.6	0.1	85.5	0.1	83.4	0.10	91.2	0.1	84.8	0.10	84.7	0.10
Silver	110	0.49 U	0.49	0.49 U	0.49	0.48 U	0.48	0.44 U	0.44	0.48 U	0.48	0.58 U	0.58
Aluminum		6800	3.3	15700	3.3	2220	3.2	4510	3.0	5800	3.2	7800	3.9
Arsenic	20	4.3	0.38	10.3	0.72 *	1.3	0.38	3.5	0.35	7.5	0.73 *	19.5	2.0 **
Barium	700	5.0	0.16	25.9	0.16	2.3	0.15	3.3	0.14	8.8	0.15	40.1	0.19
Beryllium	1	0.72	0.059	1.1	0.059	0.06 U	0.06	0.053 U	0.053	0.76	0.058	0.85	0.070
Calcium		235	1.7	653	1.7	76.2	1.6	44.8	1.5	76	1.6	746	2.0
Cadmium	1	0.57 U	0.57	0.57 U	0.57	0.56 U	0.56	0.51 U	0.51	0.56 U	0.56	0.58 U	0.68
Cobalt		1.1	0.45	4.5	0.45	0.54	0.44	0.65	0.41	1.1	0.44	3.0	0.54
Chromium		77.5	0.93	66.1	0.92	33.6	0.90	48.0	0.83	64.7	0.91	76.5	1.1
Copper	600	1.8	0.79	6.6	0.79	0.77 U	0.77	1.2	0.71	1.7	0.77	5.1	0.94
Iron		16700	0.49	32000	0.49	6100	0.48	11800	0.44	16000	0.48	28300	0.58
Mercury	14	0.11 U	0.11	0.1 U	0.1	0.09 U	0.09	0.081 U	0.081	0.12 U	0.12	0.14	0.10
Potassium		3900	13.4	2780	13.3	1710	13.0	2410	12.0	3740	13.1	4080	15.9
Magnesium		1710	6.8	2390	6.7	622	6.6	932	6.1	1450	6.6	1890	8.0
Manganese		9.4	0.18	122	0.18	2.8	0.17	3.4	0.16	6.8	0.17	48.7	0.21
Sodium		56.8	3.8	37.7	3.8	39.9	3.7	22.4	3.4	18.7	3.7	29.8	4.5
Nickel	250	3.1	0.83	8.3	0.83	1.4	0.81	2.2	0.74	3	0.81	5.6	0.98
Lead	400	3.5	0.20	11.1	0.95 **	1.7	0.20	2.7	0.18	4.1	0.19	12.1	0.56 *
Antimony	14	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	1.9 U	1.9	2.1 U	2.1	2.5 U	2.5
Selenium	63	0.30 U	0.30	0.85	0.29	0.30 U	0.30	0.49	0.28	0.55	0.29	0.90	0.35
Thallium	2	0.14 U	0.14	0.13 U	0.13	0.14 U	0.14	0.13 U	0.13	0.14 U	0.14	0.26 U	0.26
Vanadium	370	35.0	0.41	59.6	0.41	17.3	0.40	25.0	0.37	35.1	0.41	23.5	0.49
Zinc	1500	20.3	0.37	34.3	0.37	6.9	0.36	11.6	0.34	17.5	0.37	47.7	0.44
Cyanide	1100	0.51 U	0.51	0.41	0.41	0.39 U	0.39	0.38 U	0.38	0.55 U	0.55	0.47 U	0.47
Dilution Factor				* = 2.00, ** = 5.00						* = 2.00		* = 2.00, ** = 5.00	
Method:TAL Metals													

CHARLES WOOD
SOIL BORING INORGANICS

Geographical Location		B9		B9		B10		B10	
Sample		B9-SB01-A02		B9-SB01-C02		B10-SB01-A01		B10-SB01-A02	
Sample Type									
Batch#		9501G831		9501G831		9501G553		9501G553	
Prep#						95GTS013		95GTS013	
RFW#		002		003		001		002	
Sample Depth (bgs)									
Dilution Factor		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date						1/10/95		1/10/95	
Analysis Date						1/13/95		1/13/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		83.4	0.10	81.9	0.10	84.1	0.1	84.9	0.1
Silver	110	0.58 U	0.58	0.47 U	0.47	0.49 U	0.49	0.48 U	0.48
Aluminum		6250	3.9	6520	3.1	9790	3.3	10200	3.2
Arsenic	20	22.7	2.6 *	20.4	1.6 *	31.6	3.8 *	24.9	3.7 *
Barium	700	39.2	0.18	35.3	0.15	22.3	0.16	26.0	0.15
Beryllium	1	0.68	0.069	0.74	0.056	1.7	0.058	1.6	0.058
Calcium		297	1.9	244	1.6	517	1.6	501	1.6
Cadmium	1	0.67 U	0.67	0.54 U	0.54	0.57 U	0.57	0.56 U	0.56
Cobalt		2.9	0.53	2.8	0.43	3.3	0.45	3.4	0.44
Chromium		69.2	1.1	70.0	0.88	126	0.92	128	0.91
Copper	600	3.5	0.92	3.4	0.75	3.3	0.78	3.1	0.77
Iron		25200	0.58	23800	0.47	45500	0.49	43200	0.48
Mercury	14	0.32	0.092	0.12 U	0.12	0.10 U	0.10	0.10 U	0.10
Potassium		3300	15.7	4080	12.7	10600	13.2	10400	13.1
Magnesium		1490	7.9	1830	6.4	3920	6.7	3960	6.6
Manganese		25.1	0.21	25.9	0.17	31.0	0.18	23.6	0.17
Sodium		19.8	4.4	20.3	3.6	55.2	3.7	44.6	3.7
Nickel	250	5.6	0.97	6.0	0.78	7.1	0.82	7.4	0.81
Lead	400	6.1	0.19	5.6	0.23	5.1	0.20	4.5	0.19
Antimony	14	2.5 U	2.5	2.0 U	2.0	2.1 U	2.1	2.1 U	2.1
Selenium	63	0.49	0.23	0.50	0.29	0.56	0.30	0.61	0.29
Thallium	2	0.17 U	0.17	0.21 U	0.21	0.14 U	0.14	0.14 U	0.14
Vanadium	370	25.6	0.48	20.6	0.39	42.9	0.41	40.9	0.41
Zinc	1500	49.4	0.44	49.8	0.35	55.6	0.37	53.6	0.37
Cyanide	1100	0.42 U	0.42	0.40 U	0.40	0.56 U	0.56	0.49 U	0.49
Dilution Factor		* = 10.00		* = 5.00		* = 10.0		* = 10.0	
Method:TAL Metals									

CHARLES WOOD
SOIL BORING PESTICIDES/PCBS

Geographical Location		AOC7		AOC7		AOC7		AOC7		AOC7		AOC7	
Sample		CWA7-SB01-A02		CWA7-SB02-A02		CWA7-SB03-A02		CWA7-SB04-A02		CWA7-SB05-A02		CWA7-SB06-A03	
Sample Type													
Batch#		9412G264		9412G264		9412G264		9412G264		9412G264		9412G264	
Prep#		94GP1108		94GP1108		94GP1108		94GP1108		94GP1108		94GP1108	
RFW#		001		003		002		006		004		005	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94		12/21/94	
Analysis Date		1/4/95		1/4/95		1/4/95		1/4/95		1/4/95		1/4/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
beta-BHC		0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
delta-BHC		0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
gamma-BHC (Lindane)	0.52	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
Heptachlor	0.15	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
Aldrin	0.04	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
Heptachlor epoxide		0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
Endosulfan I	340	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
Dieldrin	0.042	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
4,4'-DDE	2	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
Endrin	17	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
Endosulfan II	340	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
4,4'-DDD	3	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
Endosulfan sulfate		0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
4,4'-DDT	2	0.0037 U	0.0037	0.0036 U	0.0036	0.004	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
Methoxychlor	280	0.018 U	0.018	0.018 U	0.018	0.018 U	0.018	0.018 U	0.018	0.018 U	0.018	0.018 U	0.018
Endrin ketone		0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
Endrin aldehyde		0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036	0.0037 U	0.0037	0.0036 U	0.0036	0.0036 U	0.0036
alpha-Chlordane		0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
gamma-Chlordane		0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018	0.0018 U	0.0018
Toxaphene	0.1	0.18 U	0.18	0.18 U	0.18	0.18 U	0.18	0.18 U	0.18	0.18 U	0.18	0.18 U	0.18
Aroclor-1016	0.49	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036
Aroclor-1221	0.49	0.073 U	0.073	0.073 U	0.073	0.072 U	0.072	0.073 U	0.073	0.073 U	0.073	0.073 U	0.073
Aroclor-1232	0.49	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036
Aroclor-1242	0.49	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036
Aroclor-1248	0.49	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036
Aroclor-1254	0.49	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036
Aroclor-1260	0.49	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036	0.037 U	0.037	0.036 U	0.036	0.036 U	0.036
Method:TCL Pesticides/PCBs													

CHARLES WOOD
SOIL BORING PESTICIDES/PCBS

Geographical Location		CW1		CW1		CW1		CW1		CW2		CW2	
Sample		CW01-SB26-A02		CW01-SB27-A02		CW01-SB28-A02		CW01-SB29-A02		CW02-SB30-A02		CW02-SB30-A02DL	
Sample Type													
Batch#		9412G216		9412G216		9412G216		9412G216		9412G182		9412G182	
Prep#		94GP1108		94GP1108		94GP1108		94GP1108		94GP1090		94GP1090	
RFW#		004		002		003		001		002		002DL	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		5.0	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/19/94		12/19/94		12/19/94		12/19/94		12/16/94		12/16/94	
Analysis Date		1/4/95		1/4/95		1/4/95		1/4/95		1/3/95		1/3/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
beta-BHC		0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
delta-BHC		0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
gamma-BHC (Lindane)	0.52	0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
Heptachlor	0.15	0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
Aldrin	0.04	0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
Heptachlor epoxide		0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
Endosulfan I	340	0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
Dieldrin	0.042	0.0042 U	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.0039 U	0.0039	0.019 U	0.019
4,4'-DDE	2	0.0038 J	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.0035 JP	0.0039	0.019 U	0.019
Endrin	17	0.0042 U	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.0039 U	0.0039	0.019 U	0.019
Endosulfan II	340	0.0042 U	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.0039 U	0.0039	0.019 U	0.019
4,4'-DDD	3	0.0042 U	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.012 P	0.0039	.014 JD	0.019
Endosulfan sulfate		0.0042 U	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.0039 U	0.0039	0.019 U	0.019
4,4'-DDT	2	0.0042 U	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.062 P	0.0039	.053 DP	0.019
Methoxychlor	280	0.021 U	0.021	0.022 U	0.022	0.02 U	0.02	0.022 U	0.022	0.019 U	0.019	0.097 U	0.097
Endrin ketone		0.0042 U	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.0039 U	0.0039	0.019 U	0.019
Endrin aldehyde		0.0042 U	0.0042	0.0043 U	0.0043	0.0041 U	0.0041	0.0043 U	0.0043	0.0039 U	0.0039	0.019 U	0.019
alpha-Chlordane		0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
gamma-Chlordane		0.0021 U	0.0021	0.0022 U	0.0022	0.002 U	0.002	0.0022 U	0.0022	0.0019 U	0.0019	0.0097 U	0.0097
Toxaphene	0.1	0.21 U	0.21	0.22 U	0.22	0.2 U	0.2	0.22 U	0.22	0.19 U	0.19	0.97 U	0.97
Aroclor-1016	0.49	0.042 U	0.042	0.043 U	0.043	0.041 U	0.041	0.043 U	0.043	0.039 U	0.039	0.19 U	0.19
Aroclor-1221	0.49	0.085 U	0.085	0.087 U	0.087	0.082 U	0.082	0.086 U	0.086	0.078 U	0.078	0.39 U	0.39
Aroclor-1232	0.49	0.042 U	0.042	0.043 U	0.043	0.041 U	0.041	0.043 U	0.043	0.039 U	0.039	0.19 U	0.19
Aroclor-1242	0.49	0.042 U	0.042	0.043 U	0.043	0.041 U	0.041	0.043 U	0.043	0.039 U	0.039	0.19 U	0.19
Aroclor-1248	0.49	0.042 U	0.042	0.043 U	0.043	0.041 U	0.041	0.043 U	0.043	0.039 U	0.039	0.19 U	0.19
Aroclor-1254	0.49	0.042 U	0.042	0.043 U	0.043	0.041 U	0.041	0.043 U	0.043	0.61	0.039	.75 D	0.19
Aroclor-1260	0.49	0.042 U	0.042	0.043 U	0.043	0.041 U	0.041	0.043 U	0.043	0.039 U	0.039	0.19 U	0.19
Method:TCL Pesticides/PCBs													

CHARLES WOOD
SOIL BORING PESTICIDES/PCBS

Geographical Location		CW2		CW2		CW2		CW2		CW4		CW5	
Sample		CW02-SB31-A02		CW02-SB32-A02		CW02-SB33-A02		CW02-SB33-A02DL		CW04-SB01-A02		CW05-SB01-A02	
Sample Type													
Batch#		9412G182		9412G182		9412G154		9412G154		9412G264		9412G245	
Prep#		94GP1090		94GP1090		94GP1090		94GP1090		94GP1108		94GP1108	
RFW#		003		001		002		002DL		008		001	
Sample Depth (bgs)						7-9'		7-9'					
Dilution Factor		1.00		1.00		1.00		10.0		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/16/94		12/16/94		12/15/94		NA		12/21/94		12/20/94	
Analysis Date		1/3/95		1/3/95		1/3/95		1/3/95		1/4/95		1/4/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0019 U	0.0019
beta-BHC		0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0019 U	0.0019
delta-BHC		0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0019 U	0.0019
gamma-BHC (Lindane)	0.52	0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0019 U	0.0019
Heptachlor	0.15	0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0019 U	0.0019
Aldrin	0.04	0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0019 U	0.0019
Heptachlor epoxide		0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0019 U	0.0019
Endosulfan I	340	0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0019 U	0.0019
Dieldrin	0.042	0.0044 U	0.0044	0.0041 U	0.0041	0.0041 U	0.0041	0.041 U	0.041	0.004 U	0.004	0.0038 U	0.0038
4,4'-DDE	2	0.0044 U	0.0044	0.0041 U	0.0041	0.0083 P	0.0041	0.041 U	0.041	0.004 U	0.004	0.21 P	0.0038
Endrin	17	0.0044 U	0.0044	0.0041 U	0.0041	0.0041 U	0.0041	0.041 U	0.041	0.004 U	0.004	0.0038 U	0.0038
Endosulfan II	340	0.0044 U	0.0044	0.0041 U	0.0041	0.0041 U	0.0041	0.041 U	0.041	0.004 U	0.004	0.0038 U	0.0038
4,4'-DDD	3	0.0098	0.0044	0.0073	0.0041	0.26	0.0041	.2 D	0.041	0.004 U	0.004	0.087	0.0038
Endosulfan sulfate		0.0044 U	0.0044	0.0041 U	0.0041	0.0041 U	0.0041	0.041 U	0.041	0.004 U	0.004	0.0038 U	0.0038
4,4'-DDT	2	0.0058	0.0044	0.0041 U	0.0041	0.046	0.0041	.043 D	0.041	0.004 U	0.004	0.087	0.0038
Methoxychlor	280	0.022 U	0.022	0.02 U	0.02	0.021 U	0.021	0.21 U	0.21	0.02 U	0.02	0.0038 U	0.0038
Endrin ketone		0.0044 U	0.0044	0.0041 U	0.0041	0.0041 U	0.0041	0.041 U	0.041	0.004 U	0.004	0.0038 U	0.0038
Endrin aldehyde		0.0044 U	0.0044	0.0041 U	0.0041	0.0041 U	0.0041	0.041 U	0.041	0.004 U	0.004	0.0038 U	0.0038
alpha-Chlordane		0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0084 P	0.0019
gamma-Chlordane		0.0022 U	0.0022	0.002 U	0.002	0.0021 U	0.0021	0.021 U	0.021	0.002 U	0.002	0.0092	0.0019
Toxaphene	0.1	0.22 U	0.22	0.2 U	0.2	0.21 U	0.21	2.1 U	2.1	0.2 U	0.2	0.19 U	0.19
Aroclor-1016	0.49	0.044 U	0.044	0.041 U	0.041	0.041 U	0.041	0.41 U	0.41	0.04 U	0.04	0.038 U	0.038
Aroclor-1221	0.49	0.089 U	0.089	0.082 U	0.082	0.083 U	0.083	0.83 U	0.83	0.079 U	0.079	0.077 U	0.077
Aroclor-1232	0.49	0.044 U	0.044	0.041 U	0.041	0.041 U	0.041	0.41 U	0.41	0.04 U	0.04	0.038 U	0.038
Aroclor-1242	0.49	0.044 U	0.044	0.041 U	0.041	0.041 U	0.041	0.41 U	0.41	0.04 U	0.04	0.038 U	0.038
Aroclor-1248	0.49	0.044 U	0.044	0.041 U	0.041	0.041 U	0.041	0.41 U	0.41	0.04 U	0.04	0.038 U	0.038
Aroclor-1254	0.49	0.044 U	0.044	0.041 U	0.041	0.041 U	0.041	0.41 U	0.41	0.04 U	0.04	0.17	0.038
Aroclor-1260	0.49	0.044 U	0.044	0.041 U	0.041	0.041 U	0.041	0.41 U	0.41	0.04 U	0.04	0.15	0.038
Method:TCL Pesticides/PCBs													

CHARLES WOOD
SOIL BORING PESTICIDES/PCBS

Geographical Location		CW5		CW5		CW6		CW6		CW6		CW6	
Sample		CW05-SB01-A02DL		CW05-SB02-A02		CW06-SB02-A01		CW06-SB02-A01DL		CW06-SB34-A01		CW06-SB34-A01DL	
Sample Type													
Batch#		9412G245		9412G245		9505G840		9505G840		9501G423		9501G423	
Prep#		94GP1108		94GP1108		95GP0512		95GP0512		95GP0028		95GP0028	
RFW#		001DL		002		001		001 DL		001		001DL	
Sample Depth (bgs)													
Dilution Factor		10.0		1.00		1.00		1.00		1.00		10.0	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		12/20/94		12/20/94		5/10/95		5/10/95		1/3/95		1/3/95	
Analysis Date		1/5/95		1/4/95		5/29/95		5/29/95		1/17/95		1/18/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.019 U	0.019	0.0019 U	0.0019	0.0023 U	0.0023	0.23 U	0.23	0.002 U	0.002	0.02 U	0.02
beta-BHC		0.019 U	0.019	0.0019 U	0.0019	0.0023 U	0.0023	0.23 U	0.23	0.002 U	0.002	0.02 U	0.02
delta-BHC		0.019 U	0.019	0.0019 U	0.0019	0.0023 U	0.0023	0.23 U	0.23	0.002 U	0.002	0.02 U	0.02
gamma-BHC (Lindane)	0.52	0.019 U	0.019	0.0019 U	0.0019	0.0023 U	0.0023	0.23 U	0.23	0.002 U	0.002	0.02 U	0.02
Heptachlor	0.15	0.019 U	0.019	0.0019 U	0.0019	0.0023 U	0.0023	0.23 U	0.23	0.002 U	0.002	0.02 U	0.02
Aldrin	0.04	0.019 U	0.019	0.0019 U	0.0019	0.0023 U	0.0023	0.23 U	0.23	0.002 U	0.002	0.02 U	0.02
Heptachlor epoxide		0.019 U	0.019	0.0019 U	0.0019	0.0078 P	0.0023	0.23 U	0.23	0.018 P	0.002	0.02 U	0.02
Endosulfan I	340	0.019 U	0.019	0.0019 U	0.0019	0.0023 U	0.0023	0.23 U	0.23	0.002 U	0.002	0.039 U	0.039
Dieldrin	0.042	0.038 U	0.038	0.0039 U	0.0039	0.0046 U	0.0046	0.46 U	0.46	0.0047 P	0.0039	.061 DP	0.039
4,4'-DDE	2	.18 D	0.038	0.0058	0.0039	0.11 CP	0.0046	.34 JCD	0.46	0.074 P	0.0039	0.039 U	0.039
Endrin	17	0.038 U	0.038	0.0039 U	0.0039	0.0046 U	0.0046	0.46 U	0.46	0.0039 U	0.0039	0.039 U	0.039
Endosulfan II	340	0.038 U	0.038	0.0039 U	0.0039	0.0046 U	0.0046	0.46 U	0.46	0.0039 U	0.0039	0.039 U	0.039
4,4'-DDD	3	.069 D	0.038	0.0035 J	0.0039	0.21 CP	0.0046	2.9 CD	0.46	0.0095 P	0.0039	0.039 U	0.039
Endosulfan sulfate		0.038 U	0.038	0.0039 U	0.0039	0.0046 U	0.0046	0.46 U	0.46	0.0039 U	0.0039	0.039 U	0.039
4,4'-DDT	2	.067 D	0.038	0.0039 U	0.0039	0.46 UZ	0.0046	0.46 UZ	0.46	0.16 P	0.0039	.18 DP	0.039
Methoxychlor	280	0.19 U	0.19	0.019 U	0.019	0.023 U	0.023	2.3 U	2.3	0.02 U	0.02	0.2 U	0.2
Endrin ketone		0.038 U	0.038	0.0039 U	0.0039	0.0046 U	0.0046	0.46 U	0.46	0.0039 U	0.0039	0.039 U	0.039
Endrin aldehyde		0.038 U	0.038	0.0039 U	0.0039	0.0046 U	0.0046	0.46 U	0.46	0.0039 U	0.0039	0.039 U	0.039
alpha-Chlordane		0.019 U	0.019	0.0019 U	0.0019	0.043	0.0023	.07 JD	0.23	0.14 P	0.002	.14 DP	0.02
gamma-Chlordane		0.019 U	0.019	0.0019 U	0.0019	0.047	0.0023	.068 JD	0.23	0.11 P	0.002	.11 DP	0.02
Toxaphene	0.1	1.9 U	1.9	0.19 U	0.19	0.23 U	0.23	23 U	23	0.2 U	0.2	2 U	2
Aroclor-1016	0.49	0.38 U	0.38	0.039 U	0.039	0.046 U	0.046	4.6 U	4.6	0.039 U	0.039	0.39 U	0.39
Aroclor-1221	0.49	0.77 U	0.77	0.077 U	0.077	0.092 U	0.092	9.2 U	9.2	0.079 U	0.079	0.79 U	0.79
Aroclor-1232	0.49	0.38 U	0.38	0.039 U	0.039	0.046 U	0.046	4.6 U	4.6	0.039 U	0.039	0.39 U	0.39
Aroclor-1242	0.49	0.38 U	0.38	0.039 U	0.039	0.046 U	0.046	4.6 U	4.6	0.039 U	0.039	0.39 U	0.39
Aroclor-1248	0.49	0.38 U	0.38	0.039 U	0.039	0.046 U	0.046	4.6 U	4.6	0.039 U	0.039	0.39 U	0.39
Aroclor-1254	0.49	.2 JD	0.38	0.039 U	0.039	0.046 U	0.046	4.6 U	4.6	0.039 U	0.039	0.39 U	0.39
Aroclor-1260	0.49	.18 JD	0.38	0.039 U	0.039	0.046 U	0.046	4.6 U	4.6	0.039 U	0.039	0.39 U	0.39
Method:TCL Pesticides/PCBs													

CHARLES WOOD
SOIL BORING PESTICIDES/PCBS

Geographical Location		CW6		CW9		B6		B6		B6		B7	
Sample		CW06-SB34-A02		CW09-SB01-A02		B6-SB01-A01		B6-SB01-A02		B6-SB01-A02DL		B7-SB01-A01	
Sample Type													
Batch#		9501G423		9501G450		9501G553		9501G553		9501G553		9501G553	
Prep#		95GP0028		95GP0028		95GP0050		95GP0050		95GP0050		95GP0050	
RFW#		002		001		008		009		009DL		006	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		5.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/3/95		1/4/95		1/10/95		1/10/95		1/10/95		1/10/95	
Analysis Date		1/17/95		1/17/95		1/26/95		1/26/95		2/6/95		1/26/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.0019 U	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
beta-BHC		0.0019 U	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
delta-BHC		0.0019 U	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
gamma-BHC (Lindane)	0.52	0.0019 U	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
Heptachlor	0.15	0.0019 U	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
Aldrin	0.04	0.0019 U	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
Heptachlor epoxide		0.0019 U	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
Endosulfan I	340	0.0019 U	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
Dieldrin	0.042	0.0038 U	0.0038	0.0038 U	0.0038	0.0037 U	0.0037	0.0039 U	0.0039	0.02 U	0.02	0.0038 U	0.0038
4,4'-DDE	2	0.0038 U	0.0038	0.0076 P	0.0038	0.028	0.0037	0.071	0.0039	.066 D	0.02	0.023	0.0038
Endrin	17	0.0038 U	0.0038	0.0038 U	0.0038	0.0037 U	0.0037	0.0039 U	0.0039	0.02 U	0.02	0.0038 U	0.0038
Endosulfan II	340	0.0038 U	0.0038	0.0038 U	0.0038	0.0037 U	0.0037	0.0039 U	0.0039	0.02 U	0.02	0.0038 U	0.0038
4,4'-DDD	3	0.0038 U	0.0038	0.0038 U	0.0038	0.0037 U	0.0037	0.0039 U	0.0039	0.02 U	0.02	0.0038 U	0.0038
Endosulfan sulfate		0.0038 U	0.0038	0.0038 U	0.0038	0.0037 U	0.0037	0.0039 U	0.0039	0.02 U	0.02	0.0038 U	0.0038
4,4'-DDT	2	0.011 P	0.0038	0.008 P	0.0038	0.032	0.0037	0.053	0.0039	.047 D	0.02	0.013	0.0038
Methoxychlor	280	0.019 U	0.019	0.019 U	0.019	0.018 U	0.018	0.02 U	0.02	0.098 U	0.098	0.019 U	0.019
Endrin ketone		0.0038 U	0.0038	0.0038 U	0.0038	0.0037 U	0.0037	0.0039 U	0.0039	0.02 U	0.02	0.0038 U	0.0038
Endrin aldehyde		0.0038 U	0.0038	0.0038 U	0.0038	0.0037 U	0.0037	0.0039 U	0.0039	0.02 U	0.02	0.0038 U	0.0038
alpha-Chlordane		0.0034 P	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
gamma-Chlordane		0.0027 P	0.0019	0.0019 U	0.0019	0.0018 U	0.0018	0.002 U	0.002	0.0098 U	0.0098	0.0019 U	0.0019
Toxaphene	0.1	0.19 U	0.19	0.19 U	0.19	0.18 U	0.18	0.2 U	0.2	0.98 U	0.98	0.19 U	0.19
Aroclor-1016	0.49	0.038 U	0.038	0.038 U	0.038	0.037 U	0.037	0.039 U	0.039	0.2 U	0.2	0.038 U	0.038
Aroclor-1221	0.49	0.076 U	0.076	0.076 U	0.076	0.074 U	0.074	0.078 U	0.078	0.39 U	0.39	0.077 U	0.077
Aroclor-1232	0.49	0.038 U	0.038	0.038 U	0.038	0.037 U	0.037	0.039 U	0.039	0.2 U	0.2	0.038 U	0.038
Aroclor-1242	0.49	0.038 U	0.038	0.038 U	0.038	0.037 U	0.037	0.039 U	0.039	0.2 U	0.2	0.038 U	0.038
Aroclor-1248	0.49	0.038 U	0.038	0.038 U	0.038	0.037 U	0.037	0.039 U	0.039	0.2 U	0.2	0.038 U	0.038
Aroclor-1254	0.49	0.038 U	0.038	0.038 U	0.038	0.037 U	0.037	0.039 U	0.039	0.2 U	0.2	0.038 U	0.038
Aroclor-1260	0.49	0.038 U	0.038	0.038 U	0.038	0.037 U	0.037	0.039 U	0.039	0.2 U	0.2	0.038 U	0.038
Method:TCL Pesticides/PCBs													

CHARLES WOOD
SOIL BORING PESTICIDES/PCBS

Geographical Location		B7		B8		B8		B9		B9		B9	
Sample		B7-SB01-A02		B8-SB01-A01		B8-SB01-A02		B9-SB01-A01		B9-SB01-A02		B9-SB01-C02	
Sample Type												Duplicate	
Batch#		9501G553		9501G553		9501G553		9501G831		9501G831		9501G831	
Prep#		95GP0050		95GP0050		95GP0050		95GP0079		95GP0079		95GP0079	
RFW#		007		004		005		001		002		003	
Sample Depth (bgs)													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		1/10/95		1/10/95		1/10/95		1/23/95		1/23/95		1/23/95	
Analysis Date		1/26/95		1/26/95		1/26/95		2/3/95		2/3/95		2/3/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
beta-BHC		0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
delta-BHC		0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
gamma-BHC (Lindane)	0.52	0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
Heptachlor	0.15	0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
Aldrin	0.04	0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
Heptachlor epoxide		0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
Endosulfan I	340	0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
Dieldrin	0.042	0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.0039 U	0.0039	0.004 U	0.004	0.004 U	0.004
4,4'-DDE	2	0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.011	0.0039	0.004 U	0.004	0.0044	0.004
Endrin	17	0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.0039 U	0.0039	0.004 U	0.004	0.004 U	0.004
Endosulfan II	340	0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.0039 U	0.0039	0.004 U	0.004	0.004 U	0.004
4,4'-DDD	3	0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.0039 U	0.0039	0.004 U	0.004	0.004 U	0.004
Endosulfan sulfate		0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.0039 U	0.0039	0.004 U	0.004	0.004 U	0.004
4,4'-DDT	2	0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.02	0.0039	0.0024 J	0.004	0.0053	0.004
Methoxychlor	280	0.019 U	0.019	0.018 U	0.018	0.019 U	0.019	0.019 U	0.019	0.02 U	0.02	0.02 U	0.02
Endrin ketone		0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.0039 U	0.0039	0.004 U	0.004	0.004 U	0.004
Endrin aldehyde		0.0039 U	0.0039	0.0036 U	0.0036	0.0038 U	0.0038	0.0039 U	0.0039	0.004 U	0.004	0.004 U	0.004
alpha-Chlordane		0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
gamma-Chlordane		0.0019 U	0.0019	0.0018 U	0.0018	0.0019 U	0.0019	0.0019 U	0.0019	0.002 U	0.002	0.002 U	0.002
Toxaphene	0.1	0.19 U	0.19	0.18 U	0.18	0.19 U	0.19	0.19 U	0.19	0.2 U	0.2	0.2 U	0.2
Aroclor-1016	0.49	0.039 U	0.039	0.036 U	0.036	0.038 U	0.038	0.039 U	0.039	0.04 U	0.04	0.04 U	0.04
Aroclor-1221	0.49	0.078 U	0.078	0.072 U	0.072	0.077 U	0.077	0.078 U	0.078	0.079 U	0.079	0.081 U	0.081
Aroclor-1232	0.49	0.039 U	0.039	0.036 U	0.036	0.038 U	0.038	0.039 U	0.039	0.04 U	0.04	0.04 U	0.04
Aroclor-1242	0.49	0.039 U	0.039	0.036 U	0.036	0.038 U	0.038	0.039 U	0.039	0.04 U	0.04	0.04 U	0.04
Aroclor-1248	0.49	0.039 U	0.039	0.036 U	0.036	0.038 U	0.038	0.039 U	0.039	0.04 U	0.04	0.04 U	0.04
Aroclor-1254	0.49	0.039 U	0.039	0.036 U	0.036	0.038 U	0.038	0.039 U	0.039	0.04 U	0.04	0.04 U	0.04
Aroclor-1260	0.49	0.039 U	0.039	0.036 U	0.036	0.038 U	0.038	0.039 U	0.039	0.04 U	0.04	0.04 U	0.04
Method:TCL Pesticides/PCBs													

CHARLES WOOD
SOIL BORING PESTICIDES/PCBS

Geographical Location		B10		B10		B10	
Sample		B10-SB01-A01		B10-SB01-A02		B10-SB01-A02RE	
Sample Type							
Batch#		9501G553		9501G553		9501G553	
Prep#		95GP0050		95GP0050		95GP0079	
RFW#		001		002		002RE	
Sample Depth (bgs)							
Dilution Factor		1.00		1.00		1.00	
Matrix		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg	
Sampling Date		1/10/94		1/10/95		1/10/95	
Analysis Date		1/26/95		1/26/95		2/3/95	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
alpha-BHC		0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
beta-BHC		0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
delta-BHC		0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
gamma-BHC (Lindane)	0.52	0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
Heptachlor	0.15	0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
Aldrin	0.04	0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
Heptachlor epoxide		0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
Endosulfan I	340	0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
Dieldrin	0.042	0.0039 U	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
4,4'-DDE	2	0.0035 J	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
Endrin	17	0.0039 U	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
Endosulfan II	340	0.0039 U	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
4,4'-DDD	3	0.0039 U	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
Endosulfan sulfate		0.0039 U	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
4,4'-DDT	2	0.0024 J	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
Methoxychlor	280	0.02 U	0.02	0.019 U	0.019	0.019 U	0.019
Endrin ketone		0.0039 U	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
Endrin aldehyde		0.0039 U	0.0039	0.0039 U	0.0039	0.0039 U	0.0039
alpha-Chlordane		0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
gamma-Chlordane		0.002 U	0.002	0.0019 U	0.0019	0.0019 U	0.0019
Toxaphene	0.1	0.2 U	0.2	0.19 U	0.19	0.19 U	0.19
Aroclor-1016	0.49	0.039 U	0.039	0.039 U	0.039	0.039 U	0.039
Aroclor-1221	0.49	0.079 U	0.079	0.078 U	0.078	0.077 U	0.077
Aroclor-1232	0.49	0.039 U	0.039	0.039 U	0.039	0.039 U	0.039
Aroclor-1242	0.49	0.039 U	0.039	0.039 U	0.039	0.039 U	0.039
Aroclor-1248	0.49	0.039 U	0.039	0.039 U	0.039	0.039 U	0.039
Aroclor-1254	0.49	0.039 U	0.039	0.039 U	0.039	0.039 U	0.039
Aroclor-1260	0.49	0.039 U	0.039	0.039 U	0.039	0.039 U	0.039
Method:TCL Pesticides/PCBs							

CHARLES WOOD
GROUNDWATER VOLATILES

Geographical Location			CW1		CW1		CW1		CW1		CW1		CW1		CW1	
Sample			CW01-MW26-A01		CW01-MW26-A02		CW01-MW26-D02		CW01-MW26-E02		CW01-MW27-A01		CW01-MW27-A02		CW01-MW28-A01	
Sample Type							Trip Blank		Field Rinsate Blank							
Batch#			9502G358		9503G739		9503G739		9503G739		9502G358		9503G739		9502G358	
Prep#			95GVC041		95GVE071		95GVE071		95GVE071		95GVC039		95GVE071		95GVC039	
RFW#			001		003		005		006		003		001		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/21/95		3/14/95		3/14/95		3/14/95		2/21/95		3/14/95		2/21/95	
Analysis Date			3/1/95		3/19/95		3/19/95		3/19/95		2/27/95		3/19/95		2/27/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	23	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	4 J	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dilution Factor																
Method:TCL Volatiles																

CHARLES WOOD
GROUNDWATER VOLATILES

Geographical Location			CW1		CW1		CW1		CW1		CW1		CW2		CW2	
Sample			CW01-MW28-A02		CW01-MW29-A01		CW01-MW29-A02		CW01-MW29-D01		CW01-MW29-E01		CW02-MW30-A01		CW02-MW30-A02	
Sample Type									Trip Blank		Field Rinsate Blank					
Batch#			9503G739		9502G358		9503G739		9502G358		9502G358		9502G358		9503G739	
Prep#			95GVE071		95GVC039		95GVE071 & 62		95GVC039		95GVC039		95GVC041		95GVE071	
RFW#			008		007		010		009		010		012		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/14/95		2/21/95		3/14/95		2/21/95		2/21/95		2/21/95		3/14/95	
Analysis Date			3/19/95		2/27/95		3/19/95		2/27/95		2/27/95		3/1/95		3/19/95	
Analysis	Standard	MDL	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	20	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	4 J	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	110	10	360	50 *	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	36	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	48	10	780	100 *	990	50 *	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dilution Factor					* = 10		* = 5									
Method:TCL Volatiles																

CHARLES WOOD
GROUNDWATER VOLATILES

Geographical Location			CW2		CW2		CW2		CW2		CW2		CW2		CW6	
Sample			CW02-MW31-A01		CW02-MW31-A02		CW02-MW32-A01		CW02-MW32-A02		CW02-MW33-A01		CW02-MW33-A02		CW06-MW01-A01	
Sample Type																
Batch#			9502G358		9503G739		9502G358		9503G739		9502G358		9503G739		9505G840	
Prep#			95GVC041		95GVE072		95GVC041		95GVE072		95GVC041		95GVE072		95GVC129	
RFW#			014		014		016		016		018		018		002	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/21/95		3/14/95		2/21/95		3/14/95		2/21/95		3/14/95		5/10/95	
Analysis Date			3/1/95		3/20/95		3/1/95		3/20/95		3/1/95		3/20/95		5/16/95	
Analysis	Standard	MDL	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	11	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	3 J	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	2 J	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	4 J	10
Dilution Factor																
Method:TCL Volatiles																

CHARLES WOOD
GROUNDWATER VOLATILES

Geographical Location			CW6		CW6		CW6		CW6		CW6		CW6	
Sample			CW06-MW01-A02		CW06-MW01-E02		CW06-MW01-D02		CW06-MW34-A01		CW06-MW34-A02		CW06-MW34-D01	
Sample Type					Field Rinsate Blank		Trip Blank						Trip Blank	
Batch#			9505G138		9505G138		9505G138		9502G300		9503G723		9502G300	
Prep#			95GVB148		95GVB148		95GVB148		95GVC034		95GVE071		95GVC034	
RFW#			002		003		004		001		001		002	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			5/25/95		5/25/95		5/25/95		2/20/95		3/13/95		2/20/95	
Analysis Date			6/1/95		6/1/95		6/1/95		2/23/95		3/19/95		2/23/95	
Analysis	Standard	MDL	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	30	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dilution Factor														
Method:TCL Volatiles														

CHARLES WOOD
GROUNDWATER VOLATILES

Geographical Location			CW9		CW9		CW9		CW9		CW9		B6	
Sample			CW09-MW35-A01		CW09-MW35-A02		CW09-MW35-E01		CW09-MW36-A01		CW09-MW36-A02		B6-MW06B-A01	
Sample Type							Field Rinsate Blank							
Batch#			9502G300		9503G723		9502G300		9502G300		9503G723		9502G198	
Prep#			95GVC034		95GVE071		95GVC036		95GVC036		95GVE071		95GVC029	
RFW#			003		002		007		005		004		003	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/20/95		3/13/95		2/20/95		2/20/95		3/13/95		2/15/95	
Analysis Date			2/23/95		3/19/95		2/24/95		2/24/95		3/19/95		2/20/95	
Analysis	Standard	MDL	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	12	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	25	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dilution Factor														
Method:TCL Volatiles														

CHARLES WOOD
GROUNDWATER VOLATILES

Geographical Location			B6		B7		B7		B8		B8		B9		B9	
Sample			B6-MW06B-A02		B7-MW07B-A01		B7-MW07B-A02		B8-MW08B-A01		B8-MW08B-A02		B9-MW09B-A01		B9-MW09B-A02	
Sample Type																
Batch#			9503G641		9502G198		9503G617		9502G198		9503G641		9502G198		9503G617	
Prep#			95GVC053		95GVC029		95GVC052		95GVC029		95GVC053		95GVC029		95GVC052	
RFW#			001		005		003		007		003		001		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/8/95		2/15/95		3/7/95		2/15/95		3/8/95		2/15/95		3/7/95	
Analysis Date			3/10/95		2/20/95		3/9/95		2/20/95		3/10/95		2/20/95		3/9/95	
Analysis	Standard	MDL	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	2 J	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dilution Factor																
Method:TCL Volatiles																

CHARLES WOOD
GROUNDWATER VOLATILES

Geographical Location			B10		B10		B10		B10		B10		B10	
Sample			B10-MW10B-A01		B10-MW10B-A02		B10-MW10B-D01		B10-MW10B-D02		B10-MW10B-E01		B10-MW10B-E02	
Sample Type							Trip Blank		Trip Blank		Field Rinsate Blank		Field Rinsate Blank	
Batch#			9502G198		9503G641		9502G198		9503G641		9502G198		9503G641	
Prep#			95GVC030		95GVC053		95GVC030		95GVC053		95GVC030		95GVC053	
RFW#			009		005		011		007		012		008	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/15/95		3/8/95		2/13/95		3/8/95		2/13/95		3/8/95	
Analysis Date			2/21/95		3/10/95		2/21/95		3/10/95		2/21/95		3/10/95	
Analysis	Standard	MDL	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
Chloromethane		7.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromomethane		6.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Vinyl Chloride	5	7.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroethane		9.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Methylene Chloride	2	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Acetone	700	6.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Disulfide		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethene		4.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1-Dichloroethane	70	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethene (total)		4.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chloroform	6	2.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloroethane	2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Butanone		4.1	10 U	10	10 U	10	14	10	10 U	10	15	10	10 U	10
1,1,1-Trichloroethane	30	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Carbon Tetrachloride	2	1.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromodichloromethane	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,2-Dichloropropane	1	1.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
cis-1,3-Dichloropropene	0.2	3.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Trichloroethene	1	2.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dibromochloromethane	10	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2-Trichloroethane	3	4.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Benzene	1	3.3	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
trans-1,3-Dichloropropene	0.2	2.4	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Bromoform	4	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
4-Methyl-2-pentanone	400	5.5	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
2-Hexanone		3.9	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Tetrachloroethene	1	4.0	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
1,1,2,2-Tetrachloroethane	2	4.2	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Toluene	1000	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Chlorobenzene	4	2.7	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Ethylbenzene	700	3.1	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Styrene	100	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Xylene (total)	40	3.8	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10	10 U	10
Dilution Factor														
Method:TCL Volatiles														

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			CW1		CW1		CW1		CW1		CW1		CW1	
Sample			CW01-MW26-A01		CW01-MW26-A02		CW01-MW26-E02		CW01-MW27-A01		CW01-MW27-A02		CW01-MW28-A01	
Sample Type							Field Rinsate Blank							
Batch#			9502G358		9503G739		9503G739		9502G358		9503G739		9502G358	
Prep#			95GB0123		95GB0181		95GB0181		95GB0123		95GB0181		95GB0123	
RFW#			001		003		006		003		001		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/21/95		3/14/95		3/14/95		2/21/95		3/14/95		2/21/95	
Analysis Date			3/12/95		3/30/95		3/29/95		3/13/95		3/29/95		3/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
bis(2-Chloroethyl) ether	10	9.7	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2-Chlorophenol	40	7.3	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
1,3-Dichlorobenzene	600	5.3	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
1,4-Dichlorobenzene	75	4.8	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
1,2-Dichlorobenzene	600	5.7	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2-Methylphenol		6.7	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2,2'-oxybis(1-Chloropropane)		7.0	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
4-Methylphenol		12.9	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
N-Nitroso-di-n-propylamine	20	8.0	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Hexachloroethane	10	5.3	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Nitrobenzene	10	7.4	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Isophorone	100	3.9	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2-Nitrophenol		7.0	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2,4-Dimethylphenol	100	4.8	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
bis(2-Chloroethoxy) methane		6.1	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2,4-Dichlorophenol	20	4.4	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
1,2,4-Trichlorobenzene	9	9.6	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Naphthalene		8.4	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
4-Chloroaniline		2.9	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Hexachlorobutadiene	1	4.6	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
4-Chloro-3-methylphenol	20	3.1	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2-Methylnaphthalene		8.7	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Hexachlorocyclopentadiene	50	3.6	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2,4,6-Trichlorophenol		5.6	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2,4,5-Trichlorophenol	700	4.7	26 U	26	25 U	25	28 U	28	26 U	26	26 U	26	27 U	27
2-Chloronaphthalene		8.2	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2-Nitroaniline		6.1	26 U	26	25 U	25	28 U	28	26 U	26	26 U	26	27 U	27
Dimethylphthalate	7000	4.4	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Acenaphthylene	10	6.0	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2,6-Dinitrotoluene	10	5.2	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
3-Nitroaniline		5.2	26 U	26	25 U	25	28 U	28	26 U	26	26 U	26	27 U	27
Acenaphthene	400	6.7	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2,4-Dinitrophenol	40	4.6	26 U	26	25 U	25	28 U	28	26 U	26	26 U	26	27 U	27

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			CW1		CW1		CW1		CW1		CW1		CW1	
Sample			CW01-MW26-A01		CW01-MW26-A02		CW01-MW26-E02		CW01-MW27-A01		CW01-MW27-A02		CW01-MW28-A01	
Sample Type							Field Rinsate Blank							
Batch#			9502G358		9503G739		9503G739		9502G358		9503G739		9502G358	
Prep#			95GB0123		95GB0181		95GB0181		95GB0123		95GB0181		95GB0123	
RFW#			001		003		006		003		001		005	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/21/95		3/14/95		3/14/95		2/21/95		3/14/95		2/21/95	
Analysis Date			3/12/95		3/30/95		3/29/95		3/13/95		3/29/95		3/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	25 U	25	28 U	28	26 U	26	26 U	26	27 U	27
Dibenzofuran		6.5	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
2,4-Dinitrotoluene	10	5.8	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Diethylphthalate	5000	5.4	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
4-Chlorophenyl-phenylether		7.0	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Fluorene	300	6.3	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
4-Nitroaniline		6.4	26 U	26	25 U	25	28 U	28	26 U	26	26 U	26	27 U	27
4,6-Dinitro-2-methylphenol		5.3	26 U	26	25 U	25	28 U	28	26 U	26	26 U	26	27 U	27
N-Nitrosodiphenylamine (1)	20	4.2	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
4-Bromophenyl-phenylether		5.3	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Hexachlorobenzene	10	5.5	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Pentachlorophenol	1	4.0	26 U	26	25 U	25	28 U	28	26 U	26	26 U	26	27 U	27
Phenanthrene	10	5.0	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Anthracene	2000	4.6	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Carbazole		4.4	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Di-n-butylphthalate	900	6.5	11 U	11	10 U	10	11 U	11	11 U	11	5 J	11	11 U	11
Fluoranthene	300	6.0	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Pyrene	200	5.4	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Butylbenzylphthalate	100	5.3	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
3,3'-Dichlorobenzidine	60	2.8	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(a)anthracene	10	4.9	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Chrysene	20	4.4	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
bis(2-Ethylhexy)phthalate	30	9.7	2 J	11	10 U	10	11 U	11	2 J	11	2 J	11	2 J	11
Di-n-octyl phthalate	100	5.6	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(b)fluoranthene	2	5.7	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(k)fluoranthene	2	6.2	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(a)pyrene	20	4.9	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Indeno(1,2,3-cd)pyrene	20	7.1	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Dibenzo(a,h)anthracene	20	6.0	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Benzo(g,h,i)perylene	20	6.8	11 U	11	10 U	10	11 U	11	11 U	11	11 U	11	11 U	11
Total Est. Conc. of TIC			8 JB		5 J		5 J		5 J				40 J	
Dilution Factor														
Method:TCL Semivolatiles									6 JB				5 JB	

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			CW1		CW1		CW1		CW1		CW2		CW2	
Sample			CW01-MW28-A02		CW01-MW29-A01		CW01-MW29-A02		CW01-MW29-E01		CW02-MW30-A01		CW02-MW30-A02	
Sample Type									Field Rinsate Blank					
Batch#			9503G739		9502G358		9503G739		9502G358		9502G358		9503G739	
Prep#			95GB0181		95GB0123		95GB0181		95GB0123		95GB0123		95GB0181	
RFW#			008		007		010		010		012		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/14/95		2/21/95		3/14/95		2/21/95		2/21/95		3/14/95	
Analysis Date			3/29/95		3/15/95		3/29/95		3/15/95		3/15/95		3/29/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2-Chlorophenol	40	7.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
1,4-Dichlorobenzene	75	4.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2-Methylphenol		6.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
4-Methylphenol		12.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Hexachloroethane	10	5.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Nitrobenzene	10	7.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Isophorone	100	3.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2-Nitrophenol		7.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
1,2,4-Trichlorobenzene	9	9.6	10 U	10	3 J	10	5 J	10	10 U	10	12 U	12	12 U	12
Naphthalene		8.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
4-Chloroaniline		2.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2-Methylnaphthalene		8.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2,4,5-Trichlorophenol	700	4.7	26 U	26	24 U	24	26 U	26	24 U	24	31 U	31	30 U	30
2-Chloronaphthalene		8.2	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2-Nitroaniline		6.1	26 U	26	24 U	24	26 U	26	24 U	24	31 U	31	30 U	30
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Acenaphthylene	10	6.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
3-Nitroaniline		5.2	26 U	26	24 U	24	26 U	26	24 U	24	31 U	31	30 U	30
Acenaphthene	400	6.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2,4-Dinitrophenol	40	4.6	26 U	26	24 U	24	26 U	26	24 U	24	31 U	31	30 U	30

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			CW1		CW1		CW1		CW1		CW2		CW2	
Sample			CW01-MW28-A02		CW01-MW29-A01		CW01-MW29-A02		CW01-MW29-E01		CW02-MW30-A01		CW02-MW30-A02	
Sample Type									Field Rinsate Blank					
Batch#			9503G739		9502G358		9503G739		9502G358		9502G358		9503G739	
Prep#			95GB0181		95GB0123		95GB0181		95GB0123		95GB0123		95GB0181	
RFW#			008		007		010		010		012		012	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/14/95		2/21/95		3/14/95		2/21/95		2/21/95		3/14/95	
Analysis Date			3/29/95		3/15/95		3/29/95		3/15/95		3/15/95		3/29/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	24 U	24	26 U	26	24 U	24	31 U	31	30 U	30
Dibenzofuran		6.5	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Diethylphthalate	5000	5.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Fluorene	300	6.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
4-Nitroaniline		6.4	26 U	26	24 U	24	26 U	26	24 U	24	31 U	31	30 U	30
4,6-Dinitro-2-methylphenol		5.3	26 U	26	24 U	24	26 U	26	24 U	24	31 U	31	30 U	30
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Pentachlorophenol	1	4.0	26 U	26	24 U	24	26 U	26	24 U	24	31 U	31	30 U	30
Phenanthrene	10	5.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Anthracene	2000	4.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Carbazole		4.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	2 J	12
Fluoranthene	300	6.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Pyrene	200	5.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Chrysene	20	4.4	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
bis(2-Ethylhexy)phthalate	30	9.7	1 J	10	1 J	10	10 U	10	10 U	10	2 J	12	2 J	12
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	10 U	10	10 U	10	12 U	12	12 U	12
Total Est. Conc. of TIC					2 J		2 J		99 J		78 J		3 J	
Dilution Factor														
Method:TCL Semivolatiles					5 JB				5 JB		6 JB			

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			CW2		CW2		CW2		CW2		CW2		CW2	
Sample			CW02-MW31-A01		CW02-MW31-A02		CW02-MW32-A01		CW02-MW32-A02		CW02-MW33-A01		CW02-MW33-A02	
Sample Type														
Batch#			9502G358		9503G739		9502G358		9503G739		9502G358		9503G739	
Prep#			95GB0123		95GB0181		95GB0123		95GB0181		95GB0123		95GB0181	
RFW#			014		014		016		016		018		018	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/21/95		3/14/95		2/21/95		3/14/95		2/21/95		3/14/95	
Analysis Date			3/15/95		3/29/95		3/15/95		3/29/95		3/15/95		3/29/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2-Chlorophenol	40	7.3	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
1,4-Dichlorobenzene	75	4.8	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2-Methylphenol		6.7	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
4-Methylphenol		12.9	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Hexachloroethane	10	5.3	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Nitrobenzene	10	7.4	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Isophorone	100	3.9	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2-Nitrophenol		7.0	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
1,2,4-Trichlorobenzene	9	9.6	10 U	10	5 J	10	11 U	11	12 U	12	11 U	11	12 U	12
Naphthalene		8.4	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
4-Chloroaniline		2.9	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2-Methylnaphthalene		8.7	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2,4,5-Trichlorophenol	700	4.7	25 U	25	26 U	26	26 U	26	30 U	30	26 U	26	30 U	30
2-Chloronaphthalene		8.2	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2-Nitroaniline		6.1	25 U	25	26 U	26	26 U	26	30 U	30	26 U	26	30 U	30
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Acenaphthylene	10	6.0	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
3-Nitroaniline		5.2	25 U	25	26 U	26	26 U	26	30 U	30	26 U	26	30 U	30
Acenaphthene	400	6.7	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2,4-Dinitrophenol	40	4.6	25 U	25	26 U	26	26 U	26	30 U	30	26 U	26	30 U	30

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			CW2		CW2		CW2		CW2		CW2		CW2	
Sample			CW02-MW31-A01		CW02-MW31-A02		CW02-MW32-A01		CW02-MW32-A02		CW02-MW33-A01		CW02-MW33-A02	
Sample Type														
Batch#			9502G358		9503G739		9502G358		9503G739		9502G358		9503G739	
Prep#			95GB0123		95GB0181		95GB0123		95GB0181		95GB0123		95GB0181	
RFW#			014		014		016		016		018		018	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/21/95		3/14/95		2/21/95		3/14/95		2/21/95		3/14/95	
Analysis Date			3/15/95		3/29/95		3/15/95		3/29/95		3/15/95		3/29/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	25 U	25	26 U	26	26 U	26	30 U	30	26 U	26	30 U	30
Dibenzofuran		6.5	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Diethylphthalate	5000	5.4	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Fluorene	300	6.3	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
4-Nitroaniline		6.4	25 U	25	26 U	26	26 U	26	30 U	30	26 U	26	30 U	30
4,6-Dinitro-2-methylphenol		5.3	25 U	25	26 U	26	26 U	26	30 U	30	26 U	26	30 U	30
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Pentachlorophenol	1	4.0	25 U	25	26 U	26	26 U	26	30 U	30	26 U	26	30 U	30
Phenanthrene	10	5.0	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Anthracene	2000	4.6	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Carbazole		4.4	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Di-n-butylphthalate	900	6.5	10 U	10	11	10	11 U	11	2 J	12	11 U	11	2 J	12
Fluoranthene	300	6.0	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Pyrene	200	5.4	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Chrysene	20	4.4	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
bis(2-Ethylhexy)phthalate	30	9.7	10 U	10	10 U	10	1 J	11	2 J	12	1 J	11	2 J	12
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	11 U	11	12 U	12	11 U	11	12 U	12
Total Est. Conc. of TIC			4 JB				5 JB				3 J			
Dilution Factor														
Method:TCL Semivolatiles											5 JB			

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			CW6		CW6		CW6		CW6		CW6		CW9	
Sample			CW06-MW01-A01		CW06-MW01-A02		CW06-MW01-E02		CW06-MW34-A01		CW06-MW34-A02		CW09-MW35-A01	
Sample Type							Field Rinsate Blank							
Batch#			9505G840		9505G138		9505G138		9502G300		9503G723		9502G300	
Prep#			95GB0319		95GB0350		95GB0350		95GB0118		95GB0181		95GB0118	
RFW#			002		002		003		001		001		003	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			5/10/95		5/25/95		5/25/95		2/20/95		3/13/95		2/20/95	
Analysis Date			5/29/95		6/2/95		6/2/95		3/15/95		3/27/95		3/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
bis(2-Chloroethyl) ether	10	9.7	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2-Chlorophenol	40	7.3	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
1,3-Dichlorobenzene	600	5.3	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
1,4-Dichlorobenzene	75	4.8	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
1,2-Dichlorobenzene	600	5.7	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2-Methylphenol		6.7	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
4-Methylphenol		12.9	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
N-Nitroso-di-n-propylamine	20	8.0	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Hexachloroethane	10	5.3	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Nitrobenzene	10	7.4	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Isophorone	100	3.9	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2-Nitrophenol		7.0	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2,4-Dimethylphenol	100	4.8	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
bis(2-Chloroethoxy) methane		6.1	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2,4-Dichlorophenol	20	4.4	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
1,2,4-Trichlorobenzene	9	9.6	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Naphthalene		8.4	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
4-Chloroaniline		2.9	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Hexachlorobutadiene	1	4.6	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
4-Chloro-3-methylphenol	20	3.1	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2-Methylnaphthalene		8.7	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Hexachlorocyclopentadiene	50	3.6	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2,4,6-Trichlorophenol		5.6	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2,4,5-Trichlorophenol	700	4.7	28 U	28	24 U	24	27 U	27	24 U	24	26 U	26	24 U	24
2-Chloronaphthalene		8.2	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2-Nitroaniline		6.1	28 U	28	24 U	24	27 U	27	24 U	24	26 U	26	24 U	24
Dimethylphthalate	7000	4.4	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Acenaphthylene	10	6.0	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2,6-Dinitrotoluene	10	5.2	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
3-Nitroaniline		5.2	28 U	28	24 U	24	27 U	27	24 U	24	26 U	26	24 U	24
Acenaphthene	400	6.7	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2,4-Dinitrophenol	40	4.6	28 U	28	24 U	24	27 U	27	24 U	24	26 U	26	24 U	24

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GROUNDWATER SEMIVOLATILES

Geographical Location			CW6		CW6		CW6		CW6		CW6		CW9	
Sample			CW06-MW01-A01		CW06-MW01-A02		CW06-MW01-E02		CW06-MW34-A01		CW06-MW34-A02		CW09-MW35-A01	
Sample Type							Field Rinsate Blank							
Batch#			9505G840		9505G138		9505G138		9502G300		9503G723		9502G300	
Prep#			95GB0319		95GB0350		95GB0350		95GB0118		95GB0181		95GB0118	
RFW#			002		002		003		001		001		003	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			5/10/95		5/25/95		5/25/95		2/20/95		3/13/95		2/20/95	
Analysis Date			5/29/95		6/2/95		6/2/95		3/15/95		3/27/95		3/15/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	28 U	28	24 U	24	27 U	27	24 U	24	26 U	26	24 U	24
Dibenzofuran		6.5	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
2,4-Dinitrotoluene	10	5.8	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Diethylphthalate	5000	5.4	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
4-Chlorophenyl-phenylether		7.0	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Fluorene	300	6.3	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
4-Nitroaniline		6.4	28 U	28	24 U	24	27 U	27	24 U	24	26 U	26	24 U	24
4,6-Dinitro-2-methylphenol		5.3	28 U	28	24 U	24	27 U	27	24 U	24	26 U	26	24 U	24
N-Nitrosodiphenylamine (1)	20	4.2	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
4-Bromophenyl-phenylether		5.3	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Hexachlorobenzene	10	5.5	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Pentachlorophenol	1	4.0	28 U	28	24 U	24	27 U	27	24 U	24	26 U	26	24 U	24
Phenanthrene	10	5.0	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Anthracene	2000	4.6	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Carbazole		4.4	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Di-n-butylphthalate	900	6.5	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Fluoranthene	300	6.0	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Pyrene	200	5.4	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Butylbenzylphthalate	100	5.3	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
3,3'-Dichlorobenzidine	60	2.8	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Benzo(a)anthracene	10	4.9	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Chrysene	20	4.4	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
bis(2-Ethylhexy)phthalate	30	9.7	11 U	11	21 B	10	1 JB	11	2 J	10	11 U	11	10 U	10
Di-n-octyl phthalate	100	5.6	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Benzo(b)fluoranthene	2	5.7	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Benzo(k)fluoranthene	2	6.2	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Benzo(a)pyrene	20	4.9	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Indeno(1,2,3-cd)pyrene	20	7.1	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Dibenzo(a,h)anthracene	20	6.0	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Benzo(g,h,i)perylene	20	6.8	11 U	11	10 U	10	11 U	11	10 U	10	11 U	11	10 U	10
Total Est. Conc. of TIC					29 J		42 J		6 J		300 J			
Dilution Factor														
Method:TCL Semivolatiles														

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			CW9		CW9		CW9		CW9		B6		B6	
Sample			CW09-MW35-A02		CW09-MW35-E01		CW09-MW36-A01		CW09-MW36-A02		B6-MW06B-A01		B6-MW06B-A02	
Sample Type					Field Rinsate Blank									
Batch#			9503G723		9502G300		9502G300		9503G723		9502G198		9503G641	
Prep#			95GB0181		95GB0118		95GB0118		95GB0181		95GB0108		95GB0172	
RFW#			002		007		005		004		003		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/13/95		2/20/95		2/20/95		3/13/95		2/15/95		3/8/95	
Analysis Date			3/27/95		3/15/95		3/15/95		3/27/95		3/7/95		3/25/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2-Chlorophenol	40	7.3	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
1,4-Dichlorobenzene	75	4.8	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2-Methylphenol		6.7	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
4-Methylphenol		12.9	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Hexachloroethane	10	5.3	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Nitrobenzene	10	7.4	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Isophorone	100	3.9	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2-Nitrophenol		7.0	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
1,2,4-Trichlorobenzene	9	9.6	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Naphthalene		8.4	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
4-Chloroaniline		2.9	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2-Methylnaphthalene		8.7	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2,4,5-Trichlorophenol	700	4.7	24 U	24	26 U	26	24 U	24	28 U	28	25 U	25	24 U	24
2-Chloronaphthalene		8.2	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2-Nitroaniline		6.1	24 U	24	26 U	26	24 U	24	28 U	28	25 U	25	24 U	24
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Acenaphthylene	10	6.0	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
3-Nitroaniline		5.2	24 U	24	26 U	26	24 U	24	28 U	28	25 U	25	24 U	24
Acenaphthene	400	6.7	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2,4-Dinitrophenol	40	4.6	24 U	24	26 U	26	24 U	24	28 U	28	25 U	25	24 U	24

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Geographical Location			CW9		CW9		CW9		CW9		B6		B6	
Sample			CW09-MW35-A02		CW09-MW35-E01		CW09-MW36-A01		CW09-MW36-A02		B6-MW06B-A01		B6-MW06B-A02	
Sample Type					Field Rinsate Blank									
Batch#			9503G723		9502G300		9502G300		9503G723		9502G198		9503G641	
Prep#			95GB0181		95GB0118		95GB0118		95GB0181		95GB0108		95GB0172	
RFW#			002		007		005		004		003		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			3/13/95		2/20/95		2/20/95		3/13/95		2/15/95		3/8/95	
Analysis Date			3/27/95		3/15/95		3/15/95		3/27/95		3/7/95		3/25/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	24 U	24	26 U	26	24 U	24	28 U	28	25 U	25	24 U	24
Dibenzofuran		6.5	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Diethylphthalate	5000	5.4	10 U	10	10 U	10	10 U	10	11 U	11	1 J	10	1 JB	10
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Fluorene	300	6.3	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
4-Nitroaniline		6.4	24 U	24	26 U	26	24 U	24	28 U	28	25 U	25	24 U	24
4,6-Dinitro-2-methylphenol		5.3	24 U	24	26 U	26	24 U	24	28 U	28	25 U	25	24 U	24
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Pentachlorophenol	1	4.0	24 U	24	26 U	26	24 U	24	28 U	28	25 U	25	24 U	24
Phenanthrene	10	5.0	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Anthracene	2000	4.6	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Carbazole		4.4	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Fluoranthene	300	6.0	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Pyrene	200	5.4	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Chrysene	20	4.4	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
bis(2-Ethylhexy)phthalate	30	9.7	10 U	10	10 U	10	2 J	10	6 J	11	10 U	10	10 U	10
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	10 U	10	11 U	11	10 U	10	10 U	10
Total Est. Conc. of TIC			600 J		13 J		4 J		430 J		11 JB			
Dilution Factor														
Method:TCL Semivolatiles														

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Geographical Location			B7		B7		B8		B8		B9		B9	
Sample			B7-MW07B-A01		B7-MW07B-A02		B8-MW08B-A01		B8-MW08B-A02		B9-MW09B-A01		B9-MW09B-A02	
Sample Type														
Batch#			9502G198		9503G617		9502G198		9503G641		9502G198		9503G617	
Prep#			95GB0108		95GB0166		95GB0108		95GB0172		95GB0108		95GB0166	
RFW#			005		003		007		003		001		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/15/95		3/7/95		2/15/95		3/8/95		2/15/95		3/7/95	
Analysis Date			3/7/95		3/26/95		3/7/95		3/26/95		3/7/95		3/26/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
bis(2-Chloroethyl) ether	10	9.7	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2-Chlorophenol	40	7.3	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
1,3-Dichlorobenzene	600	5.3	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
1,4-Dichlorobenzene	75	4.8	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
1,2-Dichlorobenzene	600	5.7	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2-Methylphenol		6.7	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2,2'-oxybis(1-Chloropropane)		7.0	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
4-Methylphenol		12.9	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
N-Nitroso-di-n-propylamine	20	8.0	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Hexachloroethane	10	5.3	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Nitrobenzene	10	7.4	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Isophorone	100	3.9	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2-Nitrophenol		7.0	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2,4-Dimethylphenol	100	4.8	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
bis(2-Chloroethoxy) methane		6.1	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2,4-Dichlorophenol	20	4.4	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
1,2,4-Trichlorobenzene	9	9.6	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Naphthalene		8.4	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
4-Chloroaniline		2.9	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Hexachlorobutadiene	1	4.6	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
4-Chloro-3-methylphenol	20	3.1	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2-Methylnaphthalene		8.7	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Hexachlorocyclopentadiene	50	3.6	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2,4,6-Trichlorophenol		5.6	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2,4,5-Trichlorophenol	700	4.7	26 U	26	26 U	26	26 U	26	26 U	26	24 U	24	24 U	24
2-Chloronaphthalene		8.2	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2-Nitroaniline		6.1	26 U	26	26 U	26	26 U	26	26 U	26	24 U	24	24 U	24
Dimethylphthalate	7000	4.4	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Acenaphthylene	10	6.0	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2,6-Dinitrotoluene	10	5.2	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
3-Nitroaniline		5.2	26 U	26	26 U	26	26 U	26	26 U	26	24 U	24	24 U	24
Acenaphthene	400	6.7	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2,4-Dinitrophenol	40	4.6	26 U	26	26 U	26	26 U	26	26 U	26	24 U	24	24 U	24

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			B7		B7		B8		B8		B9		B9	
Sample			B7-MW07B-A01		B7-MW07B-A02		B8-MW08B-A01		B8-MW08B-A02		B9-MW09B-A01		B9-MW09B-A02	
Sample Type														
Batch#			9502G198		9503G617		9502G198		9503G641		9502G198		9503G617	
Prep#			95GB0108		95GB0166		95GB0108		95GB0172		95GB0108		95GB0166	
RFW#			005		003		007		003		001		001	
Dilution Factor			1.00		1.00		1.00		1.00		1.00		1.00	
Matrix			water		water		water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/15/95		3/7/95		2/15/95		3/8/95		2/15/95		3/7/95	
Analysis Date			3/7/95		3/26/95		3/7/95		3/26/95		3/7/95		3/26/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	26 U	26	26 U	26	26 U	26	26 U	26	24 U	24	24 U	24
Dibenzofuran		6.5	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
2,4-Dinitrotoluene	10	5.8	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Diethylphthalate	5000	5.4	1 J	10	10 U	10	11 U	11	2 JB	11	1 J	10	10 U	10
4-Chlorophenyl-phenylether		7.0	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Fluorene	300	6.3	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
4-Nitroaniline		6.4	26 U	26	26 U	26	26 U	26	26 U	26	24 U	24	24 U	24
4,6-Dinitro-2-methylphenol		5.3	26 U	26	26 U	26	26 U	26	26 U	26	24 U	24	24 U	24
N-Nitrosodiphenylamine (1)	20	4.2	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
4-Bromophenyl-phenylether		5.3	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Hexachlorobenzene	10	5.5	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Pentachlorophenol	1	4.0	26 U	26	26 U	26	26 U	26	26 U	26	24 U	24	24 U	24
Phenanthrene	10	5.0	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Anthracene	2000	4.6	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Carbazole		4.4	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Di-n-butylphthalate	900	6.5	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Fluoranthene	300	6.0	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Pyrene	200	5.4	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Butylbenzylphthalate	100	5.3	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
3,3'-Dichlorobenzidine	60	2.8	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Benzo(a)anthracene	10	4.9	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Chrysene	20	4.4	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
bis(2-Ethylhexy)phthalate	30	9.7	10 U	10	1 J	10	11 U	11	11 U	11	10 U	10	10 U	10
Di-n-octyl phthalate	100	5.6	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Benzo(b)fluoranthene	2	5.7	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Benzo(k)fluoranthene	2	6.2	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Benzo(a)pyrene	20	4.9	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Indeno(1,2,3-cd)pyrene	20	7.1	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Dibenzo(a,h)anthracene	20	6.0	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Benzo(g,h,i)perylene	20	6.8	10 U	10	10 U	10	11 U	11	11 U	11	10 U	10	10 U	10
Total Est. Conc. of TIC			6 JB		2 J		5 JB		3 J		8 JB		3 J	
Dilution Factor														
Method:TCL Semivolatiles														

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			B10		B10		B10		B10	
Sample			B10-MW10B-A01		B10-MW10B-A02		B10-MW10B-E01		B10-MW10B-E02	
Sample Type							Field Rinsate Blank		Field Rinsate Blank	
Batch#			9502G198		9503G641		9502G198		9503G641	
Prep#			95GB0108		95GB0172		95GB0108		95GB0172	
RFW#			009		005		012		008	
Dilution Factor			1.00		1.00		1.00		1.00	
Matrix			water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/15/95		3/8/95		2/13/95		3/8/95	
Analysis Date			3/7/95		3/25/95		3/7/95		3/25/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
Phenol	4000	7.1	12 U	12	11 U	11	11 U	11	11 U	11
bis(2-Chloroethyl) ether	10	9.7	12 U	12	11 U	11	11 U	11	11 U	11
2-Chlorophenol	40	7.3	12 U	12	11 U	11	11 U	11	11 U	11
1,3-Dichlorobenzene	600	5.3	12 U	12	11 U	11	11 U	11	11 U	11
1,4-Dichlorobenzene	75	4.8	12 U	12	11 U	11	11 U	11	11 U	11
1,2-Dichlorobenzene	600	5.7	12 U	12	11 U	11	11 U	11	11 U	11
2-Methylphenol		6.7	12 U	12	11 U	11	11 U	11	11 U	11
2,2'-oxybis(1-Chloropropane)		7.0	12 U	12	11 U	11	11 U	11	11 U	11
4-Methylphenol		12.9	12 U	12	11 U	11	11 U	11	11 U	11
N-Nitroso-di-n-propylamine	20	8.0	12 U	12	11 U	11	11 U	11	11 U	11
Hexachloroethane	10	5.3	12 U	12	11 U	11	11 U	11	11 U	11
Nitrobenzene	10	7.4	12 U	12	11 U	11	11 U	11	11 U	11
Isophorone	100	3.9	12 U	12	11 U	11	11 U	11	11 U	11
2-Nitrophenol		7.0	12 U	12	11 U	11	11 U	11	11 U	11
2,4-Dimethylphenol	100	4.8	12 U	12	11 U	11	11 U	11	11 U	11
bis(2-Chloroethoxy) methane		6.1	12 U	12	11 U	11	11 U	11	11 U	11
2,4-Dichlorophenol	20	4.4	12 U	12	11 U	11	11 U	11	11 U	11
1,2,4-Trichlorobenzene	9	9.6	12 U	12	11 U	11	11 U	11	11 U	11
Naphthalene		8.4	12 U	12	11 U	11	11 U	11	11 U	11
4-Chloroaniline		2.9	12 U	12	11 U	11	11 U	11	11 U	11
Hexachlorobutadiene	1	4.6	12 U	12	11 U	11	11 U	11	11 U	11
4-Chloro-3-methylphenol	20	3.1	12 U	12	11 U	11	11 U	11	11 U	11
2-Methylnaphthalene		8.7	12 U	12	11 U	11	11 U	11	11 U	11
Hexachlorocyclopentadiene	50	3.6	12 U	12	11 U	11	11 U	11	11 U	11
2,4,6-Trichlorophenol		5.6	12 U	12	11 U	11	11 U	11	11 U	11
2,4,5-Trichlorophenol	700	4.7	30 U	30	26 U	26	28 U	28	28 U	28
2-Chloronaphthalene		8.2	12 U	12	11 U	11	11 U	11	11 U	11
2-Nitroaniline		6.1	30 U	30	26 U	26	28 U	28	28 U	28
Dimethylphthalate	7000	4.4	12 U	12	11 U	11	11 U	11	11 U	11
Acenaphthylene	10	6.0	12 U	12	11 U	11	11 U	11	11 U	11
2,6-Dinitrotoluene	10	5.2	12 U	12	11 U	11	11 U	11	11 U	11
3-Nitroaniline		5.2	30 U	30	26 U	26	28 U	28	28 U	28
Acenaphthene	400	6.7	12 U	12	11 U	11	11 U	11	11 U	11
2,4-Dinitrophenol	40	4.6	30 U	30	26 U	26	28 U	28	28 U	28

CHARLES WOOD
GROUNDWATER SEMIVOLATILES

Geographical Location			B10		B10		B10		B10	
Sample			B10-MW10B-A01		B10-MW10B-A02		B10-MW10B-E01		B10-MW10B-E02	
Sample Type							Field Rinsate Blank		Field Rinsate Blank	
Batch#			9502G198		9503G641		9502G198		9503G641	
Prep#			95GB0108		95GB0172		95GB0108		95GB0172	
RFW#			009		005		012		008	
Dilution Factor			1.00		1.00		1.00		1.00	
Matrix			water		water		water		water	
Units	ug/l	ug/l	ug/l		ug/l		ug/l		ug/l	
Sampling Date			2/15/95		3/8/95		2/13/95		3/8/95	
Analysis Date			3/7/95		3/25/95		3/7/95		3/25/95	
Analysis	Standard	MDL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL	Analytical Result	CRQL
4-Nitrophenol		7.5	30 U	30	26 U	26	28 U	28	28 U	28
Dibenzofuran		6.5	12 U	12	11 U	11	11 U	11	11 U	11
2,4-Dinitrotoluene	10	5.8	12 U	12	11 U	11	11 U	11	11 U	11
Diethylphthalate	5000	5.4	12 U	12	1 JB	11	11 U	11	2 JB	11
4-Chlorophenyl-phenylether		7.0	12 U	12	11 U	11	11 U	11	11 U	11
Fluorene	300	6.3	12 U	12	11 U	11	11 U	11	11 U	11
4-Nitroaniline		6.4	30 U	30	26 U	26	28 U	28	28 U	28
4,6-Dinitro-2-methylphenol		5.3	30 U	30	26 U	26	28 U	28	28 U	28
N-Nitrosodiphenylamine (1)	20	4.2	12 U	12	11 U	11	11 U	11	11 U	11
4-Bromophenyl-phenylether		5.3	12 U	12	11 U	11	11 U	11	11 U	11
Hexachlorobenzene	10	5.5	12 U	12	11 U	11	11 U	11	11 U	11
Pentachlorophenol	1	4.0	30 U	30	26 U	26	28 U	28	28 U	28
Phenanthrene	10	5.0	12 U	12	11 U	11	11 U	11	11 U	11
Anthracene	2000	4.6	12 U	12	11 U	11	11 U	11	11 U	11
Carbazole		4.4	12 U	12	11 U	11	11 U	11	11 U	11
Di-n-butylphthalate	900	6.5	12 U	12	11 U	11	11 U	11	11 U	11
Fluoranthene	300	6.0	12 U	12	11 U	11	11 U	11	11 U	11
Pyrene	200	5.4	12 U	12	11 U	11	11 U	11	11 U	11
Butylbenzylphthalate	100	5.3	12 U	12	11 U	11	11 U	11	11 U	11
3,3'-Dichlorobenzidine	60	2.8	12 U	12	11 U	11	11 U	11	11 U	11
Benzo(a)anthracene	10	4.9	12 U	12	11 U	11	11 U	11	11 U	11
Chrysene	20	4.4	12 U	12	11 U	11	11 U	11	11 U	11
bis(2-Ethylhexy)phthalate	30	9.7	12 U	12	600	110 *	11 U	11	11 U	11
Di-n-octyl phthalate	100	5.6	12 U	12	11 U	11	11 U	11	11 U	11
Benzo(b)fluoranthene	2	5.7	12 U	12	11 U	11	11 U	11	11 U	11
Benzo(k)fluoranthene	2	6.2	12 U	12	11 U	11	11 U	11	11 U	11
Benzo(a)pyrene	20	4.9	12 U	12	11 U	11	11 U	11	11 U	11
Indeno(1,2,3-cd)pyrene	20	7.1	12 U	12	11 U	11	11 U	11	11 U	11
Dibenzo(a,h)anthracene	20	6.0	12 U	12	11 U	11	11 U	11	11 U	11
Benzo(g,h,i)perylene	20	6.8	12 U	12	11 U	11	11 U	11	11 U	11
Total Est. Conc. of TIC			9 JB				15 JB			
Dilution Factor							* = 10			
Method:TCL Semivolatiles										

CHARLES WOOD
GROUNDWATER INORGANICS

Geographical Location		CW1		CW1		CW1		CW1		CW1	
Sample		CW01-MW26-A01		CW01-MW26-A01 SOL		CW01-MW26-A02		CW01-MW26-A02		CW01-MW26-A02 SOL	
Sample Type		Total		Soluble		Total		Total		Soluble	
Batch#		9502G358		9502G358		9502G739		9502G739		9502G739	
Prep#		95GI454		95GI454		95GI508		95GI508		95GI508	
RFW#		001		002		002		003		004	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/21/95		2/21/95		3/14/95		3/14/95		3/14/95	
Analysis Date		3/8/95		3/8/95		3/8/95		3/8/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	6830	24.0	279	24.0	885	16.8	4990	16.8	375	16.8
Arsenic	8	7.8	1.9	1.9 U	1.9	1.9 U	1.9	3.8	1.9	1.9 U	1.9
Barium	2000	81.4	1.7	62.9	1.7	116	0.80	99.3	0.80	86.7	0.80
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.56	0.30	0.30 U	0.30
Calcium		25800	10.4	24500	10.4	24900	8.4	32700	8.4	31300	8.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Cobalt		6.0	3.0	5.1	3.0	13.2	2.3	8.0	2.3	4.2	2.3
Chromium	100	79.7	2.9	2.9 U	2.9	4.7 U	4.7	54.0	4.7	4.7 U	4.7
Copper	1000	1.9 U	1.9	1.9 U	1.9	8.1	4.0	8.9	4.0	5.7	4.0
Iron	300	15500	6.4	25.0	6.4	93.3	2.5	10700	2.5	18.6	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		13100	685	9970	685	11800	67.9	14500	67.9	12300	67.9
Magnesium		4810	18.3	3390	18.3	13500	34.3	5340	34.3	4240	34.3
Manganese	50	68.3	1.8	45.2	1.8	114	0.90	71.8	0.90	54.6	0.90
Sodium	50000	55300	30.5	53100	30.5	73800	19.1	58600	19.1	56800	19.1
Nickel	100	24.6	10.8	10.8 U	10.8	15.0	4.2	7.9	4.2	8.7	4.2
Lead	10	5.6	1.6	1.6 U	1.6	2.2	1.2	4.1	1.2	1.2	1.2
Antimony	20	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	1.1 U	1.1
Vanadium		57.7	2.3	2.3 U	2.3	2.1 U	2.1	39.7	2.1	2.1 U	2.1
Zinc	5000	39.0	3.8	14.4	3.8	32.5	1.9	35.6	1.9	17.2	1.9
Cyanide	200										
Method:TAL Metals, Cyanide											

CHA[illegible]S WOOD
GROUNDWATER INORGANICS

Geographical Location		CW1		CW1		CW1		CW1		CW1	
Sample		CW01-MW26-E02		CW01-MW26-E02 SOL		CW01-MW27-A01		CW01-MW27-A01 SOL		CW01-MW27-A02	
Sample Type		Field Rinsate - Total		Field Rinsate - Soluble		Total		Soluble		Total	
Batch#		9502G739		9502G739		9502G358		9502G358		9502G739	
Prep#		95GI508		95GI508		95GI454		95GI454		95GI508	
RFW#		004		007		003		004		001	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/14/95		3/14/95		2/21/95		2/21/95		3/14/95	
Analysis Date		3/8/95		3/8/95		3/8/95		3/8/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5
Aluminum	200	20.2	16.8	18.4	16.8	3770	24.0	653	24.0	7620	16.8
Arsenic	8	1.9 U	1.9	1.9 U	1.9	5.0	1.9	1.9 U	1.9	4.4	1.9
Barium	2000	0.80 U	0.80	0.80 U	0.80	112	1.7	95.6	1.7	142	0.80
Beryllium	20	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90	0.90 U	0.90	0.99	0.30
Calcium		105	8.4	115	8.4	22000	10.4	21500	10.4	26200	8.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9
Cobalt		2.3 U	2.3	2.3 U	2.3	12.4	3.0	12.2	3.0	16.6	2.3
Chromium	100	4.7 U	4.7	4.7 U	4.7	34.5	2.9	2.9 U	2.9	76.6	4.7
Copper	1000	4.0 U	4.0	4.0 U	4.0	1.9 U	1.9	1.9 U	1.9	10.4	4.0
Iron	300	12.0	2.5	16.8	2.5	7190	6.4	122	6.4	15400	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		67.9	67.9	119	67.9	11400	685	10500	685	14500	67.9
Magnesium		34.3	34.3	47.6	34.3	11700	18.3	10900	18.3	15600	34.3
Manganese	50	0.90 U	0.90	0.90 U	0.90	110	1.8	98.4	1.8	140	0.90
Sodium	50000	132	19.1	156	19.1	64300	30.5	62700	30.5	79100	19.1
Nickel	100	4.2 U	4.2	4.2 U	4.2	11.9	10.8	20.4	10.8	30.0	4.2
Lead	10	2.6	1.2	1.5	1.2	5.6	1.6	1.6 U	1.6	11.0	1.2
Antimony	20	10.9 U	10.9	13.2	10.9	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Thallium	10	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1
Vanadium		2.1 U	2.1	2.1 U	2.1	34.4	2.3	2.3 U	2.3	71.5	2.1
Zinc	5000	1.9 U	1.9	1.9 U	1.9	41.9	3.8	33.4	3.8	56.6	1.9
Cyanide	200										
Method:TAL Metals, Cyanide											

CHARLES WOOD
GROUNDWATER INORGANICS

Geographical Location		CW1		CW1		CW1		CW1		CW1	
Sample		CW01-MW27-A02 SOL		CW01-MW28-A01		CW01-MW28-A01 SOL		CW01-MW28-A02		CW01-MW28-A02 SOL	
Sample Type		Soluble		Total		Soluble		Total		Soluble	
Batch#		9503G739		9502G358		9502G358		9502G739		9502G739	
Prep#		95GI508		95GI454		95GI454		95GI508		95GI508	
RFW#		002		005		006		008		009	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/14/95		2/21/95		2/21/95		3/14/95		3/14/95	
Analysis Date		3/8/95		3/8/95		3/8/95		3/8/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5
Aluminum	200	885	16.8	3480	24.0	510	24.0	4150	16.8	498	16.8
Arsenic	8	1.9 U	1.9	4.3	1.9	1.9 U	1.9	3.7	1.9	1.9 U	1.9
Barium	2000	116	0.80	54.3	1.7	49.3	1.7	51.8	0.80	39.7	0.80
Beryllium	20	0.30 U	0.30	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.33	0.30
Calcium		24900	8.4	15300	10.4	15100	10.4	14800	8.4	14500	8.4
Cadmium	4	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9
Cobalt		13.2	2.3	7.5	3.0	4.7	3.0	6.4	2.3	4.4	2.3
Chromium	100	4.7 U	4.7	27.1	2.9	2.9 U	2.9	29.2	4.7	4.7 U	4.7
Copper	1000	8.1	4.0	1.9 U	1.9	1.9 U	1.9	4.4	4.0	4.0 U	4.0
Iron	300	93.3	2.5	5760	6.4	8.4	6.4	6610	2.5	28.6	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		11800	67.9	12900	685	12100	685	12900	67.9	11600	67.9
Magnesium		13500	34.3	3890	18.3	3380	18.3	4270	34.3	3580	34.3
Manganese	50	114	0.90	44.0	1.8	36.3	1.8	48.7	0.90	39.5	0.90
Sodium	50000	73800	19.1	17000	30.5	17100	30.5	19200	19.1	19000	19.1
Nickel	100	15.0	4.2	11.5	10.8	17.2	10.8	6.0	4.2	7.2	4.2
Lead	10	2.2	1.2	2.7	1.6	1.6 U	1.6	3.6	1.2	1.5	1.2
Antimony	20	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Thallium	10	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1
Vanadium		2.1 U	2.1	23.4	2.3	2.3 U	2.3	24.4	2.1	2.1 U	2.1
Zinc	5000	32.5	1.9	21.9	3.8	13.1	3.8	27.8	1.9	14.4	1.9
Cyanide	200										
Method:TAL Metals, Cyanide											

CHA[illegible]S WOOD
GROUNDWATER INORGANICS

Geographical Location		CW1		CW1		CW1		CW1		CW1	
Sample		CW01-MW29-A01		CW01-MW29-A01 SOL		CW01-MW29-A02		CW01-MW29-A02 SOL		CW01-MW29-E01	
Sample Type		Total		Soluble		Total		Soluble		Field Rinsate - Total	
Batch#		9502G358		9502G358		9502G739		9502G739		9502G358	
Prep#		95GI454		95GI454		95GI508		95GI508		95GI454	
RFW#		007		008		010		011		010	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/21/95		2/21/95		3/14/95		3/14/95		2/21/95	
Analysis Date		3/8/95		3/8/95		3/8/95		3/8/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0
Aluminum	200	1980	24.0	118	24.0	2760	16.8	143	16.8	24.0 U	24.0
Arsenic	8	2.3	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	46.3	1.7	37.6	1.7	55.3	0.80	46.0	0.80	1.7 U	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90
Calcium		25400	10.4	25000	10.4	31300	8.4	31400	8.4	113	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8
Cobalt		4.4	3.0	3.6	3.0	5.2	2.3	4.1	2.3	3.0 U	3.0
Chromium	100	17.5	2.9	2.9 U	2.9	21.9	4.7	4.7 U	4.7	2.9 U	2.9
Copper	1000	1.9 U	1.9	1.9 U	1.9	4.0 U	4.0	4.0 U	4.0	1.9 U	1.9
Iron	300	3810	6.4	134	6.4	5300	2.5	238	2.5	6.4 U	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		10700	685	9660	685	11300	67.9	11000	67.9	685 U	685
Magnesium		4940	18.3	4520	18.3	6100	34.3	5890	34.3	18.3 U	18.3
Manganese	50	65.8	1.8	60.5	1.8	75.3	0.90	70.3	0.90	1.8 U	1.8
Sodium	50000	28000	30.5	27600	30.5	30800	19.1	33500	19.1	321	30.5
Nickel	100	15.4	10.8	10.8 U	10.8	4.8	4.2	5.8	4.2	10.8 U	10.8
Lead	10	1.6 U	1.6	1.6 U	1.6	2.3	1.2	1.2	1.2	1.6 U	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70
Vanadium		14.5	2.3	2.3 U	2.3	16.7	2.1	2.1 U	2.1	2.3 U	2.3
Zinc	5000	21.4	3.8	15.8	3.8	23.8	1.9	16.3	1.9	3.8 U	3.8
Cyanide	200										
Method:TAL Metals, Cyanide											

CHARLES WOOD
GROUNDWATER INORGANICS

Geographical Location		CW1		CW2		CW2		CW2		CW2		CW2	
Sample		CW01-MW29-E01 SOL		CW02-MW30-A01		CW02-MW30-A01 SOL		CW02-MW30-A02		CW02-MW30-A02 SOL		CW02-MW31-A01	
Sample Type		Field Rinsate - Soluble		Total		Soluble		Total		Soluble		Total	
Batch#		9502G358		9502G358		9502G358		9502G739		9502G739		9502G358	
Prep#		95GI454		95GI454		95GI454		95GI508		95GI508		95GI454	
RFW#		011		012		013		012		013		014	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/21/95		2/21/95		2/21/95		3/14/95		3/14/95		2/21/95	
Analysis Date		3/8/95		3/8/95		3/8/95		3/8/95		3/8/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0
Aluminum	200	24.0 U	24.0	127	24.0	24.0 U	24.0	131	16.8	22.2	16.8	24.0 U	24.0
Arsenic	8	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	1.7 U	1.7	227	1.7	219	1.7	240	0.80	235	0.80	170	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90
Calcium		72.3	10.4	61200	10.4	59100	10.4	66000	8.4	66000	8.4	37100	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	2.3 U	2.3	2.3 U	2.3	3.0 U	3.0
Chromium	100	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	4.7 U	4.7	4.7 U	4.7	2.9 U	2.9
Copper	1000	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	7.6	4.0	8.2	4.0	1.9 U	1.9
Iron	300	6.4 U	6.4	42800	6.4	40500	6.4	48700	2.5	47500	2.5	34600	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		685 U	685	9460	685	9590	685	10500	67.9	10600	67.9	8270	685
Magnesium		18.3 U	18.3	6770	18.3	6560	18.3	7320	34.3	7300	34.3	4500	18.3
Manganese	50	1.8 U	1.8	352	1.8	340	1.8	378	0.90	375	0.90	212	1.8
Sodium	50000	137	30.5	18000	30.5	17600	30.5	16200	19.1	16200	19.1	9650	30.5
Nickel	100	12.9	10.8	16.7	10.8	21.1	10.8	4.6	4.2	4.2 U	4.2	26.0	10.8
Lead	10	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.2 U	1.2	1.8	1.2	1.6 U	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	12.7	10.9	20.7 U	20.7
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70
Vanadium		2.3 U	2.3	3.2	2.3	2.3 U	2.3	2.1 U	2.1	2.1 U	2.1	2.3 U	2.3
Zinc	5000	3.8 U	3.8	6.6	3.8	5.1	3.8	4.8	1.9	6.1	1.9	5.6	3.8
Cyanide	200												
Method:TAL Metals, Cyanide													

CHA[illegible]S WOOD
GROUNDWATER INORGANICS

Geographical Location		CW2		CW2		CW2		CW2		CW2	
Sample		CW02-MW31-A01 SOL		CW02-MW31-A02		CW02-MW31-A02 SOL		CW02-MW32-A01		CW02-MW32-A01 SOL	
Sample Type		Soluble		Total		Soluble		Total		Soluble	
Batch#		9502G358		9502G739		9502G739		9502G358		9502G358	
Prep#		95GI454		95GI508		95GI508		95GI454		95GI454	
RFW#		015		014		015		016		017	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/21/95		3/14/95		3/14/95		2/21/95		2/21/95	
Analysis Date		3/8/95		3/8/95		3/8/95		3/8/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0
Aluminum	200	24.0 U	24.0	35.3	16.8	26.1	16.8	530	24.0	24.0 U	24.0
Arsenic	8	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	169	1.7	191	0.80	183	0.80	216	1.7	187	1.7
Beryllium	20	0.90 U	0.90	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90	0.90 U	0.90
Calcium		37600	10.4	40400	8.4	39500	8.4	45800	10.4	43700	10.4
Cadmium	4	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8
Cobalt		3.0 U	3.0	2.3 U	2.3	2.3 U	2.3	3.0 U	3.0	3.0 U	3.0
Chromium	100	2.9 U	2.9	4.7 U	4.7	4.7 U	4.7	2.9 U	2.9	2.9 U	2.9
Copper	1000	1.9 U	1.9	4.3	4.0	4.0 U	4.0	1.9 U	1.9	1.9 U	1.9
Iron	300	33300	6.4	38100	2.5	34200	2.5	47700	6.4	38300	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		8210	685	9150	67.9	8930	67.9	9480	685	9210	685
Magnesium		4540	18.3	5050	34.3	4960	34.3	5560	18.3	5230	18.3
Manganese	50	214	1.8	233	0.90	228	0.90	266	1.8	250	1.8
Sodium	50000	9790	30.5	11000	19.1	10900	19.1	11500	30.5	11000	30.5
Nickel	100	26.4	10.8	4.2 U	4.2	14.7	4.2	10.8 U	10.8	10.8 U	10.8
Lead	10	1.6 U	1.6	1.2 U	1.2	1.7	1.2	1.6 U	1.6	1.6 U	1.6
Antimony	20	20.7 U	20.7	10.9 U	10.9	15.8	10.9	20.7 U	20.7	22.3	20.7
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70
Vanadium		2.3 U	2.3	2.1 U	2.1	2.1 U	2.1	3.9	2.3	2.3 U	2.3
Zinc	5000	3.8 U	3.8	2.2	1.9	5.4	1.9	14.2	3.8	4.1	3.8
Cyanide	200										
Method:TAL Metals, Cyanide											

CHARLES WOOD
GROUNDWATER INORGANICS

Geographical Location		CW2		CW2		CW2		CW2		CW2	
Sample		CW02-MW32-A02		CW02-MW32-A02 SOL		CW02-MW33-A01		CW02-MW33-A01 SOL		CW02-MW33-A02	
Sample Type		Total		Soluble		Total		Soluble		Total	
Batch#		9502G739		9502G739		9502G358		9502G358		9502G739	
Prep#		95GI508		95GI508		95GI454		95GI454		95GI508	
RFW#		016		017		018		019		018	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/14/95		3/14/95		2/21/95		2/21/95		3/14/95	
Analysis Date		3/8/95		3/8/95		3/8/95		3/8/95		3/8/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5
Aluminum	200	365	16.8	16.8	16.8	651	24.0	24.0 U	24.0	701	16.8
Arsenic	8	1.9 U	1.9	1.9 U	1.9	3.0	1.9	1.9 U	1.9	1.9 U	1.9
Barium	2000	206	0.80	189	0.80	235	1.7	184	1.7	233	0.80
Beryllium	20	0.30 U	0.30	0.30 U	0.30	0.90 U	0.90	0.90 U	0.90	0.30 U	0.30
Calcium		46700	8.4	47100	8.4	49300	10.4	48600	10.4	53200	8.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9
Cobalt		2.3 U	2.3	2.5	2.3	3.0 U	3.0	3.0 U	3.0	5.8	2.3
Chromium	100	4.7 U	4.7	4.7 U	4.7	4.3	2.9	2.9 U	2.9	4.7 U	4.7
Copper	1000	4.0	4.0	4.4	4.0	8.4	1.9	1.9 U	1.9	15.4	4.0
Iron	300	50200	2.5	42700	2.5	54900	6.4	39700	6.4	54000	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		9680	67.9	9720	67.9	8030	685	8130	685	8880	67.9
Magnesium		5630	34.3	5670	34.3	5890	18.3	5710	18.3	6310	34.3
Manganese	50	271	0.90	270	0.90	252	1.8	248	1.8	294	0.90
Sodium	50000	12100	19.1	12300	19.1	12800	30.5	12600	30.5	15900	19.1
Nickel	100	23.5	4.2	6.1	4.2	10.8 U	10.8	10.8 U	10.8	5.4	4.2
Lead	10	1.4	1.2	1.2	1.2	1.6 U	1.6	1.6 U	1.6	6.6	1.2
Antimony	20	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Thallium	10	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1
Vanadium		2.7	2.1	2.1 U	2.1	4.5	2.3	2.3 U	2.3	5.8	2.1
Zinc	5000	13.5	1.9	4.5	1.9	14.0	3.8	6.1	3.8	37.2	1.9
Cyanide	200										
Method:TAL Metals, Cyanide											

Geographical Location		CW2		CW9		CW9		CW9		CW9	
Sample		CW02-MW33-A02 SOL		CW09-MW35-A01		CW09-MW35-A01 SOL		CW09-MW35-A02		CW09-MW35-A02 SOL	
Sample Type		Soluble		Total		Soluble		Total		Soluble	
Batch#		9502G739		9502G300		9502G300		9503G723		9503G723	
Prep#		95GI508		95GI450		95GI450		95GI503		95GI503	
RFW#		019		003		004		002		003	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/14/95		2/20/95		2/20/95		3/13/95		3/13/95	
Analysis Date		3/8/95		3/6/95		3/6/95		3/15/95		3/15/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	25.6	16.8	242	16.8	85.2	16.8	210	16.8	91.0	16.8
Arsenic	8	1.9 U	1.9	1.3 U	1.3	1.3 U	1.3	1.3 U	1.3	1.3 U	1.3
Barium	2000	192	0.80	40.5	0.80	36.8	0.80	34.0	0.80	35.4	0.80
Beryllium	20	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.35	0.30	0.33	0.30
Calcium		51800	8.4	21800	8.4	20700	8.4	25000	8.4	25800	8.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Cobalt		4.0	2.3	4.9	2.3	4.2	2.3	2.3 U	2.3	2.3 U	2.3
Chromium	100	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7	4.7 U	4.7
Copper	1000	7.7	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	6.5	4.0
Iron	300	38900	2.5	123	2.5	17.1	2.5	85.4	2.5	30.1	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		8700	67.9	2110	67.9	1990	67.9	1960	67.9	2180	67.9
Magnesium		6140	34.3	5770	34.3	5360	34.3	5980	34.3	6200	34.3
Manganese	50	284	0.90	43.9	0.90	40.2	0.90	36.3	0.90	37.9	0.90
Sodium	50000	15900	19.1	7300	19.1	6760	19.1	6660	19.1	7080	19.1
Nickel	100	4.3	4.2	11.3	4.2	9.6	4.2	4.2 U	4.2	9.3	4.2
Lead	10	5.6	1.2	1.6 U	1.6	1.6 U	1.6	1.1 U	1.1	1.1 U	1.1
Antimony	20	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1
Zinc	5000	25.4	1.9	60.1	1.9	55.0	1.9	51.6	1.9	58.4	1.9
Cyanide	200										
Method:TAL Metals, Cyanide											

CHARLES WOOD
GROUNDWATER INORGANICS

Geographical Location		CW9		CW9		CW9		CW9		CW9	
Sample		CW09-MW35-E01		CW09-MW35-E01 SOL		CW09-MW36-A01		CW09-MW36-A01 SOL		CW09-MW36-A02	
Sample Type		Total		Soluble		Total		Soluble		Total	
Batch#		9502G300		9502G300		9502G300		9502G300		9503G723	
Prep#		95GI450		95GI450		95GI450		95GI450		95GI503	
RFW#		007		008		005		006		004	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/20/95		2/20/95		2/20/95		2/20/95		3/13/95	
Analysis Date		3/6/95		3/6/95		3/6/95		3/6/95		3/15/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5	2.5 U	2.5
Aluminum	200	231	16.8	16.8 U	16.8	460	16.8	39.5	16.8	645	16.8
Arsenic	8	1.3 U	1.3	1.3 U	1.3	1.3 U	1.3	1.3 U	1.3	1.3 U	1.3
Barium	2000	40.8	0.80	0.80 U	0.80	33.2	0.80	28.3	0.80	29.4	0.80
Beryllium	20	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30	0.30 U	0.30
Calcium		21100	8.4	191	8.4	37400	8.4	37600	8.4	32700	8.4
Cadmium	4	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Cobalt		4.0	2.3	2.3 U	2.3	3.2	2.3	4.2	2.3	2.5	2.3
Chromium	100	4.7 U	4.7	4.7 U	4.7	6.4	4.7	6.5	4.7	5.0	4.7
Copper	1000	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0	4.0 U	4.0
Iron	300	85.8	2.5	3.8	2.5	1120	2.5	44.1	2.5	1420	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		2090	67.9	82.5	67.9	4180	67.9	4110	67.9	3820	67.9
Magnesium		5580	34.3	34.3 U	34.3	8200	34.3	8170	34.3	7470	34.3
Manganese	50	43.9	0.90	0.90 U	0.90	239	0.90	240	0.90	195	0.90
Sodium	50000	7230	19.1	654	19.1	5990	19.1	6120	19.1	5810	19.1
Nickel	100	10.8	4.2	4.2 U	4.2	6.4	4.2	8.3	4.2	4.9	4.2
Lead	10	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	1.6 U	1.6	4.1	1.1
Antimony	20	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70
Vanadium		2.1 U	2.1	2.8	2.1	3.5	2.1	2.1 U	2.1	4.2	2.1
Zinc	5000	60.7	1.9	2.6	1.9	25.7	1.9	24.9	1.9	28.3	1.9
Cyanide	200										
Method:TAL Metals, Cyanide											

CHA[illegible]S WOOD
GROUNDWATER INORGANICS

Geographical Location		CW9		B6		B6		B6		B6		B7	
Sample		CW09-MW36-A02 SOL		B6-MW06B-A01		B6-MW06B-A01 SOL		B6-MW06B-A02		B6-MW06B-A02 SOL		B7-MW07B-A01	
Sample Type		Soluble		Total		Soluble		Total		Soluble		Total	
Batch#		9503G723		9502G198		9502G198		9503G641		9503G641		9502G198	
Prep#		95GI503		95GI427		95GI427		95GI479		95GI479		95GI427	
RFW#		005		003		004		001		002		005	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/13/95		2/15/95		2/15/95		3/8/95		3/8/95		2/15/95	
Analysis Date		3/15/95		2/23/95		2/28/95		3/14/95		3/10/95		2/23/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	36.2	16.8	7500	24.0	152	24.0	8210	24.0	245	24.0	1360	24.0
Arsenic	8	1.3 U	1.3	14.6	1.9	1.9 U	1.9	25.1	1.6	2.3	1.6	1.9 U	1.9
Barium	2000	22.6	0.80	170	1.7	50.8	1.7	192	1.7	34.9	1.7	71.0	1.7
Beryllium	20	0.35	0.30	2.3	0.90	0.90 U	0.90	2.8	0.90	0.94	0.90	0.90 U	0.90
Calcium		31700	8.4	5270	10.4	5050	10.4	4500	10.4	4200	10.4	7610	10.4
Cadmium	4	2.9 U	2.9	3.7	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Cobalt		2.6	2.3	12.5	3.0	5.2	3.0	10.7	3.0	8.7	3.0	30.6	3.0
Chromium	100	4.7 U	4.7	49.6	2.9	2.9 U	2.9	48.3	2.9	2.9 U	2.9	9.7	2.9
Copper	1000	4.0 U	4.0	6.8	1.9	1.9 U	1.9	9.8	1.9	4.0	1.9	1.9 U	1.9
Iron	300	29.3	2.5	15600	6.4	1800	6.4	19600	6.4	1010	6.4	2150	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		3600	67.9	4030	685	2450	685	4630	685	2060	685	2140	685
Magnesium		7080	34.3	4770	18.3	2940	18.3	4430	18.3	2540	18.3	6670	18.3
Manganese	50	186	0.90	59.2	1.8	36.3	1.8	51.5	1.8	27.3	1.8	232	1.8
Sodium	50000	5640	19.1	16600	30.5	16600	30.5	17000	30.5	16900	30.5	36400	30.5
Nickel	100	5.0	4.2	48.3	10.8	23.3	10.8	35.7	10.8	22.8	10.8	12.5	10.8
Lead	10	1.1 U	1.1	2.8	1.6	4.1	1.6	3.9	1.0	1.0 U	1.0	3.3	1.6
Antimony	20	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	3.8	1.5	1.5 U	1.5	3.7	1.8	1.8 U	1.8	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70
Vanadium		2.1 U	2.1	27.0	2.3	2.3 U	2.3	28.9	2.3	2.3 U	2.3	9.1	2.3
Zinc	5000	25.4	1.9	133	3.8	70.0	3.8	126	3.8	66.3	3.8	23.5	3.8
Cyanide	200			10 U	10			10 U	10			10 U	10
Method:TAL Metals, Cyanide													

CHARLES WOOD
GROUNDWATER INORGANICS

Geographical Location		B7		B7		B7		B8		B8		B8	
Sample		B7-MW07B-A01 SOL		B7-MW07B-A02		B7-MW07B-A02 SOL		B8-MW08B-A01		B8-MW08B-A01 SOL		B8-MW08B-A02	
Sample Type		Soluble		Total		Soluble		Total		Soluble		Total	
Batch#		9502G198		9503G617		9503G617		9502G198		9502G198		9503G641	
Prep#		95GI427		95GI475		95GI475		95GI427		95GI427		95GI479	
RFW#		006		003		004		007		008		003	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/15/95		3/7/95		3/7/95		2/15/95		2/15/95		3/8/95	
Analysis Date		2/28/95		3/13/95		3/13/95		2/23/95		2/28/95		3/14/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	327	24.0	993	16.8	289	16.8	340	24.0	27.9	24.0	627	24.0
Arsenic	8	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	1.6 U	1.6
Barium	2000	67.0	1.7	64.9	0.80	62.5	0.80	45.3	1.7	45.3	1.7	45.7	1.7
Beryllium	20	0.90 U	0.90	0.45	0.30	0.57	0.30	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Calcium		7420	10.4	7420	8.4	7460	8.4	1890	10.4	1960	10.4	1870	10.4
Cadmium	4	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Cobalt		30.6	3.0	29.3	2.3	29.7	2.3	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Chromium	100	2.9 U	2.9	5.7	4.7	4.7 U	4.7	2.9 U	2.9	2.9 U	2.9	5.7	2.9
Copper	1000	1.9 U	1.9	4.0 U	4.0	4.0 U	4.0	2.9	1.9	3.8	1.9	1.9 U	1.9
Iron	300	6.4 U	6.4	1430	2.5	10.9	2.5	702	6.4	6.4 U	6.4	1240	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		1280	685	1400	67.9	1130	67.9	1740	685	2230	685	2120	685
Magnesium		6260	18.3	6160	34.3	6080	34.3	3260	18.3	3310	18.3	3330	18.3
Manganese	50	223	1.8	205	0.90	203	0.90	16.6	1.8	16.6	1.8	15.8	1.8
Sodium	50000	35500	30.5	34100	19.1	34100	19.1	12000	30.5	12300	30.5	12100	30.5
Nickel	100	10.8 U	10.8	4.2 U	4.2	6.5	4.2	10.8 U	10.8	14.2	10.8	10.8 U	10.8
Lead	10	1.6 U	1.6	1.0 U	1.0	1.0 U	1.0	1.6 U	1.6	1.6 U	1.6	1.0 U	1.0
Antimony	20	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8
Thallium	10	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1
Vanadium		2.3 U	2.3	4.3	2.1	2.1 U	2.1	2.3 U	2.3	2.4	2.3	4.4	2.3
Zinc	5000	24.7	3.8	22.3	1.9	22.0	1.9	14.7	3.8	14.7	3.8	16.0	3.8
Cyanide	200			10 U	10			10 U	10			10 U	10
Method:TAL Metals, Cyanide													

Geographical Location		B8		B8		B9		B9		B9		B9	
Sample		B8-MW08B-A02 SOL		B8-MW10B-A02 SOL		B9-MW09B-A01		B9-MW09B-A01 SOL		B9-MW09B-A02		B9-MW09B-A02 SOL	
Sample Type		Soluble		Soluble		Total		Soluble		Total		Soluble	
Batch#		9503G641		9503G641		9502G198		9502G198		9503G617		9503G617	
Prep#		95GI479		95GI479		95GCN040		95GI427		95GI475		95GI475	
RFW#		004		006		001		002		001		002	
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/8/95		3/8/95		2/15/95		2/15/95		3/7/95		3/7/95	
Analysis Date		3/10/95		3/10/95		2/23/95		2/28/95		3/13/95		3/13/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	2.5 U	2.5	2.5 U	2.5
Aluminum	200	29.1	24.0	50.5	24.0	1290	24.0	400	24.0	3880	16.8	399	16.8
Arsenic	8	1.6 U	1.6	2.3	1.6	2.3	1.9	1.9 U	1.9	13.2	1.9	1.9 U	1.9
Barium	2000	35.7	1.7	14.9	1.7	82.8	1.7	71.2	1.7	92.3	0.80	50.0	0.80
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.56	0.30	0.45	0.30
Calcium		2010	10.4	3490	10.4	8600	10.4	8700	10.4	7810	8.4	8030	8.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.9 U	2.9	2.9 U	2.9
Cobalt		3.0 U	3.0	3.0 U	3.0	4.8	3.0	5.1	3.0	6.3	2.3	4.8	2.3
Chromium	100	2.9 U	2.9	2.9 U	2.9	8.1	2.9	2.9 U	2.9	31.8	4.7	4.7 U	4.7
Copper	1000	1.9 U	1.9	4.8	1.9	1.9	1.9	3.0	1.9	4.0 U	4.0	4.0 U	4.0
Iron	300	25.5	6.4	28.2	6.4	2650	6.4	13.6	6.4	12800	2.5	33.3	2.5
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		1300	685	1520	685	2400	685	1890	685	2940	67.9	1620	67.9
Magnesium		3120	18.3	2090	18.3	6460	18.3	6160	18.3	7160	34.3	6380	34.3
Manganese	50	15.3	1.8	23.3	1.8	58.2	1.8	54.1	1.8	62.2	0.90	47.4	0.90
Sodium	50000	12000	30.5	14900	30.5	3330	30.5	3440	30.5	3390	19.1	3530	19.1
Nickel	100	10.8 U	10.8	10.8 U	10.8	23.8	10.8	22.3	10.8	18.4	4.2	15.0	4.2
Lead	10	1.0 U	1.0	1.0 U	1.0	2.0	1.6	1.6 U	1.6	3.6	1.2	1.0 U	1.0
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	10.9 U	10.9	10.9 U	10.9
Selenium	50	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5	1.5 U	1.5
Thallium	10	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1
Vanadium		2.3 U	2.3	2.3 U	2.3	4.4	2.3	2.3 U	2.3	13.2	2.1	2.1 U	2.1
Zinc	5000	18.6	3.8	24.1	3.8	54.8	3.8	53.1	3.8	75.8	1.9	61.3	1.9
Cyanide	200					10 U	10			10 U	10		
Method:TAL Metals, Cyanide													

CHARLES WOOD
GROUNDWATER INORGANICS

Geographical Location		B10		B10		B10		B10		B10	
Sample		B10-MW10B-A01		B10-MW10B-A01 SOL		B10-MW10B-A02		B10-MW10B-A02 SOL		B10-MW10B-E01	
Sample Type		Total		Soluble		Total		Soluble		Field Rinsate - Total	
Batch#		9502G198		9502G198		9503G641		9503G641		9502G198	
Prep#		95GI427		95GI427		95GI479		95GI479		95GI427	
RFW#		009		010		005		006		012	
Dilution Factor		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/15/95		2/15/95		3/8/95		3/8/95		2/15/95	
Analysis Date		2/23/95		2/28/95		3/14/95		3/14/95		2/23/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	1690	24.0	71.1	24.0	1250	24.0	50.5	24.0	24.0 U	24.0
Arsenic	8	3.5	1.9	1.9 U	1.9	4.0	1.6	2.3	1.6	1.9 U	1.9
Barium	2000	77.5	1.7	20.3	1.7	63.2	1.7	14.9	1.7	1.7 U	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Calcium		3980	10.4	3690	10.4	3500	10.4	3490	10.4	33.6	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Cobalt		3.5	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Chromium	100	12.1	2.9	2.9 U	2.9	6.7	2.9	2.9 U	2.9	2.9 U	2.9
Copper	1000	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9	4.8	1.9	1.9 U	1.9
Iron	300	3070	6.4	92.3	6.4	2220	6.4	28.2	6.4	6.4 U	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		2060	685	685 U	685	1870	685	1520	685	685 U	685
Magnesium		2790	18.3	2340	18.3	2450	18.3	2090	18.3	18.3 U	18.3
Manganese	50	34.8	1.8	30.4	1.8	27.6	1.8	23.3	1.8	2.7	1.8
Sodium	50000	16400	30.5	16200	30.5	15600	30.5	14900	30.5	95.0	30.5
Nickel	100	20.4	10.8	17.3	10.8	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8
Lead	10	2.2	1.6	7.3	1.6	1.0 U	1.0	1.0 U	1.0	1.6 U	1.6
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8	1.5 U	1.5
Thallium	10	0.70 U	0.70	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1	0.70 U	0.70
Vanadium		8.5	2.3	2.3 U	2.3	2.8	2.3	2.3 U	2.3	2.3 U	2.3
Zinc	5000	35.9	3.8	32.4	3.8	30.8	3.8	24.1	3.8	3.8 U	3.8
Cyanide	200	10 U	10			10 U	10	10 U	10		
Method:TAL Metals, Cyanide											

CHARLES WOOD
GROUNDWATER INORGANICS

Geographical Location		B10		B10		B10	
Sample		B10-MW10B-E01 SOL		B10-MW10B-E02		B10-MW10B-E02 SOL	
Sample Type		Field Rinsate - Soluble		Field Rinsate - Total		Field Rinsate - Soluble	
Batch#		9502G198		9503G641		9503G641	
Prep#		95GI427		95GI479		95GI479	
RFW#		013		008		009	
Dilution Factor		1.00		1.00		1.00	
Matrix		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l	
Sampling Date		2/15/95		3/8/95		3/8/95	
Analysis Date		2/28/95		3/14/95		3/10/95	
Analysis	Standard	Analytical Result	MDL	Analytical Result	MDL	Analytical Result	MDL
Silver	20	3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Aluminum	200	24.0 U	24.0	24.0 U	24.0	24.0 U	24.0
Arsenic	8	1.9 U	1.9	1.6 U	1.6	1.6 U	1.6
Barium	2000	1.7 U	1.7	1.7 U	1.7	1.7 U	1.7
Beryllium	20	0.90 U	0.90	0.90 U	0.90	0.90 U	0.90
Calcium		111	10.4	141	10.4	130	10.4
Cadmium	4	2.8 U	2.8	2.8 U	2.8	2.8 U	2.8
Cobalt		3.0 U	3.0	3.0 U	3.0	3.0 U	3.0
Chromium	100	2.9 U	2.9	2.9 U	2.9	2.9 U	2.9
Copper	1000	1.9 U	1.9	1.9 U	1.9	1.9 U	1.9
Iron	300	6.4 U	6.4	9.3	6.4	9.8	6.4
Mercury	2	0.20 U	0.20	0.20 U	0.20	0.20 U	0.20
Potassium		685 U	685	685 U	685	685 U	685
Magnesium		18.3 U	18.3	24.0	18.3	18.3 U	18.3
Manganese	50	1.8 U	1.8	1.8 U	1.8	1.8 U	1.8
Sodium	50000	70.4	30.5	170	30.5	231	30.5
Nickel	100	10.8 U	10.8	10.8 U	10.8	10.8 U	10.8
Lead	10	1.6 U	1.6	1.0 U	1.0	1.0 U	1.0
Antimony	20	20.7 U	20.7	20.7 U	20.7	20.7 U	20.7
Selenium	50	1.5 U	1.5	1.8 U	1.8	1.8 U	1.8
Thallium	10	0.70 U	0.70	1.1 U	1.1	1.1 U	1.1
Vanadium		2.3 U	2.3	2.3 U	2.3	2.3 U	2.3
Zinc	5000	3.8 U	3.8	6.5	3.8	6.4	3.8
Cyanide	200			10 U	10		
Method:TAL Metals, Cyanide							

CHARLES WOOD
GROUNDWATER PESTICIDES/PCBS

Geographical Location		CW1		CW1		CW1		CW1		CW1		CW1	
Sample		CW01-MW26-A01		CW01-MW26-A02		CW01-MW26-E02		CW01-MW27-A01		CW01-MW27-A02		CW01-MW28-A01	
Sample Type						Field Rinsate Blank							
Batch#		9503G358		9503G739		9503G739		9503G358		9503G739		9503G358	
Prep#		95GP0154		95GP0251		95GP0251		95GP0154		95GP0251		95GP0154	
RFW#		001		003		006		003		001		005	
Sample Depth													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/21/95		3/14/95		3/14/95		2/21/95		3/14/95		2/21/95	
Analysis Date		3/15/95		3/12/95		3/12/95		3/15/95		3/12/95		3/15/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
beta-BHC	0.2	0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
delta-BHC		0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
gamma-BHC (Lindane)	0.2	0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
Heptachlor	0.4	0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
Aldrin	0.04	0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
Heptachlor epoxide	0.2	0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
Endosulfan I	0.4	0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
Dieldrin	0.03	0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
4,4'-DDE	0.1	0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
Endrin	2	0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
Endosulfan II	0.4	0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
4,4'-DDD	0.1	0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
Endosulfan sulfate	0.4	0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
4,4'-DDT	0.1	0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
Methoxychlor	40	0.48 U	0.48	0.52 U	0.52	0.52 U	0.52	0.52 U	0.52	0.56 U	0.56	0.47 U	0.47
Endrin ketone		0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
Endrin aldehyde		0.097 U	0.097	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10	0.11 U	0.11	0.094 U	0.094
alpha-Chlordane		0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
gamma-Chlordane	0.5	0.048 U	0.048	0.052 U	0.052	0.052 U	0.052	0.052 U	0.052	0.056 U	0.056	0.047 U	0.047
Toxaphene	3	4.8 U	4.8	5.2 U	5.2	5.2 U	5.2	5.2 U	5.2	5.6 U	5.6	4.7 U	4.7
Aroclor-1016	2	0.97 U	0.97	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.1 U	1.1	0.94 U	0.94
Aroclor-1221	2	1.9 U	1.9	2.1 U	2.1	2.1 U	2.1	2.1 U	2.1	2.2 U	2.2	1.9 U	1.9
Aroclor-1232	2	0.97 U	0.97	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.1 U	1.1	0.94 U	0.94
Aroclor-1242	2	0.97 U	0.97	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.1 U	1.1	0.94 U	0.94
Aroclor-1248	2	0.97 U	0.97	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.1 U	1.1	0.94 U	0.94
Aroclor-1254	2	0.97 U	0.97	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.1 U	1.1	0.94 U	0.94
Aroclor-1260	2	0.97 U	0.97	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0	1.1 U	1.1	0.94 U	0.94
Method:TCL Pesticides/PCBs													

CHARLES WOOD
GROUNDWATER PESTICIDES/PCBS

Geographical Location		CW1		CW1		CW1		CW1		CW2		CW2	
Sample		CW01-MW28A02		CW01-MW29-A01		CW01-MW29-E01		CW01-MW29A02		CW02-MW30-A01		CW02-MW30-A02	
Sample Type						Field Rinsate Blank							
Batch#		9503G739		9503G358		9503G358		9503G739		9503G358		9503G739	
Prep#		95GP0251		95GP0154		95GP0154		95GP0251		95GP0154		95GP0251	
RFW#		008		007		010		010		012		012	
Sample Depth													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/14/95		2/21/95		2/21/95		3/14/95		2/21/95		3/14/95	
Analysis Date		3/12/95		3/16/95		3/16/95		3/12/95		3/16/95		3/12/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
beta-BHC	0.2	0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
delta-BHC		0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
gamma-BHC (Lindane)	0.2	0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Heptachlor	0.4	0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Aldrin	0.04	0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Heptachlor epoxide	0.2	0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Endosulfan I	0.4	0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Dieldrin	0.03	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDE	0.1	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endrin	2	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endosulfan II	0.4	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDD	0.1	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endosulfan sulfate	0.4	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
4,4'-DDT	0.1	0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Methoxychlor	40	0.52 U	0.52	0.47 U	0.47	0.53 U	0.53	0.51 U	0.51	0.52 U	0.52	0.52 U	0.52
Endrin ketone		0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
Endrin aldehyde		0.10 U	0.10	0.094 U	0.094	0.11 U	0.11	0.10 U	0.10	0.10 U	0.10	0.10 U	0.10
alpha-Chlordane		0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
gamma-Chlordane	0.5	0.052 U	0.052	0.047 U	0.047	0.053 U	0.053	0.051 U	0.051	0.052 U	0.052	0.052 U	0.052
Toxaphene	3	5.2 U	5.2	4.7 U	4.7	5.3 U	5.3	5.1 U	5.1	5.2 U	5.2	5.2 U	5.2
Aroclor-1016	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1221	2	2.1 U	2.1	1.9 U	1.9	2.1 U	2.1	2.0 U	2.0	2.1 U	2.1	2.1 U	2.1
Aroclor-1232	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1242	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1248	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1254	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Aroclor-1260	2	1.0 U	1.0	0.94 U	0.94	1.1 U	1.1	1.0 U	1.0	1.0 U	1.0	1.0 U	1.0
Method:TCL Pesticides/PCBs													

CHARLES WOOD
GROUNDWATER PESTICIDES/PCBS

Geographical Location		CW2		CW2		CW2		CW2		CW2		CW2	
Sample		CW02-MW31-A01		CW02-MW31-A02		CW02-MW32-A01		CW02-MW32-A02		CW02-MW33-A01		CW02-MW33-A02	
Sample Type													
Batch#		9503G358		9503G739		9503G358		9503G739		9503G358		9503G739	
Prep#		95GP0154		95GP0251		95GP0154		95GP0251		95GP0154		95GP0251	
RFW#		014		014		016		016		018		018	
Sample Depth													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/21/95		3/14/95		2/21/95		3/14/95		2/21/95		3/14/95	
Analysis Date		3/16/95		3/12/95		3/16/95		3/12/95		3/16/95		3/12/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
beta-BHC	0.2	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
delta-BHC		0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
gamma-BHC (Lindane)	0.2	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
Heptachlor	0.4	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
Aldrin	0.04	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
Heptachlor epoxide	0.2	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
Endosulfan I	0.4	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
Dieldrin	0.03	0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
4,4'-DDE	0.1	0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
Endrin	2	0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
Endosulfan II	0.4	0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
4,4'-DDD	0.1	0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
Endosulfan sulfate	0.4	0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
4,4'-DDT	0.1	0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
Methoxychlor	40	0.70 U	0.70	0.52 U	0.52	0.54 U	0.54	0.52 U	0.52	0.62 U	0.62	0.053 U	0.053
Endrin ketone		0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
Endrin aldehyde		0.14 U	0.14	0.10 U	0.10	0.11 U	0.11	0.10 U	0.10	0.12 U	0.12	0.11 U	0.11
alpha-Chlordane	-	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
gamma-Chlordane	0.5	0.070 U	0.070	0.052 U	0.052	0.054 U	0.054	0.052 U	0.052	0.062 U	0.062	0.053 U	0.053
Toxaphene	3	7.0 U	7.0	5.2 U	5.2	5.4 U	5.4	5.2 U	5.2	6.2 U	6.2	5.3 U	5.3
Aroclor-1016	2	1.4 U	1.4	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2	1.1 U	1.1
Aroclor-1221	2	2.8 U	2.8	2.1 U	2.1	2.2 U	2.2	2.1 U	2.1	2.5 U	2.5	2.1 U	2.1
Aroclor-1232	2	1.4 U	1.4	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2	1.1 U	1.1
Aroclor-1242	2	1.4 U	1.4	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2	1.1 U	1.1
Aroclor-1248	2	1.4 U	1.4	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2	1.1 U	1.1
Aroclor-1254	2	1.4 U	1.4	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2	1.1 U	1.1
Aroclor-1260	2	1.4 U	1.4	1.0 U	1.0	1.1 U	1.1	1.0 U	1.0	1.2 U	1.2	1.1 U	1.1
Method:TCL Pesticides/PCBs													

CHARLES WOOD
GROUNDWATER PESTICIDES/PCBS

Geographical Location		CW6		CW6		CW6		CW6		CW6		CW6	
Sample		CW06-MW01-A01		CW06-MW01-A02		CW06-MW01-E02		CW06-MW34-A01		CW06-MW34-A02		CW06-MW35-A01	
Sample Type						Field Rinsate Blank							
Batch#		9505G840		9505G138		9505G138		9502G300		9503G723		9502G300	
Prep#		95GP0510		95GP0580		95GP0580		95GP0154		95GP0247		95GP0154	
RFW#		002		002		003		001		001		003	
Sample Depth													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		5/10/95		5/10/95		5/25/95		2/20/95		3/13/95		2/20/95	
Analysis Date		5/19/95		6/1/95		6/1/95		3/15/95		3/29/95		3/12/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.054 U	0.054	0.046 U	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
beta-BHC	0.2	0.054 U	0.054	0.046 U	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
delta-BHC		0.054 U	0.054	0.046 U	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
gamma-BHC (Lindane)	0.2	0.054 U	0.054	0.046 U	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
Heptachlor	0.4	0.054 U	0.054	0.046 U	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
Aldrin	0.04	0.054 U	0.054	0.046 U	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
Heptachlor epoxide	0.2	0.054 U	0.054	0.046 U	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
Endosulfan I	0.4	0.054 U	0.054	0.046 U	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
Dieldrin	0.03	0.11 U	0.11	0.092 U	0.092	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.097 U	0.097
4,4'-DDE	0.1	0.11 U	0.11	0.092 U	0.092	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.097 U	0.097
Endrin	2	0.11 U	0.11	0.092 U	0.092	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.097 U	0.097
Endosulfan II	0.4	0.11 U	0.11	0.092 U	0.092	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.097 U	0.097
4,4'-DDD	0.1	0.098 J	0.11	0.074 J	0.092	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.097 U	0.097
Endosulfan sulfate	0.4	0.11 U	0.11	0.092 U	0.092	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.097 U	0.097
4,4'-DDT	0.1	0.11 U	0.11	0.092 U	0.092	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.097 U	0.097
Methoxychlor	40	0.54 U	0.54	0.46 U	0.46	0.53 U	0.53	0.47 U	0.47	0.53 U	0.53	0.48 U	0.48
Endrin ketone		0.11 U	0.11	0.092 U	0.092	0.11 U	0.11	0.094 U	.094	0.11 U	0.11	0.097 U	0.097
Endrin aldehyde		0.11 U	0.11	0.092 U	0.092	0.11 U	0.11	0.094 U	0.094	0.11 U	0.11	0.097 U	0.097
alpha-Chlordane		0.054	0.054	0.055	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
gamma-Chlordane	0.5	0.033 JP	0.054	0.037 J	0.046	0.053 U	0.053	0.047 U	0.047	0.053 U	0.053	0.048 U	0.048
Toxaphene	3	5.4 U	4.7	4.6 U	4.6	5.3 U	5.3	4.7 U	4.7	5.3 U	5.3	4.8 U	4.8
Aroclor-1016	2	1.1 U	1.1	0.92 U	0.92	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	0.97 U	0.97
Aroclor-1221	2	2.2 U	2.2	1.8 U	1.8	2.1 U	2.1	1.9 U	1.9	2.1 U	2.1	1.9 U	1.9
Aroclor-1232	2	1.1 U	1.1	0.092 U	0.092	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	0.97 U	0.97
Aroclor-1242	2	1.1 U	1.1	0.092 U	0.092	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	0.97 U	0.97
Aroclor-1248	2	1.1 U	1.1	0.092 U	0.092	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	0.97 U	0.97
Aroclor-1254	2	1.1 U	1.1	0.092 U	0.092	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	0.97 U	0.97
Aroclor-1260	2	1.1 U	1.1	0.092 U	0.092	1.1 U	1.1	0.94 U	0.94	1.1 U	1.1	0.97 U	0.97
Method:TCL Pesticides/PCBs													

CHARLES WOOD
GROUNDWATER PESTICIDES/PCBS

Geographical Location		CW9		CW9		CW6		CW9		B6		B6	
Sample		CW09-MW35-A02		CW09-MW35-E01		CW06-MW36-A01		CW09-MW36-A02		B6-MW06B-A01		B6-MW06B-A02	
Sample Type				Field Rinsate Blank									
Batch#		9503G723		9502G300		9502G300		9503G723		9502G198		9503G641	
Prep#	/	95GP0247		95GP0154		95GP0154		95GP0247		95GP0119		95GP0229	
RFW#		002		007		005		004		003		001	
Sample Depth													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		3/13/95		2/20/95		2/20/95		3/13/95		2/15/95		3/8/95	
Analysis Date		3/29/95		3/15/95		3/15/95		3/29/95		3/4/95		3/19/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
beta-BHC	0.2	0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
delta-BHC		0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
gamma-BHC (Lindane)	0.2	0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
Heptachlor	0.4	0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
Aldrin	0.04	0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
Heptachlor epoxide	0.2	0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
Endosulfan I	0.4	0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
Dieldrin	0.03	0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
4,4'-DDE	0.1	0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
Endrin	2	0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
Endosulfan II	0.4	0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
4,4'-DDD	0.1	0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
Endosulfan sulfate	0.4	0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
4,4'-DDT	0.1	0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
Methoxychlor	40	0.55 U	0.55	0.50 U	0.50	0.48 U	0.48	0.53 U	0.53	0.48 U	0.48	0.50 U	0.50
Endrin ketone		0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
Endrin aldehyde		0.11 U	0.11	0.10 U	0.10	0.096 U	0.096	0.11 U	0.11	0.096 U	0.096	0.10 U	0.10
alpha-Chlordane		0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
gamma-Chlordane	0.5	0.055 U	0.055	0.050 U	0.050	0.048 U	0.048	0.053 U	0.053	0.048 U	0.048	0.050 U	0.050
Toxaphene	3	5.5 U	5.5	5.0 U	5.0	4.8 U	4.8	5.3 U	5.3	4.8 U	4.8	5.0 U	5.0
Aroclor-1016	2	1.1 U	1.1	1.0 U	1.0	0.96 U	0.96	1.1 U	1.1	0.96 U	0.96	1.0 U	1.0
Aroclor-1221	2	2.2 U	2.2	2.0 U	2.0	1.9 U	1.9	2.1 U	2.1	1.9 U	1.9	2.0 U	2.0
Aroclor-1232	2	1.1 U	1.1	1.0 U	1.0	0.96 U	0.96	1.1 U	1.1	0.96 U	0.96	1.0 U	1.0
Aroclor-1242	2	1.1 U	1.1	1.0 U	1.0	0.96 U	0.96	1.1 U	1.1	0.96 U	0.96	1.0 U	1.0
Aroclor-1248	2	1.1 U	1.1	1.0 U	1.0	0.96 U	0.96	1.1 U	1.1	0.96 U	0.96	1.0 U	1.0
Aroclor-1254	2	1.1 U	1.1	1.0 U	1.0	0.96 U	0.96	1.1 U	1.1	0.96 U	0.96	1.0 U	1.0
Aroclor-1260	2	1.1 U	1.1	1.0 U	1.0	0.96 U	0.96	1.1 U	1.1	0.96 U	0.96	1.0 U	1.0
Method:TCL Pesticides/PCBs													

CHARLES WOOD
GROUNDWATER PESTICIDES/PCBS

Geographical Location		B7		B7		B8		B8		B9		B9	
Sample		B7-MW07B-A01		B7-MW07B-A02		B8-MW08B-A01		B8-MW08B-A02		B9-MW09B-A01		B9-MW09B-A02	
Sample Type													
Batch#		9502G198		9503G617		9502G198		9503G641		9502G198		9503G617	
Prep#		95GP0119		95GP0219		95GP0119		95GP0229		95GP0119		95GP0219	
RFW#		005		003		007		003		001		001	
Sample Depth													
Dilution Factor		1.00		1.00		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/15/95		3/7/95		2/15/95		3/8/95		2/15/95		3/7/95	
Analysis Date		3/4/95		3/17/95		3/7/95		3/19/95		3/4/95		3/17/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
beta-BHC	0.2	0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
delta-BHC		0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
gamma-BHC (Lindane)	0.2	0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
Heptachlor	0.4	0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
Aldrin	0.04	0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
Heptachlor epoxide	0.2	0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
Endosulfan I	0.4	0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
Dieldrin	0.03	0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
4,4'-DDE	0.1	0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
Endrin	2	0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
Endosulfan II	0.4	0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
4,4'-DDD	0.1	0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
Endosulfan sulfate	0.4	0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
4,4'-DDT	0.1	0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
Methoxychlor	40	0.60 U	0.60	0.51 U	0.51	0.60 U	0.60	0.52 U	0.52	0.47 U	0.47	0.48 U	0.48
Endrin ketone		0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
Endrin aldehyde		0.12 U	0.12	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.094 U	0.094	0.095 U	0.095
alpha-Chlordane		0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
gamma-Chlordane	0.5	0.060 U	0.060	0.051 U	0.051	0.060 U	0.060	0.052 U	0.052	0.047 U	0.047	0.048 U	0.048
Toxaphene	3	6.0 U	6.0	5.1 U	5.1	6.0 U	6.0	5.2 U	5.2	4.7 U	4.7	4.8 U	4.8
Aroclor-1016	2	1.2 U	1.2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	0.94 U	0.94	0.95 U	0.95
Aroclor-1221	2	2.4 U	2.4	2.0 U	2.0	2.4 U	2.4	2.1 U	2.1	1.9 U	1.9	1.9 U	1.9
Aroclor-1232	2	1.2 U	1.2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	0.94 U	0.94	0.95 U	0.95
Aroclor-1242	2	1.2 U	1.2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	0.94 U	0.94	0.95 U	0.95
Aroclor-1248	2	1.2 U	1.2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	0.94 U	0.94	0.95 U	0.95
Aroclor-1254	2	1.2 U	1.2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	0.94 U	0.94	0.95 U	0.95
Aroclor-1260	2	1.2 U	1.2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	0.94 U	0.94	0.95 U	0.95
Method:TCL Pesticides/PCBs													

CHARLES WOOD
GROUNDWATER PESTICIDES/PCBS

Geographical Location		B10		B10		B10		B10	
Sample		B10-MW10B-A01		B10-MW10B-A02		B10-MW10B-E01		B10-MW10B-E02	
Sample Type						Field Rinsate Blank		Field Rinsate Blank	
Batch#		9502G198		9503G641		9502G198		9503G641	
Prep#		95GP0119		95GP0229		95GP0119		95GP0229	
RFW#		009		005		012		008	
Sample Depth									
Dilution Factor		1.00		1.00		1.00		1.00	
Matrix		water		water		water		water	
Units	ug/l	ug/l		ug/l		ug/l		ug/l	
Sampling Date		2/15/95		3/8/95		2/13/95		3/8/95	
Analysis Date		3/7/95		3/19/95		3/7/95		3/19/95	
Analysis	Standard	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL	Analytical Result	CRDL
alpha-BHC	0.02	0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
beta-BHC	0.2	0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
delta-BHC		0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
gamma-BHC (Lindane)	0.2	0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
Heptachlor	0.4	0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
Aldrin	0.04	0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
Heptachlor epoxide	0.2	0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
Endosulfan I	0.4	0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
Dieldrin	0.03	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
4,4'-DDE	0.1	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
Endrin	2	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
Endosulfan II	0.4	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
4,4'-DDD	0.1	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
Endosulfan sulfate	0.4	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
4,4'-DDT	0.1	0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
Methoxychlor	40	0.51 U	0.51	0.61 U	0.61	0.52 U	0.52	0.55 U	0.55
Endrin ketone		0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
Endrin aldehyde		0.10 U	0.10	0.12 U	0.12	0.10 U	0.10	0.11 U	0.11
alpha-Chlordane		0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
gamma-Chlordane	0.5	0.051 U	0.051	0.061 U	0.061	0.052 U	0.052	0.055 U	0.055
Toxaphene	3	5.1 U	5.1	6.1 U	6.1	5.2 U	5.2	5.5 U	5.5
Aroclor-1016	2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	1.1 U	1.1
Aroclor-1221	2	2.0 U	2.0	2.4 U	2.4	2.1 U	2.1	2.2 U	2.2
Aroclor-1232	2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	1.1 U	1.1
Aroclor-1242	2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	1.1 U	1.1
Aroclor-1248	2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	1.1 U	1.1
Aroclor-1254	2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	1.1 U	1.1
Aroclor-1260	2	1.0 U	1.0	1.2 U	1.2	1.0 U	1.0	1.1 U	1.1
Method:TCL Pesticides/PCBs									

CHARLES WOOD
TRANSFORMERS - PCBs

Geographical Location		Building 2000		Building 2000		Building 2000		Building 2000		Building 2018		Building 2018	
Sample		CW07-TR01-A01		CW07-TR02-A01		CW07-TR03-A01		CW07-TR04-A01		CW07-TR05-A01		CW07-TR06-A01	
Sample Type		Transformer		Transformer		Transformer		Transformer		Transformer		Transformer	
Batch#		9411G831		9411G831		9411G831		9411G831		9412G854		9412G854	
Prep#		94GP1024		94GP1024		94GP1024		94GP1024		94GP1024		94GP1024	
RFW#		001		002		003		004		017		018	
Sample Depth													
Dilution Factor		250		50.0		50.0		10.0		50.0		5.0	
Matrix		soil		soil		soil		soil		soil		soil	
Units	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Sampling Date		11/29/94		11/29/94		11/29/94		11/29/94		11/30/91		11/30/91	
Analysis Date		12/21/94		12/20/94		12/20/94		12/21/94		12/22/94		12/21/94	
Analysis	Standard	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting	Analytical	Reporting
		Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit	Result	Limit
% Solids		85.8	0.10	89.0	0.10	90.3	0.10	85.7	0.10	86.4	0.10	92.5	0.10
Aroclor-1016	0.055	23 U	23	4.4 U	4.4	4.4 U	4.4	0.91 U	0.91	4.50	4.5	0.42 U	0.42
Aroclor-1221	0.055	23 U	23	4.4 U	4.4	4.4 U	4.4	0.91 U	0.91	4.50	4.5	0.42 U	0.42
Aroclor-1232	0.055	23 U	23	4.4 U	4.4	4.4 U	4.4	0.91 U	0.91	4.50	4.5	0.42 U	0.42
Aroclor-1242	0.055	23 U	23	4.4 U	4.4	4.4 U	4.4	0.91 U	0.91	4.50	4.5	0.42 U	0.42
Aroclor-1248	0.055	23 U	23	4.4 U	4.4	4.4 U	4.4	0.91 U	0.91	4.50	4.5	0.42 U	0.42
Aroclor-1254	0.055	46 U	46	8.8 U	8.8	8.7 U	8.8	1.8 U	1.8	9 U	9	0.84 U	0.84
Aroclor-1260	0.055	100		27		26		6.4		9 U	9	0.84 U	0.84
Method:TCL PCBs													

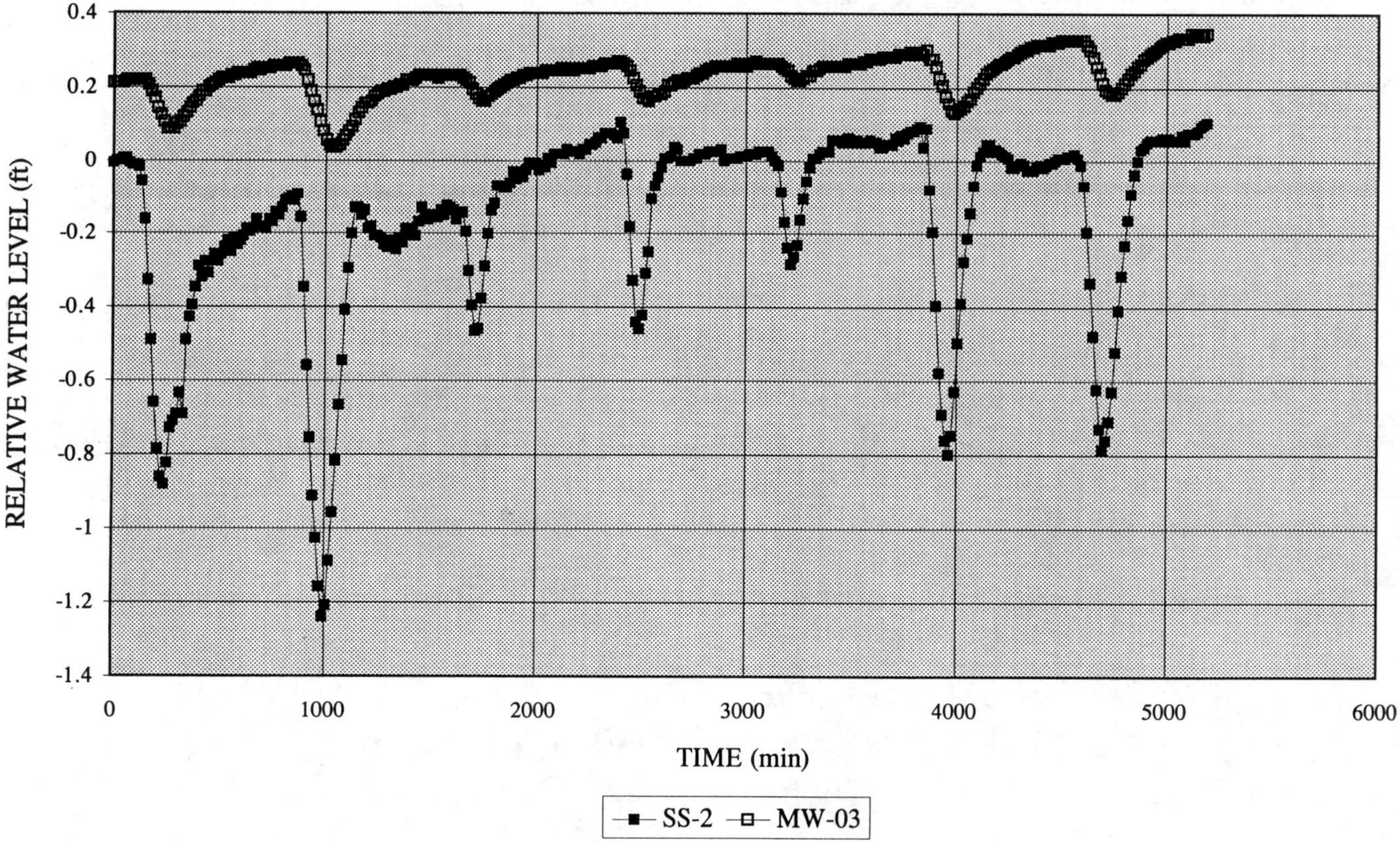
CHARLES WOOD
TRANSFORMERS - PCBs

Geographical Location		Building 2276		Building 2276	
Sample		CWAE-TR01-A01		CWAE-TR01-C01	
Sample Type		Transformer		Duplicate	
Batch#		9412G854		9412G854	
Prep#		94GP1024		94GTS467	
RFW#		015		016	
Sample Depth					
Dilution Factor		2.5		0.5	
Matrix		soil		soil	
Units	mg/kg	mg/kg		mg/kg	
Sampling Date		11/30/94		11/30/94	
Analysis Date		12/22/94		12/21/94	
Analysis	Standard	Analytical Result	Reporting Limit	Analytical Result	Reporting Limit
% Solids		92.0	1.0	90.7	1.0
Aroclor-1016	0.055	0.21 U	0.21	0.044 U	0.044
Aroclor-1221	0.055	0.21 U	0.21	0.044 U	0.044
Aroclor-1232	0.055	0.21 U	0.21	0.044 U	0.044
Aroclor-1242	0.055	0.21 U	0.21	0.044 U	0.044
Aroclor-1248	0.055	0.21 U	0.21	0.044 U	0.044
Aroclor-1254	0.055	0.43 U	0.43	0.088 U	0.088
Aroclor-1260	0.055	0.43 U	0.43	0.088 U	0.088
Method:TCL PCBs					

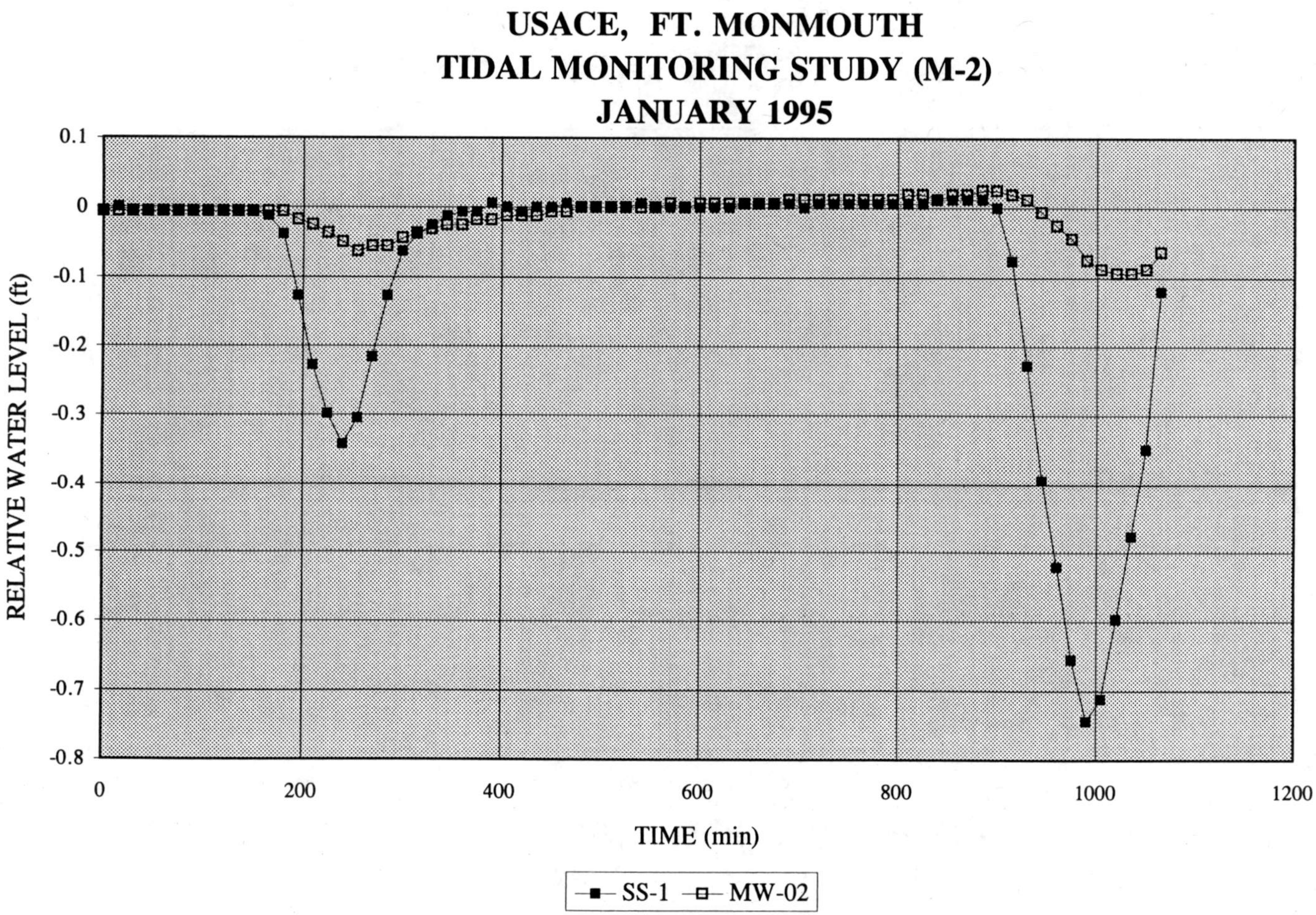
APPENDIX E

TIDAL MONITORING GRAPHS

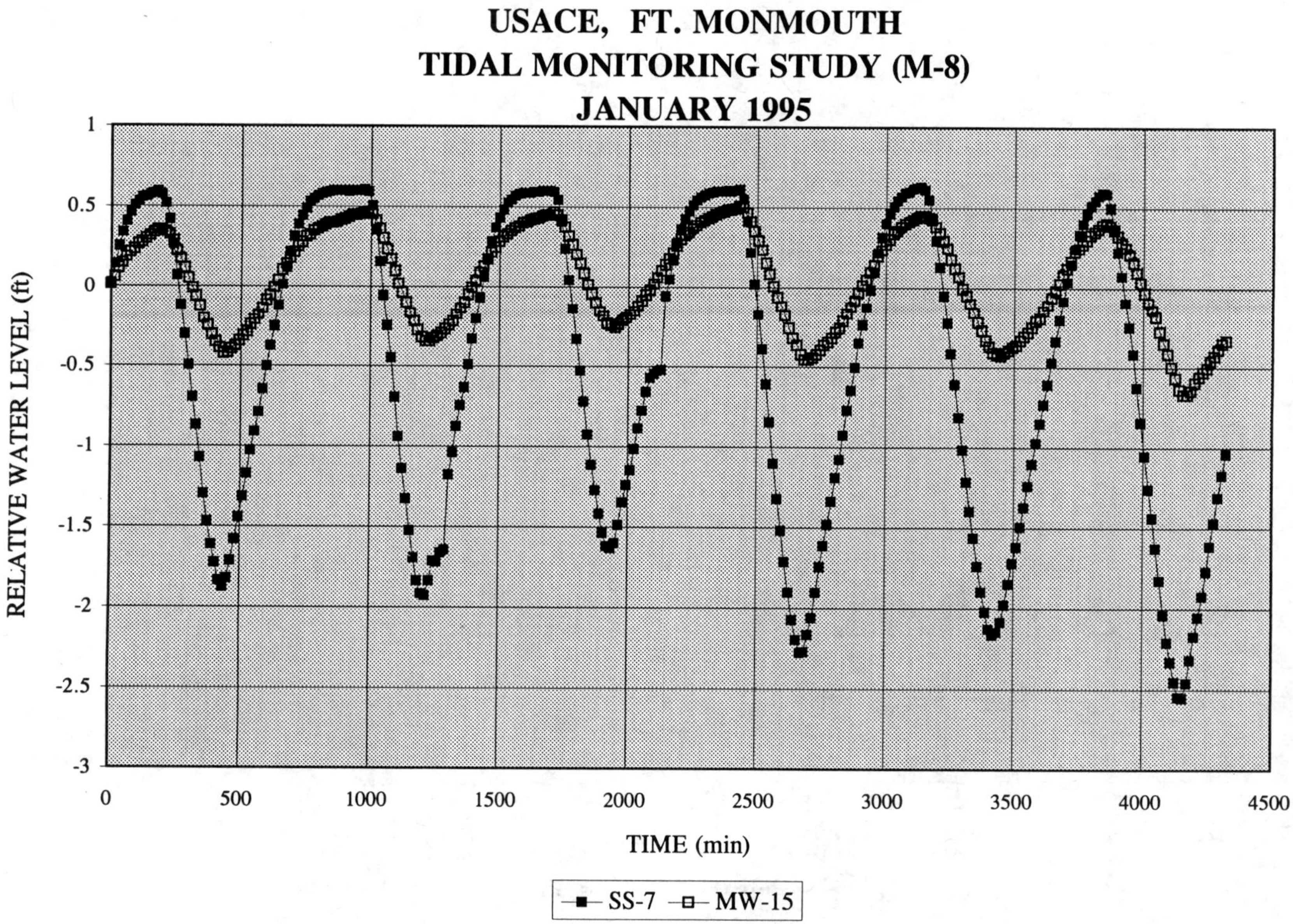
USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-2)
JANUARY 1995



(-) negative value shows rise in water level
(+) positive value shows fall in water level

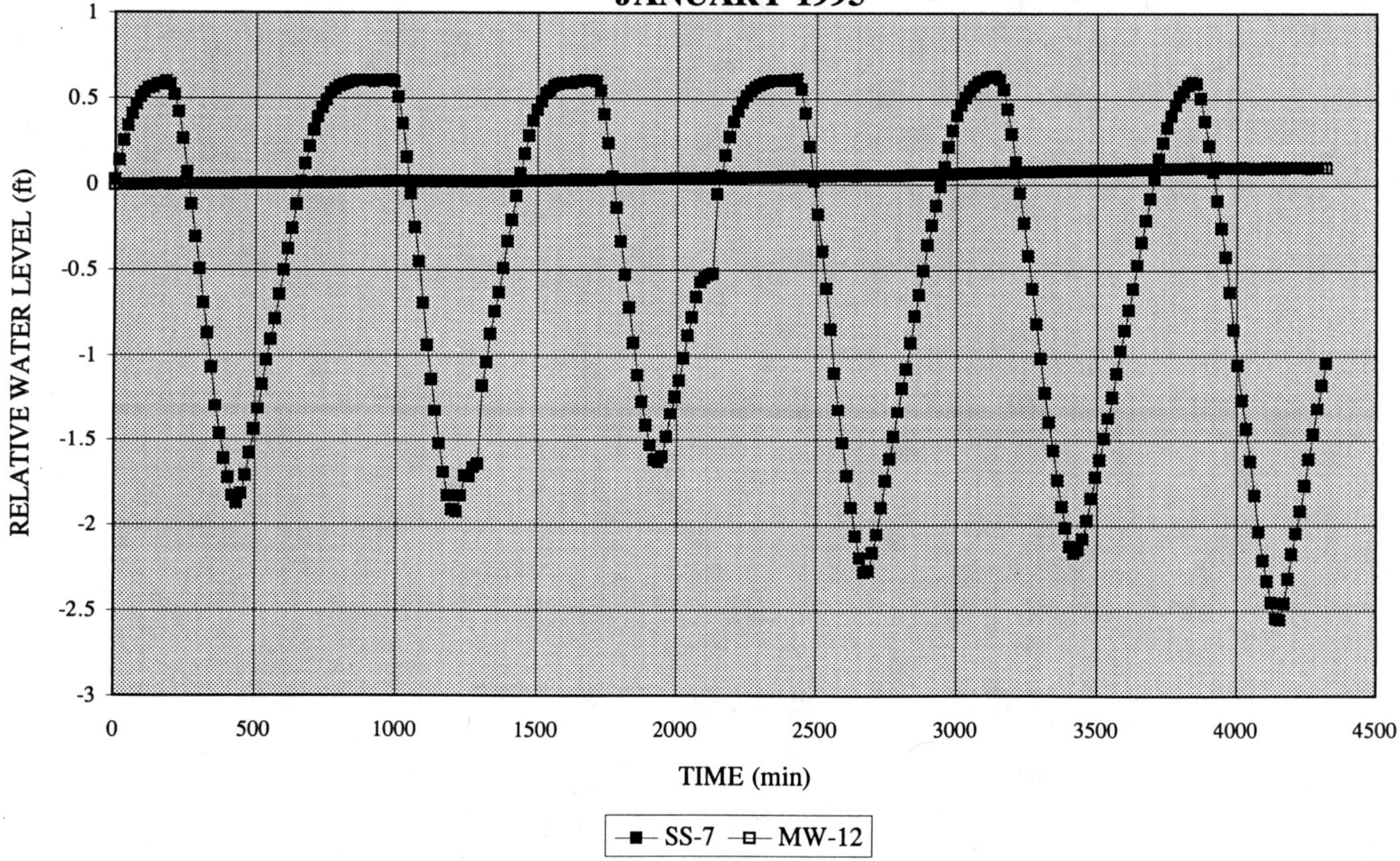


(-) negative value shows rise in water level
(+) positive value shows fall in water level

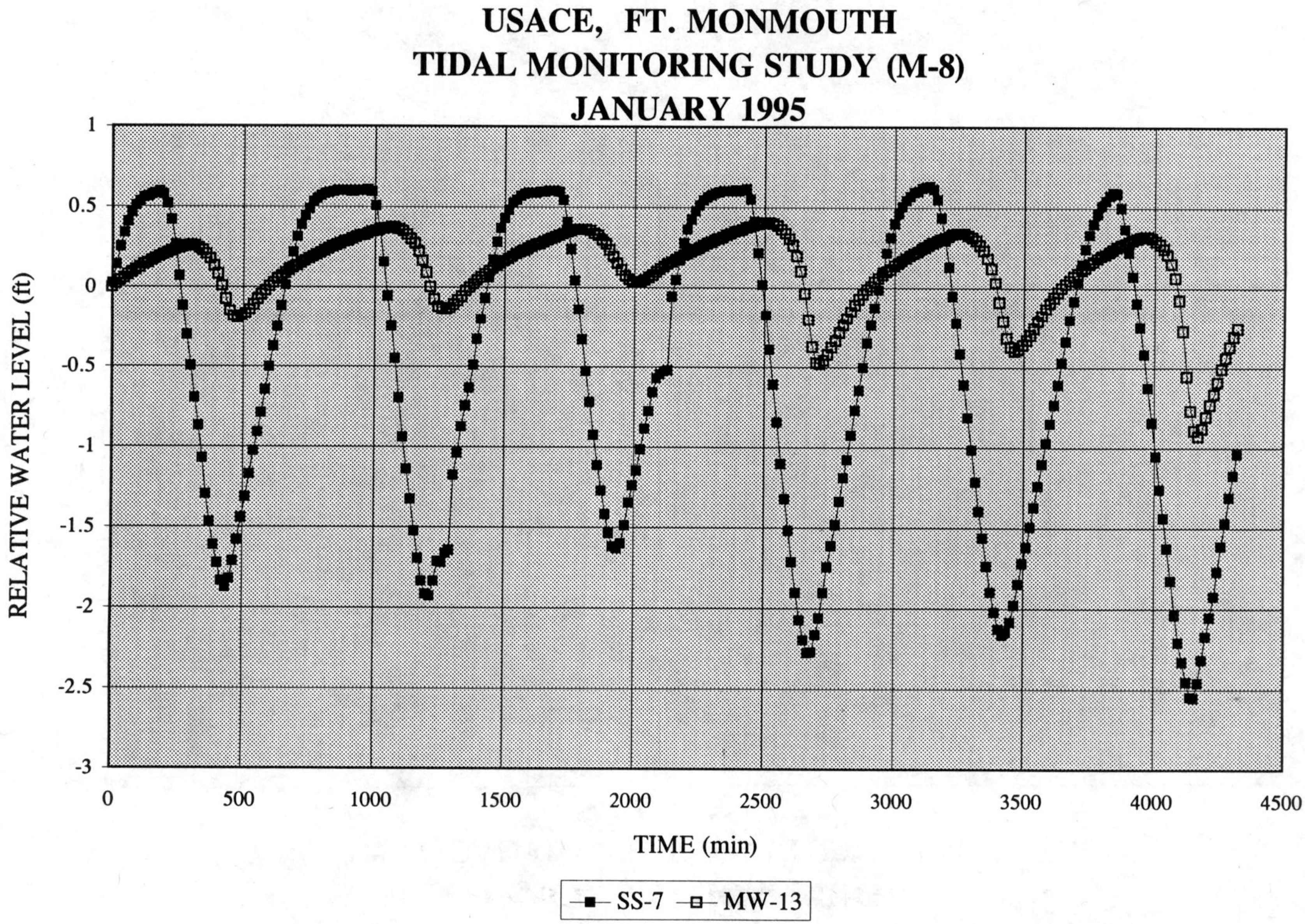


(-) negative value shows rise in water level
(+) positive value shows fall in water level

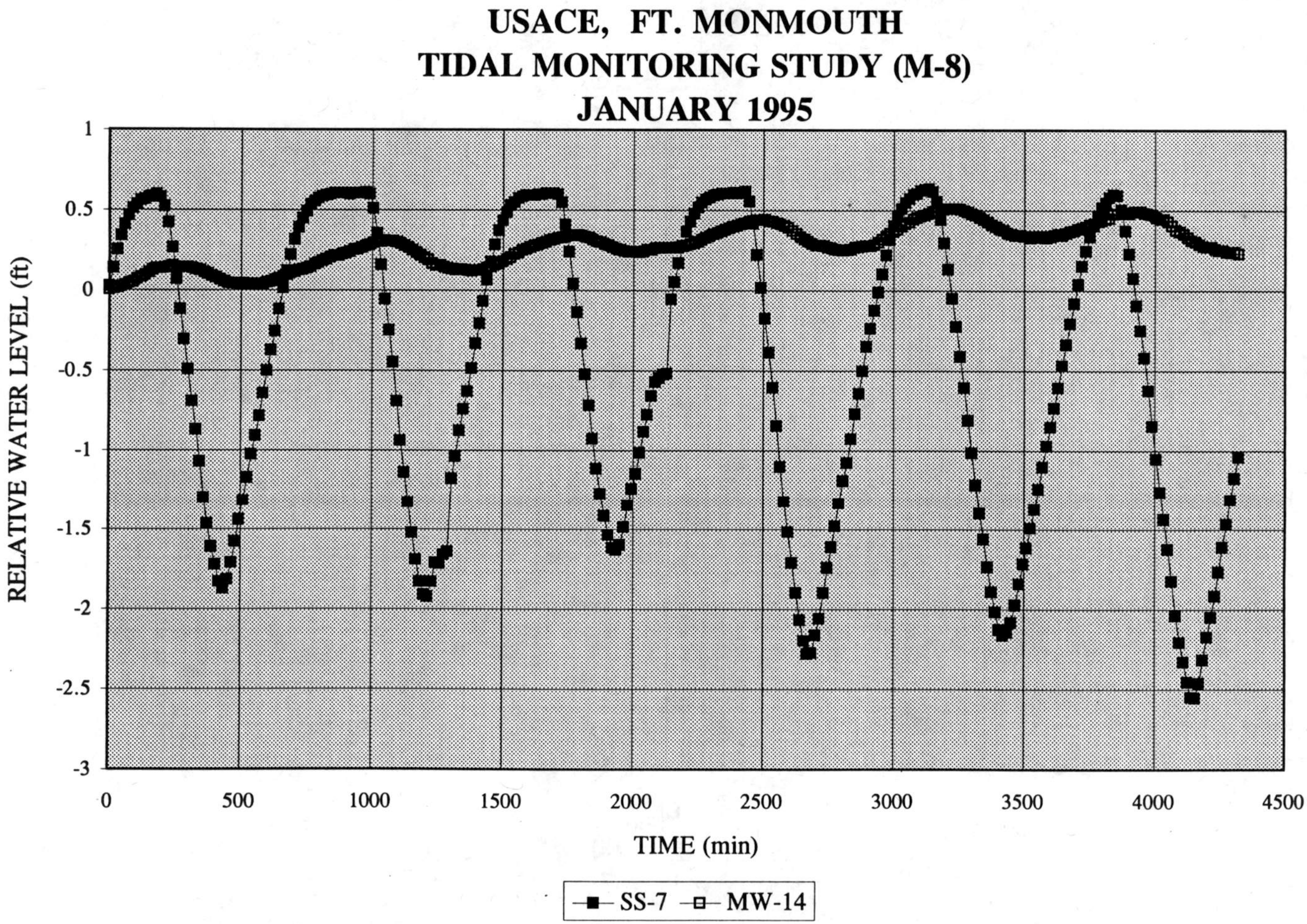
USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-8)
JANUARY 1995



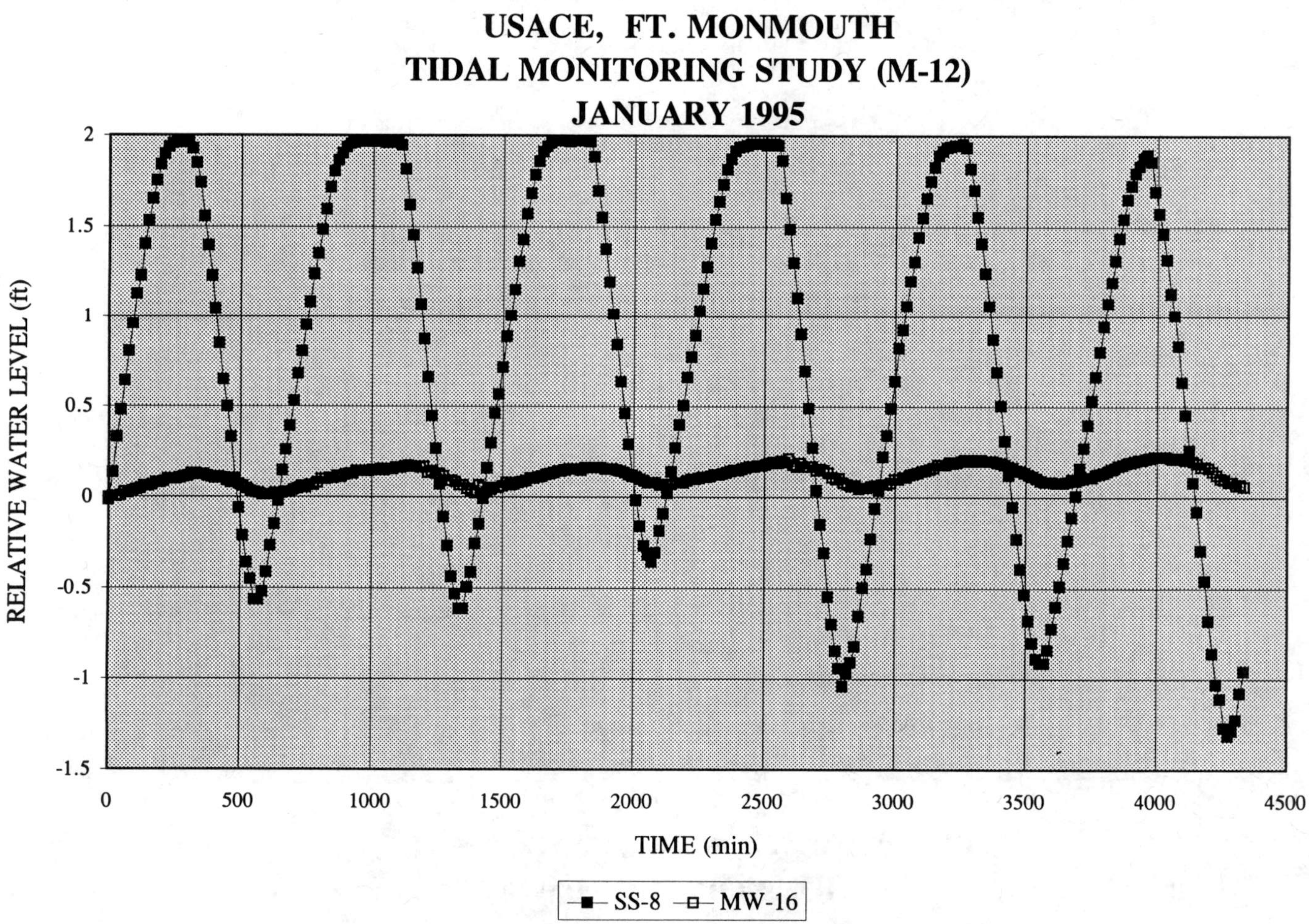
(-) negative value shows rise in water level
(+) positive value shows fall in water level



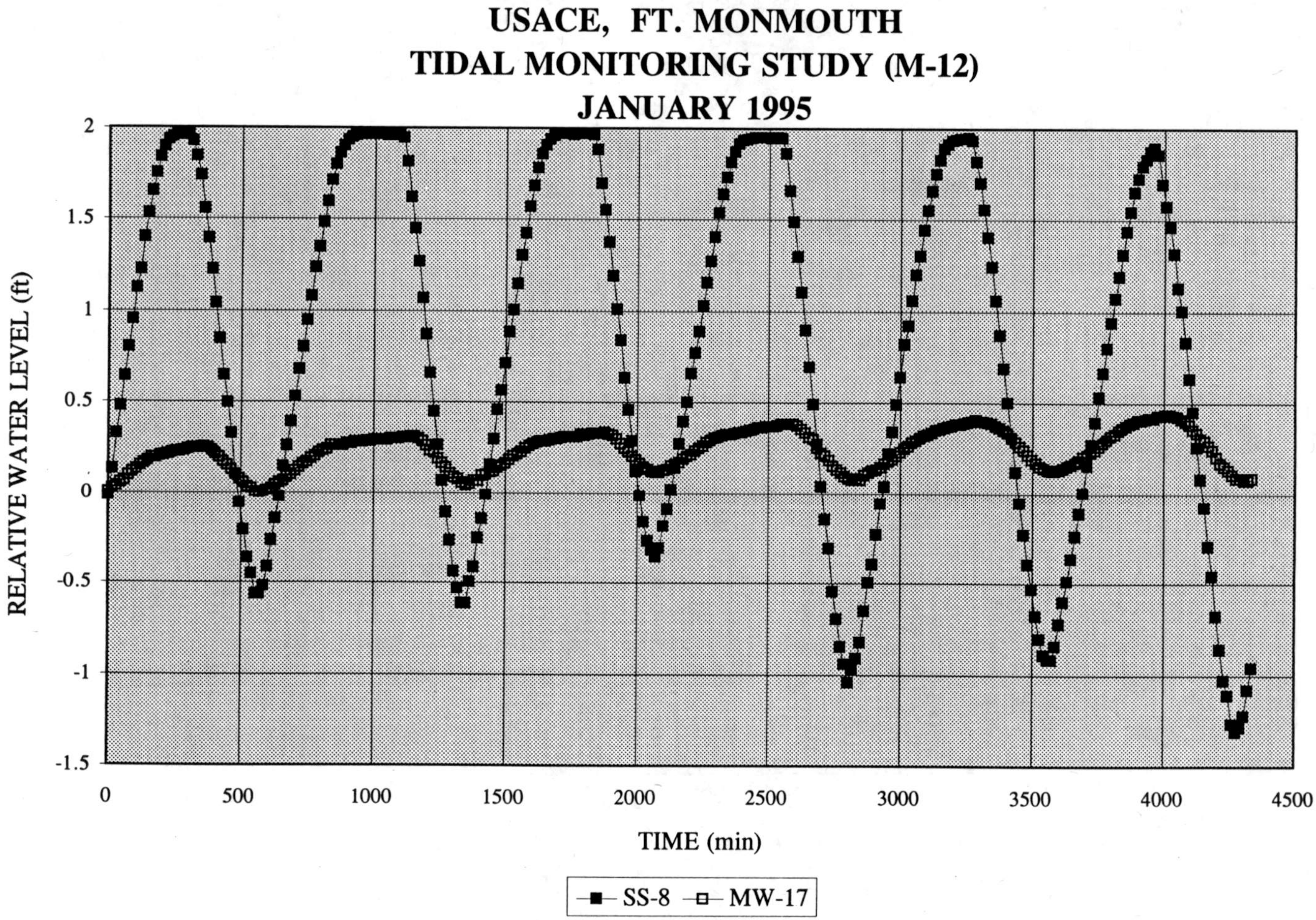
(-) negative value shows rise in water level
(+) positive value shows fall in water level



(-) negative value shows rise in water level
(+) positive value shows fall in water level

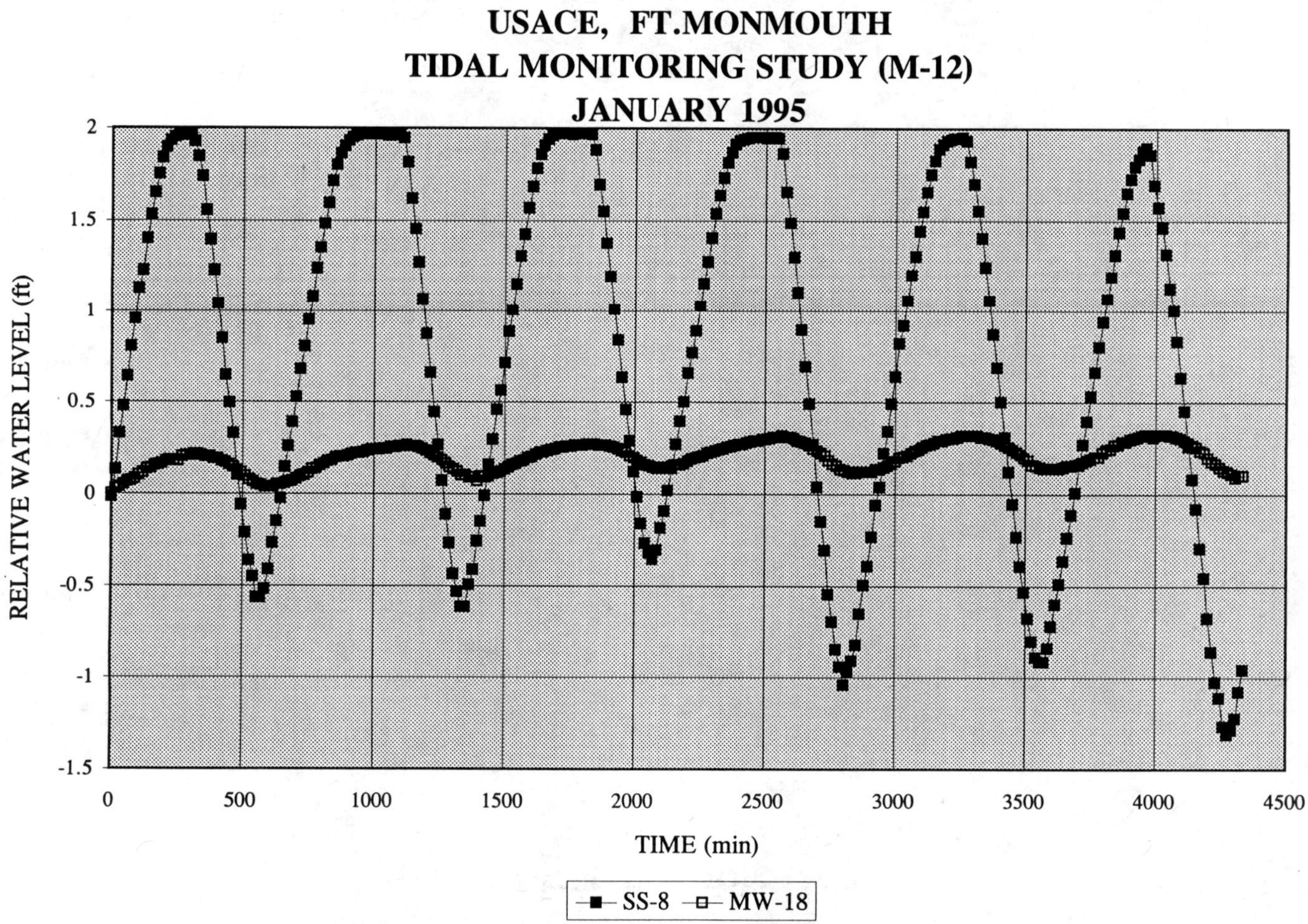


(-) negative value shows rise in water level
(+) positive value shows fall in water level



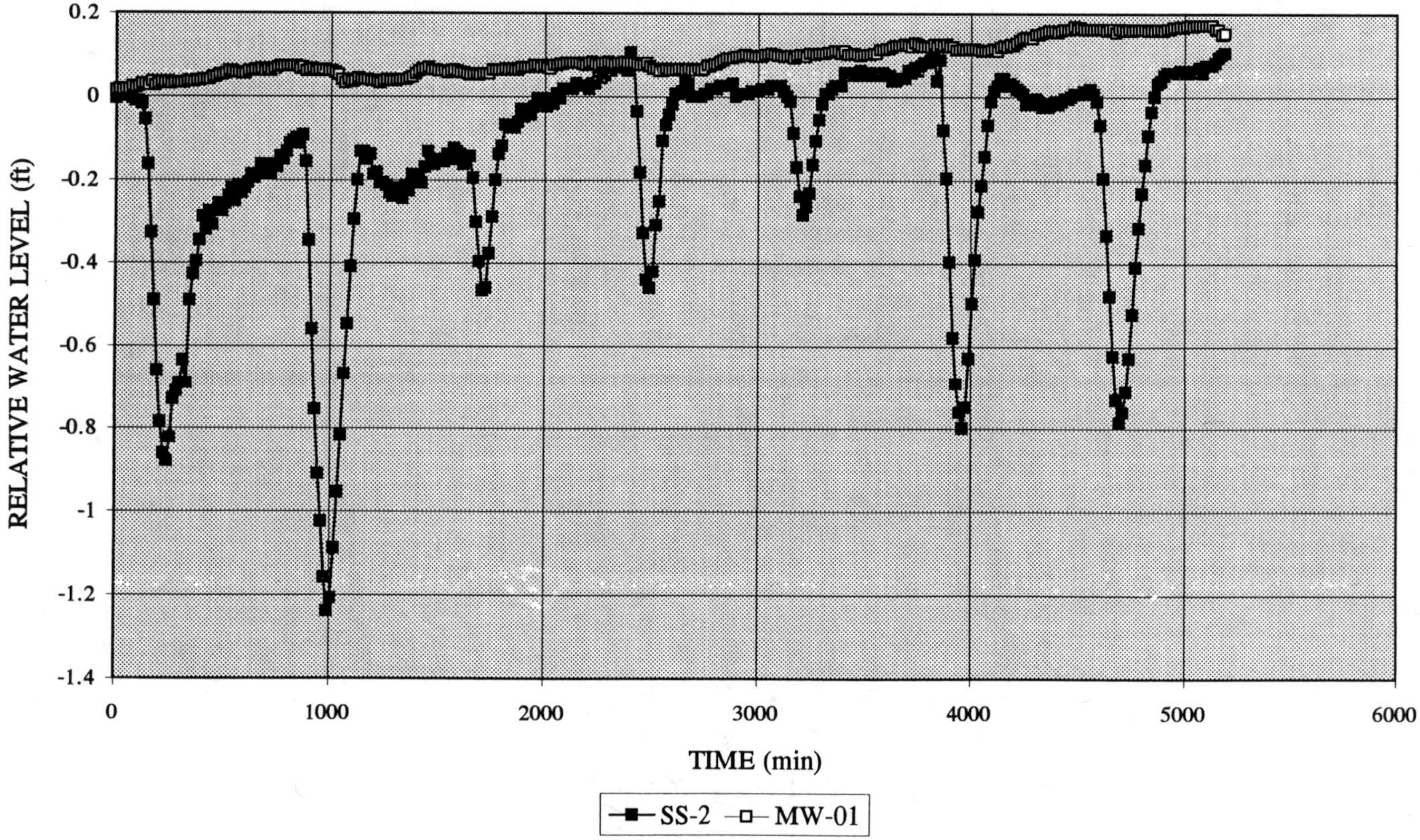
(-) negative value shows rise in water level

(+) positve value shows fall in water level



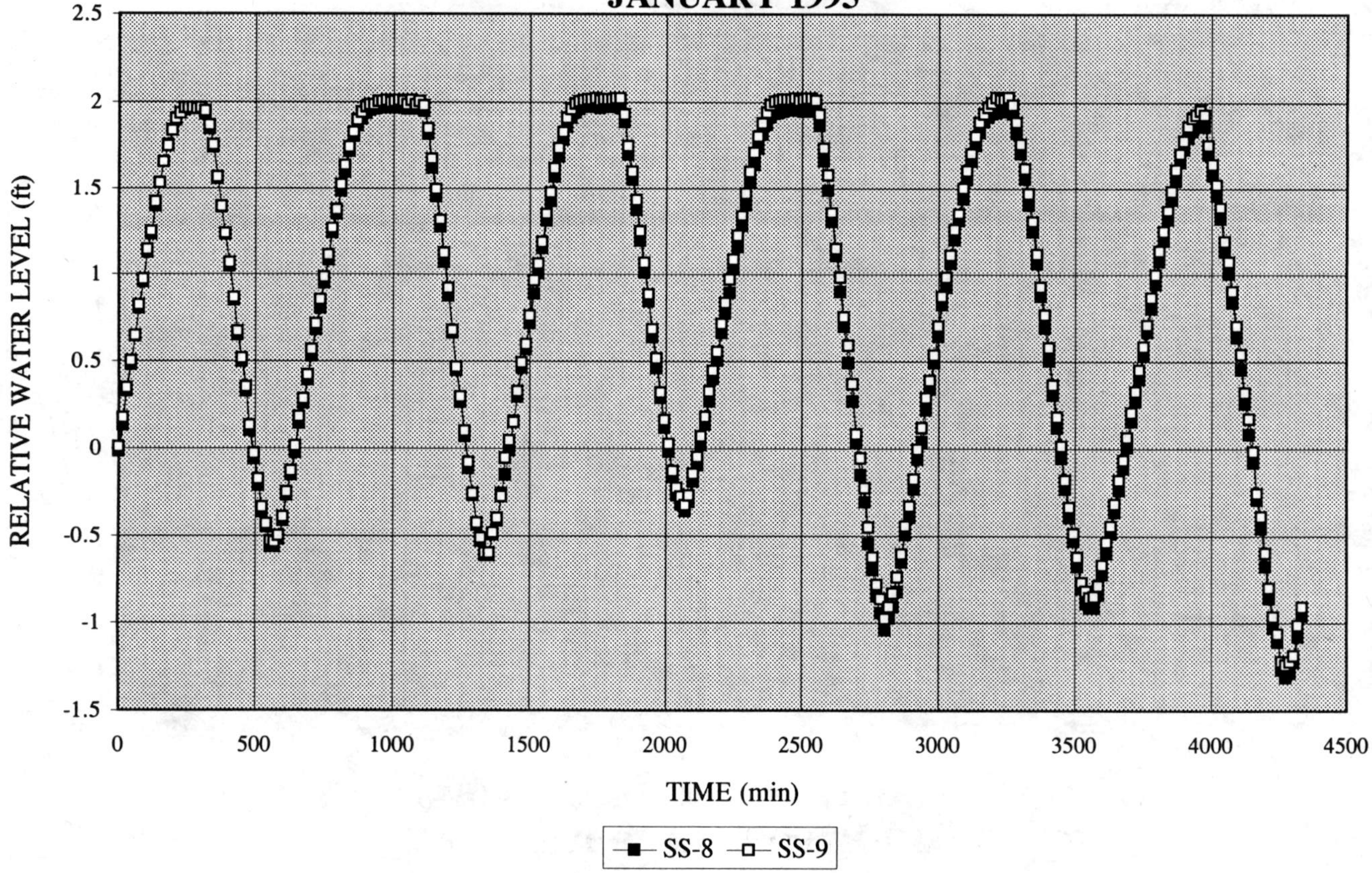
(-) negative value shows rise in water level
(+) positive value shows fall in water level

USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-12)
JANUARY 1995



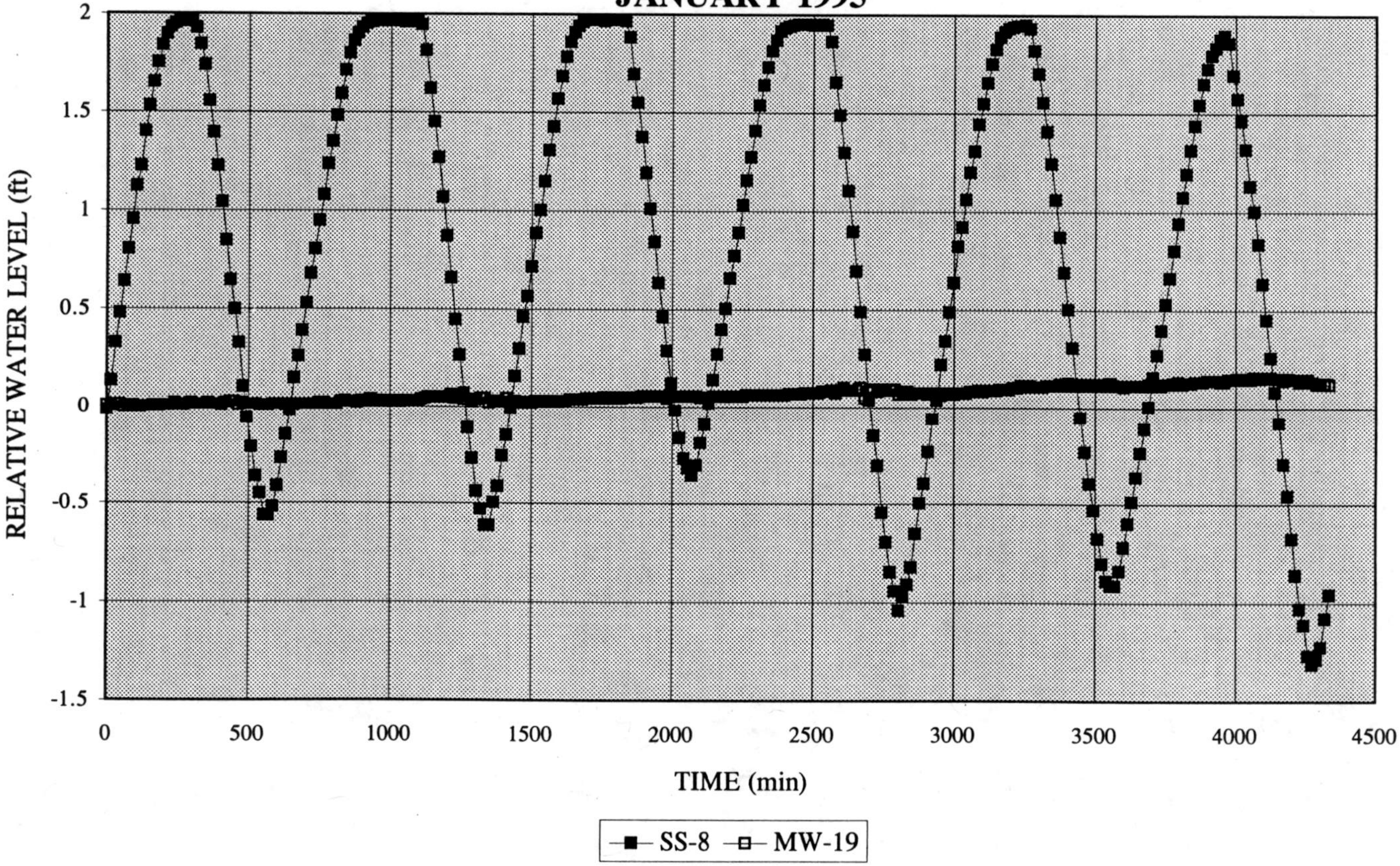
(-) negative value shows rise in water level
(+) positive value shows fall in water level

USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-12)
JANUARY 1995



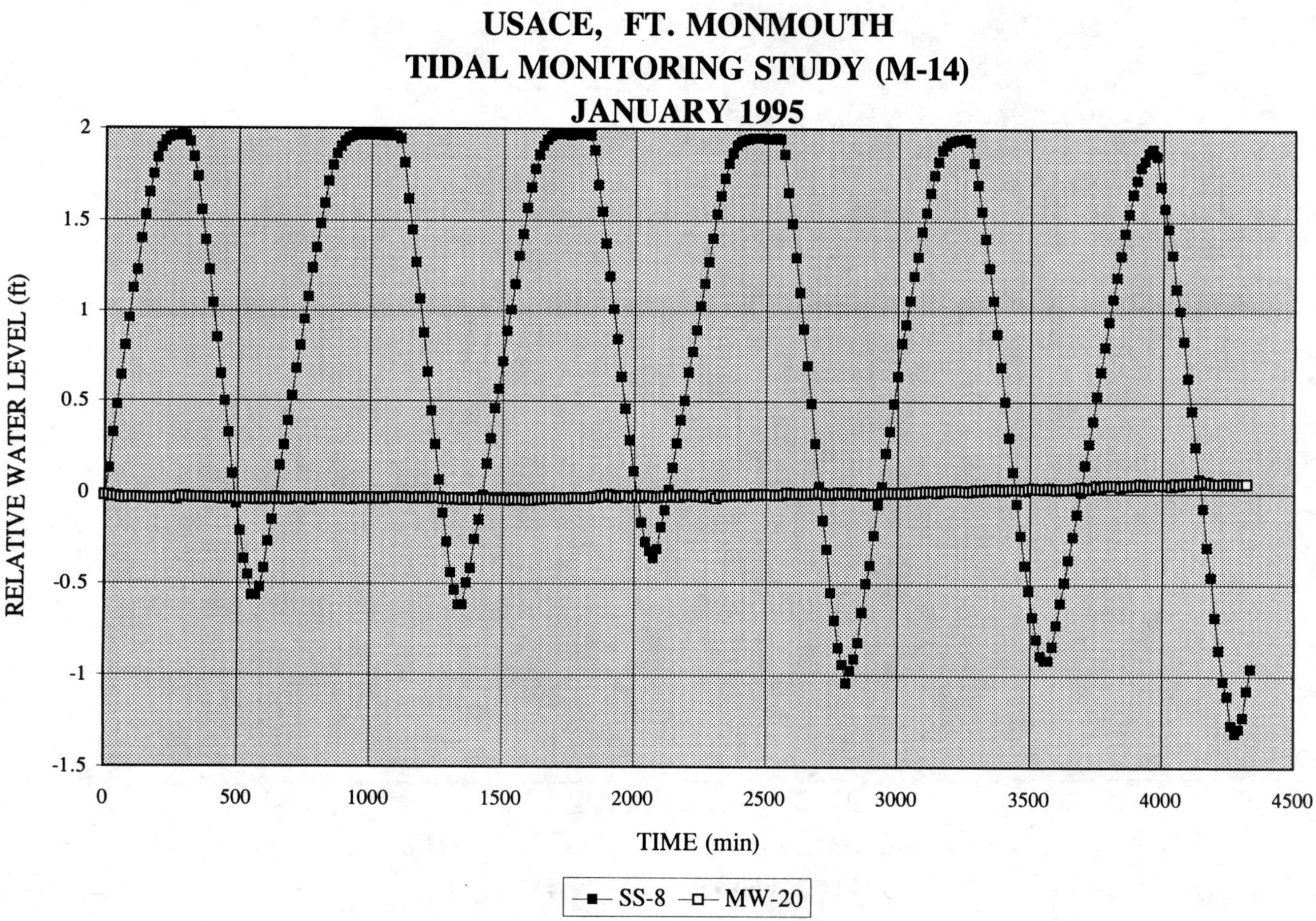
(-) negative value shows rise in water level
(+) positive value shows fall in water level

USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-14)
JANUARY 1995



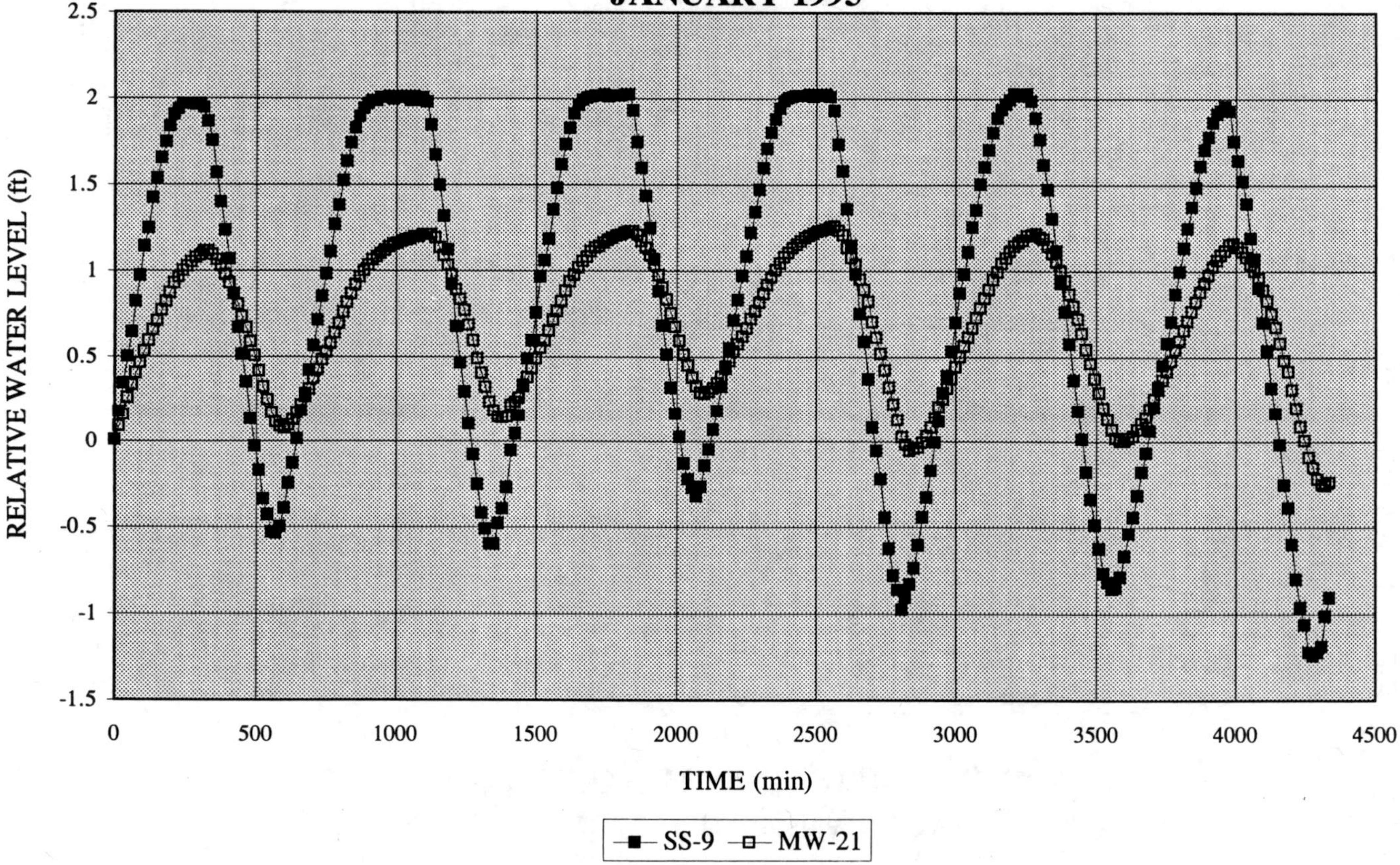
(-) negative value shows rise in water level

(+) positive value shows fall in water level

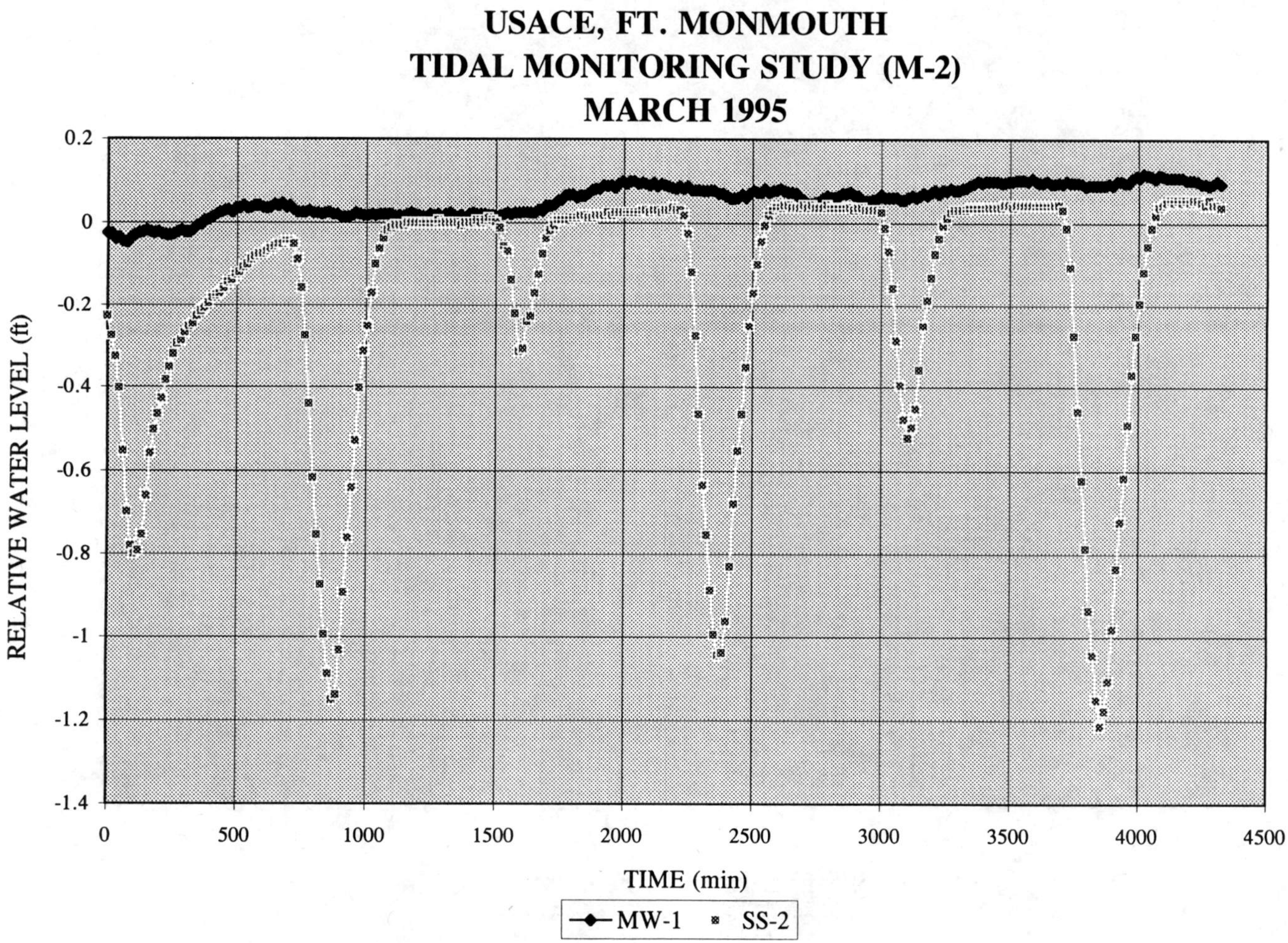


(-) negative value shows rise in water level
(+) positive value shows fall in water level

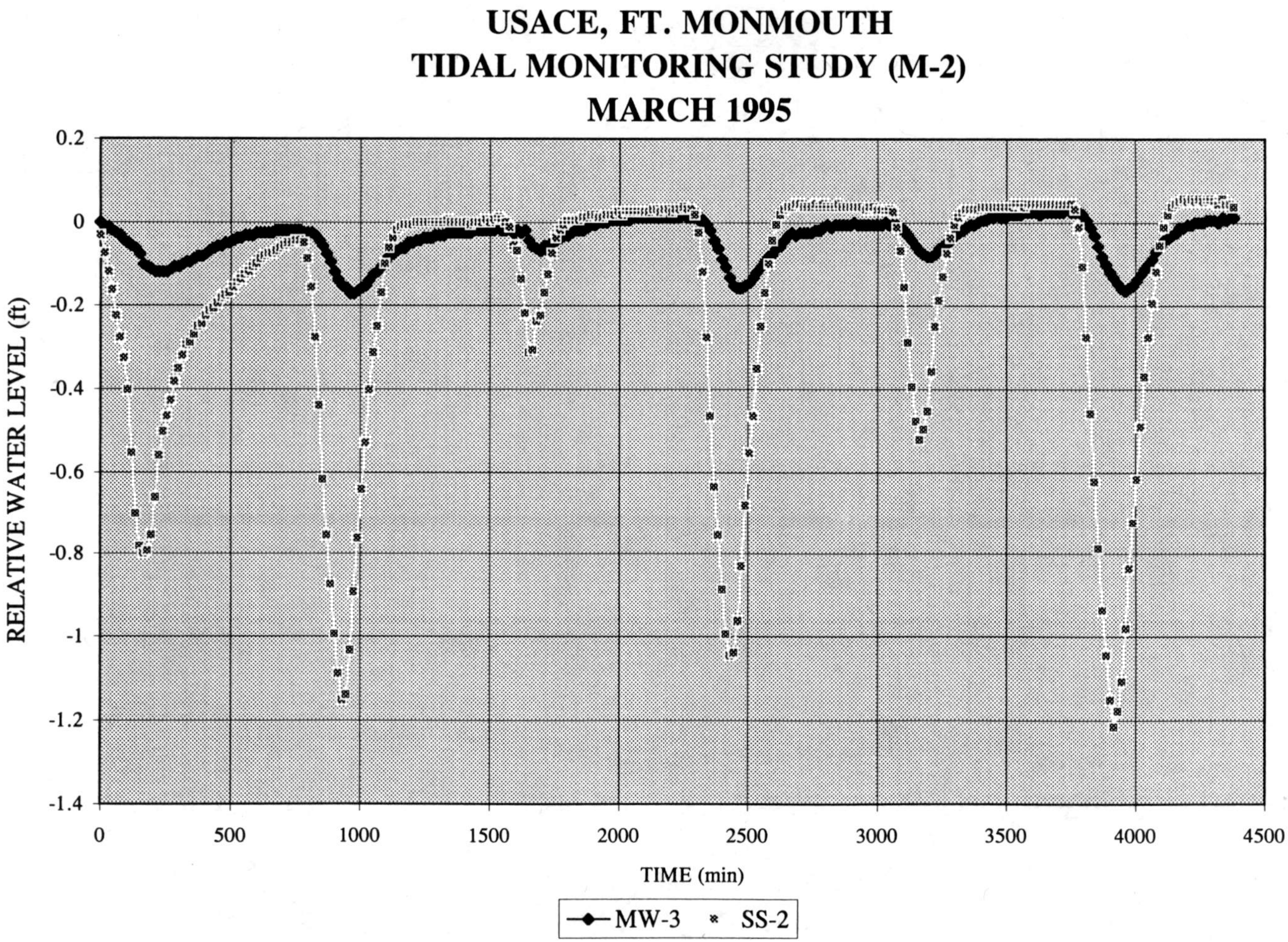
USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-14)
JANUARY 1995



(-) negative value shows rise in water level
(+) positive value shows fall in water level

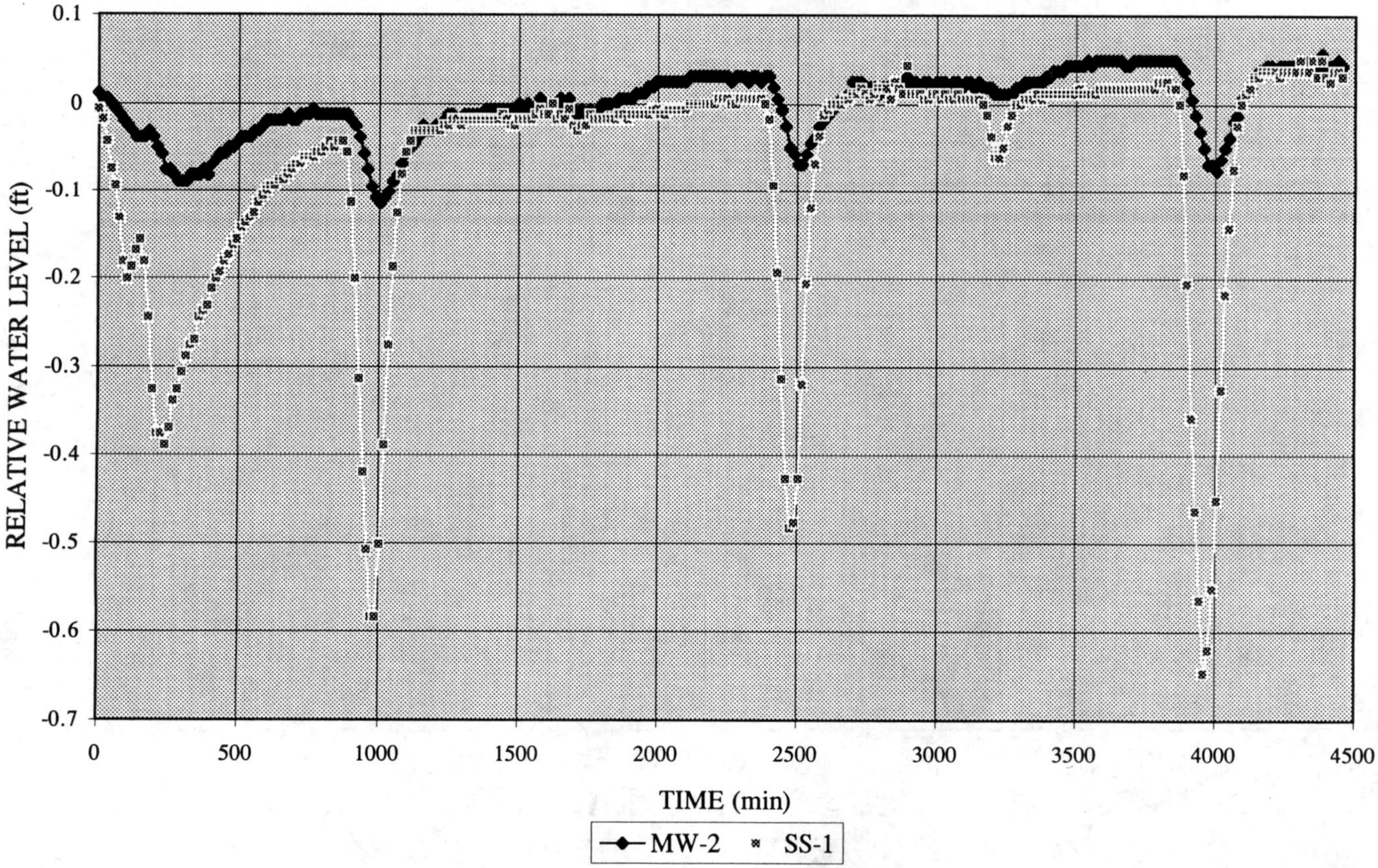


(-) negative value shows a rise in water level
(+) positive value shows fall in water level



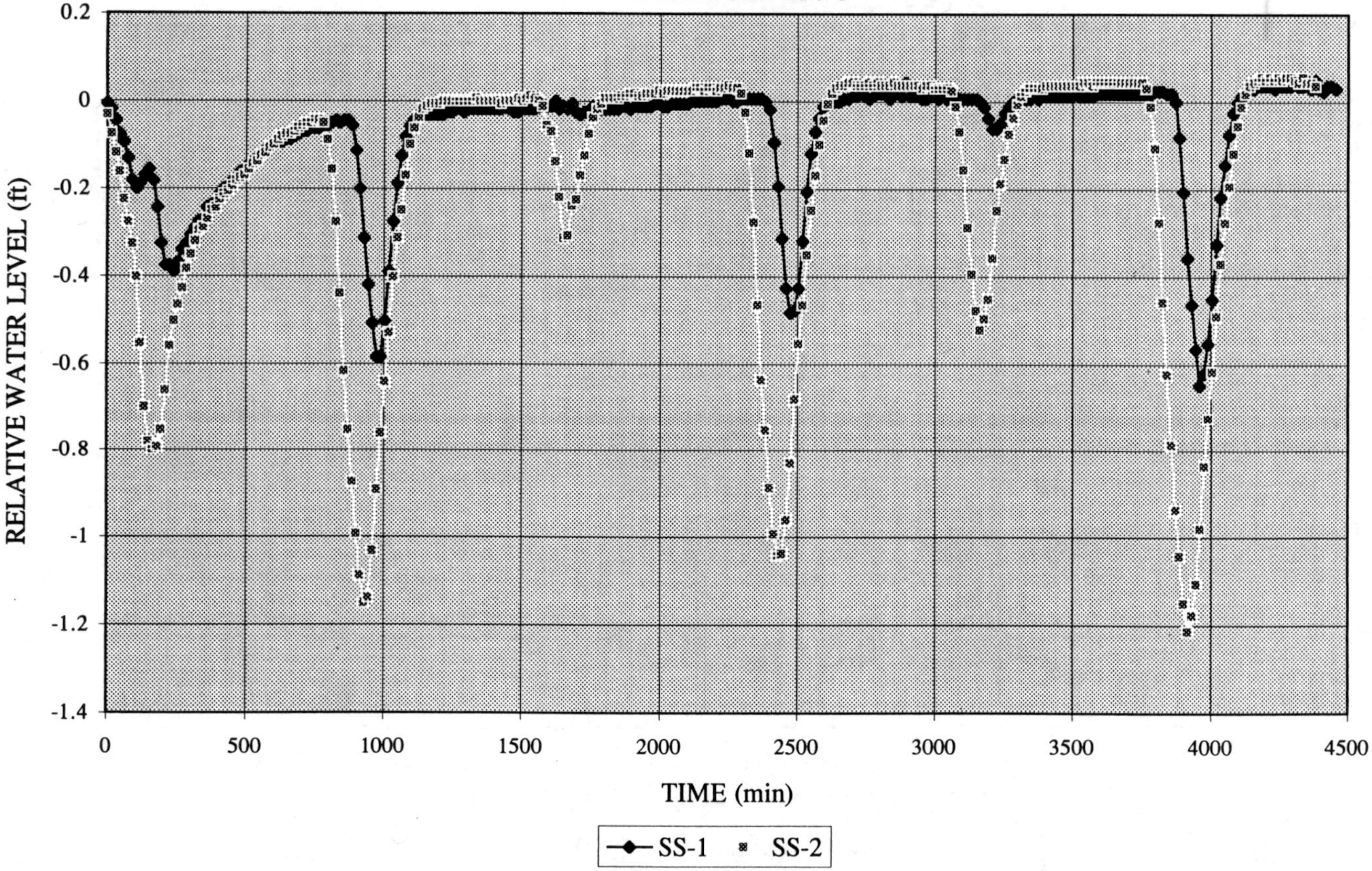
(-) negative value shows rise in water level
(+) positive value shows fall in water level

USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-2)
MARCH 1995

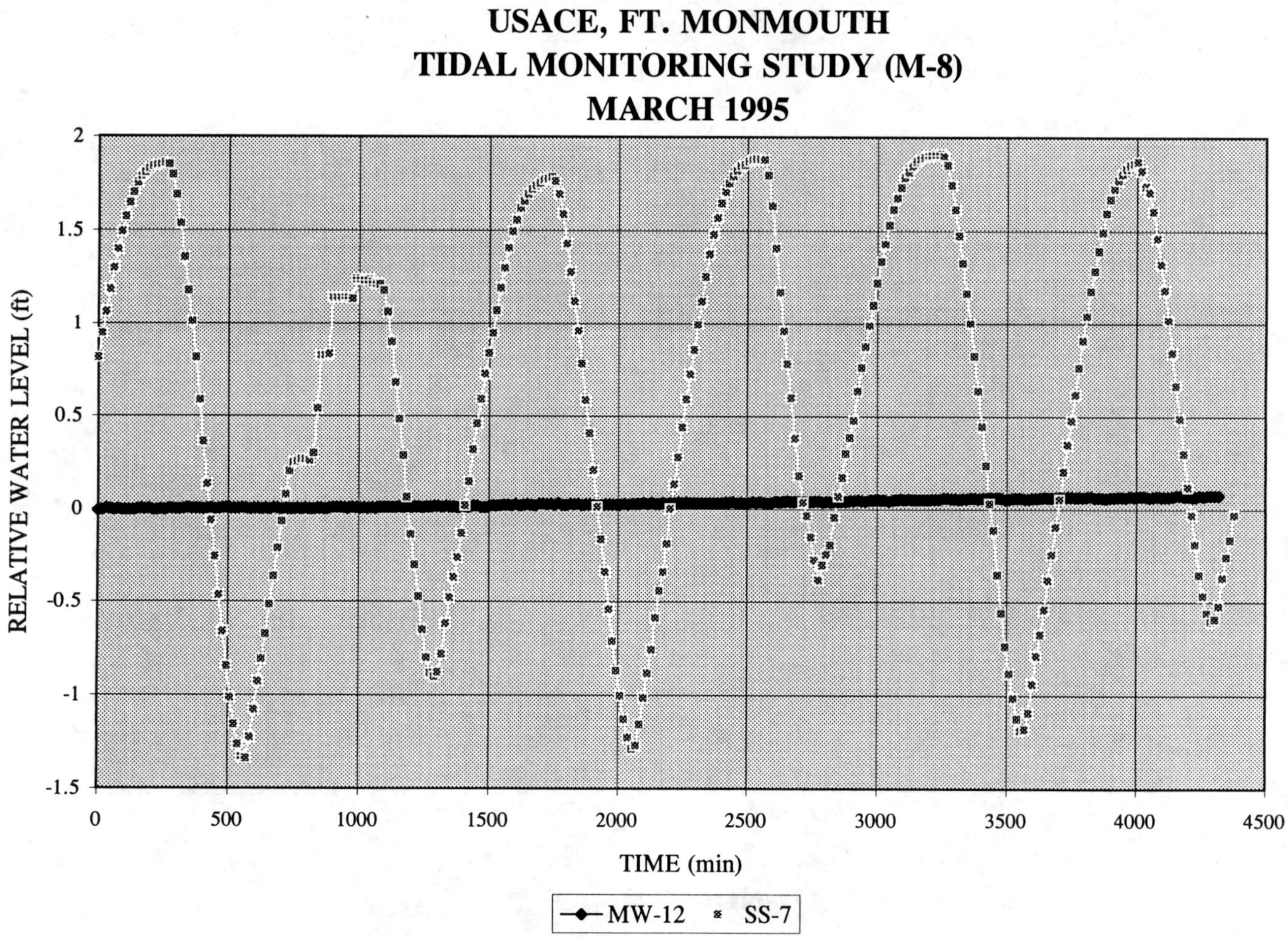


(-) negative value shows rise in water level
(+) positive value shows fall in water level

USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-2)
MARCH 1995

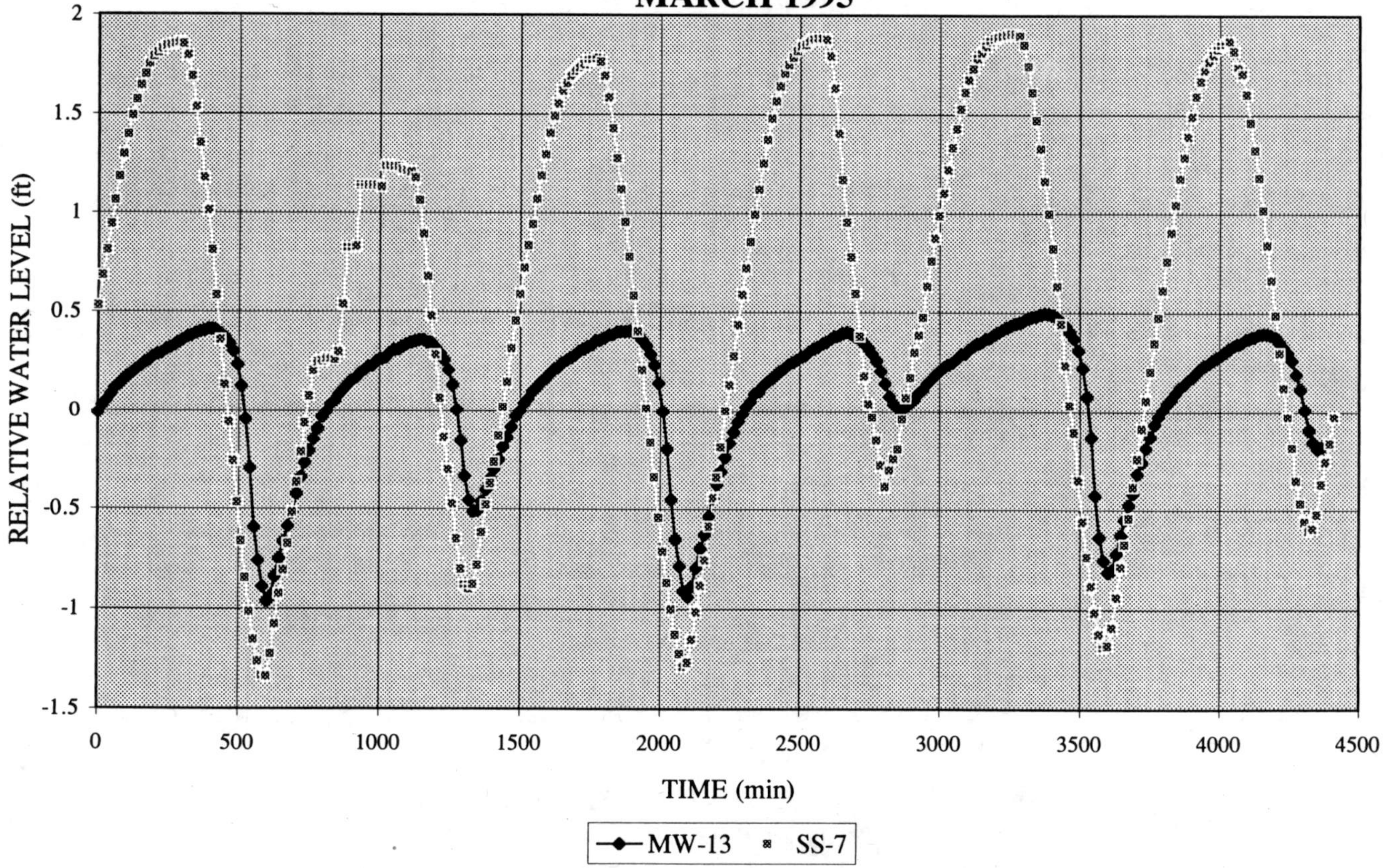


(-) negative value shows rise in water level
(+) positive value shows fall in water level

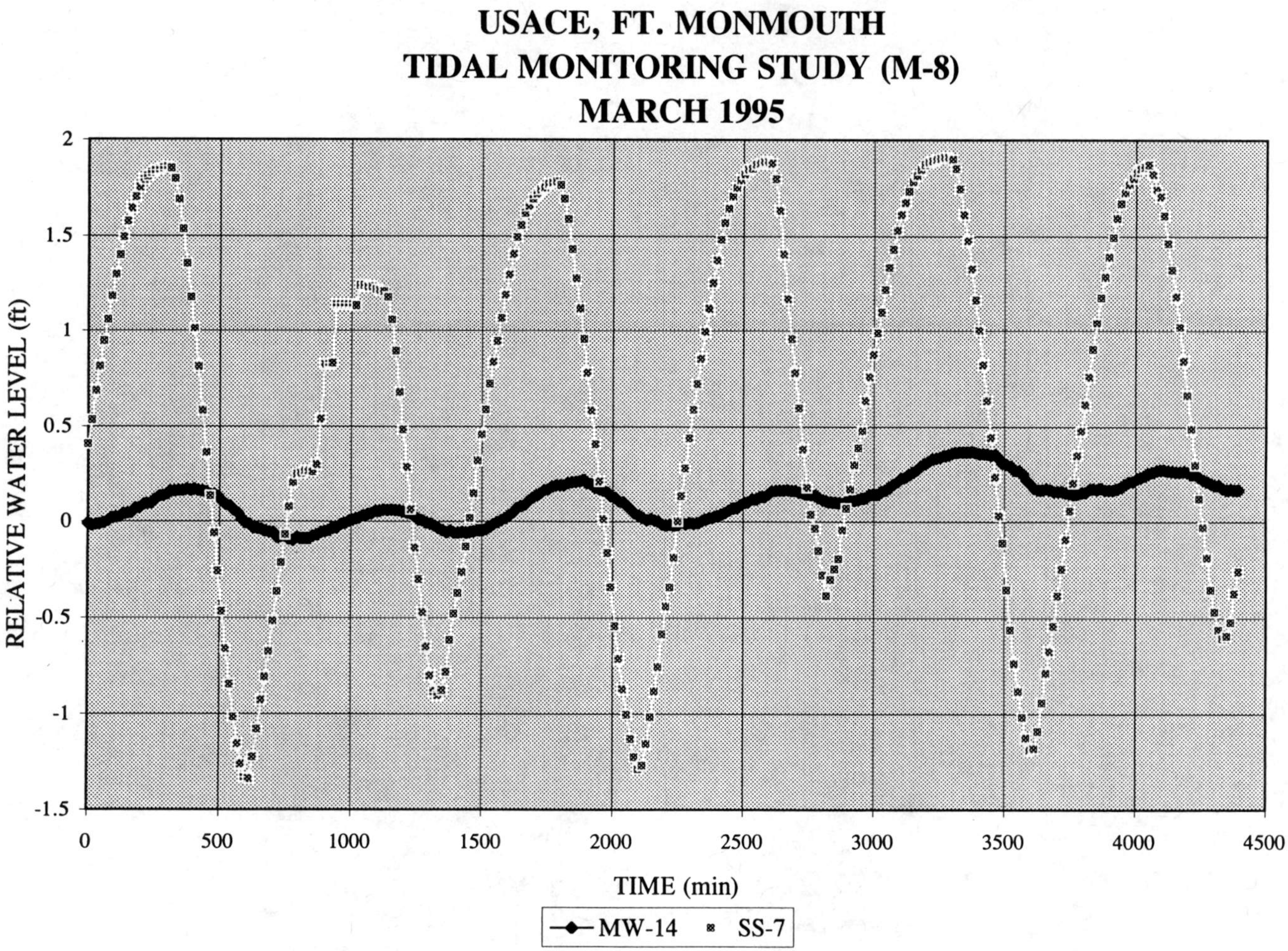


(-) negative value shows rise in water level
(+) positive value shows fall in water level

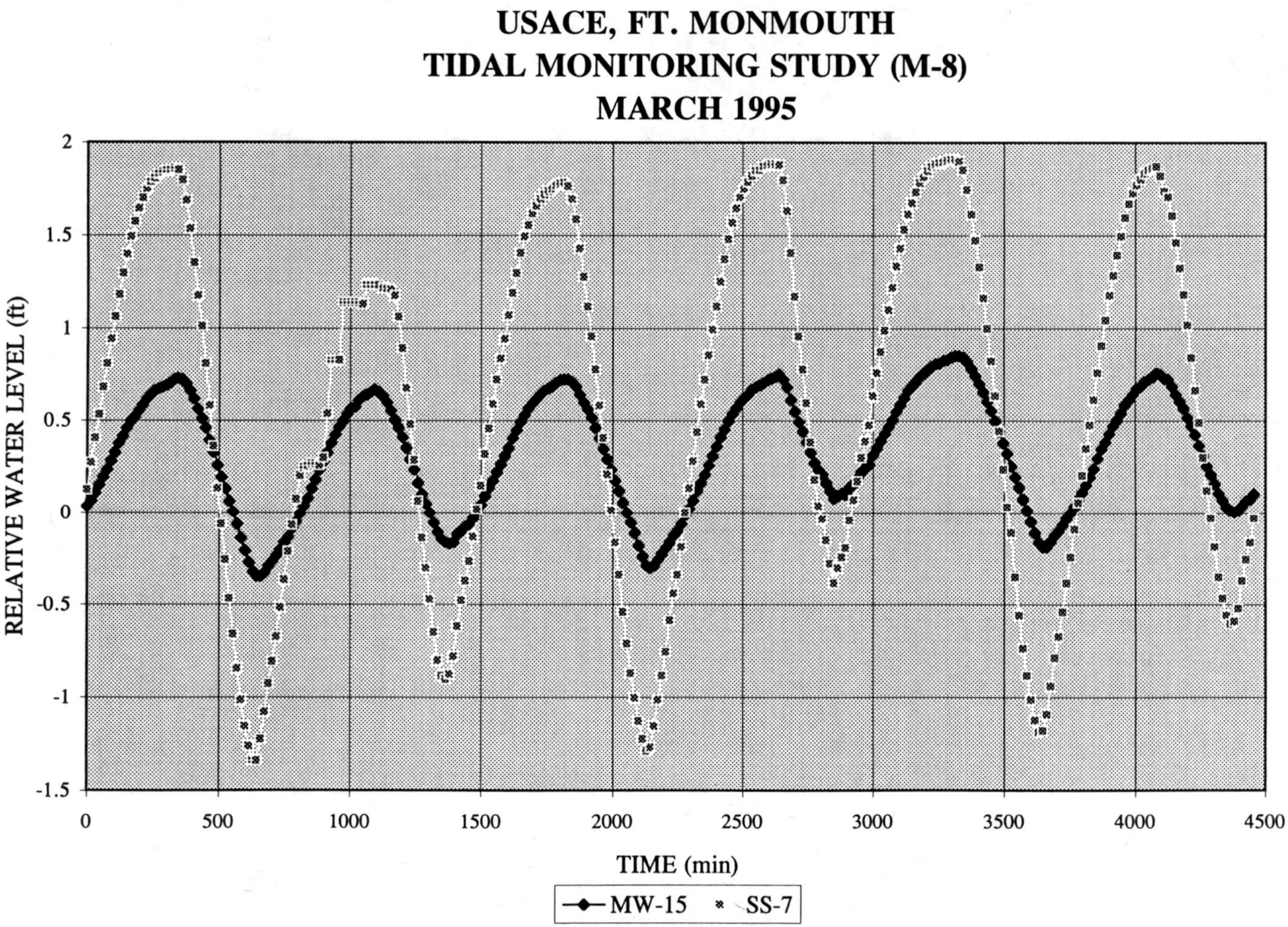
USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-8)
MARCH 1995



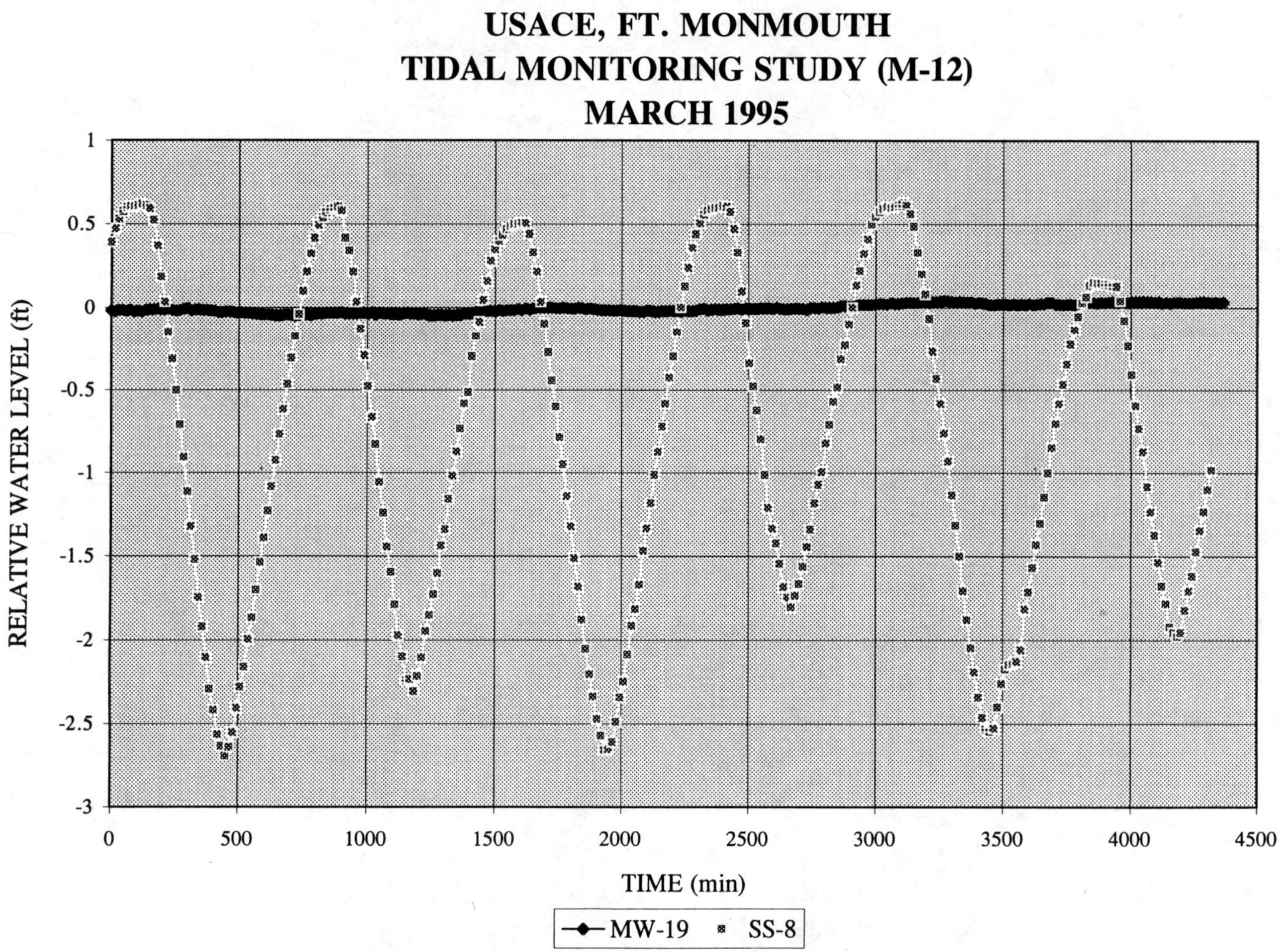
(-)negative value shows rise in water level
(+) positive value shows fall in water level



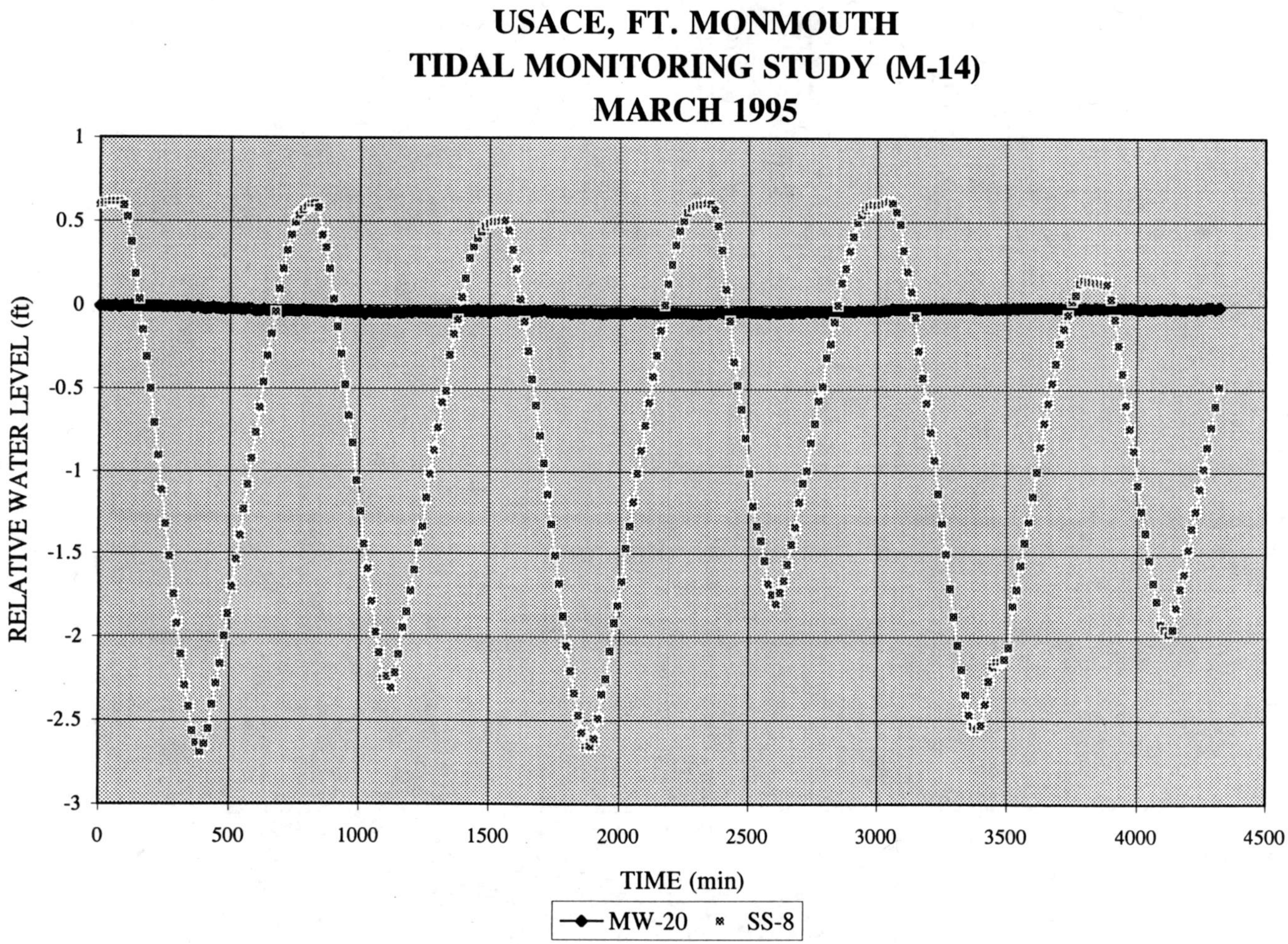
(-) negative value shows rise in water table
(+) positive value shows fall in water level



(-) negative value shows rise in water level
(+) positive value shows fall in water level

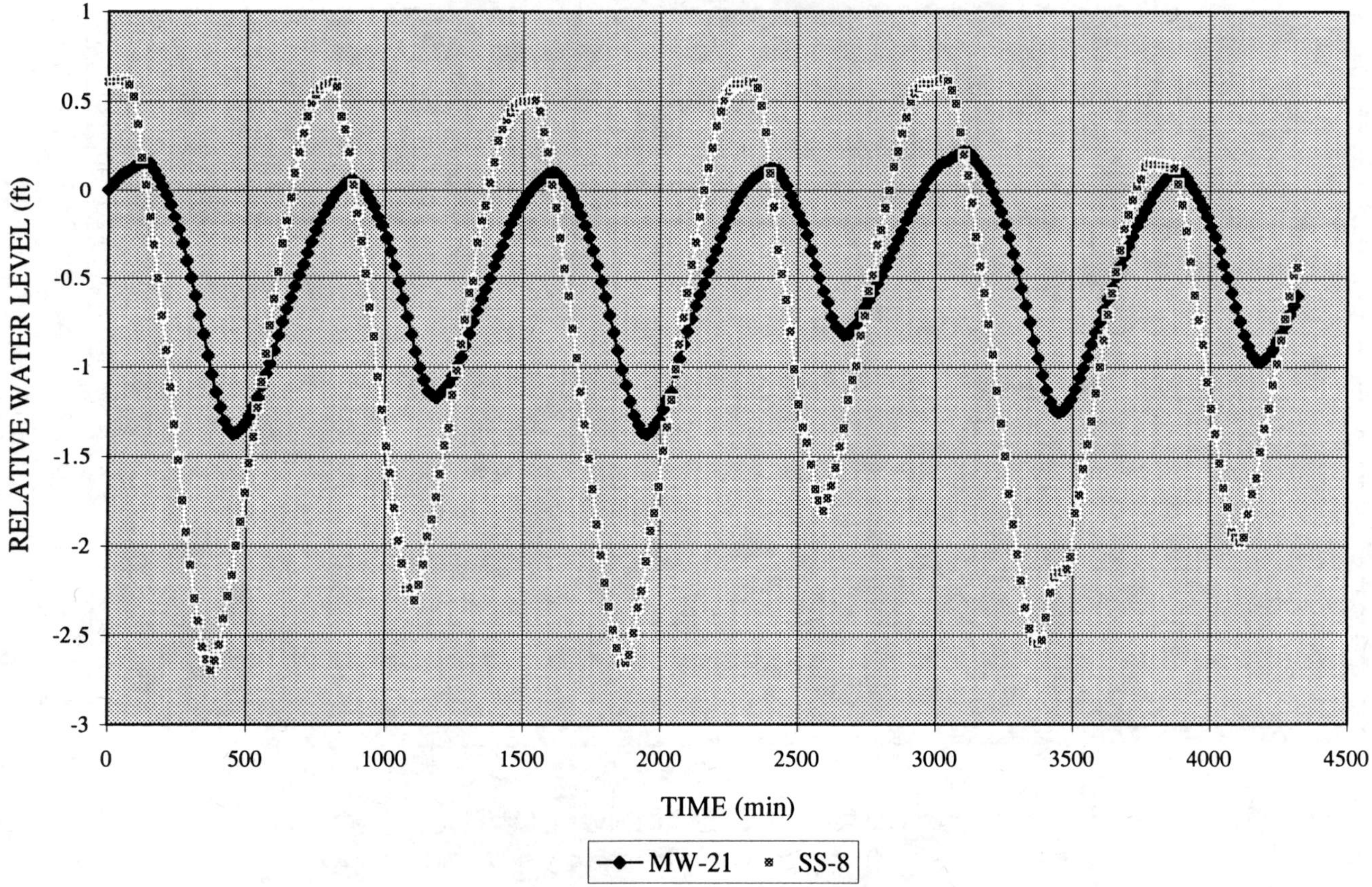


(-) negative value shows rise in water level
(+) positive value shows fall in water level

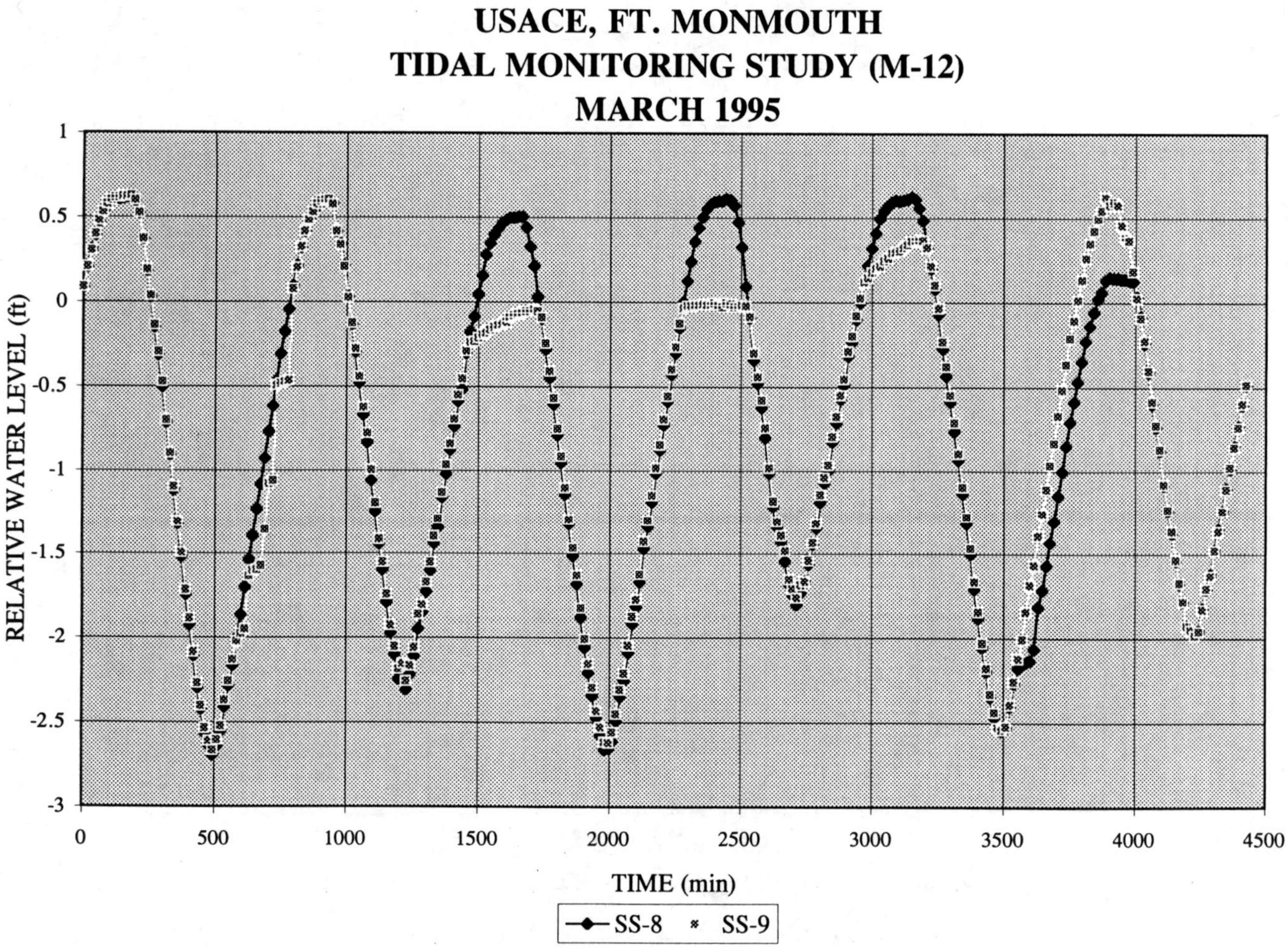


(-) negative value shows rise in water level
(+) positive value shows fall in water level

USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-14)
MARCH 1995

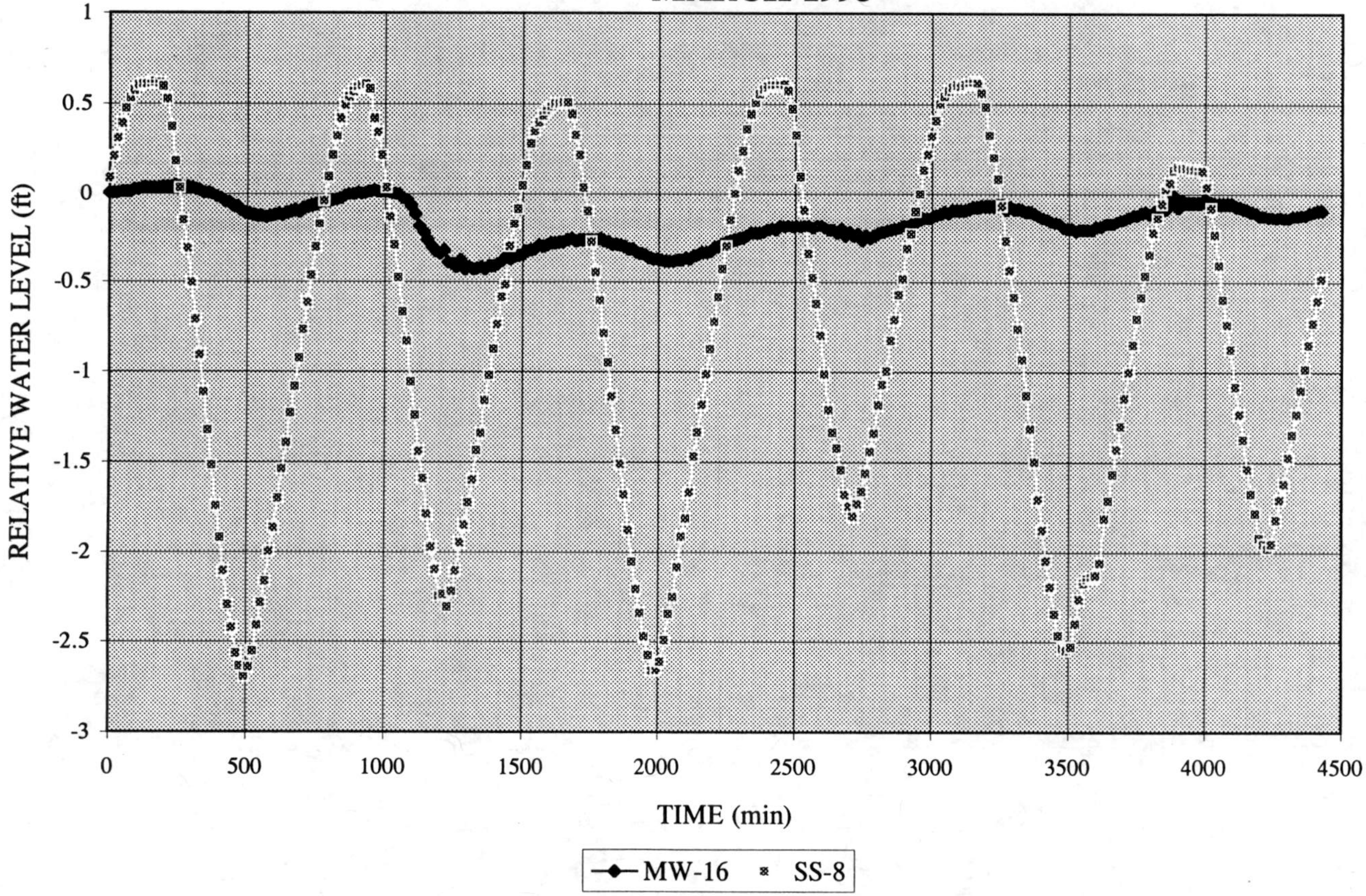


(-) negative value shows rise in water level
(+) positive value shows fall in water level

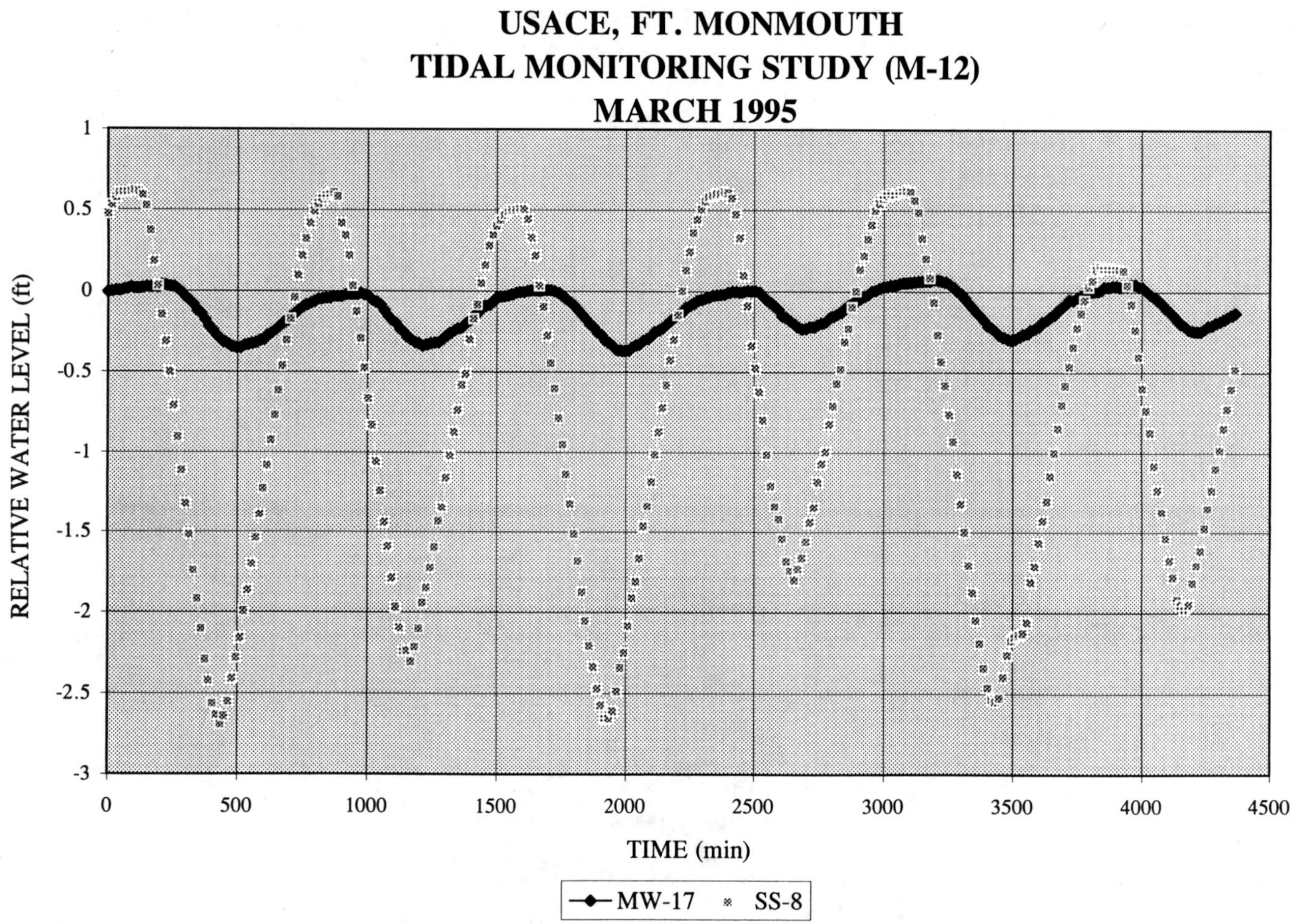


(-) negative value shows rise in water level
(+) positive value shows fall in water level

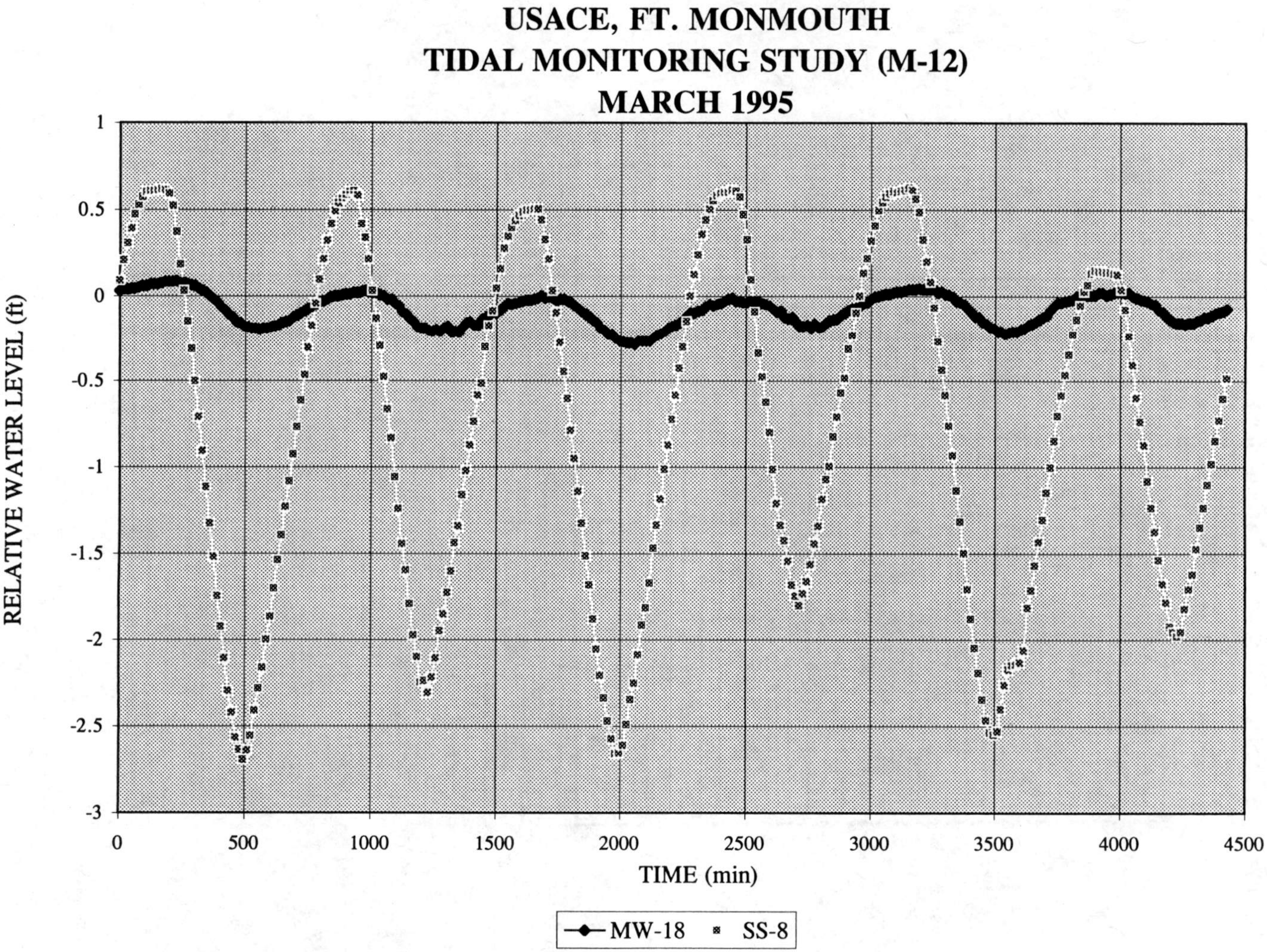
USACE, FT. MONMOUTH
TIDAL MONITORING STUDY (M-12)
MARCH 1995



(-) negative value shows rise in water level
(+) positive value shows fall in water level



(-) negative value shows rise in water level
(+) positive value shows fall in water level



(-) negative value shows rise in water level
(+) positive value shows fall in water level

Table E-1
Conductivity and Salinity Summary
Tidal Monitoring Study
January 1995
Tide Out

Well No.	Tide (In/Out)	SPCD (umhos)	Salinity (umhos)
MW-1	Out	ND	ND
MW-2	Out	ND	ND
MW-3	Out	350	0.3
Stilling Well-1 (SS-1)	Out	198	0.2
Stilling Well-2 (SS-2)	Out	200	0.2
MW-12	Out	ND	ND
MW-13	Out	2300	1.5
MW-14	Out	2300	2.0
MW-15	Out	2250	2.0
Stilling Well-7 (SS-7)	Out	4200	6.5
MW-16	Out	ND	ND
MW-17	Out	ND	ND
MW-18	Out	ND	ND
MW-19	Out	130	0.0
MW-20	Out	ND	ND
MW-21	Out	ND	ND
Stilling Well-8 (SS-8)	Out	2200	2
Stilling Well-9 (SS-9)	Out	4500	4.2

Note: SPCD - specific conductance.
ppth - parts per thousand.
ND - No data.

Table E-2
Conductivity and Salinity Summary
Tidal Monitoring Study
March 1995
Tide In

Well No.	Tide (In/Out)	SPCD (umhos)	Salinity (umhos)
MW-1	In	210	0.0
MW-2	In	850	0.0
MW-3	In	355	0.0
Stilling Well-1 (SS-1)	In	225	0.0
Stilling Well-2 (SS-2)	In	235	0.0
MW-12	In	160	0.0
MW-13	In	170	1.5
MW-14	In	270	2.0
MW-15	In	2000	2.0
Stilling Well-7 (SS-7)	In	3600	1.5
MW-16	In	140	0.0
MW-17	In	200	0.0
MW-18	In	165	0.0
MW-19	In	128	0.0
MW-20	In	195	0.0
MW-21	In	180	0.0
Stilling Well-8 (SS-8)	In	11000	9.5
Stilling Well-9 (SS-9)	In	11000	9.5

Note: SPCD - specific conductance.
ppth - parts per thousand.

Table E-3
Conductivity and Salinity Summary
Tidal Monitoring Study
March 1995
Tide Out

Well No.	Tide (In/Out)	SPCD (umhos)	Salinity (umhos)
MW-1	Out	190	0.0
MW-2	Out	880	0.0
MW-3	Out	320	0.0
Stilling Well-1 (SS-1)	Out	235	0.0
Stilling Well-2 (SS-2)	Out	240	0.0
MW-12	Out	150	1.0
MW-13	Out	1600	1.0
MW-14	Out	2600	2.0
MW-15	Out	210	2.0
Stilling Well-7 (SS-7)	Out	4000	4.5
MW-16	Out	130	0.0
MW-17	Out	198	0.0
MW-18	Out	150	0.0
MW-19	Out	120	0.0
MW-20	Out	140	0.0
MW-21	Out	170	0.0
Stilling Well-8 (SS-8)	Out	3600	3.0
Stilling Well-9 (SS-9)	Out	3000	2.0

Note: SPCD - specific conductance.
ppth - parts per thousand.

APPENDIX F

GPR PROFILES