FINAL

Remedial Investigation Report Site 2567

U. S. Army Garrison Fort Monmouth Fort Monmouth, New Jersey



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Remedial Investigation Report

Site 2567

Fort Monmouth, New Jersey

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EXECUTIVE SUMMARY

VERSAR, Inc. (Versar) has been contracted by the United States (U.S.) Army Garrison, Fort Monmouth (Fort Monmouth), Directorate of Public Works (DPW), Fort Monmouth, New Jersey to prepare a Remedial Investigation Report (RIR) to document groundwater conditions at Site 2567 located in the Charles Wood Area of Fort Monmouth, New Jersey. This report addresses the remedial investigation activities performed at this site to investigate groundwater conditions from April 1997 through January 2004.

Site 2567 is located in the Charles Wood Area of Fort Monmouth at the northwest corner of the intersection between Laboratory Road and Hope Road. Site 2567 includes Building 2567, two gasoline dispenser islands located within the paved area south of the building and dense wooded areas located to the south and east of the site. Two Underground Storage Tank (UST) closure reports have been submitted to the New Jersey Department of Environmental Protection (NJDEP) regarding USTs in the immediate vicinity of Site 2567.

The UST Closure and Site Assessment Report for Building 2567, Tanks 33 and 46 documents the removal of two single-wall steel USTs located adjacent to Building 2567. Both USTs were cleaned, excavated and disposed of in accordance with NJDEP requirements. Following the removal of these two USTs, eight post-excavation samples were collected and contained either non-detectable concentrations of total petroleum hydrocarbons (TPHC) or concentrations below NJDEP criteria.

The UST Closure and Site Assessment Report, Building 2567, UST Nos. 42, 43, 44 and 45 documented the removal of four gasoline USTs located under the pavement approximately 30 feet southeast of Building 2567. The DPW notified the NJDEP of a fuel leak at the Charles Wood gas station, Building 2567. Four groundwater monitoring wells were installed in 1991 to evaluate groundwater quality in the area of Building 2567 and the USTs at Site 2567 were closed. Approximately 936 cubic yards of soil were excavated from the area surrounding the USTs and the dispenser island. Twelve post-excavation soil samples were collected and TPHC was either not detected or detected below NJDEP criteria.

Subsequently, 23 post-excavation soil samples were collected from the side walls of the excavation area. TPHC was detected in one sample at a concentration below the NJDEP criteria. There were three volatile organic compounds (VOCs) detected at concentrations exceeding the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) or the Impact to Groundwater Soil Cleanup Criteria (IGWSCC). Lead was detected below the RDCSCC. There is no IGWSCC for lead.

In response to the suspected discharges from the USTs following the reported release, four groundwater monitoring wells were installed near Building 2567. These wells were sampled in five sampling rounds; during these sampling events, four VOCs and lead were detected in groundwater samples collected at Site 2567 at concentrations greater than the Class II-A NJDEP Ground Water Quality Criteria (GWQC).



The Weston 1995 report identified methyl tert-butyl ether (MTBE) and tert-butyl alcohol (TBA) as groundwater contaminants without GWQC; however, both MTBE and TBA exceeded the interim GWQC in multiple rounds of sampling at one monitoring well.

In September 1994, one additional monitoring well (2567-MW5) was installed by the DPW to determine if contaminants were present downgradient from the site.

In a letter report submitted to the NJDEP in May 2000, ATC Associates (ATC) reported sampling results collected during six sampling events from five monitoring wells at Site 2567. During these six sampling events, five VOCs (benzene, MTBE, TBA, xylenes and methylene chloride) were detected in groundwater samples collected at Site 2567 at concentrations greater than their respective GWQC. Lead was not detected in any of the groundwater samples collected during this time at concentrations exceeding its GWQC.

As presented in the Weston SI Report, several natural and anthropogenic factors contribute to the wide range in concentrations of metals in soils, which further impact the concentration of metals in groundwater. A low-flow sampling methodology was proposed for use by the DPW and accepted by the NJDEP to assess the impact of entrained sediments on the dissolved phase metals concentrations at Fort Monmouth.

Fort Monmouth DPW has conducted a Remedial Investigation (RI), including a groundwater sampling program, to define the areal extent of potential pollutants and evaluate impacts to groundwater in the vicinity of Site 2567. Remedial investigation activities were performed from September 1991 and continued through January 2004.

A total of seven monitoring wells comprise the quarterly groundwater monitoring program conducted by the DPW. The location of each well was strategically selected by the DPW to monitor possible contaminants released into the groundwater due to the former USTs located at Building 2567. As part of the remedial investigation, a quarterly groundwater sampling program was conducted from April 1997 through January 2004 at Site 2567.

During the 30 quarterly sampling events, four VOCs and five Target Analyte List (TAL) metals were detected in groundwater samples at concentrations above their respective NJDEP GWQC. Based on the magnitude of their exceedences, the frequency of their occurrences and their wide-ranging results, TBA is identified as the only contaminant of concern (COC) at Site 2567.

The RI also included the collection of groundwater depth measurements, the performance of slug tests, evaluation of aquifer classification, and the completion of a sensitive receptor survey. The results of the field and laboratory investigations were used to develop a conceptual site model to provide a basis for the development of a three-dimensional computer model. The conceptual site model considers the site-specific topography, groundwater recharge, groundwater flow conditions and the geologic formations present at the site. A MODFLOW computer model was used to simulate



groundwater flow and contaminant transport beneath the site. The purpose of developing a groundwater model for Site 2567 was to predict the migration of the identified COC in site groundwater.

In order to evaluate groundwater conditions and potential COC migration at Site 2567, additional Geoprobe® groundwater samples were collected from seven points in February and April 2004.

Continued groundwater monitoring of TBA degradation through natural attenuation at Site 2567 is recommended.



1.0 INTRODUCTION

Versar has been contracted by the U.S. Army Garrison, Fort Monmouth DPW, Fort Monmouth, New Jersey to prepare an RIR to document groundwater and surface water conditions at Site 2567 located at the Charles Wood Area, Fort Monmouth, New Jersey. This report addresses the remedial investigation activities performed at this site to investigate groundwater conditions from April 1997 through January 2004.

1.1 Objectives

The objectives of this RIR are to define aquifer chemical and physical characteristics and to determine the requirement for further remedial activities at Site 2567. The remedial investigation was conducted in accordance with NJDEP *Technical Requirements for Site Remediation* (February 2003), NJAC 7:26E, et seq.

The remedial investigation and subsequent preparation of the RIR encompassed the following:

- Characterization of groundwater quality over time through quarterly groundwater sampling events conducted from April 1997 through January 2004.
- Characterization of groundwater quality during two low-flow sampling events in May and June 2001.
- Comparison of the results of the groundwater quality monitoring programs with the NJDEP GWQC.
- Investigation and evaluation of the designated aquifer uses, the associated aquifer classification, and the appropriate groundwater quality criteria for groundwater resources beneath Site 2567. The NJDEP Ground Water Quality Standards (GWQS) specify the quality criteria and designated uses for groundwater and also contain technical and general policies to ensure that the designated uses can be adequately protected.
- Performance of slug tests during August 2001 to characterize the hydraulic conductivity and groundwater flow regime.
- Development of a biodegradation model for potential COCs at Site 2567 based on hydrogeologic data, field investigation programs and technical research to evaluate the migration of potential COCs beneath the site.
- Formulation of recommendations for future remedial investigation or remedial action alternatives for Site 2567.

1.2 Report Organization

This report is organized to minimize repetition. **Section 2.0** provides background information and a general description of Site 2567 located in the Charles Wood Area of Fort Monmouth. **Section 3.0** describes and summarizes the field activities conducted at Site 2567 including groundwater and surface water sampling and aquifer testing. **Section 4.0** presents the physical characterization of Site 2567, including lithology and



groundwater conditions. Chemical characterization is presented in **Section 5.0**, which includes groundwater sampling results and the determination of potential COCs. **Section 6.0** discusses the potential for contaminant migration in the vicinity of Site 2567 and presents groundwater modeling involving COCs. Conclusions and recommendations are presented in **Section 7.0**. The references used to prepare this report are listed in **Section 8.0**.



2.0 SITE BACKGROUND AND ENVIRONMENTAL SETTING

The following sections describe the site background and environmental setting of the area surrounding Fort Monmouth and Site 2567. Included is a description of the site location, background, current conditions and environmental setting.

2.1 Site Location and Description

Fort Monmouth is located in the central-eastern portion of New Jersey in Monmouth County, approximately 45 miles south of New York City and 70 miles northeast of Philadelphia (**Figure 2-1**). In addition to the Main Post, the installation includes two subposts, the Charles Wood Area and the Evans Area. The Main Post encompasses approximately 630 acres and is bounded by State Highway 35, Parkers Creek, Lafetra Brook, the New Jersey Transit Railroad and a residential area to the south. The post was established in 1918 during World War I (WWI) as an Army Signal Corps training center. The Main Post currently provides administrative, training, and housing support functions, as well as providing many of the community facilities for Fort Monmouth. The primary mission of Fort Monmouth is to provide command, administrative, and logistical support for Headquarters, U.S. Army Communications and Electronics Command (CECOM). CECOM is a major subordinate command of the U.S. Army Materiel Command (AMC) and is the host tenant at Fort Monmouth.

Site 2567 is located in the Charles Wood Area of Fort Monmouth at the northwest corner of the intersection between Laboratory Road and Hope Road (**Figure 2-2**). Site 2567 includes Building 2567, two gasoline dispenser islands located within the paved area south of the building and dense wooded areas located to the south and east of the site.

2.2 Site Background

In the early 1990s, the DPW developed a UST program for managing approximately 506 USTs located throughout the Fort Monmouth installation (Main Post, Charles Wood and Camp Evans areas). This program was created to work toward replacing the use of heating oil as a major energy source and to convert to natural gas. The DPW's approach involved installing new gas lines and new gas-fed boilers and removing the non-regulated (residential) USTs. Since 1990, approximately 97 percent of the aforementioned USTs at Fort Monmouth have been removed.

As part of the DPW's UST management program, two UST closure reports (October 1993 and January 1995) have been submitted to the NJDEP regarding USTs in the immediate vicinity of Site 2567. In addition to these two closure reports, the DPW submitted one letter report (May 2000) detailing the results of a long-term groundwater monitoring program for Site 2567. These three reports are presented in **Appendix A**, **Appendix B** and **Appendix C** and are discussed below.

In 1995, the DPW submitted a Site Investigation (SI) report to the NJDEP (Weston, 1995) for the Main Post and Charles Wood areas. Relevant sections of this SI report are



presented in **Appendix D** and are discussed below in **Section 2.2.3**. The Weston SI report was incorporated into the discussion of COCs (**Section 5.2**) for Site 2567.

The groundwater monitoring program presented in this report includes the five wells originally installed as part of the closure of former USTs. The locations of these five monitoring wells and two additional wells installed during this remedial investigation are shown in **Figure 2-3**. A well construction summary is provided in **Table 2-1**. Monitoring well records are provided in **Appendix E**.

2.2.1 UST Closure and Site Assessment for Two USTs – Weston, 1993

According to the *UST Closure and Site Assessment Report for Building 2567, Tanks 33 and 46*, prepared by Weston for the DPW, October 1, 1993 (**Appendix A**), there were two single-wall steel USTs (USTs 33 and 46) located adjacent to Building 2567 (**Figure 2-4**). UST No. 33 was a 1,000-gallon No.2 fuel oil UST, and UST No. 46 was a 500-gallon waste oil UST. On December 31, 1991, both USTs were cleaned, excavated and disposed of in accordance with NJDEP requirements. No holes were noted in the USTs, and no potentially contaminated soils were observed surrounding the USTs. U.S. Department of Health (DEH) records indicate that UST No. 46 was never in use. Following the removal of these two tanks, eight post-excavation samples were collected and analyzed for TPHC. The eight soil samples contained either non-detectable concentrations of contaminants or concentrations below NJDEP subsurface cleanup criteria.

2.2.2 UST Closure and Site Assessment for Four USTs – Weston, 1995

According to the *UST Closure and Site Assessment Report, Building 2567, UST Nos. 42, 43, 44, and 45*, prepared by Weston for the DPW in January 1995 (**Appendix B**), there were four gasoline USTs (Nos. 42 through 45) located under the pavement approximately 30 feet southeast of Building 2567 (**Figure 2-4**). UST Nos. 42, 43 and 44 were single-walled steel 10,000-gallon unleaded gasoline USTs. UST No. 45 was a single-walled steel 6,000-gallon leaded gasoline UST.

In December 1989, the DPW notified the NJDEP of a fuel leak at the Charles Wood gas station, Building 2567 (Case No. 89-12-12-1442). In January 1990, a tightness test was conducted on the premium gasoline line, which tested tight. In January 1991, UST Nos. 42, 43 and 44 were tightness tested. UST Nos. 42 and 44 passed the UST system tightness test, although UST No. 43 failed this test (Case No. 91-8-27-1414). In response to the failed tightness test, UST No. 43 was placed out of service and four groundwater monitoring wells were installed in 1991 to evaluate groundwater quality in the area of Building 2567. The closure, remediation and construction of a new facility near Building 2567 were conducted by the DPW in 1993.



In February 1993, UST Nos. 42 through 45 were closed at Site 2567. During the closure, UST Nos. 42 through 45 were drained and removed along with associated piping. The subsurface evaluator did not observe any holes in any of these four USTs after they were removed from the ground. There was no sheen observed on groundwater during the UST removals. Based on visual observations of stained soils and screening with a PID, approximately 936 cubic yards of soil were excavated from the area surrounding the USTs and the dispenser island (**Figure 2-4**). The excavation was extended to a maximum depth of 11 feet (where groundwater was encountered).

Soil Sampling

On February 2, 1993, four post-excavation samples were collected from the bottom and north side wall of the excavation and analyzed for TPHC. In addition, on February 8, 1994, eight post-excavation soil samples were collected from the east sidewall and also analyzed for TPHC. In these 12 post-excavation soil samples, TPHC was either not detected or detected below NJDEP soil cleanup criteria.

On February 24, 1993, 23 post-excavation soil samples were collected from the sidewalls of the excavation area and analyzed for TPHC, VOCs plus 15 tenatively identified compounds (TICs) and lead. The soil sampling results were compared to the NJDEP RDCSCC and IGWSCC.

TPHC was detected in one sample at a concentration below the NJDEP cleanup criteria. There were three VOCs detected in these 23 post-excavation soil samples at concentrations exceeding the RDCSCC or the IGWSCC. Benzene was detected at concentrations ranging from 1.8 mg/kg to 45 mg/kg. The IGWSCC for benzene is 1 mg/kg and the RDCSCC for benzene is 3 mg/kg. Ethylbenzene was detected at concentrations ranging from 120 mg/kg to 170 mg/kg. The IGWSCC for ethylbenzene is 100 mg/kg and the RDCSCC for ethylbenzene is 1000 mg/kg. Total xylenes were detected at concentrations ranging from 11.7 mg/kg to 1200 mg/kg. The IGWSCC for total xylenes is 10 mg/kg and the RDCSCC for total xylenes is 410 mg/kg. Lead was detected below the RDCSCC of 400 mg/kg at concentrations ranging from 7.77 mg/kg to 129 mg/kg. There is no IGWSCC for lead.

Appendix B includes these soil sampling results as presented in the 1995 Weston SI and Closure Report.

Groundwater Sampling

In response to the suspected discharges from the USTs following the reported release in 1989 and failed tightness test in 1991, four groundwater monitoring wells (2567-MW1, 2567-MW2, 2567-MW3 and 2567-MW4) were installed near Building 2567 in October 1991 (see **Table 2-1** and **Figure 2-3**). Soil boring logs and monitoring well records are contained in **Appendix E**. These wells were sampled in five sampling rounds (December 1991, October 1992, April 1993, February 1994, and March 1994). The groundwater samples that were collected during December 1991, October 1992, February 1994 and



March 1994 were analyzed for VOCs plus 15 TICs. The groundwater samples that were collected during April 1993 were analyzed for semi-volatile organic compounds (SVOCs) plus 15 TICs.

During these sampling events, four VOCs (benzene, 1,2-dichloroethene, xylenes, and methylene chloride) and lead were detected in groundwater samples collected at Site 2567 at concentrations greater than the Class II-A NJDEP GWQC. There were no SVOCs detected in groundwater samples collected in April 1993 at concentrations greater than the GWQC. Groundwater sampling results for wells 2567-MW1 through 2567-MW4, as presented in the 1995 Weston SI report, are included in **Appendix B**.

In the groundwater results tables included in the 1995 Weston SI report, Weston identified MTBE and TBA as groundwater contaminants without GWQC. As of December 2001, the NJDEP applies the interim groundwater quality criteria of 70 ug/L and 100 ug/L to MTBE and TBA, respectively. The exceedences of these interim criteria for the groundwater samples collected between December 1991 and March 1994 are discussed below.

MTBE was detected at concentrations exceeding the interim GWQC of 70 ug/L in four rounds of sampling collected at one monitoring well location (2567-MW1). Concentrations ranged from 650 ug/L (February 1994) to 2,200 ug/L (December 1991).

TBA was detected at concentrations exceeding the interim GWQC of 100 ug/L in three rounds of sampling collected at one monitoring well location (2567-MW1). Concentrations ranged from 470 ug/L (April 1993) to 5,400 ug/L (October 1992).

In the 1995 Weston SI and closure report, Weston presented two groundwater flow maps in addition to groundwater sampling results. These groundwater flow maps both show groundwater flow to the southeast. Weston also conducted an NJDEP well search to identify all irrigation, monitoring, domestic, industrial and public supply wells near Site 2567. The nearest domestic well was found to be 6,500 feet southeast of Site 2567.

In September 1994, one additional monitoring well (2567-MW5) was installed by the DPW to determine if contaminants were present downgradient from the site. Well 2567-MW5 is located southeast of the site on the eastern side of Hope Road (see **Table 2-1**, **Figure 2-3** and **Appendix E**). The results for groundwater samples collected at well 2567-MW5 were presented by ATC in the letter report discussed below.

2.2.3 Groundwater Monitoring Letter Report – ATC, 2000

In a letter report submitted to the NJDEP in May 2000 (**Appendix C**), ATC reported sampling results collected from five monitoring wells at Site 2567 (2567-MW1 through 2567-MW5). These groundwater samples were collected by the DPW during six quarterly sampling rounds between May 1995 and April 1997. In this letter report, ATC also presented one groundwater flow map that shows groundwater flow to the southeast.



Groundwater sampling results for wells 2567-MW1 through 2567-MW5, as presented in the ATC letter report (May 2000), are included in **Appendix C**.

The groundwater samples collected at Site 2567 during May 1995, August 1995, November 1995, February 1996, and April 1997 were analyzed for VOCs plus 15 TICs and lead. The groundwater samples collected at Site 2567 during January 1997 were analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX) and lead.

During these six sampling events, four VOCs (benzene, MTBE, xylenes and methylene chloride) were detected in groundwater samples collected at Site 2567 at concentrations greater than the GWQC. The results of the groundwater sampling indicated that benzene concentrations decreased in monitoring well 2567-MW3 during the period addressed by the ATC letter report. Lead was not detected at concentrations exceeding the GWQC in any of the groundwater samples collected during this time.

In the groundwater results tables included in the ATC 2000 letter report, ATC identified TBA as a groundwater contaminant without an associated GWQC. As discussed above in **Section 2.2.2**, the NJDEP currently applies the interim groundwater quality criterion of 100 ug/L for TBA contamination in class II-A aquifers. In four sampling rounds (May 1995, August 1995, November 1995, and February 1996), TBA was detected above the groundwater criteria of 100 ug/L in groundwater samples collected at well 2567-MW1 at concentrations ranging from 780 ug/L to 930 ug/L.

2.2.4 SI Report for Main Post and Charles Wood Areas – Weston, 1995

Weston, as part of the SI of the Fort Monmouth military installation, conducted soil sampling, monitoring well installation and sampling and geophysical surveying. In addition to sampling of soil and groundwater at sites throughout the Main Post and Charles Wood areas of Fort Monmouth, Weston established background concentrations of chemical constituents in soil and groundwater for the Fort Monmouth installation, as reported in the 1995 Weston SI report. These background concentrations have been used by the DPW for comparing sampling results for native constituents of soil and groundwater.

As presented in the Weston SI Report, several natural and anthropogenic factors contribute to the wide range in concentrations of metals in soils, which further impact the concentration of metals in groundwater. Soils derived from the glauconitic sands contain abundant aluminum, calcium, potassium, iron, magnesium and manganese (among others), which are likely to be present at elevated concentrations in the groundwater, particularly when sediments are entrained in the collected groundwater samples. A low-flow sampling methodology was proposed for use by the DPW and accepted by the NJDEP to assess the impact of entrained sediments on the dissolved phase metals concentrations at the Main Post and Charles Wood areas of Fort Monmouth. Using a low-flow sampling methodology to reduce the presence of entrained sediment has generally yielded substantial reductions in the dissolved phase concentrations of metals, such as arsenic, antimony, beryllium, cadmium, chromium, cobalt, lead, mercury,



selenium, silver, thallium and vanadium at Fort Monmouth sites. Significant decreases in the concentrations of metals characteristic of glauconitic sand also were observed. These included aluminum, barium, calcium, copper, iron, magnesium, manganese, nickel, potassium, sodium and zinc.

2.3 Current Conditions

Versar conducted a site walk-through in April 2004, to assess current conditions at Site 2567. The site consists of Building 2567, which is a convenience store and gasoline station, paved parking areas along the west, south, and east sides of the building, and two gasoline dispenser islands located within the paved area south of the building. There are dense wooded areas located south and east of the site. Site 2567 photographs were taken during a site walk-through in 2001 and are included in **Appendix F**.

The gas station currently utilizes three double-fiberglass reinforced 10,000-gallon USTs to store gasoline (UST Nos. 81515-66, 81515-67, and 81515-68). These three USTs are located at the same approximate area as the former gasoline USTs (UST Nos. 81515-42 through 81515-45, shown in **Figure 2-4**). Underground utility lines at Site 2567, including gas, storm sewer and water are shown in **Figure 2-5**. There is also an abandoned sewer line in the vicinity of the former gasoline USTs. A swale runs parallel to Hope Road, and elevations of the base of the swale indicate that the swale may intersect groundwater in the vicinity of the site. Underground utilities and the swale may impact shallow groundwater flow at Site 2567, as discussed in **Sections 4.0** and **6.0** below.

2.4 Environmental Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Site 2567. Included is a description of the regional geology of the area surrounding Fort Monmouth, as well as descriptions of the local geology and hydrogeology of the Charles Wood area.

2.4.1 Regional and Local Geology

Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. Site 2567 is located in what may be referred to as the Outer Coastal Plain subprovince, or the Outer Lowlands. The geologic map of New Jersey is provided as **Figure 2-6**.

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). These sediments, predominantly derived from deltaic, shallow marine and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.



The formations record several major transgressive/regressive cycles and contain units, which 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. 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 individual thickness for these units varies greatly (e.g., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from the Fall Line (e.g., a boundary zone between older, resistant rocks and younger, softer plain sediments) to greater than 6,500 feet in Cape May County (Brown and Zapecza, 1990).

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Main Post and Charles Wood areas. The Red Bank Sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile. The upper member (Shrewsbury) of the Red Bank Sand is a yellowish-gray to reddish brown clayey medium-to-coarse-grained sand that contains abundant rock fragments, minor mica and glauconite (Jablonski). The 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 percent of the sand fraction in the upper part of the unit. The upper part of the Tinton Sand is often highly oxidized and iron oxide encrusted (Minard, 1969).

The Hornerstown Sand unconformably overlies the Red Bank Sand and dips to the southeast at 50 to 60 feet per mile. The Hornerstown Sand consists of dark green clayey glauconitic sand.

The Tertiary-age Kirkwood Formation and Vincentown Formations crop out approximately two miles south of the Main Post. The Vincentown Formation contains a lower member which is greenish-gray glauconitic sand and an upper member which ranges from sand to clayey limestone. The Kirkwood Formation consists of alternating layers of sand and clay. The Vincentown and Kirkwood Formations dip to the southeast at approximately 20 and 27 feet per mile, respectively (Jablonski, 1968).

Based on the interpretation of lithologic boring logs (**Appendix E**), the lithology of native material at Site 2567 consists of the Tinton Sand. Below Building 2567 and the surrounding paved areas exists asphalt and/or fill material overlying sedimentary layers of light green sand, dark brown/green clay with trace amounts of sand, and medium-fine sand. In the area of monitoring well 2567-MW5, there exists a slightly different progression consisting of brown fine sand overlying black, soft clay, followed by brown fine sand with trace amounts of silt, and finally gray medium sand intermixed with well-



rounded gravel. Further discussion of the subsurface conditions is presented in **Section 4.0**.

2.4.2 Hydrogeology

Fort Monmouth lies in the Atlantic and Eastern Gulf Coastal Plain groundwater region. 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 Red Bank, Tinton and Hornerstown Sands) is dominated by calcium, magnesium, manganese, aluminum and iron. The sediments in the area of Fort Monmouth were deposited in fluvial-deltaic to near shore environments.

The water table aquifer in the Main Post and Charles Wood areas is identified as part of the "Composite Confining Unit," or minor aquifers. The minor aquifers include the Navesink formation, Red Bank Sand, Tinton Sand, Hornerstown Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation and the basal clay of the Kirkwood Formation. These geologic formations comprise a "Composite Confining Bed" for the Wenonah Mount Laurel Aquifer (Zapecza, 1984). Measured hydraulic conductivities for the Navesink Hornerstown Confining Unit, presented in Martin (1998) range from 0.0005 to 9 feet per day, with a geometric mean of 0.12 feet per day. The hydraulic conductivity of 0.12 feet per day is discussed in relation to Site 2567 in Section 6.1.4.

Wells installed in the Red Bank and Tinton Sands produce 2 to 25 gallons per minute (gpm) (Jablonski, 1968). Groundwater is typically encountered at the Charles Wood areas at shallow depths below ground surface (bgs) (2 to 9 feet bgs). Water in the surficial aquifer generally flows east toward the Atlantic Ocean.

As presented in **Figure 2-7**, Fort Monmouth is located within the outcrop area of the Composite Confining Unit (Martin, 1998), which also includes the Red Bank Sand, Tinton Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation and the basal clay of the Kirkwood Formation. The Composite Confining Unit is approximately 125 feet thick at Site 2567.

Based on a review of the NJDEP GWQS, January 7, 1993, Versar has determined that the site is underlain by a Class III-A aquifer. A formal presentation of this finding was made to the NJDEP on April 17, 2001. The primary designated use for Class III-A groundwater is the release or transmittal of groundwater to adjacent classification areas and surface water, as relevant. Secondary designated uses in Class III-A include any reasonable use. Further discussion of the Class III-A aquifer designation is presented in **Section 6.3**.

Shallow groundwater may be locally influenced within the Charles Wood Area by the following factors:



- Tidal influence (based on proximity to the Atlantic Ocean, rivers and tributaries)
- Topography
- Nature of the fill material within the Charles Wood Area
- Presence of clay and silt lenses in the natural overburden deposits
- Local groundwater recharge areas (e.g., streams, lakes)
- Roadways, utility conduits and stormwater culverts

Due to the fluvial nature of the overburden deposits (e.g., sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. Groundwater in the vicinity of Site 2567 appears to be flowing in a south-southeast direction toward Wampum Brook. Underground utilities may have a significant effect of diverting shallow groundwater flow.

2.4.3 Soils

According to the U.S. Department of Agriculture (USDA), Soil Conservation Service, Monmouth County Soil Survey (April 1989), the majority of the Main Post and Charles Wood areas is covered by urban land (**Figure 2-8**). The soil survey describes urban land as areas where concrete, asphalt, buildings, shopping centers, airports or other impervious surfaces cover 80 percent or more of the surface. In addition, the survey indicated that the natural subsurface soils have largely been replaced with artificial or foreign fill materials (developed land with disturbed soils).

The following soil series and classification units are mapped in the Charles Wood area:

•	DoB	Downer sandy loam (with 2 to 5 percent slopes)
•	FrB	Freehold sandy loam (with 2 to 5 percent slopes)
•	FUB	Freehold sandy loam/urban land complex (with 0 to 10 percent slopes)
•	HUA	Holmdel sandy loam/urban land complex (with 0 to 5 percent

- slopes)HV Humaquepts, frequently flooded
- KvA Kresson loam (with 0 to 5 percent slopes)
- PT Pits, Sand and Gravel
 Sn Shrewsbury sandy loam
 UA Udorthents, smoothed and
- UD Udorthents urban land complex (with 0 to 3 percent slopes).

The Downer series soils are well-drained soils that are found on uplands and terraces. The soils are formed in acid, silty coastal plain sediments. The Freehold soils are also well drained and are formed in acid, loamy, coastal plain sediments that, by volume, are 1 to 10 percent glauconite and are found on uplands. The Holmdel series consists of moderately well drained or somewhat poorly drained soils on uplands. The soils are



formed in acid, loamy, coastal plain sediments that have 2 to 10 percent glauconite by volume. The Humaquepts soils are somewhat poorly- to very poorly- drained soils that are formed in stratified, sandy, or loamy sediments of fluvial origins. The Humaquepts soils are located on the floodplain and are subject to flooding several times each year. The Kresson loam is a nearly level to gently sloping soil and is somewhat poorly drained. The soil is found on low divides and in depressions. The Shrewsbury soils consist of poorly drained soils or upland flats that are formed in acid, loamy, coastal sediments that, by volume, are as much as 10 percent glauconite. The Udorthents soils have been altered by excavation or filling activities, and may include old sand and gravel pits. In filled areas, these soils consist of loamy material that is more than 20 inches thick. The filled areas include floodplain, tidal marshes and areas with moderately well-drained to very poorly drained soils. Some Udorthent soils contain concrete, asphalt, metal and glass. The soils in the vicinity of Site 2567 are classified as HUA – Holmdel sandy loam/urban land complex (Figure 2-8).

2.4.4 Topography and Surface Drainage

Over the last 80 years, the natural topography of Fort Monmouth has been altered by excavation and filling activities by the military. Site 2567 is located just north of the floodplain of Wampum Brook. The USGS topographic map (**Figure 2-1**) shows that the land surface of the site is relatively flat at an elevation of approximately 30 to 35 feet above mean sea level (amsl).

Surface water bodies in the vicinity of the Charles Wood area include two unnamed tributaries of Wampum Brook. Wampum Brook is joined by several unnamed tributaries east of Charles Wood, prior to becoming Wampum Lake. Wampum Lake discharges into Mill Creek, which flows toward the Main Post area.

The U.S. Fish and Wildlife Service (FWS) National Wetland Inventory Long Branch quadrangle maps indicate the presence of several wetlands at the Main Post and Charles Wood areas. In the Charles Wood Area, the golf course lake is classified as palustrine open water/unknown bottom, and several areas along the unnamed tributaries of Wampum Brook are classified as palustrine forested wetland, broad-leaved deciduous.

Based on the topography of the area, surface water runoff is expected to flow in a southeast direction toward Wampum Brook. There are drainage ditches that run south along Hope Road and an unnamed tributary/drainage ditch that crosses underneath Hope Road about 200 feet south of Site 2567 (**Figure 2-2**). Surface water runoff from Site 2567 drains into these ditches and flows south then east into Wampum Brook.



3.0 SITE ACTIVITIES

Fort Monmouth DPW has conducted remedial investigation activities, including a groundwater sampling program, to define the areal extent of potential pollutants and evaluate impacts to groundwater in the vicinity of Site 2567. Remedial investigation activities were performed from September 1991 and continued through January 2004. These activities were managed by the Fort Monmouth DPW and performed by TECOM-Vinnell Services (TVS). The details of remedial investigation activities that occurred at Site 2567 are described in the following sections.

3.1 Well Installation

A total of seven monitoring wells (2567-MW1, 2567-MW2, 2567-MW3, 2567-MW4, 2567-MW5, 2567-MW6 and 2567-MW7) comprise the quarterly groundwater monitoring program conducted by the DPW. Four of the seven monitoring wells were installed in 1991 during the Weston UST closure and site investigation (2567-MW1, 2567-MW2, 2567-MW3 and 2567-MW4). One monitoring well was installed in 1994 (2567-MW5), and the remaining two monitoring wells were installed by the DPW in 2000 (2567-MW6 and 2567-MW7). **Figure 2-3** shows the locations of the monitoring wells at Site 2567. The location of each well was strategically selected by the DPW to monitor possible contaminants released into the groundwater due to the former USTs located at Building 2567. Monitoring well construction details are discussed in **Section 2.2** and are summarized in **Table 2-1**. Well boring logs and monitoring well records are provided in **Appendix E**.

3.2 Groundwater Monitoring Well Sample Collection Activities

As part of the remedial investigation, a quarterly groundwater sampling program was conducted from April 1997 through January 2004 at Site 2567. Sampling activities were performed in accordance with the *Fort Monmouth Standard Sampling Operating Procedure* (December 1997). Laboratory analyses of the samples collected at Site 2567 were conducted at the Fort Monmouth Environmental Testing Laboratory (FMETL), a New Jersey certified laboratory (Certification No. 13461).

Five monitoring wells (2567-MW1, 2567-MW2, 2567-MW3, 2567-MW4 and 2567-MW5) were sampled during 28 quarterly sampling rounds (#1 through #28) from June 1997 through January 2004 and two low-flow sampling rounds for a total of 30 quarterly sampling rounds. Monitoring wells 2567-MW6 and 2567-MW7 were incorporated later into the quarterly monitoring program and sampled from August 2000 through January 2004 during 15 quarterly rounds (#14 through #28) and two low-flow sampling rounds for a total of 17 quarterly sampling rounds.

During the 30 rounds of quarterly groundwater sampling, a total of 240 groundwater samples, including 31 duplicate samples, 33 field blanks and 28 trip blanks for quality assurance/quality control (QA/QC), were collected from seven monitoring wells. The quarterly groundwater samples were analyzed as follows:



- During quarterly sampling rounds #1 and #2, VOCs plus 15 TICs were analyzed using USEPA Method 624, and lead was analyzed using USEPA Method 3113B.
- During quarterly sampling rounds #3 and #4, VOCs plus 15 TICs were analyzed using USEPA Method 624, SVOCs plus 25 TICs were analyzed using USEPA Method 625, pesticides and PCBs were analyzed using USEPA Method 608, and TAL metals were analyzed using USEPA Methods 3120B and 3112B.
- During quarterly sampling rounds #5 through #28, VOCs plus 15 TICs were analyzed using USEPA Method 624, and lead was analyzed using USEPA Method 3120B.

A summary of the groundwater sampling activities, including rounds, well IDs, sample IDs, sample locations, collection/analysis date, analytical parameters and analysis method, is provided in **Table 3-1**. Copies of the groundwater sampling chain-of-custody forms and laboratory data sheets are presented in **Appendix G**. The results of the quarterly groundwater monitoring program for Site 2567 are discussed in **Section 5.1**.

In consideration of the potential benefits of the low-flow sampling procedure, two additional rounds of low-flow sampling (Low Flow #1 and Low Flow #2) were conducted from May 31-June 5, 2001 and June 25-26, 2001. A total of 21 samples, including three duplicate samples and four field blanks, were collected and analyzed for TAL metals to determine whether elevated metal concentrations observed in the groundwater samples at Site 2567 are due to entrained soil particles (e.g., high turbidity) rather than dissolved phased groundwater constituents. The samples were analyzed by the FMETL for TAL metals utilizing USEPA Methods 3120B and 3112B.

Sampling equipment was thoroughly decontaminated before and after each use, in accordance with the *Fort Monmouth Standard Sampling Operating Procedure* (1997). Following collection, groundwater samples were immediately placed in laboratory-supplied bottleware. The sample containers were labeled, sealed, packed in ice and transported to the FMETL under proper chain-of-custody procedures.

During each of the monitoring well sampling rounds, aquifer chemical characteristics including pH, temperature, conductivity and dissolved oxygen (DO) were recorded prior to sampling. These chemical characteristics are included in the laboratory data packages. The aquifer DO data is presented in **Section 5.3** and discussed in **Section 6.1.3**.

3.3 Geoprobe® Groundwater Sample Collection Activities

In order to evaluate groundwater conditions and potential COC migration at Site 2567, additional Geoprobe[®] groundwater samples were collected from seven points in February and April 2004. Sampling activities were performed in accordance with the *Fort Monmouth Standard Sampling Operating Procedure* (December 1997). Laboratory analyses of the samples collected at Site 2567 were conducted at the Fort Monmouth Environmental Testing Laboratory (FMETL), a New Jersey certified laboratory (Certification No. 13461).



Seven Geoprobe® sampling points (GW-1, GW-2, GW-3, W-1, W-2, W-3 and W-4) were sampled during two separate sampling events in February and April 2004.

During the two Geoprobe[®] groundwater sampling events, a total of 13 groundwater samples, including two duplicate samples, two field blanks and two trip blanks for QA/QC, were collected from the seven Geoprobe[®] points. The Geoprobe[®] groundwater samples were analyzed as follows:

• During the two sampling events, VOCs plus 15 TICs were analyzed using USEPA Method 624.

A summary of the Geoprobe[®] groundwater sampling activities, including Geoprobe[®] point IDs, sample IDs, sample locations, collection/analysis date, analytical parameters and analysis method, is provided in **Table 3-2**. Copies of the groundwater sampling chain-of-custody forms and laboratory data sheets are presented in **Appendix H**. The results of the Geoprobe[®] groundwater sampling program for Site 2567 are discussed in **Section 5.2**.

Sampling equipment was thoroughly decontaminated before and after each use, in accordance with the *Fort Monmouth Standard Sampling Operating Procedure* (1997). Following collection, groundwater samples were immediately placed in laboratory-supplied bottleware. The sample containers were labeled, sealed, packed in ice and transported to the FMETL under proper chain-of-custody procedures.

3.4 Groundwater Depth Measurements

During each of the 30 groundwater monitoring rounds conducted at Site 2567 (including the 28 quarterly monitoring rounds and two low-flow rounds), measurements of the depth to water in each of the monitoring wells was recorded with an accuracy of 0.01 feet. These depth to groundwater measurements, recorded from 1997 through 2004, are presented in **Table 3-2**. The groundwater elevation at each well was calculated by subtracting the measured depth to groundwater from the elevation of the top of the well casing. Groundwater elevations are discussed in **Section 4.2**.

3.5 Slug Testing Procedures

Versar conducted slug testing on the seven monitoring wells located at Site 2567 from August 16-17, 2001. The slug testing was performed to estimate hydrogeologic properties of the shallow soils at this site, such as groundwater velocity, to be used for contaminant transport modeling. The equipment used to perform the slug testing included a Hermit Environmental Data logger (Model 1000C), a 10-psi pressure transducer, and a 4-foot long, 3.5-inch diameter PVC slug.

The slug testing was performed by first recording the depth to top of groundwater, then placing the slug and the transducer into the well and allowing the water to equilibrate to a



level close to the original water level. The new water level was set as the reference water level for the data logger during the slug test. The slug was then removed and the data logger recorded the changing water level with time. The collected data were then transferred to a personal computer for later review and reduction. The raw data are presented in **Appendix H**. The results are discussed in **Section 4.2**.

3.6 Sensitive Receptors and Well Search

Searches were conducted using various databases and historical information to identify receptors and groundwater wells that may be potentially affected by Site 2567. An Offsite Receptor Report (dated October 24, 2001) was prepared for Site 2567 by Environmental Data Resources, Inc. (EDR).

In addition, a search of the comprehensive well database maintained by the NJDEP Well Permitting and Regulations Section of the Bureau of Water Allocation was performed to identify groundwater wells that may potentially be affected by Site 2567. The search was performed for a one-mile radius surrounding the central point of the Site 2567. A copy of the sensitive receptor survey is provided in **Appendix I** and a copy of the well search summary is provided in **Appendix J**. The results of the sensitive receptor survey and well search are discussed in **Section 6.2**.



4.0 SITE PHYSICAL CHARACTERISTICS

The following sections represent the findings of the geologic and hydrogeologic characterization program for Site 2567. These sections include a detailed discussion of the physical properties of the unconsolidated soil, bedrock and groundwater underlying the study area. Groundwater elevation data collected by the DPW from August 1997 through January 2004 are presented in this section.

4.1 Lithology

The lithology encountered at Site 2567 consists primarily of fill material, fine sand, silt and clay. Two geologic cross-sections were prepared for Site 2567. Geologic cross-sections A-A' and A-A" were based on the boring logs of monitoring wells in the study area, as well as the locations of underground utilities. The geologic cross-section location map is included as **Figure 4-1**. Geologic cross-sections A-A' (**Figure 4-2**) and A-A" (**Figure 4-3**) include the locations of underground utility pipes, which are discussed with regard to shallow groundwater flow in **Section 4.2**. The data used to construct the geologic cross-sections are presented in **Table 4-1** (data for geologic cross-section A-A') and **Table 4-2** (data for geologic cross-section A-A'). The boring logs used to create the cross-section data tables are contained in **Appendix E**.

Geologic cross-section A-A' (**Figure 4-2**) depicts the profiles for monitoring wells 2567-MW2, 2567-MW3 and 2567-MW6, and portrays the following lithology:

- In the boring of well 2567-MW2, asphalt was encountered at the surface, fill was encountered below the asphalt to a depth of 5 feet bgs, and native material was encountered beneath the fill to a depth of 13 feet bgs.
- In the boring of well 2567-MW3, asphalt was encountered at the surface, fill was encountered below the asphalt to a depth of 4 feet bgs, and native material was encountered beneath the fill to a depth of 13 feet bgs.
- In the boring of well 2567-MW6, topsoil and roots were encountered at the surface, fill was encountered below the topsoil to a depth of 5 feet bgs, and native material was encountered to a depth of 13 feet bgs.
- There are three underground utilities shown in geologic cross-section A-A': a 15-inch diameter sewer line, a 6-inch diameter gas line and a 15-inch diameter abandoned storm sewer line.
- Geologic cross-section A-A'' portrays an area of fill with unknown depth beneath the gas line, sanitary sewer line and abandon storm sewer line.

Geologic cross-section A-A" (**Figure 4-3**) depicts the profiles for monitoring wells 2567-MW2, 2567-MW1 and 2567-MW5, and portrays the following lithology:

• As in geologic cross-section A-A' (**Figure 4-2**), the boring of well 2567-MW2, asphalt was encountered at the surface, fill was encountered below the asphalt to a depth of 5 feet bgs, and native material was encountered beneath the fill to a depth of 13 feet bgs.



- In the boring of well 2567-MW1, asphalt was encountered at the surface, fill was encountered below the asphalt to a depth of 4 feet bgs, and native material was encountered to a depth of 13 feet bgs.
- In the boring of well 2567-MW5, native material was encountered from the surface to a depth of 12.5 feet bgs. As an approximation, geologic cross-section A-A" shows approximately 1 foot of topsoil and roots at the surface of well 2567-MW5, which was not noted on the boring log for this well.
- There are three underground utilities shown on geologic cross-section A-A": one 6-inch diameter gas line, one gas main of unknown diameter, and one 36-inch diameter water main.
- Geologic cross-section A-A" portrays an area of fill with unknown depth and lithology surrounding the gas and water mains.
- Geologic cross-section A-A'' portrays an area of fill with a depth of at least 11 feet in the vicinity of the former UST excavation.

The fill encountered in the well borings at Site 2567 consisted of light orange to brown sand (Unit 3). Fill with unknown lithology is portrayed in **Figure 4-2** as Unit 7. The native material encountered in the well borings at Site 2567 consisted of poorly sorted brown, green, gray and black clay, silt and fine sand (Units 4, 5, 8, 9 and 10) and gray sand with well-rounded gravel (Unit 11). The lithology of the native material is consistent with the Tinton Sand (Minard, 1969).

4.2 Groundwater Flow

During the groundwater sampling program at Site 2567 (28 quarterly rounds and two low-flow rounds), groundwater was encountered in monitoring wells at Site 2567 at depths ranging from 1.69 to 12.20 feet bgs (**Table 3-2**) with a slight gradient toward the southeast. Groundwater velocity and flow directions were predicted based on the interpretation of groundwater contour maps and slug test results, as well as the locations of underground utilities.

4.2.1 Groundwater Flow Direction

In accordance with NJAC 7:26E-3.13(d)2iv, 15 groundwater contour maps were generated for Site 2567 based on groundwater depth measurements from the seven monitoring wells collected on August 22, 2000 (Figure 4-4a), November 1, 2000 (Figure 4-4b), February 9, 2001 (Figure 4-4c), May 8, 2001 (Figure 4-4d), August 15, 2001 (Figure 4-4e), November 9, 2001 (Figure 4-4f), February 26, 2002 (Figure 4-4g), May 28, 2002 (Figure 4-4h), August 20, 2002 (Figure 4-4i), October 28, 2002 (Figure 4-4j), February 26, 2003 (Figure 4-4k), June 11, 2003 (Figure 4-4l), July 22, 2003 (Figure 4-4m), October 7, 2003 (Figure 4-4n) and January 16, 2004 (Figure 4-4o). The groundwater underlying Site 2567 appears to be consistently flowing to the southeast. No significant variations in groundwater flow conditions were observed in these 15 groundwater contour maps. Groundwater elevation data are presented in Table 3-2.



4.2.2 Hydrogeologic Properties

As discussed in **Section 3.4**, Versar conducted slug testing of the seven monitoring wells located at Site 2567 on August 16 and 17, 2001. Versar used the computer software *Aquifer Test* by Waterloo Hydrogeologic, Inc. (version 3.01, 2001) to reduce the slug testing data using the Bouwer-Rice methodologies. Data plots generated by Aquifer Test are presented in **Appendix I**. A summary of the calculated conductivity values is presented in **Table 4-3**.

The calculated conductivity values range from 18.8 feet/day at monitoring well 2567-MW7 to 35.6 feet/day at Monitoring Well 2567-MW3, with a calculated geometric mean of 25.9 feet/day. The variability in the range of hydraulic conductivities is associated with the shallow depth of the monitoring wells, partial penetration into the aquifer, and the heterogeneous nature of the fill material at the site. The geometric mean is used instead of the average due to the commonly high range of variability in hydraulic conductivity measurements.

The groundwater flow gradient for the site was estimated using the groundwater elevation data discussed above. The groundwater flow gradient (i) is calculated by measuring the distance (L) between two equipotential lines h_1 and h_2 using the following equation:

$$i = \frac{h_1 - h_2}{L}$$

The groundwater flow gradient for Site 2567, based on water level measurements collected on February 9, 2001, was estimated at approximately 0.02 feet per foot.

Groundwater flow velocity (v) in the vicinity of the site was then estimated using the groundwater flow gradient (i), an estimated hydraulic conductivity (K) for the surrounding soils based on the slug test results, and an assumed porosity (α) in the following equation:

$$v = \frac{Ki}{\alpha}$$

The hydraulic conductivity (K) used in the calculation, 25.9 feet/day, is the geometric average based on the results of slug testing performed by Versar (**Table 4-3**). The porosity (α) was estimated at 40% using average values for silt and sands (Heath, USGS, 1989). The groundwater velocity for the site was calculated to be approximately 1.3 feet per day (equal to 475 feet per year) based on the February 9, 2001 water-level measurements.

As discussed in **Section 2.4.2**, Site 2567 is located within the Composite Confining Unit, which typically has low hydraulic conductivities (on the order of 0.1 feet per day). However, the higher hydraulic conductivity of the subsurface materials at Site 2567 is most likely due to the following factors:



- Fill material is present in the subsurface throughout much of Site 2567.
- The native material (Tinton Sand Formation) found at Site 2567, is comprised of relatively coarse material such as sand and sub-rounded quartz gravel.



5.0 SITE CHEMICAL CHARACTERIZATION

This section includes a discussion of the chemical characterization of Site 2567 based on the various samples collected and analyzed including 30 rounds of monitoring well samples. DPW personnel were responsible for the collection of samples during this remedial investigation. Sample analyses were performed by the FMETL. In **Section 5.1**, groundwater sampling results are presented for samples collected between April 1997 and January 2004. In **Section 5.1**, the groundwater sampling results are evaluated and one potential COC (TBA) is identified for groundwater at Site 2567.

5.1 Groundwater Monitoring Well Sampling Results

This section presents a discussion of the results of laboratory analyses performed for the 30 rounds (28 quarterly rounds plus two additional low-flow rounds) of groundwater samples collected from April 1997 through January 2004 from the seven monitoring wells (2567-MW1 through 2567-MW7) at Site 2567. The groundwater samples were collected and analyzed for VOCs plus 15 TICs, SVOCs plus 15 TICs, pesticides, plychlorinated biphenyls (PCBs) and TAL metals. The two low-flow sampling rounds were conducted from May 31 to June 5, 2001 and June 25-26, 2001 using a low-flow groundwater sampling technique for TAL metals.

As discussed in **Section 2.4.2**, Fort Monmouth is underlain by a Class III-A aquifer. The appropriate groundwater quality criteria for Class III-A are the criteria for the most stringent classification for vertically or horizontally adjacent ground waters that are not Class III-A (NJAC 7:9-6.7e). The NJDEP criteria used for comparison of groundwater analytical results were the higher of the Practical Quantitation Limits (PQLs) and the NJDEP GWQC for Class II-A aquifers (NJAC 7:9-6, Table 1). Analytes detected in groundwater monitoring well samples at Site 2567 at concentrations above the NJDEP criteria are bold and highlighted in **Table 5-1**. The chain-of-custody forms for groundwater monitoring well samples and laboratory data sheets are provided in **Appendix G**. **Figure 5-1** shows the distribution of COCs for groundwater within the area of Site 2567.

During the 30 quarterly sampling events, a total of 11 VOCs were detected in site groundwater. Four VOCs were detected at concentrations that exceeded their respective GWQC in at least one sample, while the remaining seven VOCs were detected below their respective GWQC. A total of four SVOCs were detected in site groundwater below their respective GWQC. No pesticides or PCBs were detected in site groundwater. A total of 18 metals were detected in site groundwater. Five metals were detected at concentrations that exceed their respective GWQC in at least one sample, while the remaining 13 metals were detected below their respective GWQC.

Analytes exceeding the NJDEP GWQC in groundwater samples are presented in four subsections: VOCs (Section 5.1.1), SVOCs (Section 5.1.2), Pesticides and PCBs (Section 5.1.3) and TAL Metals (Section 5.1.4).



5.1.1 **VOCs**

During 30 quarterly sampling events, four VOCs were detected in site groundwater at concentrations that exceeded their respective GWQC in at least one sample.

Benzene was detected at concentrations exceeding the GWQC of 1.0 ug/L in eight rounds of sampling collected at two monitoring well locations. Concentrations ranged from 1.03 ug/L (sampling round #8) in 2567-MW3 to 39.4 ug/L (sampling round #2) in 2567-MW1.

Methylene chloride was detected at concentrations exceeding the interim GWQC of 2.0 ug/L in one round of sampling collected at one monitoring well location at a concentration of 25 ug/L (sampling round #2) in 2567-MW3.

MTBE was detected at concentrations exceeding the interim GWQC of 70 ug/L in four rounds of sampling collected at two monitoring well locations. Concentrations ranged from 81.82 ug/L (sampling round #5) in 2567-MW3 to 240 ug/L (sampling round #2) in 2567-MW1.

TBA was detected at concentrations exceeding the interim GWQC of 100 ug/L in 24 rounds of sampling collected at two monitoring well locations. Concentrations ranged from 143.26 ug/L (sampling round #7) in 2567-MW1 to 1,488.05 ug/L (sampling round #2) in 2567-MW1.

5.1.2 SVOCs

No SVOCs were detected above the appropriate GWQC at the site.

5.1.3 Pesticides and PCBs

No pesticides or PCBs were detected at the site.

5.1.4 TAL Metals

During 30 quarterly sampling events, five metals were detected in groundwater samples at concentrations above their respective NJDEP GWOC.

Aluminum was detected at concentrations exceeding the GWQC of 200 ug/L in four rounds of sampling collected at five monitoring well locations. Concentrations ranged from 261 ug/L (sampling round #4) in 2567-MW2 to 1,832 ug/L (sampling round #4) in 2567-MW3.

Iron was detected at concentrations exceeding the GWQC of 300 ug/L in four rounds of sampling collected at seven monitoring well locations. Concentrations ranged from 3,290 ug/L (Low Flow #2) in 2567-MW6 to 19,180 ug/L (sampling round #3) in 2567-MW5.



Lead was detected at concentrations exceeding the GWQC of 10 ug/L in seven rounds of sampling collected at two monitoring well locations. Concentrations ranged from 10.7 ug/L (sampling round #1) to 49.5 ug/L (sampling round #23) in 2567-MW5.

Manganese was detected at concentrations exceeding the GWQC of 50 ug/L in four rounds of sampling collected at six monitoring well locations. Concentrations ranged from 56.4 ug/L (sampling round #4) in 2567-MW5 to 271.8 ug/L (sampling round #3) in 2567-MW2.

Sodium was detected at concentrations exceeding the GWQC of 50,000 ug/L in two rounds of sampling collected at two monitoring well locations. Concentrations ranged from 51,200 ug/L (Low Flow #1) in 2567-MW1 to 98,300 ug/L (Low Flow #1) in 2567-MW2.

5.2 Groundwater Geoprobe® Point Sampling Results

This section presents a discussion of the results of laboratory analyses performed for the groundwater samples collected in February and April 2004 from the seven Geoprobe[®] points (GW-1, GW-2, GW-3, W-1, W-2, W-3 and W-4) at Site 2567. The groundwater samples were collected and analyzed for VOCs plus 15 TICs.

As discussed in **Section 2.4.2**, Fort Monmouth is underlain by a Class III-A aquifer. The appropriate groundwater quality criteria for Class III-A are the criteria for the most stringent classification for vertically or horizontally adjacent ground waters that are not Class III-A (NJAC 7:9-6.7e). The NJDEP criteria used for comparison of groundwater analytical results were the higher of the PQLs and the NJDEP GWQC for Class II-A aquifers (NJAC 7:9-6, Table 1). Analytes detected in Geoprobe[®] point groundwater samples at Site 2567 at concentrations above the NJDEP criteria are bold and highlighted in **Table 5-2**. The chain-of-custody forms for groundwater Geoprobe[®] point samples and laboratory data sheets are provided in **Appendix H**. **Figure 5-1** shows the distribution of COCs for groundwater within the area of Site 2567.

During the one sampling event, a total of two VOCs, MTBE and TBA, were detected in site groundwater at concentrations below their respective GWQC in at least one sample.

5.3 Potential COCs

In order to determine the contaminants of concern at Site 2567, the first step was to identify exceedences of the NJDEP criteria. These exceedences are presented in **Section 5.1** and **Section 5.2** above and in **Table 5-1** and **Table 5-2**. There were several factors that were used to eliminate or identify analytes as COCs. These factors include the magnitude and frequency of the exceedences, comparisons to low-flow sampling results (for metals only) and comparisons to established background concentrations. **Table 5-3** summarizes the process used to identify contaminants of concern at Site 2567.



There were four VOCs (benzene, methylene chloride, MTBE and TBA) that were detected in groundwater at concentrations exceeding the GWQC. Of the four VOCs detected above the NJDEP GWQC, three are considered to be uncharacteristic (benzene, MTBE and TBA), as discussed below:

- Benzene has not been detected in monitoring wells at Site 2567 above its NJDEP criteria of 1.0 ug/L since May 1999 and it has not been detected at all in monitoring wells since July 1999. Benzene was not detected in any of the Geoprobe® points. Although benzene was identified as a contaminant at Site 2567 in the 1995 Weston SI and closure report, due to the magnitude and frequency of its exceedences, benzene is no longer considered to be a COC.
- Methylene chloride exceeded the NJDEP criteria of 3.0 ug/L in only one groundwater monitoring well sample collected at Site 2567 since April 1997 and is therefore not considered to be a COC.
- MTBE has not been detected in groundwater samples at Site 2567 at concentrations exceeding its GWQC since June 1998. MTBE was not detected in any of the Geoprobe[®] points at concentrations exceeding its GWQC. Although MTBE was identified as a contaminant at Site 2567 in the 1995 Weston SI and closure report, due to the magnitude and frequency of its exceedences, MTBE is no longer considered to be a COC.
- TBA was detected above the NJDEP criteria of 100 ug/L during 23 rounds of sampling conducted at monitoring well 2567-MW1. TBA was also detected above the NJDEP criteria of 100 ug/L during one round of groundwater sampling at monitoring well 2567-MW3 (in August 1997). TBA was detected in one of the seven Geoprobe[®] points at a concentration below its GWQC. Based on these results, TBA is determined to be a COC at Site 2567.

There were no SVOCs detected at concentrations exceeding the GWQC, and therefore no SVOCs are considered COCs at Site 2567. In addition, there are no pesticides or PCBs considered to be COCs at Site 2567 because none were detected in groundwater samples at the site.

There were five metals that were detected in site groundwater at concentrations exceeding the NJDEP GWQC (aluminum, iron, lead, manganese and sodium). The specific exceedences and the identification of each of these metals as a potential contaminant of concern are discussed below. As presented in the Weston SI Report (1995), several natural and man-made factors contribute to the wide range in concentrations of metals in soils, which further impact the concentration of metals in groundwater. Soils derived from the glauconitic sands contain abundant aluminum, calcium, potassium, iron, magnesium and manganese (among others), which are likely to be present at elevated concentrations in the groundwater, particularly when sediments are entrained in the collected groundwater samples. A low-flow sampling methodology was proposed for use by the DPW and accepted by the NJDEP to assess the impact of suspended sediments on the dissolved phase metals concentrations at the site. Using a low-flow sampling methodology to reduce the presence of suspended sediment yielded substantial reductions in the dissolved phase concentrations of metals, particularly for the



constituents regarded as "non-native" (e.g., arsenic, antimony, beryllium, cadmium, chromium, cobalt, lead, mercury, selenium, silver, thallium, vanadium). Significant decreases in the concentrations of naturally occurring metals have been observed when the low-flow sampling procedure was used prior to analysis, including the results for aluminum, barium, calcium, copper, iron, magnesium, manganese, nickel, potassium, sodium and zinc. However, the native metal constituents (e.g., those indigenous to the soil types present at Fort Monmouth) were consistently present in the groundwater, even when the low-flow sampling methodology was employed.

The five different metals that were detected in site groundwater at concentrations exceeding the NJDEP GWQC are distinguished into background and non-native metals. The indigenous metals are compared to the Main Post Maximum Background Concentrations (MBC) identified in the Weston SI Report (1995), which are presented in **Tables 5-1** and **5-3**. The non-native metals are discussed in relation to the NJDEP GWQC only.

Of the five metals detected in site groundwater that exceed the NJDEP cleanup criteria, four metals (aluminum, iron, manganese and sodium) are common background constituents in Monmouth County soils. The water chemistry in areas underlain by glauconitic sediments (such as Red Bank, Tinton and Hornerstown Sands) is dominated by calcium, magnesium, manganese, aluminum and iron. Elevated concentrations of these metals are routinely observed in groundwater samples collected at Fort Monmouth. In consideration of these facts, the groundwater analytical results for these eight metals were compared to their respective MBCs of 121,000 ug/L (aluminum), 431,000 ug/L (iron), 331 ug/L (manganese), and 21,500 ug/L (sodium). Aluminum, iron and manganese are not considered to be COCs because these metals did not exceed their respective MBC. Sodium is not considered to be a COC due to the proximity of Site 2567 to sea water.

There was one non-native metal that exceeded its GWQC (lead). Lead is not considered to be a COC at Site 2567 because there were only seven exceedences of NJDEP criteria in groundwater samples collected at two monitoring well locations.

Two separate rounds of sampling (May 31 to June 5, 2001, and June 25-26, 2001) were performed during the groundwater sampling program using the low-flow groundwater sampling technique as discussed in **Section 3.2.1**. This technique was used to determine if the detected metal concentrations observed in the groundwater samples are a function of entrained sediments suspended in the groundwater during the course of well purging and sampling activities, or an accurate representation of dissolved phase aquifer/groundwater conditions. Since the five metals detected above the GWQC at Site 2567 were not considered to be COCs through other reasons (as discussed above), the low-flow sample results do not affect the determination of the COCs.

Based on the magnitude of the exceedences, the frequency of occurrences and the wideranging results, one VOC (TBA) is identified as potential COC at Site 2567 and is given



further consideration with regard to contaminant migration potential in **Section 6.0** of this RIR. No other potential COCs were identified at Site 2567.

5.4 Dissolved Oxygen

During each of the monitoring well sampling rounds, the DO of the groundwater was recorded prior to sampling. The average DO ranged from 1.85 mg/L in well 2567-MW7 to 3.31 in well 2567-MW5. The aquifer DO measurements for groundwater sampling rounds between April 1997 and January 2004 are shown in **Table 5-4**. The DO measurements are included in the laboratory data packages. The aquifer DO is discussed in more detail in **Section 6.1.3**.



6.0 CONTAMINANT MIGRATION AND GROUNDWATER USE DESIGNATION

As discussed above, there was one identified COCs in groundwater at Site 2567: TBA. The possible migration and degradation of this COC is discussed below.

Section 6.1 presents a groundwater model that addresses TBA biodegradation and migration at Site 2567. Predictions for the migration and change in TBA concentration over time are based on the most recent groundwater sampling results for TBA at Site 2567 and published biodegradation rates for TBA in groundwater. These model results are presented graphically and in tabular form.

Following the discussion of the groundwater migration model for Site 2567, **Section 6.2** presents the results of the sensitive receptor survey. A discussion of appropriate aquifer classification is provided in **Section 6.3**. The findings of the contaminant migration model and groundwater use designation are summarized in **Section 6.4**.

6.1 Groundwater Model Development

The parameters used in the groundwater flow model were based on Fort Monmouth survey data, published literature covering the hydrogeology of the region, as well as field measurements of groundwater elevation at the site (discussed in **Section 4.2**). A biodegradation spreadsheet model was used to predict the decay and contaminant transport of TBA at Site 2567. The biodegradation model incorporates the effects of horizontal groundwater flow, biodegradation and retardation.

6.1.1 Conceptual Site Model

Land surface at the Charles Wood Area is mostly flat with some moderate slopes, with elevation ranging from 20 feet amsl in the northeast to 60 feet amsl in the southwest. Site 2567 is located approximately 200 feet north of an unnamed tributary/drainage to Wampum Brook (**Figure 2-2**), which flows eastward into Wampum Brook. The USGS topographic map (**Figure 2-1**) shows that the land surface of the site is relatively flat with an elevation of approximately 30 feet amsl. Surface water runoff from Site 2567 is likely to flow south along Hope Road and into the unnamed tributary to Wampum Brook identified in **Figure 2-2**.

As discussed in **Section 2.4.1**, the geologic formations that outcrop at the Charles Wood Area of Fort Monmouth include the Tinton and Red Bank Sands, as well as the Hornerstown Formation. These formations, along with the Navesink Formation, are part of the Composite Confining Unit that overlies the Wenonah-Mount Laurel Aquifer (Zapecza, 1990). A cross section of the New Jersey Coastal plain that shows these formations is presented in **Figure 6-1**.



As discussed in **Section 4.1**, the lithology encountered at Site 2567 consists primarily of fill material, fine sand, silt and clay. The well borings in the paved area of Site 2567 (2567-MW1 through 2567-MW4) encountered fill with a maximum depth ranging from 4 to 9 feet bgs. The fill consisted of light orange and light green sand. The native material encountered in the well borings consisted of brown, green and black clay, silt and fine sand, as well as gray sand with well-rounded gravel. The lithology of the native material is consistent with the Tinton Sand (Minard, 1969).

As discussed in **Section 4.2**, groundwater was encountered in the seven monitoring wells at Site 2567 at depths ranging from 1.69 to 12.20 feet bgs. The groundwater underlying Site 2567 appears to be consistently flowing to the southeast with a gradient of approximately 0.02 feet per foot.

6.1.2 Biodegradation Model

A Microsoft Excel spreadsheet (**Table 6-1**) was used to predict the biodegradation and migration of TBA at Site 2567. The biodegradation model incorporates the effects of horizontal groundwater flow, first-order biodegradation and retardation. The results of this biodegradation model are discussed with respect to possible offsite migration of the TBA at Site 2567. The model results were used to explain groundwater sample results for the one identified COC at Site 2567.

As discussed in **Section 5.1**, TBA was detected in well 2567-MW1 during 23 of the 30 rounds of sampling at concentrations in excess of the NJDEP criteria of 100 ug/L at concentrations ranging from 143.26 ug/L to 1,488.05 ug/L. In one round of sampling (sampling round #5), TBA was detected below the NJDEP criteria of 100 ug/L in well 2567-MW1 at a concentration of 95.63 ug/L. TBA was also detected above the NJDEP criteria of 100 ug/L in well 2567-MW3 in only one round (940 ug/L in sampling round #2). Due to the infrequent occurances of TBA in well 2567-MW3, the biodegradation model does not address TBA contamination at this well. TBA was not detected in the other five wells sampled during the 30 rounds of groundwater samples collected and analyzed from Site 2567.

Due to the lack of a decreasing trend in the TBA detections in well 2567-MW1, a site-specific decay rate for TBA was not calculated. Instead, the first-order, aerobic decay constant of 0.0019 (1/day) was obtained from published results (high value listed in Howard, 1991) and used in the model. This published decay constant corresponds to a half-life of 365 days.

6.1.3 Dissolved Oxygen

The aerobic biodegradation of the COCs at Site 2567 is justified based on analysis of the DO observed during monitoring well sampling at Site 2567. During each sampling event at each well, DO was recorded while the wells were being purged. **Table 5-4** shows the DO measurements for the monitoring wells at Site 2567 during sampling events between April 1997 and January 2004.



Aerobic respiration is the first reaction in an aerobic environment that contains microorganisms capable of biodegradation (Wiedemeir, 1999). Once the available DO is depleted and anaerobic conditions dominate the interior regions of the organic contaminant plume, anaerobic microorganisms can utilize other electron acceptors in the following order of preference: nitrate, manganese, iron (III), sulfate and finally, carbon dioxide. As each electron acceptor being utilized for biodegradation becomes depleted, the next most preferable electron acceptor is utilized. Each successive redox couple provides less energy to the microorganism.

Aerobic degradation requires the presence of DO. If the subsurface environment becomes devoid of oxygen, the rate of aerobic biodegradation will typically be limited by oxygen supply rather than by nutrient concentration. For anaerobic biodegradation the microbial competition ultimately will determine the dominant process, but the dominant process can vary both temporally and spatially. Therefore, either iron (III) reduction, sulfate reduction or methanogenesis may dominate depending on seasonal variations in concentrations of DO and sulfate.

Using stoichiometry, a utilization factor can be developed showing the ratio of the oxygen consumed to the mass of DO consumed in the biodegradation reactions. Similarly, utilization factors can be developed to show the ratio of the mass of metabolic by-products (such as ferrous iron) that are generated to the mass of dissolved organic degraded in the biodegradation reactions. When the available electron acceptor/by-product concentrations are divided by the appropriate utilization factor, an estimate of the biodegradation capacity of the ground water flowing through the source zone and plume can be developed as follows:

Biodegradation Capacity (mg/L) =

{(Average Upgradient Electron Acceptor Concentration) - (Minimum Plume Zone Electron Acceptor Concentration)} / Utilization Factor

The upgradient well used in the calculation of Biodegradation Capacity is well 2567-MW2. The plume zone is assumed to be located in the vicinity of well 2567-MW1. The following utilization factors and site biodegradation capacity, based on the degradation of benzene, MTBE and TBA, are calculated for Site 2567:



Contaminant of Concern	Upgradient Well	Average Upgradient Dissolved Oxygen (mg/L)	Plume Zone Well	Minimum Plume Zone Dissolved Oxygen (mg/L)	Utilization Factor	Site Biodegradation Capacity (mg/L)								
	Aerobic Biodegeradation of Benzene: $C_6H_6 + 7.5O_2 \rightarrow 6CO_2 + 3H_2O$													
Benzene	2567-MW2	4.04	2567-MW3	1.00	3.08	0.98								
	Aerobic B	iodegeradation	of MTBE: C5	$H_{12}O + 7.5O_2$	→ 5CO ₂ + 6H ₂ O									
MTBE	2567-MW2	4.04	2567-MW3	1.00	2.73	1.11								
	Aerobic	Biodegeradation	on of TBA: C ₄	$H_{10}O + 6O_2 \rightarrow$	$4\mathrm{CO}_2 + 5\mathrm{H}_2\mathrm{O}$									
TBA	2567-MW2	4.04	2567-MW1	1.40	0.385	6.85								

The highest concentration of TBA detected at well 2567-MW1 (in February 2001) was 1,488.05 ug/L (=1.48805 mg/L). Based on the calculations presented in the preceding table and on site observations, groundwater has enough biodegradation capacity to degrade dissolved-phase TBA, if aerobic reactions are occurring at Site 2567

6.1.4 Model Results and Discussion

The TBA biodegradation model parameters and results for well 2567-MW1 is presented in **Table 6-1**. At monitoring well 2567-MW1, the initial TBA concentration was measured to be 1,488.05 ug/L on February 9, 2001. This concentration led to a predicted time of 3.9 years for compliance with the NJDEP criteria (100 ug/L). The migration distance of TBA from well 2567-MW1 is predicted to be 1,800 feet. The predicted TBA concentration at well 2567-MW1 is shown in **Figure 6-2**. **Figure 6-3** displays the area that is estimated to be impacted by future TBA migration.

The model predictions for TBA do not match observations of TBA concentrations in groundwater at Site 2567. If the TBA contamination will migrate approximately 1,800 feet in 3.9 years, as predicted in the biodegradation model, TBA should have already migrated to one of the three downgradient monitoring wells 2567-MW5, 2567-MW6 or 2567-MW7. However, TBA was not detected in any of these three monitoring wells in any of the sampling rounds presented in this RIR (see **Table 5-1**), and was also not detected in samples collected at well 2567-MW5 between May 1995 and April 1997. Additionally, TBA was not detected in six of seven groundwater Geoprobe sampling points. Therefore, it appears that no significant migration of TBA has occurred at Site 2567.

6.2 Sensitive Receptor Survey Results

The sensitive receptor survey was completed by performing two tasks: an Offsite Receptor Report and an NJDEP well record search.



Offsite Receptor Report

An Offsite Receptor Report (dated October 24, 2001) was prepared for Site 2567 by EDR of Southport, Connecticut. A copy of the Offsite Receptor Report, identifying sensitive receptors in the area, is provided in **Appendix J**.

The Offsite Receptor Report indicates that there are seven schools and one daycare facility located within a one-mile of Site 2567. The seven schools were located between ½ and 1 mile from Site 2567. The day care facility is located approximately ½ mile south of Site 2567 and approximately ¼ mile south of Wampum Brook.

Well Record Search

A search of the comprehensive well database maintained by the NJDEP Well Permitting and Regulations Section of the Bureau of Water Allocation was performed by Versar to identify groundwater wells that may be potentially affected by contaminant migration at Site 2567. The search was performed for a one-mile radius surrounding the central point of Site 2567.

The well records obtained during the Well Search are provided in **Appendix K** and are summarized in **Table 6-2**. The wells designated for domestic or irrigation uses are presented in **Figure 6-4**. The migration distance of 1,800 feet, which is discussed above, was used as a basis for comparison. There were no domestic wells identified by records within 1,800 feet of Site 2567 with the following exception (though actual water use and physical presence were not verified):

NJDEP Permit #2919540 Permit Date: 11/9/87

Location: N40°17'33" W74°04'53"

Depth of well: 200 feet

Approximate distance from site: 1,400 feet (southwest)

Due to the significant distance of this one sensitive receptor to Site 2567, as well as the south to southeasterly groundwater flow direction from Site 2567, the concern for this groundwater receptor is minimal. The probability that any well in the vicinity of the site is being used for consumptive purposes is low, thus minimizing health-based risks associated with ingestion. Therefore, no sensitive receptors are likely to be impacted by the presence of COCs in the groundwater beneath Site 2567.

6.3 Aquifer Classification

Upon review of the NJDEP Groundwater Quality Standards (NJAC 7:9-6), January 7, 1993, Site 2567 is found to be underlain by a Class III-A aquifer. The primary designated use for Class III-A ground water is the release or transmittal of groundwater to adjacent classification areas and surface water, as relevant. Secondary designated uses in



Class III-A include any reasonable uses. For an area to be classified as a Class III-A aquifer, the groundwater must meet the following characteristics:

- Class III-A groundwater includes portions of the saturated zones (that meet the criteria below) of the Woodbury Formation, Merchantville Formation, Marshalltown Formation, Navesink Formation, Hornerstown Formation, aquitard formations of the Potomac-Raritan-Magothy aquifer system and the Kirkwood aquifer system, portions of the glacial moraine and glacial lake deposits, and other geologic units having the characteristics of an aquitard. Class III-A areas have the following characteristics (NJAC 7:9-6.5):
 - The average thickness of a Class III-A aquifer must be at least 50 feet
 - Typical hydraulic conductivity of a Class III-A aquifer is approximately 0.1 feet/day or less
 - The aereal extent defined as Class III-A must be at least 100 acres.

The shallow aquifer at Site 2567 meets each of the four criteria listed above. These criteria are discussed below:

- The Charles Wood Area of Fort Monmouth is located within the outcrop area of the Composite Confining Unit (Martin, 1998), which includes the Red Bank Sand, Tinton Sand, Vincentown Formation, Manasquan Formation, Shark River Formation, Piney Point Formation and the basal clay of the Kirkwood Formation (see Section 2.4.2). The thickness of the Composite Confining Unit in the vicinity of Fort Monmouth is approximately 125 feet.
- Published hydraulic conductivities (Martin, 1998) for the Composite Confining Unit yield a geometric mean of 0.12 feet per day, which is consistent with an aquitard.
- The Charles Wood area of Fort Monmouth is greater than 100 acres.

6.4 Contaminant Migration Summary

TBA was identified as the only COC in groundwater at Site 2567 using the NJDEP GWQC for Class II-A aquifers. The Class II-A criteria were used for comparison with site-specific data obtained from the various sampling rounds because the GWQS (NJAC 7:9-6.7e) state that the groundwater quality criteria to be used for Class III-A aquifers are the most stringent criteria associated with vertically or horizontally adjacent groundwaters that are not Class III-A.

Groundwater modeling and a sensitive receptor survey were conducted to determine whether groundwater from Site 2567 could impact surface water, off-site domestic wells and the subsurface groundwater aquifers. The groundwater modeling shows the impact of TBA migration in groundwater will be minimal. The results of the groundwater modeling (Section 6.1) and sensitive receptor survey (Section 6.2) are summarized below:



- The surface waters nearest to Site 2567 are the unnamed tributary to Wampum Brook and Wampum Brook. Using published biodegradation rates for TBA, the biodegradation model predicts that the TBA will degrade at well 2567-MW1 within 3.9 years. However, because downgradient sampling did not detect TBA, impacts to surface water are not expected.
- The sensitive receptor survey indicates that the closest downstream domestic well is approximately 1,400 feet southwest of the site, which is too far off the predicted groundwater flow direction to be impacted by COC migration.
- The risk of impacts to human health or to domestic animals associated with the ingestion of the TBA is negligible. It is unlikely that the well in the vicinity of the site is used for consumptive purposes due to poor overall water quality and low well yields. The potential migration of COCs from Site 2567 to this well in any reasonable time period is not possible.



7.0 CONCLUSIONS AND RECOMMENDATIONS

Geologic publications show that Site 2567 is located within an aquitard (the Navesink-Hornerstown Confining Unit). The low hydraulic conductivity of the aquitard and the thickness of the aquitard at the site conform to the requirements of a Class III-A aquifer, as specified in the NJDEP GWQS (NJAC 7:9-6, January 7, 1993).

The analytical results for the groundwater samples collected between June 1997 and January 2004 indicate that TBA is a potential COC at Site 2567. The Class II-A criteria were used for comparison with site-specific data obtained from the various sampling rounds because the GWQS (N.J.A.C. 7:9-6.7e) state that the GWQC to be used for Class III-A aquifers are the most stringent criteria associated with vertically or horizontally adjacent groundwaters that are not Class III-A. Although previous investigations at Site 2567 did not address TBA as a potential COC, the current NJDEP interim groundwater criteria of 100 ug/L was used in reference to TBA concentrations in this RIR, and further remedial investigations should consider exceedences of this interim groundwater criteria.

Based on a review of the groundwater sampling results by the DPW and NJDEP, it appears that no significant migration of TBA has occurred at Site 2567. TBA degradation has the potential to occur at the site, based on the site results and the model. Continued monitoring of TBA degradation through natural attenuation is recommended at the site.

Quarterly groundwater sampling at Site 2567 will include groundwater samples collected from monitoring wells 2567-MW1, 2567-MW2, 2567-MW3, 2567-MW4, 2567-MW5, 2567-MW6 and 2567-MW7. The groundwater samples collected from these monitoring wells will be analyzed by the FMETL for VOCs plus 15 TICs. NJDEP GWQC for identified COC should be used for comparison to groundwater sampling results. A remedial action progress report will be submitted annually. The following table summarizes the groundwater sampling program at Site 2567.

Monitoring Well	Analyzed for	Future Sampling Status
2567-MW1	VOCs	Continue Quarterly Sampling
2567-MW2	VOCs	Continue Quarterly Sampling
2567-MW3	VOCs	Continue Quarterly Sampling
2567-MW4	VOCs	Continue Quarterly Sampling
2567-MW5	VOCs	Continue Quarterly Sampling
2567-MW6	VOCs	Continue Quarterly Sampling
2567-MW7	VOCs	Continue Quarterly Sampling



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TABLES

Table 2-1
Well Construction Summary
Site 2567 - Charles Wood Area
Fort Monmouth, New Jersey

Well ID	NJDEP Permit Number	Northing	Easting	Elevation of Inner Casing Survey Mark	Elevation of Ground Surface	Hole Diameter	Total Depth of Well	Depth to Top of Screen	Screen Length	Screen Diameter	Screen Material	Date of Construction
Units		ft	ft	ft (amsl) ⁽¹⁾	ft (amsl) ⁽¹⁾	in	ft (bgs) ⁽²⁾	ft (bgs) ⁽²⁾	ft	in		
2567-MW1	29-26925	532956.749	609537.780	33.93	34.14	10	13.0	3.0	10.0	4.0	10 Slot PVC	9/31/91
2567-MW2	29-26926	533016.726	609468.755	35.26	35.28	10	13.0	3.0	10.0	4.0	10 Slot PVC	10/1/91
2567-MW3	29-26947	532939.317	609472.358	33.88	33.94	10	13.0	3.0	10.0	4.0	10 Slot PVC	10/1/91
2567-MW4	29-26948	533042.700	609544.264	33.51	33.64	10	12.0	2.0	10.0	4.0	10 Slot PVC	9/31/91
2567-MW5	29-31783	532871.131	609697.518	34.99	31.83	8	12.5	2.5	10.0	4.0	20 Slot PVC	9/23/94
2567-MW6	29-42585	532869.379	609542.569	35.10	32.86	8	13.0	3.0	10.0	4.0	10 Slot PVC	5/12/00
2567-MW7	29-42586	532879.489	609473.420	36.34	33.41	8	13.0	3.0	10.0	4.0	10 Slot PVC	5/12/00

Notes:

Where a difference in reported data exists between a monitoring well permit and the corresponding boring log, data from the permit was used.

The wells presented in this table were installed by the Department of Public Works (DPW) at Fort Monmouth, New Jersey.

NA = Not available

Well locations were recorded using Trimble GPS equipment in August 2001.

2567 Table 2-1 Well Construction.xls 7/30/2004

⁽¹⁾ amsl = above mean sea level

⁽²⁾bgs = below ground surface

Round #	Sample ID	Monitoring Well	Date	Date Analysis	Matrix	Sample	Analytical Devenuetors	Analysia Mathad
Round #	Sample ID	ID	Collected	Started	Watrix	Type	Analytical Parameters	Analysis Method
	2446.01	Trip Blank	04/11/97	04/22/97	aqueous	Blank	VOCs +15	Method 624
	2446.02	Field Blank	04/11/97	04/22/97	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	2446.03	2567-MW4	04/11/97	04/22/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
1	2446.04	2567-MW5	04/11/97	04/22/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
1	2446.05	2567-MW2	04/11/97	04/22/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2446.06	2567-MW1	04/11/97	04/22/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2446.07	2567-MW3	04/11/97	04/22/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2446.08	Duplicate	04/11/97	04/22/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2940.01	Trip Blank	08/28/97	09/02/97	aqueous	Blank	VOCs +15	Method 624
	2940.02	Field Blank	08/28/97	09/02/97	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	2940.03	2567-MW5	08/28/97	09/02/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
2	2940.04	2567-MW2	08/28/97	09/02/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
-	2940.05	2567-MW4	08/28/97	09/02/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2940.06	2567-MW3	08/28/97	09/02/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2940.07	2567-MW1	08/28/97	09/08/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2940.08	Duplicate	08/28/97	09/08/97	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3188.01	Trip Blank	12/02/97	12/05/97	aqueous	Blank	VOCs +15	Method 624
	3188.02	Field Blank	12/02/97	12/05/97	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3188.03	2567-MW2	12/02/97	12/05/97	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
3	3188.04	2567-MW4	12/02/97	12/05/97	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
,	3188.05	2567-MW5	12/02/97	12/06/97	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3188.06	2567-MW1	12/02/97	12/06/97	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3188.07	2567-MW3	12/02/97	12/06/97	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3188.08	Duplicate	12/02/97	12/10/97	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3381.01	Trip Blank	03/04/98	03/06/98	aqueous	Blank	VOCs +15	Method 624
	3381.02	Field Blank	03/04/98	03/06/98	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3381.03	2567-MW1	03/04/98	03/06/98	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
4	3381.04	2567-MW2	03/04/98	03/06/98	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
•	3381.05	2567-MW3	03/04/98	03/06/98	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3381.06	2567-MW4	03/04/98	03/06/98	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3381.07	Duplicate	03/04/98	03/06/98	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3381.08	2567-MW5	03/04/98	03/06/98	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	3605.01	Trip Blank	06/01/98	06/02/98	aqueous	Blank	VOCs +15	Method 624
	3605.02	Field Blank	06/01/98	06/02/98	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	3605.03	2567-MW1	06/01/98	06/02/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
5	3605.04	2567-MW2	06/01/98	06/02/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3605.05	2567-MW3	06/01/98	06/02/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3605.06	2567-MW4	06/01/98	06/02/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3605.07	2567-MW5	06/01/98	06/02/98	aqueous	GW GW	VOCs+15; Lead	Method 624; Method 3113B
	3605.08	Duplicate	06/01/98	06/02/98	aqueous		VOCs+15; Lead	Method 624; Method 3113B
	3912.01	Trip Blank	09/24/98	10/05/98	aqueous	Blank	VOCs +15	Method 624
I	3912.02	Field Blank	09/24/98	09/29/98	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
I	3912.03	2567-MW4	09/24/98	09/29/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3912.04	2567-MW2	09/24/98	09/29/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
6	3912.05	2567-MW1	09/24/98	09/29/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
I	3912.06	Duplicate	09/24/98	09/29/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
I	3916.01	Field Blank	09/25/98	10/06/98	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
I	3916.02	2567-MW3	09/25/98	09/29/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3916.03	2567-MW5	09/25/98	09/29/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B

Notes:
GW: Groundwater
TAL metals: Target Analyte List metals
VOCs+15: Volatile Organic Compounds plus 15 tentatively identified compounds (TICs)
SVOCs+15: Semi-Volatile Organic Compounds plus 15 TiCs
*Low Flow Sampling Method was used to collect sample

Round #	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
	4144.01	Trip Blank	12/16/98	12/28/98	aqueous	Blank	VOCs +15	Method 624
	4144.02	Field Blank	12/16/98	12/28/98	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	4144.03	2567-MW1	12/16/98	12/28/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
7	4144.04	2567-MW2	12/16/98	12/28/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
,	4144.05	2567-MW3	12/16/98	12/28/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4144.06	2567-MW4	12/16/98	12/28/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4144.07	2567-MW5	12/16/98	12/28/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4144.08	Duplicate	12/16/98	12/28/98	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4296.01	Trip Blank	02/24/99	02/26/99	aqueous	Blank	VOCs +15	Method 624
	4296.02	Field Blank	02/24/99	02/26/99	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	4296.03	2567-MW1	02/24/99	02/26/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
8	4296.04	2567-MW2	02/24/99	02/26/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
· ·	4296.05	2567-MW3	02/24/99	02/26/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4296.06	2567-MW4	02/24/99	02/27/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4296.07	2567-MW5	02/24/99	02/27/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4296.08	Duplicate	02/24/99	02/27/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4524.01	Trip Blank	05/29/99	06/03/99	aqueous	Blank	VOCs +15	Method 624
	4524.02	Field Blank	05/29/99	06/01/99	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	4524.03	2567-MW1	05/29/99	06/01/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
9	4524.04	2567-MW2	05/29/99	06/01/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
,	4524.05	2567-MW3	05/29/99	06/01/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4524.06	2567-MW4	05/29/99	06/01/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4524.08	Duplicate	05/29/99	06/01/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4535.01	2567-MW5	06/08/99	06/10/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4635.01	Trip Blank	07/21/99	07/22/99	aqueous	Blank	VOCs +15	Method 624
	4635.02	Field Blank	07/21/99	07/22/99	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	4635.03	2567-MW1	07/21/99	07/22/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
10	4635.04	2567-MW2	07/21/99	07/22/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
10	4635.05	2567-MW3	07/21/99	07/22/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4635.06	2567-MW4	07/21/99	07/22/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4635.07	2567-MW5	07/21/99	07/22/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4635.08	Duplicate	07/21/99	07/22/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4871.01	Trip Blank	10/21/99	10/25/99	aqueous	Blank	VOCs +15	Method 624
	4871.02	Field Blank	10/21/99	10/25/99	aqueous	Blank	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
	4871.03	Duplicate	10/21/99	10/25/99	aqueous	GW	VOCs+15; SVOCs+25; Pesticides; PCBs; TAL metals	Method 624; Method 625; Method 608; Methods 3112B and 3120B
11	4872.01	2567-MW1	10/21/99	10/25/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4872.02	2567-MW2	10/21/99	10/25/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4872.03	2567-MW3	10/21/99	10/25/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4872.04	2567-MW4	10/21/99	10/25/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4872.05	2567-MW5	10/21/99	10/26/99	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5167.01	Trip Blank	02/14/00	02/16/99	aqueous	Blank	VOCs +15	Method 624
	5167.02	Field Blank	02/14/00	02/15/00	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	5167.03	Duplicate	02/14/00	02/15/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
12	5167.04	2567-MW1	02/14/00	02/15/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5167.05	2567-MW2	02/14/00	02/15/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5167.06	2567-MW3	02/14/00	02/15/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5167.07	2567-MW4	02/14/00	02/15/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5167.08	2567-MW5	02/14/00	02/15/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B

S167.08 2367-MW5 02/14/00 02/15/00

Notes:
GW: Groundwater
TAL metals: Target Analyte List metals
VOCs+15: Volatile Organic Compounds plus 15 tentatively identified compounds (TICs)
SVOCs+15: Semi-Volatile Organic Compounds plus 15 TICs
*Low Flow Sampling Method was used to collect sample

1	T	Monitori \A/-1'	Det-	Dete A!!		Carrell		
Round #	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
	5417.01	2567-MW1	05/15/00	05/17/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5417.02	2567-MW2	05/15/00	05/17/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5417.03	2567-MW3	05/15/00	05/17/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
13	5417.04	2567-MW4	05/15/00	05/17/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
13	5417.05	2567-MW5	05/15/00	05/17/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5417.06	Trip Blank	05/15/00	05/17/00	aqueous	Blank	VOCs +15	Method 624
	5417.07	Field Blank	05/15/00	05/17/00	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	5417.08	Duplicate	05/15/00	05/17/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5647.01	Trip Blank	08/22/00	08/31/00	aqueous	Blank	VOCs +15	Method 624
	5647.02	Field Blank	08/22/00	08/31/00	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	5647.03	Duplicate	08/22/00	08/31/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5647.04	2567-MW1	08/22/00	08/31/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5647.05	2567-MW2	08/22/00	08/31/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
14	5647.06	2567-MW3	08/22/00	08/31/00	aqueous	GW	VOCs+15: Lead	Method 624; Method 3113B
	5647.07	2567-MW4	08/22/00	08/31/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5647.08	2567-MW5	08/22/00	08/31/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5647.09	2567-MW6	08/22/00	08/31/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5647.10	2567-MW7	08/22/00	08/31/00	aqueous	GW	VOCs+15: Lead	Method 624; Method 3113B
	5825.01	Trip Blank	11/01/00	11/07/00	aqueous	Blank	VOCs +15	Method 624
	5825.02	Field Blank	11/01/00	11/07/00	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	5825.03	Duplicate	11/01/00	11/07/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5825.04	2567-MW1	11/01/00	11/07/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5825.05	2567-MW2	11/01/00	11/07/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
15	5825.06	2567-MW3	11/01/00	11/07/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5825.07	2567-MW4	11/01/00	11/07/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5825.08	2567-MW5	11/01/00	11/07/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5825.09	2567-MW6	11/01/00	11/07/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	5825.10	2567-MW7	11/01/00	11/07/00	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	707	Trip Blank	02/09/01	02/10/01	aqueous	Blank	VOCs +15	Method 624
	708	Field Blank	02/09/01	02/10/01	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	709	Duplicate	02/09/01	02/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	710	2567-MW1	02/09/01	02/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	711	2567-MW2	02/09/01	02/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
16	712	2567-MW3	02/09/01	02/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	713	2567-MW4	02/09/01	02/12/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	714	2567-MW5	02/09/01	02/12/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	715	2567-MW6	02/09/01	02/12/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	716	2567-MW7	02/09/01	02/12/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1615401	Field Blank	05/31/01	06/01/01	aqueous	Blank	TAL Metals	Method 3112B, 3120B
	1615405	Field Duplicate	05/31/01	06/01/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
Low Flow #1	1615402	2567-MW05	05/31/01	06/01/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
LOW 1 IOW #1	1615403	2567-MW04	05/31/01	06/01/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
	1615404	2567-MW01	05/31/01	06/01/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
	1616801	Field Blank	06/05/01	06/05/01	aqueous	Blank	TAL Metals	Method 3112B, 3120B
	1616802	2567-MW3	06/05/01	06/05/01	aqueous	GW	TAL Metals	Method 3112B, 3120B Method 3112B, 3120B
Low Flow #1	1616802	2567-MW3 2567-MW2	06/05/01	06/05/01	aqueous	GW	TAL Metals TAL Metals	Method 3112B, 3120B Method 3112B, 3120B
LOW Flow #1	1616803	2567-MW7	06/05/01	06/05/01		GW	TAL Metals	Method 3112B, 3120B Method 3112B, 3120B
	1616805	2567-MW6	06/05/01	06/05/01	aqueous aqueous	GW	TAL Metals	Method 3112B, 3120B
	1621101		06/25/01	06/25/01		Blank	TAL Metals	Method 3112B, 3120B
		Field Blank			aqueous	GW Blank		
	1621106	Field Duplicate	06/25/01	06/25/01	aqueous		TAL Metals	Method 3112B, 3120B
Low Flow #2	1621102	2567-MW1	06/25/01	06/25/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
	1621105	2567-MW2	06/25/01	06/25/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
	1621104	2567-MW3	06/25/01	06/25/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
	1621103	2567-MW4	06/25/01	06/25/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
	1621401	Field Blank	06/26/01	06/26/01	aqueous	Blank	TAL Metals	Method 3112B, 3120B
Law Et	1621405	Field Duplicate	06/26/01	06/26/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
Low Flow #2	1621404	2567-MW5	06/26/01	06/26/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
	1621403	2567-MW6	06/26/01	06/26/01	aqueous	GW	TAL Metals	Method 3112B, 3120B
	1621402	2567-MW7	06/26/01	06/26/01	aqueous	GW	TAL Metals	Method 3112B, 3120B

Notes:
GW: Groundwater
TAL metals: Target Analyte List metals
VOCs+15: Volatile Organic Compounds plus 15 tentatively identified compounds (TICs)
\$VOCs+15: Semi-Volatile Organic Compounds plus 15 TiCs
*Low Flow Sampling Method was used to collect sample

Round #	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
	1610701	Trip Blank	05/08/01	05/16/01	aqueous	Blank	VOCs +15	Method 624
	1610702	Field Blank	05/08/01	05/16/01	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	1610703	Duplicate	05/08/01	05/16/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1610704	2567-MW1	05/08/01	05/16/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
17	1610705	2567-MW2	05/08/01	05/16/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
17	1610706	2567-MW3	05/08/01	05/16/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1610707	2567-MW4	05/08/01	05/16/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1610708	2567-MW5	05/08/01	05/16/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1610709	2567-MW6	05/08/01	05/16/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1610710	2567-MW7	05/08/01	05/16/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1635601	Trip Blank	08/15/01	08/23/01	aqueous	Blank	VOCs +15	Method 624
	1635602	Field Blank	08/15/01	08/23/01	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	1635603	Duplicate	08/15/01	08/23/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1635604	2567-MW1	08/15/01	08/23/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
18	1635605	2567-MW2	08/15/01	08/23/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1635606	2567-MW3	08/15/01	08/23/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1635607 1635608	2567-MW4 2567-MW5	08/15/01 08/15/01	08/23/01 08/23/01	aqueous	GW GW	VOCs+15; Lead	Method 624; Method 3113B
	1635609	2567-MW6	08/15/01	08/23/01	aqueous	GW	VOCs+15; Lead VOCs+15; Lead	Method 624; Method 3113B
	1635610	2567-MW7	08/15/01	08/23/01	aqueous aqueous	GW	VOCs+15; Lead VOCs+15; Lead	Method 624; Method 3113B Method 624; Method 3113B
	1657301	Trip Blank	11/09/01	11/10/01	aqueous	Blank	VOCs+15, Lead VOCs+15	Method 624
	1657302	Field Blank	11/19/01	11/10/01	aqueous	Blank	VOCs+15 VOCs+15; Lead	Method 624; Method 3113B
	1657303	Duplicate Duplicate	11/19/01	11/10/01	aqueous	GW	VOCs+15; Lead VOCs+15; Lead	Method 624; Method 3113B Method 624; Method 3113B
	1657304	2567-MW1	11/19/01	11/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1657305	2567-MW2	11/19/01	11/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
19	1657306	2567-MW3	11/19/01	11/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1657307	2567-MW4	11/19/01	11/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1657308	2567-MW5	11/19/01	11/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1657309	2567-MW6	11/19/01	11/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	1657310	2567-MW7	11/09/01	11/10/01	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2011201	Trip Blank	02/26/02	03/04/02	aqueous	Blank	VOCs +15	Method 624
	2011202	Field Blank	02/26/02	03/04/02	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	2011203	Duplicate	02/26/02	03/04/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2011204	2567-MW1	02/26/02	03/04/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
20	2011205	2567-MW2	02/26/02	03/04/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
20	2011206	2567-MW3	02/26/02	03/04/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2011207	2567-MW4	02/26/02	03/04/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2011208	2567-MW5	02/26/02	03/04/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2011209	2567-MW6	02/26/02	03/04/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2011210	2567-MW7	02/26/02	03/04/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2033101	Trip Blank	05/28/02	06/06/02	aqueous	Blank	VOCs +15	Method 624
	2033102	Field Blank	05/28/02	06/06/02	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	2033103	Duplicate	05/28/02	06/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2033104	2567-MW1	05/28/02	06/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
21	2033105	2567-MW2	05/28/02	06/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2033106	2567-MW3	05/28/02	06/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2033107 2033108	2567-MW4 2567-MW5	05/28/02 05/28/02	06/06/02 06/06/02	aqueous	GW GW	VOCs+15; Lead VOCs+15; Lead	Method 624; Method 3113B Method 624; Method 3113B
	2033108	2567-MW6	05/28/02	06/06/02	aqueous	GW	VOCs+15; Lead VOCs+15; Lead	
	2033110	2567-MW7	05/28/02	06/06/02	aqueous aqueous	GW	VOCs+15; Lead VOCs+15; Lead	Method 624; Method 3113B Method 624; Method 3113B
	2058501	Trip Blank	08/20/02	08/22/02	aqueous	Blank	VOCs+15; Lead VOCs +15	Method 624 Method 624
ĺ	2058501	Field Blank	08/20/02	08/22/02	aqueous	Blank	VOCs+15 VOCs+15; Lead	Method 624; Method 3113B
l	2058503	Duplicate	08/20/02	08/22/02	aqueous	GW	VOCs+15; Lead VOCs+15; Lead	Method 624; Method 3113B Method 624; Method 3113B
	2058504	2567-MW1	08/20/02	08/22/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2058505	2567-MW2	08/20/02	08/22/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
22	2058506	2567-MW3	08/20/02	08/22/02	aqueous	GW	VOCs+15; Lead VOCs+15; Lead	Method 624; Method 3113B
ĺ	2058507	2567-MW4	08/20/02	08/22/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2058508	2567-MW5	08/20/02	08/22/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2058509	2567-MW6	08/20/02	08/22/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2058510	2567-MW7	08/20/02	08/22/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
Notes:	2030310	2301-1V1 VV /	00/20/02	00/22/02	aqueous	O 11	v OCs - 13, Leau	IVICUIOU 024, IVICUIOU 3113D

Notes:
GW: Groundwater
TAL metals: Target Analyte List metals
VOCs+15: Volatile Organic Compounds plus 15 tentatively identified compounds (TICs)
SVOCs+15: Semi-Volatile Organic Compounds plus 15 TICs
*Low Flow Sampling Method was used to collect sample

Round #	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
	2076201	Trip Blank	10/28/02	11/06/02	aqueous	Blank	VOCs +15	Method 624
	2076202	Field Blank	10/28/02	11/06/02	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	2076203	Duplicate	10/28/02	11/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2076204	2567-MW1	10/28/02	11/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
23	2076205	2567-MW2	10/28/02	11/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2076206	2567-MW3	10/28/02	11/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2076207	2567-MW4	10/28/02	11/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2076208	2567-MW5	10/28/02	11/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2076209	2567-MW6	10/28/02	11/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	2076210	2567-MW7	10/28/02	11/06/02	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3008301	Trip Blank	02/26/03	03/12/03	aqueous	Blank	VOCs +15	Method 624
	3008302	Field Blank	02/26/03	03/12/03	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	3008303	Duplicate	02/26/03	03/12/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3008304	2567-MW1	02/26/03	03/12/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
24	3008305	2567-MW2	02/26/03	03/12/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3008306	2567-MW3	02/26/03	03/12/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3008307	2567-MW4	02/26/03	03/12/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3008308	2567-MW5	02/26/03	03/12/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3008309	2567-MW6	02/26/03	03/12/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3008310	2567-MW7	02/26/03	03/12/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3028301	Trip Blank	06/11/03	06/24/03	aqueous	Blank	VOCs +15	Method 624
	3028302	Field Blank	06/11/03	06/24/03	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	3028303	Duplicate	06/11/03	06/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3028304	2567-MW1	06/11/03	06/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
25	3028305	2567-MW2	06/11/03	06/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3028306	2567-MW3	06/11/03	06/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3028307	2567-MW4	06/11/03	06/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3028308	2567-MW5	06/11/03	06/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3028309	2567-MW6	06/11/03	06/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3028310	2567-MW7	06/11/03	06/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3039701	Trip Blank	07/22/03	07/24/03	aqueous	Blank	VOCs +15	Method 624
	3039702	Field Blank	07/22/03	07/24/03	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	3039703	Duplicate	07/22/03	07/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3039704	2567-MW1	07/22/03	07/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
26	3039705	2567-MW2	07/22/03	07/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3039706	2567-MW3	07/22/03	07/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3039707	2567-MW4	07/22/03	07/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3039708	2567-MW5	07/22/03	07/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3039709	2567-MW6	07/22/03	07/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3039710	2567-MW7	07/22/03	07/24/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3063401	Trip Blank	10/07/03	10/17/03	aqueous	Blank	VOCs +15	Method 624
	3063402	Field Blank	10/07/03	10/17/03	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	3063403	Duplicate	10/07/03	10/17/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3063404	2567-MW1	10/07/03	10/17/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
27	3063405	2567-MW2	10/07/03	10/17/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3063406	2567-MW3	10/07/03	10/17/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3063407	2567-MW4	10/07/03	10/17/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3063408	2567-MW5	10/07/03	10/17/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3063409	2567-MW6	10/07/03	10/17/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	3063410	2567-MW7	10/07/03	10/17/03	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4004301	Trip Blank	01/16/04	01/27/04	aqueous	Blank	VOCs +15	Method 624
	4004302	Field Blank	01/16/04	01/27/04	aqueous	Blank	VOCs+15; Lead	Method 624; Method 3113B
	4004303	Duplicate	01/16/04	01/27/04	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4004304	2567-MW1	01/16/04	01/27/04	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
28	4004305	2567-MW2	01/16/04	01/27/04	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4004306	2567-MW3	01/16/04	01/27/04	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4004307	2567-MW4	01/16/04	01/27/04	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4004308	2567-MW5	01/16/04	01/27/04	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4004309	2567-MW6	01/16/04	01/27/04	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B
	4004310	2567-MW7	01/16/04	01/27/04	aqueous	GW	VOCs+15; Lead	Method 624; Method 3113B

Notes:
GW: Groundwater
TAL metals: Target Analyte List metals
VOCs+15: Volatile Organic Compounds plus 15 tentatively identified compounds (TICs)
SVOCs+15: Semi-Volatile Organic Compounds plus 15 TICs
*Low Flow Sampling Method was used to collect sample

Round #	Sample ID	Monitoring Well ID	Date Collected	Date Analysis Started	Matrix	Sample Type	Analytical Parameters	Analysis Method
	4008901	Trip Blank	02/02/04	02/06/04	aqueous	Blank	VOCs +15	Method 624
	4008902	Field Blank	02/02/04	02/06/04	aqueous	Blank	VOCs+15	Method 624
	4008903	GW-1	02/02/04	02/06/04	aqueous	GW	VOCs+15	Method 624
	4008905	GW-2	02/02/04	02/06/04	aqueous	GW	VOCs+15	Method 624
	4008906	GW-3	02/02/04	02/06/04	aqueous	GW	VOCs+15	Method 624
	4008904	Duplicate	02/02/04	02/06/04	aqueous	GW	VOCs+15	Method 624
1	4031601	Trip Blank	04/30/04	05/06/04	aqueous	Blank	VOCs+15	Method 624
	4031602	Field Blank	04/30/04	05/06/04	aqueous	Blank	VOCs+15	Method 624
	4031603	W-1	04/30/04	05/06/04	aqueous	GW	VOCs+15	Method 624
	4031604	W-2	04/30/04	05/06/04	aqueous	GW	VOCs+15	Method 624
	4031606	W-3	04/30/04	05/06/04	aqueous	GW	VOCs+15	Method 624
	4031607	W-4	04/30/04	05/06/04	aqueous	GW	VOCs+15	Method 624
	4031605	Duplicate	04/30/04	05/06/04	aqueous	GW	VOCs+15	Method 624

Notes:
GW: Groundwater
VOCs+15: Volatile Organic Compounds plus 15 tentatively identified compounds (TICs)

2

3

NS

Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground- water Elev.									
2567-MW1	33.93	04/11/97	3.80	30.13	08/28/97	4.80	29.13	12/02/97	3.90	30.03	03/04/98	3.51	30.42
2567-MW2	35.26	04/11/97	3.40	31.86	08/28/97	4.30	30.96	12/02/97	3.45	31.81	03/04/98	2.92	32.34
2567-MW3	33.88	04/11/97	3.15	30.73	08/28/97	4.00	29.88	12/02/97	3.10	30.78	03/04/98	2.48	31.4
2567-MW4	33.51	04/11/97	2.55	30.96	08/28/97	3.20	30.31	12/02/97	2.45	31.06	03/04/98	2.11	31.4
2567-MW5	34.99	04/11/97	7.20	27.79	08/28/97	7.50	27.49	12/02/97	7.20	27.79	03/04/98	7.30	27.69

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Notes:

1) Elev.: Elevation in feet above mean sea level.

2567-MW6

2567-MW7

2) Depth to water: depth in feet from the inner casing survey mark.

Round#:

35.10

36.34

1

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	Round#:	5			5			6 7					
Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground- water Elev.									
2567-MW1	33.93	06/01/98	4.06	29.87	NS	NS	NS	09/24/98	5.21	28.72	12/09/98	4.90	29.03
2567-MW2	35.26	06/01/98	3.59	31.67	NS	NS	NS	09/24/98	12.20	23.06	12/09/98	3.42	31.84
2567-MW3	33.88	06/01/98	3.99	29.89	06/19/98	3.99	29.89	09/25/98	4.56	29.32	12/16/98	4.25	29.63
2567-MW4	33.51	06/01/98	2.33	31.18	06/19/98	2.33	31.18	09/24/98	3.55	29.96	12/12/98	3.11	30.4
2567-MW5	34.99	06/01/98	7.55	27.44	NS	NS	NS	09/25/98	7.59	27.4	12/16/98	7.34	27.65
2567-MW6	35.10	NS	NS	NS									

NS

NS

NS

Notes:

1) Elev.: Elevation in feet above mean sea level.

2567-MW7

2) Depth to water: depth in feet from the inner casing survey mark.

36.34

NS

Round#: 8 9 10 11

Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground- water Elev.									
2567-MW1	33.93	02/24/99	3.75	30.18	05/29/99	4.20	29.73	07/21/99	5.48	28.45	10/21/99	4.03	29.9
2567-MW2	35.26	02/24/99	3.38	31.88	05/29/99	3.83	31.43	07/21/99	5.03	30.23	10/21/99	3.65	31.61
2567-MW3	33.88	02/24/99	3.16	30.72	05/29/99	3.55	30.33	07/21/99	4.85	29.03	10/21/99	3.93	29.95
2567-MW4	33.51	02/24/99	2.44	31.07	05/29/99	2.76	30.75	07/21/99	3.98	29.53	10/21/99	2.37	31.14
2567-MW5	34.99	02/24/99	8.16	26.83	06/08/99	7.33	27.66	07/21/99	7.87	27.12	10/21/99	8.57	26.42
2567-MW6	35.10	NS	NS	NS									
2567-MW7	36.34	NS	NS	NS									

Notes:

1) Elev.: Elevation in feet above mean sea level.

2) Depth to water: depth in feet from the inner casing survey mark.

Round#: 12 13 14 15

Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground- water Elev.									
2567-MW1	33.93	02/14/00	3.31	30.62	05/15/00	4.04	29.89	08/22/00	3.87	30.06	11/01/00	4.24	29.69
2567-MW2	35.26	02/14/00	3.00	32.26	05/15/00	3.77	31.49	08/22/00	3.51	31.75	11/01/00	4.15	31.11
2567-MW3	33.88	02/14/00	3.42	30.46	05/15/00	3.40	30.48	08/22/00	3.17	30.71	11/01/00	3.56	30.32
2567-MW4	33.51	02/14/00	1.69	31.82	05/15/00	2.65	30.86	08/22/00	2.49	31.02	11/01/00	2.91	30.6
2567-MW5	34.99	02/14/00	5.75	29.24	05/15/00	6.92	28.07	08/22/00	6.73	28.26	11/01/00	7.16	27.83
2567-MW6	35.10	NS	NS	NS	NS	NS	NS	08/22/00	7.06	28.04	11/01/00	7.26	27.84
2567-MW7	36.34	NS	NS	NS	NS	NS	NS	08/22/00	6.65	29.69	11/02/00	6.80	29.54

Notes:

1) Elev.: Elevation in feet above mean sea level.

2) Depth to water: depth in feet from the inner casing survey mark.

Table 3-3
Groundwater Elevation Summary
Site 2567
Fort Monmouth, New Jersey

	Round#:	16			Low Flow 1			Low Flow 2			17		
Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground- water Elev.	Date	Depth to Water	Ground- water Elev.	Date	Depth to Water	Ground- water Elev.	Date	Depth to Water	Ground- water Elev.
2567-MW1	33.93	02/09/01	3.30	30.63	02/09/01	3.30	30.63	02/09/01	3.30	30.63	05/08/01	4.15	29.78
2567-MW2	35.26	02/09/01	2.75	32.51	02/09/01	2.75	32.51	02/09/01	2.75	32.51	05/08/01	3.95	31.31
2567-MW3	33.88	02/09/01	2.50	31.38	02/09/01	2.50	31.38	02/09/01	2.50	31.38	05/08/01	3.40	30.48
2567-MW4	33.51	02/09/01	1.99	31.52	02/09/01	1.99	31.52	02/09/01	1.99	31.52	05/08/01	2.68	30.83
2567-MW5	34.99	02/09/01	5.26	29.73	02/09/01	5.26	29.73	02/09/01	5.26	29.73	05/08/01	7.47	27.52
2567-MW6	35.10	02/09/01	6.44	28.66	02/09/01	6.44	28.66	02/09/01	6.44	28.66	05/08/01	7.42	27.68
2567-MW7	36.34	02/09/01	6.23	30.11	02/09/01	6.23	30.11	02/09/01	6.23	30.11	05/08/01	7.02	29.32

Notes:

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

	Round#:	18			19			20			21		
Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground- water Elev.									
2567-MW1	33.93	08/15/01	4.95	28.98	11/09/01	5.11	28.82	02/26/02	3.95	29.98	05/28/02	4.09	29.84
2567-MW2	35.26	08/15/01	4.65	30.61	11/09/01	4.81	30.45	02/26/02	3.86	31.4	05/28/02	3.83	31.43
2567-MW3	33.88	08/15/01	4.30	29.58	11/09/01	4.30	29.58	02/26/02	3.29	30.59	05/28/02	3.40	30.48
2567-MW4	33.51	08/15/01	3.50	30.01	11/09/01	3.65	29.86	02/26/02	2.71	30.8	05/28/02	2.83	30.68
2567-MW5	34.99	08/15/01	7.70	27.29	11/09/01	7.83	27.16	02/26/02	6.95	28.04	05/28/02	5.91	29.08
2567-MW6	35.10	08/15/01	8.15	26.95	11/09/01	8.09	27.01	02/26/02	6.82	28.28	05/28/02	7.29	27.81
2567-MW7	36.34	08/15/01	7.75	28.59	11/09/01	7.56	28.78	02/26/02	6.71	29.63	05/28/02	6.83	29.51

Notes:

1) Elev.: Elevation in feet above mean sea level.

2) Depth to water: depth in feet from the inner casing survey mark.

	Round#:	22			23			24			25		
Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground- water Elev.									
2567-MW1	33.93	08/20/02	5.45	28.48	10/28/02	3.62	30.31	02/26/03	3.11	30.82	06/11/03	3.35	30.58
2567-MW2	35.26	08/20/02	5.13	30.13	10/28/02	3.32	31.94	02/26/03	2.71	32.55	06/11/03	3.00	32.26
2567-MW3	33.88	08/20/02	4.03	29.85	10/28/02	2.98	30.9	02/26/03	2.39	31.49	06/11/03	2.55	31.33
2567-MW4	33.51	08/20/02	3.96	29.55	10/28/02	2.26	31.25	02/26/03	1.84	31.67	06/11/03	2.15	31.36
2567-MW5	34.99	08/20/02	8.03	26.96	10/28/02	5.95	29.04	02/26/03	5.37	29.62	06/11/03	5.78	29.21
2567-MW6	35.10	08/20/02	8.78	26.32	10/28/02	6.62	28.48	02/26/03	6.24	28.86	06/11/03	6.50	28.6
2567-MW7	36 34	08/20/02	8 28	28.06	10/28/02	6.40	29 94	02/26/03	6.07	30.27	06/11/03	6.26	30.08

Notes:

1) Elev.: Elevation in feet above mean sea level.

2) Depth to water: depth in feet from the inner casing survey mark.

	Round#:	26			27			28		
Well ID	Elev. of Inner Casing Survey Mark	Date	Depth to Water	Ground- water Elev.	Date	Depth to Water	Ground- water Elev.	Date	Depth to Water	Ground- water Elev.
2567-MW1	33.93	07/22/03	4.39	29.54	10/07/03	4.23	29.7	01/16/04	3.60	30.33
2567-MW2	35.26	07/22/03	3.91	31.35	10/07/03	3.89	31.37	01/16/04	3.42	31.84
2567-MW3	33.88	07/22/03	3.81	30.07	10/07/03	3.52	30.36	01/16/04	2.95	30.93
2567-MW4	33.51	07/22/03	2.62	30.89	10/07/03	2.75	30.76	01/16/04	2.37	31.14
2567-MW5	34.99	07/22/03	7.30	27.69	10/07/03	7.17	27.82	01/16/04	6.93	28.06
2567-MW6	35.10	07/22/03	7.61	27.49	10/07/03	7.31	27.79	01/16/04	6.65	28.45

29.15

10/07/03

29.46

01/16/04

29.97

6.37

07/22/03

Notes:

1) Elev.: Elevation in feet above mean sea level.

2) Depth to water: depth in feet from the inner casing survey mark.

36.34

3) NS: Not Sampled

2567-MW7

Table 4-1 Data for Geologic Cross-Section A-A' Site 2567 - Charles Wood Area Fort Monmouth, New Jersey

Well ID	Units	2567-MW2	2567-MW3	2567-MW6
Elevation of Top of Casing	ft (amsl)	35.26	33.88	35.1
Elevation of Ground Surface	ft (amsl)	35.28	33.94	32.86
Elevation of Top of Screen	ft (amsl)	32.28	30.94	29.86
Elevation of Groundwater (5/8/01)	ft (amsl)	31.31	30.48	27.68
Elevation of Top of Unit 4	ft (amsl)	30.28	NA	NA
Elevation of Top of Unit 5	ft (amsl)	27.28	29.94	NA
Elevation of Top of Unit 6	ft (amsl)	NA	NA	32.86
Elevation of Bottom of Well	ft (amsl)	22.28	20.94	19.86

Explanation of Units (see Minard, 1969):

Surface Materials:

*Unit 1 = topsoil/roots

*Unit 2 = asphalt/base stone

*Unit 3 = light orange and brown sand - fill

Native Material (Tinton Sand or Hornerstown Sand Formation):

Unit 4 =light green sand

Unit 5 = dark brown/black clay with some fine sand

Unit 6 = medium-fine sand

Notes

*Shown in geologic cross section A-A' but not in table above

All measurements in feet. amsl: above mean sea level

NA: Not Applicable

Unit numbering matches Geologic Cross Section A-A"

Table 4-2 Data for Geologic Cross-Section A-A" Site 2567 - Charles Wood Area Fort Monmouth, New Jersey

Well ID	Units	2567-MW2	2567-MW1	2567-MW5
Elevation of Top of Casing	ft (amsl)	35.26	33.93	34.99
Elevation of Ground Surface	ft (amsl)	35.28	34.14	31.83
Elevation of Top of Screen	ft (amsl)	32.28	31.14	29.33
Elevation of Groundwater (5/8/01)	ft (amsl)	31.31	29.78	27.52
Elevation of Top of Unit 1	ft (amsl)	0	NA	NA
Elevation of Top of Unit 2	ft (amsl)	30.28	NA	NA
Elevation of Top of Unit 3	ft (amsl)	27.28	32.14	NA
Elevation of Top of Unit 7	ft (amsl)	NA	NA	32.33
Elevation of Top of Unit 8	ft (amsl)	NA	NA	30.83
Elevation of Top of Unit 9	ft (amsl)	NA	NA	29.83
Elevation of Top of Unit 10	ft (amsl)	NA	NA	28.83
Elevation of Bottom of Well	ft (amsl)	22.28	21.14	19.33

Explanation of Units (see Minard, 1969):

Surface Materials:

*Unit 1 = topsoil/roots

*Unit 2 = asphalt/base stone

Unit 3 =light orange and brown sand - fill

Unit 4 = light green sand - fill

*Unit 7 = fill, unknown depth and lithology

Native Material (Tinton Sand Formation):

Unit 5 = dark brown/black clay with some fine green sand

Unit 8 = brown fine sand

Unit 9 = black, soft clay

Unit 10 = brown fine sand and silts

Unit 11 = gray medium sand with well-rounded gravel

Notes:

*Shown in geologic cross section A-A" but not in table

All measurements in feet.

amsl: above mean sea level

NA: Not Applicable

Unit numbering matches Geologic Cross Section A-A'

Table 4-3
Slug Testing Results Summary
Site 2567 - Charles Wood Area
Fort Monmouth, New Jersey

Well ID	Date	Depth to Static Water Level	DTW at t=0	b	DTW Adjustment	Hydraulic Conductivity (feet/day)
2567-MW1	8/17/2001	4.97	7.464	5.536	0.007	35.1
2567-MW2	8/17/2001	4.52	7.154	5.846	0.038	28.5
2567-MW3	8/17/2001	5.49	7.827	5.173	0.789	35.6
2567-MW4	8/17/2001	3.42	5.330	6.670	0.108	20.2
2567-MW5	8/17/2001	7.56	10.405	2.095	0.005	24.4
2567-MW6	8/17/2001	8.14	10.685	2.315	0.013	23.6
2567-MW7	8/16/2001	7.75	10.348	2.652	0.083	18.8

Geometric Mean of Hydraulic Conductivity (feet/day):

25.9

Notes:

DTW = Depth To Water

Depth to Static Water Level was estimated by subtracting 0.3 ft. from the measured DTW at the end of each test.

b = height of water in well at the beginning of the test.

DTW Adjustment = factor by which raw data was adjusted so final hermit data point equals final measured DTW.

Fort Monmouth, New Jersey

		Well ID	2567-MW1														
Lab Sample ID	NJDEP	Site Specific	2446.06	2940.07	3188.06	3381.03	3605.03	3912.05	4144.03	4296.03	4524.03	4635.03	4872.01	5167.04	5417.01	5647.04	5825.04
Sample Date	Criteria	MBC ⁽¹⁾	04/11/97	08/28/97	12/02/97	03/04/98	06/01/98	09/24/98	12/16/98	02/24/99	05/29/99	07/21/99	10/21/99	02/14/00	05/15/00	08/22/00	11/01/00
		Round No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Volatiles																
Acetone	700	N/A	ND														
Benzene	1	N/A	ND	39.4	ND												
2-Butanone	300	N/A	ND														
Carbon Disulfide	NLE	N/A	ND														
Ethylbenzene	700	N/A	ND														
Methylene Chloride	2	N/A	ND														
MTBE ⁽³⁾	70	N/A	ND	240	20.3	37	24.23	10.02	3.43	26.15	9.16	3.33	4.8	12.05	5.24	1.2	15.04
Di-isopropyl ether ⁽³⁾	100	N/A	ND	ND	3.66	ND											
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	ND	357	560	95.63	283	143.26	675	605.1	155.56	497.3	992	458.88	218.42	ND
Toluene	1000	N/A	ND	1.3	ND												
Xylenes ⁽³⁾	1000	N/A	ND	72.7	ND												
Se	mi-Volatiles				•	•	•				•	•	•				
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	1.25	ND	NS										
Naphthalene ⁽³⁾	100	N/A	NS	NS	ND	ND	NS										
Di-n-butylphthalate	900	N/A	NS	NS	ND	ND	NS										
Pyridine ⁽³⁾	100	N/A	NS	NS	ND	ND	NS										
Pes	Pesticides/PCBs				ND	ND	NS										
	Metals				•	•	•				•	•	•				
Aluminum	200	121000	NS	NS	128	186	NS										
Barium	2000	699	NS	NS	356.7	367.1	NS										
Beryllium	20	N/A	NS	NS	ND	ND	NS										
Cadmium	4	N/A	NS	NS	ND	ND	NS										
Calcium	NLE	45400	NS	NS	46880	52030	NS										
Chromium	100	N/A	NS	NS	1.8	3	NS										
Cobalt	NLE	N/A	NS	NS	ND	ND	NS										
Copper	1000	65.6	NS	NS	40	23	NS										
Iron	300	431000	NS	NS	4112	5774	NS										
Lead	10	N/A	1.8	1.4	7	ND	0.5	ND	ND	ND	ND	ND	1.3	1.31	ND	ND	ND
Magnesium	NLE	62700	NS	NS	4970	5480	NS										
Manganese	50	331	NS	NS	92.8	107.6	NS										
Mercury	2	N/A	NS	NS	0.4	ND	NS										
Nickel	100	187	NS	NS	2.4	2.9	NS										
Potassium	NLE	137000	NS	NS	7120	7390	NS										
Sodium	50000	21500	NS	NS	76190	48910	NS										
Vanadium	NLE	N/A	NS	NS	ND	ND	NS										
Zinc	5000	233	NS	NS	63	37	NS										

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and \boldsymbol{bold}

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

Fort Monmouth, New Jersey

		Well ID	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1	2567-MW1
Lab Sample ID	NJDEP	Site Specific	710	1615404	1621102	1610704	1635604	1657304	2011204	2033104	2058504	2076204	3008304	3028304	3039704	3063404	4004304
Sample Date	Criteria	MBC ⁽¹⁾	02/09/01	5/31/2001	6/25/2001	05/08/01	08/15/01	11/09/01	2/26/2002*	05/28/02	08/20/02	10/28/02	02/26/03	06/11/02	07/22/03	10/07/03	01/16/04
		Round No.	16	LF1 ⁽²⁾	LF2 ⁽²⁾	17	18	19	20	21	22	23	24	25	26	27	28
	Volatiles																
Acetone	700	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE ⁽³⁾	70	N/A	4.83	NS	NS	2.1	ND	1.09	1.61	ND	ND	ND	ND	1.78	1.93	ND	2.08
Di-isopropyl ether ⁽³⁾	100	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)(3)	100	N/A	1488.05	NS	NS	764.25	248.74	ND	859.38	331.75	441.16	259.69	828.6	186.42	205.86	175.48	224.08
Toluene	1000	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes ⁽³⁾	1000	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Se	mi-Volatiles				•			•			•	•		•	•		
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	900	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pes	Pesticides/PCBs				NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Metals				1									1			
Aluminum	200	121000	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	2000	699	NS	526	0.528	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	20	N/A	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	4	N/A	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Calcium	NLE	45400	NS	68200	64.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	100	N/A	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	NLE	N/A	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	1000	65.6	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	431000	NS	8580	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Lead	10	N/A	ND	ND	ND	0.93	ND	ND	ND	ND	ND	1.22	1.4	ND	ND	ND	ND
Magnesium	NLE 50	62700	NS	7900	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS NC
Manganese	50	331	NS	148	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Mercury Nickel	100	N/A 187	NS NS	ND ND	ND ND	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
	NLE	137000	NS NS	6060	ND ND	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Potassium Sodium	50000	21500	NS NS	51200	47.3	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Vanadium	NLE	N/A	NS	ND	47.3 ND	NS NS	NS	NS	NS NS	NS NS	NS	NS	NS NS	NS NS	NS	NS	NS NS
Vanadium Zinc	5000	N/A 233	NS	9.4	ND ND	NS NS	NS	NS	NS NS	NS NS	NS	NS	NS NS	NS NS	NS NS	NS	NS NS
ZiiiC	3000	433	NO	7.4	ND	IND	IND	NO	N9	GNI	CNI	CNI	CNI	GNI	CN	INO	INO

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and \boldsymbol{bold}

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

⁽³⁾Interim Criteria used as NJDEP criteria

Fort Monmouth, New Jersey

		Well ID	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2	2567-MW2
Lab Sample ID	NJDEP	Site Specific	2446.05	2940.04	3188.03	3381.04	3605.04	3912.04	4144.04	4296.04	4524.04	4635.04	4872.02	5167.05	5417.02	5647.05	5825.05
Sample Date	Criteria	MBC ⁽¹⁾	04/11/97	08/28/97	12/02/97	03/04/98	06/01/98	09/24/98	12/16/98	02/24/99	05/29/99	07/21/99	10/21/99	02/14/00	05/15/00	08/22/00	11/01/00
		Round No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Volatiles																
Acetone	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.99	ND
Benzene	1	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE ⁽³⁾	70	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-isopropyl ether ⁽³⁾	100	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes ⁽³⁾	1000	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Se	mi-Volatiles					•			•	•		•		•		•	
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	ND	6.98	NS										
Naphthalene ⁽³⁾	100	N/A	NS	NS	4.79	6.98	NS										
Di-n-butylphthalate	900	N/A	NS	NS	1.08	ND	NS										
Pyridine ⁽³⁾	100	N/A	NS	NS	ND	ND	NS										
Pes	sticides/PCBs		NS	NS	ND	ND	NS										
	Metals			i i						1		1		1		1	
Aluminum	200	121000	NS	NS	78	261	NS										
Barium	2000	699	NS	NS	796.2	188.9	NS										
Beryllium	20	N/A	NS	NS	ND	ND	NS										
Cadmium	4	N/A	NS	NS	ND	ND	NS										
Calcium	NLE	45400	NS	NS	67840	21250	NS										
Chromium	100	N/A	NS	NS	1.7	1.9	NS										
Cobalt	NLE	N/A	NS	NS	ND	ND	NS										
Copper	1000	65.6	NS	NS	8	23	NS										
Iron	300	431000	NS	NS	16290	12450	NS										
Lead	10	N/A	10.7	ND	20	8	1.4	ND	ND	ND	ND	ND	1.2	1.49	ND	ND	ND
Magnesium	NLE 50	62700	NS	NS	7520	2030	NS	NS NC									
Manganese	50	331	NS	NS	271.8	99.6	NS	NS	NS NC	NS	NS NC						
Mercury Nickel	2 100	N/A 187	NS NS	NS NS	0.4 3.9	ND 2.5	NS NS										
	NLE	137000	NS NS	NS NS	8730	7880	NS NS										
Potassium Sodium	50000	21500	NS NS	NS NS	58690	26640	NS NS										
Vanadium	NLE	N/A	NS NS	NS NS	ND	ND	NS NS	NS NS	NS	NS NS	NS	NS	NS NS	NS NS	NS	NS NS	NS NS
Vanadium Zinc	5000	N/A 233	NS NS	NS NS	53	93	NS NS	NS NS	NS NS	NS	NS	NS	NS NS	NS NS	NS NS	NS	NS NS
ZiiiC	3000	433	INO.	CNI	33	93	NO	CN	ONI	GNI	GNI	GNI	CNI	No.	INO	NO	IND

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and \boldsymbol{bold}

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

Fort Monmouth, New Jersey

Well ID 2567-MW2 1657305 2033105 3039705 Lab Sample ID NJDEP Site Specific 1616803 1621105 1610705 1635605 2011205 2058505 2076205 3008305 3028305 3063405 4004305 Sample Date Criteria $MRC^{(1)}$ 02/09/01 5/31/2001 6/25/2001 05/08/01 08/15/01 11/09/01 02/26/02 05/28/02 08/20/02 10/28/02 02/26/03 06/11/03 07/22/03 10/07/03 01/16/04 LF1 25 Round No. 16 LF2 17 18 19 20 21 22 23 24 27 28 26 Volatiles Acetone 700 N/A ND NS NS 3.31 ND ND ND ND ND ND 4.19 ND ND ND ND Benzene 1 N/A ND NS NS ND -Butanone N/A ND NS NS 2.25 ND 300 Carbon Disulfide NLE N/A ND NS NS ND ND ND ND ND 1.94 ND ND ND ND ND ND thylbenzene 700 N/A ND NS NS ND Methylene Chloride 2 N/A ND NS NS ND N/A ND ND ND MTRE(3) 70 ND NS NS ND ND ND ND ND ND ND ND ND 100 ND NS NS ND Di-isopropyl ether(3) N/A tert-Butyl Alcohol (TBA)(3) 100 ND NS NS ND N/A 1000 ND NS ND Toluene N/A NS Xylenes(3) 1000 ND NS NS ND N/A Semi-Volatiles bis(2-Ethylhexyl)phthalate N/A 30 NS Naphthalene⁽³⁾ 100 NS N/A NS NS NS NS Di-n-butylphthalate 900 N/A NS Pyridine⁽³⁾ N/A NS Pesticides/PCBs NS Metals Aluminum 121000 NS 72.1 ND NS 398 283 NS NS NS NS Barium 2000 699 NS NS NS NS NS NS NS NS ND Beryllium 20 N/A NS ND NS Cadmium N/A NS ND 1.81 NS Calcium NLE 45400 NS 52400 26700 NS Chromium 100 N/A NS 0.574 1.15 NS NLE NS NS NS NS NS NS NS Cobalt N/A NS ND ND NS NS NS NS NS 1000 65.6 NS 4.72 8.83 NS Copper 300 431000 NS 5890 14300 NS Iron ead 10 N/A ND ND ND 1.02 ND ND ND ND ND 2.47 ND ND ND 0.831 ND 3370 NS Magnesium NLE 62700 NS 5490 NS 50 331 NS 113 125 NS Manganese Mercury 2 N/A NS 0.13 ND NS Nickel 100 187 NS ND ND NS otassium NLE 137000 NS 6630 4380 NS 50000 98300 Sodium 21500 NS 27300 NS NLE N/A ND 2.18 Vanadium 27.3 233 NS ND NS Zinc

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

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NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

⁽³⁾Interim Criteria used as NJDEP criteria

Fort Monmouth, New Jersey

		Well ID	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3
Lab Sample ID	NJDEP	Site Specific	2446.07	2940.06	3188.07	3381.05	3605.05	3916.02	4144.06	4296.05	4524.05	4635.05	4872.03	5167.06	5417.03	5647.06	5825.06
Sample Date	Criteria	MBC ⁽¹⁾	04/11/97	08/28/97	12/02/97	03/04/98	06/01/98	09/25/98	12/16/98	02/24/99	05/29/99	07/21/99	10/21/99	02/14/00	05/15/00	08/22/00	11/01/00
		Round No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Volatiles																
Acetone	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	N/A	ND	ND	4.31	19	4.68	5.96	15.45	1.03	1.7	ND	ND	ND	ND	ND	ND
2-Butanone	300	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	1.04	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE ⁽³⁾	70	N/A	ND	62	188	102	81.82	27.27	20.54	3.3	26.34	8.98	13.08	3.78	9.35	5.36	20.24
Di-isopropyl ether ⁽³⁾	100	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	940	ND	ND	27.52	ND	19.38	ND							
Toluene	1000	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes ⁽³⁾	1000	N/A	ND	ND	ND	8.6	ND	3.62	3.67	ND	1.29	ND	ND	ND	ND	ND	ND
Sei	mi-Volatiles					•			•	•	•						•
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	ND	1.29	NS										
Naphthalene ⁽³⁾	100	N/A	NS	NS	1.92	1.67	NS										
Di-n-butylphthalate	900	N/A	NS	NS	3.9	ND	NS										
Pyridine ⁽³⁾	100	N/A	NS	NS	4.5	ND	NS										
Pes	ticides/PCBs		NS	NS	ND	ND	NS										
	Metals																
Aluminum	200	121000	NS	NS	341	1832	NS										
Barium	2000	699	NS	NS	212.1	356.5	NS										
Beryllium	20	N/A	NS	NS	ND	ND	NS										
Cadmium	4	N/A	NS	NS	ND	ND	NS										
Calcium	NLE	45400	NS	NS	27450	39820	NS										
Chromium	100	N/A	NS	NS	1.5	3.8	NS										
Cobalt	NLE	N/A	NS	NS	ND	ND	NS										
Copper	1000	65.6	NS	NS	79	22	NS										
Iron	300	431000	NS	NS	5342	13860	NS										
Lead	10	N/A	2.5	ND	10	ND	ND	ND	ND	1	ND	ND	1.3	1.22	ND	ND	ND
Magnesium	NLE	62700	NS	NS	2910	4560	NS										
Manganese	50	331	NS	NS	56.6	144.4	NS	NS	NS NC	NS							
Mercury Nickel	2 100	N/A 187	NS NS	NS NS	0.4	ND 1.7	NS NS										
	NLE	137000	NS NS	NS NS	5440	1.7 6460	NS NS										
Potassium Sodium	50000	21500	NS NS	NS NS	26920	39610	NS NS										
	NLE	N/A	NS NS	NS NS	ND	39010	NS NS										
Vanadium Zinc	5000	N/A 233	NS	NS NS	81	30	NS NS	NS	NS NS	NS NS							
Notes	3000	233	110	11/3	01	30	11/2	INO	119	11/0	11/0	11/0	11/3	11/3	11/2	11/2	149

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and \boldsymbol{bold}

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

Table 5-1 Groundwater Monitoring Well Sampling Results Site 2567 Fort Monmouth, New Jersey

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		Well ID	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3	2567-MW3
Lab Sample ID	NJDEP	Site Specific	712	1616802	1621104	1610706	1635606	1657306	2011206	2033106	2058506	2076206	3008306	3028306	3039706	3063406	4004306
Sample Date	Criteria	MBC ⁽¹⁾	02/09/01	5/31/2001	6/25/2001	05/08/01	08/15/01	11/09/01	02/26/02	05/28/02	08/20/02	10/28/02	02/26/03	06/11/03	07/22/03	10/07/03	01/16/04
		Round No.	16	LF1	LF2	17	18	19	20	21	22	23	24	25	26	27	28
Volatiles																	
Acetone	700	N/A	ND	NS	NS	ND	2.97	ND	ND	ND	ND						
Benzene	1	N/A	ND	NS	NS	ND											
2-Butanone	300	N/A	ND	ND	ND	ND	31.95	ND									
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	NS	NS	ND											
MTBE ⁽³⁾	70	N/A	1.96	NS	NS	11.95	17.8	5.51	4.14	3.13	ND	2.37	3.64	ND	6.82	4.56	ND
Di-isopropyl ether ⁽³⁾	100	N/A	ND	NS	NS	ND											
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	NS	NS	ND	67.42	ND	31.59	ND	ND	ND	ND	ND	ND	13.51	ND
Toluene	1000	N/A	ND	NS	NS	ND											
Xylenes ⁽³⁾	1000	N/A	ND	NS	NS	ND	1.38	ND									
Semi-Volatiles																	
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	900	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pesticides/PCBs			NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Metals																	
Aluminum	200	121000	NS	195	22.1	NS											
Barium	2000	699	NS	298	275	NS											
Beryllium	20	N/A	NS	ND	ND	NS											
Cadmium	4	N/A	NS	ND	ND	NS											
Calcium	NLE	45400	NS	32200	33100	NS											
Chromium	100	N/A	NS	2.97	ND	NS											
Cobalt	NLE	N/A	NS	ND	ND	NS											
Copper	1000	65.6	NS	6.27	9.93	NS											
Iron	300	431000	NS	12400	4670	NS											
Lead	10 NLE	N/A 62700	ND	1.92 3490	ND 4030	0.96	ND	ND NS	ND NS	ND	ND NS	ND	ND NS	ND NS	0.983	ND NS	ND NS
Magnesium Manganese	50	62700 331	NS NS	3490 137	4030 74.3	NS NS											
Mercury	2	N/A	NS NS	0.11	74.3 ND	NS NS											
Nickel	100	187	NS NS	ND	ND ND	NS NS											
Potassium	NLE	137000	NS	4660	5470	NS	NS NS	NS NS	NS NS	NS	NS	NS NS	NS NS	NS NS	NS	NS NS	NS NS
Sodium	50000	21500	NS	30700	61100	NS	NS NS	NS	NS NS	NS NS							
Vanadium	NLE	N/A	NS	2.46	ND	NS											
Zinc	5000	233	NS	22.7	16.5	NS											
N .			.10	-2.7	. 5.0	.10	.10	.10	.10	.10	110	.10	.10	210	.10	.10	.10

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

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(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

Fort Monmouth, New Jersey

		Well ID	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4
Lab Sample ID	NJDEP	Site Specific	2446.03	2940.05	3188.04	3381.06	3605.07	3912.03	4144.05	4296.06	4524.06	4635.06	4872.04	5167.07	5417.08	5647.07	5825.07
Sample Date	Criteria	MBC ⁽¹⁾	04/11/97	08/28/97	12/02/97	03/04/98	06/01/98	09/24/98	12/16/98	02/24/99	05/29/99	07/21/99	10/21/99	02/14/00	05/15/00	08/22/00	11/01/00
		Round No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Volatiles																	
Acetone	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.57	ND
Benzene	1	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE ⁽³⁾	70	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-isopropyl ether ⁽³⁾	100	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes ⁽³⁾	1000	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Semi-Volatiles																	
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	ND	1.03	NS										
Naphthalene ⁽³⁾	100	N/A	NS	NS	ND	ND	NS										
Di-n-butylphthalate	900	N/A	NS	NS	1.37	ND	NS										
Pyridine ⁽³⁾	100	N/A	NS	NS	ND	ND	NS										
Pesticides/PCBs			NS	NS	ND	ND	NS										
Metals				i i						1				1		1	
Aluminum	200	121000	NS	NS	1208	608	NS										
Barium	2000	699	NS	NS	156	103.9	NS										
Beryllium	20	N/A	NS	NS	ND	ND	NS										
Cadmium	4	N/A	NS	NS	ND	2.2	NS										
Calcium	NLE	45400	NS	NS	19850	14720	NS										
Chromium	100	N/A	NS	NS	9	1.5	NS										
Cobalt	NLE	N/A	NS	NS	1.7	2.5	NS										
Copper	1000	65.6	NS	NS	14	11	NS										
Iron	300	431000	NS	NS	3586	4212	NS										
Lead	10	N/A	2.3	ND	9	ND 1700	ND	ND	ND	ND	ND	ND	1.2	1.4	ND	ND	ND
Magnesium	NLE 50	62700 331	NS NS	NS NS	2320 90	1700 78.6	NS NS										
Manganese	2	331 N/A	NS NS	NS NS	0.3	7 8.6 ND	NS NS										
Mercury Nickel	100	187	NS NS	NS NS	4.8	10.8	NS NS										
Potassium	NLE	137000	NS NS	NS NS	2810	ND	NS NS	NS NS	NS NS	NS NS	NS	NS NS	NS NS	NS NS	NS	NS NS	NS NS
Sodium	50000	21500	NS NS	NS NS	15600	12580	NS	NS NS	NS NS	NS	NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Vanadium	NLE	N/A	NS	NS	3	ND	NS										
Zinc	5000	233	NS	NS	57	79	NS										
	5000	200	110	110	JI	17	110	110	110	110	140	110	140	110	110	110	110

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and \boldsymbol{bold}

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

Table 5-1 **Groundwater Monitoring Well Sampling Results** Site 2567

Fort Monmouth, New Jersey

		Well ID	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4	2567-MW4
Lab Sample ID	NJDEP	Site Specific	713	1615403	1621103	1610707	1635607	1657307	2011207	2033107	2058507	2076207	3008307	3028307	3039707	3063407	4004307
Sample Date	Criteria	MBC ⁽¹⁾	02/09/01	5/31/2001	6/25/2001	05/08/01	08/15/01	11/09/01	02/26/02	05/28/02	08/20/02	10/28/02	02/26/03	06/11/03	07/22/03	10/07/03	01/16/04
		Round No.	16	LF1	LF2	17	18	19	20	21	22	23	24	25	26	27	28
	Volatiles																
Acetone	700	N/A	ND	NS	NS	4.54	ND										
Benzene	1	N/A	ND	NS	NS	ND											
2-Butanone	300	N/A	ND	ND	ND	2.88	ND										
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	NS	NS	ND											
MTBE ⁽³⁾	70	N/A	ND	NS	NS	ND											
Di-isopropyl ether ⁽³⁾	100	N/A	ND	NS	NS	ND											
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	NS	NS	ND											
Toluene	1000	N/A	ND	NS	NS	ND											
Xylenes ⁽³⁾	1000	N/A	ND	NS	NS	ND											
Se	mi-Volatiles																
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	900	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pes	sticides/PCBs		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Metals				•	•	•			•	•		•				
Aluminum	200	121000	NS	20.2	602	NS											
Barium	2000	699	NS	233	196	NS											
Beryllium	20	N/A	NS	ND	ND	NS											
Cadmium	4	N/A	NS	ND	1.18	NS											
Calcium	NLE	45400	NS	27100	20900	NS											
Chromium	100	N/A	NS	0.729	1.79	NS											
Cobalt	NLE	N/A	NS	0.757	1.85	NS											
Copper	1000	65.6	NS	ND	29.4	NS											
Iron	300	431000	NS	6510	4160	NS											
Lead	10 N. F.	N/A	ND	ND	6.18	ND	2.2	ND	ND	ND	ND	ND	ND	2.26	1.22	ND	ND
Magnesium	NLE 50	62700 331	NS NS	3090 160	3240 118	NS NS											
Manganese	50	331 N/A	NS NS	ND	0.13	NS NS											
Mercury Nickel	100	N/A 187	NS NS	2.68	8.27	NS NS											
Potassium	NLE	137000	NS NS	3300	2980	NS NS											
Sodium	50000	21500	NS NS	22800	19300	NS NS											
Vanadium	NLE	N/A	NS	1.47	1.73	NS	NS NS	NS	NS	NS NS	NS	NS NS	NS NS	NS NS	NS	NS NS	NS
Zinc Zinc	5000	233	NS	18.6	30.8	NS											
Zinc	3000	200	IND	10.0	30.0	NO	IND	IND	CMI	CM	No	No	IND	IND	IND	IND	IND

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion

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Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded andbold

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

(2)Low Flow Sampling Method used to collect sample

⁽³⁾Interim Criteria used as NJDEP criteria

Table 5-1 Groundwater Monitoring Well Sampling Results Site 2567 Fort Monmouth, New Jersey

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		Well ID	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5
Lab Sample ID	NJDEP	Site Specific	2446.04	2940.03	3188.05	3381.08	3605.06	3916.03	4144.07	4296.07	4535.01	4635.07	4872.05	5167.08	5417.05	5647.08	5825.08
Sample Date	Criteria	MBC ⁽¹⁾	04/11/97	08/28/97	12/02/97	03/04/98	06/01/98	09/25/98	12/16/98	02/24/99	06/08/99	07/21/99	10/21/99	02/14/00	05/15/00	08/22/00	11/01/00
		Round No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Volatiles																
Acetone	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE ⁽³⁾	70	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-isopropyl ether ⁽³⁾	100	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes ⁽³⁾	1000	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Se	mi-Volatiles																
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	ND	ND	NS										
Naphthalene ⁽³⁾	100	N/A	NS	NS	ND	ND	NS										
Di-n-butylphthalate	900	N/A	NS	NS	1.3	ND	NS										
Pyridine ⁽³⁾	100	N/A	NS	NS	ND	ND	NS										
Pes	sticides/PCBs		NS	NS	ND	ND	NS										
	Metals					•		•		•	•					•	
Aluminum	200	121000	NS	NS	406	362.6	NS										
Barium	2000	699	NS	NS	93.1	58.9	NS										
Beryllium	20	N/A	NS	NS	1.3	ND	NS										
Cadmium	4	N/A	NS	NS	ND	ND	NS										
Calcium	NLE	45400	NS	NS	21120	12180	NS										
Chromium	100	N/A	NS	NS	5.5	ND	NS										
Cobalt	NLE	N/A	NS	NS	ND	ND	NS										
Copper	1000	65.6	NS	NS	14	13.4	NS										
Iron	300	431000	NS	NS	19180	16370	NS										
Lead	10 N. F.	N/A	2.7	ND	7	ND	ND	ND	ND	l NG	ND	ND	4.4	1.21	ND	1.6	2.4
Magnesium	NLE	62700	NS	NS	3410	1961	NS										
Manganese	50	331	NS NS	NS NS	100.2	56.4	NS	NS NS	NS	NS	NS NS	NS NS	NS NS	NS	NS	NS NS	NS NS
Mercury Nickel	100	N/A 187	NS NS	NS NS	0.4 6.5	ND 3.4	NS NS										
	NLE	137000	NS NS	NS NS	3530	2675	NS NS										
Potassium Sodium	50000	21500	NS NS	NS NS	10480	9134	NS NS										
			NS NS	NS NS	10480	6.8	NS NS										
Vanadium Zinc	NLE 5000	N/A 233	NS NS	NS NS	91	43.8	NS NS										
ZIIC	3000	233	CN	NO	91	43.6	NO	CN	GNI	GNI	CN	N9	CNI	No	NO	CNI	CNI

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and \boldsymbol{bold}

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

(3)Interim Criteria used as NJDEP criteria

Table 5-1 Groundwater Monitoring Well Sampling Results Site 2567 Fort Monmouth, New Jersey

Well ID 2567-MWS 2567

		Well ID	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5	2567-MW5
Lab Sample ID	NJDEP	Site Specific	714	1615402	1621404	1610708	1635608	1657308	2011208	2033108	2058508	2076208	3008308	3028308	3039708	3063408	4004308
Sample Date	Criteria	MBC ⁽¹⁾	02/09/01	5/31/2001	6/26/2001	05/08/01	08/15/01	11/09/01	02/26/02	05/28/02	08/20/02	10/28/02	02/26/03	06/11/03	07/22/03	10/07/03	01/16/04
		Round No.	16	LF1	LF2	17	18	19	20	21	22	23	24	25	26	27	28
	Volatiles																
Acetone	700	N/A	ND	NS	NS	4.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	300	N/A	ND	ND	ND	2.54	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
MTBE ⁽³⁾	70	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-isopropyl ether ⁽³⁾	100	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	1000	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes ⁽³⁾	1000	N/A	ND	NS	NS	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Se	mi-Volatiles					•	•	•			•	•	•	•	•	•	•
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	900	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pes	sticides/PCBs		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Metals					•	•	•			•	•	•	•	•	•	
Aluminum	200	121000	NS	893	557	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Barium	2000	699	NS	86.8	68.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Beryllium	20	N/A	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cadmium	4	N/A	NS	ND	ND	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Calcium	NLE	45400	NS	21000	18000	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chromium	100	N/A	NS	5.32	5.04	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	NLE	N/A	NS	1.96	0.803	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Copper	1000	65.6	NS	6.17	12.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Iron	300	431000	NS	8850	3910	NS 4.52	NS	NS	NS	NS	NS	NS 40.7	NS 2.57	NS	NS	NS	NS
Lead	10 NA E	N/A	ND	8.47	3.21	4.53	8.4	9.7	6.5	3.6	32.3	49.5	3.57	43.9	22.1	22.1	ND
Magnesium	NLE	62700 331	NS NS	2910 86.1	2440	NS NS	NS	NS NS	NS	NS NS	NS	NS NS	NS NS	NS NS	NS	NS	NS
Manganese	50	N/A	NS NS	86.1 ND	46.2 ND	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Mercury Nickel	100	N/A 187	NS NS	4.22	4.19	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Potassium	NLE	137000	NS NS	3610	3470	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Sodium	50000	21500	NS NS	19200	17300	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS	NS NS
Vanadium	NLE	N/A	NS	8.23	4.74	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Zinc	5000	233	NS	57.5	36.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Notes	5000	200	140	57.5	50.4	110	140	110	140	140	140	110	110	110	110	110	110

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and \boldsymbol{bold}

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

(2)Low Flow Sampling Method used to collect sample

⁽³⁾Interim Criteria used as NJDEP criteria

Table 5-1 Groundwater Monitoring Well Sampling Results Site 2567

Fort Monmouth, New Jersey

		Well ID	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6	2567-MW6
Lab Sample ID	NJDEP	Site Specific	5647.09	5825.09	715	1616805	1621403	1610709	1635609	1657309	2011209	2033109	2058509	2076209	3008309	3028309	3039709	3063409	4004309
Sample Date	Criteria	MBC ⁽¹⁾	08/22/00	11/01/00	02/09/01	6/5/2001	6/26/2001	05/08/01	08/15/01	11/09/01	02/26/02	05/28/02	08/20/02	10/28/02	02/26/03	06/11/03	07/22/03	10/07/03	01/16/04
		Round No.	14	15	16	LF1	LF2	17	18	19	20	21	22	23	24	25	26	27	28
	Volatiles																		
Acetone	700	N/A	4.02	ND	ND	NS	NS	ND											
Benzene	1	N/A	ND	ND	ND	NS	NS	ND											
2-Butanone	300	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	ND	ND	NS	NS	ND											
MTBE ⁽³⁾	70	N/A	ND	ND	ND	NS	NS	ND											
Di-isopropyl ether(3)	100	N/A	ND	ND	ND	NS	NS	ND											
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	ND	ND	NS	NS	ND											
Toluene	1000	N/A	ND	ND	ND	NS	NS	ND											
Xylenes ⁽³⁾	1000	N/A	ND	ND	ND	NS	NS	ND											
,	mi-Volatiles																		
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	900	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pes	ticides/PCBs	u.	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Metals																		
Aluminum	200	121000	NS	NS	NS	381	320	NS											
Barium	2000	699	NS	NS	NS	94.3	79.8	NS											
Beryllium	20	N/A	NS	NS	NS	0.887	1.16	NS											
Cadmium	4	N/A	NS	NS	NS	ND	1.25	NS											
Calcium	NLE	45400	NS	NS	NS	11900	8170	NS											
Chromium	100	N/A	NS	NS	NS	3.11	2.5	NS											
Cobalt	NLE	N/A	NS	NS	NS	2.09	5.63	NS											
Copper	1000	65.6	NS	NS	NS	2.53	19.6	NS											
Iron	300	431000	NS	NS	NS	6000	3920	NS											
Lead	10	N/A	ND	ND	ND	ND	ND	1.48	ND	ND	ND	ND	1.32	ND	ND	ND	ND	ND	ND
Magnesium	NLE 50	62700	NS	NS	NS	1700	1360	NS											
Manganese	50	331	NS	NS	NS	44.2	29.8	NS											
Mercury Nickel	100	N/A 187	NS NS	NS NS	NS NS	ND 5.77	ND 10.6	NS NS											
Nickei Potassium	NLE	137000	NS NS	NS NS	NS NS	2510	1930	NS NS											
Sodium	50000	21500	NS NS	NS NS	NS NS	18100	15000	NS NS											
Vanadium	NLE	N/A	NS	NS NS	NS	1.74	0.871	NS NS	NS	NS	NS	NS							
Zinc	5000	233	NS	NS	NS	61.8	101	NS											
ZIIIC	3000	200	NO	ON	IND	01.0	101	No	IND	INO	INO	IND	IND	NO	IND	IND	IND	110	IND

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) & Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded and**bold**

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

(3)Interim Criteria used as NJDEP criteria

Table 5-1 **Groundwater Monitoring Well Sampling Results** Site 2567

Fort Monmouth, New Jersey

		Well ID	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7	2567-MW7
Lab Sample ID	NJDEP	Site Specific	5647.1	5825.1	716	1616804	1621402	1610710	1635610	1657310	2011210	2033110	2058510	2076210	3008310	3028310	3039710	3063410	4004310
Sample Date	Criteria	MBC ⁽¹⁾	08/22/00	11/01/00	02/09/01	6/5/2001	6/26/2001	05/08/01	08/15/01	11/09/01	02/26/02	05/28/02	08/20/02	10/28/02	02/26/03	06/11/03	07/22/03	10/07/03	01/16/04
	·	Round No.	14	15	16	LF1	LF2	17	18	19	20	21	22	23	24	25	26	27	28
	Volatiles																		
Acetone	700	N/A	ND	ND	ND	NS	NS	ND											
Benzene	1	N/A	ND	ND	ND	NS	NS	ND											
2-Butanone	300	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	NLE	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	700	N/A	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	2	N/A	ND	ND	ND	NS	NS	ND											
MTBE ⁽³⁾	70	N/A	ND	ND	ND	NS	NS	ND											
Di-isopropyl ether ⁽³⁾	100	N/A	ND	ND	ND	NS	NS	ND											
tert-Butyl Alcohol (TBA)(3)	100	N/A	ND	ND	ND	NS	NS	ND											
Toluene	1000	N/A	ND	ND	ND	NS	NS	ND											
Xylenes ⁽³⁾	1000	N/A	ND	ND	ND	NS	NS	ND											
Se	mi-Volatiles																		
bis(2-Ethylhexyl)phthalate	30	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	900	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyridine ⁽³⁾	100	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pes	ticides/PCBs		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	Metals						•			•			•		•		•		
Aluminum	200	121000	NS	NS	NS	ND	ND	NS											
Barium	2000	699	NS	NS	NS	220	255	NS											
Beryllium	20	N/A	NS	NS	NS	ND	ND	NS											
Cadmium	4	N/A	NS	NS	NS	ND	ND	NS											
Calcium	NLE	45400	NS	NS	NS	25500	30100	NS											
Chromium	100	N/A	NS	NS	NS	0.852	ND	NS											
Cobalt	NLE	N/A	NS	NS	NS	ND	ND	NS											
Copper	1000	65.6	NS	NS	NS	2.78	10.8	NS											
Iron	300	431000	NS	NS	NS	5250	6520	NS											
Lead	10	N/A	ND	ND	ND	ND	ND 4200	ND	0.855	ND	ND	ND							
Magnesium	NLE 50	62700 331	NS NS	NS NS	NS NS	2950 113	4380 157	NS NS											
Manganese Mercury	2	N/A	NS NS	NS NS	NS NS	ND	ND	NS NS											
Nickel	100	187	NS NS	NS NS	NS NS	ND ND	ND ND	NS NS											
Potassium	NLE	137000	NS	NS	NS	4260	4970	NS											
Sodium	50000	21500	NS	NS	NS	33300	30800	NS											
Vanadium	NLE	N/A	NS	NS	NS	0.75	0.602	NS											
Zinc	5000	233	NS	NS	NS	13.9	9.11	NS											

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded andbold

*Sampling results that exceeded calibration limits were not run again with dilution due to a laboratory error.

ND: Analyte not detected in sample

N/A: Not Applicable NS: Not Sampled

D: Diluted Sample

NLE: No cleanup standard exists for this analyte

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Low Flow Sampling Method used to collect sample

(3)Interim Criteria used as NJDEP criteria

Table 5-2 Geoprobe Groundwater Sampling Results Site 2567 Fort Monmouth, New Jersey

		Geoprobe ID	GW-1	GW-2	GW-3	W-1	W-2	W-3	W-4
Lab Sample ID	NJDEP	Site Specific	4008903	4008905	4008906	4031603	4031604	4031606	4031607
Sample Date	Criteria	MBC ⁽¹⁾	02/02/04	02/02/04	02/02/04	04/30/04	04/30/04	04/30/04	04/30/04
	Volatiles								
MTBE ⁽²⁾	70	N/A	5.52	2.63	0.47	3.37	3.29	1.2	ND
tert-Butyl Alcohol (TBA)(2)	100	N/A	ND	ND	46	ND	ND	ND	ND

Notes

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion

(ppb)

NJDEP Criteria: Higher of Practical Quantitation Limits (PQLs) &

Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

Exceedences of NJDEP GWQS are shaded andbold

ND: Analyte not detected in sample

N/A: Not Applicable

(1)Fort Monmouth Site-specific Groundwater Maximum Background

Concentrations (MBCs), background (native) metals only (Weston SI Report

Dated 1995)

(2)Interim Criteria used as NJDEP criteria

Table 5-3 Determination of Contaminants of Concern Site 2567 Fort Monmouth, New Jersey

Analyte	NJDEP Criteria ⁽¹⁾	Site Specific Groundwater MBC ⁽²⁾	Maximum Result	No. of NJDEP Criteria Exceedences	No. of Site Maximum Background Exceedences	Comments
		Volatiles				
Acetone	700	N/A	5.99	0	N/A	No exceedence of NJDEP criteria
Benzene	1	N/A	39.4	8	N/A	Not a Contaminant of Concern. Benzene has not been detected at Site 2567 since July 1999.
2-Butanone	300	N/A	31.95	0	N/A	No exceedence of NJDEP criteria
Carbon Disulfide	NLE	N/A	1.94	0	N/A	No exceedence of NJDEP criteria
Ethylbenzene	700	N/A	1.04	0	N/A	No exceedence of NJDEP criteria
Methylene Chloride	2	N/A	25	1	N/A	Not a Contaminant of Concern: only one exceedence of NJDEP Cleanup Criteria.
MTBE ⁽³⁾	70	N/A	240	4	N/A	Not a Contaminant of Concern. MTBE has not been detected in wells at Site 2567 above the NJDEP Groundwater Criteria (1) since June 1998.
Di-isopropyl ether(3)	100	N/A	3.66	0	N/A	No exceedence of NJDEP criteria
Tert-Butyl Alcohol (TBA) ⁽³⁾	100	N/A	1488.05	24	N/A	Contaminant of Concern. exceedences primarily at well 2567–MW1. There was only one other well with an exceedence of the NJDEP criteria (2567–MW3 in August 1997).
Toluene	1000	N/A	1.3	0	N/A	No exceedence of NJDEP criteria
Xylenes ⁽³⁾	1000	N/A	72.7	0	N/A	No exceedence of NJDEP criteria
	•	Semi-Volatile	es			
bis(2-Ethylhexyl)phthalate	30	N/A	6.98	0	N/A	No exceedence of NJDEP criteria
Naphthalene ⁽³⁾	100	N/A	6.98	0	N/A	No exceedence of NJDEP criteria
Di-n-butylphthalate	900	N/A	3.9	0	N/A	No exceedence of NJDEP criteria
Pyridine ⁽³⁾	100	N/A	4.5	0	N/A	No exceedence of NJDEP criteria

Table 5-3 Determination of Contaminants of Concern Site 2567 Fort Monmouth, New Jersey

Analyte	NJDEP Criteria ⁽¹⁾	Site Specific Groundwater MBC ⁽²⁾	Maximum Result	No. of NJDEP Criteria Exceedences	No. of Site Maximum Background Exceedences	Comments
	Pesti	cides/PCBs: None	e Detected			
		Metals				
Aluminum	200	121000	1832	7	0	Not a Contaminant of Concern: no exceedence of the Site Specific MBC
Barium	2000	699	796.2	0	1	No exceedence of NJDEP criteria
Beryllium	20	N/A	1.3	0	N/A	No exceedence of NJDEP criteria
Cadmium	4	N/A	2.2	0	N/A	No exceedence of NJDEP criteria
Calcium	NLE	45400	67840	N/A	3	No NJDEP Groundwater Criteria
Chromium	100	N/A	9	0	N/A	No exceedence of NJDEP criteria
Cobalt	NLE	N/A	2.5	N/A	N/A	No NJDEP Groundwater Criteria
Copper	1000	65.6	79	0	1	No exceedence of NJDEP criteria
Iron	300	431000	19180	10	0	Not a Contaminant of Concern: no exceedence of the Site Specific MBC
Lead	10	N/A	49.5	7	N/A	Not a Contaminant of Concern: only seven exceedences of NJDEP criteria at two monitoring wells.
Magnesium	NLE	62700	7520	N/A	0	No NJDEP Groundwater Criteria
Manganese	50	331	271.8	10	0	Not a Contaminant of Concern: no exceedence of the Site Specific MBC.
Mercury	2	N/A	0.4	0	N/A	No exceedence of NJDEP criteria
Nickel	100	187	10.8	0	0	No exceedence of NJDEP criteria
Potassium	NLE	137000	8730	N/A	0	No NJDEP Groundwater Criteria
Sodium	50000	21500	76190	2	6	Not a Contaminant of Concern due to the proximity of the site to sea water.
Vanadium	NLE	N/A	6.8	N/A	N/A	No NJDEP Groundwater Criteria
Zinc	5000	233	93	0	0	No exceedence of NJDEP criteria

Notes:

All concentrations in micrograms per liter (ug/L), equivalent to parts per billion (ppb).

NJDEP GWQC: New Jersey Department of Environmental Protection Groundwater Quality Criteria.

N/A = Not Applicable

Exceeds NJDEP GWQC =

ND: Analyte not detected in sample

NLE: No limit established for this analyte

⁽¹⁾ Higher of Practical Quantitation Limits (PQLs) and Groundwater Quality Criteria (GWQC) per NJAC 7:9-6

⁽²⁾ Fort Monmouth Site-specific Groundwater Maximum Background Concentrations (MBCs), background (native) metals only (Weston SI Report Dated 1995)

⁽³⁾Interim Criteria used as NJDEP criteria

Table 5-4 Aquifer Dissolved Oxygen Site 2567 Fort Monmouth, New Jersey

2567-	MW1	2567-	MW2	2567-]	MW3	2567-]	MW4		2567-1	MW5
Sample	DO	Sample	DO	Sample	DO	Sample	DO		Sample	DO
Date	(mg/L)	Date	(mg/L)	Date	(mg/L)	Date	(mg/L)	Ш	Date	(mg/L)
04/11/97	3.00	04/11/97	2.50	04/11/97	2.50	04/11/97	2.40		04/11/97	2.20
08/28/97	2.40	08/28/97	2.40	08/28/97	2.20	08/28/97	2.50		08/28/97	3.40
12/02/97	1.40	12/02/97	1.90	12/02/97	1.00	12/02/97	1.50		12/02/97	1.80
03/04/98	4.10	03/04/98	5.40	03/04/98	3.50	03/04/98	3.50		03/04/98	2.60
06/01/98	2.10	06/01/98	2.30	06/01/98	2.20	06/01/98	1.70		06/01/98	1.10
09/24/98	5.18	09/24/98	5.92	09/25/98	6.90	09/24/98	6.76		09/25/98	7.27
12/16/98	7.87	12/16/98	6.72	12/16/98	7.33	12/16/98	7.63		12/16/98	8.04
02/24/99	3.85	02/24/99	3.27	02/24/99	3.37	02/24/99	3.64		02/24/99	3.68
05/29/99	4.77	05/29/99	5.70	05/29/99	2.95	05/29/99	4.27		06/08/99	4.80
07/21/99	3.07	07/21/99	2.77	07/21/99	3.31	07/21/99	3.74		07/21/99	4.18
10/21/99	4.33	10/21/99	4.37	10/21/99	4.41	10/21/99	4.57		10/21/99	4.17
02/14/00	5.17	02/14/00	5.16	02/14/00	4.71	02/14/00	5.20		02/14/00	5.19
05/15/00	4.23	05/15/00	4.81	05/15/00	4.57	05/15/00	5.34		05/15/00	5.36
08/22/00	3.17	08/22/00	3.07	08/22/00	3.04	08/22/00	3.11		08/22/00	3.24
11/01/00	3.87	11/01/00	3.21	11/01/00	3.37	11/01/00	3.71		11/01/00	3.76
02/09/01	5.22	02/09/01	5.07	02/09/01	5.07	02/09/01	5.20		02/09/01	5.31
05/08/01	5.17	05/08/01	5.14	05/08/01	5.05	05/08/01	5.20		05/08/01	5.18
08/15/01	0.01	08/15/01	0.05	08/15/01	0.00	08/15/01	0.13		08/15/01	0.17
11/09/01	1.40	11/09/01	0.73	11/09/01	0.41	11/09/01	1.16		11/09/01	0.87
02/26/02	1.60	02/26/02	0.98	02/26/02	1.11	02/26/02	1.08		02/26/02	0.97
05/28/02	2.10	05/28/02	1.97	05/28/02	1.97	05/28/02	2.11		05/28/02	1.66
08/20/02	2.71	08/20/02	2.47	8/20/2002	2.91	08/20/02	2.31		08/20/02	2.32
10/28/02	0.00	10/28/02	0.29	10/28/02	0.08	10/28/02	0.63		10/28/02	5.10
02/26/03	1.03	02/26/03	2.17	02/26/03	2.69	02/26/03	2.99		02/26/03	2.50
06/11/03	1.84	06/11/03	2.11	06/11/03	2.52	06/11/03	2.32		06/11/03	2.30
07/22/03	0.40	07/22/03	0.43	07/22/03	0.40	07/22/03	0.52		07/22/03	1.38
10/07/03	1.74	10/07/03	1.11	10/07/03	1.96	10/07/03	2.01		10/07/03	2.03
01/16/04	2.61	01/16/04	2.21	01/16/04	2.08	01/16/04	2.17		01/16/04	2.17
Min:	0.00	Min:	0.05	Min:	0.00	Min:	0.13		Min:	0.17
Max:	7.87	Max:	6.72	Max:	7.33	Max:	7.63		Max:	8.04
Average:	3.01	Average:	3.01	Average:	2.91	Average:	3.12		Average:	3.31

Table 5-4 Aquifer Dissolved Oxygen Site 2567 Fort Monmouth, New Jersey

		3 F		
2567-1	MW6		2567-	MW7
Sample	DO		Sample	DO
Date	(mg/L)		Date	(mg/L)
08/22/00	3.27		08/22/00	3.31
11/01/00	3.81		11/01/00	3.87
02/09/01	5.27		02/09/01	NA
05/08/01	5.23		05/08/01	5.22
08/15/01	0.30		08/15/01	0.05
11/09/01	0.89		11/09/01	0.42
02/26/02	1.17		02/26/02	1.04
05/28/02	1.07		05/28/02	1.02
08/20/02	2.04		08/20/02	1.98
10/28/02	1.17		10/28/02	0.39
02/26/03	1.71		02/26/03	1.38
06/11/03	2.01		06/11/03	2.30
07/22/03	0.91		07/22/03	0.57
10/07/03	2.10		10/07/03	2.17
01/16/04	2.09		01/16/04	2.23
Min:	0.30		Min:	0.05
Max:	5.27		Max:	5.22
Average:	2.20		Average:	1.85

Notes:

1.) DO: Dissolved Oxygen2.) NA: Not Available

Table 6-1 tert-Butyl Alcohol Biodegradation at Monitoring Well 2567-MW1 Site 2567 - Charles Woods Area Fort Monmouth, New Jersey

	Input	
Parameters	Units	Constituent: tert-Butyl Alcohol (TBA
Δt	days	90
T _{1/2}	days	365
k ⁽¹⁾	days ⁻¹	0.00190
Initial Concentration, $C_0^{\ (2)}$	-	4.400.05
February 9, 2001	μg/L	1488.05
*	Calculation and Results	
Time (days)	Date	Predicted Concentrations, C (ug/L)
0	February 9, 2001	1488.05
90	May 10, 2001	1254.27
180	August 8, 2001	1057.22
270	November 6, 2001	891.12
360	February 4, 2002	751.12
450	May 5, 2002	633.12
540	August 3, 2002	533.65
630	November 1, 2002	449.81
720	January 30, 2003	379.14
810	April 30, 2003	319.58
900	July 29, 2003	269.37
990	October 27, 2003	227.05
1080	January 25, 2004	191.38
1170	April 24, 2004	161.31
1260	July 23, 2004	135.97
1350	October 21, 2004	114.61
1440	January 19, 2005	96.60
	Time until NJDEP criteria is reached	d:
1,440	January 19, 2005	96.60
New Jersey Criteria	μg/L	100

Constituent Predicted Concentration: $C_p(t) = C_p(t-1) * e^{-k\Delta t}$

Time to reach NJ Criteria = TNJC

Reaction Rate Constant = $k = -\ln(0.5)/t_{1/2}$

Length of Impacted Area Based on Available Published Biodegradation Rates									
Input Data									
Hydraulic Conductivity ⁽³⁾ (K)	ft/day	25.9							
Hydraulic Gradient ⁽⁴⁾ (i):	ft/ft	0.02							
Effective Porosity ⁽⁵⁾ (n _e):		0.4							
Bulk Density of Formation ⁽⁵⁾ (ρ _b)	kg/L	1.59							
n-Octanol/Carbon Partition $^{(6)}(K_{oc})$:	L/kg	2.27							
Fraction of Organic Carbon ⁽⁷⁾ (f _{oc})		0.003							
Sorption Coefficient (K _d)	L/kg	0.007							
	Calculation and Results								
Seepage Velocity (ft/day)	vs = K*i/ne =	1.295							
Retardation Factor	$Rd = 1 + (Kd * \rho_b / ne) =$	1.03							
Pollutant Transport Rate (ft/day)	vpt = vs/Rd =	1.261							
or (ft/year)	vpt – vs/Ku –	460.22							
TNJC (days)	Determined above	1,440							
TNJC (years)	Determined above	3.9							
Length (ft)	vpt * TNJC =	1,800							

- (1) Half-Life for aerobic biodegradation in groundwater, upper limit: Howard, P.H. et. al. 1991. Handbook of Environmental Degradation Rates. Lewis Publishers.
- (2) Initial concentration (Co) is the most recent concentration that was detected during the groundwater monitoring program.
- (3) Hydraulic conductivity of surficial fill, K = 25.9 ft/day (Geometeric mean of slug tests performed by Versar in August 2001)
- (4) Hydraulic gradient (i) derived from ground water elevation contours (August 2000)
- (5) Effective porosity, n=0.4, and bulk density, $\rho_b=1.5$ g/mL (consistent with the type of soil clayey sands, at the Site).
- (6) K_{oc} data reference: USEPA Soil Screeening Guidance 1996.
- (7) $f_{oc} = 0.003$ (the geometric mean of the minimum and maximum range of f_{oc}). USEPA 1996.

Table 6-2 Well Search Summary Site 2567 - Charles Wood Area Fort Monmouth, New Jersey

Number Creet Use* Date Lattitude Longitude	NIDED Downit	Donth	1	Downit	1	1
2900151 300 D 7/13/1951 401746 740546 2901121 70 D 6/2/1954 401706 740519 2901154 70 D 6/2/1954 401706 740519 2901154 70 D 6/2/1962 401733 740546 2903374 50 D 8/15/1960 401733 740546 2903374 50 D 8/15/1960 401733 740546 2905076 100 D 5/2/1962 401733 740546 2905076 100 D 5/2/1966 401733 740546 2905756 150 D 6/14/1974 401813 740533 2908442 60 D 8/3/1976 401826 740426 291733 150 D 12/4/1981 401813 740533 2912070 40 G 5/14/1982 401720 740346 2912719 40 G 5/14/1982 401720 740346 2912719 40 G 4/8/1983 401726 740406 2913524 20 M 3/2/1984 401712 740406 2913525 20 M 3/2/1984 401712 740406 2913525 20 M 3/2/1984 401712 740406 2913525 20 M 3/2/1984 401712 740406 2913526 20 M 3/2/1984 401712 740406 2913529 20 M 3/2/1984 401712 740406 2913551 20 M 3/2/1984 401712 740406 2913561 20 M 3/2/1984 401712 740406 291676 20 M 3/2/1986 401659 740432 2916770 20 M 3/2/1986 401659 740432 2916771 20 M 3/2/1986 401659 740432 2916773 20 M 3/2/1986 401659 740432 2916778 20 M 3/2/1986 401659 740432 2916785 20 M 3/2/198	NJDEP Permit	Depth	TT A	Permit	* 1	, .
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2916774 20 M 6/30/1986 401659 740432 2916775 15 M 6/30/1986 401752 740552 2916776 15 M 6/30/1986 401752 740552 2916777 20 M 6/30/1986 401659 740512 2916778 20 M 6/30/1986 401659 740406 2916779 20 M 6/30/1986 401659 740446 2916780 20 M 6/30/1986 401659 740446 2916781 20 M 6/30/1986 401659 740446 2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406	2916772	20	M	6/30/1986	401659	740432
2916775 15 M 6/30/1986 401752 740552 2916776 15 M 6/30/1986 401752 740552 2916777 20 M 6/30/1986 401659 740512 2916778 20 M 6/30/1986 401659 740512 2916779 20 M 6/30/1986 401726 740406 2916780 20 M 6/30/1986 401659 740446 2916781 20 M 6/30/1986 401659 740446 2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406	2916773	20	M	6/30/1986	401659	740432
2916776 15 M 6/30/1986 401752 740552 2916777 20 M 6/30/1986 401659 740512 2916778 20 M 6/30/1986 401659 740512 2916778 20 M 6/30/1986 401659 740406 2916780 20 M 6/30/1986 401659 740446 2916781 20 M 6/30/1986 401659 740446 2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432	2916774	20	M	6/30/1986	401659	740432
2916777 20 M 6/30/1986 401659 740512 2916778 20 M 6/30/1986 401659 740512 2916779 20 M 6/30/1986 401726 740406 2916780 20 M 6/30/1986 401659 740446 2916781 20 M 6/30/1986 401659 740446 2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401659 740446 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432	2916775	15	M	6/30/1986	401752	740552
2916778 20 M 6/30/1986 401659 740512 2916779 20 M 6/30/1986 401726 740406 2916780 20 M 6/30/1986 401659 740446 2916781 20 M 6/30/1986 401659 740446 2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401659 740446 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406	2916776	15	M	6/30/1986	401752	740552
2916779 20 M 6/30/1986 401726 740406 2916780 20 M 6/30/1986 401659 740446 2916781 20 M 6/30/1986 401659 740446 2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401659 740446 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406	2916777	20	M	6/30/1986	401659	740512
2916780 20 M 6/30/1986 401659 740446 2916781 20 M 6/30/1986 401659 740446 2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406	2916778	20	M	6/30/1986	401659	740512
2916781 20 M 6/30/1986 401659 740446 2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406	2916779	20	M	6/30/1986	401726	740406
2916782 20 M 6/30/1986 401659 740446 2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406	2916780	20	M	6/30/1986	401659	740446
2916783 20 M 6/30/1986 401659 740446 2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406	2916781	20	M	6/30/1986	401659	740446
2916784 20 M 6/30/1986 401659 740446 2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406	2916782	20	M	6/30/1986	401659	740446
2916785 20 M 6/30/1986 401659 740446 2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406	2916783	20	M	6/30/1986	401659	740446
2916786 15 M 6/30/1986 401712 740406 2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406	2916784	20	M	6/30/1986	401659	740446
2916787 15 M 6/30/1986 401712 740406 2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2916785	20	M	6/30/1986	401659	740446
2916788 20 M 6/30/1986 401659 740432 2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2916786	15	M	6/30/1986	401712	740406
2916789 20 M 6/30/1986 401659 740432 2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2916787	15	M	6/30/1986	401712	740406
2917933 13 W 2/10/1987 401739 740406 2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2916788	20	M	6/30/1986	401659	740432
2917934 13 W 2/10/1987 401739 740406 2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2916789	20	M	6/30/1986	401659	740432
2917935 13 W 2/10/1987 401739 740406 2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2917933	13	W	2/10/1987	401739	740406
2917936 13 W 2/10/1987 401739 740406 2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2917934	13	W	2/10/1987	401739	740406
2917937 13 W 2/10/1987 401739 740406 2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2917935	13	W	2/10/1987	401739	740406
2917938 13 W 2/10/1987 401739 740406 2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2917936	13	W	2/10/1987	401739	740406
2917939 13 W 2/10/1987 401739 740406 2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2917937	13	W	2/10/1987	401739	740406
2917940 13 W 2/10/1987 401739 740406 2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406 2917942 40 40 74 74 74	2917938	13	W	2/10/1987	401739	740406
2917941 13 W 2/10/1987 401739 740406 2917942 13 W 2/10/1987 401739 740406	2917939	13	W	2/10/1987	401739	740406
2917942 13 W 2/10/1987 401739 740406	2917940	13	W	2/10/1987	401739	740406
	2917941	13	W	2/10/1987	401739	740406
2917943 13 W 2/10/1987 401739 740406	2917942	13	W	2/10/1987	401739	740406
	2917943	13	W	2/10/1987	401739	740406

NJDEP Permit	Depth		Permit		
Number	(feet)	Use*	Date	Lattitude	Longitude
2917944	13	W	2/10/1987	401739	740406
2917945	13	W	2/10/1987	401739	740406
2917946	13	W	2/10/1987	401739	740406
2917947	13	W	2/10/1987	401739	740406
2917948	13	W	2/10/1987	401739	740406
2917949	13	W	2/10/1987	401739	740406
2917950	13	W	2/10/1987	401739	740406
2917951	13	W	2/10/1987	401739	740406
2917952	13	W	2/10/1987	401739	740406
2918127	13	W	3/17/1987	401739	740406
2918128	13	W	3/17/1987	401739	740406
2918129	13	W	3/17/1987	401739	740406
2918130	13	W	3/17/1987	401739	740406
2918131	13	W	3/17/1987	401739	740406
2918132	13	W	3/17/1987	401739	740406
2918579	13	W	5/18/1987	401746	740413
2918580	13	W	5/18/1987	401746	740413
2918581	13	W	5/18/1987	401746	740413
2918582	13	W	5/18/1987	401746	740413
2918583	13	W	5/18/1987	401746	740413
2918584	13	W	5/18/1987	401746	740413
2918585	13	W	5/18/1987	401746	740413
2918586	13	W	5/18/1987	401746	740413
2918587	13	W	5/18/1987	401746	740413
2918588	13	W	5/18/1987	401746	740413
2918589	13	W	5/18/1987	401746	740413
2918590	13	W	5/18/1987	401746	740413
2919285	40	M	9/11/1987	401720	740413
2919286	40	M	9/11/1987	401720	740413
2919287	40	M	9/11/1987	401720	740413
2919288	40	M	9/11/1987	401720	740413
2919540	200	D	11/9/1987	401733	740453
2920979	80	G	7/20/1988	401720	740346
2921634	200	G	10/19/1988	401733	740346
2921698	190	R	11/9/1988	401813	740519
2921967	30	M	12/22/1988	401733	740533
2922685	30	M	5/1/1989	401746	740519
2922686	30	M	5/1/1989	401746	740519
2922982	35	M	6/8/1989	401653	740453
2923160	30	M	7/17/1989	401733	740533
2923339	20	В	8/23/1989	401706	740440
2923916	20	M	12/11/1989	401720	740506
2923917	20	M	12/11/1989	401720	740506
2923918	20	M	12/11/1989	401720	740506
2923919	20	M	12/11/1989	401720	740453
2923920	20	M	12/11/1989	401720	740453
2923921	20	M	12/11/1989	401720	740453
2923922	10	В	12/11/1989	401720	740506
2923923	10	В	12/11/1989	401720	740506
2923924	10	В	12/11/1989	401720	740506
2923925	10	В	12/11/1989	401720	740453
2923926	10	В	12/11/1989	401720	740453
2923927	10	В	12/11/1989	401720	740453
2923928	10	В	12/11/1989	401720	740453
2923929	10	В	12/11/1989	401720	740453
2923930	10	В	12/11/1989	401720	740453
2923931	10	В	12/11/1989	401720	740453
2923932	10	В	12/11/1989	401720	740453
2923933	10	В	12/11/1989	401720	740453

Table 6-2 Well Search Summary Site 2567 - Charles Wood Area Fort Monmouth, New Jersey

NIDED Down:4	Donalh	1	D		
NJDEP Permit	Depth	*** 4	Permit		
Number	(feet)	Use*	Date	Lattitude	Longitude
2923934	10	В	12/11/1989	401720	740453
2923935	10	В	12/11/1989	401720	740453
2923936	10	В	12/11/1989	401720	740453
2923937	10	В	12/11/1989	401720	740453
2923938	10	В	12/11/1989	401720	740453
2923939	10	В	12/11/1989	401720	740453
2923940	10	В	12/11/1989	401720	740453
2923941	10	В	12/11/1989	401720	740453
2923942	10	В	12/11/1989	401720	740453
2923943	10	В	12/11/1989 12/11/1989	401720	740453
2923944	10	В		401720	740453
2924555	30	M	4/10/1990	401733	740533
2924890	30	В	6/12/1990	401800	740453
2924891	30	В	6/12/1990	401800	740453
2924892	30	В	6/12/1990	401800	740453
2924893	30	В	6/12/1990	401800	740453
2924894	30	В	6/12/1990	401800	740453
2924895	30	В	6/12/1990	401800	740453
2924896	30	В	6/12/1990	401800	740453
2924897	30	В	6/12/1990	401800	740453
2924898	30	В	6/12/1990	401800	740453
2924899	30	В	6/12/1990	401800	740453
2925352	3	M	10/10/1990	401733	740533
2925775	13	M	1/29/1991	401720	740506
2926312	13	M	6/6/1991	401720	740506
2926590	25	M	7/18/1991	401706	740506
2926591	25	M	7/18/1991	401706	740506
2926592	25	M	7/18/1991	401706	740506
2926724	60	D	8/8/1991	401653	740453
2927443	25	M	1/21/1992	401733	740546
2927444	25	M	1/21/1992	401733	740546
2927453	25	M	1/23/1992	401733	740546
2927643	20	Z	3/5/1992	401813	740426
2927644	20	Z	3/5/1992	401813	740426
2927645	20	Z	3/5/1992	401813	740426
2927756	20	Z	3/31/1992	401733	740453
2927757	20	Z	3/31/1992	401733	740453
2927758 2928781	20 25	Z M	3/31/1992 9/22/1992	401733 401720	740453 740546
2928782	25	M	9/22/1992		
2928782	78	Y	12/30/1992	401720 401653	740546 740453
2929189	25	M M	3/23/1993	401653	740453
2929421	25	M	4/29/1993	401720	740506
2929607	25	M	5/4/1993	401720	740546
2929742	30	M M	6/3/1993	401720	740546
2929742	30	M	6/3/1993	401733	740519
2929744	30	M	6/3/1993	401733	740519
2929744	30	M M	6/3/1993	401733	740519
2929743	14	M	6/3/1993	401733	740519
2929753	14	M	6/3/1993	401706	740519
2929754	14	M	6/3/1993	401706	740519
2930115	45	M	8/19/1993	401700	740319
2930115	45	M	8/19/1993	401800	740346
2930117	45	M	8/19/1993	401800	740346
2930117	45	M	8/19/1993	401800	740346
2930118	45	M	8/19/1993	401800	740346
2930119	45	M	8/19/1993	401800	740346
2930480	20	M	11/18/1993	401800	740400
2930494	35	M	11/24/1993	401800	740346

NJDEP Permit	Depth		Permit		
Number	(feet)	Use*	Date	Lattitude	Longitude
2930495	35	M	11/24/1993	401800	740346
2930514	20	M	12/3/1993	401720	740453
2930958	15	M	4/5/1994	401800	740506
2930959	15	M	4/5/1994	401800	740506
2930960	15	M	4/5/1994	401800	740506
2930969	15	M	4/5/1994	401746	740533
2931238	15	Z	5/11/1994	401733	740506
2931239	15	M	5/11/1994	401733	740506
2931240	15	M	5/11/1994	401733	740506
2931561	20	M	7/5/1994	401813	740413
2931562	20	M	7/5/1994	401813	740413
2931563	20	M	7/5/1994	401813	740413
2932158	60	G	9/27/1994	401813	740440
2932159	60	G	9/27/1994	401813	740440
2932160	60	G	9/27/1994	401813	740440
2932161	60	G	9/27/1994	401813	740440
2932162	60	G	9/27/1994	401813	740440
2932163	60	G	9/27/1994	401813	740440
2932590	25	M	11/29/1994	401746	740519
2932591	25	M	11/29/1994	401746	740519
2932592	25	M	11/29/1994	401746	740519
2932593	25	M	11/29/1994	401746	740519
2932594	25	M	11/29/1994	401746	740519
2932595	25	M	11/29/1994	401746	740519
2932596	25	M	11/29/1994	401746	740519
2932597	25	M	11/29/1994	401746	740519
2932598	25	M	11/29/1994	401746	740519
2932599	25	M	11/29/1994	401800	740440
2932600	25	M	11/29/1994	401800	740440
2932601	25	M	11/29/1994	401800	740440
2932602	25	M	11/29/1994	401800	740440
2932603	25	M	11/29/1994	401800	740440
2932604	25	M	11/29/1994	401800	740519
2932605	25	M	11/29/1994	401800	740519
2932894	20	M	3/1/1995	401720	740533
2932895	20	M	3/1/1995	401720	740533
2932896	20	V	3/1/1995	401720	740533
2932897	20	J	3/1/1995	401720	740533
2933763	20	M	7/19/1995	401813	740440
2934753	15	M	1/10/1996	401733	740453
2934754	15	M	1/10/1996	401733	740453
2934755	15	M	1/10/1996	401733	740453
2935236	100	G	4/23/1996	401720	740413
2935462	180	D	5/29/1996	401813	740533
2936178	180	D	10/31/1996	401813	740533
2936179	180	D	10/31/1996	401813	740533
2936202 2936204	180 180	D D	11/7/1996 11/7/1996	401813 401813	740533 740533
	180				
2936284 2936563		D V	11/25/1996 2/5/1997	401813	740533
2936564	10	V	2/5/1997	401720 401720	740533 740533
2936565	6	V	2/5/1997	401720	740533
2936566	6	V	2/5/1997	401720	740533
2936567	6	V	2/5/1997	401720	740533
2936568	35	V	2/5/1997	401720	740533
2936569	35	V	2/5/1997	401720	740533
2936570	35	V	2/5/1997	401720	740533
2936571	20	M	2/5/1997	401720	740533
2936653	180	D	2/28/1997	401720	740533
		1			

Table 6-2 **Well Search Summary** Site 2567 - Charles Wood Area Fort Monmouth, New Jersey

NJDEP Permit	Depth		Permit		
Number	(feet)	Use*	Date	Lattitude	Longitude
2936654	180	D	2/28/1997	401813	740533
2936658	180	D	3/4/1997	401813	740533
2936753	10	M	3/31/1997	401720	740506
2936968	100	G	5/20/1997	401720	740426
2936969	100	G	5/20/1997	401720	740426
2937036	10	V	6/4/1997	401720	740533
2937037	35	V	6/4/1997	401720	740533
2937899	50	В	11/20/1997	401800	740506
2938654	180	U	5/15/1998	401826	740519
2938660	100	G	5/15/1998	401720	740426
2939028	180	1	7/30/1998	401813	740519

Notes: Source: State of New Jersey Department of Environmental Protection - Well Permitting and Regulations Section of the Bureau of Water Allocation,

Trenton, NJ.

Search date: 6 August 2001.

Well search was performed for a 1-mile radius surrounding the center point of Site 2567, U.S. Army Garrison Fort Monmouth, Fort Monmouth, New Jersey.

2567 Location: latitude = North 40° 17' 45",

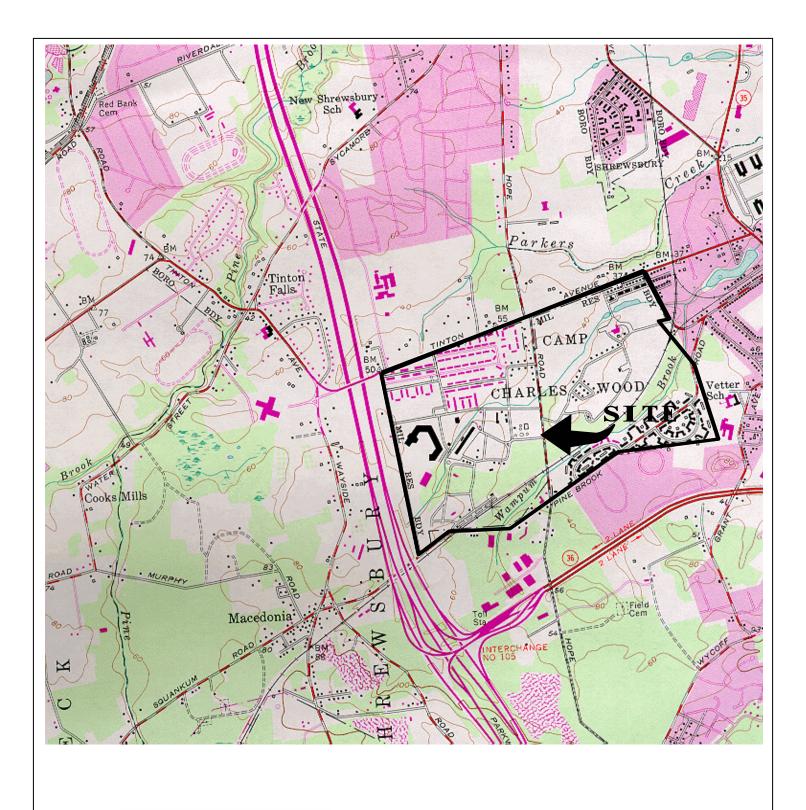
longitude = West 74° 04' 46".

*Well Use Codes

- A Unknown/Well Record Use Only
- B Boring
- C Commercial
- D Domestic (Potable)
- E Recovery/Decontamination Pollution Control/Leachate with Pump Capacity
- F Fire
- G Irrigation
- H Heat Pump/Geothermal (Return Well)
- I Industrial
- J Injection
- K Inclinometer
- L Livestock
- M Monitoring Well (Observation)
- N Public Non Community
- O Oil/Gas Exploration
- P Public Supply
- Q Recharge
- R Replacement (Replacement Codes: 1 Domestic, 2 Public Community, 5 Irrigation)
- S Closed Loop
- T Test
- U Non Public (Supply)
- V Gas Vent
- W Dewatering
- X Agricultural/Horticultural/IrrigationWells
- Y Cathodic Protection
- Z Piezometer



FIGURES





LONG BRANCH, N. J. 40073-C8-TF-024

1954 PHOTOREVISED 1981 DMA 6164 I SE-SERIES V822



Mapped, edited and published by the Geological Survey

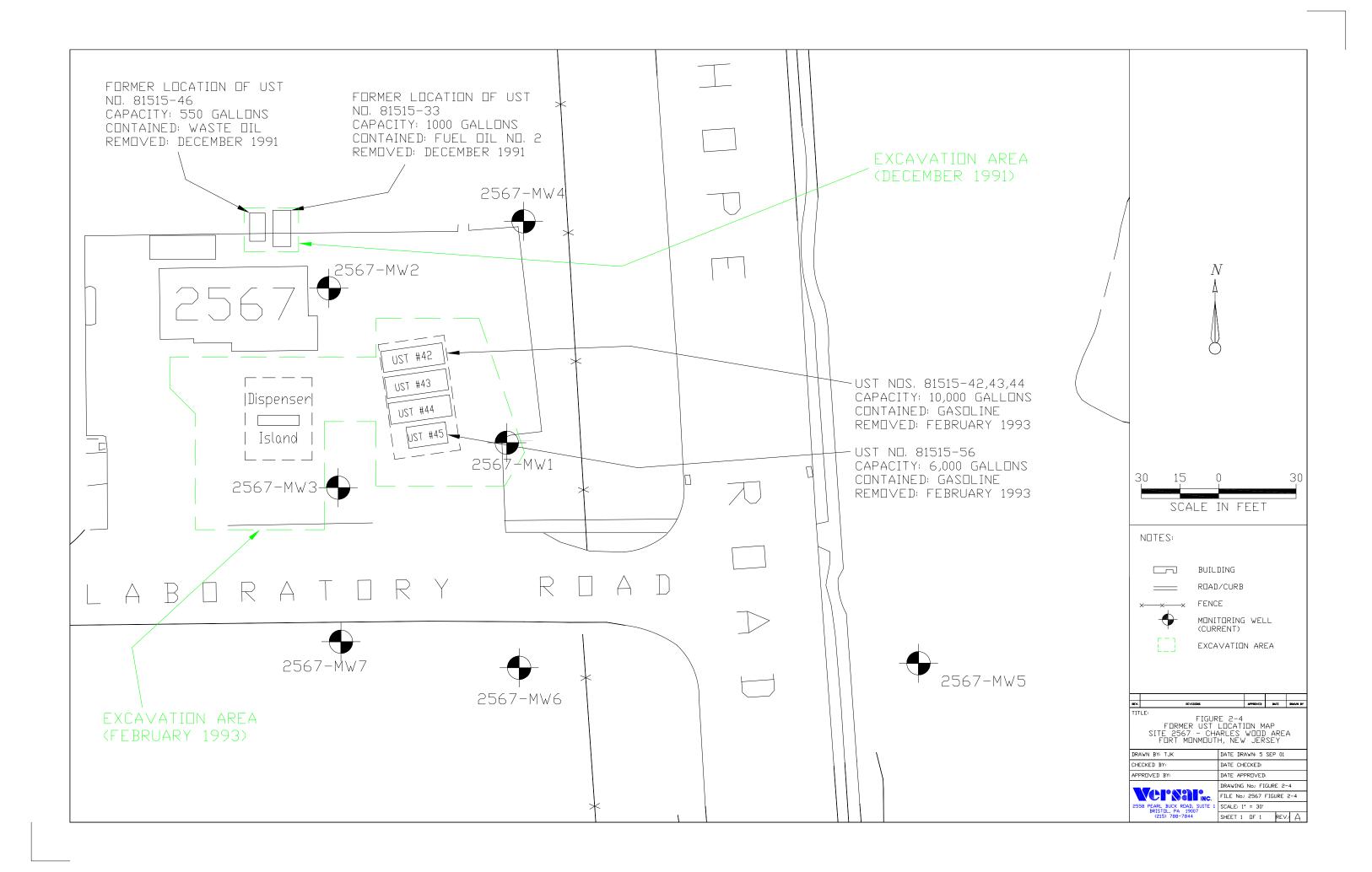
Figure 2-1 **Site Location Map** Site 2567 Fort Monmouth, New Jersey

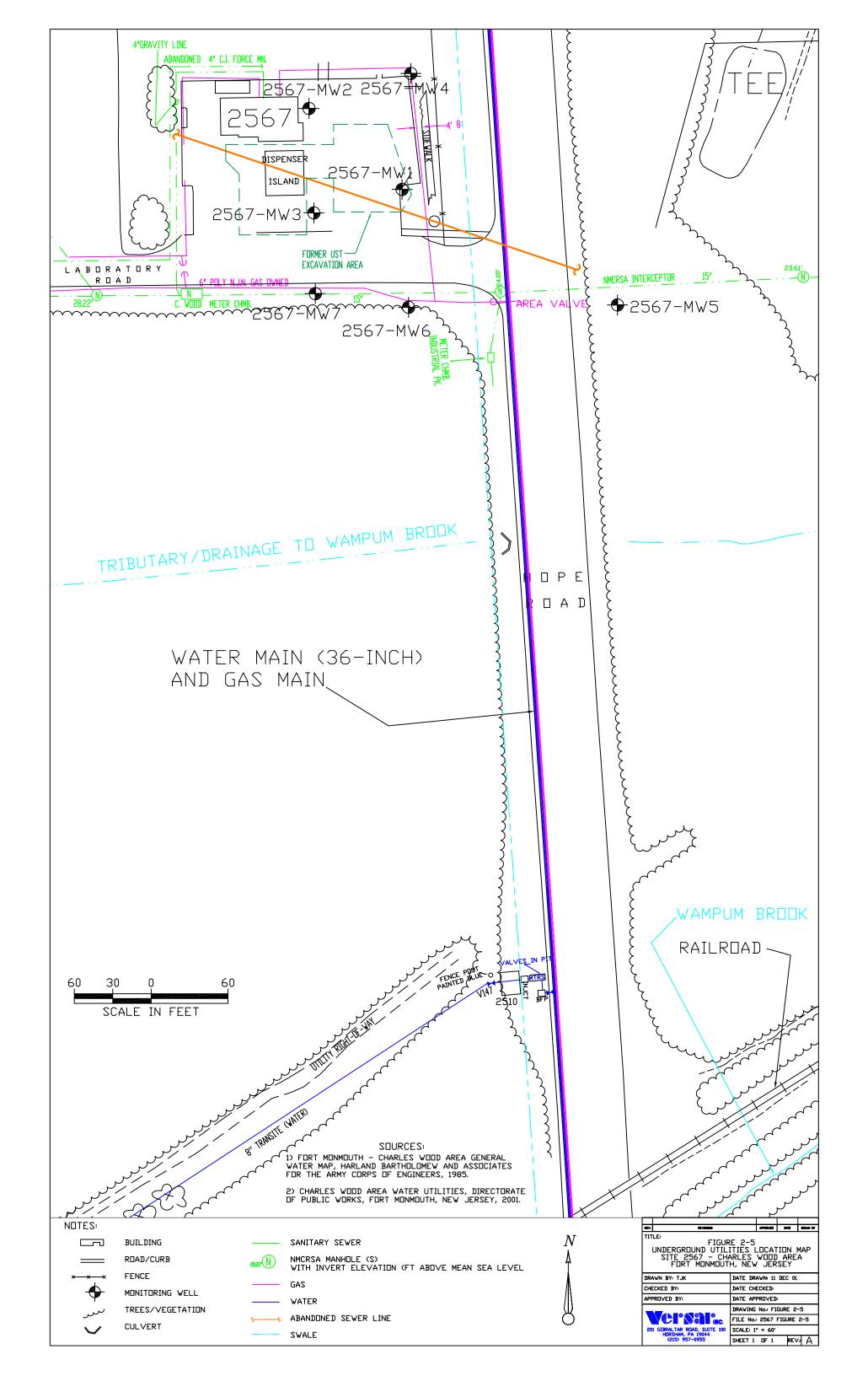


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Geologic Map of New Jersey

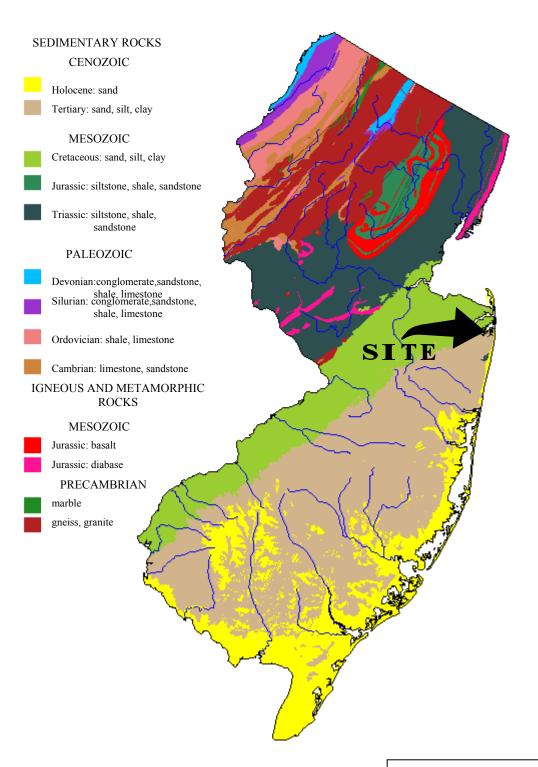
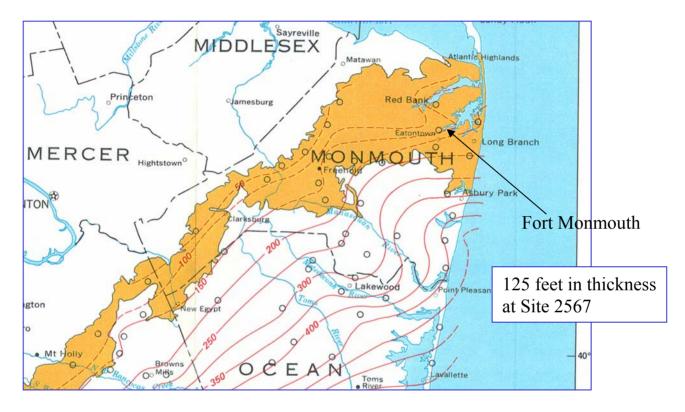
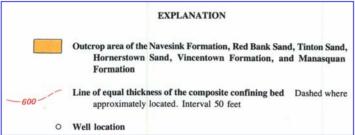


FIGURE 2-6 Geologic Map of New Jersey Site 2567 Fort Monmouth, New Jersey



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Source: Zapecza, O. 1989. *Hydrogeologic Framework of the New Jersey Coastal Plain.* USGS Professional Paper 1404-B. U.S. Government Printing Office, Washington, DC.

FIGURE 2-7

Outcrop and Thickness of Composite Confining Unit Site-2567 Fort Monmouth, New Jersey



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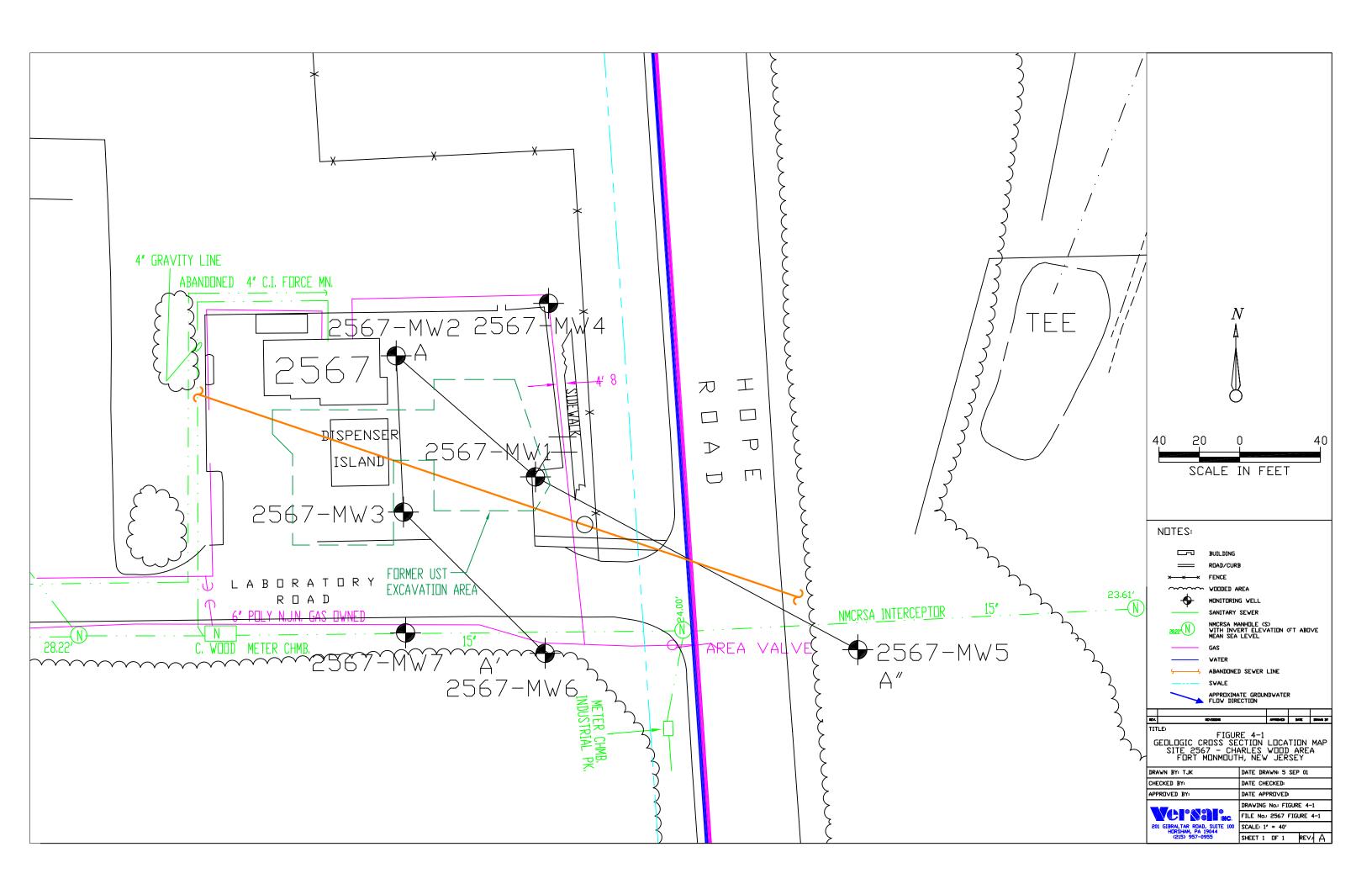


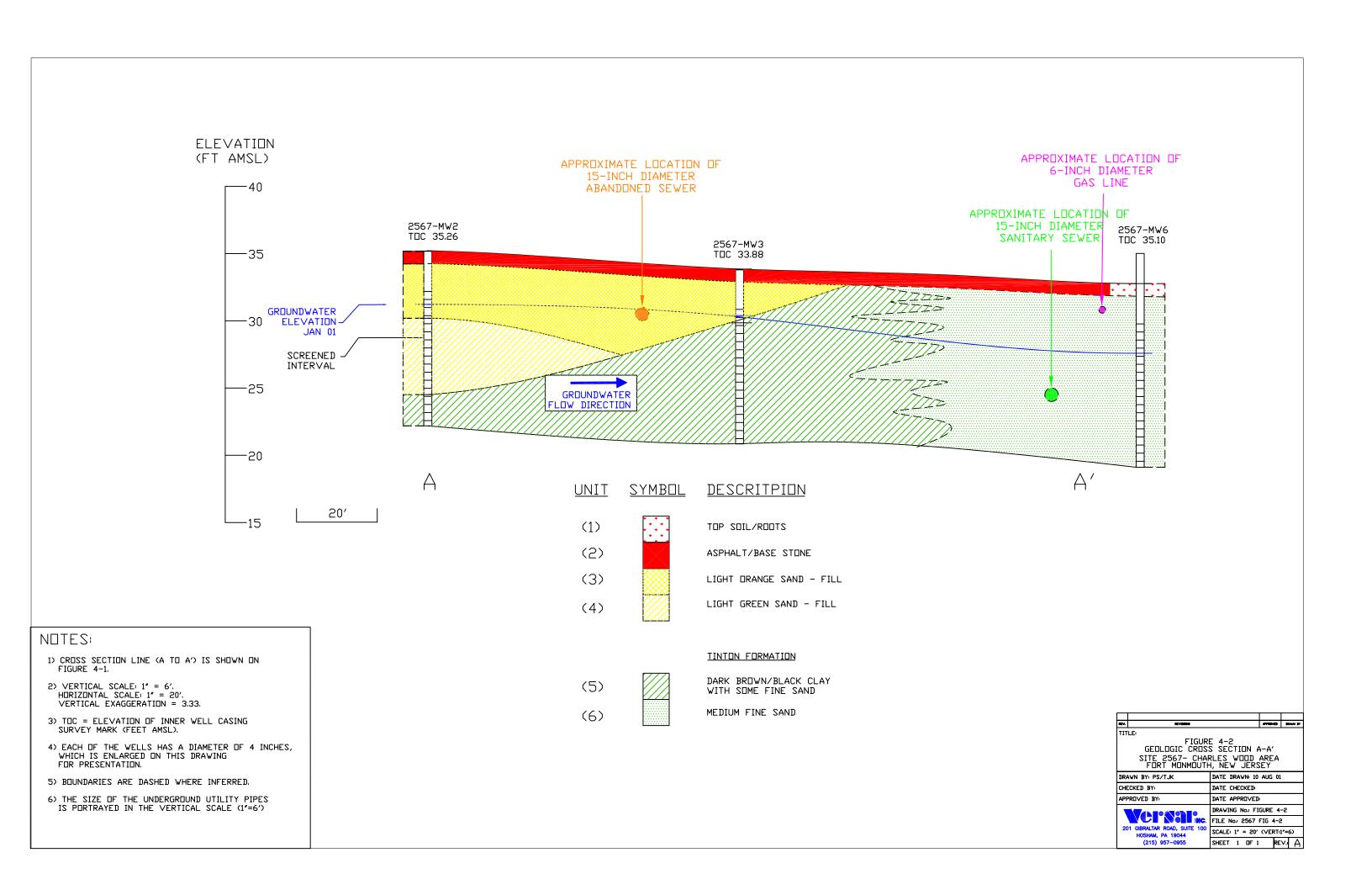
US Department of Agriculture Soil Conservation Service Soil Survey of Monmouth County, NJ April 1989

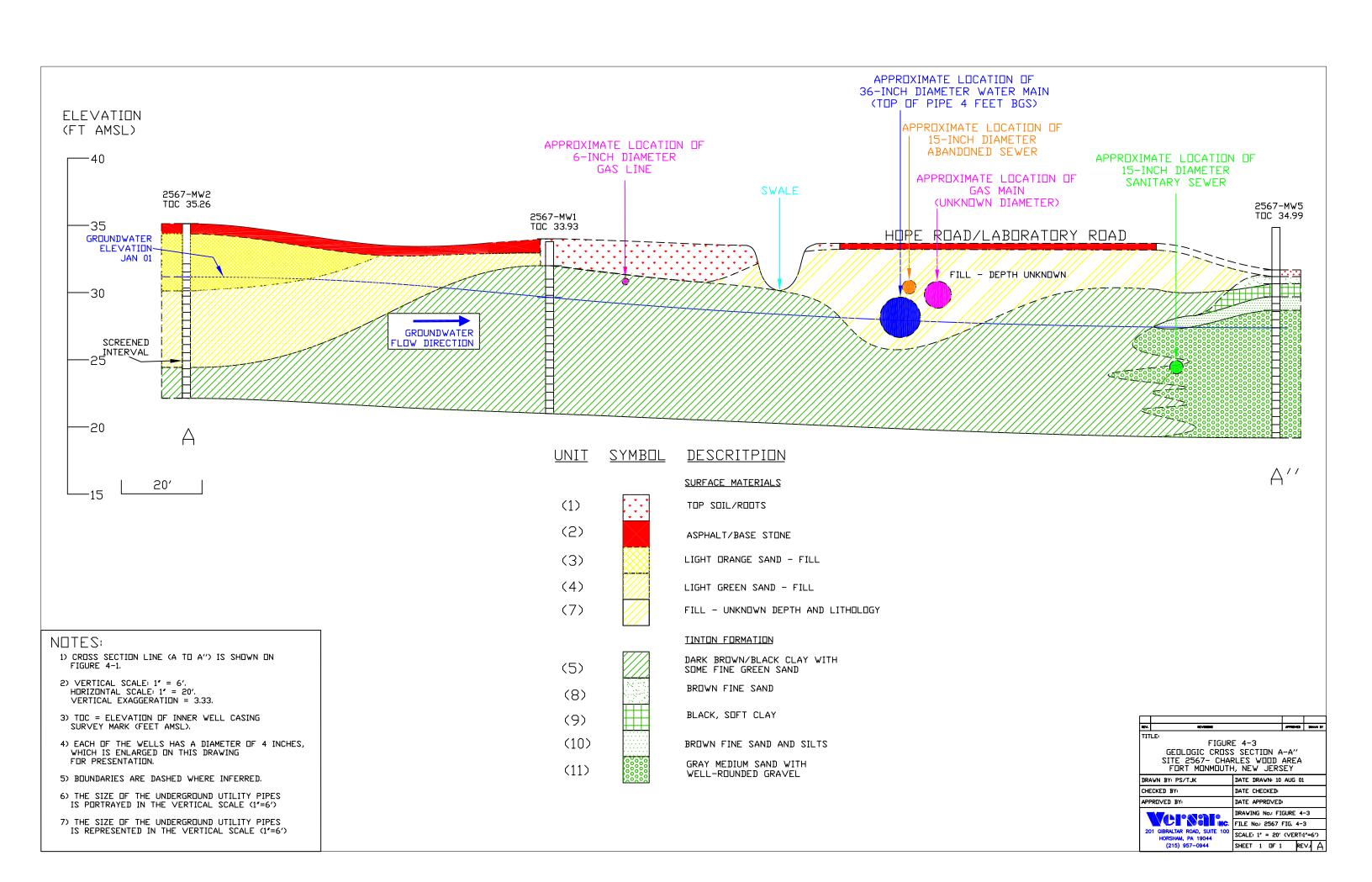
Figure 2-8 Soil Map of Monmouth County Site 2567 Fort Monmouth, New Jersey

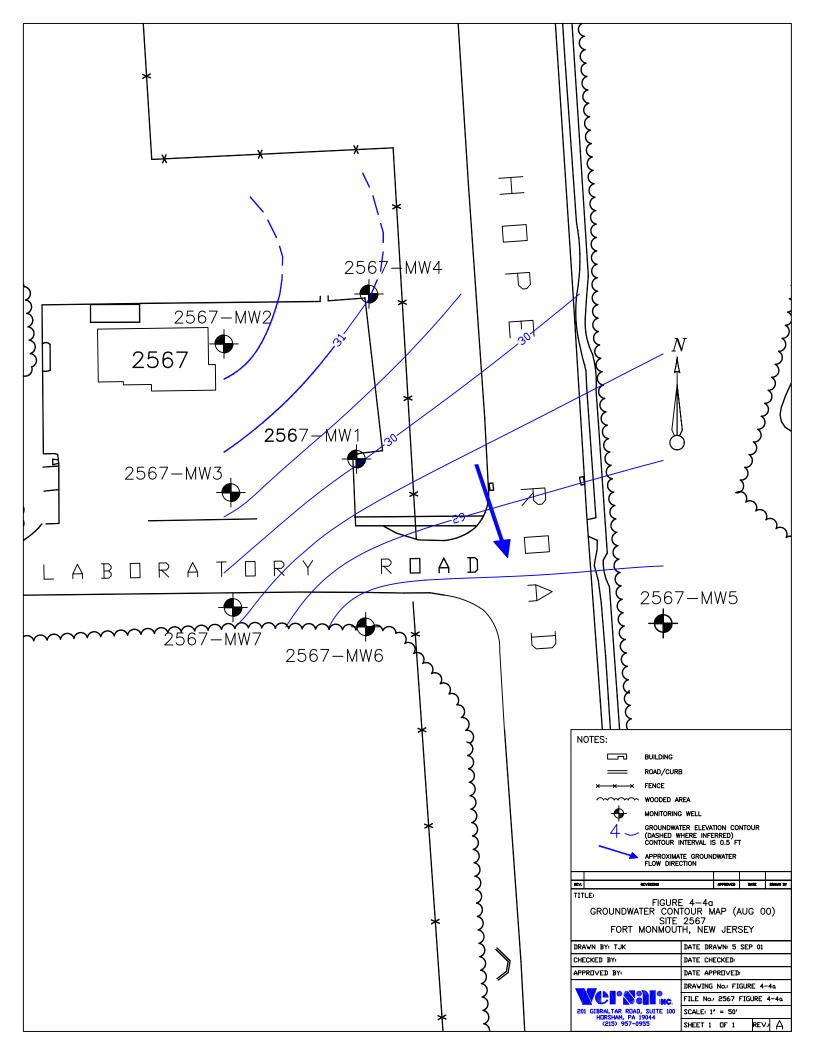


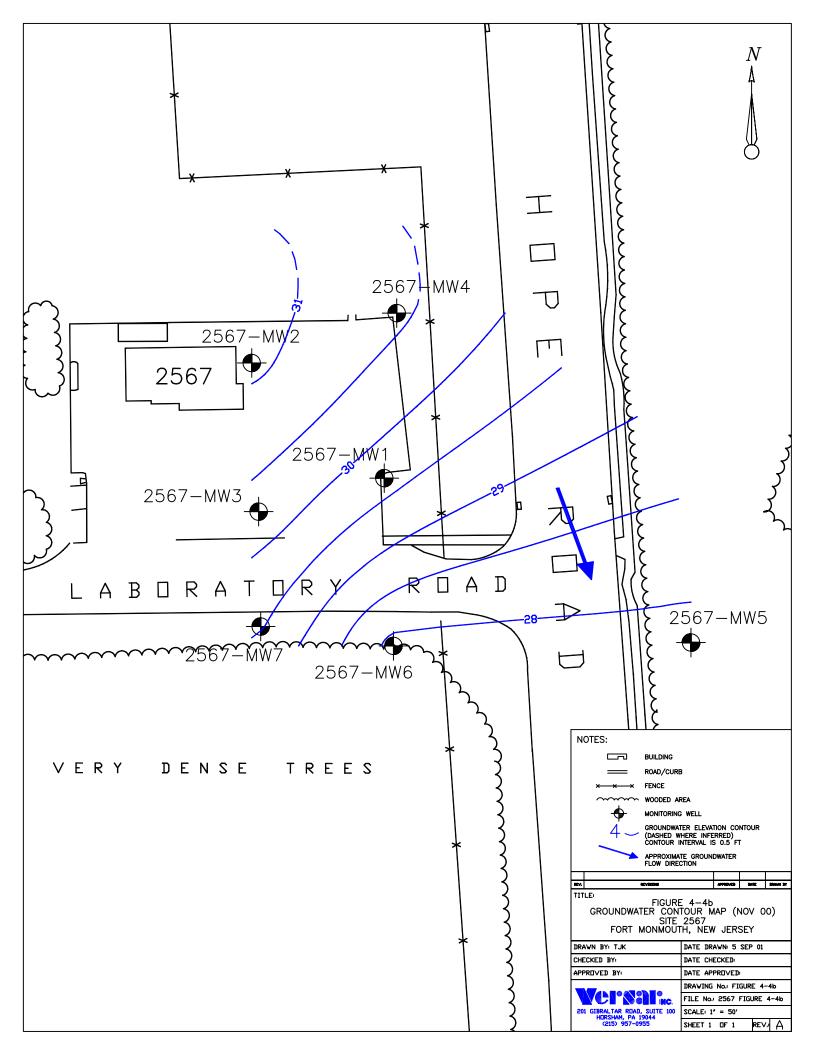
201 Gibraltar Road, Suite 100

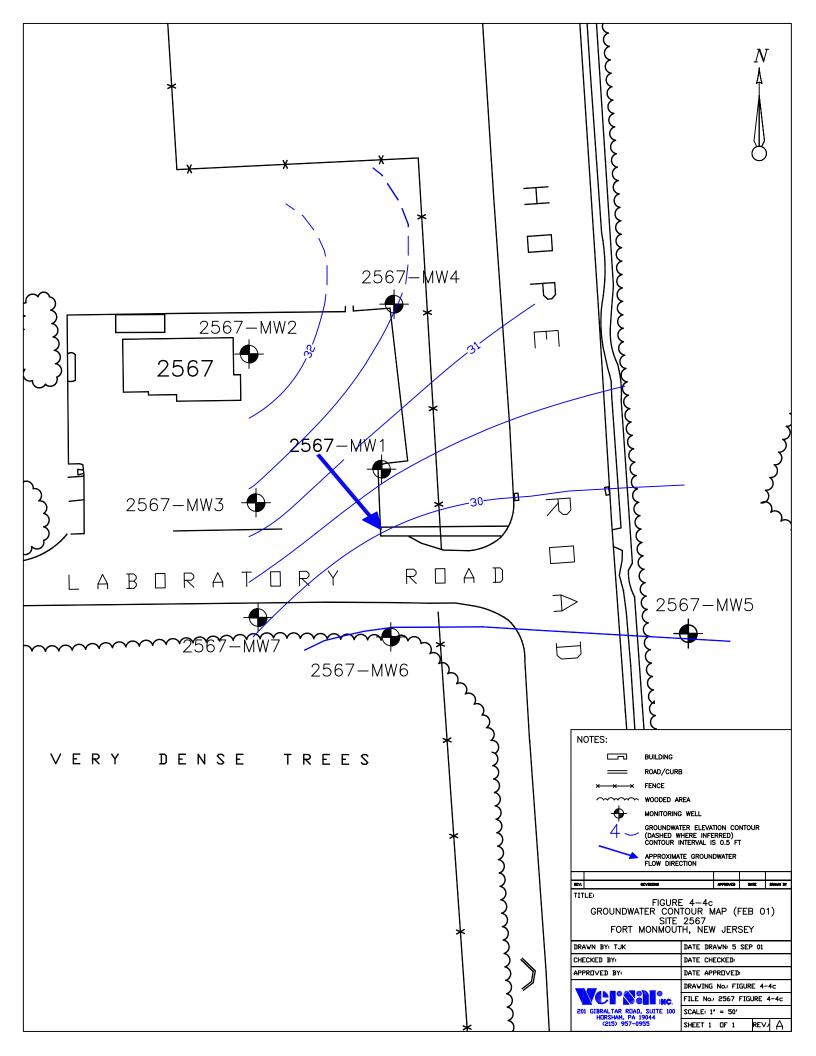


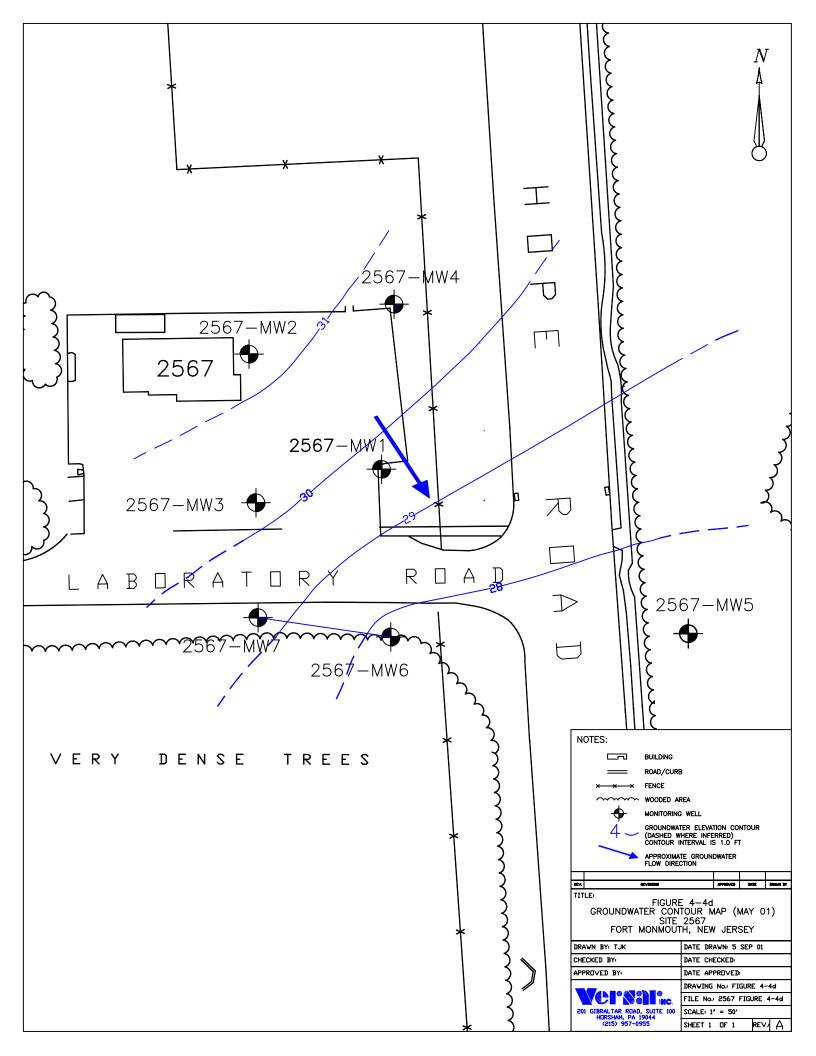


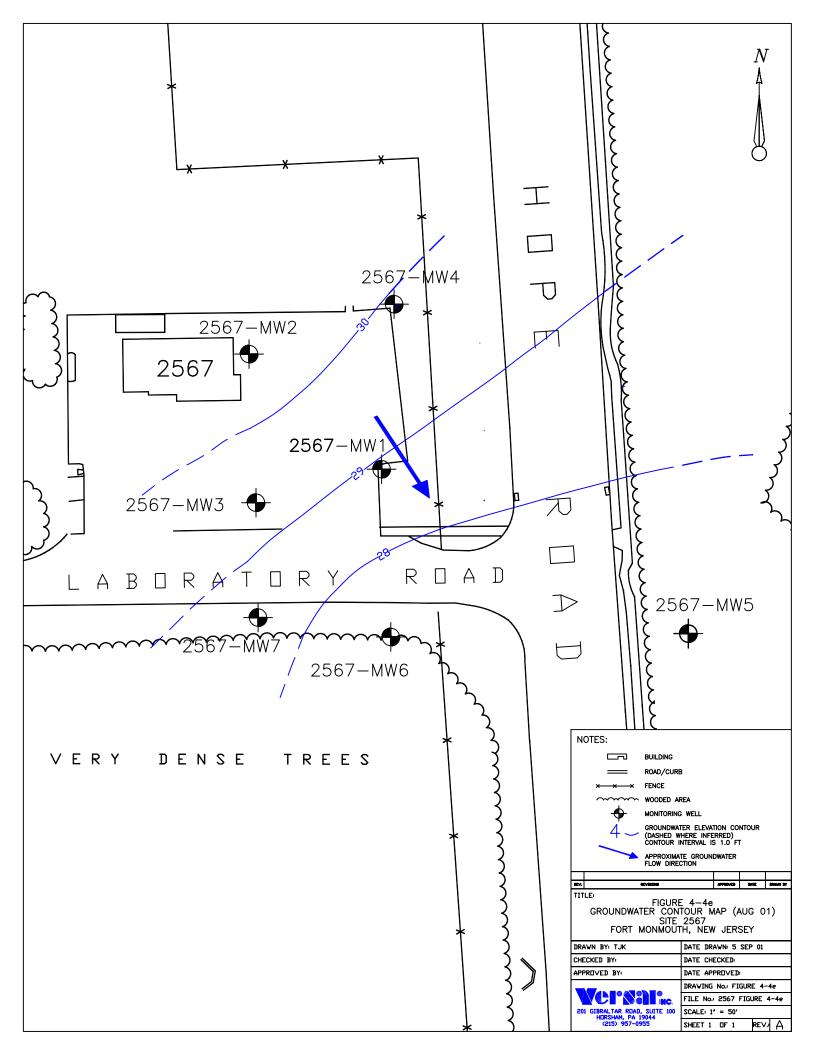


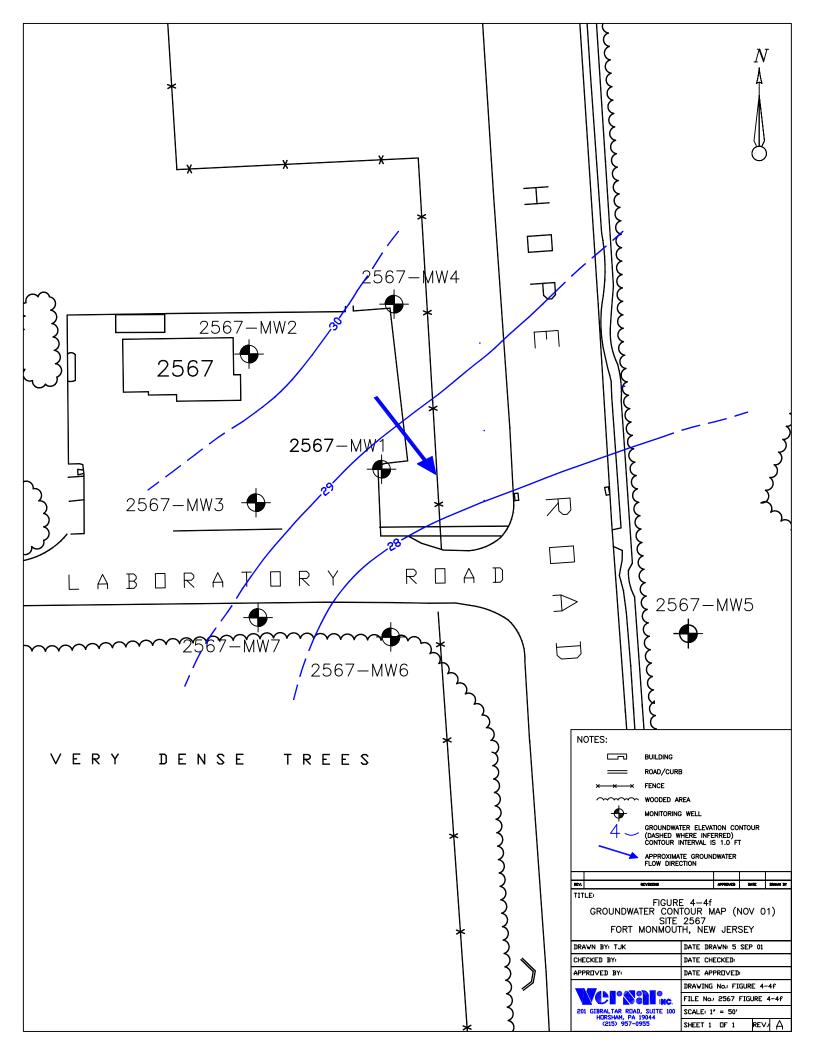


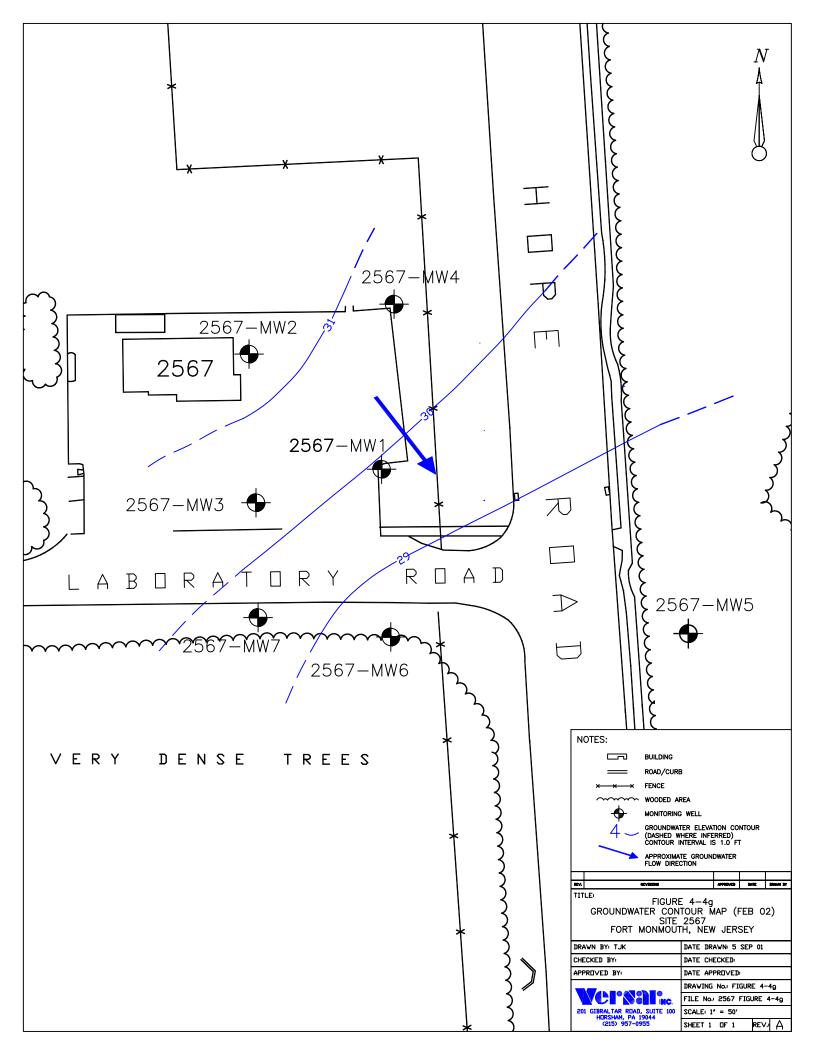


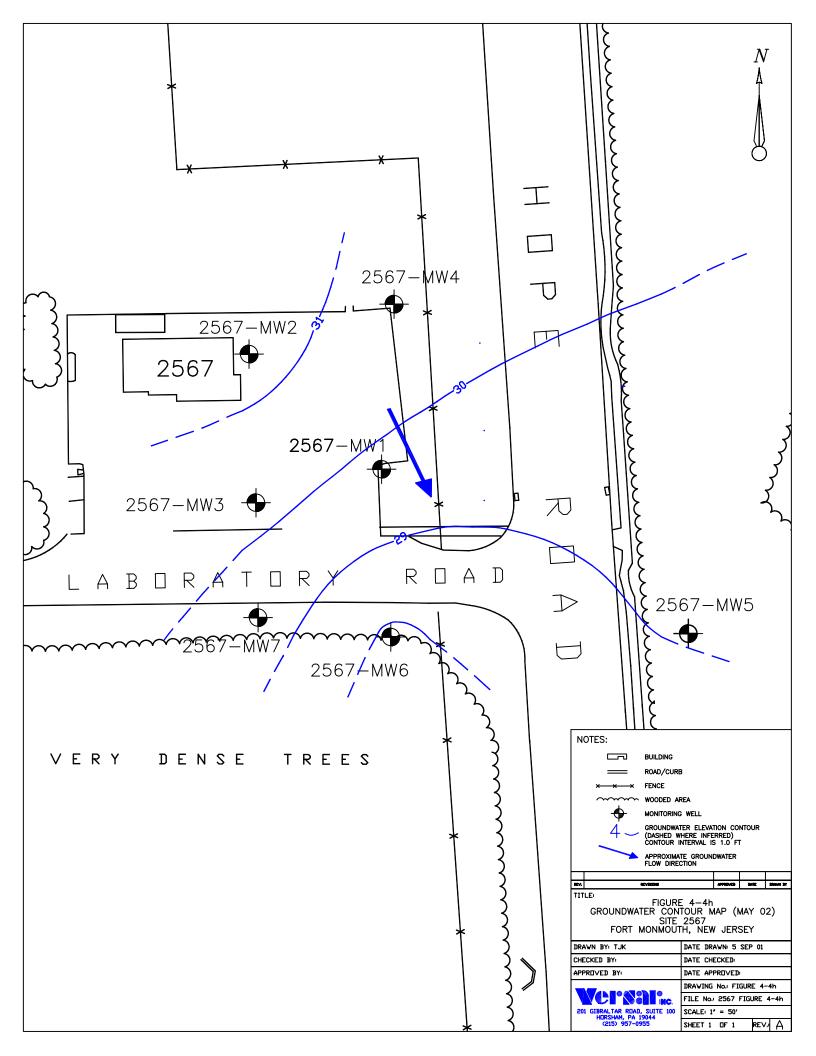


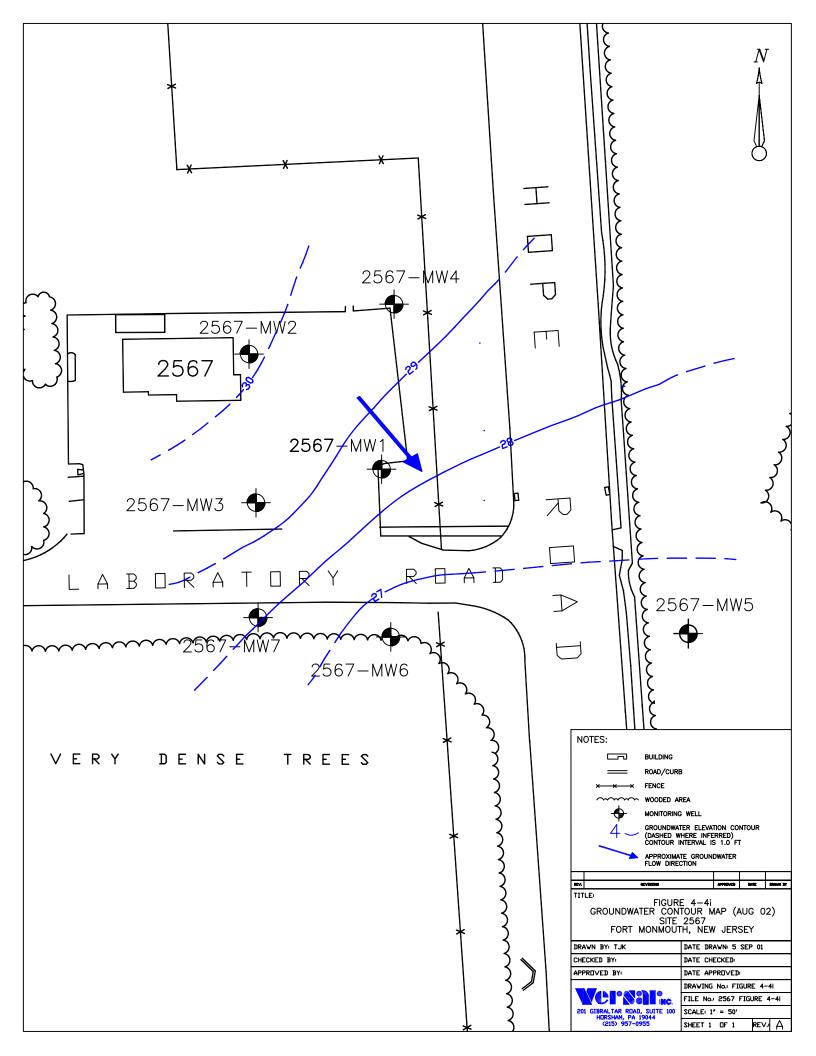


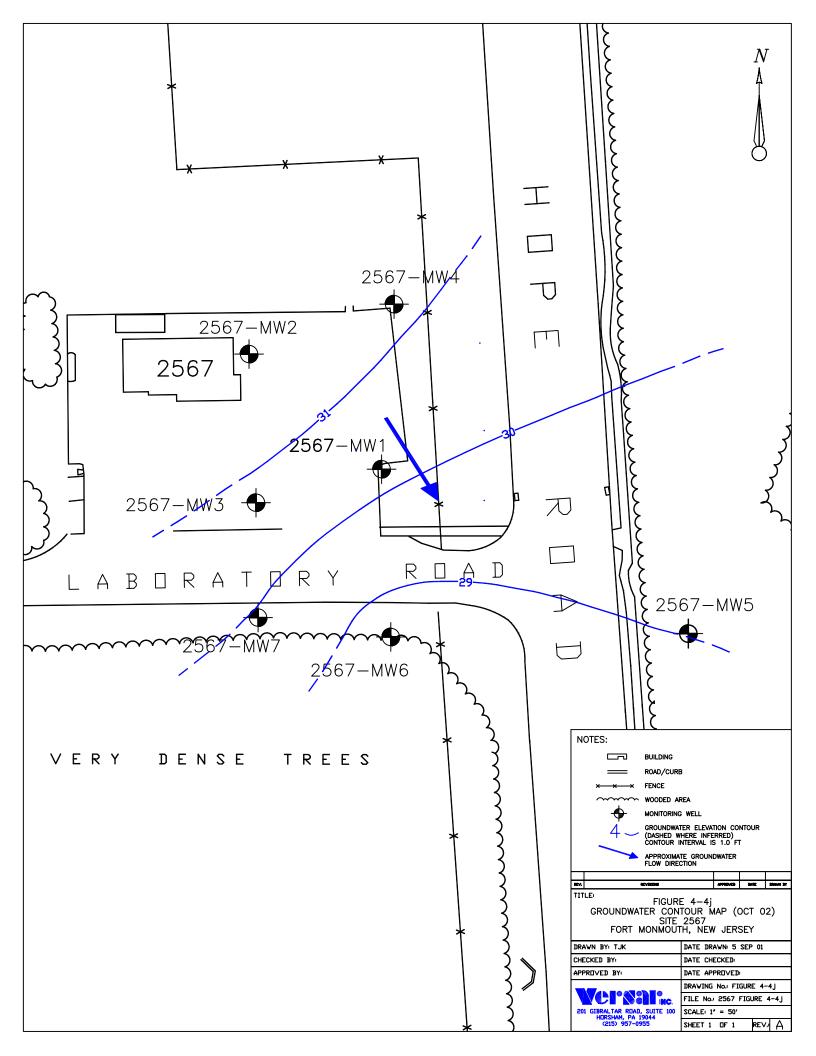


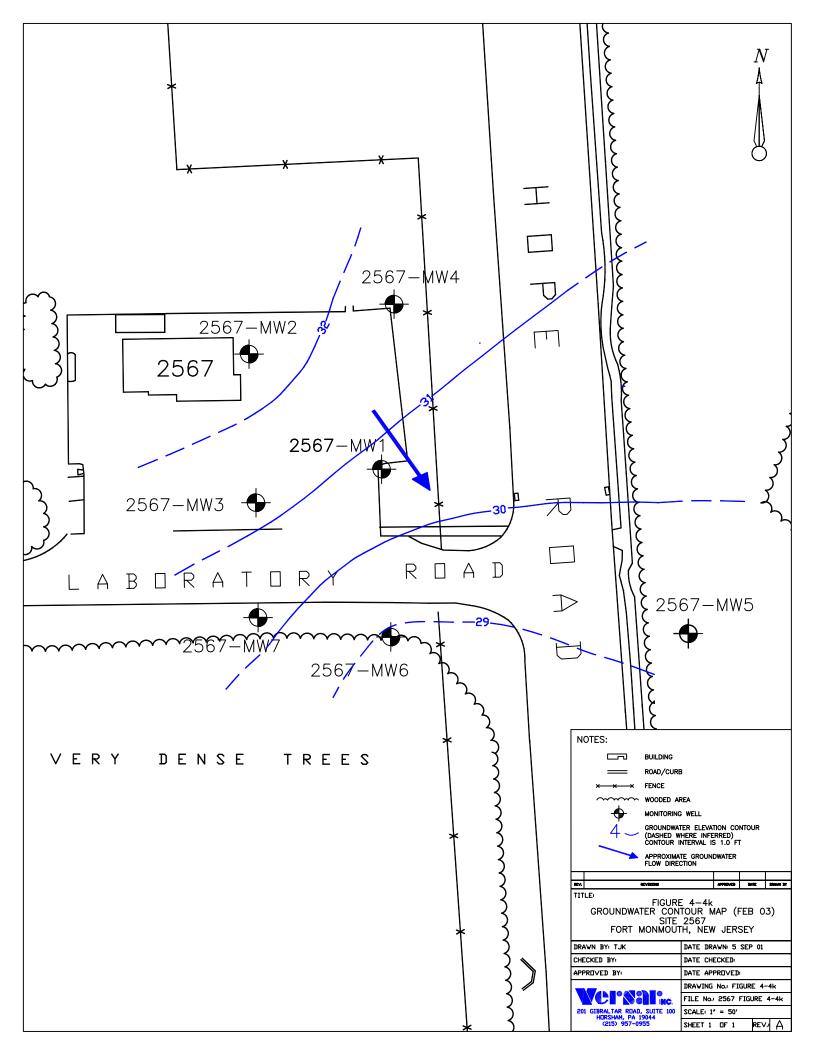


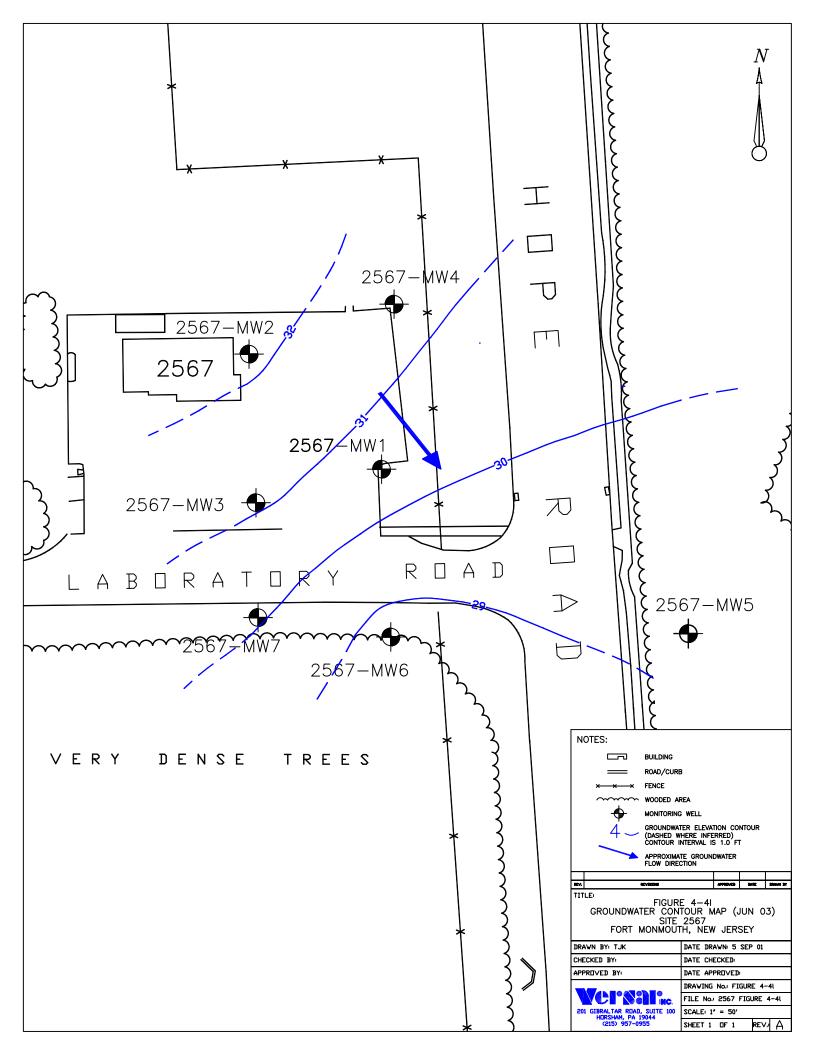


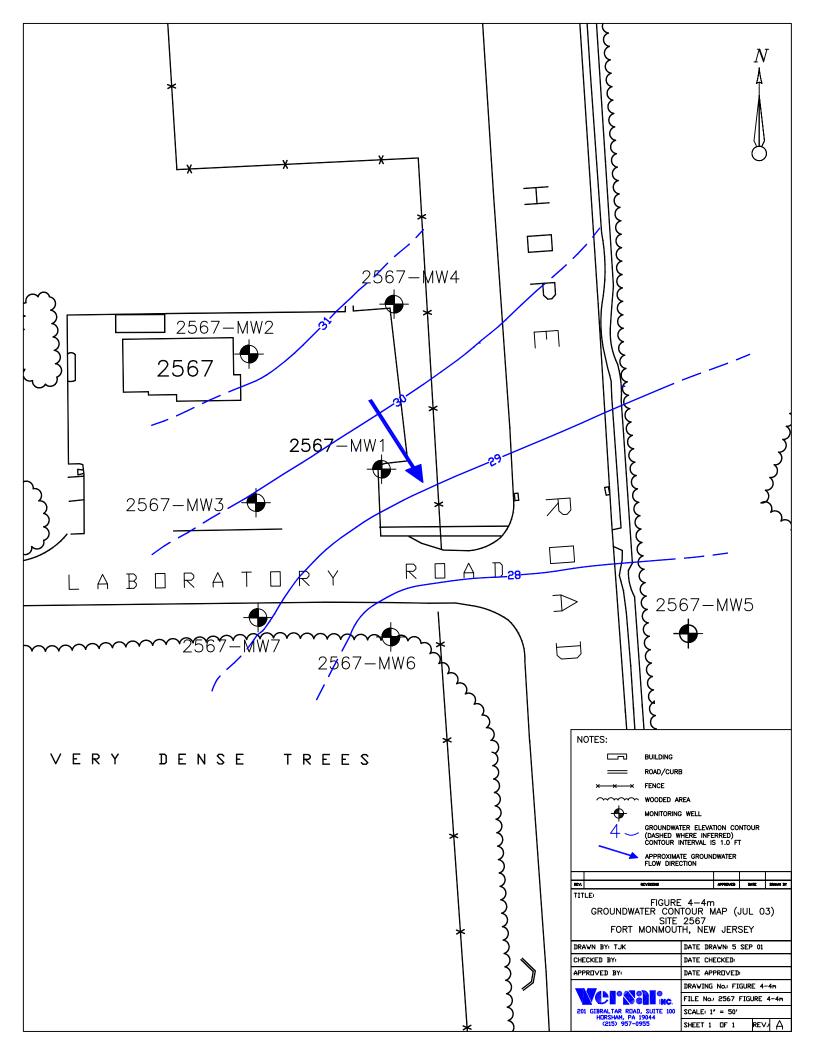


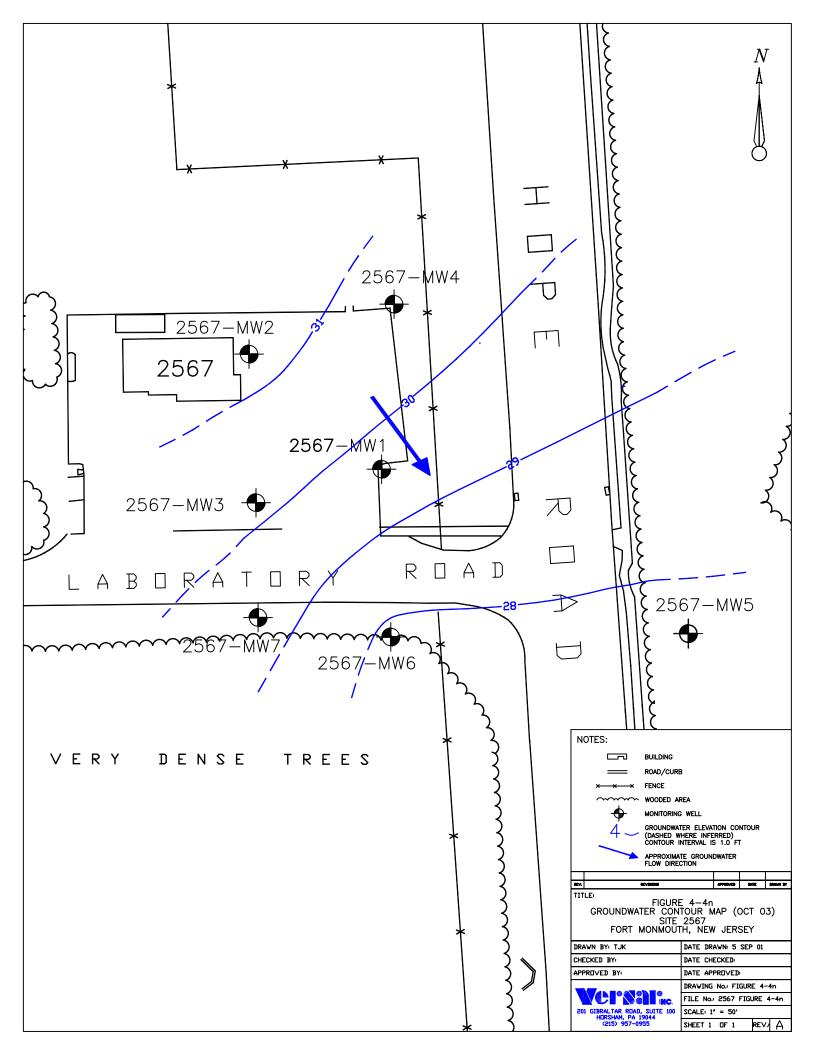


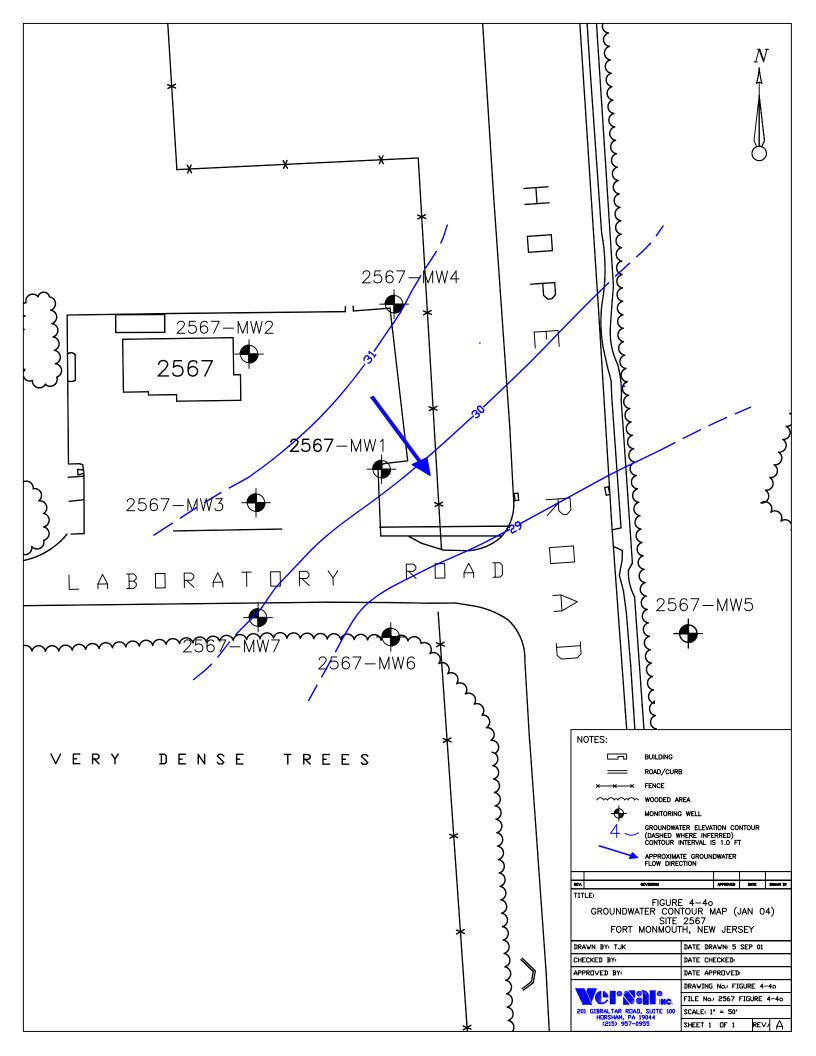


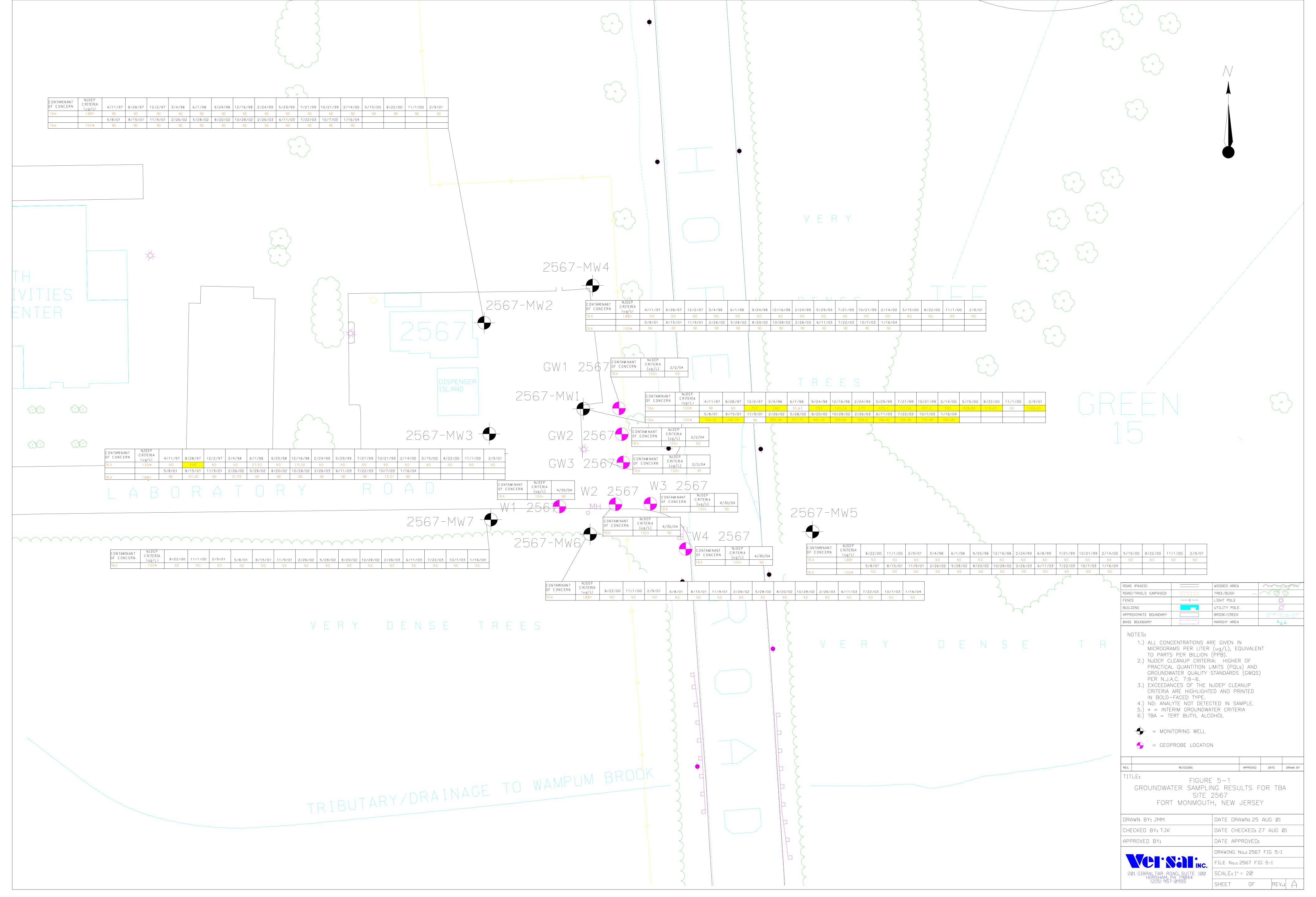


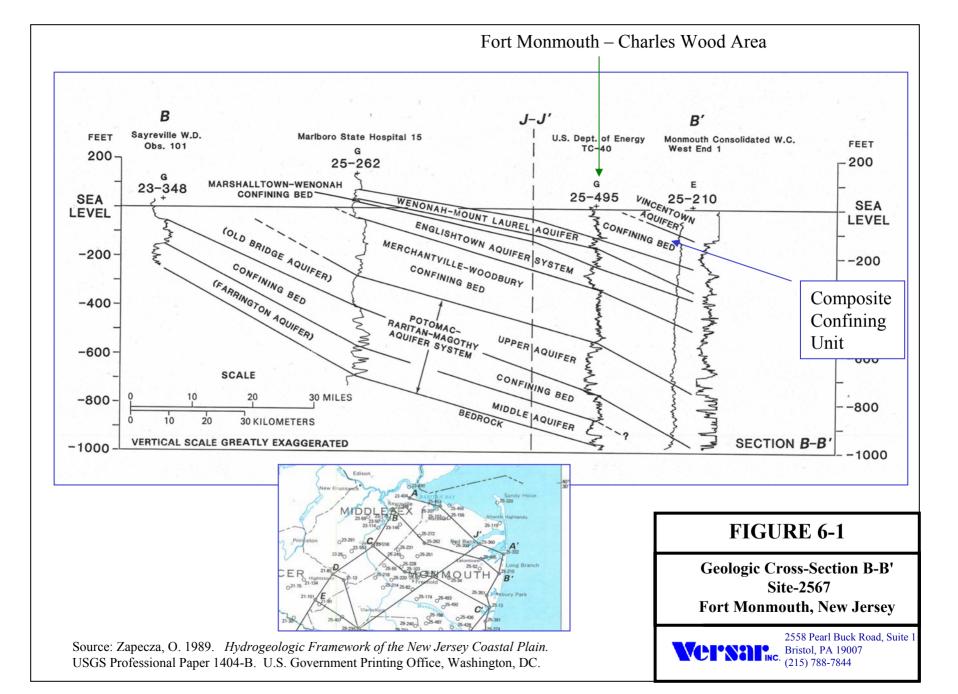


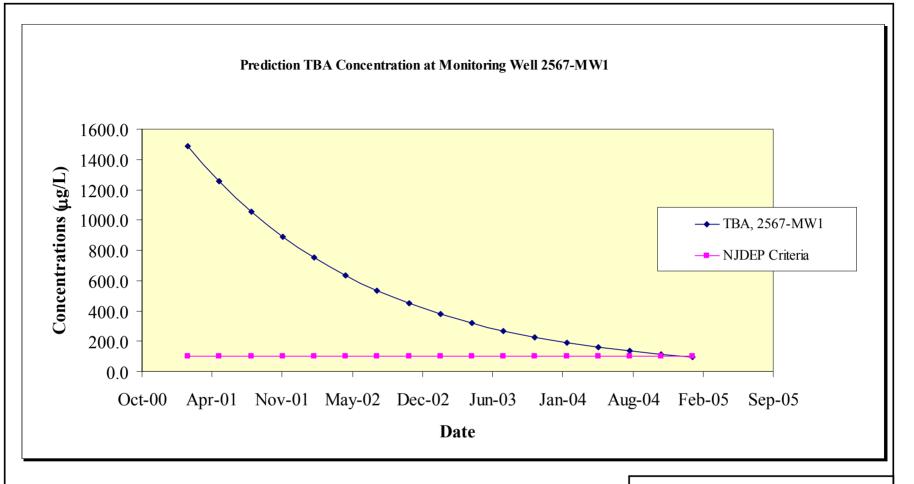












Notes:

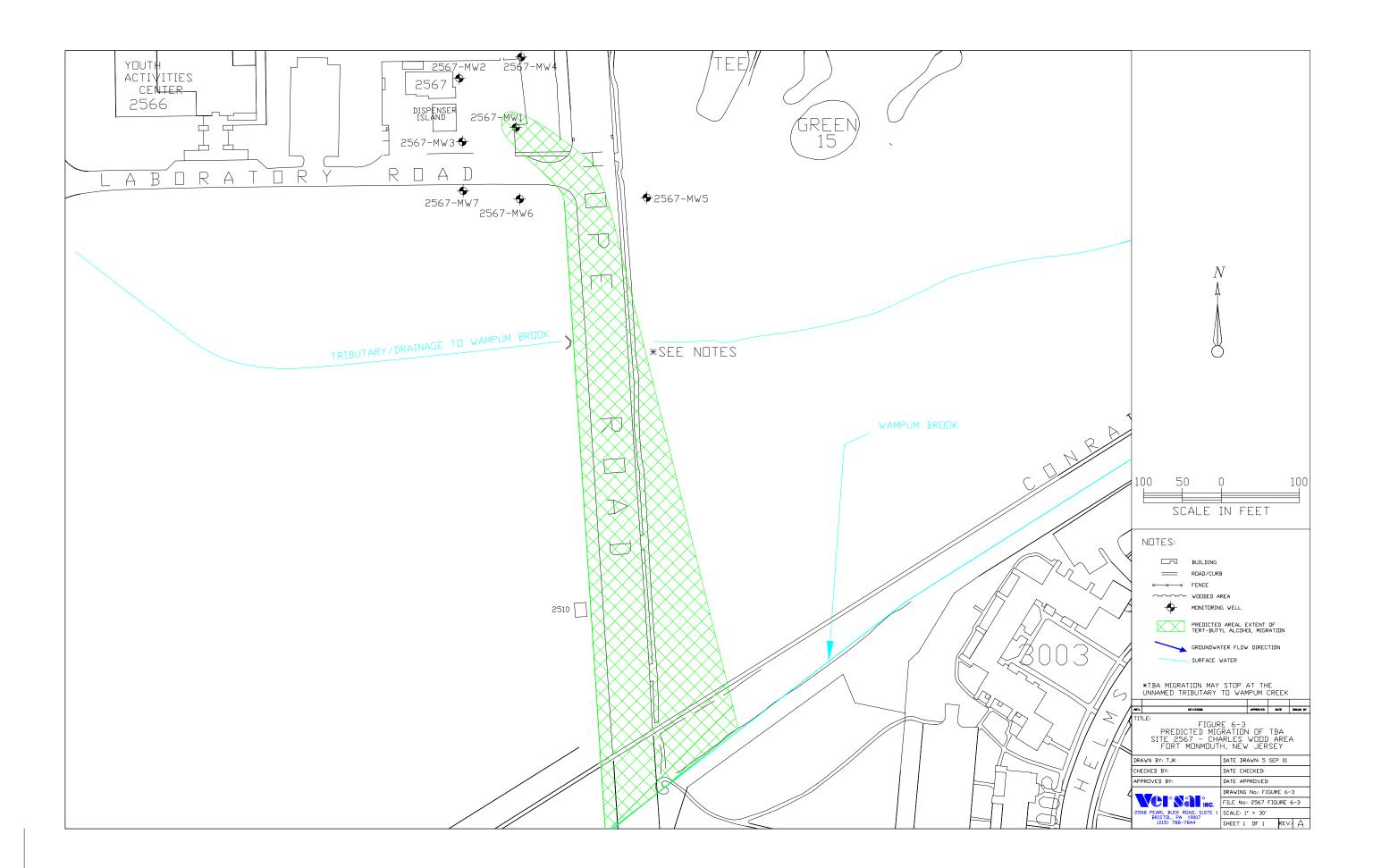
- 1) Concentration is shown in micrograms per liter (ug/L), equivalent to parts per billion
- 2) Initial TBA concentration at well 2567-MW1 was considered to be 1488.05 ug/L on February 9, 2001.
- 3) Estimated time for NJDEP compliance is 3.9 years.

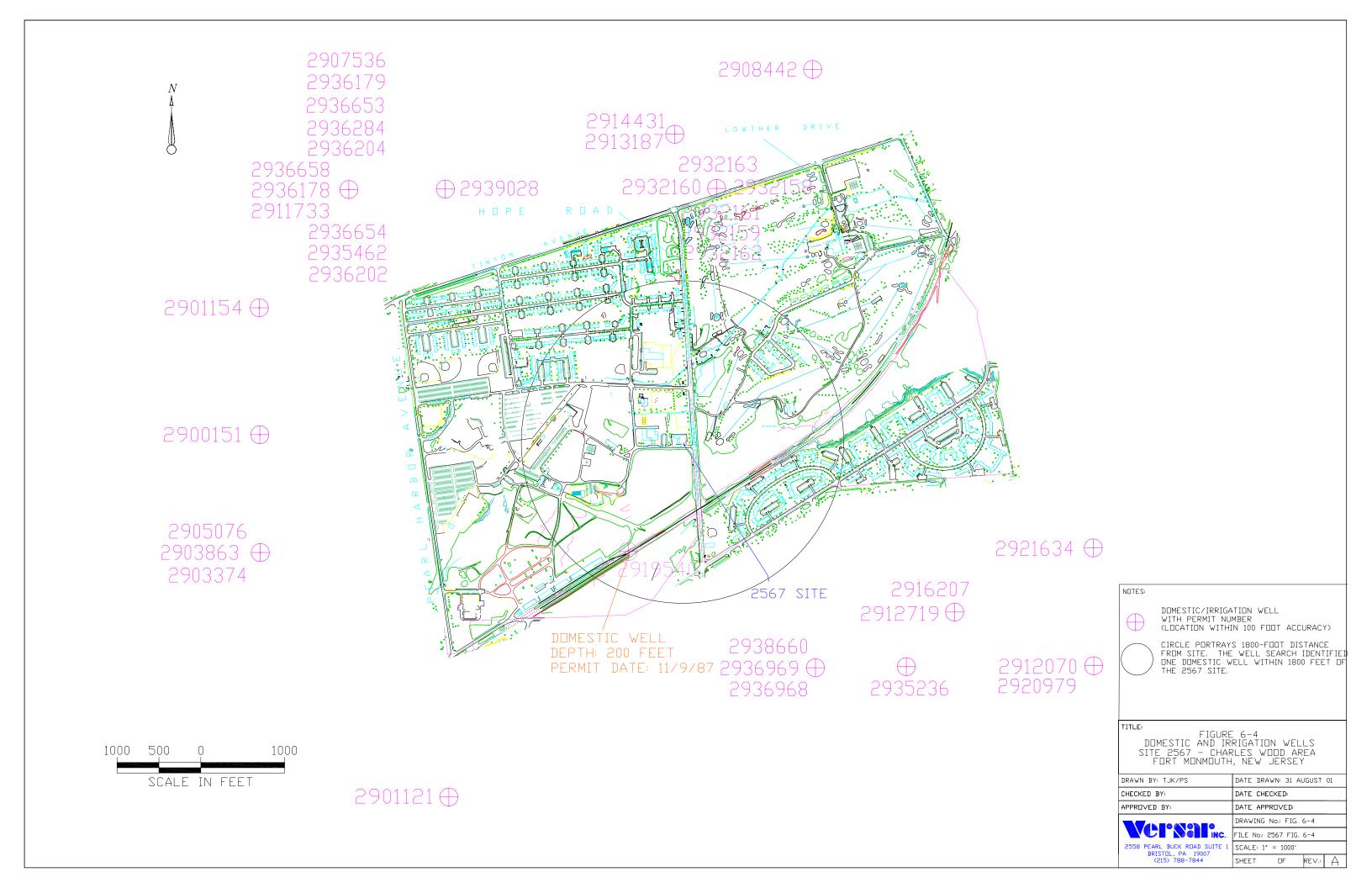
FIGURE 6-2

Predicted TBA Concentration at Well 2567-MW1 Site 2567 Fort Monmouth, New Jersey



2558 Pearl Buck Road, Suite 1 Bristol, PA 19007 (215) 788-7844







APPENDICES



APPENDIX A

UST Closure and Site Assessment Report for Building 2567, Tanks 33 and 46, Roy F. Weston, Inc., October 1993



RARITAN PLAZA I 4TH FLOOR, RARITAN CENTER EDISON, NJ 08837-3616 908-417-5800 • FAX: 908-417-5801

16 November 1993

Lynne Mitchell
Bureau of Underground Storage Tanks
Division of Responsible Party Site Remediation
New Jersey Department of Environmental
Protection and Energy
CN 028
Trenton, New Jersey 08625-0028

RE: UNDERGROUND STORAGE TANK CLOSURE AND SITE INVESTIGATION/ASSESSMENT REPORTS UST NOS.: 0081515-33 AND 90010-14 (TMS C91-2838)

Dear Lynne:

Roy F. Weston, Inc., (WESTON®), on behalf of the U.S. Army Fort Monmouth Directorate of Public Works (DPW), is pleased to submit copies of the Underground Storage Tank Closure and Site Investigation/Assessment Reports for USTs associated with Buildings 161 and 2567 at U.S. Army Fort Monmouth. Closure of these USTs was conducted under approval and onsite supervision of Douglas Greenfield of the New Jersey Department of Environmental Protection and Energy Central Bureau of Water and Hazardous Waste Enforcement (NJDEPE-CBWHWE).

A waste oil UST and a #2 fuel oil UST were located immediately adjacent to one another at Building 161. The same situation occurred at Building 2567. Closures of the waste oil USTs and the #2 fuel oil USTs at Buildings 161 and 2567 were conducted simultaneously. Due to the presence of a waste oil UST at these sites, closures were performed under approval by the NJDEPE-CBWHWE. At NJDEPE-CBWHWE's request, we have provided copies of the Closure and Site Assessment/Investigation Reports for Buildings 161 and 2567 for your files. The hazardous waste manifest for the contents of UST No. 0081515-33 is not included in the Closure and Site Assessment Report for Building 2567. DPW is currently attempting to obtain a copy of this manifest. No further action has been requested by the NJDEP-CBWHWE in reference to USTs associated with Buildings 161 or 2567.

Closure and Site Investigation Reports for waste oil tanks associated with Buildings 750, 1122 and 290 at U. S. Army Fort Monmouth have been submitted to, and are on file at, the NJDEPE-CBWHWE. Closure of these USTs is considered complete and no further action has been requested by the NJDEPE-CBWHWE in reference to closure of these USTs.



Lynne Mitchell

2

16 November 1993

Should you have any questions or comments, please contact Charles Appleby of the DPW at (908) 532-6224.

Very truly yours,

ROY, F. WESTON, INC.,

Scott Hubbard, C.H.M.M

Project Scientist



RARITAN PLAZA I 4TH FLOOR, RARITAN CENTER EDISON, NJ 08837-3616 908-417-5800 • FAX: 908-417-5801

5 October 1993

Mr. Doug Greenfield
Case Manager
Central Bureau of Water and
Hazardous Waste Enforcement
New Jersey Department of Environmental
Protection and Energy
CN 407
Trenton, NJ 08625-0407

Work Order No.: 03886-088-001

RE: UNDERGROUND STORAGE TANK CLOSURE AND SITE ASSESSMENT REPORT - BUILDING 2567

Dear Mr. Greenfield:

Roy F. Weston Inc. (WESTON®), on behalf of the U.S. Army, Fort Monmouth, Directorate of Engineering and Housing (DEH), is pleased to submit this <u>Underground Storage Tank Closure</u> and <u>Site Assessment Report</u> for Tanks 33 and 46 at Building 2567. At DEH's request, we have provided one (1) copy of the report for your review.

Following closure, the USTs were transported to Mazza and Sons Inc. for recycling, in compliance with all applicable regulations and laws. The tank reclamation certificates from Mazza and Sons and the hazardous waste manifest for the contents of Tank 33 are not included in this report. These documents are in the possession of DEH and will be supplied to your office when available. The Closure and Site Assessment Reports for the remaining waste oil tanks will be submitted to your office no later than 22 October, 1993.

Should you have any questions or comments, please contact Charles Appleby of the DEH at (908) 532-6224.

Very truly yours,

ROY F. WESTON INC..

Scott E. Hubbard, C.H.M.M

Project Scientist

cc: C. Appleby, DEH



UNDERGROUND STORAGE TANK CLOSURE AND SITE ASSESSMENT REPORT BUILDING 2567 TANKS 33 AND 46

October 1, 1993

W.O. No.: 03886-088-001

Prepared For:

UNITED STATES ARMY, FORT MONMOUTH NEW JERSEY DIRECTORATE OF ENGINEERING AND HOUSING ENVIRONMENTAL OFFICE BUILDING 167
FORT MONMOUTH, NJ 07703

Prepared by:

ROY F. WESTON, INC. Raritan Plaza I, 4th Floor Edison, New Jersey 08837



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EXECUTIVE SUMMARY

On 31 December 1991, two single wall, steel underground storage tanks (USTs) were closed at U.S. Army Fort Monmouth, in Fort Monmouth, New Jersey. The USTs, identified as Tanks 33 and 46, were located adjacent to Building 2567 in the Charles Wood section of Fort Monmouth. Tank 33 was a 1,000-gallon capacity, No.2 fuel oil tank. Tank 46 was a 500-gallon capacity, waste oil tank. The tanks were located immediately adjacent to one another and were closed simultaneously. Fabiano and Son, Inc. performed the tank closures.

Soils surrounding the tanks were screened visually and with air monitoring instruments for evidence of contamination. The tanks were inspected following removal for corrosion holes for indications of historical leakage from the tanks. No holes were noted in the tanks and no potentially contaminated soils were identified surrounding the tanks. It should be noted, however that U.S. Army Directorate of Engineering and Housing Environmental office (DEH) records indicated that Tank 46 was never in use. This was confirmed during closure and inspection of Tank 46.

Following removal of the tanks, eight post-excavation soil samples were collected and analyzed for total petroleum hydrocarbons (TPHC). Those samples which contained a concentration of TPHC exceeding 100 milligrams per kilogram (mg/kg) were also analyzed for base neutral compounds with a forward library search for 15 tentatively identified compounds (BN+15). Only one sample (sample C91-675) contained a concentration (190 mg/kg) of TPHC exceeding 100 mg/kg. All samples contained either non-detectable concentrations of contaminants or concentrations below proposed New Jersey Department of Environmental Protection and Energy (NJDEPE) subsurface cleanup criteria.

This site is currently undergoing a groundwater investigation to address groundwater contamination identified during closure of four(4) gasoline USTs in February 1993 (NJDEPE case #89-12-12-1442). Approximately 1,000 cubic yards of potentially contaminated soils and four(4) groundwater monitoring wells were installed as part of closure of Tanks 42, 43, 44, and 45. The closure of Tanks 33 and 46 are being conducted separately from these tanks.

No further action is proposed at this site in reference to Tanks 33 and 46 since no soils were identified during closure of these tanks with concentrations of contaminants exceeding proposed NJDEPE subsurface cleanup criteria.



SECTION 1.0

UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 Overview:

Two underground storage tanks (USTs), identified as Tanks 33 and 46, were closed at Building 2567 at Fort Monmouth, New Jersey on 31 December 1991. This Underground Storage Tank (UST) Closure and Site Assessment Report was prepared by Roy F. Weston Inc., (WESTON®) to assist the United State Army Directorate of Engineering and Housing (DEH) in complying with the New Jersey Department of Environmental Protection and Energy - Bureau of Underground Storage Tanks (NJDEPE-BUST) regulations. The applicable NJDEPE-BUST regulations at the date of closure were the "Interim Closure Requirements for Underground Storage Tank Systems" (NJAC 7:14B-1 et seq. September 1990). This report presents the results of the DEH's implementation of the UST Decommissioning/Closure Plans submitted to the NJDEPE on 12 July 1991. Tank 33 was a 1,000 gallon capacity No.2 heating oil UST and Tank 46 was a 500-gallon capacity waste oil tank.

All activities associated with the decommissioning of Tanks 33 and 46 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to: NJAC 7:14B-1 et seq., NJAC 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 &1910.120. All permits including but not limited to the NJDEPE-approved Decommissioning/Closure Plans were posted on site for inspection. Fabiano and Sons Inc., the contractors that conducted the decommissioning activities, are registered and certified by the NJDEPE for performing UST closure activities. The UST Decommissioning/Closure Plans and the UST Site Assessment Summary Forms for Tanks 33 and 46 have been included in Appendices A and B, respectively.

Based on an inspection of the USTs, field screening of subsurface soils and analytical results of soil samples collected, DEH concluded that no discharges historically occurred from the USTs. This UST Closure and Site Assessment Report provides a summary of the tank closure activities, including the results of the soil sampling investigation. Conclusions and recommendations are included in the final section of this report.



1.2 Site Description

Building 2567 is located on Hope Road in the Charles Wood section of Fort Monmouth. A site location map is provided in Figure 1-1. Building 2567 is an active gasoline service station. Four additional USTs (identified as Tanks 42-45) containing gasoline were closed at Building 2567 in February 1993 (Closure Approval No.C-92-3355/56). Approximately 1,000 cubic yard of potentially contaminated soils were removed and four groundwater monitoring wells were installed as part of closure of these tanks. The closure of these tanks and subsequent groundwater investigation is being conducted separately (NJDEPE case #89-12-12-1442) from the closure of Tanks 33 and 46.

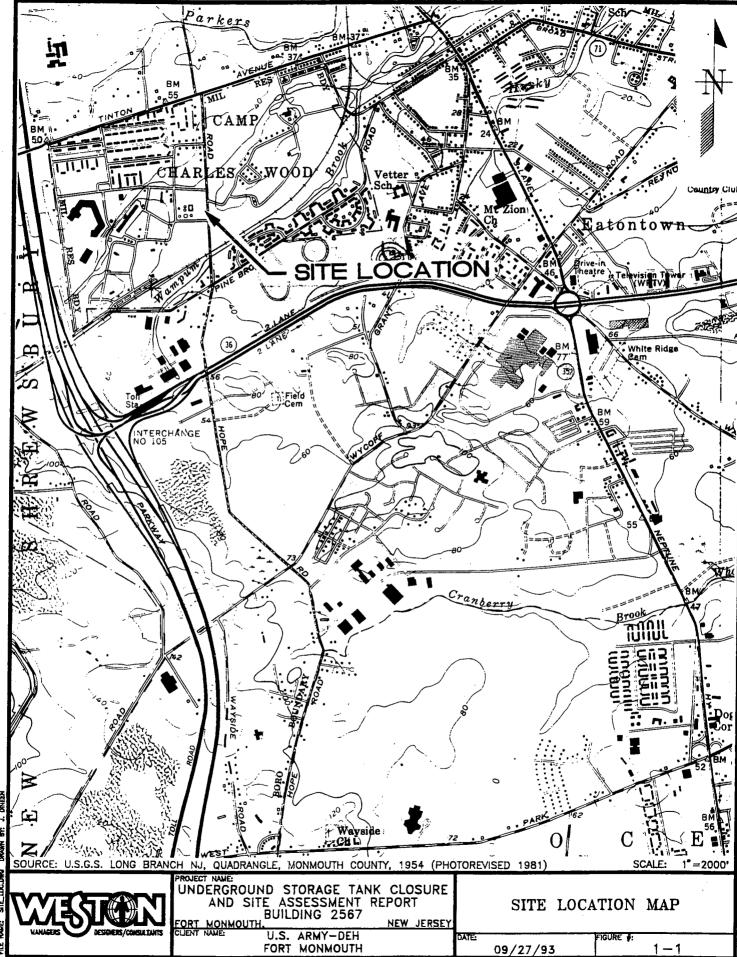
1.3 Health and Safety

Before, during, and after all activities, hazards at the work site which may have posed a threat to the health and safety of all personnel who were involved with, or were affected by, the decommissioning of the UST systems were minimized. All areas which posed, or may have been suspected to pose a vapor hazard were monitored by a qualified individual utilizing approved equipment. The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA.

1.4 Removal of Underground Storage Tanks

1.4.1 General Procedures

- All underground obstructions (utilities,... etc.) were marked out by the contractor performing the closure prior to excavation activities.
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- All excavated soils were screened visually and with air monitoring instruments for evidence of contamination. No potentially contaminated soils were identified during closure activities.
- Surface materials (i.e, asphalt, concrete, etc...) were excavated and staged separate from all soils.
- A Sub-Surface Evaluator from the DEH was present during all closure activities.



to 09/27/93 PLOT NAME FORTSTE

TEMSION #: 0000 Pr 08/



1.4.2 Underground Storage Tank Excavation

Soil was excavated to expose the USTs and associated piping. The piping was not removed/disturbed until all free product was drained into the USTs. The USTs were rendered vapor free by purging prior to any cutting or access. After the removal of the associated piping, manways were made in the USTs to allow for the proper cleaning of the USTs. The USTs were completely emptied of all liquids prior to removal of the USTs from the ground. Liquids were transported and disposed of by L and L Oil Co. All of the openings in the tanks were plugged except for one hole (manway).

After each UST was removed from the excavation, it was staged on polyethylene sheeting and examined for corrosion holes. The presence or absence of corrosion holes was documented by the Sub-Surface Evaluator. No corrosion holes were observed upon the inspection of each of the USTs. Soils surrounding the USTs were screened visually and with a Flame Ionization Detector (FID) for evidence of contamination. No evidence of contamination was noted. During removal of Tank 46, the 550 gallon waste oil tank, it was determined that this tank had never been in use. This was consistent with observations made by the NJDEPE representative present during removal of the tanks.

1.5 <u>Underground Storage Tank Transportation and Disposal:</u>

The tanks were transported by Fabiano and Sons and recycled by Mazza and Sons Inc., in compliance with all applicable regulations and laws.

The Subsurface Evaluator labelled each tank prior to transport with the following information:

- site of origin,
- contact person,
- NJDEPE UST Facility ID number,
- name of transporter/contact person, and
- destination site/contact person.

1.6 Management of Excavated Soils:

No potentially contaminated soils were excavated as part of the removal of Tanks 33 and 46. All soils were free of evidence of contamination and were backfilled into the excavation following removal of the USTs.



SECTION 2.0

SITE ASSESSMENT ACTIVITIES

2.1 Overview:

The Site Assessment was managed and carried out by U.S ARMY DEH personnel. All analyses were performed and reported by Environmental Profile Laboratories, a NJDEPE-certified testing laboratory. All sampling was performed under the direct supervision of a NJDEPE Certified Sub-Surface Evaluator according to the methods described in the NJDEPE Field Sampling Procedures Manual (1988). Sampling frequency and parameters analyzed complied with the NJDEPE-BUST document "Interim Closure Requirements for Underground Storage Tank Systems" (September 1990) which was the applicable regulation at the time of the closure. All records of the Site Assessment activities are maintained by Fort Monmouth DEH: Environmental Office.

The following Parties participated in Closure and Site Assessment activities.

- Subsurface Evaluator: DINKERRAI DESAI Employer: U.S. Army, Fort Monmouth Phone Number: (908) 532-1475
- Analytical Laboratory: Environmental Profile Laboratories Contact Person: DANIEL WRIGHT Phone Number: (908) 244-6278
- NJDEPE Representative: DOUG GREENFIELD DIVISION OF HAZARDOUS WASTE MANAGEMENT Phone Number: (609) 584-4200
- Closure Contractor: FABIANO AND SONS.
 Contact Person: Mr. Fabiano



2.2 Field Screening/Monitoring

All soils that were excavated as part of the removal of the USTs were screened using a FID, for evidence of contamination. Soils were also visually screened for evidence of contamination (staining, free product, etc..). No evidence of contamination was noted during excavation of soils.

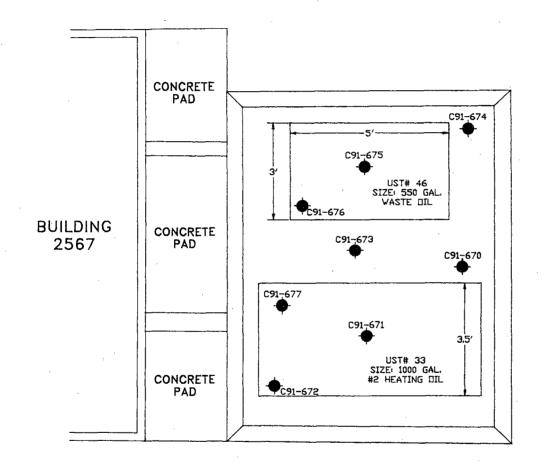
Soils on the sides and base of the excavation were screened with a FID by an individual under the direct supervision of a NJDEPE Certified Sub-Surface Evaluator. No evidence of contamination was noted within soils on the sidewalls or base of the excavation.

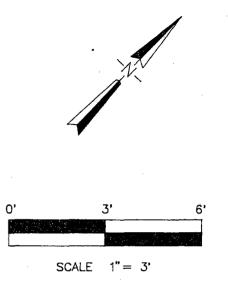
2.3 Soil Sampling

Following removal of Tanks 33 and 46, eight post-excavation soil samples were collected in accordance with NJDEPE procedure and the approved closure plan. A summary of sampling activities including parameters analyzed is provided in Table 2-1. Figure 2-1 depicts the location of the post-excavation samples. The samples were typically collected along the base and sidewalls of the excavation using decontaminated stainless steel scoops. Following soil sampling activities, the samples were chilled and delivered to Environmental Profile laboratories located in Toms River, New Jersey.

All samples were analyzed for total petroleum hydrocarbons (TPHC), and in accordance with NJDEPE requirements, samples containing a concentration exceeding 100 milligrams per kilograms (mg/kg) of TPHC were also analyzed for base neutral compounds with a forward library search for fifteen tentatively identified compounds (BN+15). Based on the TPHC analytical results, one sample (C91-675) was analyzed for BN+15.

Analytical parameters for post-excavation samples associated with Tank 46, the 550 gallon waste oil tank, were reduced from a priority pollutant scan plus 40 tentatively identified compounds (PP+40) based on the determination that the tank was never in use. This revised approach was verbally approved by the NJDEPE representative present onsite during closure of Tanks 33 and 46.





C91-670 - POST-EXCAVATION SAMPLE LOCATION



PROJECT NAME:
UNDERGROUND STORAGE TANK CLOSURE AND SITE ASSESSMENT REPORT

BUILDING 2567 NEW JERSEY

U.S. ARMY-DEH FORT MONMOUTH

POST-EXCAVATION SAMPLE LOCATIONS UST#'s 33 & 46

09/22/93

FIGURE #:



TABLE 2-1

SUMMARY OF POST-EXCAVATION SAMPLING ACTIVITIES TANK NOS. 33 AND 46 BUILDING NO. 2567 FORT MONMOUTH, NEW JERSEY

Sample I.D No.	Matrix	Sample Type	Analytical Parameters	Sampling Method
C91-670	Soil	Post-Excavation	ТРНС*	Stainless Steel Scoop
C91-671	Soil	Post-Excavation	TPHC*	Stainless Steel Scoop
C91-672	Soil	Post-Excavation	трнс*	Stainless Steel Scoop
C91-673	Soil	Post-Excavation	ТРНС*	Stainless Steel Scoop
C91-674	Soil	Post-Excavation	ТРНС*	Stainless Steel Scoop
C91-675	Soil	Post-Excavation	TPHC* BN+15	Stainless Steel Scoop
C91-676	Soil	Post-Excavation	ТРНС*	Stainless Steel Scoop
C91-677	Soil	Post-Excavation	ТРНС*	Stainless Steel Scoop

TPHC - Total Petroleum Hydrocarbons. Those samples which contained concentrations of TPHC exceeding 100 mg/kg were also analyzed for BN+15.

BN+15 - Base neutral compounds with a forward library search for 15 tentatively identified compounds.



SECTION 3.0

CONCLUSIONS AND RECOMMENDATIONS

3.1 Soil Sampling Results

To evaluate soils conditions following removal of the USTs and associated soils, the post-excavation sample results were compared to proposed NJDEPE subsurface cleanup criteria (NJAC 7:26D and revisions dated 8 March 1993). A summary of the analytical results and applicable subsurface cleanup criteria are provided in Table 3-1. The analytical data package is provided in Appendix C.

TPHC was detected in samples C91-675 and C91-676 at concentrations of 190 mg/kg and 20 mg/kg, respectively. All other samples contained non-detectable concentrations of TPHC. Sample C91-675 contained TPHC at a concentration (190 mg/kg) exceeding 100 mg/kg and as required by NJDEPE, this sample was analyzed for BN+15. Di-n-butylphthalate, butylbenzylphthalate and bis(2-Ethylhexyl) phthalate were detected in sample C91-675; however, at concentrations well below proposed NJDEPE subsurface cleanup criteria. Several tentatively identified base neutral compounds were identified in sample C91-675; however, at concentrations well below proposed NJDEPE subsurface cleanup criteria.

3.2 Conclusions and Recommendations:

DEH successfully removed two USTs at Building 2567 in the Charles Wood section of Fort Monmouth. Based on visual inspection of the USTs and field screening of the soils adjacent to the USTs, it was determined that no discharges had occurred from the USTs. Analytical results of the post-excavation samples confirm that no soils are present with concentrations of contaminants exceeding proposed NJDEPE subsurface cleanup criteria.

No further action is proposed at building 2567 in reference to Tanks 33 and 46.



TABLE 3-1

SUMMARY OF ANALYTICAL RESULTS TANK NOS. 33 AND 46 BUILDING NO. 2567, FORT MONMOUTH, NEW JERSEY

ТРНС	mg/kg	ND	ND .	ND	ND	NC	
Analytical Parameter	Units						
Sample Type		PE	PE	PE	PE	Criteria	
Matrix		Soil	Soil	Soil	Soil	Cleanup	
Lab ID No.		7013.1	7013.2	7013.3	7013.4	Proposed Subsurface	
Sample ID No.		C91-670	C91-671	C91-672	C91-673	NJDEPE	

Sample ID No.	C91-674	C91-675	C91-676	C91-677	NJDEPE	
Lab ID No.		7013.5	7013.6	7013.7	7013.8	Proposed
Matrix		Soil	Soil	Soil	Soil	Subsurface Cleanup
Sample Type		PE	PE	PE	PE	Criteria
Analytical Parameter	Units					
ТРНС	mg/kg	ND	190	20	ND	NC
Base Neutral Compounds						
Di-n-butylphthalate	mg/kg	NA	1.6	NA	NA	100
Butylbenzylphthalate	mg/kg	NA	.68	NA	NA	100
Bis(2-Ethylhexyl) phthalate	mg/kg	NA	.51	NA	NA	100

TPHC - Total Petroleum Hydrocarbons

PE - Post-Excavation.
ND - Non-Detected.

NC - No cleanup criterion has been proposed for TPHC by NJDEPE; however, the proposed

NJDEPE subsurface cleanup criterion for total organic compounds is 10,000 mg/kg.

NA - Not analyzed.

mg/kg - Milligrams per Kilogram



APPENDIX A

.UST CLOSURE PLANS

The following UST Closure Plans for Tanks 33 and 46 were submitted by DEH to the NJDEPE in July 1991. Written Closure approvals were not received by DEH for Tanks 33 and 46; however, closure of these tanks proceeded under verbal approval by the NJDEPE Division of Hazardous Waste Management.

UST-013 9/90

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WATER RESOURCES BUREAU OF UNDERGROUND STORAGE TANKS TANK MANAGEMENT SECTION

CN 029, 401 EAST STATE STREET TRENTON, N.J. 08625-0029

FOR STAT	TE USE ONLY
UST # Date Rec'd CA # Staff	

UNDERGROUND STORAGE TANK CLOSURE PLAN APPROVAL APPLICATION

Under the provisions of the Underground Storage of Hazardous Substances Act in accordance with N.J.A.C. 7:14B-9 et seq.

This application form shall be used by all applicants who plan to close Underground Storage Tank Systems pursuant to N.J.A.C. 7:14B-9 et seq.

INSTRUCTIONS:

- Before completing application form please refer to the attached Application Instruction Sheet.
- Please print legibly or type.
- Fill in all appropriate blanks. This application form requires that additional sheets be <u>attached</u> for some of the information requested. You may call the Bureau of Underground Storage Tanks/Tank Management Section (609/984-3156) for assistance.
- Return one original of this form (including all attachments required) and a copy of the complete Standard Reporting Form (SRF) to the address above. You must sign all forms as required and attach a check for the proper fee (see the fee schedule on Page 3). Make check payable to the <u>Treasurer</u>, <u>State of</u> <u>New Jersey</u>.
- If the subject facility is not registered the Closure Plan will not be approved.
- <u>Please Note:</u> Make sure that all required information on the Standard Reporting Form (SRF) is submitted. The SRF and this Closure Plan Application must be submitted together.

Date of Application

FACILITY REGISTRATION #

			0081515	- 33
ļ.	FACILITY NAME AND ADDRESS			
	U.S. Army Fort Monmouth			
	DEH Bldg. 167			
	Fort Monmouth NJ 07703	-		
	Telephone No. (908) 532-1475	Dinkerrai Desai		

0	•	
۱.	THIS	CLOSURE PLAN IS FOR:
	A. :	Substance stored in subject tank(s):
		1. Petroleum Products
		Indicate Type of Product Heating oil #2 (Write out product name;, e.g.)
		a. Gasoline, Jet Fuel, or Kerosene b. Heating Oil (#2, 4, 6), or Diesel c. Waste Oil (Please indicate total storage capacity of waste oil at the facility [including the tank(s) being closed])
	2	. Hazardous Substances other than Petroleum Products (Describe)
		Indicate Type of Product
	в. т	ype of Activity: (Circle one)
	1	. Abandonment of Tank(s)
		Attach the closure plan for abandonment, as required by N.J.A.C. 7:14B-9.2(b) or 9.3(b), which must contain the following items:
	•	a. Implementation schedule (3 copies per N.J.A.C. 7:14B-9.2(a)3) b. Site assessment plan c. Tank decommissioning plan
		 d. A site map e. Attach all <u>justification</u> for abandonment-in-place as required by N.J.A.C. 7:14-9.1(d). Attach the <u>certification statement</u> (on the back page) for abandonment-in-place, if applicable.
(2.	Removal of Tank(s)
		Attach the closure plan for removal as required by N.J.A.C. 7.14B-9.2(b) or 9.3(b). The following items must be included:
		a. Implementation schedule (3 copies) b. Site assessment plan c. Tank decommissioning plan

3. Temporary Closure

Indicate which situation applies and attach appropriate documentation.

- a. ____ Temporary closure for 12 months or less is subject to requirements of N.J.A.C. 7:14B-9.1(a).
- Bequesting an extension of temporary closure for more than 12 months per N.J.A.C 7:14B-9.1(b) must perform site assessment and submit results.

4. Change in Service

Attach documentation that the tank system being changed from the storage of a regulated to a non-regulated substance has been emptied and cleaned and that a site assessment has been performed, as required by N.J.A.C. 7:14B-9.1(e).

IV.

NOTE:

other address is specified here.

1 1	II.	FEE	~~!	

Check the activities below that apply,	, calculate the Total Fee and submit that amount with this application
Make checks payable to Treasurer,	State of New Jersey. Public schools and religious and charitable
institutions are exempt form the fees.	The owner or operator shall submit a separate fee for each excavation
where an activity occurs.	

A.	-	tivities Which Require a Site Assessment Removal or Abandonment without exemption to site assessment requirement	•	120.00	\$ 120	0.00		
	2.	Change in service from a regulated substance to a non-regulated substance						
	3.	Extension of period of Temporary Closure						
В.		tivities Not Requiring a Site Assessment Removal or abandonment with valid exemption			\$ 80	.00		
C.		ditional Activities Change in service from one regulated substand to another regulated substance	: 0		NO F	ŒE		
APE	LiC	ATION REVIEW FEE (activities in A, B, C)	÷ \$	50.00				
		TOTAL FEE DUE	\$	170.00				
COM PLA FINA PER LOC	AL AL	UREAU OF UNDERGROUND STORAGE T ETENESS AND APPROPRIATENESS AS SPEC PPROVAL WILL INDICATE THAT THE OWNER APPROVAL OF THE CLOSURE IS NOT IN IS, LICENSES AND CERTIFICATES REQUIRE , STATE AND/OR FEDERAL AGENCIES IN ATION.	IFIED IN SUBO OR OPERATO MPLIED. AL ED FOR ANY O	CHAPTER 9 OF OR MAY PROCE L APPROPR OF THE ABOV	F THE UEED WI	ST REGI TH THE IND API VITIES F	JLATION CLOSUE PLICAB ROM A	NS LE N'
		ITE ASSESSMENT SAMPLING AND A	NALYTICAL	REQUIREM	ENTS	WILL	BE SEI	N

SIGNATURE OF CONTACT PERSON

Notice of Approval to Proceed or Disapproval will be mailed to the facility address unless some

This application form must be signed by a contact person of the owner or operator of the subject facility. The contact person should have overall knowledge of tank decommissioning procedures and the site assessment requirements applicable to the tank closure which is the subject of this application.

NAME (Print or Type) Dinkerrai Desai	SIGNATURE
TITLE DEH Environmental Coordinator	DATE 7/10/91

other address is specified here.

	 F	_		_	
l					

Check the activities below that apply,	, calculate the Total Fee and submit that amount with this application.
Make checks payable to Treasurer,	State of New Jersey. Public schools and religious and charitable
institutions are exempt form the fees.	The owner or operator shall submit a separate fee for each excavation
where an activity occurs.	·

	A.	Activities Which Require a Site Assessment 1. Removal or Abandonment without exemption to site assessment requirement		120.00	\$ 120.00	
	•	Change in service from a regulated substance to a non-regulated substance				
		3. Extension of period of Temporary Closure				
	В.	Activities Not Requiring a Site Assessment 1. Removal or abandonment with valid exemption			\$ 80.00	
	C.	Additional Activities 1. Change in service from one regulated substance to another regulated substance	9		NO FEE	
	API	PLICATION REVIEW FEE (activities in A, B, C)	+ \$	50.00		
		TOTAL FEE DUE	\$_	170:00	NA	
IV.	PEF LOC	E BUREAU OF UNDERGROUND STORAGE T MPLETENESS AND APPROPRIATENESS AS SPEC IN APPROVAL WILL INDICATE THAT THE OWNER: AL APPROVAL OF THE CLOSURE IS NOT IN RMITS, LICENSES AND CERTIFICATES REQUIRE CAL, STATE AND/OR FEDERAL AGENCIES IN PLICATION.	IFIED IN SUB OR OPERATO MPLIED. AL ED FOR ANY	CHAPTER 9 OR MAY PRO L APPROP OF THE ABO	OF THE UST REGU OCEED WITH THE C RIATE AND APP OVE ACTIVITIES FI	LATIONS LOSURE PLICABLE ROM ANY
		E SITE ASSESSMENT SAMPLING AND A TH THE APPROVAL TO PROCEED.	NALYTICAL	REQUIRE	MENTS WILL B	E SENT
NOT	E:	Notice of Approval to Proceed or Disapproval will be	mailed to the	facility addre	ess unless some	

SIGNATURE OF CONTACT PERSON

This application form must be signed by a contact person of the owner or operator of the subject facility. The contact person should have overall knowledge of tank decommissioning procedures and the site assessment requirements applicable to the tank closure which is the subject of this application.

NAME (Print or Type) Dinkerrai Desai	SIGNATURE			
TITLE DEH Environmental Coordinator	DATE 7/13/91			

U.S. Army DEH Bldg. 167 SELFM-EH Date: 7/10/9/

NJDEP UST REG #: 008/5/5 - 46

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Underground Storage Tank (UST) Decommissioning / Closure Plan

A. General Requirments:

Fort Monmouth, NJ 07703

All activities associated with the decommissioning of any underground storage tank (UST) shall comply with all applicable Federal, State and Local laws and ordinances. These laws include but are not limited to: NJAC 7:14B et seq., 5:23 et seq. and OSHA 1910.146, 1910.120. All permits including but not limited to this document, the NJDEP Closure Plan Approval Package, etc..., shall be posted on site for inspection. The contractor conducting the decommissioning activities shall be registered by the NJDEP for performing said activities.

B. Safety and Health:

Before, during, and after all activities, the work site shall be made free of all hazards which may pose a threat to the health and safety of all personnel who are involved with, or are affected by, the decommissioning of the UST. All areas which pose, or may be suspected of posing, a vapor hazard shall be monitored by a qualified individual utilizing approved equipment. This individual will ascertain if the area is properly vented to render the area safe, as defined by OSHA.

C. UST Excavation:

- 1. All underground obstructions (utilities,... etc.) shall be marked out by the contractor performing the excavation.
- 2. All activities shall be carried out with the greatest regard to safety and health and the safeguarding of the environment.
- 3. All excavated soils will be evaluated as to the possibility of contamination. Soils suspected to be contaminated with product shall be staged on poly-sheeting separate from soils not suspected to be contaminated (see section E. Excavated Soils Management).
- 4. Surface materials (ie. asphalt, concrete, ect...) shall be excavated and staged separate from all soils.
- 5. Soil will be excavated to expose the UST and associated piping. The piping shall not be removed / disturbed until all free product is drained into the UST. The UST will be rendered vapor free prior to any cutting or access. After the removal of the associated piping, a manway will be made in the UST to allow for the proper cleaning of the UST.

U.S. Army

DEH Bldg. 167 SELFM-EH

Fort Monmouth, NJ 07703

Date: 7/13/9/

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6. After the UST is removed from the ground, it will be staged on poly-sheeting and examined for corrosion holes. The presence or absence of corrosion holes will be documented by the contractor. If corrosion holes are observed, or if upon inspection of the excavation site evidence of a discharge to the environment, the NJDEP hotline shall be notified.

- 7. In the event of a discharge to the environment, additional soils will be excavated. Site assessment activities will determine to what depth the contractor will excavate.
- 8. After completion of the Site Assessment activities, the excavation will be lined with poly-sheeting and backfilled to grade with noncontaminated soils from the site and additional certified clean fill provided by the contractor.

D. UST Transport / Disposal:

- 1. The tank will be transported and disposed / recycled in compliance with all applicable regulations and laws.
- 2. The contractor shall label the tank with the following information:
 - a. site of origin
 - b. generator / contact person
 - c. NJDEP UST ID number
 - d. product previously stored
 - e. name of transporter / contact person
 - f. destination site / contact person
 - g. other info. as required
- 3. The contractor shall provide Fort Monmouth with sufficient documentation certifying that transport / disposal (recycling) of the tank was completed according to all applicable Federal and State regulations.

E. Excavated Soils Management:

- 1. All excavated soils suspected to be contaminated will be transported, by the contractor, to a designated staging area. The designated area will contain the soils as well as manage all stormwater runoff.
- 2. All soils stored in the designated staging area will be maintained in piles no larger than 100 cubic yards each. Each pile will be lined and covered with poly-sheeting and weighted to ensure containment.
- 3. Each soil pile will be sampled and analyzed for waste classification as outlined in the NJDEP document titled "Management of Excavated Soils" dated August 17, 1990.

U.S. Army

Date:

7/12/91

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Fort Monmouth, NJ 07703

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4. All soils catagorized as Hazardous waste or non-hazardous waste will be managed as such, in accordance with N.J.A.C. 7:26-1 et seq..

5. All soils that contain levels of contaminants below the Catagory 3 soil limits will be used in accordance with Federal and State requirements.

F. Changes / Authorizations:

1. All deviations in activities related to the closure of a UST as outlined in this document shall require prior authorization from the NJDEP-DWR-BUST.

U.S. Army
DEH Bldg. 167
SELFM-EH
Fort Monmouth, NJ 07703

Date: 7/12/9/ NJDEP UST REG #: 608/5/5- 46

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UNDERGROUND STORAGE TANK (UST) SITE ASSESSMENT PLAN

A. General:

This site specific assessment plan will be managed and carried out by U.S. Army DEH and Serv-Air Inc. personnel. All analyses will be performed and reported by NJDEP certified testing laboratries. All monitoring wells will be installed by NJDEP licensed well drillers. All sampling will be performed according to methods described in the NJDEP Field Sampling Procedures Manual. All records of the Site Assessment will be maintained by DEH and submitted to the NJDEP-DWR-BUST in accordance with N.J.A.C. 7:14B-9.2 and 9.3.

PHASE I UST Decommissioning

A. Initial Soil Excavation:

- 1. Soil will be excavated from the UST site and screened utilizing a Photo Ionization Detector (PID) and/or a Flame Ionization Detector (FID).
- 2. All soils suspected to be contaminated will be treated in accordance with the UST Decommissioning Plan.

B. Continued Excavation:

- Excavation of suspect contaminated soil will continue until one of the following situations is encountered:
 - a. groundwater
 - b. excavated soils no longer exhibit characteristics of contamination
 - c. excavation equipment can no longer remove soils due to depth or other restrictive cause.

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PHASE II Site Survey

- A. Vapor Screening:
 - 1. An individual trained in the operation of a FID and/or PID shall evaluate the sides and pit bottom of the excavation.
 - 2. All observed instrument readings will be documented and included in the Site Assessment Survey report. This documentation will include all factory and daily calibrations of the instrument.

PHASE III Site Sampling

A. Soil samples will be collected from the UST excavation and analyzed according to the following schedule:

			TPHC	8/N 715	LEAD, XYLENE	PP+15
TANK	CAPACITY	PRODUCT	SAMPLES	(IF TPHC >100)	(1F IPHC >100)	(IF TPHC >100)
46	550g.	Unsteoil	4	NA	MA	4
						_
						

U.S. Army DEH Bldg. 107 SELEM-EH Port Monmouth, NJ 07703 Date: 7/12/91 NUDEP UST REG #: 0081515 - 46

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B. Soil samples will be collected from the Pipe excavation and analyzed according to the following schedule:

TANK	LENGTH OF P	TPE PRODUCT	8N +15 (It TPHC >100)	VOA +15 Lead, Xylene (If TPHC >100)	PP+15	TPHC
[₹] 46	<15	WASTE OIL	NIA	NIA	NIA	NIA
						N

- C. All samples will be taken in the native soil below the bedding material. The sample locations should be along the mid-lines of the tank outline except for at least two of the samples which should be taken within one foot of each of the two highest field survey readings. All of the soil samples should be discrete samples taken within a of vertical interval. All samples will be collected by utilizing laboratory decontaminated stainless steel trowels dedicated to each sample location.
- D. The excavation will remain open until laboratory results determine all TPHC samples are less than 100 ppm. If levels greater than 100 ppm are reported, further excavation and resampling may be requested for those specific areas. If further excavation is not possible, additional required analyses will be performed and the excavation lined with poly-sheeting and filled to grade with certified clean fill.

U.S. Army
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SELFM-EH
Fort Monmouth, NJ 07703

Date: 7/13/91
NJDEP UST REG #: 00 8/5/5 - 46

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PHASE IV Groundwater Monitoring

- A. Monitoring wells will be installed within the UST field at all UST locations where the tank(s) being closed stored gasoline, kerosene, jet fuel and/or site specific factors indicate a known or potential impact of soil contamination exists.
- B. Groundwater monitoring wells will be installed by a New Jersey licensed Well Driller in accordance with N.J.S.A 58:4A-4.1 et seq..
- C. All monitoring wells will be sampled as described in the NJDEP Field Sampling Procedures Manual, 1988.
- D. All monitoring wells will be analyzed in accordance with the following table:

46	Waste oil	Not Required	n/4	MA
TANK	PRODUCT	MONITORING WELL(S)	624	625
		,	(A) EPA Method	(B) EPA Method

Note (A): Sample must be analyzed by EPA Method 624 + 15 (GC/MS plus identification of non-targeted compounds) modified to include calibration for xylenes, methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA)

Note (B): Sample must be analyzed by EPA Method 624 + 15 (GC/MS plus identification of non-targeted compounds) modified to include calibration for xylenes; AND EPA Method 625 + 15 (base/neutral extractable extractable organics).

- C. All monitoring well sampling will be conducted according to methods described in the NJDEP Field Sampling Procedures Manual February 1988
- D. All laboratory analyses will be performed by NJDEP certified Laboratories using approved methods and following all Quality Control/Assurance procedures.

Administrative Check List Underground Storage Tank Closure

	Completed	Submitted (NJDEP
Submission and/or Activity	Yes No	Yes No
UST_Registration	415	<u> </u>
Site Investigation (Preliminary)		
Standard Reporting Form (Closure)	415_	
Closure_Plan_Approval_Application	/ -	
Fees (\$ 500) Blowlet DHWM	yes_	
Implementation Schedule (3 copies)	yes	
Site_Assessment_Plan	705	
Decommissioning Plan	425	
Site Map	415	
Certificate For Abandonment-In-Place	WA	
UST Site Assessment Summary		
Analytical Results (Snil)		
Analytical_Results_(M-Vell_Two_Round	s)	
Chain of Custody		
Laboratory_Authentication_Statement		·

Page 4				UST NO	
Tank LD, No.	TANK NO.	TANK NO.	TANK NO.	TANK NO.	TANK NO.
27. Tank Status MARK ONE III A. Operational		5 4	184	5 /-	#
(+)B. Temporarily out of service (Less than 90 days)	<u> </u>		6		
(+)C. Extended out of service (90 days to 2 years)			Ö	<u> </u>	
D. Long term out of service (Greater than 2 years)		0			
		0		0	
E. Abandoned, in place F. Abandoned, in place, filled only G. Abandoned in place, sealed only		D	0	0	
G. Abandoned, in place, sealed only				0	
H. Abandoned, in place, filled and sealed	D		0	О	
(+) J. Seasonal (Answer only for motor fuel uses)	0		0		
K. Prior retrolitting work, Please Specify	,				
L. Other, Please Specify	Ramyko 7 88				
28. Spill recovery system on-site (MAR ONE X) A. Yes	0)8 (5 /-	55-	0
B. No	8 ⁄		0	ם	₩.
29. Overfill protection (tank only) (MAN ONE X) A. Yes		¥	19-	20 -	
B. No	7,	0			₽-
30. Emergency shut-off mechanisms (dispensers) (MARK OHC II) A Yes		_			
B. No	<u>ar</u>	5	55	<u>\$</u>	
31. Substance last used in tank mank out at A. Leaded gasoline	<u></u>	<u> </u>	<u> </u>		<u> </u>
B. Unleaded gasoline	1 - 5 -			 	
C. Alcohol enriched gasoline		<u> </u>		D	
D. Light diesel fuel (No. 1-D)	1 -	-	0	0	
E. Medium diesel fuel (No. 2-D)	<u> </u>	0	0	D	Ö
F. Waste oil		0	0	0	0
G. Kerosene (No. 1)	0			0	
H. Home heating oil (No. 2)					
1. Heating oil (No. 4)		0	ם	0	
J. Heavy heating oil (No. 6)					
K. Aviation fuel	0				
L Hazardous substances (per Fact Sheet)		0			
M. Other, Please Specify				1	1
32. Estimated date last used (month/year)	Mo. Yr.	Mo. Yr.	Mo. Yr.	Mo. Yr.	Mo. Yr.
33. Estimated quantity (gallons) left in tank	سسال	سسا			
		,			
OWNER OR OWNER'S AGENT CERTIF	FICATION				
I certify under penalty of law that I have person am familiar with the information submitted in th	ally examined an is and all attache	d		SSCALATURE:	-
documents, and that based on my inquiry of immediately responsible for obtaining the info that the submitted information is true, accurate.	ormation, I believ			INT OR TYPE NAME)	
that the submitted information is true, accurate,	, ,	V			

(5)

State of New Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION Division of Water Resources

CN-029 Trendon, New Jersey 08625



ust aC	9	. <u>:51</u>	5
	YES	NO	
CK. IN	0		
AMT.		0	
AUTH	0	D	
SP ROUTE		a	
SITE PLN		0	
SIGN	<u>D</u>	۵	
COMCODE		$\overline{11}$	Ĭ

UNDERGROUND STORAGE TANK REGISTRATION QUESTIONNAIRE

Bureau of Underground Storage Tanks Registration Section 1-800-722-TANK

		eneral Facility Inform	nation		
Facility name:	سسسا		111111		
Facility location:		1 1 1 1 I	AND STREET		Ш
	COMITY	CITYO	H M JAIC JPAL ITY		<u>.</u>
3. Owner's mailing	address:	11111	NUMBER AND STREET		لــ
	L	CITY OR MUNICIPAL			لــا
4. Owner's name:		للللال			1_1
5. Contact person 6. Contact telepho		AREA CODE	PERSON OF TITLE	NUMBER	J
7. Total number of underground st			Total facility undergro tank capacity (gallon		
9. Status of owne	f: (mark one) A. D. CU	RRENT B.	FORMER		
0. Type of owner: (mark one)	A. D STATE OR LOCAL GOVERNMENT	B. PRIVATE OR CORPORATE	C. OWNERSHIP UNCERTAIN	D. TEDERAL GOVT. (GSA FACILITY I.D. NUMBER)	
	a site plan are submitt	ed with this registr	ation, A. 🗆	YES B. 🗆 NO	
underground a hand-drawn sk distances that t operating or ex	torage tanks. EITHER, etch of the alte may be so anks, buildings, and disp ilsting. (E); abandoned, (i	an existing engine ubmitted. In either ca pensers are from the A); or out of service,	ering site plan, if ava se the site plan or sketo facility's property bou (C). Each un Jerground	dings and the location of liable, OR a neat and leg ch MUST show the location ndary. Include all tanks tha t tank on the site plan or sk er assigned to a tank on the	gible and Il are leich

HOT	NO.

ALL underground tanks, including those taken out of operation. (UNLESS THE TANK WAS REMOVED FROM THE GROUND) must be included in this registration. All in-ground tanks shall be reported as underground tanks on this questionnaire regardless of their current status; Existing, E. Abandoned, A; or out of service, C.

SPECIFIC TANK INFORMATION

	TANK	(NO.	TANK	NO.	TANK	NO.		(NO.	TANK	K NO.
2. Tank Identification Number		916		917		932		<u>49)</u>		<u> </u>
3. CASRN Number (Hazardous Substances Only)	111				1111			• • • •		
4. Tank Age (Years)		8	1	1		1	\perp	1		4
5. Tank Size (gallons)		5.50	1.0.	000	140	0.00	1.4	000	1, 24	000
6. Tank Contents (MARIE ONE II)								. 1		
A. Leaded gasoline		1		<u> </u>		-		+		
B. Unleaded gasoline		1				-				
C. Alcohol enriched gasoline										
D. Light diesel fuel (No. 1-D)										
E. Medium diesel fuel (No. 2-D)		2		1 1		-		2		
F. Waste oil	19		E							
G. Kerosene (No. 1)		2		·				-		
H. Home heating oil (No. 2)		2								
J. Heating oll (No. 4)		2								
K, Heavy heating oil (No. 6)		2		3						
L. Aviation fuel						-		} -		
M. Hazardous substances (per Fact Sheet)				2	3	<u>*</u>		5-	ئـــــ ا	<u>*</u>
N. Other, Please Specify					ļ					
17. Tank and Piping Construction	Tank	Piping	Tank	Piping	Tank	Piping 🗆	Tank	Piping	Tank	Piping
A Bare steel	 		-		-		H		0	-
B. Carbon steel					 		1		1 -	
C. Stainless steel	무		0		-		1 -			-
D. Aluminum		-	 	-	1 -		一	-	-	0
E. Polyvinyl chloride	누므				十十	 -	<u> </u>		1 =	0
F. Concrete	 		 		1 6		1 =	-	1	0
G. Bronze	1 8		⊢∺		1 -		<u> </u>	-		
H. Earthen walks			15	ᇴ	1	- 4	1	<u> </u>	8	×
J. Fiberglass reinforced plastic	1 =				-		1 7		1 0	
K. Fiberglas-clad steel	 므		<u> </u>		1	_	금		<u> </u>	0
L Painted/asphalt steel	10		누므		+ ∺		1 -		1 -	-
ML TBUILDO	1 =		<u> </u>		╁╬╌		1 5	-	1 -	
N. Composite	1 -		1 -		╁╬		1 6		1 5	<u> </u>
P. Iron (cast or ductile)	1 -		 - -		1 📅		╁╬		1 - -	
R. Non-metallic			<u> </u>		+ -		╁┸		1	
S. Other; Please Specify	 	64-1-	\ 	Piping	Tank	Plping	Tank	Piping	Tank	Piping
18. Tank and Piping Structure (MARK ALL THAT APPLY & A. Single wall	Tank	Piping E—P	Tank	. Piping	מ' ו'					X
B. Double wall	1 6	-	1 ਛੋ		1 1	<u>_</u> _	1 3	14	0	0
C. Manway in tank	┤╩	- -	1 -	<u>g</u>	1 -	<u>a</u> _	1	6/-		0
	Tank		Tank		Tank		Tank		Tarde	
19. Internal Tank and Piping Lining A. Rubber		C Librid	lana D			. 0	0		 	
8. Epoxy	П						<u></u>		╁╬	
C. Alklyd				0	0					—∺.
D. Phenolic		0		0	П		0		무	
E. Glass	0	0	o				0		0	
F. Clay	10		0	а	0				1-9	- 3
G. None	声	8	125	<u> </u>	18	. 9	. ₽		1	
H. Other, Please Specify							Τ		ــــــــــــــــــــــــــــــــــــــ	

Tank ID. No. TANK	Pag	Page 3.							UST NO			
20. Tank and Piping Lining installed A. Al purchase of lank A. Al purchase of lank												
A. At purchase of tank B. Retrofitted C. None S. S			_=	==_,	_=	 ,						
B. Pierrofilied	20.							, ,				
C None C None S4. 59. 59. 59. 59. 59. 59. 59. 59. 59. 59	_	A, At purchase of tarit								$\overline{}$		
21. Secondary containment was at the area of the content of the co	_				=							
A. Liner												
B. Vault	21.			1		1		1	-			, -
C. Double wall ○ None ○ Non	_											
D. None	_											
E. Other, Please Specify 22. External Type/Application of Cathodic Protection uses As that Amy 19 Tank Piping Tank Pi	_											
External Type/Application of Cathodic Protection was Aut must away 19			- 00-	76	U.			<u> </u>	u_		75-	¥ <u>-</u>
Tank Piping Tank Pipin	-											
Tank Piping Tank Pipin	22.									i		
S. Sprayed		Trotoconon (and the first training)	Tank	Piping	Tank ³	Piping	Tank	Piping	Tank	Piping	Tank	Piping
C. Sacrificial anode □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		A. Wrapped				_						
D. Impressed current	_								_			
E None	_											
F. Other, Please Specify 23. Monitoring/detection method	_											
23. Monitoring/detection method	_	E. None	<u>B</u> -		194	₹_	<u> 58</u>	5 -	. 55-	€_	gz.	_₽_
A Automatic sampling	_											
A Automatic sampling	23.	Monitoring/detection method	Tank	Piping	Tank	Pipina	Tank	Pipina	Tank	Pipina	Tank	Pipina
C. Ground water monitoring					ᇡ		_ ≱-		5 5-		Ö	
D. System in secondary containment □ □ 38 87 55 55 55 55 55 55 55 55 55 55 55 55 55	_		Ø	₹	58	82	54 -	51-	₩.	₽-	75	₩-
E. System outside backfill F. System within piping (piping lesk detector) G. None G. None G. O. G. C. G. G. C. G. G. C. G. C. G. C. G. G. G. C. G. C. G. G. G. C. G. C. G. G. C. G. G. C. G. G. G. C. G. G. G. C. G. G. G. C. G.	_	C. Ground water monitoring	0			a					٥	0
F. System within piping (piping leak detector) G. None 24. Type of monitoring/detection system A Continuous B. Event activated C. Audio C. Visual E. Electric sensor F. Stock/inventory control (manual) G. F. Stock/inventory control (manual) G. F. Stock/inventory control (manual) G. Stock/inventory control (electronic) H. Tile drain J. Vapor sniff wells C. Cherry Please Specify M. None 25. Tank/piping tested (any hype) audia Aud. Invat APPLY III A. Yes B. NO C. Test positive audia Audia Audia Apply III B. Within the past 1 year C. More than S years ago		D. System in secondary containment	0	_ 0	E .	8	54	₽-	₽-	€-		0
G. None 24. Type of monitoring/detection system Tank Piping Tank Pip	_	E. System outside backfill	0		0						a	
24. Type of monitoring/detection system (abble AL Trivit APPLY 11) A. Continuous		F. System within piping (piping leak detector)			28	B			8	_₽		<u> </u>
A Continuous 8. Event activated C. Audio C. Audio C. Yesual E. Electric sensor F. Stock/inventory control (manual) C. Stock/inventory control (manual) C. H. Tile drain J. Vapor sniff wells C. Tile the main				0_			**					
A Continuous 8. Event activated C. Audio C. Audio C. Yesual E. Electric sensor F. Stock/inventory control (manual) C. Stock/inventory control (manual) C. H. Tile drain J. Vapor sniff wells C. Tile the main	24	. Type of monitoring/detection system	Tank	Piping	Tank	Pipina	Tank	Plpino	Tank	Piping	Tank	Pioina
C. Audio D. Visual E. Electric sensor F. Stock/inventory control (manual) D. H. Tile drain J. Vapor sniff wells K. Internal Inspection L. Other, Please Specify M. None 25. Tank/plping lested (any hype) audit AU THAT APPLY TI B. NO D. None (Never tested) D. None (Never tested) B. Within the past 1 year B. Within the past 1 year C. More than 5 years ago D. No Records	ı											
D. Visual D.	-	B. Event activated	0	0	-	15	64-	Ø -	₩-	₽-		
E. Electric sensor		C. Audio	a		R	M	₩-	120-	₩-	68 -	0	
F. Stock/inventory control (manual) G. Stock/inventory control (electronic) H. Tile drain J. Vapor sniff wells C. Thest positive aware allow was described in the past 1 to 5 years ago C. More than 5 years ago	_	O. Visual	0	_ 0						0	0	
G. Stock/inventory control (electronic) H. Tile drain J. Vapor sniff wells L. Vapor sniff wells C. Internal Inspection L. Other, Please Specify M. None 25. Tank/piping tested (eny hype) (AULE ALL THAT APPLY IN A. Within the past 1 year D. None (None than 5 years ago C. More than 5 years ago D. No Records		E. Electric sensor	0	0	8	_ 8	128	8 2	B	ਬ		
H. Tile drain	1: (]	F. Stock/inventory control (manual)	由	₽-	R	尼	100		12	R	121-	8-
J. Vapor sniff wells	\ i	G. Stock/inventory control (electronic)		. 0						_ a	0	
K. Internal Inspection		H. Tile drain	0					0		0		
L Other, Please Specify M. None 25. Tank/piping lested (any hype) aware ALL that APRIT B A. Yea B. No GF- GF- 25' M SP' 85' B SF	(a.)			0						. 0		
M. None 25. Tank/piping tested (any hype) access AL THAT APPLY 10 A. Yea B. No G. Test positive access a Lean was decorrance 10 10 10 10 10 10 10 10 10 10 10 10 10		K. Internal Inspection	o								a	
25. Tank/piping lested (any type) ALLER ALL THAT APPLY II A. Yes B. NO C. Test positive ALLER AL	Ι.	L. Other, Please Specify			<u> </u>		L					
A. Yes B. No C. Test positive aware a LIMINIA DECOVEROR D. None (Name winds) C. Leak/spill occurrence (MARK ALL THAT APPLY X) A. Within the past 1 to 5 years C. More than 5 years ago D. No Records	١.										0	
B. No SF	2	5. Tank/piping tested (any type) numeru, nur wert to	1_	_	1: _		l _	_	l _		ł _	_
C. Test positive aware LIAM WAS DECOVERDS D. None (News Instact D. None (News Instact A. Within the past 1 year B. Within the past 1 to 5 years C. More than 5 years ago D. No Records			_		-				+			
D. None (Mark Author) 28. Leak/spill occurrence (MARK ALL THAT APPLY X) A. Within the past 1 year C. More than 5 years ago D. No Records	<u> </u>		_		+		+		+		-	
28. Leak/spill occurrence (MARK ALL THAT APPLY 2) A. Within the past 1 year B. Within the past 1 to 5 years C. More than 5 years ago D. No Records	8		-		_		_					
A. Within the past 1 year			+"	<u>u</u>	╁┈╙		₩.		 □		-	
B. Within the past 1 to 5 years		A. Within the past 1 year		O			0	п	1	" п	l n	
C. More than 5 years ago	r :						_		 -			
D. No Records	5		_						-			
	1						↓					
	KI.	E None	+-						 -			



State of New Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES CN 029

Trenton, N.J. 08625-0029

ATTN: BUST Program (609) 984-3156

F	or State	Us	e Only
Date Rec Auth. Routing	d.		
UST NO.		٠.	

• • •	TANDARD REPORTING FORM porting activities at an UST facility:
General Facility Informati Closure (Abandonment o Temporary Closure Change in Service	tion Changes Sale or Transfer or Removal) Substantial Modification Financial Responsibility Address Change Only
Check ONLY One Ty	ype of Activity - Complete Form For That Activity
(More tha	an one tank can be listed per activity)
* * * NOTE * * * ALL facilities must submit a	. NEW tank installations at existing registered a Registration Questionnaire for the new tanks.
Answer questions 1 through 5 and others as app	•
Company name and address (as it	U.S. Army Fort Monmouth
appears on registration questionnaire):	DEH Bldg. #167
	Fort Monmouth NJ 07703 ATTN Dinkerrai Desai
	•
Facility name and location (if different from above):	R1dg. 2567
3. Contact person for this activity:	Dinkerrai Desai
- 1955년 - 12 - 12 - 12 - 12 - 12 - 12 - 12 - 1	Telephone Number: (908) <u>532-1475</u>
4. The identification number of the affected tan	nk as it appears in Question Number 12 on the Registration Questionnaire:
5. Registration Number (if known):	UST- 008/5/5
	nges (address, telephone, contact person, etc. – supply NEW information only):
a. Facility name: b. Facility location:	
c. Owner's mailing address:	
	NJ
d. Block: Lot:	· · · · · · · · · · · · · · · · · · ·
	· · · · · · · · · · · · · · · · · · ·
Contact telephone number: (

"(OVER)

	andonment						
		ary implementation	•	opies) and all de	ocumentation ne	eded for	
	•	N.J.A.C. 7:14B-9.1	(d).				
b. Re		•					
Attach	the necessa	try implementation :	schedule (3 co	pies).			
8. For CHAN	GES IN HAZ	ZARDOUS SUBSTA	ANCES STOR	ED (check all th	nat apply):		
a. 🗆 Ten	nporary Clos	sure (12 month max	:imum time — s	see N.J.A.C. 7:1	4B-9.1(b)). Rem	ove all hazard	ous
substa	nces; leave	tank in place.					
		ice from a regulated			d substance. Tai	nk must be cle	aned
and site	e assessme	nt perlormed per N.	J.A.C. 7:14B-9	9.1(e).			
c. 🗆 Cha	inges in sen	vice from one regul	ated hazardou	is substance to	another regulate	ed hazardous s	ubstance.
Ta	nk No	Old			New		
	nk No	Old			New		
Ta	nk No				New		<i>:</i>
		(Attach ad	ditional sheets	if more space	is needed)		7.5
9. For TRANS	FER OF O	WNERSHIP:					<u>.</u>
a. New O	vner (operat	or)			·	<u> </u>	.*•
b. New Fa	cility Name				·		
				<u>. </u>		<u>. </u>	•
		· · · · · · · · · · · · · · · · · · ·			NJ	·	
			······				
			County				
A	A						
	ANTIAL MC	DIFICATIONS (to it	include any re		Tele: (
10. For SUBST monitoring : a. Type of	ANTIAL MC systems, cal Modification	DIFICATIONS (to	include any re	etrofitted activity	/ - a.g. the addi		
10. For SUBST monitoring a. Type of b. NOTE	ANTIAL MC systems, cal Modification * Substantia	DDIFICATIONS (to it hodic protection, et al. modifications requ	include any re c.): uire a permit u	trofitted activity	/ - e.g. the addi	tion of spill/ov	erfill protectio
10. For SUBST monitoring a. Type of b. NOTE	ANTIAL MO systems, cal Modification * Substantia s in FINANC	DDIFICATIONS (to it hodic protection, et al modifications required RESPONSIBIL	include any re lc.): uire a permit u	trofitted activity inder N.J.A.C. 7 appropriate cha	/ - e.g. the additeration / - / / / / / / / / / / / / / / / / /	tion of spill/ov	erfill protectio
10. For SUBST monitoring a. Type of b. * NOTE	ANTIAL MO systems, cal Modification Substantia in FINANC a. Pol	DDIFICATIONS (to it hodic protection, et al modifications required Type:	include any reconstruction.): uire a permit use of the construction of the constructi	etrofitted activity ander N.J.A.C. 7 appropriate cha Company/Cam	y – e.g. the adding response to the second r	tion of spill/ov	erfill protectio
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10. For SUBST monitoring: a. Type of b. *NOTE 11. For change:	ANTIAL MC systems, cat Modification * Substantia s in FINANC a. Poli b. Poli c. Oth	DIFICATIONS (to ithodic protection, et al modifications required in the control of the control o	include any relac.): uire a permit u ITY to (check d. e. ify) nits, licenses and the obtained	etrofitted activity ander N.J.A.C. 7 appropriate characteristics Date Expiration Date and certificates ed separately for	y – a.g. the adding required by the	n copies of new	erfill protection
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10. For SUBST monitoring: a. Type of b. *NOTE 11. For change: NOTE: ALL applical, selectify (N.J.A.C.) I certify under phat there are selections.	ANTIAL MC systems, cat Modification Substantia in FINANC a. Poli b. Poli c. Oth ppropriate a state and/or on form sha 7:14B-2.3 (penalty of la gnificant civ	DIFICATIONS (to ithodic protection, etc.) al modifications required in the information of the information o	include any reconstruction. ITY to (check d. e.	etrofitted activity ander N.J.A.C. 7 appropriate characteristics Date and certificates and certificates and separately from	required by the om this notification the facility with	above activity	r information): r(ies) from an
nonitoring: a. Type of b. NOTE 11. For change: NOTE: ALL application of the registration of the registra	ANTIAL MC systems, cat Modification * Substantia s in FINANC a. Poli b. Poli c. Oth propriate astate and/or on form sha 7:14B-2.3 (penalty of la gnificant civilisonment.*	DIFICATIONS (to ithodic protection, etchodic protection, etchodic protection, etchodic protections required. IAL RESPONSIBILL icy Type: (Special common co	include any resc.): uire a permit u ITY to (check d. e. ify) nits, licenses a ust be obtained CERTIF highest ranki ion provided i alties for subr	etrofitted activity ander N.J.A.C. 7 appropriate characteristics Date Expiration Date and certificates and separately from this document in th	required by the or this notification the facility with accurate or incompared by the accurate or incompared by the accurate or incompared by the facility with the facility with accurate or incompared by the accurate or incompared by the facility with the facility with the facility with accurate or incompared by the facility with the f	above activity	r information):
nonitoring: a. Type of b. NOTE 11. For change: NOTE: ALL application of the registration of the registra	ANTIAL MC systems, cat Modification * Substantia s in FINANC a. Poli b. Poli c. Oth propriate astate and/or on form sha 7:14B-2.3 (penalty of la gnificant civilisonment.*	DIFICATIONS (to ithodic protection, etc.) al modifications required in the information of the information o	include any resc.): uire a permit u ITY to (check d. e. ify) nits, licenses a ust be obtained CERTIF highest ranki ion provided i alties for subr	etrofitted activity ander N.J.A.C. 7 appropriate characteristics Date Expiration Date and certificates and separately from this document in th	required by the or this notification the facility with accurate or incompared by the accurate or incompared by the accurate or incompared by the facility with the facility with accurate or incompared by the accurate or incompared by the facility with the facility with the facility with accurate or incompared by the facility with the f	above activity on. overall respon	r information): r(ies) from an



State of Dew Jersey DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES CN 029 Trenton, N.J. 08625-0029

ATTN: BUST Program (609) 984-3156

For State	Use Only
Date Rec'd. Auth.	 -
Routing	
UST NO.	

	TANDARD REPORTING FORM porting activities at an UST facility:
General Facility Informa Closure (Abandonment of Temporary Closure Change in Service	or Removal) Sale or Transfer Substantial Modification Financial Responsibility Address Change Only
Check ONLY One Ty	ype of Activity - Complete Form For That Activity
(More that	an one tank can be listed per activity)
facilities must submit	NEW tank installations at existing registered a Registration Questionnaire for the new tanks.
Answer questions 1 through 5 and others as ap	oplicable. U.S. Army Fort Monmouth
1. Company name and address (as it appears on registration questionnaire):	DEH B1dg. #167
,	Fort Monmouth NJ 07703
	ATTN Dinkerrai Desai
2. Facility name and location (if different from above):	Bldg. 2567
3. Contact person for this activity:	Dinkerrai Desai
	Telephone Number: (908) 532-1475
4. The identification number of the affected tand	k as it appears in Question Number 12 on the Registration Questionnaire
5. Registration Number (if known):	UST- 0081515
6. For GENERAL FACILITY INFORMATION chang	ges (address, telephone, contact person, etc. – supply NEW information only):
c. Owner's mailing address:	
	NJ
· .	
e. Contact person (facility operator):	
Contact telephone number: () G. Other (Specify):)

For CLOSURE (aband	ionint or removal – check a	all that apply):		
a. Abandonment				
Altach the necessa	ry implementation schedule	(3 copies) and all docume	entation needed for	
	v.J.A.C. 7:14B-9.1 (d).			
b. Removal				
	ry implementation schedule	(3 copies).		
	•		nh.)•	
	ARDOUS SUBSTANCES S	•	• • •	adaa
substances; leave to	•			
	ce from a regulated substand at performed per N.J.A.C. 7:1		stance. Tank must be o	leaned
c. Changes in serv	rice from one regulated haza	rdous substance to anoth	er regulated hazardous	s substance.
Tank No.	Old	New	/	
Tank No.			·	
Tank No.		New		.:
14/K 110.	(Attach additional st	neets if more space is nee	eded)	; ;
	•	,		•
9. For TRANSFER OF OW			. , ,	Ç.,
a. New Owner (operato	or)			
b. New Facility Name				
•				·
. *		·		
•	Cou	ntv		
c. Closing Attorney			Tele: ()	
10. For SUBSTANTIAL MOI monitoring systems, cath	nodic protection, etc.):			verfill protect
b * NOTE * Substantial	modifications require a perm	nit under N.J.A.C. 7:148-1	10	
11. For changes in FINANCIA	'	,, ,	•	w information
	• • •	d. Company/Carrier:	•	
b. Polic	y Number:	e. Expiration Date:		
c. Othe	r. 🗆			
<u> </u>				
		•		
· ·				
. 	(Specify)	•	•	
NOTE: ALL appropriate and local, state and/or fe	d applicable permits, license ederal agencies must be obta			y(ies) from a
	CFR	TIFICATION		•
***This registration form shall facility (N.J.A.C. 7:14B-2.3 (a)	be signed by the highest ra		cility with overall respo	nsibility for th
	•	d in this document is tou	a securate and semple	to I am awa
"I certify under penalty of law that there are significant civil fines and/or imprisonment."	and criminal penalties for si	ubmitting false, inaccurate	e or incomplete inform	ation, includin
Signature:				
Name (print or type): Di	nKerrai Desi	4;	·	
Tille: Environme	entry (Coordina	Date:	7/12/91	·

Underground Storage Tank Removal / Abandonment Implementation Schedule

Date: 7/12/91

Facility Facility	Location:	S. Army, For Bldg. 256 ort Monmouth	t Monmouth 7 , Monmouth Co	unty NJ 0770	3
Owners Ma	iling Addres		. #167 mouth, NJ 077	03	y t
Owners Na	me: V.S. Arm	у			
	erson: Dinke ber:(908) 53				
UST_Number	r: 00815	15	_		
	Product Stored (Dil.Gas.etc.)		Site Assessment Required		
33	#2011	1000	40)	NO	·
					·
					
		· s	Schedule		<u>:</u>
Activit	y.	S		Date	Completion
	•		Start		Completion 10//1/9/
Remoyal	·		<u> </u>	/91	
Removal	sment		<u> </u>	/91 	10/11/91
RemovalSite_Assess	sment	lation	Start /o/9	91 0 11 9 N a	10/11/91
RemovalSite_Assess Monitoring_Site_Assess	sment	lation Lon_ Results	Start /o/9	/91 	10/11/91 1

Underground Storage Tank Removal / Abandonment Implementation Schedule

Date: 7/12/91				
Facility Name: U Facility Location:	.S. Army, Fort Ridg. 2567 Fort Monmouth,) 	unty NI 0770	0.3
Owners Mailing Addres	ss: DEH Bldg.		·	
Owners Name: U.S. Arr	пу			•
Contact Person: Dinke Phone Number: (908) 53				
UST Number: 008/3	7/5			
Tank 10 Product Stored Number(s) (01) Gas etc.)	•		-	
33 #20il	1000	481	NO	
	Sc	chedule		
Activity		Start	Date	Completion
Kemoyal		10/9	/91	10/11/91
Site_Assessment			10/11/5	7/
Monitoring Vell Instal	lation			·
Site Assessment Analyt	ical Results		11/15/9	
Monitoring Vell Analyt	ical_Results_		NA	
UST_Site_Assessment_Su	mma'r'n			1/9/92

Underground Storage Tank Removal / Abandonment Implementation Schedule

Date: 1 /12/ 71			
Facility Name: U.S. Army, Fort Racility Location: Riag. 2567	Monmouth		
Fort Monmouth,	Monmouth Co	unty NJ 0770	3
Owners Mailing Address: DEH Bldg. Fort Monmo	#167 uth, NJ 077	03	
Owners Name: U.S. Army			
Contact Person: Dinkerrai Desai Phone Number: (908) 532-1475	4.4 1 3.		
UST_Number: 0081515			
Tank 10 Product Stored Tank Capacity S Number(s) (Dil.Gas.etc.) (Gallons)			
33 #20il 1000	481	NO	
	·		
Sc	hedule	•	
Activity	Start	Date	Completion
Келоуа).			10/11/91
Site_Assessment		10/11/9	<i></i>
Monitoring Vell Installation			
Site Assessment Analytical Results		11/15/9	<u>/</u>
Monitoring Vell Analytical Results		NA	
JST_Site_Assessment_Summary			1/9/92



APPENDIX B

NJDEPE UST ASSESSMENT SUMMARY FORMS

ι	JS	T	-0	1	4
2	/9	1			

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

JUN SINIE USE UNLY

UST# Date Rec'd

TMS # Suult

DIVISION OF WATER RESOURCES
BUREAU OF UNDERGROUND STORAGE TANKS
TANK MANAGEMENT SECTION

CN 029, 401 EAST STATE STREET TRENTON, N.J. 08625-0029

UNDERGROUND STORAGE TANK SITE ASSESSMENT SUMMARY

Under the provisions of the Underground Storage of Hazardous Substances Act in accordance with N.J.A.C. 7:148

This Summary form shall be used by all owners and operators of Underground Storage Tank Systems (USTS) who have either reported a release and are subject to the site assessment requirements of N.J.A.C. 7:14B-8.2 or who have closed USTS pursuant to N.J.A.C. 7:14B-9.1 et seq. and are subject to the site assessment requirements of N.J.A.C. 7:14B-9.2 and 9.3.

INSTRUCTIONS:

١.

- Please print legibly or type.
- Fill in all applicable blanks. This form will require various <u>attachments</u> in order to complete the Summary. The technical guidance document, <u>Interim Closure Requirements for UST's</u>, explains the regulatory (and technical) requirements for closure and the <u>Scope of Work, Investigation and Corrective Action Requirements for Discharges from Underground Storage Tanks and Piping Systems</u> explains the regulatory (and technical) requirements for corrective action.
- Return one original of the form and all required attachments to the above address.
- Attach a scaled site diagram of the subject facility which shows the information specified in Item IV B of this form.
- Explain any "No" or "N/A" response on a separate sheet.

	Date of Submission 9/1/93
	0081515-33 FACILITY REGISTRATION
FACILITY NAME AND ADDRESS	
U. S. ARMY FORT MONMOUTH DEH BLDG. #167	
FORT MONMOUTH, NJ 07703 Telephone No. (908) 532-1475	County MONMOUTH
OWNER'S NAME AND ADDRESS, if different from above	
	· · · · · · · · · · · · · · · · · · ·

1

D	DISCHARGE REPORTING REQUIREMENTS	
A	Note: All discharges must be reported to the Environmental Action Hotline (609) 292-7172)	
В.	3. The substance(s) discharged was(were) N/A	
C.	C. Have any vapor hazards been mitigated?YesNoX_N/A	
D	ECOMMISSIONING OF TANK SYSTEMS Closure Approval No. N/A DHWM	
de de loc to sa	duidance Document, InterIm Closure Requirements for UST's, Section V. A-D. Attach compocumentation of the methods used and the results obtained for each of the steps of all samples and borings ocation of all tanks and piping runs at the facility at the beginning of the tank closure operation and annot be differentiate the status of all tanks and piping (e.g., removed, abandoned, temporarily closed, etc.). The step is the status of all tanks and piping (e.g., removed, abandoned, temporarily closed, etc.).	ete ani the atec The
SI	TE ASSESSMENT REQUIREMENTS	
A.	Excavated Soil	
	Waste or Non-Hazardous Waste. Please include all required documentation of compliance with requirements for handling contaminated excavated soil (if any was present) as explained in the technique.	the lical
В.	Scaled Site Diagrams	
	Scaled site diagrams must be attached which include the following information:	
	a. North arrow and scale	
	b. The locations of the ground water monitoring wells	
	e. Approximate property boundaries	
	 g. A cross-sectional view indicating depth of tank, stratigraphy and location of water table h. Locations of surface water bodies 	
C.	Soil samples and borings (check appropriate answer)	
	Were soil samples taken from the excavation as prescribed? X YesNoN/A	
	2. Were soil borings taken at the tank system closure site as prescribed? Yes No x	l/A
	a. Customer sample number (keyed to the site map) b. The depth of the soil sample c. Soil boring logs d. Method detection limit of the method used	
	E C D TGdddlatasile S A B.	B. The substance(s) discharged was(were) N/A C. Have any vapor hazards been mitigated? Yes No X.N/A DECOMMISSIONING OF TANK SYSTEMS Closure Approval No. N/A DHWM The site assessment requirements associated with tank decommissioning are explained in the Techn Guidance Document. Interim Closure Requirements for UST's, Section V. A-D. Attach completecumentation of the methods used and the results obtained for each of the steps of please include a gite map which shows the locations of all samples and bornings, location of all tanks and piping runs at the facility at the beginning of the tank closure operation and annot of differentiate the status of gill tanks and piping (e.g., removed, abandoned, temporarily closed, etc.). same site map can be used to document other parts of the site assessment requirements, if it is property legibly annotated. SITE ASSESSMENT RECUIREMENTS A. Excavated Soil Any evidence of contamination in excavated soil will require that the soil be classified as either Hazard Waste or Non-Hazardous Waste. Please include all required documentation of compliance with requirements for handling contaminated excavated soil (if any was present) as explained in the techniquidance documents for closure and corrective action. Describe amount of soil removed, its classificat and disposal location. B. Scaled Site Diagrams 1. Scaled site diagrams must be attached which include the following information: a. North arrow and scale b. The locations of the ground water monitoring wells c. Location and depth of each soil sample and borning d. All major surface and sub-surface structures and utilities e. Approximate property boundaries f. All existing or closed underground storage tank systems, including appurtenant piping g. A cross-sectional view indicating depth of tank, stratigraphy and location of water table h. Locations of surface water bodies C. Soil samples and borings (check appropriate answer) 1. Were soil samples taken from the excavation as prescribed? Yes No No 2. Were soil boring

D. Ground Water Monitoring

	Number of ground water monitoring wells installedNONE	
	Attach the analytical results of the ground water samples in tabular form. Include the following information for each sample from each well:	
	a. Site diagram number for each well installed	
	b. Depth of ground water surface	
	c. Depth of screened interval	
	d. Method detection limit of the method used	
	e. Well logs f. Well permit numbers	
	g. QA/QC Information as required	
٧.	SOIL CONTAMINATION	
	A. Was soil contamination found?Yes X_ No	
	If "Yes", please answer Question 8-E	
	If "No", please answer Question B	
	in the second of	
,	3. The highest soil contamination still remaining in the ground has been determined to be:	*
	N/A ppb total BTEX, N/A ppb total non-targeted VOC N/A ppb total B/N, N/A ppb total non-targeted B/N	
	3. N/A ppm TPHC	٠.
	4. N/A ppb N/A (for non-petroleum substance)	
	3. Free product contaminated soils are suspected to exist off the property boundaries. Yes No	N/A
/1. G	ROUND WATER CONTAMINATION	
A	Was ground water contamination found? If "Yes", please answer Questions B-G. If "No", please answer only Question B.	
. 8	. The highest ground water contamination at any 1 sampling location and at any 1 sampling event to date has been determined to be:	
	1. N/A ppb total BTEX, N/A ppb total non-targeted VOC	
	2. N/A ppb total B/N, N/A ppb total non-targeted B/N	
	3N/Appb total MTBE, N/Appb total TBA	
	4. N/A ppb N/A (for non-petroleum substance) 5. Greatest thickness of secarate phase product found N/A	
	5. greatest thickness of separate phase product found N/A 6. separate phase product has been delineated Yes No y N/A	
С	Result(s) of well search	
J.	· · · · · · · · · · · · · · · · · · ·	
	A well search (including a review of manual well records) indicates that private, municipal or commercial wells do exist within the distances specified in the Scope of Work,YesNoXN/A	

1. The shallowest depth of any well noted in the well a potential path(s) of the contaminant plume(s) is N/A for the effects of pumping, subsurface structures, et	tearch which may be in the horizontal or vertice
This well is N/A feet from the source and its scree	feet below grade (consideration has been given to, on the direction(s) of contaminant migration)
 The shallowest depth to the top of the well screen for described in D1 above) is N/A feet below grade. 	
 The closest horizontal distance of a private, commer plume (as determined in D1) is	
E. A plan for separate phase product recovery has been include	ded. Yes No X N/A
F. A ground water contour map has been submitted which inc	dudes the ground water elevations for each well.
G. Delineation of contamination	
The ground water contaminants have been delines boundariesYesNo N/A	ated to MCLs or lower values at the property
2. The plume is suspected to continue off the property at aYesNoN/A	concentrations greater than MCLs.
3. Off property access (circle one): is being sought	has been approved has been denied $N/2$
VII. SITE ASSESSMENT CERTIFICATION [preparer of site asset	essment plan - N.J.A.C. 7:148-8.3(b) &9.5(a)3)
The person signing this certification as the "Qualified Ground War responsible for the design and implementation of the site assess 9.2(b)2, must supply the name of the certifying organization and of the certification as the "Qualified Ground War responsible for the design and implementation of the site assessment as the "Qualified Ground War responsible for the design and implementation of the site assessment as the "Qualified Ground War responsible for the design and implementation of the site assessment as the certification of the site assessment as the certification of the certification	iter Consultant* (as defined in N.J.A.C.7:148-1.6) ment plan as specified in N.J.A.C. 7:148-8:3(a) &
"I certify under penalty of law that the information pro and complete and was obtained by procedures in con am aware that there are significant penalties for sub- information, including fines and/or imprisonment."	npliance with NJA.C. 7:14B-8 and 9.1
	\mathcal{O}
NAME (Print or Type) DINKERRAL DESAL SK	GNATURE by m
NAME (Print or Type) DINKERRAI DESAI SK COMPANY NAME DEH = U. S. ARMY (Preparer of Site Assessment Plan)	GNATURE

VIII.	TANK DECOMMISSIC	NING CERTIFIC	ation [p	erson perform:	ng tank doc	ommissioning portion s
	"I certify under pen compliance with N.J. submitting false, inact	alty of law tha A.C. 7:14B-9.2(b)3. I am	aware that t	here are sig	nificant penalties for
	NAME (Print or Type) DI	NKERRAI DESAI		SIGNATUI	7E 45-	Endle)
	COMPANY NAME DE (Peri	CH - U. S. ARM cormer of Tank Decor	Y nmissioning	DATE	9/1/9	3
IX.	CERTIFICATIONS BY TH					
	A. The following cert responsibility for	fication shall be that facility [N.	signed to J.A.C. 7:	y the highes 148-2.3(c)11].	it ranking i	ndividual with overal
	accurate, and compinaccurate, or incomp	nlete . I am awari mplete informatio	e that ther on, includi	e are signific ng fines and/o	ant penaltie r imprisonn	~ 1
	NAME (Print or Type)			SIGNATUR	e are	us Ctt
	COMPANY NAME	DEH- U. S	. ARMY	`	DATE	9/1/93
	B. The following certifica N.J.A.C. 7:14B-2.3(C)2		d as follow	s (according to	the requirem	ients of
	 For a corporation, by For a partnership or For a municipality, S elected official. 	sole proprietarship,	by a genera	partner or the p	proprietor, resp	pectively; or
	In cases where the harduired in A above need to be made, in	s the same person a	s the officia	required to cer	tify in B. only t	
	information submitt inquiry of those indi that the submitted i	ed in this applica viduals immedia nformation is tri for submitting f	ition and d tely respon ie, accura	ill attached d usible for obt te, and comp	ocuments, a aining the in lete. I am a	um familiar with the ind that based on my iformation, I believe tware that there are formation, including
	NAME (Print or Type)		· ·	SIGNATURE		
	COMPANY NAME			DAT	E	



RARITAN PLAZA 1 4TH FLOOR, RARITAN CENTER EDISON, NJ 08837-3616 908-417-5800 • FAX: 908-417-5801

ATTACHMENT I

NO/NA RESPONSE EXPLANATION

SAS QUESTION #	RESPONSE	EXPLANATION
IA.	No	No contaminants were identified in soil samples at concentrations exceeding proposed NJDEPE cleanup criteria.
IB.	N/A	Same as above.
IC.	N/A	Same as above.
III.	N/A	Closure of Tank 33 was conducted under verbal approval and on-site supervision of the NJDEPE Division of Hazardous Waste Management.
IV.C.2	N/A	No soil borings were proposed in the closure plan.
V.A	No	No contaminants were identified in soil samples at concentrations exceeding proposed NJDEPE cleanup criteria.
V.B.1-4	N/A	Same as above.
V.C.1-3	N/A	Same as above.
V.D	N/A	Same as above.
V.E	N/A	Same as above.
VI.A	No	No groundwater monitoring wells were installed as part of closure of Tank 33; therefore, no groundwater samples were collected.



ATTACHMENT I

NO/NA RESPONSE EXPLANATION

SAS QUESTION #	RESPONSE	<u>EXPLANATION</u>
VI.B.1-6	N/A	Same as above
VI.C.1-3	N/A	No release to groundwater has occurred from Tank 33; therefore, no well search was performed as part of the site assessment
VI.E	N/A	Same as above
VI.F	N/A	Same as above
VI.G.1-3	N/A	No groundwater contamination resulting from a release from Tank 33 has been identified

UST-01	4
2/91	

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

	UST #	
1	Date Rec'd	
- 1	TMS #	
	Sulf	
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DIVISION OF WATER RESOURCES
BUREAU OF UNDERGROUND STORAGE TANKS
TANK MANAGEMENT SECTION

CN 029, 401 EAST STATE STREET TRENTON, N.J. 08625-0029

UNDERGROUND STORAGE TANK SITE ASSESSMENT SUMMARY

Under the provisions of the Underground Storage of Hazardous Substances Act in accordance with N.J.A.C. 7:148

This Summary form shall be used by all owners and operators of Underground Storage Tank Systems (USTS) who have either reported a release and are subject to the site assessment requirements of N.J.A.C. 7:148-8.2 or who have closed USTS pursuant to N.J.A.C. 7:148-9.1 et seq. and are subject to the site assessment requirements of N.J.A.C. 7:148-9.2 and 9.3.

INSTRUCTIONS:

- Please print legibly or type.
- Fill in all applicable blanks. This form will require various attachments in order to complete the Summary. The technical guidance document, Interim Closure Requirements for UST's, explains the regulatory (and technical) requirements for closure and the Scope of Work, Investigation and Corrective Action Requirements for Discharges from Underground Storage Tanks and Piping Systems explains the regulatory (and technical) requirements for corrective action.
- Return one original of the form and all required attachments to the above address.
- Attach a scaled site diagram of the subject facility which shows the information specified in Item IV B of this form.

		Date of Sub	mission9/	1/93
			008	1515-46
			FACILITY	REGISTRATION
FACILITY NAME	AND ADDRESS			
	U. S. ARMY FORT MONMOUTH			
	DEH BLDG, #167			
Telephone No.	FORT MONMOUTH, N.J. 07703 (908) 532-1475	County	MONMOUT	1
OMNEH 2 NAM	E AND ADDRESS, if different from above			
				

H.	DISCHARGE REPORTING REQUIREMENTS	
	A. Was contamination found? Yes X No (Note: All discharges must be reported to the Envir	If Yes, Case No onmental Action Hotline (609) 292-7172)
	B. The substance(s) discharged was(were)	N/A
	C. Have any vapor hazards been mitigated?Yes	No _x_N/A
III.	DECOMMISSIONING OF TANK SYSTEMS	Closure Approval No. N/A DHWM
	The site assessment requirements associated with the Guidance Document, Interim Closure Requirement documentation of the methods used and the redecommissioning used. Please include a site map while location of all tanks and piping runs at the facility at the to differentiate the status of all tanks and piping (e.g., same site map can be used to document other parts of legibly annotated.	ents for UST's, Section V. A-D. Attach complete esuits obtained for each of the steps of <u>fan</u> ch shows the locations of all samples and borings, the beginning of the tank closure operation and annotate removed, abandoned, temporarily closed, etc.). The
٧.	SITE ASSESSMENT REQUIREMENTS	
	A. Excavated Soil	
	requirements for handling contaminated excavated	all required documentation of compliance with the soil (if any was present) as explained in the technica on. Describe amount of soil removed, its classification
	Scaled site diagrams must be attached which inc	lude the following information:
	 a. North arrow and scale b. The locations of the ground water monitoring volume to a continuous continuous and depth of each soil sample and both and a continuous and sub-surface structures in a continuous and a continuous and	onng and utilities ik systems, including appurtenant piping
	C. Soil samples and borings (check appropriate answer)	
	1. Were soil samples taken from the excavation as pr	escribed? Yes X No N/A
	2. Were soil borings taken at the tank system closur	e site as prescribed?YesNoN.A
	3. Attach the analytical results in tabular form and in- a. Customer sample number (keyed to the site may b. The depth of the soil sample c. Soil boring logs d. Method detection limit of the method used e. QA/QC Information as required	

D. Ground Water Monitoring

	Number of ground water monitoring wells installed <u>NONE</u>
	Attach the analytical results of the ground water samples in tabular form. Include the follow information for each sample from each well:
	a. Site diagram number for each well installed
	b. Depth of ground water surface
	c. Depth of screened interval
	d. Method detection limit of the method used
	e. Welt logs f. Well permit numbers
	g. QAQC Information as required
<i>1</i> .	SOIL CONTAMINATION
	A. Was soil contamination found?Yes X_No
	If Yes', please answer Question B-E
	If "No", please answer Question 8
	B. The highest soil contamination still remaining in the ground has been determined to be: 1N/Aopb total STEXN/Aopb total non-targeted VOC
	2. N/A pob total B/N. N/A pob total non-termeted B/N
	3. N/A ppm TPHC
	3. N/A ppm TPHC 4. N/A ppb N/A (for non-petroleum substance)
	C: Remediation of free product contaminated soils
	S. Free product contaminated soils are suspected to exist off the property boundaries
	E. Does soil contamination intersect ground water?YesNoN/A
	GROUND WATER CONTAMINATION
	A. Was ground water contamination found?Yes
	If "Yes", please answer Questions B-G. If "No", please answer only Question B.
	B. The highest ground water contamination at any 1 sampling location and at any 1 sampling event to date habeen determined to be:
	1. N/A ppb total BTEX, N/A ppb total non-targeted VOC
	2. N/A ppb total B/N, N/A ppb total non-targeted B/N
	2. N/A ppb total B/N, N/A ppb total non-targeted B/N 3. N/A ppb total MTBE, N/A ppb total TBA
	4. N/A ppb N/A (for non-petroleum substance)
•	5. greatest thickness of separate phase product found N/A 6. separate phase product has been delineated Yes No VN/A
	C. Result(s) of well search
	1. A well search (including a review of manual well records) indicates that private, municipal or commercial
	wells do exist within the distances specified in the Scope of WorkYesNoXN/A
	7. The market of the control of the settle to the settle t
٠.	2. The number of these wells identified is N/A

N/.

VII.

D.	Proximity of	wells and d	contaminant	plume	•				
	potential p	path(s) of t fects of p	the contamir umping, sul	rell noted in th nant plume(s) is osurface struct ne source and i	ures, etc.	feet below	w grade (con: irection(s) of	sideration has a contaminant	been give
				of the well sc feet below					
3	piume (as	determin	ed in D1) is	of a private.					
E. A	A pian for sep	iarate phai	e product re	covery has be	n include	dY	'esNo	X N/A	
F. A	ground water	er contour No <u>v</u>	map has be N/A	en submitted w	hich inclu	des the gr	ound water e	levations for ea	ich well.
G. E	elineation of	contamin	etion						
, 1			contaminan	ts have been N/A	delineste	ed to MC	Ls or lower	values at the	propert
2	. The plume	is suspect	ted to contin	ue off the prop	erty at co	ncentratio	ns greater tha	en MCLs.	
3,	, Off propert	y access (circie one):	is being so	ught	has been	approved	has been de	nied N/
SITE A	SSESSMEN	IT CERTI	FICATION	[preparer of a	ite asses	sment pla	in - N.J.A.C.	7:14B-8.3(b)	&9.5(a) 3)
respons	lible for the d	esign and	implementa	"Qualified Gro tion of the site ying organizati	255035M0	ent plan as	specified in	d in N.J.A.C.7 N.J.A.C. 7:148	14B-1.6) -8.3(a) &
and co am aw	mplete and are that th	d was ob vere are .	stained by Significan	the informati procedures t penalties fi imprisonmen	in comp or subm	iliance v	vith N.J.A.C	C. 7:14 B- 8 d	ınd 9. I
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¥!II	Closure plan - N.J.	ISSIONING A.C. 7:148-9.5	CERTIFICATIO	<u>M</u> (person pe	iderming	tank do≪	mmissisn	ing portion of
	"I certify under compliance with submitting false,	r penaity oj h N.J.A.C. 7	f law that tan 1:14B-9.2(b)3.	I am aware t	that thei	re are sig	nificant	penalties for
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	COMPANY NAME		. S. ARMY Tank Decommiss		E	9/1/9	3	
IX.	CERTIFICATIONS I	certification	n shall be sig	ned by the h	ighest i		idividusi	with overall
		ier penaity complete . l	of law that th am aware tha	ne information It there are sig	n provi gnificani	penalties	for subr	
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	COMPANY NAM	ED	EH- U. S. AR	UMY		DATE	9/1/9	3
	B. The following or N.J.A.C. 7:14B-2	2.3(C)2I]:	-	·				
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	COMPANY NAME				DATE_			



RARITAN PLAZA I 4TH FLOOR, RARITAN CENTER EDISON, NJ 08837-3616 908-417-5800 • FAX: 908-417-5801

ATTACHMENT 1

NO/NA RESPONSE EXPLANATION

SAS QUESTION #	RESPONSE	EXPLANATION
IA.	No	No contaminants were identified in soil samples at concentrations exceeding proposed NJDEPE cleanup criteria.
IB.	N/A	Same as above.
IC.	N/A	Same as above.
III.	N/A	Closure of Tank 46 was conducted under verbal approval and on-site supervision of the NJDEPE Division of Hazardous Waste Management.
IV.C.1	No	Sampling parameters were reduced from PP+40 to TPHC (and BN+15 if TPHC > 100 mg/kg) based on the conclusion that the tank was never in use. This approach was verbally approved by the NJDEPE representative present during closure.
IV.C.2	N/A	No soil borings were proposed in the closure plan.
V.A	No	No contaminants were identified in soil samples at concentrations exceeding proposed NJDEPE cleanup criteria.
V.B.1-4	N/A	Same as above.
V.C.1-3	N/A	Same as above.
V.D	N/A	Same as above.
V.E	N/A	Same as above.
VI.A	No	No groundwater monitoring wells were installed as part of closure of Tank 46; therefore, no groundwater samples were collected.



ATTACHMENT 1

NO/NA RESPONSE EXPLANATION

SAS QUESTION #	RESPONSE	EXPLANATION
VI.B.1-6	N/A	Same as above.
VI.C.1-3	N/A	No release to groundwater has occurred from Tank 46; therefore, no well search was performed as part of the site assessment.
VI.E	N/A	Same as above.
VI.F	N/A	Same as above.
VI.G.1-3	N/A	No groundwater contamination resulting from a release from Tank 46 has been identified.



APPENDIX B

UST Closure and Site Assessment Report, Building 2567, UST Nos. 42, 43, 44, and 45, Roy F. Weston, Inc., January 1995



UNDERGROUND STORAGE TANK CLOSURE AND SITE INVESTIGATION REPORT BUILDING 2567 NJDEP FACILITY UST NO. 081515 UST NOS. 42, 43, 44 AND 45 TMS NO. C-92-2950 SPILL CASE NOS. 89-12-12-1442 AND 91-8-27-1414

Volume 1 of 2

January 1995

Work Order No.: 03886-088-001

Prepared For:

UNITED STATES ARMY
Directorate of Public Works
Building 167
Fort Monmouth, New Jersey 07703

Prepared by:

ROY F. WESTON, INC.
Raritan Plaza I
4th Floor
Raritan Center
Edison, New Jersey 08837



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EXECUTIVE SUMMARY

On 12 December 1989, the Directorate of Public Works (DPW) notified the New Jersey Department of Environmental Protection and Energy (NJDEP) of a suspected fuel leak at the Charles Wood gas station, Building 2567. Spill Case No. 89-12-12-1442 was assigned by the NJDEP. The U.S. Army-DPW investigated the suspected release by performing a tightness test of the premium gas line which was suspected of leaking. On 30 January 1990, this line passed the tightness test.

On 15 and 16 January 1991, routine tightness tests were performed of three underground storage tanks (USTs), identified as Nos. 42, 43, and 44. UST Nos. 42 and 44 passed the tank system tightness test, however UST No. 43 failed. In response to the failed tightness test, the DPW issued a purchase order for the removal of USTs of Building 2567 gas station and notified the NJDEP of the failed tightness test. NJDEP issued Spill Case No. 91-8-27-1414.

In response to the suspected discharges, four groundwater monitor wells were installed at the Building 2567 gas station on 9 October 1991. These wells were sampled on 10 December 1991 and sample results indicated lead and all volatile organic compounds were less than the NJDEP's Ground Water Quality Criteria, except for benzene, 1,2-dichloroethene, total xylene, and methylene chloride.

The groundwater monitor wells were resampled on 26 October 1992, 21 April 1993, 3 February and 31 March 1994. In general, the detected concentrations of volatile organic compounds declined during the subsequent samplings. However, lead was detected in groundwater samples at greater levels with each sampling. Results from 31 March 1994 indicated that all detected volatile organic compounds were less than the NJDEP's Class IIA Ground Water Quality Criteria, except for benzene, total xylene, and methylene chloride. Lead was detected only in monitor well MW-3 above the NJDEP's Class II A Ground Water Quality Criteria.

Concurrent with the groundwater sampling investigation program, the DPW pursued the closure of UST Nos. 42 through 45. On 26 June 1992, a UST Decommissioning/Closure Plan was submitted to the NJDEP, followed by submittal of an UST Closure Plan Approval Application on 5 August 1992. The NJDEP issued Closure Approval, TMS No. C-92-2950 on 14 September 1992.

During 2 to 5 February 1993, the four USTs were closed at U.S. Army Fort Monmouth, in Fort Monmouth, New Jersey. UST Nos. 42 to 45 were located adjacent to Building 2567 in the Charles Wood area of Fort Monmouth. UST Nos. 42 to 44 were single walled steel, 10,000-gallon capacity, unleaded gasoline tanks. UST No. 45 was a single walled steel, 6,000-gallon capacity, leaded gasoline tank. UST Nos. 42 to 45 were located adjacent to each other. Cycle Construction Incorporated (CCI) performed the tank closure. The tanks were inspected



following removal for cracks, corrosion holes and puncture holes for indications of historical leakage from the tanks. UST Nos. 42 to 45 were found to be in good condition with no corrosion holes.

Soils surrounding the tanks were screened visually and with air monitoring instruments for evidence of contamination. Based on visual observations and screening approximately 936 cubic yards of soil were removed from the area surrounding the USTs and pump island. In both areas excavation was continued until either no evidence of contamination was found, based on field observations, or until further removal of soil would have endangered the integrity of structures, and roadways adjacent to the areas of investigation. Despite the groundwater levels in the monitoring wells, groundwater was not encountered until the excavation reached 7 feet BGS. The excavations were therefore extended to 7 feet BGS when necessary. When the excavation was completed the area was backfilled with clean soil and the surface paved.

Post excavation soil sample were collected on 2 February 1993 and 24 February 1993. Soil samples were analyzed for total petroleum hydrocarbons (TPHC), volatile organic compounds, and lead. Analytical results were compared to both the Impact to Ground Water (ITGW) and Residential Direct Contact (RDC) Soil Cleanup Criteria established by NJDEP. TPHC and lead were detected in post-excavation samples, however, the results were below both the ITGW and RDC soil cleanup criteria. Thirteen of 23 samples analyzed for volatile organics exceeded the ITGW and/or RDC soil cleanup criteria for xylenes, benzene, or ethylbenzene.

Based on the reduction in groundwater contaminant levels, future impact on the environment is not anticipated. The reduction in groundwater contaminant levels is attributable to the following:

- The contaminant sources, tank Nos. 42 to 45, 936 cubic yards of soil and the pump island piping were successfully removed. The analytical testing of soil had indicated that limited residual contamination exists in the soil below the surface.
- The site was backfilled with clean material and paved. The asphalt pavement caps the site and precludes the infiltration of precipitation and other surface water to the ground, which reduces the potential for residual soil contaminants leaching from the soil into the groundwater.

On 23 September 1994 one additional monitoring well (MW-5) was installed to determine if contaminants were present downgradient from the site. Well MW-5 is located southeast of the site on the eastern side of Hope Road. The well was placed downgradient of the site based on previous groundwater level measurements. Well MW-5 will be used for future sampling events and to confirm groundwater flow patterns on the site. An addendum to this report will be provided to the NJDEP when groundwater sample analysis is complete.



SECTION 1.0

UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

On 5 February 1993, four underground storage tanks (USTs), UST Nos. 42 to 45, were closed at Building 2567 at U.S. Army Fort Monmouth, New Jersey. UST Nos. 42 to 44 were single wall steel, 10,000-gallon capacity, unleaded gasoline tanks. UST. No. 45 was a single wall steel, 6,000-gallon capacity, leaded fuel tank. UST Nos. 42 to 45 were located immediately adjacent to each other. This report presents the results of the DPW's implementation of the UST Decommissioning/Closure Plan submitted to the NJDEP-DHWM on 26 June 1992 and approved 14 September 1992 (Closure approval No. C-92-2950).

All activities associated with the decommissioning of UST Nos. 42 to 45 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to: N.J.A.C. 7:14B-1 et seq., N.J.A.C. 5:23-1 et seq., N.J.A.C. 7:26E-1 et seq. and Occupational Safety and Health Administration (OSHA) 29 CFR 1910.146 & 29 CFR 1910.120. All permits including but not limited to the NJDEP-approved Decommissioning/Closure Plan were posted onsite for inspection. Cycle Construction, Inc. (CCI), the contractors that conducted the decommissioning activities, are currently registered and certified by the NJDEP for performing UST closure activities.

The NJDEP Closure Approval and correspondence with the NJDEP have been included in Appendix A. The UST Site Assessment Summary Form for UST Nos. 42 to 45 has been included in Appendix B. The UST Site Assessment Summary Form has been signed and sealed by Mr. James Ott, Acting Director of DPW, U.S. Army Fort Monmouth.

This UST Closure and Site Investigation Report was prepared by Roy F. Weston Inc. (WESTON®), to assist the United State Army Directorate of Public Works (DPW) in complying with the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST) regulations.

Section 1 of this UST Closure and Site Investigation Report provides a summary of the tank decommissioning activities. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in the final section of this report.

The applicable NJDEP-BUST regulations at the date of closure were the "Technical Requirements for Site Remediation" (N.J.A.C. 7:26E-1 et seq., dated May 1992).



1.2 SITE DESCRIPTION AND UST HISTORY

Building 2567 is located off Laboratory Road in the Charles Wood area of U.S. Army, Fort Monmouth. A facility location map is provided in Figure 1-1. Building 2567 is used as the installation gas station and is situated on level ground. The gasoline dispenser area was located approximately 50 feet west of the UST field. A pipe chase approximately 60 feet in length connected the dispenser area to the UST field. Figure 1-2 provides a site map of the former UST location and dispenser area.

On 12 December 1989, the Directorate of Public Works (DPW) notified the New Jersey Department of Environmental Protection and Energy (NJDEP) of a fuel leak at the Charles Wood gas station, Building 2567 (Case No. 89-12-12-1442).

On 30 January 1990, a tightness test was conducted on the premium gasoline line by Herbert Lutz and Company located in Linden, New Jersey. The line tested tight.

On 15 and 16 January 1991, three underground storage tanks (USTs) identified by Nos. 42, 43, 44 and 45 were tightness tested by Tank Test Inc. (TTI). UST Nos. 42 and 44 passed the tank system tightness test, although UST No. 43 failed.

On 1 August 1991, a purchase order to obtain permits for the removal of USTs at Buildings 2567, 8003, 8005 and 8006 was sent to the NJDEP by E-Systems Inc./Serv-Air (SAI).

On 27 August 1991, the NJDEP was notified of the UST which failed the tank system tightness test on 15 and 16 January 1991 (Case No. 91-8-27-1414). In response, the UST was placed out of service and the closure, remediation and construction of a new facility at that location was planned and coordinated by the DPW.

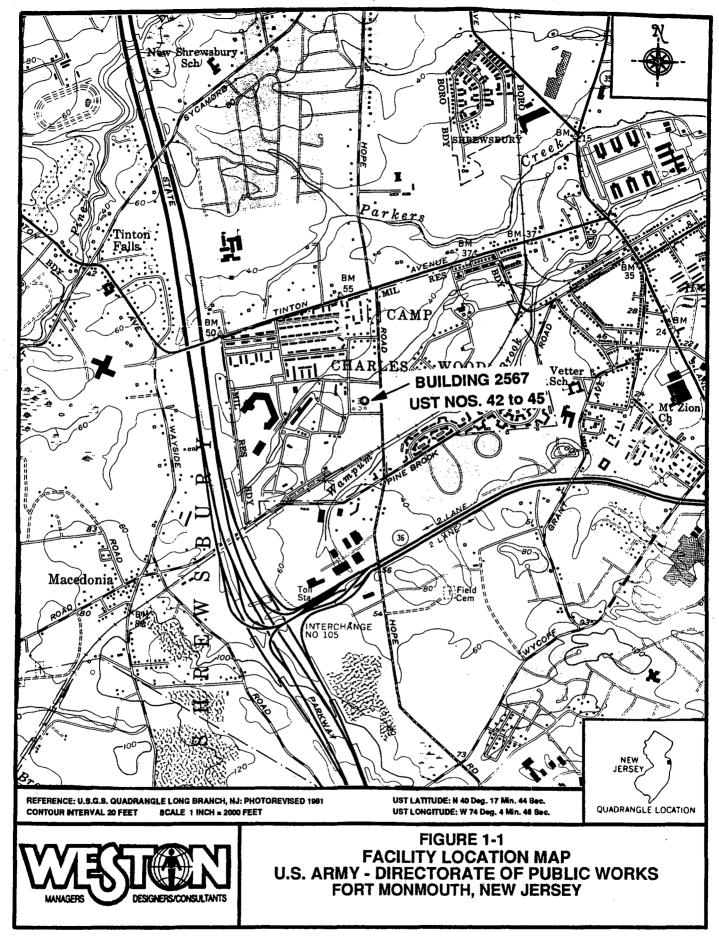
On 26 June 1992, a UST Decommissioning/Closure Plan was submitted to NJDEP.

On 5 August 1992, a UST Closure Plan Approval Application was submitted to NJDEP. The state responded on 14 September 1992 with a Closure Approval (TMS No. C-92-2950).

On 29 October 1992, a pre-construction conference was conducted between CCI and DPW.

On 24 November 1992, DPW sent a correspondence to NJDEP requesting a one year extension for the existing closure permits.

Between 2 and 5 February 1993, four USTs were closed at U.S. Army Fort Monmouth, in Fort Monmouth, New Jersey. UST Nos. 42 to 45 were located adjacent to Building 2567 in the Charles Wood area of Fort Monmouth. UST Nos. 42 to 44 were single walled steel, 10,000-





gallon capacity, unleaded gasoline tanks. UST No. 45 was a single walled steel, 6,000-gallon capacity, leaded gasoline tank. UST Nos. 42 to 45 were located adjacent to each other. CCI performed the tank closure.

1.3 GEOLOGICAL/HYDROGEOLOGICAL SETTING

The following is a description of the geological/hydrogeological setting of the area surrounding Building 2567. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Charles Wood area.

1.3.1 Geological Setting

Regional Geology

Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. The Main Post, Charles Wood, and the Evans areas are located in what may be referred to as 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). These sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

The formations record several major transgressive/regressive cycles and contain units which are generally thicker to the southeast and reflect a deeper water environment. Over 20 regional geologic units are present within the sediments of the Coastal Plain. 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 individual thicknesses for these units vary greatly (i.e., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from the Fall Line to greater than 6,500 feet in Cape May County (Brown and Zapecza, 1990).



Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Charles wood area. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile. The upper member (Shrewsbury) of the Red Bank sand is a yellowish-gray to reddish-brown clayey, medium-to-course-grained sand that contains abundant rock fragments, minor mica and glauconite (Jablonski). The lower member (Sandy Hook) is a dark grey 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 percent of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton is often highly oxidized and iron-oxide encrusted (Minard).

Over the last 80 years, the natural topography of Fort Monmouth has been altered by excavation and filling activities by the military. Topographic elevations for the Charles Wood area range from five feet above mean sea level (MSL) to 31 feet above MSL.

A Subsurface Profile of the USTs located at Building 2567 is provided in Figure 1-3.

1.3.2 Hydrogeological Setting

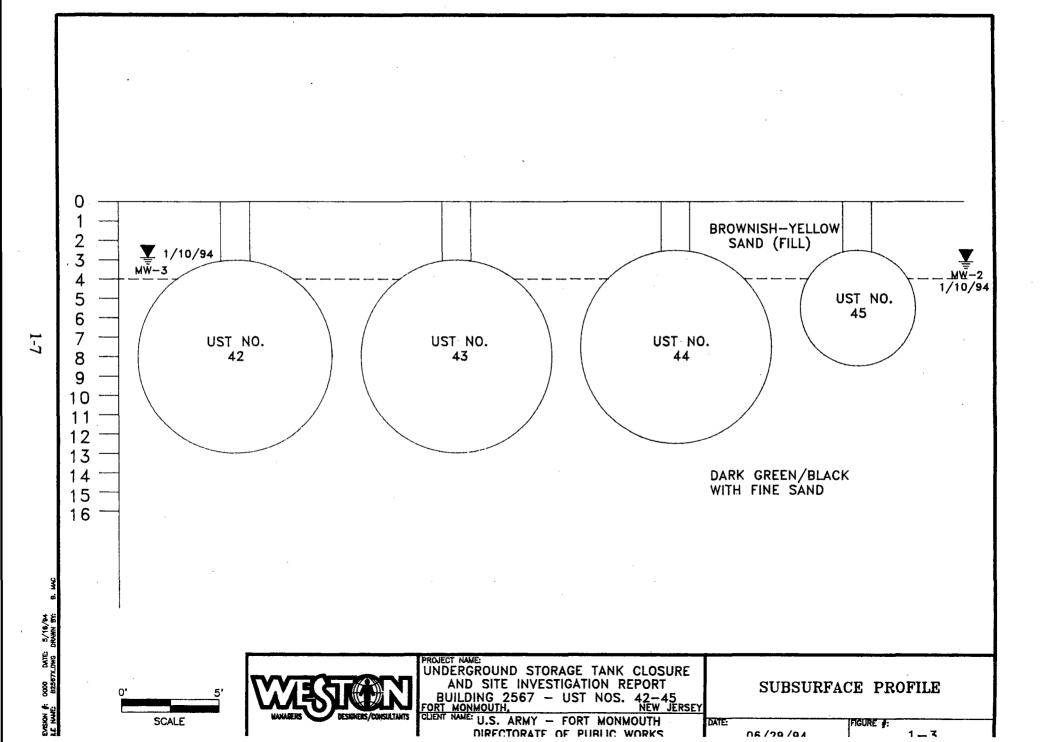
Hydrogeology

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

Based on records from wells drilled at the Charles Wood area, ground water is typically encountered at depths of two to nine feet below ground surface (BGS). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce from 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Shallow groundwater is locally influenced within the Charles Wood area by the following factors:

- tidal influence (based on proximity to the Atlantic Ocean, rivers and tributaries),
- topography,





- nature of the fill material within the Main Post area,
- presence of clay and silt lenses in the natural overburden deposits, and
- local groundwater recharge areas (i.e. stream, lakes).

Due to the fluvial nature of the overburden deposits (i.e. sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. This is consistent with lithologies observed in borings installed within the Charles Wood area, which primarily consisted of fine-to-medium grained sands, with occasional lenses or laminations of silt and/or clay.

On 9 October 1991, four monitoring wells were placed in the area surrounding UST Nos. 42 to 45. The monitoring well permit, monitoring well records, and Form B for each well are provided in Appendix C. A fifth monitoring well (MW-5) was installed downgradient, southeast of the site, on 23 September 1994. Well MW-5 had not been surveyed or sampled when this report was completed. Information provided by the well will be included in future submittals. The monitoring well permit and well records are included in Appendix C.

Building 2567 is less than 1/2 mile north of Mill Brook, the nearest water body. The groundwater flow in the area of Building 2567 has been determined to be in a southeastern direction. A table of water level elevations collected from the four monitoring wells located in the area of Building 2567 is provided in Table 1-1. The Atlantic Ocean is located approximately 15 miles east of the site.

1.3.3 Offsite Groundwater Usage

In compliance with the NJDEP regulations, WESTON conducted a well search to identify all irrigation, monitoring, domestic, industrial and public supply wells within one half mile of U.S. Army Fort Monmouth, Charles Wood area. The file search produced records for 68 wells. The well search summary table includes the following information on surrounding wells: well identification number; well owner; well address; total depth (feet BGS); casing length (feet); static water level elevation (feet BGS); use code; and NJDEP permit number. In addition, a summary table of all U.S. Army wells located at Fort Monmouth is provided which includes the following information: well number; NJDEP permit number; New Jersey State Plane Coordinates; casing elevation and; elevation of the ground surface; and well records for the nearest identified offsite well have been included, if available. This information is included in Appendix D.

A review of the well records indicated that the majority of the wells within the area of concern are used for monitoring purposes. There are 52 monitoring wells. A domestic well (Permit Number 29-16207), owned by Joseph Stella is the closest to the site in the downgradient flow direction. The well is located at 144 Grant Avenue, approximately 6,500 feet southeast of the site.

TABLE 1-1

WATER LEVEL ELEVATIONS FOR MONITORING WELLS MW-1, MW-2, MW-3 AND MW-4 LOCATED AT BUILDING 2567

Monitoring Well Permit Number	Date	Time of Collection	Ground Surface Elevation (feet)	Depth to Water (feet)	Groundwater Surface Elevation (feet)
29-26925 (MW-1)	12/10/91	11:05 am	33.93	4.45	29.48
29-26926 (MW-2)	12/10/91	10:55 am	35.26	3.65	31.61
29-26927 (MW-3)	12/10/91	11:00 am	33.88	4.25	29.63
29-26928 (MW-4)	12/10/91	10:50 am	33.51	2.20	31.31

Monitoring Well Permit Number	Date	Time of Collection	Ground Surface Elevation (feet)	Depth to Water (feet)	Groundwater Surface Elevation (feet)
29-26925 (MW-1)	10/26/92	3:55 pm	33.93	5.17	28.76
29-26926 (MW-2)	10/26/92	4:05 pm	35.26	3.16	32.10
29-26927 (MW-3)	10/26/92	4:10 pm	33.88	4.52	29.36
29-26928 (MW-4)	10/26/92	4:13 pm	33.51	4.38	.29.13

Monitoring Well Permit Number	Date	Time of Collection	Ground Surface Elevation (feet)	Depth to Water (feet)	Groundwater Surface Elevation (feet)
29-26925 (MW-1)	1/28/93	9:10 to 9:40 am	33.93	4.05	29.88
29-26926 (MW-2)	1/29/93	9:10 to 9:40 am	35.26	3.65	31.61
29-26927 (MW-3)	1/29/93	9:10 to 9:40 am	33.88	4.15	29.73
29-26928 (MW-4)	1/29/93	9:10 to 9:40 am	33.51	2.50	31.01

WATER LEVEL ELEVATIONS FOR MONITORING WELLS MW-1, MW-2, MW-3 AND MW-4 LOCATED AT BUILDING 2567

Monitoring Well Permit Number	Date	Time of Collection	Ground Surface Elevation (feet)	Depth to Water (feet)	Groundwater Surface Elevation (feet)
29-26925 (MW-1)	2/25/93	10:45 to 11:15 am	33.93	4.65	29.28
29-26926 (MW-2)	2/25/93	10:45 to 11:15 am	35.26	4.25	31.01
29-26927 (MW-3)	2/25/93	10:45 to 11:15 am	33.88	4.20	29.68
29-26928 (MW-4)	2/26/93	10:45 to 11:15 am	33.51	2.75	30.76

Monitoring Well Permit Number	Date	Time of Collection	Ground Surface Elevation (feet)	Depth to Water (feet)	Groundwater Surface Elevation (feet)
29-26925 (MW-1)	4/21/93	9:53 am	33.93	4.60	29.33
29-26926 (MW-2)	4/21/93	10:58 am	35.26	4.30	30.96
29-26927 (MW-3)	4/21/93	11:02 am	33.88	4.00	29.88
29-26928 (MW-4)	4/21/93	9:45 am	33.51	2.90	30.61

Monitoring Well Permit Number	Date	Time of Collection	Ground Surface Elevation (feet)	Depth to Water (feet)	Groundwater Surface Elevation (feet)
29-26925 (MW-1)	1/10/94	8:15 am	33.93	3.70	30.23
29-26926 (MW-2)	1/10/94	8:05 am	35.26	3.18	32.08
29-26927 (MW-3)	1/10/94	8:20 am	33.88	2.85	31.03
29-26928 (MW-4)	1/10/94	8:10 am	33.51	2.16	31.35



1.4 HEALTH AND SAFETY

Before, during, and after all activities, hazards at the work site which may have posed a threat to the health and safety of all personnel who were involved with, or were affected by, the decommissioning of the UST system were minimized. All areas which posed, or may have been suspected to pose a vapor hazard were monitored by a qualified individual utilizing approved equipment. The trained individual ascertained if the area was properly vented to render the area safe, as defined by OSHA.

1.5 REMOVAL OF UNDERGROUND STORAGE TANK

1.5.1 General Procedures

Between 2 and 5 February 1993, UST No. 42 to 45 were closed by removal at Building 2567 on the Charles Wood area of Fort Monmouth. Tank closure activities were conducted as follows:

- All underground obstructions (utilities,... etc.) were marked out by the contractor performing the closure prior to excavation activities.
- Surface materials (i.e, asphalt, concrete, etc...) were excavated and staged separate from all soils. These materials were later recycled in accordance with all applicable laws and regulations.
- Each tank's atmosphere was inerted.
- Access ways on top of the tank's were opened.
- Licensed tank closure contractor personnel entered the tanks to visually inspect and manually clean the insides of the tanks.
- All wastes (tank bottom sludge and tank rinsate) generated during cleaning were collected and disposed.
- The tanks were removed from the excavation and staged on plastic sheeting.
- Soil was excavated until field screening no longer indicated the presence of contamination or the structural integrity of buildings and road ways were threatened.
- Soil excavated during the tank closure was transported to Soil Remediation of Philadelphia for characterization and disposal/reuse.



- Post closure soil samples were collected for laboratory analysis.
- The excavation was backfilled with clean fill material to the original surface grade, and the area paved.
- A Sub-Surface Evaluator from the DPW was present during all closure activities.

1.5.2 Underground Storage Tank Excavation

Soil was excavated to expose the USTs and the associated piping. The piping was not removed/disturbed until all free product was drained into the USTs. The USTs were rendered vapor free by purging prior to any cutting or access. After removal of the associated piping, a manway from each UST was made to allow for proper cleaning. The USTs were completely emptied of all liquids prior to removal. Liquids were transported and disposed of by L & L Oil Service, Inc. L & L is a licensed hazardous waste transporter (USEPA ID# NJD01427895). Approximately 180 gallons of hazardous liquid was transported by L & L Oil Service, Inc. to S & W Wastes, Inc. in South Kearny, New Jersey. Hazardous waste manifests were completed and can be found in Appendix C. All of the openings in the tanks were plugged except for one hole (manway).

After the USTs were removed from the excavation, they were staged on polyethylene sheeting and examined for cracks, corrosion or puncture holes. The presence or absence of holes was documented by the Sub-Surface Evaluator. UST Nos. 42 to 45 were found to be in good condition with no corrosion holes. Groundwater was present in the excavation at approximately four feet BGS.

Soils surrounding the UST were screened visually and with a Photoionization Detector (PID) for evidence of contamination. Based on visual observations and screening approximately 936 cubic yards of soil were removed from the area surrounding the USTs and pump island. In both areas excavation was continued until either no evidence of contamination was found, based on field observations, or until further removal of soil would endanger their integrity of structures and roadways adjacent to the area of investigation. Groundwater noted in the wells at 4 feet BGS was not encountered in the excavation above the 7 feet BGS. Therefore, the excavations were extended to 7 feet BGS when necessary. When excavation was completed, the area was backfilled and the site paved. The potentially contaminated soil was manifested and transported to Soil Remediation of Philadelphia for recycling. A certificate of soil remediation is provided in Appendix E.



1.6 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tanks were transported by Cycle Construction, Inc. to Mazza and Sons, Inc., for recycling in compliance with all applicable regulations and laws. The Tank Reclamation Certificates are provided in Appendix F.

The contractor labelled the UST prior to transport with the following information:

- site of origin,
- · contact person,
- NJDEP UST Facility ID number,
- name of transporter/contact person, and
- destination site/contact person.

1.7 MANAGEMENT OF EXCAVATED SOIL

Approximately 936 cubic yards of contaminated soil were removed from the area surrounding UST Nos. 42 to 45 and the pump island. Soil was placed on and covered with polyethylene sheets. Potentially contaminated soils were stockpiled separately from other excavated material. Potentially contaminated soils were transported to Soil Remediation of Philadelphia. A certificate of soil remediation is provided in Appendix F. All soils free of evidence of contamination were backfilled into the excavation following removal of the USTs.



SECTION 2.0

SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S ARMY DPW personnel. All analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory, Environmental Profile Laboratories and 21st Century Environmental, which are NJDEP-certified testing laboratories. All sampling was performed under the direct supervision of a NJDEP Certified Sub-Surface Evaluator according to the methods described in the NJDEP Field Sampling Procedures Manual (May 1992). Sampling frequency and parameters analyzed complied with the NJDEP-BUST document "Technical Requirements for Site Remediation-Proposed New Rules" (May 1992) which was the applicable regulation at the date of closure. All records of the Site Investigation activities are maintained by Fort Monmouth DPW: Environmental Office.

The following Parties participated in Closure and Site Investigation activities.

• Closure Contractor #1: Cycle Construction, Inc.

Contact Person: Peter P. Maglow Phone Number: (908) 264-7177

NJDEP Company Certification No.: G0000592

• Hazardous Waste Hauler: L & L Oil Service, Inc.

Contact Person: Frank Labella Phone Number: (908) 566-2785 USEPA ID No.: NJD01427895

 Subsurface Evaluator: Charles Appleby Employer: U.S. Army, Fort Monmouth

Phone Number: (908) 532-6224 NJDEP Certification No.: 2056

Analytical Laboratory: Environmental Profile Laboratories

Contact Person: Daniel Wright Phone Number: (908) 244-6278

NJDEP Laboratory Certification No.: 15526



• Analytical Laboratory: 21st Century Environmental, Inc.

Contact Person: Richard W. Lynch Phone Number: (609) 467-9521

NJDEP Laboratory Certification No.: 08031

• Analytical Laboratory: U.S. Army Fort Monmouth Environmental Testing Laboratory

Contact Person: Brian McKee Phone Number: (609) 532-4359

NJDEP Laboratory Certification No.: 13461

2.2 FIELD SCREENING/MONITORING

All soils that were excavated as part of the removal of the UST were screened using a PID, for evidence of contamination. Soils were also inspected visually for evidence of contamination (staining, free product, etc..). Soils on the sidewalls and base of the excavation were screened with a PID by an individual under the direct supervision of the NJDEP Certified Sub-Surface Evaluator. Evidence of contamination was noted during excavation of soils surrounding the UST and soils were subsequently removed.

2.3 SOIL AND GROUNDWATER SAMPLING

On 10 December 1991, one groundwater sample was collected from each monitoring well and analyzed by Environmental Profile Laboratories for volatile organic compounds plus 15 tentatively identified compounds (VO+15) and lead.

On 26 October 1992, one groundwater sample was collected from each monitoring well and analyzed by Environmental Profile Laboratories for VO+15 and lead.

On 2 February 1993, four post excavation soil samples were collected from the bottom and north side wall of the excavation and analyzed by U.S. Army Fort Monmouth Laboratory (FML) for total petroleum hydrocarbons (TPHC). In addition, on 8 February 1993, two post excavation soil samples were collected from the east side wall of the excavation and analyzed by FML for TPHC.

On 24 February 1993, 23 post-excavation soil samples were collected from the side walls of the excavation and analyzed by FML for TPHC and 21st Century Laboratories for VO+15 and lead.

On 21 April 1993, one groundwater sample was collected from each monitoring well and analyzed by 21st Century Laboratories for VO+15, base neutral compounds plus 15 tentatively identified compounds (BN+15) and lead.

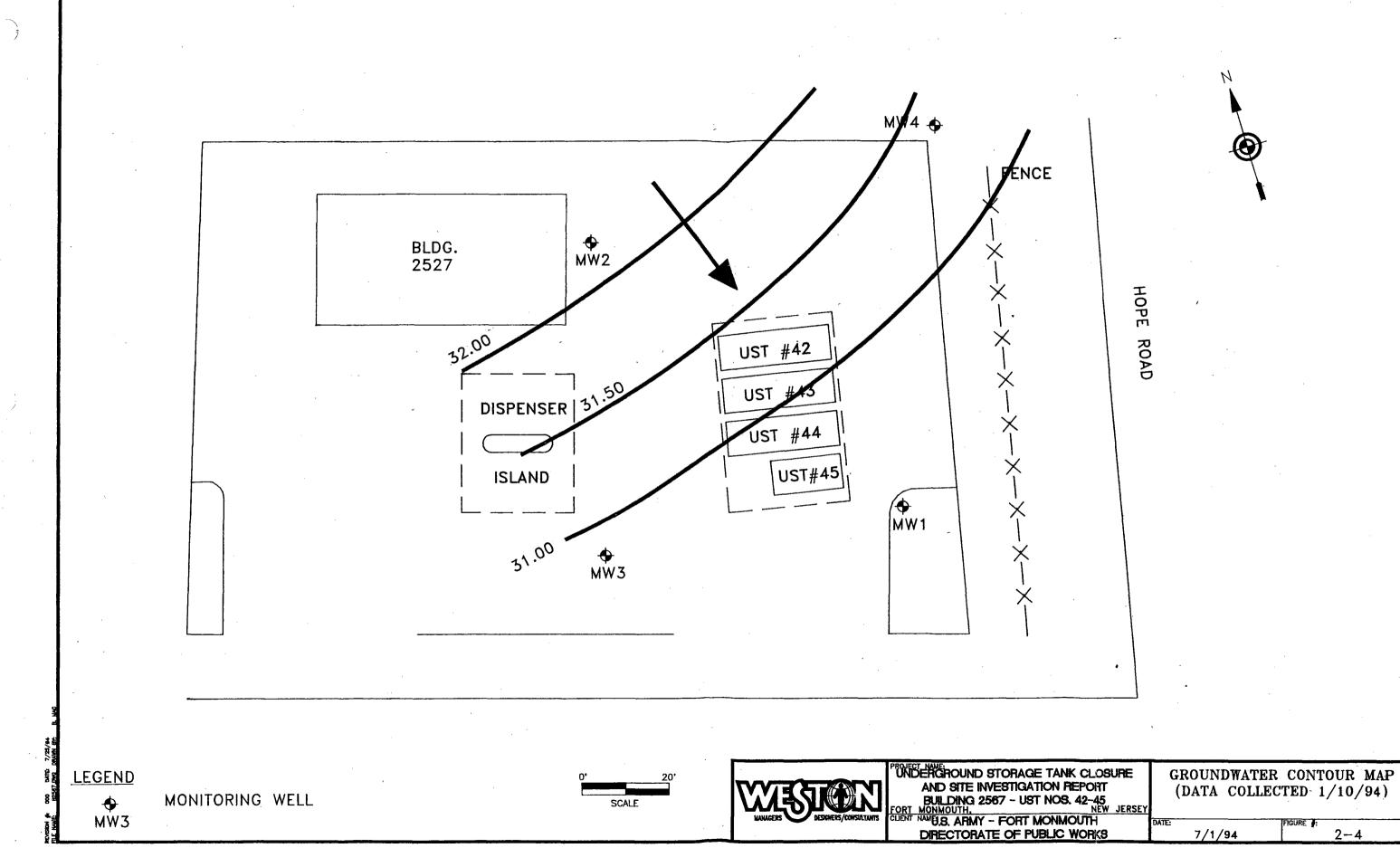


On 3 February 1994, one groundwater sample was collected from each monitoring well and analyzed by 21st Century Laboratories for VO+15 and lead.

On 31 March 1994, one groundwater sample was collected from each monitoring well and analyzed by 21st Century Laboratories for VO+15 and lead.

A summary of sampling activities including parameters analyzed is provided in Table 2-1. Figure 2-1 depicts the location of the post-excavation soil samples. Figure 2-2 depicts the locations of the monitoring wells. The post-excavation soil samples were collected using decontaminated stainless steel scoops and groundwater samples were collected using decontaminated teflon bailers. Following soil and groundwater sampling activities, the samples were chilled and delivered to the applicable testing laboratory.

The frequency of sampling and parameters analyzed were consistent with the applicable NJDEP regulations at the date of closure, which were the "Technical Requirements for Site Remediation" (NJAC 7:26E-1 et seq., dated May 1992).



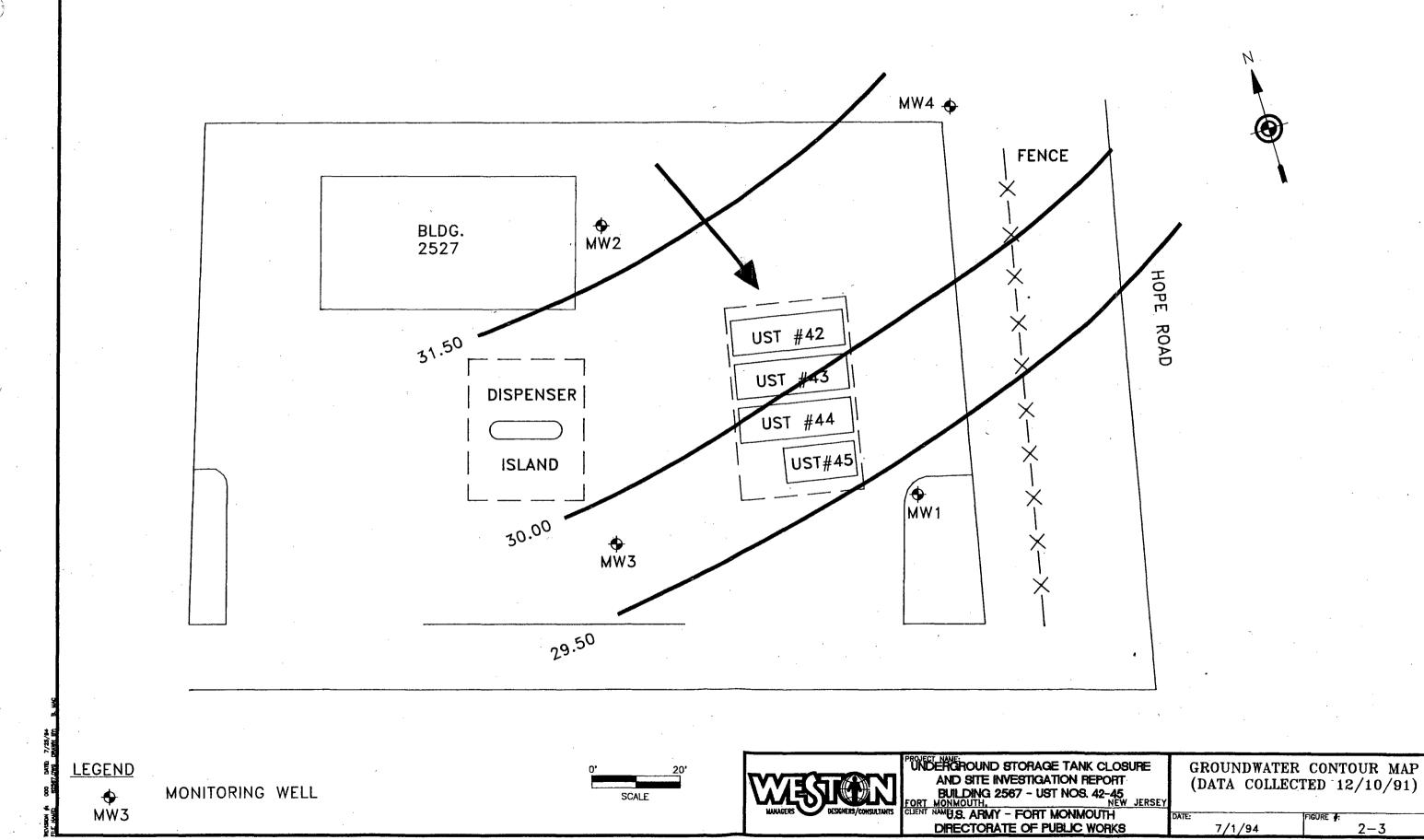
2-7

7/1/94

2-4

MONITORING WELL

MW3



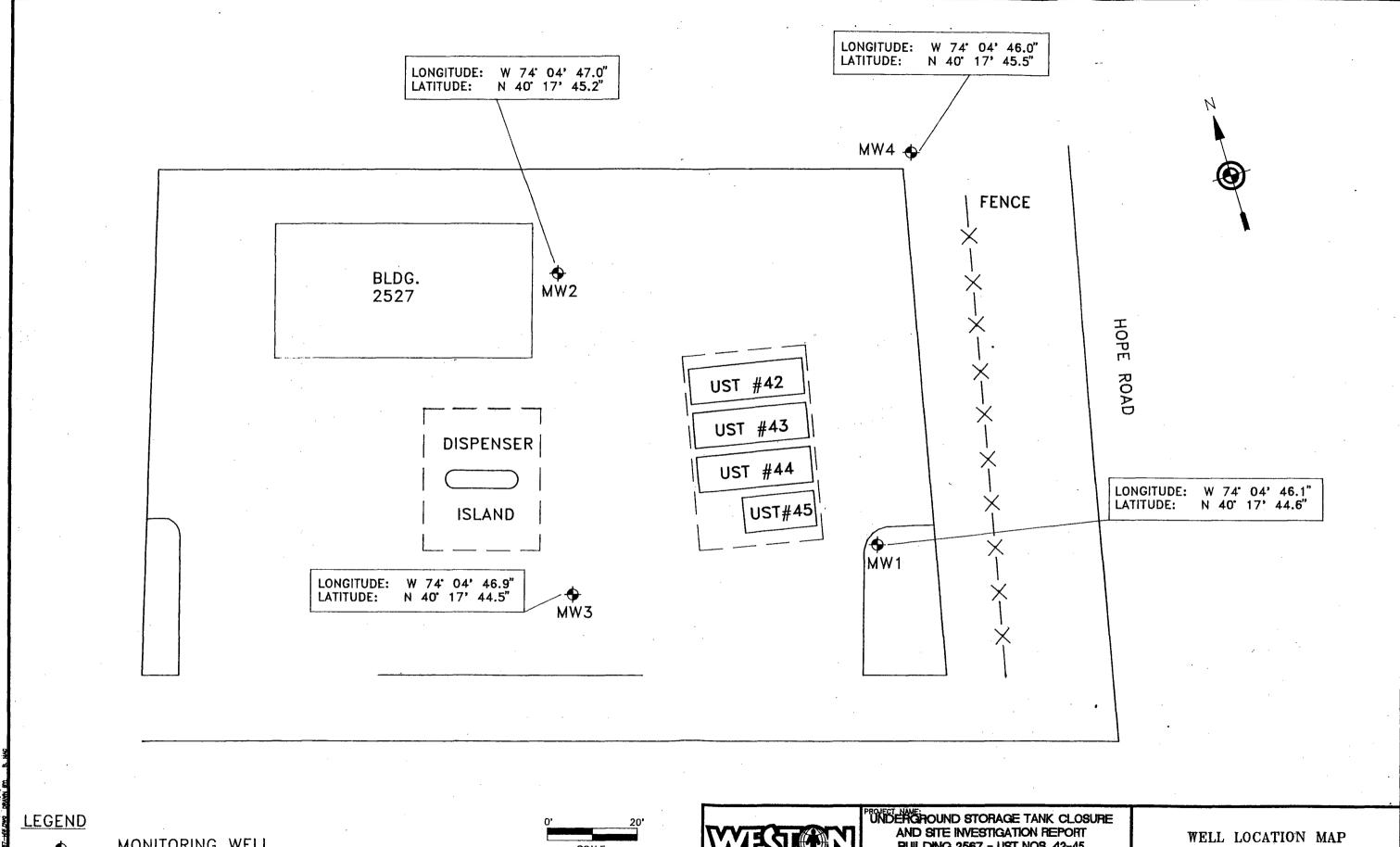
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7/1/94

2-3

MONITORING WELL

MW3



♦ MW3

MONITORING WELL





PROJECT NAME:
UNDERGROUND STORAGE TANK CLOSURE
AND SITE INVESTIGATION REPORT
BUILDING 2567 - UST NOS. 42-45
FORT MONMOUTH,
CLIENT NAMES. ARMY - FORT MONMOUTH
DIRECTORATE OF PUBLIC WORKS

7/1/94

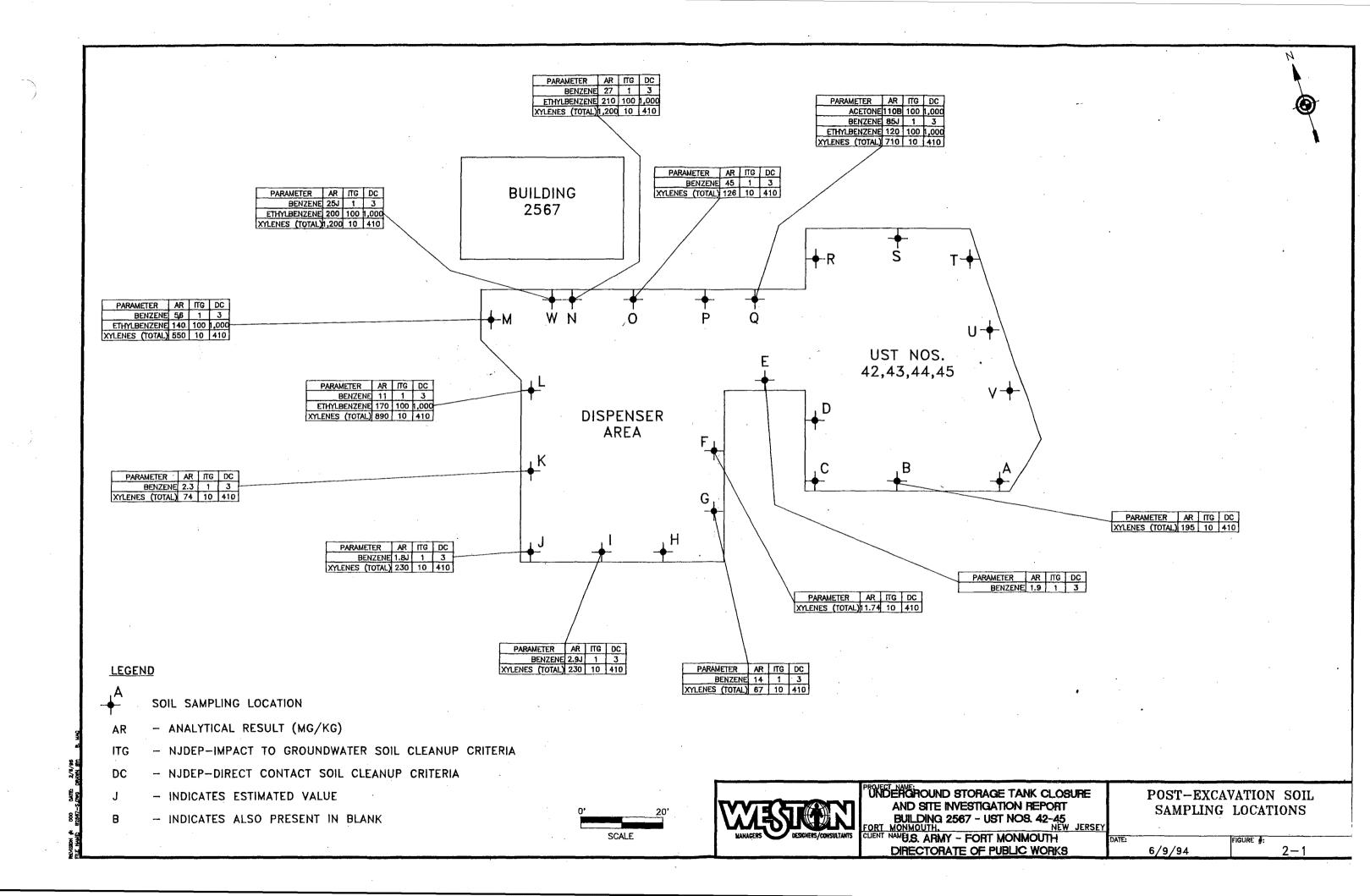


TABLE 2-1

SUMMARY OF POST-EXCAVATION SOIL SAMPLING BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.	Lab ID No.	Date of Collection	Matrix	Sample Depth (Feet BGS)	Sample Type	Analytical Parameters	Sampling Method
# 1	1140.1	2/2/93	Soil	3	Post Excavation	ТРНС	Stainless Steel Scoop
# 2	1140.2	2/2/93	Soil	3	Post Excavation	ТРНС	Stainless Steel Scoop
# 3	1140.3	2/2/93	Soil	12	Post Excavation	ТРНС	Stainless Steel Scoop
# 4	1140.4	2/2/93	Soil	12	Post Excavation	ТРНС	Stainless Steel Scoop

Sample ID No.	Lab ID No.	Date of Collection	Matrix	Sample Depth (Feet BGS)	Sample Type	Analytical Parameters	Sampling Method
S-1	1142.3	2/8/93	Soil	4	Post Excavation	ТРНС	Stainless Steel Scoop
S-2	1142.4	2/8/93	Soil	2	Post Excavation	ТРНС	Stainless Steel Scoop
S-3 Duplicate	1142.4	2/8/93	Soil	2	Post Excavation	ТРНС	Stainless Steel Scoop
S-4 Spike	1142.4	2/8/93	Soil	2	Post Excavation	ТРНС	Stainless Steel Scoop

Abbreviation:

TPHC: - Total Petroleum Hydrocarbons.

SUMMARY OF POST-EXCAVATION SOIL SAMPLING BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.	Lab ID No.	Date of Collection	Matrix	Sample Type	Analytical Parameters	Sampling Method
A	1151.1	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
В	1151.2	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
С	1151.3	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
D	1151.4	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
E	1151.5	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
F	1151.6	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
G	1151.7	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
Н	1151.8	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
I	1151.9	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
J	1151.10	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
К	1151.11	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
L	1151.12	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
М	1151.13	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
N	1151.14	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
0	1151.15	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop
P	1151.16	2/24/93	Soil	Post Excavation	ТРНС	Stainless Steel Scoop

Abbreviation:

TPHC: - Total Petroleum Hydrocarbons.

SUMMARY OF POST-EXCAVATION SOIL SAMPLING BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.	Lab ID No.	Date of Collection	Matrix	Sample: Type	Analytical Parameters	Sampling Method
Q	1151.17	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop
R	1151.18	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop
S	1151.19	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop
T	1151.20	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop
U	1151.21	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop
v	1151.22	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop
w	1151.23	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop
Duplicate	1151.23 Dup	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop
Spike	1151.23 Spike	2/24/93	Soil	Post-Excavation	ТРНС	Stainless Steel Scoop

Abbreviation:

TPHC: - Total Petroleum Hydrocarbons.

SUMMARY OF POST-EXCAVATION SOIL SAMPLING BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.	Lab ID No.	Date of Collection	Matrix	Sample Type	Analytical Parameters	Sampling Method
A	A0995	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
В	A0996	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
С	A0997	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
D	A0998	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
E	A0999	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
F	A1000	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
G	A1001	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
Н	A1002	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
I	A1003	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
J	A1004	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
К	A1005	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
L	A1006	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
M	A1007	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
N	A1008	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
0	A1009	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
P	A1010	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
Q	A1011	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
R	A1012	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
S	A1013	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
Т	A1014	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop

SUMMARY OF POST-EXCAVATION SOIL SAMPLING BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.	Lab ID No.	Date of Collection	Matrix	Sample Type	Analytical Parameters	Sampling Method
ט	A1015	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
v	A1016	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
w	A1017	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
Trip Blank	A1018	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop
Field Blank	A1019	2/24/93	Soil	Post-Excavation	VO+15, LEAD	Stainless Steel Scoop

Abbreviation:

VO+15: - Volatile Organic Analysis Plus 15 tentatively identified compounds.

TABLE 2-2

SUMMARY OF GROUNDWATER SAMPLING BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.	Lab ID No.	Date of Collection	Matrix	Sample Type	Analytical Parameters	Sampling Method
MW-1	6944.8	12/10/91	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-2	6944.9	12/10/91	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-3	6944.10	12/10/91	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-4	6944.11	12/10/91	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-1	9173.15	10/26/92	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-1 (Dup)	9173.16	10/26/92	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-2	9173.17	10/26/92	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-3	9173.18	10/26/92	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-4	9173.19	10/26/92	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-1	A1634	4/21/93	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-1 (Dup)	A1635	4/21/93	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-2	A1636	4/21/93	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-3	A1637	4/21/93	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Tesson Bailer
MW-4	A1633	4/21/93	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Tesson Bailer
MW-1	A1745	4/28/93	Aqueous	Monitoring Well	BN+15	Decontaminated Tesson Bailer
MW-2	A1747	4/28/93	Aqueous	Monitoring Well	BN+15	Decontaminated Teflon Bailer
MW-3	A1746	4/28/93	Aqueous	Monitoring Well	BN+15	Decontaminated Teflon Bailer
MW-4	A1748	4/28/93	Aqueous	Monitoring Well	BN+15	Decontaminated Teflon Bailer
MW-1	B0244	2/3/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teffon Bailer

SUMMARY OF GROUNDWATER SAMPLING BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.	Lab ID No.	Date of Collection	Matrix	Sample Type	Analytical Parameters	Sampling Method
MW-2	B0243	2/3/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-3	B0245	2/3/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-4	B0242	2/3/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-1	B0658	3/31/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-2	B 0660	3/31/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-3	B0659	3/31/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-4	B0656	3/31/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer
MW-4 (Dup)	B0657	3/31/94	Aqueous	Monitoring Well	Lead, VO+15	Decontaminated Teflon Bailer

Abbreviations:

VO+15: - Volatile organic analysis plus 15 tentatively identified compounds.

BN+15: - Base neutral analysis plus 15 tentatively identified compounds.

DUP: - Duplicate Sample.



SECTION 3.0

CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL AND GROUNDWATER SAMPLING RESULTS

To evaluate soil conditions following removal of the USTs and associated soils, the post-excavation sample results were compared to NJDEP ITGW and RDC Soil Cleanup Criteria (N.J.A.C. 7:26D and revisions dated 3 February 1994). Summaries of analytical results for soils are presented in Table No. 3-1.

To evaluate groundwater conditions following removal of the USTs and associated soils, analytical results from the groundwater samples were compared to NJDEP Class II-A Ground Water Quality Criteria (N.J.A.C. 7:9-6.4, 6.8 and Table 1). A summary of the analytical results and comparison to NJDEP Class II Groundwater Cleanup Standards is provided in Table No. 3-2.

A summary of the analytical methods used and quality assurance information is provided in Table 3-3. The analytical data package summary is provided in Appendix E. The full data package, including associated quality control and chromatograph data are on file at U.S. Army Fort Monmouth, DPW.

Soil

On 2 February 1993, four post excavation soil samples were collected from the bottom and north sidewall of the excavation and analyzed by U.S. Army Fort Monmouth Laboratory (FML) for total petroleum hydrocarbons (TPHC). In addition, on 8 February 1993, two post excavation soil samples were collected from the east sidewall of the excavation and analyzed by FML for TPHC. In accordance with NJDEP requirements, those samples which exhibited a concentration of TPHC exceeding 1,000 milligrams per kilogram (mg/kg) would have been also analyzed for VO+15. Based on the concentrations of TPHC detected in the post excavation samples, no samples were analyzed for VO+15.

On 24 February 1993, 23 post-excavation soil samples were collected from the sidewalls of the excavation and analyzed by FML for TPHC and 21st Century Laboratories for VO+15 and lead. TPHC was detected in all samples, although only sample L (4539.3 mg/kg) exceeded the 1,000 mg/kg requirement. Lead was detected in samples A (129 mg/kg), B (55.1 mg/kg), C (15 mg/kg), F (19.6 mg/kg), G (37.4 mg/kg), H (15.2 mg/kg), I (39 mg/kg), J (15.5 mg/kg), K (6.19 mg/kg), L (25.8 mg/kg), M (87.5 mg/kg), N (49.3 mg/kg), O (92.5 mg/kg), R (7.77 mg/kg), S (10.8 mg/kg), T (9.38 mg/kg), V (22.7 mg/kg) and W (47.2 mg/kg). Benzene was

TABLE 3-1

SUMMARY OF ANALYTICAL RESULTS FOR SOILS BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

ТРНС	65.1	ND	ND	ND	141	7.9	2.0	382	9.1	31	31.4	37.4	41.5	44.1	NC*	NC*
Analytical Parameter Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg						
Date of Collection	2/2/93	2/2/93	2/2/93	2/2/93	2/8/93	2/8/93	2/8/93	2/8/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93		
Sample Type	PE	PE	PE	PE	PE	PE	狸	PE	Criteria	Critoris						
Metrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Groundwater Soll Cleanup	Contact Boll Cleanup						
Leb ID No.	1140.1	1140.2	1140.3	1140.4	1142.3	1142.4	1142.4	1142.4	1151.1	1151.2	1151.3	1151.4	1151.5	1151.6	NUDEP Impact to	Residential Direct
Sample ID No.	#1	n	n	14	5-1	S-2	S-3 Duplicate	5-4 Spike	A	В	Ċ	D	E	F		

трнс	50.4	53.4	28.9	66.3	90.4	4539.3	290.5	246.3	279.6	151.2	362.7	147.8	59.2	120.5	NC.	NC.
Analytical Parameter Units	mg/kg	mg/kg														
Date of Collection	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/8/93	2/8/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93		
Sample Type	PE	Criteria														
Matrix	Soil	Soil	Soil	Sail	Soil	Soil	Soil	Soll	Soil	Soil	Soil	8oil	Soll	Soll	Oroundwater Soil Cleanup	Soil Cleanup Criteria
Lab ID No.	1511.7	1151.8	1151.9	1151,10	1151.11	1151.12	1151.13	1151.14	1151.15	1151.16	1151.17	1151.18	1151.19	1151.20	NUDEP Impact to	Residential Direct Contact
Sample ID No.	đ	н		1	X	L	М	N	0	P	Q	R		T		

Abbreviations:

NC+: - No cleanup criterion has been proposed by NJDEP; however, the proposed NJDEP subsurface cleanup criterion for total organic compounds is 10,000 mg/kg.

PE: - Post Excavation

TPHC: - Total petroleum hydrocarbons ung/kg: - Milligrams per kilogram

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SUMMARY OF ANALYTICAL RESULTS FOR SOILS BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

ТРНС	187.4	217.3	321.5	307	1043.1	NC*
Analytical Parameter Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date of Collection	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	
Sample Type	PE	PE	PE	PE	PE	Criteria
Matrix	Soil	Soil	Soil	Soil	Soil	Groundwater Soil Cleanup
Lab ID No.	1151.21	1151.22	1151.23	1151.23 Dup	1151.23 Spike	NJDEP Impact to
Sample ID No.	U	У	w	W-Duplicate	W-Spike	NIE W

Abbreviations:

NC*: - No cleanup criterion has been proposed by NJDEP; however, the proposed NJDEP subsurface cleanup criterion for total organic compounds is 10,000 mg/kg.

PE: - Post Excavation

TPHC: - Total petroleum hydrocarbons mg/kg: - Milligrams per kilogram

SUMMARY OF ANALYTICAL RESULTS FOR SOILS BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.		A	В	C	D	E	F	G	Н	1	J	K	L.	M	N		
Lab ID No.		A0995	A0996	A0997	A0998	A0999	A1000	A1001	A1002	A1003	A1004	A1005	A1006	A1007	A1008	NJDEP Impect to	Residential Direct
Matrix		Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soll	Soil	Groundwater Soil Cleanup	Contact Soil
Sample Type		PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	PE	Criteria	Cleanup Criteria
Date of Collection		2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93		
Analytical Parameter	Units	50 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -		Talanda Santa Talanda Rasada Talanda													
Volatile Organic Compe	ounds		·														
Acetone	mg/kg	0.014	ND B	0.35	0.020	0.14	ND	39 Љ	100	1,000							
Methylene Chloride	mg/kg	ND	ND B	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1	49
2-Butanone	mg/kg	ND	ND	0.069	ND	ND	ND	ND	0.39J	2.4J	ND	ND	ND	ND	ND	50	1,000
Benzene	mg/kg	ND	ND	ND	ND	1.9	0.68J	14	0.25J	2.9 J	1.8J	2.3	11	5.6	27	1	3
Toluene	mg/kg	ND	ND	0.0036J	ND	0.044	1.0	14	1.2	- 30	68	32	320	110	460	500	1,000
Ethylbenzene	mg/kg	ND	44	ND	ND	0.02 J	0.78J	9.3	1.4	45	37	14	170	140	210	100	1,000
Xylenes (Total)	mg/kg	ND	195	0.024	0.019	0.116	11.74	67	8.6	230	229	74	890	550	1,200	10	410
Inorganics																	
Lead	mg/kg	129	55.1	15.0	ND	ND	19.6	37.4	15.2	39.0	15.5	6.19	25.8	87.5	49.3	NC	400

SUMMARY OF ANALYTICAL RESULTS FOR SOILS BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.	O	P	Q	R	S	т	U	v	w	Trip Blank	Field Blank		
Lab ID No.	A1009	A1010	A1011	A1012	A1013	A1014	A1015	A1016	A1017	A1018	A1019	NJDEP	Residential Direct
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Impact to Groundwater	Contact Soil
Sample Type	PE	PE	PE	PE.	PE	PE	PE	PE	PE	PE	PE	Soil Cleanup Criteria	Cleanup Criteria
Date of Collection	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93	2/24/93		
Analytical Units Parameter	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/L	mg/kg	mg/kg
Volatile Organic Compounds	,												
Acetone	ND	ND	110B	0.059B	0.14B	0.068B	0.0073JB	0.12B	ND	0.0065JB	3.3B	100	1,000
Methylene Chloride	ND	ND	ND	ND	ND	ND	0.0033JB	0.00 7J	ND	ND	ND	1	49
2-Butanone	ND	0.018 J	ND	ND	0.037	ND	ND	0.031	ND	ND	ND	50	1,000
Benzene	45	0.032 J	85 J	ND	0.029	0.0023J	ND	0.026	253	ND	0.038	1	3
Xylene (Total)	126	1.11	710	0.0087J	0.00993	0.0046J	0.0052J	0.00993	1200	ND	0.38	10	410
Toluene	11	0.29	220	0.0014J	0.0087	0.0021J	0.0038J	0.0097	450	ND	0.29	500	1,000
Ethylbenzene	29	0.14	120	ND	0.002J	ND	ND	0.002J	200	ND	0.074J	100	1,000
Inorganics			 										
Lead	92.5	ND	ND	7.77	10.8	9.38	ND	22.7	47.2	ND	ND	NC	400



ABBREVIATIONS, DATA QUALIFIERS AND NOTES BUILDING NO. 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Abbreviations:

PE:

Post Excavation

NC:

No groundwater cleanup criterion has been proposed for this analyte by

NJDEP.

ND:

Not detected.

mg/kg:

Milligrams per Kilogram.

Data Qualifiers:

J:

Indicates an estimated value.

B:

Indicates also present in blank.

TABLE 3-2
SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER
BUILDING 2567
UST NOS. 42 TO 45

Sample ID No.		MW-I	MW-2	MW-3	MW-4	NIDEP
Lab ID No.		6944.8	6944.9	6944.10	6944.11	Class II-A Groundwater
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	Cleanup Criteria
Sample Type		MW	MW	MW	MW	
Date of Collection		12/10/91	12/10/91	12/10/91	12/10/91	
Analytical Parameter	Units					
Lead	ug/L	4	ND	ND	5	10
VOLATILE ORGANIC COMI	POUNDS					
Methylene Chloride	ug/L	240	7	240	27	2
1,2-Dichloroethane	ug/L	55	ND	ND	ND	2
Benzene	ug/L	2400	3.1	110	ND	1
Xylenes (Total)	ug/L	42 J	ND	200	ND	40
tert-Butyl Alcohol	ug/L	4400	ND	ND	ND	NC
Methyl tert-Butyl Ether	ug/L	2200	ND	69	ND	NC

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER BUILDING 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.		MW-1	MW-1 (Dup)	MW-2	MW-3	MW-4	Field Blank	Trip Blank	NJDEP
Lab ID No.		9173.15	9173.16	9173.17	9173.18	9173.19	9173.25	9173.26	Class II-A Groundwater
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Cleamp Criteria
Sample Type		MW	MW	MW	MW	MW	QA	QA	
Date of Collection		10/26/92	10/26/92	10/26/92	10/26/92	10/26/92	10/26/92	10/26/92	
Analytical Parameter	Units								
Lead	ug/L	ND	ND	11	5	ND	NA	NA	10
VOLATILE ORGANIC COMPOUND	S								
Methylene Chloride	ug/L	420 B	130 B	23 B	24	27 B	66 B	5 JB	2
Bromodichloromethane	ug/L	77	ND	ND	ND	ND	ND	ND	NC
1,2-Dichloropropane	ug/L	62	ND	ND	ND	ND	ND	ND	1
Cis-1,3-Dichloropropene	ug/L	48 J	ND	ND	ND	ND	ND	ND	0.2
Trichloroethene	ug/L	32 J	ND	ND	ND	ND	ND	ND	1
Dibromochloromethane	ug/L	130	ND	ND	ND	ND	ND	ND	10
1,1,2-Trichloroethane	ug/L	140	ND	ND	ND	ND	ND	ND	3
Benzene	ug/L	2800	3200	ND	ND	ND	ND	ND	1
Trans-1,3-Dichloropropene	ug/L	220	ND	ND	ND	ND	ND	ND	0.2
Bromoform	ug/L	140	ND	ND	ND	ND	ND	ND	4
Tetrachloroethene	ug/L	51	ND	ND	ND	ND	ND	ND	i
1,1,2,2-Tetrachloroethane	ug/L	170	ND	ND	ND	ND	ND	ND	2
Toluene	ug/L	73	ND	ND	ND	ND	ND	ND	1,000
Chlorobenzene	ug/L	99	ND	ND	ND	ND	ND	ND	2

TABLE 3-2 (CONTINUED) SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER BUILDING 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.		MW-I	MW-1 (Dup)	MW-2	MW-3	MW-4	Field Blank	Trip Blank	NJDEP
Lab ID No.		9173.15	9173.16	9173.17	9173.18	9173.19	9173.25	9173.26	Class II-A Groundwater
Matrix		Aqueous	Aqueous	Aqueous	Адиеоня	Aqueous	Aqueous	Aqueous	Cleanup Criteria
Sample Type		MW	MW	MW	MW	MW	QA	QA	
Date of Collection		10/26/92	10/26/92	10/26/92	10/26/92	10/26/92	10/26/92	10/26/92	
Analytical Parameter	Units								
Ethylbenzene	ug/L	90	ND	ND	ND	ND	ND	ND	700
Styrene	ug/L	84	ND	ND	ND	ND	ND	ND	100
Xylenes (Total)	ug/L	302	57	3 J	3 Ј	ND	ND	ND	40
1,3-Dichlorobenzene	ug/L	100	ND	ND	ND	ND	ND	ND	600
1,2-Dichlorobenzene	ug/L	120	ND	ND	ND	ND	ND	ND	600
1,4 - Dichlorobenzene	ug/L	120	ND	ND	ND	ND	ND	ND	75
Tert-butyl Alcohol	ug/L	5400	7000	ND	ND	ND	ND	ND	NC
Methyl Tert-butyl Ether	ug/L	1200	1500	ND	ND	ND	ND	ND	NC
Acetone	ug/L	ND	ND	ND	1 J	ND	84	ND	700

Abbreviations:

NC - No NJDEP Class II-A groundwater cleanup criterion has been proposed for this analyte by NJDEP.

ND - Not detected.

NR - Analysis not requested.

MW - Monitoring Well.

QA - Quality Assurance sample.
ug/L - Micrograms per liter.

Data Qualifiers:

B - Indicates also present in blank.

Indicates an estimated value.

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER BUILDING 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.		MW-1	MW-1 Dup	MW-2	MW-3	MW-4	Field Blank	Trip Blank	NIDEP Class II-A
Lab ID No.		A 1634	A 1635	A 1636	A 1637	A 1633	A 1638	A 1639	Groundwater Cleanup
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Criteria
Sample Type		MW	MW	MW	MW	MW	MW	MW	
Date of Collection		4/21/93	4/21/93	4/21/93	4/21/93	4/21/93	4/21/93	4/21/93	
Analytical Parameter	Units								
Lead	ug/L	70	ND	ND	60	ND	ND	NA	10
VOLATILE ORGANIC CO	MPOUN	DS							
Acetone	ug/L	ND	28 JB	2.5 JB	7.7 JB	2.4 JB	2.5 JB	ND	700
Methylene Chloride	ug/L	16 J	ND	ND ·	ND	ND	3.8 J	4.8 J	2
Benzene	ug/L	520	470	ND	180	ND	ND	ND	1
Toluene	ug/L	ND	ND	ND	15	ND	ND	ND	1,000
Methyl Tertiary Butyl Ether	ug/L	890	970	ND	27	ND	. ND	ND	NC
Tert-butyl alcohol	ug/L	470 J	640	ND	ND	ND	ND	ND	NC
Xylenes (Total)	ug/L	ND	ND	2.0 J	74.2 J	ND	ND	ND	40

Abbreviations:

MW - Monitoring Well.

ND - Not detected.

J - Indicates an estimated value.

ug/L - Micrograms per liter.

TABLE 3-2 (CONTINUED)

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER BUILDING 2567

UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.		MW-I	MW-2	MW-3	MW-4	Field Blank	
Lab ID No.		A 1745	A 1747	A 1746	A 1748	A 1749	NJDEP Class II-A
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Groundwater Cleanu Criteria
Sample Type		MW	MW	MW	MW	QA	
Date of Collection		4/28/93	4/28/93	4/28/93	4/28/93	4/28/93	
Analytical Parameter	Units						
BASE NEUTRAL COMPOUNDS							
Butylbenzylphthalate	ug/L	12	18	12	10	ND	NC
Naphthalene	ug/L	ND	ND	1.2 J	ND	ND	NC
Bis(2-Ethylhexyl)Phthalate	ug/L	ND	ND	2.8 J	ND	ND	30

Abbreviations:

MW - Monitoring Well.

NC - No NJDEP Class II-A groundwater criterion has been proposed for this analyte by NJDEP.

ug/L - Micrograms per liter.
QA - Quality Assurance

Data Qualifiers:

ND - Not detected.

Indicates an estimated value.

TABLE 3-2 (CATINUED)

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER BUILDING 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.		MW-1	MW-2	MW-3	MW-4	Field Blank	Trip Blank	
Lab ID No.		B 0244	B 0243	B 0245	B 0242	B 0246	B 0241	NIDEP Class II-A
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Aqueous	Groundwater Cleanup Criteria
Sample Type		MW	MW	MW	MW	QA	QA	
Date of Collection		2/3/94	2/3/94	2/3/94	2/3/94	2/3/94	2/3/94	
Analytical Parameter	Units							
INORGANIC								
Lead	ug/L	ND	260	41	ND	ND	NA	10
VOLATILE ORGANIC COMPOUNDS								
Methylene Chloride	ug/L	26 JB	4.0 J	4.4 J	5.0	7.3	5.2	2
Vinyl Acetate	ug/L	ND	ND	ND	1.3 J	ND	ND	NC
Benzene	ug/L	21 J	19	19	14	ND	ND	1
Toluene	ug/L	66	55	43	56	ND	ND	1000
Ethylbenzene	ug/L	16 J	7.4	7.0	8.9	ND	ND	700
Xylenes (Total)	ug/L	41	43	65	60	ND	ND	40
Tert-butyl alcohol	ug/L	28 J	ND	ND	ND	ND	ND	NC
Carbon Disulfide	ug/L	ND	3.1 J	ND	ND	ND	ND	NC
Acetone	ug/L	54 JB	ND	ND	ND	12	ND	700
Methyl tert-butyl ether	ug/L	650	7.0 J	9.1	ND	ND	ND	NC

Abbreviations:

MW - Monitoring Well,

NC - No NJDEP Class II-A groundwater cleanup criterion has been proposed for this analyte by NJDEP.

ND - Not detected.

J - Indicates an estimated value.
 B - Indicates also present in blank.

ug/L - Micrograms per liter.

TABLE 3-2 (ITINUED)

SUMMARY OF ANALYTICAL RESULTS FOR GROUNDWATER BUILDING 2567 UST NOS. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Sample ID No.		MW-I	MW-2	MW-3	MW-4	MW-4 (Dup)	Field Blank	Trip Blank	
Lab ID No.		B 0658	B 0660	B 0659	B 0656	B 0657	B 0661	B 0662	NIDEP Class II-A
Matrix		Aqueous	Aqueous	Aqueous	Aqueous	Aqueoua	Aqueous	Aqueous	Groundwater Cleanup Criteria
Sample Type		MW	MW	MW	MW	MW	QA	Q.	
Date of Collection		3/31/94	3/31/94	3/31/94	3/31/94	3/31/94	3/31/94	3/31/94	
Analytical Parameter	Units	Units							
VOLATILE ORGANIC COMPOUNDS									
Xylene (Total)	ug/L	ND	2.5 J	ND	ND	ND	ND	ND	40
Methyl Tert-Butyl Ether (MTBE)	ug/L	10	11	ND	1.3 J	1.3 J	ND	ND	NC
Acetone	ug/L	6.9 J	140 B	ND	ND	4.4 JB	7.2 JB	11 B	700
Methylene Chloride	ug/L	ND	17	ND	2.3 J	2.91	2.3 J	3.11	2
Tertiary Butyl Alcohol	ug/L	22 J	ND	ND	ND	ND	ND	ND	NC
INORGANIC COMPOUNDS									
Lead	ug/L	ND	ND	25	ND	ND	ND	NA	100

Abbreviations:

NC - No NJDEP Class II-A groundwater cleanup criterion has been proposed for this analyte by NJDEP.

ND - Not detected.

NR - Analysis not requested.

MW - Monitoring Well.

QA - Quality Assurance sample.

ug/L - Micrograms per liter.

Data Qualifiers:

B - Indicates also present in blank.

J - Indicates an estimated value.

TABLE 3-3

ANALYTICAL METHODS/QUALITY ASSURANCE SUMMARY TABLE UST NO. 2567 BUILDING NO. 42 TO 45 FORT MONMOUTH, NEW JERSEY

Analytical Parameter	No. of Samples Collected	Matrix	Date Collected	Date Analysis Completed	Preservation Method	USEPA SW-846 Analytical Method
ТРНС	4	S	2/2/93	2/3/93	Cool to 4°C	418.1
ТРНС	4	s	2/8/93	2/8/93	Cool to 4°C	418.1
ТРНС	23	s	2/24/93	2/24/93	Cool to 4°C	418.1
VOCs	23	S	2/24/93	2/26/93	Cool to 4°C	USEPA-CLP-IFB
Lead	23	s	2/24/93	2/25/93	Cool to 4°C	6010
Lead	. 4	Aqueous	12/10/91	12/11/91	Cool to 4°C	418.1
VOCs	4	Aqueous	12/10/91	12/13/91	Cool to 4°C	USEPA-CLP-IFB
Lead	4	Aqueous	10/26/92	10/28/92	Cool to 4°C	418.1
VOCs	4	Aqueous	10/26/92	10/30/92	Cool to 4°C	USEPA-CLP-IFB
Lead	4	Aqueous	4/21/93	4/27/93	Cool to 4°C	418.1
VOCs	4	Aqueous	4/21/93	4/27/93	Cool to 4°C	USEPA-CLP-IFB
BNAs	4	Aqueous	4/28/93	5/12/93	Cool to 4°C	8270
Lead	4	Aqueous	2/3/94	2/7/94	Cool to 4°C	418.1
VOCs	4	Aqueous	2/3/94	2/7/94	Cool to 4°C	USEPA-CLP-IFB
Lead	4	Aqueous	3/31/94	4/5/94	Cool to 4°C	418.1
VOCs	4	Aqueous	3/31/94	4/5/94	Cool to 4°C	USEPA-CLP-IFB

Abbreviations:

USEPA-CLP-IFB

- Volatile samples were analyzed using the method cited in the USEPA-CLP-IFB version 2/88. The CLP volatile method is based on USEPA

Method 624 and SW-846.

TPHC - Total Petroleum Hydrocarbons.
VOCs - Volatile Organic Compounds.

BNAs - Base Neutral Acid Extractable Compounds.

- Celsius.

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detected in samples E (1.9 mg/kg), G (14 mg/kg), I (2.9 mg/kg), J (1.8 mg/kg), K (2.3 mg/kg), L (11 mg/kg), M (5.6 mg/kg), N (27 mg/kg), O (45 mg/kg), Q (8.5 mg/kg) and W (34 mg/kg). Total xylenes were detected in samples B (195 mg/kg), F (11.7 mg/kg), G (67 mg/kg), I (230 mg/kg), J (229 mg/kg), K (74 mg/kg), L (890 mg/kg), M (550 mg/kg), N (1200 mg/kg), O (126 mg/kg), Q (710 mg/kg) and W (1200 mg/kg). Ethyl benzene was detected in samples L (170 mg/kg), M (140 mg/kg), N (210 mg/kg), Q (120 mg/kg) and W (170 mg/kg). All other samples contained either non-detectable concentrations of contaminants or concentrations of contaminants below NJDEP ITGW or RDC Soil Cleanup Criteria.

Groundwater

On 10 December 1991, one groundwater sample was collected from each monitoring well and analyzed by Environmental Profile Laboratories for volatile organic compounds plus 15 tentatively identified compounds (VO+15) and lead. Benzene was detected in MW-1 (2400 ug/l), MW-2 (3 ug/l) and MW-3 (110 ug/l), 1,2-dichloroethane in MW-1 (55 ug/l), total xylene in MW-1 (42 ug/l) and MW-3 (200 ug/l), and methylene chloride in MW-1 (240 ug/l), MW-2 (7 ug/l), MW-3 (240 ug/l) and MW-4 (27 ug/l). These concentrations of contaminants exceed NJDEP Class II-A Ground Water Quality Criteria. All other samples contained either non-detectable concentrations of contaminants or concentrations of contaminants below NJDEP Class II-A Ground Water Quality Criteria.

On 26 October 1992, one groundwater sample was collected from each monitoring well and analyzed by Environmental Profile Laboratories for VO+15 and lead. Due to an unusual amount of contaminants present which exceeded NJDEP Class II-A ground water quality criteria in MW-1, a duplicate sample was analyzed. The MW-1 duplicate sample indicated concentrations of benzene (3200 ug/l), total xylene (57 ug/l) and methylene chloride (130 ug/l). In addition, methylene chloride was detected in MW-2 (23 ug/l), MW-3 (24 ug/l) and MW-4 (27 ug/l), and lead in MW-2 (11 ug/l) which exceed NJDEP Class II-a ground water quality criteria. All other samples contained either non-detectable concentrations of contaminants or concentrations of contaminants below NJDEP Class II-A ground water quality criteria. Class II Groundwater Cleanup Standards.

On 21 April 1993, one groundwater sample was collected from each monitoring well and analyzed by 21st Century Laboratories for VO+15 and lead. Lead was detected in MW-1 (70 ug/l) and MW-3 (60 ug/l) in concentrations which exceed NJDEP Class II-A ground water quality criteria. In addition, benzene was detected in MW-1 (520 ug/l) and MW-1 duplicate (470 ug/l), total xylene in MW-3 (74.2 ug/l) and methylene chloride in MW-1 (16 ug/l). Methylene chloride was also detected in the field blank (3.8 ug/l) and the trip blank (4.8 ug/l). The presence of methylene chloride in these quality assurance samples indicates laboratory induced contamination of sample may have occurred and is not related to the operation of the UST system. All other samples contained either non-detectable concentrations of contaminants or concentrations of contaminants below NJDEP Class II-A ground water quality criteria.



On 28 April 1993, one groundwater sample was collected from each monitoring well and analyzed by 21st Century Laboratories for base neutral compounds plus 15 tentatively identified compounds (BN+15). All samples contained either non-detectable concentrations of contaminated or concentrations of contaminants below NJDEP Class II-A Ground Water Quality Criteria.

On 3 February 1994, one groundwater sample was collected from each monitoring well and analyzed by 21st Century Laboratories for VO+15 and lead. Lead was detected in MW-2 (260 ug/l) and MW-3 (41 ug/l) in concentrations which exceed NJDEP Class II-A ground water quality criteria. Benzene was detected in MW-1 (21 ug/l), MW-2 (19 ug/l), MW-3 (19 ug/l) and MW-4 (14 ug/l). Total xylene was detected in MW-1 (42 ug/l), MW-2 (43 ug/l), MW-3 (65 ug/l) and MW-4 (60 ug/l). Methylene chloride was detected in MW-1 (26 ug/l), MW-2 (4 ug/l), MW-3 (4.4 ug/l) and MW-4 (5 ug/l). All other samples contained either non-detectable concentrations of contaminants or concentrations of contaminants below NJDEP Class II-A ground water quality criteria.

On 31 March 1994, one groundwater sample was collected from each monitoring well and analyzed by 21st Century Laboratories for VO+15 and lead. Lead was detected in MW-3 (25 ug/l) in concentrations which exceed NJDEP Class II-A ground water quality criteria. Methylene chloride was detected in MW-2 (17 ug/l), MW-4 (2.3 ug/l) and MW-4 duplicate (2.9 ug/l). Since methylene chloride was also detected in the field blank (2.3 ug/l) and the trip blank (3.1 ug/l), its presence indicates laboratory induced contamination of sample may have occurred and is not related to the operation of the UST system. All other samples contained either non-detectable concentrations of contaminants or concentrations of contaminants below NJDEP Class II-A ground water quality criteria.

3.2 <u>CONCLUSIONS AND RECOMMENDATIONS</u>

Prior to the closure of UST No. 42, 43, 44 and 45, four monitoring wells were installed and sampled. Based on the analysis of groundwater samples elevated volatile and semivolatile parameters were detected. The most notable of the parameters were benzene (3 ug/L to 3,200 ug/L) and total xylenes (55 ug/L to 200 ug/L).

During closure, the tanks were observed to be intact and potentially contaminated soil was excavated until further removal would threatened the integrity of structure and roadways or until field screening indicated sufficient reduction in contaminant levels. Upon completion the excavation was backfilled with clean material and the surface paved.

Monitoring well samples, obtained after the closure, indicated significant reductions in groundwater contamination. Samples obtained on 31 March 1994 indicated the presence of only methylene chloride above NJDEP Class IIA groundwater quality criteria.



The reduction in groundwater contaminant levels is attributable to the following:

- The contaminant sources, Tank Nos. 42 to 45, 936 cubic yards of soil and the pump island piping were successfully removed. The analytical testing of soil has indicated that limited residual contamination exists in the soil below the surface.
- The site was backfilled with clean material and paved. The asphalt pavement caps the site precludes the infiltration of precipitation and other surface water to the ground; which reduces the potential for residual soil contaminants leaching from the soil into ground water.

Based on the above actions that have been implement on-site, the future impact of the site on the groundwater is considered to be insignificant. On 23 September 1994 a fifth monitoring well (MW-5) was installed to assess groundwater downgradient from the site. The four on-site and one downgradient wells will be sampled quarterly and analyzed for VO+15, xylenes, methyl tertiary butyl ether, tertiarybutyl alcohol and lead using Method 524.2. Information regarding these samples will be forwarded to the State.



APPENDIX C

Results of Long-Term Groundwater Monitoring Program, Fort Monmouth, Building 2567, Fort Monmouth, New Jersey (Letter Report), ATC Associates, May 2000

New Jersey Department of Environmental Protection Bureau of Federal Case Management CN 028 401 East State Street Trenton, New Jersey 08625-1454

RE: Results of Long-Term Groundwater Monitoring Program
Fort Monmouth, Building 2567
Fort Monmouth, New Jersey
NJDEP Case #89-12-12-1442 and #91-08-27-1414

Dear Mr. Ian R. Curtis

ATC Associates, Inc. (ATC), on behalf of Fort Monmouth, presents in this letter, a summary report describing the results of the long-term monitoring program conducted for the investigation of the former underground storage tank (UST) system at Building 2567 at Fort Monmouth, New Jersey. Provided below is a brief site history and summary of previous investigations, excerpted from the *Site Investigation Report* dated January 1995, prepared by Weston for the Fort Monmouth, Building 2567. The site history and summary of previous investigations is followed by a description of the results of the long-term monitoring program to date.

Site History

Building 2567 is located off Laboratory Road in the Charles Wood area of Fort Monmouth. A site map detailing the former UST locations is provided as Figure 1. Building 2567 is used as the installation gas station. On 12 December 1989, the New Jersey Department of Environmental Protection (NJDEP) Hotline was contacted due to a suspected release at the subject facility. The facility was assigned NJDEP case #89-12-12-1442. The release was investigated by performing a tightness test on 30 January 1990. The suspected line passed the test.

On 15 and 16 January 1991, tightness tests were performed on the facility's USTs. One UST failed. The NJDEP Hotline was contacted and the site was assigned case #91-08-27-1414. In response to the suspected release, four groundwater monitoring wells (MW-1 to MW-4) were installed at the subject facility on 9 October 1991. Groundwater was encountered between 2.5 to 5 feet bgs. Subsequent monitoring events indicated the groundwater flow direction was to the southeast.

Groundwater samples were collected from the four monitoring wells on 10 December 1991. Analysis for volatile organic compounds with a library search of fifteen tentatively identified compounds (VO+10) and total lead indicated no compounds were detected above the NJDEP Groundwater Quality Standards (GWQS), except for benzene, 1,2-dichloroethene, total xylenes, and methylene chloride.

The four monitoring wells were subsequently sampled on 26 October 1992, 21 April 1993, 3 February 1994, and 31 March 1994. Analytical results from these sampling events indicated that concentrations of lead, benzene, total xylenes, and methylene chloride were detected above the NJDEP GWQS.

On 2 to 5 February 1993, the four subject USTs were closed according to NJDEP regulations. Based on field screening, approximately 936 cubic yards of potentially impacted soils were removed from the site. Groundwater was encountered during excavation activities at approximately 7 feet below the ground surface (bgs).

On 2 February 1993 and 24 February 1993, soil samples were collected from the excavation area. Analysis for total petroleum hydrocarbons (TPH) and lead indicated no samples reported concentrations above the NJDEP GWQS. However, thirteen of the twenty-three samples reported volatile organic compounds above the NJDEP GWQS. Concentrations of xylenes, benzene, and ethylbenzene were detected above the NJDEP GWQS.

On 23 September 1994, an additional monitoring well (MW-5) was installed downgradient from the site.

The Site Investigation Report in January 1995 recommended no further action for the soils due to source removal including approximately 936 cubic yards of soil and the excavation was backfilled with clean fill and a capped with asphalt reducing the potential for residual soil contaminants to leach into the groundwater. The report recommended further groundwater monitoring to determine flow patterns on the site.

Results of the Long-Term Monitoring Program

As part of the long-term monitoring program for Building 2567, the five existing monitoring wells (MW-1 through MW-5) were sampled on 5 May 1995, 15 August 1995, 21 November 1995, 20 February 1996, 7 January 1997 and 11 April 1997. Prior to sampling, each well was gauged and groundwater elevations were then calculated from depth-to-water measurements. Groundwater elevation data are summarized in Table 1, located in Appendix A of this report. A groundwater elevation contour map showing groundwater flow direction based on the most recent groundwater elevation measurements (April 1997) is provided as Figure 1, located in Appendix A. Groundwater flow direction was determined to be to the southeast. This groundwater flow direction has remained consistent throughout the monitoring period. A groundwater sampling summary is provided in Appendix A as Table 2. After gauging each well, the wells were purged and sampled. All sampling procedures were conducted in accordance with the

NJDEP Field Sampling Procedures Manual. The samples were analyzed for VO+15 using EPA Method 624 and total lead.

The analytical results from each sampling event were compared to the NJDEP Groundwater Quality Standards (GWQS). Each constituent that exceeded the established GWQS was then compared to its maximum background concentration, as identified in the 1995 Site Investigation Report prepared by Weston.

A review of the historical groundwater analytical results indicates that concentrations of benzene, xylenes, methyl tertiary butyl ether (MTBE), and methylene chloride have been detected during these sampling events above the NJDEP GWQS. The highest concentrations have historically been detected in samples collected from MW-3. Methylene chloride has been detected, however, methylene chloride is commonly found as a laboratory contaminant and was also observed in quality control blanks. Concentrations of benzene in samples collected from MW-3 have been decreasing from 94 micrograms per liter (μ g/L) in May 1995 to not detected in April 1997. The groundwater analytical data, included in Attachment B, is summarized in Attachment A, Tables 3 through 8.

ATC, on behalf of Fort Monmouth, recommends that a determination be made to obtain a conditional No Further Action (NFA) with a Classification Exception Area (CEA). Based on the relatively low concentrations present in the groundwater at the subject site and the lack of potential receptors, ATC believes this site qualifies for a conditional NFA with a CEA. According to the NJDEP document titled "Final Guidance on Designation of Classification Exception Areas", four criteria are necessary to obtain a conditional NFA with a CEA in UST cases. The criteria are as follows:

- Source and source area are remediated (i.e. no soils contamination above the site-specific impact to groundwater criteria and no product remaining);
- Decreasing groundwater contaminant trends are established based upon sitespecific groundwater monitoring and a sound technical decision can be made to predict the duration it will take to meet the GWQS;
- Monitoring of groundwater clearly indicates that contaminants have not and will not migrate beyond given boundaries; and
- No receptors are at risk and public water supply is available.

The site may qualify for a conditional NFA with a CEA due to the following:

- The source and impacted soils in the source area have been removed;
- Concentrations of benzene in MW-3 have decreased from the initial concentration of 2,100 μg/L (12/10/91) to not detected (04/11/97);

- CEA boundaries have not been determined, however, ATC believes that contaminants will not migrate beyond given boundaries based on historical data. CEA boundaries need to be determined based on further aquifer characterization, i.e. hydraulic gradient and conductivity;
- No receptors have been identified to date.

If you have any questions or concerns regarding this summary report, please feel free to contact me at (609) 386-8800.

Sincerely, ATC Associates Inc.

Peter Niculescu Senior Project Geologist Edward S. Curry Project Geologist

Enclosures: Appendix A – Tables and Figures

Appendix B – Analytical Data Reports

cc: Project File

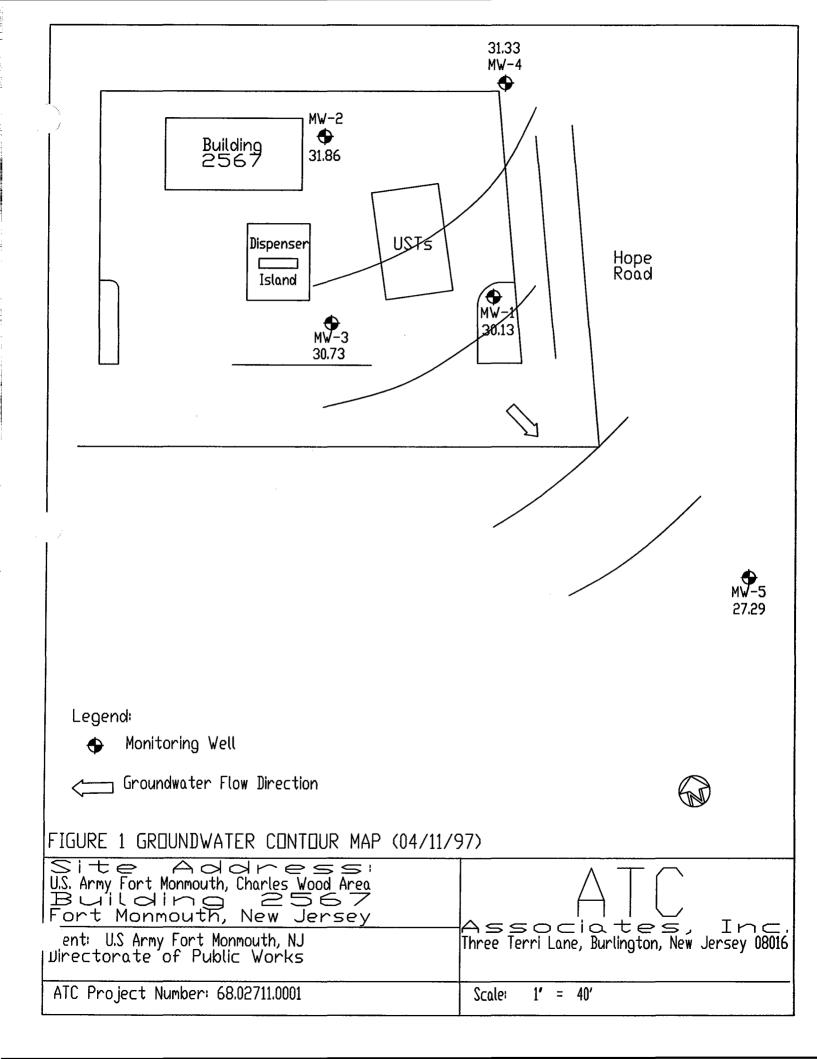


TABLE 1 GROUNDWATER ELEVATIONS

Fort Monmouth, Charles Wood Area Site 2567

Well ID/	Casing	Depth to	Depth to	Groundwater
Date	Elevation (ft)	Water (ft)	Product (ft)	Elevation (ft)
MW-1				
04/11/97	33.93	3.80	NA	30.13
01/07/97	33.93	3.75	NA	30.18
02/20/96	33.93	3.55	NA	30.38
11/21/95	33.93	3.60	NA	30.33
08/15/95	33.93	5.11	NA	28.82
05/25/95	33.93	4.36	NA	29.57
MW-2				
04/11/97	35.26	3.40	NA	31.86
01/07/97	35.26	3.30	NA	31.96
02/20/96	35.26	3.04	NA	32.22
11/21/95	35.26	3.00	NA	32.26
08/15/95	35.26	4.68	NA	30.58
05/25/95	35.26	4.03	NA	31.23
MW-3				
04/11/97	33.88	3.15	NA	30.73
01/07/97	33.88	3.15	NA	30.73
02/20/96	33.88	3.00	NA	30.88
11/21/95	33.88	3.00	NA	30.88
08/15/95	33.88	4.45	NA	29.43
05/25/95	33.88	3.69	NA	30.19
MW-4				
04/11/97	33.88	2.55	NA	31.33
01/07/97	33.88	2.15	NA	31.73
02/20/96	33.88	2.07	NA	31.81
11/21/95	33.88	2.22	NA	31.66
08/15/95	33.88	3.77	NA	30.11
05/25/95	33.88	3.08	NA	30.80
MW-5	·			
04/11/97	34.99	7.20	NA	27.79
01/07/97	34.99	7.30	NA	27.69
02/20/96	34.99	7.05	NA	27.94
11/21/95	34.99	6.30	NA	28.69
08/15/95	34.99	7.84	NA	27.15
05/25/95	34.99	7.59	NA	27.40

Notes:

NA - Not Applicable

TABLE 2 SAMPLING SUMMARY

Fort Monmouth, Charles Wood Area Site 2567

	Laboratory	Sample	Sample	Sample	Sample
Sample Identification	Identification	Date	Time	Matrix	Analyses
Bldg. 2567 MW-1 2926925	95-24199	05/25/95	10:22	Groundwater	VO+15, Pb
Bldg. 2567 MW-2 2926926	95-24200	05/25/95	9:13	Groundwater	VO+15, Pb
Bldg. 2567 MW-3 2926947	95-24201	05/25/95	11:14	Groundwater	VO+15, Pb
Bldg. 2567 MW-4 2926948	95-24202	05/25/95	9:44	Groundwater	VO+15, Pb
Bldg. 2567 MW-5 2931783	95-24203	05/25/95	11:50	Groundwater	VO+15, Pb
Bldg. 2567 MW-1 2926925	95-36414	08/15/95	10:30	Groundwater	VO+15, Pb
Bldg. 2567 MW-2 2926926	95-36412	08/15/95	9:21	Groundwater	VO+15, Pb
Bldg. 2567 MW-3 2926947	95-36415	08/15/95	11:23	Groundwater	VO+15, Pb
Bldg. 2567 MW-4 2926946	95-36413	08/15/95	9:50	Groundwater	VO+15, Pb
Bldg. 2567 MW-5 2931788	95-36416	08/15/95	12:21	Groundwater	VO+15, Pb
Bldg. 2567 MW-1 2926925	95-54052	11/21/95	11:54	Groundwater	VO+15, Pb
Bldg. 2567 MW-2 2926926	95-54053	11/21/95	10:40	Groundwater	VO+15, Pb
Bldg. 2567 MW-3 2926947	95-54054	11/21/95	12:53	Groundwater	VO+15, Pb
Bldg. 2567 MW-4 2926948	95-54055	11/21/95	11:14	Groundwater	VO+15, Pb
Bldg. 2567 MW-5 2931783	95-54056	11/21/95	14:21	Groundwater	VO+15, Pb
2017.1 MW-1 2926925	96-8368	02/20/96	11:15	Groundwater	VO+15, Pb
2017.1 MW-2 2926926	96-8369	02/20/96	10:00	Groundwater	VO+15, Pb
2017.3 MW-3 2926947	96-8370	02/20/96	12:10	Groundwater	VO+15, Pb
2017.4 MW-4 2926948	96-8371	02/20/96	10:34	Groundwater	VO+15, Pb
2017.5 MW-5 2931783	96-8372	02/20/96	12:40	Groundwater	VO+15, Pb
Bldg. 2567 MW-1	2258.7	01/07/97	15:05	Groundwater	BTEX, PB
Bldg. 2567 MW-2	2258.5	01/07/97	11:45	Groundwater	BTEX, PB
Bldg. 2567 MW-3	2258.6	01/07/97	14:25	Groundwater	BTEX, PB
Bldg. 2567 MW-4	2258.3	01/07/97	10:30	Groundwater	BTEX, PB
Bldg. 2567 MW-5	2258.4	01/07/97	11:05	Groundwater	BTEX, PB
Bldg. 2567 MW-1	2446.06	04/11/97	14:20	Groundwater	VO+15, Pb
Bldg. 2567 MW-2	2442.05	04/11/97	12:00	Groundwater	VO+15, Pb
Bldg. 2567 MW-3	2442.07	04/11/97	14:45	Groundwater	VO+15, Pb
Bldg. 2567 MW-4	2442.03	04/11/97	10:30	Groundwater	VO+15, Pb
Bldg. 2567 MW-5	2442.04	04/11/97	11:00	Groundwater	VO+15, Pb

Notes:

NA - Not Available

VO+15 - Volatile organic compounds with a library search of fifteen tentatively identified compounds

Pb - Total lead

TABLE 3 GROUNDWATER ANALYTICAL RESULTS - 05/25/95

Fort Monmouth, Charles Wood Area Site 2567

Sample Identification	MW-1	MW-2	MW-3	MW-4	MW-5	NJDEP
Lab Identification	95-24199	95-24200	95-24201	95-24202	95-24203	GWQS
Total Lead	<2.5	<2.5	2.7	<2.5	4.0	10

Detected Volatile Organic Compounds	MW-1 95-24199	MW-2 95-24200	MW-3 95-24201	MW-4 95-24202	MW-5 95-24203	NJDEP GWQS
Methylene Chloride	1.5B	.90B	21B	1.0B	1.2B	3
Benzene	ND	ND	94	ND	ND	1
Toluene	0.70	ND	3.8	ND	ND	1,000
Ethylbenzene	ND	1	6.3	ND	ND	700
Xylenes (total)	0.50	6.5	190	ND	ND	40
Methyl Tertiary Butyl Ether	110	3.1	400	ND	ND	70
Tertiary Butyl Alcohol	930	ND	ND	ND	ND	NA
Isopropylbenzene	ND	1.1	17	ND	ND	NA
n-Propylbenzene	ND	1.3	13	ND	ND	NA
1,3,5-Trimethylbenzene	ND	1.0	12	ND	ND	NA
1,2,4-Trimethylbenzene	ND	8.8	8.6	ND	ND	NA
Naphthalene	ND	11.0	9.4	ND	ND	NA
# of TICs	2	13	14	0	0	
TIC Concentration (total)	2	35	154	ND	ND	NA

Notes:

- 1. All results reported in micrograms per liter (μ g/L).
- 2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection

GWQS- Groundwater Quality Standard TIC- Tentatively identified compound

B- Compound detected in blank

TABLE 4 GROUNDWATER ANALYTICAL RESULTS - 08/15/95

Fort Monmouth, Charles Wood Area Site 2567

Sample Identification	MW-1	MW-2	MW-3	MW-4	MW-5	NJDEP
Lab Identification	95-36414	95-36412	95-36415	95-36413	95-36416	GWQS
Total Lead	3.3	5.6	<2.5	2.6	5.0	10

Detected Volatile Organic Compounds	MW-1 95-36414	MW-2 95-36412	MW-3 95-36415	MW-4 95-36413	MW-5 95-36416	NJDEP GWQS
Methylene Chloride	1.3B	1.3B	25B	1.3B	1.2B	3
Benzene	ND	ND	89	ND	ND	1
Toluene	0.7	ND	ND	ND	ND	1,000
Ethylbenzene	ND	0.6	8.4	ND	ND	700
Xylenes (total)	0.5	5.3	360	ND	ND	40
Methyl Tertiary Butyl Ether	29	2.5	670	ND	ND	70
Tertiary Butyl Alcohol	930	ND	ND	ND	ND	NA
Isopropylbenzene	ND	1.1	30	ND	ND	NA
n-Propylbenzene	ND	1.3	25	ND	ND	NA
1,3,5-Trimethylbenzene	ND	1.0	38	ND	ND	NA
1,2,4-Trimethylbenzene	ND	8.2	33	ND	ND	NA
Naphthalene	ND	11.0	21	ND	ND	NA
# of TICs	2	15	15	0	0	
TIC Concentration (total)	2	41	298	ND	ND	NA

Notes:

- 1. All results reported in micrograms per liter (µg/L).
- 2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection

GWQS- Groundwater Quality Standard TIC- Tentatively identified compound

B- Compound detected in blank

TABLE 5 GROUNDWATER ANALYTICAL RESULTS - 11/21/95

Fort Monmouth, Charles Wood Area Site 2567

Sample Identification Lab Identification	MW-1	MW-2	MW-3	MW-4	MW-5	NJDEP
	95-54052	95-54053	95-54054	95-54055	95-54056	GWQS
Total Lead	<3.0	<3.0	<3.0	<3.0	<3.0	10

Detected Volatile Organic Compounds	MW-1 95-54052	MW-2 95-54053	MW-3 95-54054	MW-4 95-54055	MW-5 95-54056	NJDEP GWQS
Methylene Chloride	36B	.60B	18B	.60B	ND	3
Benzene	ND	ND	35	ND	ND	1
Toluene	ND	ND	ND	ND	ND	1,000
Ethylbenzene	ND	ND	ND	ND	ND	700
Xylenes (total)	ND	3.6	91	ND	ND	40
Methyl Tertiary Butyl Ether	80	1.6	360	ND	ND	70
Tertiary Butyl Alcohol	860	ND	46	ND	ND	NA
Isopropylbenzene	ND	1.0	14	ND	ND	NA
n-Propylbenzene	ND	1.1	ND	ND	ND	NA
1,3,5-Trimethylbenzene	ND	0.6	7.7	ND	ND	NA
1,2,4-Trimethylbenzene	ND	4.6	5.0	ND	ND	NA
Naphthalene	ND	7.3	6.6	ND	ND	NA
# of TICs	2	13	9	3	2	
TIC Concentration (total)	80	30	155	4	2	NA

Notes:

- 1. All results reported in micrograms per liter (µg/L).
- 2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection

GWQS- Groundwater Quality Standard
TIC- Tentatively identified compound
B- Compound detected in blank

TABLE 6 GROUNDWATER ANALYTICAL RESULTS - 02/20/96

Fort Monmouth, Charles Wood Area Site 2567

Sample Identification	MW-1	MW-2	MW-3	MW-4	MW-5	NJDEP
Lab Identification	96-8368	96-8369	96-8370	96-8371	96-8372	GWQS
Total Lead	4.0	<3.0	6.0	<3.0	<3.0	10

Detected Volatile Organic Compounds	MW-1 96-8368	MW-2 96-8369	MW-3 96-8370	MW-4 96-8371	MW-5 96-8372	NJDEP GWQS
Methylene Chloride	2.1B	2.0B	2.4B	1.2B	.80B	3
Benzene	ND	ND	40	ND	ND	1
Toluene	ND	ND	1.0	ND	ND	1,000
Ethylbenzene	ND	ND	4.5	ND	ND	700
Xylenes (total)	ND	4.2	70	ND	ND	40
Methyl Tertiary Butyl Ether	100	2.0	250	ND	ND	70
Tertiary Butyl Alcohol	780	ND	43	ND	ND	NA
Isopropylbenzene	ND	1.0	13	ND	ND	NA
n-Propylbenzene	ND	1.1	8.3	ND	ND	NA
1,3,5-Trimethylbenzene	ND	0.8	4.7	ND	ND	NA
1,2,4-Trimethylbenzene	ND	6.2	1.4	ND	ND	NA
Naphthalene	ND	7.2	5.4	ND	ND	NA
# of TICs	3	14	15	0	1	
TIC Concentration (total)	3	30	164	ND	1	NA

Notes:

- 1. All results reported in micrograms per liter (µg/L).
- 2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection

GWQS- Groundwater Quality Standard TIC- Tentatively identified compound

B- Compound detected in blank

TABLE 7 GROUNDWATER ANALYTICAL RESULTS - 01/07/97

Fort Monmouth, Charles Wood Area Site 2567

Sample Identification	MW-1	MW-2	MW-3	MW-4	MW-5	NJDEP
Lab Identification	2258.7	2258.5	2258.6	2258.3	2258.4	GWQS
Total Lead	1.4	0.8	1.2	ND	ND	10

Detected Volatile Organic Compounds	MW-1 2258.7	MW-2 2258.5	MW-3 2258.6	MW-4 2258.3	MW-5 2258.4	NJDEP GWQS
Benzene	ND	ND	19.93	ND	ND	1
Toluene	ND	ND	0.91	ND	ND	1,000
Ethylbenzene	ND	ND	0.15	ND	ND	700
Xylenes (total)	ND	ND	28.49	ND	ND	40

Notes:

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

2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection

GWQS- Groundwater Quality Standard

ND- Not detected

TABLE 8 GROUNDWATER ANALYTICAL RESULTS - 04/11/97

Fort Monmouth, Charles Wood Area Site 2567

Sample Identification Lab Identification	MW-1	MW-2	MW-3	MW-4	MW-5	NJDEP
	2446.06	2446.05	2446.07	2446.03	2446.04	GWQS
Total Lead	4.0	<3.0	6.0	<3.0	<3.0	10

Detected Volatile	MW-1	MW-2	MW-3	MW-4	MW-5	NJDEP
Organic Compounds	2446.06	2446.05	2446.07	2446.03	2446.04	GWQS
None Detected	ND	ND	ND	ND	ND	NA

Notes:

1. All results reported in micrograms per liter (μ g/L).

2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection

GWQS- Groundwater Quality Standard



APPENDIX D

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



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



Site Investigation Summary — Main Post

Site Number	Site Type	Description	Potential Waste/ Contaminants	Previous Sampling Activities*	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°/TAL/CN. Tidal water-level monitoring.
М-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 surfacewater 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 ₂ /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.

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Table 4.2-1

Site Investigation Summary — Main Post (Continued)

Site Number	Site Type	Description	Potential Waste/ Contaminants	Previous Sampling Activities*	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	Pormer 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.

^{*}Results of previous investigation were presented on the report titled Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey (1993).

*TCL +30 = Target Compound List; includes volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs).



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).



APPENDIX E

Boring Logs and Monitoring Well Construction Records

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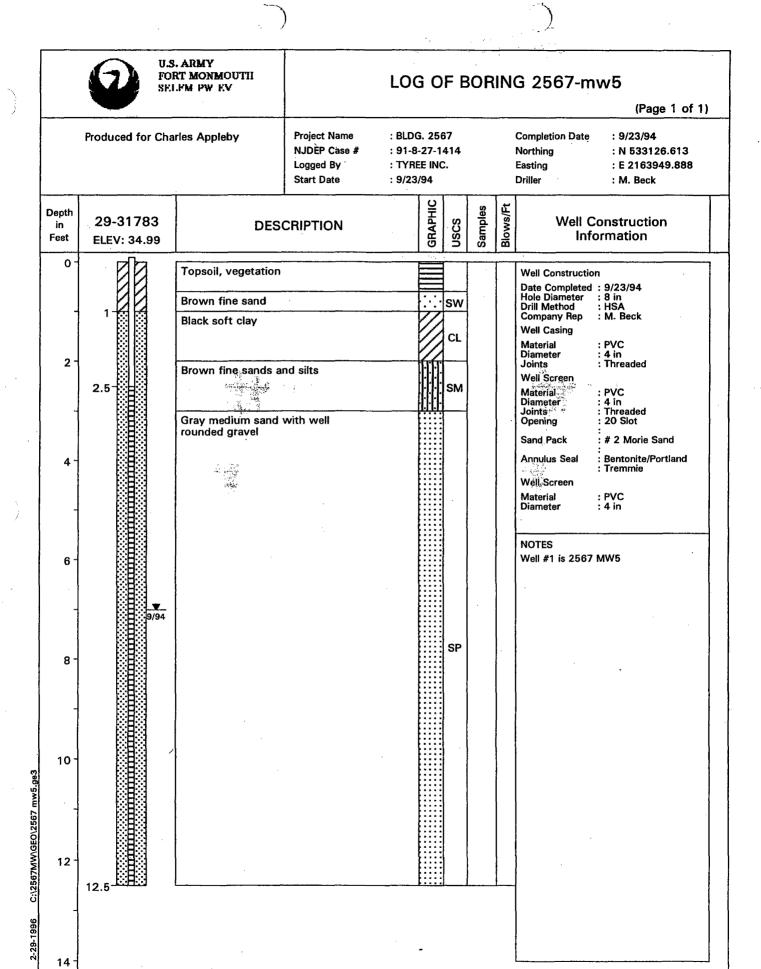
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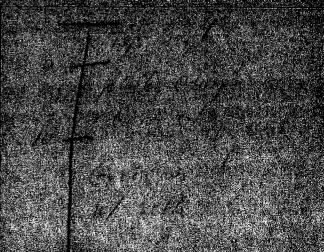
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DIRECTORATE OF PUBLIC WORKS ENVIRONMENTAL OFFICE

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GROUND WATER MONITO	RING WELL CERTIFICATION - FOR	RM B - LOCATION
		<u> </u>
Name of Permittee:	United States Army	<u> </u>
Name of Facility:	Fort Monmouth - Building No.	2567
Location:	Fort Monmouth	
W. Comment of the Com	New Jersey	
NJPDES Permit No:	NJ 29-26926	
LAND SURVEYOR'S CER	<u> </u>	
Well Permit Number:	As assigned by NJDEPE's Wate	
Allocation Section		
	permanently affixed to the	
well casing.		29-26926
Longitude (one tentl	n of a second): West	74° 04' 47.0"
Latitude (one tenth		
Elevation of Top of	Casing (cap off)	35.26
Distance from Top of	E Casing (cap off) to ground	0.02
Owner's Well Number	(As shown in the application	MW-2
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	ible for obtaining the infor	
	mation is true, accurate and	
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	to the population of time and	a imprisonment.
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Professional Land Su	rveyor's Signature	•
	-	
<u> William E. Telling,</u>		
Professional Land Su	rveyor's Name	SEAL
N.J.P.L.S. License N Professional Land Su	No. 37211	•
Drofessional Land St	rvevor's License #	•

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DIRECTORATE OF PUBLIC WORKS ENVIRONMENTAL OFFICE

3/22/1983

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All input values are NAD 27, geographic coordinates.

All output values are NAD 27, state plane zone 2900 (FEET).

STATION

INPUT (transformed to) OUTPUT

2567mw2

40 17 45.20000 N 074 04 47.00000 W 533267.836 N 2163728.879 E

Convergence Scale Factor 0 22 46.58 1.00000567

U.S. Army Engineer Topographic Labs, CORPSCON V2.1, Page 1 of 1

GROUND WATER MONITOR	RING WELL CERTIFICATION - FO	ORM B - LOCATION
Name of Permittee: Name of Facility: Location:	United States Army Fort Monmouth - Building No Fort Monmouth New Jersey	0. 2567
NJPDES Permit No:	NJ 29-26947	
LAND SURVEYOR'S CERT	rification	
Allocation Section (This number must be well casing. Longitude (one tenth, Latitude (one tenth, Elevation of Top of Distance from Top of	permanently affixed to the of a second): West of a second): North	29-26947 74° 04' 46.9" 40° 17' 44.5" 33.88
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Professional Land Su	rveyor's Name	SEAL
N.J.P.L.S. License N Professional Land Su	o. 37211 rveyor's License #	

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GROUND WATER MONITOR	RING WELL CERTIFICA	ATION - FOR	MB - LOCATION	
Name of Permittee:	United States Arm	.		
Name of Facility:	Fort Monmouth - Bu		2567	
Location:	Fort Monmouth			
	New Jersey			
NJPDES Permit No:	NJ 29-26947			
Karamatan Perangan P				
		•	•	
LAND SURVEYOR'S CERT	<u> IFICATION</u>	•		
Well Permit Number; Allocation Section This number must be well casing. Longitude (one tenth Latitude (one tenth Elevation of Top of Distance from Top of Owner's Well Number or Plans): Benchmark: AUTHENTICATION:	(609-984-6831): permanently affixed of a second): of a second): Casing (cap off) Casing (cap off)	West North	29-26947 74° 04' 46.9" 40° 17' 44.5" 33.88 0.06	
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Professional Land Su	rveyor's Signature			
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William E. Telling,	P.L.S.			
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Professional Land Su	rveyor's License #	•		
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DIRECTORATE OF PUBLIC WORKS ENVIRONMENTAL OFFICE

3/22/1983

All input values are NAD 27, geographic coordinates.

All output values are NAD 27, state plane zone 2900 (FEET).

STATION

INPUT (transformed to) OUTPUT

2567mw3

40 17 44.50000 N

533197.052 N

Convergence Scale Factor 074 04 46.90000 W

2163737.097 E

0 22 46.64

1.00000568

GROUND WATER MONITOR	RING WELL CERTIFICATION - FOR	RM B - LOCATION
Name of Permittee: Name of Facility: Location:	United States Army Fort Monmouth - Building No. Fort Monmouth New Jersey	2567
NJPDES Permit No:	NJ 29-26948	
LAND SURVEYOR'S CERT	<u> </u>	
Allocation Section This number must be well casing. Longitude (one tenth Latitude (one tenth Elevation of Top of Distance from Top of	permanently affixed to the of a second): West of a second):	29-26948 74° 04' 46.0" 40° 17' 45.5" 33.51 0.13
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<u>William E. Telling,</u> Professional Land Su	P.L.S. rveyor's Name	SEAL
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GROUND WATER MONITO	RING WELL CERTIFICATION - FORM B - LOCATION
Name of Permittee:	United States Army
Name of Facility:	Fort Monmouth - Building No. 2567
Location:	Fort Monmouth
	New Jersey
NJPDES Permit No:	NJ 29-26948

LAND SURVEYOR'S CERTIFICATION

Well Permit Number; As assigned by NJDEPE's Water
Allocation Section (609-984-6831):
This number must be permanently affixed to the
well casing.

Longitude (one tenth of a second):

West 74° 04' 46.0"

Latitude (one tenth of a second):
North 40° 17' 45.5"

Elevation of Top of Casing (cap off)

Distance from Top of Casing (cap off) to ground 0.13

Owner's Well Number (As shown in the application MW-4

or Plans):
Benchmark:

AUTHENTICATION:

I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Professional Land Surveyor's Signature

William E. Telling, P.L.S.
Professional Land Surveyor's Name

SEAL

N.J.P.L.S. License No. 37211
Professional Land Surveyor's License #

DIRECTORATE OF PUBLIC WORKS ENVIRONMENTAL OFFICE

3/22/1983

All input values are NAD 27, geographic coordinates. All output values are NAD 27, state plane zone 2900 (FEET).

STATION

INPUT (transformed to) OUTPUT

2567mw4

40 17 45.50000 N 074 04 46.00000 W

533298.707 N 2163806.165 E

Convergence Scale Factor 0 22 47.23 1,00000570

L CERTIFICATION-PORM B-LOC ION CERTIFICATION

Name of Parmittee: U.S. ARMY Name of Facility: FORT MONMOUTH LOCATION! MON MOUTH COUNTY, NJ

NJPDES Number: 91-8-27-1414

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:

This number must be permanently affixed to

the well casing.

Longitude (to mearest second):

Latitude (to mearest second):

Elevation of Top of Inner Casing (cap off)

(one-hundredth of a foot): Elevation of ground Level (1/100th ft)

Bource of elevation datum (benchmark, nail, c.c.) and year. (If an alternate datum has

been approved by the Department, identify here, assume datum of 100', and give

approximated actual elevation.)

Owners Well Number (As shown on application or plans):

29-31783-

74°04' 44.16"

Morth 40° 17' 43.79"

34.99

FM-12

1927 | 1983

13LDG. 2567 MW-5

Elevations are to be determined by double run, three Vire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from Tederal or State banchmarks if not more than 1000 feet from the site or from an alternate datum approved by the Department. Tolgrances should meet third order standards, which are 0.05 ft x (mile) 172. For sections less than 0.1 mile, let miles - 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

W. BURGETT MAYNE PROFESSIONAL LAND SURVEYOR'S NAME (Please print or type)

SEAL

31654 PROFESSIONAL LAND GURVEYOR'S LICENSE

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SERIAL # 411/6 STATE OF NEW JERSEY /R-133M (10/93) DEPAN MENT OF ENVIRONMENTAL PROTECTION AND ENERGY TRENTON, NJ Mail to Permit No IDEPE **MONITORING WELL PERMIT Ireau Water Allocation** 4426 VALID ONLY AFTER APPROVAL BY THE D.E.P.E. ton, NJ 08625 COORD # Driller \ddress Address Diameter of Well(s) Name of Facility Proposed Depth of Well(s) Will pumping equipment be installed? YES □ # of Wells Applied for (max Type of Well (see reverse) If Yes, give pump **GPM** LOCATION OF WELL(S) Block # Municipality County Draw sketch of well(s) nearest roads, buildings, etc. with marked distances in feet. Each well MUST be labeled with a name and/or number on the sketch. ate Atlas Map No 33 Deg 65 6 OR MONITORING WELLS, RECOVERY WELLS, OR PIEZOMETERS, THE FOLLOWING MUST BE COMPLETED BY THE APPLICANT. PLEASE INDICATE WHY THE WELLS ARE BEING INSTALLED: This Space for Approval Stamp _ Spill Site ISRA Site CERCLA (Superfund) Site WELL PERMIT APPROVED RCRA Site CASE I.D. Number JUnderground Storage Tank Site Operational Ground Water Permit Site Pretreatment and Residuals Site 3 1994 aug Water and Hazardous Waste Enforcement Case Water Supply Aquifer Test Observation Well BUREAU OF WATER ALLOCATION Other (explain) Ill Issuance of this permit is subject to the conditions attached. (see next page) The well(s) may not be completed with more than 25 feet of total screen FOR D.E.P.E. The For manitoring purposes only or uncased borehole. USE EVERSE SIDE FOR IMPORTANT PROVISIONS AND REGULATIONS PERTAINING TO THIS PERMIT. compliance with N.J.S.A. 58:4A-14, application is made for a permit to drill a well/as described above. Signature of Driller SELFM-2W-E1 Signature of Owner Health Dept. - Yellow COPIES: Water Allocation - White and Pink Owner - Blue Driller --- White

DEPARTMENT SO SENVICIONMENTALES COLEGIONANDIENERGY E(E(NS)/H(NE)

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Permit No

Na 20186945 C. S. C. S. S. C. F. W. I. C. W. Address <u> Tigastillikaranitziliskieraktorranen</u> Name of Facility 12 de 2005 Sell Address LOCATION OF WELL(S) & REPRESENT OF FORCE SHOULD SHEW Draw sketch of well(s) nearest roads, buildings, etc. with Town the well must be a senimarked distances in feet. Each well MUST be labeled with a name and/or number on the sketch. State Atlas Map No. 38 29 The primit conveys no rights, pither is pressed or implied, to divid water - inclavorage tooks & Tues of the side of the side West accords submitted incom en la gion, ar se se en propiet de se la compacta de la compacta d or belique **vilcade**s anades in h Pate: 4 location with our prior appropriate for the Ba ing provided the court of the c A well record must be fulfilled ar of Water Allocation within state to This permit is NONTRANSFER If the use of the well is to be changed, a well permit for the proposesues of the well must be submitted to sec and approved. The existing well permit number must be referenced on the studioshortical FOR MONITORING WELLS, RECOVERY WELLS, OF PLEZOMETERS, THE FOLLOWING MUST BE COMPLETED BY THE APPLICANT. PLEASE INDICATE WHY THE WELLS ARE BEING INSTALLED: This Space for Approval Stamp Spill Site ☐ ISRA Site CERCLA (Superfund) Site ☐ RGRA Site CASE I.D. Number WELL PERMIT APPROVED Underground Storage Tank Site Operational Ground Water Permit Site Pretreament and Residuals Site. ☐ Water and Flazardous Waste Embroement Ca ELWater Supply Aquifer Test Observation Well BUREAU OF WATER ALLOCATION FOR

SIDE FOR IMPORTANT PROVISIONS AND REGULATIONS PERTAINING TO THIS PERMIT,

In compliance with N.J.S.A. 58:4A-14, application is made for a permit to drill a well as described above.

Signature of Driller

Signature of Owner

Driller --- White

DEPE//2 populationic side

MONITORING WELL CERTIFICATION-FORM B-LOCATION CERTIFICATION

Name of Parmittee: U.S. ARMY

Name of Pacility: FORT MONMOUTH LOCATION! MON MOUTH COUNTY, NJ

NJPDES Number: 91-8-27-1414

Discharge

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:

This number must be permanently affixed to

the well casing.

Longitude (to mearest second):

Latituda (to mearest second):

Elevation of Top of Inner Casing (cap off)

(one-hundredth of a foot):
Elevation of ground Level (1/100th ft)
Bource of elevation datus (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the Department, identify here, assume datum of 100 pand give approximated actual elevation.)

Owners Well Number (As shown on application or plans):

29-31783-

West 74°04'44.16"

Morth 40° 17' 43.79"

34.99

31.83

Bourco: FM-12

II 1927 II 1983

Elev.:

BLDG. 2567 MW-5

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from rederal or State benchmarks if not more than 1000 feet from the site or from an alternate datum approved by the Department. Tolerances should meet third order standards, which are 0.05 ft x (mile) 1/2. For sections less than 0.1 mile, let miles = 0.1.

<u>AUTHENTICATION</u>

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

PROFESSIONAL LAND SURVEYOR'S SIGNATURE

PROFESSIONAL LAND SURVEYOR'S NAME
(Please print or type)

BEAL

31654
FROFESSIONAL LAND BURVEYOR'S LICENSE

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT GROUND WATER MONITORING WELL CERTIFICATION CERTIFICATION Name of Permittee: UNITED STATES ARMY Name of Facility: CAMP CHARLES WOOD Location: TINTON FALLS BOROUGH, NEW JERSEY NJPDES Permit No: LAND SURVEYOR'S CERTIFICATION Well Permit Number (As assigned by NJDEPE's Water 29-42585 Allocation Section, 609-292-2957): This number must be permanently affixed to the well casing. Longitude (one tenth of a second): West Latitude (one tenth of a second): North Elevation of Top of Casing (cap off) Distance from Top of Casing (cap off) to ground Owner's Well Number (As shown in the application or Plans): NJGCS Monument No. Benchmark: Elevation = 56.69 **AUTHENTICATION:** I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. 's Signature Frederick W. Kocen Jr. Professional Land Surveyor's Name SEAL N.J. Lic. # 34008 Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seq.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJPDES permit.



LOG OF BORING 2567 MW6

(Page 1 of 1)

U.S. ARMY SELFM-PW-EV JOSEPH FALLON BLDG. 2567
GROUNDWATER INVESTIGATION

X:MTECH5/M12\2567MW6.BOR

DRILLING COMPANY: IPSI

DRILLER

DRILLING METHOD : HOLLOW STEM AUGER

HOLE DIAMETER : 11 INCH
SAMPLING METHOD : 2 IN SPLIT SPOON

: FRANK ACCORSI **GEOLOGIST**

DATE COMPLETED : 05/12/00

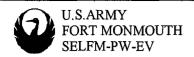
NJDEP PERMIT NO. :

NJDEP COORD.

GR	ROUN	DW	ATER INVESTIGATION	SAMPLIN	G METHOD : 2 IN. SPLIT SPOON					
Depth in FEET	Samples	Blow Count	DESCRIPTION Brown-yellow brown coarse-management	ad-fine	nscs	OVA (PPM)	Well Construction Information	Well: 2567 MW6 Elev.:		
3-3-4-3-5-1-6-1	2 3 4 5 6 7 8 9 10 11 12 13		Wet at 4.5 ft. Green black Clayey SILT, som Sand	iravel	GM	0 0.3 0.5 0.6 0.4 0.2	WELL CASING MATERIAL PVC DIAMETER 4 inch JOINTS threaded LENGTH 3 feet WELL SCREEN: MATERIAL PVC DIAMETER 4 inch JOINTS threaded OPENING 0.010 inch LENGTH 10 feet SAND PACK Morie #1 ANNULUS SEAL bentonite STICK UP MATERIAL steel DIAMETER 6 inch	CASING CASING BENTONITE		
7- 8- 9- 10- 11- 12- 13-	14 15 16 17 18 19 20	7000	End of boring @ 14 ft.		ML	0 0 0	NOTES Development of the monitoring well was performed using a submersible pump until ground water was visibly free of sediments (approximately one-half hour).	Ŋ ĬŀĤŀĿĿŞĄŊ₽₽ĄCK I		
14 15 - 16 - 17 - 18 - 19 - 20 - 20 -										

THIS FORM MUST BE COMPLETED BY THE PERMITTEE OR HIS OR HER AGENT GROUND WATER MONITORING WELL CERTIFICATION CERTIFICATION Name of Permittee: UNITED STATES ARMY Name of Facility: CAMP CHARLES WOOD Location: TINTON FALLS BOROUGH, NEW JERSEY NJPDES Permit No: NJ LAND SURVEYOR'S CERTIFICATION Well Permit Number (As assigned by NJDEPE's Water 29-42586 Allocation Section, 609-292-2957): This number must be permanently affixed to the well casing. Longitude (one tenth of a second): West Latitude (one tenth of a second): North Elevation of Top of Casing (cap off) Distance from Top of Casing (cap off) to ground Owner's Well Number (As shown in the application 2567-MW-7 or Plans): Benchmark: NJGCS Monument No. Elevation = 56.69 AUTHENTICATION: I declare under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. Professional Land Surveyor's Signature Frederick W. Kocen Jr. Professional Land Surveyor's Name SEAL N.J. Lic. # 34008 Professional Land Surveyor's License #

The Department reserves the right in cases of violation of permit specified ground water limits or Ground Water Quality Standards (NJAC 7:9-6.1 et seg.) to require that wells be resurveyed to an accuracy of one-hundredth of a second latitude and longitude. This shall not be considered to require a major modification of the NJPDES permit.



LOG OF BORING 2567 MW7

(Page 1 of 1)

U.S. ARMY SELFM-PW-EV JOSEPH FALLON BLDG. 2567 GROUNDWATER INVESTIGATION DRILLING COMPANY : IPSI

DRILLER : MIKE

DRILLING METHOD : HOLLOW STEM AUGER

GEOLOGIST : FRANK ACCORSI

DATE COMPLETED : 05/12/00

NJDEP PERMIT NO. :

NJDEP COORD.

	G	ROUN		BLDG. 2567 ATER INVESTIGATION	HOLE DI SAMPLIN			INCH N. SPLIT SPOON	NJDEP COORD. :
	Depth in FEET	Samples	Blow Count	DESCRIPTION		nscs	OVA (PPM)	Well Constructio Information	Well: 2567 MW7 Elev.:
j j	0- 1 2- 3- 3- 5- 6- 7 8- 10- 11- 12-	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20		Brown coarse-med-fine SANI Gravel, trace Silt Green brown coarse-med-fin little Silt, trace fine Gravel Wet at 5 ft. Green fine SAND, and Silt		GC	0 0.4 0.5 0.3 0.4 0 0	WELL CASING: MATERIAL: PVC DIAMETER: 4 inch JOINTS: threaded LENGTH: 3 feet WELL SCREEN: MATERIAL: PVC DIAMETER: 4 inch JOINTS: threaded OPENING: 0.010 inch LENGTH: 10 feet SAND PACK: Morie #1 ANNULUS SEAL: bentonite STICK UP MATERIAL: steel DIAMETER: 6 inch NOTES Development of the monitor was performed using a subr pump until ground water wa free of sediments (approxim one-half hour).	ing well mersible is visibly
	13 – - 14 –			End of boring @ 14 ft.					
08-31-2001 X:WTECH5\M12\2567MW7.BOR	15 16 17 18 19 20								



APPENDIX F

Versar Current Conditions Site Photographs

CURRENT SITE CONDITIONS SITE 2567 – CHARLES WOOD AREA FORT MONMOUTH, NEW JERSEY



MONITORING WELL 2567-MW7



BUILDING 2567 AND GASOLINE PUMPS



APPENDIX G

Groundwater Sampling Laboratory Data Sheets

Data not provided in this file.



APPENDIX H

Geoprobe® Point Groundwater Sampling Laboratory Data Sheets

Data not provided in this file.



APPENDIX I

Slug Test Analyses and Raw Data

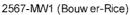


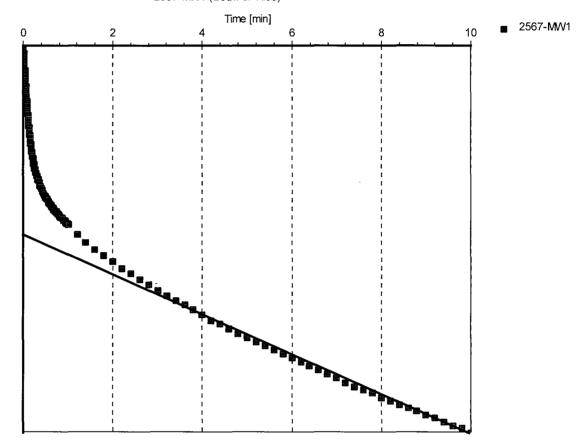
180 Columbia St. Unit 1104 Waterloo, Ontario, Canada Phone: +1 519 746 1798 **Pumping Test Analysis Report**

Project: DO 19

No: 4936-119

Client: Fort Monmouth





Test name:

h/h0

2567-MW1

Analysis method:

Bouwer-Rice

Analysis results:

Conductivity:

3.51E+1 [ft/d]

Test parameters:

Test well:

2567-MW1

Aquifer thickness:

100 [ft]

Screen radius:

0.333 [ft]

Gravel pack Porosity (%)

25

Screen length:

3 [ft]

,,,,

Casing radius:

0.833 [ft]

r(eff):

0.740 [ft]

Comments:

Evaluated by: TJK/PS

Date:

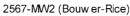


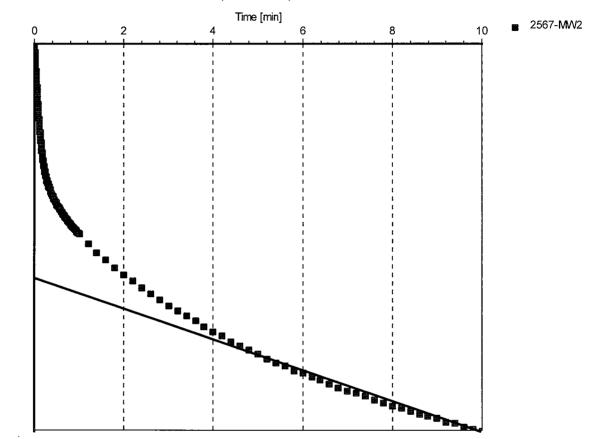
180 Columbia St. Unit 1104 Waterloo, Ontario, Canada Phone: +1 519 746 1798 **Pumping Test Analysis Report**

Project: DO 19

No: 4936-119

Client: Fort Monmouth





Test name:

h/h0

2567-MW2

Analysis method:

Bouwer-Rice

Analysis results:

Conductivity:

2.85E+1 [ft/d]

Test parameters:

Test well:

2567-MW2

Aquifer thickness:

100 [ft]

Screen radius:

0.333 [ft]

Gravel pack Porosity (%)

25

Screen length:

3 [ft]

Casing radius:

0.833 [ft]

.

r(eff):

0.740 [ft]

Comments:

Evaluated by: TJK/PS

Date:



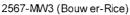
180 Columbia St. Unit 1104 Waterloo, Ontario, Canada Phone: +1 519 746 1798

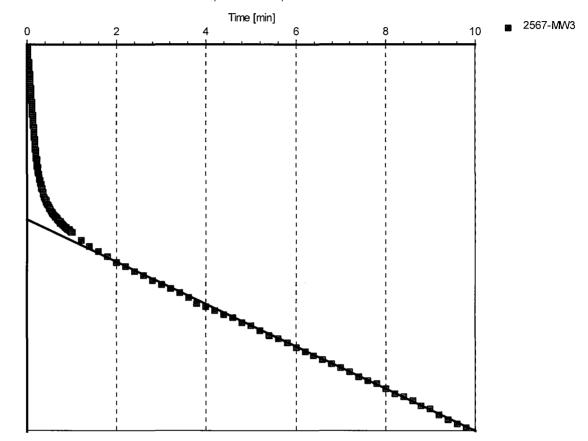
Pumping Test Analysis Report

Project: DO 19

No: 4936-119

Client: Fort Monmouth





Test name:

h/h0

2567-MW3

Analysis method:

Bouwer-Rice

Analysis results:

Conductivity:

3.56E+1 [ft/d]

Test parameters:

Test well:

2567-MW3

Aquifer thickness:

100 [ft]

Screen radius:

0.333 [ft]

Gravel pack Porosity (%)

25

Screen length:

3 [ft]

Casing radius:

0.833 [ft]

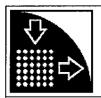
r(eff):

0.740 [ft]

Comments:

Evaluated by: TJK/PS

Date:



180 Columbia St. Unit 1104 Waterloo, Ontario, Canada Phone: +1 519 746 1798

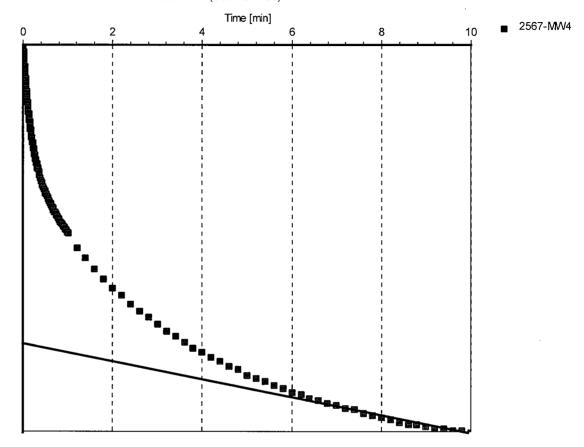
Pumping Test Analysis Report

Project: DO 19

No: 4936-119

Client: Fort Monmouth

2567-MW4 (Bouw er-Rice)



Test name:

h/h0

2567-MW4

Analysis method:

Bouwer-Rice

Analysis results:

Conductivity:

2.02E+1 [ft/d]

Test parameters:

Test well:

2567-MW4

Aquifer thickness:

100 [ft]

Screen radius:

0.333 [ft]

Gravel pack Porosity (%)

25

Screen length:

2 [ft]

Casing radius:

0.833 [ft]

r(eff):

0.740 [ft]

Comments:

Evaluated by: TJK/PS

Date:



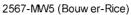
180 Columbia St. Unit 1104 Waterloo, Ontario, Canada Phone: +1 519 746 1798

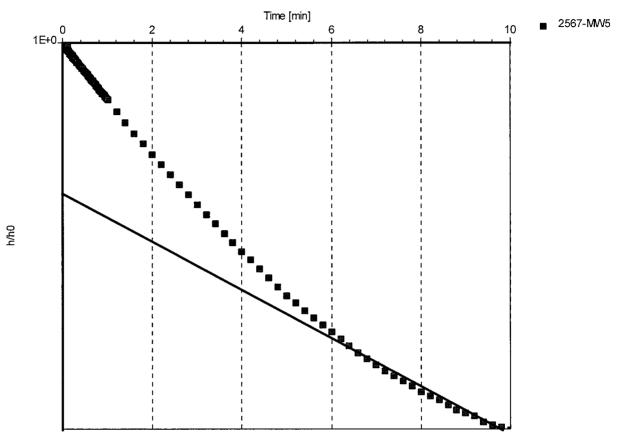
Pumping Test Analysis Report

Project: DO 19

No: 4936-119

Fort Monmouth Client:





Test name:

2567-MW5

Analysis method:

Bouwer-Rice

Analysis results:

Conductivity:

2.44E+1 [ft/d]

Test parameters:

Test well:

2567-MW5

Aquifer thickness:

100 [ft]

Screen radius:

0.333 [ft]

Gravel pack Porosity (%)

25

Screen length:

Casing radius:

2.5 [ft]

0.666 [ft]

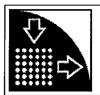
r(eff):

0.600 [ft]

Comments:

Evaluated by: TJK/PS

Date:



180 Columbia St. Unit 1104 Waterloo, Ontario, Canada Phone: +1 519 746 1798

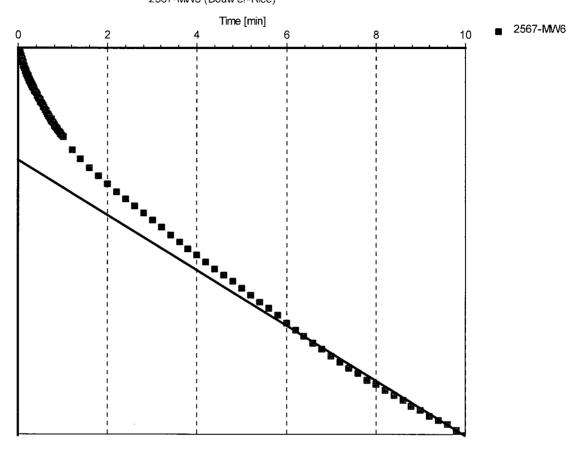
Pumping Test Analysis Report

Project: DO 19

No: 4936-119

Client: Fort Monmouth

2567-MW6 (Bouw er-Rice)



Test name:

h/h0

2567-MW6

Analysis method:

Bouwer-Rice

Analysis results:

Conductivity:

2.36E+1 [ft/d]

Test parameters:

Test well:

2567-MW6

Aquifer thickness:

100 [ft]

Screen radius:

0.333 [ft]

Gravel pack Porosity (%)

25

Screen length:

3 [ft]

Casing radius:

0.666 [ft]

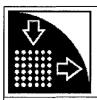
r(eff):

0.600 [ft]

Comments:

Evaluated by: TJK/P\$

Date:



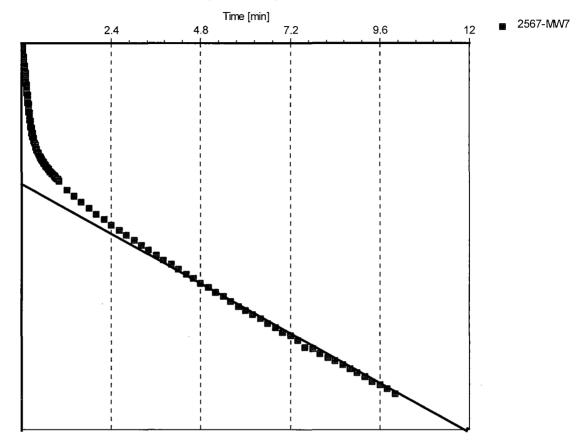
180 Columbia St. Unit 1104 Waterloo, Ontario, Canada Phone: +1 519 746 1798 **Pumping Test Analysis Report**

Project: DO 19

No: 4936-119

Client: Fort Monmouth





Test name:

h/h0

2567-MW7

Analysis method:

Bouwer-Rice

Analysis results:

Conductivity:

1.88E+1 [ft/d]

Test parameters:

Test well:

2567-MW7

Aquifer thickness:

100 [ft]

Screen radius:

0.333 [ft]

Gravel pack Porosity (%)

25

Screen length:

3 [ft]

Casing radius:

0.666 [ft]

r(eff):

0.600 [ft]

Comments:

Evaluated by: TJK/PS

Date:

8/16/01

Unit# 00001 Test 4

Setups:	INPUT 1
Type Mode	Level (F)
I.D.	16426
Reference Linearity Scale factor Offset Delay mSEC	4.750 0.000 10.000 -0.330 50.000

Step 0 08/17 10:50:07

0.0833 0.0866 0.0900 0.0933 0.0966 0.1000 0.1033 0.1066 0.1100 0.1133 0.1166 0.1200 0.1233 0.1266 0.1300 0.1333 0.1366 0.1400 0.1433 0.1466 0.1500 0.1533 0.1566 0.1600	6.764 6.745 6.726 6.707 6.691 6.675 6.657 6.641 6.625 6.609 6.593 6.565 6.552 6.552 6.552 6.552 6.540 6.527 6.518 6.527 6.492 6.480 6.458 6.448 6.439
0.1633	6.429
0.1666	6.420
0.1700	6.410
0.1733	6.401
0.1766	6.391
0.1800	6.382
0.1833	6.372
0.1866	6.366
0.1900	6.357
0.1933	6.350
0.1966	6.341
0.2000	6.338
0.2033	6.331
0.2066	6.322
0.2100	6.316
0.2133	6.306
0.2166	6.300
0.2200	6.293
0.2233	6.290
0.2266	6.284
0.2200	6.284
0.2300	6.278
0.2333	6.271
0.2366	6.265
0.2400	6.262

0.2433	6.256
	6.252
0.2466 0.2500	6.246
0.2533	6.243
0.2566	6.237
0.2600	6.230
0.2633	6.227
0.2666	6.224
0.2700	6.218
0.2700 0.2733 0.2766	6.218 6.214 6.211
0.2766	6.211
0.2800	6.205
0.2833 0.2866	6.202 6.199
0.2866	6.196
0.2933	6.192
0.2966	6.189
0.2933 0.2966 0.3000	6.186
0.3033	6.183
0 3066	6.177
0.3100	6.173
0.3133	6.173
0.3100 0.3133 0.3166 0.3200 0.3233	6.173 6.170 6.164
0.3200	6.164
0.3233	6.164
0.3266	6.161
0.3300	6.158
0.3333 0.3500	6.155 6.142
0.3300 0.3333 0.3500 0.3666	6.126
0.3500 0.3666 0.3833 0.4000	6.126 6.117 6.104
0.4000	6.104
0.4166	6.095
0.4333	6.085
0.4500	6.076
0.4666	6.066
0.4833	6.060
0.5000	6.050
0.5166	6.044
0.5333	6.038
0.5500 0.5666	6.031 6.025
0.5833	6.025 6.019
0.6000	6.019
0.6166	6.006
0.6333	6.000
0.6500	5.997
0.6666	5.990

0.6833 0.7000 0.7166 0.7333 0.7500 0.7666 0.7833 0.8000 0.8166 0.8333 0.8500 0.8666 0.8833 0.9000 0.9166 0.9333 0.9500 0.9666 0.9833 1.0000 1.2000 1.4000 1.6000 1.8000 2.0000 2.2000 2.4000 2.2000 2.4000 2.6000 3.6000 3.6000 3.6000 3.6000 3.6000 4.0000	5.984 5.981 5.975 5.965 5.965 5.965 5.946 5.940 5.940 5.940 5.924 5.924 5.924 5.924 5.9215 5.925 5.925 5.925 5.926 5.934 5.934 5.934 5.935 5
3.4000 3.6000	5.592 5.577 5.561
4.0000	5.545 5.529
4.4000 4.6000	5.520 5.504
4.8000 5.0000 5.2000 5.4000 5.6000 5.8000 6.0000	5.479
5.2000 5.4000	5.457
5.6000 5.8000	5.447 5.438
6.2000	5.428 5.419
6.4000 6.6000	5.409 5.400

6.8000	5.390
7.0000	5.381
7.2000	5.371
7.4000	5.362
7.6000	5.356
7.8000	5.349
8.0000	5.340
8.2000	5.334
8.4000	5.327
8.6000	5.321
8.8000	5.315
9.0000	5.308
9.2000	5.302
9.4000	5.296
9.6000	5.289
9.8000	5.286
10.0000	5.277

SE1000C Environmental Logger 08/17 16:22

Unit# 00001 Test 2

Setups:	INPUT 1
Type Mode I.D.	Level (F) TOC 16426
Reference Linearity Scale factor Offset Delay mSEC	4.420 0.000 10.000 -0.330 50.000
0 00/17	10 05 10

Step 0 08/17 10:05:13

Elapsed Time	INPUT 1
Elapsed Time 0.0000 0.0033 0.0066 0.0100 0.0133 0.0166 0.0200 0.0233 0.0266 0.0300 0.0333 0.0366 0.0400 0.0433 0.0466 0.0500 0.0533 0.0566	7.192 7.157 7.116 7.078 7.031 6.986 6.993 6.945 6.908 6.873 6.829 6.781 6.743 6.709 6.677 6.642 6.617 6.589
0.0600 0.0633	6.560 6.522
0.0700 0.0733 0.0766	6.478 6.453 6.428
0.0800	6.405

0.0833	6.380 6.358 6.336
0.0900 0.0933 0.0966	6.336 6.317 6.295
0.1000 0.1033	6.276
0.1066	6.238 6.219
0.1100 0.1133 0.1166 0.1200	6.203 6.184
0.1200 0.1233	6.169
0.1266	6.137 6.121
0.1366	6.109 6.093 6.080
0.1433	6.068
0.1466 0.1500	6.055 6.042
0.1533 0.1566	6.030 6.017
0.1566 0.1600 0.1633 0.1666	6.004 5.995 5.986 5.973
0.1666 0.1700 0.1733	5.986 5.973 5.963
0.1766 0.1800	5.954
0.1833 0.1866	5.935 5.926
0.1833 0.1866 0.1900 0.1933	5.945 5.935 5.926 5.919 5.910
0.1966 0.2000	5.903
0.2033 0.2066	5.894 5.888 5.881
0.2100 0.2133	5.872 5.866
0.2166 0.2200	5.859 5.853 5.847
0.2233 0.2266 0.2300	5.847 5.843 5.837
0.2333 0.2366	5.831 5.828
0.2300	5.821

0.2433 0.2466 0.2500 0.2533 0.2566 0.2600 0.2633 0.2666 0.2700 0.2733 0.2766 0.2800 0.2833 0.2866	5.815 5.806 5.802 5.799 5.790 5.777 5.777 5.774 5.7765 5.765 5.765 5.746 5.755 5.746 5.746 5.746 5.739 5.730 5.733 5.727 5.723 5.723 5.723 5.723 5.723 5.723 5.736 5.7695
0.2800 0.2833 0.2866 0.2900 0.2933 0.2966 0.3000 0.3033	5.765 5.761 5.758 5.755 5.752
0.2833 0.2866 0.2900 0.2933 0.2966 0.3000 0.3033 0.3066 0.3100 0.3133 0.3166 0.3200 0.3233 0.3266 0.3300	5.777 5.774 5.771 5.768 5.765 5.761 5.755 5.755 5.746 5.746 5.746 5.742 5.739 5.730 5.730 5.730
	5.730 5.727 5.723 5.723 5.708 5.695 5.686
0.4166 0.4333 0.4500	5.645
0.4666 0.4833 0.5000 0.5166 0.5333	5.635 5.629 5.619 5.613 5.604
0.5500 0.5666 0.5833 0.6000 0.6166 0.6333 0.6500	5.597 5.591 5.585 5.578 5.572 5.566 5.559
0.6666	5.559 5.553

0.6833 0.7000 0.7166 0.7333 0.7500 0.7666 0.7833 0.8000 0.8166 0.8333 0.8500 0.8666 0.9333 0.9500 0.9166 0.9333 0.9500 0.9666 0.9833 1.0000 1.2000 1.4000 1.6000 1.8000 2.2000 2.4000 2.4000 2.4000 2.4000 3.6000 3.6000 3.6000 3.6000 3.6000 3.6000 4.2000 4.4000 4.6000 4.6000 4.6000 5.2000 5.2000	5.547 5.540 5.537 5.531 5.525 5.521 5.502 5.502 5.496 5.484 5.477 5.484 5.477 5.465 5.461 5.465 5.461 5.458 5.335 5.225 5.225 5.225 5.2203 5.225 5.2203 5.180 5.143 5.127 5.067 5.067 5.079 5.079 5.007
4.6000	5.041
4.8000	5.029
5.2000	5.007
5.4000	4.997
5.6000	4.988
5.8000	4.978
6.0000 6.2000	4.972 4.963
6.4000	4.956
6.6000	4.947

6.8000	4.940
7.0000	4.934
7.2000	4.928
7.4000	4.922
7.6000	4.915
7.8000	4.909
8.0000	4.903
8.2000	4.899
8.4000	4.893
8.6000	4.887
8.8000	4.884
9.0000	4.880
9.2000	4.874
9.4000	4.871
9.6000	4.865
9.8000	4.862
10 0000	4 858

Unit# 00001 Test 1

Setups:	INPUT	1
Type Mode I.D.	Level TOC 16426	(F)
Reference Linearity Scale factor Offset Delay mSEC	4.2 0.0 10.0 -0.3 50.0	000

Step 0 08/17 09:42:57

Elapsed Time	INPUT 1
0.0000	7.038
0.0033	7.013
0.0066	6.991
0.0100	6.991
0.0133	6.991
0.0166	6.959
0.0200	6.943
0.0233	6.915
0.0266	6.899
0.0300	6.842
0.0333	6.830
0.0366	6.804
0.0400	6.766
0.0433	6.754
0.0466	6.732
0.0500	6.716
0.0533	6.672
0.0566	6.675
0.0600	6.650
0.0633	6.628
0.0666	6.609
0.0700	6.590
0.0733	6.571
0.0766	6.552
0.0800	6.533

0.0833	6.514
0.0866	6.498
0.0900 0.0933	6.476 6.457
0.0966	6.441
0.1000	6.422
0.1033 0.1066	6.406 6.388
0.1100	6.372
0.1133	6.353
0.1166 0.1200	6.337 6.318
0.1233	6.302
0.1266	6.28/
0.1300 0.1333 0.1366	6.271 6.258
0.1366	6.239
0.1400	6.227
0.1433 0.1466	6.211 6.195
0.1500	6.182
0.1533	6.167
0.1533 0.1566 0.1600	6.167 6.154 6.141
0.1633	6.129
0.1666 0.1700	6.116 6.100
0.1700 0.1733	6.091
0.1766	6.078
0.1800 0.1833	6.065 6.053
0.1866	6.043
0.1900	6.031
0.1933 0.1966	6 11:71
0.2000	5.999
0.2033	5.990
0.2033 0.2066 0.2100 0.2133	5.990 5.980 5.971
0.2133	5.961
0.2166	5.955
0.2200 0.2233	5.946 5.936
0.2266	5.930
0.2300	5.920
0.2333 0.2366	5.914 5.908
0.2400	5.901

0.2433 0.2466 0.2500 0.2533 0.2566 0.2600 0.2633 0.2666 0.2700 0.2733 0.2766 0.2800	5.895 5.889 5.882 5.876 5.870 5.863 5.857 5.854 5.848
0.2833 0.2866 0.2900 0.2933 0.2966 0.3000	5.838 5.835 5.829 5.826 5.819 5.816
0.3033 0.3066 0.3100 0.3133 0.3166 0.3200 0.3233 0.3266	5.813 5.810 5.803 5.800 5.797 5.794 5.791 5.788 5.784 5.778 5.775
0.3200 0.3300 0.3333 0.3500 0.3666 0.3833 0.4000 0.4166 0.4333 0.4500	5.797 5.794 5.791 5.788 5.784 5.778 5.775 5.759 5.747 5.734 5.724 5.724 5.706 5.696
0.4500 0.4666 0.4833 0.5000 0.5166 0.5333 0.5500 0.5666 0.5833	5.690 5.680 5.674 5.668 5.661 5.655 5.649
0.6000 0.6166 0.6333 0.6500 0.6666	5.639 5.636 5.630 5.627 5.623

0.6833	5.617
0.6833 0.7000 0.7166	5.617 5.614 5.611
0.7166	5.611
0.7333	5.608
0.7500	5.601
0.7666	5.601
0.7833	5.601 5.601 5.595 5.592
0.7366 0.7666 0.7833 0.8000 0.8166	5.592
0.8166	5.589
0.7500 0.7666 0.7833 0.8000 0.8166 0.8333 0.8500	5.586 5.582
0.8666	5.502
0.8833	5.576
0.9000	5.573
0.9166	5.579 5.576 5.573 5.570
0.9333	5.570 5.567
0.7666 0.7833 0.8000 0.8166 0.8333 0.8500 0.8666 0.8833 0.9000 0.9166 0.9333 0.9500 0.9666	5.567
0.9000 0.9166 0.9333 0.9500 0.9666	5.563
0.9833 1.0000	5.560
1.0000	5.557
0.8666 0.8833 0.9000 0.9166 0.9333 0.9500 0.9666 0.9833 1.0000 1.2000 1.4000 1.6000 1.8000 2.0000 2.2000 2.4000 2.6000 2.8000 3.0000 3.2000 3.4000 3.6000 3.8000	5.601 5.595 5.592 5.589 5.586 5.579 5.570 5.570 5.567 5.563 5.560 5.555 5.497 5.475 5.475 5.434 5.434 5.438 5.388 5.388 5.389 5.389 5.389 5.389 5.389
1.4000	5.497
1.8000	5.456
1.8000 2.0000	5.434
2.2000	5.434 5.418
2.4000	5.399 5.384
2.6000	5.384
2.8000	5.368 5.352
3.0000	5.352
3.2000 3.4000 3.6000 3.8000	5.339
3.4000	5.327
3.0000	5.311 5.292 5.282
4.0000	5.282
4.2000	
4.4000	5.257
4.6000	5.248
4.8000	5.235
5.0000	5.226
5.2000	5.213
4.8000 5.0000 5.2000 5.4000 5.6000 5.8000 6.0000	5.200
5.6000 5.8000	5.191 5.181
6.0000	5.181 5.169
6.2000	5.159
6.4000	5.150
6.6000	5.140

6.8000	5.131
7.0000	5.121
7.2000	5.112
7.4000	5.102
7.6000	5.093
7.8000	5.087
8.0000	5.077
8.2000	5.068
8.4000	5.061
8.6000	5.055
8.8000	5.046
9.0000	5.039
9.2000	5.030
9.4000	5.020
9.6000	5.014
9.8000	5.008
10.0000	5.001

Unit# 00001 Test 3

Setups:	INPUT 1
Type Mode	Level (F) TOC
I.D.	16426
Reference Linearity	3.410
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/17 10:24:32

0.0833 0.0866 0.0900	4.811 4.799 4.789
0.0933 0.0966	4.777 4.764
0.1000 0.1033	4.755 4.745
	4.732
0.1133	4.713
0.1166 0.1200	4.701 4.691
0.1233	4.682
0.1266 0.1300	4.672 4.666
0.1333 0.1366 0.1400	4.657 4.647
	4.641
0.1433 0.1466	4.631 4.622
0.1500	4.616
0.1533 0.1566	4.606 4.600
0.1600 0.1633	4.594 4.584
0.1666	4.578
0.1700 0.1733	4.571 4.565
0.1766	4 559
0.1800 0.1833	4.552 4.546
0.1866	4.540
0.1933	4.527
0.1966 0.2000	4.524 4.518
0.2033	4.511
0.2066 0.2100	4.505 4.502
0.2133 0.2166	4.496
0.2200	4.492 4.486
0.2233 0.2266	4.480 4.477
0.2300	4.470
0.2333 0.2366	4.467 4.461
0.2400	4.458

0.2433 0.2466	4.455 4.448
0.2500	4.445
	4.442
0.2566 0.2600	4.439 4.432
0.2633	4.429
0.2666	4.423
0.2700	4.420
0.2733	4.417
0.2766 0.2800	4.414 4.410
0.2833	4.410 4.407
0.2866	4.404
0.2900	4.401
0.2933	4.395 4.391
0.2933 0.2966 0.3000 0.3033	4.391 4.388 4.385
0.3000 0.3033	4.388 4.385
0.3066	4.382
0.3100	4.379
0.3133 0.3166 0.3200	4.376
0.3166	4.372 4.369
0.3200 0.3233 0.3266 0.3300	4.369 4.366
0.3266	4.366 4.363
0.3300	4.360
0.3333	4.357
0.3500	4.344
0.3666 0.3833	4.328 4.316
0.4000	4.316 4.303
0.4166	4.294
0.4333	4.284
0.4500	4.275
0.4666	4.265
0.4833	4.256 4.246
0.5166	4.240
0.5333	4.234
0.5500	4.224
0.5666	4.218
0.5833	4.211 4.205
0.6166	4.199
0.6333	4.193
0.6500	4.186
0.6666	4.180

0.6833 4.174 0.7000 4.167 0.7166 4.164 0.7333 4.158 0.7500 4.155 0.7666 4.148 0.7833 4.142
0.7666 4.148
0.7666 4.148
0.7666 4.148
0.7833 4.142
0.7000
0.8000 4.139 0.8166 4.133
0.8166 4.133 0.8333 4.126
0.8500 4.123
0.85004.1230.86664.1200.88334.117
0.8333 4.126 0.8500 4.123 0.8666 4.120 0.8833 4.117 0.9000 4.110
0.9166 4.107
0.9333 4.101
0.9500 4.098
0.9666 4.095 0.9833 4.088
0.9833 4.088 1.0000 4.085 1.2000 4.032
0.9666 4.095 0.9833 4.088 1.0000 4.085 1.2000 4.032 1.4000 3.997
1.40003.9971.60003.962
1.8000 3.934
2.0000 3.908
2.2000 3.886 2.4000 3.864
2.6000 3.845
2.8000 3.829
3.0000 3.814 3.2000 3.798 3.4000 3.785 3.6000 3.773 3.8000 3.760
3.2000 3.798 3.4000 3.785 3.6000 3.773 3.8000 3.760 4.0000 3.751
3.4000 3.785 3.6000 3.773 3.8000 3.760
4.0000 3.751 4.2000 3.741
4.4000 3.732
4.6000 3.722
4.8000 3.716 5.0000 3.706
5.0000 3.706 5.2000 3.700 5.4000 3.694
4.4000 3.732 4.6000 3.722 4.8000 3.716 5.0000 3.706 5.2000 3.700 5.4000 3.694 5.6000 3.687 5.8000 3.675 6.2000 3.672 6.4000 3.665
5.6000 3.687 5.8000 3.681
6.0000 3.675
6.2000 3.672
4.4000 3.732 4.6000 3.722 4.8000 3.716 5.0000 3.706 5.2000 3.700 5.4000 3.694 5.8000 3.687 6.2000 3.675 6.2000 3.665 6.6000 3.665 6.6000 3.662

6.8000	3.656
7.0000	3.653
7.2000	3.649
7.4000	3.646
7.6000	3.640
7.8000	3.637
8.0000	3.634
8.2000	3.631
8.4000	3.627
8.6000	3.624
8.8000	3.624
9.0000	3.621
9.2000	3.618
9.4000	3.618
9.6000	3.615
9.8000	3.615
10.0000	3.612

Unit# 00001 Test 5

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	7.480
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/17 11:21:00

Elapsed Time	INPUT 1
0.0000 0.0033 0.0066 0.0100 0.0133 0.0166 0.0200 0.0233 0.0266 0.0300 0.0333 0.0366	10.410 10.416 10.410 10.410 10.394 10.394 10.384 10.384 10.378 10.372
0.0400 0.0433 0.0466 0.0500 0.0533 0.0566 0.0600 0.0633 0.0666 0.0700	10.359 10.331 10.356 10.356 10.359 10.359 10.305 10.327 10.321
0.0733 0.0766 0.0800	10.312 10.381 10.340

0.0833 0.0866 0.0900 0.0933 0.0966 0.1000 0.1033 0.1066 0.1100 0.1133 0.1166 0.1200 0.1233 0.1266 0.1300 0.1333 0.1366 0.1400 0.1433 0.1466 0.1500 0.1533 0.1566 0.1600 0.1633 0.1666 0.1700 0.1733 0.1666 0.1700 0.1733 0.1666 0.1700 0.1733 0.1666 0.1700 0.1833 0.1866 0.1900 0.1933 0.1966 0.2000 0.2033 0.2066 0.2100 0.2133	10.337 10.309 10.315 10.299 10.315 10.365 10.362 10.296 10.296 10.286 10.299 10.290 10.277 10.277 10.277 10.274 10.264 10.264 10.258 10.236 10.236 10.249 10.245 10.242 10.239 10.230 10.231 10.230 10.231 10.231 10.214 10.214 10.214 10.201 10.201
0.2000	10.214
0.2033	10.211
0.2100 0.2133	10.201
0.2166	10.198
0.2200	10.204
0.2233	10.192
0.2266	10.185
0.2300	10.189
0.2333	10.185
0.2366	10.182
0.2400	10.179

0.2433 0.2466 0.2500 0.2533 0.2566 0.2600 0.2633 0.2666 0.2700 0.2733 0.2766 0.2800 0.2833 0.2866 0.2900 0.2933 0.2966 0.3000 0.3033 0.3166 0.3100 0.3133 0.3166 0.3200 0.3233 0.3266 0.3333 0.3666 0.3333 0.3666 0.3333 0.3666 0.3333 0.3666 0.3333 0.3666 0.3333 0.3666 0.3333 0.3666 0.3333 0.3500 0.3666 0.3700 0.3700	10.176 10.176 10.176 10.173 10.166 10.163 10.160 10.157 10.154 10.151 10.148 10.144 10.141 10.138 10.138 10.135 10.125 10.125 10.125 10.125 10.125 10.116 10.116 10.116 10.116 10.116 10.106 10.106 10.106 10.106 10.088 10.075 10.088 10.075 10.059 10.046 10.034 10.021 10.009 9.993 9.980 9.967 9.955
0.4333 0.4500 0.4666	10.009 9.993
0.5000	9.967
0.5500 0.5666 0.5833	9.930 9.917 9.904
0.6000 0.6166 0.6333 0.6500	9.892 9.879 9.870
0.6500 0.6666	9.857 9.844

0.6833 0.7000 0.7166 0.7333 0.7500 0.7666 0.7833 0.8000 0.8166 0.8333 0.8500 0.8666 0.8333 0.9000 0.9166 0.9333 0.9000 0.9666 0.9833 1.0000 1.2000 1.4000 1.6000 1.8000 2.0000 2.1000 2.1000 2.1000 2.1000 2.1000 3.1000	9.832 9.819 9.806 9.794 9.772 9.7750 9.7750 9.7724 9.7702 9.688 9.6658 9.6658 9.6658 9.6459 9.614 9.355 9.355 9.248 9.055 8.8742 8.676 8.559 8.458 8.411 8.370 8.329 8.2256
4.0000 4.2000 4.4000 4.6000	8.506 8.458 8.411 8.370 8.329 8.291

6.8000	8.019
7.0000	8.004
7.2000	7.988
7.4000	7.975
7.6000	7.963
7.8000	7.953
8.0000	7.940
8.2000	7.931
8.4000	7.922
8.6000	7.912
8.8000	7.903
9.0000	7.896
9.2000	7.890
9.4000	7.880
9.6000	7.874
9.8000	7.871
10.0000	7.865

SE1000C Environmental Logger 08/17 16:27

Unit# 00001 Test 0

Setups:	INPUT 1	
Type Mode I.D.	Level (F TOC 16426	')
Reference Linearity Scale factor Offset Delay mSEC	7.850 0.000 10.000 -0.330 50.000)

Step 0 08/17 09:11:43

Time	INPUT 1	-
Time 00 33 56 00 33 56 00 33 56 00 33 56 00 33 56 00 33 36 36 36 36 36 36 36 36 36 36 36 36	INPUT 1 10.698 10.698 10.682 10.672 10.656 10.647 10.641 10.634 10.622 10.603 10.603 10.603 10.593 10.587	3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 -
56 00 33 56 00 33	10.578 10.578 10.568 10.559 10.552 10.552	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
	10 13 16 10 13 16 10 13 16 10 13 16 10 13 16 10 13 16 16 16 16 16 16 16 16 16 16 16 16 16	10.691 10.685 10.685 10.685 10.672 10.647 10.647 10.647 10.647 10.647 10.647 10.647 10.647 10.633 10.623 10.623 10.633 10.633 10.633 10.633 10.587 10.587 10.578 10.578 10.578 10.558

0.233310.3000.236610.2970.240010.293	0.0833 0.0866 0.0900 0.0933 0.0966 0.1000 0.1033 0.1066 0.1100 0.1133 0.1166 0.1200 0.1233 0.1266 0.1300 0.1333 0.1466 0.1400 0.1433 0.1466 0.1500 0.1533 0.1666 0.1700 0.1633 0.1666 0.1700 0.1733 0.1666 0.1700 0.1733 0.1666 0.1700 0.1833 0.1666 0.1900 0.1933 0.1966 0.1900 0.1933 0.1966 0.2000 0.2033 0.2166 0.2100 0.2233 0.2266 0.2300	10.518 10.521 10.521 10.511 10.508 10.502 10.495 10.486 10.483 10.499 10.451 10.454 10.454 10.454 10.454 10.426 10.435 10.426 10.413 10.401 10.398 10.391 10.388 10.385 10.379 10.366 10.366 10.357 10.357 10.357 10.357 10.357 10.357 10.357 10.357 10.357 10.357 10.357 10.357 10.357 10.366 10.379 10.375 10.366 10.379 10.375 10.366 10.363 10.379 10.375 10.366 10.363 10.379 10.375 10.366 10.363 10.379 10.375 10.366 10.363 10.379 10.375 10.366 10.363
	0.2233 0.2266 0.2300 0.2333 0.2366	10.312 10.309 10.306 10.300 10.297

0.2433 0.2466 0.2500 0.2533 0.2666 0.2633 0.2666 0.2700 0.2733 0.2766 0.2800 0.2833 0.2866 0.2900 0.2933 0.2966 0.3000 0.3133 0.3166 0.3200 0.3133 0.3166 0.3233 0.3266 0.3333 0.3666 0.3833 0.3666 0.3833 0.4000 0.4166 0.4333 0.4666 0.4333 0.4666 0.4333 0.55000 0.51666 0.5333 0.55000 0.5666 0.5833 0.5666 0.5833 0.5666 0.5833 0.5666 0.5833 0.5666 0.5833 0.5666 0.5	10.290 10.287 10.281 10.274 10.271 10.268 10.265 10.259 10.255 10.249 10.246 10.240 10.237 10.237 10.237 10.221 10.214 10.211 10.208 10.211 10.208 10.205 10.202 10.199 10.192 10.177 10.158 10.145 10.129 10.158 10.069 10.073 10.082 10.069 10.053 10.041 10.000 9.987 9.974
0.5500	10.000
0.5666	9.987

0.6833 0.7000 0.7166 0.7333 0.7500 0.7666 0.7833 0.8000 0.8166 0.8333 0.8500 0.8666 0.8833 0.9000 0.9166 0.9333 0.9500 0.9666 0.9833 1.0000 1.2000 1.4000 1.4000 1.6000 1.8000 2.2000 2.4000 2.4000 2.4000 2.6000 3.6000 3.6000 3.6000 3.6000 3.6000 4.0000 4.2000 4.4000 4.2000 4.4000	9.899 9.886 9.873 9.864 9.851 9.839 9.829 9.817 9.788 9.776 9.766 9.7760 9.747 9.738 9.731 9.722 9.706 9.602 9.529 9.460 9.403 9.302 9.255 9.213 9.172 9.097 9.097 9.097 9.092 8.961 8.932 8.904
3.2000 3.4000 3.6000	9.059
4.0000	8.961
4.8000	8.854
5.0000	8.828
5.2000	8.803
5.4000	8.778
5.6000	8.756
5.8000	8.734
6.0000	8.711
6.2000	8.689
6.4000	8.670
6.6000	8.651

6.8000	8.636
7.0000	8.617
7.2000	8.601
7.4000	8.588
7.6000	8.576
7.8000	8.560
8.0000	8.550
8.2000	8.538
8.4000	8.528
8.6000	8.516
8.8000	8.506
9.0000	8.497
9.2000	8.487
9.4000	8.478
9.6000	8.471
9.8000	8.462
10.0000	8.453

SE1000C Environmental Logger 08/16 14:09

Unit# 00001 Test 18

Setups:	INPUT 1
Type	Level (F)
Mode	TOC
I.D.	16426
Reference	7.650
Linearity	0.000
Scale factor	10.000
Offset	-0.330
Delay mSEC	50.000

Step 0 08/16 08:31:23

Elapsed Time	INPUT 1
0.0000 0.0033 0.0066	10.431 10.406 10.387
0.0100	10.374
0.0133	10.368
0.0166 0.0200	10.352 10.321
0.0233	10.311
0.0266	10.283
0.0300	10.277
0.0333	10.248
0.0366	10.245
0.0400	10.226
0.0433 0.0466	10.220 10.191
0.0500	10.175
0.0533	10.153
0.0566	10.141
0.0600	10.125
0.0633	10.106
0.0666	10.131
0.0700	10.093
0.0733 0.0766	10.081 10.074
0.0800	10.074

0.0833 0.0866 0.0900 0.0933 0.0966 0.1000 0.1033 0.1066 0.1100 0.1133 0.1166 0.1200 0.1233 0.1266 0.1300 0.1333 0.1366 0.1400 0.1433 0.1466 0.1500 0.1533 0.1566 0.1600 0.1533 0.1666 0.1700 0.1733 0.1666 0.1700 0.1733 0.1766 0.1800 0.1833 0.1866 0.1900 0.1933 0.1966 0.2000 0.2033 0.2066 0.2100 0.2133	10.030 10.024 10.008 9.992 10.008 9.970 9.951 9.932 9.904 9.875 9.860 9.847 9.884 9.819 9.875 9.765 9.775 9.765 9.775 9.765 9.775 9.
0.1966	9.604
0.2000	9.591
0.2033	9.582
0.2100	9.560
0.2133	9.547
0.2166	9.541
0.2200	9.528
0.2233	9.519
0.2266	9.509
0.2300	9.503
0.2333	9.493
0.2366	9.484
0.2400	9.474

0.2433	9.468
0.2433 0.2466	9.462
0.2500	9.452
0.2533	9.446
0.2566	9.440
0.2600	9.433
0.2633	9.427
0.2666	9.433 9.427 9.421
0.2700	9.414
0.2733	9.433 9.427 9.421 9.414 9.408
0.2766	9 402
0.2800	9.396
0.2833	9.392
0.2866	9.386
0.2900	9.383
0.2933	9.396 9.392 9.386 9.383 9.377
0.2566 0.2600 0.2633 0.2666 0.2700 0.2733 0.2766 0.2800 0.2833 0.2866 0.2900 0.2933 0.2966 0.3000	9.370
0.3000	9.367
0.3033	9.361 9.358 9.355 9.348 9.345 9.342 9.339
0.3066 0.3100	9.355
0.3100 0.3133 0.3166	9.358 9.355 9.348 9.345
0.3166	9.345
0.3066 0.3100 0.3133 0.3166 0.3200 0.3233	9.342
0.3233	9.339
0.3266	9.339 9.336 9.329
0.3300 0.3333 0.3500 0.3666 0.3833 0.4000	9.329
0.3333	9.326
0.3500	9.307
0.3666	9.291
0.3833	9.276
0.4000	9.263
0.4166 0.4333	9.250
0.4333	9.241 9.228
0.4500 0.4666	9.228 9.219
0.4833	9.209
0.5000	9.200
0.5166	9.190
0.5333	9.181
0.5500	9.178
0.5666	9.168
0.5833	9.162
0.6000	9.156
0.6166	9.146
0.6333	9.140
0.6500	9.133
0.6666	9.127

0.6833 0.7000 0.7166 0.7333 0.7500 0.7666 0.7833 0.8000 0.8166 0.8333 0.8500 0.8666 0.8833 0.9000 0.9166 0.9333 0.9500 0.9666 0.9833 1.0000		9.124 9.115 9.111 9.105 9.099 9.089 9.083 9.077 9.064 9.061 9.055 9.051 9.045 9.042 9.039 9.032 9.029 8.972
1.4000 1.6000 1.8000 2.0000		8.897 8.862 8.827
2.2000 2.4000		8.799 8.770
2.6000 2.8000 3.0000		8.742 8.717 8.695
3.2000	•	8.669 8.650
3.4000 3.6000 3.8000		8.628 8.606
4.0000 4.2000		8.587 8.565
4.4000		8.546 8.530
4.8000 5.0000		8.511 8.496
5.2000 5.4000		8.480 8.464
5.6000 5.8000		8.448 8.429
6.0000 6.2000		8.417 8.404
6.4000 6.6000		8.391 8.376

6.8000	8.366
7.0000	8.350
7.2000	8.341
7.4000	8.328
7.6000	8.309
7.8000	8.306
8.0000	8.294
8.2000	8.284
8.4000	8.275
8.6000	8.265
8.8000	8.256
9.0000	8.246
9.2000	8.237
9.4000	8.227
9.6000	8.221
9.8000	8.212
10.0000	8.202
12.0000	8.133



APPENDIX J

Sensitive Receptor Survey



EDR Offsite Receptor Report

Fort Monmouth - Main Post DPW Building 173 Eatontown, NJ 07724

Inquiry Number: 0695817.1r

October 24, 2001

The Source For Environmental Risk Management Data

3530 Post Road Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050 Fax: 1-800-231-6802 Internet: www.edrnet.com

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Census Map	3
Census Findings	4
Receptor Map	5
Map Findings	6
Records Searched/Data Currency Tracking Addendum	10

Thank you for your business Please contact EDR at 1-800-352-0050 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available records was conducted by Environmental Data Resources, Inc. (EDR). The EDR Offsite Receptor Report provides information which may be used to comply with the Clean Air Act Risk Management Program 112-R. "The rule requires that you estimate in the RMP residential populations within the circle defined by the endpoint for your worst-case and alternative release scenarios (i.e., the center of the circle is the point of release and the radius is the distance to the endpoint). In addition, you must report in the RMP whether certain types of public receptors and environmental receptors are within the circles."

The address of the subject property, for which the search was intended, is:

FORT MONMOUTH - MAIN POST DPW BUILDING 173 EATONTOWN, NJ 07724

Distance Searched: 2.000 miles from subject property

RECEPTOR SUMMARY

An X indicates the presence of the receptor within the search radius.

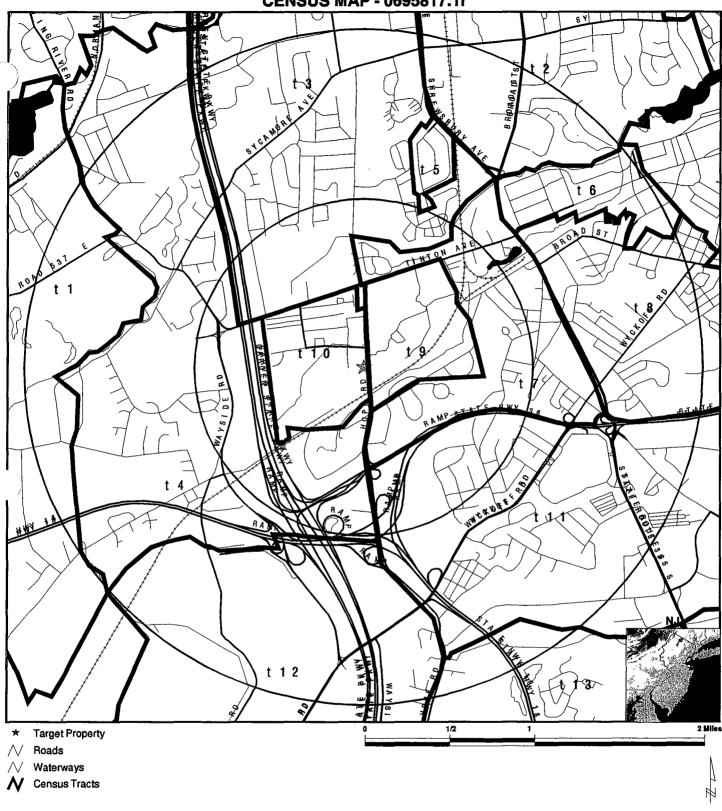
Residential Population

Estimated population within search radius: 21254 persons.

Other Public Receptors

Type	Within Search Radius	Sites Total	
Day Care Centers: Medical Centers: Nursing Homes:		4	
Schools: Hospitals: Arena: Prison:		12	
Environmental Receptors			
Туре	Within Search Radius	Sites Total	
Federal Land:	X	2	

CENSUS MAP - 0695817.1r



TARGET PROPERTY: ADDRESS: CITY/STATE/ZIP: LAT/LONG: Fort Monmouth - Main Post DPW Building 173 Eatontown NJ 07724 40.2958 / 74.0794

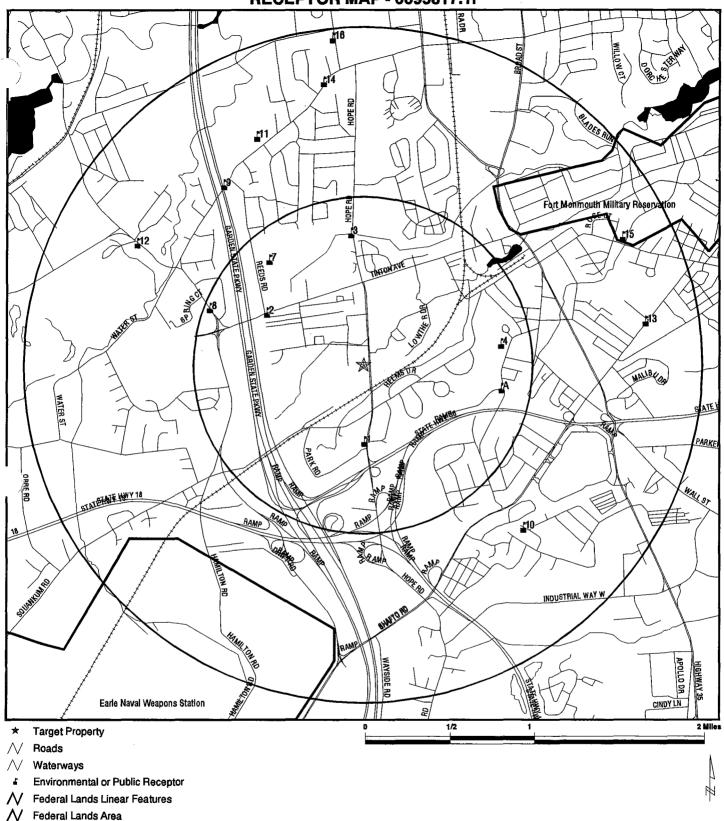
CUSTOMER: CONTACT: INQUIRY #: DATE: Versar, Inc. Audrey Romano 0695817.1r

0695817.1r October 24, 2001 6:59 pm

CENSUS FINDINGS

Map ID	Tract Number	Total Population	Population in Radius	Total Area(sq.mi.)	Area in Radius(sq.mi.)
T1	8099.02	2834	126.7	15.52	0.69
T2	8043.00	3096	767.0	2.23	0.55
T3	8045.00	5299	3551.2	2.87	1.92
T4	8046.00	1743	1532.9	3.05	2.68
T5	8044.00	1098	1098.0	0.10	0.10
T6	8049.00	638	581.2	0.35	0.32
T7	8050.01	4589	4589.0	1.00	1.00
T8	8050.02	3708	2684.8	1.22	0.89
T9	8047.97	1713	1713.0	0.41	0.41
T10	8047.98	1737	1737.0	0.43	0.43
T11	8051.00	3152	2077.9	2.95	1.95
T12	8048.00	3582	541.4	9.26	1.40
T13	8065.01	1971	253.4	1.28	0.16

RECEPTOR MAP - 0695817.1r



TARGET PROPERTY: ADDRESS:

CITY/STATE/ZIP: LAT/LONG:

Fort Monmouth - Main Post DPW Building 173 Eatontown NJ 07724

40.2958 / 74.0794

CUSTOMER: CONTACT: **INQUIRY#:** DATE:

Versar, Inc. Audrey Romano

0695817.1r October 24, 2001 6:59 pm

Map ID Direction Distance Distance (ft.) Elevation	Site		EDR ID Database
1 South 1/4-1/2 mi 2418 Higher	Name: ID: Site Type:	Kid's Campus 585450963 Daycare ctr	DAY1045385 DAYCARE
2 WNW 1/2-1 mi 3406 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade Highest Grade	MONMOUTH e: Ungraded	341750006094 CCD
3 North 1/2-1 mi 4137 Higher	Name: ID: Site Type:	RANNEY SCHOOL 9023 Private sch.	PRV1007246 PRV_SCH
4 East 1/2-1 mi 4337 Higher	Name: ID: Site Type: Latitude: Longitude:	Vetter School 882586 school 40.29700 -74.06000	GNS0931468 GNIS_SCH
A5 East 1/2-1 mi 4363 Higher	School Level: County:	MONMOUTH : Kindergarten	340441003768 CCD

Map ID Direction Distance Distance (ft.) Elevation	Site		EDR ID Database
A6 East 1/2-1 mi 4370 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade Highest Grad	MONMOUTH o: 07	340441003770 CCD
7 NW 1/2-1 mi 4396 Higher	Name: ID: Site Type: Latitude: Longitude:	Monmouth Regional High School 883505 school 40.30500 -74.09000	GNS0927201 GNIS_SCH
8 WNW 1/2-1 mi 5088 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade Highest Grade	MONMOUTH e: 06	341620004116 CCD
NA NE 1-2 mi 6231 NA	Name: ID: State FIPS: Feature:	Fort Monmouth Military Reservation 29120 34 Army DOD	US0029120 FED_LAND
9 NW 1-2 mi 7109 Higher	Name: ID: Site Type:	Winding Brook School 585451092 Daycare ctr	DAY1045372 DAYCARE

Map ID Direction Distance Distance (ft.)	Site		EDR ID
Elevation	Site		Database
10 SE 1-2 mi 7143 Higher	School Level: County:	MONMOUTH b: Kindergarten	340441003774 CCD
NA SSW 1-2 mi 7591 NA	Name: ID: State FIPS: Feature:	Earle Naval Weapons Station 29317 34 Navy DOD	US0029317 FED_LAND
11 NNW 1-2 mi 7864 Higher	Name: ID: Site Type: Latitude: Longitude:	New Shrewsbury School 882520 school 40.31500 -74.09000	GNS0927653 GNIS_SCH
12 WNW 1-2 mi 7989 Higher	Name: ID: Site Type:	Luther Memorial Christian Preschool 585450915 Daycare ctr	DAY1045374 DAYCARE
13 East 1-2 mi 8907 Lower	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type: School Level: County: Lowest Grade Highest Grade	MONMOUTH : Kindergarten	340441003772 CCD

Map ID Direction Distance Distance (ft.) Elevation	Site		EDR ID Database
14 North 1-2 mi 8915 Higher	Name: NCES ID: Address: School ID: Telephone: Local Code: School Type School Leve County: Lowest Grac Highest Grac	 Regular Elementary and Secondary Schools Primary MONMOUTH Kindergarten 	341620004112 CCD
15 ENE 1-2 mi 9018 Lower	Name: ID: Site Type: Latitude: Longitude:	Steelman School 882575 school 40.30700 -74.05000	GNS0930612 GNIS_SCH
16 North 1-2 mi 10244 Higher	Name: ID: Site Type:	Tinton Falls Cooperative Nursery School 585451093 Daycare ctr	DAY1045366 DAYCARE

RECORDS SEARCHED/DATA CURRENCY TRACKING

CENSUS

Source: U.S. Census Bureau Telephone: 301-457-4100

1990 U.S. Census data was used to estimate residential population following these EPA guidelines: "Census data are presented by Census tract. If your circle covers only a portion of the tract, you should develop an estimate for that portion...Determine the population density per square mile (total population of the Census tract divided by the number of square miles in the tract) and apply that density figure to the number of square miles within your circle."

FED_LAND: Federal Lands

Source: USGS

Telephone: 703-648-5094

Federal lands data. Includes data from several Federal land manangement agencies, including Fish and Wildlife Service, Bureau of Land Management, National Park Service, and Forest Service. Includes National Parks, Forests, Monuments;

Wildlife Sanctuaries, Preserves, Refuges; Federal Wilderness Areas.

Date of government version: 09/09/97.

HCFA: Provider of Services Listing

Source: The Health Care Financing Administration

Telephone: 410/786-3000

A listing of hospitals with Medicare provider number, produced by The Health Care Financing Administration

(HCFA), a federal agency within the U.S. Department of Health and Human Services.

HCFA runs the Medicare and Medicaid programs.

Date of government version: 06/01/98.

CCD: Common Core of Data

Source: National Center for Education Statistics

555 New Jersey Avenue NW

Washington, DC 20208-5651

The Common Core of Data (CCD) is the National Center for Education Statistics' primary database on elementary and secondary public education in the United States. CCD is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Date of government version: 1995-96.

GNIS: Geographic Names Information System

Source: USGS

Telephone: 703-648-5094

The Geographic Names Information System (GNIS), developed by the USGS in cooperation with the U.S. Board on Geographic Names (BGN), contains information about almost 2 million physical and cultural geographic features in the United States. The GNIS is our Nation's official repository of domestic geographic names information.

Date of government version: 03/01/98.

PRV_SCH: Private Schools

EDR indicates the location of buildings and facilities - private schools - where individuals who are public receptors are likely to be located.

DAYCARE: Daycare Centers

EDR indicates the location of buildings and facilities - daycare centers - where individuals who are public receptors are likely to be located.

MEDCEN: Medical Centers

EDR indicates the location of buildings and facilities - medical centers - where individuals who are public receptors are likely to be located.

NURSING: Nursing Homes

EDR indicates the location of buildings and facilities - nursing homes - where individuals who are public receptors are likely to be located.

ARENA: Arenas

EDR indicates the location of buildings and facilities - arenas - where individuals who are public receptors are likely to be located.

PRISON: Prisons

EDR indicates the location of buildings and facilities - prisons - where individuals who are public receptors are likely to be located.

BOP: Bureau of Prisons Facilities

Source: Federal Bureau of Prisons

List of facilities operated by the Federal Bureau of Prisons.

Date of government version: 07/01/98.



APPENDIX K

Well Survey and Well Search Summary

2916770 NJ DOT 2913864 CRAG 20 0 M 3004 93 11 25 06-30-1986 401659 740432 01-11-1993 N SD1
3 306 MAIN STREET 07-30-1986 41.5 wrl 2916771 NJ DOT 2913864 CRAG 20 0 M 3004 93 11 25 06-30-1986 401659 740432 01-11-1993 N SE1
306 MAIN STREET 07-30-1986 36.5 WR1
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306 MAIN STREET 07-30-1986 36.5 WR1
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306 MAIN STREET 07-30-1986 63 WRI
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3L 306 MAIN STREET 07-30-1986 46.5 WR1 2916778 NJ DOT 2913854 CRAG 20 0 M 11 25 06-30-1986 401659 740512 01-11-1993 N R40
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5 306 MAIN STREET 07-30-1986 46.5 WR1 2916781 NJ DOT 2913856 CRAG 20 0 M 1.2 11E 36 25 06-30-1986 401659 740446 01-11-1993 N R45
8 306 MAIN STREET 07-30-1986 16.5 WR1
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7 N WR1 2917937 EATONTOWN TOWNSHIP 2913836 TIGE 13 10 W 43 55 11 25 02-10-1987 401739 740406 08-25-198
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7 N WR1
Dage #2

ÀUG 27 '01 09: 23AM WATER SUPPLY ELEMENT A PE OD 27 2001 POR SUPPLY ELEMENT OF A PE OD 27 2001 POR SUPPLY ELEMENT
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Redected - Privacy AcRedaded - Privacy Act
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2913187 Redacted - Privacy Ac ^{Redacted - Privacy Act} KAYE 80 50 G 1 1.03 36 25 09-12-1983 401819 740446 N
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1 235 HOPE ROAD 12-21-1984 25 100 Redacted - Privacy Act J0348 WR1 2916207 Redacted - Privacy ARedacted - Privacy Act GREA 220 20 D 2 94 11 25 02-17-1986 401726 740406 11-01-1986 N .
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987 WR1
2919288 UNDERWRITERS ADJUSTI 2913863 NEPL 40 0 M 45 111 11 25 09-11-1987 401720 740413 09-24-1
987 Redácîed - Přívácý Actredácied - Přívácý Actredáci
1988 WR1 2920979 Redacted - Privacy Act TIGE 80 25 G 50.02 61 25 25 07-20-1988 401720 740346 01-18-19
89 WR1 2921634 Redacted - Privacy Acredacted -
2921698 Redacted - Privacy Act Redacted - Privacy Act PICK 190 15 R 2-01 55 36 25 11-09-1988 401813 740519 12-09-1988
2921698 Redacted Privacy Act Privacy Act Prick 190 15 R 2-01 55 36 25 11-09-1988 401813 740519 12-09-1988
2921967 STRAVOLA REALTY 2913819 GEOR 30 0 M 2.01 115 36 25 12-22-1988 401733 740533 05-10-1989
W2 HOPE RD & RT 36 04-10-1989 WR1 2922685 STRAVOLA REALTY 2913824 GEOR 30 0 M 7.01 115 36 25 05-01-1989 401746 740519 05-10-1989
W1 HOPE RD & ROUTE 36 05-02-1989 WR1 2922686 STRAVOLA REALTY 2913824 GEOR 30 0 M 7.01 115 36 25 05-01-1989 401746 740519 05-10-1989
W3 HOPE RD & ROUTE 36 05-01-1989 WR1
2922982 R.M. SHOEMAKER CO. 2913859 PICK 35 0 M 5.02&17A 115 36 25 06-08-1989 401653 740453 08-04-1989 5 750 HOPE ROAD 07-11-1989 37 Redacted - Privacy Act, M1041 WR1
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2923339 JACK BIRNBERG & ASSO 2913864 MATH 20 0 B 1,2,3 133-01 11 25 08-23-1989 401706 740440 0 3-31-1989 B1-8 611 INDUSTRIAL WAY WEST 08-24-1989 20 Redacted - Privacy Act 1530
2923339 JACK BIRNBERG & ASSO 2913864 MATH 20 0 B 1,2,3 133-01 11 25 08-23-1989 401706 740440 0 3-31-1989 B1-8 611 INDUSTRIAL WAY WEST 08-24-1989 20 Redacted - Privacy Act 1530 WR1 2923916 Redacted - Privacy Act ARIS CORP. 2913852 KAVL 20 0 M 21.02 114.01 36 25 12-11-1989 401720 740506 08-
2923339 JACK BIRNBERG & ASSO 2913864 MATH 20 0 B 1,2,3 133-01 11 25 08-23-1989 401706 740440 0 3-31-1989 B1-8 611 INDUSTRIAL WAY WEST 08-24-1989 20 Redacted - Privacy Act 1530 WR1 2923916 Redacted - Privacy Act ARIS CORP. 2913852 KAVL 20 0 M 21.02 114.01 36 25 12-11-1989 401720 740506 08-27-1990 MW1 100 CRESCENT COURT 04-10-1990 9 Redacted - Privacy Act M1328 WR1
2923339 JACK BIRNBERG & ASSO 2913864 MATH 20 0 B 1,2,3 133-01 11 25 08-23-1989 401706 740440 0 3-31-1989 B1-8 611 INDUSTRIAL WAY WEST 08-24-1989 20 Redacted - Privacy Actr1530 WR1 2923916 Redacted - Privacy Actr ARIS CORP. 2913852 KAVL 20 0 M 21.02 114.01 36 25 12-11-1989 401720 740506 08-27-1990 MW1 100 CRESCENT COURT 04-10-1990 9 Redacted - Privacy Act M1328 WR1 2923917 Redacted - Privacy Act M1328 WR1 2923917 ARIS CORP. 2913852 KAVL 20 0 M 21.02 114.01 36 25 12-11-1989 401720 740506 08-27-1990 MW2 100 CRESCENT COURT 04-10-1990 13 Redacted - Privacy Act M1328 WR1
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2929744 US ARMY - FT. MONMOU 2913827 DRCT 30 0 M N/A N/A 38 25 06-03-1993 401733 740519 01-10-
1994 ... ... 3 BLDG 2500 06-10-1993 25 0 Redacted - Privacy Act JR. M1051 ... WRI
2929745 US ARMY - FT. MONMOU 2913827 DRCT 30 0 M N/A N/A 38 25 06-03-1993 401733 740519 01-10-
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2929752 WORZALLA PUBLISHING 2913854 MRSI 14 0 M 63 111 11 25 06-03-1993 401706 740519 07-10-19
93 ... ... MW1 556 INDUSTRIAL WAY EAST 06-14-1993 10 ... Redacted - Privacy Act J1145 ... ... WR1
2929753 WORZALLA PUBLISHING 2913854 MRSI 14 0 M 63 111 11 25 06-03-1993 401706 740519 07-18-19
93 ... ... MW2 556 INDUSTRIAL WAY EAST 06-14-1993 10 ... Redacted - Privacy Act 31145 ... ... WR1
2929754 WORZALLA PUBLISHING 2913854 MRSI 14 0 M 63 111 11 25 06-03-1993 401706 740519 07-21-19
93 ... ... MW3 556 INDUSTRIAL WAY EAST 06-14-1993 10 ... Redacted - Privacy Act J1145 ... ... WR1
2930115 ALLIED SIGNAL INC. 2913912 AQUI 45 0 M 26 64 11 25 08-19-1993 401800 740346 09-30-1993
 ... ... MW36 118 HIGHWAY 35 08-25-1993 12.2 ... Redacted - Privacy Act J1579 ... ... WR1
2930116 ALLIED SIGNAL INC. 2913912 AQUI 45 0 M 26 64 11 25 08-19-1993 401800 740346 09-30-1993 .... MW37 118 HIGHWAY 35 08-25-1993 26 ...
2930117 ALLIED SIGNAL INC. 2913912 AQUI 45 0 M 26 64 11 25 08-19-1993 401800 740346 09-30-1993
 ..., MW38 118 HIGHWAY 35 08-26-1993 37.5 ... Redacted - Privacy Act J1579 .... WR1
2930118 ALLIED SIGNAL INC. 2913912 AQUI 45 0 M 13 64 11 25 08-19-1993 401800 740346 09-30-1993
 ... ... MW33 118 HIGHWAY 35 08-30-1993 12 .. Redacted - Privacy ActJ1579 ... ... WR1
2930119 ALLIED SIGNAL INC. 2913912 AQUI 45 0 M 13 64 11 25 08-19-1993 401800 740346 09-30-1993
 .... MW34 118 HIGHWAY 35 08-30-1993 22 ... Redacted - Privacy Act J1579 .... WR1
2930120 ALLIED SIGNAL INC. 2913912 AQUI 45 0 M 13 64 11 25 08-19-1993 401800 740346 09-30-1993
 ... ... MW35 118 HIGHWAY 35 08-30-1993 32,5 ... Redacted - Privacy Act 1579 ... ... WR1
2930480 EATONTOWN BOARD OF E 2913911 UNIT 20 0 M 43-44 55 11 25 11-18-1993 401800 740400 01-06
-1994 ... ... 1 7 GRANT AVENUE 11-24-1993 15 0 Redacted - Privacy Act J1521 ... ... WR1
2930494 ALLIED SIGNAL INC. 2913912 REXR 35 0 M 13 64 11 25 11-24-1993 401800 740346 12-14-1993
 ... ... 39 COLUMBIAN ROAD 11-30-1993 18 0 Redacted - Privacy Act 1129 ... WR1
2930495 ALLIED SIGNAL INC. 2913912 REXR 35 0 M 13 64 11 25 11-24-1993 401800 740346 12-14-1993
 ... 40 COLUMBIAN ROAD 11-29-1993 30 0 Redacted - Privacy Act J1129 ... WR1
2930514 STANDARD ROOFING INC 2913853 RECO 20 0 M 29 11401 36 25 12-03-1993 401720 740453 01-24
-1994 ..... 1 100 PARK ROAD 12-13-1993 12 0 Redacted - Privacy Act J1549 .... WR1
2930958 U S ARMY FORT MONMOU 2913822 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401800 740506 08-11-
1994 .... MW-1 ... 07-19-1994 13 0 Redacted - Privacy Act J1421 ... WRI
2930959 U S ARMY FORT MONMOU 2913822 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401800 740506 08-11-
1994 ... ... MW-2 ... 07-06-1994 15 0 Redacted - Privacy Act J1421 ... ... WR1
2930960 U S ARMY FORT MONMOU 2913822 TYRE 15 0 M N/A N/A 38 25 04-05-1994 401800 740506 08-11-
1994 ... ... MW-3 ... 07-06-1994 15 0 Redacted - Privacy Act J1421 ... ... WR1
2930969 U S ARMY FORT MONMOU 2913816 TYRE 15 U M N/A N/A 38 25 04-05-1994 401746 740533 07-27-
1994 ... ... 07-19-1994 20 0 Redacted - Privacy Act J1421 ... WR1
2931238 MIDMONMOUTH REALTY A 2913828 SALO 15 0 Z 13.02 114 36 25 05-11-1994 401733 740506 06-3
0-1994 ... Pl 1 COLDSTREAM WAY 05-19-1994 15 (Redacted - Privacy Act J1330 ... ... WR1
2931239 MIDMONMOUTH REALTY A 2913828 SALO 15 0 M 13.02 114 36 25 05-11-1994 401733 740506 06-3
0-1994 ... ... MW-4 1 COLDSTREAM WAY 05-19-1994 11 0 Redacted - Privacy Act[1330 ... ... WR]
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2931240 MIDMONMOUTH REALTY A 2913828 SALO 15 0 M 13.02 114 36 25 05-11-1994 401733 740506 06-3
0-1994 ... ... MW-6 1 COLDSTREAM WAY 05-19-1994 13 0 Redacted - Privacy Act J1330 ... ... WR1
2931561 EATONTOWN BOROUGH OF 2913599 GARS 20 0 M 2 54 11 25 07-05-1994 401813 740413 08-30-199
4 ... ,, 1 131 LEWIS ST 08-16-1994 14 0 Redacted - Privacy Actaelo ... wri
2931562 EATONTOWN BOROUGH OF 2913599 GARS 20 U M 2 54 11 25 U7-05-1994 401813 740413 08-30-199
4 ... ... 2 131 LEWIS ST 08-16-1994 13 0 1 Redacted - Privacy Act 71610 ... ... WRL
2931563 EATONTOWN BOROUGH OF 2913599 GARS 20 0 M 32 12 11 25 07-05-1994 401813 740413 08-30-19
94 ... .. 1 131 LEWIS ST 08-15-1994 13 0 Redacted - Privacy Act J1610 ... ... WR1
2932158 FORT MONMOUTH GOLF C 2913597 PICK 60 15 G NA NA 11 25 09-27-1994 401813 740440 11-04-1
994 ..... TINTON AVENUE 10-20-1994 50 0 Redacted - Privacy Act M1041 ..... WR1
2932159 FORT MONMOUTH GOLF C 2913597 PICK 60 15 G NA NA 11 25 09-27-1994 401813 740440 11-04-1
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2932160 FORT MONMOUTH GOLF C 2913597 PICK 60 15 G NA NA 11 25 09-27-1994 401813 740440 11-04-1
994 ... ... TINTON AVENUE 10-19-1994 50 0 Redacted - Privacy Act M1041 ... ... WR1
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2932162 FORT MONMOUTH GOLF C 2913597 PICK 60 15 G NA NA 11 25 09-27-1994 401813 740440 11-04-1
994 ...... TINTON AVENUE 10-27-1994 48 0 Redacted - Privacy Act M1041 ... WR1
2932163 FORT MONMOUTH GOLF C 2913597 PICK 60 15 G NA NA 11 25 09-27-1994 401813 740440 11-04-1
994 ...... TINTON AVENUE 10-20-1994 45 0 Redacted - Privacy Act $1041 ..... WR1
2932590 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... ... MW-26 BLDF 167 12-19-1994 15 0 Redacted - Privacy Act J1455 ... WR1
2932591 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... ... MW-27 BLDF 167 12-19-1994 15 0 Redacted - Privacy Act J1455 ... ... WR1
2932592 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... ., MW-28 BLDF 167 12-19-1994 15 0 1 Redacted - Privacy Act J1624 ... ... WR1
2932593 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... ... MW-29 BLDF 167 12-19-1994 15 0 Redacted - Privacy Act
                                                                         J1624 ... WR1
2932594 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... ... MW-30 BLDF 167 12-16-1994 16 0 Redacted - Privacy Acts1455 ... WR1
2932595 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... ... MW-31 BLDF 167 12-16-1994 15 0 Redacted - Privacy Act
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2932596 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... MW-32 BLDF 167 12-16-1994 15 0 Redacted - Privacy Act J1624 ... WR1
2932597 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... ... xw-33 BLDF 167 12-15-1994 15 0 Redacted - Privacy Act 1624 ... ... wr.1
2932598 U. S. ARMY (DIRECTOR 2913824 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401746 7405
19 04-20-1995 ... ... MW-08 BLDF 167 01-10-1995 15 0 Redacted - Privacy Act J1624 ... ... WR1
2932599 U. S. ARMY (DIRECTOR 2913831 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401800 7404
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2932600 U. S. ARMY (DIRECTOR 2913831 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401800 7404
40 04-20-1995 ... ... MW-35 BLDF 167 01-03-1995 15 0 Redacted - Privacy Act J1455 ... ... WR1
2932601 U. S. ARMY (DIRECTOR 2913831 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401800 7404
40 04-20-1995 ... ... MW-36 BLDF 167 01-04-1995 15 0 Redacted - Privacy Act J1455 ... ... WR1
2932602 U. S. ARMY (DIRECTOR 2913831 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401800 7404
40 04-20-1995 ... ... MW-06 BLDF 167 01-10-1995 14 0 Redacted - Privacy Act '1455 ... ... WR1
3932603 U. S. ARMY (DIRECTOR 2913831 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401800 7404
 \0 04-20-1995 ... ... MW-09 BLDF 167 01-10-1995 15 0 Redacted - Privacy Act 31624 ... ... WR1
 932604 U. S. ARMY (DIRECTOR 2913821 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401800 7405
 12605 U. S. ARMY (DIRECTOR 2913821 ANDE 25 0 M 1,1,8.01 1,53,54 11 25 11-29-1994 401800 7405
   04-20-1995 ... ... MW-10B BLDF 167 01-10-1995 15 0 Redacted - Privacy Act J1624 ... ... WR1
   \894 MONMOUTH CO. BLDGS. 2913843 PLAN 20 0 M 21.01 97 36 25 03-01-1995 401720 740533 04-17-
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    395 MONMOUTH CO. BLDGS. 2913843 PLAN 20 0 M 21.01 97 36 25 03-01-1995 401720 740533 04-17.
     ... ... MW-5 PINE BROOK ROADS 03-29-1995 17 30 Redacted - Privacy Act (0775 ... WR1
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2932896 MONMOUTH CO. BLDGS. 2913843 PLAN 20 0 V 21.01 97 36 25 03-01-1995 401720 740533 05-11-
1995 ... ... SVE-1 PINE BROOK ROAD 03-30-1995 10 0 ASSANTE, MICHAEL L. M0775 ... ... WR1
2932897 MONMOUTH CO. BLDGS. 2913843 PLAN 20 0 J 21.01 97 36 25 03-01-1995 401720 740533 04-27-
1995 ... ... ... ... ... ... WR1
2933763 US ARMY - FORT MONMO 2913597 PARE 20 0 M N/A N/A 38 25 07-19-1995 401813 740440 10-02-
1995 ... ... 2018 BLDG 2018 09-12-1995 16 0 Redacted - Privacy Act J1540 ... ... WRI
2934753 MID MONMOUTH REALTY 2913829 PARE 15 0 M 13B,1201 114 36 25 01-10-1996 401733 740453 02
-14-1996 ... MW-1A 1 COLDSTREAM WAY & PINE B 02-10-1996 10.5 0 Redacted - Privacy Act 11540 ... ...
2934754 MID MONMOUTH REALTY 2913829 PARE 15 0 M 13B,1201 114 36 25 01-10-1996 401733 740453 02
-14-1996 ... ... MW6 1 COLDSTREAM WAY & PINE B 02-10-1996 11 0 1Redacted - Privacy Act 71540 ... ... WR1
2934755 MID MONMOUTH REALTY 2913829 PARE 15 0 M 13B,1201 114 36 25 01-10-1996 401733 740453 02
-14-1996 ... ... MW 7 1 COLDSTREAM WAY & PINE B 02-10-1996 9.5 0 Redacted - Privacy Act 11540 ... ... WR
       Redacted - Privacy Act Redacted - Privacy Act PICK 100 15 G 1 93.7 11 25 04-23-1996 401720 740413 05-28-1996
2935236
 ... ... 22 SHERWOOD DR. 05-06-9196 119 12 Redacted - Privacy Act J13762 ... WR1
2935462 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.02 55 36 25 05-29-1996 401813 740533 10-0
9-1996 ... ... POND VIEW DR. 08-22-1996 181 20 Redacted - Privacy Actj13762 ... wri
2936178 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.10 55 36 25 10-31-1996 401813 740533 03-2
6-1997 ... ... POND VIEW DR. 01-22-1997 182 0 Redacted - Privacy Act J13762 ... ... WR1
2936179 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.09 55 36 25 10-31-1996 401813 740533 03-1
7-1997 ... ... POND VIEW DR. 01-15-1997 188 20 Redacted - Privacy Act J13762 ... ... WR1
2936202 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.03 55 36 25 11-07-1996 401813 740533 06-1
2-1997 ... ... POND VIEW DR 05-01-1997 182 20 Redacted - Privacy Act J13762 ... ... WRL
2936204 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.08 55 36 25 11-07-1996 401813 740533 06-1
7-1997 ... ... POND VIEW DR 04-07-1997 181 20 Redacted - Privacy Act J13762 ... ... WR1
2936284 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.01 55 36 25 11-25-1996 401813 740533 05-2
0-1997 ... ... POND VIEW DR 03-20-1997 182 20 Redacted - Privacy Act [13762 ... ... WR]
2936563 MONMOUTH CTY DEPT OF 2913843 TABA 10 0 V 21.01 97 36 25 02-05-1997 401720 740533 03-11
-1997 ... ... PINE BROOK RD 03-03-1997 11 0 Redacted - Privacy Act JR M1289 ... ... WR1
2936564 MONMOUTH CTY DEPT OF 2913843 TABA 6 0 V 21.01 97 36 25 02-05-1997 401720 740533 03-11-
1997 ... ... VP-1 PINE BROOK RD 02-27-1997 4 0 Redacted - Privacy Act M1066 ... ... WR1
2936565 MONMOUTH CTY DEPT OF 2913843 TABA 6 0 V 21.01 97 36 25 02-05-1997 401720 740533 03-11-
1997 ... ... VP-2 PINE BROOK RD 02-27-1997 5 0 Redacted - Privacy Act M1066 ... ... WR1
2936566 MONMOUTH CTY DEPT OF 2913843 TABA 6 0 V 21.01 97 36 25 02-05-1997 401720 740533 03-11-
1997 .... VP-3 PINE BROOK RD 02-27-1997 5 0 Redacted - Privacy Act M1066 ... WR1
2936567 MONMOUTH CTY DEPT OF 2913843 TABA 6 0 V 21.01 97 36 25 02-05-1997 401720 740533 03-11-
1997 ... ... VP-4 PINE BROOK RD 02-27-1997 5 0 Redacted - Privacy Act M1066 ... ... WRI
2936568 MONMOUTH CTY DEPT OF 2913843 TABA 35 0 V 21.01 97 36 25 02-05-1997 401720 740533 03-11
-1997 ... ... AS-2 PINE BROOK RD 02-28-1997 30 0 Redacted - Privacy Act M1066 ... ... WR1
2936569 MONMOUTH CTY DEPT OF 2913843 TABA 35 0 V 21.01 97 36 25 02-05-1997 401720 740533 03-11
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2936570 MONMOUTH CTY DEPT OF 2913843 TABA 35 0 V 21.01 97 36 25 02-05-1997 401720 740533 03-11
-1997 ... AS-4 PINE BROOK RD 03-03-1997 28 0 Redacted - Privacy Actm1066 ... ... wr1
2936571 MONMOUTH CTY DEPT OF 2913843 TABA 20 0 M 21.01 97 36 25 02-05-1997 401720 740533 03-11
-1997 ... ... MW-6 PINE BROOK RD 02-27-1997 15 0 Redacted - Privacy Act M1066 ... ... WR1
2936653 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.07 55 36 25 02-28-1997 401813 740533 10-0
6-1997 ... ... POND VIEW DRIVE 08-19-1997 180 20 Redacted - Privacy Act M13762 ... WR1
2936654 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.04 55 36 25 02-28-1997 401813 740533 06-2
7-1997 ... ... POND VIEW DRIVE 05-23-1997 181 20 Redacted - Privacy Act J13762 ... ... WR1
2936658 MATZEL & MUMFORD @ W 2913579 PICK 180 15 D 1.05 55 36 25 03-04-1997 401813 740533 07-2
4-1997 ... ... POND VIEW DR 06-18-1997 165 20 Redacted - Privacy Act J13762 ... ... WR1
2936753 LAMONTS CORP 2913852 TOTA 10 0 M 31.02 114.01 36 25 03-31-1997 401720 740506 04-21-199
7 ... ... MW-7R 46 PARK RD 04-08-1997 8 0 Redacted - Privacy Act J. M1328 ... ... WR1
2936968 Redacted - Privacy Act Redacted - Privacy Act PUTM 100 20 G 7 93.8 11 25 05-20-1997 401720 740426 08-06-19
97 ... 1 1 SHERWOOD DRIVE 07-18-1997 80 20 Redacted - Privacy Act J1054 ... WR1
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2936969 1 PUTN 100 20 G 6 93.8 11 25 05-20-1997 401720 740426 08-06-1997
1 5 SHERWOOD DRIVE 07-26-1997 75 20 Redacted - Privacy Act 1054 WR1
2937036 MONMOUTH CO. DEPT. O 2913843 TABA 10 0 V 21.01 97 36 25 06-04-1997 401720 740533 06-23
-1997 SVE-3 PINE BROOK RD. 06-20-1997 7 0 Redacted - Privacy Act J1466 WR1
2937037 MONMOUTH CO. DEPT. O 2913843 TABA 35 0 V 21.01 97 36 25 06-04-1997 401720 740533 06-23
-1997 PINE BROOK RD. 06-20-1997 23 0 Redacted - Privacy Act J1466 WR1
2937899 DIRACTORATE OF PUBLI 2913822 HPDR 50 0 B N/A N/A 38 25 11-20-1997 401800 740506 12-17-
1997 B-1 BLDG. 167 12-08-1997 47 0 Redacted - Privacy Act J1053 WR1
2938654 MONMOUTH REG. HIGH \$ 2913584 PICK 180 15 U 1.11 55 36 25 05-15-1998 401826 740519
ONE NORMAN J FIELD WAY WR1
2938660 Redacted - Privacy Actredacted - Pri
145 NOTTINGHAM DRIVE WR1
2939028 Redacted - Privacy Act Redacted - Privacy Act PICK 180 15 1 7 54 36 25 07-30-1998 401813 740519
521 TINTON AVE WRL

Form 87-5M-4-49

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DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT Distriction of Water Policy & Symple

Permit No. 29-151
Application No.

	<u>-</u>	er Policy & Supply	County
	WELL	RECORD	County 213, \$15
1. OWNER. Redacted	- Privacy Act	ADDRESS KEO	acted - Privacy Act
Owner's Well No.	./	șurface elevay	ION Feet
Owner's Well No.	fetwer Tribas	Tell . In Bis	(Altore mean je leval)
3. DATE COMPLETED	4 15 1951 DRI	LLER Malle h Gh	
			TOTAL DEPTH 68.6 Feet
5. CASING: Type Mankad		Diameter 4 In	iches Length 49 6 Feet
6. SCREEN: Type Nov.	Size of Opening	DiameterIn	iches Length Feet
Range in Depth Bottom	Feet Feet	Geologic Formation.	Jacque 16ch
Tail piece: Diameter			LengthFeet
7. WELL FLOWS NATURAL	LLYGallons	per Minute at	Feet above surface
Water rises to			
	/ 1 /	<i>n</i>	Gallons per minute
Static water level before p	ounding 30	ft	Feet below survice
Pumping level 25	feet be	low surface after	hours pumping
Drawdown 5	Foot Specific Co.	ponity 2	Gals. per min. per ft. of drawdown
DIAWUVWII	,ree, specific Ca	Pacity	
	plunger pury		al pail
How Pumped _ dep_well Observed effect on nearby 9. PERMANENT PUMPING	wells purpose EQUIPMENT:	How measured	
How Pumped day well Observed effect on nearby	wells EQUIPMENT:	How measured 5	Gallons per minute
How Pumped _ dep_well Observed effect on nearby 9. PERMANENT PUMPING	wells EQUIPMENT:	How measured 5	ed paid
How Pumped des well Observed effect on nearby 9. PERMANENT PUMPING Type Skalle feel How Driven leeled Depth of pump in well	wells EQUIPMENT: Jel purp Teet	Capacity Horse Power Depth of foot piece in	Gallons per minute R.P.M. 35
How Pumped des well Observed effect on nearby 9. PERMANENT PUMPING Type Skalle feel How Driven leeled Depth of pump in well	wells EQUIPMENT: Jel purp Teet	Capacity Horse Power Depth of foot piece in	Gallons per minute R.P.M. 35
How Pumped des well Observed effect on nearby 9. PERMANENT PUMPING Type Skalle feel How Driven leeled Depth of pump in well	wells EQUIPMENT: Jel purp Teet	Capacity Horse Power Depth of foot piece in	Gallons per minute R.P.M. 35
How Pumped des well Observed effect on nearby 9. PERMANENT PUMPING Type Skalle feel How Driven leeled Depth of pump in well	wells EQUIPMENT: Jel purp Teet	Capacity Horse Power Depth of foot piece in	Gallons per minute R.P.M. 35
How Pumped des well Observed effect on nearby 9. PERMANENT PUMPING Type Skalle feel How Driven leeled Depth of pump in well	wells EQUIPMENT: Jel purp Teet	Capacity Horse Power Depth of foot piece in	Gallons per minute R.P.M. 35
How Pumped deputed Observed effect on nearby 9. PERMANENT PUMPING Type Shalls feelf How Driven believed Depth of pump in well 10. USED FOR domes 11. QUALITY OF WATER Taste 3	Wells EQUIPMENT: Jel purpo So Feet L. On July dor	Capacity Horse Power Depth of foot piece in the second of the second o	Gallons per minute R.P.M. 35
How Pumped deputed Observed effect on nearby 9. PERMANENT PUMPING Type falls fell How Driven letter Depth of pump in well 10. USED FOR downer Taste 3 00 12. LOG (Gillar)	wells EQUIPMENT: Jel purpose Feet A 7.0 fut dor	Capacity Horse Power Depth of foot piece in value (Average Maximum Sample:)	Gallons per minute R.P.M. 35 70 well Feet Gallons Daily Gallons Daily Yes No. Temperature °F Are samples available?
How Pumped deputed Observed effect on nearby 9. PERMANENT PUMPING Type Skalle full How Driven believed Depth of pump in well 10. USED FOR deputed 11. QUALITY OF WATER Taste 10. 12. LOG (Gill 13. SOURCE OF DATA 14. DATA OBTAINED BY	wells EQUIPMENT: Jel purpo 30 Feet The To fut dor we details on back of sheet or on a	Capacity Horse Power Depth of foot piece in value (Average Maximum Sample:) Color DATE	Gallons per minute R.P.M. 35 well Feet Gallons Daily Gallons Daily No. Temperature °F

43-51 57-53 53-17 67- 68'6" sand tiesing gien

29.13.8.5.4

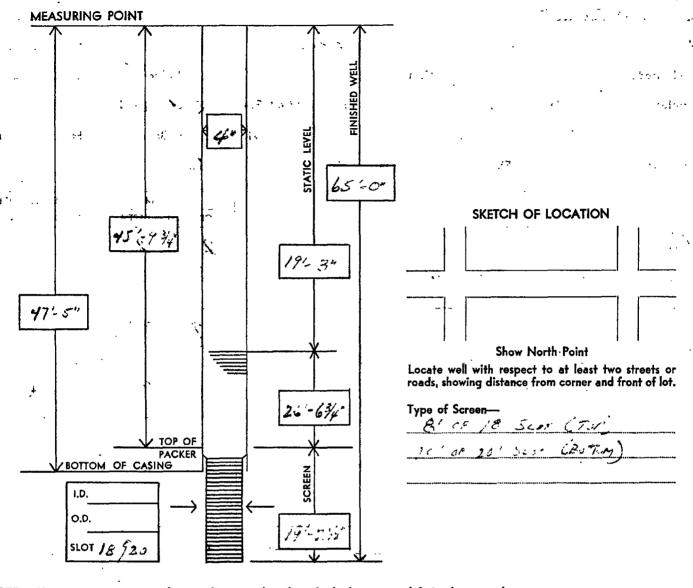
Form '87-5M

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT Division of Water Policy & Supply WELL RECORD

Permit No. <u>29-//2/</u>
Application No
County Monmouth
29.13 854

1.	OWNER N.J. Hway Ruth	ADDRESS 1035 PKway Ave Trenton
	Owner's Well No.	_ SURFACE ELEVATIONFeet
2.	LOCATION Toll Area 5 (Shrews bury)	#3D Garden St. PKwan
3.	DATE COMPLETED 8-4-54 DRIL	#3B H3B Garden St. PKway LER C.W. Lauman , Bethpage , L.
4.	DIAMETER: Top Inches Bottom	Inches TOTAL DEPTH <u>£9</u> Feet
5.	CASING: Type Woonght Steel Size of Top 8'-18 sh	DiameterInches Length
6.	SCREEN: Type Everdur Opening Rod. 10-20 "	Diameter / Inches Length /92/4 Feet
	Range in Depth Top	Geologic Formation Vancenton
7		per Minute atFeet above surface
	Water rises toFe	
8.	RECORD OF TEST: Date	Yield 22-2 Gallons per minute Feet below surface clow surface after 2 hours pumping Capacity 49 Gals. per min. per ft. of drawdown How measured
	Observed effect on nearby wells	
	Depth of pump in well 35 Feet Depth of Air Line in well Feet USED FOR Several	Capacity Gallons per minute Horse Power R.P.M. 3450 Depth of Foot piece in well Feet Type of Meter on Pump AMOUNT Maximum Gallons Daily Gallons Daily
11.	QUALITY OF WATER	Sample: Yes No
	TasteOdor	Color TemperatureOF
		parate sheet) Are samples available? ———————————————————————————————————
13.	SOURCE OF DATA - Files	
14.	DATA OBTAINED BY <u>Ale Kreitma</u>	DATE 2-15-55
	(Wote: Use other side of this sheet for additional information, shotch map, shotch of special casing arrangement	mation such as log of materials penetrated, analysis of the its, etc.)

SUPPLY WELL LOG Jile 4-	3:6	29.13		PCC No	- 112	
JOB 41 GARDEN STATE PARKWAY	Addres	TOLLA	REA #3	B, SUR	ENSEU	ey
Date Started 7-2/-54 Completed	7-2	8-54	D	riller <i>FIPPL</i>	61958	***************************************
Diameter # In. 29,13.854	Measure	d from Grad		;	.	
Depth	Above	F t _p	In.	Below	Ft.	In.
Static Level /9' Ft. 3"	Elevation	69.	99 Ft.			
			STR	ATUM	TEMF	ERATURE
SKETCH OF LOCATION	-	<u> </u>	THICKNESS	DEPTH-	SAND	WATER
FILE	-+		20	20'		
GREENISH YELLOW SIZNE WITH CL	براوا		.4.	£ :-	:	
FINE & SHART GREENISH YELLOW SIX	WL WIZ	W CLAS				1
\$ 6174	, ,		71	37'	_ }	
FINE GREENING WITH Supplied by the supplied of	4 1	,			-	
Locate well with respect to st loss two reals or reads, showing distinct opens and with the point of WTTIW	, , 1	:	' چي	40'		15
FINE YELLOWISH GREW SAM WI	ند مزیم میلاد	عار بعد أبعاد ب	4'	441		N.
CLAY, SILT & LESS MICH	-			7	1	
FINE GREEN SAND & CLAY, SILT A	W) 52 14	100 12	13/1	N. 85550 N	NOTE:	
FINEE GEEN SAND, DAKE CE, MIRE					\$.1 ₁	
\$ M1.4				75	.tc	
		ا مداع		81.	1012	
FINE GLANGGNITH SMIN CLA	6 = 147	7 171617				
פר not left in the פוסטיל	edlad, in	ten lengta a	state diama	וואז שנכ רצבין	f outer cas	1-27 JM
n of deep-dates and male or famale through	a la malia	i aab taas	n sin marin de	ila hadalali	e i e sara : l	3: 3:
(and of element to shell this sales of the	.11 15 110114	117803 13980	e vib 1 sett in	in no rotten.	6, 11,221,	31.57
				<u> </u>		2)1)1 (IV) 1
	·		-		-	
	·	<u> </u>				
					*	
	-, ,					
		-	_			
						
						
						6.65. 4.10



NOTE — If outer casings are used state diameter, length and whether or not left in the ground.

W405-7/53-3M

NOTE — If screen is finished off with riser, give exact description of top of riser—(size and male or female thread.)

REMARKS		 		•		
		 · · · · · · · · · · · · · · · · · · ·				
·		 				
	<u>.</u> .			-		
				-		
		-				
			•			

29-13-854 29-1121

United States Testing Company, Inc.

NUMBER



HOBOKEN, N. J. TELEPHONE HOBOKEN 3-3166

76643-A (Refer to this number)

REPORT

2901121

August 23, 1954.

Client

New Jersey Highway Authority e/o Miller-Warden Associates

Box 19-B - R.D. #1 Eatontown, New Jersey.

Toll Area 3B

Subject

Well Water Survey -- Sample taken from Shrewsbury by United States Testing Company, Inc. Representative on August 4, 1954.

PURPOSE OF TEST:

The object of the test was to analyze the water for conformance to Article 2.3.10 Water Quality Guarantee of the Garden State Parkway supplementary specifications Contract No. 148 - Sections 7, 8, 10 and 11.

METHOD OF TEST:

The tests were conducted in accordance with the Standard Methods for the Examination of Water and Sewage, 9th Edition, American Public Health Association.

RESULTS OF TEST:	Year of the	
	<u> Kesults</u>	A equirements
Bacteriological	Negat ive	No evidence of presence of the Coliform group.
	Results	<u>Requirements</u>
Physical		
Turbidity	25 ppm	Less than 5 ppm (silica scale)
	Results	Requirements
01 47 13 441		
Chemical Constituents		
Arsenic	Not found	Less than 0.05 ppm
Arsenic Selenium	Not found	Less than 0.05 ppm
Arsenic Selenium Hexavalent Chromium	Not found	Less than 0.05 ppm Less than 0.05 ppm
Arsenic Selenium Hexavalent Chromium Linc	Not found Not found Less than 1 ppm	Less than 0.05 ppm Less than 0.05 ppm
Arsenic Selenium Hexavalent Chromium Zinc Iron) combined	Not found Not found Less than 1 ppm 0.47 ppm	Less than 0.05 ppm Less than 0.05 ppm Less than 15 ppm
Arsenic Selenium Hexavalent Chromium Linc	Not found Not found Less than 1 ppm	Less than 0.05 ppm Less than 0.05 ppm

Page of 2

United States Testing Company, Inc.

Supervised by

M.J. Maziarski

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CONTRACTOR AND ARRORS HAS FOR THE EXECUTIVE CHEST THE SURENT TO MAIOM THEY ARE ADDRESSED AND THE THE LINE OF THE PLANE OF UNITED STATES THOSTING U.S. I. Y. INC., WEST A LIGHE USIN PRICE WAITTEN APPLICA WHLY TO THE SAUNCE TESTED INDIANE HOT HECESSARILY HIDICATIVE OF THE CLASSIES OF APPARENTLY IDENTICALLY AND ASSISTED.

WETABLISHED 1000

United States Testing Company, Irec. 29-112/



HOBOKEN, N. J. TELEPHONE: HOBOKEN 3-3166

29,13.854 2901121

76643-A (Reter to this number)

REPORT

August 23, 1954.

NUMBER

Client

New Jersey Highway Authority c/o Miller-Warden Associates

Box 19-B - R.D. #1 Estontown, New Jarsey.

Subject:

Well Water Survey -- Sample taken from Shrewsbury by United States Testing Company, Inc., representative on August 4, 1954.

Chemical Constituents (Cont'd)

	Results	Requirements		
Sulphates (as SO,) Phenolic Compounds (as Phenol) Total Solids Magnesium Nitrates (as NO ₃)	22.0 ppm Not found 133 ppm 1.0 ppm 0.1 ppm	Less than 250 ppm Less than 0.001 ppm Less than 1000 ppm Less than 125 ppm Less than 50 ppm		

CONCLUSION:

The water sample, identified as above does not meet the turbidity requirements of the Garden State Parkway Contract No. 148 - Section 7, 8, 10 and 11.

CONTINUED - PAGE

#2

Land the state of the state of

C.W. LAUMAN & CO., INC.

WATER ANALYSIS

2901121

BETHPAGE, L. L.

Hicksville 3-2305

29-13.854

29-1121 No. 531

50 CHURCH ST., N. Y. C.

Digby 9-0318 Date 8/25/54

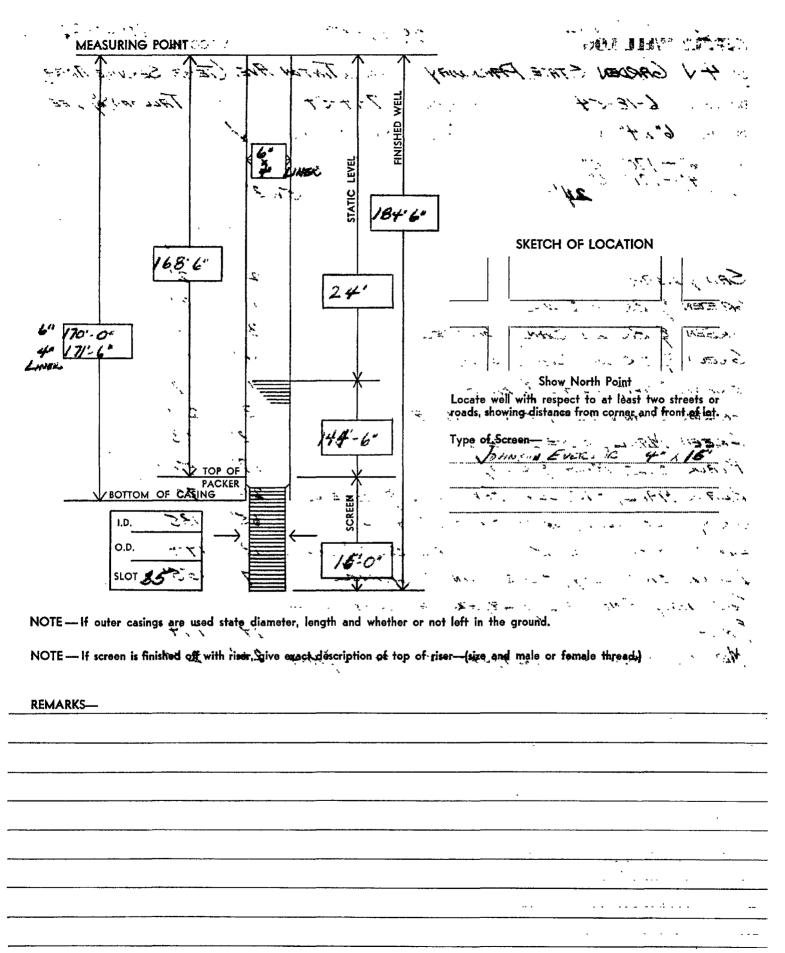
Address Toll Area 3B -	Shrewsbury		·		
Source of Sample 12 hr test					
Collection Date		Point of	Collection	i •	
. 8/4/54		pump dis	charge		
2		 			
3		······································			
					
	· · · · · · · · · · · · · · · · · · ·	1	2	3	4
Hydrogen Iron Conc. (pH)		7.3			
Free Carbon Dioxide, as CO2	ppm	7.8			
Alkalinity "P", as CaCO3	ppm	0			
Total Alkalinity, as CaCO3	· ppm	78.0	•		
Hardness, total, as CaCO3	ppm	92.			
Chlorides, as Cl	ppm	6			
Iron, as Fe	ppm	1.2			
Nitrates, as N	ppm	0.			
Turbidity, as SiØ2	. ppm	7.2			
Hexavalent Chromium	ppm	0.0			
•					
				<u> </u>	
Remarks, Corrosion index	19.9 non co	rrocive - 1	ow COo	and high	tot.
Iron high - Treatm			1	arra tra der	44.01
Analyzed by HRB			UMARI &	CO. INC.	
8/25/54	 	by ВО А	11 /1		

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT Division of Water Policy & Supply WELL RECORD

Permit No. <u>29-//54</u>
Application No.
County Monmouth
29.13.812

1.	OWNER N. J. Hway Auth ADDRESS 1035 Phway Ave Trenton
	Owner's Well No SURFACE ELEVATION Feet
2.	LOCATION Temp. Service Area Garden St. PKung & Tinton Rd , N.J.
3.	DATE COMPLETED 8-11-54 DRILLER CW Lawman, Beth page, L.
	DIAMETER: Top 6 Inches Bottom / Inches TOTAL DEPTH Feet
	CASING: Type Wraught Stee Diameter 6 Inches Length 120 Feet
6.	SCREEN: Type Freedock Opening 35 5/ Diameter 4 Inches Length 6 Feet
	Range in Depth Top 168'6" Feet Geologic Formation Ted Bank Bottom 184'6" Feet
	Tail piece. Diameter Inches Length Feet
7.	WELL FLOWS NATURALLY Gallons per Minute at Feet above surface Water rises to Feet above surface
8.	RECORD OF TEST: Date 5-11-54 Yield 22.3 Gallons per minute
٠.	Static water level before pumping 24 Feet below surface
	Pumping levelhours pumping
	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How Pumped How measured
	now ranged
	00 1
_	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
9.	PERMANENT PUMPING EQUIPMENT: Type Capacity Gallons per minute
9.	PERMANENT PUMPING EQUIPMENT:
9.	PERMANENT PUMPING EQUIPMENT: Type
	PERMANENT PUMPING EQUIPMENT: Type
	PERMANENT PUMPING EQUIPMENT: Type
10.	PERMANENT PUMPING EQUIPMENT: Type
10.	PERMANENT PUMPING EQUIPMENT: Type
10.	PERMANENT PUMPING EQUIPMENT: Type
10. 11.	PERMANENT PUMPING EQUIPMENT: Type

SUPPLY WELL LUG	•			- TINUCE M	
Job 4 V GARDEN STATE PARKWAY	Address TINTON	I AVE. C	TEMP S	ERVICE A	1889)
Date Started 6-18-54 Completed	7-14-54	Dr	iller TALL	now Set	les .
Diameter. 6 X 4" In. 29.13.812	Measured from Grad	de Pes	□ No		
Depth 6"- 170 Ft. 0" In.	Above Ft.	ln.	Below	Ft.	ln.
Static Level Ft fn.	Elevation	6.3 _{Ft.}	1	;	
-	1	STRA	TUM	TĖMPE	RATURE
Notive to light	·	THICKNESS	··· DEPTH-	SAND	WATER
SANDY LOAM	· · · · · · · · · · · · · · · · · · ·	2'	2.		
GREEN & BROWN SAND		/*	3'	H02-	
GREEN & BROWN SAND & GRAVER		3'	6.		
GREWN & BROWN SANDY CLAY		4'	10'	1	. '4
BLACK SILT CLAY & MICA		7'	17'	,	-
GREW SMUY CLAY, SUT & MKG		3'	20'	Į·	
GREEN MARL, SIME MATER		13'	<i>3</i> 3'	"	
BLACK SILT, MILA & CLAY		17'	50.	Tinton	
BLACK MARL, SILT, CLAY, FEN GRITS	5 SNELL	20	70 1	10/19/17	B.
GRAY SILT, CLAY, GRITS, SNEEL &	MICA	\$5'	135"	TEN Ma	w.k.
LIGHT GRAY CLAY, BLACK MARI,	SUT & SHOTL	13'	148'	17 4	
BLACK SUT, CLAY, SOME SAND &	Terra.	7'	1554.	701 4	·
SIT, VERY FINE SAND & LAYERS OF	CLAY, SHELL				
5 MCA Strange Sit of the form	.∋dr. Altro ipi i rol	rer 99 tests		ir surer cat	
MEDIUM COMES STONA LAYERS OF C	erry, SHIF MICH	26 i	w 2 60 tie	! sôfeon is	=3roxt
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STABLISHED 1999

United States Testing Company, Inc.

HOBOICEN, N. J. TELEPHONE HOBOKEN 3-3106 NUMBER
76643-B
(Refer to this number)

REPORT

29.13.812

August 27, 1954.

Clients

New Jersey Highway Authority C/e Miller-Warden Associates Box 19 -8 R.D. \$1 Ententown, New Jersey

Subject

Well Water Survey -- Sample taken from Tinton Ave. Area By United States Testing Company representative on 8/13/54.

Purpose of Test:

The ebject of the test was to analyse the water for conformance to Article 2.3.10 Water Quality Guarantee of the Garden State Parkway supplementary specifications Contract No. 146 - Sections 7, 8, 10 and 11.

Method of Test:

The tests were conducted in accordance with the Standard Methods for the Examination of Water & Sewage, 9th Edition, American Public Health Association.

Results of Test:

	Results	Requirements
Bacteriological	Negative	No evidence of presence of the Coliform group.
	Results	Requirements
Physical Turbidity	4 ppm	Less than 5 ppm (silica scale)
	Resul ts	Requirements
Chemical Constituents		
Arsenic Selenium	Not found Not found	Less than 0.05 ppm Less than 0.05 ppm
Hexavalent Chromium	Less than 0.02 ppm	Less than 0.05 ppm
Zinc	Less than 1 ppm	Less than 15 ppm
Manganese Combined	Not found Less than O.1 ppm	Less than 3.0 ppm
Chloride (as Cl)	10.7 ppm	Less than 250 ppm.

Page of 2

Supervised by

Ciki Crocker

United States Testing Company, Inc.

M.J. Maziarski

MZ

OUR LETTERS AND REPORTS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED. AND THEIR COMMUNICATION TO ANY CITEMA OR THE USE OF THE NAME OF UNITED STATES TESTING COMPANY, INC. MUST RECEIVE OUR PRIOR WRITTEN APPROVAL. OUR LETTERS AND REPORTS APPLY ONLY TO THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATIVE OF THE QUALITIES OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS.

G 11AR1-7 54 18

ESTABLISHED 1900

United States Testing Company, Inc.



HOBOKEN, N. J.

TELEPHONE HOBOKEN 3-3166

NUMBER
76643-E
(Refer to this number)

REPORT

29,13.812

August 27, 1954.

Client

New Jersey Highway Authority c/o Miller-Warden Associates

Box 19-B R.D. #1 Eatontown, New Jersey

Subject:

Well Mater Survey -- Sample taken from Tinton Ave. Area By United States Testing Company representative on 8/13/54.

Chemical Constituents (Cont'd)

	Results	<u>Requirements</u>		
Sulphates (as SO ₁) Phenolic Compounds (as Phenol) Total Solids Magnesium Nitrates (as NO ₃)	12 ppm Not found 136 ppm 2 ppm 0.1 ppm	Less than 250 ppm Less than 0.001 ppm Less than 1000 ppm Less than 125 ppm Less than 50 ppm		

Conclusion:

The water sample, identified as above, meets the requirements of the Garden State Parkway Contract No. 148 - Section 7, 8, 10 and 11.

CONTINUED - PAGE #2

29-1154

C. W. LAUMAN & CO., INC.

WATER ANALYSIS

BETHPAGE, L. I. Hicksville 3-2305 29,13,812

50 CHURCH ST., N. Y. C.

Date.

Name	BYATE PARENT	<u> </u>			
Address SIEST AVE. 2					
Source of Sample	*				
Collection Date			f Collection		
1		PUMP DIA	CIAROR		
2					
3	***************************************				
4					
		_	_	_	_
		7.8	2	3	4
Hydrogen Iron Conc. (pH)		9.5	·····		
Free Carbon Dioxide, as CO2	ppm				
Alkalinity "P", as CaCO3	ppm				
Total Alkalinity, as CaCO3	ppm	**			
Hardness, total, as CaCO3	ppm	96			
Chlorides, as Cl	ppm	2.9			
Iron, as Fe	ppm	27000			
Nitrates, as N	ppm	23000			
Turbidity, as SiO2	ppm	-45			
Menovalent Chronium	Na.	0.0			
,					
c errealen indes « Remarks:	• 15.7 Ben (erceive &	leb alk	und Hard	nose
Analyzed by		C. W. LA	WAN & C	:O., INC.	
9/2/34 Date		by			

FORM 87- 10M

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT DIVISION OF WATER POLICY & SUPPLY

Permit No	29-3374
	1 No
County	15 0:01
29 29	13.818 13.818

WELL RECORD

	Well # I
1.	OWNERRedacted - Privacy Act ADDRESS _199-Port Monmouth, N.J.
	OWNERRedacted - Privacy Act ADDRESS199-Port Monmouth, N.J. Owner's Well No Feet Feet
	LOCATIONTinton Falls
3.	DATE COMPLETED 8/14/60 DRILLER A.P. Tice & Son
4.	DIAMETER: top 4 Inches Botton 4 Inches TOTAL DEPTH 68 Feet
5.,	CASING: Type Blk steel Diameter 4 inches Length 68 Feet
6.	Size of SCREEN: Typeno ne Opening Diameterinches LengthFeet
	Range Top Feet Geologic Formation Bottom Feet Feet
	Tail piece. DiameterInches LengthFeet
7.	WELL FLOWS NATURALLY 10 Gallons per Minute at Feet above surface
	Water rises toFeet above surface
8.	RECORD OF TEST: Date 8/15/60 gleld 10 gallons per minute
	Static water level before pumping 16 Feet below surface
	Pumping levelhours pumping
	Drawdown 28 Feet Specific Capacity Gals. per min. per ft. of drawdown
	How Pumped gas pump How measured 5 gallon buckett
	Observed effect on nearby wells none
9.	PERMANENT PUMPING EQUIPMENT:
	Type Hfrs. Name Rapi-Dayton
	Capacity 10 G.P.M. How Driven electric H.P. 1 R.P.M. 3400
	Depth of Pump in well cellar FeetDepth of Footpiece in wellFeet
	Depth of Air Line in wellFeetDepth of Meter on Pump
10.	USED FOR AMOUNT Average Gallons Daily
	Heximum 450 Gallons Daily
11.	QUALITY OF WATER 1rony Sample: Yes No. X
	Taste none Odor sylphur Color clear Temp. 54 of
12.	(Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13.	SOURCE OF DATA
14.	DATA OBTAINED BY Arthur p Tole Date 9/4/60
	(NOTE: Use other side of this sheet for additional information such as log of materials penetrated,

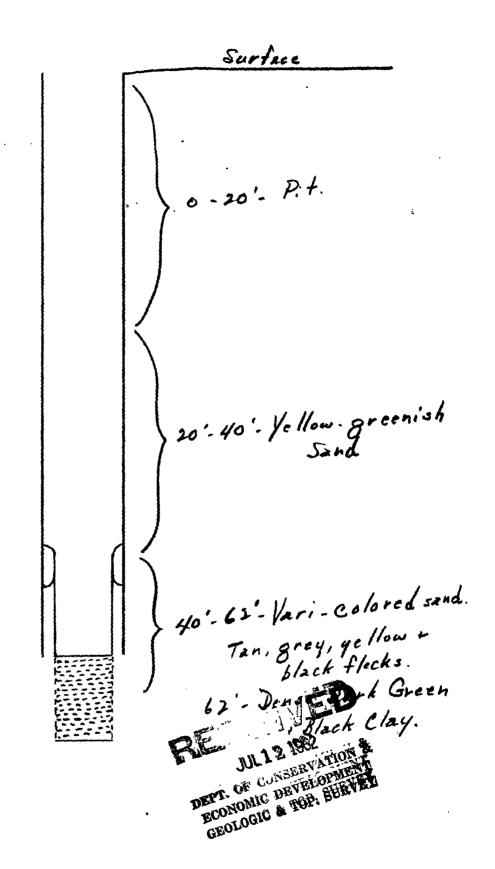
FORM 87

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT DIVISION OF WATER POLICY & SUPPLY

29-13-818 [d] Permit No. 39-3863
Application No.
• •
29.13.818 29.03863
29-03863

WELL RECORD

OWNERRedacted - Privacy Act ADDRESS Box 260 Nolan Rd. Morganvill N.
Owner's Well No SURFACE ELEVATION Feet
LOCATION Nolan Rd., Morganville, N. J.
DATE COMPLETED June 30, 1962 DRILLER Greenhalgh & Kaye
DIAMETER: topInches BottomInches TOTAL DEPTH 62 Feet
CASING: Type Black Steel Diameter 4 inches Length Feet
SCREEN: Type Cook Size of 25 Diameter 4 Inches Length 4 Feet
Range in Depth Top
Tail piece: DiameterInches LengthFeet
WELL FLOWS NATURALLY Gallons per Minute at Feet above surface
Water rises toFeet above surface
RECORD OF TEST: Date June 30, 1962 Yield 10 Gallons per minute
Static water level before pumping Feet below surface
STATE WATER 1878 DETOTE PUMPING
Pumping level 28 feet below surface after hours pumping
Pumping level 28 feet below surface after hours pumping Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown
Pumping level 28feet below surface afterhou's pumping DrawdownFeet Specific CapacityGals. per min. per ft. of drawdown How Pumped Cylinder
Pumping level 28
Pumping level 28 feet below surface afterhou's pumping DrawdownFeet Specific CapacityGals. per min. per ft. of drawdown How Pumped Cylinder
Pumping level 28
Pumping level
Pumping level 28 feet below surface after hou's pumping Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How Pumped Cylinder How measured 50 Gal. Drum Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name R.P.M. Capacity G.P.N. How Driven H.P. R.P.M. Depth of Pump in well Feet Depth of Footpiece in well Feet Depth of Air Line in well Feet Type of Meter on Pump Size Inches USED FOR Domestic AMOUNT Average Gallons Daily QUALITY OF WATER Good Sample: Yes No.
Pumping level
Pumping level 28 feet below surface after hou's pumping Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How Pumped Cylinder How measured 50 Gal. Drum Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name H.P. R.P.M. Capacity G.P.M. How Driven H.P. R.P.M. Depth of Pump in well Feet Depth of Footpiece in well Feet Depth of Air Line in well Feet Type of Meter on Pump Size Inches USED FOR Domestic AMOUNT Average Gallons Daily QUALITY OF WATER Good Sample: Yes No.
Pumping level



FORM 87 *

DEPARTMENT OF CONSERVATION AND ECONOMIC DEVELOPMENT DIVISION OF WATER POLICY & SUPPLY

Permit No. 29-5076
Application No.
29 13.818

WELL RECORD

۱.	OWNER Redacted - Privacy Act ADDRESS Wayside Road Tinton Falls M. J.
	Owner's Well No. ODE SURFACE ELEVATION Feet
	(Above mean sea level)
2.	LOCATION Wayside Road, Tinton Falls
3.	DATE COMPLETED May 24 /66 DRILLER WITLIAM R.Tice Sr.
4.	DIAMETER: top <u>four</u> inches Bottom <u>four</u> inches TOTAL DEPTH <u>96</u> Feet
5.	CASING: Type std. weight steel. Diameter four Indhes Length 84 Feet
6.	SCREEN: Type Size of Opening DiameterInches LengthFeet
	Range in Depth { Top Feet Geologic Formation
	Tail piece: DiameterInches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per Minute at Feet above surface
	Water rises toFeet above surface
8.	RECORD OF TEST: Date May 23/66 Yield Gallons per minute
	Static water level before pumping <u>The</u> Feet below surface
	Static water level before pumping <u>I4</u> Feet below surface while pumping IOOO g.p.h. for 4hrs Pumping level <u>I7</u> feet below surface after hours pumping
	Drawdown 3 Feet Specific Capacity Gals. per min. per ft. of drawdown
	How Pumped submersible test pump. How measured five gal.pail.
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type sybmersible Mfrs. Name MYERS
	Capacity
	Depth of Pump in well 40 Feet Depth of Footpiece in well Feet
	Depth of Air Line in wellFeet Type of Meter on Pump SizeInches
	USED FOR one family home Avoust Average Gallons Daily
10.	USED FOR one family home. AMOUNT Maximum Gallons Daily
11.	QUALITY OF WATER Hardness 6 g.p.g. Sample: Yes No
	Taste good Odor none Color clear Temp. 54 of
12.	LOG Are samples available? (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy)
13.	SOURCE OF DATA
14.	DATA OBTAINED BY William R. Tice Sr. Date May 1966
	(NOTE: Use other side of this sheet for additional information such as log of materials penetrated analysis of the water, sketch map, sketch of special casing arrangements etc.)

. rolsú 87

DEPARTMENT, OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Permit Nor 2	7-7536
Application N	·
County	

29.13.579

WELL RECORD 29 7536

١.	Vocational Educational Building OWNER M & R. Mechanical Contractors DDRESS P.O. Box 435. Highlands, N.UJ.
	Owner's Well No SURFACE ELEVATION 69 (Above mean sea level)
2.	LOCATION New Shrewsbury, N.J.
3.	DATE COMPLETED Sept. 24, 1974 DRILLER Kaye Well Drilling, Inc.
4.	DIAMETER: top 4 Inches Bottom 4 Inches TOTAL DEPTH 144 Feet
5.	CASING: Type Black Steel Diameter 4 Inches Length 131 Feet
6.	Stainless Steel Size of SCREEN: Type Johnson Opening 16 Diameter 4 Inches Length 10 Feet
	Range in Depth { Top Feet Geologic Formation
	Tail piece: DiameterInches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per Minute at Feet above surface
	Water rises toFeet above surface
8.	RECORD OF TEST: Date Sept. 24, 1974 Yield 20 Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level 100" Air Lipet below surface after hours pumping
	DrawdownFeet Specific CapacityGals. per min. per ft. of drawdown
	How Pumped Air Compressor . How measured 50 Gal. Drum
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	TypeMfrs. Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in wellFeet Depth of Footpiece in wellFeet
	Depth of Air Line in wellFeet Type of Neter on Pump SizeInches
	USED FOR Domestic AMOUNT AverageGallons Daily
10.	USED FOR AMOUNT { Maximum Gallons Daily
11.	QUALITY OF WATER Good Sample: Yes No
	Taste Godd 6dor None Color Clear Temp. OF
i 2.	LOG Are samples available? furnish copy)
13.	SOURCE OF DATA
14.	DATA OBTAINED BY Kaye Well Drilling, Inc. Date Oct. 8, 1974
	(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, enalysis of the water, sketch map, sketch of special casing arrangements etc.)

Surface 0-8'- Brown Green Clay Green Black Clay + Sand 70'-100' - Green Clay 100: 136 - Tough Green Clay 136-140'. Ht. Laurel 140'- 155'- Gray Marl Very fine & muddy
Very fine & muddy
165'-166'- Dense Grzy Clay

* 50<u>10</u> 4... **0NA** * H**9AA3**03(T

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BECEINED

29-13-595

FORM 87

DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

29.13.595

Perm	it	No.Z	29	-8442
Appl	i ca	tion	N o.	
Goun	ty.			

WELL RECORD 29,8442

١.	OWNER M.T.B. ING.		. ADDRESS 💇	A COMP WIND	TV WATER	********
	Owner's Well No.		. SURFACE EL	EVATION	have seen see	Feet
2.	LOCATION Lakehuret Rd.,			•		
3.	DATE COMPLETED 8/5/76			•		
4.	* **			•		
5.	DIAMETER: top inches CASING: Type	1	liameter	3 Inches	Length	Feet
6.	SCREEN: Type con. slt. 0					
	Range in Depth { Top	50 Feet	Geologic Form	nation same	d and grav	el
	Tail piece: Diameter	1 inches	Length 40	F	eet	
7.	WELL FLOWS NATURALLY	Gallons per F	inute at		Feet above	surface
	Water rises to					
3.	RECORD OF TEST: Date 8/5/1	76	Yie	1d 8	Gallons pe	r minute
	Static water level before ;					
	. -	_				
	Pumping level	feet below su	urface after.	опф	hours	pumping
	Pumping level					
	DrawdownFeet	Specific Ca	apacity	Gals. per	min. per ft. o	
	Drawdown Feet How Pumped	Specific Ca	Pacity	Gals. per	min. per ft. o	
).	Drawdown Feet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT	Specific Ca	Pacity	Gals. per sasured 5 (min. per ft. o	f drawdown
٠.	Drawdown Feet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT	Specific Ca	Pacity	Gals. per sasured 5 (min. per ft. o	f drawdown
).	Drawdown Feet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT	Specific Ca	Pacity	Gals. per sasured 5 (min. per ft. o	f drawdown
١.	DrawdownFeet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT Type Capacity G.P.	Specific Ca compressor etts [: jet	How me	Gals. per sasured 5 (min. per ft. o	f drawdown
).	DrawdownFeet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT Type Capacity G.P. Depth of Pump in well	Specific Ca compressor ells [:]es	How me Name elect.	Gals. per sasured 5 (min. per ft. o	7. H Feet
9.	DrawdownFeet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT Type CapacityG.P. Depth of Pump in well Depth of Air Line in well	Specific Ca compressor ells T: Mfrs M. How Driv Feet Dep	How me Name Poth of Footp pe of Meter	Gals. per sasured 5 (min. per ft. o	7. H Feet
	DrawdownFeet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT Type CapacityG.P. Depth of Pump in well Depth of Air Line in well	Specific Ca compressor ells [:]es	How me Name Poth of Footp pe of Meter	Gals. per sasured 5 (min. per ft. o	7. H Feet
О.	DrawdownFeet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT Type CapacityG.P. Depth of Pump in well Depth of Air Line in well USED FORdeme	Specific Ca compressor ells T: Mfrs M. How Driv Feet Dep	How me Name Plots Pth of Footp pe of Meter AMOUNT	Gals. per 5 (men) H.P. iece in well on Pump Average 3	Pan R.F Gall Gall Gall	7. H Feet
0.	DrawdownFeet How Pumped Observed effect on nearby w PERMANENT PUMPING EQUIPMENT Type CapacityG.P. Depth of Pump in well Depth of Air Line in well USED FOR QUALITY OF WATER	Specific Cancella Can	How me Name Porth of Footp pe of Meter AMOUNT	Gals. per sasured 5 (Pan R.F Gall Gall Gall	ret zeinches ons Daily
o. 1.	DrawdownFeet How Pumped	Specific Canders Cande	How me Name Plost. Pth of Footp pe of Meter AMOUNT { Color	Gals. per 5 1	PAN R.F Gall Gall Temp.	Feet zeinches ons Daily ons Daily
o. 1.	DrawdownFeet How Pumped	Specific Canders Cande	How me Name Plost. Pth of Footp pe of Meter AMOUNT { Color	Gals. per 5 1	PAN R.F Gall Gall Temp.	Feet zeinches ons Daily ons Daily
9. 0. 2.	DrawdownFeet How Pumped	Specific Canders Specific Canders Cand	How me Name Plost. Pth of Footp pe of Meter AMOUNT { Color	Gals. per 5 1	PAN R.F Gall Gall Temp.	Feet zeinches ons Daily ons Daily

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

APPLICATION NO. _______

	Redacted - Privacy Act
1.	OWNER ADDRESS 329 Newman Springs Rd-
	Owner's Well No. 29-11733 SURFACE ELEVATION (Above Insen see level)
2.	LOCATION LOT J9 BIK 367 Middle Town Tup.
3.	DATE COMPLETED 12/9/7/ DRILLER Dames Pettier 66/
4.	DIAMETER: Topinches Bottominches TOTAL DEPTHFeet
5.	CASING: Type drive Steel Diameter Inches Length 105 Feet
6.	SCREEN: Type Size of Opening 125/67 Diameter Inches Length Feet
	Range in Depth { Top 105 Feet Geologic Formation Fine gray Sand + Lime Stone
	Tail Piece: Diameter Inches Length Feet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date 12/9/7/ Yield 10 Gallons per minute
	Static water level before pumping
	Pumping level 3 3 feet below surface after 2 hours pumping
	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown
	How pumped Lad & cylinder How measured Stop too the togal pail
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT: Did Not Install
	Type Mfrs, Name
	Capacity G,P.M. How Driven H,P R.P.M
	Depth of Pump in well Feet . Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
1Q.	USED FOR
	Maximum 300 Gallons Daily
11.	QUALITY OF WATER 900 9 Sample: Yes No
	Taste Odor Color Temp, OF.
12.	LOG Are samples available? O
13.	SOURCE OF DATA
14.	DATA OBTAINED BY Que Conore 95/ Date 12/21/8/

į

30-50 gun dagt sand 50-64, gray dag-sand-shell 64-93 ren-gray t black sand 93-95 gran-gray t black sand 95-115 gray dag 105-111 fine gray sandt line stone

Pitters adapter

JAN 25 1962

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Marie Contraction

FOR IRRIGATION PURPOSES ONLY

FOR IRRIGATION DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

29.13.942

WELL RECORD

PERMIT NO. 29:12070

APPLICATION NO. ______

	OWNER_Redacted - Privacy Act ADDRESS _ 25 Bernard St. Eaton
١.	Owner's Well No. Surface ELEVATION (Above mean see level)
	Same as above
2,	DATE COMPLETED 5-18-82 DRILLER (David) (Norman) Primost
	DIAMETER: Top 6½ inches Bottom inches TOTAL DEPTH 42 Feet
5.	CASING: Type PVC Sched 40 SCREEN: Type PVC Size of Opening .018 Diameter 2 Inches Length 17 Feet Length 5 Feet
6.	SCREEN: Type PVC Size of Opening .018 Diameter 12 Inches Length 5 Feet
	Range in Depth { Top Feet Geologic Formation \(\sumset \sumset \) W.T. Well)
	Tail Piece: DiameterInches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date 5-18-83 Yield 6 Gallons per minute
	Static water level before pumping Feat below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped (Centrifugal) (Air Lift) How measured Container
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type(Shallow) (Deep) JET Mfrs. Name (COULDS) (CRANE-DEMING)
	Capacity 15 G.P.M. How Driven Electric H.P. 1 R.P.M. 3450
	Depth of Pump in well Feet Depth of Footpiecs in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
0.	USED FOR IRRIGATION AMOUNT AMOUNT AMOUNT Amount Gallons Daily
1.	QUALITY OF WATER Sample: Yes No _X_
	Taste Odor Color Temp °F.
2.	LOG Are samples available?
3.	SOURCE OF DATA Pickwick Well Drilling P.O. Box 6 DRILLER Durby
4,	DATA OBTAINED BY Farmingdale, N.J. 07727 Date

PURPOSES ONLY

FOR IRRIGATION DEPARTMENT OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

29.13.8.4.3.9
PERMIT NO. 29-12719
APPLICATION NO.
county Manmouth

WELL RECORD

1.	OWNER Redacted - Privacy Act ADDRESS 211 Grant Ave. Faton town
	Owner's Well No. SURFACE ELEVATION GO Fee
2.	LOCATION Same as above Lot 12 Block 99-2 (Above mean see level)
3.	DATE COMPLETED 4-21-83 DRILLER (David) (Margan) Primost
4.	DIAMETER: Top 6½ inches Bottominches TOTAL DEPTH 48Feet
5.	CASING: Type PVC Sched 40 Diameter 2 Inches Length 43 Feet
6.	SCREEN: Type PVC Size of Opening 018 Diameter 12 Inches Length 5 Feet
	Range in Depth { Top Feet Geologic Formation LOB (W.T. Well) Geologic Formation LOB (W.T. Well) Geologic Formation Cob (W.T. Well) Geologic Formation Geologic Formation Cob (W.T. Well) Geologic Formation Geologic
	Tail Piece Diameter Inches Length Feet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date 4-21-83 Yield 11 Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped (Centrifugal) (How measured Container
Q	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped (Centrifugal) (How measured Container Observed effect on nearby wells None
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped (Centrifugal) (How measured Container Observed effect on nearby wells None PERMANENT PUMPING EQUIPMENT:
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped (Centrifugal) (How measured Container Observed effect on nearby wells None
9.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped (Centrifugal) (
9.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped (Centrifugal) (
	Drawdown Feet Specific Capacity Gals, per min. per ft. of drawdown How pumped (Centrifugal) (
10.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped (Centrifugal) (
10.	Drawdown Feet Specific Capacity Gals, per min. per ft. of drawdown How pumped (Centrifugal) (
IO.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped (Centrifugal) (Feet) How measured Container Observed effect on nearby wells None PERMANENT PUMPING EQUIPMENT: Type (Shallow) JET Mfrs. Name (GOULDS) (Feet) Capacity 15 G.P.M. How Driven Electric H.P. 1 R.P.M. 3450 Depth of Pump in well Feet Depth of Footpiece in well Feet Depth of Air Line in well Feet Type of Meter on Pump Size Inches USED FOR IRRIGATION AMOUNT Average 2,000 Gallons Daily Maximum Gallons Daily QUALITY OF WATER Odor Color Temp. Fee
10. 11.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped (Centrifugal) (

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO. 29-13187
APPLICATION NO.

COUNTY_

29.13.586 WELL RECORD 29.13.87

OWNER Tinton Woods		ADDRESS	301 minton A	ve. Eatonto	vn. i
		^			
Owner's Well No.	 	SURFACE E	LEVATION	50	Feet
LOCATION _ Route 537					
DATE COMPLETED Sept. 9	1983	DRILLER Ka	ye Well Drill	ing, Inc.	
DIAMETER: Top 4 inches	Bottom	inches	TOTAL DEPTH_	80	Feet
CASING: Type	e el	Diameter _	Inches		
SCREEN: TypeSUCES					
Range in Depth { Top					
Tail Piece: Diameter	Inches	Length	Feet		
WELL FLOWS NATURALLY	Gallons per mi	inute at	Feet above	surface	
Water rises to	Feet at	pove surface			
RECORD OF TEST: DateSep	t. 9, 1983	Yield.	Galions	per minute	
Static water level before pumping					
Pumping level	_ feet below surfa	ce after	hours	pumping	
Drawdown F					
How pumped					
Trow pumped					
Observed affect on nearby wells					
Observed effect on nearby wells					
PERMANENT PUMPING EQUIPMEN	T:				
PERMANENT PUMPING EQUIPMEN	т:	Mfrs. Name		·	
PERMANENT PUMPING EQUIPMEN Type G.P.N	T: 1. How Drive	Mfrs. Name	н.р	R.P.M	
PERMANENT PUMPING EQUIPMEN Type G,P.N Depth of Pump in well	T: 1. How Drive	Mfrs. Nameen	H.P	R.P.M	
PERMANENT PUMPING EQUIPMEN Type G.P.N	T: 1. How Drive	Mfrs. Nameen Depth of Footpie rpe of Meter on Pump	H.Pece in well	R.P,M, Feet	
PERMANENT PUMPING EQUIPMEN Type G,P.N Depth of Pump in well Depth of Air Line in well	T: How Drive Feet Feet Ty	Mfrs. Nameen Depth of Footpie rpe of Meter on Pump	H.P	R.P.M Feet SizeInches Gallons Daily	
PERMANENT PUMPING EQUIPMEN Type G.P.N Capacity G.P.N Depth of Pump in well Depth of Air Line in well	T: 1. How Drive - Feet - Feet Ty	Mfrs. Nameen Depth of Footpie rpe of Meter on Pump AMOUNT	H.Pece in well	R.P,M, Feet	
PERMANENT PUMPING EQUIPMEN Type G.P.N Capacity G.P.N Depth of Pump in well Depth of Air Line in well USED FOR Traigation QUALITY OF WATER	How Drive Feet Feet Ty	Mfrs. Nameen Depth of Footpie rpe of Meter on Pump AMOUNT	H.P	R.P.M Feet SizeInches Gallons Daily Gallons Daily	
PERMANENT PUMPING EQUIPMEN Type G.P.N Capacity G.P.N Depth of Pump in well Depth of Air Line in well	How Drive Feet Feet Ty	Mfrs. Nameen Depth of Footpie rpe of Meter on Pump AMOUNT	H.P ace in well Average Maximum Sample: Yes	R.P.M Feet SizeInches Gallons Daily Gallons Daily	
PERMANENT PUMPING EQUIPMEN Type G.P.N Depth of Pump in well Depth of Air Line in well USED FOR Treigntion QUALITY OF WATER Taste Took Jreny Oct	How Drive Feet Feet Ty Cood Translor None	Mfrs. Name en Depth of Footpie rpe of Meter on Pump AMOUNT	H.P	R.P,M Feet SizeInches Gallons Daily Gallons Daily No	
PERMANENT PUMPING EQUIPMEN Type G,P.N Capacity G,P.N Depth of Pump in well Depth of Air Line in well USED FOR IPELSELLER QUALITY OF WATER Taste God Jreny Od	H. How Drive Feet Feet Ty None Reparate sheet, If elect	Mfrs. Name en Depth of Footpie rpe of Meter on Pump AMOUNT	H.P	R.P,M Feet SizeInches Gallons Daily Gallons Daily No	

Form DWR- 138

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913863

271700	
ERMIT NO.	2913524-9

APPLICATION NO. _____

OUNTY_____

1	PURPUSES DILL. WELL RECORD 29.13.843
1.	OWNER ADDRESS P.O. BOX 688 Owner's Well No SURFACE ELEVATION (Above new to both
2.	LOCATION Lot: Hecon Pacifity Municipality: Madison Boro
3.	DATE COMPLETED 2/15/24 DRILLER New England Pollution Control
4.	DIAMETER: Top 13 inches Bottom 13 inches TOTAL DEPTH 45 Feet
5.	CASING: Type STEET TVC Diameter T Inches Length 35 Feet
6.	SCREEN: Type PVC Size of Opening 020 Diameter 4 Inches Length Feet
	Range in Depth { Top 25 Feet Slot Geologic Formation Ruritan
	Tail Piece: DiameterInches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals. per min. per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs. Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
10.	Depth of Air Line in well Feet Type of Meter on Pump SizeInches USED FOR Monitoring Gallons Daily
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches USED FOR AMOUNT
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches USED FOR AMOUNT
11.	Depth of Air Line in well
11. 12.	Depth of Air Line in well Feet Type of Meter on Pump SizeInches USED FOR Mor ton'ng AMOUNT
11. 12.	Depth of Air Line in well Feet Type of Meter on Pump SizeInches USED FOR Mor ton'ng AMOUNT
11. 12.	Depth of Air Line in well

29-13524-9

New England Pollution Control Co, Inc 7 Edgewater Place Norwalk, CT 06855 29.13.843

Drill Master:

Dan Fiorentino

Page 1 of 1

Dan Fioren	tino		and the same and t
Description	Thickness (in feet)	Depth	Owner:
- Reddish brown medium to	3	0-3	Hecon Building
coarse sand, homogeneous.			Location: Eatontown, NJ
			Well No: ## 1
- Greenish brown medium to	3	3-6	
coarse sand, homogeneous.			Date Completed: 2/15/84
- Greenish medium to coarse	8	6-14	Drilling Method: Hollow Stem Auger 13" O.D
sand, glauconitic causing			Samala.
sands to stick together.		<u></u>	Sample Method: N/A
- Brownish medium to coarse	16	14-30	Samples Examined By: Herb Woike
sand. Some glauconitc			_
and few clay lenses.			Reference T.O.C.
- Brown, medium to coarse	15	30~45	Elevation Of R. P.: 106.93 (Assumed Datum)
sand, few clay lenses, damp at about 40'.			Casing: N/A
			Screen 25' solid PVC Type: 20' Slotted PVC
			Diameter: 4 Inch
			Static Water Level:
			4
			Remarks: Clean, no product.
			•
	1		

Form DWR- 138

PURPOSES ONLY

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2913863

PERMIT NO.

APPLICATION NO. Monmouth

WELL RECORD

	PURPOSES ONLY	WELL RECORD	COUN	TY 29,13.863
2. 3. 4.	OWNER UNDERWRITERS AD OWNER'S Well No. LOCATION Lot: Hecen FEM DATE COMPLETED 2/15/84 DIAMETER: Top 13 inches CASING: Type PVC	SURFACE E Municipa DRILLER Bottom 13 inches	P.O. BOX 68 LEVATION 108. Ality: Madison New England Pol TOTAL DEPTH	8 8 (Assumed Pater Boro) Iution Control 40 Feet
	SCREEN: Type PVC Size of Range in Depth { Top	. Inches Length	Feet	
7.	WELL FLOWS NATURALLY G Water rises to		Pest above sur	Tace
8.	RECORD OF TEST: Date Static water level before pumping Pumping level fee Drawdown Feet How pumped Observed effect on nearby wells	Specific Capacity	Feet below surface hours pu Gals, per min, per ft,	mping of drawdown
9.	Capacity G,P.M. Depth of Pump in well Fectors for Line in well	How Driven	ece în well	R.P.M
10.	USED FOR Monitoring	AMOUNT	Average	Gallons Daily Gallons Daily
11.				
12		Color		
13.	LOG (Give details on back of sheet or on separations) SOURCE OF DATA NEPCLO GO	to shook. If electric log was made, places 20/0g/sf WELL L	Are samples available? of furnish copy)	<i></i>
14.	SOURCE OF DATA NEPCLO GO DATA OBTAINED BY Herb Work Br	ian Beahon	Date	9/84

29-13525-7

New England Pollution Control Co, Inc 7 Edgewater Place Norwalk, CT 06855 29.13.863 29.13525

Drill Master: Dan Fiorent		3525	Page 1 . of 1
Description	Thickness (in feet)		Owner:
- Brown clay sized particles	, 7	0-7	Hecon Building
little to no sand.			Location: Eatontown, NJ
			Well No: #2
- Reddish brown medium to	3	7-10	
coarse sand with few well			Date Completed: 2/15/84
rounded pebbles.			
			Drilling Method: Hollow Stem Auger 13" O.
- Greenish brown medium to	2	10-12	
coarse sand, few pebbles			Sample Method: N/A
and clay lenses.			
·			Samples Examined By: Herb Woike
- Brownish medium to coarse	1	12-13	
sand, with common cobbles			Reference Point: T.O.C.
and some clay, more resis-			
tent.			Elevation Of R. P.: 108.88 (Assumed Datu
- Brown medium to coarse	7	13-20	Casing: N/A
sand, no coarse fragments,			0 201144 750
some clay.			Screen 20' solid PVC Type: 20' slotted PVC
			Diameter: 4 Inches
- Dark brown sand, more clay	7	20-27	
material holds together			Static Water Level:
well.			
			Remarks: Clean, no product.
- Some sand and clay but col	or 13	27-40]
change to reddish brown.			

FOR MONITORING PURPOSES ONLY

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913863

PERMIT NO.

2913526- 1

2913863

WELL RECORD

1.	OWNER UNDERWRITERS ADJUSTING CO. ADDRESS P.O. BOX 688
	Owner's Well No. Surface ELEVATION 108.24 Assumed do:
2.	LOCATION HECON FORDINGY Municipality: Madison Boro
3.	DATE COMPLETED 2/15/84 DRILLER New England Pollution Control
	DIAMETER: Top 13 inches Bottom 13 inches TOTAL DEPTH Feet
5.	CASING: Type PVC Diameter 4 Inches Length Peet
6.	SCREEN: Type PVC Size of Opening 020 Diameter 1 Inches Length 20 Feet
	Range in Depth Top 20 Feet Raritan. Bottom 40 Feet Geologic Formation Raritan.
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min. per ft. of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs. Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footplecs in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
0.	USED FOR Maximum Gallons Daily AMOUNT AMOUNT AMOUNT AMOUNT Maximum Gallons Daily
1.	QUALITY OF WATER Sample: Yes No
	Taste Odor Color Temp OF.
2.	LOG Are samples available?
13	SOURCE OF DATA NEPCLO Geologist Well Log.
	DATA OBTAINED BY Herr Worke Date 7/9/84
, 	Brian J. Bouchen (NETGO)

New England Pollution Control Co, Inc 7 Edgewater Place Norwalk, CT 06855 29.13.863 29.13526

Drill Master:

Page ___of____

Description	Thickness (in feet)		Owner:
- Reddish brown medium to	2	0-2	Hecon Building
coarse sand, homogeneous.			Location: Eatontown, NJ
			Well No: #3
- Reddish brown medium to	6	2-8	
coarse sand, few well			Date Completed: 2/15/84
rounded pebbles and			
cobbles.			Drilling Method: Hollow Stem Auger 13" O.D
- Brown medium to coarse	5	8-13	Sample Method: N/A
sand with few pebbles		, , , , , , , , , , , , ,	
and some clay.			Samples Examined By: Herb Woike
- Greenish brown medium to	27	13-40	Reference Point: T.O.C.
coarse glauconitic sand,			
few pebbles and cobbles,			Elevation Of R. P.: 108.24
more clay evident.			
			Casing: N/A
			Screen 20' solid PVC Type: 20' slotted PVC
	 		
	 	<u> </u>	Diameter: 4 Inches
			Static Water 4
			Remarks: Clean, no product.
		1	

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2913863

APPLICATION NO. .

Monmouth 2913803

FOR MONITORING PURPOSES ONLY

WELL RECORD

	OWNER UNDERWRITERS ADJUSTING CO. ADDRESS P.O. BOX 688
1.	101 -A- Assumed dat
	Owner's Well No. SURFACE ELEVATION 1657 Feet (Above inser's see level) LOCATION # COCH, Farigity Municipality: Madison Boro
2.	
3.	DATE COMPLETED 2/16/84 DRILLER New England Pollution Control
4.	DIAMETER: Top 13 inches Bottom 13 inches TOTAL DEPTH 40 Feet
5.	CASING: Type PVC Diameter Inches Length 30 Feet
6.	SCREEN: Type PVC Size of Opening DZO Diameter 4 Inches Length 20 Feet
	Range in Depth { Top Feet Geologic Formation Raritan Rarit
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date Yield Gellons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs, Name
	Capacity G,P,M, How Driven H,P, R,P,M,
	Depth of Pump in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
10.	USED FOR Monitoring AMOUNT Average Gallons Daily
	AMOUNT
••	Maximum Gallons Daily
11.	QUALITY OF WATER Sample: Yes No
	QUALITY OF WATER
	QUALITY OF WATER Gallons Daily Taste Odor Color Temp OF. LOG Are samples available? Are samples available?
	QUALITY OF WATER Gallons Daily Taste Odor Color Temp OF. LOG Are samples available?

SHOW I HAVE TAKE

29.13.863

New England Pollution Control Co, Inc 7 Edgewater Place Norwalk, CT 06855 29.13.863 2913527. Dan Fiorentino

Drill Master:

Page 1 of 1

Drill Master. Dan Florer	ILTIIO		
Description	Thickness (in feet)		Owner:
- Brown medium to coarse	9	0-9	Hecon Building
sand, with traces of clay			Location: Eatontown, NJ
		·	Well No: #4
- Greenish brown medium to	21	9-30	
coarse glauconitic sand,			Date Completed: 2/16/84
intermittent clay layer,			
inches thick.			Drilling Method: Hollow Stem Auger 13" O.
- Brownish medium to coarse	10	30-40	Sample Method: N/A
sand, some clay in in-			
termittent lenses.			Samples Examined By: Herb Woike
			Reference Point: Grade (curb box)
			Elevation Of R. P.: 106.54
			Casing: N/A
			Screen 20' solid PVC Type: 20' slotted PVC
			Diameter: 4 Inches
			Static Water Level:
			Remarks: Clean, no product.

FÖR MONITORING PURPOSES ONLY

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913863

291 28 ~

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PPI	(C)	TIO	N NC	.			

Monmouth 29.73.863

1.	OWNER UNDERWRITERS ADJUSTING CO. ADDRESS P.O. BOX 688
	Owner's Well No. 5 SURFACE ELEVATION 106.45 (Assumed date
2.	I odle a Frack'. [44 Municipality Madison Boro
	DATE COMPLETED 2/16/84 DRILLER New England Pollution Control
4.	13.
5.	CASING: Type Diameter Inches LengthFeet
	SCREEN: Type FVC Size of Opening 020 Diameter Finches Length 40 Feet
	Range in Depth { Top Feet Slot Geologic Formation Ran'tun, Geologic Formation Geologic Formati
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs. Name
	Cepacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
0.	USED FOR Moniforny AMOUNT AMOUNT Average Gallons Daily Maximum Gallons Daily
1.	QUALITY OF WATER Sample: Yes No
	Taste Odor Color Temp ºF.
2.	LOG Are samples available? (Give details on back of sheet or an separate sheet. If electric log was made, please furnish capy.)
3.	SOURCE OF DATA NEPOCO GEOLOGIST WELL LOG. ,
4.	DATA OBTAINED BY HERB WOIKE pate 7/9/84
	Brian - T. Royd a. (NERVO)

New England Pollution Control Co, Inc
7 Edgewater Place
Norwalk, CT 06855
29.13.803

2913528 Page 1 of 1 Drill Master: Dan Fiorentino Thickness Depth Description Owner: (in feet) 0-5 - Light brown silt and very Location: Hecon Building Eatontown, NJ fine grained sand. Well No: #5 5-9 - Brown medium to coarse sand, with a little clay. Completed: 2/16/84 Drilling
Method: Hollow Stem Auger 13" O.E 9-15 - Reddish brown medium to coarse sand, few pebbles. Sample Method: N/A 15-27 - Greenish brown medium to Samples coarse glauconitic sand, Examined By: Herb Woike some clay lenses. Reference Grade (curb box) Point: - Same material with strong Elevation 106.45 oil smell. Of R. P.: Casing: N/A Screen 40' slotted PVC Diameter: 4 Inches Static Water Level: Remarks: Under parking lot. Strong product smell.

Form DWR- 138

Coord: 2913863

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

29.13,863

PERMIT NO.	2913529-
ADDI ICATIO	N NA

FOR MONITORING PURPOSES CHLY

WELL RECORD

APPLICATION NO.	
	Monmout
COUNTY	

	0343
1.	OWNER UNDERWRITERS ADJUSTING CO. ADDRESS P.O. BOX 688
	Owner's Well No. 6 SURFACE ELEVATION 107.56 (ASSumed date)
2	LOCATION HEACON FA BY JOHT: W Municipality: Madison Boro
3.	DATE COMPLETED 2/16/84 DRILLER New England Pollution Control
4.	DIAMETER: Top 13 inches Bottom 15 inches TOTAL DEPTH 40 Feet
5.	CASING: Type PVC Diameter 4 Inches Length 55-eet
6.	SCREEN: Type PVC Size of Opening 020 Diameter 4 Inches Length 55 Feet
	Range in Depth { Top Feet Geologic Formation Ray; fan }
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gailons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min. per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs, Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiecs in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
10.	USED FOR Moniforing AMOUNT AMOUNT AMOUNT Gallons Daily
11.	QUALITY OF WATER Sample: Yes No
	Taste Odor Color Temp ⁹ F,
	LOG Are samples available? [Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.]
12	SOURCE OF DATA NEPCLO GEOLOGIST WELL LOG
13.	SOURCE OF DATA NEPCCO GEOLOGIST WELL LOG. DATA OBTAINED BY HERB WOIKE Brian Beechan (Nepcco) Data OFFICE OF DATA Brian Beechan (Nepcco)
14.	Brian Beehan (Nebeco)

New England Pollution Control Co, Inc. 7 Edgewater Place
Necwalk, CI 06855
29:13, 843

Drill Master: Dan Fiorentino 29/3529 Page of

Dan Protence			
Description	thickness (in feet)		Owner:
- Reddish brown medium to		0-5	Hecon Building Location: Eatontown, NJ
coarse sand, few pebbles	·		Location:
somewhat rounded, some			Well No: #6
clay.		,	
		,	Date Completed: 2/16/84
- Light brown medium to		5-7	
·coarse sand more clay			Drilling Method: Hollow Stem Auger 13" O.D
present.		 	
'			Sample Method: N/A
- Well rounded cobbles		10-14	
mostly some sand, pro-			Samples Examined By: Herb Woike
bably fill.			
			Reference Point: T.O.C.
- Brown medium to coarse		10-14	
sand. Few pebbles and a			Elevation Of R. P.: 107.56
little clay.			
		•	Casing: N/A
- Greenish brown medium to		14-28	Screen 5' solid PVC
coarse glauconitic sand,			Type: 35' slotted PVC
few pebbles. (Product			Diameter: 4 Inches
odor at 22')			
			Static Water Level:
- Brown medium to coarse		28-38	
sand with intermittent			Remarks: product smell
clay lenses.			
- Same as last but real wet		38-40	,

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

WELL RECORD

Coord:	29	13	86	3
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271700	
PERMIT NO.	2913511-6

APPLICATION NO.

Monmouth 29/3 863

FOR MONITORING PURPOSES ONLY

1.	OWNER UNDERWRITERS ADJUSTING CO. P.O. BOX 688
	Ourselo Well No. 106,60 453 UME
2.	
3.	DATE COMPLETED \(\alpha / \alpha / \delta / \de
4,	DIAMETER: Top 13 inches Bottom 13 inches TOTAL DEPTH 40 Feet
5.	CASING: Type PVC Diameter Inches Length 29-eet
6.	SCREEN: Type PVC Size of Opening 620, Diameter 1 Inches Length 20 Feet
	SCREEN: Type PVC Size of Opening 520, Diameter 1 Inches Length 20 Feet Range in Depth { Top 20 Feet Bottom 10 Feet Geologic Formation Raritan Raritan Feet Geologic Formation
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs, Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
10.	USED FOR Monitoring AMOUNT AMOUNT AMOUNT AMOUNT Gallons Daily
11.	QUALITY OF WATER Sample: Yes No
	Taste Odor Color Temp, ⁰ F.
12.	LOG Are samples available? [Give details on back of sheet or an separate sheet, if electric log was made, please furnish copy.]
13.	SOURCE OF DATA NEPCLO GEOLOGIST WELL LOG.
14.	DATA OBTAINED BY HERB WOIKE Date 7/9/34 Brien Beshen (VERW)
-	Brien Beshon (VERLO)

29.13.863

New England Poliution Control Co, Inc 7 Edgewater Place Norwalk, CT 06855 29,13.863

29-13551-6

Dan Fiorentino 2913.557 Drill Master:

Page 1 of 1

Description	Thickness (in feet)		Owner:			
Brown medium to coarse	8	8-0	Hecon Building			
loose sand, many well			Location: Eatontown, NJ			
rounded pebbles and		<u>.</u>	Well No: #7			
cobbles.						
			Date 2/29/84 Completed:			
Brown medium to coarse	4	8-19				
sand. Slight greenish	•		Prilling Hollow Stem Auger 13" O.E.			
tinge, common pebbles, fe	e w					
cobbles, some thin gray			Sample N/A Method:			
clay layers after (12)						
feet.			Samples Herb Woike Examined By:			
	<u> </u>					
Brownish green glauconiti	c 5	19-24	Reference Grade (curb box)			
medium to coarse sand,	<u> </u>					
sticky, no coarse frag-			Elevation Of R. P.: 106.60 (Assumed Datum)			
ments.						
		,	Casing: N/A			
Color change to more	6	24-30	Screen 20' solid PVC			
brown medium - coarse			Type: 20' slotted PVC			
sand.			Diameter: 4 Inches			
Moist greenish brown	10	30-40	Static Water Level:			
medium - coarse sand.						
			Remarks: Under parking lot. Clean, no product.			
			Clean, no product. ,			
	 		1			

	DWR. 120	1/26/91			rd: 2913863	•
1/80	ÓWR- 138WELL SEALED	l Di	STATE OF NEW . PARTMENT OF ENVIRONM DIVISION OF WATER	JERSEY ENTAL PROTECTION RESOURCES	PERMIT NO.	2913
	FOR MONIT	iaring -			APPLICATION NO.	Monmouth
			WELL DEC	non .	COLINTY	
	PURPOSES		WELL REC		· 2913	843
1.	OWNER UND	ERWRITERS A	DJUSTING CO.	P.O.	BOX 688	*
	Owner's Well No	8	SUR	FACE ELEVATION	106.25 (Ba	tum to
2.	LOCATION	Hecon Fo		icipatity i wa	015011 2010	M)
3.	DATE COMPLETED	2/29/8			nd Pollution (Control
4.	DIAMETER: Top	inches	Bottomind	thes JOTAL I	DEPTH	Feet
5.	CASING: Type	PVC	Dia	meterInch	r nes Length	20 Feet
6.	SCREEN: Type	PVC Size	of Opening <u>0</u> 20 Dia			20 Feet
	Range in Depth	{ Top	Feet Geolog	gic Formation <u></u>	eritan	
	Tail Piece: Diame	ter	_ inches Lengti	,Fee	t	
7 .	WELL FLOWS NATU	IRALLY	Gallons per minute at	Fee	t above surface	
	Water rises to	· · · · · · · · · · · · · · · · · · ·	Feet above surface			
8.	RECORD OF TEST:	Date		Yield	Gallons per minute	
	Static water level b	efore pumping	····	Feet bel	ow surface	
	Pumping level	fe	et below surface after		_ hours pumping	
	Drawdown	Feet	Specific Capacity .	Gals, per	min, per ft. of drawdowi	n
	How pumped			How measured		
	Observed effect on	nearby wells				
9.	PERMANENT PUMP	ING EQUIPMENT:	•	·		
	Туре		Mfrs, Name			
	Capacity	G,P.M.	How Driven	Н.Р	R,P.M.	
	Depth of Pump in	well F	eet Depth o	f Footpiece in well	Fe	et
	Depth of Air Line i	in well F	Type of Meter of	on Pump	SizeInc	ches
0.	USED FOR	onitoring		MOLINT SAVerage	Gallons	Dally
Ψ.		0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Maximum	Gallons	Daily
1.	QUALITY OF WATE	R		Sample: Yes	No	
	Taste	Odor .	œ	olor	Temp,	of.
2.	LOG (Give details on be	ick of sheet or on secen	ate sheet. If electric log was me	Are samples	available?	
3.		NEDCCO	GFOLDGIST	WEID 10	6 -	
4.	DATA OBTAINED B	Y HERB 1	voike vian J. Bertsa	Date	7/9/84	
		B	vian J. Beeksa	n (NERLO)	, , , , , , , , , , , , , , , , , , , 	
				~ (

New England Pollution Control Co, Inc 29-13552-4

29.13.863

7 Edgewater Place Norwalk, CT 06855 29,13,863

Drill Master: Dan Fiorentino Page 1 of 1 Owner: Thickness Depth Description (in feet) 8 b_8 - Reddish brown medium to Hecon Building Location: Eatontown, NJ coarse loose sand, many well rounded pebbles and Well No: #8 cobbles. Completed: 2/29/84 8 - 10- Brown medium to coarse Drilling sand with few pebbles. Method: Hollow Stem Auger 13" O.D. Sample 10-13 - Greenish medium to coarse Method: N/A loose sand no coarse Samples fragments. Examined By: Herb Woike Reference 1.3-30 - Creen medium to coarse 17 Point: Grade (curb box) glauconitic sand, sticky, Elevation no coarse fragments. Of R. P.: 106.25 (Assumed Datum) (Product smell at 22') Casing: N/A 30-40 - Greenish brown medium to 10 Screen 20' solid PVC
Type: 20' slotted PVC coarse sand, damp.

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	FOR	MONIT Poses	ORINE	i	DEPARTMEN DIV

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

000.4, 4,1,00	Coord:	2913863
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COUNTY.

PERMIT NO. _

29 3 53	-2

APPLICATION NO.

Monmouth

WELL RECORD

	I Old Copp	WELL RECORD	COUNT	29,13.863
1.	OWNER UNDERWRITERS AD Owner's Well No. 9 LOCATION TEXAS Facilit	JUSTING . ADDRESS _	P.O. BOX 688	(Assumed)
	Owner's Well No.	SURFACE EL	EVATION (Above	meen see level)
2.	DATE COMPLETED 2	e los	ew England Pol	lution Control
3.	DATE COMPLETED	7/07 DRILLER	ew England Poli	100 Control
4.	DIAMETER: Top 13 inches	Bottominches	TOTAL DEPTH	40 Feet
	CASING: Type PVC			
6.	SCREEN: Type PVC Size of			
	•	Feet Geologic Forma		~
	Tail Piece: Diameter	inches Length	Feet	
7.	WELL FLOWS NATURALLY Ga	llons per minute at	Feet above surf	BC8
	Water rises to	Feet above surface		
8.	RECORD OF TEST: Date	· Yield _	Gallons per	minute
	Static water level before pumping			•
	Pumping level feet	below surface after	hours pur	nping
	Drawdown Feet	Specific Capacity	Gals, per min, per ft. o	of drawdown
	How pumped	How m	easured	······································
	Observed effect on nearby wells	**************************************		
9.	PERMANENT PUMPING EQUIPMENT:	•	•	
	Туре	Mfrs, Name		
	Capacity G.P.M.	How Driven	н.Р.	R.P.M
	Depth of Pump in well Fee	Depth of Footpie	ce in well	Feet
	Depth of Air Line in well Feet	Type of Meter on Pump	Siz	zeInches
0.	USED FOR moniforing	AMOUNT	₹	Gallons Daily Gallons Daily
11.	QUALITY OF WATER	·	Sample: Yes N	lo
	Taste	Color	Temp	of.
12.	LOG	share If plantels low use made plants	Are samples available?	
3	4 /	SEOLOGIST WELL		
	· · · · · · · · · · · · · · · · · · ·			19/84
	[2	SOIKE S. Beston	(KERID)	//

29.13.863

New England Pollution Control Co, Inc

7 Edgewater Place Norwalk, CT 06855 29,13,863 2913553

Drill Master:

Dan Fiorentino

Page _ 1 of _ 1 '

Description	Thickness (in feet)		Owner:
- Brown medium to coarse	4	0-4	Hecon Building
loose sand, few pebbles			Location: Eatontown, NJ
and well rounded cobbles.			Well No: #9
- Reddish brown medium to	3	4-7	Date Completed: 2/29/84
coarse loose sand, no			1
coarse fragments.			Drilling Method: Hollow Stem Auger 13" O.D.
- Greenish brown medium to	8	7–15	Sample Method: N/A
coarse loose sand.			- -
			Samples Examined By: <u>Herb Woike</u>
- Green medium to coarse	16	15-31	
glauconitic sand, sticky,	ļ		Reference Point: Grade (curb box)
some fluid clay layers.			
(Product smell at 29')			Elevation Of R. P.: 106.40 (Assumed Datum)
- Light brown medium to	11	31-40	Casing: N/A
coarse sand, moist, some			Screen 20' solid PVC
clay.			Type: 20' Slotted PVC
		ļ	Diameter: 4 Inches
			Static Water Level:
			Remarks: Product Smell 10" of product by days en

Form DWR- 138 11,60

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT N	29 -	13581
	ion no	V
COUNTY	Monm	auth

29 · 13 · 863 WELL RECORD

	Underwriter's Adjusting Co. P.O. Box 688
1.	OWNER Underwriter's Adjusting Co. ADDRESS P.O. BOX 688
	OWIETS WELL MO SORPACE EFEAUTION
2.	
3.	DATE COMPLETED 3/15/84 DRILLER New England Pollution Control Co.
4.	DIAMETER: Top 30 inches Bottom 30 inches TOTAL DEPTH 52 Feet
5.	CASING: Type Mild Steel Diameter 12 Inches Length 28 Feet
6.	SCREEN: Type bery Mild Size of Opening Diameter Inches Length Feet
	SCREEN: Type Doen Mild Size of Opening Diameter 12 Inches Length 20 Feet Range in Depth Revitan Revitan
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs, Name
	Type Mfrs. Name Capacity G.P.M. How Driven H.P. R.P.M.
	Capacity G,P.M. How Driven H.P R.P.M
i 0 .	Capacity G,P.M. How Driven H.P R,P.M Depth of Pump in well Feet Depth of Footpiece in well Feet
•	Capacity G,P.M. How Driven H.P R,P.M Depth of Pump in well Feet
•	Capacity G,P.M. How Driven H.P R,P.M Depth of Pump in well Feet
11.	Capacity G,P.M. How Driven H.P R,P.M Depth of Pump in well Feet
11.	Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet Depth of Footpiece in well Feet Size inches Depth of Air Line in well Feet Type of Meter on Pump Size inches USED FOR RECOVERY OF Hydro Cay box AMOUNT
11.	Capacity G,P,M, How Driven H,P R,P,M Depth of Pump in well Feet

New England Pathatian Control Co., Inc. 7 Edgewater Place - Norwalk, CT 08856

29.13.863

NEW ENGLAND POLLUTION CONTROL CO., INC.

X) NORWALK, CT (203) 653-1990

□ ROBBINSVILLE, NJ (609) 259-3333

(716) 343-8444

29-13581

BORING LOG.

29.12.862 2913581

Page ____ of ___

PROJECT	NAME:		Hed	con			11 /	<u> </u>	<u> </u>			<u> </u>				PROJECT NO.	
FROMET LOCATION Eatontown, NJ										ONT3/115784							
BORING	LOCATION	Reb					xt to	1	oad	ing	ran	no .				DATE 3715/84	
DMLLING	SQUIPM	MY					t Rig					RIG. N	D .	1102		ELEVATION	
DAILLING	METHOD			ary B					******			J				DATUM	
CASING		······································		11 1	<u>acree</u>		НА	MME	R				ORC	· · · · · · · · · · · · · · · · · · ·		DEPTH TO ROCK: (feet)	
SAMPLEA	1						НА	MME	R		·		ORCI	p		COMPLETION DEPTH:	
PERSONNEL Jay Vanliere HELPER Fred Johnson																	
MO	NITORIN	vG.	SCRE	EN 12	IN DI	A FR	юм 26	, ,	то	46		FT. DEPTI	+	204-15	(P _I /T ₁	#2°#3 Morie	
	WELL		RISE	12	IN DE	A FR	10M +2	<u> </u>	TO	26		FT DEPTI	4	BENTONITE	EAL	(Thickness, Depth)	
CONS	STRUCT	ION	FLUS	H BOX		ST	ICK-UP	2'		SURF	NCE SEAL	. (Type, Ti	Nicita	1000)		LOCKING CAP	
		DAT	E	TIME	DEPTI TO WATE	H R	DEPTH OF WELL		DE	PTH OF SING	ELEV/ O TH	TION F			co	MMENTS	
WAT		3/16	/84	7:0	0 30	1	52'		5	0'				2' St:	Lck	cup	
LEV													M	easure	ner	nt from top o	£
													ú	asing.			
DEP	тн			LASSIFIC	CATION			CA: BL	SING			AMPLE	s			REMARKS	
From	To						·	PE	OWS A FT	'No	From	To	\downarrow	Blowe/4"			
0	6"	Bla	ckt	top a	nd fi	11		ļ					\downarrow	——————————————————————————————————————			
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6"	4'	Yel	10	v cla	у								1				
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4'	28						såndy						L				
		cla	у -	- dry	– fi	ne	3 -										
		med	liur	n san	d.												
28'	52'	Yel	10	w and	gree	n	_										
		san	dy	clay	- wa	ite	er										
		bea	rir	ng.	Fine	_							T				
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STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROT DIVISION OF WATER RESOURCES

COUNTY.

2913586 PERMIT NO.

APPLICATION NO. Monmouth

29. 13.586

WELL RECORD 29.14431

1.	OWNERADDRESSADDRESS	
	Owner's Well No. 1 SURFACE ELEVATION (Above mean sea level)	Feet
2.	Lot: 1A Block: 29 Municipality: Tinton Falls Boro	
3.	DATE COMPLETED 12/21/84 DRILLER A.C. Schultes & Sons, Inc.	
4.	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 25	Feet
5.	CASING: Type PVC Diameter 8 Inches Length 5	
6.	SCREEN: Type PVC Size of Opening • 045 Diameter 8 Inches Length 20	
	Range in Depth Top5	
	Tail Piece: DiameterInches LengthFeet	
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface	
	Water rises to Feet above surface	
8.	RECORD OF TEST: Date 12/21/84 Yield 50 Gallons per minute	
	Static water level before pumping Feet below surface	
	Pumping level feet below surface after hours pumping	
	Drawdown5 Feet Specific Capacity Gals, per min, per ft, of drawdown	
	How pumped With Air How measured 5 Gal. Bucket	
	Observed effect on nearby wells	
9.	PERMANENT PUMPING EQUIPMENT:	
	Type Submersible Mfrs. Name Worthington	
	Capacity 100 G.P.M. How Driven Electric Motorp. 5 R.P.M. 34	150
	Depth of Air Line in well 25 Feet Type of Meter on Pump unknown Size Unknown	
n	and the second s	
u.	USED FOR Irrigation AMOUNT AMOUNT Average Gallons Daily Maxigum Gallons Daily	
	Maximum Gallons Daily	
	USED FOR Irrigation AMOUNT Average Gallons Daily QUALITY OF WATER Good Sample: Yes No: Taste None Odor None Color glear Temp 58 °F.	
1.	Taste None Color clear Temp. 58 °F.	
1. 2.	Taste None Odor None Color clear Temp 58 °F. LOG See Attached Are samples available? [Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.]	
1. 2. 3.	Taste None Color clear Temp. 58 °F.	

A.C.SCHULTES & SONS, INC.

29-14431

-		7	SINGLE CASED	WELL	29.13.506
 2'			WELL LOG	FEET FROM	NAME OF OWNER
				0 to	RAnney School
GROUND		LEVEL	Top Soil	0 - 2	tocation Tinton Falls, NJ
			Clay	2 - 11	Well No.
			Cemented Sand	11 - 30	State Permit
					Job No 20198
					Test Pumped (Hrs)
	}				Capacity (GPM) 50 GPM
					Static Level 5 1
					Pumping Level
					Datum
<u> </u>					Specific Capacity
u.					Diameter 8 **
25'		_			Depth of Well (Ground) 25
					Depth to Gravet 3 T
H					Gravel Size #1
TOTAL DEPTH					Length of Casing & Screen 27 :
101		. [Screen Material P.V.C.
					Screen Mig.
					Screen Dis. 8 II
*					Length of Screen 20 !
					Top of Screen Fitting To 8" Pipe
					Bottom of Screen Fitting P.V.C. Plug
20'					Slot Size . 045
					Seal Material
					Quantity
<u></u>					Depth of Seal Material
					Orilling Machine 6B
					Date Well Completed 12-21-84
					Oriller Jim Duffy
	 				

Form DWR- 138 11/80

29-13-839

STATE OF NEW JERSEY

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WATER RESOURCES

29.13.839

PERMIT NO. 29-16207
APPLICATION NO.
COUNTY MONMOUTH.
, 29,13,839

WELL RECORD

	Redacted - Privacy Act		, 200000
	OWNER	ADDRESS 144 Grant	Ave, Extontour
٠	Owner's Well No.	SURFACE ELEVATION	52Feet
2 .	LOCATION 144 GRANTAGE.	LOT 2 BIK 94	EATON TO 10 N
3.	DATE COMPLETED 8-2-86	DRILLER Vim Pettier +	1661
4.	DIAMETER: Topinches	Bottominches TOTAL DEP	THFeet
5.	CASING: Type DRIVE STORE	Diameter 4 Inches pening 016 Diameter Inches	Length /// Feet
6.	SCREEN: . Type Sauces 578 Size of O	pening 016 Diameter Inches	Length Feet
	Range in Depth { Top	Geologic Formation GREEN Feet	Clay + Black Sand
	Tail Piece: DiameterInc	ches LengthFeet	
7. ,	±•	ons per minute at Feet ab	ove surface
*	Water rises to	_ Feet above surface	
8.	RECORD OF TEST: Date 8-2-80	6 Yield <u>20</u> Ga	llons per minute
		Feet below:	
	Pumping level63feet be	elow surface afterh	ours p umping
	Drawdown 5/_ Feet	Specific Capacity 22+ Gals. per min	. per ft. of drawdown
	How pumped TEST Pumiped-	Rodreylinder How measured STOP	WATCH + 5 GAI PAIL
	Observed effect on nearby wells	:	
9.			
	Type Schmersible	Mfrs, Name Myers How Driven ELEC H.P. 1	
	Capacity G.P.M. H	How Driven <u>ELEC</u> H.P. 1	R.P.M. 3450
	Depth of Pump in well Feet	Depth of Footpiece in well	Feet
	Depth of Air Line in well Feet	Type of Meter on Pump	SizeInches
0.	USED FOR Domestic	AMOUNT { Average	Gallons Daily
		(Maximum _se	Gallons Daily
1.	QUALITY OF WATER 9000	Sample: Yes	
	Taste Good Odor A		TempOF.
2.	(Give details on back of sheet or on separate sh	Are samples avai	lable?
3.	SOURCE OF DATA		
	DATA OBTAINED BY SREAT WATE	ER /Ne Mil Date	8-2-86

Form DWR- 138 11/80

STATE OF NEW JERSEY COOTD: DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913854

PERMIT NO. 29-16-766

APPLICATION NO.		_(`
COUNTY	Monmouth	٧

WELL RECORD

	W.T. DOM	2916766
1.	1. OWNER NJ DOT	DDRESS 306 MAIN STREET
	Owner's Well No. SA-	URFACE ELEVATIONFeet
	2. LOCATION Lot: 30.04 Block: 43 Munici	ipality: Eatontown Boro
	3. DATE COMPLETED 7/30/86 DRILLEI	
4.	6. DIAMETER: Top 8 inches Bottom 8	inches TOTAL DEPTH 41.5 Feet
5.	5. CASING: Type Sch. 40 PVC	Diameter 11/2 Inches. Length 36,5 Feet
6.	5. CASING: Type Sch. 40 PVC 5. SCREEN: Type Sch. 40 Size of Opening +020"	Diameter 1/2 Inches Length 5 Feet
		ologic Formation
	Tail Piece: DiameterInchesLen	gthFeet
	7. WELL FLOWS NATURALLY Gallons per minute at	
	Water rises to Feet above surfaces. RECORD OF TEST: Date	* PURPOSES OF L
8.	3. RECORD OF TEST: Date VONE	Yield FOR CORONS per minute
	Static water level before pumping	Feet below surface
	Pumping level feet below surface after	hours pumping
	Drawdown Feet Specific Capacit	Gels. per min, per ft. of drawdown
	How pumped	How measured
	Observed effect on nearby wells	
9.		•
	Type Mfrs. Nam	18
	Capacity G.P.M. How Driven	H.P R.P.M
	Depth of Pump in well Feet Depth	h of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Mate	er on Pump SizeInches
0.	o. USED FOR BW Monitoring	AMOUNT Average Gallons Daily Maximum Gallons Daily
١.	1. QUALITY OF WATER	Semple: Yes No
	TasteOdor	Color Temp OF.
2.	2. LOG BACK AT THIS Sheet [Give details on back of shoot or an apparets sheet. If electric los was	Are samples available?
2	3. SOURCE OF DATA Drillers Log	
	A DATA ORTAINED BY TOSTUPIL Craig Tost T	300100 - 11/10/02

29,13.854 2916766

Clay & pilt, th cf sand 0-41.5'

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Form DiVR- 138 11/80

STATE OF NEW JERSEY COORD: DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913854

OTECTION PERMIT NO 29-16767

PERMIT	10. <u> </u>	
APPLICAT	ION NO	
661 WYW	Monmouth	4.

WELL RECORD

	N.T. DOT	2916767
1.	1. OWNER NJ DOT ADDRESS 306 MAI	N STREET
	Owner's Well No. SA-4 SURFACE ELEVATION	(Above men see (ave/)
2.	2. LOCATION Lot: 30.04 Block: 93 Municipality: Eaton	ntown Boro
	3. DATE COMPLETED 7/30/86 DRILLER TESTWELL CR.	
	4. DIAMETER: Top inches Bottom Inches TOTA	
5.	5. CASING: Type Sch. 40 PVC Diameter 11/2 . 1	nches Length 405 Feet
6.	6. SCREEN: Type Sch. 40 Size of Opening 6020" Diameter 11/2 1	
	Range in Depth { Top 46.5 Feet Geologic Formation	
٠	Tail Piece: Diameter Inches Length	Feet
	7. WELL FLOWS NATURALLY Gallons per minute at	
	Water rises to Feet above surface	PURPOSES OF LY
8.	Water rises toFeet above surface 8. RECORD OF TEST: Date	OR CAROLE Per minute
	Static water level before pumpingFeet	below surface
	Pumping level feet below surface after	hours pumping
	Drawdown Feet Specific Capacity Gals, g	per min, per ft, of drawdown
	How pumped How messured	to the second control of the second control
	Observed effect on nearby wells	and the second s
9.	9. PERMANENT PUMPING EQUIPMENT:	
	Type AbNE Mfrs. Name	
	Capacity G.P.M. How Driven H.P.	
	Depth of Pump in well Feet Depth of Footpiece in well .	Feet
	Depth of Air Line in well Feet Type of Meter on Pump	SizeInches
0.	O. USED FOR BW Monitoring AMOUNT AMOUNT Mexim	Gallons Deily Gallons Daily
11.	1. QUALITY OF WATER Sample:	Yes No
	Taste Odor Color	Temp OF.
2	Dody all this oh I	d v
-	12. LOG BACK OF TABLE SAMPLE S	les evailable?
		les evailable?/UO

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Form DWR- 138

STATE OF NEW JERSEY COORD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913854

****	RECORD
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1	1. OWNER NJ DOT ADDRES	306 MAIN STRE	2916768 ET	
	Owner's Well No. SD-2 SURFACE	F FLEVATION	NIA	Fast
2.	2. LOCATION Lot: 30, 04 Block: 93 Municipali	ty: Eatontown	Abave Inden see Jevel) Boro	
	3. DATE COMPLETED 7/30/86 DRILLER TES			
	4. DIAMETER: Top inches Bottom inches			
5.	5. CASING: Type Sch. 40 PVC Diamete	1 1/2 loches	Length 45:	3 Feet
6.	6. SCREEN: Type Sch 40 Size of Opening 020" Diameter	r Inches	Length 5	Feet
	Range in Depth $ \begin{cases} Top \underline{45.3} & Feet \\ Bottom \underline{50.3} & Feet \end{cases} $ Geologic Fo	ormation	· · · · · · · · · · · · · · · · · · ·	
	Tail Piece: Diameter Inches Length			
	7. WELL FLOWS NATURALLY Gallons per minute at			
R	Water rises to Feet above surface 8. RECORD OF TEST: Date Yie	eld ENR ARS	RVATION PURPOS	iès ol:,7,
U .	Static water level before pumping	Feet below surf	ace	
	· · · · ·			
	Pumping level feet below surface after	hour	pumping	
	Pumping level feet below surface after Drawdown Feet Specific Capacity			
	Drawdown Feet Specific Capacity	Gals, per min, pe	r ft. of drawdown	
	Drawdown Feet Specific Capacity How pumped Ho	Gals, per min, pe	r ft. of drawdown	
9.	Drawdown Feet Specific Capacity	Gals, per min, pe	r ft. of drawdown	
9.	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT:	Gals, per min, pe	r ft. of drawdown	
9.	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells	Gals, per min, pe	r ft. of drawdown	
9.	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven	Gals, per min, pe	r ft. of drawdown	
9.	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven	Gals, per min, pe	r ft. of drawdown R.P.M. Feet	
	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Foo Depth of Air Line in well Feet Type of Meter on Pu	Gals, per min, pe	R.P.M Feet	
0.	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells S. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name	Gals, per min, per w measured	R.P.M Feet SizeInches Galions Daily	
0.	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Foo Depth of Air Line in well Feet Type of Meter on Pu	Gals, per min, per win, per wi	R.P.M Feet SizeInches Galions Daily	
0.	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells S. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name	Gals, per min, per win, per wi	R.P.M. R.P.M. Feet SizeInches Gellons Daily No TempOF.	
10. 11.	Drawdown Feet Specific Capacity How pumped Ho Observed effect on nearby wells S. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Foo Depth of Air Line in well Feet Type of Meter on Pumping USED FOR AMOUNT AMO	Gals, per min, per win, per wi	R.P.M. R.P.M. Feet SizeInches Gellons Daily No TempOF.	

F-M-C sand, tr & gravel, tr sict 0-50.3'

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Form DiVR- 138 11/80

STATE OF NEW JERSEY COORD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

Coord: 2913854

-7034	20 /
PERMIT NO.	29-1676

APPLICAT	ION	NO.	
	Mo	nma	outh

29, 13.854 29, 13.854

1.	OWNER NJ DOT ADDRESS 306 MAIN STREET
	Owner's Well No. 51-9 SURFACE ELEVATION (ABove meen see level)
2.	LOCATION Lot: 30,04 Block: 93 Municipality: Eatontown Boro
3.	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
4.	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 40.3 Feet
5.	CASING: Type Sch. 40 PVC Diameter 11/2 Inches Length 35, 3 Feet SCREEN: Type Sch. 40 Size of Opening 5020" Diameter 11/2 Inches Length 5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening 5020" Diameter 1/2 Inches Length 5 Feet
	Range in Depth { Top 35, 3 Feet Geologic Formation Geologic Format
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises toFeet above surface RECORD OF TEST: Date
8.	RECORD OF TEST: Date VONE Yield FOR GREEN MINUTE
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type 16NE Mfrs, Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
	USED FOR BW Monitoring AMOUNT Average Gallons Daily
10.	USED FOR GW WIONIFORING AMOUNT Maximum Gellons Daily
11.	QUALITY OF WATER Sample: Yes No
	Taste Odor Color Temp OF.
12.	LOG BACK of this Sheet Are samples available? 100
13	Give details on back of short or an separate short. If electric log was made, please furnish copy.) SOURCE OF DATA Drillers Log
	DATA OBTAINED BY TESTURI Craig Test Boring Date 11/12/92

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Elin Carl Hill

Form DivR- 138 11/80

Coord: 2913854 STATE OF NEW JERSEY COORD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

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PERMIT NO.	29-16770

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APPLICATION NO.	6
Monmouth	7

WELL RECORD

COUNTY	onmou	
39	.13.	854
	1677	

1.	OWNER NJ DOT ADDRESS 306 MAIN STREET Owner's Well No. SURFACE ELEVATION (Above inden see level) Feet
	Owner's Well No. 30-13 SURFACE ELEVATION N/A Feet
2.	LOCATION Lot: 30.04 Block: 93 Municipality: Eatontown Boro
3.	DATE COMPLETED 7/30/80 DRILLER TESTWELL CRAIG TEST BORING
	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 41.5 Feet
5.	CASING: Type Sch. 40 PVC Diameter 11/2 Inches Length 36.5 Feet SCREEN: Type Sch. 40 Size of Opening ©20" Diameter 11/2 Inches Length 5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening 020" Diameter 1/2 Inches Length 5 Feet
	Range in Depth { Top 36,5 Feet Geologic Formation Geologic Formation
	Tail Piece: DiameterInchesEeet
	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	Water rises to Feet above surface RECORD OF TEST: Date Yield Feet below surface Static water level before pumping Feet below surface
	Static water level before pumping Feet below surface
	· · ·
	Pumping level feet below surface after hours pumping
	Pumping level feet below surface after hours pumping Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown
	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown
9.	Drawdown Feet Specific Capacity Gals, per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:
9.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed effect on nearby wells
9.	Drawdown Feet Specific Capacity Gals, per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:
9.	Drawdown Feet Specific Capacity Gals, per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name
9.	Drawdown Feet Specific Capacity Gals, per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G.P.M. How Driven H.P R.P.M
9.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet Depth of Footpiece in well Feet
9. 10.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet
9. 10.	Drawdown Feet Specific Capacity Gals, per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet
9. 10. 11.	Drawdown
9. 10. 11.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured
9. 10. 11. 12.	Drawdown

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Form DWR- 138 11/80

STATE OF NEW JERSEY COO'RD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

Coord: 2913854

PERMIT NO. 29-11.7

APPLICAT	ION	NO.	
COUNTY	Mo	nma	outh

	ລິ່ງເທົ່າວາ
1.	OWNER NJ DOT ADDRESS 306 MAIN STREET
	OWNER NJ DOT ADDRESS 306 MAIN STREET Owner's Well No. SE-/ SURFACE ELEVATION (Algore mean sea level) Feet
2.	LOCATION Lot: 50,04 Block: 93 Municipality: Eatontown Boro
3.	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
4.	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 30.5 Feet
5.	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 3/.5 Feet SCREEN: Type Sch. 40 Size of Opening •020" Diameter 1/2 Inches Length 5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening 6020" Diameter 1/2 Inches Length 5 Feet
	Range in Depth { Top31,5_Feet Geologic Formation Geologic Formation
	Tail Piece: Diameter Inches LengthFeet
	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises toFeet above surface RECORD OF TEST: Date
8.	RECORD OF TEST: Date VONE Yield FOR CHRONS per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after, hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type AbNE Mfrs, Name
	Capacity G,P.M, How Driven H.P, R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
10.	USED FOR SW Monitoring AMOUNT Average Gallons Daily Maximum Gallons Daily
11,	QUALITY OF WATER Semple: Yes No
	Taste Odor Color Temp 6F.
12.	LOG Back of this Sheet (Give details on back of short or an separate sheet. If electric log was made, please furnish eapy.)
13.	SOURCE OF DATA Drillers Log
	DATA OBTAINED BY TESTUPIL Craig Test Boring Date 11/12/92

Clay & put, tr of sand 0-36.5'

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Form DiVR- 138 11/80

STATE OF NEW JERSEY COORD: DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913854

PERMIT NO. 29-10772

APPLICAT	10N NO	
COUNTY_	Monmouth	L

WELL RECORD

	29110772
1.	OWNER NJ DOT ADDRESS 306 MAIN STREET
	Owner's Well No. SE-G SURFACE ELEVATION Feet
2.	LOCATION Lot:30.64 Block: 93 Municipality: Eatontown Boro
	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
4.	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 36.5 Feet
	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 31.5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening 020" Diameter 1/2 Inches Length 5 Feet
	Range in Depth { Top 31. 5 Feet Geologic Formation
	Tail Piece: DiameterInches LengthFeet
	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface RECORD OF TEST: Date Yield
8.	RECORD OF TEST: Date VONE Yield FOR CARONS per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type AbNE Mfrs. Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
١٥.	USED FOR Gallons Daily AMOUNT Average Gallons Daily Maximum Gellons Daily
11.	QUALITY OF WATER Semple: Yes No
	Tarte Odor Color Temp ⁰ F.
12.	LOG BACK At this Sheet Are samples available? NO
	Who should no beat of shore as as seemed there is a major flowing made planet from the
17	(Give details on back of short or an separate short. If electric log was made, please furnish capy.)
	SOURCE OF DATA DELLES LOG DATA OBTAINED BY 10.5 TUPI Craig Test Boring Date 11/12/92

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Form DWR- 138 11/80

Coord: 2913854 STATE OF NEW JERSEY COORD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO.	29-	10773
APPLICATION		1

WELL RECORD	COUNTY
WELL RECORD	29,13.854

1.	OWNER NJ DOT ADDRESS 306 MAIN STREET
	Owner's Well No. SF-3 SURFACE ELEVATION Above from sea level)
	LOCATION Lot 30.04 Block: 93 Municipality: Eatontown Boro
	DATE COMPLETED 7/30/80 DRILLER TESTWELL CRAIG TEST BORING
4.	DIAMETER: Top 8 inches Bottom 8 Inches TOTAL DEPTH 41.5 Feet
5.	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 365 Feet
6.	SCREEN: Type Sch. 40 Size of Opening 020" Diameter 11/2 Inches Length 5 Feet
	Range in Depth { Top 36.5 Feet Geologic Formation Geologic Formation
	Tail Piece: Diameter Inches LengthFeet
	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	Water rises to Feet above surface RECORD OF TEST: Date Yield FOR GRSERVATION PURPOSES OF CORD OF TEST:
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
9.	
9.	PERMANENT PUMPING EQUIPMENT:
9.	PERMANENT PUMPING EQUIPMENT: Type
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	PERMANENT PUMPING EQUIPMENT: Type
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10. 11.	Type

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Form DiVR- 138 11/80

STATE OF NEW JERSEY COORD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913854

PERMIT NO.	29-16774	•
APPLICATION MC		
29	,13.854	

WELL RECORD

	OWNER NJ DOT APPRECE 306 MAIN STREET
1.	OWNERADDRESS
	Owner's Well No. SF-/ SURFACE ELEVATION Above meen use fevel/
_	LOCATION Lot: 30,04 Block: 93 Municipality: Eatontown Boro
	DATE COMPLETED 7/30/80 DRILLER TESTWELL CRAIG TEST BORING
4.	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 41.5 Fact
5.	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 36.5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening 020" Diameter 11/2 Inches Length 5 Feet
	Range in Depth { Top 36, 5 Feet Geologic Formation Geologic Formatio
	Tail Piece: Diameter Inches LengthFeet
	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
8.	Water rises to Feet above surface RECORD OF TEST: Date Yield Yield For below surface Static water level before numping Feet above surface
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Pumping level feet below surface after hours pumping Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured
9.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown
9 .	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:
9.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name
9.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven H.P R.P.M
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G,P,M. How Driven H,P R,P,M Depth of Pump in well Feet Depth of Footpiece in well Feet
9 .	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name ' Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet
	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed affect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name
	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name
	Drawdown Feet Specific Capacity Gals. per min, per ft. of drawdown How pumped How measured Observed affect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name H.P R.P.M Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet Depth of Footpiece in well Feet Type of Meter on Pump Size Inches USED FOR MOINT for ing AMOUNT { Average Gallons Deily Maximum Gallons Deily QUALITY OF WATER Semple: Yes No
11. 12.	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mc Mfrs. Name H.P R.P.M Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet

29,13.854

F Sand, tr sict 0-41,5'

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Coord: 2913882

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO. 29-16775

W	EL	.L	RE	CC	ıR	D
_	_	_	_	_	_	

APPLICATION NO. MONMOUTH			-6	
COUNTY	Y			
	29,	13.	886	عي

	NJ DOT 306 MAIN STREET	
1.	1. OWNER ADDRESS	<u> </u>
	Owner's Well No. SB-2 SURFACE ELEVATION Municipality: Tinton Falls	H Feet
2.		
3.	3. DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST	
4.	4. DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH	
	5. CASING: Type Sch. 40 PVC Diameter 1/2 Inches	
6.	6. SCREEN: Type Sch. 40 Size of Opening 4020" Diameter 1/2 Inches	LengthFeet
	Range in Depth { Top 58 Feet Geologic Formation	
	Tail Piece: DiameterInchesFeet	
7.	7. WELL FLOWS NATURALLY Gallons per minute at Feet above surf	ace .
	Water rises to Feet above surface FOR ORCEDIA	
8.	8. RECORD OF TEST: Date NONE Yield Gallors	Offings Property
	7. WELL FLOWS NATURALLY Gallons per minute at Feet above surface Water rises to Feet above surface	ONPOSES ON
	Pumping level feet below surface after hours pur	nping
	Drawdown Feet Specific Capacity Gals. per min. per ft.	of drawdown
	How pumped How measured	
	Observed effect on nearby wells	
9.	9. PERMANENT PUMPING EQUIPMENT:	
	Type NONE Mfrs, Name	·
	Capacity G.P.M. How Driven H.P	R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well	Feet
	Depth of Air Line in well Feet Type of Meter on Pump Si	teInches
10.	10. USED FOR GIVE Monitoring AMOUNT AMOUNT Meximum	Gallons Daily Gallons Daily
11.	11. QUALITY OF WATER Sample: Yes	4o
	Taste Odor Color Temp	0F.
12.	12. LOG Back of thest or an apparets sheet. If electric log was made, please furnish capy.)	No
13.	13. SOURCE OF DATA Drillers Log	
14.	14. DATA OBTAINED BY TESTIVELL Craig Test Boring Date 11/12	/92

29.13.882

F-M-c Sand, tr f gravel, tr silt

0-15' F-M-C Sand; trisit

> 15'-45' F Sand, tr SILT 45'-43'

EP 111 PE 1 11 HAL

Rate of the full fluid

Form DWR. 138

Coord: 2913882

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO. 29-14774

APPLICATION NO. MONMOUTH

WELL RECORD

COUNT	ें ब्रवः	19.	608
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1.	NJ DOT OWNER	306 MAIN STREET
	Owner's Well No. 58-9 Lot: 8A9A Block: 113 Munic	
2.	LOCATION	
3.	DATE COMPLETED 7/30/86 DRILL	TESTWELL CRAIG TEST BORING
4.	DIAMETER: Top 8 inches Bottom 8	inches TOTAL DEPTH 76.5 Fact
5.	CASING: Type Sch. 40 PVC	Diameter 1/2 Inches Length 7/5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening . 020"	Diameter 1/2 Inches Length 5 Feet
	715	eologic Formation
	Tail Piece: Diameter Inches Lo	
7.	WELL FLOWS NATURALLY Gallons per minute at .	Feet above surface
	Water rises to Feet above surf	FOR OBSERVE
8.	RECORD OF TEST: DateNONE	Yield Gallons partitions
	Static water level before pumping	Feet above surface FOR OBSERVATION OF THE POSES OF THE P
	Pumping level feet below surface after	hours pumping
	Drawdown Feet Specific Capac	dan
	Drawdown reet Specific Capac	Sity Gas. per min. per ft, or drawdown
		How measured
		How measured
9.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:	How measured
9.	Observed effect on nearby wells	How measured
9.	How pumped Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type	How measured
9.	How pumped	How measured
9.	How pumped	How measured
9. 10.	How pumped	How measured H.P. R.P.M. oth of Footpiece in well Feet ster on Pump Size Inches
	Observed effect on nearby wells	How measured H.P. R.P.M. oth of Footpiece in well Feet ster on Pump Size Inches (Average Gallons Daily
	How pumped Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type	How measured H.P. R.P.M. Inch of Footpiece in well Feet Iter on Pump Size Inches AMOUNT Average Gallons Daily Meximum Gallons Daily
11.	How pumped Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type	How measured H.P. R.P.M. Inch of Footpiecs in well Feet Iter on Pump Size Inches AMOUNT Average Gallons Daily Meximum Gellons Daily Color Temp. Are samples available?
11. 12.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type	How measured H.P. R.P.M. Inch of Footpiecs in well Feet Iter on Pump Size Inches AMOUNT Average Gallons Daily Meximum Gellons Daily Color Temp. Are samples available?

29,13,882

Clay & piet, tr cf sand

0-40'

C-F Sand, tr. piet

40'-76.5'

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STATE OF NEW JERSEY COORD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913854

PERMIT NO. 29-110777

APPLICATION NO. . Monmouth COUNTY

WELL RECORD

1.	OWNER NJ DOT ADDRESS 306 MAIN STREET
	Owner's Well No. R-403C SURFACE ELEVATION
2.	LOCATION Lot: N/A Block: N/A Municipality: Eatontown Boro
	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 46.5 Fact
5.	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 4/, 5 Feet SCREEN: Type Sch. 40 Size of Opening 020" Diameter 1/2 Inches Length 5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening 020" Diameter 1/2 Inches Length 5 Feet
	Range in Depth Top 41, 5 Feet Geologic Formation Ge
	Tail Piece: Diameter InchesFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	Water rises toFeet above surface RECORD OF TEST: Date
	Static water level before pumping Feet below surface
	Static water level before pumping Feet below surface after hours pumping
	Pumping level feet below surface after hours pumping
	Pumping level feet below surface after hours pumping Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
9.	Pumping level feet below surface after hours pumping Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:
9.	Pumping level feet below surface after hours pumping Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed affect on nearby wells
9.	Pumping level feet below surface after hours pumping Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:
9.	Pumping level
9.	Pumping level
9.	Pumping level
	Pumping level
	Pumping level
	Pumping level
11. 12.	Pumping level

29.13.854 2916777

CMF Sand, tr SILT

0-16,5'

F Sand, 51LTY

10.5-28,5

CMF Sand, tr trash

28,5-46.5

Hamilton II

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Form DWR- 138 11/80

STATE OF NEW JERSEY COORD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913854

PERMIT NO. SELECTION	٠,
APPLICATION NO.	./.
COUNTY Monmouth	し
29,13.854	•

WELL RECORD

	N.T. DOT 2910778
١.	OWNER ADDRESS 306 MAIN STREET
	OWNER NJ DOT ADDRESS 306 MAIN STREET Owner's Well No. R-406 SURFACE ELEVATION (Above tries) see love!) Feet
2.	LOCATION Lot: N/A Block: N/A Municipality: Eatontown Boro
	DATE COMPLETED 7/30/80 DRILLER TESTWELL CRAIG TEST BORING
	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 4/15 Feet
	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 30.5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening +020" Diameter 1/2 Inches Length 5 Feet
	Range in Depth Top 36.5 Feet Bottom 41.5 Feet Geologic Formation
	Tail Piece: Diameter Inches LengthFeet
	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	Water rises to Feet above surface RECORD OF TEST: Date Vield Vield FOR GRISERVATION PURPOSES OF CORD OF TEST:
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type AbNE Mfrs. Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
0.	USED FOR BW Monitoring AMOUNT AMOUNT AMOUNT Gallons Daily
11.	QUALITY OF WATER Semple: Yes No
	Taste Odor Color Temp 0F.
2.	LOG BACK OF THIS Sheet Are samples available? NO
13	SOURCE OF DATA Drillers Log
	DATA OBTAINED BY Testuril Craig Test Boring Date 11/12/92
· – .	POINT PRINTED BY THE TANK AND THE TOTAL PRINTED BY THE PRINTED BY THE TOTAL PRINTED BY THE PRINTED BY

FMC sand 0-1.5'

F Sand, sm SILT

1.5'-11.5'

F Sand, tr SILT

11.5'-36.5'

F Sand, sm SILT

36.5'-41.5'

200

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Form DiVR- 138 11/80

STATE OF NEW JERSEY COORD : DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913854

PERMIT NO. 29-16779

APPLICAT	TION NO.
COUNTY	Monmouth Y
	20 13 851

WELL RECORD

	NT DOM			2916779	
1.	OWNER NJ DOT	ADDRESS $\frac{30}{2}$	06 MAIN STREET	***************************************	
	Owner's Well No. R-401L	SURFACE EL	EVATION	ve meen see (evel)	_Feet
	LOCATION Lot: 30 Block:	93 Municipality:	Eatontown Bo	ro	
	DATE COMPLETED _ 7/30/86	_			
	DIAMETER: Top inches				
5.	CASING: Type Sch. 40 PVC	· Diameter	11/2 Inches	Length <u>55,4</u>	_Feet
6.	SCREEN: Type Sch. 40 Size of				
	Range in Depth $ \begin{cases} Top \underline{55, 4} \\ Bottom \underline{60, 4} \end{cases} $				
	Tail Piece: Dismeter	Inches Length	Feet		
	WELL FLOWS NATURALLY Ga				
	.Water rises to	Feet above surface	COD ABSER	ATION PURPOSE	S 01:74
0.	Static water level before pumping			n mangte	
	Pumping levelfeet			moins.	
	Drawdown Feet How pumped				
	·				
	△				
_	Observed effect on nearby wells				
9.	PERMANENT PUMPING EQUIPMENT:	•			
9.	PERMANENT PUMPING EQUIPMENT:	Mfrs. Name			
9.	PERMANENT PUMPING EQUIPMENT: Type G.P.M.	Mfrs. Name	н.Р	R.P.M	
9.	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven t Depth of Footpies	H.P	R.P.M	
	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven Depth of Footpied Type of Mater on Pump	H.P	R.P.M Feet	
	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven Depth of Footpied Type of Mater on Pump	H.P	R.P.M Feet	
0.	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven Depth of Footpied Type of Mater on Pump	H.P	R.P.M Feet	
0.	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven Depth of Footpies Type of Mater on Pump AMOUNT	H.P	R.P.M Feet lizeInches Gallons Daily Gellons Daily No	
O. 1.	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven Depth of Footpies Type of Mater on Pump AMOUNT	H.PSin wellS { Average Maximum Semple: Yes Term	R.P.MFeet lizeInchesGallons DailyGetlons Daily NoOF.	
O. 1.	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven Depth of Footpies Type of Mater on Pump AMOUNT	H.P	R.P.M Feet sizeInches Gallons Deily Getlons Daily No	
0.	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven Depth of Footpies Type of Meter on Pump AMOUNT Color Color	H.P	R.P.MFeet lizeInchesGallons DailyGetlons Daily NoOF.	
0. 1. 2.	PERMANENT PUMPING EQUIPMENT: Type	Mfrs. Name How Driven Depth of Footpies Type of Meter on Pump AMOUNT Color Color	H.P	R.P.MFeet lizeInchesGallons DailyGetlons Daily NoOF.	

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29.13.854 29.16779

CMF Sand, tr f gravel

0-36.5'

CMF Sand, tr cley, tr silt

36.5'-60.4'

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Form DWR- 138 11/80

STATE OF NEW JERSEY COO'ED DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

Coord: 2913858

PERMIT NO.	29-14780	P.
ABBI ICATION	. NA	7

APPLICATION	NO.	

COUNTY_	Monmouth					
	39.	13.	858			
			780			

1.	OWNER NJ DOT ADDRESS 306 MAIN STREET
	Owner's Well No
2.	LOCATION Lot: 1. A Block: 1/6 Municipality: Tinton Falls Boro
3.	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
4.	DIAMETER: Top 8 inches Bottom 8 Inches TOTAL DEPTH 4(e.5 Feet
5.	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 41.6 Feet
6.	SCREEN: Type SCh, 40 Size of Opening 1020 Diameter 11/2 Inches Length 5 Feet
	Range in Depth Top 41.5 Feet Bottom 46.5 Feet Geologic Formation
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to FOR OBSERVATION PURPOSES ONLY
8.	
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min. per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type None Mfrs, Name
	Capacity G,P,M, How Driven H,P, R,P,M,
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
10.	USED FOR GW Monitoring AMOUNT AMOUNT AMOUNT Gellons Daily
11.	QUALITY OF WATER No
	Tatte Odor Color Temp OF.
12.	LOG Back of this sheet for on separate phoet. If electric log was made, places furnish appy.)
13.	SOURCE OF DATA Drillers Log
	DATA OBTAINED BY TOSTWELL Craig Test Boring Date 11/12/92
	· · · · · · · · · · · · · · · · · · ·

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

MF Sand, tr sut 29.13.858 2916780 0-1.5' CMF Sand, tr f graver 1.5'-16.5' MF Sand, tr clay, tr sict 16.5'-40.5'

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na Authouth Form DWR- 138 11/80

STATE OF NEW JERSEY COO'S DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913858

13030	29-16781	
PERMIT NO.	Q.1. 14 [A]	4
APPLICATION	N NO	

WEL-	ŁR	ECO	RD

COUNTY	Monmouth				
6	29.13.858				

1.	OWNER NJ DOT ADDRESS 306 MAIN STREET
	Owner's Well No R 458 SURFACE ELEVATION Feet
2.	LOCATION Lot: 1, 2 Block: 1/5 Municipality: Tinton Falls Boro
3.	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
4.	DIAMETER: Top_8 inches Bottom 8 Inches TOTAL DEPTH Fact
	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 11.5 Feet
6.	SCREEN: Type SCh. 40 Size of Opening -020 Diameter 1/2 Inches Length 5 Feet
	Range in Depth { Top
•	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface FOR OBSERVATION PURPOSES ONLY
8.	
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	SPRALAIPHE BUILDING POLISHIPHE
	PERMANENT PUMPING EQUIPMENT:
	Type NONE Mfrs, Name
	A 4
	Type None Mfrs, Name
	Type Mfrs, Name Capacity G.P.M. How Driven H.P. R.P.M.
10.	Type None Mfrs, Name Capacity G.P.M. How Driven H.P. R.P.M. Depth of Pump in well Feet Depth of Footpiece in well Feet
	Type NONE Mfrs, Name Capacity G.P.M. How Driven H.P. R.P.M. Depth of Pump in well Feet Depth of Footpiece in well Feet Depth of Air Line in well Feet Type of Meter on Pump Size Inches USED FOR GW Monutage Gallons Daily
	Type NONE Mfrs, Name Capacity G.P.M. How Driven H.P. R.P.M. Depth of Pump in well Feet Depth of Footpiece in well Feet Depth of Air Line in well Feet Type of Meter on Pump Size Inches USED FOR Monitoring AMOUNT AMOUNT Awarage Gallons Daily Maximum Gellons Daily
11.	Type NONE Mfrs, Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet
11. 12.	Type NONE Mfrs, Name Capacity G.P.M. How Driven H.P. R.P.M. Depth of Pump in well Feet Depth of Footpiece in well Feet Depth of Air Line in well Feet Type of Meter on Pump Size Inches USED FOR Monitoring AMOUNT Average Gallons Daily QUALITY OF WATER Sample: Yes No Taste Odor Color Temp. OF. LOG Back of these or an apperate sheet. If electric log was made, please furnish copy.)
11. 12. 13.	Type NONE Mfrs, Name Capacity G.P.M. How Driven H.P. R.P.M. Depth of Pump in well Feet Depth of Footpiece in well Feet Depth of Air Line in well Feet Type of Meter on Pump Size Inches USED FOR GN Moniforms AMOUNT Average Gallons Daily Maximum Gellons Daily QUALITY OF WATER Sample: Yes No Taste Odor Color Temp. OF. LOG Back of this Short Are samples available? Are samples available?

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, atc.)

MF Sand, to selt 0-16.5'

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Form DWR- 138

STATE OF NEW JERSEY COO'RD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913858

PERMIT NO. Q.9.-1(1) 782

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_	 	_		 	 _				

WELL RECORD

COUNTY_	Monmouth			
	24	, 13.	828.	
	29	16	782	

1.	1. OWNER NJ DOT ADDRE	306 MAIN STREET	0100
	Owner's Well No. SG-2 SURFA	CE ELEVATION	Feet
2.	2. LOCATION Lot: // A Block: //5 Municipa	(Above Incention Falls Boro	re()
3.	3. DATE COMPLETED 7/30/86 DRILLER T	ESTWELL CRAIG TEST BORING	<u> </u>
4.	4. DIAMETER: Top 8 inches Bottom 8 inches		
5.	5. CASING: Type Sch. 40 PVC Diame	rter 11/2 Inches Length	31.5 Feet
6.	6. SCREEN: Type SCh, 40 Size of Opening 1020 Diame	iter 1/2 Inches Length_	5 Feet
	Range in Depth $ \begin{cases} Top & 31.5 \\ Bottom & 36.5 \end{cases} $ Feet Geologic		·····
	Tail Piece: Diameter Inches Length	Feet	
	7. WELL FLOWS NATURALLY Gallons per minute at		
	Water rises to Feet above surface 8. RECORD OF TEST: Date	FOR OBSERVATION PURPOSES (Омі У .
8.	8. RECORD OF TEST: Date NONE	Yield Gallons per minute	OII L
	Static water level before pumping	Feet below surface	
	Pumping level feet below surface after	hours pumping	
	Pumping level feet below surface after Drawdown Feet Specific Capacity	-	n
	· •	Gals, per min, per ft, of drawdow	
	Drawdown Feet Specific Capacity	Gals, per min, per ft. of drawdow	
9.	Drawdown Feet Specific Capacity How pumped & Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT:	Gals, per min, per ft. of drawdow	
9.	Drawdown Feet Specific Capacity How pumped & Observed effect on nearby wells	Gals, per min, per ft. of drawdow	
9.	Drawdown Feet Specific Capacity How pumped & Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT:	Gals, per min, per ft. of drawdow	
9.	Drawdown Feet Specific Capacity How pumped Feet Specific Capacity Observed affect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name	Gals, per min, per ft. of drawdow How measured H.P. R.P.M.	
9.	Drawdown Feet Specific Capacity How pumped & Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Fe	Gals, per min, per ft. of drawdow How measured H.P. R.P.M.	·
	Drawdown Feet Specific Capacity How pumped & Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Fe	Gals, per min, per ft. of drawdow How measured H.P. R.P.M. ootpiece in well Average Gallons	net ches Daily
10.	Drawdown Feet Specific Capacity How pumped	Gals, per min, per ft. of drawdow How measured H,P. R,P,M. cotpiece in well Fermion Size In Average Gallons	net ches Daily
10.	Drawdown Feet Specific Capacity How pumped	Gals, per min, per ft. of drawdow How measured H,P. R,P,M. cotpiece in well Fe Pump Size In Gallons Maximum Gallons Sample: Yes No	net ches Daily
10.	Drawdown Feet Specific Capacity How pumped	Gals, per min, per ft. of drawdow How measured H.P. R.P.M. cotpiece in well Fe Pump Size In Average Gallons Maximum Gallons Sample: Yes No Temp. Are samples available?	net ches Daily
10. 11.	Drawdown Feet Specific Capacity How pumped	Gals, per min, per ft. of drawdow How measured H.P. R.P.M. cotpiece in well Fe Pump Size In Average Gallons Maximum Gallons Sample: Yes No Temp. Are samples available?	net ches Daily

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

CMF Sand, tr roots, tr silt

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EG. 11 TH 1 11 NAC

Recognition of Aug

Form DWR- 138 11/80

STATE OF NEW JERSEY COO'ND DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913858

PERMIT NO. 2.9-16-783	
APPLICATION NO.	۶
COUNTY Monmouth	

WELL RECORD

	2710103
1,	OWNER NJ DOT ADDRESS 306 MAIN STREET
	Owner's Well No. 36-9 SURFACE ELEVATION (Above meen see level)
2.	LOCATION Lot: 1.2 Block: 15 Municipality: Tinton Falls Boro
3.	DATE COMPLETED 7/30/80 DRILLER TESTWELL CRAIG TEST BORING
	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 40,8 Freet
5.	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 35.8 Feet
6.	SCREEN: Type SCh, 40 Size of Opening 020 Diameter 1/2 Inches Length 5 Feet
	Range in Depth Top 35, 8 Feet Bottom 40, 8 Feet Geologic Formation
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface FOR OBSERVATION PURPOSES ONLY
8.	RECORD OF TEST: Date
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type None
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
0.	USED FOR GW Monitoring AMOUNT AMOUNT AMOUNT Gallons Daily
1.	QUALITY OF WATER Semple: Yes No
	Taste Odor Color Temp OF.
2.	LOG Back of this sheet or an apparete sheet. If electric log was made, please furnish copy.)
3	SOURCE OF DATA Drillers Log
4.	DATA OBTAINED BY 185twell Craig 18st Poring Date 11/12/92

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

Form DWR- 138 11/80

STATE OF NEW JERSEY COO'S DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913858

PERMIT NO.	2.9-16.784
4804 1045104	

W	Е	L	L	R	E	C	0	R	D	

COUNTY	Monmouth	
-	\$9,13.858	•
	29112784	

1.	OWNER NJ DOT	ADDRESS 306 MAIN STREET
	Owner's Well No. SH-2	
2.	LOCATION Lot: 1/2 Block: 1/5 Munic	cipality: Tinton Falls Boro
3.	DATE COMPLETED _ 7/30/80 DAILLE	R TESTWELL CRAIG TEST BORING
4.		inches TOTAL DEPTH 40.5 Feet
5.	CASING: Type Sch. 40 PVC	Diameter 11/2 Inches Length 41.5 Feet
6.	SCREEN: Type Sch, 40 Size of Opening - 020	Diameter 1/2 Inches Length 5 Feet
	and a second	ologic Formation
	Tail Piece: Diameter Inches Le	ngthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at _	Feet above surface
	Water rises to Feet above surfa	FOR DRAFRANCING FORFILES DRIVE
8.	RECORD OF TEST: Date	Yield Gallons per minute
	Static water level before pumping	Feet below surface
	Pumping level feet below surface after	hours pumping
	Drawdown Feet Specific Capaci	ty Gals, per min, per ft. of drawdown
	How pumped	How measured
	Observed effect on nearby wells	
9.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:	
9.	Observed effect on nearby wells	
9.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:	ne
9.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Nat Capacity G.P.M. How Driven Depth of Pump in well Feet Depth	th of Footpiece in well Feet
9.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type	th of Footpiece in well Feet ter on Pump SizeInches
9.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Nat Capacity G.P.M. How Driven Depth of Pump in well Feet Depth	th of Footpiece in well Feet
	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Nai Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Air Line in well Feet Type of Mer	th of Footpiece in well Feet ter on Pump Size Inches (Average Gallons Daily
	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type	H.P. R.P.M
11.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type	H.P. R.P.M
11. 12.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type	H.P. R.P.M

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

· F Sand, tr skt

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WELREC 107 1223

Form DWR- 138

STATE OF NEW JERSEY COO'S DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913858

PERMIT NO. 29-16785	
APPLICATION NO.	کے
COUNTY Monmouth	
29.13.858	

WELL RECORD

	2910785
1.	OWNER NJ DOT ADDRESS 306 MAIN STREET
	Owner's Well No RUPA SURFACE ELEVATION Feet
	LOCATION Lot: /, a Block: //5 Municipality: Tinton Falls Roro
3.	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 11.5 Feet
	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 6.5 Feet
6.	SCREEN: Type SCh, 40 Size of Opening 1020 Diameter 1/2 Inches Length 5 Feet
	Range in Depth { Top Feet Geologic Formation Geologic Formation
	Tail Piece: Diameter:Inches LengthFeet
7.	WELL FLOWS NATURALLY, Gallons per minute at Feet above surface
	Water rises to Feet above surface FOR OBSERVATION PURPOSES ONLY
_	RECORD OF TEST: Date NONE Yield Gallons per minute
۵.	
8 .	Static water level before pumping Feet below surface
.	Static water level before pumping Feet below surface Pumping level feet below surface after hours pumping
.	· · · ·
.	Pumping level feet below surface after hours pumping
6.	Pumping level feet below surface after hours pumping Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
e. 9.	Pumping level
9.	Pumping level
9 .	Pumping level
9 .	Pumping level
9 .	Pumping level
9. 0. 1.	Pumping level
9. 0. 1. 2.	Pumping level

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

MF Sand, fr clay
0-1.5'

OMF Sand, sm Selt
1.5'-6.5'

MM-P Sand
6.5'-11.5'

E6. 11 th / // May

Form DWR- 138 11/80

STATE OF NEW JERSEY COORD DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Coord: 2913863

70-1/1781

WELL RECORD

PERMIT NO	رملا
APPLICATION NO.	9
COUNTY Monmouth	_
29,13.863	_

1.	OWNER NJ DOT ADDRESS 306 MAIN STREET 2916784
	OWNER NJ DOT ADDRESS 306 MAIN STREET Owner's Well No. R-407 SURFACE ELEVATION (Above mean see level) LOCATION Lot: 3002 Block: 93 Municipality: Eatontown Boro
2.	
3.	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 3/.5 Feet
4.	DIAMETER: Top 8 inches Bottom 6 inches TOTAL DEPTH 3/.5 Feet
5.	CASING: Type Sch. 40 PVC Diameter 1/2 Inches Length 26,5 Feet SCREEN: Type Sch. 40 Size of Opening 1020 Diameter 1/2 Inches Length 5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening 1020 Diameter 1/2 Inches Length 5 Feet
	Range in Depth Top 26.5 Feet Geologic Formation
	Tail Piece: DiameterInchesFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date None Yield Gallons per pringers ONLY Static water level before pumping FOR OBSERVATION PURPUSES ONLY
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
10.	USED FOR GIV MONITORING AMOUNT AMOUNT AMOUNT Gallons Daily
11.	QUALITY OF WATER Semple: Yes No
	Teste Odor Color Temp OF.
12.	LOG Kack of this sheet Are semples evallable? No Company sheet, If electric log was made, please furnish gapy.)
13.	SOURCE OF DATA Drillers Log
	DATA OBTAINED BY Testwell Craig Test Boring Dono 11/12/92

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

tr f sand, sict 0-24' F-M sand, tr sict 24'- 31.5'

EG. 11 ON 1 11 HUP

BG. 111 ON

Form DWR- 138

STATE OF NEW JERSEY COORD: 2913863 DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES PERMIT

PERMIT NO. 29-16787

APPLICATION NO.	_5
COUNTY Monmouth	
29,13.863	

WELL RECORD

1.	1. OWNER NJ DOT ADDRESS 30	06 MAIN STREET
	Owner's Well No. R-423 SURFACE EL	EVATIONFeet
2.	2. LOCATION Lot: 3002 Block: 93 Municipality:	
3.		
4.	4. DIAMETER: Top inches Bottom inches	
5.	5. CASING: Type SCh. 40 PVC Diameter	1/2 Inches Length 4/5 Feet
6.	6. SCREEN: Type 30h, 40 Size of Opening , 020" Diameter	1/2 Inches Length 5 Feet
	Range in Depth $ \begin{cases} Top \underline{4/.5} & Feet \\ Bottom \underline{40.5} & Feet \end{cases} $ Geologic Format	tion
	Tail Piece: Diameter Inches Length	Feet
7.	7. WELL FLOWS NATURALLY Gallons per minute at	Feet above surface
	Water rises to Feet above surface	
8.	8. RECORD OF TEST: Date	Gollon PORPUSES ONLY
	Static water level before pumpingFOR	OB Feet below surface
	Pumping level feet below surface after	hours pumping
	Pumping level feet below surface after Drawdown Feet Specific Capacity	
	-	Gals, per min, per ft. of drawdown
	Drawdown Feet Specific Capacity	Gals, per min, per ft. of drawdown
9.	Drawdown Feet Specific Capacity How pumped How me Observed affect on nearby wells 9. PERMANENT PUMPING EQUIPMENT:	Gals, per min, per ft. of drawdown
9.	Drawdown Feet Specific Capacity How my Observed affect on nearby wells	Gals, per min, per ft. of drawdown
9.	Drawdown Feet Specific Capacity How pumped How me Observed affect on nearby wells 9. PERMANENT PUMPING EQUIPMENT:	Gals, per min, per ft. of drawdown
9.	Drawdown Feet Specific Capacity How pumped How me Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name	Gals, per min, per ft. of drawdown easured H.P. R.P.M.
9.	Drawdown Feet Specific Capacity How pumped How me Observed affect on nearby wells S. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven	Gals, per min, per ft. of drawdown easured H.P. R.P.M. De in well Feet SizeInches
	Drawdown Feet Specific Capacity How my Observed affect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Footpies	H.P. R.P.M. Feet SizeInches Average Gallons Daily
10.	Drawdown Feet Specific Capacity How pumped How me Observed effect on nearby wells S. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet	Gals, per min, per ft. of drawdown easured H.P. R.P.M. De in well Feet SizeInches
10.	Drawdown Feet Specific Capacity How pumped How me Observed effect on nearby wells S. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name	Gals, per min, per ft. of drawdown easured H.P. R.P.M. De in well Feet SizeInches
10.	Drawdown Feet Specific Capacity How pumped How my Observed effect on nearby wells S. PERMANENT PUMPING EQUIPMENT: Type Mone Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Footpied Depth of Air Line in well Feet Type of Mater on Pump 10. USED FOR G.A. Monitoring AMOUNT 11. QUALITY OF WATER Color Color Taste Odor Color Color 12. LOG Back of Holes Sheet	Gals, per min, per ft. of drawdown easured H.P. R.P.M. De in well Feet Size Inches Average Gallons Daily Maximum Gallons Daily Sample: Yes No
10. 11.	Drawdown	Gals, per min, per ft. of drawdown easured H,P. R,P,M, SizeInches Average Gallons Daily Maximum Gellons Daily Sample: Yes No Temp, 9F.
10. 11. 12.	Drawdown Feet Specific Capacity How pumped How my Observed effect on nearby wells S. PERMANENT PUMPING EQUIPMENT: Type Mone Mfrs. Name Capacity G.P.M. How Driven Depth of Pump in well Feet Depth of Footpied Depth of Air Line in well Feet Type of Mater on Pump 10. USED FOR G.A. Monitoring AMOUNT 11. QUALITY OF WATER Color Color Taste Odor Color Color 12. LOG Back of Holes Sheet	Gals, per min, per ft. of drawdown easured H.P. R.P.M. De in well Feet Size Inches Average Gallons Daily Maximum Gallons Daily Sample: Yes No Temp. OF. Are samples available? Armish copy.)

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

Clay & silt, tr cf sand 29.13.863 0-1.5' C-F sand, tr silt 1.5'-46.5'

ES. " 104 1 11 MAL

illi Line in the Form DiVR- 138 11/80

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

Coord: 2913864 PERMIT NO. 29-16788

W	EL	L F	EC	OR	D

APPLICA	TION	NO			
		oma	uth	2	•
COUNTY.	20	12	Wat		

1.	OWNERADDRESS 306 MAIN STREET
	Owner's Well No. R - 425 SURFACE ELEVATIONNA Feet
2.	LOCATION Lot: 3003 Block: 93 Municipality: Eatontown Boro
3.	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
4,	DIAMETER: Top 8 inches Bottom 8 inches TOTAL DEPTH 4615 Feet
5.	CASING: Type Sch.40 PVC Diameter 1/2 Inches Length 41.5 Feet SCREEN: Type Sch.40 Size of Opening • 020 Diameter 1/2 Inches Length 5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening • 020 " Diameter 1/2 Inches Length 5 Feet
	Range in Depth { Top 41.5 Feet Bottom 46.5 Feet Geologic Formation
	Tail Piece: Diameter InchesFeet
7 .	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Lattibuld (644)
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G,P,M, How Driven H,P, R,P,M,
9.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G,P,M. How Driven H,P R,P,M Depth of Pump in well Feet Depth of Footpiece in well Feet
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G,P,M. How Driven H,P R,P,M Depth of Pump in well Feet
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type /ONE Mfrs. Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet Depth of Footpiece in well Feet Inches USED FOR MONIForing AMOUNT Average Gallons Daily
	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet Depth of Footpiece in well Feet Depth of Air Line in well Feet Type of Meter on Pump Size Inches USED FOR MONIFORING AMOUNT Average Gallons Daily Maximum Gellons Daily QUALITY OF WATER Sample: Yes No Taste Odor Color Temp OF. LOG Are samples available? Mo
11. 12.	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type G.P.M. How Driven H.P R.P.M Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

M-F Sand O-1.5'

M-F Sand, tr clay, tr silt

1.5'-16.5'

CMF Sand 16.5'-22.5'

MF Sand, clay,

22.5'-26.5

CMF Sand, tr silt

26.5'-41.5'

MF Sand 41.5'-46.5'

Grace - ELSEN

E6. 111 84 | 11 HAL

No Faus North JULIA

Coord: 2913864

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES

PERMIT NO. 29-16789

APPLICATION NO	٤
29.13.864	

WELL RECORD

1	OWNERADDRESS 306 MAIN STREET 29/6789
••	Owner's Well No. R - 427 L SURFACE ELEVATION
_	LOCATION Lot: 3003 Block: 93 Municipality: Eatontown Boro
2.	DATE COMPLETED 7/30/86 DRILLER TESTWELL CRAIG TEST BORING
4	DIAMETER Top 8 inches Roman 8 inches TOTAL DEPTH 45.9 Feet
5.	CASING: Type Sch.40 PVC Diameter 1/2 Inches Length 40, 9 Feet SCREEN: Type Sch.40 Size of Opening +020" Diameter 1/2 Inches Length 5 Feet
6.	SCREEN: Type Sch. 40 Size of Opening • 020" Diameter 1/2 Inches Length 5 Feet
	Range in Depth Top 40.9 Feet Bottom 45.9 Feet Geologic Formation
	Tail Piece: Diameter Inches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
8.	Water rises to Feet above surface RECORD OF TEST: Date YieldFOR OBSERVATION DURINGES ONLY
	Static water level before pumping Feet below surface
	Static water level before pumping Feet below surface Pumping level feet below surface after hours pumping
	Pumping level feet below surface after hours pumping
	Pumping level feet below surface after hours pumping Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown
	Pumping level
0	Pumping level
9.	Pumping level
	Pumping level
	Pumping level
	Pumping level
11. 12.	Pumping level

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

F-M-C Sand, tr f gravel, tr sict

0-12'

F-M-C Sand, tr sict

12'-36.5'

F Sand, tr SILT

36,5-45.9

Carrier Commence

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

Static water-level before pumping				Well Permit No2	29 - 17935
Address 47 PRAD STREET. EATCHTICHN State NT Zip Code 07724 WELL LOCATION : If not this same owner please give address. Owner's Well No. Address Prine Brook Road County Monition th Municipality EATCHTION BOKED Lot No. 43 Block No. 55 WELL USE temporary dewatering point Status WATER USE dewatering Average gals daily Maximum gals per min. The below land surface after hrs. of pumping. Maximum daily				Atlas Sheet Coordinat	es <u>29 : 13 : 836 </u> L
Address 47 PRAD STREET. EATCHTICHN State NT Zip Code 07724 WELL LOCATION : If not this same owner please give address. Owner's Well No. Address Prine Brook Road County Monition th Municipality EATCHTION BOKED Lot No. 43 Block No. 55 WELL USE temporary dewatering point Status WATER USE dewatering Average gals daily Maximum gals per min. The below land surface after hrs. of pumping. Maximum daily	AWNED INCUTIFE	IPATION - Owner - ETACT	CATCHAL TOLEROUTE	OE.	,
WELL LOCATION: - In not this same power places give address. WELL USE					
WELL LOCATION - If not this same owner please give address. Owner's Well No. Address Prine Brook Road Prine Brook Road Monmouth Menicipality EATONTONN ROBO Lot No. 43 Block No. 55 WELL USE temporary dewatering point Status WELL USE temporary dewatering point Status WELL CONSTRUCTION Date well completed 3 / 20 / 87 Block No. 55 WELL CONSTRUCTION Date well completed 3 / 20 / 87 Block No. 55 WELL CONSTRUCTION Detwell completed 3 / 20 / 87 Block No. 55 Well Construction Depths: Total 13 ft. Finished 11 ft. Diameter Top 2 in. Bottom 12 in. Bottom 14 Greens: Note Stort Status) Well Consider Status Well 45 ft. Elevation was determined using topic status of the Well of the Wel					
Address Pine Brook Road County Monimouth Municipality EATONITONN ROED Lot No. 43 Block No. 55 WELL USE temporary dewatering point Status WATER USE dewatering Doint Status WATER USE dewatering Doint Status WATER USE Jens Jens Jens Jens Jens Jens Jens Jens	•	•			
WELL USE temporary dewatering point Status WATER USE dewatering Average gals, daily Maximum gels, daily WELL CONSTRUCTION Date well completed 3 / 20 / 87. Date well completed 3 / 20 / 87. Date well completed 13 ft. Finished 13 ft. Diameter: Top 2 in. Bottom 2 in. Casing Height (stick-up) above land surface ft. DEPTH TO TOP LEMANTH DIAMETER Servens: Note Stot Storm) Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tall Place Grave Pack Grout Grouting Method WELL FLOWS NATURALLY gals, per min. stft. above the land surface. WELL FLOWS NATURALLY gals, per min. st ft. above the land surface. WELL FLOWS NATURALLY gals, per min. st ft. above the land surface. WELL FLOWS NATURALLY gals, per min. st ft. above the land surface. WELL FLOWS NATURALLY gals, per min. st ft. above the land surface. WELL FLOWS NATURALLY gals, per min. st ft. above the land surface. Weter level gals, per min. per ft. of drawdown ft. Discharge Rate gals, per min. per ft. of drawdown ft. Discharge Rate gals, per min. per ft. of drawdown ft. Discharge Rate		Pine Brook Road			
WATER USE	County	Monmouth Mur	icipality <u>FATONTO</u>	DUN BORO Lot N	No. 43 Block No. 55
WELL CONSTRUCTION Dethe well completed 3 / 20 / 87 Depthe: Total 13 ft. Finished 13 ft. Borton 2 in. Botton 2 in. Elevation was determined using topography map #29 Casing Height (stick-up) above land surface ft. DEPTH TOTOP LENGTH DIAMETER TYPE AND MATERIAL Screens: Note Stat State(s) Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Place Gravel Pack Grout Grouting Method Grouting Method Grouting Method Grouting Method Grouting Method from the land surface. Wetter rises to ft. above the land surface. Water rises to ft. above the land surface. Water level ft. below land surface after hrs. of pumping. Davedown ft. Discharge rate measured using Discharge Rate gals, per min. per ft. of drewdown Well Funder of the control	WELL USE	temporary dewate	ring point	Status	
BOREHOLE DIMENSIONS Depther Total 13 ft. Bintshed 13 ft. Diameter: Top 2 in. Bottom 2 in. Elevation was determined using topography map #29 Casing Height (stick-up) above land surface ft. DEPTH TOT LENGTH DIAMETER TYPE AND MATERIAL Screens: Note Siot Size(s)) Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Place Gravel Pack Grout Grouting Method Grouting Method FILE LOWS NATURALLY gels. per min. at ft. above the land surface. MEEL FLOWS NATURALLY ft. above the land surface. MEECORD OF TEST Test Dote / / Static water-level before pumping ft. below land surface. Mater level was measured using Diacharge Rate assured using Diacharge rate measured using Diacharge Rate assured using Scheme diffects on nearby wells Mell was pumped using Specific Capacity gels. per min. per ft. of drawdown Diacharge rate massured using Specific Capacity gels. per min. per ft. of drawdown Diacharge rate maters, doir, color, etc.) PERMANENT PUMPING EQUIPMENT Installed by Power Source DEPTHS: Pump ft. Footpiece ft. Airline ft. LOW METER: Model Fightway 71, P.O. Box 394 In Specific Capacity Corp. Date 8 / 14 / 87	WATER USE	dewatering	Average	gals. daily	Maximum gals. daily
Cealing 1 Cealing 1 Cealing 1 Cealing 2 Cealing 3 Screen: Note Stot State(e) Cealing 3 Screen 2 Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY	BOREHOLE DIME	NSIONS Depths:	Total13 ft. er: Top2 in.	Finished 13 ft. Bottom 2 in	ı .
Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Gravel Pack Grouting Method WELL FLOWS NATURALLY gels, per min. et				on was determined using	topography map #29
Casing 1 Caing 2 Casing 3 Screen 1 Screen 2 Tail Piace Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY	Casing Height (stick	(-up) above land surface	ft.	•	
Casing 2 Casing 3 Screen 1 Screen 2 Tail Piace Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY					
Screen 1 Screen 2 Tail Piace Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY	Casing 2				
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY	•				
Gravel Pack Grouting Method MELL FLOWS NATURALLY	Screen 2				
Grout Grouting Method WELL FLOWS NATURALLY gals, per min. et ft. above the land surface. Weter rises to ft. ebove the land surface. RECORD OF TEST	•				
Grouting Method WELL FLOWS NATURALLY gals, per min. et ft. above the land surface. Weter rises to ft. below land surface. RECORD OF TEST Test Date /					
WELL FLOWS NATURALLY					
Water rises to	•	-			
Static water-level before pumping				ft. above the land surface.	
Static water-level before pumping	RECORD OF TEST	Test Da	te /		•
Discharge rate measured using					ft. below land surface after hrs. of pumping.
Specific Capacity					
Disserved effects on nearby wells Nater Quality (taste, odor, color, etc.) Permanent Pumping Equipment Installed by		• • •			
PERMANENT PUMPING EQUIPMENT Installed by Pump Type Model CAPACITY: Pump delivers GPM at PSI pressure. POWER: HP at RPM Power Source DEPTHS: Pump ft. Footpiece ft. Airline ft. FLOW METER: Model installed on in. diameter pipe. FIGER CONSTRUCTION CORP. CONTRACTOR - Name of Drilling Contractor Address 806 Highway 71, P.O. Box 394 City Spring Lake Heights State N.J. Zip Code 07762 License No. M987					
PERMANENT PUMPING EQUIPMENT Installed by					
Model CAPACITY: Pump delivers GPM at PSI pressure. COWER: HP at RPM	isérei craaurà (1921e	, oadi, coloi, etc./			
CAPACITY: Pump delivers GPM at PSI pressure. POWER: HP at RPM	ERMANENT PUM	PING EQUIPMENT	Installed by	Po	ump Type
POWER:	Mfrs. Name			Model	
DEPTHS: Pump					
installed onin, diameter pipe. CONTRACTOR - Name of Drilling Contractor	POWER:	HP at	RPM Power	r Source	
CONTRACTOR - Name of Drilling Contractor Address 806	DEPTHS: Pump	ft.	Footpiece	ft. Airline	
CONTRACTOR - Name of Drilling Contractor	-LOW METER: Mo	odel			i, diameter pipe.
Address 806 Highway 71, P.O. Box 394 City Spring Lake Heights State N.J. Zip Code 07762 Hame of Driller Dennis B. Davis License No. M987 Cignature of Contractor Date 8 / 14 / 87	ONTRACTOR . No	eme of Drilling Contractor	TIGER CONSTR	RUCTION CORP.	
State N.J. Zip Code 07762 Iame of Driller Dennis B. Davis State N.J. Zip Code 07762 License No. M987 Date 8 / 14 / 87		_			
Signature of Contractor	ity	Spring Lake Heigh	ts	StateN_1	Zip Code07762
Signature of Contractor Date8 / _14 / _87	lame of Driller	Dennis B. Davis			License NoMQQ7
					ri 3 0/
COPIES: White · DEP Canary · Driller Pink · Owner Goldenrod · Health Dept.	Signature of Contrac	ctor			Date 8 / 14 / 87
	_	COPIES: White	- DEP Canary - Dri	iller Pink - Owner ·	Goldenrod - Health Dept.

WELL RECORD

Well Permit No. 29 - 17933 29, 13.836

Oriller: Please use the space below for the log description. Note water bearing zones or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft. Bedrock Lith, Code Bedrock Fm, Code
Aquifer/Geo, FmLOG	Completed by / / / Date / / / Thick. Lith. Fm.
OTHER FILES: Lithologic Log Samples Available	
Checked by Date	//

WELL RECORD

								<u> </u>
				Atlas Sheet C	Coordinates .	_ : ::	3236: 236	L
OWNER IDENTIF	FICATION - Owner	EASTONTOW	N. TOWNSHIP	UF		·		
+	47 BROAD STRE							
				State	NJ	Zi	p CodeO	7724
			dress. Owner	's Well No				
Address	Pine Brook		F 1 TO 1 FF	Cal W. f 13. 20 dr .		··-		
County	MOTIMOUCH	Municipality	EAIONIO	DWN BORO	Lot No	43	Block No5	5
WELL USE	temporary o	lewatering	point	Status				
WATER USE	dewatering		Average	gals.	daily	Maximum .		gals. daily
BOREHOLE DIMI		Depths: Total _ Diameter: Top	13 ft. 2 in.	Bottom	2 in.	A an a busa		# 00
	ation at well43 :k-up) above land surf			on was determined using	9	topogra	pny map.:	
	DEPTH TO (FT.)		NGTH (FT.)	DIAMETER (IN.)			MATERIAL te Slot Size(s)	
Casing 1 Casing 2 Casing 3								
Screen 1	 		 .	 .				
Screen 2							·	
Tail Piece Gravel Pack								
Grout								
Grouting Mo	ethod			· · · · · · · · · · · · · · · · · · ·				
	ATURALLY ft, above		min. at	ft, above the land	d surface.			-1
RECORD OF TES								
				Water level		elow land surface	after h	rs, of pumping,
	sured using			Drawdown Discharge Rate		s. per min.		
				Specific Capacity _			r ft. of drawdo	ıwn
Nater Quality (tast	te, odar, color, etc.) _							
				Mod	del			
	p delivers							
	HP at ft.			r Source				
				installed on				
				RUCTION CORP.				
ONTRACTOR - N	Name of Drilling Cont	ractor						
Address	806 Highway	71, P.O. I	30x_394		N 1		07762	····
ity	Apring Lake	alleights -		State	N.U.	_ Zip Code		
lame of Driller	Demiis D. D	4112			Lic	ense No	1/130/	
Signature of Contra	actor			., ,	Dat	8/_	14 /8	37
	COPIES:	White - DEP	Canary - Dr	iller Pink - Owne	r Gold	enrod - Health D	ept.	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>17935</u> <u>29. 13.836</u>

Driller: Please use the space below for the log description. Note water bearing zone or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft. Bedrock Lith. Code Bedrock Fm. Code
Aquifer/Geo. Fm	Completed by///
GWPI No NJP	DES No
Lat-Long Accuracy	nty/Municipality Code Aquifer Test Pollution Case
	//

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

							<u> </u>		_
					Atlas She	et Coordinates	<u> 29 : 1</u>	<u>3:8</u>	<u> 36 L</u>
			eros eros es	ngraphy at these sincer-	over-				
•		· Carrier			OF				
Address					State	NIT.		7:- 0	07724
City	EATTONIC	ANN	······································		State	NO		Zip Code	01124
WELL LOCATI	'ION - If not ti	he same owner p	lasea niva addı	rare Owner	's Well No				
Address	D.2	Brook Roa	d	1655. OWIIGH	2 44811 140				
County				EATONIO	WIN BURO	Lot No	43	Rinck No	55
		· '						DIOUR III	'•
WELL USE	\tempo	rary dewa	tering p	oint	Status				
WATER USE	dewat	ering		Average	9	jals. daily	Maximum		gals. daily
	ollowou.	D-44		3 /	20 / 97				
WELL CONSTR				13 ft.	_20/_87	13 ft.			
BOREHOLE D	IMENSIONS			2 in.		2 in.			
Land Surface E	lavation at wa				on was determined		tonograni	ov man #	29
		e land surface			On May neferminen	using	արսցւ գր	A mah **	
cestral meight (:	Stick-oh! and	# 10110 20110C0 _		_ 11.					
	D	EPTH TO TOP		IGTH FT.}	DIAMETER (IN.)			ND MATERI Note Slot Siz	
		(61.)	(-	1.1	(114.)		Screens.	NOTE BIOL BIZ	, e19)
Casing 1					····				
Casing 2			·-·						
Casing 3	ı								
Screen 1									
Screen 2	<u> </u>								
Tail Piece	:0								
Gravel Pa	ack								
Grout									
	Method					,			
·	, –								
WELL FLOWS!	NATURALLY	/	gals, per mi	in. at	ft. above the	land surface.			
Water rises to		_ ft. above the l	and surface.		•				
			_						
RECORD OF T		Test ping	Date	_//	We are level		halam land and		has of assembles
		ping						ace alter	hrs. of pumping.
		-							
-	-	l 	 ,						
Nell was pumpe	_				Specific Capacity				
	-								
water creatity (t	taste, odor, co	lor, etc./							
EDMANCHT S	DIMBING EN	IIIDMENT	Inetallar	l hv '		Pun	n Tyne		
				-					
		(model			
					r Source				•
		ft.				ne	ft.		
FLOW METER:	: Model	 '''	. 00.0.0		installed on	in. d	iameter pipe.		
2011					AUCTION CORP				
CONTRACTOR	t - Name of Dr	illina Contractor		CEN CONSTI	SOCITON CORP	·			
Address	806 H	illing Contractor	, P.O. Bo	x 394					
City	Sprin	g Lake He	ghts		State	N.J.	Zip Co	de0	7762
Vame of Driller		s B. Davis	}		Otate	1	icense No.	M987	
VI DIME!									
lianetura es P	ntractor					n	ate <u>8</u> /	14 ,	87
Millernia di Col						U	are/	/ _	
	cc	OPIES: W	hite - DEP	Canary - Dr.	iller Pink - O	wner Go	idenrod - Health	Dept.	

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29 - 17936</u> 29. 13, 836

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft, Bedrock Lith. Code Bedrock Fm. Code Completed by
LOG NO	Thick. Lith, Fm.
GWPI No NJPDES	, 3 No
Latitude ' ' Longitu Lat-Long Accuracy	de 0 , ,,
OTHER FILES: Lithologic Log Samples Available	Municipality Code Aquifer Test Water Level Data Pollution Case
Checked by Date _	//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

Goldenrod - Health Dept.

WELL RECORD

					nit No 22		_
				Atlas She	et Coordinates	29: _13: £	336
AWMED INCOMPLE	TION 0	EASTONITOLE	TOLKICITO	ne			
OWNER IDENTIFICA Address <u>47 E</u>							
	LONLOMN				L.T	Zip Code	07724
City <u>EAT</u>	CITIONIT			State		ZIP Code	0//24
				7. 182-0 BF			
WELL LOCATION - If	not the same ow	ner please give addri		's Well No	 	_	
Address P	ine brook	Road	FATATO				
CountyM	onmouth	Municipality _	EALUNIO	MN BORO	Lot No	43 Block No	55
				_			
WELL USE	emporary d	<u>ewatering po</u>	nint	Status			
			•				
NATER USEd	watering_		Average	gi	ais. daily	Maximum	gals. daily
wr		D 45 411 1-4-		00 / 07			
WELL CONSTRUCTIO		Depths: Total		_ 	10 4		
BOREHOLE DIMENSI	UM9	Depths: Otal	<u></u>	Patter			
	45	Diameter: Top	in,	Bottom			"00
Land Surface Elevation				on was determined u	Jsing	topography m	iap_#29
Casing Height (stick-up)	above land suffi	ice	π.	•			
	DEPTH TO	TOP LEN	GТН	DIAMETER		TYPE AND MATER	AL
	(FT.)		T.)	(IN.)		Screens: Note Slot Siz	
Casing 1							
Casing 2							
Casing 3		 	 -				
Screen 1			 -			· · · · · · · · · · · · · · · · · · ·	
Screen 2			 -				
Tail Piece							
Gravel Pack							· · · · · · · · · · · · · · · · · · ·
Grout							
Grauting Method							
						-	
WELL FLOWS NATUR			n. at	ft. above the	land surface.		
Veter rises to	ft. above	the land surface.					
		Test Date					
						ow land surface after	hrs. of pumping.
Vator level was measure							
Discharge rate measured							
Vell was pumped using				Specific Capacity		als. per min, per ft, of dr	awdown
Observed effects on nea	•						
Vater Quality (taste, od	or, color, etc.) _	,					
					Pump T	уре	
Afrs. Name					Model		
APACITY: Pump deli	vers	GPM at	PSI	pressure.			
OWER:	HP at	' RPM	Power	r Source			
EPTHS: Pump	ft.	Footpiec	8	ft. Airlin	ne	_ ft.	
LOW METER: Model		····		installed on	in. diam	eter pipe.	
				RUCTION CORP			
ONTRACTOR - Name	of Drilling Cont	actor					
Address80	<u> 6 Highway</u>	<u>71. P.O. Bo</u>					
SitySr	ring Lake	<u>Heights</u>		State .	N.J	Zip Code077	62
lame of DrillerDe	nnis B. D	\vis		·	Licer	se No. <u>M987</u>	
						0 14	07
ignature of Contractor					Date	8 / 14 /	87
						•	-
	COPIES:	White - DEP	Canary - Dri	iller Pink - Ov	wner Golder	rod - Health Dept.	

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>17937</u> 29. 13.836

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code
Drilling Method	USGS Hydrogeo Codeft.
Divining married	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo, Fm.	Completed by
$N_{-\alpha}$	Dete///
LOG	Thick. Lith. Fm.
GWPI No NJPDES	No
Latitude o ' '' Longitud	deoıı
Lat-Long Accuracy 1" 5" 10" 20"	
	Municipality Code
OTHER FILES: Lithologic Log Samples Available	Aquifer Test Water Level Data Pollution Case
Checked by Date	

COPIES:

White - DEP

Canary - Driller

Pink - Owner

Goldenrod - Health Dept.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

						9		
		FACTOR FOR B. 1	tor is source.			_		
OWNER IDENTIFICAL Address47			LOWNSHIP	OF .		· · · · · · · · · · · · · · · · · · ·		
City EAT				Sta	te NT	Z	ip Code	07724
	ine Brook	Road						
CountyM	onmouth	Municipality	EATONIC	WN BORO	Lot N	04;	. Block No.	-55
		ewatering poi						•
WATER USE	ewatering		Average		gals. daily	Maximum		gals. dail
WELL CONSTRUCTION BOREHOLE DIMENS Land Surface Elevation	IONS	Date well completed Depths: Total Diameter: Top ft.	13 ft. 2 in.	Finished _ Bottom _	13 ft. 2 in.	topogr	aphy ma	np #29
Casing Height (stick-up) above land surfa	icef			•	, 0		
	DEPTH TO	TOP LENG (FT.		DIAMETER (IN.)			D MATERIA ote Slot Size	
Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Gravel Pack Grout								
WELL FLOWS NATUR	RALLY	gals. per min.			the land surface.			
RECORD OF TEST		Test Date	11	<u>.</u>				
Static water-level befor	e pumping	ft, below i	and surface.	Water level	f	t. below land surfac	e after	_ hrs. of pumping.
Water level was measure					f			
Discharge rate measure	_				9		{	
Well was pumped using Observed effects on nea Weter Quality (taste, or	rby wells							
PERMANENT PUMPIN	IG EQUIPMENT	installed b	у		Pu	тр Туре		
Mfrs. Name					Model			
CAPACITY: Pump del								
POWER: DEPTHS: Pump	HP at	Energiace	Power	Source	rline	ft		
FLOW METER: Model								
CONTRACTOR - Name	of Drilling Contr	TIGE	r constr	UCTION COR	RP	,		
Address 80		-						· · · · · · · · · · · · · · · · · · ·
CitySp Name of DrillerDe	oring Lake ennis B. Da	Heights vis		State	eN.J	Zip Code License No	— 0770 — M987	62
Signature of Contractor					·	Date <u>8</u> /_	14_/_	87_
-	COPIES:					oldenrod - Health D	• -	

WELL RECORD

Well Permit No. 29 - 17938 29. 13.836

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft, Bedrock Lith. Code
Aquifer/Geo, Fm,	Completed by////
GWPI No NJPDES	No
OTHER FILES: Lithologic Log Samples Available	Municipality Code Aquifer Test Water Level Data Pollution Case
Checked by Date	///

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

	Well Permit No. 29 - 17939
	Atlas Sheet Coordinates 29:13:836
OWNED INCUTED ATION . Owner EAST/AITOLAL TOLARCLITO	OE
Address 47 BROAD STREET	
City EATTONTOWN	
	1
WELL LOCATION - If not the same owner please give address. Owner Address Pine Brook Road	
County Monmouth Municipality FATONTO	N BORO Lot No. 43 Block No. 55
WELL USE temporary dewatering point	Status
WATER USE <u>dewatering</u> Average	gals. daily Maximum gals. daily
WELL CONSTRUCTION Date well completed	20 / <u>_87</u>
BOREHOLE DIMENSIONS Depths: Total13ft.	
Diameter: Top2in.	Bottom in.
	n was determined usingtopography_map_#29
Casing Height (stick-up) above land surface ft.	
DEPTH TO TOP LENGTH (FT.) (FT.)	DIAMETER TYPE AND MATERIAL (IN.) Screens: Note Slot Size(s)
Casing 1	
Casing 2	
Casing 3	
Screen 1	
Screen 2	
Tail Piece	· · · · · · · · · · · · · · · · · · ·
Gravel Pack	
Grout Grouting Method	
WELL FLOWS NATURALLY gals. per min. at ft, above the land surface.	
RECORD OF TEST Test Date//	
Static water-level before pumping ft. below land surface.	
Water level was measured using	Drawdown ft. Discharge Rate gals. per min.
Discharge rate measured using	Specific Capacity gals, per min, per ft, of drawdown
Observed effects on nearby wells	
Water Quality (taste, odor, color, etc.)	
	Pump Type
Mfrs. Name GPM at PSI	Model
POWER: HP at RPM Power DEPTHS: Pump ft. Footpiece	ft. Airlineft.
FLOW METER: Model	
LIGER CONSTR	
CONTRACTOR - Name of Orilling Contractor	JULIAN CANA
CONTRACTOR - Name of Drilling Contractor Address 806 Hi ghway 71, P.O. Box 394	
City Spring Lake Heights	StateN.J. Zip Code07762
Name of Driller Dennis B. Davis	MOO7
Signature of Contractor	Date 8 / 14 / 87
COPIES: White - DEP Canary - Drit	ler Pink - Owner Goldenrod - Health Dept.

WELL RECORD

Well Permit No. 29 - 17939 29, 13, 836

Driller: Please use the space below for the log description. Note water bearing zon or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code
	USGS Hydrogeo Code
Orilling Method	Depth to Bedrock ft.
Type of Rig	Bedrock Lith. Code
Aguiter/Geo. Fm.	Completed by
LOG LOG	Thick. Lith. Fm.
C.	
(1)	
GWPI No NJI	PDES No
Latitudeo, '' Lor Lat-Long Accuracy	ngitude o
	unty/Municipality Code Aquifer Test Water Level Data Pollution Case
Checked by Dat	te//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

Goldenrod - Health Dept.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL RECORD

			Atlan Chant Con		
			With 2 Street Con	rdinates <u>29</u> : <u>1</u>	3_:836
A1446	A E40E*	MITCHAL TOUR OF THE	n or		
OWNER IDENTIFICATION	-Owner <u>EASTU</u> ND STREET	INTOWN, TOWNSHIP	2 01-		· · · · · · · · · · · · · · · · · · ·
Address 47 BROA			Ctata hiT		Zip Code <u>07724</u>
City				<u> </u>	rih Code
WELL LOCATION - If not ti	ne same owner please	aive address. Own	er's Well No.		
Address Pine					
County Monte	uth Muni	cipality <u>EATON</u> 1	TOWN BORO	Lot No. 43	Block No. 55
WELL USEtemp(rary dewater	r ing point	Status		
WATER USE		A			
WATER USE ——dewat	ering	Average _	gais, dai	ну махітит	gals. daily
WELL CONSTRUCTION	Date wel	I completed	20 / 87		
BOREHOLE DIMENSIONS	Depths:	Total 13 ft.	Finished 13 Bottom 2	ft.	
	Diameter	r: Top 2 in.	Bottom 2	in.	
Land Surface Elevation at we	u 45 ft.	Eleva	tion was determined using _	topogra	phy map #29
Casing Height (stick-up) abov					
seems					
5	EPTH TO TOP	LENGTH	DIAMETER		D MATERIAL
	(FT.)	(FT.)	(IN.)	Screens: I	lote Slot Size(*)
Casing 1					
Casing 2					
Casing 3					
Screen 1					
Scroon 2					
Screen 2					
Tail Piece	`				
Tail Piece Gravel Pack)				
Tail Piece Gravel Pack Grout	,				
Tail Piece Gravel Pack	`				
Tail Piece Gravel Pack Grout Grouting Method					
Tail Piece Gravel Pack Grout Grouting Method	/g	als. per min. at			,
Tail Piece Gravel Pack Grout Grouting Method	/g	als. per min. at			
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY	fg _ ft, above the land s	als. per min. at surface.	ft, above the land s		,
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST	fg; _ ft. above the land s	als. per min. at surface.	ft, above the land st	urface.	,
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before purp	fg; _ ft. above the land : Test Date	als. per min. at surface. s /	ft, above the land so	urface. ft. below land surfa	ce after hrs. of pumping.
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Vater level was measured usin	fgegegege	als. per min. at	ft, above the land so / Water level Drawdown	urface. ft. below land surfa ft.	,
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Vater level was measured using	fgege	als. per min. at surface. g /	ft, above the land so / Water level Drawdown Discharge Rate	urface. ft. below land surfa ft. gals. per min.	ce after hrs. of pumping.
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Vater level was measured using Discharge rate measured using Well was pumped using	fge	als. per min. at surface. s / _ ft. below land surface	ft. above the land so Water level Drawdown Discharge Rate Specific Capacity	urface. ft. below land surfa ft. gals. per min. gals. per min.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method NELL FLOWS NATURALLY Nater rises to RECORD OF TEST Static weter-level before pum Veter level was measured using Vell was pumped using Vell was pumped using Discharge rate measured using Vell was pumped using	fge	als. per min. at surface. s / _ ft. below land surface	ft. above the land so Water level Drawdown Discharge Rate Specific Capacity	urfaceft. below land surfaftgals. per mingals. per min.	ce after hrs, of pumping. per ft, of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST	fge	als. per min. at surface. s / _ ft. below land surface	ft. above the land so Water level Drawdown Discharge Rate Specific Capacity	urfaceft. below land surfaftgals. per mingals. per min.	ce after hrs, of pumping. per ft, of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Veter level was measured using Discharge rate measured using Well was pumped using Disserved effects on nearby w Veter Quality (taste, odor, co	ft. above the land s Test Date ping g ells	als. per min. at surface. e / ft. below land surface	ft, above the land so Water level Drawdown Discharge Rate Specific Capacity	urface. ft. below land surfa ft. gals. per min. gals. per min. [ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Nater rises to RECORD OF TEST Static water-level before pum Vater level was measured using Uscharge rate measured using Well was pumped using Ubserved effects on nearby w Vater Quality (taste, odor, co	fgr ft. above the land s Test Date ping g ells lor, etc.)	als. per min. at	ft, above the land so / Water level Drawdown Discharge Rate Specific Capacity	urfaceft. below land surfaftgals. per mingals. per min.	ce after hrs, of pumping. per ft, of drawdown
Tail Piece Gravel Pack Grout Grouting Method NELL FLOWS NATURALLY Nater rises to RECORD OF TEST Static water-level before pum Neter level was measured using Discharge rate measured using Usicharge rate measured using Nell was pumped using Disserved effects on nearby w Nater Quality (taste, odor, co	fg ft. above the land s Test Date ping g ells lor, etc.)	als. per min. at surface. ft. below land surface.	ft, above the land st / . Water level _ Drawdown _ Discharge Rate _ Specific Capacity Model	urfaceft. below land surfaftgals. per mingals. per min.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Water level was measured using Discharge rate measured using Ubserved effects on nearby w Water Quality (taste, odor, co	ft. above the land s Test Date ping g ells UIPMENT GPM	als. per min. at	ft, above the land so / Water level Drawdown Discharge Rate Specific Capacity Model SI pressure.	urfaceft. below land surfaft gals. per min gals. per min.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before purm Water level was measured using Uischarge rate measured using Well was pumped using Uischarge rate measured using Well was pumped using Capacity: Pump delivers CAPACITY: Pump delivers	fgr_ft. above the land stress Date Test Date ping g ells lor, etc.) UIPMENT HP at GPM	installed byatPS	ft, above the land so / . Water level _ Drawdown _ Discharge Rate _ Specific Capacity Model SI pressure. er Source	urfaceft. below land surfaft gals. per min gals. per min.	ce after hrs, of pumping. per ft, of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Water level was measured using Uscharge rate measured using Well was pumped using Uscharge rate measured using Capacity: Pump delivers Capacity: Pump delivers Coperty: Pump	ft. above the land s Test Date ping ells lor, etc.) HP at ft.	als. per min. at surface. ft. below land surface installed by atPSRPM	ft, above the land st / . Water level _ Drawdown _ Discharge Rate _ Specific Capacity Model SI pressure, per Source ft. Airline	urface. ft. below land surfaftgals. per mingals. per min.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Water level was measured using Uscharge rate measured using Well was pumped using Uscharge rate measured using Capacity: Pump delivers Capacity: Pump delivers Coperty: Pump	ft. above the land s Test Date ping ells lor, etc.) HP at ft.	als. per min. at surface. ft. below land surface installed by atPSRPM	ft, above the land st / . Water level _ Drawdown _ Discharge Rate _ Specific Capacity Model SI pressure, per Source ft. Airline	urface. ft. below land surfaftgals. per mingals. per min.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Nater level was measured using Well was pumped using Well was pumped using Well was pumped using Well was pumped using Charlet Tests on nearby w Nater Quality (taste, odor, co PERMANENT PUMPING EQ Afrs. Name CAPACITY: Pump delivers CAPACITY: Pump delivers CAPACITY: Pump LOW METER: Model	fge_ft. above the land second pringgg	Installed byatPSRPM	ft, above the land st / . Water level _ Drawdown _ Discharge Rate _ Specific Capacity Model SI pressure, per Source ft. Airline	urface. ft. below land surfaftgals. per mingals. per min.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Vater level was measured using Discharge rate measured using Vell was pumped using Ubserved effects on nearby w Vater Quality (taste, odor, co PERMANENT PUMPING EQ Afrs. Name CAPACITY: Pump delivers OWER: DEPTHS: Pump ELOW METER: Model	fgr_ft. above the land s Test Date ping g elis lor, etc.) UIPMENT HP at ft.	installed byatPS	ft, above the land so / Water level Drawdown Discharge Rate Specific Capacity Model SI pressure, er Source ft. Airline installed on FRUCTION CORP_	urface. ft. below land surfaftgals. per mingals. per minftftin. diameter pipe.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Veter level was measured using Discharge rate measured using Vell was pumped using Ubserved effects on nearby w Veter Quality (taste, odor, co VERMANENT PUMPING EQ Afrix. Name CAPACITY: Pump delivers OWER: DEPTHS: Pump LOW METER: Model CONTRACTOR - Name of Dr Address ——806—1	ft. above the land of the land	Installed byatPS Footpiece	ft. above the land so / Water level Drawdown Discharge Rate Specific Capacity Model SI pressure. Fer Source ft. Airline installed on FRUCTION CORP.	urface. ft. below land surfaftgals. per mingals. per min pals. per minftftin. diameter pipe.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Nater level was measured using Discharge rate measured using Well was pumped using Discharge rate measured using Cobserved effects on nearby w Nater Quality (taste, odor, co PERMANENT PUMPING EQ Afrix. Name CAPACITY: Pump delivers COWER: DEPTHS: Pump FLOW METER: Model CONTRACTOR - Name of Dr Address ——806—1	ft. above the land of the land	Installed byatPS Footpiece	ft. above the land so / Water level Drawdown Discharge Rate Specific Capacity Model SI pressure. Fer Source ft. Airline installed on FRUCTION CORP.	urface. ft. below land surfaftgals. per mingals. per min pals. per minftftin. diameter pipe.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Nater level was measured using Discharge rate measured using Well was pumped using Discharge rate measured using Cobserved effects on nearby w Nater Quality (taste, odor, co PERMANENT PUMPING EQ Afrix. Name CAPACITY: Pump delivers COWER: DEPTHS: Pump FLOW METER: Model CONTRACTOR - Name of Dr Address ——806—1	ft. above the land a Test Date ping g ells lor, etc.) HP at ft. illing Contractor ighway 71, P g Lake Heigh	Installed by atPSRPM	ft. above the land so / Water level Drawdown Discharge Rate Specific Capacity Model SI pressure. Fer Source ft. Airline installed on FRUCTION CORP.	urface. ft. below land surfaftgals. per mingals. per minPump Typeftin, diameter pipe.	ce after hrs. of pumping. per ft. of drawdown
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Nater level was measured using Discharge rate measured using Well was pumped using Discharge rate measured using Well was pumped using Charge rate measured using Well was pumped using Discharge rate measured using Discharge rate measured using Well was pumped using Discharge rate measured using Discharge rate measured using Well was pumped using Discharge rate measured using Discharge rate measured using Well was pumped using Discharge rate measured using Discharge rate measured using Well was pumped using Discharge rate measured using	ft. above the land a Test Date ping g ells lor, etc.) HP at ft. illing Contractor ighway 71, P g Lake Heigh	Installed by atPSRPM	ft. above the land so / Water level Drawdown Discharge Rate Specific Capacity Model SI pressure. Fer Source ft. Airline installed on FRUCTION CORP.	urface. ft. below land surfaftgals. per mingals. per minPump Typeftin, diameter pipe.	ce after hrs. of pumping. per ft. of drawdown 07762
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static weter-level before pum Vater level was measured using Well was pumped using Well was pumped using Well was pumped using Charge rate measured using Well was pumped using Well was pumped using Charge rate measured using Well was pumped using Well was pumped using Charge rate measured using Well was pumped using Well was pumped using Charge rate measured using Well was pumped using Well was pumped using Charge rate measured using Well was pumped using Well was pumped using Charge rate measured using Well was pumped using Well was pumped using Well was pumped using Charge rate measured using Well was pumped us	ft. above the land a Test Date ping g ells lor, etc.) HP at ft. illing Contractor ighway 71, P g Lake Heigh	Installed by atPSRPM	ft. above the land so / Water level Drawdown Discharge Rate Specific Capacity Model SI pressure. Fer Source ft. Airline installed on FRUCTION CORP.	urface. ft. below land surfaftgals. per mingals. per minftftftin. diameter pipe	ce after hrs. of pumping. per ft. of drawdown 07762 M987
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Water rises to RECORD OF TEST Static water-level before pum Nater level was measured using Discharge rate measured using Well was pumped using Discharge rate measured using Well was pumped using Charge rate measured using Well was pumped using Discharge rate measured using Discharge rate measured using Well was pumped using Discharge rate measured using Discharge rate measured using Well was pumped using Discharge rate measured using Discharge rate measured using Well was pumped using Discharge rate measured using Discharge rate measured using Well was pumped using Discharge rate measured using	rest Date ft. above the land a Test Date ping	installed by atPs RPM Pow Footpiece TIGER CONST	ft. above the land so / . Water level _ Drawdown Discharge Rate Specific Capacity Model SI pressure. Fer Source ft Airline installed on FRUCTION CORP State	urface. ft. below land surfaftgals. per mingals. per minftftftin. diameter pipe	ce after hrs. of pumping. per ft. of drawdown 07762

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>17940</u> 29. 13. 836

Driller: Please use the sport peological formation.		the log desc	ription. Not	_	g zones		DEP USE ONLY	
Are samples available?	☐ Yes	□ No	•	\mathcal{O}	s	toret Hydrogeo (Code	
•				•	Ų	SGS Hydrogeo C	ode	
Drilling Method						epth to Bedrock	ft,	
					В	edrock Lith. Cod	e	
Type of Rig					} B	edrock Fm. Code		
Aquifer/Geo. Fm					c	ompleted by	 	
			\wedge	Đ ,	İ	Date	//	
		LOG		09		Thick.	Lith,	Fm.
		 						
							-	
			·			··		
			······································			 		
								
	 		·-····································					
			·- ·- · · · · · · · · · · · · · · · · ·					
					 ·			***********
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······································				······		.,		
GWPI No.				,	NJPDES No.		·	
Letitude	_ ^ '	"			Longitude	°	r n	
Lat-Long Accuracy USGS Quadrangle	□ 1″	□ 5″	□ 10°·	□ 20°				
Drainage Basin Code				1	County/Munic	ipality Code		<u>,, , , , , , , , , , , , , , , , , , ,</u>
	Lithologic L Geophysical			les Avaitable Chemistry	□ Aquif □ Pollut		☐ Water Level Data	,
Checked by					Date	_//_		

COPIES:

White - DEP

Canary - Driller

Pink - Owner

PAGE 1 OF 2

						_ _ 17941	
				Auas Sh	sat roolaiustes	_29: _13: 8	 L
		-					
	47 BROAD STRE						07724
CityE	ALIUNIUMN	 		State	NI	Zip Code	V//44
WELL LOCATION	M - If not the same ov Pine Brook	vner please give addro Road	ss. Owner	s Well No.	· <u>.</u>	 ,	
County			EATONITO	JN ROPO	i ot No	_43 Block No) EE
		·					
WELL USE	temporary o	lewatering po	int	Status			
WATER USE	dewatering		Average	(gals. daily	Maximum	gals. daily
WELL CONSTRU	CTION	Date well complete	d <u>3</u> /_	20/_87	_		
BOREHOLE DIM	ENSIONS	Depths: Total	<u>13</u> ft.	Finished	ft.		
	4.5	Diameter: Top _			in.		
	ration at well <u>45</u> ck-up) above land surl			n was determined	using	topography ma	p #29
	DEPTH TO (FT.)	TOP LEN		DIAMETER (in.)		TYPE AND MATERI Screens: Note Slot Siz	
Casing 1					_		
Casing 2							
Casing 3				,			
Screen 1							
Screen 2							
Tail Piece							
Gravel Pack	<u></u>						
Grout							
Grouting M	ethod						
	ATURALLY ft. above		n. at	ft. above the	e land surface.		
RECORD OF TES	त	Test Date	-11-				
						below land surface after	hrs. of pumping.
	easured using						
				Discharge Rate			
	using			•	-	_ gals. per min. per ft. of dr	awdown
	n nearby wells						
Vater Quality (tast	te, odor, color, etc.)						
	MPING EQUIPMENT					р Туре	
Afrs. Name					Model		
	p delivers						
	HP at			Source			
	ft		•		ine		
LOW METER: N	Aodel			_ installed on	in. di	ameter pipe.	
ONTRACTOR -	Name of Drilling Cont 806 Highway	TIC	ER CONSTR	UCTION CORE	Ρ.		
	Spring Lake	lla i a la La			M	J. Zip Code	07762
ity	D			State			01102
lame of Driller _	Definits D. D.	UA 19			Li	cense No. <u>M987</u>	·
ignature of Contra	actor				Da	nte <u>8</u> / <u>14</u> /	87
	COPIES:	White - DEP	Canary - Drie	ller Pink - C	wner Goi	denrod - Health Dept,	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 - 17941 29.13.836

Are samples available?		USGS Hydroged	Code	
Diniting matriced			* ft.	
Type of Rig			ode	
		Bedrock Fm. Co	ge	
Aquifer/Geo. Fm		Completed by _		
	, O	Date _	//	
LOG	roy	Thick,	Lith.	Fm.
	.\			
	······································			
		-		
GWPI No		NJPDES No.	·	
Letitude 0 1 11		Longitude	11	
Lat-Long Accuracy 1" 5"	□ 10°· □ 20°	Conditude	······································	
USGS Quedrangle		Oncore Marining Inc. Ondo		
OTHER FILES: Lithologic Log	Samples Available	County/Municipality Code Aquifer Test	☐ Water Level Data	

COPIES:

White - DEP

Canary - Driller

Pink - Owner

							917942	F
			•		Atias Sh	set Coordinate	· _29 : _13	.:. .836 _L
		for a company						
			MIOMN, TO	<u>INSHIP</u>	OF			
	47 BROAD STR	<u>-ET</u>		 -				· · · · · · · · · · · · · · · · · · ·
City	EATTONTOWN				State	NJ	Zip Cor	le <u>07724</u>
WELL LOCATIO	N - If not the same ov	vner please g	jive address.	Owner	's Well No	 	· · · · · · · · · · · · · · · · · · ·	
Address	Pine Brook	Road						
County	Monmouth	Munic	ioality E	EATONIC	DWN BORO	Lot No	o43 Bloc	k No. 55
								~~
WELL USE	temporary (dewater	ing point	5	Status			
								
WATER USE	dewatering		Ava	enane	!	vlish alsn	Maximum	gals. dail
		 				gu-01 - u-11 y		gara. con
WELL CONSTRU	ICTION	Date well	completed	3 /	20/_87_	1		
BOREHOLE DIM			otal13			13 ft.		
SOUTHOUT DIS	ENGIONO		Top 2			2 in.		
land Curfoon Cla	vation at well45		тор				tonoguanhi, ma	. 420
			•	CISASIII	ou was defermined	using	topography ma	p #29
asing Height (sti	ick-up) above land surf	Tace	π.		•			
	DEPTH TO	TOP	LENGTH		DIAMETER		TYPE AND MAT	FDIAI
	{FT.}		(FT.)		(IN.)		Screens: Note St	
		•		•				
Casing 1				<u> </u>			····	_
Casing 2				<u> </u>				
Casing 3								
Screen 1								
Screen 2								
Tail Piece								
Gravel Paci	k							
Grout							<u> </u>	
Grouting M	lethod			_				
Crouting in								
WELL FLOWS NA	ATURALLY	gai	. per min. et		ft, above the	e land surface.		
	ft, above	_	•					
	11, 4501.	, (110 141.4	114001				•	
RECORD OF TES	ST	Toet Nate	,	,				
						, 4 1	t, below land surface after	her of numning
	easured using							ms. or hauthing.
	asured using							
-							-	.E. danieri danieri
Veli was pumped					•	-	gals. per min. per ft. o	
Vater Quality (tas	ste, odor, color, etc.)							
ERMANENT PU	MPING EQUIPMENT	'	Installed by			Pu	mp Type	
lfrs. Name			 			Model		
APACITY: Pum	p delivers	GPM a	t	PSI	pressure.			
NWFR.	HP at		RPM	Power	Source			
EPTHS: Pump .	ft	. 1	Footpiece		ft. Airli	ne	ft.	
LOW METER: N	Model				installed on	in.	diameter pipe.	
					RUCTION CORP			
ONTRACTOR -	Name of Drilling Cont	ractor	· ~	7747	COLICY DURF			<u> </u>
				04				
ity	Spring lake	Hojah+	C. DOX 3) 	State	At 1	Zip Code	07762
eme of Driller	Donnie D. D.	nergne	3			N.U	License NoM987	07702
	- vennis b. U	/ /\V 5				 '	- M987	
	•	•						
lemature of Care	ractor						Date 8 / 14	, 87
gnature of Contr	actor						Date/	-1
	COPIES:	White -	DEP C	nary - Dri	ller Pink - O	lwner Go	oldenrod - Health Dept.	
					-		- · - •	•

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION **DIVISION OF WATER RESOURCES**

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 - 17942 29 - 13 - 836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	ZONES <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
Type of Rig	Bedrock Lith. Code Bedrock Fm. Code
Aquifer/Geo, Fm.	Completed by / / / Date / / Fm,
GWP1 No	NJPDES No
Lat-Long Accuracy	Longitudeo
OTHER FILES:	County/Municipality Code Water Level Data Pollution Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

				<u>29</u> – <u>17943 ′</u>
			Atlas Sheet Cool	rdinates <u>29 : 13 : 836 </u>
OWNER IDENTIFICA	TION - Owner FAST	TONTOWN. TOWNSHIP	0F	
City <u>EAT</u>	TONTOWN		State NJ	Zip Code
Address P	not the same owner plea ine Brook Road		's Well No	
CountyM	onmouth Mu	nicipality <u>EATONTO</u>	DWN BORO	Lot No. 43 Block No. 55
WATER USEd	ewatering	Average	gals. daii	ly Maximum gals, daily
WELL CONSTRUCTION	ON Date w	ell completed3 / .	20/_87	
BOREHOLE DIMENSI		: Total <u>13</u> ft. ter: Top <u>2</u> in.	Finished 13 Bottom 2	
Land Surface Elevation	at well45ft.	Elevati	on was determined using _	topography map #29
Casing Height (stick-up) above land surface		-	
	DEPTH TO TOP (FT.)	LENGTH (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL Screens: Note Slot Size(s)
Casina 1				
Casing 1 Casing 2				
Casing 3				
Screen 1				
Screen 2				
Tail Piece				
Gravel Pack				
Grout				
Grouting Methos	d			
	RALLY ft. above the land		ft. above the land su	rface.
RECORD OF TEST	Test Da	nte//		
Static water-level before	a pumping	ft. below land surface.	Water level	ft. below land surface after hrs. of pumping.
			Drawdown	
				gels. per min, per ft, of drawdown
	•			
ERMANENT PUMPIN	IG EQUIPMENT	Installed by		Pump Type
Mfrs. Name				
	GPI	M atPSI		
DEPTHS: Pump		Footpiece		ft.
			installed on	
PASS WEIGHT WOURS				III. Gidinatoi pipo.
ONTRACTOR - Nama	of Drilling Contractor_	TIDER CONST	RUCTION CORP.	
Address80	06 Highway 71,	P.O. Box 394		
ity St	pring Lake Heig		State <u>N</u> .	J. Zip Code 07762
lame of Driller De	ennis B. Davis			License NoM987
V				8 14 87
ignature of Contractor	·			Date//
	COPIES: White	e · DEP Canary · Dr	iller Pink - Owner	Goldenrod - Health Dept.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>17943</u> 29. 13.836

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft. Bedrock Lith, Code Bedrock Fm, Code
Aquifer/Geo. Fm.	Completed by / / /
LOG D9	Thick. Lith. Fm.
,	
GWPI No NJPDES	No
Latitude o ' '' Longitude Lat-Long Accuracy □ 1" □ 5" □ 10" □ 20" USGS Quadrangle □ □ □ □	· ° ' ''
OTHER FILES: Lithologic Log Samples Available	Municipality Code Aquifer Test Water Level Data Pollution Case
Checked by Date	//

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

					mit No2		_
				Atlas Sh	eet Coordinates	_29: _13:	<u>836 L</u>
WMER IDENT	IFICATION - Owner_	EASTONTOWN	L.TOWNSHTP	OF.			
	47 BROAD STRE			·			· · · · · · · · · · · · · · · · · · ·
	E ATTOMETOLINE					Zip Code	07724
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				State	·	Zip Gode .	ULILA
WELL LOCATIO	IN - If not the same ov	vner nlesse nive add	ress Owner	's Well No.			
Address	Pine Brook	Road	ibaa. Olimor	211011110			
County			EATONTO	OWN BORO	I of No	45 Block I	lo 55
							· V :
WELL USE	temporary o	dewatering p	oint_	Status			
NATER USE _	dewatering		Average		gals, daily	Maximum	gals. daily
VELL CÓNSTRU	UCTION			20_ /87_	_		
OREHOLE DIN	IENSIONS	Depths: Total	_ <u>13</u> ft.	Finished	<u>_13</u> ft.		
		Diameter: Top _			in.		
and Surface Elec	vation at well <u>45</u>	ft	Elevati	on was determined	using	topography ma	p #29
asing Height (sti	ick-up) above land surf	ace	_ft.				•
				,			
	DEPTH TO (FT.)		NGTH FT.)	DIAMETER (IN.)		TYPE AND MATER Screens: Note Stot S	
	\,	,		,,			
Casing 1							
Casing 2							
Casing 3					<u></u>	· · · · · · · · · · · · · · · · · · ·	
Screen 1	·						
Screen 2							
Tail Piece							
Gravel Paci							
Grout					, 		
Grouting N	Aethod						
							•
	ATURALLY		in. at	ft. above th	e land surface.		
Yater rises to 🔔	ft. abovi	the land surface.					
ECORD OF TE		Test Date					
	before pumping					below land surface after _	hrs. of pumping.
	easured using						
_	asured using				g		
	using			-	-	$_$ gals, per min, per ft, of $\mathfrak c$	lrawdown
later Quality (tas	rte, odor, color, etc.)_						
					,		
	MPING EQUIPMENT					P Type	
frs. Name		_ _			Model		
	np delivers						
OWER:	HP at	RPN	A Powei	Source			
	ft				ine		
LOW METER: 1	Model			installed on	in. di	ameter pipe.	
		TJ	IGIER CONSTI	RUCTION COR	P.		
ONTRACTOR -	Name of Drilling Cont 806 Highway	tractor	- 20A				· · · · · · · · · · · · · · · · · · ·
ddress	Constra late	/I, P.U. BO	JX 394		· LI 4		7760
ity		neignts		State	<u>N.J.</u>	Zip Code	7762
ame of Driller _	Dennis B. D	avis			Li	cense No. <u>M987</u>	
gnature of Conti	ractor				Da	te <u>8</u> / <u>14</u> /	_87
	contr.	MAIL DEP	Ones = 5 :	illos Bisto d	D	donard Houlet Boss	
	COPIES:	White - DEP	Canary - Dr.	iller Pink - C	owner Gol	denrod - Health Dept.	

Form_DWR-138

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No.	29 -	17944
	29.	13.836

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.	<u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
LOG VOQ	Date / / / Thick. Lith. Fm.
GWPI No NJPDES	No
Latitude ' '' Longitud	e
Lat-Long Accuracy 1" 5" 10" 20" USGS Quadrangle	
	Aunicipality Code
OTHER FILES:	Aquifer Test
Checked by Date	

COPIES:

White - DEP

Canary - Driller

Pink - Owner

					Weil Pe	rmit No. <u>29</u>	1794	15	
					Atlas S	heet Coordinates	_29 :.	<u> 13: £</u>	36L
OWNER IDENTIF	ICATION - Owner	EASTO	NTOWN. T	OWNSHIP	ΰF				
Address4									
	ATTONTOWN					te NJ		Zip Code	07724
WELL LOCATION			give address	. Owner	's Well No				
County			ipality	EATONTO	JWN BORO	Lot No.	43	Block No	. 55
WELL USE	temporary	dewater	ing poi	nt	Status				
WATER USE	dewatering	J	<i>f</i>	verage	 	gals. daily	Maximur	n	gals. daily
WELL CÓNSTRUC BOREHOLE DIME Land Surfaca Eleva	NSIONS	Depths: Diameter: 45ft.	Total1	3 ft. 2 in. Elevati	Bottom	13ft. 2in. d using	topo	graphy m	ap #29
Casing Height (stick	(-up) above land su	ırface (ft.						
	DEPTH T (Ft		LENGT (FT.)		DIAMETER (IN.)			NO MATERI Note Slot Siz	
Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Gravel Pack Grout	thod								
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RECORD OF TEST	•	Test Date		! <i>!</i>					
						ft.	below land sur	face after	_ hrs. of pumping.
Vater level was mea	sured using								
Discharge rate meas						9			
Vell was pumped us	ing				Specific Capac	ity	_ gals. per min	, per ft. of dra	wdown
)bserved effects on Vater Quality (taste									
•									
Ifrs. Name :APACITY: Pump	deline-	CDM		001		MODBI			
OWER:									
EPTHS: Pump						rline			
LOW METER: Mo	ndal	14.	1 ootpiece		inetalled on				
LUMMETER. MIC							hiha		
ONTRACTOR - No	ame of Brilling Co	ntractor	(±0:ale;	ICANOL N	RUCTION CO	KY.			
				204					·
Address	- 806 - Highwa	y / 1 	О. ВОХ -	394	Ctnt		Zin Co	do O	7760
lane of Dellan	-spring Lak	e-Height	.s		51810	* - N. J.	ZIP GE	ing ————————————————————————————————————	7762
lame of Driller	Dennis B.	Davis -		 -		Li	CEIISE NO		
ignature of Contrac	ctor		· · · · · · · · · · · · · · · · · · ·			Da	ate 8	/ <u>14</u> / _	87
=							·	•	
	COPIES:	White -	DEP	canary - Dr.	iller Pink -	Owner Gol	denrod - Healt	n vept.	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29	- 17945
	13.836

Driller: Please use the space below for the log description. Note water bearing zone or geological formation.); <u>L</u>	DEP USE ONLY	
Are samples available?	Storet Hydrogeo Code		
	USGS Hydrogeo Code		
Drilling Method	Depth to Bedrock	ft.	
	Bedrock Lith. Code	,	
Type of Rig	Bedrock Fm. Code		
Aquifer/Geo, Fm.	Completed by		
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LOG NOG	Thick.	Lith.	Fm,
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GWPI No NJF	PDES No.		
Latitude o ' ''	ngitudeo	_ 1 ′ 11	
Lat-Long Accuracy 1" 5" 10" 20"			
USGS Quadrangle			
	inty/Municipality Code	1144	
OTHER FILES:	☐ Aquifer Test ☐ Pollution Case	Water Level Data	
Checked by Dat	e/	_	

COPIES:

White - DEP

Canary - Driller

Pink - Owner

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

Cesing 1 Caring 2 Casing 3 Screen 1 Screen 2 Tail Piace Gravel Pack Grouting Method WELL FLOWS NATURALLY gals, per min, at				Well Permit No	29 - 17946
Address AZ REFAD STREET RELL LOCATION Stree NI Zip Code 07724 WELL LOCATION Float the same pyear please give address. Owner's Well No.				Atlas Sheet Coordina	ntes _29 : 13 : 836
Address A7 BRYAND STREET City EATCHTUANN Stree NI Zip Code 07724 WELL LOCATION - If not the same owner please give address. Owner's Well No. Pine Brook Road County Monitouth Municipality EATCHTUAN BUSS Lat No. 45 Black No. 55 WELL USE TEMPORARY dewatering point Status WATER USE DePARTURED Date well completed 3 / 20 / 87 BORRIOLE DIMENSIONS Depths: Total 13 ft. Finished 13 ft. Dimension: Total 13 ft. Elevation as determined using topography map \$29 Claing Might (rick-up) above land surface. Land Surface Elevation at well 45 ft. Elevation was determined using topography map \$29 Casing 1 Cosing 2 Casing 3 Casen 1 Screen 1 Screen 2 Casing Place Grove Peck Grout Grove the land surface. City First Casing 1 Casing 2 Casing 3 Casen 1 Screen 1 Screen 2 Casing Place Grove Peck Grout Grove the land surface. Whater rises to ft. above the land surface. RECORD OF FEST Test Date ft. below land surface. Wetter rises to ft. above the land surface. RECORD OF FEST Test Date ft. below l	AUGIPA :	D.A.I.W.A.I. A			
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WELL LOCATION - If nor the same owner please give address. Address Pine Brock Road Well use temporary dewatering point WELL USE temporary dewatering point WELL CONSTRUCTION Date well completed 3 / 20 / 87 BOREHOLE DIMENSIONS Depths: Total 13 ft. Finished 13 ft. Diameter: Top 2 in. Botton 2 in. Band Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Casing 1 Casing 1 Casing 2 Cating 3 Screen 1 Screen 2 Tail Piece Growt Peck Growt Peck Growt Peck Growt Peck Growt Method WELL FLOWS NATURALLY gals, per min. at ft. above the land surface. Water field to temporary devaluing Devandown ft. Discharge rate measured using Devandown ft. Discharge rate measured using Devandown ft. Discharge rate measured using Devandown gals, per min. per ft. of drawdown Devandown gals, per min. Well was pumped using Devandown ft. Discharge rate measured using Devandown gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Contractor Growth facts on nearby wells gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Devandown ft. Discharge Rate gals, per min. Well was pumped using Devandown ft. Discharge					7in Code 07724
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RECORD OF TEST Test Date /	Grouting M	lethod	·		
Static water-level before pumping		ft, above the i	and surface.		8.
Drawdown		Test	Date//	<u> </u>	
Discharge rate measured using					
Specific Capacity		_			
Description	•				
Neter Quality (taste, odor, color, etc.) PERMANENT PUMPING EQUIPMENT Installed by	Nell was pumped (using		Specific Capacity	
Pump Type Model Pump Type Model Pump Type Model Power Source Powe					
Afrs. Name	Neter Quality (tas	te, odor, color, etc.)			
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OWER:	APACITY: Pum	p delivers			
DEPTHS: Pump	OWER:	HP at	RPM Pow	er Source	
Installed onin, diameter pipe. FIGER CONSTRUCTION CORP. CONTRACTOR - Name of Drilling Contractor					
CONTRACTOR - Name of Drilling Contractor					
CONTRACTOR - Name of Drilling Contractor					
State N.J. Zip Code 07762 Iame of Driller Dennis B. Davis License No. M987 Date 8 / 14 / 87	ONTRACTOR - !	Name of Drilling Contractor	(MOSTEMA OCAL	
State N.J. Zip Code 07762 Iame of Driller Dennis B. Davis License No. M987 Date 8 / 14 / 87	Address	806 Highway 71	P 0 Box 394		
lame of Driller — Dennis B. Davis — M987————————————————————————————————————	ity	-Spring-Lake He	ights	StateN	Zip Code
Signature of ContractorDate8 / _14 / _87	lame of Driller _	Dennis B. David			License No. Mgg7
			-		11301
CONTROL Makes DED. Course Dellar St. t. Course C. March M. M. C.	ignature of Contr	actor			Date 8 / 14 / 87
				riller Pink - Owner	Goldenrod - Health Dept.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>17946</u> 29. 13, 836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	zones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft. Bedrock Lith. Code Bedrock Fm. Code
LOG LOG	Completed by / / /
GWPI No	NJPDES No.
Latitude	County/Municipality Code Aquifer Test Pollution Case
Checked by	Date/

COPIES:

White - DEP

Canary - Driller

Pink - Owner

Atter Sheet Coordinates 22 : 13 : 835 Atter Sheet Coordinates 22 : 13 : 835 Address 42 RRAD STISET City EATTONICAN, TOWNSHIP OF State NI Zip Code 0772 WELL LOCATION - If not the same owner please give address. Owner's Well No					Well F	Permit No. <u>29</u>	<u> 17947 </u>	
Address 42 RRADU STREET City EATUNITUM 1 not the same owner please give address. Owner's Well No. Pine Brook Road County Monitor th Municipality EATUNITUM Edition Lot No. 43 Block No. 55 WELL USE TEMPORARY dewatering point Status MARTER USE dewatering Average gets. daily Meximum ge					Atlas	Sheet Coordinates	_29: _13: 83	ند ــــــــــــــــــــــــــــــــــــ
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MATER USE	County	Monmouth	Municipality _	EATONT	OWN BORO	Lot No.	_43 Block No	55
Determined and surface Elevation at well completed 3 / 20 / 87 / 20 / 20 / 20 / 20 / 20 / 20 / 20 / 2	WELL USE	temporary de	watering p	oint	Status		\	
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Depths: Total 12 ft. Finished 13 ft. Diameter: Top 2 in. Bottom 2 in. Bottom 2 in. Elevation at well 45 ft. Elevation was determined using topography map #29 Dealing Height (stick-up) above land surface ft. DEPTH TOTOP LENGTH (FT.) (IN.) Servens: Note Stot Size(s) Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Place Gravel Pack Grout Grouting Method Grouting					00 . 07			-
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Static water-level before pumping	RECORD OF TES	i T 1	Test Date	//				
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Specific Capacity								
Description	•	•						/down
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AFRE. Name								
AFRE. Name							_	
APACITY: Pump delivers GPM at PSI pressure. OWER: HP at RPM								
OWER: HP at RPM	CAPACITY: Purs	n delivere	GPM at	` PS		Minnel		
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ONTRACTOR - Name of Drilling Contractor								
ONTRACTOR - Name of Drilling Contractor	FLOW MEIEN. N						ameter bibe.	
ity Spring Lake Heights State N.J. Zip Code Zip Code Zip Code Zip Code Zip Code	CONTRACTOR - !	Name of Drillion Contra		LIEK LIONST	KOCITON CO	жP.		
ity Spring Lake Heights State N.J. Zip Code				204				
ignature of Contractor Date _8 / _14 / _87_	City	Coming lake	/1, 	X 394	Ste	te 1	Zin Code 07760	
ignature of Contractor Date _8 / _14 / _87_	Vame of Driller	- spring Lake	ieignts -	·	Jia	·· N.J.	cense No. MO27	
		vennis v. Da	V13			L	- 430/	
COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.	Signature of Contro	actor				D	ate <u>8</u> / <u>14</u> /	87_
		COPIES:	White - DEP	Canary - Di	riller Pink	- Owner Go	denrod - Health Dept.	

Wall Permit No. <u>29</u> - <u>17947</u> 29. 13.836

Driller: Please the space below for the log description. Note water bearing zones or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code
·	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
	Bedrock Lith. Code
Type of Rig	Bedrock'Fm. Code
Aquifer/Géo. Fm.	Completed by
$\mathcal{N}^{\mathcal{O}}$	Dete//
	•
LOG	Thick. Lith. Fm.
GWPI No NJPDI	ES No
Letitude ' '' Longin	tude1
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quedrangle Drainage Basin Code Count	y/Municipality Code
	Aquifer Test Water Level Data
	Pollution Case
Checked by Date	<i>/ /</i>

COPIES:

White - DEP

Canary - Driller

Pink - Owner

					Well P	ermit No	<u> </u>	48	_ [
					Atlas S	heet Coordinat	es <u>_29</u> :	<u>-13</u> : €	36L
		<u></u>							
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	47 BROAD S' EALTONTOWN							7in Cada	07724
,nty	CHI CONTOWN				518	ra 		Zip Code	U//24
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				ATOMTO	WN BORO	Lot!	Vo. 43	Block No	-55
NELL USE	temporary	∠dewater	ing point		Status				
NATER USE	dewateri	1g	Aver	age		gals. daily	Maximu	m	gals. daily
WELL CONSTRI	CTION	Note we	completed	2 /	20 / 07				
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sering Lieißur /zru	ck-nh/ anose ratio	2011909	(L.						
		то то р т.)	LENGTH {FT.}		DIAMETER (IN.)			AND MATERIA Note Stot Size	
Casing 1									
Casing 2									
Casing 3			····		*******			************	
Screen 1				 -					
Screen 2	<u></u>			_ ` _					
Tail Piece									
Gravel Pack	·					· · · · · · · · · · · · · · · · · · ·			
Grout				-		<u> </u>			
Grouting M	lethod				····		·		
VELL FLOWS NA	ATURALLY	g	als. per min. at		ft. above t	he land surface.	•		
Veter rises to	ft. al	ove the land :	surface.						
RECORD OF TES	iT	Test Date	/-	/_					
tatic water-level t	before pumping		_ ft. below land :	surface.	Water level		ft. below land su	rface after	hrs. of pumping.
Vater level was me	easured using				Drawdown		ft.		_ , , ,
	esured using						_ gals. per min.		
	using				-		gals. per mi	n. per ft. of dra	wdown
	n nearby wells								
	te, odor, color, etc								
ERMANENT PU	MPING EQUIPME	.NT	Installed by			Р	итр Түре	<u></u>	
APACITY: Pum	p delivers	GPM	at	PSI	pressure.				
OWER:	НР а	t	RPM	Power	Source				
EPTHS: Pump _		_ ft.	Footpiece		ft. Ai	rline	ft.		
	Model								
			TTIFR	YNSTR	AUCTION COL	эр			
ONTRACTOR -	Name of Drilling (ontractor							
Address	806 Highw	<u>ay 71. P</u>	<u>.0. Box 39</u>	4					
ity	_Spring_La	<u>ke Heigh</u>	ts		State	eN.J	Zip C	ode0776	52
lame of Driller	_Dennis_B.	_Davis_					License No	M98	37
ignature of Contr	actor						Date 8	/ 14 /-	87
<u> </u>								. ,	
	COPIES:	White	- DEP Car	nary - Drii	ller Pink •	Owner (Goldenrod - Heal	th Dept.	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29 - 17948</u> 29, 13, 836

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method	Depth to Bedrockft.
	Bedrock Lith. Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
V O	Date//
211	
LOG	Thick. Lith. Fm.
GWP! No NJPDE:	
Latitude'' Longitu	de ' ''
Lat-Long Accuracy	
USGS Quadrangle Drainage Basin Code County,	/Municipality Code
OTHER FILES: Lithologic Log Samples Available	Aquifer Test
Checked by Date	

COPIES:

White - DEP

Canary - Driller

Pink - Owner

	,			Weli P	ermit No29			[7
						-29 : 1 3		L
OWNED INCHES	(EICATION O		POS B. S. PROS	into the				
				IIP OF		· · · · · · · · · · · · · · · · · · ·		
				Str		Zin	Code077	24
								
				wner's Well No				
	Pine Broo							
County	Monmouth	Municipi	alityFATO	NTOWN BORO	Lot No.	-43	Block No55	····
WELL USE	temporary	-dewateri	ig point	Status		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	
	, ,		•					
WATER USE	dewaterin	ı g	Average		_ gais. daily	Maximum		gals. dailγ
WELL CONSTRU	UCTION	Date well co	mpleted3	/_20/97_				
BOREHOLE DIN	AENSIONS	Depths: To	tal <u>13</u> f	- / - 20 / 87 - t. Finished	<u>13</u> ft.			
		Diameter: 7	Горі	n. Bottom _	in.	1 2 5 2 2 2 2 2 2 2 2	tonogwan	hy man #2
	vation at well			evation was determin	ed using	temporar/	copograpi	ny map #2
Casing Height (sti	ick-up) above land :	surface	ft.					
	DEPTH '	то тор	LENGTH	DIAMETER		TYPE AND		,
	(P.	т.)	(FT.)	(IN.)		Screens: Not	e Slot Size(s)	
Casing 1		_				····		
Casing 2								
Casing 3		_						
Screen 1					<u>. </u>			
Screen 2								
Tail Piece					•			
Gravel Paci	k							
Grout								
Grouting N	Method			····				
WELL ELOWER	ATHDALLV	gala	nor min at	ft. above	the land surface			
	ft, ab			11. 05046	tilo isita seriaco.			
_								
RECORD OF TE	ST	Test Date	//	_/	•.			
				ce. Water level			after hrs.	ot pumping.
	_			Drawdown _				
	esured using				te (
Well was pumped				Specific Capa				
Water Quality (tas	ste, odor, color, etc							
FRMANFNT PI	MPING FOILIPME	NT (n	etaliad by		Pun	no Type		
CAPACITY: Pur	np delivers	GPM at		PSI pressure.				
OWER:	HP at		RPM P	ower Source				
				ft. A				
LOW METER:	Model			installed on	in, d	liameter pipe.		
ONTRACTOR -	Name of Drilling C	ontractor	TUEN UN	ISTRUCTION CO	rtr'.			
Address	806 High	vav 71. P.). Box 394					
City	Spring L	ke Height	\$	Sta	teN.J	Zip Code _	07762	
Name of Driller _	Dennis R	Davis	-		L	icense No.	M987	
						o ·	14 97	
Signature of Conti	ractor			· · · · · · · · · · · · · · · · · ·	D	ate8 /	14 / 87	_
-								
	COPIES:	White - D.	EP Canary	- Driller Pink	- Owner Go	idenrod - Health Dei	Jt.	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>17949</u> 29. 13.836

Priller: Please use the space below for the log description. Note water bearing zon or geological formation.	DEP USE ONLY
Are samples evaliable?	Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
•	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
$\mathcal{N}^{\mathcal{O}}_{\alpha}$	Date//
106	Thick. Lith. Fm.
GWPI No	PDES No
Latitude ' '' Loi	ngitude o ,
Lat-Long Accuracy	
	unty/Municipality Code
OTHER FILES: Lithologic Log Samples Available	☐ Aquifer Test ☐ Water Level Data ☐ Pollution Case
Checked by Det	te//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

WELL LOCATION - If not the same owner please give address. Owner's Well No. Address Pine Brook Road County Morsoutth Municipality EATLANTOWN BORD Lot No. 43 Block No. 55 WELL USE temporary dewatering point Status WATER USE dewatering Average gals, daily Maximum gels, daily WELL CONSTRUCTION Date well completed 3 / 20 / 87 Dismiture: Total 13 ft. Finished 13 ft. Dismiture: Total 13 ft. Block on 2 in. Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Casing 1 Garding							- <u>1/950</u>	_
Address EATCATION. State NO Zip Code 07724 Metal LOCATION - If not the same owner places give address. Owner's Well No					Atlas She	et Coordinates	<u> </u>	836
WELL LOCATION - If not the same owner please give address. Owner's Well No	NWHED INCUTIEICATIO	OM . Owner E	astuntown	,TOWNSHIP	OF			
MELL LOCATION - If not the same owner please give address. Owner's Well No. Address Pine Brook Road County Momputh Municipality EATONTOWN BORG Lot No. 45 Block No. 55 WELL USE temporary dewatering point Status WATER USE dewatering Average gals. daily Maximum gals. daily WELL CONSTRUCTION Date well completed 3 / 20 / 87 Diameter: Top 2 in. Bottom 2 in. Diameter: Top 2 in. Bottom 2 in. Diameter: Top 2 in. Bottom 2 in. Elevation at well 5 ft. Elevation was determined using topography map #29 Casing Height (stick-up) above land surface ft. Casing 1 Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tall Piece Grout Grouting Method WELL FLOWS NATURALLY gals, per min. at ft. above the land surface. Well FLOWS NATURALLY gals, per min. at ft. above the land surface. Well was pumped using Diameter difficult on nearby wells fellow land surface. Well FLOWS NATURALLY gals, per min. at ft. above the land surface. Well FLOWS NATURALLY gals, per min. at ft. above the land surface. Well FLOWS NATURALLY gals, per min. at ft. above the land surface. Water level surface surface gals, per min. per ft. of drawdown ft. Dameter difficult on nearby wells fell was pumped using Diameter difficult on nearby wells fell was pumped using Specific Capacity gals, per min. Per manuer of Contractor ft. Per manuer of Contractor surface. TICER CYNETIC LICENS No. M987 Licenses No. M987 Licenses No. M987 Licenses No. M987 Licenses No. M987	Address	CAD STREET			·		· · · · · · · · · · · · · · · · · · ·	
WELL LOCATION - If not the same owner please give address. Owner's Well No. Address Pine Brook Road Pine Brook P	City	MICMA			State	ΝĴ	Zip Code	07724
Address Pine Brook Road Monmouth Municipality EATUNITON BORD Lot No. 45 Block No. 55 Block No. 5								
Month Municipality EAUNITUAN BORD Lot No. 43 Block No. 55	WELL LOCATION - If no	t the same owner	please give addr	ess. Owner	's Well No		-	
WELL USE temporary dewatering point Status WATER USE dewatering Average gals, daily Maximum gals, daily WELL CONSTRUCTION Date well completed 3 / 20 / 87 BORRHOLE DIMENSIONS Depth: Total 13 ft. Finished 13 ft. Dimenter: Top 2 in. Bettom 2 in. Elevation at well 45 ft. Elevation at well 45 ft. DEPTH-TOTOP LENGTH DIAMETER Casing 1 (FT.) DEPTH-TOTOP LENGTH (IFT.) Surveys: Noise Slore Slor				EXT. AIT.	ALKE PLACE.			
WATER USE dewatering Average gels. daily Maximum gels. daily WELL CONSTRUCTION Desther: Total 13 ft. Finished 13 ft. Diameter: Top 2 in. Bottom 2 in. Lond Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Casing Height (stick-up) above land surface ft. DEFTH TO TOP LENOTH INN.) DIAMETER TYPE AND MATERIAL Screens: Note Stot Stare(e) Casing 1 Casing 2 Casing 3 Casing 3 Casing 3 Casing 3 Casing 4 Casing 4 Casing 4 Casing 5 Casing 6 Casing 6 Casing 6 Casing 7 Casing 7 Casing 7 Casing 8 Casing 8 Casing 9 Cas	CountyMor	mouth	Municipality _	EMIONIC	MIN BURU	Lot No	43 Block N	lo. <u>55</u>
Date well completed 3 / 20 / 37 Depth: Total 13 ft. Finished 13 ft. Diameter: Top 2 in. Bottom 2 in. Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. DEFT(T) TO TOP LENGTH DIAMETER TYPE AND MAYERIAL Screens: Note Stat State(s) Ceaing 1 Ceaing 2 Ceaing 3 Screen 1 Screen 2 Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Matter rises to ft. above the land surface. RECORD OF TEST Test Date // Fest Date // State water-level before pumping ft. below land surface. Well FLOW Brazer at measured using Discharge rate measured using Discharge rate measured using Discharge rate measured using Specific Capacity gals. per min. per ft. of drawdown Deserved effects on nearby wells Neter Coulstry (tests, odor, color, etc.) PERMANENT PUMPING EQUIPMENT Installed by Pump Type ##Finished 13 ft. Finished 13 ft. Finished 13 ft. Finished 13 ft. Elevation was determined using Discharge Rate gals, per min. per ft. of drawdown Deserved effects on nearby wells Neter Quality (tests, odor, color, etc.) PERMANENT PUMPING EQUIPMENT Installed by Power Source Specific Capacity gals. per min. per ft. of drawdown Discharge Rate installed on in. dismester pips. TIGER CONSTRUCTION CORP. CONTRACTOR Name of Drilling Contractor Unders Society State N.J. Zip Code 07762 Licenso No. M987 Licenso No. M987	WELL USEten	mporary dew	atering-p	oint	Status			
Date well completed 3 / 20 / 37 Depth: Total 13 ft. Finished 13 ft. Diameter: Top 2 in. Bottom 2 in. Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Land Surface Elevation at well 45 ft. DEFT(T) TO TOP LENGTH DIAMETER TYPE AND MAYERIAL Screens: Note Stat State(s) Ceaing 1 Ceaing 2 Ceaing 3 Screen 1 Screen 2 Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY Matter rises to ft. above the land surface. RECORD OF TEST Test Date // Fest Date // State water-level before pumping ft. below land surface. Well FLOW Brazer at measured using Discharge rate measured using Discharge rate measured using Discharge rate measured using Specific Capacity gals. per min. per ft. of drawdown Deserved effects on nearby wells Neter Coulstry (tests, odor, color, etc.) PERMANENT PUMPING EQUIPMENT Installed by Pump Type ##Finished 13 ft. Finished 13 ft. Finished 13 ft. Finished 13 ft. Elevation was determined using Discharge Rate gals, per min. per ft. of drawdown Deserved effects on nearby wells Neter Quality (tests, odor, color, etc.) PERMANENT PUMPING EQUIPMENT Installed by Power Source Specific Capacity gals. per min. per ft. of drawdown Discharge Rate installed on in. dismester pips. TIGER CONSTRUCTION CORP. CONTRACTOR Name of Drilling Contractor Unders Society State N.J. Zip Code 07762 Licenso No. M987 Licenso No. M987	WATER USEdev	atering -	 	Average	g:	als. daily	Maximum	gals. daily
BOREHOLE DIMENSIONS Depth: Total 13 ft. Finished 13 ft. Diameter: Top 2 in. Bottom 2 in. Diameter: Top 2 in. Bottom 2 in. Diameter: Top 2 in. Bottom 2 in. Land Surface Elevation at well 45 ft. Elevation was determined using topography map #29 Casing 1 Casing 1 Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Gravel Pack Grout Grouting Method Grouting Method Grouting Method Fit. Bottow the land surface. RECORD OF TEST Test Date / / / Static water-level before pumping ft. below lend surface. RECORD OF TEST Static water-level before pumping ft. below lend surface. Note rises to		_		_				
Land Surface Elevation at well 45 ft. Elevation was determined using TOPOGRADNY MAP #29 Casing Height (sitck-up) above land surface		Dat	te well complete	ed 2 / -		12 .		
Land Surface Elevation at well 45 ft. Elevation was determined using TOPOGRADNY MAP #29 Casing Height (sitck-up) above land surface	BOREHOLE DIMENSION	IS De	pths: Total	13 π.	Finished	13 tt.		
Casing Height (stick-up) above land surface	t and Oudres Planeton at	ال سي 45	ımeter: lop _	IN.	Boπom		topography	man #29
Cesing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piace Gravel Pack Grouting Method WELL FLOWS NATURALLY	·				on was determined t	Ising	copograpily	map #EJ
Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Grout Grouting Method WELL FLOWS NATURALLY	cating neight (stick-nh) st	JOAR (8110 201.1908		, п.				
Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY								
Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY	Casino 1							
Casing 3 Screen 1 Screen 2 Tail Piace Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY gals. per min. at	•							
Screen 1 Screen 2 Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY	<u> </u>							
Screen 2 Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY	-							
Tail Piece Gravel Pack Grout Grouting Method WELL FLOWS NATURALLY								
Gravet Grouting Method WELL FLOWS NATURALLY gals. per min. at ft. ebove the land surface. Weter rises to ft. above the land surface. Weter rises to ft. below the land surface. Weter rises to ft. below land surface after hrs. of pumping. Weter rises to ft. below land surface after hrs. of pumping. Weter rises to ft. below land surface. Water level ft. below land surface after hrs. of pumping. In the surface after hrs. of pumping. Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate gals. per min. per ft. of drawdown Discharge Rate				 -				
Grouting Method WELL FLOWS NATURALLY				-				
Grouting Method WELL FLOWS NATURALLY			·					
WELL FLOWS NATURALLY								_
Neter rises to								
Test Date	WELL FLOWS NATURAL	.LY	gals. per mi	n. at	ft. above the	land surface.		
Static water-level before pumping	Nater rises to	ft, above the	land surface.					
Static water-level before pumping	DECADA AE TECT	Tax	e Data	, ,				
Drawdown						ft hel	nw land eurface after	hes of numbing
Discharge rate measured using							OM 1916 2511958 91561	ms. or pumping.
Specific Capacity gals. per min. per ft. of drawdown							ner min	
Description		•						rawdowo
PERMANENT PUMPING EQUIPMENT Installed by								
PERMANENT PUMPING EQUIPMENT Installed by	Mater Auslity (taste odor	color etc)						
Mfrs. Name								
Mfrs. Name	PERMANENT PUMPING	EQUIPMENT	Installed	by		Pump 1	ype	
CAPACITY: Pump delivers GPM at PSI pressure. POWER: HP at RPM	Mfrs. Name	· · · · · · · · · · · · · · · · · · ·				Model		
POWER:	CAPACITY: Pump deliver	'\$	GPM at	PSI	pressure.			
DEPTHS: Pump	POWER:	HP at	RPM	Power	r Source	<u></u> _		
CONTRACTOR - Name of Drilling Contractor	DEPTHS: Pump	ft.	Footpiec	:B	ft. Airlir	ne	ft.	
CONTRACTOR - Name of Drilling Contractor	FLOW METER: Model _			_ 	_ installed on	in. diam	ieter pipe.	
Address 806 Highway 71, P.O. Box 394 City Spring Lake Heights State N.J. Zip Code 07762 License No. M987 Cignature of Contractor Date 8 / 14 / 87			TIG	ER CONSTR	LICTION CORP.			
City Spring Lake Heights State N.J. Zip Code 07762								
lame of DrillerDennis B. Davis License NoM987	Address806	Highway 7	1 , P.O. B o	ox 394 —				
lame of DrillerDennis B. Davis License NoM987	CitySpr	ing Lake H	eights		State	N.J.	. Zip CodeO	7762
Date 8 / 14 / 87	lame of Driller ——Den	n is B. Dav	is			Licer	ise No. <u> </u>	
				-		•		
							Q 1A	97
CODIES White DED Conner Dellas Bisk Owner Coldonad Hotels See	Signature of Contractor _					Date	//	<u>01</u>
LLIELES: WILLIE LANGEY LITTING WIDE LANGUET (LOTOROTO MADITO DANGE		COPIES:	White - DEP	Canary . Dr	iller Pink . Ou	vnar Golder	nrod - Health Dept.	



NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 _ 17950 29. 13.836

Driller: Please use the space below for the log description. Note water bearing zo or geological formation.	DEP USE ONLY
Are samples available?	Storet Hydrogeo Code
wie zeitibiez stadiianiet.	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm	Completed by
	Date//
LOG	Thick. Lith. Fm.
	
······································	
	····
GWPI No N	JPDES No
Latitude'	ongitude 0 1 11
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quedrangle	
	ounty/Municipality Code
OTHER FILES: Lithologic Log Samples Available	☐ Aquifer Test ☐ Water Level Data
Geophysical Logs Water Chemistry	Pollution Case
Checked by D	ate//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

					rmit No29_		
				Atlas Si	heet Coordinates _	29 : 13	: -836
AWNED INCUTIO	ICATION - Owner_	FASTONTOL	N. TOWNSHIP	nc.			•
	17 BROAD STR		194 TOWNSHIE	. U			
71 U U 1 D40	ATTONTOWN			Ctat.	e <u>NJ</u>	Zip Code	07724
	 			State	·	Zip Code	<u></u>
	I-If not the same of Pine Brook	wner please give ad	dress. Owner	's Well No			·
Address	Monmouth		E ATCA ITC	4 8 1 13 c.ma.			
County	TIOTHIOG CIT	Municipality	EATUNI	WN BURU	Lot No	43 Block	No55
WELL USE	temporary	dewatering	point	Status_			
WATER USE	dewatering	<u> </u>	_ Average		gals. daily	Maximum	gals. daily
WELL CONSTRUC	TION	Date well compl	eted 3 /	20 / 87			
BOREHOLE DIME			13 ft.		ft.		
		Diameter: Top			in.		
Land Surface Eleva	tion at well45	ft,				topography	man #20
	k-up) above land sur				•	-vopograping-	map #25
	DEPTH TO {FT.}		ENGTH (FT.)	DIAMETER (IN.)		TYPE AND MATE Screens: Note Slot	
	,		•	••			
Casing 1			 ,				
Casing 2			 -				
Casing 3							
Screen 1			 -	···			····
Screen 2			 .				· · - · · · · · · · · · · · · · · · · ·
Tail Piece			 -				•
Gravel Pack							
Grout							
Grouting Me	thod						
	TURALLY ft. abov	e the land surface.			ne land surface.		
RECORD OF TEST		Test Date					
	efore pumping					elow land surface after	hrs. of pumping.
Vater isvel was mes	sured using						
	ured using		-		ga		
• •	sing				•	_ gals. per min. per ft. of	
	-						
Voter Quality (taste	a, odor, color, etc.)						
EDMANENT DIM	DING ENIIOMENT	Γ Inetall	ed by		Pume	Tyne	
Afrs. Name	HING EGON MEN	. Indum			Model	. 1780	
APACITY Pump	delivers	GPM at	PSI	nressure			
OWER.	HP at	RF	M Power	r Source			
FPTHS: Pump	f	t Footni	iece	ft. Air	line	ft.	
	odel						
LOW METERS. III.				UCTION COR			
ONTRACTOR - N	ame of Drilling Con			COLTON COR	- 		
ddanaa	006 114	. 71 0 0	Pov 204				
ity	Spring Lake	, /1, T.V.		State	N.J.	Zip Code07	762
lame of Driller	Spring Lake	DAVIS			Lic	ense No. <u>M98</u>	7
		· - · · · · · · · · · · · · · · · · · ·				·	
ignature of Contra	ctor				Da	te <u>8</u> / <u>14</u>	/ _87
						,	
	COPIES:	White - DEP	Canary - Dr.	iller Pink -	Owner Gold	ienrod - Health Dept.	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No	<u> 29</u> _	17951
	29.	13,836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	ZONES <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft. Bedrock Lith. Code Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by//
	·
GWPI No	NJPDES No
OTHER FILES: Lithologic Log Samples Available Geophysical Logs Water Chemistry	County/Municipality Code Aquifer Test Water Level Data Pollution Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

					Well Pa	rmit No29	<u> </u>		1
					Atlas S	heet Coordinates	_29_: 13	28ـ : ــــــــــــــــــــــــــــــــــ	6L
		Fr. 9 Count.	Affron Bill Torre						
OWNER IDENTIF	FICATION - OW	er EASIU	NTOWN, TOW	NSHIP	<u>OF</u>				
Address	EATTONION								
City	CHIONION	·			Stat	e <u>NJ</u>	Zip	Code	07724
	m4 15	•							
WELL LOCATION				Owner'	s Well No				
Address	Manmouth	ok koad	in the E	ATOMEO	MI BODO		477		
County	MOUNOUTE	munic	ipanty	41 OI 41 O	WY DONO	Lot No.	45	RIOCK NO.	35
WELL HEE	tomnous	u dowatew			Statue				
MELL 095	renturat	y dewater	'ing-point		Status				
WATER USE	dewateri	na .	Aver	AOA		usis daily	Maximum		gals, daily
		11 9				guie, cany			guis, cony
WELL CÓNSTRU	CTION	Date well	completed	3/_	20 / 87	_			
BOREHOLE DIM	ENSIONS		ייי						
		Diameter	: Top <u>2</u>	in.	Bottom	in.			
Land Surface Elev	ation at well	ft.		Elevatio	n was determine	d using	topogra	phy map	#29
Casing Height (stic	ck-up) above land	surface	ft.				, ,	. •	
		1 TO TOP FT.}	LENGTH (FT.)		DIAMETER (IN.)		TYPE AND Screens: No	MATERIAL te Slot Size/s	-
	•		((,				•
Casing 1									
Casing 2									
Casing 3				 ,				·····	
Screen 1									
Screen 2									
Tail Piece									
Gravel Pack	·								
Grout									
Grouting M	lethod								
			_						
WELL FLOWS NA					ft. above t	he land surface.			
Water rises to	tt. e	bove the land s	urtace.						
DECADA AE TEC	e r	Tost Floto	,	,					
RECORD OF TES	bi bafaan mumainn	i eži Date	fr. below land	/ -	Mineral Inval	4	below land surface	after	hm of numning
Static water-level is Water level was me						n.		81(91	ուշ, օւ բաություց.
						'I., ' [
Discharge rate mea Well was pumped o							gals. per min. pe	r ft of drawe	inum
					-		gais. per mini. pe		MI
	-								
Marie Cynality (192	18, 0001, 60101, 8						 		
EDMANCHT DIN	MDING EAHIDM	CNT	Installed by			Pur	р Туре		
Wfrs. Name	MITHE LEGITM	LAI	Illafation Di				·P · / /P°		
CAPACITY: Pum	n delivers	GPM							
DEPTHS: Pump _									
FLOW METER: N			TIGER	YNK:TRI	ICTTOM COD	D	ramotal pipol		
ONTRACTOR -	Name of Drilling	Contractor	1.1.4.11	~~4 %~> 1 1 W	JOITON COM	F .			_
Address			0 Box 39	1					
City	Spring La	ke Height	2		State	- N_1	Zip Code	0776	·o
Name of Driller _	Dennis B.	Davis				L	icense No	U7 /0)
	- <u>-</u>					-		וסכויו	
ignature of Contr	actor		, ·			D	ate <u>8</u> /_	<u>L4 / 8</u>	37
							•	•	
	COPIES	: White -	DEP Car	nary - Dril	ier Pink -	Owner Go.	idenrod - Health De	pt.	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>17952</u> 29. 13.836

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.	<u>DEP USE ONLY</u>
Are samples available?	USGS Hydrogeo Code Depth to Bedrock ft.
Type of Rig	Bedrock Lith. Code
LOG LOG	Completed by///
GWPI No NJPDE:	s No
Latitude o ' '' Longitu Lat-Long Accuracy	
OTHER FILES:	/Municipality Code Aquifer Test Water Level Data Pollution Case
Checked by Date	//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

		Well Permit No.	29 _18127
		Atlas Sheet Coordi	nates 29 13 836
AWWED INCUTIONS	Owner Transmission of the State	•	
	- Owner PATONTOWN, TOWNSHIP OF		
City			Zip Code
			3., <u> </u>
	the same owner please give address. Owner k Road		.
County Monmouth	Municipality RATORIO	N BORO L	ot No. 43 Black No.55
WELL HEE TOWNS AND	dewatering noint	Statue	
, ,	7		
WATER USE dewaterin	g Average	gals, daily	Maximum gals. daily
WELL CONSTRUCTION	Date well completed3 / _	20 / 87	
BOREHOLE DIMENSIONS		Finished 13	_ft.
Land Surface Elevation at w		on was determined using	*
	ve land surface ft.		\
c	DEPTH TO TOP LENGTH	DIAMETER	TYPE AND MATERIAL
	(FT.)	(IN.)	Screens: Note Slot Size(s)
Casing 1			
Casing 2			
Casing 3			
Screen 1 _			
Screen 2		 	
Tail Piece			
Gravel Pack _			
Grout _			
Grauting Method _			
WELL FLOWS NATURALL	Y gals. per min. at	ft. above the land surfi	ace.
	ft, above the land surface.		
RECORD OF TEST	Test Date / / / /		
Rtetic weter-level hefore num	pping ft. below land surface.	Water level	ft. below land surface after hrs. of pumping.
	ng		
	9		
	vells		
	plor, etc.)		
	•		
PERMANENT PUMPING ED			. Pump Type
Mfrs. Name			
	GPM atPSI		
DEPTHS: Pump		r Source ft. Airlins	
	T. rootpiece		
rtuw meten. Moder		•	_ in. diameter pipe.
CONTRACTOR - Name of D	rilling Contractor TRGER CONST	RUCTION CORP.	,
Addom 806 Highwa	ay 71, P.O. Box 394	······································	
Spring lat	ke Heights	State	N.J. Zip Code07762
	is B. Davis		License No. M987
4944 OI DINIAL	13 U D0 Y 1 3		Lighting 110 1930/
Signature of Contractor			Date <u>8</u> / <u>14</u> / <u>87</u>
Minaraia ni chilliarini			/ / / /
C	OPIES: White - DEP Canary - Dri	iller Pink - Owner	Goldenrod - Health Dept.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION **DIVISION OF WATER RESOURCES**

PAGE 2 OF 2

-			WELI	RECORD	Well P	Permit No. <u>29</u> -	1812' 13.'83
iller: Please use the spa geological formation.	ace below for the	log description. N	lote water bearin	g zones		DEP USE ONLY	13-83
		□ No		US	GS Hydrogeo Co	odeft.	
pe of Rig		·					
uifer/Geo. Fm	· · · · · · · · · · · · · · · · · · ·		1 0	co			
	L	OG V	109		Thick.	Lith.	Fm.
		·····				**************************************	
				······································			

 						1	
SWPI No	-			NJPDES No.			
atitude at-Long Accuracy SGS Quadrangle	0 1"	"] 5"	20 ″	Longitude	°	' "	
rainage Basin Code	Lithologic Log		nples Available ter Chemistry	County/Munici Aquife	r Test	☐ Water Level Data	
Checked by				Date	//-		

COPIES:

White - DEP

Canary - Driller

Pink - Owner

			No29		
		Atlas Sheet	Coordinates 29	: 13 :836	L L_
AMMED INCUTIFICATION /	DANNAMORAL MORROWS AND	0			
	Owner RATONTOWN, TOWNSHIP OF 47 HOOAD STREET	<u> </u>			
	EATONTOWN	State 1	MT	Zip Code C	7721
<u> </u>				codo <u></u>	1764
WELL LOCATION - If not the	same owner please give address. Owner	r's Well No			
Address Pine B	rook Road				
CountyMonmou	th Municipality RATORITO	N BORO	Lot No. 43	Block No.	5
WELL USE tempor	ary dewatering points	Status		·····	
WATER USEdewate	ring Average	gals	s. daily Ma	aximum	gals. daily
	- . .				
WELL CONSTRUCTION	Date well completed3 /_	-20 / -87- -			
BOREHOLE DIMENSIONS	Depths: Total <u>13</u> ft. Diameter: Top <u>2</u> in.	Finished			
Land Surface Elevation at well					"00
Casing Height (stick-up) above I	and surface ft	ion was determined usi	"y 	opograpny map	#29
need the factor aby anote in	110 5411400				
DEF	PTH TO TOP LENGTH {FT.} (FT.)	DIAMETER (IN.)		YPE AND MATERIA reens: Note Slot Size(
Casina 1					
Casing 1 Casing 2					
	<u> </u>				
Casing 3					
Screen 1					
Screen 2		· · · · · · · · · · · · · · · · · · ·		~ 	
Tail Piece					
Gravel Pack					
Grout					
Grouting Method					
WELL FLOWS NATURALLY	gals, per min, at	ft. above the la	nd surface.		
Water rises tof	t, above the land surface.				
RECORD OF TEST	Test Date//				
	ng ft. below land surface.		ft. below la	and surface after	hrs. of pumping.
Nater level was measured using	1	Drawdown	ft.		
_			gals, per r	min.	
		-		er min. per ft. of draw	down
Observed effects on nearby wells	s				
•	r, etc.)				
	PMENT Installed by				
Wfrs. Name		M:	odel	···	
	GPM atPSI				
POWER:	HP at RPM Powe	r Source			
	ft. Footpiece		ft.		
FLOW METER: Madel		installed on	in. diameter	pipe.	
	TIGG CONSTR	CONTRACTOR CORP			
CONTRACTOR - Name of Drilli	ng Contractor Pour 304	OCTION CORP.	· · · · · · · · · · · · · · · · · · ·		
Address OVO FIT	ghway 71, P.O. Box 394				7760
ityspring	Lake Heights	State		Zip CodeO	//62
Name of Driller <u>Dennis</u>	B. Davis		License N	o. <u>M987</u>	
			,	8 14	87
Signature of Contractor			Date	8 / 14 / -	
000	IEC. IAbie- DEB O D-	iller Pink - Own	or Caldanus d	- Health Dept.	
COPI	IES: White - DEP Canary - Dri	nier rink - UWN	e, gorgenroa -	певин Берт.	

Form DWR-138 11485

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 - 18128

29.13.834

Driller: Please use the space below for the log description. Note water be or geological formation.	aring zones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method	ft,
Type of Rig	Bedrock Lith. Code Bedrock Fm. Code
Aquifer/Geo, Fm.	Completed by
, O	Date///
106	Thick, Lith, Fm.
GWPI No	NJPDES No.
Latitude 0 ' !!	Longitudeo'
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quadrangle	The state of the s
Drainage Basin Code	County/Municipality Code
OTHER FILES: Lithologic Log Samples Availab	·
Geophysical Logs Water Chemistry	Pollution Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

			Well Permit No Atlas Sheet Co		29 13 836
OWNER IDENTIFICAT	ION - Owner_ RATORT	CHN. TOWNSHIP OF		TOTO IN THE STATE OF THE STATE	
Address	47 HRC	AD STRUKT			
City	RATON	OIN	State NJ	······································	Zip Code <u>07724</u>
		give address. Owner	's Well No.		
Address Pi	ne Brook Koad	cipality <u>KATONTO</u>	N DODO	44	55
CountyMo	nmouth Muni	cipality	er bustu	Lot No. 43	Block No.55
WELL USEte	emporary dewate	ring point	Status	"	
WATER USEde	watering	Average	gals. d	aily M axi	mum gals.
WELL CONSTRUCTION	i Date wel	completed3_/_	20 / 97		•
BOREHOLE DIMENSIO	NS Depths:	Total13 ft.	Finished13		
I and Cuelina Elemeion a		r: Top in,	on was determined using		raphy map #29
Land Surface Elevation a Casing Height (stick-up) :	nt well45n. above land surface		on was determined using		apily map #23
James Valley	рертн то тор	LENGTH	DIAMETER	TVI	E AND MATERIAL
	{FT.}	(FT.)	(IN.)		ens: Note Slot Size(s)
Casing 1					
Casing 2					
Casing 3					
Screen 1					
Screen 2				······································	
Tail Piece					
•			•		
Gravel Pack					
Grout			_		
Grouting Method					· · · · · · · · · · · · · · · · · · ·
	ALLY gr ft. above the land :	als. per min. at surface.	ft. above the land	surface.	
RECORD OF TEST	Test Date	a / /			
Static water-level before	Oumpino	ft, below land surface.	Water level	ft. below land	surface after hrs. of pump
Natar loval was massurad	Heina		Drawdown		,
					,
					-
	-				
, , , , , , , , , , , , , , , , , , , ,			·		
ERMANENT PUMPING		Installed by		Pump Type	
Kfrs. Name				el	
CAPACITY: Pump deliver	ers GPM	atPSI	pressure.		
		RPM Power	r Source		
DEPTHS: Pump	ft.	Footpiece		ft.	
LOW METER: Model			_ installed on	in. diameter pip	e.
		WILLIAM CANCEL	HUCTION CORP.	. 4	,
ONTRACTOR - Name o	f Drilling Contractor				
Address80	<u>6 Highway 71, P</u>	.0. Box 394		<u> </u>	
Sity Sp	ring Lake Heigh	ts	State	N.J. Zi	p Code07762
Name of Driller Da	nnis B. Davis			License No.	
Aerrig of Dinigi	MIN MI WUYIA			E(C01130 14V.	, , , , , , , , , , , , , , , , , , , ,
Signature of Contractor				Date8	/
-					
	COPIES: White	- DEP Canary - Dri	iller Pink - Owner	Goldenrod - H	ealth Dept.

Form DWR-138

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 - 18129

29.13.836

Driller: Please use the space below for the log description. Note water bearing a or geological formation.	ZONES <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
Dulling Blacked	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
Type of Rig	Bedrock Lith. Code Bedrock Fm, Code
Aquifer/Geo. Fm.	Completed by
NO	Date//
LOG 109	Thick. Lith. Fm.
	<u>-</u>
GWPI No	NJPDES No
Latitude'	Longitudeo'''
Lat-Long Accuracy 🔲 1" 🔲 5" 🔲 10' 🔲 20"	j
USGS Quadrangle	
	County/Municipality Code
OTHER FILES: Lithologic Log Samples Available Geophysical Logs Water Chemistry	☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry	Pollution Case
Chacked by	Date / /

				Well Permit N	229 No	18130 29 - 13 -	
				Atlas Sheet C	Coordinates _	28	836
AWNED INCUTIEICA	TION Owner	KATONTOWN, T	OMEHIP O	3			
Address	LION - OMIRE	47-BROAD ST	EEST	N	17		
City		BALCHION		State		Zip C	ode <u>07724</u>
WELL LOCATION - If Address Pine B	not the same or Brook Road	wner please give addr	ess. Owner	's Well No.			
County Monmou	ith	Municipality	EATONTO	IN BORO	Lot No	43	lock No.
WELL USE <u>tempor</u>	ary dewat	<u>ering points</u>		Status			
water used <u>ewate</u>	ring		Average	gals.	daily	Maximum	gals, de
WELL AGUSTRISTIS		Date well complete		20 / 27			
WELL CONSTRUCTION		Depths: Total			3 4		
BOREHOLE DIMENSI	UNO	Diameter: Top _	2 in	Bottom2			
Land Surface Elevation		nisinater: 10h -	III. Elevetic	on was determined using		tonogra	phy map #29 _
				on was detalunusa nzivi	9	copogra	pily map #E3
Casing Height (stick-up)) SDOAS (SUG 201	IRCA	.π.				
	DEFTH TO (FT.)		IGTH 'Т.)	DIAMETER (IN.)		TYPE AND M Screens: Note:	
Casing 1							
Casing 2							
Casing 3							
Screen 1							
Screen 2							
Tail Piece							
Gravel Pack							
Grout				,			
Grouting Method	, <u> </u>			·			
MELL SI NWR MATIIS	ALIV	nele ner mi	in at	ft. above the land	d eurfare		
Nater rises to				11. 45010 (114 1411)	u 3u, 1400.		
RECORD OF TEST		Test Date	_11				
Static water-level before	eniamua e	ft. belov	w land surface.	Water level	ft. b	alow land surface af	iter hrs. of pumping
Vater level was measure	ed using			Drawdown	ft.		
Discharge rate measured	_					s, per min.	
				Specific Capacity _			t. of drawdown
	-						
ERMANENT PUMPIN	e compaces	Inetalled	l forz		Pumn	Tuna	
APACITY: Pump deli	hore	GOM at	Dei	Draceura	uoi	·	
OWER:				Source			
EPTHS: Pump		Footnies	-0	ft Airline			
		. Footbied		installed on			
LOW METER: Model		Th	CHER CYNESTS	OCTION CORP.	III, UIBI	meter hihe.	
			CEL COLDIE	WOILER COME.			
7001822	gnway /1,	P.O. BOX 39	4	Ctata	A: 7	Zin Code	07760
ony ————————————————————————————————————	Lake Hei	gnts	······································	State	N.√.	ՀՈՒ ՐՈԾՔ	07762 M987
isme of Driller	- Dennis B	. Davis			LICE	MISS ND.	1130/
ignature of Contractor					Dat	8 / 14	4 / 87
	008170	44. 556	A A	U 6: 1- 6:	^		
	COPIES:	White - DEP	Canary - Dri	iler Pink - Owner	r Golde	anrod - Health Dept	•

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 - 18130

Driller: Please use the space below for the log description. Note water bearing zone or geological formation.	<u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method	ft.
	Bedrock Lith. Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm	Completed by
v 🗸	Date//
roe rod	Thick. Lith. Fm.
	· · · · · · · · · · · · · · · · · · ·
GWPI No ' NJP	DES No
Latitude ' '' Long	gitude 0 1 11
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quadrangle	
Drainage Basin CodeCoul	nty/Municipality Code
OTHER FILES:	☐ Aquifer Test ☐ Water Level Data ☐ Pollution Case
Checked by Date	·/

COPIES:

White - DEP

Canary - Driller

Pink - Owner

			Atias Sh	eet Coordinates	<u> 29 : 13 </u>	836	
WNER IDENTIFICATION - Owne	r RATONTONI.T	OLNEHTE	P OFF	,	1		
ddress						· · · · · · · · · · · · · · · · · · ·	
ity	EATONTOWN		State	NJ	Zip	Code0772	Δ
							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
ELL LOCATION - If not the same	-	ress. O	wner's Well No				
ddress <u>Pine R rook R</u> ounty <u>Monmouth</u>		PATVN	PROCEST DOCOD		49	KK	
ountyPHIRIDIALII	municipanty _		TOTAL DATE	LOT NO.		RIOCK NO.	
MELL USE Temporary Dewi	stering Point	 	Status_				
ATERUSE <u>Dewatering</u>	· · · · · · · · · · · · · · · · · · ·	Average		gals. daily	Maximum		gals. dail
ELL CONSTRUCTION	Date well complet	ed 3	, 20 , 87				
OREHOLE DIMENSIONS	Depths: Total	13 _f	_ / <u>20 / 87</u> ft. Finished	13 ft.			
	Diameter: Top _						
and Surface Elevation at well	•		evation was determined		topography	y map #29	
esing Height (stick-up) above land s	urface	_ft.					
DEPTH .	TO TOP 1 FR	NGTH	DIAMETER		TYPE AND		
(F1		FT.)	(IN.)		Screens: Not		
Casing 1							
Casing 2							· · · · · ·
Casing 3					·	•	
Screen 1							
00,0011							
Cerson 2							
Screen 2							
Tail Piece					1		
Teil Piece Gravel Pack							
Tail Piece Gravel Pack Grout							
Tail Piece Gravel Pack							
Tail Piece Gravel Pack Grout Grouting Method	oals, per m	in, at	ft. above the	a land surface.			
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY		in. at	ft. above the	land surface.			
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to	ove the land surface.			e land surface.			
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab	ove the land surface. Test Date	_/	- /				
Tail Piece Gravel Pack Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST /	ove the land surface. Test Dateft, below	/ w land surfa	/ ace. Water level	ft, I	pelow land surface	after hrs.	of pumping.
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises toft. ab ECORD OF TEST / atic water-level before pumping ater level was measured using	ove the land surface. Test Date ft. below	/ w land surfa	/ ace, Water level Drawdown	ft. l		after hrs.	of pumping.
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST / atic water-level before pumping ster level was measured using scharge rate measured using	Test Date ft. below	/ w land surfa	/ ace. Water level Drawdown Discharge Rate _	ft. I	ils. per min.		
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST / atic water-level before pumping ater level was measured using ischarge rate measured using	ove the land surface. Test Date ft. below	/w land surfa	ace. Water level Drawdown Discharge Rate Specific Capacity	ft. l ft. ge y	ils. per min. _ gals. per min. per		
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY eter rises to	ove the land surface. Test Date ft. below	/w land surfa	/ ace. Water level Drawdown Discharge Rate _ Specific Capacit	ft. l ft. ge y	ils. per min. _ gals. per min. per		
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY eter rises to	ove the land surface. Test Date ft. below	/w land surfa	/ ace. Water level Drawdown Discharge Rate _ Specific Capacit	ft. l ft. ge y	ils. per min. _ gals. per min. per		
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST atic water-level before pumping ster level was measured using scharge rate measured using	Test Date ft. below	/ w land surfa	/	ft. I	els, per min, gals, per min, per	ft, of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to	Test Date ft. below	/w land surfa	/	ft. ft. ft. gs yPump	ols, per min, gals, per min, per	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to	Test Date ft. below	/ w land surfa	/	ft. ft. ft. gs yPump	ols, per min, gals, per min, per	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST atic water-level before pumping eter level was measured using escharge rate measured using	Test Dateft. below	w land surfa	/	ft. ft. ft. gs yPump Model	ols, per min, _ gals, per min, per	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to	Test Dateft. below	w land surfa	/ ace. Water level Drawdown Discharge Rate _ Specific Capacit	ft. ft. ft. gs yPump Model	ols, per min, _ gels, per min, per o Type	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to	Test Dateft. below	w land surfa	/ ace. Water level Drawdown Discharge Rate Specific Capacit Specific Capacit PSI pressure. //wwer Source ft. Airli	ft. l	els. per min. _ gals. per min. per o Typeft.	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to	Test Dateft. below	w land surfa	/	ft. I	els, per min. gels, per min, per Type ft. ameter pipe.	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST atic water-level before pumping eter level was measured using ell was pumped using ell was pumped using ester Quality (taste, odor, color, etc.) ERMANENT PUMPING EQUIPMER frs. Name APACITY: Pump delivers DWER: HP at EPTHS: Pump COW METER: Model	Test Dateft. below Installed GPM atRPM ft. Footpies	d by	ace. Water level	ft. I	els, per min. gels, per min, per Type ft. ameter pipe.	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST atic water-level before pumping eter level was measured using ell was pumped using ell was pumped using ester Quality (taste, odor, color, etc.) ERMANENT PUMPING EQUIPMER frs. Name APACITY: Pump delivers DWER: HP at EPTHS: Pump LOW METER: Model DNTRACTOR - Name of Drilling Coldress 806 Highway 71	Test Dateft. below InstalledRPM ft. FootpiedRPM ontractorT1	w land surfa	Drawdown Discharge Rate Specific Capacit PSI pressure. Ower Source ft. instelled on NOTHICTION COR	ft. l	els, per min. gels, per min, per Type ft. ameter pipe.	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST atic water-level before pumping seter level was measured using scharge rate measured using seter Quality (taste, odor, color, etc. ERMANENT PUMPING EQUIPMEL irs. Name APACITY: Pump delivers DWER: HP at EPTHS: Pump COW METER: Model DNTRACTOR - Name of Drilling Coloress APACTOR - Name of Drilling Coloress	Test Dateft. below NT Installed GPM atRPM ft. Footpied ontractorT1	d by	/ace. Water level Drawdown Discharge Rate Specific Capacitr PSI pressure ft, Airli instelled on State	ft. I	els, per min. gels, per min, per Type ft. ameter pipe.	ft. of drawdown	
Tail Piece Gravel Pack Grout	Test Dateft. below NT Installed GPM atRPM ft. Footpied ontractorT1	d by	/ace. Water level Drawdown Discharge Rate Specific Capacitr PSI pressure ft, Airli instelled on State	ft. I	els, per min. gels, per min, per Type ft. ameter pipe.	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY [ater rises to	Test Dateft. below NT Installed GPM atRPM ft. Footpied ontractorT1	d by	/ace. Water level Drawdown Discharge Rate Specific Capacitr PSI pressure ft, Airli instelled on State	ft. I	els. per min gals. per min. per ft. ameter pipe Zip Code	ft. of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST atic water-level before pumping eter level was measured using ell was pumped using ell was pumped using beerved effects on nearby wells eter Quality (taste, odor, color, etc. ERMANENT PUMPING EQUIPMENT ERMANENT PUMPING EQUIPMENT ERMANENT PUMPING EQUIPMENT EPTHS: Pump LOW METER: Model DNTRACTOR - Name of Drilling Coldress SDG Highway 71 Try Spring Lake He	Test Dateft. below NT Installed GPM atRPM ft. Footpied ontractorT1	d by	/ace. Water level Drawdown Discharge Rate Specific Capacitr PSI pressure ft, Airli instelled on State	ft. I	els. per min gals. per min. per ft. ameter pipe Zip Code cense No M98	ft, of drawdown	
Tail Piece Gravel Pack Grout Grouting Method ELL FLOWS NATURALLY ater rises to ft. ab ECORD OF TEST atic water-level before pumping seter level was measured using scharge rate measured using seter Quality (taste, odor, color, etc. ERMANENT PUMPING EQUIPMEL irs. Name APACITY: Pump delivers DWER: HP at EPTHS: Pump COW METER: Model DNTRACTOR - Name of Drilling Coloress APACTOR - Name of Drilling Coloress	Test Dateft. belowft. belowft. belowft. GPM atRPMRPMRPMRPMRPM	w land surfa	/	ft. I	els. per min gals. per min. per ft. ameter pipe Zip Code	ft, of drawdown	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 - 18131

29.13.836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	g zones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
•	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft,
	Bedrock Lith. Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
V V	Date//
1 · · · · · · ·	
LOG	Thick. Lith. Fm.
, , , , , , , , , , , , , , , , , , ,	
GWPI No	NJPDES No
Latitude	Longitude o ' ''
Let-Long Accuracy 1" 5" 10' 20"	<u> </u>
USGS Quedrangle	
Drainage Basin Code	County/Municipality Code
OTHER FILES: Lithologic Log Samples Available	☐ Aquifer Test ☐ Water Level Data
Geophysical Logs Water Chemistry	Pollution Case
Checked by	Date / /

		Well Permit No	29 13 836 ates
OWNER IDENTIFICATION - Own	er RATONTOWN, TOWNSHIP OF	· · · · · · · · · · · · · · · · · · ·	
City	RATONTOWN	State KJ	Zip Code 07724
, , , , , , , , , , , , , , , , , , ,		0.0.0	Zip Code
WELL LOCATION - if not the sam		s Well No.	
Adfrime Brook Road		N 19404	43 55
CountyMonmouth	Municipality KATUBION	N HORO Lot	No Block No
WELL USETemporar	y Dewatering Points	Status	
NATER USEDewateri	ng Average	gals. daily	Maximum gals, daily
MELL CAMETOHETICH	Data well as mulated as /	00 / 07	
WELL CONSTRUCTION	Date well completed3 / _	20 / 8/ -	<u>.</u>
BOREHOLE DIMENSIONS	Depths: Total13ft.	rinished131	π.
4.00 6 90	Diameter: Top in.		
and Surface Elevation at well	45 ft. Elevation	on was determined using	copogiapity map #23
Casing Height (stick-up) above land	surface ft.		
	TO TOP LENGTH (T.) (FT.)	DIAMETER (IN.)	TYPE AND MATERIAL Screens: Note Stot Size(s)
Casing 1			
Casing 2			
			
Casing 3			
Screen 1		·	
Screen 2			
Tail Piece	 		
Gravel Pack			·
Grout			
Grouting Method			
TELL FLOWS NATURALLY ft. al	gals, per min. at bove the land surface.	ft. above the land surfac	:e.
ECORD OF TEST	Test Date / / / / / /		
tatic water-level before pumping _	ft. below land surface.	Water level	_ft. below land surface after hrs. of pumping.
eter level was measured using			
ischarge rate measured using		Discharge Rate	gals. per min.
ell was pumped using		Specific Capacity	gals. per min. per ft, of drawdown
eter Quality (taste, odor, color, et	c.)	· · · · · · · · · · · · · · · · · ·	
ERMANENT PUMPING EQUIPME	SMT Inetalled by		Pump Type
frs. Name			Tump Type
	GPM atPSI		
WER: HP a			
	ft. Footpiece		f+
LUM MEIEN: MODBI			m. dameter pipe.
ANTO ACTOR Hama of Dalling	TICKR CONST	RUCTION CORP.	
ONTRACTOR - Name of Drilling (
daress OUD HIGHWAY /	1, P.P. Box 394		N 1 7: 0 1 07762
			N_J_ Zip Code <u>07762</u>
ame of Driller <u>Dennis</u> B.			License No. <u>M987</u>
gnature of Contractor			Date8 /14 / _87
•			· ,
COPIES:	White - DEP Canary - Drie	ller Pink - Owner	Goldenröd - Health Dept.

. Form DWR-138 11/96

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 CF 2

WELL RECORD

Well Permit No. 29 - 18132

29.13.836

Driller: Please use the space below for the log description. Note water bearing z or geological formation.	ONES <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
·	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
Type of Rig	Bedrock Lith. Code Bedrock Fm. Code
Aquifer/Geo, Fm	Completed by
N O	Date/
roe 10d	Thick. Lith. Fm.
• •	
GWPI Na	NJPDES No
Latitude 0 1	Longitude 0,,
Let-Long Accuracy 1" 5" 10' 20"	
USGS Quedrangle	
	County/Municipality Code
OTHER FILES: Lithologic Log Samples Available	☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry	☐ Pollution Case
	ļ
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

Form DWR- 138 11/80

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

PERMIT NO. 2919285

	DIVISION OF WATER RESOURCES DIVISION OF WATER RESOURCES
•	WELL SEALED 1 26 9) WELL RECORD COUNTY MONTH
	WELL RECORD COUNTY LIGHTLAND
	29.73.8.63
1.	OWNER Underwriters Adjusting Co ADDRESS PO Box 688, Euton town, N.T
	Owner's Well No SURFACE ELEVATION Feet
	LOCATION 15 Marician Kd, Forkstaun, NJ
3.	DATE COMPLETED 8-23-85 DRILLER NEPCCO
4.	DIAMETER: Top 13 inches Bottom 3 inches TOTAL DEPTH 40 Feet
5.	CASING: Type VC Diameter Inches Length 20 Feet
6.	SCREEN: Type PVC Size of Opening 1020 Diameter 4 Inches Length 20 Feet
	Range in Depth { Top Feet Geologic Formation Uncentaun Feet Geologic Formation Continue Cont
	Tail Piece: Diameter Inches Length Feet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft. of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs, Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Mater on Pump SizeInches
10.	USED FOR Monitor AMOUNT AMOUNT Sallons Daily
10.	USED FOR AMOUNT Maximum Gallons Daily
11.	QUALITY OF WATER Semple: Yes No
	Taste Odor Color Temp OF.
12.	LOG Are samples available? [Give details on back of sheps or on separate sheet. If electric log was made, please furnish copy.)
	SOURCE OF DATA Nepcon Gerbaist B. Barban
	SUURLE DE HALA <i>(VVIETO TORIONIST EL L'ARTIGI</i>)

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

14. DATA OBTAINED BY Mepus Galages D. Garkenel

H

				Well Pe	rmit No. <u>29</u>	- 18579	<u> </u>
				Atlas Si	heet Coordinates .	29 : 13 : 1	336
OWNER IDEA	NTIFICATION - Owner					•	
Address		KATONIOWN,	WP. OF		· · · · · · · · · · · · · · · · · · ·		
City		47 EROAD ST	10251	Stat	⁸ NJ	Zip Code	07724
		PUTONION			NO	,	
	FION - If not the same o						
Address							
County	Monmouth	Municipality	RATONTO	N BORO	Lot No	43 Block	No 55
METT NSE ***	newater ing P	otor Trembo	cary)	Status _	·····		
WATER USE	Dewatering		Average		gals, daily	Maximum	gals. daily
	<u></u>				g= u= ,		
well const	RUCTION	Date well comple					
BOREHOLE C	DIMENSIONS	Depths: Total _			ft.		
		Diameter: Top			in.		"00
	Elevation at well			on was determined	i using	topography	map #29
Casing Height	(stick-up) above land su	rface	_ ft.				
	ОЕРҮН Т	O TOP LE	NGTH	DIAMETER		TYPE AND MATE	RIAL
	(FT.) (FT.}	(IN.)		Screens: Note Slot	Size(s)
Casing 1	1						
Casing 2	_						
Casing 3							
Screen 1	1						
Screen 2	2		·				
Tail Pier	C e						
Gravel P	ack		 -			~····	
Grout							
Groutin	g Method						
	NATURALLY ft. abo		in. at	ft. above th	ne land surface.		
ECORD OF 1	TEST	Test Date	_//				
tatic water-lev	el before pumping	ft. belo	w land surface.	Water level	ft. b	elow land surface after _	hrs. of pumping.
Vater level was	measured using	· · · · · · · · · · · · · · · · · · ·		Drawdown	ft.		
lischarge rate :	measured using						
	ed using					gals, per min, per ft, of o	irawdown
bserved effect	ts on nearby wells					·	
Veter Quality ((taste, odor, color, etc.)						
					_	_	
	PUMPING EQUIPMEN	T Installe	d by			Туре	
Ifrs. Name _	ump delivers	' CDM	DOL		Model		
	ump delivers HP at _						•
)P HF at _		C6		line	4	
	: Model	_			in. dia		
LUM MEIEN	. muusi			_ IIIStanad OII	III. UIE	inietei pipe.	
ONTRACTOR	R - Name of Drilling Co	ntractor TI	GIGR CONSTR	UCTION COR	P		
ddress	806 Highway						
ity	Spring Lake	le i ghts		State	N.J.	_ Zip Code	7762
ame of Driller	Dennis	BuchAun	Av			ense No	3
		1	1	Ω	, 1	· · · · · · · · · · · · · · · · · · ·	
	J -	1 -	$T = \mathcal{U}$.	V .	1 //		~
ignature of Co	intractor Silvin	w Const	serlin	Sever.	Dat (مُمعَلُ). Dat	te 10 1	8/
-	* 7	,	2000	, ,	// a		
	COPIES:	White - DEP	Canary - Dri	ller Pink - C	ownery Gold	enrod - Health Dept.	

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>18579</u> 29.13.836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	Zones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo, Fm.	
	Completed by
•	Date / /
LOG	Thick. Lith, Fm.
Installed a 13' x 2" Ø temporary	
dewatering point	i ,
والرواقة والمراواة والمراو	
	<u></u>
	
•	
· · · · · · · · · · · · · · · · · · ·	
	1
<u> </u>	
GWPI No	NJPDES No
1	_
Latitude'	Longitude'''
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quedrangle	Annual March Stratter
Drainage Basin Code	County/Municipality Code
OTHER FILES: Lithologic Log Samples Available	☐ Aquifer Test ☐ Water Level Data
Geophysical Logs 🔲 Water Chemistry	☐ Pollution Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

				Well Permit N Atlas Sheet C	lo. <u>29</u> coordinates	18579 836	
						1000	
OWNER IDEN	ITIFICATION - Dwne	RATONTOWN; TO	ar.or				
City		47 IROAD STI	REST	State		Zip Code0	7724
UNY		EATONTOWN		State N]	2.p 0000 <u></u>	
WELL LOCAT	FION - If not the same	owner please give addr	ess. Owner	s Well No.		_	
County	Monmouth	Municipality _	EATONTON	N BORO	_ Lot No4	3 Block No	5
WELL USE	Dewatering F	Point (Tempor	ary)	Status	······································		
WATER USE	Dewatering		Average	gals. (daily	Maximum	gals, daily
				05 . 07			
	RUCTION	Date well complete					
BOREHOLE C	DIMENSIONS	Depths: Total					
	-	Diameter: Top _				4	- 420
	Elevation at well			in was determined using)	topography ma	D #29
Casing Height	(stick-up) above land s	urface	π.				
	DEPTH 1 (FI		GTH T.)	DIAMETER (IN.)		TYPE AND MATERIAL Screens: Note Slot Size(
Casing 1	i						
Casing 2			 -				
Casing 3							
Screen 1							
Screen 2				•			
Tail Pier							
Gravel F	-		 -				
Grout							
	g Method			•			
Oloutin	A mietilon						
WELL FLOWS	NATURALLY	gals. per mi	n. at	ft. above the land	d surface.		
Nator rises to	ft. ab	ove the land surface.					
RECORD OF 1	rest	Test Date	, ,				
	el before numping	ft. belov	v land surface.	Water level	ft. bei	ow land surface after	hrs. of pumping.
						per min.	
						als. per min, per ft, of draw	down
hearved effect	ts on nearby wells						
	•	.)					
•	• • •						
ERMANENT	PUMPING EQUIPME	NT Installed	by		Pump T	уре	
Afrs. Name 🔔				Mod	iel		
APACITY: P	ump delivers	GPM at	PS1	pressure.			
OWER:	HP at	RPM	Power	Source			
	ıp		e				
LOW METER	: Model			installed on	in. diam	eter pipe.	
	R - Name of Drilling Co	ontractor TIC	AGR CONSTR	DCTION CORP.			
\ddress		71, P.O. Box	394		- H 7		160
ity	Spring Lake			State	N.J.	Zip Code 077	02
lame of Driller	-Dennis	BuchAuns	41		Licen	se No	
	A	1	A 0	// /	1		
	\mathscr{L} .	7 7	· //	V d	<u> </u>	,	2
ignature of Co	intractor 🗆 📈	w Confl	welve	Almen Co	Date	101-1-12	<u> </u>
	COPIES:	White - DEP	Canary - Dril	ller Pink - Owner	Golden	rod - Health Dept.	
		THE DEF					

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>18579</u>

Driller: Please use the space below for the log description. Note water beari	ng zones <u>DEP USE ONLY</u>
or geological formation.	Storet Hydrogeo Code
Are samples available?	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
Manny method	Bedrock Lith, Code
Type of Rig	Bedrock Lith, Code
Aquifer/Geo. Fm.	Completed by
·	Date//
LOG	Thick. Lith. Fm.
Installed a 13' x 2" 0 temporary	
dewatering point	
-	
`	,
_	
GWPI No	NJPDES No.
Latitude ' ''	Longitude o ' ''
Lat-Long Accuracy	
USGS Quadrangle	
Drainage Basin Code	County/Municipality Code
OTHER FILES:	☐ Aquifer Test ☐ Water Level Data ☐ Pollution Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

				Well Permit No.	-29	
				Atlas Sheet Coord	dinates 29 : 13	— 88 6 —
OWNER IDEN	ITIFICATION - Own	er RATIONITORN	NP OF		····	···
V001509		47 TROAD S	 			
City		EATONTOWN		State NJ	Zi	p Code <u>07724</u>
		e owner please give ad Road	dress. Owner	's Well No.		
County	Monmouth	Municipality	RATIONIU	N PORO	Lot No. 43	Block No55
WATER USE	dewatering		_ Average	gals, daily	/ Maximum _	gals. daily
BOREHOLE D		Depths: Total _ Diameter: Top	13 ft. 2 in.		in.	
	levation at well stick-up) above land	ft. surface	Elevati ft.	on was determined using	topogra	aphy map #29
	DEPTH	TO TOP LE	INGTH (FT.)	DIAMETER (IN.)		MATERIAL te Siot Size(s)
Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piec Gravel Pi	e					
WELL FLOWS		gals, per n	nin, at	ft. above the land sur	face.	
RECORD OF T	EST	Test Date	_//	., -		
						after hrs. of pumping.
	-			Drawdown		
				Discharge Rate		
		 		Specific Capacity		r It. of drawdown
ERMANENT F	PUMPING EQUIPME	NT Installe	ed by		Pump Type	
Afrs. Name		······				
APACITY: PI	ump delivers	GPM at	PSI	pressure.		
		t RP		Source		
DEPTHS: Pum	p	ft. Footpie	ce	ft.	ft.	
LOW METER:	: Model			installed on	in. diameter pipe.	
ONTRACTOR	- Name of Drilling (Contractor T	GGR CONSTR	OCTION CORP.		
\ddress		71, P.O. Box	374		M 7	07760
ity	Spring Lake			State	N.J. Zip Code	
lame of Driller Signature of Co	DEnnis Buch	in Conti	A. S.	- deli	License No1 Date10/	
Same and At An	COPIES:	White - DEP	Canary - Dri	iller Pink - Owner	Goldenrod - Health De	, - <u>-</u>

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No.	29	185	.80

29.13.836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	Zones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
•	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
	Bedrock Lith. Code
Type of Rig	Bedrock Fm. Code
]
Aquifer/Geo, Fm.	4
	Dete / /
LOG	Thick. Lith. Fm.
installed a 13' x 2" Ø temporary	
dewatering point	·
I	· · · · · · · · · · · · · · · · · · ·
-	
	
	1
	
GWPI No	NJPDES No.:
Latitude''	Longitude ' ''
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quadrangle	
Drainage Basin Code	County/Municipality Code
OTHER FILES:	☐ Aquifer Test ☐ Water Level Data
Geophysical Logs Water Chemistry	Pollution Case
Checked by	Date : / / /

COPIES:

White - DEP

Canary - Driller

Pink - Owner

					Well Per	rmit No2	- 18561	***************************************	Г
					Atlas SI	neet Coordinate	s - 29 - : 13	:83 6	<u> </u>
OWNER IDEN	TIFICATION - Owner	"-EATONTO	N, TWP. O						
Moduess		47-IROAI	STREET				 	p Code	07704
U117		EATONTO	N		3181	" NJ		h cons	07724
	ION - If not the same Pine Brook								
	Monmouth					Lot N	°- 43	Block No.5	5
WELL USE	Temporary d	ewatering p	oint	 .	Status _				
WATER USE	_dewatering_		Avera	ge		gals. daily	Maximum .		gals. daily
WELL CÓNS TI B o rehole d		Depths: Tota	J13_	_ ft.	25 / <u>87</u> Finished <u> </u> Bottom <u> </u>	<u>13</u> ft.			
Land Surface E	levation at well		,				topog	raphy mai	#29
Casing Height (:	stick-up) above land :	surface	ft.				30,00		
	DEPTH (F		LENGTH (FT.)		DIAMETER (IN.)			MATERIAL ote Slot Size(s)	
Casing 1 Casing 2 Casing 3									
Screen 1									
Screen 2									
Tail Piec				_					
Gravel Pa	ack			- -	·				
Grout				-					
Grouting	Method								
	NATURALLY ft. ab				ft. above th	e land surface.			
RECORD OF T	EST	Test Date _	/	/	···				
	el before pumping	ft.	balow land s	urface.	Water level _	f	t. below land surface	after l	rrs, of pumping.
	measured using				Drawdown				
•	neasured using								
	ed using				-p	-,	gals. per min. pe	r ft, of drawd	own
	s on nearby wells taste, odor, color, etc								
ERMANENT P	UMPING EQUIPME	NT Inst	talled by			Pu	mp		
Afrs. Name 🔃						Model			
	ımp delivers			PSI p	ressure.				
	HP at								
	p		tpiece			ine			
LOW METER:	Model				installed on	in.	diameter pipe.		
	- Name of Drilling C	ontractor			ICTION COR	P			
Address	806 Highway Spring Lake		UX 334			· N .1	Zip Code	0776	2
ity	Dennis Bucha				State		Zip Code	1000	16-
	f.	- لم	1-1	-	. 7				
ignature of Cor	ntractorCOPIES:	White - DE	P Cani	ary - Drille	er Pink · C	47	Date <u>10</u> /	-	i/_

Form DWR-138 11/85

Checked by _

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION **DIVISION OF WATER RESOURCES**

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>39</u> _ 18581

		01.13.000				
Driller: Please use the space below for the log description. Note water bearing or geological formation.) zones	DEP USE ONLY				
Are samples available?		ode				
		ode				
Drilling Method	.	ft.				
W 2 DV	Bedrock Lith. Code					
Type of Rig	Bedrock Fm. Code		•			
Aquifer/Geo. Fm.	Completed by					
	Date	— / —— / ——	- .			
LOG	Thick.	Lith,	Fm.			
installed a 13' x 2" 0 temporary						
dewatering point						
						
						
		·				
						
						
						
						
			`			
						
			1			
GWPI No	NJPDES No.		,			
Latitude 1 11	Longitudeo					
Lat-Long Accuracy 1" 5" 10' 20"						
USGS Quadrangle						
Drainage Basin Code	County/Municipality Code					
OTHER FILES:	☐ Aquifer Test☐ Pollution Case	☐ Water Level Data				

COPIES:

White - DEP

Canary - Driller

Pink - Owner

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

				Well Per	rmit No. <u>29</u>	— - 18582	<u> </u>
				Atias Si	neet Coordinates		836
OWNER IDE	NTIFICATION - Owns	RATONTOWN; T	***				
Address		"-KATUNTUMN; T	WE CE				
City		- RATONTOWN	MESI .	Stat	9 11	Zip Code	07724
		TETTONITON			IW		
		owner please give add:					
	Pine Brook						
County	Monmouth	Municipality _	EATONTO	HIN BORO	Lot No.	43 Block	No: 55
WELL USE_	temporary de	watering poin	t	Status			
	-						
WATER USE	dewatering		Average		gals. daily	Maximum	gals. daily
WELL CONST	FRUCTION	Date well complet	ed6/_	25/_87_	<u></u>		
BOREHOLE	DIMENSIONS	Depths: Total	_13ft.	Finished	ft.		
		Diameter: Top _	in.	Bottom	in.		
Land Surface	Elevation at well	70ft.		on was determined	using	topograph	v man #29
Casing Height	(stick-up) above land	surface			-	,	
	DEPTH '	TO TOP LEN	NGTH	DIAMETER		TYPE AND MATE	RIAL.
	(F)		T.)	(IN.)		Screens: Note Slot	*
Ondan !	•						
Casing '							
Casing 2	_						
Casing :							
Screen	\ <u> </u>			······································			
Screen :							
Tail Pie	C8						
Gravel I	Pack						
Grout							
Groutin	g Method				- 		
	· · · · · · · · · · · · · · · · · · ·	gals, per mi	in. at	ft. above th	e land surface.	•	
Nater rises to	ft. ab	ove the land surface.					
RECORD OF	TEST	Test Date	_11		•		
Static water-le					ft.	below land surface after _	hrs. of pumping.
	-				9		
•	•					gals. per min, per ft, of	drawdown
				-		_ ganet her (11111; her 171 e.	4.6.1.001,
	•	.)			·		
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
ERMANENT	PUMPING EQUIPME	NT Installed	l by			р Түре	
Afrs. Name _					Model		
		GPM at					
		RPM	l Powei	r Source			
DEPTHS: Pun	np	ft. Footpied	:0	ft. Airl	ine	ft,	
LOW METER	R: Model			_ installed on _	in. d	iameter pipe.	
ONTRACTO	R - Name of Drilling Co	ontractor TIC 71, P.O. Box	GIGR CONSTI	RUCTION COR	P		
Address			394				
ity	Spring Lake			State			07762
lame of Drille	_r <u>Dennis Bucha</u>	nnan		<i></i>	L	icense No. <u>1393</u>	
	n	1	1 //		1 4		
	P	· 1 -	V-+X	- V -	1 /		
ignature of Co	ontractor	you (and	an Via	Klina		ate 10 / 1	/ <u>87</u>
		, , , , , , , , , , , , , , , , , , , ,	000			,	· —
	COPIES:	White - DEP	Canary - Dri	iller Pınk - (Owner (f Go	ldenrod - Health Dept.	

Form DWR-138 11/85 =

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> <u>18582</u> 29 · 13 · 836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	ZONOS <u>DEP USE ONLY</u>
Are samples available?	` Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
	Date///
LOG	Thick, Lith. Fm.
installed a 13' x 2" Ø temporary	
dewatering point	7
· ·	
]
GWPI No	NJPDES No.
Letitude 0 ! !!	Longitude o , ,
Lat-Long Accuracy 1" 5" 10" 20"	
USGS Quadrangia	
Dráinage Basin Code	County/Municipality Code
OTHER FILES:	☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry	☐ Pollution Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

				Well Permit No.	29	- 18583	— г
				Atlas Sheet Coor	dinates _2	9: 13: 8	36
OWNER IDEN	ITIFICATION - Owner_	RATONTOWN, TWP. O	?			, , , , , , , , , , , , , , , , , , , 	
Address		47 DOAD STREET					07724
UILY		RATONTOWN		State NJ		Zip Code _	0//24
WELL LOCAT	TON - If not the same ow Pine Brook Roa	/ner please give address. Ad	Owner	's Well No.		<u>.</u>	
County	Monmouth	adMunicipality	CONTO	NN BORO	Lot No.	Block N	0.55
		atering point					
WATED HEE	dewatering	Avera	ine	rich sten	v	Maximum	nale dails
WAILE OOL			-		Y	//	yars. warr
WELL CONST	RUCTION	Date well completed					
BOREHOLE D	IMENSIONS	Depths: Total13	ft.	Finished13	ft.		
	. 70	Diameter: Top 2	in.	Bottom2	in.		man #20
	levation at well70		Elevation	on was determined using		topography	map #29
Casing Height (stick-up) above land surf	aceft.					
	DEPTH TO (FT.)	TOP LENGTH {FT.}		DIAMETER (IN.)		TYPE AND MATER Screens: Note Slot Si	
Casing 1							
Casing 2							
Casing 3							
Screen 1							
Screen 2				ı			
Tail Piec	8						
Gravel Pr	ack			•			
Grout			•				
Grouting	Method						
	NATURALLY ft. above	gels. per min. at the lend surface.		ft, above the land sur	rface.		
RECORD OF T		Test Date/					
Static water-lev	el before pumping	ft. below land s	urface.			ow land surface after	hrs. of pumping.
Water level was	measured using						
				Discharge Rate			
Well was pumpe	ed using			Specific Capacity	g	als. per min, per ft, of dr	awdown
	-						
Water Quality (taste, odor, color, etc.) _						
PERMANENT I	PUMPING EQUIPMENT	Installed by			Pump T	ype	
Mfrs. Name 🔔							
CAPACITY: PI	ump delivers	GPM at	PSI	pressure.			
	HP at			Source			
DEPTHS: Pum	p ft.	Footpiece		ft, Airline		_ ft.	
		•			in. diam	eter pipe.	
		ractor TIGER C	LNSU	RUCTION CORP.			
		L , P.O. Box 394					7.60
		eights		State			
Name of Driller	DEnnis Buchanı	nan /			Licen	se No1393	
	'n	. 1 +		'- () A	//		
Signature of Co	nermotor ~ to	un Coulle	1.	V (v.	Date	_10/_1/	07
SMUTTER OF CO.	nuacioi		W/F	y the y	المالك مرام	//	5/
	COPIES:	White - DEP Can	ary - Dri	iller Pink - Owner	/ Golden	rod - Health Dept.	

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. $\frac{39}{29} - 18583$

Driller: Please use the space below for the log description. Note water bearing or geological formation.	Zones <u>DEP USE ONL Y</u>
Are samples available?	Storet Hydrogeo Code
·	USGS Hydrogeo Code
Drilling Method	Depth to Bedrockft.
	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
	Date//
LOG	Thick. Lith. Fm.
installed a 13' x 2" Ø temporary	}
dougled a 13 x 2 y temporary	
dewatering point	
**************************************	——————————————————————————————————————

<u> </u>	
	·
GWPI No.	NJPDES No
	NJPDES No.
Latitude	Longitude o i ii ,
Let-Lorig Accuracy 1" 5" 10' 20"	Conditions
	County/Municipality Code
OTHER FILES: Lithologic Log Samples Available	☐ Aquifer Test ☐ Water Level Data
Geophysical Logs Water Chemistry	☐ Pollution Case
The Additional Control of the Additional Chamilton	- Louinflou Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

			We A+	Il Permit No28		
OWNED IDENTIFICATION	4 Ouron					-836
OWNER IDENTIFICATION Address	- CATONTO	WN, TWP: OF			···	
City	TATION TO	D STRIGGT				ode07724
•	MICHIO	VE.		No		
WELL LOCATION - If not a Address Pine B	rook Road		 			
County Monmou	th Munici	pality - RATC	NTOWN BORO	Lot No.	43 Bio	ock No ₅₅
well use tempor	ary dewatering	point	Sta	tus	· · · · · · · · · · · · · · · · · · ·	
WATER USEdewate	ring	Averag	e	gals, daily	Maximum	gals. daily
WELL SANGERHATION	Data wall a	المعددات م	C/ OF /	07		
WELL CONSTRUCTION BOREHOLE DIMENSIONS	Denthe: T	ompieted	<u>_6 / _25 _ / _</u> _ ft.	-8/- ad 10 ft		
BOUTHOLL DIMENSIONS	Diameter:	Top2	in Botton	n2 in.		
Land Surface Elevation at w			Elevation was detern		tonogra	ohy map #29
Casing Height (stick-up) abo		ft.			— topogra	my-map #29
•	DEPTH ТО ТОР	LENGTH	DIAMETE	R	TYPE AND MA	
	(FT.)	(FT.)	(IN.)		Screens: Note S	lot Size(s)
Casing 1	_					
Casing 2				 – —	···· <u> </u>	
Casing 3	_		<u> </u>			
Screen 1				-		
Screen 2						
Tail Piece	_		·			
Gravel Pack						·
Grout _				<u></u>		·
Grouting Method _						
NELL FLOWS NATURALL Nater rises to	ft. above the land su	rface.		ve the land surface.		,
RECORD OF TEST	Test Date	/	/			
Static water-level before pun	nping	ft. below land su	rface. Water level	ft.	below land surface aft	er hrs. of pumping.
Nater level was measured usi	ng			ift.		
Discharge rate measured usin				Rate 9		
Vell was pumped using			Specific Ca	pacity	gals. per min. per ft.	of drawdown
Observed effects on nearby v						
Vater Quality (taste, odor, c	olor, etc.)					
	MINESPEE !			O	. T	
PERMANENT PUMPING EC	LUIPMENT					
Afrs. Name CAPACITY: Pump delivers	COM		DCI necessary	Middel		
OWER:						
DEPTHS: Pump			ft.	Airline		
LOW METER: Model						
LUM MEIEN. MUUGI			1115(01160 0	II III. U	maineter pipe.	
ONTRACTOR - Name of D	rilling Contractor	TIGER CO	NSTRUCTION C	ORP.		
Address 806 Hig	hway 71, P.O.	Box 394				
Str Spring	Lake Heights			State N.J.	Zip Code	07762
lame of Driller Dennis	Buchannan		•		cense No139	3
	0 1	1	1 1	, 1		
	1.	T	' V -		414	
ignature of Contractor 🙏	JULLY COS	sund!	s Aug		ate <u>10</u> / <u>1</u>	/ _87
c	OPIES: White - L	DEP Canad	ry · Driller Pu	nk - Owner Go	denrod - Health Dept.	
					•	

Form DICIR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u>_ <u>18584</u> 29.13.836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	Zones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
Type of Rig	Bedrock Lith. Code Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by//
LOG	Thick. Lith. Fm.
installation of a 13' x 2" Ø temporar dewatering point	cy
	· ·
GWPI No	NJPDES No
Let-Long Accuracy 1" 5" 10' 20" USGS Quedrangle	Longitude o ' ''
OTHER FILES: Lithologic Log Samples Available Geophysical Logs Water Chemistry	County/Municipality Code Aquifer Test Water Level Data Pollution Case

COPIES:

Checked by

White - DEP

Canary - Driller

Pink - Owner

	•		Well Pern	nit No. <u>29</u>	⁻ 18585	-
			Atlas She	et Coordinates _	29 : 13 : 83	- -
OWNER IDENTIFICATION -	Owner manus					
Address	- SATUNIUM	, IWP. OF				
City	EATONTOWN		State	-N.T.	Zip Code	07724
	PRIONICAN			IN.		
WELL LOCATION - If not the	same owner please give a	ddress. Owner	r's Well No			
Address Pine Bro	ook Road					
CountyMonmout	1 Municipalit	Y <u>EATONTO</u>	WIN BORO	Lot No	43 Block No.	55
well use temporal	rv dewatering n	nint	Status			
			,			· · · · · · · · · · · · · · · · · · ·
WATER USEdewater	ing	Average	g	als. daily	Maximum	gals. daily
WELL CONSTRUCTION	Data well comm	lated 6 /	25 / 87			
BOREHOLE DIMENSIONS			Finished	10 ft		
J	Biemeter: Top	in.	Bottom			
Land Surface Elevation at well		Elevati	on was determined u		tópgraphy map	#20
Casing Height (stick-up) above	land surface	ft.		<u> </u>	oopgi apiij ilap	
DE	РТН ТО ТОР L	ENGTH.	DIAMETER		TYPE AND MATERIA	Ŀ
	(FT.)	(FT.)	(IN.)		Screens: Note Slot Size	(a)
Casing 1						
Casing 2						
Casing 3						
Screen 1				····		
Screen 2	·					
Tail Piece						
Gravel Pack		······				_
Grout						
Grouting Method	· · · · · · · · · · · · · · · · · · ·					
WELL FLOWS NATURALLY Water rises to	ft. above the land surface	•		land surface.		
	Test Date					
Static water-level before pumpi					low land surface after	_ hrs. of pumping.
Water level was measured using			Drawdown	ft.		
Discharge rate measured using .			•			
Well was pumped using					gals, per min, per ft, of drav	vdown
Observed effects on nearby wel Nater Quality (taste, odor, colo				 -		
region County (Marc, Cool, Cord		 	····			-,
PERMANENT PUMPING EQU	IPMENT Instal	led by		Pump '	Туре	
Mfrs. Name						
CAPACITY: Pump delivers						
POWER:						
DEPTHS: Pump		iece		18		
FLOW METER: Model		 -	installed on	in. diar	neter pipe.	
ONTRACTOR - Name of Drill	ion Cueroser T	PERMIT	OCTION CORP	ı		
Address 806 High	way 71, P.O. Bo	x 394	WALLYNI JAAGE	<u> </u>		
Carrie	ake Heights	,, ,,,,		N.J.	Zip Code07762	2
CitySpring L Name of Driller Dennis B			State .		nse No. <u>1393</u>	
ABING OF DUNE!	4	1 /		LICE	1100 ITU	
<i>ب</i>	γ.] -	#	1/ 1] /		
Signature of Contractor	LAIN COUNT	19/2	Ken [Date	10 , 1 , 87	7
	y s	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	000	77	,,	
ÇOF	PIÉS: White - DEP	Canary - Dr.	iller Pink - Ov	vnei ^V Golde	nrod - Health Dept,	

Form DWR-138

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>18585</u> 29.13.836

Oriller: Please use the space below for the log description. Note water bearing zo or geological formation.	ones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft. Bedrock Lith. Code Bedrock Fm. Code
Aquifer/Geo, Fm	Completed by//
LOG	Thick. Lith. Fm.
installed a 13' x 2" Ø temporary dewatering point	
GWPI No N	NJPDES No
Latitude " " " " Lat-Long Accuracy	Longitude o
	County/Municipality Code Aquifer Test Pollution Case
Checked by	Date / /

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

			-29 - 18586
		Atlas Sheet Coord	finates -29 : 13 836
ANNER IRPRITERATION	Ourse		•
OWNER IDENTIFICATION -	Owner <u>EATONTOWN, TWP. OF</u>		
Address	41 DIMED STREET	State NJ	Zip Code
UILY	RATONTOWN	State NJ	Zip code
WELL LOCATION - If not the	same owner please give address. Ow	ner's Well No	
Address Pine Broo	ok Road		
			Lot No. 43 Block No55
WELL USEtemporary	y dewatering point	Status	
WATED HOE	ng Average .	gale dails	Maximum gals, daily
WATER USE - GEWATER'H	19 Average	yais. uaiiy	gais, dany
WELL CONSTRUCTION	Date well completed6	/ <u>25 / 87</u>	
BOREHOLE DIMENSIONS	Depths: Total 13 ft. Diameter: Top 2 in	Finished 13	ft.
	_ Diameter: Top 2 in	. Bottom2	_ in.
Land Surface Elevation at well		ration was determined using	topography map #29
Casing Height (stick-up) above I	and surface ft.		
DE	PTH TO TOP LENGTH	DIAMETER	TYPE AND MATERIAL
52.	(FT.) (FT.)	(IN.)	Screens: Note Slot Size(s)
Coring 1			
Casing 1			
Casing 2			
Casing 3			
Screen 1			
Screen 2			
Tail Piece			•
Gravel Pack			
Grout			
Grouting Method			
		F. 1 .1 1	
	gals, per min. at	ft. above the land sur	Tace.
Water rises to	it. above the land surface.		
RECORD OF TEST	Test Date /	1	
			ft. below land surface after hrs. of pumping.
			gals, per min, per ft, of drawdown
Observed offects on pearly well	s		
	r, etc.)		
===, (====, ===, ===			
PERMANENT PUMPING EQUI	PMENT installed by		Pump Type
CAPACITY: Pump delivers	GPM at	PSI pressure.	
POWER:	HP atRPM Po	wer Source	
DEPTHS: Pump		ft. Airline	ft.
CONTRACTOR - Name of Drill	ing Contractor TICKR CON	STRUCTION CORP.	·
	yay 71 P.O. Box 394		· · · · · · · · · · · · · · · · · · ·
CitySpring La			J. Zip Code
Name of Driller Dennis Ru			License No1393
			A
_	V. 1 T #	- // -]	//
Signature of Contractor	Lun Continte	Mes. Cal	Date 10 / 1 / 87
•	The state of the s	y a ay	,,
CÒP	IES: White - DEP Canary -	Driller Pink - Owner	Goldenrod - Health Dept.

Form DWR-138 11/85 ---

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 18586

or geological formation.	
Are samples available?	Storet Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
Type of Rig	Bedrock Lith. Code Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
	Date//
LOG	Thick. Lith. Fm.
installation of a 13' x 2" Ø temporary	
dewatering point	
	
· · ·	
-	
Bergandur gebande gebande gan de de geben de	
GWPI No NJPI	DES No
Latitude O''' Long	itude01
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quedrangie	
	nty/Municipality Code
- -	☐ Aquifer Test ☐ Water Level Data ☐ Pollution Case
Checked by Date	///

COPIES:

White - DEP

Canary - Driller

Pink - Owner

<u>.</u>		- Well Permit No	
<u>-</u>	•	Atlas Sheet Coordinates 29 : 13 836	— -
DWNER IDENTIFICATION - Owner	I managementar mena con		•
Address	ENICHICAN, TWI. CF		
City	47 BROAD STREET RATONYOWN	State NJ Zip Code 0772	24
	ESTORION	160	
NELL LOCATION - If not the same	owner please give address. Owner	r's Well No	
Address Pine Brook F	Road		
County Monmouth	MunicipalityRATIONTO	Lot No. 43 Block No. 55	
	,		
WELL USE <u>temporary de</u>	watering point	Status	
water use downtowing	A.	-de delle Bierd-e-	
WATER USE <u>dewatering</u>	Average	gals, daily Maximum	gais, daily
WELL CONSTRUCTION	Date well completed6/.	25 / 97	
BOREHOLE DIMENSIONS	Depths: Total 13 ft.		•
	Diameter: Top in.		
Land Surface Elevation at well		ion was determined usingtopography_map_#29	
Casing Height (stick-up) above land :	purface ft.	copography map #25	
DEPTH '	TO TOP LENGTH F.) {FT.}	DIAMETER TYPE AND MATERIAL (IN.) Screens: Note Slot Size(s)	
•		1	
Casing 1			
Cesing 2			
Casing 3			
Screen 1			
Screen 2			
Tail Piece			
Gravel Pack			
Grout			
Grouting Method			
WELL FLOWS NATURALLY	gals. per min. at	ft. above the land surface.	
Vater rises to ft. ab			
RECORD OF TEST	Test Date / /		
		Water levelft, below land surface after hrs. of	pumping.
Vell was pumped using		Specific Capacity gals, per min, per ft, of drawdown	
-	 		
later Quality (taste, odor, color, etc	.)		
ERMANENT PUMPING EQUIPME	-	Pump Type	
Ifrs. Name	Anta .	Model	
	GPM at PS	I pressure,	
OWER: HP at		er Source	
	ft. Footpiece		
COM WEIEN: WOOD!		installed on in. diameter pipe.	
ONTRACTOR - Name of Drilling C	entractor TT/S/D /YACT	RUCTION CORP.	
ddress 806 Highway	71, P.O. Box 394	WALLER CARE.	
Spring Lake		State N.J. Zip Code 07762	
leme of Driller Dennis Buchar		State N Zip Code 07762 License No1393	
idilid At Divide		/ Litelise No	
0.	1 -# -#	// . //	
ignature of Contractor	an Condition	Date 10 / 1 / 87	
Minerale of Coursector	V- WARRENOVE	ACA CO DATE - 1 - 1 - 1	
COPIES:	White - DEP Canary - Dr	riller Pink - Owner V Goldenrod - Health Dept.	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION **DIVISION OF WATER RESOURCES**

PAGE 2 OF 2

WELL RECORD

Well Permit No. <u>29</u> - <u>18587</u> 29 · 13 · 836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	zones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft, Bedrock Lith, Code
Type of Rig Aquifer/Geo, Fm.	Bedrock Fm. Code
LOG installed a 13' x 2" Ø temporary dewatering point	Thick. Lith. Fm.
GWPI No	NJPDES No
Latitude "" Lat-Long Accuracy 1" 5" 10' 20" USGS Quadrangle Drainage Basin Code	County/Municipality Code
OTHER FILES: Lithologic Log Samples Available Geophysical Logs Water Chemistry	☐ Aquifer Test ☐ Water Level Data ☐ Pollution Case
Checked by	Date//

				Well Per	mit No. 29		- Г
				Atlas Sh	eet Coordinates	29 : 13 :	836
NAMES INCA	TIEICATION O	_					
UWNEN IDEN Address	TIFICATION - Owne	- RATONTOWN,	TWP. OF		····		
		#1 DEMED D	IRESI	Ctate		Zip Code	07724
)ity	·····	EATONTOWN		State	NJ NJ	Zip Coue	07724
WELL LOCAT	10N - If not the same	hwner nlesse give add	Irass Dwi	nar's Well No			
	Pine Brook F						
					Lot No.	43 Block	No
			ENIUM	IOMN BOW		43	55
WELL USE	temporary de	watering poi	nt	Status		**************************************	
	, ,	٠,					
NATER USE	_dewatering		Average _		gals. daily	Maximum	gals. dail
	,						
WELL CONST		Date well comple	ted6	/ -25_ / -87 -			
BOREHOLE D	IMENSIONS			Finished			
		Diameter: Top			in.		
	levation at well7	_	Elev	ation was datermined	using	topography	y map #29
asing Height (stick-up) above land s	nutace	_ tt.				
	DEPTH 1	'O TOP LE	NGTH	DIAMETER		TYPE AND MATE	RIAL
	(FT		FT.)	(IN.)		Screens: Note Slot	
0: 1							
Casing 1							
Casing 2					***		
Casing 3							
Screen 1							
Screen 2							
Tail Piec	-						
Gravel P	eck						
Grout						·	
Grouting	Method						
	MATHRALLY			£4	- 1		
	NATURALLY ft. abo		iin. at	T. above to	e land sufface.		
AMERI LIBOS (D.	(t, qbt	re the fally suitage.					
ECORD OF T	EST	Test Date	/	1			
					ft.	below land surface after _	hrs. of pumping.
	measured using						
	nessured using					als, per mín,	
	ed using					gals. per min. per ft. of o	frawdown
	s on nearby wells						
	taste, odor, color, etc.						
,, <u></u> ,,,	,,,			•			
ERMANENT I	PUMPING EQUIPMEN	iT Installe	d bv		Pum	р Туре	
lfrs. Name _							
	ımp delivers	GPM at	F	PSI pressure.			
	HP at			wer Source			
	P		Ce	ft. Airl	ine	ft.	
	Model				in. d		
						,	
ONTRACTOR	- Name of Drilling Co	ntractor T	CERR CONS	TRUCTION COR	P		
ddress	806 Highway						
ity	Spring Lake			State	N.J.	Zin Code	07762
ame of Driller	Dennis B//D/			Uigit		cense No. 1393	
SHE OF DIMES			1	10			- '
	P	\ 1	-	U (/	<i>[]</i>		
Innature - L C		el Com	d. T	/_X. `	4 %	ate <u>10 1 1 1 1 1 1 1 1 1 </u>	e>
ignature of Co	nuractor		wet.	A Property		ste//	_0_/_
	COPIES:	White - DEP	Canary - I	Driller Pink - C	wner (/ Gol	denrod - Health Dept.	
					-		

Form DWR-138

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 - 18588

29.13.836

Driller: Please use the space below for the log description. Note water bearing a or geological formation.	ZONES <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
• • • • • • • • • • • • • • • • • • • •	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
	Date//
LOG	Thick. Lith. Fm.
installed a 13' x 2" Ø temporary	
dewatering point	
actuated this position	
	/
	1
GWPI No	NJPDES No
0	
	Longitude ' ''
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quedrangie	
	County/Municipality Code
OTHER FILES:	☐ Aquifer Test ☐ Water Level Data ☐ Pollution Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

					Well Pern	nit No. <u>—29</u> .	 18589 -	-
					Atlas She	et Coordinates	-29 : 13 :	336 L
OWNER IDEN	ITIFICATION - Owner	- EATONTON	N. TWP. (F				
Address		47 BROAD	STREET	P				
City		RATONTON			State	-N-T	Zip Code _	07724
								,
WELL LOCAT	ION - If not the same o	wner please give	address.	Owner's	Well No			
	Pine Brook R							
County	Monmouth	Municipali	ty R	WONTOW	N RORO	Lot No.	Block N	lo.
well use	temporary de	vatering po	oint		Status			
WATER USE	dewatering	 	Ave	rage	g	als. daily	Maximum	gals. daily
						•		
WELL CONST		Date well com	pleted	-6- /	-25_ / 87 -			
BOREHOLE D	IMENSIONS	Depths: Tota	13ا	ft.	Finished	<u>13</u> ft.	•	
			p <u> </u>		Bottom			
	levation at well70			Elevation	was determined u	using	topography m	ap #29 —
Casing Height (stick-up) above land su	rface	ft.				i Seeped	
	DEPTH TO						TYPE AND MATER	
	DEPTH TO		LENGTH (FT.)		DIAMETER (IN.)		Screens: Note Slot 8	
Casing 1								
Casing 2							 	
Casing 3		<u></u>						
Screen 1							 	
Screen 2								
Tail Piec								
Gravel P	ack							
Grout								
	Method			_				
				-				
WELL FLOWS	NATURALLY	gals, pe	r min. at		ft. above the	land surface.		
	ft. abo							
-								
RECORD OF 1	EST	Test Date						
Static water-lev						ft.	below land surface after	hrs. of pumping,
	measured using							
	measured using							
							gals. per min, per ft, of d	rawdown
Theorem office	ed using s on nearby wells							(LAN DOTTI)
	teste, odor, color, etc.}							····
enter consult (2516 , 0001, 00101, 610./							
COMANENT:	DIMENUS ENUINMEN	T Inst	alfort by			Dur	р Туре	•
							ib tabe	
Afrs. Name	ump delivers	CDM -+		DCI n		MIDTER	·	
				Power C	iource			
	HP at _					ne		
	P							
-FOM WEIEK	: Model				installed on	IN. 0	lameter pipe.	
			M7/920		*****			
ONTRACTOR	806 Highway 7	ntractor	TICHA	COLDIN	CTION CORP			
			(354			Al 1		.7.0
	Spring Lake He				State .			7762
iame of Driller	Dennis Buchan	ıdn	7			L	icense No1393_	
	1		#		//	1 1		
	1.	N	V	1	<i>y</i> -	<i>[[]</i>	10 1	07
ignature of Co	ntractor	(~ CAM	M	1200	بهلامر	Dent D	ate <u>10</u> / <u>1</u> /	8/
	COPIES!	44.in 67		none Date	. 0:-4 0	(F c-	Idenmed - Hantsh Door	
	COPIES.	White - DEI	- (A)	nary - Drille	er Pink - Ov	wner V GO	ldenrod - Health Dept.	

Form DWR-138 41/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

	99.	18589
Well Permit No.	<u>01</u> -	10001

29.13.836

Driller: Please use the space below for the log description. Note water bearing or geological formation.	ng zones <u>DEP USE ONLY</u> -
Are samples available?	Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft.
	Bedrock Lith, Code
Type of Rig	Bedrock Fm. Code
Aquifer/Geo. Fm.	Completed by
	Date//
LOG	Thick. Lith. Fm.
installed a 13' x 2" Ø temporary	· [
dewatering point	
	,

GWPI No	NJPDES No
Latitude ' ''	LongitudeO
Lat-Long Accuracy 1" 5" 10' 20"	
USGS Quedrangle	
Drainage Basin Code	County/Municipality Code
OTHER FILES: Lithologic Log Samples Available	☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry	☐ Pollution Case
Chacked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

			Well Peri	mit No. <u>29</u>	⁻ 1859Ø	- [
			Atlas Sho	eet Coordinates _2	9 : 13 :83	5 L
NWIFE INFUTICIOATI	AM . Owner					
Address	ON - Owner	N, TVP. OF	·-··			
City	RATONTO	BTRISET	State			07724
	ENIGNIO			100	, , , , , , ,	
	t the same owner please giv		ier's Well No		-	
Address Pine F	Brook Road	····	 			
CountyMonmor	uth Municipa	elity — EATONT	OWN BORO	Lat No. 📲	3 Block No	55
WELL USE tempor	cary dewatering p	point	Status			`
WATER USE _dewate	ering	Average _		gals, daily	Maximum	gals. dail
WELL CONSTRUCTION	Bets well co	mnleted C	/ _25 / _87			
BOREHOLE DIMENSION	IS Denths: To	tal 12 ft.	Finished	12 ft.		
	Diameter: T	op 2 in.	Finished Bottom	in.		
Land Surface Elevation at	wellft.	Eleva	ation was determined		topography n	420
	pove land surface	ft.		-	copography i	παρ _. π23 ——
•	DEPTH TO TOP	LENGTH (FT.)	DIAMETER (IN.)		TYPE AND MATERIA Screens: Note Slot Size	
	(***)	(,,,,	(inc.)		Derection 21010 SIDE SIZE	1-7
Casing 1	-					_
Casing 2						
Casing 3	_					
Screen 1				·····		
Screen 2						
Tail Piece		 				
Gravel Pack						····································
Grout					•	
Grouting Method						
	.t.Y gals. ; ft. above the land surfa		ft. above the	land surface.		
RECORD OF TEST	Test Date _	/		6. 1.1		
•	umpingft.				ow land surface after	_ hrs. of pumping.
	using					
	sing			gals.		
Nell was pumped using				-	els. per min, per ft, of drav	vaown
	/ wells color, etc.)					
, , , , , , , , , , , , , , , , , , ,						
PERMANENT PUMPING		•			Abe	
Afrs. Name				Model		
	GPM at		·			
	HP at		ver Source			,
EPTHS: Pump		otpieçe		ne		
FOR WEIFK: WOOD _			installed on	(n. giam	eter pipe.	
ONTRACTOR - Name of	Drilling Contractor	TIGER CONS	TRUCTION CORE)		
	ghway 71, P.O. B	ox 394				
	Lake Heights			N_J	Zip Code07	762
lame of Driller Dennis	Buchannan				se No1393	
:= =: -:	0			1 ,		
	r · 1	T = I	// -	1 /	10 -	07
ignature of Contractor 🙎	July Cas	A. Ta	Lu.	Date Date		8/
	200150					
	COPIES: White - DI	EP Canary - I	Driller Pink - O	wner 👻 Golden	rod - Health Dept.	

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 _ 18590

à	7 .	13	•	8	<u>3</u>	6

urmer: riess use the space below for the log description. Note water bearin or geological formation.	g zones <u>DEP USE ONLY</u>
Are samples available?	Storet Hydrogeo Code
Dulling Stathad	USGS Hydrogeo Code
Drilling Method	Depth to Bedrock ft,
Type of Rig	Bedrock Lith. Code Bedrock Fm. Code
1 ype of my	Budioux Fill, Codo
Aquifer/Geo. Fm	Completed by
•	Date//
LOG	Thick. Lith. Fm.
installed a 13' x 2" Ø temporary	`
dewatering point	
, and the same of	
	
GWP(No	NJPDES No
Latitude 0 1 11	Longitude o · · ·
Lat-Long Accuracy 1" 5" 10" 20"	
USGS Quedrangle	
Drainage Basin Code	County/Municipality Code
OTHER FILES:	☐ Aquifer Test ☐ Water Level Data
☐ Geophysical Logs ☐ Water Chemistry	Pollution Case
Checked by	Date//

COPIES:

White - DEP

Canary - Driller

Pink - Owner

GEOLOGIST WELL LOG

29.13.843

New England Pollution Control Co., Inc.
7 Edgewater Place Place

Norwalk, CT 16855

DRILL MASTER: DALE NELSON

PAGE

OF

BRCORI DELOU	THICKNESS		OWNER:
DESCRIPTION		033	
Concrete	.33	055	Hecon Facility
			Fatontown, NJ
	1, 70	.33-4.5	LOCATION:
Tannish green clayey silt,	4.17	• • • • • • • • • • • • • • • • • • • •	
some fine sand.			WELL NO: 10A
TOTAL COMPANY		1, 5 0	0.00.04
Light brown, some green	3.5	4.5-8	DATE COMPLETED: 8-23-85
fine to medium sand.			
			DRILLING METHOD: Hollow Stem Auger
Fuel odor begins increasing	_	. 8	
with depth			SAMPLE METHOD: Cuttings
	1		SAGUAC METALINE
	-		
Very strong fuel odor	-	.26	SAMPLES B. Beahan EXAMINED BY:
	-		BEREARNOR
Dark green to fine to	3 2	8-40	REFERENCE Top of PVC casing POINT:
medium sand			
			ELEVATION 104.57 (Assumed Datum)
			OF R. P.:
			N/A
			N/A CASING:
			20' solid PVC
SEP 8 '87			20' slotted PVC
JER O AI			SCREEN TYPE:
1			&
,,,			4-inch
	 		DLAMETER: 4-inch 72
			STATIC WATER LEVEL:
	1		

Form DiVR- 138

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO.	29/9286
FERMIT NO.	

APPLICATION NO. ...

WELL RECORD	COUNTY <u>Manmarth</u> 29-13, 8-63
	2019201

			- ప్ర	117284	
١.	OWNER Underwriters Adjusting Co	_ ADDRESS 🗜	O Box 688, Fo	IN, and not	
	Owner's Well No.	_ SURFACE EL	EVATION		Fee
2.	LOCATION 15 Maridian Rd Euton to	un NJ	140	ove mean sea (ever)	
3.	DATE COMPLETED 8-23-85 DRIE	LLER		· · · · · · · · · · · · · · · · · · ·	
4.	DIAMETER: Top 13 inches Bottom	3_inches	TOTAL DEPTH	est	Feet
5.	CASING: Type //C	Diameter	4 Inches	Length 20	Feet
6.	SCREEN: Type PVC Size of Opening	Diameter	L/ Inches	Length 20	Fee1
	Range in Depth { TopFeet BottomFeet	Geologic Forma	tion <i>Vincented</i>	up	
	Tail Piece: Diameter Inches	Length	Feet		
7.	WELL FLOWS NATURALLY Galtons per minute a	nt	Feet above su	rface	
	Water rises to Feet above so	urface			
8.	RECORD OF TEST: Date	Yield _	Gallons p	er minute	
	Static water level before pumping		Feet below surface	•	
	Pumping level feet below surface aft	er1	hours p	umping	
	Drawdown Feet Specific Ca	pacity	Gals, per min, per f	t. of drawdown	
	How pumped	How me	easured		
	Observed affect on nearby wells				
9.	PERMANENT PUMPING EQUIPMENT:				
	Type Mfrs,	Name		·	
	Capacity G,P.M. How Driven				
	Depth of Pump in well Feet [Depth of Footpies	ce in well	Feet	
	Depth of Air Line in well Feet Type of	Mater on Pump	······	SizeInches	
0.	USED FOR Monidar	AMOUNT	Average	Gallons Daily Gallons Daily	
1.	QUALITY OF WATER		Semple: Yes	No	
	TasteOdor	Color	Ter	np ºF.	
2.	LOG (Give details of back of short or an separate short of electric log	g was made, places	Are samples available?		
3.	SOURCE OF DATA	I BR	ahon		
4.	DATA OBTAINED BY SUPERO STEELO STATE	Hu	Sand Date 9	7-87	

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

GEOLOGIST WELL LOG

New England Pollution Control Co., Inc. 7 Edgewater Place Norwalk, CT 16855

29,13.863

DRILL MASTER: DALE NELSON PAGE OF THICKNESS DEPTH OWNER: (1n FI) DESCRIPTION Asphalt 0-.33 .33 Hecon Facility Eatontown, NJ LOCATION: 4.67 Tannish brown medium .33-5 11 A sand with gravel and WELL NO: pebbles 8-23-85 DATE COMPLETED: Tannish brown medium to 5-10 fine sand with clean Hollow Stem Auger DRILLING METHOD: quartz pebbles and cobbles Cuttings & Split Spoon SAMPLE METHOD: Spoils begin to have SAMPLES B. Beahan EXAMINED BY: greenish tint and feel REFERENCE Top of PVC Casing sticky POINT: ELEVATION. 106.66 (Assumed Datum) Fuel odor 22.33 OF R. P.: N/A Split spoon sample 25-27 CASING: 20' solid PVC 20' slotted PVC Green fine to medium 10-40 SCREEN TYPE רחי ח sand 4-inch DIAMETER: STATIC WATER LEVEL:

Form DiVR- 138 11/80

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

WELL

PERMIT NO.	29/9287

APPLICATION NO. _

	COUNTY Manmouth
RECORD	COUNTY 2 TONISTICOTY

1.	OWNER Underwriters Adjusting Co	ADDRESS PO BOX 688 E	aton town N.T
	Owner's Well No. OW 12 A	_ SURFACE ELEVATION	Feet
2.	Owner's Well No. OW 12 A LOCATION 5 Myrichan 2d	Enter toun UT	ove meen ses level)
	DATE COMPLETED 8-24-85 DRI	•	
4.	DIAMETER: Top 13 inches Bottom 1	inches TOTAL DEPTH	40 Feet
5	CASING: Type NC	Diameter 4 Inches	Length 20 Feet
6.	SCREEN: Type PVC Size of Opening 020	Diameter 4 Inches	Length Peet
	Range in Depth { Top Feet Bortom Feet		=
	Tail Piece: Diameter Inches	LengthFeet	
7.	WELL FLOWS NATURALLY Gallons per minute a	at Feet above so	urface
	Water rises to Feet above s	urface	
8.	RECORD OF TEST: Date	Yield Gallons	per minute
	Static water level before pumping	Feet below surface	e e
	Pumping level feet below surface aft	er hours p	pumping
	Drawdown Feet Specific Ca	pacity Gals, per min, per t	ft, of drawdown
	How pumped	How measured	
	Observed effect on nearby wells		
9.	Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:		
9.			
9.	PERMANENT PUMPING EQUIPMENT:	Name	
9.	PERMANENT PUMPING EQUIPMENT: Type Mfrs. Capacity G,P,M, How Driven	Name H.P	
9.	PERMANENT PUMPING EQUIPMENT: Type Mfrs.	Name H.P	. R.P.M
	PERMANENT PUMPING EQUIPMENT: Type Mfrs. Capacity G,P.M. How Driven Depth of Pump in well Feet	Name H.P. Dapth of Footpiece in well Meter on Pump	R.P.M Feet SizeInchesGallons Daily
10.	PERMANENT PUMPING EQUIPMENT: Type Mfrs. Capacity G,P,M. How Driven Depth of Pump in well Feet Type of	Name H.P. Dapth of Footpiece in well Meter on Pump Average	R.P.M Feet SizeInchesGallons Daily
10.	PERMANENT PUMPING EQUIPMENT: Type Mfrs. Capacity G,P,M. How Driven Depth of Pump in well Feet Type of USED FOR Manufact	Name H.P Dapth of Footpiece in well Meter on Pump AMOUNT { Average	R.P.M Feet SizeInches Gallons Daily Gellons Daily No
10. 11.	PERMANENT PUMPING EQUIPMENT: Type Mfrs. Capacity G,P,M. How Driven Depth of Pump in well Feet Type of USED FOR Taste Odor LOG Odor	Name H.P. Dapth of Footpiecs in well Meter on Pump AMOUNT Average Maximum Semple: Yes Color Are samples available?	R.P.MFeet SizeInches Gallons Daily Gallons Daily No
10. 11.	PERMANENT PUMPING EQUIPMENT: Type Mfrs. Capacity G,P,M. How Driven Depth of Pump in well Feet Type of USED FOR Markfact QUALITY OF WATER Odor	Name H.P. Dapth of Footpiecs in well Meter on Pump AMOUNT Average Maximum Semple: Yes Color Are samples available?	R.P.MFeet SizeInches Gallons Daily Gallons Daily No

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

GEOLOGIST WELL LOG

29,13,863.

New England Pollution Control Co., Inc. 7 Edgewater Place Norwalk, CT 16855

DESCRIPTION	THICKNESS	DEPTH	OWNER:
Asphalt	-33	033	
			Hecon Facility LOCATION: Eatontown, NJ
Tannish brown fine to	6.67	.33-7	govern town
Medium sand, some coars			WELL NO:
sand, few small pebbles			
			DATE COMPLETED: 8-24-85
Lighter brown fine to	3	7-10	
medium sand, some coars	9		DRILLING METHOD: Hollow Stem Auger
sand, few small pebbles			
			SAMPLE METHOD: Cuttings
Fuel odor	-	22	
i			SAMPLES EXAMINED BY: B. Beahan
Green fine to medium	30	10-40	
sand			REFERENCE POINT: Top of PVC casing
		· · · · · · · · · · · · · · · · · · ·	ELEVATION 106.32 (Assumed Datum)
•			OF R. P.: 100.92 (Adduted Editor)
			CASING: N/A
Sap 8 '87			20' solid PVC SCREEN TYPE: 20' slotted PVC
			5
			DIAMETER:
			₩ 23
			STATIC WATER LEVEL:

Form DiVR- 138

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

350447 NO	2919288
PERMIT NO.	21/200

APPLICATION NO _

	WELL RECORD COUNTY Monmostle
	29,13,8.63
1.	OWNER Underwriters Adjusting Co ADDRESS PO Box 688, Foton town, N.T.
	Owner's Well No SURFACE ELEVATION (Above mean see level) Feet
2.	LOCATION 15 Meridian Kd Forton Town NJ
3.	DATE COMPLETED 8-24-85 DRILLER NEPCCO
4.	DIAMETER: Top 13 inches Bottom 13 inches TOTAL DEPTH 40 Feet
5.	CASING: Type Diameter 1 Inches Length 20 Feet
6.	SCREEN: Type <u>fuc</u> Size of Opening <u>1020</u> Diameter <u>fuches</u> Length <u>Restaurante</u> Feet
	Range in Depth Top Feet Geologic Formation Mincentcu Mi
	Tail Piece: DiameterInches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8.	RECORD OF TEST. Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfrs. Name
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
0.	USED FOR Mount Sallons Daily AMOUNT Maximum Gallons Daily
1.	QUALITY OF WATER Semple: Yes No
	Taste Odor Color Temp OF.
2.	LOG Are samples available?
3.	SOURCE OF DATA A Bachan
	DATA OBTAINED BY Date 9-2-87
	1//.

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

GEOLOGIST WELL LOG

New England Pollution Control Co., Inc. 7 Edgewater Place Norwalk, CT 16855

29,13,863

DRILL MASTER: DALE NELSON

PAGE

OF

	·····	T	
DESCRIPTION	THICKNESS (In FI)	DEPTH	OWNER:
Asphalt	.33	033	Hecon Facility
			LOCATION: Eatontown, NJ
Tannish brown medium to	6.67	.33-7	•
fine sand.			WELL NO: 1.3A
Greenish brown medium	8	7-15	DATE COMPLETED: 8-24-85
sand, some coarse sand			_
			DRILLING METHOD: Hollow Stem Auger
Green medium, some	16	15-31	
coarse, glauconitic	·		SAMPLE METHOD: Cuttings
(sticky) sand (fuel odor at			
22')			SAMPLES B. Beahan
Tannish brown medium		31-40	REFERENCE Top of PVC casing
sand, some clay			
			ELEVATION OF R. P.: 106.94 (Assumed Datum)
			CASING: N/A
			20' solid PVC
,			SCREEN TYPE: 20' slotted PVC
५२ ४ ७।			
			DIAMETER: 4-inch
			STATIC WATER

			Well Permit No	29 19549 29	
			Atlas Sheet Co	ordinates : : : : : : : : : : : : : : : : : : :	LJ
OWNER IDENTIFICAT		RRSS/LINDA DAI INKHROUK ROAD	Ϋ́		
Address	TINIUN		Canal 183	7: 0 d	
City		(WR:		Zip Code	
WELL LOCATION - If n	ot the tame owner please	give eddress Own	Finton Falls	, NJ	
County Cty: M	Onmouth Mun	icipality TINTON	FALLS BO	Lot No. Block No. 114	
WELL USE	WITHDRAWAL		Status	IN UȘE	
WATER USEDO	MESTIC	Average _	1,000 gals, d	aily Maximum 2,000	gals. daily
WELL CONSTRUCTION BOREHOLE DIMENSIO		li completed <u>COM</u> Total <u>TD: 21</u> 5t.	PLETED: 87/11 Finished		
		r: Top <u>8.5</u> 'ln.	Bottom		
Land Surface Elevation a			ation was determined using	Topographic map	
Casing Height (stick-up)	above land surface	<u>.5"</u> ft.			
	DEPTH TO TOP	LENGTH	DIAMETER	TYPE AND MATERIAL Screens: Note Slot Size(s)	
	(FT.)	(FT.) L: 200	(IN.) 4.0"	Sched 40 PVC	
Casing 1					
Casing 2 Casing 3					
Screen 1	Top: 200	102	4.0 " -	Sched 40 PVC/.020	
Screen 2			4.0 " -	Sched 40 PVC	
Tail Piece	Top: 190	25	8.5"	.025 Blended	
Gravel Pack	Surface	L: 190		200 Mesh Bentonite	
Graut Grauting Method	Pres	sure thru t	remie pipe -		
WELL FLOWS NATURA		surface.	ft. above the land	surface.	
	T . D .		: 87/11/25	156	
RECORD OF TEST Static water-level before	iestuan Lastiac: 33	ft helow land surface	/ Level:	ft. below land surface after 1 hrs.	of nummina
Water level was measured	usinges	timated	Drawdown DD:		or bambutg.
Discharge rate measured	using <u>neasure</u>	<u>d container</u>	Discharge Retal_cl :	60 gals. per min.	
Well was pumped using _			Specific Compative =_	0.5 gals. per min. per ft. of drawdow	n
Observed effects on near					
Water Quality (taste, odo	r, color, stc.)	good	· · · · · · · · · · · · · · · · · · ·		
PERMANENT PUMPING	EQUIPMENT	Installed by PIC	KWICK WELL DE	U.G. Pump TypeSubmersible	e
Mfrs. Name Gould 4	Red Jackst	· · · · · · · · · · · · · · · · · · ·	Mode	Model: 10EJ07422	
CAPACITY: Pump deliv			_		
POWER: # 3/4 DEPTHS: Pumpsets		Footpiece		:tric t.	
FLOW METER: Model			installed on	in, diameter pipe.	
			AL DRILLING		
CONTRACTOR - Name o	of Drilling Contractor	Farming	dale. NJ 0778	?7 (201 938 5300)	
Address					
City Name of Driller	David Prime		M 1041 State	Zip Code License No	
	Norman Prim	_	J 1040		
- K I	Allah Frame		J 1407	a -	
Signature of Contractor	- Sord	Arlun	3	_ Date 8 102/07	_
	COPIES: White	- DEP Canary - I	Driller Pink - Owner	Goldenrod - Health Dept.	

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29_19540

Driller: Please use the space below for the log description. Note water bearing zones or geological formation.		DEP USE ONLY	
Are samples available?	Storet Hydrogeo Code		
	USGS Hydrogeo Code		
Drilling Method Mud Rotory	Depth to Bedrock	ft.	
- 1 × 1.	Bedrock Lith. Code		
Type of Rig T. H. Drive	_ Bedrock Fm. Code		
•			
Aquifer/Geo. Fm. Kmw	Completed by		
		//	
	DBN-	_ / /	
LOG	Thick.	Lith.	Fm.
0-35 Med. light a reen-brown sand	1		
			
35-45 Dark Green sang with gray clay			
45-65 Gray Oclay with dark larden			***************************************
Clayland gray sond	11		
65-95 Dark green clay with black sand	71		
and Argusitty Clay	!		
95-115 Gray with clay with some gray san	M		
115-170 Gray Clay, with some shell			
and black sand		****************	
70-175 Gray clay with gray sand and a			
trace of green pebbles			
115-195 Fine grad sand with some.			
armen adables.			
195 - Bitty atou sand and gray clay			
		***************************************	···

	· 		
			
`.			
GWPI NoNJPD	ES No		
	_		
Latitude' Longi	tude °	'	
Lat-Long Accuracy 🔲 1" 🖂 5" 🖂 10" 🖂 20"			
USGS Quadrangle			
Drainage Basin Code Count	y/Municipality Code		
OTHER FILES: Lithologic Log Samples Available	Aquifer Test	☐ Water Level Data	
	Pollution Case	_ = ====	
—			
Checked by Date	/		

			i Permit No2	9— [—] — 20079 —	
		Atta	s Sheet Coordinates	· - 29 : - - 13	:- 942
OWNER IDENTIFICATION - Owne	Redacted - Priva	cv Act			
					
Address	4 MRADOW LANK				
City	WEST LONG BRA	NCH.	State NJ	Zip t	ode
WELL LOCATION - If not the same	•				
Address Monmouth		(Est Long Branch		··	
County MONIBOUTA	Municipality	VEst Long Branch	Lot No		ock No.
WELL USE irrigation				GO! BE	01
WELL USE 1rrigation		Stat	us		
WATER HOE					1 11
WATER USE	<i>/</i>	Average	gals. daily	Maximum	gals, daily
WELL CONSTRUCTION	Date well completed	8 , 13 , 8	88		
BOREHOLE DIMENSIONS	Depths: Total	no ft. Finishe			
BONEHULE DIMENSIONS	Diameter: Top	in. Bottom	<u> </u>		
Land Surface Elevation at well 68	ft.			ography map #	20
COLO DEL IGLE CIOVACION AL MON		Elevation was determ	inea using <u>cob</u>	ogi apity likep 1	(2)
Casing Height (stick-up) above land s	urtace tt	•			
DEPTH 1	TO TOP LENGT	TH DIAMETER		TYPE AND M	ATERIAL
(FT				Screens: Note	
Casina 1	70	Δ	C = L A	0 040	
Casing 1		4	<u>-Sch_4</u>	U PYC	······
Casing 2 Casing 3					
Screen 1 70	15	4	-015	slot screen F	VC.
Screen 2	30				
Tail Piece		4		<u>. —</u>	
Gravel Pack 60	, -	8			
Grout			hole	plug	
Grouting Mathod		drop		h.ma	
Grouting matheur		<u> чтор</u>			-
WELL FLOWS NATURALLY	gale nor min	at ft. abo	us the land surface		
Water rises to ft. ab	·	at It. abo	re ule lalla surtace.		
Trace rises to rt. do	Die tile illie illiete.				
RECORD OF TEST	Test Date 8	, 13 , 88			
Static water-level before pumping		and surface. Water level	60 fr	t helow land curface at	iter1 hrs, of pumping.
Water level was measured using	dropline/M-s	cope Brawdown	20		tor ma, or pamping.
Discharge rate measured using	bucket	Discharge f		gals, per min.	
Well was pumped using	air	Specific Ca	4	gals, per min, per f	t of drawdown
Observed effects on nearby wells	none		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Water Quality (taste, odor, color, etc.	.)				
, (, ,, ,, ,,					
PERMANENT PUMPING EQUIPME	NT Installed by	<u>, David Van Brun</u>	t Jr. Pm	mo Type Submer	sible
Mfrs. Name Red Jacket				GC.	
CAPACITY: Pump delivers25	5 GPM at 4	O PSI pressure.		u	
POWER: HP at			electricity		
	ft. Footpiece	ft.	Airline	ft.	
FLOW METER: Model	· · · · · · · · · · · · · · · · · · ·		n in.		
	INTOKA			diamotor pipe.	
CONTRACTOR - Name of Drilling Co	ontractor	CONSTRUCTION OC	RP.		
Address 806 Hwy.	. 71			- · · · · · · · · · · · · · · · · · · ·	
	ake Heights		tate N.J	Zip Code Q	7762
Name of Driller Dennis Bud				License No11	· · • –
					
4	1.1-		•		
Signature of Contractor	Metro Metro	return (N)	<u>' </u>	Date 12,2	9,88
				/	 /
COPIES!	White - DEP	Canary - Driller Pir	ık - Owner G	oldenrod - Health Dept	•

rm DWR-138 /85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

Well Permit No. $\frac{9}{}$	<u> </u>	<u> </u>
9 9.	13	942

Driller: Please use the space below for the log description. Note water bearing a or geological formation.	ZONES <u>DEP USE ONLY</u>
Are samples available? 🔲 Yes 🕮 No	Storet Hydrogeo Code
	USGS Hydrogeo Code
Drilling Method <u>Mud Rotary</u>	Depth to Bedrock ft.
Type of Rig Failing CF-15	Bedrock Lith, Code Bedrock Fm. Code
Aquifer/Geo. Fm. Vincenttown	Completed by
	Date//
LOG	Thick. Lith. Fm.
0-1 Clayey topsoil	
1-35 fine to medium silty yellow sand and	
grave i	
35-38 sandy green and yellow silt	
38-90 fine to medium tan sand with hardpan	
	
	
GWPI No	NJPDES No
•	Longitude ' '
	Longitude
Lat-Long Accuracy	
	County/Municipality Code
OTHER FILES: Lithologic Log Samples Available Geophysical Logs Water Chemistry	Aquifer Test Water Level Data Pollution Case
Checked by	Date//

	Well Permit No
	Atlas Sheet Coordinates 29 : 13 : 918
OWNER IDENTIFICATION - Owner Redacted - Privacy Act	
Address	
City PARTONIO	State Zip Code 0772
Baitaitae	State N Zip Code D / Z - State
WELL LOCATION - If not the same owner please give address. Owner's We	
Address Emma Place Eaton.	town
County Monaceth Municipality RATONTONN	CORO Lot No. 13 Block No. 97
Frank I Dalith In.	_
WELL USE (IRRIGATION) WITHCHAWAL	Status IN USE
WATER USE TRRIGATION Average 4	400 gals, deily Maximum 400 gals, deily
WELL CONSTRUCTION Date well completed Cet / 2	<u> </u>
BOREHOLE DIMENSIONS Dapths: Total <u>238</u> ft.	Finished <u>238</u> ft.
Dismeter: Top 😅 in.	Bottom B in.
	as determined using Bench MariLav
Casing Height (stick-up) above land surfaceft.	
DEPTH TO TOP LENGTH DI	AMETER TYPE AND MATERIAL
(FT.)	(IN.) Screens: Note Slot Size(s)
Casing 1	
Casing 2	<u> </u>
Casing 3 ZOK	4" Sch ## PVC
Screen 1	Sch#40 OVC X 15 SLOT
Screen 2	
Tail Piece	
Gravel Pack	3 #2 Sand
Grout	Bentonite
Grouting Method PRESSURE STUT	
<i>I</i>	
WELL FLOWS NATURALLY gals. per min. at	_ ft. above the land surface.
Water rises to ft. above the land surface.	
	,
RECORD OF TEST Test Date Cel / 29 / 8	2
· · · · · · · · · · · · · · · · · · ·	ater level 58 ft. below land surface after 2 hrs. of pumping.
	rawdown <u>10</u> ft. Fachame Rata 30 gals, per min.
	3
	pacific Capacity gals. per min. per ft. of drawdown
Observed effects on nearby wells Water Quality (taste, odor, color, etc.)	
Water duality (vaste, odor, color, etc.)	
PERMANENT PUMPING EQUIPMENT Installed by	Chargon Pump Type Schmersible
Mfrs. Name Red-JACKCT	Model ZZ 90M
CAPACITY: Pump delivers 27 GPM at 40 PSi pres	
POWER: HP at 3450 RPM Power Sou	- PI I
DEPTHS: Pump 100 ft. Footpiecef	
	nstalled on in. diameter pipe.
JONAS ENDRESON	••••••
CONTRACTOR - Name of Drilling Contractor	
Address 400 351 BAYWAY	
City Come Bull	State Zip Code 08753
Name of Driller SXAS ENAVESON	U License No
	61
Signature of Contractor	Date Q£ / 29 / 188
COPIES: White - DEP Canary - Driller	Pink - Owner Goldenrod - Health Dept,
Sandy Sandy	Comment of the commen

Form DWR-138 11/85

Checked by _

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION **DIVISION OF WATER RESOURCES**

PAGE 2 OF 2

		29.	13.918
Driller: Please use the space below for the log description. Note water bearing zone or geological formation.	rs .	DEP USE ONLY	Bank -
Are samples available?	Storet Hydrogeo Co USGS Hydrogeo Co Depth to Bedrock		
Type of Rig 1250 Failing	Bedrock Lith. Code Bedrock Fm. Code		
Aquifar/Geo. Fm. 1874. Lawel -	Completed by		-
0-/0 SC 10-13', SP	Thick.	Lith.	Fm.
13-15, shell 15-130' 30-45' Light Color shall with Fine 45-75' DARK Color shall with Fine			
75-90 shell with the Sind 90'-115' sp/sm/m/ 115'-120 Of With sume Shell			
120-195 OC with some shall 195-204 OL 1011 204-210 Shall with fine Sand 210-238 Splam Paper Sand F			
STEIL			
GWPI No NJ	PDES No.		
Latitude O COMPANIE C	ngitudeO	·"	
OTHER FILES: Lithologic Log Samples Available Geophysical Logs Water Chemistry	unty/Municipality Code Aquifer Test Pollution Case	☐ Water Level Data	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

			Well Permit	No	21	648	Γ-
			Atlas Sheet	Coordinates	_ 27 :1	19 : 587	<u> L</u>
01/2/50 1051/5/5/64 TIO		ed - Privacy Act					
OWNER IDENTIFICATIO	463	iinton Ave.					
City	Tint	on Falls	State	NJ		p Code	
						P 0000	
WELL LOCATION - If not Address Same A	the same owner please S Above		r's Well No				
County Monao	uth Munic	ipality Inton	Falls	Lot No	5-01	Block No.	
WELL USE Withdr	awal		Status	In	Use		
Dom	estic		2000			4000	
WATER USE		Average	gal:	s, daily	Maximum _		gals. daily
WELL CONSTRUCTION	Date well	completed88 /	<u> 11</u> / <u>11</u>				
BOREHOLE DIMENSIONS	S Denths: 1	_{Fotal} 186 fr	Finished	ft.			
	Diameter	Top 8.5" in.	Bottom	in			
Land Surface Elevation at v	well <u>33</u> ft,	Elevat	ion was determined usi	ng Top	ographi	с мар	
Casing Height (stick-up) ab	ove land surface 1 -	<u>5"</u> ft.					
	DEPTH TO TOP	LENGTH	DIAMETER		TYPE AND	MATERIAL	
	(FT.)	(FT.)	(IN.)		Screens: No	te Slot Size(z)	
Casing 1		171	4.0"	Sche	dule 40	PVC	
Casing 2		,	·			<u> </u>	
Casing 3					4.3.66	20004 000	
Screen 1	171	10	4	Sche	OUIE 4	PVC/.020	
Screen 2							
Tail Piece		5'	4"				
Gravel Pack	161	257	8.5"		Blende		
Grout	Surface	161		500	nesh F	entonite	
Grouting Method	Press	ure, Thru T	remie Pipe				
·							
WELL FLOWS NATURAL	LYga	ls. per min. at	ft, above the la	ind surface.			
Water rises to	ft. above the land s	urface.					
		OD 11	. 11				
RECORD OF TEST	mning 32 Test Date	,	<u> </u>	41		. 1	_
Static water-level before pu		ft, below land surface.	Anater level	AD II, DUI	ow land surface	e after <u>1</u> hrs. of p	ımping.
Water level was measured u	SII19	d Container	_ DISMUUMII	1 t _a			
Discharge rate measured us	01 125				per min.		
Well was pumped using		<u> </u>	_ Specific Capacity		als, per min, pe	er ft. of drawdown	
Observed effects on nearby			Good				
Water Quality (taste, odor,	color, etc.)		5000				
PERMANENT PUMPING E	OULPMENT	Installed by PICK	WICK WELL I	ORLG Pump T	ype Subr	mersible	
Mfrs. NameGou	1d		М		EJ07		
CAPACITY: Pump deliver	4.5	et <u>40</u> PS	il pressure.				
POWER:3/4_	HP at 345	_	er Source Elec	tric			
DEPTHS: Pump	ft.	Footpiece	ft. Airline		_ ft.		
FLOW METER: Model _		·	installed on	in. diam	eter pipe.		
		PICKWI	CK WELL DRI	LLING			
CONTRACTOR - Name of	Drilling Contractor Box 6, Farm			201) 938	5300		
High (198)	DUX O) FBIH	MIOGI					
City No	rman Primos	71040	State		ZIP COGE Se No		
Name of Driller — A1	len Primost	J1407		LICBU	30 IVU	· - ·	
	7 -	\triangle			<u> </u>		
Signature of Contractor	Midn	Min		Date	_81_	12 08	
_	COPIES: White	DEP Canary - D	riller Pink - Owi	ner Golden	rod • Health D	ept.	

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No. 29 - 21698

Driller Place use the space below for the log description. Note water bearing zones or geological formation. Are samples valiable?			29.13	1.587
Drilling Method Mun Portey Type of Rig T. H. Defue Aquifer/Geo, Fm. K. M. W. Completed by Date // / Date // Da	· · · · · · · · · · · · · · · · · · ·	zones	DEP USE ONLY	
Drilling Method Mun Portey Type of Rig T. H. Defue Aquifer/Geo, Fm. K. M. W. Completed by Date // / Date // Da	Ara comples quailable? TVac No	Storet Hydrogeo Cod	le	
Type of Rig T. J. DEJUE Aquifar/Geo, Fm. KA W LOG Thick. Lith. Fm. Conformed by Date //				
Type of Rig T.H. DETUE Aquifor/Geo. Fm. K.M. W. Completed by Date // // LOG Thick. Lith. Fm. O-10 Cravel O-22 Silkusteen Clay w/ Fine green Sand 32-35 Catage green Sand 33-35 Catage green Sand 33-36 Catage green Sand Some Silkusteen Clay Some holack Sand Some Silkusteen Clay Some No Lith. Sand Tis Sand Lithus Shells The Grey Silkusteen Clay Some Silkusteen Clay Some Silkusteen Clay Some Silkusteen Clay Some Some Silkusteen Some	Drilling Method MUD KOTORY			
Aquifar/Geo. Fm.	m 11 %	1		
LOG Thick. Lith. Fm. O-10 Grave! O-20 SiltyGreen Clay w/ Fine Green Sand 32-5 Carace green Sand Some Silty green Sand Some Silty green Clay Some Alack Sand O-18 Crey Silty Clay Some Alack Sand Some Fine gray Silty Sand Some Silty green Clay	Type of Rig 1. H. DRIVE	Bedrock Fm. Code _		
LOG Thick. Lith. Fm. O-10 Grave! O-20 SiltyGreen Clay w/ Fine Green Sand 32-5 Carace green Sand Some Silty green Sand Some Silty green Clay Some Alack Sand O-18 Crey Silty Clay Some Alack Sand Some Fine gray Silty Sand Some Silty green Clay	Aquifar/Gen Fm K MA W	Completed by		
Log	Addition 6000, Fills,	Completed by	, ,	
GWPI No		Date	_//	
Some Siltugreen Clay Some	LOG	Thick.	Lith.	Fm.
Some Siltugreen Clay Some	M-20 Silvicroon Man in Fine accord			
Some Silty green Clay / Some Silty green Sand Some Silty green Clay / Some Silty Grey Silty Clay / Some Silty Sand Some Fine gray Silty Sand Some Fine gray Silty Sand Some Shells Some Green publics Some Green public Some Green Some Green public	22-25 Carre a ceep sand	and		*****
Same Sittle Ren Clay Some		<i></i>		
Silve Saily Class Some Fine gray Silve Saily Class Some Fine gray Silve Saily Class Some Fine gray Silve Saily Saily Some Silve Saily Some Silve Saily Some Silve Saily Some Silve Saily Some Silve Saily Some Silve Saily Some Silve Saily Some Silve Saily Some Silve Saily Some Silve Saily S	عصمهما والمسانين والتهري والمناز والمن	D.		
GWPI No NJPDES No Latitude ' '' Longitude ' '' Lat-Long Accuracy 1" 5" 10" 20" USGS Quadrangle Drainage Basin Code County/Municipality Code County/Municipality Code OTHER FILES: Lithologic Log Samples Available Aquifer Test Water Level Data Geophysical Logs Water Chemistry Pollution Case	hlank Ango	<u> </u>		
GWPI No NJPDES No Latitude ' '' Longitude ' '' Lat-Long Accuracy 1" 5" 10" 20" USGS Quadrangle Drainage Basin Code County/Municipality Code County/Municipality Code OTHER FILES: Lithologic Log Samples Available Aquifer Test Water Level Data Geophysical Logs Water Chemistry Pollution Case	70-145 (Line Silly Class Some Fine C	7 601		
GWPI No NJPDES No Latitude ' '' Longitude ' '' Lat-Long Accuracy 1" 5" 10" 20" USGS Quadrangle Drainage Basin Code County/Municipality Code County/Municipality Code OTHER FILES: Lithologic Log Samples Available Aquifer Test Water Level Data Geophysical Logs Water Chemistry Pollution Case	STLL Sand Minshells	1114		
GWPI No NJPDES No Latitude ' '' Longitude ' '' Lat-Long Accuracy 1" 5" 10" 20" USGS Quadrangle Drainage Basin Code County/Municipality Code County/Municipality Code OTHER FILES: Lithologic Log Samples Available Aquifer Test Water Level Data Geophysical Logs Water Chemistry Pollution Case	115-R5 Madison and Johns			
GWPI No NJPDES No Latitude ' '' Longitude ' '' Lat-Long Accuracy 1" 5" 10" 20" USGS Quadrangle Drainage Basin Code County/Municipality Code County/Municipality Code OTHER FILES: Lithologic Log Samples Available Aquifer Test Water Level Data Geophysical Logs Water Chemistry Pollution Case	anopy applied		******************	
GWPI No NJPDES No Latitude ' '' Longitude ' '' Lat-Long Accuracy	125-18/2 Eine a lair Sand Shalls			
GWPI No NJPDES No Latitude ' '' Longitude ' '' Lat-Long Accuracy	Same To hole & I togge			
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Lat-Long Accuracy	GWP1 No	-		
Lat-Long Accuracy	Letitude 0 ' ''	Longitudeo	+ 11	
USGS Quadrangle Drainage Basin Code County/Municipality Code OTHER FILES:	·			
Drainage Basin Code County/Municipality Code OTHER FILES:				
OTHER FILES: Lithologic Log Samples Available Aquifer Test Water Level Data Water Chemistry Pollution Case		County/Municipality Code		
Geophysical Logs Water Chemistry Pollution Case			☐ Water Level Data	
		'		
Checked by / / /	and and an and a second and the second and a	C Gildright Case		
	Checked by	Date//		

DWR-138A 1/88

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO. 2921967.	Z
APPLICATION NO.	
COUNTY	
COORD. 29. 13. 8.19	
29-21969	

WELL RECORD

1.	OWNER Starola Really ADDRESS
	Owner's Well No. (Abovergeen see level) Feet
2.	LOCATION - Intersection Hope 25 + RT. 36 Tinton (Alls dis-
3.	DATE COMPLETED 4/10/89 DRILLER Warren Heinge alme
4.	DIAMETER: Topinches Bottominches TOTAL DEPTHFeet
5.	CASING: Type Diameter Inches LengthFeet
6.	SCREEN: Type Size of Opening Diameter Inches LengthFeet
	Range in Depth { Top Feet Geologic Formation See Attack or Jog
	Tail Piece: Diameter Inches Length Feet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface WELL SEALED 1/8/90
8.	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type
	Capacity G.P.M. How Driven H.P R.P.M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
0.	
	USED FOR Gallons Daily AMOUNT Average Gallons Daily Maximum Gallons Daily
1.	USED FOR AMOUNT {
1.	AMOUNT Maximum Gallons Daily
	QUALITY OF WATER Sample: Yes No
2.	QUALITY OF WATER Gallons Daily Color Temp °F.

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

N. J. TEL. (201) 433-9797

WARREN GEORGE, INC.

FOOT OF JERSEY AVENUE P. O. BOX 413 JERSEY CITY, N.J. 07303 29,13.819

TEST BORINGS

Prej	et Scherme Con	T	۵ و:	o Tuell	15, lt 18 Twin 1	ally N	J.
Born	ng No. 40-2 Job No		_RLG No	·	Date 4/10/59		19
	SORING LOS		SPOON SAMPLE AND COME DATA . BLOWS ON CASIN				
				BLOWS PER FT.	DEDRY UNUNDESTURBED TETRA WEWASH READD CECON	-	59-60 60-61
DEPTH	DESCRIPTION	we	DEPTH			23	61- 62
rum to	OF MATERIAL	SAMPL	FROM - TO	CORE RECOVO.	COME RECOVED. NO. PCS.	34	62-63
		23		IECHES	Remarks *	45	63-64
بمحيم						5-6	64-65
	Black Sit	,	%	,	7.2-3-4	6-1	65 66
/		-		ļ	7.2-3-4	7-8	64 - 67
/ / *	i e	ر	5/2	1	2-3-3-4	8-9	67 68
·		ļ	//	 	2-3-3-4	910	66-64
' /	YEHON -BL.	3	10/12	ŀ	2-3-4.5	10-11	69 70
	F-M. Sano.	<u> </u>		 		11-12	70 71
/3'	1 3 4 . 3 4 . 0 .	y	15/1	ļ	3-4-7-4	12-13	71-72
,-	4-		14/	-	1 7 7	13-14	72-73
' /	Dun ME SAME	5	18/17/6.	1	23-37-105/60	14 -15	73 74
/ .	The E.C.	 	1.76	 		15-16	74 - 75
19	to- 5, 64	ŧ	[1	\$	16 17	75 76
	· · · · · · · · · · · · · · · · · · ·		 	 	·	17-18	76-77
/4/	Dreen Glavkin. Tie	ŀ	ì	1		18-19	77-78
1/11	SANDS YSHELLS.		ļ	 		19-20	7879
//96"	, , , , , , , , , , , , , , , , , , ,	1	1	1	İ	20-21	79-80
<u> </u>		-	 	 		21-22	80-81
	8013	1	1	ł		22-23	81.82
	-	-		 		23-24	82-83
	01964	1	1			24-25	83-84
******		├─		 		25-26	84-85
	1570888 W 19/1 a	}	l .	1	1	26 27	A5-96
	due to compact	┢━		 		27-28	86-87
		i	}	1	1	28 - 29	87 68
	Confinition			 		29-30	88-89
	Contining LAYER	1	1		MATERA 15	30-31	89-90
				 	77.	31-32	90.91
	i	I	1		7-BAGS SAMP.	32-33	91-92
1				1	1 779	33-34	97 43
2/	2" PUL RISEN		Ī	j	1-BUCART PALLETS.	34-35	93-94
10.	1 1 - C MOER	 		 		35 36	94-95
36"		l	[1	1-BAG CEMENT	36-37	95 96
/	A -E	f		 	1-BAG CEMIENT 1-6" PROTECTIONS PIPE.	37-38	96. 47
<i>(° /</i>	2" FUC ATTEN	•			1- 6° protecting	38-39	97- 9R
/ . :	SERGEN			 	0.32	39-40	9899
188-	- ,02 8,0		I	1	172.	40 41	99 105
				†	 	41-42	100-101
0/	CEMENT GROUTS	ł	Į	1	1	42-43	101 402
26.				 	†	43-44	107 103
		<u> </u>	L			44-45	103-101
161	BENTONITE SEA!		T	1		45 46	104-105
'6° /	ODEWIOWIE SEA!		1	ŀ	}	46 47	105 106
1.				 		97, 49	100 107
3'		Ī	}	1	1	48 49	107,108
			 	 		49 50	108 109
′ / [SAND PACK.	1	Ī	1	1		

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STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO. 2922 685.	6
APPLICATION NO.	6
COUNTY 29. 13. 8.24	
mon 29. 13. 8.24	

WELL RECORD

1,	OWNER Stavola Lealth ADDRESS	
	Owner's Well No SURFACE ELEVATION	Feet
2.	(Abgustment sea level)	
3.	DATE COMPLETED 5/2/89 DRILLER Warre George Inc.	
4.	DIAMETER: Topinches Bottominches TOTAL DEPTH	
5.	CASING: Type Diameter Inches Length	Feet
6.	SCREEN: Type Size of Opening Diameter Inches Length	Fee1
	Range in Depth { Top Feet Geologic Formation See Attacked for g	
	Tail Piece: Diameter Inches LengthFeet	
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface	
	Water rises to Feet above surface	
8,	RECORD OF TEST: Date Yield Gallons per minute	
	Static water level before pumping Feet below surface	
	Pumping level feet below surface after hours pumping	
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown	
	How pumped How measured	
	Observed effect on nearby wells	
9.	PERMANENT PUMPING EQUIPMENT:	
	Type Mfrs. Neme	
	Capacity G.P.M. How Driven H.P R.P.M	
	Depth of Pump in well Feet Depth of Footpiece in well Feet	
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches	
0.	USED FOR Gallons Daily Maximum Gallons Daily	
1.	QUALITY OF WATER Sample: Yes No	
	Taste Odor Color Temp, °F.	
2.	LOG Are samples available? (Give details on back of sheet or on separate sheet. If electric log was made, please furnish copy.)	
3.	SOURCE OF DATA Pure Land 16 9	
-•	11) 200 // 100	
	Data OBTAINED BY WILL STORY Date 5/9/89	

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

N. J. TEL. (801) 433-9797

WARREN GEORGE, INC.

FOOT OF JERSEY AVENUE P. O. BOX 413 JERSEY CITY, N.J. 07303

29,13.824 29-22685

TEST BORINGS

Proj	out Sextsuand Congs	Thre	710-7	Ti	aton Falls.				
Borı	ng Nq. w-/ Job No		_KLG NO	·	Date 5/2/3-9				19
	SORING LOS			_	LE AND CORE. DATA.		810	WS ON	CASING
			BLOWS CHORY UNUNDISTURBED TOTAL						54-60
DEPTH	OESCRIPTION		DE PTH	PER FT.	W-WASH RAROD C-	ORE 1	-2		60-61
DS TO	OF MATERIAL	23	FR04 - TO	CORE		_	٠-:		61-62
		SAMPLE	ŀ	RECOVID.	COME RECOV'S, HO. PES.				62-63
					Zonarke *	_	5		63-64
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	+ Top Soil		1.6	<u> </u>	1-6-1-1		=;		
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13'	į				1	_	-28 -29		84-87
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1	2" PUC SINKER.	1		l	1		-31		89-90
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DWR-138A 1/88

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO 2922686-4	
APPLICATION NO.	6
COUNTY	7
COORD. 29./3.8.24	

WELL RECORD

1.	OWNER Standa Polls ADDRESS
	Owner's Well No. 10.3 SURFACE ELEVATION [Above meep the level]
	LOCATION contented un Mape O. TRI. 36, funtion (A/18, 1.1.
3.	DATE COMPLETED 5/1/89 DRILLER Warnen Menge winc.
4.	DIAMETER: Topinches Bottominches TOTAL DEPTHFeet
5.	CASING: Type Diameter Inches LengthFeet
6.	SCREEN: Type Size of Opening Diameter Inches LengthFeet
	Range in Depth { Top Feet Geologic Formation Sec Attacked fog
	Tail Piece: Diameter Inches
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
8,	RECORD OF TEST: Date Yield Gallons per minute
	Static water level before pumping Feet below surface
	Pumping level feet below surface after hours pumping
	Drawdown Feet Specific Capacity Gals, per min, per ft, of drawdown
	How pumped How measured
	Observed effect on nearby wells
9.	PERMANENT PUMPING EQUIPMENT:
	Type Mfre. Name
	Capacity G,P,M. How Driven H,P R,P,M
	Depth of Pump in well Feet Depth of Footpiece in well Feet
	Depth of Air Line in well Feet Type of Meter on Pump SizeInches
0.	USED FOR Gallons Daily AMOUNT Amount Maximum Gallons Daily
1.	QUALITY OF WATER Sample: Yes No
	Taste Odor Color Temp °F.
2.	Are samples available? [Give details on back of sheet or separate sheet. If electric log was made, please furnish copy.]
3.	SOURCE OF DATA Borng 409
4.	DATA OBTAINED BY Warne Hurge clac. Date 5/9/89

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

N. Y. TEL. 267-3215

WARREN GEORGE, INC.

N. J. TEL. (201) 433-9797

FOOT OF JERSEY AVENUE P. O. BOX 413 JERSEY CITY, N.J. 07303

29.13.824

TEST BORINGS

Born	ng No <u>. 4-3</u> Job No		RIG NO	,	_ Palls N.J.		19
	SORING LOS		370	BLOWS	BLOWS ON CASING		
				SLOWS	DOORY UNUSCISTURGED TOTAL	01	59-60
CPT4	DESCRIPTION		DEPTH	PER FT.	W-WASH BARDS Cacor	t 1 -2	60-61
n TO	OF NATERIAL	45	FROM - TO	CORE		23	61-42
		135		RECOV'D.		3	62-63
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	nell	L	<u></u>	<u> </u>		34-35	93-94
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DWR-138A 1/88

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

FERMIT N	o. <u>49-229</u> 82
	ION NO
COUNTY	MONMOUTH
COORD.	29:13:859

WELL RECORD

	186 Marie 196
1.	OWNER R.M. Shoemakerla. ADDRESS SKILLER TO KITTE OF STE
	Owner's Well No. #55 SURFACE ELEVATION 90 (Above mean see level) Feet
2.	LOCATION UNITED PARCET SERVICE FACILITY 750 HOPE ROAD TIMEN FACE N
3.	DATE COMPLETED 89/07/11 DRILLER Tickwick Well
4.	DIAMETER: Top 8/2 inches Bottom 8/2 inches TOTAL DEPTH 37-0" Feet
5.	CASING: Type PVE Schoo 40 Diameter 4.00 Inches Length Dispeter
6.	SCREEN: Type Pre Schoff Size of Opening 1020 Diameter 4.0 Inches Length Feet
	Top Feet
	Range in Depth { Top Feet Geologic Formation KRB Geologic Formation KRB Geologic Formation Geologic Formation KRB Geologic Formation KRB Geologic Formation KRB Geologic Formation Geologic
	Tail Piece: DiameterInches LengthFeet
7.	WELL FLOWS NATURALLY Gallons per minute at Feet above surface
	Water rises to Feet above surface
В.	RECORD OF TEST: Date 7-11-89 Yield 10 Gallons per minute
	RECORD OF TEST: Date 7-11-89 Yield 10 Gallons per minute Static water level before pumping 91-11! Feet below surface
	·
	Pumping level feet below surface after hours pumping
	Pumping level
	Drawdown Feet Specific Capacity Gals. per min. per ft, of drawdown
9.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured
9.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells
9.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT:
9.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name
9.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Affrs, Name Capacity G.P.M. How Driven H.P R,P.M
9.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet
9.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet Depth of Footpiece in well Feet
	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G.P.M. How Driven H.P R.P.M Depth of Pump in well Feet
	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G,P.M. How Driven H,P R,P.M Depth of Pump in well Feet Depth of Footpiece in well Feet Inches Depth of Air Line in well Feet Type of Meter on Pump Size inches USED FOR MONITOR RAPOSES ONLY AMOUNT Average Gallons Daily
11.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name
11. 12.	Drawdown
11. 12. 13.	Drawdown Feet Specific Capacity Gals. per min. per ft. of drawdown How pumped How measured Observed effect on nearby wells PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

29,13,859

·· .-·.

0-37 MEDIUM & COARSE GREEN SAND

SALT Spoon Samples @5' INTERVALS.

SAMPLES HAVE BEEN RETAINED.

Derum

Soil Santes Untressed by W. David Fromtelf Dr. James Resources NIPPES PERMIT # NJ 00516.59



4-138A

STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERMIT NO. <u>29 - 23/60</u>

APPLICATION NO. _____

COUNTY ____

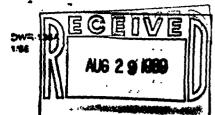
COORD. 29/13/8/9

WELL RECORD

Maximum	
Owner's Well No. 117 2 LICATION (LACE) HOPE RD + CT, 36 3. DATE COMPLETED 7.5-89 DRILLER CACADA 4. DIAMETER: Top 2' inches Bottom (0'' inches TOTAL DEPTH 5. CASING: Type PVC Size of Opening Diameter Inches 6. SCREEN: Type Feet Geologic Formation Range in Depth Bottom Feet Tail Piece: Diameter Inches Length Feet 7. WELL FLOWS NATURALLY Gallons per minute at Feet above surface 8. RECORD OF TEST: Date Yield Gallons Static water level before pumping Feet below surface after hour Drawdown Feet Specific Capacity Gals, per min, per Mow pumped How measured Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type G.P.M. How Driven H.P. Depth of Air Line in well Feet Depth of Footpiece in well Depth of Air Line in well Feet Type of Meter on Pump ID. USED FOR Maximum Sample: Yes Sample: Yes Taste Odor Color Are samples evallab G. Giver details on Lack of sheeting on moants unest. (felective log was muse, please furnish copy.)	
2. LOCATION ANTE HOSE NOT COMPLETED 25-89 DRILLER ACCORDA 3. DATE COMPLETED 25-89 DRILLER ACCORDA 4. DIAMETER: Top (9' inches Bottom (0" inches TOTAL DEPTH 5. CASING: Type DivC Diameter Accordance Inches Inches 6. SCREEN: Type PVC Size of Opening Diameter Accordance Range in Depth Bottom Feet Geologic Formation Feet Tail Piece: Diameter Inches Length Feet 7. WELL FLOWS NATURALLY Gailons per minute at Feet above surface 8. RECORD OF TEST: Date Yield Gailons Static water level before pumping Feet above surface after house Drawdown Feet Specific Capacity Gails, per min, per How pumped How measured Diserved effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mirs, Name H.P. Depth of Pump in well Feet Depth of Footpiece in well Depth of Air Line in well Feet Type of Meter on Pump Maximum Sample: Yes Sample: Yes Taste Odor Governits on Levi of America on measured Maximum Sample: Yes Taste Odor Governits on Levi of America on measured Maximum Sample: Yes Taste Odor Governits on Levi of America on measured of Governits on Levi of America on measured in the Coopy of Maximum Sample: Yes Taste Odor Governits on Levi of America on measures of America on Pump Are samples available Of Governits on Levi of America on measures of America on Pump Are samples available Of Governits on Levi of America on measures of America on Pump Are samples available Of Governits on Levi of America on measures of America on Pump Are samples available Of Governits on Levi of America on measures of America on Pump Are samples available Of Governits on Levi of America on measures of America on Pump Are samples available Of Governits on Levi of America on measures of America on Pump Are samples available Of Governits on Levi of America on Pump Are samples available Of Governits on Levi of America on Pump Are samples available Of Governity on Levi of America on Pump Are samples available Of Governity on Levi of America of America of America of America of America of America of America of America of America of America of America of	Fee
DATE COMPLETED 7.5-89 DRILLER CACADA A DIAMETER: Top 6' inches Bottom 6'' inches TOTAL DEPTH 5. CASING: Type PVC Size of Opening Diameter 1 inches 6. SCREEN: Type PVC Size of Opening Diameter 1 inches Range in Depth Bottom Feet Geologic Formation Feet Tail Piece: Diameter Inches Length Feet 7. WELL FLOWS NATURALLY Gailons per minute at Feet above surface 8. RECORD OF TEST: Date Yield Gailons Static water level before pumping Feet above surface Static water level before pumping Feet Specific Capacity Gals, per min, per How pumped How measured Diserved effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs., Name H.P., Depth of Pump in well Feet Depth of Footpiece in well Depth of Air Line in well Feet Type of Meter on Pump D. USED FOR Mountain Maximum Sample: Yes Maximum Sample: Yes Sample:	Woose week as assis
5. CASING: Type PVC Size of Opening Diameter Inches 6. SCREEN: Type PVC Size of Opening Diameter PVC Inches Range in Depth Sortom Feet Geologic Formation Feet Tail Piece: Diameter Inches Length Feet 7. WELL FLOWS NATURALLY Gallons per minute at Feet above surface 8. RECORD OF TEST: Date Yield Gallons Static water level before pumping Feet below surface after hour Drawdown Feet Specific Capacity Gals, per min, per How pumped How measured Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven H.P. Depth of Pump in well Feet Depth of Footpiece in well Depth of Air Line in well Feet Type of Meter on Pump D. USED FOR Maximum Sample: Yes Sample: Yes Taste Odor Color 7. Color Grant on Local of sheet of on moarthy sheet. If electric log was made, please fumuh capy, J. Are samples availab	Megory
5. CASING: Type PVC Size of Opening Diameter Inches 6. SCREEN: Type PVC Size of Opening Diameter PVC Inches Range in Depth Sortom Feet Geologic Formation Feet Tail Piece: Diameter Inches Length Feet 7. WELL FLOWS NATURALLY Gallons per minute at Feet above surface 8. RECORD OF TEST: Date Yield Gallons Static water level before pumping Feet below surface after hour Drawdown Feet Specific Capacity Gals, per min, per How pumped How measured Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven H.P. Depth of Pump in well Feet Depth of Footpiece in well Depth of Air Line in well Feet Type of Meter on Pump D. USED FOR Maximum Sample: Yes Sample: Yes Sample: Yes Long Gard Color Colo	1 9 60 Fee
6. SCREEN: Type Size of Opening Diameter Inches Range in Depth Bottom Feet Tail Piece: Diameter Inches Length Feet 7. WELL FLOWS NATURALLY Gallons per minute at Feet above surface 8. RECORD OF TEST: Date Yield Gallon Static water level before pumping Feet below surface after hour Drawdown Feet Specific Capacity Gals, per min, per How pumped How measured Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mirs, Name H.P. Capacity G.P.M. How Driven H.P. Depth of Air Line in well Feet Type of Metter on Pump D. USED FOR Moveton Maximum 1. QUALITY OF WATER Sample: Yes Mars and a sample; Yes Taste Odor Color Are samples available.	Length 6.6 Fee
Tail Piece: Diameter	Length 15 Fee
Water rises to	·
B. RECORD OF TEST: Date	•
B. RECORD OF TEST: Date Yield Gallot Static water level before pumping Feet below surface after hour Pumping level feet below surface after hour Drawdown Feet Specific Capacity Gals, per min, per How pumped How measured Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs. Name Capacity G.P.M. How Driven H.P. Depth of Pump in well Feet Depth of Footpiece in well Depth of Air Line in well Feet Type of Meter on Pump D. USED FOR Mountain Maximum 1. QUALITY OF WATER Sample: Yes Taste Odor Color Color Gardenia on Let of sheet of on measure sheet. If electric log was made, please furnish coopy.) Are samples evailab	e surface .
Static water level before pumping	
Pumping level	ns per minute
Drawdown Feet Specific Capacity Gals, per min, produced How pumped How measured Observed effect on nearby wells	rface
How pumped How measured Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type Mfrs, Name Capacity G.P.M. How Driven H.P. Depth of Pump in well Feet Depth of Footpiece in well Depth of Air Line in well Feet Type of Meter on Pump 0. USED FOR Moveton in G.P.M. AMOUNT Average Maximum 1. QUALITY OF WATER Sample: Yes Taste Odor Color 2. LOG Give with an Local of short of an experimenent. If electric log was made, please furnish coopy.)	rs pumping
Observed effect on nearby wells 9. PERMANENT PUMPING EQUIPMENT: Type	er ft, of drawdown
9. PERMANENT PUMPING EQUIPMENT: Type	
Type	
Capacity G.P.M. How Driven H.P Depth of Pump in well Feet Depth of Footpiece in well Depth of Air Line in well Feet Type of Meter on Pump Depth of Air Line in well Feet Type of Meter on Pump AMOUNT Average Maximum 1. QUALITY OF WATER Sample: Yes Taste Odor Color 2. LOG Are samples availab	
Depth of Pump in well Feet	
Depth of Air Line in well Feet Type of Meter on Pump D. USED FOR AMOUNT { Average Maximum 1. QUALITY OF WATER Sample: Yes Taste Odor Color 2. LOG Are samples availab Give details on Lines of sheet gir on separate sneet. If electric log was made, please (umish copy.)	R.P.M.
Depth of Air Line in well Feet Type of Meter on Pump D. USED FOR AMOUNT { Average Maximum 1. QUALITY OF WATER Sample: Yes Taste Odor Color 2. LOG Are samples availab Give details on Lines of sheet gir on separate sneet. If electric log was made, please (umish copy.)	Feet
1. QUALITY OF WATER Sample: Yes Taste Odor Color 2. LOG Are samples availab Give details on Local of sheet by on separate sneet. If electric log was made, please (umish copy.)	SizeInches
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Z. LOG	Gallons Daily
2. LOG Are samples availab	
Are samples availab Give details on Licit of sheet or on repersite sheet. If electric log was made, please furnish copy.) 3. SOURCE OF DATA On the samples availab	Temp, of,
3. SOURCE OF DATA BOT UNO 104	ole?

4. DATA OBTAINED BY Warre Heride Elice Date	4-2- 90

INOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)



STATE OF NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PERICT NO 29-23339	
APPLICATION NO.	
	•
COUNTY	

WELL RECORD

	+ 1000000000000000000000000000000000000			
1,	OWNER Tack Birnberg & ASSOC.	_ ADDRESS (2)	1 Industral !	Jan Wood
	Owner's Well No. 5 1-8	_ SURFACE EL	EVATION	ero mana asa asa//
2	LOCATION taken town IN ?			
3.	DATE COMPLETED 8-24 DR	ILLER JODC	Mather	32230
4.	DIAMETER: Top B inches Bottom	inches	TOTAL DEPTH_	20
\$.	CASING: Type	Diameter	fnehes	LangthF
	SCREEN: Type Size of Opening			
	Range in Depth { Sottom Feet	Geologic Forma		· · · · · · · · · · · · · · · · · · ·
	Tail Piece: Diameter Inches	Length	Feet	
7.	WELL FLOWS NATURALLY Gallons per minute	at	Feet above s	urface
	Water ripes to Feet above s	surface	•	
₩.	RECORD OF TEST: Date	Yield_	Gallons :	per minute
	Static water level before pumping	<u> </u>	Feet below surfe	*
	Pumping levelteet below surface af	'Wr	hours	umping
	Drewsown Feet Specific Co		Gals. per min. per	h, ef drawdown
	How pumped	How m	easured	
	Observed effect on nearby wells			
₽.	PERMANENT PUMPING SQUIPMENT:			
	Type Mirs			
	Capacity G.P.M. How Driven _		н.Р	R.P.M
	Depth of Pump in well	Depth of Footpie	ce in well	Feet
	Depth of Air Line in well Feet Type of	Meter on Pump		SizeInches
5 .	USED FOR Fost Bocing 5	AMOUNT	Average	
1.	QUALITY OF WATER		Sample: Yes	No
	Terre Odor	Color		mp ef.
2.	EDG Hach of Social Standard or on Montal phops of Succession in	Maria Maria	Are samples evallable	
) .	$\overline{}$	<i>?</i>	10man 2007J 5.C	· •
•	DATA DETAINED BY Xan F Hitzelle	/	Dațe	
-			Date	

(NOTE: Use other side of this sheet for additional information such as log of materials penetrated, analysis of the water, sketch map, sketch of special casing arrangements, etc.)

Borng PERUIT# 29-23339 1 thru 8 29.13.864 2923339 FIII material 2 8 Breen stra & saturated 101 10 sitty sAnd Colog like 18' 12 14 16 funny green 3 Amils. 18 201 201 Lunny green sand Last spoon 22 zz 4 /4 hollow stem Hugens. ZOFt. in depth grouting From Botton to top through Augers with frammy Pipe. Zo' zz' Spoon hate collaspet due to Runny SAWD.

New Jersey Department of Environmental Protection Division of Water Resources



MONITORING WELL RECORD

		Well	Permit No2	<u> 29 2</u>	3916		
		Atlas	Sheet Coord	inates <u>29</u>	: <u>13</u>	: <u>852</u>	
OWNER IDENTIFICATION - Owner	dacted - Privacy Act						
Address	100 CRESCENT COUR		00				•
City	DALLAS		State TX		Zip Code		_
WELL LOCATION - If not the same as			ner's Well No.	MU	441	_	•
County	_ Municipality	I PALLO P	} ———	_ Lot No	21 02 Bl	lock No. <u>114.01</u>	
Address							-
TYPE OF WELL (as per Well Permit Ca	ategories)		Date w	eli complete	ed 4/10	2 / % O	
Regulatory Program Requiring Well	CRA HONITORING	· · · · · · · · · · · · · · · · · · ·			990 & 8BA	_	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	6	11			587-03	'0€
WELL CONSTRUCTION	* * *	Depth to	Depth to	Diameter			
Total depth drilledft.		Top (ft.)	Bottom (ft.)	(inches)	Туре а	and Material	
Well finished toft.	l 0i	[From lar	nd surface]	114			
Borehole diameter;	Inner Casing	0	2'	4"	puc s	ch40	
Top <u>8 5/4</u> in.	Outer Casing (Not Protective Casing)	none					
Bottom <u>8 3/4</u> in.	Screen (Note slot size)	2'	9'	110	NIC.S.	140.020	
Well was finished: above grade				7	Pro Ge	190.020	
flush mounted	Tail Piece	77-316	0.0			-	
If finished above grade, casing	Gravel Pack	1'	9°		#1 Nor		
height (stick up) above land surface	Annular Seal/Grout	0	10		Cenent	JBen	
Was steel projective casing installed?	Method of Grouting	neat 1	e Men	£			
Yes No	•	·		(Cania	s of other aea	ologic logs and/or	
Static water level after drilling		GEO	PLOGIC LOG	geophy	sical logs sh	ould be attached.)	
Water level was measured using	1 -	10	-9 T	in H	l Men	Med- Fine	
·	rs at 2 gpm		Cond	70	i cei i	VIEW FINE	
Method of development			2440				
Was permanent pumping equipment in:	stalled? Li Yes Li No	·				ļ	
Pump capacitygpm							
Pump type:							
Drilling Method Augers	-4Dia Q < 7		a** ** -				
	of Rig BS7 Avlunas	 }	C. Li				
	Yes No						
_evel of Protection used on site (circle o	- <i>/</i> 71 .						
N.J. License No. MD1328	ne) None D O B A						
Name of Drilling Company MIC	HAKL KAVLUNAS						
	roforonced well in sec	ordones :::	. allall	olt popular		l applicable	
certify that I have drilled the above State rules and regulations.	•		•	int requirer	nents and al	н аррисаріе	
Maio dia regulatione.	n 11 1	<u> </u>			01	-10	
Driller's Signa	iture Michael	Marken	rul	D	ate 8 /	15/90	
_	, , , , , ,				,	<i>'</i>	

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



		Well	Permit No	_29	23917	
		Atlas	Sheet Coord	inates	29 : 13	:852
OWNER IDENTIFICATION - Owner	Redacted - Privacy Act	CP				
Address	100 CRESCIENT CO		600			
City	DALLAS		-		Zip Code	
				11.	<u> </u>	
WELL LOCATION - If not the same as	owner please give addre	ss. Owi	ner's Well No.			
County	_ Municipality	CLIAT IC	RO	_ Lot No	Blo Blo	ck No
Address					Z1.UZ	114.
TYPE OF WELL (as per Well Permit Ca	ategories)		Date w	rell complete	ed 4/10	190
Regulatory Program Requiring Well	MONITURING		Case I.	D.# ـ	8990 & 88 <u>/</u>	
		GT	7		18990 & 884	587-030
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	<u>u</u>			1 818. #	307-000
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled 13' ft.		Top (ft.)	Bottom (ft.)	(inches)		nd Material
Well finished to 13 ft.		[From lan	d surface]			
	Inner Casing	lo '	.21	411	pvc d	Chuo
Borehole diameter: Top 83/4 in.	Outer Casing				/	
Bottom 83/4 in.	(Not Protective Casing)					
	Screen (Note slot size)	a'	12'	49	Duoseh	40.020
Well was finished: above grade	Tail Piece	· · · · ·			/ <u> </u>	7
flush mounted	Tall Fiece					
if finished above grade, casing	Gravel Pack	1'	12'		# 1mo1	ۻ
height (stick up) above land	Annular Seal/Grout	O'	, ,		Canant	
surfaceft.					LOWING	-1360
Was steel protective casing installed?	Method of Grouting	Tre	mie_			
Yes No				(Copie	s of other geolo	ogic logs and/or
Static water level after drilling	ft.	GEC	LOGIC LOG	geophy	sical logs sho	uld be attached.)
Water level was measured using <u>M</u>	scope_				/`	
Well was developed forhou	rs at <u> </u>	0	-/3	Tan 1	- O/NO	sand
Method of development	1				·	į.
Was permanent pumping equipment in:	stalled? Yes No	,				
Pump capacitygpm	· • • • • • • • • • • • • • • • • • • •					1
Pump type:		}				
Orilling Method Avaers		- 1				
* ***	of Rig_B57					1
-/N ·	avionas					
		20 FC				
•	Yes No	, 13 (1)				i
evel of Protection used on site (circle o	ne) (None D C B A					:
V.J. License No. <u>MD (32-8</u>	CHARL KAVLUNAS					ł
Name of Drilling Company	CONTRACTOR INTERPRETATION OF THE PERSON OF T					
certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance with	all well perr	nit requirei	ments and all	applicable
Driller's Signa	iture 7/1/1/2	of Ka	Kurst	D	ate <u>*8//</u>	1/90
COPIES: White	& Green - DEP Canary	y - Dtiller F	ink - Owner	Goldenrod	l - Health Dept.	•

New Jersey Department of Environmental Protection Division of Water Resources



MT/YIAPT, PAVI FINAC				Permit No		
Address 100 CRESTANT COURT, STE 1600 WELL LOCATION - If not the same as owner please give address.	R	Redacted - Privacy Act	Atla	s Sheet Coord	linates2	<u> </u>
Address 100 CRESTANT COURT, STE 1600 WELL LOCATION - If not the same as owner please give address.			RP			
WELL LOCATION - If not the same as owner please give address. WELL COATION - If not the same as owner please give address. WELL COATION - If not the same as owner please give address. WELL CORD - If not the same as owner please give address. WELL CORD - If not the same as owner please give address. WELL CORD - If not not not not not not not not not not	-	7		600		
WELL LOCATION - If not the same as owner please give address. Owner's Well No		DALLAS		(COLV		Zip Code
County Municipality TINTON PALLS BO Lot No. 21.02 Block No. 114.01 Address TYPE OF WELL (as per Well Permit Categories) INTERNINS Regulatory Program Requiring Well ECPA Case I.D. # 88800 & 88A14 CONSULTING FIRM/FIELD SUPERVISOR (if applicable) WELL CONSTRUCTION Total depth drilled	oy				441	
County Municipality TINTON PALLS BO Lot No. 21.02 Block No. 114.01 Address TYPE OF WELL (as per Well Permit Categories) INTERNINS Regulatory Program Requiring Well ECPA Case I.D. # 88800 & 88A14 CONSULTING FIRM/FIELD SUPERVISOR (if applicable) WELL CONSTRUCTION Total depth drilled			ss. Ow	ner's Well No.	_MU	1.3
TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) TYPE OF WELL (as per Well Permit Categories) Type and Material Top (it.) Bottom (it.) [From land surface] Type and Material (inches) Type and Materi	County	Municipality	W PATTO	D O	_ Lot No	Block No.
Date well completed 4 109 90 Case I.D. # S8800 & S8814 Tele. # \$ \$ \$ 7.02	Address	1101	OR FALLS			21.02 114.0
Regulatory Program Requiring Well BYPA CONSULTING FIRMFIELD SUPERVISOR (if applicable) GTT Tele. # \$67089 WELL CONSTRUCTION Total depth drilled 2 ft. Well finished to 12 ft. Well finished to 12 ft. Borehole diameter Top (in.) Bottom \$3 / vin. Bottom \$5 / vin. Bottom (it.) Circum land surface (inches) Type and Material (inches) Type and				Dotou	فماسمم المد	W 100 90
WELL CONSTRUCTION Total depth drilled 12 ft. Well finished to 12 ft. Well finished to 12 ft. Borehole diameter Top (It.) Bottom (It.) [From land surface] Top 8 ft. Borehole diameter Top (Not eslot size) Top 8 ft. Borehole diameter Top (Not eslot size) Top 8 ft. Borehole diameter Top (Not eslot size) Top 8 ft. Borehole diameter Top (Not eslot size) Top 8 ft. Borehole diameter Top (Not eslot size) Top 8 ft. Borehole diameter Top (Not eslot size) Top 8 ft. Borehole diameter Top (Not eslot size) Top 8 ft. Borehole diameter Top (Not eslot size) Top 8 ft. Borehole diameter Top (Not eslot size) Top 9 ft. Bottom 12 ft. Borehole diameter Top (Not eslot size) Top 9 ft. Bottom (It.) Inner Casing (Not eslot size) Top 9 ft. Borehole diameter Top (Not eslot size) Top 9 ft. Borehole diameter Top (Not eslot size) Top 9 ft. Borehole diameter Top (Not eslot size) Top 9 ft. Borehole diameter Top (Not eslot size) Top 9 ft. Borehole diameter Top (Not eslot size) Top 9 ft. Borehole diameter Top (Not eslot size) Top 9 ft. Borehole diameter Top 9						
Total depth drilled 12 ft. Well finished to 12 ft. Borehole diameter Type and Material [From land surface] Cinches] Type and Material [From land surface] Cinches] Type and Material [From land surface] Cinches] Type and Material [From land surface] Cinches] Type and Material [From land surface] Cinches] Type and Material [From land surface] Cinches] Type and Material Cinches] Type and Surface Type an			1-4-7	Case I.	D. # ——8	8990 & 88A14
Total depth drilled 12 ft. Well finished to 12 ft. Borehole diameter Top 8 in. Bottom 8 in. Well was finished: above grade If flush mounted If finished above grade, casing height (stick up) above land surface If flush mounted If flushed above grade, casing height (stick up) above land surface If flush mounted If flushed above grade, casing height (stick up) above land surface If flush mounted If flushed above grade, casing height (stick up) above land surface If flush mounted If flushed above grade, casing height (stick up) above land surface If flush mounted If flush mounted If flush mounted If flush mounted If flush mounted If flush mounted If flush mounted If flush	CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	611			Tele. # O
Total depth drilled 12 ft. Well finished to 12 ft. Borehole diameter Top 8 in. Bottom 8 in. Well was finished: above grade If flush mounted If finished above grade, casing height (stick up) above land surface If flush mounted If flushed above grade, casing height (stick up) above land surface If flush mounted If flushed above grade, casing height (stick up) above land surface If flush mounted If flushed above grade, casing height (stick up) above land surface If flush mounted If flushed above grade, casing height (stick up) above land surface If flush mounted If flush mounted If flush mounted If flush mounted If flush mounted If flush mounted If flush mounted If flush	WELL CONSTRUCTION	•	Donth to	Denth to	L.	
Well finished to	/		-	-		Type and Material
Well finished to	·			, ,	(inches)	i ypo and material
Borehole diameter Top \$7 \in. Bottom \$7 \in. Bottom \$7 \in. Bottom \$7 \in. Well was finished: above grade If flush mounted If finished above grade, casing height (stick up) above land surface 1. Was steel protective casing installed? Was steel protective casing installed? Method of Grouting Method of Grouting Method of Grouting Method of developed for hours at 3 gpm Method of developed for hours at 3 gpm Method of developement Method of Grouting Method	Well finished toft.	Innor Casing		T .	1111	0.00 0 / 10
Bottom	Borehole diameter:	<u>-</u>	0	-	9	poc 36990
Bottom \$7/4 in. Well was finished: above grade	Top <u>8 7/4</u> in.	Outer Casing	,			' '
Well was finished: above grade If lish mounted If finished above grade, casing height (stick up) above land surface Offi. Was steel protective casing installed: Annular Seal/Grout O' Ronfanite Was steel protective casing installed: Method of Grouting Tremile Was steel protective casing installed: Method of Grouting Tremile GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.) Water level was measured using M-Suape Well was developed for hours at gpm Method of development Bailing Was permanent pumping equipment installed? Yes Tho Pump capacity gpm Pump capacity gpm Pump capacity gpm Pump prope: Drilling Method A-yells Drilling Fluid Aeae at Type of Big S57 Name of Drillier Was above referenced well in accordance with all well permit requirements and all applicable State rules and regulations. Driller's Signature Mathod Adaptive Date State rules and regulations.	Bottom <u>83/4</u> in.		- /			
If linished above grade, casing height (stick up) above land surface of the was steel protective casing installed? Was steel protective casing installed? Water level was measured using MSU PE Water level was measured usi	<u> </u>	(Note slot size)	2'	12'	4"	prosch 40.020
If finished above grade, casing height (stick up) above land surface of the street protective casing installed? Annular Seal/Grout of the state of the street protective casing installed? Method of Grouting Tremie Was steel protective casing installed? Method of Grouting Tremie Was steel protective casing installed? Method of Grouting Tremie GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.) Water level was measured using M-Supper Method of development Bailing Method of development Bailing Method of development Bailing Method Angers Drilling Fluid Dage Type of Big S57 Name of Driller Middle Method Method on site (circle one) Wone D C B A N.J. License No. Miliaz 8 Name of Drilling Company MICHARI, KAYLINAS Driller's Signature Mullim Method Metho		Tail Piece				,
Method of Grouting Method Grouting Method Gro	tiush mounted					
Was steel protective casing installed? Method of Grouting Yes No Static water level after drilling 2' ft. Water level after drilling 2' ft. Water level was measured using MSCOPE Well was developed for hours at 3 gpm Method of development Bain a gpm Was permanent pumping equipment installed? Yes No Pump capacity gpm Pump type: Drilling Method Age CS Drilling Fluid Age Safety Plan submitted? Yes No Level of Protection used on site (circle one) None D C B A N.J. License No. Mil 328 Name of Drilling Company Driller's Signature Make Make Signature Date F/22/90 Date F/22/90		Gravel Pack		עו '		41
Was steel protective casing installed? Method of Grouting Yes No Static water level after drilling 2' ft. Water level after drilling 2' ft. Water level was measured using MSCOPE Well was developed for hours at 3 gpm Method of development Bain a gpm Was permanent pumping equipment installed? Yes No Pump capacity gpm Pump type: Drilling Method Age CS Drilling Fluid Age Safety Plan submitted? Yes No Level of Protection used on site (circle one) None D C B A N.J. License No. Mil 328 Name of Drilling Company Driller's Signature Make Make Signature Date F/22/90 Date F/22/90		Annular Seal/Grout	√? [*]	,,		Pertaite
Static water level after drilling 2' ft. Water level was measured using M-Scape Well was developed for hours at 3 gpm Method of development Bailing gpm Was permanent pumping equipment installed? Yes No Pump capacity gpm Pump type: Drilling Method Angers Drilling Fluid Angers Health and Safety Plan submitted? Yes No Level of Protection used on site (circle one) None D C B A N.J. License No. MD1328 Name of Drilling Company MICHARI, KAVIJNAS Driller's Signature Driller's Signature GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.) Brown Green J Blqck Med 5, Ify Sqnd Driller's Signature Driller's Signature Date \$\begin{align*} 24,2490 Date \begin{align*} 24,2490	surfaceft.			'/		BOITANI
Static water level after drilling		Method of Grouting	TIE	Mil		
Static water level after drilling	•				(Conie	s of other geologic lags and/or
Well was developed for	Static water level after drilling	ft.	GEO	PLOGIC LOG	geophy	sical logs should be attached.)
Well was developed for	Water level was measured using M-	Suppe		A	1	2/6
Was permanent pumping equipment installed? Yes No Pump capacity gpm Pump type: Drilling Method Type of Rig S	Well was developed forhou	rs atgpm		rown	6166) f Black
Was permanent pumping equipment installed? Yes Yes Yes Pump capacitygpm Pump type:			1 1	100 <	ithe	25.15
Pump type:			' '	<i>n</i> 4 <i>5</i>	,,,,,,	3400
Pump type:		Stalled Fig. 165 Fig. 140	' l			
Drilling Method						
Drilling Fluid	•			•		
Name of Driller William Kaylund Health and Safety Plan submitted? Yes No Level of Protection used on site (circle one) None D C B A N.J. License No		- OKY	ł			1
Health and Safety Plan submitted? Level of Protection used on site (circle one) None D C B A N.J. License No		of Rig				
Level of Protection used on site (circle one) None D C B A N.J. License No		KANTUNA				
N.J. License No						1
Name of Drilling Company MICHARL KAVIJNAS I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations. Driller's Signature Mulliw Mulliw Date P/22/90	Level of Protection used on site (circle o	ne) (None) D C B A				
I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations. Driller's Signature Date F/22/90	N.J. License No		İ			ł
State rules and regulations. Driller's Signature Mulus Rules Date 8/22/90	Name of Drilling Company	ICHAKL KAYLUNAS				
State rules and regulations. Driller's Signature Mulus Rules Date 8/22/90	Loodify that I have dilled the chare	roforonood wall in see	ordanos will	ali well see	nit roguiro:	mente and all annileshia
Driller's Signature Mullul Rushund Date 8/22/90	•	Piereiereuwen ni doc		an won peri	rer reduitei	nonto anu an applicable
	outo raiso and rogulations.	\mathcal{M}	111.	// .		9/2-1-
	Oriller's Signs	ature ///////	1 MAIM	(INA)	_ , n	ate 7/22/90
COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.	Jimer a Signe			**************************************		
	COPIES: White	& Green - DEP Canary	- Dtiller I	Pink - Owner	Goldenrod	l - Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No Sheet Coord		23919 9 : 13 : 853
OWNER IDENTIFICATION - Owner	edacted - Privacy Act ARTS COE 100 CRESCENT CO		200		
Address	DALLAS	ALL, OIL I	State TX		Zip Code
WELL LOCATION - If not the same as County Address		ss. Ow	ner's Well No.	MW	4
TYPE OF WELL (as per Well Permit Ca	EVEDA		Case I.	D.#8	ed 4 / 10 / 90 8990 & 88A14
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	TL			Tele. #
WELL CONSTRUCTION Total depth drilledft.	:	Depth to Top (ft.)	Depth to Bottom (ft.) id surface]	Diameter (inches)	₩
Well finished toft.	Inner Casing	0	3,	4"	pucschyo
Borehole diameter: Top 8 3/y in. Bottom 3/y in.	Outer Casing (Not Protective Casing)				
Well was finished: above grade	Screen (Note slot size) Tail Piece	a'	12'	4"	puc sch 40.020
flush mounted	Gravel Pack	1 '	12'		#2
If finished above grade, casing height (stick up) above land	Annular Seal/Grout	6 '	11		Bentonite
surfaceft.	Method of Grouting		Mil		UNITO 1/17
Was steel protective casing installed? Yes No		1,0	7747	(Conie	s of other geologic logs and/or
Static water level after drilling	ft.	GEO	PLOGIC LOG	geophy	sical logs should be attached.
Water level was measured using	rs atgpm		rown Sand	6111	1 to live coarse
Was permanent pumping equipment in:	stalled? Yes No	,]	Suna		
Pump capacitygpm Pump type:		, ,	-12'		
Drilling Method Augers Drilling Fluid 1016 Type Name of Driller 11 What	havlunas	TS E			
Health and Safety Plan submitted? Level of Protection used on site (circle on the circle on the cir	Yes No ne) None D C'B A				
Name of Drilling Company		ــــــ			
I certify that I have drilled the above State rules and regulations. Driller's Signa	-M.I	ordance with	all well pern unat	nit require	ments and all applicable ate $8/22/90$
COPIES: White of	• & Green - DEP	- Dtiller 1	ink - Owner	Goldenrod	' ! - Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No			
F	Redacted - Privacy Act	Atla	Sheet Coord	dinates2	9 : 13	: <u>853</u> l
OWNER IDENTIFICATION - Owner_	ARIS CO	P.			·	
Address	100 CRESCRIT CO	RT.STE 1	600		- ···	
City	DALLAS		State TX	· ·	_ Zip Code	
WELL LOCATION - If not the same as	numer places also addre	Ow	ner's Well No.	MI	15	
	• •					sk Na
CountyAddress		N FALLS	30		21.02	k No. <u>114.0</u> 1
					- // 10	00
TYPE OF WELL (as per Well Permit Ca	tegories) HONITORING				ed <u>4/10</u>	
Regulatory Program Requiring Well	-		Case I	.D. # ——8	8990 & 88 41	4
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	67	+		Tele. #(587-0300
WELL CONSTRUCTION		Depth to	Depth to	Diameter	<u> </u>	
Total depth drilledft.		Top (ft.)	Bottom (ft.)	Diameter (inches)		d Material
Well finished to 12 ft.		(From lar	d surface]			
	Inner Casing	o'	2'	411	pros	ch40
Borehole diameter: Top	Outer Casing	<u> </u>				
Bottom <u>83/u</u> in.	(Not Protective Casing) Screen				ļ,	
' / - 1	(Note slot size)	2'	12'	411	pucsch	40.020
Well was finished: above grade flush mounted	Tail Piece					
	Gravel Pack	1,	436		1/ /	
If finished above grade, casing height (stick up) above land	Glaver ack	 	12'		#/	
surfaceft.	Annular Seal/Grout	0'	1"		Benton	FP
Was steel projective casing installed?	Method of Grouting	Trei	nie			}
Yes No		• •	<u> </u>	(0		
Static water level after drilling ?	ft.	GEO	PLOGIC LOG	geophy	s of other geolog sical logs shou	gic logs and/or ld be attached.)
Water level was measured using	-Scope		CAAA		e med	
	rs at <u>3</u> gpm	- I	,	FOUVE	, husa	34119
Method of development	ling	0	-12'			
Was permanent pumping equipment ins	stalled? Yes No					
Pump capacitygpm						
Pump type:						
Drilling Method Augers	_ , , , , ,					
	of Rig <u>B</u> 57					ļ
	Whas		06. 12			
	Yes No		٠, .			ì
Level of Protection used on site (circle of	None D C B A	[
N.J. License No. MD1328	CHARL KAVLUNAS					
Name of Drilling Company	CHICISCI MINICALES					
certify that I have drilled the above-	referenced well in acc	ordance with	all well per	mit requirer	ments and all a	pplicable
State rules and regulations.	, 10	1 1	-		,	/
Dallianta Office	M Kalt	Varley .	a1	_	8/2	12/90
Driller's Signa	ture hil viving	LAW WILL	all	0	ate 0/	
COPIES: White A	Green - DEP Canary	. Driller F	ink - Owner	Goldenrod	. Health Dent	1

New Jersey Department of Environmental Protection Division of Water Resources



		Well	Permit No	<u> 29</u>	23921	
Re	edacted - Privacy Act	Atlas	Sheet Coord	linates	<u> 29 : 13 </u>	: <u>853</u>
OWNER IDENTIFICATION - OwnerAddress	MRIS CO	RP. URT,STK 1	500			
	HALLAS		State TX		7in Cada	
City	-			A A	_ Zip Code	
WELL LOCATION - If not the same as County	. •		er's Well No.		21.02 Bloc	ж No.
Address					21.02	114.01
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	ategories MONITORING MCRA				8990 & 88A	
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	67				587-0300
		,		<u></u>	1	
WELL CONSTRUCTION Total depth drilled /2 / ft.			Depth to Bottom (ft.) d surface]	Diameter (inches)		d Material
Well finished toft.	Inner Casing	0'	2′	4"	PUC S	1610
Borehole diameter: Topiin.	Outer Casing (Not Protective Casing)				7	77.5
Bottom 83/4 in.	Screen (Note slot size)	a'	12'	4"	puc st	40.020
Well was finished:above gradeflush mounted	Tail Piece			4		
If finished above grade, casing	Gravel Pack		12'		#1	
height (stick up) above land surfaceft.	Annular Seal/Grout	o'	1'		Benton	rite'
Was steel protective casing installed?	Method of Grouting	10	remit			
Yes V No Static water level after drilling 4	ft.	GEC	LOGIC LOG	(Copie	s of other geological	gic logs and/or ild be attached.)
Water level was measured using			75			
Well was developed for/hou	rs at gpm	Ð	noe 2	1310	own N	redsand
Method of development	ed			0-	12	
Was permanent pumping equipment in				\mathcal{O}	, ~	
Pump capacitygpm						
Pump type:		ĺ				
Drilling Method Aug ers						
	of Rig , BS7					
Name of Driller Michael	/ Avlunas					
	Yes No					
Level of Protection used on site (circle o	ne) None D C'B A	6.5	. List.			<u>}</u>
A4 20 m	HARL KAVLUNAS					
Name of Drilling Company 37	MARL KAVLUNAS					
I certify that I have drilled the above State rules and regulations. Driller's Signa	11	ordance with	ali well peri	<i>~</i>	ments and all a rate $\frac{8}{3}$	applicable
COPIES: White of	& Green - DEP Canary	- Dtiller P	ink - Owner	Goldenrod	i - Health Dept.	/

New Jersey Department of Environmental Protection Division of Water Resources



				inates 2	<u> </u>
NER IDENTIFICATION - Ow	Redacted - Privacy Act			 -	
ress	100 CERSCIENT CO		.600	· -	
	DALLAS			<u> </u>	Zip Code
					<u> </u>
	me as owner please give addre				
	Municipality TINI	ON FALLS	B0	_ Lot No	21.02 Block No. 11
ress					
PE OF WELL (as per Well Per	mit Categories)		Date v	ell completed	4,11,90
	/ell <u>RCRA</u>		Case I.	D. #8	990 & 88A14 —
NSULTING FIRM/FIELD SUF	ERVISOR (if applicable)	GT	\mathcal{I}		Tele. # 587-0
LL CONSTRUCTION		<u> </u>		1 ** · · · · · 	
~ /		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	Type and Material
al depth drilled	π.		d surface]	(inches)	Aba ana Matelial
I finished toft.	Inner Casing]		· · · · · · · · · · · · · · · · · · ·
ehole diameter:				 	
Top <u>4"</u> in. tom <u>4"</u> in.	Outer Casing (Not Protective Casing)				
tom <u>4</u> in.	Screen (Note slot size)				
l was finished: 🔲 above gra	de				
flush mou	nted Tail Piece				
ished above grade, casing	Gravel Pack				
ht (stick up) above land	Annular Seal/Grout				
aceft.					
s steel protective casing inst	alled? Method of Grouting				
Yes No		054	N 0010 I 00	(Copies	of other geologic logs and/o
ic water level after drilling			LOGIC LOG		of other geologic logs and/o ical logs should be attached
er level was measured using		L	ight B	rown.	silty sand
was developed for			-21	_	,
nod of development		<i>0</i> -	. שי		
permanent pumping equipm	ent installed? 🔲 Yes 🔛 No	,			
p capacitygpm		j			
ıp type:					
	965	1			
ng Fluid	Type of Rig				•
ne of Driller Micha		02° E 201			
		fic c 86.4			
th and Safety Plan submitted		i			
. A A .	ircle one) None D C B A				
License No. M0132					
e of Drilling Company	HICHARD MALLUMAS	ـ			
e of Drilling Company tify that I have drilled the a e rules and regulations.	Above-referenced well in acc	ordance with	n all well perr	nit ro	equirem Dat
COPIES:	White & Green - DEP Canary	y - Driller 🛮 F	ink - Owner		Goldenrod -

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No.		
R	edacted - Privacy Act	Atlas	Sheet Coord	inates Z	9 : 13 : 852
OWNER IDENTIFICATION - Owner	ARTS CO				
Address	100 CRESCENT COL	RT,STE 10	300		
City	DALLAS		State TX		Zip Code
WELL LOCATION - If not the same as	_ Municipality TINT C	ss. Owi N FALLS I	ner's Well No.	SB	-B
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	ategories BORING		Case II	D #	d 4/12/90
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	671			_ Tele. #_ <i>587-0300</i>
WELL CONSTRUCTION Total depth drilledft.	j	Depth to Top (ft.)		Diameter (inches)	
Well finished toft.	Inner Casing				
Borehole diameter: Topin.	Outer Casing (Not Protective Casing)				
Bottomin.	Screen (Note slot size)				
Well was finished: above grade flush mounted	Tail Piece				
If finished above grade, casing	Gravel Pack				
height (stick up) above land surfaceft.	Annular Seal/Grout				•
Was steel protective casing installed?	Method of Grouting				
Static water level after drilling	ft.	GEO	LOGIC LOG	(Copies geophy	of other geologic logs and/or sical logs should be attached.)
Water level was measured using			5000	-11.	sand w-peblo
Well was developed forhou		ا ا	(eer)	3/119	39010 W-71 410
Method of development		0	-2	·	
Was permanent pumping equipment in	stalled? Yes No	·			
Pump capacitygpm		ľ			i
Pump type:		j			}
Name of Driller Mukau M	of Rigg Lawlinas	OS E	6 í		
Health and Safety Plan submitted? Level of Protection used on site (circle of N.J. License No	Yes No one) (None) D C B A				
Name of Drilling Company					
I certify that I have drilled the above State rules and regulations. Driller's Signa	1.0	ordance with	all well pern	•	nents and all applicable ate $\frac{7/3//90}{}$
COPIES: White	& Green - DEP Canary	- Driller F	ink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



		Well	Permit No	29 2 20 20	23924 7 . 13	. 852
Re	dacted - Privacy Act		Sheet Coord	linates	:	:
OWNER IDENTIFICATION - OwnerAddress	VRIS COR	₽.				
Address	100 CERSCENT COU	RT,STK 16	300 310			
OWNER IDENTIFICATION - Owner Address City	DELLES		State	 	Zip Code	
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	.580		
County						k No. 114 M
Address		er remed r			41.100 -	
TYPE OF WELL (as per Well Permit Ca	atogorico)		Date	vall complete	ed 4 ///	190
Regulatory Program Requiring Well					3990 & 88A1	
CONSULTING FIRM/FIELD SUPERVI	COD (4 anallaghla)	077	- 0000 /			87-0300
CONSULTING FIRM/FIELD SUPERVI	SOR (it applicable)	0/	<u> </u>		1 818. #	070300
WELL CONSTRUCTION Total depth drilledft.		Depth to	Depth to	Diameter		
Total depth drilled 2.5" ft.		Top (ft.)	Bottom (ft.)	(inches)	Type and	d Material
Well finished to ft.		[From lan	d surface]			
Borehole diameter:	Inner Casing					
Topin.	Outer Casing					
Top $\underline{\underline{\psi}''}$ in. Bottom $\underline{\underline{\psi}''}$ in.	(Not Protective Casing) Screen					
Well was finished: above grade	(Note slot size)	<u></u>	<u> </u>			
flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack					
height (stick up) above land surfaceft.	Annular Seal/Grout					
Was steel protective casing installed?	Method of Grouting					
Yes No	· · · · · · · · · · · · · · · · · · ·				- · · · · · · · · · · · · · · · · · · ·	
Static water level after drilling	ft.	GEO	DLOGIC LOG	(Copie:	s of other geolo /sical logs shou	gic logs and/or ld be attached.)
Water level was measured using	. <u> </u>		0111			
Well was developed forhou			POBLE	st D	rown r	red
Method of development		'	5, Hy	591	rown i	
Was permanent pumping equipment in	stalled? Yes No) I			,	
Pump capacitygpm		0.	-265	-11		İ
Pump type:						
Drilling Method HAnd Avge	7					
	of Rig	- 1				i
Name of Driller Michael	Avlungs		أأعم عموم			
Health and Safety Plan submitted?	Yes No		神教 多			
Level of Protection used on site (circle of	— — — ·	1				
N.J. License No. MD 1328	Ino, (None D O D A	- 1				
, -	ICHAEL KAVLUNAS					į
Name of Drilling Company				 .		
I certify that I have drilled the above State rules and regulations. Driller's Signa	1:11	erdance with	all well peri		ments and all a	applicable
-		y - Dtiller I	ink - Owner	Goldenrod	l - Health Dept.	/

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No			
6 .	idented Privings Act	Atlas	Sheet Coord	inates <u>29</u>	: <u>13</u>	:_853
	dacted - Privacy Act ARTS_COR	P				
Address	100 CRESCIONT COU	RF.STR 16	00			
OWNER IDENTIFICATION - Owner Address City	DALLAS		State TX		Zip Code _	
WELL LOCATION - If not the same as	nwaer alease sive addre	see Owi	nore Well No	S R.	Δ	
County	Municipality	. OW	101 3 11011 110.	Lot No.	Blo	ck No
Address	TINIO	V FALLS B)		1.02	114.01
			Data	- د د احد د الد	4/1/	·90
TYPE OF WELL (as per Well Permit Co	BORING					
Regulatory Program Requiring Well		174	Case I.	D. # — 889	90 & 88A1	4
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	GJL			_ Tele. #	30/-0300
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled 25" ft.		Top (ft.)	Bottom (ft.)		Type at	nd Material
Well finished to ft.		[From lan	d surface]			
	Inner Casing			<u> </u>		
Borehole diameter: Topin.	Outer Casing (Not Protective Casing)					
Bottomin.	Screen	<u> </u>	<u> </u>	 		
Well was finished: above grade	(Note slot size)					
flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack					
height (stick up) above land surfaceft.	Annular Seal/Grout					
Was steel protective casing installed?	Method of Grouting					
Yes No	<u> </u>			(Carles		
Static water level after drilling	ft.	GEO	PLOGIC LOG	geophy:	or other geom sical logs sho	ogic logs and/or uld be attached.)
Water level was measured using			20	Mad	مور سر	S and
Well was developed forhou		1		i	Pine	3 4000
Method of development		0) - J,3			
Was permanent pumping equipment in	stalled? Yes No	, .				
Pump capacitygpm						
Pump type:	 _					:
Drilling Method Hand Auge		ĺ				1
Drilling Fluid Type	of Rig					
Name of Driller Wichael	KAVlungs	13°E	£ - 14			
Health and Safety Plan submitted?	Yes No					i
Level of Protection used on site (circle of						1
N.J. License No		İ				
MT	CHARL KAVLUNAS					ì
Name of Drilling Company			·7			
certify that I have drilled the above	-referenced well in acc	ordance with	all well perr	mit requirem	nents and all	applicable
State rules and regulations.	. //	1-1	1		,	,
Driller's Signa	atura William	TANK	unal_	Da	te 7/2/	190
Dillier a Signa	Televina	- WO	- 1404		-/-//	
CODIES White	& Green - DEP Congr	. Deiller 1	ink . Oumer	Goldenrod	. Health Dent	

New Jersey Department of Environmental Protection Division of Water Resources



			il Permit No			Г
				dinates <u>2</u>	<u> </u>	<u> 13</u> [_
OWNER IDENTIFICATION - Owner	dacted - Privacy Act ARTS CO	RP				
Address	100 CRESCENT CO	URT, STE	1600			
City	DALLAS		State T	T	Zip Code	
					_	
WELL LOCATION - If not the same as	owner please give addre	ss. Ov	vner's Well No	-SB2		
County	Municipality	ON FALLS	BO	_ Lot No	21.02 Block No	114.01
Address						
TYPE OF WELL (as per Well Permit Ca	ategories)				4,12,9	
Regulatory Program Requiring Well			Case I	.D. # 88	990 & 88A14	-
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	GI			_ Tele. # S d	7-03 e
				<u> </u>		
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Dlameter (inches)	Type and Mate	rial
			ind surface]	(1101165)		
Well finished toft.	Inner Casing					
Borehole diameter:	Outer Casing			 		
Topin.	(Not Protective Casing)				<u> </u>	
Bottomin.	Screen (Note slot size)		ł			
Well was finished: above grade	Tail Piece					_
Li flush mounted			 	 		
f finished above grade, casing	Gravel Pack		ļ			
height (stick up) above land surfaceft.	Annular Seal/Grout					
	Method of Grouting		^	·		
Was steel protective casing installed? ☐ Yes ☐ No						
Static water level after drilling	4	GE	OLOGIC LO	(Copies	of other geologic logs ical logs should be a	and/or
Water level was measured using				geopilya		
Well was developed forhou		['	Light	Brown	n siltys	900
Method of development			· 11	رسد	,	
Was permanent pumping equipment in		. (1) - 2 :	5 '		
Pump capacitygpm	163 C 16					İ
Pump type:						
Orilling Method Hand Aug &	00	ľ				
	of Rig					İ
Name of Driller Michael	KAVlungs					
lealth and Safety Plan submitted?	Yes I No	{	30 F			
evel of Protection used on site (circle o						
I.J. License No	no, money of the A	1				
MI	CHARL KAVLUNAS					
Name of Drilling Company						
certify that I have drilled the above	referenced well in acc	ordance wi	th all well per	mit requirem	ents and all applica	ble
State rules and regulations.	.1. 1	ρ	1 1		, ,	
	-M. V.	1/7	La. 11.	. / -	7/21/9	0
Driller's Signa	iture / flunde	p 10	aveun	of Da	le <u>//-//</u>	
COPIES: White of	& Green - DEP Canary	- Driller	Pink - Owner	Goldenrod -	Health Dept.	

New Jersey Department of Environmental Protection Division of Water Resources



OWNER IDENTIFICATION - Owner Address 100 CRESCENT COURT, STE 1800 DATUAS State TX Zip Code WELL LOCATION - If not the same as owner please give address. Owner's Well No			Well Atlas	Permit No Sheet Coord	linates 29	: 13 : 853
WELL LOCATION - If not the same as owner please give address. Owner's Well No	OWNER IDENTIFICATION - Owner	edacted - Privacy Act IRTS COR		00		
WELL LOCATION - If not the same as owner please give address. Owner's Well No	Address	DALLAS	MI,DID IC			Zin Code
Date well completed # 1/2_90 Regulatory Program Requiring Well RCPA Case I.D. # 88900 & 88814 CONSULTING FIRM/FIELD SUPERVISOR (if applicable). WELL CONSTRUCTION Total depth drilled # ft. Well finished toft. Borehole diameter: Topin. Bottomin. Bottomin. Well was finished:	WELL LOCATION - If not the same as	owner please give addre		ner's Well No.	5B-F	
Regulatory Program Requiring Well RTBA CONSULTING FIRMFIELD SUPERVISOR (if applicable) WELL CONSTRUCTION Total depth drilled				Date	معمالي	4 12 90
Tele. # 5870 Depth to Depth to Depth to Depth to Top (ft.) Diameter (inches) Type and Material						
Depth to Depth to Depth to Depth to Top (it.) Government Top (it.) From land surface] Type and Material Ty			77			
Top diliches of the source of	CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	6/	<i></i>		_ Tele. #_ 3 8 7 703
Well finished toft. Inner Casing Outer Casing			Top (ft.)	Bottom (ft.)		Type and Material
Outer Casing Topin. Bottomin. Well was finished: above grade flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted	Well finished toft.	Inner Cooling		id sunace)		
Bottomin. Nell was finished:		Outer Casing				
If finished above grade, casing leight (stick up) above land surface ft. Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Wethod of Grouting GEOLOGIC LOG GCopies of other geologic logs and geophysical logs should be attach Water level was measured using gpm Well was developed for hours at gpm Well was developed for hours at gpm Well was developed for phours at gpm Was permanent pumping equipment installed? Yes No Pump capacity gpm Ump type: Willing Fluid Type of Rig Jame of Driller Michael Kavung [Jeath and Safety Plan submitted? Yes No Bevel of Protection used on site (circle one) None D C B A J. License No. Mil 338 MICHARI, KAVIJNAS Certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable tate rules and regulations.		Screen	·			
Annular Seal/Grout Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was steel protective casing installed? Was measured using Was developed for hours at gpm Was developed for hours at gpm Was permanent pumping equipment installed? Yes No ump capacity gpm ump type: Was permanent pumping equipment installed? Yes No ump capacity yes Should be attach Was permanent pumping equipment installed? Yes No ump capacity yes Should be attach Was permanent pumping equipment installed? Yes No ump capacity yes No was permanent pumping equipment installed? Yes No was permanent pumping equipment installed? Yes No was permanent pumping equipment installed? Yes No was permanent pumping equipment installed? Yes No was permanent pumping equipment installed? Yes No was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equipment installed? Yes No Was permanent pumping equip		Tail Piece				_
was steel protective casing installed? Method of Grouting Yes No No No No No No No N	If finished above grade, casing height (stick up) above land	Gravel Pack				
Was steel protective casing installed? Method of Grouting Yes No Notatic water level after drilling ft. Water level was measured using ft. Water level was measured using gpm Method of development get hours at gpm Method of development gpm Was permanent pumping equipment installed? Yes No To permanent pumping equipment installed? Yes No		Annular Seal/Grout				
Static water level after drillingft. Vater level was measured using	Vas steel protective casing installed?	Method of Grouting		· · · · · ·		
Vell was developed for	_ 	ft.	GEO	DLOGIC LOG	l acceby	ciaal lage chauld ha attachad
Nas permanent pumping equipment installed? Yes No Pump capacitygpm Pump type: Drilling Method	Vater level was measured using			1/	2	c 1/140 d
Vas permanent pumping equipment installed? Yes No Pump type: Drilling Method Hand Auger Drilling Fluid Type of Rig Driller Michael Kaylung Dreath and Safety Plan submitted? Yes No Evel of Protection used on site (circle one) None D C B A Drilling Company MICHAEL KAYLUNAS Drilling Company MICHAEL KAYLUNAS Drilling Company MICHAEL Cardinal Drilling Company Type Type Drilling Company Type Type Drilling Company Type Drilli			2	19nF B	rown	81/74 2019
Vas permanent pumping equipment installed? Yes No rump capacitygpm rump type: prilling Method	fethod of development		6	1-21		•
Pump type:				<i>-</i>		
Pump type:						
Orilling Method						
Prilling Fluid Type of Rig Clearly Charles						
lealth and Safety Plan submitted?	· · · · /		 			
lealth and Safety Plan submitted? Yes No evel of Protection used on site (circle one) None D C B A I.J. License No				86. E 21	31 23	
evel of Protection used on site (circle one) None D C B A I.J. License No						
I.J. License No	·	,	İ			
certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable state rules and regulations.	1.J. License No. 1001328	•				
certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable state rules and regulations.	MT	CHARL KAVLUNAS				
Driller's Signature Muhael Rawluna Date 7/31/90	certify that I have drilled the above	e-referenced well in acc	ordance with	all well perr	mit requiren	nents and all applicable
	Driller's Signa	ature Mukao	Kart	unas_	Da	te 7/31/90
COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.	CODIEC. White	& Green - DEP Comm	. Deillan 1	Pink - Owner	Coldannod	- Health Dent

New Jersey Department of Environmental Protection Division of Water Resources



		Well	Permit No		23928	
Rec	dacted - Privacy Act	Atlas	Sheet Coord	inates 2	:_13	: 853
OWNER IDENTIFICATION - Owner _	'ARTS COR		·····			
Address	100 CRESCENT COU	RT,STE 16	00			
City	DALLAS		StateTX		Zip Code	
WELL LOCATION - If not the same as	owner please give addre	ee Owi	ar'e Wall Na	50	6	
County						k No
Address		N FALLS E	0		21.02	——————————————————————————————————————
					. 11 .11	.00
TYPE OF WELL (as per Well Permit Ca				•	d <u>4 1//</u>	
Regulatory Program Requiring Well	KURA	2-			990 & 88A1	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	6	II		Tele. #	587-03
WELL CONSTRUCTION		Depth to	Depth to	Diameter		······································
Total depth drilled 2'ft.		Top (ft.)	Bottom (ft.)	Diameter (inches)		! Material
·			d surface]	(11101163)		
Well finished toft.	Inner Casing					
Borehole diameter; Topin.	Outer Casing	· · · · · · · · · · · · · · · · · · ·				
·	(Not Protective Casing)					
Bottomin.	Screen (Note slot size)					
Well was finished: above grade						
flush mounted	Tail Piece			ļ. —		
If finished above grade, casing	Gravel Pack					
height (stick up) above land	Annular Seal/Grout					
surfaceft.	Method of Grouting					
Was steel protective casing installed? Yes No					·	
Static water level after drilling	4	GEO	LOGIC LOG	(Copies	s of other geolog sical logs shoul	jic logs and/or
Water level was measured using		0				
Well was developed forhou		131	DUN	Inves	to Med	Jano.
Method of development		\cap	-2'			1
			<i>V</i> .			
Was permanent pumping equipment in	stalled? L Yes L No	'				
Pump capacitygpm						
Pump type:		م ا	18 e ·			
Drilling Method Hand Huge		y y	3.8			
Orilling Fluid Type	of Rig					
Name of Driller	AVIVAGS	f				
leaith and Safety Plan submitted?	Yes U No	į				=
evel of Protection used on site (circle o	ne) (None D C B A	j				
N.J. License No. <u>M01328</u>						
Name of Drilling Company	CHARL KAVLUNAS					
certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance with	all well peri	mit requirer	nents and all a	pplicable
_	-m -// /	1-1.1	1		フラ	1/an
Driller's Signa	ature Mukeef	MULL	may-	D	ate // S.	1/10
COPIES: White	& Green - DEP Canary	- Driller F	ink - Owner	Goldenrod	- Health Dept.	<i>'</i>

New Jersey Department of Environmental Protection Division of Water Resources

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		Weil Atlas	Permit No Sheet Coord	inates 29	· 13 · 853
OWNED IDENTIFICATION - Owner	dacted - Privacy Act		3		
	100 CRESCIONT COU		00		· · · · · · · · · · · · · · · · · · ·
City	DALLAS			·	Zip Code
WELL LOCATION - If not the same as	owner please give addre	ess. Owr	er's Well No.	<u>ು ಅ</u>	<u> </u>
County		N PALLS D)	_ Lot No	21:02 Block No. 114.
Address					
TYPE OF WELL (as per Well Permit C	ategorie DRTNC		Date w	ell complete	d <u>4 1/2 190</u>
Regulatory Program Requiring Well			Case I.	D.# <u>88</u> 9	390 & 88A14
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	GT.	<u> </u>		_ Tele. #_ <i>58 7-03</i>
WELL CONSTRUCTION		Donah do	Danih ia	L	
Total depth drilled 2 ft.		Depth to Top (ft.)	Depth to Bottom(ft.)	Diameter (inches)	Type and Material
			d surface]	(IIICHUS)	
Well finished toft.	Inner Casing				
Borehole diameter:	Outer Casing				
Top <u>4</u> in.	(Not Protective Casing)				
Bottomin.	Screen (Note slot size)				
Vell was finished: above grade	Tail Piece				
flush mounted					
f finished above grade, casing neight (stick up) above land	Gravel Pack				
surfaceft.	Annular Seal/Grout				
Nas steel protective casing installed?	Method of Grouting				
Static water level after drilling	#	GEC	LOGIC LOG	(Copies	of other geologic logs and/or sical logs should be attached
Nater level was measured using					
Vell was developed forhou		1 8	rown ,	- Black	e med sand
Method of development		0	-2'		
Vas permanent pumping equipment in		,	_		
ump capacitygpm					
ump type:					
Orilling Method Hand Aug	er]			
Orilling Fluid Type	of Rig				
lame of Driller ///ichae/	KAVIVNOS	02° E 0	a#		
lealth and Safety Plan submitted?	Yes No	UE E D	₹ <u>Š</u>		
evel of Protection used on site (circle of	one) (None) D C B A				
I.J. License No. <u>MD 1328</u>	CHAFIL KAVLUNAS				
lame of Drilling Company	CHEST VELLICIAN	ــــــ			
certify that I have drilled the above state rules and regulations.	referenced well in acc	ordance with	all well perr	nit requiren	nents and all applicable
Driller's Signa	ature Mukas	Karte	inas	Da	ate 7/31/90
COPIES: White	& Green - DEP Canary	ı - Dtiller 🛮 F	ink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources

6

			I Permit No s Sheet Coord		<u>23930 </u>	
OWNER IDENTIFICATION - Owner	dacted - Privacy Act					
Address			500			
Address	DALLAS		State TX		Zip Code	
WELL LOCATION - If not the same as County	_ Municipality		ner's Well No.	58	I	
			Dete	بادا مصحماله	4 4 12 90	
TYPE OF WELL (as per Well Permit Ca	BORING BORING				ed 4 1/2 190	
Regulatory Program Requiring Well	KCRA.	400	Case I.		990 & 88A14	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	GI	<u></u>		Tele. # <i>587-0</i>	<u> 32</u>
WELL CONSTRUCTION	·	Depth to	Depth to	Diameter		
Total depth drilledft.		T // // // -			Towns and Mileteritat	
Well finished toft.	Inner Casing					
Borehole diameter: Topin.	Outer Casing					\neg
Bottomin.	(Not Protective Casing) Screen		 			\dashv
Well was finished: above grade	(Note slot size)	 	<u> </u>			_
I flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack					
height (stick up) above land surfaceft.	Annular Seal/Grout				<u> </u>	
Was steel protective casing installed?	Method of Grouting			•		
Yes No		-		(Conie	s of other geologic logs and/	 /or
Static water level after drilling		GE	OLOGIC LOG	geophy	s of other geologic logs and/ ysical logs should be attach	ed.)
Water level was measured using		1,	610	Aur in	med sand	
Well was developed forhou	ırs atgpm	4	14 111 131	JU 21	med soncy	
Method of development			0-2.			ı
Was permanent pumping equipment in	stalled? 🔲 Yes 🔲 No	,				
oump capacitygpm		j				ļ
Pump type:						- 1
Orilling Method		ŀ				Ì
Orilling Fluid	of Rig	n	E 82			1
Name of Driller Wulley	KAVlungs	יט	, 6 G.M			
lealth and Safety Plan submitted?	☐ Yes ☐ No	i				ł
evel of Protection used on site (circle o	one) None D C B A					
N.J. License No. <u>//////328</u>		+11.				
Name of Drilling Company	CHARL KAVLUNAS &	/ /Orla				
certify that I have drilled the above State rules and regulations.	e-referenced well in acc	ordance wit	h all well peri	mit require	ments and all applicable	
Driller's Signa	ature Muhay	Karl	unas	D	ate 7/3//90	_
COPIES: White	& Green - DEP Canary	y - Dfiller	Pink - Owner	Goldenroa	l - Health Dept.	

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No Sheet Coord		23931 9 : 13 : 8	53
OWNER IDENTIFICATION - Owner _	Redacted - Privacy Act	RP.				
Address	100 CRESCENT CO	ORT, STE 1	600			
City	DALLAS				Zip Code	
WELL LOCATION - If not the same as	Municipality	oss. Owr	ner's Well No. BO	<u>SB</u> Lot No	21.02 Block No.	114.01
Address					11 15 0	
TYPE OF WELL (as per Well Permit Ca	ategories)				d 4/2/90	<u>)</u>
Regulatory Program Requiring Well	RCRA		Case I.	D. # 8 :	8990 & 88A14	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	67	T_		Tele. # <i>58</i>	7-0300
WELL CONSTRUCTION		Don'th to	Donalh do			
Total depth drilled 2' ft.			Depth to Bottom (ft.) d surface]	Dlameter (inches)	Type and Mat	erial
Well finished toft.	Inner Casing					
Borehole diameter: Topin.	Outer Casing (Not Protective Casing)					
Bottomin.	Screen					
Well was finished: above grade	(Note slot size)	<u> </u>				·
flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack					
height (stick up) above land	Annular Seal/Grout					
surfaceft.	Method of Grouting			<u> </u>		_
Was steel protective casing installed? Yes No	Metriod of Grouning					
	4	GEC	LOGIC LOG	(Copies	s of other geologic log	s and/or
Static water level after drilling Water level was measured using				UGUDIII	sical logs should be	attached.)
Well was developed forhou			ight 1	Rowi	n silty sai	7 \$
Method of development			19.77	J, CC	' /	- 1
Was permanent pumping equipment in		o	-2'			
Pump capacitygpm		'				
Pump type:		}				}
Drilling Method Hand Ava						1
· ——	of Rig					
Name of Driller Michael K	Avlunas	001				İ
<u> </u>	Yes No	100 1 100	Į.			Ì
Level of Protection used on site (circle of	one) (None D C'B A					
N.J. License No. MO1328						
Name of Drilling Company	ICHARL KAVLUNAS					
I certify that I have drilled the above State rules and regulations. Driller's Signa	ature Muhae	Phav	l all well perr	mit requiren	nents and all applicate $\frac{7/3}{4}$	able , <u>O</u>
COPIES: White	& Green - DEP Canary	y - Driller P	ink - Owner	Goldenrod	- Health Dept.	

New Jersey Department of Environmental Protection Division of Water Resources



		Well	Permit No	<u>29</u>	23932			
Rec	dacted - Privacy Act	Atlas	Sheet Coord	linates <u>2</u>	9 : 13	:_853		
OWNER IDENTIFICATION - Owner								
Address	100 CRESCIONT COL	RT,STE 10				<u> </u>		
City	DALLAS		State		_ Zip Code			
WELL LOOKTION IS and the company			aaria Marii Ma	SR	-			
WELL LOCATION - If not the same as	owner please give addre	iss. Owi	ners well No.			l- 81-		
County	_ Municipality	N PALLS 1	30	_ LOT NO	21.02 Boo	K NO. 114.		
Address			···········	· ·				
TYPE OF WELL (as per Well Permit Ca	tegories hon TNG				ed <u>4 / //</u>			
Regulatory Program Requiring Well	ICRA		Case I.	D.#8	8990 & 88A1	4		
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	GTI			Tele. # _	587-030		
WELL CONSTRUCTION			Danish to	1		_		
Total depth drilled 2.5 ft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter		d Material		
			id surface]	(inches)	1,750 0			
Well finished to ft.	Inner Casing							
Borehole diameter:		<u> </u>						
Top <u>4 7</u> in.	Outer Casing (Not Protective Casing)	ļ						
Bottomin.	Screen (Note slot size)				1			
Well was finished: above grade						_		
Ilush mounted	Tail Piece					<u></u>		
f finished above grade, casing	Gravel Pack							
height (stick up) above land	Annular Seal/Grout							
surfaceft.			L	<u> </u>	<u> </u>			
Was steel protective casing installed?	Method of Grouting		.,-			·		
Yes No		GEO	DLOGIC LOG	(Copie	s of other geologysical logs shou	gic logs and/or		
Static water level after drilling								
Nater level was measured using			Brown	Fine	silly s	and		
Well was developed forhou			_ 0-2:5"					
Method of development		1	7-21.3	>				
Was permanent pumping equipment in	stalled? L Yes L No	·						
Pump capacitygpm								
Pump type:	·	1						
Drilling Method Hand Huge								
rilling Fluid Type of Rig ame of DrillerM, &hae (KAVUAS			02° E 20%					
Name of Driller <u>M, とんなと</u> Health and Safety Plan submitted?		V6 % 4.7.						
evel of Protection used on site (circle o	」Yes	- 1						
N.J. License No.	ile) Noile D O B A							
Name of Drilling Company	CHARL KAYLUNAS							
certify that I have drilled the above	-referenced well in acc	ordance with	all well perr	nit require	ments and all a	pplicable		
State rules and regulations.	11.11	11/	// n		5/	/		
Driller's Signa	ture William	VILLIN	Und	n	ate //3/	190		
2.mo, 6 Olgila					7			
COPIES: White of	& Green - DEP Canary	- Dtiller F	ink - Owner	Goldenroa	l - Health Dept.			

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No			
		Atla	s Sheet Coord	linates	<u> 29 : 13</u>	3_: <u>853</u>
OWNER IDENTIFICATION - Owner	dacted - Privacy Act	RP.				
Address	100 CRESCIENT CO	URT, STR 1	600			
City	DALLAS		State TX	<u> </u>	_ Zip Code	>
Address		_		0	,	
WELL LOCATION - IT NOT THE SAME AS	owner diease dive addre	iss. Ow	ners well no.	- JO:		
County	Municipality TINE	ON FALLS	BO	_ LOT NO	21.02	Block No
Address		 				
TYPE OF WELL (as per Well Permit Ca	tegories)					2190
Regulatory Program Requiring Well			Case I.	.D. #8	8990 & 8	8 814
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	GT.	<u> </u>		Tele. #_	587030
WELL CONSTRUCTION		Donah An		T		
Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	I —	and Material
		[From land surface]		(inches)	',,,,,	
Well finished toft.	Inner Casing					
Borehole diameter:	Outer Casing					
Topin.	(Not Protective Casing)					
Bottomin.	Screen (Note slot size)					
Well was finished: above grade	Tail Piece				 	,
flush mounted	Tall Flece	<u> </u>		 -	ļ	
f finished above grade, casing	Gravel Pack		<u> </u>		<u> </u>	
height (stick up) above land	Annular Seal/Grout					
surfaceft.	Method of Grouting	 -		1	l	
Was steel protective casing installed?	Metriod of Grouting					
Yes No	4	GE	DLOGIC LOG	(Copie	s of other ge	eologic logs and/or should be attached.)
Static water level after drilling Water level was measured using					4	
Well was developed forhou		/	30wn t	-Tan	Mark	sandw-
Method of development			ome s		<i>,</i> ~	
		. 1		1175		
Was permanent pumping equipment ins	Stalled? L Yes L No	' /	0-4"			
Pump capacitygpm			,			
Pump type:						
Orilling Method Hand Hug	of Dim					
M : I	of Rig					
Name of Driller	KAVIUNOS	DE F	guil.			
lealth and Safety Plan submitted?	Yes No	יי פוע	li w 51			
evel of Protection used on site (circle of	ue Noue D C R A					
N.J. License No. /// // 328	CHARL KAVLUNAS	1				
Name of Drilling Company						
certify that I have drilled the above- State rules and regulations. Driller's Signa	1.	Save	n all well peri Musi-		ments and	
COPIES: White of	& Green - DEP Canary	- Dtiller	Pink - Owner	Goldenrod	i - Health De	ept.

New Jersey Department of Environmental Protection Division of Water Resources



			l Permit No			
P	edacted - Privacy Act	Atla	s Sheet Coord	dinates <u>2</u>	13	:_ <u>853</u>
OWNER IDENTIFICATION - Owner		7P	. <u></u> .			
Address	100 CRESCIENT COU	RT,STE 10	300			
City	DALLAS		State TX		Zip Code	
				56	2 M	
WELL LOCATION - If not the same as	owner please give addre	ess. Ow	ner's Well No.	_ <u>ಲ</u>		_
County	_ Municipality _TINTO	N-FALLS-1	30	_ Lot No	21.02 E	3lock No. 114.01
Address		·				
TYPE OF WELL (as per Well Permit C	ategories)		Date v	well complete	ed <u>4</u> 14	<u> 2190</u>
Regulatory Program Requiring Well			Case I	.D.#88	990 & 88	A14 —
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	_6			Tele. #	587030
WELL CONSTRUCTION	•	<u> </u>				
Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter		and Material
_			nd surface]	(inches)	1360	and material
Well finished toft.	Inner Casing		1			
Borehole diameter:		 	 	ļ		
Top 4 in.	Outer Casing (Not Protective Casing)	}				
Bottomin.	Screen					
Well was finished: above grade	(Note slot size)		 			
liush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack	ļ				
height (stick up) above land	Annular Seal/Grout					
surfaceft.		<u> </u>	<u> </u>		<u> </u>	
Was steel protective casing installed?	Method of Grouting	<u></u> _				
Yes No			ni 0010 i 0 <i>1</i>	(Copie	s of other ge	ologic logs and/or
Static water level after drilling		GE:	OLOGIC LOC	geophy	sical logs st	nould be attached.)
Water level was measured using		47		Paul	10	
Well was developed forhou	ırs atgpm		an f	DOW	71	[
Method of development		<i>A</i>	101	•		
Was permanent pumping equipment in	nstalled? 🔲 Yes 🔲 No	\cup	13			
Pump capacitygpm						[
Pump type:		1				
Drilling Method Hand Aug	ec.					
Drilling Fluid Type	of Rig]				ļ
Name of Driller Mukael	Karlunas		65, €	80.8		
Health and Safety Plan submitted?	Yes No		Ac e	ec:		
Level of Protection used on site (circle of	one None D C B A					
N.J. License No. M01328						
MT	CHARL KAVLUNAS					
Name of Drilling Company	·		., 			
I certify that I have drilled the above State rules and regulations.	_11.	cordance with	h all well per		7	all applicable
Driller's Signa	ature / ////////	Juni	WILDU	ט	ate/	<u> </u>
COPIES: White	& Green - DEP Canar	y - Driller	Pink - Owner	Goldenrod	l - Health Del	pt.

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No		23935 29 : 13 :	
Re	edacted - Privacy Act	Alla	Sheet Coord	inates	<u>28 : 13 :</u>	853
OWNER IDENTIFICATION - Owner	IRIS CX				·	
Address	100 CRESCIONT CO	URT, SIK		7		
City	DOLLARD		State	<u>. </u>	Zip Code	
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	SR	2-N	
County	Municipality	YNY PATEC.	<u> </u>	_ Lot No	Block	K No.
Address	11111	ON PAUL	BU		21.02	114.0
TYPE OF WELL (as per Well Permit Ca	ategories) moname		Date v	vell complete	ed 4 1/2	90
Regulatory Program Requiring Well					38990 & 88A	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	67	7			587-03e
CONSULTING FIRM/FIELD SUPERVI	SON (II applicable)	<u> </u>	<i></i>		1010. #	30 /203 6
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled 2:5 ft.		Top (ft.)	Bottom (ft.)	(inches)	Type and	Material
Well finished toft.	<u> </u>	<u> </u>	nd surface]			
Borehole diameter:/	Inner Casing					
Topin.	Outer Casing (Not Protective Casing)	1				
Bottomin.	Screen					
Well was finished: above grade	(Note slot size)		<u> </u>			
Ilush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack					
height (stick up) above land surfaceft.	Annular Seal/Grout					
Was steel protective casing installed?	Method of Grouting				··	
Yes No	· ····································			/On-1-	6 -41	
Static water level after drilling	ft.	GE	DLOGIC LO	1 ~~~~	s of other geolog ysical logs shoul	d ha allaabad \
Water level was measured using			^ / ·	2	silt	Sand
Well was developed forhou	rs atgpm	/	an FL	srow	silty	Sine
Method of development		/)-2.'S	-11		
Was permanent pumping equipment in	stalled? Yes No	,				ł
oump capacitygpm						
oump type:						1
Drilling Method Hand Auge						İ
Orilling FluidType	of Rig		481 (
Name of Driller Wichae	AVIUNAS		05. 1	S ELE		
lealth and Safety Plan submitted?	Yes No	ľ				ſ
evel of Protection used on site (circle of	one) (None D C B A	,				
N.J. License No. <u>M01328</u>	ICHAEL KAVLUNAS					1
Name of Drilling Company	TOTALISM VEIGHT					
certify that I have drilled the above State rules and regulations.	referenced well in acc	cordance with	n all well per <i>]</i>	mit require	ments and all a	pplicable
Driller's Signa	ature Mukas	Kavle	not	D	ate $\frac{7/3}{3}$	1/90
CODIES. White	& Green - DEP - Canar	u ₋ D <i>riller</i> i	Pink - Owner	Goldeness	t - Health Dent	7

New Jersey Department of Environmental Protection Division of Water Resources

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			Permit No			·	
Ro	edacted - Privacy Act		Sheet Coord	linates	<u>29</u> :1:	3_: <u>853</u>	_ـــــ
OWNER IDENTIFICATION - OwnerAddress	ARIS C	XXP.					
Address	100 CRESCENT C	OURT, STK	1600	<u></u>			
City	DALLAS		State 7	X	Zio Code		_
					_		
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	_513.	.0		
County	Municipality	TON PALLS	BO	_ Lot No	21 02 BI	ock No	F 04
Address							 F.OT
TYPE OF WELL (as per Well Permit Ca	ategories) FORTNE		Date w	vell complete	d 4 16	190	
Regulatory Program Requiring Well	There a		Case I.	.D. #	00000 • 0		
CONSULTING FIRM/FIELD SUPERVI		CT-		<u></u>	Tele #	K87-07	200
	oor (ii applicable)				1010. #	20/ 00	
WELL CONSTRUCTION		Depth to	Depth to	Diameter]
Total depth drilledft.		Top (ft.)	Bottom (ft.)	(inches)	Туре а	nd Materiai	1
Well finished toft.		[From lar	nd surface]				4
Borehole diameter:	Inner Casing						
Top 4" in.	Outer Casing						7
Bottomin.	(Not Protective Casing) Screen						4
	(Note slot size)	<u></u>					_
Well was finished: above grade flush mounted	Tail Piece						
If finished above grade, casing	Gravel Pack]
height (stick up) above land surfaceft.	Annular Seal/Grout						1
Was steel protective casing installed?	Method of Grouting						1
Yes No	······································	<u> </u>	··· <u></u>	<i>'</i> 0 :			_
Static water level after drilling	ft.	GEO	DLOGIC LOG			logic logs and/or ould be attached.)
Water level was measured using			1 .	1-0	1 0 1	L. cand	7
Well was developed forhou			nwon	F Ke	d Sri	build be attached. Seud	
Method of development		\	$\frac{1}{2}$				
Was permanent pumping equipment in	stalled? Yes No		<i>A</i>				1
Pump capacitygpm		1					
Pump type:							Ì
Drilling Method Hand Ava	0/	İ					1
	of Rig						
	AVlungs		. 1.0				
	Yes No		1 1 E				1
Level of Protection used on site (circle of	ney None D C B A						
N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
Name of Drilling Company	CHARL KAVLUNAS						
I certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance with	h all well perf	mit requirer	nents and al	i applicable	
Cate luics and regulations.	-11-11	1 -//	1			1	
Driller's Signa	ature 71/4 kach	Karli	inal	D	ate $\frac{7/3}{2}$	190	
_	, ,				77	,	
COPIES: White	& Green - DEP Canary) - Dtiller 🔝 🕹	Pink - Owner	Goldenrod	- Health Dept		

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No Sheet Coord				. 853	ſ
	dacted - Privacy Act		. 311661 30010		<u></u>	· <u>13</u>	· <u>000</u>	L
OWNER IDENTIFICATION - Owner Address	ARIS COS		<u> </u>			-		—
City	DALLAS	MI , DIII IV			7	ip Code		_
WELL LOCATION - If not the same as County	owner please give addre Municipality	ss. Owi	ner's Well No.	56	3-P			_
						W 10		_
TYPE OF WELL (as per Well Permit Ca	BORING		Date v	veil comp	leted _	4112	190	
Regulatory Program Requiring Well		17	Case I.	.D. #	8899	98 8 - 8 - 8	14	_
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	G/A	<u> </u>			Геlе. #	587-0	گ <u>ج</u>
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diamet (inches		Туре а	nd Material	7
Well finished toft.	1 0	[From lar	d surface]		+-			\dashv
Borehole diameter:	Inner Casing							4
Top <u>9</u> in.	Outer Casing (Not Protective Casing)			<u> </u>				╛
Bottomin.	Screen (Note slot size)				ļ			
Well was finished: above grade flush mounted	Tail Piece							
f finished above grade, casing	Gravel Pack]
height (stick up) above land surfaceft.	Annular Seal/Grout							7
Was steel protective casing installed?	Method of Grouting							7
Yes No				(Car	oies of	other geo	logic logs and/or	_
Static water level after drilling			PLOGIC LOG	geo	physica	l logs sho	logic logs and/or build be attached.)	<u>)</u>
Water level was measured using		V	in LR	COLL	10	Med	srud	1
Weil was developed forhou		"		,,,,,	• •			1
Method of development		1 /) -a-'s	5"				1
Was permanent pumping equipment in	stalled? 🔲 Yes 🔲 No	, '	_					j
Pump capacitygpm		ļ						1
Pump type:		Ì						1
Orilling Method # Hand Ava	7							
n 11 11 11 11 11 11 11 11 11 11 11 11 11	of Rig	i						ł
	avlunas	ni	e suñ					
lealth and Safety Plan submitted?	Yes No	— ''	O Buss					
evel of Protection used on site (circle o	— /TT · ·	Í						
	Mollar D. C. B. V.	- 1						1
N.J. License No. <u>M0 /32-8</u>	CHARL KAVLUNAS	ĺ						
Name of Drilling Company	CERTISCI INTERVENIO							J
certify that I have drilled the above State rules and regulations. Driller's Signa	11.0	ordance with	all well peri	mit requi	remen Date	ts and all $\frac{7/31}{2}$	applicable	
		- Dtiller I	ink - Owner	Golden	rod - H	ealth Dept	· · · 	

New Jersey Department of Environmental Protection Division of Water Resources

			Permit No			_ г
Re	edacted - Privacy Act			linates	29 : 13	<u>853</u> L
OWNER IDENTIFICATION - Owner	ARIS O	ORP.				
Address	100 CRESCRAT CO	OURT, STE	1600			
City	A CALLED STATE OF THE STATE OF		StateT	X	_ Zip Code	
WELL LOCATION - If not the same as		•				
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	<u>ع رب</u>	2.ch -	
County	_ Municipality	UN FALLS	B 0 —	_ LOT NO	21.02 Bioci	K NO
Address	 _					
TYPE OF WELL (as per Well Permit Ca					ed 4 1/2	
Regulatory Program Requiring Well	ISCRA		Case 1.	.D. #	38990 & 88A	 4
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	_GT	T		Tele. # <	587-0300
WELL CONSTRUCTION		Depth to	Donth to	<u> </u>	r · · · · · · · · · · · · · · · · · · ·	
WELL CONSTRUCTION Total depth drilled 2 ft.		Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		Material
			d surface]	(IIICI163)		
Well finished toft.	Inner Casing					
Borehole diameter; Topin.	Outer Casing					
Bottomin.	(Not Protective Casing)					
	Screen (Note slot size)					
Well was finished: above grade	Tail Piece					
flush mounted				-		
If finished above grade, casing	Gravel Pack					
height (stick up) above land surfaceft.	Annular Seal/Grout					
Was steel protective casing installed?	Method of Grouting					
Yes No		<u></u>				
Static water level after drilling	ff	GEO	LOGIC LOG	(Copie	s of other geolog ysical logs shoul	ic logs and/or
Water level was measured using						
Well was developed forhou		17	an t	Brow	n Mea	- Sand
Method of development		′	A) '			1
Was permanent pumping equipment in		_ 4	クーム			Ĭ
Pump capacitygpm						
Pump type:	_					
Drilling Method Hand Auge.	_					1
	of Rig					
Name of Driller Michael Ko	AVIUNAS		₩. €	6 3		ŀ
Health and Safety Plan submitted?	Yes No		UE C	• ••		
Level of Protection used on site (circle of	ne) (None D C B A	ľ				ľ
N.J. License No. 11328 MT	CHARL KAVLUNAS					
Name of Drilling Company						
I certify that I have drilled the above State rules and regulations. Driller's Signa	ature <u>Muhar</u>	Karlu	all well peri	D	ate <u>7/3/</u>	pplicable
COPIES: White	& Green - DEP Canary	- Dtiller F	ink - Owner	Goldenrod	l - Health Dept.	

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No					
	dacted - Privacy Act		Sheet Coord	linates	:_	13:_	<u>853</u>	_
OWNER IDENTIFICATION - OwnerAddress	ARIS CO	RP. Ner sine i	600					
			A.b.		· · · ·			-
City			State		_ : 4			
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	SS Lot No.	? - UE	Block I	No	
Address				_	21.0	Z-	114.0)1
TYPE OF WELL (as per Well Permit Ca			Date w	vell comple	eted 4	1 121	90	•
Regulatory Program Requiring Well				D. #				
CONSULTING FIRM/FIELD SUPERVI							8202	00
	oon (ii applicable)			······································				
WELL CONSTRUCTION		Depth to	Depth to	Diamete	-		Mataulai	l
Total depth drilledft.		Top (ft.) From lar	Bottom (ft.) id surface]	(inches) '	ype and I	Material	
Well finished toft.	Inner Casing	1,						
Borehole diameter:	Outer Casing			 	+			
Top <u>S</u> // in. Bottomin.	(Not Protective Casing)		·	<u></u>				
	Screen (Note slot size)				1			
Well was finished: above grade flush mounted	Tail Piece							
If finished above grade, casing	Gravel Pack							
height (stick up) above land surfaceft.	Annular Seal/Grout							
Was steel protective casing installed?	Method of Grouting			_				
Yes No				(Con	ies of oth	er geologic	lone and/or	
Static water level after drilling	ft.	GEO	DLOGIC LOG	geop	hysical lo	gs should	logs and/or be attached.)	
Water level was measured using		1 -	Tan +	a /	40	Mande	1 0	
Well was developed forhou		/	901 7	-071	VE.	MEG	. Jand	
Method of development	proved proved	_						
Was permanent pumping equipment in	stalled? L Yes L No		d					
Pump capacitygpm							1	
Pump type:								
Drilling Method Huger	- Dra	ļ						
AA C. I I	of Rig 357		00° 17 50	4				
Name of Driller // CN4 61	Anylores		1.3 g.,	:				
Health and Safety Plan submitted? Level of Protection used on site (circle of	Yes No							
44.5 1.72 5	•							
Name of Drilling Company 67	HAML KAVILINAS							
certify that I have drilled the above State rules and regulations. Driller's Signa	10-6	ordance with	all well perr	mit requir	ements a	and all app	olicable	
· ·	& Green DEP Canary	Daitt	Other Comme			h Dari	/	

New Jersey Department of Environmental Protection Division of Water Resources

4

			Permit No		
Re	dacted - Privacy Act	Atlas	Sheet Coord	inates	29: 13: 853
OWNER IDENTIFICATION - Owner	ARIS CO				
Address	TON CHOCHCHAIL CO	URT, STE 1	600		
City	DALLAS		StateTX	· ·	Zip Code
				00	P
WELL LOCATION - If not the same as	owner please give addre	ss. Owi	ner's Well No.	کیات	
County	_ Municipality	ON FALLS	BO	_ Lot No	21.02 Block No. 114
Address					
TYPE OF WELL (as per Well Permit Ca	ategories) FORTING		Date w	ell complete	d <u>4 1 /2 1910</u>
Regulatory Program Requiring Well	ECRA	4	Case I.	D. #8	3990 & 88 <u>414</u>
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	GTI			_ Tele. #_587-0300
WELL CONSTRUCTION	,				
WELL CONSTRUCTION		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	Type and Material
Total depth drilled 2 ft.			d surface]	(inches)	type and material
Well finished toft.	Inner Casing	·			
Borehole diameter:					
Topin.	Outer Casing (Not Protective Casing)				
Bottomin.	Screen				
Well was finished: above grade	(Note slot size) Tail Piece				
flush mounted					-
If finished above grade, casing height (stick up) above land	Gravel Pack				
surfaceft.	Annular Seal/Grout				
Was steel protective casing installed?	Method of Grouting				
Yes No	<u> </u>		 	(Carles	
Static water level after drilling	ft.	GEO	LOGIC LOG	geophy	s of other geologic logs and/or sical logs should be attached.)
Water level was measured using			-2 T		s + 6 mvel
Well was developed forhou			~ J4	113117	S & G MAR!
Method of development			•		
Was permanent pumping equipment in	stalled? Yes No	,			
Pump capacitygpm					
Pump type:		Į			
Drilling Method Avaer					
Drilling Fluid None Type	of Rig <u> </u>				
Name of Driller Michael K	AVIUNAS				
Health and Safety Plan submitted?	Yes No	fig. It of	!		
Level of Protection used on site (circle of	ne) None D C'B A	T "			
MILLIAND NO MARZOS					
Name of Drilling Company	HAKL KAVLUNAS				
I certify that I have drilled the above State rules and regulations. Driller's Signa	Will B	ordance with	all well perr		nents and all applicable ate 8/7/90
COPIES: White	& Green - DEP Canary	- Pailler I	ink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



		Well Atlas	Permit No	29 - 2	3941 : 13	 · 853	
Re CAMPIED IDENTIFICATION	dacted - Privacy Act		, C/1661, CCC/1C		·_ 		
OWNER IDENTIFICATION - Owner Address			200				
	DALLAS	KI,DIB IC	State TX	·····	Zin Codo		
Oily				4	_		
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	SB	<u> </u>		
County	_ Municipality	n Paijs P	10	_ Lot No	21_02- Blo	ck No114_01	
Address							
TYPE OF WELL (as per Well Permit Ca	ategories)		Date w	ell complete	d <u>4/2</u>	90	
Regulatory Program Requiring Well	DOM:		Case I.	D. #88	990 & 88A1	!4	
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	GTI	·		Tele. #	587-0300	
	, ,,			1			
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	Tyne en	nd Material	
		[From land surface] (inches)			1700 0110 1710.05710.1		
Well finished toft.	Inner Casing						
Borehole diameter:	Outer Casing				· . · ·		
Topin. Bottomin.	(Not Protective Casing)						
	Screen (Note slot size)			İ		į	
Well was finished: above grade flush mounted	Tail Piece						
If finished above grade, casing	Gravel Pack						
height (stick up) above land surfaceft.	Annular Seal/Grout						
Was steel protective casing installed?	Method of Grouting						
Yes No	· · · · · · · · · · · · · · · · · · ·			(Conice	of other gools	ogic logo and/or	
Static water level after drilling	ft.	GE	DLOGIC LOG	geophy:	sical logs show	ogic logs and/or uld be attached.)	
Water level was measured using	<u>,</u>)-21	TOA +	Med		
Well was developed forhou	rs atgpm	'		1901	7.70 -(.		
Method of development							
Was permanent pumping equipment in:	stalled? 🔲 Yes 🔲 No	,					
Pump capacitygpm							
Pump type:							
Drilling Method Auger							
Drilling Fluid Aool Type	of Rig <u>257</u>						
Name of Driller <u>Michael K</u>	AVIONAS						
Health and Safety Plan submitted? 📙	Yes No					į	
Level of Protection used on site (circle o	ne) None D C B A	.				•	
N.J. License No. <u>M01328</u>		'				į	
Name of Drilling Company MI	CHARL KAVLUNAS						
certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance with	all well perr	mit requiren	nents and all	applicable	
Driller's Signa	iture <u> </u>	1 Kar	Kanal	Da	ite <u>8/7/</u>	40	
COPIES: White	& Green - DEP Canary	/ - Dtiller	Pink - Owner	Goldenrod	- Health Dept.		

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No			
	edacted - Privacy Act	Atla	s Sneet Coord	inates	<u>29</u> : <u>13</u>	: <u>853</u>
OWNER IDENTIFICATION - Owner	ARIS CO					
Address	100 CRESCIONT COL	er,sik i				
City			State		_ Zip Code	
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	<u>_SR</u>	T	
County	Municipality	W PALLS	D G	_ Lot No.	Blo	ck No
Address	******				21.02	114.0
TYPE OF WELL (as per Well Permit Ca	ategories honore		Date v	vell complet	led 4 1/2	190
Regulatory Program Requiring Well					88990 & 88A	
CONSULTING FIRM/FIELD SUPERVI		CTI			Tele. #	587-02
						30 / 903-
WELL CONSTRUCTION		Depth to	Depth to	Diamete	· 1 —	
Total depth drilledft.		Top (ft.)	Bottom (ft.) nd surface]	(inches)	Type an	nd Material
Well finished toft.	Janes Casina		T CONTROOT			
Borehole diameter:	Inner Casing		 		 	
Top 8 Stylin.	Outer Casing (Not Protective Casing)					
Bottomin.	Screen		 			
Well was finished: 🔲 above grade	(Note slot size)			-		
flush mounted	Tail Piece	 .			ļ	
If finished above grade, casing	Gravel Pack					
height (stick up) above land surfaceft.	Annular Seal/Grout					
Was steel protective casing installed?	Method of Grouting	_				
Yes No				(Conic	es of other deal	oric lone and/or
Static water level after drilling		GE	OLOGIC LOG	geoph	ysical logs shou	ogic logs and/or uld be attached.)
Water level was measured using		1/2	Cours	1. 7	Tin	j
Well was developed forhou			rown	8	<i>(1)</i>	
Method of development						
Was permanent pumping equipment in	stalled? Yes No	,				
Pump capacitygpm						
Pump type:						
Drilling Method Hugers						-
	of Rig 13 3		27 20	, в		1
Name of Driller	1 Kavelina		44 (4.7)	1.		
Heaith and Safety Plan submitted?	Yes No ne) None D C B A					,
N.J. License No	HOILA C B A					
Name of Drilling Company 67	CHARL KAVLUNAS	Ì				ľ
	17					
certify that I have drilled the above State rules and regulations.	reterenced well in acc. م	ordance wit	n all well peri	mit require	ments and all	applicable
nato idies and regulations.	M //	1/1/	. //	,	~/	6
Driller's Signa	iture // uhn	1 12d	Vuna	<u>_</u> c	ate <u>80.</u>	2/70
_		J Delli	n: 1	~		/
COPIES: White	& Green - DEP Canary	- Driller .	Pink - Owner	Goldenro	d - Health Dept.	

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No			
Re	edacted - Privacy Act			linates	<u> 29 : 13 : 85</u>	3
OWNER IDENTIFICATION - Owner Address	'ARIS CO	XRP.				
Address	100 CRESCIONT OC	ORT, STE				
City	201110			(Zip Code	
					<i>F</i>	
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	S131		
County	Municipality TINT	ON PALLS	B0 —	_ Lot No	21.02 Block No	
Address			 			
TYPE OF WELL (as per Well Permit Ca	ategories) FORTING		Date v	vell complete	d 412190	
Regulatory Program Requiring Well					88990 & 88 <u>814</u>	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	GT.			Tele # <2-7-	.a 20a
	oon (ii applicasio)				1010.#	<u> </u>
WELL CONSTRUCTION			Depth to	Diameter		
Total depth drilledft.		Top (ft.)	Bottom (ft.)	(inches)	Type and Mater	ial
Well finished toft.		[From lai	nd surface]			——
Borehole diameter:	Inner Casing					
Topin.	Outer Casing					
Bottomin.	(Not Protective Casing) Screen					
	(Note slot size)					
Well was finished: above grade flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack					
height (stick up) above land	Annular Seal/Grout					
surfaceft.	Mathad of Oranting			<u></u>		
Was steel protective casing installed?	Method of Grouting					
☐ Yes ☐ No		OE.	DLOGIC LOG	(Copies	s of other geologic logs rsical logs should be att	and/or
Static water level after drilling						ached.)
Water level was measured using			rown	claus	y sand	
Weil was developed forhou		"		C 15076	7 34714	
Method of development					•	
Was permanent pumping equipment in	stalled? LYes LNo	·				
Pump capacitygpm		1				1
Pump type:						1
Drilling Method Han I Hug	<u>e /</u>	ļ				1
Drilling Fluid 1010 Type	of Rig					
Name of Driller 7 what 7	Kavlunas					į
	Yes No					1
Level of Protection used on site (circle o	ne) (None D C B A	ء ا	•-			l
N.J. License No. MD 1328	HARL KAVLUNAS	U_{ij}	12 5.			
Name of Drilling Company 670	ria	ـــــ	 			HT-1
I certify that I have drilled the above State rules and regulations.		ordance with	n all well peri	1 /	v/n/a	le ^
Driller's Signa	iture	1 ,000	vorjuge	D:	ate _ 8 / 2 04 7 C	<u></u>
COPIES: White	& Green - DEP Canary	- Driller	Pink - Owner	Goldenrod	- Health Dept.	

New Jersey Department of Environmental Protection Division of Water Resources



		Atia	Permit No Sheet Coord	inates 2	23944 9 : 13 : 853			
Re	edacted - Privacy Act ARIS CO	nen nen	3 011001 00010		·			
OWNER IDENTIFICATION - Owner	100 CRESCIENT CO	RT.STR 1	600					
Address	DALLAS		עיד		Zip Code			
City			State		·			
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	<u>SB</u>	<u>V</u>			
County	_ Municipality	N FALLS	90	_ Lot No	21 02 Block No. 114-0			
Address					21.02 114.0.			
TYPE OF WELL (as per Well Permit Ca	ategories proprag		Date w	ell complete	d 4 1/2 190			
Regulatory Program Requiring Well				=				
CONSULTING FIRM/FIELD SUPERVI								
	oor (ii applicable)							
WELL CONSTRUCTION Total depth drilledft.		Depth to	Depth to	Diameter	_			
Total depth drilledft.		Top (ft.)	Bottom (ft.) ad surface]	(inches)	Type and Material			
Well finished toft.		[FIOIII IAI	IL SUITACEJ					
Borehole diametey:	Inner Casing			<u> </u>				
Top <u>8 3/4</u> in.	Outer Casing (Not Protective Casing)			1				
Bottomin.	Screen	· · · · · · · · · · · · · · · · · · ·						
Well was finished: 🔲 above grade	(Note slot size)	<u> </u>	}					
flush mounted	Tail Piece							
if finished above grade, casing neight (stick up) above land	Gravel Pack							
	Annular Seal/Grout							
surfaceft.			<u></u>	L_,				
Was steel protective casing installed?	Method of Grouting							
Yes No		OE.	DLOGIC LOG	(Copies	s of other geologic logs and/or sical logs should be attached.)			
Static water level after drilling								
Water level was measured using		10	0-125" Brown med send.					
Well was developed forhou								
Method of development								
Was permanent pumping equipment in	stalled? L Yes No)						
Pump capacitygpm								
Pump type:								
Drilling Method Hand Hug								
Drilling Fluid //o/1/Char Type Name of Driller ////Char //	of Rig		a	\ 9				
	C Yes No		C)	1. L.C. 3. 1.				
Level of Protection used on site (circle one) None D C B A								
N.I. License No. MA/328								
	CHARL KAVLUNAS							
certify that I have drilled the above		ordance wit	n all wall par	mit requires	nente and all annlicable			
certify that I have drilled the above State rules and regulations.	accionation mention accionationation accionationation accionationationationationationationationat	/ / wit	ali weli peri	rm reduirer	nonto anu an applicable			
Title Taras alle Tagonilono	\mathcal{M}^{-1}	. 11 %		١	elastas			
Driller's Signa	ature <u> </u>	y In	vung.	<u> </u> D.	ate 8/41/90			
COPIES: White	& Green - DEP Canary	y - Driller .	Pink - Owner	Goldenrod	- Health Dept.			

New Jersey Department of Environmental Protection Division of Water Resources



		Well Atlas	Permit No Sheet Coord	29 - 2	24555 1:_13:_8:	10
OWNER IDENTIFICATION - Owner		7 11100	, G11001 00010		} ' <u>1,3</u> '0,	L y
Address	STRAVOLA REALTY	 				
City	RED BANK		State NJ	·	Zip Code <u>07</u>	701
WELL LOCATION - If not the same as	owner please give addre	ss. Owi	ner's Weil No.		Plack No.	
County Monmouth Address	_ Municipality	N FALLS E	0	_ LOUNO	7.01	11.5
Add1600						
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	MONITORING		Case I	re ii complete	od /10 /9 /	2
						_
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)		WIA		Tele. #/	1
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled ft.		Top (ft.)	Bottom (ft.) id surface]	(inches)	Type and Ma	teriai
Well finished to 20' ft.		(From lar		1/11	= 1 1/2 .	
Borehole diameter:	Inner Casing	<u> </u>	20'	4	5ch.40 F	YC
Top & in.	Outer Casing (Not Protective Casing)	NA-				
Bottom 8" in.	Screen	10'	20'	4"	.0a0 SI	ot
Well was finished: above grade	(Note slot size)	1.	1 20	7	.000 310	21
flush mounted	Tail Piece	N/A			# a 4 (
If finished above grade, casing	Gravel Pack	10'	20'	4"	#2 Morie	Sand
height (stick up) above land	Annular Seal/Grout	0	12		Benton	ite
surface AA ft.	Method of Grouting			<u>ســــا</u>	porrior	//
Was steel protective casing installed?	Method of Grouning		Tre	ויון		
Yes Mo Static water level after drilling hone		GEO	DLOGIC LOG	(Copie	s of other geologic lo ysical logs should be	gs and/or
Water level was measured using	<u> </u>			geopin	ysical logs should be	attached.)
Well was developed for \(\begin{align*} ali			0	1 1	^	
Method of development NA		(Grout	(12' RISER	
Was permanent pumping equipment in	stailed? Yes No	,	,	/I I)	14	`
Pump capacitygpm			(•	- }
Pump type:			_	1ED	^	ŀ
Drilling Method Auger			Gravel	11511	}	
Drilling FluidType	of Rig Mobil 61	5	Pack	11=12	10' Screen	İ
Name of Driller Chad Kra				11=13	10 321001	İ
Health and Safety Plan submitted?	_ Yes X No	05.) Har 14			
Level of Protection used on site (circle o	ne) None (D) C B A		`	\	\downarrow	
N.J. License No. 1403	ARRIGN CHOOKER INC.		201	4 11	•	
• • • •						
I certify that I have drilled the above State rules and regulations.	-referenced well in acc	ordance with	n all well perr	mit requirer	ments and all applic	able
olale luico allu legulaliolio.	On A L	1,				
Driller's Signa	ature <u>(had Kn</u>	aft		D	ate <u>5-11-90</u>)
CODIEC. White	& Green DED Conom	Deillon I	link Owner	Coldens	I Vogith Dane	

WARREN GEORGE, INC.

Permit#2924555-9 Coord# 29.13.819

FOOT OF JERSEY AVENUE P. O. BOX 413 JERSEY CITY, N.J. 07303

29,13,819

TEST BORINGS

Proje	TINTON EA	-11	N 5		SchiAlo	NN	0	Cos 87
	ng No. W- 3 Job No.					· 1 E		19 J
	SORING LOG		3 PO	ON SAME	LE AND CORE DATA		BLC	OWS ON CASING
				BLOWS	D-DRY D-UNDISTURBED	TETRAP	01	59-60
CEPTH	DESCRIPTION	~	DEPTH	PER FT.	W=WASH RMAOD	C-CORE	12	60-6;
FRUN TO	OF MATERIAL	SAMPLE	FROM - TO	CORE			23	61· 62 62 63
		35		MECOV'D.	CORE RECOV'S, NO. 1	·çs.	34 45	63-64
			 		A		5-6	64-65
/	_			ł	2.2 1/4	1	61	65 65
0/	Brown Coarse	-	0-2	ļ	123-7-	0	78	64-67
12	4						8-9	67 68
	7 am					~	910	65-69
	Jan Done	l	5 - 7	1	4-6-7-	· 9	1011	69 70
	ITAL ALT					7	11-12	71 - 72
	word see !					 	1314	72-73
1	A / 1	1	8-10		4-1- 0	9	18 -15	73 74
2/	Brown Medin		8-10		-1 0 0		15-16	/4 - 75
1/2	more	Ì	1.				16-17	75 76
1-1-51	1 - 10 - 1		 	 			17-18	76-77
	June Johns		13-15	Ì	7-12-19	1-24	18-19	77-78
	- 1+		/ //_7 _	 			19-20	7879
	Mac Sell			Ī	Ī		20-21	79-80
12/	1/ / 1		, .		-/ 12-		2122	80-81
13/	From Meder	_	16-18	<u> </u>	7-6	<u> </u>	22-23	81.82
120	I we sund				17		23-24 24-25	82-83
1 /0	onte para			<u> </u>			25-26	83-84 81-85
	, , ,]			26 27	85-36
		P		ļ			27-28	86-87
	and he a sil	Y		}			28-29	87 -68
	, , , , , , , , , , , , , , , , , , , ,	_		 	 		29-30	88-89
				ĺ			30-31	8990
		}		 			31-32	90.91
		<u>L_</u>	L	L			32-33	91-92
	11 0	h _		<u> </u>	1		33-34	92.43
	10 of 2 11 PC	<u> </u>					34-35	93-94
	VACABO	ł					35 36 36-37	9495 95 96
	12/06 2/P.C. pepe		 	 			37-38	96. 47
	12 06 2 P.C	\subset	{				38-39	97- 98
	12 06 - 10	┝	 				39-40	9899
į	pepel	•	[}			40 41	99-100
	25 les Rice	1	 	 			41-42	100-101
	25 les Rice	L	<u> </u>		1		42-43	101 402
	Rellet				T		n3- na	107 103
				ļ	<u> </u>		41-45	103-404
	7 lays sand	•			1		45 46	101125
	9 /	<u> </u>	<u> </u>	 :	-		16 17	105 104
	7 Ways rand			1			4/ 48	105 107
	1			 			49 50	107 108 108 149
	// /)		المرا	1			50- 51	109 119
	111 Lugger a	 4		 	 		51 52	110-111
			[\ \		1		52 53	111 112

New Jersey Department of Environmental Protection Division of Water Resources



			Well	Permit No	Z7	7 <u>13 : 823</u>
	Primer same same and a		Atlas	Sneet Coor	cinates	·
OWNER IDENTIFICATION - Owner	FORT MONMOUTH SELFMENTE BUILD	TKE T	27	,		
Address	FORT MONHOUTH	TIAT T				····
City				State		Zip Code
WELL LOCATION - If not the same as	owner please give addre	S S .	Owr	er's Well No	. MCD	C-1
County	• •				•	
Address						
						6,19,90
TYPE OF WELL (as per Well Permit Ca						
Regulatory Program Requiring Well			_		I.D. #/	757-175
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	DY.	Pa.	tanja		Tele. # 757-2255
WELL CONSTRUCTION		Depth	to	Depth to	Diameter	
Total depth drilled/O ft.		Top (Bottom (ft.		Type and Material
Well finished to 1/4 ft.		[Fro	m lan	d surface]		
•	Inner Casing					
Borehole diameter: Topin.	Outer Casing					
Bottomin.	(Not Protective Casing)				1.1/	
	Screen (Note slot size)				MA	
Well was finished: Whabove grade	Tail Piece					
If finished above grade, casing	Gravel Pack					, , , , , , , , , , , , , , , , , , ,
height (stick up) above land	Annular Seal/Grout	<u> </u>		10		11.10 +
surface ////ft.	Annular Seal/Grout	\mathcal{L}^{2}		10	.i	Neat CevenT
Was steel protective casing installed?	Method of Grouting	Ω	100	SULE		
Yes No					(Copie	s of other geologic logs and/or
Static water level after drilling	ft.			PLOGIC LO	G geoph	ysical logs should be attached.)
Water level was measured using			0	- G "	Topso	<i>i</i> /
Well was developed forhou	rs atgpm				7	
Method of development	A '		١		oreenish	brown to
Was permanent pumping equipment in	stalled? 🔲 Yes 💢 No)	6"	4	light.	gray SMD
Pump capacity <u>V/A</u> gpm	,]	i	,) '
Pump type:						
Drilling Method Auger	- 					DI 1 T
Drilling Fluid	of Rig Mahil B-	47_	4 -	a' 0	oreenism	Black Fine
Name of Driller Oary Pa	rent		7	° ,	SAUL)
Health and Safety Plan submitted?	JYes ⊠No			### ### N	77 C	
Level of Protection used on site (circle of	one) None(D)C`B A		,	,	. 1	
N.J. License No. BCOBA 54	RY PARENT		8	10	led brown	n Med SMD
Name of Drilling Company			L	l		
I certify that I have drilled the above State rules and regulations.	e-referenced well in acc	ordano	e witł	n ali well pe	rmit require	ments and all applicable
Driller's Signa	ature <u>Cau</u>	ari	THE WAY		0	ate <u>8-2-90</u>
COPIES: White	& Green - DEP Canary	e - Drille	er I	Pink - Owner	Goldenrod	l - Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



					29 - 2	
		Atla	as Sheet	Coord	inates 25	? : <u>13 : 823 </u>
OWNER IDENTIFICATION - Owner	FORT MONMOUTH					
Address	SELFM-EH-E BUILD	ING 167				
City	FURT MUNMOUTH		State	N.	1	Zip Code
WELL LOCATION - If not the same as	•					-2
County	_ Municipality _ EATON	TOWN DOE			_ Lot No	NZA Block No. NZA
Address						
TYPE OF WELL (as per Well Permit C	ategories			Date v	vell complete	of 6 119,90
Regulatory Program Requiring Well	NA				D.#/_/	-
CONSULTING FIRM/FIELD SUPERV	· · · · · · · · · · · · · · · · · · ·		7.		· · · · · /	Tele. #
CONSULTING FIRM/FIELD SUPERV	SON (ii applicable)	 	דוטי			
WELL CONSTRUCTION	!	Depth to	Depth	to	Diameter	
Total depth drilledft.		Top (ft.)	Botto		(inches)	Type and Material
Well finished toft.		[From la	and surfa	ce]		
	Inner Casing		ŀ			
Borehole diameter: Topin.	Outer Casing					
Bottomin.	(Not Protective Casing)			+-		
	Screen (Note slot size)		1 .	IIA.		
Well was finished: Watabove grade	Tail Piece			7		
lush mounted			/	<u> </u>		
If finished above grade, casing	Gravel Pack					
height (stick up) above land	Annular Seal/Grout					
surface <u>MA</u> ft.	Method of Grouting		. I		 	
Was steel protective casing installed? Yes No	Method of Glodring	<u> </u>				
		GI	OLOGIC	: 1.00	(Copie	s of other geologic logs and/or sical logs should be attached.
Static water level after drilling 2.5					geopn	/sical logs should be attached.
Water level was measured using		0	-6"		TOP SC	vi/
Well was developed for NA hou					1	f
Method of development						
Was permanent pumping equipment in	istalled? Yes XINo	,				
Pump capacity <u>V/4</u> gpm	/			6	n reeints	h brown to
Pump type:						
Drilling Method Auge(1	-10'	q	reevish	black very
Drilling Fluid VA Type	of Rig 3-4/		•	7	rive sa	' لم
Name of Driller	arent			, i	14C 34	WELL TO THE STREET
Health and Safety Plan submitted?	עאַS וואַ Yes וואַ		600	, 27	ņ.	
Level of Protection used on site (circle o	one) None D C B A			···· (.	••	
N.J. License No. <u>B0082</u>	, 0	ĺ	ſ			
	RY PARENT					
certify that I have drilled the above	e-referenced well in acc	ordance w	th all we	il per	mit requirer	ments and all applicable
State rules and regulations.			/ _			
Driller's Sign	ature Onu 1	-10	TOIN	X	D	ate 6-2-90
-		7		U		
COPIES: White	& Green - DEP / Glanar)	- Driller	Pink - O	wner	Goldenroa	l - Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No		
		Atlas	Sheet Coord	inates <u>29</u>	: 13 : 823
OWNER IDENTIFICATION - Owner _	FIRT MINMITTH				
Address	SELFMENTE BUILD	ING 167		· · · · · · · · · · · · · · · · · · ·	
Address	FORT MONMOUTH		State NJ	· · · · · · · · · · · · · · · · · · ·	Zip Code
Olly			State	•	
WELL LOCATION - If not the same as	owner please give addre	ss. Owr	ner's Well No.	MCD	<u>C-3</u>
County	Municipality	TITLAL. DODG		Lot No.	Block No.
Address	- · · · · · · · · · · · · · · · · · · ·	LOWIN DOM			N/A N/A
				и .	
TYPE OF WELL (as per Well Permit C	ategories)				d
Regulatory Program Requiring Well	N/A		Case I.	D. #/\(\overline{\chi}\)	<u> </u>
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #
WELL CONSTRUCTION		Depth to	Depth to	L	
Total depth drilled 10 ft.		Top (ft.)	Bottom (ft.)	Diameter	Type and Material
· ———		[From lan		(inches)	1,70 2.10 1.12.01.12.
Well finished toft.	Inner Casing				
Borehole diameter:	ļ				
Top <u>&</u> in. Bottom <u> </u>	Outer Casing (Not Protective Casing)			1, 1	
Bottomin.	Screen		/	1/	
Well was finished: Watove grade	(Note slot size) Tail Piece				
Hush mounted	Gravel Pack				
If finished above grade, casing	Graver Fack				
height (stick up) above land surfaceft.	Annular Seal/Grout	_0	10		Neat Cerent
Was steel protective casing installed?	Method of Grouting	210	ssure		, and the second
Yes No		17.	, , , , , , , , , , , , , , , , , , , 		
Static water level after drilling 5/		GEC	LOGIC LOG	(Copies aeophy	s of other geologic logs and/or sical logs should be attached.)
Water level was measured using	Tape.	0-	G"	TOD SOI	
Well was developed for MA hou	irs at A/A gom			1 5 50;	
Method of development					
Was permanent pumping equipment in					
	Stalled? [_] Yes Z_FNO		Bro	WH 4 O	live green
Pump capacity 1/4 gpm		6-	g' Sa	udy ck	ay i
Pump type:		ا ا		•	<i>'</i>
Drilling Method Auder					j
	of Rig Augel		1		1
Name of Driller Cary	-		ane oc	•	1
Health and Safety Plan submitted?	Tyes Mino		\$3,77	€".,	1
Level of Protection used on site (circle of	one) None (D/CBA		,		
N.J. License No. 80087	RY PARENT	8-1	O Bro	in Ai	ne SNUD
Name of Drilling Company	· · · · · · · · · · · · · · · · · · ·			 	
I certify that I have drilled the above State rules and regulations.	e-referenced well in acc	ordance with	all well perr	mit requiren	nents and all applicable
Driller's Signa	ature <u>Oau</u>	1 Ce	rent	Da	ate <u>\$2-90</u>
COPIES: White	& Green - DEP Capary	l - Dtiller P	ink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



		Well	Permit No	29 29	187 3 — <u>13 </u>
OWNER IDENTIFICATION CONTRACT	FORT MONMOLITH		s Sheet Coord	linates	·:·
OWNER IDENTIFICATION - Owner	SILFM EH E BUILD:	ING 167		······································	
Address			State N3		Zip Code
•					
WELL LOCATION - If not the same as County	owner please give addre Municipality <u>EATUN</u>	ss. Owi	ner's Well No.	Lot NoN	
Address	······································				
TYPE OF WELL (as per Well Permit Ca	ategorie PORING		Date v	veil complete	6,19,90
Regulatory Program Requiring Well	<u> </u>		Case i	.D. # <i>N/_</i>	4
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)				Tele. #
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Well finished toft.			nd surface]		
Borehole diameter:	Inner Casing Outer Casing		ļ		
Top <u>&</u> in. Bottom & in.	(Not Protective Casing)			1 14	
Well was finished:	Screen (Note slot size)			N	
Thush mounted	Tail Piece				
If finished above grade, casing	Gravel Pack				
height (stick up) above land surfaceft.	Annular Seal/Grout	B	10		Neat Covent
Was steel protective casing installed?	Method of Grouting	ore	SSULE		
Yes 🛮 No		GE	DLOGIC LO	(Copies	of other geologic logs and/or sical logs should be attached.)
Static water level after drilling 4.5					
Water level was measured using		0	u"	Top >	01/
Well was developed for who hou Method of development whether A	rs etgpm			1/1	own fine SAUD
Was permanent pumping equipment in		<u> </u>	2' Gre	enish Dro	own tine saud
2	Stalled? Yes NC	'			
Pump capacity			j		
Drilling Method Airae					
, , ,	of Rig 13-47	1,	\		
Name of Driller	· 	2-	10 31	ack fine	e clayery SAUD
Health and Safety Plan submitted?	Yes 🔽 No	31.6	5"		111/19 1/102
Level of Protection used on site (circle of	ne) None D C B A				
N.J. License No. 3008 - GAR	Y PARENT				
Name of Drilling Company		ـ			
I certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance with	h all well per	mit requiren	nents and all applicable
Driller's Signa	ature <u>Oau</u>	Para	rut	Da	ate 8-2-90
COPIES: White	& Green - DEP Canary) - Dtiller I	Pink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



			Permit No. 2		894	
		Atla	s Sheet Coon	dinates <u>27</u>	: <u>13</u>	:823L
OWNER IDENTIFICATION - Owner_E	ORT MONMOUTH					
Address	ELFM-EH-E BUILDII	NG 167	,			
CityF	TORT MONMOUTH	·····	State NJ	 	Zip Code	
WELL LOCATION - If not the same as	avenar alasas sire addra		ner's Well No	MCDA	C 3.5	
						k No
County		DWN BORD		- LOL 140. K	I/A BIOC	NON/A
				······································	0 10	<u>a</u>
TYPE OF WELL (as per Well Permit Ca	ategories)	1.	Date		xd <u>6.119</u>	
Regulatory Program Requiring Well		•		•	V/A	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #	
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled 50 ft.		Top (ft.)	Bottom (ft.		Type and	d Material
Well finished toft.		[From las	nd surface)			
Borehole diameter:	Inner Casing		1			
Topin.	Outer Casing			ſ		
Bottom 8 in,	(Not Protective Casing) Screen			1		
Well was finished:	(Note slot size)			MA		
12 Aush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack					
height (stick up) above land surface // / ft.	Annular Seal/Grout	0	30		Neat (Zeven T
Was steel protective casing installed?	Method of Grouting	D100	sure			-
Yes No ,	· · · · · · · · · · · · · · · · · · ·			40 :		
Static water level after drilling 98		' GE	DLOGIC LO	G (Copie geophy	s of other geolo /sical logs shou	gic logs and/or ld be attached.)
Water level was measured using	Tape.	Δ.	-6"		SOIL	
Well was developed forhou	rs atgpm			,,,,	4010	
Method of development / W/A		_^h	-8'	Λ	ا ا	CAUN
Was permanent pumping equipment in	stalled? Yes XNo	, (4)	0	Crange	brown Fine	ا لانتدو ا
Pump capacity 1 gpm	/					
Pump type: NA			1			
Drilling Method Auges		18-	12	Black u	ery Fine i	Sand
Drilling Fluid Type	of Rig 15-7/					
Name of Driller	- N	 				
Health and Safety Plan submitted?	JYes IXINO		_ 03. k	15,000		
Level of Protection used on site (circle of	one) None(D) C B A		2-30	Greeni	sh black u	ery Fine SAUD
N.J. License No. 1500 82	RY PARENT					ŀ
Name of Drilling Company	VI FAVAVI	ـــــ		V,		
I certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance with	h all well per	mit require	ments and all a	applicable
Driller's Signa	ature <u>OW</u>	1 Kar	an	D	ate	2/90
COPIES: White	& Green - DEP Ganary	y - Driller	Pink - Owner	Goldenrod	l - Health Dept.	(

New Jersey Department of Environmental Protection Division of Water Resources



				<u> </u>	
		Ulio		WHITE ELL	. 20 , 020
OWNER IDENTIFICATION - Owner				,,, ,,,,,	
Address	BELFM-EH-E BUILDII	NG 167			
City	FURI MUNMUUIH		State Nu		Zip Code
WELL LOCATION - If not the same as	s owner please give addre	ss. Ov	ner's Well No	MCDO	C-6
					Block No
County	EAIUNIC	TMM BITHIT		N	/A N/A
				well complete	d 7,20,90
TYPE OF WELL (as per Well Permit C Regulatory Program Requiring Well	BURING 4/4		Case	LD. # 1/1	14
CONSULTING FIRM/FIELD SUPERV	ISOH (II applicable)				1918. #
WELL CONSTRUCTION		Depth to	Depth to	Diameter	
Total depth drilled 30 ft.		Top (ft.)	Bottom (ft	(inches)	Type and Material
Well finished to <u>NA</u> ft.		[From la	nd surface]		
Borehole diameter:	Inner Casing				
	Outer Casing (Not Protective Casing)] ,	,	
Topin. Bottomin.	Screen		+		
Well was finished: Wapove grade	(Note slot size)		$+\!\!-\!$		
A fush mounted	Tail Piece			`	
If finished above grade, casing	Gravel Pack			ļ	
height (stick up) above land surface <u>///</u> ft.	Annular Seal/Grout				
Was steel protective casing installed?	Method of Grouting		-		
Yes No		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		/Ca-i	
Static water level after drilling	<u></u>	GE	OLOGIC LO	G geophy	s of other geologic logs and/or sical logs should be attached.
Water level was measured using	Tope		, .		
Well was developed forhou	urs atAgpm	0	-6' Bn	own + 01	lue green Fine and
Method of development			C	layey Sa	nd
Was permanent pumping equipment in	nstalled? Yes XNo	, [
Pump capacity \mathcal{N}/A gpm	,	,			
Pump type:	 _	Ι,	,]		
Drilling Method, Auger		6-	24 151	lack Fine	siltly sound
Orilling Fluid NA Type	of Rig <u>B-47</u>				,
Name of Driller OCINY					
Health and Safety Plan subplitted?	Yes IXINO	ļ	02"	<u> </u>	
Level of Protection used on site (circle	one) None D C B A		مرانۍ ن	. 1 1	11 11 21 2
N.J. License No. <u>1500 8-2</u>	RY PARENT	124	1-50 61	reenish k	back silty SAUD
Name of Drilling Company GA	VI (FRANK)	L		.	
certify that I have drilled the above State rules and regulations.	e-referenced well in acc	ordance wit	h all well pe	rmit requirer	nents and all applicable
Driller's Sign	ature Ounf	ar	wA	Di	ate <u>8/2/90</u>
COPIES: White	& Green - DEP /Canary	ı - Driller	Pink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



		We Ari	oll Permit N	lo. <u>27</u> - 2	2 4896 7; <u>13_;</u> 823
AMILIPA (APIENA APIENA	physiphys plants is an area of	Υti	- O11901		· · · · · · · · · · · · · · · · · · ·
OWNER IDENTIFICATION - Owner		TNG 147			
Address	FORT MONMOUTH	/1NG 10/	•	NI	***
City			State _		Zip Code
WELL LOCATION - If not the same as	owner please give addre	ss. O	wner's We	II No. MCD	<u>C-7</u>
County	_ MunicipalityEATEN	MOWN BOX	20	Lot No	N/A Block No. N/A
Address					1011
TYPE OF WELL (as per Weil Permit Ca	ategories)			ate well complete	rd <u>6 120190</u>
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well		NA	c	,	<u> </u>
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)			/	
WELL CONSTRUCTION		Danih ta	Danih		
Total depth drilled 30 ft.		Depth to	Depth Botton	n (ft.) (inches)	Type and Material
Well finished to NA ft.	la an Ossian	[From I	and surfac	e)	
Borehole diameter:	Inner Casing	 	 		
Top <u> </u>	Outer Casing (Not Protective Casing)				
Bottom in.	Screen (Note slot size)			, IA	
Well was finished: Wabove grade	Tail Piece		+-	7	
######################################	Gravel Pack		+		
If finished above grade, casing height (stick up) above land			-		11 1 0 2
surface <u>N/A</u> ft.	Annular Seal/Grout	0	30	<i>_</i>	Neat Cerent
Was steel protective casing installed?	Method of Grouting	Ores	sure		
Yes X No	_			(Conje	s of other geologic logs and/or
Static water level after drilling 4,2			OLOGIC	geophy	sical logs should be attached.)
Water level was measured using	āpe ,		-1	Topsoi	
Well was developed for MA hou	rs at <u>N/A</u> gpm		-7'	,	
Method of developmentA	<u> </u>		-7	olive gre	en Fine SAUD
Was permanent pumping equipment in	stalled? Yes No	·		9	
Pump capacity 1/4 gpm			ľ		
Pump type:			1		
Drilling Method Auger	of Rig <u>13-47</u>		20	Rlach Us.	y Fine silly SAUD
Drilling Fluid Type Name of Driller Oo N	of Filg	^γ	76	DIGEN SE	19 3 1/10 011 19 3
Health and Safety Plan submitted?	Yes WNo		1	•! · .	
Level of Protection used on site (circle of	/ //\				
N.J. License No. <u>130082</u>	ile) None (b) C b A		7.0		
Name of Drilling Company	RY PARENT	20	-30	Greenish D	lack fine swo
• • • • • • • • • • • • • • • • • • • •	referenced well in see	ordanoo w	th all wall	normit roguiror	mente and all applicable
I certify that I have drilled the above State rules and regulations.	-icieleliced well ill acc	J. Janice W	ui all Well		/ /
Driller's Signa	ature Ocus	100	ZW	D.	ate <u>8/2/90</u>
COPIES: White	& Green - DEP Chnary	- Driller	Pink - Ow	ner Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection Division of Water Resources



		We	l Permit No	· -29 -2	1877	[
		Atla	s Sheet Co	ordinates 29	: 13	: 823 l
OWNER IDENTIFICATION - Owner	COST MORNET DU			·	 ,	
Address	SELFM CHE BUILDI	NG 167			 	
City	FORT MONMOLITH		State	17	Zip Code	
WELL LOCATION - If not the same as						
County	_ Municipality	Market Demons		Lot No	Blo	ck No
Address	CHIUNI	UMN BURU		f	WH .	N/A
TYPE OF WELL (as per Well Permit Ca			Dat	te well complete	d 10/12	190
Regulatory Program Requiring Well	BORING A	/A	Cas	e I.D. #	N/A.	
CONSULTING FIRM/FIELD SUPERVI			TOM		Tele. #7	57-2255
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled 30 ft.		Top (ft.)	-	10.14.11.4141		id Material
		[From la	nd surface]	()		
Well finished to N/A ft. Borehole diameter:	Inner Casing					
Topin.	Outer Casing					
Bottom <u>&</u> in.	(Not Protective Casing) Screen		+			
Well was finished above grade	(Note slot size)		14			
flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack		ļ			
height (stick up) above land surface N/A ft.	Annular Seal/Grout	0	30		Next	Cement.
Was steel protective casing installed?	Method of Grouting	Pres	sure.			
Yes No				(Conle	s of other geole	ogic logs and/or
Static water level after drilling 7	<u>) "_ft.</u>		OLOGIC L	geophy	sical logs sho	uld be attached.)
Water level was measured using	, ,,	0-8		Top Soil		
Well was developed for N /A hou			4'	Olive G	reen time	SAND.
	\/A		-5'	Brown 40	tre aveen	fine
Was permanent pumping equipment in	stalled? 🗌 Yes 🔀 No	,	<i>,</i> , †		Clayex	SHND.
Pump capacity N/A gpm		5	-28	Blads !	ven Di	mp
Pump type:	····		1	<i>9</i> 10(0(4	very fi Ity san	
Drilling Method Augar.	_ 0 4%		ļ	51	ity san	\mathfrak{D} .
Drilling Fluid NA Type	of Rig <u>B-47</u>		3 \$20			
Name of Driller Gary	- FE					ļ
Health and Safety Plan submitted?	_lYes L⊠ No					
Level of Protection used on site (circle of	one) None (D) C`B A	26	1-301	Guai	/ Dland	0)
N.J. License No. <u>B 00%2</u>	•	20		Octeenig	sh Black	SAND
Name of Drilling Company	RY PARENT			 		SHI4D.
I certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance wil	h all well p	ermit requirer	ments and all	applicable
Driller's Signa	ature Gaug	oron	115	40 D	ate <u>///2</u>	7/90_
COPIES: White	& Green - DEP Canary	- Driller	- Pink - Own	er Goldenrod	! • Health Dent.	•

New Jersey Department of Environmental Protection Division of Water Resources



		V	Vell Permit No.	29 . 29	24898 / <u>13 823</u>		
OWNER IDENTIFICATION - Owner _	FORT MONMOUTH	,	illas Olleet COO		·-··		
Address	SELFM-EH-E BUILD	ING 167	,	····			
Address	FORT MONMOUTH		State N	J	Zip Code		
WELL LOCATION - If not the same as							
County Man Man Hy	_ Municipality <u>FATIN</u>	TOWN BO	RO	Lot No	N/A Block No. N/A		
Address			 				
TYPE OF WELL (as per Well Permit Ca				· ·	ed 10 / 12 / 90		
Regulatory Program Requiring Weli					NIA		
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	To	М	·····	Tele. # <u>757-2253</u>		
WELL CONSTRUCTION	į	Depth to	Depth to	Diameter			
Total depth drilledft.		Top (ft.					
Well finished toN_/A ft.		[From	land surface]				
Borehole diameter:	Inner Casing			- 			
Top <u>8</u> in.	Outer Casing (Not Protective Casing)						
Bottom <u>B</u> in.	Screen (Note slot size)		74/27	,\			
Well was finished! above grade	Tail Piece						
N flush mounted If finished above grade, casing	Gravel Pack						
height (stick up) above land	Annular Seal/Grout	٥	30		New Coment		
surface N/A ft.					11400		
Was steel protective casing installed? Yes X No	Method of Grouting	Tre	essure.				
Static water level after drilling 61	₩ ft.	((Copies of other geologic logs and/or geophysical logs should be attached.)				
Water level was measured using		Γ	2-11		Soil		
Well was developed for NA hou	- -		- 77 6 11				
Method of development	\	'	-76	Brown & Olive green fine clayey SAND.			
Was permanent pumping equipment in	stalled? 🔲 Yes 🔀 No	, F					
Pump capacity N /A gpm			* // /	Black	k very fine		
Pump type: N/A			16"-26"	Si'H	y SAND.		
Drilling Method Augar					ישוויב ן		
Drilling Fluid N/A Type	of Rig B-47				ł		
Name of Driller			~	,			
•	_lYes LXINo	+	3 86				
Level of Protection used on site (circle o		26-30	Green	nish Black fine			
N.J. License No. <u>B 0082</u>	RY PARENT	1			SAND.		
Name of Drilling Company		L					
I certify that I have drilled the above State rules and regulations.		ordance	with all well pe	4.	//		
Driller's Signa	iture Cary 17	New	1 J152	<i>tO</i> D	Pate		
COPIES: White	& Green - DEP Canary	- Dtiller	Pink - Owner	Goldenroa	i - Health Dept.		

New Jersey Department of Environmental Protection Division of Water Resources



			l Permit No s Sheet Coon		24899 7 : 13 : 823
OWNER IDENTIFICATION - Owner	FORT MONMOUTH				
Address	SELFM-EH-E BUILD	ING 167			
Address	FURT MUNMOUTH		StateN		Zip Code
WELL LOCATION - If not the same as County	owner please give addre		ner's Well No	MC	DC-10.
TYPE OF WELL (as per Well Permit Ca	tegories)		Date	well complete	ed 10 112 190
Regulatory Program Requiring Well	N//	9	Case	l.D. #	N/A
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	TOM	Patani	<u>a</u>	Tele. #_ <i>757~225</i> 3
WELL CONSTRUCTION		Depth to	Depth to	Diameter	
Total depth drilled 30 ft.		Top (ft.) [From la	Bottom (ft.) nd surface)	(inches)	Type and Material
Well finished to N/A ft.	Inner Casing		T		
Borehole diameter: Top 8 in.	Outer Casing				
Bottom 8 in.	(Not Protective Casing) Screen				
Well was finished: 2 above grade	(Note slot size)		MA		
A flush mounted	Tail Piece			 	
If finished above grade, casing	Gravel Pack		1		
height (stick up) above land surface N/A ft.	Annular Seal/Grout	0	30		Need Cement.
Was steel protective casing installed?	Method of Grouting	Press	ure.		
Yes No	,	GE	OLOGIC LO	(Copie	s of other geologic logs and/or ysical logs should be attached.)
Static water level after drilling		T			
Water level was measured using Well was developed forN_/Ahour	,	0	-2'	Olive G	reen fine SAND
Method of developmentNA_		2.	76"	Brown	d olive green
Was permanent pumping equipment ins				_	dayey SAND.
Pump capacity N/A gpm		17	5-24		
Pump type: N/A					c very fine
Drilling Method Augar				Silt	Y SAN D.
Drilling Fluid N/A Type	of Rig B - 47				
Name of Driller <u>Gaty</u>			•		
Health and Safety Plan submitted?	Yes X No		, ,	Conse	Nh Dlada
evel of Protection used on site (circle or	re) None (D) C`B A	· · · · · · 24	730	Green	nish Black
N.J. License No. <u>BOOSZ</u>	34 CAPES PP				fine SAND.
Name of Drilling Company	RY PARENT	ـــــ			
certify that I have drilled the above- State rules and regulations.	referenced well in acc	ordance wit	h all well per	mit require	ments and all applicable
Driller's Signa	ture Cary Ka	arent	T1540	<u>)</u> 0	Pate
COPIES: White A	Green - DER Canary	. Deiller	Pink - Owers	Coldonno	l (i - Haalih Dant



New Jersey Department of Environmental Protection Division of Water Resources



MONITORING WELL RECORD

		Atlas	Sheet Coord	inates2	9 : 13 : 819
OWNER IDENTIFICATION - Owner	DIDULATE DESCRIPTION				
Address	THE DANK				
City	RED BANK		State NJ		Zip Code 07701
WELL LOCATION - If not the same as					
County Monmouth	_ Municipality	W PATE 1	95	Lot No	Block No
Address	11010				7.01 115
TYPE OF WELL (as per Well Permit Ca	ategories)		Date w	ell complete	ed 10/15/90
Regulatory Program Requiring Well					A
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)			NA	Tele. # \(\mu\) \(A\)
WELL CONSTRUCTION		Depth to	Depth to	Diameter	
Total depth drilled 20 ft.		Top (ft.)	Bottom (ft.)	(inches)	Type and Material
Well finished to 20'_ ft.		,	nd surface]	411	C 1 11 ALC
Borehole diameter:	Inner Casing	0.		4"	Sch. 40 PVC
Top 8 **in.	Outer Casing (Not Protective Casing)	NIA			
Bottom in.	Screen		ao'	4"	1205/25
Well was finished: above grade	(Note slot size) Tail Piece		40	7	.020 S/oT
If finished above grade, casing	Gravel Pack	7 7	20'	4"	#) Marie Sand
height (stick up) above land	Annular Seal/Grout	- / /	5'		Bentonite
surfaceft.				7	Demini
Was steel protective casing installed?	Method of Grouting		110	m	<u>e</u>
Yes No	.	GEO	DLOGIC LOG	(Copie	s of other geologic logs and/or
Static water level after drilling NON Water level was measured using				geoph	ysical logs should be attached.)
Well was developed forhou	·		·	0 11	
Method of development		(Front	₹	15 RISER
Was permanent pumping equipment in		1			1) \ \
Pump capacitygpm				7	
Pump type:	<u>.</u>		? .	\ /F	41 1 1
Drilling Method Quaer		(FRAVE) / :	= 1
_	of Rig MOBIL 6		Pal	/ ·	15screen
Name of Driller V. Gand	olto		Mer	/ 1	4 7 7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
Health and Safety Plan submitted?	Yes No		· 31	\sim \sim	
Level of Protection used on site (circle of	one) None (D) C`B A				-
N.J. License No. 109	•				=1 /
	ARREN GEORGE INC.	L		30, ∧	<u>-</u> V .
I certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance wit	h all well perr	nit require	ments and all applicable
Driller's Signa	ature Vincent	Lando	Yo_	D	ate 10-19-90

COPIES: White & Green - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.

Permit 2925352 WARREN GEORGE, INC. FOOT OF JERSEY AVENUE P. O. BOX 413 JERSEY CITY, N.J. 07303

N. J. TEL (201) 433-9797 29,13.819

Coord# 29.13.819

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Project School Con	z,	; nt	15, 7	into to	Us: U	ر س				
Boxing No. 4-36 Job No.					10/15	190			19	
SORING LOG	7	370	ON SAHI	LE AND CO	E DATA		BLC	WS OF	CASI	
			BLOWS PER FT.	1	ACO	THYRAP C=CORE	01		59-60 60-61	
DEPTH DESCRIPTION RUN TO OF MATERIAL	SAMPLE	DE PTH FROM - TO	CORE AECDY D.				23 34		61-62	
l	NECHES NECOA.DV			CORE RECOV'D, 10. PÇS. Romarko ⁴				62 63	_	
ABANDONEO - 3+1	1				0 -		5-6		65 65	
Resides vell	-			No Story	KE TAN	، سرعها	7-6		64.67	
3-6	4						8-9 9-10		67 68	_
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200		<u>L</u> .					18-19		77-78	
6 21							19-20 20-21		78-79 79-80	_
12/ 2" pre fire	1						21-27		80-81	_
	-	 	 				22-23		81 - 82 82 - 83	_
/5'	-			ļ			24-25 75-76		83~84	├
1/15' 2" Pre	L]			20-27		A5-96	
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6 BAJS SAMO.			1				29-30		88-89	_
1 Aport Ground	-						30-31 31-32		90.91	_
PROTRECTION PIPE			├ -				32-33 33-34		92-93	_
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2 DAGS CKHEST	┪	1	 	<u> </u>			37-38	·	96-97	
2 701.75 -27.22.	-	<u> </u>	ļ	ļ			38-39° 39-40	-	97- 98	-
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NOTE: W-Z	+-	 	 	 			44-45 45 46		103-404 101-105	_
Marie or	-	ļ	 				46 47 47 48		105 100 106 107	_
THE CENT ADIED							48 49		107,108	1
PROTESTIL PIPE	1						49 50 50- 51	 	108 199 109 115	
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Annua Mar		<u> </u>	<u> </u>		·		52 53 53 54		112 41	
GROUND WATER DEPTH HOWE DAYS		Drive H Spoon H	nmmer <u></u>	7 2	Lbs.		54-55		113 114	
- G		Casing	Size	. 6	Inch 🤧	<u> </u>	55-56 56 57		114 []5 115 []6	
	312	ncode • cf Cor	Size_		_ inch _ inch		57 58		116 217	-
 Under Remarks mention kind of bit, unusual ground water conditions, etc 	loss of	sample, lo	as of dri	illing water, s		or broke	50 59 in rock,		117 111 3. cavil	
ADDITIONAL REMARKS					650 · ·		<u> </u>	u-		-
				·	- DRILLI - HELPE		Pegor	v.		



COPIES:

New Jersey Department of Environmental Protection Division of Water Resources

4

MONITORING WELL RECORD

•			Permit No Sheet Coord		25775 3:_13:_852	
OWNER IDENTIFICATION - Owner _	Redacted - Privacy Act					
Address						
City	DALLAS	MLy WATE			Zip Code	
WELL LOCATION - If not the same as	owner please give addre		ner's Well No.	MU	U7 Drive poin	, /
County	_ Municipality	N FALLS E	0	_ Lot No	21.02 Block No	. 01
Address						
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	MONITORING				ed 2 1/7 19/ 3990 & 88A14	
CONSULTING FIRM/FIELD SUPERVI		GT	Z		Tele. #	300
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilledft.		Top (ft.) Bottom (ft.) [From land surface]		(inches)	Type and Material	ŀ
Well finished toft. Borehole diameter:	Inner Casing	O'	2	2"	Galvaired stee	7
Top <u>2 1/4</u> in.	Outer Casing (Not Protective Casing)					
Bottom <u>Ju</u> in.	Screen (Note slot size)	,	12'	2"	S.S. Cont. wrap. o.	2
Well was finished: above grade	Tail Piece					
If finished above grade, casing	Gravel Pack					
height (stick up) above land surfaceft.	Annular Seal/Grout	0 '	1'		Ben trement	
Was steel protective casing installed?	Method of Grouting	7	remie			
Yes WNo		GF	LOGIC LOG	(Copie	s of other geologic logs and/o	or .
Static water level after drilling	ft. 25002			geoph	ysical logs should be attache	<u>a.)</u>
Well was developed forhou		0	-/2"	59	nd med.	
Method of development	led		Tan			ļ
Was permanent pumping equipment in	stalled? Yes No	,	,			
Pump capacitygpm						
Pump type:						
Drilling Method						1
Drilling Fluid Type	of Rig Jack Ham	me				
Name of Driller Michael	KAVIUMS		_			
Health and Safety Plan submitted?	Yes No	18° 🖡 n	<u>: 1</u>			
Level of Protection used on site (circle of	ne) (None D C B A					-
N.J. License No. <u>M\$132.8</u>						ļ
Name of Drilling Company	DRILLING	ــــــ				
certify that I have drilled the above State rules and regulations. Driller's Signa	M.	ordance with	all well peri		ments and all applicable pate 3/29/9/	
Diniel's Signa	and The The The The The The The The The The				4 4 1	-

White & Green - DEP Canary - Driller Pink - Owner

Goldenrod - Health Dept.



New Jersey Department of Environmental Protection Division of Water Resources



•		Well	Permit No.	29 _ 2	6312
_		Atlas	Sheet Coord	dinates 29	. 13 . 852
OWNER IDENTIFICATION - OwnerAddress	edacted - Privacy Act				
Address	100 CRESCENT COU	RT			
City	DALLAS		StateTX		Zip Code
WELL LOCATION - If not the same as County	Municipality TINTO				
			Data	uali aamalati	d 6 110 191
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well					990888A14
		PTT			
CONSULTING FIRM/FIELD SUPERVI	SOH (if applicable)	0.14	=		Tele. #
WELL CONSTRUCTION Total depth drilled ft. Vi	stet Drive Point	Depth to Top (ft.) [From land	Depth to Bottom (ft.) d surface]	Diameter (inches)	Type and Material
Well finished toft.	Inner Casing	,			
Borehole diameter: Topin.	Outer Casing			1	
Bottom 2" in.	(Not Protective Casing)		ļ		
	Screen (Note slot size)	0'	8'	2"	Stamps Steel . 020
Well was finished: above grade	Tail Piece				
If finished above grade, casing	Gravel Pack				
height (stick up) above land surfaceft.	Annular Seal/Grout	0'	6"		Cement + Bent
Was steel protective casing installed?	Method of Grouting				
Static water level after drilling	4	GEO	DLOGIC LOG	(Copie	s of other geologic logs and/or /sical logs should be attached.
Water level was measured using		F		goopii	
Well was developed forhou	•	0-	-4" A.C	ement	_
Method of development		49	-8" M	ned To	an Sand some sitt.
Was permanent pumping equipment in	· — —/	1			
Pump capacitygpm					
Pump type:					
Drilling Method Briv	en ,				
	of Rig Jackham	ner			
Name of Driller Michael J	KAVIUNAS				
 	Yes No	12	mul		
Level of Protection used on site (circle o	ne) None D C'B A				
N.J. License No. <u>M01328</u>					
Name of Drilling Company	DRILLING				
I certify that I have drilled the above State rules and regulations. Driller's Signa	11-0	ordance with	all well peri	·	ments and all applicable ate 6/1/9/
COPIES: White	& Green - DEP Canary	/ - Dtiller F	ink - Owner	Goldenrod	- Health Dept.



New Jersey Department of Environmental Protection Division of Water Resources



•				nit No. 2		590		
		#	tlas She	et Coord	inates 29	:13	855	
OWNER IDENTIFICATION - Owner N								
Address2	INDUSTRIAL WAY	EST		N7.7				
City	ATONTOWN	·	_ Stat	e NJ		Zip Code _		
WELL LOCATION - If not the same as County Monmouth Address 556 industrial Wa	Municipality				MW# 1 _ Lot No. 6		ock No	
TYPE OF WELL (as per Well Permit Ca	tegories ANTICRING				•	d <u>7 / 19</u>		
Regulatory Program Requiring Well								
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	Accuted	ch			Tele. #	/39-6444	
WELL CONSTRUCTION Total depth drilledft.		Depth to) Bot	oth to tom (ft.)	Diameter (inches)	Туре а	nd Material	
Well finished to 12 ft.	Inner Casing		land su			- 1 40 F		
Borehole diameter:		+ 3		2	4	Sch.40 P	<u>/C</u>	
Top <u>10</u> in.	Outer Casing (Not Protective Casing)	none	<u> </u>					
Bottom 10 in.	Screen (Note slot size)	2		12	4	Sch.40PV	C/020s1ot	
Well was finished: X above grade flush mounted	Tail Piece	none	•	· · · · · · · · · · · · · · · · · · ·				
finished above grade, casing	Gravel Pack	1.5		12		#2 well	grave1	
eight (stick up) above land surface3ft.	Annular Seal/Grout	0		1.5		Bentinit	e/cement	
Was steel protective casing installed?	Method of Grouting	(Gravit	y Plac	ment			
Yes X No					(Conie:	of other geo	logic logs and/o	
static water level after drilling <u>6</u>	ft.) 	GEOLO	SIC LOG	geophy	sical logs sh	ould be attache	
Nater level was measured using <u>stee</u>		}						
Well was developed forhou			0-4'	brown	& gray	sand		
Method of development <u>centri</u>	Fugal pump		4'-12' green sand					
Vas permanent pumping equipment in	stalled? 🛛 Yes 🔲 No	,	water	1eve1	@ 6ft.			
Pump capacity <u>n/a</u> gpm		1						
Pump type: <u>n/a</u>		1						
Orilling Method Hollow stem augustion	e <u>r</u>							
orilling Fluid <u>none</u> Type	of Rig							
ame of Driller Allen WI1:	son		or so					
lealth and Safety Plan submitted?	X Yes No	18	()(244					
evel of Protection used on site (circle o	ne) None D C B A							
J. License No. <u>1.278</u>	SON DRILLING							
ame of Drilling Company	POOL DESTINATIONS	Ĺ						
certify that I have drilled the above state rules and regulations.	-referenced well in acc	ordance	with all	well per	mit requirer	ments and a	l applicable	
Driller's Signa	iture <u>Alle</u>	J. W	/lsa		D	ate <u>7/24</u>	/91	
COPIES White	& Green - DEP Canar	7 4 - Drillor	Pink	Owner	Goldenzod	- Health Dan	,	



New Jersey Department of Environmental Protection Division of Water Resources

6

MONITORING WELL RECORD

Well Permit No. 29

<u> 26591</u>

City RATONION WELL LOCATION - If not the same as owner please give address. Over			Zip Code		
County Monmouth Municipality RATCHTON BOX	0	_ Lot No	84.01 Block No. 111		
YPE OF WELL (as per Well Permit Categories) Regulatory Program Requiring Well REGULATION FIRM STEED SUPERVISOR (# coeliable)	Case I.	D. #			
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Accutech VELL CONSTRUCTION Total depth drilled 12 ft. From la	Depth to	Diameter			
Well finished to 12 ft. Borehole diameter: Inner Casing +3	2	4	Sch.40 PVC		
Top 10 in. Outer Casing (Not Protective Casing) none Screen					
Well was finished: X above grade (Note slot size) 2	12	4	Sch.40PVC.020s1ot		
flush mounted none finished above grade, casing Gravel Pack 1.5	12		#2 well gravei		
eight (stick up) above land urface _ 3 _ ft. Annular Seal/Grout _ 0	1.5		Bent./cement		
Yes X No tatic water level after drilling 6 ft. Vater level was measured using steel tape Vell was developed for ½: hours at 2 gpm lethod of development centrifugal pump Vas permanent pumping equipment installed? X Yes No	Gravity Placement (Copies of other geologic logs and/or geophysical logs should be attached) 0-4' brown & gray sand 4'-12' green sand water level at 6 ft.				
ump capacityn/agpm ump type:n/a ump type:n/a ump type:n/a ump type:n/a ump type:n/a ump type:n/a ump type:n/a ump type:n/a ump type:n/a ump type:n/a ump type:n/a upp ty	le de m				



New Jersey Department of Environmental Protection Division of Water Resources



26592

MONITORING WELL RECORD

Well Permit No. 29

WELL LOCATION - If not the same as			State		Zip Code
County Monmouth					
Address <u>556 Industrial way</u>		OMM DOOD			7.01
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well			Case I.	D. #	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	Accuted	<u>th</u>		Tele. #/39-6444
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.) [From lar	Depth to Bottom (ft.) nd surface]	Dlameter (inches)	Type and Material
Vell finished to 15 ft.	Inner Casing	⊹ 3	5	Q,	Sch. 40 PVC
Borehole diameter: Top 10 in.	Outer Casing (Not Protective Casing)	none			Della 10 1 vo
Bottom 10 in.	Screen (Note slot size)	5	15	4	Sch.40PVC.020s1ot
Vell was finished: X above grade	Tail Piece	none			
finished above grade, casing	Gravel Pack		1.5		#2 well gravel
neight (stick up) above land surface 3ft.	Annular Seal/Grout	0	4.5		bent./cement
Vas steel protective casing installed?	Method of Grouting	Gravity	Placemen	t	
Yes X No	4		OLOGIC LOG	(Copie	s of other geologic logs and
Static water level after drilling8 Vater level was measured usings		<u></u>		geopii	ysical logs should be attact
Vell was developed forhou	=	0-	4' brown	& gray s	and
lethod of developmentcentrifu			-15' gree		
Vas permanent pumping equipment in	· · — —	Wa	ter level	at 8 ft	•
ump capacity n/a gpm					
ump type: <u>n/a</u>		-			
orilling Method hollow stem au	<u>ger</u>				
orilling Fluid <u>none</u> Type	of Rig <u>D-50</u>				
lame of Driller <u>Allen Wils</u>		16 08	mL:		
lealth and Safety Plan submitted?		IA no			
evel of Protection used on site (circle o	•				
.J. License No. 1278	LSON DRILLING	- 7			
ame of Drilling Company	· · · · · · · · · · · · · · · · · · ·				
certify that I have drilled the above tate rules and regulations.	referenced well in acc	ordance wit	h all well peri	mit require	ments and all applicable
State of the state	ature <u>Alla</u>	L A. 11	7	_	ate <u>7/24/91</u>

Form DWR-138 11/85

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES



WELL RECORD

			Well Permit N	o. 29	26724	4		
					29 :	<u>13</u> : _	859	
		HIG TOWER CORPO	RATION	·-····································	 			
Address	_	129 HOPE ROAD	Cara			in Code		
City	A	SBURY PARK	State	NJ	4	ip Code		
WELL LOCATION - If	not the same owner plea	ase give address. Owne	r's Well No.					
		ad Asbury						
County Mor	mouth Mu	nicipalityTINTO	FALLS DO	_ Lot No	5.02	. Block No	·	115
WELL HEE			Canada		In lice			
WELL USEWi	thdrawal		Status		In Use			
WATER USEI	Domestic	Average	2000 gels. d	ylist	Maximum	4	000	_ gals. daily
		-		-				
WELL CONSTRUCTIO		vell completed <u>09</u> /						
BOREHOLE DIMENSI		s: Total <u>87</u> ft.						
		ter: Top <u>8.5"</u> in.	Bottom <u>Same</u>		.	1	W	
	at wellft.		ion was dețermined using	· ————	Topogra	apnic	мар	
Casing Height (stick-up)	above land surface	1.3 ft.						
	DEPTH TO TOP	LENGTH	DIAMETER			D MATERI		
	(FT.)	(FT.)	(IN.)		Screens: N			
Casing 1		72	4.0"		Schedule	9 40 P	VC	
Casing 2								
Casing 3								
Screen 1	71	10	4		Schedul	e 40 P	VC/.	020
Screen 2								
Tail Piece		5 '	4"					
Gravel Pack	61	25'	8.5"		.025 Bl	ended		
Grout	Surface	61			200 me	sh Ben	toni	te
Grouting Method		ressure, Thr	- Tromio Din		ZOO MC	<u> </u>		
Civating mealor	·	ressure, inc	T. ILEMIE LIA					
WELL ELOWE NATIO	ALI V	gals. per min. at	for all area who lone	4 a				
	ft, above the lan		It. above the land	i surface.				
ANSTEL LISES TO	Tt. above the lan	a surrace.						
RECORD OF TEST	Test D	oto 00 / 16 /	01					
		ate <u>09</u> / <u>16</u> / ft. below land surface.		44	below land surfa		h a6	i numnine
Static water-level before	T T T	n. Delow land surface.	7. 7.		DetoM ISHO 2011S	ca arrer	nrs. o:	pumping.
Water level was measure	Meas	ired Containe	Drawdown44					
Discharge rate measured	-	1154	Discharge Rate	-	•			
Well was pumped using			. Specific Capacity	0.9	_ gais. per min. ;	er it. of ar	waown	
Observed effects on nea	-	ne	Good					
Water Quality (taste, od	or, color, etc.)							
		РИМР	NOT INSTALL	ED _	_			
PERMANENT PUMPIN	GEQUIPMENT	Intrallan nv	C DEDADT	Pum	р Туре			
Mfrs. Name			INOU	iei				
	ivers GF		I pressure.					
	HP at		er Source					
	ft.	Footpiece						
FLOW METER: Model			installed on	in. di	ameter pipe.			
00NTD4670D N	- (0 - 111 0 4 4							
COM I RACTOR - Name	or Drilling Contractor	KAICK MATT DEST	1103 07727	/000	938 53	00		
AUDITESS	P.O. Box 6,	Parmingdale,	NJ U/-/-2/	•	•			
City	David Pr	imost M1041	State			· ——		
Name of Driller	Norman P	rimost <u>J1040</u>		Li	cense No			
	Allen	imost J1407						
, ,	100000 11	11mont	#1040	_	10	24,	9.	
Signature of Contractor	y war y	/ Correct V	0	Da	nte/_	- / / -		
	COPIES: Whi	ite - DEP Canary - D	riller Pink - Owner	r Gol	denrod - Health i	Dept.		
		124/91			0/24/9/	•		
	16	id t/7/			V X4]			

Form DWR-138 11/85.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER RESOURCES

PAGE 2 OF 2

WELL RECORD

Well Permit No.	29	-26	724
	29	13	859

Driller: Please use the space below for the log description. Note water bearing zone or geological formation.	s	DEP USE ONLY	
Are samples available?	Storet Hydrogeo C	ode	·
		ode	
Drilling MethodKOTARY	1 1	ft.	
Type of Rig T. H. DRIVE	· · · · · · · · · · · · · · · · · · ·	6	
Aquifer/Geo. Fm. VINCENTOWN	Completed by		·
	Date	//	-
LOG /	Thick.	Lith.	Fm.
0-15 Med Breen Sand/SomeGreen Si	·#		
15-35 Med. + Course Oreen Sand			
35-45 med. Tanish-Brown Sand			
45-55 Med & Coarse ateen Sand			
55-65 Med Oreen Sand Shells			
65-87 Med. 4 Fine any Green Sand/ See	JV<		
J /			
			
	-		
	_		
GWPI NoNJP	DES No.		
Latitude ' ' Lon	gitudeO		
Lat-Long Accuracy 1" 5" 10" 20"			
USGS Quadrangia			
	nty/Municipality Code	Minery 4 arms Darr	
OTHER FILES:	☐ Aquifer Test ☐ Pollution Case	☐ Water Level Data	
Checked by Date	€ • <u>!! </u>	 _	

DWR-138 M 12/91

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



		We	Il Permit No.	29	27443	010 [
•		Atia	as Sheet Coord	inates	::	- 818
OWNER IDENTIFICATION - Owner	MONMOUTH CO.,	NIGH JIRRS	KY			
Address	740VI TITO TOUR			····		
City	FREEHOLD	<u> </u>		NJ	Zip Code <u></u>	7728
					_	*************************************
WELL LOCATION - If not the same as						
County	_ Municipality	TON PALL	\$ BO	Lot No	21_01Block	No 97 _
County	SSION 143A V	Vaysia	e Koad	×		
TYPE OF WELL (as per Well Permit Ca	ategories)	r	Date w	ell complete	ed <u>//22/</u>	<i>92</i>
Regulatory Program Requiring Well			Case I.	D. #	· · · · · · · · · · · · · · · · · · ·	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable) Ka	LLAM	ASSOCT	ATES	Tele. # <u>(201</u>)	379-348
WELL CONSTRUCTION		Depth to	Depth to			
Total depth drilled 17 6 ft.		Top (ft.)	Bottom (ft.)	Dlameter (inches)		Materiai
1 / - 11		[From la	ınd surface]	(11101103)		
Well finished toft.	Inner Casing	O	7	A	AUC	
Borehole diameter: Topin.	Outer Casing		<u> </u>	7.		
Bottom // in.	(Not Protective Casing)					
· —	Screen (Note slot size)	フ	17	4	.020 PV	C
Well was finished: above grade	Tail Piece					
If finished chave grade pening	Gravel Pack	5	17'6"	10	#2	
If finished above grade, casing height (stick up) above land		<u> </u>				
surfaceft.	Annular Seal/Grout	0		10	1 Bentonite	4' Concr
Was steel protective casing installed?	Method of Grouting	PRES	SURE G	TOUT		
Yes No		_		(Conie	s of other geologi	c logs and/or
Static water level after drilling 11-4	ft.	GE	OLOGIC LOG	geoph	ysical logs should	be attached.)
Water level was measured using			•	A .		
Well was developed forhou	rs at <u>5</u> gpm		SEE !	MTTAC	HED LOG	ا کر
Method of developmentSUBME/	RSIBLE					
Was permanent pumping equipment in	stalled? 🔲 Yes 🔀 No	·				
Pump capacity 5 gpm						
Pump type: GOULD PUMP						1
Drilling Method Hollow Stem 140	gen MI-1 1 -1/2	اورره				
	of Rig Mobile Arill	27/				
	51000	——·				1
Health and Safety Plan submitted?	_ Yes IX No					
Level of Protection used on site (circle of	one) None (10) C B A	- 1				
N.J. License No. <u>12/7</u>	KKY-TKCH					
Name of Drilling Company	ADL LIRAL	ـــــ				
I certify that I have drilled the above	-referenced well in acc	ordance wi	th all well peri	mit require	ments and all ap	plicable
State rules and regulations.	A 1	ı	_		de	1.
Driller's Signa	ature Wayne	Verem	1		Date #/14/	190
			1			
COPIES: Whi	te & Green - DEPE Cana	ıry • Briller/	Pink - Owner	Goldenrod	- Health Dept.	

	•							Coord	#: 20	7. 13.	. 818		ermit 2927	7443		
		KEY -	- T !	ЕСН			WELI	L INS	TALLA	TION	LOG		L NO: MW-1	ı		
PR	OJECT	MOSOII	T Tr	COMMIS	ST	ON W	AVSIDE	RD '	TINTON '	FALLS.	N.T	SHEE	T NO.: 1 OF 1			
CL	IENT	KILLA	M A	SSOCIAT	ES	, MIL	LBURN,	NJ 2	FINTON.	818		JOB I	NO.: 92-05			
	Boring contractor key - Tech 29-27443											ELEVATION:				
GR	OUND	WATER						CAS.	SAMP.	CORE	E TUBE DATUM:					
	DATE	TIM	Ε	DEPTH	C.	ASING	TYPE	HSA	SS				START:1-22-92			
_1	-22-9	2 10:	00	11'4"		In	DIA.	3ኒ"	2"			DATE	FINISHED: 1-22-	92		
					L		WT.		140#			DRILL	ER: Ron			
<u></u>					L		FALL		30"			REP	Al			
DEPTH FT	CASING	SAMPLE NO.	SKOWS	SAMPLE SPOON PER 6"	SYMBOL	*	* STRATIGRAPHY REMARKS WELL						WELL	10" -4"-		
┡	+	· · ·	╀	9	Н		······						Flush Mounted			
ł,	. }	l	\vdash	10	H					1			Cast-Iron Cap			
•	<u> </u>	S-1		4		01	ive ye	llow f	ine SAN	D]			
2	:	1		4				0	'0" - 2	'0"				M W		
		1		4	IJ					$ \neg$			Concrete			
3	·	S-2	<u> </u>	4	Н	đo							Grout			
			\vdash	5		uo		-		1						
4	-	1		5 6				2	' <u>0" -</u> 4	' 0"-			4" PVC			
5	-	S-3		5		đo				1			Bentonite			
١ ـ	l		\vdash	6	ŀ				1011 6				Sear			
6		ł	-	<u>6</u> 5	ı			4	' <u>0" -</u> 6	<u></u>						
7		S-4		4				ive/ye	llow fir	ne						
		3-4	\vdash	4		SA	ND							9 = 2		
8	}	ł	H	<u>5</u>	ŀ			6'	0"-8'9	" -				加三郎		
9	<u> </u>	S-5		5		Bro	wnish	yellow	fine							
		J 3-3	\vdash	5		SAN	ID			1				二		
10		ĺ	-	4	ŀ			8'0	<u>" - 10'</u>							
11			H	3 4						H			4" PVC Screen	 		
• • •		S-6		4	1	01:	ive yel	low fi	ne SAND	·			/			
12			L	44	ı			10'	<u>0" - 12</u>	0"			/			
			\vdash	3									<i> </i>			
13		S-7	\vdash	4 4		do							/			
14	L			5	ļ			12'0	" - 14'	0"			Sand Pak			
·					ſ								Vanu Lak			
15			-	A									\			
16			<u> </u>	F	ſ					[ĺ	\			
17				\$									End Cap	1=1		
18					T									1.57.62		
						BOR	ING CO	MPLETE	@ 17'6		Well S 17'0"	et				
19		1							ations a		· v		ļ			
20							drille					- 1		 		
					1		aminat:									
21									ed duri: ocedure:		•					
22								J F 2				1				
23																
23					_i_							1	1	1 11		

DWR-138 M 12/91

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



-		Well	Permit No		27444	010	
		Atlas	Sheet Coord	inates	29 : 13 :	818	_凵
OWNER IDENTIFICATION - Owner _	MONMOUTH CO., I						_
Address	FREGROLD			NJ	7:- O4- CO		
City			State		Zip Code	_	
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	mu	2		
County	Municipality TIN	PON FALLS	-BO	_ Lot No	21.01 Block I	No97.	
Address 143A Waxcide	Road -	Mos	quito	Comm	ission		
TYPE OF WELL (as per Well Permit Ca	ategories)	·	Date w	rell complete	ed 1/22	92	
Regulatory Program Requiring Well						- 	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable) K	ZLXAM	ASSOCIA	755	Tele. # <i>[20]</i> .	379-	<u>3</u> 400
WELL CONSTRUCTION		Depth to	Depth to	Diameter			7
Total depth drilledft.		Top (ft.)	Bottom (ft.) and surface]		Type and	Material	
Well finished toft.	Inner Casing	0	7	4	AVC		1
Borehole diameter: Topin.	Outer Casing (Not Protective Casing)				7.7		-
Bottom 10 in.	Screen (Note slot size)	7	17	4	.020 A	1C	
Well was finished: above grade flush mounted	Tail Piece						
If finished above grade, casing	Gravel Pack	5	17.6"	10	#2		
height (stick up) above land surfaceft.	Annular Seal/Grout	0	5	10	1 Bentonte	4'Concr	ele Grout
Was steel protective casing installed?	Method of Grouting	Por	SURE	GROUT			7
Yes No		1823	SUME				1
Static water level after drilling 11'6	// ft.	GE	OLOGIC LOG	(Copie geophy	s of other geologic ysical logs should	c logs and/or be attached.)
Water level was measured using							Ί
Well was developed forhou	/		SEE /	TTAC	HED 2061	_5	
Method of development Submer	SIBLE						
Was permanent pumping equipment in	stalled? 🔲 Yes 🗵 No	,					
Pump capacitygpm]					
Pump type: Gourd Pum	<u>P</u>						
Drilling Method Hollow Sten H	riger m () 1 ·1	1000					
	of Rig Mobile Arill	1347					
Name of Driller Water L	10100~0						
Health and Safety Plan submitted?	Yes Mo						
Level of Protection used on site (circle of	one) None (D) C B A						
N.J. License No. 1217	KKY-TECH						
Name of Drilling Company I certify that I have drilled the above		ordance with	h all well nerr	mit require	ments and all an	nlicable	4
State rules and regulations.	. /	1 ,	/	im roquiloi	. /	1	
Driller's Signa	ature Way	lupl		D	ate <u>4/14</u>	190	
COPIES: Whi	te & Green DEPE Cana	ry - Dritter	Pink - Owner	Goldenrod	- Health Dept.		

Coord #: 29.13.818 Permit 2927444

PROJECT MOSQUITO COMMISSION, WAYSIDE RD., TINTON FALLS, NJ SHEET NO.: 1 OF 1								ora "	· 27.	10.0	Temms	<u> 29 274°</u>		
CLIENT KILLAM ASSOCIATES, MILLBURN, NJ	11.1	Key - 1	ECH	-	WEL									
CLIENT KILLAM ASSOCIATES, MILLBURN, NJ	PROJECT MOSQUITO COMMISSION, WAYSIDE RD., TINTON FALLS, NJ							SHEET NO.: OF 1						
BORING CONTRACTOR KEY - TECH SA D T LLC ELEVATION:								JOB I	NO.: 92-05					
CAS. SAMP. CORE TUBE DATE START 1-22-92 1-22-92 2:00 11'6" Th. DIA. 3½" 2" DATE START 1-22-92 1-22-92 2:00 11'6" Th. DIA. 3½" 2" DATE START 1-22-92 1-22-92 2:00 11'6" Th. DIA. 3½" 2" DATE START 1-22-92														
1-22-92	GROUND W	ATER							TUBE	DATU	м:			
WT. 140f DRILLER: Ron	DATE	TIME	DEPTH	CASIN						DATE START: 1-22-92				
	1-22-92	2:00	11'6"	In	DIA.	3₺"	2"			DATE FINISHED: 1-22-92				
### Soil identifications are @ 17'0" ### Soil identifications are @ 17'0" ### Well Set @ 10" ### Soil identifications are @ 17'0" ### Well Set @ 10" ### Well 10" ### ### ### ### ####################														
A	<u> </u>			<u> </u>	FALL		30"		<u> </u>					
A	DEPTH FT. CASING BLOWS	SAMPLE NO.	BLOWS ON SAMPLE SPOON PER 6"	SYMBOL	* STR	ATIGR	APHY		REMAI					
by drillers visual examination of soil samples obtained during test boring procedures.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 2!	S-1	A F S 4 3 3 2 A F S 4 4 4 4 4	*	Olive ye Olive braith lit Light ol SAND Olive fi Complete Soil ide by drill examinat samples	llow for the Grant de	o" - 4' ne SAND avel 'O" - 6 llow fin "" - 9' "" - 17	0"	ater @1	1'6"	Flush Mounte, Cast-Iron Ca Concrete Grout 4" PVC Bentonite Seal 4" PVC Screen	11111111111		

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



			Permit No			Γ
		Atla	s Sheet Coord	inates	_29:13:	<u>818</u> L
OWNER IDENTIFICATION - Owner		77 07				
Address			STRICT		_ <u></u>	
City	FREGEROLD		State	NJ	Zip Code	
MELL LOCATION II			ner's Well No.	Mul	-3	
WELL LOCATION - If not the same as	·					_
County		NIÇN, FALI	SED O	_ LOT NO	21.01	o 97
Address ///OSQUITE COMM	15510N 143A	wayı				
TYPE OF WELL (as per Well Permit Ca	tegories)		Date w	ell complete	ed <u>//23/9</u>	<u>14</u>
Regulatory Program Requiring Well	TRET .					
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	lang Hs	COCIAX	<u> </u>	Tele. # <u>20 /</u>	37939
WELL CONSTRUCTION	•			, <u> </u>		
Total depth drilled 18 ft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	T	aterial
			nd surface]	(inches)	rypo ama iii	
Well finished to 17 /2 ft.	Inner Casing	0	7//2	4	AUC	
Borehole diameter:	Outer Casing		12		1.1	
Top / O in.	(Not Protective Casing)					
Bottomin.	Screen (Note slot size)	7//2	17/2	4	.020 PVC	7
Well was finished: above grade	Tail Piece		1//			
III flush mounted	Tall Flece		<u> </u>	1		
f finished above grade, casing	Gravel Pack	5//2	18	10	#2.	
neight (stick up) above land	Annular Seal/Grout	0	5//2	10	1 Retails	41/2/8/
surface <u>N//7</u> ft.	Mathad of Crautian	0	/-	2	7750,000,00	1 2 1000
Was steel protective casing installed?	Method of Grouting	Mes.	Supe 6	rout		
Yes No	'a ".	GF	OLOGIC LOG	(Copie	s of other geologic I ysical logs should b	ogs and/or
Static water level after drilling	π. c.ae		^	/	7 7 7	e attached.)
Water level was measured using	, –		Tee /	Hay	hed Log	ゾ
Nethod of development Schma	/ /		<i>4</i> - <i>C</i>		J. J	
·						ĺ
Vas permanent pumping equipment in Pump capacity	stalled? YesNo	'				
Pump capacitygrm						
Drilling Method Hollow Stom	Augan Auga					
77.	of Rig Marke bull	1347				ł
Name of Driller WAYNE	ZPSCOMB					
lealth and Safety Plan submitted?	Yes X No					ł
evel of Protection used on site (circle o	_					
I.J. License No	,	1				ļ
lame of Drilling Company	KKY-TICH					
		ordones ···	h all wall par	mit romites	monte and all a	iochio
certify that I have drilled the above State rules and regulations.	-reierenced well in acc	ordance Wit	ıı alı weli peri	nic requirer	nerits and all appl	icadi e
Time tallo alla regulationo.	/a /	P.)		1/1.1	
Driller's Signa	iture Mayor D	Lypour		D	ate <u>4714/</u>	92
	/ '	1			•	
COPIES: Whit	e & Green - DÉPE Cana	ry - Driller " 🧃	wner	Goldenrod	· Health Dept.	
			•			

Cuoro. # 29.13.818/PERMY # 2927453 WELL INSTALLATION LOG MW-3WELL NO: KEY - TECH PROJECT MOSQUITO COMMISSION, WAYSIDE RD., TINTON FALLS, NJ SHEET NO .: I OF 1 CLIENT KILLAM ASSOCIATES, MILLBURN, NJ JOB NO.: 92-05 29,13,818 BORING CONTRACTOR KEY - TECH ELEVATION: 2927453 GROUND WATER SAMP. CORE DATUM: CAS. DATE DEPTH CASING DATE START: 1-23-92 TIME TYPE SS HSA DATE FINISHED: 1-23-92 11'9" 2" 1-23-92 10:30 In DIA 3½" WT. DRILLER: Ron 140# FALL 30" REP. Al BLOWS ON SAMPLE SPOON PER 6 10" CASING DEPTH FT. SAMPLE NO. * STRATIGRAPHY **REMARKS** WELL Flush Mounted Cast Iron Cap Α Concrete 2 Light olive brown fine Grout F SAND 3 S 4" PVC -0'0" - 4'0" Bentonite 5 Light olive brown fine S-I Seal SAND 4'0" - 6'0" 4 A 7 F 8 do 6'0" - 9'0" 9 S 4 10 Olive yellow fine SAND S-2 4" PVC Screen 4 <u>9"0"-11'0".</u> 12 1 1 1 1 1 1 1 1 1 1 1 1 1 13 F Sand Pack Light olive brown fine 14 SAND 15 16 17 End Cap 11'0" - 18'0" 18 Well Set 19 TEST BORING COMPLETE @ 17'6" @ 18'0" 20 Soil identifications are by drillers visual examination of soil 21 samples obtained during test boring procedures 22

MONITORING WELL RECORD

			II Permit No		
		Atl	as Sheet Coord	linates2	<u> 29 : 13 : 598 </u>
OWNER IDENTIFICATION - Owner _	DONATO CROUP-ME	REDAN CE	NF		· · · · · · · · · · · · · · · · · · ·
Address	3 INDUSTRIAL WAY	Y WEST			· · · · · · · · · · · · · · · · · · ·
City	RATONTOWN				Zip Code
WELL LOCATION - If not the same as	owner please give addre	.ss ()	uner's Well No	P-1	
County	Municipality	· ·		Lot No.	Block No.
Address	RATO	NTOWN BO	RO		6.07 135
			Date	vall complete	3,6,92
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	PIEZORETER				
CONSULTING FIRM/FIELD SUPERVI					
	SON (II applicable)			······	
WELL CONSTRUCTION		Depth to	Depth to	Diameter	1
Total depth drilled 39 ft.		Top (ft.)	Bottom (ft.) and surface]	(inches)	Type and Material
Well finished to 24 ft.	Inner Casing		14	a	PVC
Borehole diameter:		1 /		1 4	FUC
Top <u>9</u> in.	Outer Casing (Not Protective Casing)		- NA -		
Bottom 9 in.	Screen (Note slot size)	14	24	2	PUC 0,010 s/st
Well was finished: Above grade	Tail Piece		THA -		
If finished above grade, casing	Gravel Pack	100	74	ſ	# / SAND
height (stick up) above land surfaceft.	Annular Seal/Grout	PO	12/10	_	Pellets /growt
Was steel protective casing installed?	Method of Grouting		mie		
☐ Yes ☑ No				(Copie	s of other geologic logs and/or
Static water level after drilling 15.		GE	OLOGIC LOG	geophy	ysical logs should be attached.)
Water level was measured usingwe				,	C 1 sand
Well was developed for 0.5 hou		0	1-4- 13	2004 -	free-med SAND green fine med
Method of development <u>Bailing</u>)				_
Was permanent pumping equipment in	stalled? 🔲 Yes 💢 No	4	- 22/=	Bound	green fine med
Pump capacity		'	00		5.4
Pump type: MA				SANK	, true silt
Drilling Method 7,5, A	of Rig CME 55	0		·	1
Drilling FluidNAType Name of DrillerNathw (6)	aab Core				
	- I				
•					1
Level of Protection used on site (circle on N.J. License No	one) None (LV.C.B.A.				
Name of Drilling Company	MPIRE SOILS INVES	TIGATIO	16		
I certify that I have drilled the above State rules and regulations. Driller's Signa	MA V	ordance w	ith all well peri		ments and all applicable attended

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

MONITORING WELL RECORD



Well was developed for 0.5 hours atgpm Method of developmentBailing Was permanent pumping equipment installed? Yes No				Permit No Sheet Coord			13:	598	
Address STATUSTRIAL NAY WEST City RATUNTOWN State NJ Zip Code WELL LOCATION - If not the same as owner please give address. County Municipality KATUNTOWN BURU County Municipality KATUNTOWN BURU County Municipality KATUNTOWN BURU County Municipality KATUNTOWN BURU County Municipality KATUNTOWN BURU County Municipality KATUNTOWN BURU Case I.D. # Case I.D. # Tele. # WELL CONSTRUCTION Total depth drilled Total depth drilled Inches It. Well finished to Inches Inche	OWNER IDENTIFICATION - Owner	TYMENTO CONTOUR	ZOTIVANI (42	Lieft.					
City									
WELL LOCATION - If not the same as owner please give address. County				State I	IJ	Zip Cod	de		
County Address RATORION BOND Lot No. 6.07 Block No. 13 TYPE OF WELL (as per Well Permit Categories) PIRAMETER Case I.D. # CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. # WELL CONSTRUCTION Total depth drilled ft. Well finished to finished in in. Well was finished: above grade flush mounted if finished above grade, casing height (stick up) above land surface ft. Was steel protective casing installed ft. Was steel protective casing installed ft. Was steel protective casing installed ft. Was developed for O. 5 hours at I gpm Method of development functional finished in gpm Method of development functions and finished and surface for installed? Yes No Lot No. 6.07 Block No. 6.07			ss. Ow	ner's Well No.	0-6	١			
TYPE OF WELL (as per Well Permit Categories) Regulatory Program Requiring Well CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. # WELL CONSTRUCTION Total depth drilled fit. Well finished to Inner Casing Outer Casing (Not Protective Casing) Well was finished: If inished above grade If ilush mounted If inished above grade, casing height (stick up) above land surface If inished above grade, casing height (stick up) above land surface Type and Material Outer Casing (Not slot size) Inner Casing (Not slot size) Inner Casing Outer Casing (Not slot size) Inner Casing Outer Casing (Not slot size) Inner Casing Outer Casing (Not slot size) Inner Casing Outer Casing Outer Casing (Not slot size) Inner Casing Outer Casing					Lot No.		Block No.		
TYPE OF WELL (as per Well Permit Categories) Regulatory Program Requiring Well CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. # WELL CONSTRUCTION Total depth drilled ft. Well tinished to Soreen (Note slot size) Well was finished: Sabove grade If tinished above grade, casing height (stick up) above land surface If finished above grade, casing height (stick up) above land surface Toy Yes Method of development Was permanent pumping equipment installed? Date well completed 3 / 1 / 92 Case I.D. # Case I.D. # Depth to Depth to Dottom (ft.) Finished above made surface (inches) Type and Material Type and Material Type and Material Type and Material Type and Material And Surface Type and Material	Address	KATC	ONTOWN BO						.35
Regulatory Program Requiring Well				Date u	rell complete	. 3 ,	7,93	2_	
WELL CONSTRUCTION Total depth drilled ft. Well finished to Bottom Top In. Bottom Top In. Bottom Top In. Bottom Top In. Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Well was finished: Bottom In. Inner Casing Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing) Not Protective Casing Not Protective Casing) Not Protective Casing Not Protective Casin	Regulatory Program Requiring Well	PIKZOHCIKI	3						
WELL CONSTRUCTION Total depth drilled									
Total depth drilled // ft. Top (ft.) Bottom (ft.) (inches) Type and Material Well finished to // 8 ft. Inner Casing // 2 8 2 IVC Borehole diameter: Top // in. Outer Casing	CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				1 010. #	<u></u>		
Well finished toft. Borehole diameter:	WELL CONSTRUCTION					-			
Well finished to	· ———		, , , ,	, ,	(inches)	Тур	e and Ma	lerial	-
Borehole diameter: Top	Well finished toft.	Janes Carrier	7 -		$\overline{}$	010			\dashv
Bottom 1 in. (Not Protective Casing) Screen (Note slot size) 8 19 2 DVC 0,010 Slot			10	 	0				_
Well was finished: above grade flush mounted If finished above grade, casing height (stick up) above land surface ft. Was steel protective casing installed? Was eveloped for 0.5 hours at gpm Method of development balling Was permanent pumping equipment installed? Well was finished: Above grade filling flush mounted Tail Piece flush f	•			NA				-	
If finished above grade, casing height (stick up) above land surface			8	18	2	PVC	0,010	5/01	
Gravel Pack Gravel Pack		Tail Piece		NA				_	
Was steel protective casing installed? Method of Grouting Yes No Static water level after drilling ft. Water level was measured using wetted tage Well was developed for 0.5 hours at gpm Method of development Bailing Was permanent pumping equipment installed? Yes No Method of Static water level after drilling gpm O'-4' = Brown fine - need SAND		Gravel Pack	6	18	~	#/	SANO	,	
Was steel protective casing installed? Method of Grouting Yes No Static water level after drilling Water level was measured using wetted type Well was developed for 0.5 hours at gpm Method of development Bailing Was permanent pumping equipment installed? Yes No Method of Static water level after drilling GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached of geophysical logs should be attached of the static logs should be attached of the static logs and/or geophysical logs should be attached of the static logs should be attached of the static logs and/or geophysical logs should be attached of the static logs should be attached of the static logs and/or geophysical logs should be attached of the static logs and/or geophysical logs should be attached of the static logs and/or geophysical logs should be attached of the static logs and/or geophysical logs should be attached of the static logs and/or geophysical logs should be attached of the static logs and		Annular Seal/Grout	4/0	6/4	-	De/6	to Ben	real	\neg
Yes No Static water level after drilling ft. Water level was measured using wetted tage Well was developed for 0.5 hours at gpm Method of development Bailing Was permanent pumping equipment installed? Yes No GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached Seophysical logs sh		Method of Grouting	G	nu.ty			<u> </u>	· · · · ·	\exists
Water level was measured using wetted type Well was developed for 0.5 hours at gpm Method of development Bailing Was permanent pumping equipment installed? Yes No	Yes No			<u> </u>	(Copie:	of other	geologic lo	rs and/	or
Well was developed for 0.5 hours atgpm Method of developmentBailing Was permanent pumping equipment installed? Yes No	Static water level after drilling	π.	GEO	DLOGIC LOG	geophy	sical logs	should be	attache	<u>∍d.)</u>
Was permanent pumping equipment installed? LIYes Al No	Water level was measured using	Tred Topic	اما	, , ,	1-	-G			
Was permanent pumping equipment installed? LIYes Al No			0	-4 =	Drown	Tine	-nec		Ì
		J			SAND				ł
Dump appositu / 1/1/7 gom	was permanent pumping equipment in Pump capacity <u>///</u> gpm	stalled? Yes No	'						
Pump type:	4.4			101	2		G		- 1
Drilling Method H5A	1/		19	-18 x 10	nun-g	reen	Tine "	ec	
Pump type: N/A Drilling Method H5A Drilling Fluid N/A Type of Rig CME-550 SAND, Trace	Drilling Fluid M4 Type	of Ria CME-55	50	رک	AND.	trace			
Name of Driller Mathew Raab	n n n	iab							
Health and Safety Plan submitted? 🔀 Yes 🔲 No									1
Level of Protection used on site (circle one) None OC B A									1
N.J. License No	N.J. License No								ļ
Name of Drilling Company RAPIBE SOILS INVESTIGATIONS	Name of Drilling Company	OMPIRE SOILS INVE	STIGATIO	8					
I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.		referenced well in acc	cordance with	n all well perr	mit requirer	nents and	d all applic	able	
Driller's Signature Mills Rab AK Date 3/7/42	Driller's Signa	ature Millia Rail	/AK		D	ate	5/7/4	2	

MONITORING WELL RECORD

			l Permit No				_ 1
		Atla	s Sheet Coord	inates2	<u>29</u> :	<u>13</u> :	5981
OWNER IDENTIFICATION - Owner	DONATO CROUP-MIC	RIDAN (30	T				
Address	3 INDUSTRIAL WA	Y WEST					
City	EATONION		StateN	J	Zip C	ode	
			ner's Well No.	0-	3		
WELL LOCATION - If not the same as		ss. Ow	rner's Well No.		<u> </u>		. NI.
County	_ Municipality	NTONN BOI	30	_ Lot No	6.07	- BIOCH	135
Address					~		<i>Ø</i> 2
TYPE OF WELL (as per Well Permit Ca	ategories)		Date v	vell complete	<u>ں</u> ہو	<u>, 6</u>	7 2
Regulatory Program Requiring Well	TIMAN		Case I.	D. #			
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele.	#	
WELL CONSTRUCTION		Donth to	Danih ta	<u> </u>	Γ		
Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)		pe and	Material
			nd surface]	(11101185)			
Well finished to/7ft.	Inner Casing	72	7	2	Pi	ノこ	
Borehole diameter:	Outer Casing	70	101/4				
Top <u>9</u> in. Bottom <u>9</u> in.	(Not Protective Casing)		-N/A				
	Screen (Note slot size)	7	1 17	コ	AV	2 0	0/05/01
Well was finished: above grade	Tail Piece		N/A				
flush mounted			177		Λ	/ 0	
If finished above grade, casing	Gravel Pack		177			1 54	
height (stick up) above land surfaceft.	Annular Seal/Grout	3/0	5/3	_	Pll	lets 1	sensul
Was steel protective casing installed?	Method of Grouting	Gran	rh]
Yes No				/Conio	a of othe	r ===l==	is lose and/or
Static water level after drilling9	ft.		OLOGIC LOG	geoph	ysical log	r geolog js shoul	ic logs and/or d be attached.)
Water level was measured using			-2'= K	. 4	777.4	and	SAND
Well was developed forhou	rs atgpm	<i> 0</i> -	-2' = Pr	wn '			
Method of development	alling			. 11 Bm	m J	reen	
Was permanent pumping equipment in	stalled? Tyes Yes You	, <i>2</i> .	-4'= L	JA7		, . !	
Pump capacity N/A gpm			4	fine-m	e	ind	}
Pump type: N/A							,
Drilling Method HSA		- 4	· 10 = 1	Brown +	Red	Anne	ned
	of Rig CME-55	0		SAND			
Name of Driller Mathew Ra	2, 24, 11			->),			
Health and Safety Plan submitted?		· `\ /2	1,-1	<u> </u>	R		See and
Level of Protection used on site (circle of	one) None (D)C B A	γυ	7/1=	ureen d	- 670	/ \	ine - nec
N.J. License No/\$77		L		5AND			
Name of Drilling Company	MPIRE SOILS INVE	511(CATIO	<u>rsi</u>				
I certify that I have drilled the above	referenced well in acc	ordance wi	th all well per	mit require	ments a	nd all a	pplicable
State rules and regulations.	inh 1	,				7/	/
Mallana Olass	the Kil	TAK			ate	3/6	192
Driller's Signa	ziule				-ale		~~~~~

DWR-138 M 6/89



New Jersey Department of Environmental Protection Division of Water Resources



MONITORING WELL RECORD

29 _

27756

OWNER IDENTIFICATION - Owner Address 20 FRAN RIDEE City MILLHOOD State NY Zip Code 105-412 WELL LOCATION - If not the same as owner please give address. Owner's Well No. P- County Mor mouth Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Address Hope Coal Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Address Hope Coal Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Address Hope Coal Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Address Hope Coal Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Address Hope Coal Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Address Hope Coal Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Address Hope Coal Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Address Hope Coal Municipality TINTEN FALLS BD Lot No. 7.01 Block No. 115 Case I.D. # N/A Case I.D. # N/A Well finished to 14 ft. Borehold digmeter: Top 1512 in. Borton (ft.) ginnerter (inches) Type and Material (Not Protective Casing) N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	•			Permit No		27756	~ 000
Address			Atlas	Sheet Coord	inates	<u> 29</u> : <u>13</u> :	829
MILL MODD State N	OWNER IDENTIFICATION - Owner	COSTOD WHOLES	NE CORP			<u></u>	
WELL LOCATION - If not the same as owner please give address. Owner's Well No. Proceedings of the process of t	Address						
County Macronalt Municipality TINTEN FOLLS 50 Address Hope Cond TYPE OF WELL (as per Well Permit Categories) PREVIOUR (if applicable) Case I.D. #	City	MILLWOOD		State	NY	Zip Code <u></u>	0546
County Macronalt Municipality TINTEN FOLLS 50 Address Hope Cond TYPE OF WELL (as per Well Permit Categories) PREVIOUR (if applicable) Case I.D. #	MELL LOCATION If not the same on	aveca alagae aliva addra	0	aria Mali Na	D_1		
Address #696 Cond TYPE OF WELL (as per Well Permit Categories)	County Manager H	Musicipality	ss. Owi	iei s weii ivo.	Lot No.	Block	No
TYPE OF WELL (as per Well Permit Categories) Regulatory Program Requiring Well NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Case I.D. # NA Tele. # 201-366-9500 WELL CONSTRUCTION Total depth drilled 14 ft. Well finished to 14 ft. Borehole diameter: Top 7578 in. Bottom 7578 in. Couter Casing (Not Protective Casing) Not Protective Casing) Not Protective Casing (Not estot size) Well was finished: Above grade If finished above grade, casing height (stick up) above land surface Annular Seal/Crout Static water level after drilling 4 ft. Was steel protective casing installed? Water level was measured using Tace date Inc. Well was permanent pumping equipment installed? Yes No Pump Uppe: NA Date well completed 4 / 16 /92 Case I.D. # NA Total 4 /4	Address Hope Road	- Wurlicipality ——— TII	vitein Falle	3 BO	_ LOUNO	- 7₌01 block	115
Regulatory Program Requiring Well CONSULTING FIRM/FIELD SUPERVISOR (if applicable) WELL CONSTRUCTION Total depth drilled	/	otogorios)		Dotou	all complete	4 6	92
WELL CONSTRUCTION Total depth drilled 14 ft. Well finished to 15 ft. Well was finished: A above grade of flush mounted lift finished above grade, casing height (stick up) above land surface 1 ft. Was steel protective casing installed? Was steel rotective casing installed? West was measured using Total development mounts at 5 gpm Method of development Transh pumping equipment installed? Type of Rig Acker As IT Name of Driller Rowald Type of Rig Acker As IT Name of Driller Rowald Type of Rig Acker As IT Name of Driller Rowald Type of Rig Acker As IT Name of Driller Rowald Type of Rig Acker As IT Tele. # 201-326 - 4500 Depth to Depth to Top (ft.) Bottom (ft.) Depth to Depth to Depth to Top (ft.) Bottom (ft.) Depth to Depth to Depth to Top (ft.) Bottom (ft.) Depth to Depth to Depth to Top (ft.) Bottom (ft.) Depth to Depth to Depth to Top (ft.) Bottom (ft.) Depth to Depth to Depth to Top (ft.) Bottom (ft.) Depth to Depth to Depth to Top (ft.) Bottom (ft.) Depth to Depth to Depth to Top (ft.) Bottom (ft.) Inner Casing O 4 2 Sch 40 plc N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A	Populatory Program Requiring Well	negories) — PIEZOPETE	3R				<u> </u>
Depth to Depth to Depth to Top (ft.) Diameter Type and Material		· · · · · · · · · · · · · · · · · · ·	_				
Total depth drilled	CONSULTING FIRM/FIELD SUPERVI	SOH (if applicable) CCC	1251875	esm	<i></i>	1 ele. #1	<u> 266-1200</u>
Well finished to 14 ft. Borehole diameter: Top 75/2 in. Bottom 75/8 in. Well was finished: above grade Gravel Pack Geologic logs and/or geophysical logs should be attached.) Was steel protective casing installed? Yes No Pump capacity Mathod of development Tops Finished Mathod	WELL CONSTRUCTION			-	Diameter		
Well finished to	Total depth drilledft.			, ,	(inches)	Type and	Material
Borehole diameter: Top 75/8 in. Bottom 75/8 in. Well was finished: A above grade	Well finished to 14 ft.		 	o surface)		41.0	
Not Protective Casing Screen Screen Not Static water level after drilling Tree doop ince Well was measured using Ince doop ince Well was developed for hours at 5 gpm Method of development Trees Not Static water level after drilling Trees Not Static water level was measured using Ince doop ince Not Static water level was measured using Ince doop ince Well was developed for hours at 5 gpm Method of development Trees Not Static water level was measured using Ince doop ince Section S	Borehole diameter:		0	4	2	5ch 40 /	<u> </u>
Bottom			NA	N/A	NA	~/A	
Well was finished: A above grade flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush mounted flush	Bottom <u>75/8</u> in.	Screen	<u>u</u>	14	7	(11000	mach
If finished above grade, casing height (stick up) above land surface	Well was finished: X above grade		. /	11.	-	sch40pre	101000
Annular Seal/Grout Surface	flush mounted	Tail Piece	N/A	NA	MA	N/A	
Was steel protective casing installed? Was steel protective casing installed? Method of Grouting Yes No Static water level after drilling 4 ft. Water level was measured using Tape drop line Well was developed for hours at 5 gpm Method of development Teach pump Was permanent pumping equipment installed? Yes No Pump capacity NA gpm Pump type: NA Drilling Method Augus Name of Driller Royald Tuckett Health and Safety Plan submitted? Yes No Method of Grouting Teach with pump GEOLOGIC Log (Copies of other geologic logs and/or geophysical logs should be attached.) O'to 14' Yes No SANG Fump type: NA Type of Rig Acka As II Name of Driller Royald Tuckett Health and Safety Plan submitted? Yes No	If finished above grade, casing	Gravel Pack	3	14	75/8	#2 will	grand
Was steel protective casing installed? Method of Grouting Tremi with pump X Yes	height (stick up) above land	Annular Seal/Grout	\triangle	2	75/9	Com HG	
Static water level after drilling 4 ft. Water level was measured using Tape drop line Well was developed for hours at gpm Method of development TRASH pump Was permanent pumping equipment installed? Yes No Pump capacity A gpm Pump type: NA Type of Rig Acker As ## Drilling Fluid Type of Rig Acker As ## Name of Driller Rowald Tuckett Health and Safety Plan submitted? Yes No Yes No GEOLOGIC Log (Copies of other geologic logs and/or geophysical logs should be attached.) O to 14' Yellow STY m/F SANG Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No Health and Safety Plan submitted? Yes No		Marked of Oversion		<u> </u>	11 0	CENUM (L	ienfour te
Static water level after drillingft. Water level was measured usingfter drop interest. Well was developed forhours at		Method of Grouting	7 Ken	11 61	tt fr	imp	
Water level was measured using Take doep line Well was developed for hours at gpm Method of development Teach pump SANG Was permanent pumping equipment installed? Yes \ No Pump capacity M gpm Pump type: M Type of Rig Acker As II Name of Driller Rowald Type SANO Health and Safety Plan submitted? Yes \ No			GEC	N OGIC I OG	(Copie	s of other geologi	c logs and/or
Well was developed forhours atgpm Method of development				• •	geoph		
Method of development	, ,	1	0	to 14'	y su	NOW STY	mif
Was permanent pumping equipment installed? Yes No Pump capacity NA gpm Pump type:			4	SANG	•		
Pump capacity NA gpm Pump type:	•		~				
Pump type:		statied? Yes Z INO	']
Drilling Method	. //						
Drilling Fluid Type of Rig Acker AS IT Name of Driller Rosald Juckett Health and Safety Plan submitted? Yes No	*/ ·						l
Name of Driller Roxald Tuckett Health and Safety Plan submitted? Yes XNo		of Dia Acker AL II	-				
Health and Safety Plan submitted? Yes No		- Lott					
'		Type XINO					
(aval at Protection used on site (circle and). None (D/ C. R. A	·		* .				ł
Level of Protection used on site (circle one) None (D/ C B A N.J. License No. ・) はつせ		ne, none to a A					
TEDGEV DODAIG	Name of Drilling Company	JERSEY BORING					
				-11 12	!4 !		
I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable	I certify that I have drilled the above State rules and regulations.	-referenced well in acc	ordance with 1	ali well peri	mit require	ments and all ap	plicable
State fores and regulations.	Gate rules and regulations.	A) 11	11/1/	[.1 1	Δ.
Driller's Signature Karall H Jurles Date 4 11 42	Driller's Signa	ature <u>"Karall</u>	H Juch	we _	D	ate 4 11	<u>42</u>
COPIES: White & Green - DEP Canary - Diller Pink - Owner Goldenrod - Health Dept.	COPIES White	& Green - DEP Canary	o Filler F	ink - Owner	Goldenroa	i - Health Dept.	

DWR-138 M 6/89



New Jersey Department of Environmental Protection Division of Water Resources



MONITORING WELL RECORD 29.

27757

-		Well	Permit No	<u> </u>	27 13	827
	COSTCO WHOLESAL	ECORP ^{Atlas}	Sheet Coord	ınates	:	:
OWNER IDENTIFICATION - Owner	MITE & LATICAL			47		
Address					Zip Code	10541
	<u> </u>			•		103 16
WELL LOCATION - If not the same as	owner please give addre	in Fales	er's Well No.	1-0	7.01	115
County Monmouth Address Hope Road	_ Municipality			_ Lot No	Bloc	k No
,	PIEZOMETER				11 /	<i>a</i>
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	ategories)		Date w	ell complete	ed 4/6	142
Regulatory Program Requiring Well	C	IC e via	Case I.	D.#	7	1 311-900
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	DISCIEN	ise 4	<u></u>	I ele. #_	1-366-1806
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilledft. Well finished toft.			Bottom (ft.) d surface]	(inches)	Type an	d Material
Borehole diameter:	Inner Casing	0	5	2	Sch 40	PVC
Top <u>75/8</u> in.	Outer Casing (Not Protective Casing)	NA	NA	NA	ALA	•
Bottom 75/9 in.	Screen	5				-24614
Well was finished: 🔀 above grade	(Note slot size) Tail Piece		15	-1/1	Sch 40 puc	1010 2101
flush mounted		NA	N/A	74/14	NA	10 - 10
If finished above grade, casing height (stick up) above land	Gravel Pack	_5	15	13/8	#2 wel	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
surfaceft.	Annular Seal/Grout	0	5	75/8	Ceneut 1	Bentovite
Was steel protective casing installed?	Method of Grouting	TRen	i with	t pur	np	
Yes No				/Conie	s of other geolo	ogic logs and/or
Static water level after drilling	tt.		LOGIC LOG	geoph	ysical logs shou	uld be attached.)
Water level was measured using A	e angline	٥	to 15'	y ell	.ow 5To	y MIF
Method of development			BUA	1		
Was permanent pumping equipment in		-	HOOL			1
Pump capacity NA gpm						
Pump type:		1				
Drilling Method Augu		. .				
	of Rig Acken AO.I					
Health and Safety Plan submitted?	Yes No					
Level of Protection used on site (circle of						
	JERSEY BURING					
Name of Drilling Company						
I certify that I have drilled the above State rules and regulations.	-referenced well in acc	ordance with	all well peri	mit require	ments and all	applicable
Driller's Signa	ature <u>Kave</u>	W J	vebels	D	ate 4/11	92
COPIES: White	& Green - DEP Canary	o - Driller F	ink - Owner	Goldenrod	i - Ilealth Dept.	

DWR-138 M 6/89



New Jersey Department of Environmental Protection Division of Water Resources

MONITORING WELL RECORD

27

27758

•			Permit No Sheet Coord	Z7	2775 29	B 13	829
OWNED IDENTIFICATION OF THE					··	— - ·	_
OWNER IDENTIFICATION - Owner Address			·				
City	MILLWOOD		State	NY	Zin Cor	ie	541
				~ ·	_	•	70
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.				
County Monmouth	MunicipalityT	INTON FAL	LS 50	_ Lot No	7. 0	Block No	11
Address Hope Rd							
TYPE OF WELL (as per Well Permit Ca	tegories) PIEZOME	1ER	Date v	vell complete	ed 4/	6 1 96	ያ
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	NA			.D.#			
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable) Ec	olscie	nse I	~C	Tele. #	201-36	16-9500
WELL CONSTRUCTION		Depth to	Depth to	Diameter			
Total depth drilledft.		Top (ft.)	Bottom (ft.)			e and Mat	eriai
Well finished toft.		[From lar	nd surface]	<u> </u>	ļ <u> </u>		
Borehole diameter:	Inner Casing	0	4	2	Sch 4	o puc	
Top 9 <i>5</i> 78 in.	Outer Casing (Not Protective Casing)	N/A	MA	NA	1/0	·	
Bottom 75/8 in.	Screen	11	1//	20/11	10/14		
Well was finished: above grade	(Note slot size)	4,	19	0	5ch 49 p	ouc - 020	>510T
Iflush mounted	Tail Piece	NA	NA	NA	NA		
If finished above grade, casing	Gravel Pack	4	14	75/8	#24	ullgra	ul
height (stick up) above land	Annular Seal/Grout	0	4	75/4	Comer	1/01	1/2
surfaceft.			2 40 ?	1:11	O	1 David	<u> </u>
Was steel protective casing installed? Yes No	Method of Grouting	160	emi u	Jitt	pum	P-	
Static water level after drilling 4	4	GEO	OLOGIC LOG	(Copie	s of other	geologic log should be	s and/or
Water level was measured using ZA	ne Annline					4	
Well was developed forhou			7614	781	lom	sty r	וויור
Method of development TRAS			SANG				
Was permanent pumping equipment ins		<u> </u>					{
Pump capacity NA gpm							Ì
Pump type: NA-		İ					
Drilling Method Augua							
	of Rig Acker ADI	<u>-</u>					
Name of Driller Ronald Ju	ickott						ĺ
Health and Safety Plan submitted?	Yes X No						
Level of Protection used on site (circle o	ne) None D C B A						f
N.J. License No. 31474		İ					
Name of Drilling Company	JERSEY BORING		···········				
I certify that I have drilled the above	referenced well in acc	ordance with	h all well peri	mit require	ments and	d all applica	able
State rules and regulations.				1 1			-
	(-67)	11/1	2/ 1/	1.4		hito	1
Driller's Signa	ture	RUY_ T	i Jua	HUY D	ate _ '	11179	<u> </u>
COPIES: White of	& Green - DEP Canary	- Driller l	Pink - Owner	Goldenroe	l - Health D	Pept.	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

		We	ll Permit No. 2	92	3781	ſ
		Atla	s Sheet Coord	inates <u>29</u>	: <u>13 : 84</u>	<u>12 </u> [
OWNER IDENTIFICATION - Owner		.				
		NTER ST.				
	TRIGRIPOLD		State NJ		Zip Code	
				m,		
WELL LOCATION - If not the same as			ner's Well No.			
County	Municipality TINION	FALLS B	0 + 0 /	Lot No.	21.01 Block No	^{).} — 97——
Address Highway histric	1 3/-6 1911	ve Bro	W(Ka			
TYPE OF WELL (as per Well Permit Ca	ategories)		Date w	ell complete	ed <u>3 /10 / 9</u>	<u>'I'</u>
Regulatory Program Requiring Well_	EST CONTROLLED		Case I.	p. #	· · · · · · · · · · · · · · · · · · ·	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	am A	sociate	جر	Tele. #_201 3	793400
WELL CONSTRUCTION					·	
1.00		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	Type and M	atorial
Total depth drilledft.			nd surface	(inches)	l Abe and M	101101
Well finished toft.	Inner Casing	0	7	1/	Schedule 40	- 442
Borehole diameter:			'		Schedule 40	
Top / K in.	Outer Casing (Not Protective Casing)					
Bottomin.	Screen (Note slot size)	フ	17	4	:820 de 4	In BUID
Well was finished: above grade					(PA EX 2/8 -	POPOC
X flush mounted	Tail Piece					,
If finished above grade, casing	Gravel Pack	5	18	12	#2 Sarbl	'
height (stick up) above land	Annular Seal/Grout	0	7	12	C''Retenite	1/ Batter
surface ///// ft.	(Maria da Alamana)		/ /		A Je at CE	mut
Was steel protective casing installed?	Method of Grouting	<u></u>	grava	V	70 047 00	
Yes No Flush mount	il	-	OLOGIC LOG	(Copie	s of other geologic l	ogs and/or
Static water level after drilling	ft.	<u> </u>		geopii	ysical logs should b	
Water level was measured using			See	ATTO	ached Lo	19S
Well was developed forhou Method of development			•			1
_,						
Was permanent pumping equipment in	stalled? L Yes L_1 No	'				
Pump capacitygpm		J				
Pump type: SUMMINSINE	Auren	,				
Drilling Method Hallow Stem Drilling Fluid None Type	of Rig Mobile Drill	B47				
Name of Driller Powald Co	op/					
Health and Safety Plan submitted?	Yes No					
Level of Protection used on site (circle of						
N.J. License No. <u>TA/60</u> 3						
Name of Drilling Company						
	Y-TKH	ordanos wii	h all well neer	nit rocuiro	mente and all anni	icable
State rules and regulations.	-referenced well in acc	oiuaiice Wil	ni ali weli peri	iat ieduiiei	nens and an appr	ivable /
	(W) /				_ /	/
Driller's Signa	ature / Con Co	y loo	7	D	ate <u>3/22</u>	93
	<i>V</i>				, ,	

		KE	Y - 1	IECH			WEL	L INS	TALLAT	rion	L	.OG	WEL	L NO: MW-	·1 ·		
PI	PROJECT HIGHWAY DISTRICT #3/#6, Pine Brook Rd., Tinton Falls								SHEET NO.: OF 1								
C	LIENT	KII	LLAM	ASSOCIA	TES	S, MIL	LBURN,	NEW J	ERSEY 6	JOB NO.: 93-14							
				OR KEY	-TI	ECH				29-2	_		ELEVATION:				
-	ROUND				T-			CAS.	SAMP.	CORE		TUBE	DATŮ				
	DATE		TIME		ᆤ			HSA	SS 2"		_			START: 3-10-9 FINISHED: 3-10			
 -	3-10-9	13 1	10:00	11'1"	╁	In	DIA. WT.	31/4"	140#		-			ER: R. Cook	1-33		
-		┵		 	╁		FALL		30"		1		REP	J. Gallagher			
ОЕРТН	CASING	SAMPLE	NO.	BLOWS ON SAMPLE SPOON PER 6	SYMBOL	*		ATIGF	RAPHY			REMAI		WELL	12"		
	3	S-		2 1 2 2 2 3 2		SA — — Or		me Gra 			•			Flush Mounted Cast Iron Car Cement Grout			
	5	s-	.3 E.	4 4 4 5			fine SAND 2'0" - 4'0" do							PVC Casing Bentonite Seal			
7		S-	4	5 4 5 4 5		do	do 6'0" - 8'0"										
10		S-	.5 - -	5 5 5 5			own med ace of	Silt	o fine 9	ľ							
12		S-	6	5 5 6		Br	own med		o fine :	- 1				PVC Screen-			
. 13		S-	7 -	5 4 5 5		do 		12	' <u>0" - 1</u>	1'0"				Sand Pack			
15 16		S-	8	3 4 5 6 4			ange br ne SANI)	edium to								
17		S-	9	4 5 6		dо		16	'0" - 18	3'0"				Bottom Plug-			
18		!	-			TEST	BORING		ETE @ 10								
20						dri.	llers v	/isual	ns are l				i				
21 22						obt	on of s ained o ing pro	during	test								
23			F														

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

			Permit No2 Sheet Coord		: 13 :	842
OWNER IDENTIFICATION - Owner						
	COZLOSKI RD. & CE					
	TREGHOLD		State NJ		Zip Code	
				20.11		
WELL LOCATION - If not the same as	owner please give addre	ss. Owr	ner's Well No.			
County Monmouth Address Highway Austric	Municipality	TALLS B	00	_ Lot No	21.01 Block	No
Address MISINIC	1 2 S/O PINE	SISTOON	101		.4 .0.0	
TYPE OF WELL (as per Well Permit Ca			Date w	ell complete	ed <u>4,30,</u>	93
Regulatory Program Requiring Well	Er .	,/ 1	Çase, I.	D. #	·	
Regulatory Program Requiring Well CONSULTING FIRM/FIELD SUPERVISE.	SOR (if applicable)	llan Hs.	sociata	5	Tele. # <u>20/</u>	3793400
WELL CONSTRUCTION		Depth to	Depth to	Diameter	<u> </u>	
Total depth drilledft.		Top (ft.)	Bottom (ft.)	Diameter (inches)	Type and	Material
Well finished toft.		[From lan	d surface]	(
Borehole diameter:	Inner Casing	0	フ	4	Schedule	40 AVC
Top / 2 in.	Outer Casing					
Bottom 12 in.	(Not Protective Casing) Screen		 		1020	
Well was finished: above grade	(Note slot size)	7	17_	4	020 Schedule	40 PUC
If flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack	51/2	18	12	#2 well	Sand
height (stick up) above land surfaceft.	Annular Seal/Grout	0	5//2	12	6" Beton	Treat Care
Was steel protective casing installed?	Method of Grouting	<u> </u>			<u>G / (, /)</u>	
Yes No Castinon C		<u></u>				i
Static water level after drilling 72	57	GEO	DLOGIC LOG	(Copie	s of other geologi ysical logs should	c logs and/or I be attached.)
Water level was measured using				011	10/2	
	rs atgpm	İ	Jee.	HHEOL	Ledlog	2
Method of development <u>Submer</u>	sible pump					
Was permanent pumping equipment in:	stalled? 🔲 Yes 🔀 No	,				
Pump capacity 10 gpm						ĺ
Pump type: G-go/d	-4					
Dullian Harbard Hallans Chen	tigor 12 1	110				
Drilling Fluid Nane Type	of Big Mobile Dry	11347				ŀ
Name of Driller Ronald Coo						
Health and Safety Plan submitted?	Yes Mo					
Level of Protection used on site (circle o	ne) None DC B A					Ì
N.J. License No. 7/603						1
Name of Drilling Company						
l certify that I have drilled the above	-TECH -referenced well in acc	ordance with	all well peri	mit require	ments and all ap	plicable
State rules and regulations.		00	1/	•	,	
	IN		Ø	_	. 120	193
Driller's Signa	ature // www.	1 100		D	ate _G/ 2/	

Atlas COORA #29.13.842 Permit #29-28782 WELL INSTALLATION LOG WELL NO: MW-2 KEY - TECH SHEET NO.: I OF 1 PROJECT HIGHWAY DISTRICT #3/6, TINTON FALLS, MONMOUTH CO. JOB NO.: CLIENT KILLAM ASSOCIATES, 25 E. Willow St., Millburn, NJ 93-36 29-28782 BORING CONTRACTOR KEY - TECH 29,13.842 ELEVATION: GROUND WATER CAS. SAMP. CORE TUBE DATUM: DEPTH CASING DATE TIME TYPE DATE START: 4-30-93 HSA SS 4-30-93 10:00 712" DATE FINISHED:4-30-93 In DIA. 2" 31/2 140# WT. DRILLER: R. Cook FALL 30" REP J. Gallagher CASING WELL * STRATIGRAPHY REMARKS Flush Mounted Cast Iron Cap 2 Cement Grout PVC.Casing 5 Bentonite. Seal Olive brown medium to S-1 fine SAND <u>5'0" - 7'0"</u> 10 11 S-2 do 10'0" - 12'0" 12 PVC Screen 13 14 15 Sand Pack Olive brown fine SAND 16 S-3 15'0" - 17'0" 17 Bottom Plug-TEST BORING COMPLETE @ 17'0" 18 19 * Soil descriptions are by drillers visual examinat-20 ion of soil samples obtained during test boring 21 procedures. 22

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

12/30/92 E

MONITORING WELL RECORD

		Well	Permit No	29	79199		ſ
		Atlas	Sheet Coord	linates	29	-13	. 289 l
OWNER IDENTIFICATION - Owner							
		OFFORATIO	14				
Address		AD	<u> </u>		T. O. I		· · · · · · · · · · · · · · · · · · ·
City	ASBURY_PARK		State	<u>N.1</u>	Zip Code		
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.				
County MANCHOUTH	Municipality	· · · · · · · · · · · · · · · · · · ·		l ot No		- llock No	
Address		INTON FAL	LS BO	201110	5.02	//OOK 110	115
County <u>MONMOUTH</u> Address WELL 15 WELL IS CHA TYPE OF WELL (as per Well Permit Ca	VGE OF USE &	Dulled	INDEN FO	yell complete	29-20	3,93	
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	CATHODI	C PROTECT	ION Case I	.D.#	-NA/-		
CONSULTING FIRM/FIELD SUPERVIS							
WELL CONSTRUCTION		<u>, , , , , , , , , , , , , , , , , , , </u>	<u> </u>	T			
Cad		Depth to	Depth to Bottom (ft.)	Diameter	Type	and Mater	ini
Total depth drilled 8 ft.			d surface]	(inches)	туре	and Mater	lai
Well finished to <u>\$1</u> ft.		[i loni lan	0 00110001				
Borehole diameter:	Inner Casing						
Top S in.	Outer Casing	0	72	4"	Die	Theo 4	4
Bottomin.	(Not Protective Casing) Screen						
	(Note slot size)	12	82	4"	Pr Si	he to	X.000
Well was finished: above grade	Tail Piece	82	87	4	Pre Sto	0 40	
f finished above grade, casing	Gravel Pack	61	87	85	More	#0	
height (stick up) above land	Annular Seal/Grout	Surface	les			At Ben	7
surface <u>6"</u> .		7	P	<u></u>		A KOLO	mila
Was steel protective casing installed?	Method of Grouting	Kussu	re There	Tremo			
∐ Yes ☒ No	1 .	GEO	LOGIC LOG	(Copie:	s of other ge sical logs sh	ologic logs	and/or
Static water level after drilling		- GE(* geophy	sical logs sh	nould be att	ached.)
Water level was measured using	ared think	L	Je. n.	0.00	Sulla 1.	a telas	1
Well was developed for hou	4	//	ok: are	grad	muy is	Frea	7
Method of development	Ĩ	- G	mplelidu	Il Repo	\$ 29:	7672	4)
Was permanent pumping/equipment ins	stalled? 🗌 Yes 📈 No	, ,	wine	aler	TOP NO.	une Fo	1
Pump capacity	•	'			107	great	ine
Pump type:		ĺ		74~	E July		J
Orilling Method Mun Kotanu				\\. ,	sur lui	Coxene &	ENCOL
Drilling Fluid BANDMITE Type	of Rig Mobile Vi	211 4 K	ver San	Jan 1	lance of		
Name of Driller DAVID P	2mo55		Į.	1 W	BENENI	TE m	put
lealth and Safety Plan submitted?	Yes No		ļ		11	1-1:	
•				K Mes	seep Juy	venue	3
evel of Protection used on site (circle o	U6) TREES D C B A	ł		131			ł
1.J. License No. <u>M / 0 4 (</u>				Ai`			
Name of Drilling Company		ــــــــ		 			
certify that I have drilled the above- State rules and regulations.	-referenced well in acc	ordance With	all well per	mit requirer	ments and a	ıll applicab	le
_	ر ب	Δ				, ,	
Driller's Signa	ture fands	11 mm		D	ate <u>07/</u>	03/93	
2 5 O.g.i.d	- Comment	· · · · · · · · · · · · · · · · · · ·	·			100	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



	3 1	Well Atla	Permit No S Sheet Coordi	29 nates	421
OWNER IDENTIFICATION - Owner Address	dacted - Privacy Act	,,	NJ		
City			State		Zip Code 07724
WELL LOCATION - If not the same as County <u>Moumbreh</u> Address <u>46 Park Road</u>	• –	FALLS BO	_		
TYPE OF WELL (as per Well Permit Ca			Date w	eli complete	ed 4 / 8 / 93
Regulatory Program Requiring Well 👤	CRA		Case I.I	D. # 917	23
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)			 	Tele. #
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.) nd surface]	Diameter (inches)	There is a second different of the second of
Well finished to13ft.	Inner Casing	(FIOIII IAI	3	4	Sch. 40 Prc
Borehole diameter: Topin.	Outer Casing				321.70 700
Bottom 12 in.	(Not Protective Casing) Screen				
Well was finished: above grade	(Note slot size)	3	13	4	1010 PVC
Well was finished. 2 above grade I above grade I flush mounted	Tail Piece				
If finished above grade, casing	Gravel Pack	2.5	14		* 1
height (stick up) above land surfaceft.	Annular Seal/Grout	0	2.5		Cement-bertavite
Was steel protective casing installed?	Method of Grouting	GRAVI	ty Place		
Static water level after drilling 3.5	ft.	GE	OLOGIC LOG	(Copie: geophy	s of other geologic logs and/or /sical logs should be attached.)
Water level was measured using				<u> </u>	
Well was developed for hou	•	ſ	* "I ~		. \ nA A
Method of development Pupp	NG		0-14 I	unk G	reed M-C
Was permanent pumping equipment in	stalled? Tyes X No	,		SAND	
Pump capacitygpm	·				
Pump type:					
Orilling Method <u>HSA</u>					
Drilling Fluid None Type		3			
Name of Driller <u>Lew Store</u>					
lealth and Safety Plan submitted?					
evel of Protection used on site (circle o	one None D C B A				
N.J. License No		1			
Name of Drilling Company	MES C. ANDERSON A	ssec. Line			
certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance wit	h all well pern	nit requirer	nents and all applicable
Driller's Signa	ature Lem Atom	- 0	<u> </u>	D	ate <u>5 - 10 - 93</u>
COPIES: Whi	te & Green - DEPE Cana	ry - Driller	Pink - Owner	Goldenrod .	· Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

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MONITORING WELL RECORD

			Permit No. <u> </u>		: 13 : 842	
		Allas	Sugar Coold	mates <u>20</u>	. 10 . 011	
OWNER IDENTIFICATION - Owner _						
	KOZLOSKI RO. & CE	NTER STRE		· · · · · · · · · · · · · · · · · · ·		
City	FREEHOLD	 	State NJ		Zip Code	
WELL LOCATION - If not the same as	owner niesce dive addre	ee Owr	ner's Well No.	mw.	?	
County Monmork Address Highway Distric	F #3/6 TINDON	FALLS BO	mt R		21.01 - Block No	97
U	-	<u> </u>				_
TYPE OF WELL (as per Well Permit C	ategories)		Date w	ell complete	ed 5/3/95	1
Regulatory Program Requiring Well CONSULTING FIRM/FIELD SUPERVI		1 1	Case I.	D. #		•
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable) 1/1/6	am Hsso	ociates		Tele. # <i>20/379</i>	3400
WELL CONSTRUCTION .		Depth to	Depth to	D	<u> </u>	
Total depth drilledft.		Top (ft.)	Bottom (ft.)	Diameter (inches)	Type and Mate	ria!
Well finished to 17 1/2 ft.		(From lan	d surface]	(11101103)		
· · · · · · · · · · · · · · · · · · ·	Inner Casing	Ø	7/2	4	Schoole 401	ve.
Borehole diameter: Topin.	Outer Casing			/		
Bottom 12 in.	(Not Protective Casing)					
_	Screen (Note slot size)	7/2	17/2	4	:020 chedule 40 A	ve_
Well was finished: above grade	Tail Piece			·		
Ilush mounted		- 0	1.6	10	11 0 0	
If finished above grade, casing	Gravel Pack	6	18	12	#2 Sand	
height (stick up) above land surfaceft.	Annular Seal/Grout	0	6	12	6" Botonite &	veit com
/	Method of Grouting	Δ		/	-	70.
Was steel protective casing installed? Yes No Castinow		pre	ssure C	- VOC A	· · · · · · · · · · · · · · · · · · ·	
Static water level after drilling		GEO	LOGIC LOG	(Copie	s of other geologic logs ysical logs should be a	and/or
Water level was measured using	Tan P					
,	urs at 57 gpm	 	1,66	BI	TACHEN LO	265
Method of development Subme	 +					
Was permanent pumping equipment in Pump capacity	istalied? Tyes IV	'				
Pump type: Gov/of						
Dulling Mathed Hallman From 1	Tuser					İ
Drilling Fluid None Type	of Rig Mobile Brill	1347				
Name of Driller Royald Co.						
Health and Safety Plan submitted?	Yes No					ĺ
Level of Protection used on site (circle of						
N.J. License No. <u>J/603</u>						
Name of Drilling Company						
KI	Y-TECH		- allall	nit ro	manta and all amplicat	
I certify that I have drilled the above State rules and regulations.	e-reierenced well in acc	ordance with	ali weli perr	ını requirei	ments and all applicat	UIE
The rest and regulations.		11 1			1/	
Driller's Sign	ature /	of los	-	D	ate 5/20/93	
•	1/-0	•			•	

Atlas COORD #29.13.842 Permit #2929607

		KEY -	TEC		_	T	WELI	L INS	TALL AT	TION	L	og	WEL	L NO: MW-3		
PR				DISTRIC	ىلە	#3/6								T NO.: 1 OF 1		
CL	ENT	KILLA	M A	SSOCIAT	ES	3, 25	E. WIL	LOW ST	MILL	BURN.	N.	J	JOB I			
		ONTRAC	TO	R KEY	Ξ	TECH								ATION:		
		WATER						CAS.	SAMP.	CORE		TUBE	DATŮM:			
	DATE	TIM		DEPTH	lc	ASING		HSA	SS		4			START: 5-3-93		
	3-93	9:1	<u>- </u>	8'4"	╀	In	DIA. WT.	31/4	2"				DATE	FINISHED: 5-3-93		
	13.8		\dashv		╀╌		FALL		140# 30"		+		RER	J. Gallagher		
			T,	W - *.								اندىيــــــــــــــــــــــــــــــــــــ		L 12"		
DEPTH FT.	CASING	SAMPLE NO.	BLOW	ON SAMPLE SPOON PER 6"	SYMBO	*	STR	ATIGR	APHY		R	EMA	RKS	WELL 4"		
2														Flush Mounted () Cast Iron Cap () Cement ()		
3 4													i	Grout PVC Casing		
5 6 7		S-1		7 8 9				ow med:			•			Bentonite Z		
8 9 10				4												
		S-2		5 4 5		Olive SAND	e brown		m to fi - 12'0'	1				PVC Screen		
14 15				3				— — n fine						Sand Pack		
16		s-3		5 4 4		 OTIVE			- 17'0"					Bottom Plug		
18	_				1	test e	ORING	COMPLE	TE @ 17	"0"						
19		f														
21		ļ														
22	\dashv	F														
23													1			

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



	, '	Well	Permit No	<u>_29</u>	29623	_
		Atlas	s Sheet Coord	inates	<u> 29 : 13 </u>	: 842
OWNER IDENTIFICATION - Owner	MONDOCERET CONSTR	o				
Address	KOZLOSKI ROAD	-	ST.			
City	FREEHOLD	B_5/251/ALES		NJ	Zio Code	
Oity				 	· . · —	
WELL LOCATION - If not the same as of	wner please give addre	ss. Ow	ner's Well No.	mw	2A	
County	Municipality			_ Lot No	Bloc	k No97
Address Highway District	+3/6 PINE	ION FALLS	Pol		Z1 .K)T	
V	•		Data	فماسمهم المر	ed <u>514</u>	,03
TYPE OF WELL (as per Well Permit Cat	HONITORIN	<u> </u>				
Regulatory Program Requiring Well		1/	Case I.	υ, # 		1379340
CONSULTING FIRM/FIELD SUPERVIS	OR (if applicable) / / /	/lam	HSSUCI	ares	Tele. # <u>20</u>	1379540
WELL CONSTRUCTION	ĺ	Depth to	Depth to		<u> </u>	
Total depth drilled 15 ft.		Top (ft.)	Bottom (ft.)	Diameter (inches)	Type an	d Material
		[From la	nd surface]	(11101103)		
Well finished toft.	Inner Casing	0	4	4/	schedul	e 40 PUC
Borehole diameter:			 	 		
Top / / in.	Outer Casing (Not Protective Casing)					
Bottom 12 in.	Screen	4	14	4	8020 le	HOPVC
Well was finished: above grade	(Note slot size)	-7- -	/ /	 	Schools	70,70
III flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack	31/2	15	12	#2 well	sad
height (stick up) above land			+ ' - '		V2 Beton	
surface ///// ft.	Annular Seal/Grout	0	31/2	12		Neatlea
Was steel protective casing installed?	Method of Grouting					
X Yes No Cast Iron C	ap					
Static water level after drilling 6/2	ft.	GE	OLOGIC LOG	(Copie	s of other geolo	gic logs and/or uld be attached.)
Water level was measured using			0 (,
Well was developed forhour			see n	rrac	hed h	.0gS
Method of development Submer	77	1				V
	_/					
Was permanent pumping equipment ins	talled? LYes ENo	,				
Pump capacity 10 gpm						
Pump type: Gould						
Drilling Method Hollow Stem In	ugen 1.11	1000				
	of Big Mobile Drill	<u> 1977 </u>				
Name of Driller /Yowald (200						i
Health and Safety Plan submitted?	Yes No					
Level of Protection used on site (circle or	ie) None (D) C B A					
N.J. License No. <u><i>T 6 0 3</i> </u>		ŀ				!
Name of Drilling Company		ـــــ				
I certify that I have drilled the above-	KKY-TIKH referenced well in acc	ordance wit	h all well per	mit require	ments and all	applicable
State rules and regulations.	^	~ ~	0 1	-1-		• • • • • • • • • • • • • • • • • • • •
_	(,)				-/-	60
Driller's Signa	ture	or a	001	C	ate 5/20	155
CODIES WILL	A Company DEDE	D-:!!	n:h	Coldonnod	Health Dant	
COPIES: White	e & Green - DEPE 🔀 Cana	ary - Driller	Pink - Owner	Goiaenroa	- Health Dept.	

سيحن				Atl	<u>as</u>	Coo	RD#	29:/3	3:84	2		Perm	if #	29-2962	3
KEY- TECH WELL INSTALLATION LOG WELL NO: MW-24									Α.						
PROJECT HIGHWAY DISTRICT #3/6, TINTON FALLS, MONMOUTH CO. SHEET NO.: OF 1															
CLIENT KILLAM ASSOCIATES, 25 E. WILLOW ST., MILLBURN, NJ JOB NO.: 93-36															
		CONTRAC	CTO	KEY KEY	_	TECH								ATION:	
		WATER			_			CAS.	SAMP.	COR	E	TUBE	DATÚ		
	ATE	TIM		DEPTH	c		ASING TYPE HSA SS							START: 5-4-9	
	-4-93		30	6'7"	Ļ	In	DIA.	3½	2"					FINISHED: 5-4-	93
K.	13.84	4-			╀		WT.		140#					ER: R. Cook	
27	2002		┯┵		Ь		FALL		30"		, 		REP	J. Gallaghe	12"
ΙΞ	NS ¥	ے تا	\X	~ #S.6	区										4"
DEPTH FT.	CASING	SAMPLE NO.	12	ON SAMPLE SPOON PER 6"	SYMBOL	'	* STR	ATIGR	APHY			REMAI	RKS	WELL	A
<u></u>	OB	Š	100	N. O. T	S						L				<u> </u>
1 .	İ	1	-		ł						1			Flush Mounte	~
	 	1	\vdash		ł I									Cast Iron Ca	인] [[
2		J	\vdash		1									Cement	TI 11
]]			1 I									Grout >	$H \mid H$
3]			l									PVC Casing	<u> </u>
		Í	<u> </u>								1			Bentonite _	-13 13 IZ
4		}	⊢		ľ									Seal	
5]	\vdash								1			}	
"		1		4	li										
6		S-1		3			e brow	m medi	um to						
		~ ~	<u> </u>	3	ı	fine	SAND								
7			 	3	H			<u>5'0"</u>	<u>- 7'0"</u>						
а			-		l									PVC Screen	
°			\vdash		ł									I ve bereen —	
9					ı										相劃!
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10			<u> </u>	<u>-</u> -	ŀ									Sand Pack	
ll		S-2		5 6	١					- 1				\	([三].]
11		5-2	┢	5		đo									
12				5	1					- 1					
'-					1	•				1					
13	{		<u> </u>		ł					1					
ا . ا			_		ı			•		- 1				Dalhan Din	
14														Bottom Plug -	
15	1		_							ĺ			ĺ		
					T										
16						TEST	BORING	COMPL	ETE @ 1	5'0"			ł		11 11
	1												ļ		
17		ł			ı					- 1			Į]]]]
18		1								- 1			i		
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19				}		dril	lers v	isual (examin-				[
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New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



WELL RECO	RD		_	2500	
Well Permit No	29	- _	29742		

OWNER IDENTIFICATION - Owner Address	HLDG. 167 - DEH				
City	FORT MONMOUTH	.4517.441	State NJ		Zip Code
WELL LOCATION - If not the same as					
County HOPPOUTH	_ Municipality	CORT-BOR) -	_ Lot No	Block No.
1001633		·			
TYPE OF WELL (as per Well Permit Ca	ategories)		Date w	vell complete	61893
Regulatory Program Requiring Well	DOM: TOKENS	· 	Case i.	D. # C	91-2842
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #
WELL CONSTRUCTION		Denth to	Donth to	1	
Total depth drilled 25 ft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
-		[From lar	id surface]	(IIICI1 6 3)	
Vell finished to 25 ft.	Inner Casing	0'	5'	4"	SCHED 40 PUC
Borehole diameter: Top12 ¹¹ in.	Outer Casing		<u> </u>		<u> </u>
Bottomin.	(Not Protective Casing)				3.1
	,010 Screen (Note slot size)	5	25	4"	и 11 31
Well was finished: above grade	Tail Piece		CAP	4n	PVC
finished above grade, casing	Gravel Pack		25'	12"	# 1 Morie
eight (stick up) above land	Annulay Cont/Conut		1		
urface <u> </u>	Annular Seal/Grout	0'	3'	12"	NEAT CEMENT
Vas steel protective casing installed?	Method of Grouting	Consoli	TV		
Yes X No			1	(Copie	s of other geologic logs and/o
Static water level after drilling			DLOGIC LOG	geophy	sical logs should be attached
Vater level was measured using 🔼 :	The state of the s	0	-10-4	<u></u> 241 50	rted sona bythow
Vell was developed forhou			m/7	rincs	
lethod of development <u>submo</u>		__	-75. or	ndina t	o conser sand
Vas permanent pumping equipment in	stalled? L Yes L No	, <u> </u>	~~ y	Mariey .	ne clayat
ump capacitygpm			W	-in sol	me changem
ump type:			U	5-20	band white
orilling Method HSA		_ 、	o,	graves.	
Prilling Fluid Type	of Rig Mobil B-	<u>></u> †			
ame of Driller Robert U	Hcs>e				
•	∐ Yes ∐ No	İ	•		
evel of Protection used on site (circle o	one) (None D C B A				
.J. License No. 1051 M	•				
ame of Drilling Company	TRECT ROVINGO	TAL INC.			
certify that I have drilled the above	-referenced well in acc	ordance wit	h all well per	mit require	ments and all applicable
State rules and regulations.					
Driller's Signa	arina Willa Africa	11	_	n	ate <u>1-24-93</u>

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



	•	Well	Permit No.	<u> 29</u>	29743 9 13 8	27
	us army – ft. m	Atlas	Sheet Coord	inates	::	
OWNER IDENTIFICATION - Owner	HLDG. 167 - Dich					 .
Address	FORT MONSCOTH		NJ			
City			State		Zip Code	
WELL LOCATION - If not the same as County	MunicipalityOCEA	FORT BUR	ner's Well No.			
Address				····	1 0 0	
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	·				ed <u>6,99</u>	2
CONSULTING FIRM/FIELD SUPERVI						_
	OOM (ii applicable)				1016. #	
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled 25 ft.		Top (ft.)	Bottom (ft.)	(inches)	Type and Ma	ierial
Well finished to 25_ft.	I	 	id surface]	1.11	1 17	
Borehole diameter:	Inner Casing	0	5'	4"	Scho 40 MC	
Top 12 in.	Outer Casing					
Bottomin.	(Not Protective Casing)				11 77	
·	1010 (Note slot size)	50	25	4"	11 7)	
Well was finished: above grade	Tail Piece	THO	CAP	4"	Pre	
If finished above grade, casing	Gravel Pack	31	15'	12"	#1 Morie	
height (stick up) above land surfaceft.	Annular Seal/Grout	0 '	31	12"	NEAT Ceman	
Was steel protective casing installed?	Method of Grouting	GAA	itu	, ,		<u></u>
Yes X No		<u> </u>	J	(01-		
Static water level after drilling	ft.	GEO	DLOGIC LOG	geophy	s of other geologic log ysical logs should be	attached.
Water level was measured using			400		ed sand w/ s	
Well was developed forhou		0	17.00	/ C	er senci wi	~.~
Method of development Subarra			A.A.	CS		
Was permanent pumping equipment in			-70. ~	لیں کمح	sh som Ja	
Pump capacitygpm		' '2			08 offin fire	
Pump type:			* 1			
Drilling Method 45A	<u></u>		2	,		.M
	of Rig Mala 1 B-5	20	1-25- r	incy 40	fine sand w	1120
	Hesse	<u> </u>	•	som c	ay	
	Yes No					
Level of Protection used on site (circle of		•	•			
N.J. License No. 1051	NO THOISE OF A	ľ	•			
Name of Drilling Companyn						
certify that I have drilled the above	areferenced well in acc	ordance with	n all well ner	mit require	ments and all applic	able
State rules and regulations.			ran wen pen	mic require	monte and an applic	4 016
Driller's Signa	ature Kirly W	#		D	ate 7-26-9	3
COPIES: Whi	te & Green - DEPE Can	ary - Driller	Pink - Owner	Goldenrod	- Health Dept.	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



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	***		Permit No		<u> 29744 </u>	
		Atlas	Sheet Coord	inates2	9 : 13	:_ 827
OWNER IDENTIFICATION - Owner_	THE ADMY IFF ME	NAME OF PERSONS				
Address						
City	FORT MONMOUTH		State NJ		Zip Code	
WELL LOCATION - If not the same a	•		ner's Well No.			
County HOMEOUTH	Municipality	PORT BOR	0	_ Lot No	Bloc	k No
Address						
TYPE OF WELL (as per Well Permit C	ategories)		Date w	vell complete	01 \ 2 \ 3	193
Regulatory Program Requiring Well	DONL'EURLING				-91-2842	
CONSULTING FIRM/FIELD SUPERV						
	то от т (п арриоасто)			··		
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled 25 ft.		Top (ft.)	Bottom (ft.) Ind surface]	(inches)	Type and	d Material
Well finished toft.					0 11	<u> </u>
Borehole diameter:	Inner Casing	Đ'	5'	44	Setter 40 1	UC .
Topin.	Outer Casing		1		ļ	
Bottom 12" in.	(Not Protective Casing)	51		1.641	11 11	n
Well was finished: above grade	Note slot size)	20	25	K11	,, ,,	
flush mounted	Tail Piece	140	CAP	UN	PUC	
If finished above grade, casing	Gravel Pack		251	1211	# 1 Mars	-
height (stick up) above land	Annular Seal/Grout	0'	31	12"	Muc	
surfaceft.			1_2	110	IVACAT CAN	WA]
Was steel protective casing installed	Method of Grouting	GRANI	TY			
Yes No				(Copie	s of other geolog	nic logs and/or
	ft.	GEO	DLOGIC LOG	geoph	s of other geologysical logs shou	ld be attached.
Water level was measured using 🕓	acobr	0	10-W	KIM 115	ad sord	dtiw
Well was developed forho			Ś	anc fr	25	
Method of development Submo	relac		_	_		Lch.
Was permanent pumping equipment i	nstalled? 🗌 Yes 🛂 No	, VO-	$20 \cdot in$	برهياه	e govel	·Cay
Pump capacitygpm		ĺ	W	vyca w	yth sam	
oump type:		70	1.7C. 00	acl ar	ading out	40
Orilling Method + HSA			, 2.3 -5.	and wy	some d	az.
Orilling Fluid Typ	e of Rig <u>MOD (\) B - S</u>	4			ading out	G
Name of Driller Robert M	Hesse					
lealth and Safety Plan submitted?	Yes No.	· · · · · .				
evel of Protection used on site (circle	one) None D C B A					
N.J. License No. 1051 M						
Name of Drilling Company	There there are a second	MT T	····			
certify that I have drilled the abov	e-referenced well in acc	AL INC. ordance with	h all well perr	mit require	ments and all a	nolicable
State rules and regulations.	Λ / /	/, r	poi		will will b	-P-1
		// \			ate 7-26	04
Driller's Sign	## (1# / #). /	\		_	. ~ ~/	117 /

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

		Well	Permit No		29745 9 : 13	— ₈₂₇
		Atlas	s Sheet Coord	inates	<u>~:</u> .	: <u>var</u>
OWNER IDENTIFICATION - Owner _			· · · · · · · · · · · · · · · · · · ·			
Address	FORT NOMBOOTH	ENVIR.	NT			
City	FURT INCESTORIA		State		_ Zip Code	
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	ww-	+	
County	•					ck No.
Address 2500		TORI Die			N/A	- IVA
•			Date	vali complet	ad 6 / 10	1,93
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well						
				· ·		
CONSULTING FIRM/FIELD SUPERVI	SOH (п арріісавіе)				Tele. #	
WELL CONSTRUCTION		Depth to	Depth to	Diameter		
Total depth drilled 25 ft.		Top (ft.)	Bottom (ft.)	(inches)	Type ar	nd Material
Well finished toft.			nd surface]	4.18	d	0.64
Borehole diameter:	Inner Casing	0'	51	4"	Schoo 40	VVV
Topin.	Outer Casing (Not Protective Casing)					
Bottomin.	Carrage	5 1	-6	4"	£e .	4 1/
Well was finished: above grade	tolo (Note slot size)	1	25			
flush mounted	Tail Piece	140	CAP	4"	PVC	
If finished above grade, casing	Gravel Pack	3'	25'	12"	# 1 MOR	iq.
height (stick up) above land	Annular Seal/Grout	0'	21	12	NEAT (_
surface <u>3</u> ft.		<u> </u>	<u> </u>	112	NUFI CE	REN'I
Was steel protective casing installed?	Method of Grouting	GAA	ity			
Yes X No	L .	GE	/ OLOGIC LOG	(Copie	s of other geol	ogic logs and/or uld be attached.)
Static water level after drilling						
Water level was measured using Management was developed forhou		0-	13-04	We seem	ed ysle cfrcs	macra
Method of development Swork			ω_{r}	magn	C thes	1
,		65.	·25-10	wasir	na Grand	-day
Was permanent pumping equipment in Pump capacitygpm	stalled? TesNC	,	w.	ixed w	ng Grand	dimed
Pump capacitygpm Pump type:		ĺ	to	fire)		
Drilling Method						
	of Rig Mobil B-5	57				İ
Name of Driller Robert M t						
Health and Safety Plan submitted?	 					
Level of Protection used on site (circle of	one None D C B A					
N.J. License No. <u>-1051 H</u>	•	1'				l
Name of Drilling Company	IROT ENVIRONMEN	MAR. FART				
ם I certify that I have drilled the above			h all well peri	mit require	ments and all	applicable
State rules and regulations.	A / /	/ //	ſ	·- ·		- 1- In
	()	//	ı		7.1	12
Driller's Signa	ature <u> (//////</u>	7 / /	<u> </u>	D	ate 726	7



REPORT OF CHEMICAL ANALYSES

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<u> </u>		PVC Co	<u>utainer</u>	Corporation)
		Eaton T	own, N	ew Jorsey	
COLLECTED 11/19/89 RECE	IVED 11/20/69	REPORTE	.	11/20/69	
SAMPL	ING POINT			TIME	
			:		
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		1	2	3	4
TURBIDITY	UNITS		·····		
HYDROGEN ION CONCENTRATION	pH	4. 7			
FREE CARBON DIOXIDE, AS CO2	mg/l				
ALKALINITY P, AS CaCO3	mg/l				<u> </u>
TOTAL ALKALINITY, AS CaCO3	mg/l			<u> </u>	
HARDNESS, TOTAL AS CaCO3	mg/l	10.0			
CHLORIDES, AS CI	mg/l				
IRON, AS Fe	mg/l	0.85			
MANGANESE, AS Mn	mg/l			<u> </u>	<u> </u>
AMMONIA, FREE, AS N	mg/l			 	<u> </u>
NITRATES, AS N	mg/l				
SYNTHETIC DETERGENTS, AS MBAS	mg/l				
EMARKS					
REMARKS				1.	
AB. NO. C-2526		LAUMA	N LABO	PRATORIES,	INC.
COLLECTED BY JTK		13	=01	7 1	
NALYZED BY ELK		100	DIRE	ands e	
			DIRE	n	

29.13.828 SAND ANALYSIS

EDWARD E. JOHNSON, INC. 29,13.828

SAINT PAUL, MINN.

	Sample sent in by J.T. KEARNS Date Nov. 19, 1969 Address SEA GIRT N.J.																																															
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		6 0			- -	- <u>'v'</u>	7	ار.	_	٠,	79	- 1				- -						-	·EC	:01	мь		ND	En	8	Crs	EF	. N		г)IA					٧.	LF	NG				_	F	 r.
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	1	SE	07	2 <u>4.</u>	اح	1	C	9		16	20	<u>2</u> 1										_												_		_												_

SO MANY CONSIDERATIONS ENTER INTO THE MAKING OF A GOOD WELL THAT, WHILE WE BELIEVE SLOT SIZES PURNISHED OR RECOMMENDED FROM SAND SAMPLES ARE CORRECT WE ASSUME NO RESPONSIBILITY FOR THE SUCCESSFUL OPERATION OF JOHNSON WELL SCREENS.

TO PVC CERPORATION	RE: TEST BORING PROGRAM
INDUSTRIAL WAY WEST	FOR RECHARGE AVAILABILITY
EATONTOWN N.J.	29,13.828
ATT: MR. ANDRES LIPPENS	
GENTLEMEN:-	
- Control of the Cont	REPORT ON THE TEST BORING
i i	ON FRIDAY NOV. 14th & SAT.
·	REA WEST CA YOUR PLANT:
A.H" SIAM, STEEL CA	ASING WAS BAILED INTO A BET
	A TOTAL DEPTH OF 28 FEET
BELOW GRADE	
AN EXCELLENT WATE	ER-BEARING (AND RECMARGE)
SAND, GRITS & SMALL GRA	WEL FORMATION WAS ENCOUNTERED
BETWEEN THE DEPTHS OF	17 FT. AND 24 FT BELOW 24 FT THE
FORMATION WAS WATER &	REARING, BUT SLIGHTLY CLAYEY
AN 14" STAINLESS STE	EL WELL POINT WAS INSERTED IN
THE 4" CASING WITH 1"4"	STEEL GALK PIPE BROUGHT UP TO
A BONE GRADE, AND THIS	WELL WAS DEVELOPED AND PUMPED AT
A MAXIMUM CAPACITY OF	- 40 GPM DN SAT. NOV. 15 15
SLOT SIZE OF SCREEN	WAS . 625" KENGT4 36".
SUBSEQUENTLY, A R	ECHARGE TEST WAS MADE WITH
	RATE OF 86 GPM OVER A
DURATION OF ONE HOL	VR. MEASUREMENT OF BUILD-UP
	PADE BY ELECTRIC TEUL-TALE
BETWEEN THE 4" AND	THE 1 14 PIPES HETER 15 MIN
↓	WATER LEVEL ROSE FROM THE
STATIC LEVEL OF 5'6	" TO WITHIN 17" OF GRADE AND
HELD THERE FOR THE	BALANCE DE ONE HOUR TOTAL TEST

TO P.V.C. CORP.	RE:	TEST	BOR	INC PA	2061	2711	
		FOR	RE	<u>Charge</u>	Av	Allgoil	
						3.828	
(2)					·····		
						1	
6/		200	-/ -	·		ļ	
ON THE BASIS OF TH	Į.	•	1	ł	1	!	
I RECOMMEND THAT 7	1	-		i	<u> </u>	1	
PACKED WELLS BE INST	- 1		1	1	1	•	
STAINLESS STEEL SCREE	_	1	1	1	b .	•	
GRAVEL DACKING & DEV	j.	i		l .	ì	i	
THE 6" CASING IS TO BE	- 1	ì	1	ነ	1	T	
THE ANNULAR SPACE FI	ILLE	D WITH	1	MPERV	NOUS	MATA	FRIAL
	-	 	-	-	-		· · · · · · · · · · · · · · · · · · ·
THESE WELLS SHOULD	BE	ENCAS	ED	IN A	CEM	ENT B	CICK
ACCESS PIT, WITH TOP O	24 1	VELL F	tw.	SHEA	WIT	HA 7	EE_
AND PLUGGED TOP W	ELL	5 5HC	V.	25 /	AN	FOLD	40
50 THAT THE RECHARG	E u	ATER	15	EVENLY	101	STRIBL	TAID
THRUOUT THE FORMATIO	24 6	NCOM	PA	SSE.D.	ļ		
			+		ļ	 	-
AN ANALYSIS OF THE	WAZ	ER WIL	-	E FOR	WAR	DED A	≤
SOON AS RECEIVED FROM	TH	E LAE	DR	TORY	A	WILL	A
COPY OF THE SAND ANAL			!				
			<u> </u>				!
A BUNGET ESTIMA	TE	ON TH	E	COMPL	ETE	RECH	ARGE
SYSTEM WITH MANIFOL	1		i	1	1	1	!
THE DISCHARGE LINE	ĺ	1	1	i	1	•	1
WOULD DE FROM \$1500	. 1	سد (
	RE:	PECTFU	(44)	SUBM	771	Δ.	-
		h	4	de			1
		Joseph	1	There			•
		71	EPH	T. KEAR	.1	1	
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M. 14 63 Completed in Us. 15 49 Darke E. RIGHARDES. M. 14 63 Completed in Us. 15 49 Darke E. RIGHARDES. M. About	SUPPLY WELL LOG	29		W	CCNoe		
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A MENT GENERAL MO FINE 1 5'		à					CTURNS.
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LAMBERTON NEW 1 31 1. LEGAL ABOUT THE 1 41 1. LEGAL TO GREATH MED FINE 1 51	ON MESSISH SAND. MY	2. 1	NO	1			
13 BEAUNS ASANO. MED. FUE. 1 3' 14 BEAUNS ASANO. MED. FUE. 1 5' 15 BEAUNS ASANO. MED. FUE. 1 5'	CH GREENING SAVOULAN				2	\mathcal{A}	
12 Aco A Sew Men Ave 1 4' 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Loine M	ZXX	ONE				
是是这种最高的。他们就是这种的一种,我们就是这种的一种,我们就是这种的一种,我们就是这种的一种,我们就是这种的一种,我们就是这种的一种,我们就是这种的一种,我们	13 DEWINSHSAID. DE	22.	Wa.	1	3'		
是是这种最高的,我们就是这种的,我们就是这种的,我们就是这种的。""我们就是这个人,我们就是这个人,我们就是这个人,我们就是这个人,我们就是这个人,我们就是这个	7 4 Brown Ger Med	1	WE		4'		
是是这种最高的,我们就是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个	to bein to Gettish.	M	O FINE		ر سی		W. J. W.
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A CONTRACTOR OF THE STATE OF TH			\$ 15 m		7.6		
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A GREAT APPE CARACTURE TO THE CONTROL OF THE CONTRO	- TO DANE DUT MINDER	SOM	SEL :				
A GENERAL GRANTE AND CHIEF	THE GENVE MIXE	20.		1	9	7	
	THE COUNTY OF COME FAIR	10 11	HOSE				
	MIXED NOTICES I	Laur	ra Marin	7	10		
	Water Warmit Low	nit	K-27/27	1146		ST P	
	UN SEPT OF ARE	12			7/		
	1 12 Op Quan Hall		3 Pract	1	1757		
	Les Samuel	371	12 51 31	17	100		
	A LIVE AND THE						
	Letter the second	049	0/11/23			1	
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		3.9	·/3.848
Date Started Completed		The state of the s	
	Melasted from Gali		
			40
	Above Ft.		
Section 1. Company of the company of	Elevation	20	7.13.828
		STRATUM Thickness Dept	TEMPERATURE:
A Milan De mas	3-000	1	
5-le Ul GAMEN NED LANG. TO l'ANDET GUNGL.	of Starlo	10	
199 SARTE WILLS LAND	1 2 2 2 2	בע ל	7
MATERIA SINO MORE		780	7 1 - 2
LESMAN.	2		
THE SHOP STILL SHOP			
HAN GRAP CORRECTION			
ALLINESTONE			
THE CHEM THE TRUBES			
THE GROOT WHEE SMOTH	/AZONE		
FALL GRAY CHASE SANC-1			
THE LESSING MOR	All Care	4. 40	
ANUGON MATTE LOVES			
LA GUN SAUL MALE LA L'EUREE	UEU .		
L'SURCE.		2	
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STAGENED GYEN SAMO.	KW/		
	24.		
1. 10.45 (3.09 PD 1)	2 7 8 12		
INCREDION TO 156 SE	3 702 = 2		
\$ 35-74-9PAD			

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



	¥		Permit No		29752 29 13 	854
	MONTATT A TOTAL TO		Sheet Coord	inates	 ::_	
OWNER IDENTIFICATION - Owner _ Address	WORZALLA POBLIS	HLING CO. Way wiest				
Address	HATONTOWN		N_	<u></u>		·
City			State		Zip Code	
VELL LOCATION THE	aures alease give addre	ss. Ow	ner's Well No.		mwl	
County HONHOUTH	Municipality EATO					o. 111
Address						
TYPE OF WELL (as per Well Permit C	ategories) MONITORING	<u> </u>	Date w	eli complete	ed <u>611419</u>	3
Regulatory Program Requiring Well		·	Case I.	D. #		
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #	·
WELL CONSTRUCTION		Depth to	Depth to	Diameter	<u> </u>	
Total depth drilledft.		Top (ft.)	Bottom (ft.)	Diameter (inches)	T	aterial
Well finished toft.		[From lar	nd surface]	, ,		
Borehole diameter:	Inner Casing	0	5	4	PIC Sab 40	7
Top <u>19</u> in.	Outer Casing					
Bottom 12 in.	(Not Protective Casing) Screen				10 1	
Well was finished: above grade	(Note slot size)	5	10	4	PVC Seh 4	9 0,20
flush mounted	Tail Piece					
f finished above grade, casing	Gravel Pack	3	10	12	\$2 morie	
neight (stick up) above land surfaceft.	Annular Seal/Grout	0	3	10	Portland	. /
Was steel protective casing installed?	Method of Grouting		166	אם אול	acement	70 - 244 1
Yes No			Gravity_	- /		
Static water level after drilling3	ft.	GE	OLOGIC LOG	(Copie deophy	s of other geologic! /sical logs should b	ogs and/or e attached.
Nater level was measured using						1
Well was developed for <u>ร</u> ูhoเ	irs atgpm		0-5 C-1	m-F	Brown Sand	4
Method of development	er-				Green Sau	1
Was permanent pumping equipment in	stalled? Yes 🗷 No	, 5	-10 C	M-F	Green 801	10
oump capacitygpm						
Pump type:						
Drilling Method						
Orilling Fluid Type	of Rig Mobile B	53				
lame of Driller Ken C	ox.					
fealth and Safety Plan submitted?	Yes No					
evel of Protection used on site (circle o	ne) None D B A					
I.J. License No		['				
	& R SOIL INVEST	TCATTONE	TNY			
certify that I have drilled the above state rules and regulations.		•		mit require	ments and all app	licable
-	ハ ノ	0			. 1	1
Driller's Signa	ature //	Coff			ate <i>lo/8</i>	22/93
	to & Green DEPE Com	ann Drillar	Pink - Owner	Goldenrod	. Health Dent	•

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



		Wel	l Permit No.	29	29753 9 <u> </u>	QEA
		Atla	s Sheet Coord	linates	:	— 004 :
OWNER IDENTIFICATION - Owner _	WORZALLA PUBLISH	IING CO.				
Address	556 INDUSTRIAL W	AY WAST				
City	RATONTOWN		State		Zip Code	
					_	
YELL LOCATION	oweer please give addre	ss. Ow	ner's Well No.			
County MONOTOH	Municipality RATOR	TOWN BOR	0	_ Lot No	63 Bloci	k No. <u>111</u>
Address		 		· · · · · · · · · · · · · · · · · · ·	··	
TYPE OF WELL (as per Well Permit Ca	ategories MONITORING		Date v	veli complete	ed <u>6/14</u>	183
Regulatory Program Requiring Well		<u></u> .	Case I.	.D. #		
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #	
WELL CONSTRUCTION				·		
		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	—	i Material
Total depth drilledf0ft.			nd surface]	(inches)	. , pe and	114.101.141
Well finished to10ft.	Inner Casing		5	4	PIC Sch	! 110
Borehole diameter:	Outer Casing	 	"	1-7-	716 001	עד
Topin. Bottom / in.	(Not Protective Casing)					
	Screen (Note slot size)	5	10	4/	PVC Sch	אח.חמר
Well was finished: above grade	Tail Piece		1 12	-/	PIC CO	10 1000
M flush mounted		<u> </u>	ļ			_
If finished above grade, casing	Gravel Pack	3	10	12	9 2 M	orie
height (stick up) above land surfaceft.	Annular Seal/Grout	n	3	12	Portland	Neat
Was steel protective casing installed?	Method of Grouting		1	77:2	1	7
Yes No		<u></u>	Gravity)	placemen	
Static water level after drilling	3 ft	GE	OLOGIC LOG	(Copié	s of other geolog ysical logs shoul	gic logs and/or
Water level was measured using				goopii	y block logs officer	
Well was developed forhou			0-5 6	-M-F	Brown &	Sand
Method of development		`	, ,		4 (
Was permanent pumping equipment in		, 4	5-10 C	-M-H	Green E	and
Pump capacitygpm						
Pump type:						
Orilling MethodHSA						
Orilling Fluid Type	of Rig Mobile B-	53				
Name of Driller <u>Ken</u> Co	K					
lealth and Safety Plan submitted?	Yes 🔀 No					
evel of Protection used on site (circle of	one) None 🛈 C B A					
N.J. License No	•					
Name of Drilling Company	& R SOIL INVEST	GATIONS,	INC.			
certify that I have drilled the above State rules and regulations.	referenced well in acc	ordance wit	h all well peri	mit require	ments and all a	pplicable
Driller's Signa	ature Sin C			D	eate	22/13
COPIES: Whi	te & Green - DEPE Cana	ıry - Driller	Pink - Owner	Goldenrod	- Health Dept.	•

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



OWNER IDENTIFICATION - Owner_					
Address	556 INDUSTRUAL W	AY WEST	NT		
City	RATONTOWN		State		Zip Code
WELL LOCATION - Karatahanana a	www.ner please give addre	ss. Ow	ner's Well No.	n	143
County HORSOUTH					83 Block No. 111
Address	KATUN	TOWN BONG)	· · · · · · · · · · · · · · · · · · ·	63 111
TYPE OF WELL (as per Well Permit C	(ategories)		Date w	ell complete	ed <u>6/14/93</u>
Regulatory Program Requiring Well _	MONITORING				
CONSULTING FIRM/FIELD SUPERV	ISOR (if applicable)				
	ISON (II applicable)				1010. #
WELL CONSTRUCTION		Depth to	Depth to	Diameter	
Total depth drilledf0ft.		Top (ft.)	Bottom (ft.) ad surface]	(inches)	Type and Material
Well finished toft.	J O		1 -	4	01. 01 10
Borehole diameter:	Inner Casing	_0_	5	1	PVC Sch 40
Top <u>12</u> in.	Outer Casing (Not Protective Casing)				
Bottomin.	Screen	5	10	4	OR Sch 40 000
Well was finished: above grade	(Note slot size)	<u> </u>	10	7	PIC SUN 70 WOL
💹 flush mounted	Tail Piece				
f finished above grade, casing	Gravel Pack	3	10	12	# 2 Morie
neight (stick up) above land	Annular Seal/Grout	n	3	12	Portland Nept
surfaceft.		<u> </u>			/ /
Was steel protective casing installed	Method of Grouting		(movity	Disp	lacement
Yes No) .	GE	OLOGIC LOG	(Copie	s of other geologic logs and/o
ئے Static water level after drilling		7		geopn	sical logs should be attached
Water level was measured using Well was developed forho			1	m E	Brown Sand
Method of development	,		1)-5 C	-///-	prount sand
			10 1	m E	Green Sand
Was permanent pumping equipment i	nstalled? L Yes L INC	' £	יש טורם	711°F	Green Sand
Pump type:gpm					
Drilling Method					
Drilling Fluid Typ	e of Rig Mobile B-	£3			
	Cox				
lealth and Safety Plan submitted?	Yes 💹 No				
evel of Protection used on site (circle	one) None 🕖 C B A	İ			
N.J. License No	_				
lame of Drilling Company					
certify that I have drilled the abov State rules and regulations.	e-referenced well in acc	ordance wit	h all well peri	mit require	ments and all applicable
Driller's Sigr	atura XII	Cax		n	ate 6/20/93

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



	₩. 4	Well	Permit No	29 _	3Ø115		
		Atlas	Sheet Coord	inates 2	9 13	912	_L
OWNER IDENTIFICATION - Owner	ALLIED SIGNAL IN						
Address	COLUMBIA RD. & P		······································		<u>.</u>		-
City	HORRISTORN		State	f	Zip Code C	7960	-
							•
WELL LOCATION - If not the same as			ner's Well No.	-			
Address //8 ///GhwA/. 35	_ Municipality	TOWN BORG	075		_ 26 Bloc	k No 64	
Address //8 // Ghway 35	ENTON TOWN.	N · J		42		· · · · · · · · · · · · · · · · · · ·	-
TYPE OF WELL (as per Well Permit Ca	ategories)		Date w	ell complet	ed <u>8 125</u>	193	
Regulatory Program Requiring Well	EYERA		Case I.	D.#8	6688		
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable) <i>ER</i>	MIE/	<u>D. Scar</u>	<u> ~' </u>	Tele. # 574) 921-430	0
WELL CONSTRUCTION		Danah An	Donah da	<u> </u>		 -	i
Total depth drilled 12.2 ft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diamete:		d Materiai	
· · · · · · · · · · · · · · · · · · ·			d surface]	(inches)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1
Well finished to 12.2 ft.	Inner Casing	0	2.2	4	Sch. 40	PVC.	
Borehole diameter:	Outer Casing	<u> </u>	Q2 7 QC		047.70	7.0	İ
Topin. Bottom//in.	(Not Protective Casing)						
	Screen (Note slot size)	2.2	12.2	4	Sch 40	Prc.02	
Well was finished: above grade	Tail Piece						
flush mounted					4.5		
If finished above grade, casing	Gravel Pack	.1.0	12.2	//	No.2	Torie	
height (stick up) above land surfaceft.	Annular Seal/Grout	0	1.0	//	Cement	bentonite	_
Was steel protective casing installed?	Method of Grouting		Grani	he DI	acement		
Yes No		- · · · · · · · · · · · · · · · · · · ·	7	///		-	I
Static water level after drilling 3.9	ft.	GEO	LOGIC LOG	(Copie	is of other geolo ysical logs shou	gic logs and/or lld be attached.)	
Water level was measured using	- 1						
Well was developed forhou	irs atgpm	0	12'	medil	um tine	light	
Method of development <u>centri</u>	fuga!		,	brown	um fine sand	- 511+	ı
Was permanent pumping equipment in	stalled? Yes X No	,			_	(,,,	ı
Pump capacity N/A gpm			í	WET (@ 3.91		1
Pump type: N/A							
Drilling Method	_ 10.,	_ ,					
Drilling Fluid hone Type	of Rig /Yobile B	-61					
Name of Driller Steven	No/+						ı
	Yes No	ĺ				i	ı
Level of Protection used on site (circle of	one) None(D/C B A						ı
N.J. License No. <u>1579</u>							ł
Name of Drilling Company	QUIFER DRILLING 8	TESTING		······································			
I certify that I have drilled the above	-referenced well in acc	ordance with	all well per	mit require	ments and all a	applicable	
State rules and regulations.			_		. 1	1	
Driller's Signa	atura & ton	en IN	/ pll	г	Date 9//D	193 1	~
Dillier's Signa		/-	*7	·			/
COPIES: Whit	te & Green - DEPE Cana	ury - Driller	Pink - Owner	Goldenrod	- Health Dept.		

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD Wall Permit No. 28

			Sheet Coord	inates <u>2</u>	
OWNER IDENTIFICATION - Owner_	ALLIED SIGNAL IN COLUMBIA ED. & E		·	-	
Address	HURRISTONN	DOR AVE.	State N	<u> </u>	7: 0:1: 070/A
Dity			State	•	Zip Code <u>07960</u>
WELL LOCATION - If not the same as	s owner please give addres	ss. Ow	ner's Well No.	Mu	1 37
County Management	Municipality Page 1			Lot No.	Block No.
County NORTH Address 118 HIGh WA \ 35	EATONTOWN. 1	V.J	07742		26 64
ſ					ed 8 125 1 93
TYPE OF WELL (as per Well Permit C	ATEGORIES HONETORING				30 <u>0 100 1 7 0</u>
Regulatory Program Requiring Well _		200 10-1		D:,# 8	5688
CONSULTING FIRM/FIELD SUPERV	ISOR (if applicable)	M NEJ	D. Scar	γ	Tele (#5/6) 92/ 4300
WELL CONSTRUCTION		Depth to	Depth to	Dia	<u> </u>
Total depth drilled 24 ft.		Top (ft.)	Bottom (ft.)	Dlameter (inches)	Type and Material
			d surface]	(1101163)	
Well finished to 26 ft.	Inner Casing	0	16	Щ	Sch 40 Prc
Borehole diameter:	Outer Casing	<u> </u>	14	7	04170770
Topin.	(Not Protective Casing)	₩	-		
Bottom // in.	Screen	16	26	11	Sch 40 AC. 02
Well was finished: above grade	(Note slot size)	-19	20	_7	Och 40 Pro
I flush mounted	Tail Piece				
f finished above grade, casing	Gravel Pack	14	26	//	No. 2 morie
neight (stick up) above land	1		4.1		0 . 6 .
surface <u>n/A</u> ft.	Annular Seal/Grout	O	14	//	Cement Bentonite
Vas steel protective casing installed	Method of Grouting	0	PHALINETS	maka	WERNATHERSUIC Grow
Yes 🛛 No			,	, ,	U
Static water level after drilling	ft.	GE	DLOGIC LOG	geoph	s of other geologic logs and/or ysical logs should be attached.)
Vater level was measured using	7				
Vell was developed forho		1 6	2-11	md	um light brown
Method of development Centre			•	ر ار م	* 611
Vas permanent pumping equipment in	<i>()</i> '— —		~	rana	
Pump capacity ///// gpm	ISTALIACE TO 1 42 IN 140	'		wet ((D) 4.
· / -					
Pump type:		1/	-21,	medi	um dark.
Orilling Method	e of Rig Hobile B-L	./		4	um dark n Sand, trace trace gravel
= 1	10 14	" —		MOW	n Jana, Trace
				SIH	trace gravel
• • • • • • • • • • • • • • • • • • • •	Yes LINo			•	7750.27
evel of Protection used on site (circle	one) None/10/C B A				
.J. License No					
lame of Drilling Company	DIFFER DRILLING &	TESTING			
certify that I have drilled the above	•		h all well peri	mit require	ments and all applicable
State rules and regulations.			•	-	• •
Driller's Sign	dt.		(11		Pate 9/10/93

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

			Permit No Sheet Coordi	inates 2	9 : 13 :	912
OWNER IDENTIFICATION - Owner	ALLIED SIGNAL II	r:				
Address	COLUMBIA RD. & I					
·	MARGUSTON	,	State	r	Zip Code	7960
City				1/		160
WELL LOCATION - If not the same as	owner please give addre	ss. Owr	ner's Well No.	MW	<i>38</i>	
County Management	Municipality			•		lo
Address 118 HiGh WA/35			42			
TYPE OF MELL (or nor Mell Pormit Co	etogorios)	•	Data	oll complete	ed 8 1261	93
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well				on complete D. # 8		<u>/~</u>
CONSULTING FIRM/FIELD SUPERVI		mAGI				921 4300
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	MALLE	3. SCA	<u>`</u>	_ Tele. #/ 3/4/	724 7300
WELL CONSTRUCTION		Depth to	Depth to	Diameter		1
Total depth drilled 37.5 ft.		Top (ft.)	Bottom (ft.)	(inches)	Type and I	/laterial
Well finished to 37.5 ft.		[From lan	d surface]	<u>`</u>		
•	Inner Casing	0	27.5	4	Sch 40	AVC
Borehole diameter: Topin.	Outer Casing					
Bottom // in.	(Not Protective Casing)					
	Screen (Note slot size)	27.5	37.5	4	Sch 40 P	C .02
Well was finished: above grade	Tail Piece					
M flush mounted					10	,
If finished above grade, casing	Gravel Pack	25,5	37.5	//	No. 2 M	one
height (stick up) above land surface //// ft.	Annular Seal/Grout	P	25,5	//	Cement/b	entrado
/	Method of Grouting			Lea Del	7 69	Remie Ape
Was steel protective casing installed? Yes No	method of Glooting		gravary	rigi izani	MOLENAMA	cssure grout a
· //	4.	GEO	LOGIC LOG	(Copie	s of other geologic /sical logs should	logs and/or
Static water level after drilling	ft.					
Water level was measured using	rs at 3 gpm	0-	-23' 1	nediu	m fine 5	and
Method of development			1	un. H	race SIH	
	<i>(/</i> — —	— I	11	rt Q	4	
Was permanent pumping equipment in	stalled? L Yes M)		_		
Pump capacity N/h gpm		23	3-36'	medi	um fine .	sand
Pump type: N/H		ŀ				
Drilling Method	of Rig. Hob, le B	, ,		16,000	own, trace	2 31/1
	of Rigy TODITE DO	<u>0/</u>		trace	gravel black	•
Name of Driller — Ofcuen	Yes No	— l s.	.	, _	U	ļ
Health and Safety Plan submitted?		34	,-37.5	fine	black	
	INDIA C B A			51/7	to clay	
7.00 Electrico (101				. ,,	Suy	-
	WIFER DRILLING &		······································			
I certify that I have drilled the above	-referenced well in acc	ordance with	n all well perr	nit require	ments and all app	olicable
State rules and regulations.					/	,
Driller's Signa	atura At		Nac	/ n	ate 9/10/	93 (
Dillier & Signa	aluro		7		uis	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



			Permit No Sheet Coor	<u>-</u> -9	369118 9 : 13 -	 912	Γ
OWNER IDENTIFICATION - Owner _	ALLIED SIGNAL IN	c.			·-	•	_ '- - -
Address	COLUMBIA RD. & P MORRISTOWN	DOL AVA.	······································	J			
City	INCOME.		State	-	Zip Code	7960	-
WELL LOCATION - If not the same as County MONOTH Address // 8 // 6h w A / 3.	Municipality RATION	PECHANI PORC	ner's Well No	Lot No.	13 Bloc	k No. <u>64</u>	
•			Date	well comple	ted 8,30	, 93	-
TYPE OF WELL (as per Well Permit Categories) Regulatory Program Requiring Well REPA				i.D. #8		<u>, , , , , , , , , , , , , , , , , , , </u>	
CONSULTING FIRM/FIELD SUPERVI		2m 18	<u> </u>		Tele. #\5/	1. 0011	5
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable) ///	JILNE	B. ac	ш-1	1 818. #	92145	200
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.	Dlamete) (inches)	_	d Material	
Well finished toft.			id surface]	 			ł
Borehole diameter:	Inner Casing	0	2	14	Sch 40	prc	
Topin.	Outer Casing (Not Protective Casing)		_				
Bottomin.	Screen		13	 	50111	O and	
Well was finished: 🔲 above grade	(Note slot size)	2	12	17~	200 4C	Pre .02	
flush mounted	Tail Piece						
If finished above grade, casing	Gravel Pack	1	12	11	No. 2 1	none	
height (stick up) above land	Annular Seal/Grout	Ó	,	11		bentonite.	
surface <u>N/ff</u> ft.	Mathed of Counting		<u> </u>	- ~/	, ·	,	ĺ
Was steel protective casing installed? Yes No	Method of Grouting	<u></u>	gravi	ty pr	Lement	<u> </u>	
Static water level after drilling 3.2	2 _{ft}	GE	DLOGIC LO	G (Copi	es of other geolo nysical logs shou	gic logs and/or	
Water level was measured using		Γ_	-				l
Well was developed for / 5 hou		10	-121	med	lium fin	P.	ĺ
Method of development Centry fu gal			,				}
Was permanent pumping equipment installed? Yes No				aga	t brown	"	
Pump capacity NA gpm			Silh	1 Sand	wet (v)		
Pump type: MA				J		3.2'	
Drilling Method #SA		ľ				0.00	
Drilling Fluid none Type	of Rig Mobile Ba	101					
Name of Driller Steven	Wolf						
Health and Safety Plan submitted?	Yes 🔲 No						
Level of Protection used on site (circle of	one) None 🕖 C B A						
N.J. License No. <u>1579</u>	-						
Name of Drilling Company	CULFER DRILLING	. TESTING					I
l certify that I have drilled the above State rules and regulations.	referenced well in acc		n all well per	rmit require	ements and all a	applicable	
Driller's Signa	ature <u>Steve</u>	en w	of	[Date <u>9//0/</u>	193	J .
	to & Green - DEPE - Cone		Dink Come	Coldonno	I Unalth Dans		

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



	, ,		Permit No.	······9	3Ø119 9 13	- 912		
	ATTER CTOMAL TO		Sheet Coord	inates	 ;:			
OWNER IDENTIFICATION - Owner	COLUMBIA RD. & I							
Address			- K	 _				
City			State	<u> </u>				
WELL LOCATION - If not the same as	owner please give addre	ss. Owi	ner's Well No.	MU) 34			
County	Municipality				13 Block	No. RA		
Address 118 Highway	35 ENTONTOW.	4. N.J		0774				
TYPE OF WELL (as per Well Permit Ca	etodorios è en evenemento		Date	vell complete	ed 8,30,	93		
Regulatory Program Requiring Well				.D. # 8		70		
		m NE/				100-1/200		
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	11142/2	s. Jeri	<u>~</u>	_ Tele. #3/4) <u>921-43</u> 00		
WELL CONSTRUCTION		Depth to	Depth to	Diameter				
Total depth drilledft.		Top (ft.)	Bottom (ft.)		Type and	Material		
Well finished to 22 ft.	<u> </u>	[From lar	d surface]	ļ	<u> </u>			
Borehole diameter:	Inner Casing	Q	12	4	Sch. 40	Prc		
Top//in.	Outer Casing							
Bottom // in.	(Not Protective Casing) Screen			/				
Well was finished: above grade	(Note slot size)	12	22	4	Sch. 40	.02		
	Tail Piece			'		_		
If finished above grade, casing	Gravel Pack	10	22	11	No. 2 1	Marie.		
height (stick up) above land	Annular Seal/Grout	0		1/	1	•		
surface <i>N/A</i> ft.			10		Cement/b			
Was steel protective casing installed?	Method of Grouting		gracanty	more	cernantor	comie pipe essure grouted		
Yes Mo	^	054	V	(Copie	s of other geolog	ic logs and/or		
Static water level after drilling 3.	GEC	GEOLOGIC LOG geophysical logs should be attached.)						
Water level was measured using			/			. , ,		
Well was developed forhou	0	0-22' medium light brown						
Method of development <u>Central A</u>		5,1ty 5and wet @ 3,2'						
Was permanent pumping equipment in	·							
Pump capacity <u>N/A</u> gpm	}	t	wet (a) 3,2'				
Pump type:		İ						
Drilling Method	$ \mathcal{N}$							
Drilling Fluid <u>None</u> Type	of Rig Table B-C							
Name of Driller Heren U	<i>10 T</i>							
Health and Safety Plan submitted?	_							
Level of Protection used on site (circle o	ne) None D C B A							
N.J. License No								
Name of Drilling Company	QUIPER DRILLING 6	: TESTING						
I certify that I have drilled the above State rules and regulations.	-referenced well in acc	ordance with	n all well peri	mit require	ments and all ap	oplicable		
- -	1+	, .	6.11		0.10	-02 ~		
Driller's Signa	ature	ins	7		ate <u>9-10-</u>	-75 +/		
COPIES: White	te & Green - DEPE Cana	rv - Driller	Pink - Owner	Goldenrod	- Health Dept.			

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



	+ 1		Permit No	29	30120	- 912
	ALITHM CIMIAI TO		Sheet Coord	inates	<u> </u>	726
OWNER IDENTIFICATION - Owner	OCCUMETA RD. & F			 		
Address	HORRISTON	ANAL ALVAIS	N.			70/0
City			State		Zip Code _ Ø	1760
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	Mu	135	
County MONNOTAH	Municipality RATION	MONINE BORO)	_ Lot No	13 Block	NoR4
Address 118 HIGHWAY 35				742		
TYPE OF WELL (as per Well Permit Ca	ategories ing arrang		Date w	vell complete	ed <u>8 130 1</u>	93
Regulatory Program Requiring Well				D.# 8 (- <u> </u>
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	MNE/	D. Scin	, '	Tele. # 510	, 921 430
	7					
WELL CONSTRUCTION Table desired 225		Depth to	Depth to Bottom (ft.)	Diameter	Type and	Material
Total depth drilled 32.5 ft.			id surface]	(inches)	l yps and	inatel lar
Well finished to 32.5 ft.	Inner Casing	0	22.5	4	Sch 40	PVC.
Borehole diameter:	Outer Casing		00 · O	1	VIII 10	, , , ,
Top // in.	(Not Protective Casing)					
Bottomin.	Screen (Note slot size)	22.5	32.5	4	Sch 40	Prc .02
Well was finished: above grade	Tail Piece					
flush mounted			20 5		10 1 -	
If finished above grade, casing	Gravel Pack	•	32.5	//	No. 2 17	10rie
height (stick up) above land surface //// ft.	Annular Seal/Grout	3 0	20.5	//	Cement /b	entonite
Was steel protective casing installed?	Method of Grouting		Cham	Malone	robert Ac	mie Pipe
Yes Mo		l	W	•		_
Static water level after drilling 3	ft.	GEO	DLOGIC LOG	geoph	s of other geolog ysical logs shoul	d be attached.)
Water level was measured using	ipe	Ω.	211	and.	P	1 (1
	rs at 3 gpm	10	א, טגב	nearu	in fine.	light
Method of development	ritugal		\mathcal{E}	mwn	Silty 5	and
Was permanent pumping equipment in	stalled? 🔲 Yes 💹 No	,	L	vet (a) 3 ¹	İ
Pump capacity N/H gpm		2/	-29'	n		11 1
Pump type: N/A		pru		nealu	um fine o	black
Drilling Method	- 1/110	11	•	51/ty:	S and	1
Drilling Fluid <u>hone</u> Type	of Rig Mabile B-	1/	2 22/		sand Silty bla clay	,
Name of Driller Deven	Wolf		1-33	tine s	silty bla	CK
Health and Safety Plan submitted?	Yes No			Sand	-clay	
Level of Protection used on site (circle of N.J. License No1579	ne) None (JV C B A				J	
Name of Drilling Company						İ
200	OIFER DRILLING &			4		
I certify that I have drilled the above State rules and regulations.	-referenced well in acc	ordance with	h all well peri	mit require	ments and all a	pplicable
The same and regulations.			. ~ ^ ^		0//	
Driller's Signa	ature <u>Stev</u>	en 1	Will		ate 9/10/0	93
COPIES. Whi	te & Green - DEPE Cana	ary - Driller	Pink - Owner	Goldenrod	- Health Dent.	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



OWNER IDENTIFICATION - Owner	EATONTOWN BOARD				911
Address	215 BHOAD STREET				
City	RATONTOWN		State NJ	,	Zip Code
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	WM-T	
County MONNOETH	Municipality	NOWN BORO)	_ Lot No	43-44 Block No. <u>55</u>
Address 7 Grant Ave.					
TYPE OF WELL (as per Well Permit Ca	ategories NONETORING		Date w	reli complete	d 11 / 24 / 93
Regulatory Program Requiring Well			Case I.	D. #	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable) Ta:	rget Envi	romental		Tele. #_ 609-697-7575
WELL CONSTRUCTION				r	
Total depth drilled15_ft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
			nd surface]	(menes)	
Well finished to15_ft.	Inner Casing	0	51	4"	PVC SCH 40 FJ
Borehole diameter:	Outer Casing				FVC SCH 40 FJ
Top <u>8</u> in. Bottom <u>8</u> in.	(Not Protective Casing)				
	Screen (Note slot size)	51	15'	4"	PVC SCH 40 FJ .020
Well was finished: above grade X flush mounted	Tail Piece				
f finished above grade, casing	Gravel Pack	,	15'		#1 Morie
neight (stick up) above land	Annular Seal/Grout	1'	3'		Bentonite Pellets
surfaceft.	Method of Grouting	Tremie			Cement Grout
Was steel protective casing installed? X Yes No	Metriod of Grouting				
	7 4	GEO	DLOGIC LOG	(Copies	of other geologic logs and/or
Static water level after drilling Nater level was measured usingM-				geopny	sical logs should be attached
Valer level was measured using $\frac{1}{2}$. Nell was developed for $\frac{1/4}{4}$ hou		}	0-2 Cc	aran Car	nd Yellowish Red
Method of development Pumping	iis ats gpin				Reddish Yellow
Vas permanent pumping equipment in	ntelled2 Ves VN		6'-8' Sa	indy Loan	n Yellowish Brown
vas permanent pumping equipment in Pump capacitygpm	Staneor Las Par IVC	'	8'-15' Sa	ındy Loan	n Yellowish Red
Oump type:					
Orilling Method Auger					
	of Rig CME-75				
lame of Driller <u>David Conove</u>	<u> </u>				
lealth and Safety Plan submitted?	Yes X No	·, ·	. 1		
evel of Protection used on site (circle o	one) None_D C B A				
J. License No. <u>J 1521</u>		.			
ame of Drilling Company	NI-TECH DRILLING		·	<u>,</u>	
certify that I have drilled the above state rules and regulations.		ordance with	n all well perr	nit requiren	nents and all applicable
Driller's Signa	ature <u>(flaviel)</u>	/// Co		Da	ate 12/29 93
COPIES: Whit	te & Green - DEPE Cana	urv - Driller	Pink - Owner	Goldenrod -	Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

	•	W	ell Permit No		10494 1 13 9	12 [
		At	las Sheet Coord	linates	:::_	<u></u> [
OWNER IDENTIFICATION - Owner _	ALLIED SIGNAL IN	C.				
Address	MORRISTOWN	THE VAR		-		
City	INCULTATION IN		State		_ Zip Code	
WELL LOCATION - If not the same as	owner please give addre	ss. C	wner's Well No.	mw	39	
County						. RA
Address	- ISLIGH	IONET DO			10	
TYPE OF WELL (as per Well Permit Ca	atenories)	-	Date	veli complete	ed <i>11 30 0</i>)ゝ
Regulatory Program Requiring Well		.D. #86		L)		
CONSULTING FIRM/FIELD SUPERVI	M-NE/	_			_)/ <i>42</i> ~^	
CONSULTING FIRM/FIELD SUPERVI	SON (II applicable)	11-IVC /	U. SIRCIIC	<i>U</i> 1	1918. # <u>J[[] 47</u>	<u>u 100</u>
WELL CONSTRUCTION		Depth to	•	Diameter		
Total depth drilledft.		Top (ft.)	Bottom (ft.) land surface)	(inches)	Type and Ma	iteria!
Well finished toft.	lasar Ossir s			1	Sal da A	
Borehole diameter:	Inner Casing	0	5	4	Sch. 40 PV	
Top <u>in</u> in.	Outer Casing (Not Protective Casing)					
Bottom 12 in.	Screen	5	/5	1	Sch. 40 PM	m 1020 L
Well was finished: 2 above grade	(Note slot size)		+/-	7	041.7017	<u> 5/07</u>
flush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack	3	18	12	No. 2 M	nie
height (stick up) above land surface	Annular Seal/Grout	0	3	12	ament/be	thoute
	Method of Grouting			7		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Was steel protective casing installed? Yes No	Midulos of Crossing	L	Grav	174 P	lacement	
Static water level after drilling 1.4	9 #	G	EOLOGIC LOG	(Copie	s of other geologic k ysical logs should be	gs and/or
Water level was measured using	Tape	[61 70			
Well was developed for \(\bigvee \setminus \frac{\partial}{f} \) hou	rs at NA gpm			-	own fine + me	
Method of development	NA		SU On a	na With	race of Site	a Ct.
Was permanent pumping equipment in	stalled? Yes X No	,	. "0			
Pump capacity N/A gpm		િ	- ,		-dark brow	
Pump type: NA			fi	ne Sani	d & 51/4. We	<i>†</i>
Drilling Method		_ 1/	015' M	W. htm	wn fine sand	ta
Drilling Fluid <u>NONE</u> Type	of Rig Nobik B-5	Z ''	513 S il	t. Fire	material H	ien
	uente.		ak	ove we	t. Magnate m	inerals
Health and Safety Plan submitted?			<i>J</i>			1
Level of Protection used on site (circle of	ine) None (D) C B A	$\neg 1/$	5-18' De	ere by	own fire say	nd r
	SIH, WET, WEII Sorted mat 1.					
Name of Drilling Company	THE DELL'S	A SEIN	G IN			
certify that I have drilled the above	-referenced well in acc	ordance w	vith all well per	mit require	ments and all appli	cable
State rules and regulations.		1	. 8		, ,	
Driller's Signa	ature C ^	Vill	ur_	_ n	ate 12/13/9	73
Briller & Olgrie		· ///				

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



3Ø495

MONITORING WELL RECORD

	3 , , •	Wel	Permit No Sheet Coord		9 2495 7 13 912
OWNER IDENTIFICATION - Owner	ALLIED SIGNAL IN				··-
Address	COLUMBIA RD. & P.	ARK AVE.			
City	MURRIENTONN	*,	StateNJ		Zip Code
WELL LOCATION - If not the same as County	Municipality RATION		ner's Well No.		40 13 Block No. 64
TYPE OF WELL (as per Well Permit Ca	ategories) MATTINGTER		Date w	vell complete	ed 11 129,93
Regulatory Program Requiring Well				D.#86	
CONSULTING FIRM/FIELD SUPERVIS		M-NE/J	.Sheeha	S)	Tele. # <u>516 921 4300</u>
WELL CONSTRUCTION		Depth to	Depth to	Diameter	
Total depth drilledft.		Top (ft.)	Bottom (ft.)	(inches)	Trans. and \$4-4-1-1
Well finished to 30 ft.		[From la	nd surface]	(
Borehole diameter:	Inner Casing	Q	18	4	Sch. 40 PVC
Topin.	Outer Casing (Not Protective Casing)				
Bottomin.	Screen	10	40		C + 10 Am 1029 1
Well was finished: 🔀 above grade	(Note slot size)	18	28	4	Sch. 40 Arc "Slot
I flush mounted	Tail Piece				
If finished above grade, casing	Gravel Pack	16	30	12	No. 2 Morie
height (stick up) above land surface <i>D, 05</i> _ft.	Annular Seal/Grout	0	16	12	Cement / bentonite
Was steel protective casing installed?	Method of Grouting		Trem	e Gri	1 1
Yes No		, .		• "	
Static water level after drilling		GE	DLOGIC LOG	geoph	s of other geologic logs and/or ysical logs should be attached.)
Water level was measured using		0-	51 Darl	k brow	n fine & medium
Well was developed for N/A hou			Sand	1 w/tro	ace of sitt +
Method of development			grav	el. We	t @ 1.27'
Was permanent pumping equipment in	stalled? LYes 💆 No	5.	10' BA	000 × 0	tk. brown fine
Pump capacity N/θ gpm			San	d 451	It, Wet.
Pump type:		10	-15' DA	rd hn	own fire send isi H,
Drilling Method	of Rig. Mobile B	l		_	The above let
	of High / IUDI IK DES	2/		-	minerals present.
Name of Driller <u>CAFIOS</u> Health and Safety Plan submitted?	Yes No	<u> </u>	1.00	y have	ranerais present.
evel of Protection used on site (circle o		1/3	do wai	rK DFO. u +	wn fine Sand + sitt.
N.J. License No	11. (i.e.)	1	201 11	Lui	Are sandes H Debrown
Name of Drilling Company) a	bond	ing to ve	ry fire sand rish. Selevi
certify that I have drilled the above State rules and regulations.	referenced well in acc		hall well pen	mit require	
Driller's Signa	uture	1. Mur	1	D	pate 12/13/97

New Jersey Department of Environmental Protection and Energy Sureau of Water Allocation



	MONITO	RÎNG W	ELL RECOR	ID YAY		
		Ŵ	ell Permit No	<u> 29</u>	30514	
		At	las Sheet Coord	inates	<u> 29: 13: 85:</u>	<u> </u>
OWNER IDENTIFICATION - Owner	STANDARD RODE	ING INC				
Address	100 PARK ROAD	1				
City	IINIUN FALLS		State	NU	Zip Code	
WELL LOCATION - If not the same as	owner please give addre	ss. O	wner's Well No.	mw-1		
County HENNELTH	Municipality	MITTAL EC	I	_ Lot No	Block No	-11 4031
Address						11401
TYPE OF WELL (as per Well Permit Ca	ategories)	• •••	_ Date w	rell complete	ed 12 / 13 /93	
Regulatory Program Requiring Well	MUNITURI	No	Case I.	D. #	73 7 30 2723 4 7	
CONSULTING FIRM/FIELD SUPERVI						000
WELL CONSTRUCTION			DAb A-			
Total depth drilled 12 ft.		Depth to Top (ft.)	•	Diameter (inches)	Transmissional Made at all	- 1
			land surface]	(inches)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Well finished to 12 ft.	Inner Casing	D	2	2	Puc Tube	
Borehole diameter: Topin.	Outer Casing					···
Bottom 8 in.	(Not Protective Casing)					
	Screen (Note slot size)	2	12	2	PVC Screen .02	0
Well was finished: above grade	Tail Piece					
	Gravel Pack	1.8	12	8	San-1	
If finished above grade, casing height (stick up) above land						
surfaceft.	Annular Seal/Grout	0	1-8	8	Portland	
Was steel protective casing installed?	Method of Grouting	6	ravity			
Yes No				(Conie	s of other geologic logs and	l/or
Static water level after drilling		G	EOLOGIC LOG	geoph	ysical logs should be attach	ned.)
Water level was measured using <u>ال</u> م			Attache	59		
Well was developed forhou						
Method of development <u>Centrica</u>	· — · —					
Was permanent pumping equipment in	stalled? LYes LXINo	·				
Pump capacitygpm						
Pump type:						
	of Rig Simco 28	oo				
Name of Driller Crain Cald						
lealth and Safety Plan submitted?	Yes No	· .				
_evel of Protection used on site (circle o	one) None (D) C B A	Ī				
N.J. License No. <u>1549</u>	•	1.				ļ
Name of Drilling Company		L	 			
certify that I have drilled the above State rules and regulations.	RECON SYSTEMS, II referenced well in acc	NC. Fordance v	vith all well pen	mit require	ments and all applicable	- N
Driller's Signa	ature <u>Cm (</u>	alelis	De	D	ate 12/6/93	

1		B NO.		CL							ECT LOCA		
إ		331	·	STAN	DA:	ED POOFE NO	S INC.		<u> </u>	Tinton Falls ELEVATION AND DATUM			
1	1 USI Area 293057				29.13.253 29.30574	ļ		i	Grade				
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ļ		LLING	RIG T	YPE			BIT ŢŸ	PE				DATE COMPLETED	
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i	i	i	10.0	-		0-2-5' QP, Fill	C)~	ا تعام	W H		Flush mount 0-16 rener 3-2 Prc	rube -2"	
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Ì	ĺ				i	2.5-4.5' Green	Saw med	i		Γi	20"- 12' Su 2'- 12' PVC	nd Purk	
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New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

MONITORING WELL RECORD

30958 - 30969 - 29 13 822 [

ddressity	FORT MONMOUTH		State	NJ	Zip Code
VELL LOCATION - If not the same as					
ounty	Municipality	55. ON		Lot No	Block No 🙈
ounty HOROUTH	- Marrio panty — OCK	ANFORT-BE	IBIO		N/A Sloom No.
			D-4	111 - 4	1 h 10 ca
YPE OF WELL (as per Well Permit Ca	MONITORIN	3	. Case !	veil combieti	00 0 40 4040 00
egulatory Program Requiring Well					
ONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #
ELL CONSTRUCTION		Depth to	Depth to	Diameter	
otal depth drilledft.		Top (ft.)	Bottom (ft.)		**************************************
/ell finished to 12/2 ft.		(From lai	nd surface]		
	Inner Casing	0	7'	4"	PUC
orehole diameter: Topin.	Outer Casing				
Bottomin.	(Not Protective Casing) Screen				
/	(Note slot size)	る	12%	4"	205/6T PUC
ell was finished: above grade	Tail Piece				
I flush mounted	Gravel Pack	/1	101/1		#/)
finished above grade, casing eight (stick up) above land			12'/2'		2
urface 3 ft.	Annular Seal/Grout	0	1'		Gerovite
/as %eel protective casing installed?	Method of Grouting	Pour	,		
Yes No		JOUR			
atic water level after drilling 3	ft.	GE	DLOGIC LOG	(Copie	s of other geologic logs and, ysical logs should be attach
ater level was measured using 7					
ell was developed forhou		10	5-6" To	SP Sai	1
ethod of development Pank					•
as permanent pumping equipment in	stalled? Tyes PNo	6	3, 0	boek 6	bows speed
ımp capacitygpm				ned ?	ToFise
Imp type:					
rilling Method Auger		J3'	-12'b'	dook	brown Clay Coassesand
	of Rig &-90			A [MEO ON CLAY
ame of Driller Michael E &	·			40C (OARSC SAID
alth and Safety Plan submitted?					ى. الم
vel of Protection used on site (circle o					
J. License No. <u>1431</u>		-			
• ••					
ame of Drilling Company					

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

WELREC 107 0987

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

	ĺ	Wel	i Permit No s Sheet Coord	29 ·_	3Ø959 29 13 82	2	
	TO A TRAFF MODEL			ates	 '		
OWNER IDENTIFICATION - Owner	US ARMY FORT	GUNGUUTH	 	 	· · · · · · · · · · · · · · · · · · ·		
Address	FORT MONMOUTH		State	NJ	Zip Code		
WELL LOCATION - if not the same as County	owner please give addre	ss. Ow	ner's Well No.	Bldg 25 Lot No	<u>N∕A</u> Block No	N/A	
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	tegories) <u>MONITORIN</u> UST	<u> </u>		=	od <u>7 / 6 / 8 4</u> 93-8-16-1243-26		
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)				Tele. #		
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.) [From la	Depth to Bottom (ft.) nd surface]	Diameter (inches)		al	
Well finished toft.	Inner Casing	6"	la'	4"	puc		
Borehole diameter: Topin. Bottomin.	Outer Casing (Not Protective Casing)		ľ		·		
	Screen (Note slot size)	2º	15'	9"	20 Slot Pu	C	
Well was finished: above grade flush mounted	Tail Piece						
If finished above grade, casing	Gravel Pack	-	15'		#2		
height (stick up) above land surfaceft.	Annular Seal/Grout	6"	l l ·		GenoviTe		
Was steel protective casing installed?	Method of Grouting	Poze	R				
Lyes LNo Static water level after drilling <u>3</u> 名	ft.	GE	OLOGIC LOG	(Copie geoph	s of other geologic logs a ysical logs should be atta	and/or ached.)	
Water level was measured using			5-1' As	5 Ph 2 17	-		
Method of development ρ							
Was permanent pumping equipment ins	stalled? Yes No	'	•		SFive Soul		
Pump capacitygpm Pump type:		4'	4'-5' GREEN Clay + SANG 5-15' MED TO COARSE CARKGROWN FAND				
Drilling Method Accel Drilling Fluid Type	of Rig 13-50	5-	15' 1	ned T	o coasse		
Name of Driller <u>Active</u> E	3gc/C		- dark grown sand				
Level of Protection used on site (circle or							
N.J. License No. <u>/4 2)</u>							
Name of Drilling Company		STAL TRUE					
l certify that I have drilled the above- State rules and regulations.		_		mit require	ments and all applicabl	le	
Driller's Signa	iture Mente	161	W_	D	ate <u>6-7-84</u>		

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

MONITORING WELL RECORD

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3096	0	1)
3 995 29 :	13	822

Well Permit No. 29 - 32958
Atlas Sheet Coordinates 29 : 13 : 822

Address	FORT MONMOUTH		State	ŊJ	Zip Code	
WELL LOCATION - If not the same as County	owner places dive addre	nn Ow	nora Wall Na	B149 25	562 MW-3 N/A Block No. N	
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	ntegories) <u>MONITORIN</u>	<u> </u>	Date w Case I.	ell complete	od <u>7 / 6 / 94</u> 93 8 16 1243 26	
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)				Tele. #	
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.) [From lar	Depth to Bottom (ft.) ad surface]	Diameter (inches)	Type and Material	
Well finished toft.	Inner Casing	6"	יג	4"	PuC	
Borehole diameter: Topin. Bottom & in.	Outer Casing (Not Protective Casing) Screen					
Well was finished: above grade	(Note slot size)	3,	15'	4"	2086TPUC	
flush mounted	Tail Piece					
	Gravel Pack	11	15'		#2	
	Annular Seal/Grout	6"	1'		benevite	
haight (stick up) shove land						
lame of Drilling Company certify that I have drilled the above-	TYRICE KNVIRONEO			nit requiren	nents and all applicable	
State rules and regulations. Driller's Signa	ture Mul	16.6	_	Da	ate 7-6-95	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



		Well Atlas	Permit No Sheet Coord	linates	29 : 13 : 816
OWNER IDENTIFICATION - Owner	II S ARMY FORT				
Address		ADD BUT Y ASS.			
Address	FORT MONHOUTH		State	NJ	Zip Code
WELL LOCATION - If not the same as	owner please give addre	ss. Owi	ner's Well No.	1314 37	District
County HONGOTH	. Municipality	ANPORT BO	XBO	_ LOT NO	NA BIOCK NO.
Address			# t ₁		
TYPE OF WELL (as per Well Permit Ca	tegories) HONTTORIN	9	Date v	•	od 7 / 19 / 99
Regulatory Program Requiring Well			Case I	.D. #	92-3-7-1047-43
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)				Tele. #
WELL CONSTRUCTION	1	Depth to	Depth to	L	
Total depth drilled 20 ft.		Top (ft.)	Bottom (ft.)	Diameter (inches)	Type and Material
Well finished to 20 ft.		[From lan	nd surface]	(11101103)	
<u></u>	Inner Casing	6"	10'	4"	PUC
Borehole diameter: Topin.	Outer Casing				
Bottomin.	(Not Protective Casing)		ļ		
	Screen (Note slot size)	10'	201	410	205/6T PUC
Well was finished:above grade	Tail Piece				
flush mounted			-		#1
f finished above grade, casing	Gravel Pack		30,		*2
neight (stick up) above land surfaceft.	Annular Seal/Grout	6"	8'		GenouiTe PORTAND
Was steel protective casing installed?	Method of Grouting	Tan	.:0	•	
Yes No		Trem	110		
Static water level after drilling	• ft.	GEO	DLOGIC LOG	(Copie	s of other geologic logs and/or sical logs should be attached.
Vater level was measured using					your and a distance of the second of the sec
Vell was developed for hour		0-	6" Tof	Sol	
Nethod of development Panp					
Vas permanent pumping equipment ins	stalled? Yes 4No	5	-16'	rellow	Med To Charge + Clay
ump capacitygpm			2	BANG -	+ Clay
ump type:			<i>.</i>		7
Prilling Method Ausek		16.	= 20' L	ITE GR	own Coase
Prilling Fluid Type	of Rig <u>R</u> -80		3	Soul	
lame of Dritler Auchael ERE	cK		`		
ealth and Safety Plan submitted?	Yes No				
evel of Protection used on site (circle or	ne) Mon DCBA				
J. License No. 1421					
ame of Drilling Company	TYREE TOWN THE SERIES	PAT WINES	AT ATT		
certify that I have drilled the above-				mit requirer	ments and all applicable
tate rules and regulations.	_		•	•	• •
_	An +	1/1	•	_	4-2 abr
Driller's Signa	ture VIII seld	a jul		D	ate 7-20-9KY
COPIES: White	e & Green . DEPE Cana	rv - Driller 1	Pink . Owner	Goldenrod -	. Health Dent.
COPIES: White	e & Green - DEPE Cana	ry - Driller 1	Pink - Owner	Goldenrod -	· Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation





		Atias	Sheet Coord	inates	29; 13; 828
OWNED IDENTIFICATION OF					
OWNER IDENTIFICATION - Owner			<u> </u>	· · · · · · · · · · · · · · · · · · ·	
Address	75 EISENHLWER	PY-H-OKWIETY		NIT	
City	ROSELAND		State	75.	Zip Code
WELL LOCATION - If not the same as	owner please give addre	ee Owr	ars Wall No	PI	
					Plack No.
CountyAddress/	Wunicipality TI	MICH FALL	5.80	_ LOUNO	13.02 11
	•	•			
TYPE OF WELL (as per Well Permit Ca	rtegories)		Date w	ell complete	ed <u>5 / 19 / 94</u>
Regulatory Program Requiring Well	- TOPA CITE	EA	Case I.	D. #	93455
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable) Env:	ironmenta	1 Waste M	anagemen	t Tele. #633-7900
	,				
WELL CONSTRUCTION		Depth to	Depth to	Diameter	
Total depth drilledft.		Top (ft.)	Bottom (ft.)	(inches)	Type and Material
Well finished to15' ft.			d surface]		
	Inner Casing	6"	2'	4"	PVC
Borehole diameter: Top 8 ¹¹ in.	Outer Casing				
Top <u>8"</u> in. Bottom <u>8"</u> in.	(Not Protective Casing)				
	Screen (Note slot size)	21	15'	4"	.020 slot PVC
Well was finished: above grade					
Ilush mounted	Tail Piece				
If finished above grade, casing	Gravel Pack	1.5'	15'		#2 Sand
height (stick up) above land	Annular Seal/Grout				Bentonite/Neat
surfaceft.	Allitulai SearGiout	6"	1.5'		Cement
Was steel protective casing installed?	Method of Grouting	Gravit	У		
Yes No				(Onnin	
Static water level after drilling5	_ft.	GEO	DLOGIC LOG	geophy (Copie	s of other geologic logs and/or /sical logs should be attached.)
Water level was measured using E1			٦ ٥'	Y'	
Well was developed forhou		Most Concept		ur ovel .	TOP SOIL YELLOW BROWN
Method of development Att Sub		8	15-4	KASINA Z	, ·
		8	1		YELLOW BROWN
Was permanent pumping equipment ins	Stalled? L Yes No	, 1	الما		SAND
Pump capacitygpm		\$	3	25	,
oump type:		',	5	228	 6
Drilling Method Air Rotary		1 7		1 1 1	OLIVE GREEN
	of Rig TH60	🗜	Dez	020	SANA
Name of Driller <u>John Nemetz</u>		کہ		0	,
-	Yes No		1 3	1311	SAND CRANGE BROWN. SAND
evel of Protection used on site (circle o	ne) None D C B A		*	DVC	OCHAGE DRAWN
N.J. License No. <u>1330</u>				##	SAND
Name of Drilling Company			<u> </u>	7	<u> 15'</u>
certify that I have drilled the above	SBI ENVIRONMENT		1 all well non	mit require	ments and all annlicable
State rules and regulations.	TOTALBUICOU WOILIN ACC	widanos Will	. an wan ben	roquii oi	101112 and an approading
atata tataa atta ragaminana.	11		_		
Driller's Signa	iture John	Man	wat	D	ate $6-21-945$
		-	0		1
COPIES: Whit	e & Green - DEPE Cana	ıry - Driller	Pink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

		We Atl	ell Permit No as Sheet Coord	<u>- 2</u>	9 31239 : 29 : 13 828
				.III G.183	<u></u> .
OWNER IDENTIFICATION - Owner					<u></u>
Address	75 EISENH	OWER PAR	KJWAY		
City	ROSELAND		State	NJ	Zip Code
WELL LOCATION - If not the same as	owner please give addre	ss. O	wner's Well No.	mω	-4
County	Municipality			Lot No.	Block No.
County / COLOSTICE	m WAY	7.77	FALLS BU		13.02
	, ,				
TYPE OF WELL (as per Well Permit Ca		TURING	_ Date v	veil complete	od <u>5 /19 /94</u>
Regulatory Program Requiring Well	- ISTA SITE		Case I.	.D. #	73455
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable) Env	ironmen	tal Waste M	lanagemer	t Tele. # 633-7900
WELL CONSTRUCTION	1	Depth to	Depth to	Diameter	
Total depth drilledft.	İ	Top (ft.)	· ·	Diameter (inches)	Type and Material
Well finished toft.			and surface)	()	
	Inner Casing	6"	1'	4"	PVC
Borehole diameter: Top8"in.	Outer Casing			- -	
	(Not Protective Casing)				
Bottom8"in.	Screen (Note slot size)	1,	10'	4"	.020 slot PVC
Well was finished: above grade	Tail Piece	-			1000 0400 170
X flush mounted				 	
f finished above grade, casing	Gravel Pack	1'	10'		#2 Well Sand
neight (stick up) above land surfaceft.	Annular Seal/Grout	6"	1'	•	Neat Cement
	Method of Grouting	Grav:	l tw	!	
Nas steel protective casing installed?	Method of Grotting	L			
res no Static water level after drilling 2 ^s	1 4	G	EOLOGIC LOG	(Copie	s of other geologic logs and/or ysical logs should be attached.)
Vater level was measured using El		r	, D'	geoph	ysical logs should be attached.)
Valer level was inteasured using		ì	0	omis 1	0' TOO SOUL
Nethod of development Sub Pump	·		I'- x	A. A.	-1 TOPSOIL YELLOW BROWN
			\$ 2 m		YIZLOW BROWN
Vas permanent pumping equipment in	Statled? Yes!Wo	'		8	SHALL
Cump capacitygpm				S2.0em	<i>4</i> ′
Pump type:			9 1	왕 [7
brilling Fluid Type of RigTH60			Wer	2	
lame of Driller John Nemetz		\$ 3	Ö	Olive GREEN	
lealth and Safety Plan submitted?		7 7		Olive Green MARL	
evel of Protection used on site (circle of		-	18	200	111112
J. License No1330	_				
ame of Drilling Company		ļ	<u>", * </u>	Ž.	<u></u>
certify that I have drilled the above	SBI ENVIRON e-referenced well in acc	MENTAL. :	INC. vith all well per	mit require	ments and all applicable
State rules and regulations.					/ >
Driller's Signa	ature <u>John</u>	- 4	nost		Tate $6-21-94$
COPIES: Whi	ite & Green - DEPE Cana	ary - Driller	Pink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

al Protection and Energy cation	n. 6703
. RECORD	
ermit No. 39 - 31 Sheet Coordinates 29	240 13 828 [
30°	

			Permit No.		
	HIDMONHOUTH	TYPAT (IRV. 4	s Sheet Coord SSOC	inates	1:15:000 L
OWNER IDENTIFICATION - Owner	75 KISKNOW	ER PARKE	Y		
Address			04-4-		
City			State		Zip Code
WELL LOCATION - If not the same as County HORROUTH A Address	_ `Municipality	ss. Ow	ner's Well No.		13.56ck No. 114
TYPE OF WELL (as per Well Permit Conference of Well (as per Well Permit Conference of Well Permi	ategories) HONITOR	RING	Date w	reli complete D. #	od 5 / 19 / 94 93455
CONSULTING FIRM/FIELD SUPERVI					
WELL CONSTRUCTION Total depth drilled13 'ft.		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Well finished to131 ft.			nd surface]		
Borehole diameter:	Inner Casing	6"	31	4"	PVC
Top <u>8"</u> in.	Outer Casing (Not Protective Casing)				
Bottom 8" in.	Screen (Note slot size)	3'	13'	4"	.020 slot PVC
Well was finished: above grade x flush mounted	(Note slot size) Tail Piece				333 333 333
If finished above grade, casing	Gravel Pack	2'	13'	_	#2 Sand
height (stick up) above land surfaceft.	Annular Seal/Grout	6"	2'		Bentonite Neat Cement
Was steel protective casing installed?	Method of Grouting	Gravit	<u>y</u>		
Static water level after drilling5	ft.	GE	OLOGIC LOG	(Copies	s of other geologic logs and/or sical logs should be attached.)
Water level was measured using e1 Well was developed for 2 hou Method of development Sub Pum Was permanent pumping equipment in Pump capacity gpm Pump type: Drilling Method Air Rotary Drilling Fluid Type Name of Driller John Nemetz Health and Safety Plan submitted? Level of Protection used on site (circle of N.J. License No. 1330 Name of Drilling Company	ectric tape ors at 2 gpm oppostalled? Yes No of Rig TH60 x Yes No one) None D C B A	TAL INC.	PONTOWITE -NORT CEMENT.	4" PUC ,020 SARBU WINDO	- 0', CRUSHED STONE ASPINAT VIELLOCU BROUN SHND OLIVE GREEN SAND OCHNOSE BROUN SAND
l certify that I have drilled the above State rules and regulations.	10	ordance wit	h all well peri	·	
Driller's Signa	ature	ry - Driller	Pink - Owner		Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

WELL HEOOND				- 1	
Well Permit No	29	- 31561	1	y '	
Atlas Sheet Coordina	tes _	29 : _	13 :	599	

		Atla	s Sheet Coord	linates	<u>29 : 13 : 599</u>
OWNER IDENTIFICATION - Owner _	KATONTOWN BORO	OCH OF			
Address	47 N. BROAD ST				
City	EATONTOWN		State	NJ	Zip Code
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.		
	•			Lot No.	Block No.
County MONHOUTH Lewis :	St. South Eatont	own, NJ	X (0	_	2 34
TYPE OF WELL (as per Well Permit Ca					d 8 / 16 / 94
Regulatory Program Requiring Well	HONITORIN	G		-	94-1-31-1629-21
CONSULTING FIRM/FIELD SUPERVI					Tele. #
WELL CONSTRUCTION	,			 .	
		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	Type and Material
Total depth drilled 13.5 ft.			nd surface]	(inches)	Type and material
Well finished to 13.5 ft.	Inner Casing	0	3.5	4	Sch 40 PVC
Borehole diameter: Top 8 in.	Outer Casing		 		
Bottom 8 in.	(Not Protective Casing)		ļ		
	Screen (Note slot size)	3.5	13.5	4	.20 Slot PVC
Well was finished: above grade X flush mounted	Tail Piece				
If finished above grade, casing	Gravel Pack	2.5	13.5	8	#2 Well Sand
height (stick up) above land	Annular Seal/Grout		2.5	8	Portland
surfaceft.	Method of Grouting		Gravity	<u> </u>	
Was steel protective casing installed? Yes No	indiago di Grotting	· · · · · ·			
Static water level after drilling3.5	5 ft.	GE	OLOGIC LOG	(Copies	of other geologic logs and/or sical logs should be attached.)
Water level was measured using			,	доорилу	olodi isgo olissis se dilasiise.
Well was developed for 1 hou			0'-4''=G	rass and	Top Soil
Method of developmentCentri			4"-6'= G	ray Cour	se Silty Sand
Was permanent pumping equipment in		,			
Pump capacitygpm			6'-9'= Green silty # Sand 9'-13.5'= Green Clay		
Pump type:			3 -13.3 =	Green C.	lay
Drilling Method Auger					
Drilling Fluid Type	of Rig				
Name of Driller <u>William Lovenb</u>	erg				
Health and Safety Plan submitted?	Yes X No				
Level of Protection used on site (circle o	one) (None DCBA				
N.J. License No1610					
Name of Drilling Company	CARDON STATE ENV		I. 1772		
certify that I have drilled the above State rules and regulations.				mit requiren	nents and all applicable
Driller's Signa	ature Willia	wer _	enhery	, Da	ate # 8 /19/90
COPIES: Whit	te & Green - DEPE Cana	urv - Driller	Pink - Owner	Goldenrod -	Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

MONITORING WE

LL RECOR			
II Permit No.	29 -	31562	7/
as Sheet Coord	inates	29 :	13 599

		Well	Permit No	<u> 29</u>	31562	
		Atlas	Sheet Coord	inates	29 13 599	
OWNER IDENTIFICATION - Owner _	PATONTON TOPO	OCH OR				
Address	47 N. BROAD ST					
City	RATONTOWN		State	NJ	Zip Code	
WELL LOCATION K and the come on		0	anda Malall Ala	2		
WELL LOCATION - If not the same as						
County MORSOTH 131 Le	wis St. South E	ONTOWN BC	RO	_ LOI NO	BICK NO5	
TYPE OF WELL (as per Well Permit Ca	ategories) MONITORIN	G	Date v	-	nd <u>98 / 16 / 94</u>	
Regulatory Program Requiring Well			Case I.		94-3-3Ø-1349-Ø1	
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)		<u>NA</u>		Tele. #	
WELL CONSTRUCTION	1	Depth to	Depth to	Diameter		
Total depth drilled 1259" ft.		Top (ft.)	Bottom (ft.)		T	
Well finished to 1239" ft.		[From lan	d surface]	` ′		
Borehole diameter:	Inner Casing	0	2' 9"	4	Sch. 40 PVC	
Top 8 b in.	Outer Casing					
Bottom 8 in.	(Not Protective Casing) Screen		 			
Well was finished: above grade	(Note slot size)	2' 9"	12' 9"	4	.20 Slot PVC	
X flush mounted	Tail Piece				•	
If finished above grade, casing	Gravel Pack	2	12' 9"	8	#2 Well Sand	
height (stick up) above land	Annular Seal/Grout	0	2	8	Portland	
surfaceft. Was steel protective casing installed?	Method of Grouting		Gravity			
Yes No		<u> </u>	GIAVILY		<u></u>	
Static water level after drilling2	9"#	GEO	LOGIC LOG	(Copies	s of other geologic logs and/or rsical logs shou <mark>ld be attached</mark>	
Water level was measured using				goopiij	Side ingo officers to attached	
Well was developed for hou			0'-2"= Asphalt			
Method of developmentCentr			2"-2'= Gray Course Sand			
Was permanent pumping equipment in			2'-8'= Green Silty Sand			
Pump capacitygpm					n Clay	
Pump type:				, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0209	
Drilling Method Auger		ł				
	of Rig					
Name of Driller Within Willia	m Lovenberg					
Health and Safety Plan submitted?	Yeş X No					
Level of Protection used on site (circle o	ne) None D C B A					
N.J. License No. <u>1610</u>						
Name of Drilling Company	GARDEN STATE ENV		TMC		··	
I certify that I have drilled the above State rules and regulations.	-referenced well in acc	ordance with	all well peri	nit requirer	nents and all applicable	
Driller's Signa	ature Willia	~ Lo	eshey	D	ate 8/19/94	
COPIES: Whit	e & Green - DEPE Cana	vrv - Driller	() Pink - Owner	Goldenrod -	Health Dept.	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

830



MONITORING WELL RECORD

Well Permit No. 29 - 31563

				inates <u>2</u>	9 : 13 : 599
OWNER IDENTIFICATION - Owner					
Address					
City	KATUNIUMN		State	N .	Zip Code
VELL LOCATION - If not the same as county					
YPE OF WELL (as per Well Permit Ca	ategories)		Date w	ell complete	d <u>8 / 15 / 94</u>
egulatory Program Requiring Well	HOM TOKUNG	T	Case I.	D. #g	4-2-4-2016-37
ONSULTING FIRM/FIELD SUPERVIS					
VELL CONSTRUCTION otal depth drilled 13 ft.		Depth to Top (ft.)	Depth to Bottom (ft.) d surface]	Diameter (inches)	Type and Material
/ell finished to 13 ft.	Inner Casing		3	4	Sch 40 PVC
orehole diameter: Top8_in. Bottom 8_in.	Outer Casing (Not Protective Casing)				
/ell was finished: above grade	Screen (Note slot size)	3	13	4	.20 Slot PVC
X flush mounted	Tail Piece				· · · · · · · · · · · · · · · · · · ·
finished above grade, casing	Gravel Pack	2	13	8	#2 Well Sand
eight (stick up) above land urfaceft.	Annular Seal/Grout	0	2	8	Portland
as steel protective casing installed?	Method of Grouting		Grav	rity	
Yes X No tatic water level after drilling 3.5	tt	GEO	OLOGIC LOG	(Copies	of other geologic logs and/or sical logs should be attached
ater level was measured using				geopily	
ell was developed for $\frac{1}{}$ hou		j	0'-4"=	Asphalt	
ethod of developmentCer			4"-8"=	3/ 8" Ro	ad Stone
as permanent pumping equipment in:		, 			ilty sand
imp capacitygpm	orenee: F ^{red} 140 F red 140			_	turated sands
imp type:					
illing Method Auger			2 -13 =	GLCBU	Green Sandy Clay
rilling Fluid Type	of Rig	ĺ			
ame of Driller William Lovenby					
ealth and Safety Plan submitted?	Yes X No				
vel of Protection used on site (circle o	ne) None D C B A				
J. License No1610					
me of Drilling Company		L			
ertify that I have drilled the above ate rules and regulations.	GARDEN STATE INV. -referenced well in acc	IRONANTA ordance with	L DLG n all well peri	mit requiren	nents and all applicable
•	ature William	Lone	bey	Da	ate 8/19/94
COPIES: Whit	te & Green - DEPE Cana	ury - Driller	U Pink - Owner	Goldenrod -	Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

WELL RÉCORD

	9/27/94
	Ver)
3	

	Well Permit No. 29 - 32158
	Atlas Sheet Coordinates29 :13 :594
OWNER IDENTIFICATION - Owner TOTT MONMOUTH GOLF CO	OTRSK.
Address TINTON AVE	
City RATONTON	State NJ Zip Code 0772-/
	13W #6
WELL LOCATION - If not the same owner please give address. Owner's Well No Address	0,
County Municipality KATONTONN	BORO Lot No. NA Block No. NA
WELL USE WYTHORAWAL	Status /N USE
WATER USE IRAGATION Average 8000	gals, daily Maximum gals, daily
	nished ft. ottom 65 in.
DEPTH TO TOP LENGTH DIAM! (FT.) (FT.) (IN	
Casing 1 /5 4:0 Casing 2	Pu Shopuhi 40
Screen 1	pa 8wavi6 40 /0.020
Tail Piece 5.0 4.65 Gravel Pack 13.5 36.5 8.	SOMESH BENTONITE
Grouting Method	
•	•
WELL FLOWS NATURALLY gals. per min. at ft Water rises to ft, above the land surface.	. above the land surface.
Discharge rate measured using MENSURAD CONTAINER Discharge was pumped using ARMET Specific	level 40 ft, below land surface after hrs. of pumping. down 33 ft.
Observed effects on nearby wells Water Quality (taste, odor, color, etc.)	
PERMANENT PUMPING EQUIPMENT Installed by	Pump Type Model
CAPACITY: Pump delivers GPM atPSI pressure	
POWER: HP at RPM Power Source	Aldra
DEPTHS: Pump ft. Footpiece ft. FLOW METER: Model instal	Airlineft.
CONTRACTOR - Name of Drilling Contractor PICKWICK WELL DRILLING	
Address	77
City THIM INCOME. Name of Driller Day Day MacT	License No.
De en -	
Signature of Contractor Monday	Date 10 , 30 , 94
COPIES: White-DEPE Canary-Driller (P.	ink - Owner J Goldenred - Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

PAGE 2 OF 2

8/91 Dursau of	AARML WIOCKIN	on		-1
WELL	RECORD	We	ell Permit No. $\frac{29}{2}$	<u> 32158</u>
-			29	13 597
Driller: Please use the space below for the log description. Note water bearing or geological formation.	zones		<u>DEP USE ONLY</u>	
or geological formation. Are samples available?			o Code	!
Drilling Method MVD ROYPRY			o Code ft.	
Type of Rig MOPalEBY			ode	
Aquifer/Geo. FmKAIC		Completed by		
· · · · · · · · · · · · · · · · · · ·	- 1	Date .	//	
LOG		Thick.	Lith.	Fm.
0-10 AN CLAN W Meen Sons				
10-2 Why tous Black for				
To the fact Black Can W. Co.	12-			
JO-45 PINE I KARLSTON 1/8/1	010		-	
48-50 HAVE I KAKE I NO VOL	1/1/			
They Island Chay & Do	Tan			
·				
GWPI No	NJPDES No	o.	_	
Letitude 1	Longitude			
Lat-Long Accuracy 1" 5" 10" 20" USGS Quedrangle	_ 0.1 0 ,100			
Drainage Basin Code OTHER FILES: Lithologic Log Samples Available Geophysical Logs Water Chemistry	□ Aqu	nicipality Code uifer Test lution Case	☐ Water Level Date	
Checked by		/ /	/	

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New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

WELL RÉCORD

11-4	9/an/94
32159	

	Well Perm		32159	
	Atlas Shee	t Coordinates	29 . 13	007
OWNER IDENTIFICATION - Owner FORT MON Address TINTON A	MOUTH GOLF COURSE VR		<u> </u>	
City EATONTO		NJ	Zip Code	01724
XII.				
WELL LOCATION - If not the same owner please give address. Address		V#2		
Gounty Municipality	RATONTOWN BORO	Lot No	NA Block	No. NA
WELL USE WITHOR AWAC	Status	N USE		
WATER USEA	verage <u> </u>	is. daily	Maximum	gels. daily
WELL CONSTRUCTION Date well completed	10 127 194			
BOREHOLE DIMENSIONS Depths: Total	ft. Finished	50 ft.		
Land Surface Elevation at well 40 ft.	in. Bottom <u>&</u> Elevation was determined u	in. 100	OSRAMINE	MAD
Casing Height (stick-up) above land surface	Cisastion Ass defailment of	sting	Jistifus =	
DEPTH TO TOP LENGT (FT.) (FT.)	H DIAMETER (IN.)	•	Screens: Note Stot	
Casina 1 20	4.0	Silvan	to do Du	<u> </u>
Casing 1			<u> </u>	
Casing 3				
Screen 1 18.5 30	4.0	Scheou	40 P.	K/0.020
Screen 2				
Tail Piece	4.0	202	C MEN	0 = 20
Gravel Pack		20.4	MEN BE	WYONITZ
Grouting Method				W. U. U
Pil	ysule Thru	TREMI	_	
WELL FLOWS NATURALLY gels. per min. a Water rises to ft. above the land surface.	ft. shove the	land surface.		
RECORD OF TEST Test Date 10	21,94			,/
Static water-level before pumping ft. below la	ad surface. Water level	40 ft help	w land surface after	hrs. of pumping.
Water level was measured using	BTINATE Browdown	34 ft.		p=pg.
Discharge rate measured using MEASURED YOUR	ANNER_Discharge Rate_	20 gals. p		
Well was pumped usingARR LIFT	Specific Capacity		s. per min, per ft, of	drawdown
Observed effects on nearby wells			·	
Water Quality (taste, odor, color, etc.)	7300	-		
PERMANENT PUMPING EQUIPMENT Installed by	KED AT THE	TIME Pump Ty		
Mfrs. Name		Model	ye	······································
CAPACITY: Pump delivers GPM at	PSI pressure.			
POWER: HP at RPM	Power Source			
DEPTHS: Pump ft. Footpiece	ft. Airlin		ft.	
FLOW METER: Model	installed on	in. diame	ter pipe.	
CONTRACTOR - Name of Drilling Contractor PICKNICK	MIL DRILLING			
Address F.O. Bet 6				
City DARM (NADALE) M	State .		Zip Code	
Name of Driller DAVID PRIMOST		Licens	8 No	041
Signature of Contractor Dand Musico		Date	10,30	194
			•	·
COPIES: White - DEPE	Canary - Driller Pink - Owner 10/0	Goldenrod - Heel	1194 	

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New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

PAGE 2 OF 2

WELL	DECADD Well P	ermit No. <u>29 </u>	32159
WELL	RECORD Well P	29	13 597
Driller: Please use the space below for the log description. Note water bearing or geological formation.	i i	DEP USE ONLY	
Are samples available? Yes No	USGS Hydrogeo Co	ode	
Type of Rig MOBILE BY7	Depth to Bedrock Bedrock Lith, Code Bedrock Fm, Code		
Aquifer/Geo. Fm. Kar S	Completed by	//	
LOG	Thick.	Lith.	Fm.
0-15 day of gleen Sano			
16.76 MED & FINE BLACK SAND	<u> </u>		
41-50 VIsily Black Sano, Bloom	Chan		
e Bottom.			
		-	
GWPI No	NJPDES No.		
Latitude o ' '' Lat-Long Accuracy	Longitudeo	,	
OTHER FILES:	County/Municipality Code Aquifer Test Pollution Case	☐ Water Level Data	
Checked by	Date//		

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11/01/94

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

WELL RECORD



	Well Permit No. 29 - 32160 Addes Sheet Coordinates 29 : 13 : 59
OWNER IDENTIFICATION - Owner FORT MONMOTTH GOLF COUR Address TINTON AVR	RSR
City RATONTOWN	State NJ Zip Code
City	./
WELL LOCATION - If not the same owner please give address. Owner's Well No. Address	15W#3
County MONICEPH Municipality RATONTOIN B	ORO Lot No. NA Block No. NA
WELL USE WITHDRAWAC S	itatus IN USE
WATER USE RUGATION Average 8090	gels. daily Maximum gels. daily
WELL CONSTRUCTION BOREHOLE DIMENSIONS Depths: Total	om &S in. To a - Ca + O/ A+ A
Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Grouting Method DIAMET (FT.) LENGTH (FT.) (IN.) 18,5 4.0 18,	Pic Scho 40 Pic Scho 40 Pic Scho 40 0.020
WELL FLOWS NATURALLY gals. per min. at ft. all Water rises to ft. above the land surface.	bove the land surface.
RECORD OF TEST Static water-level before pumping Water level was measured using Discharge rate measured using Well was pumped using At LIFT Specific Observed effects on nearby wells	wnft.
Water Quality (taste, odor, color, etc.)	THIS TIME Pump Type
Mfrs. Name CAPACITY: Pump delivers GPM et PSI pressure. POWER: HP at RPM Power Source DEPTHS: Pump ft. Footpiece ft.	Airlineft.
FLOW METER: Model installed CONTRACTOR - Name of Drilling Contractor PICKNICK WEIL DRILLING Address FO Y	d on in. diameter pipe.
City	State Zip Code
Signature of Contractor COPIES: White-DEPE Canapy-Driller Fink 11 01 94 11 01 94	Date 10 , 30 , 94 Goldenrod - Health Dept. N 01/9 4

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

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WELL RECORD

Well Permit No. 29____32160

	29	13597
Driller: Please use the space below for the log description. Note water bearing or geological formation.		7
or geological formation. Are samples available? Syes INO Drilling Method MUD ROTMRY Type of Rig MOBILE B-47 Aquifer/Geo. Fm. KNS LOG 0-10 Clay uf GROEN Sano 10-15 GREEN Clay 15-40 MON & FINE Black San 40-45 FINE Black Sano uf Silt 45-50 V. Silty Black Sano, Blown Clay & Bottom		•
GWPI No	NJPDES No	-
	Date / /	

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New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation





<u>ORD</u>				
Well Permit No. 29 —	32161		Name of the last	r
Atlas Sheet Coordinates	29 .	<u>13</u> :	597	L

OWNER IDENTIFICATION - Owner	FORT HONMOUTH GOLF	COURSE	 	
Address	TINTON AVE.	<u> </u>	NJ	Zin Code 07724
City	RATONTOWN	State _		Zip Code <u>07724</u>
WELL LOCATION - If not the same owner pleas	se give address. Owner's Wel	1 No. 16W	£4	
	icipality <u>EATONTO</u>	NN BORO	Lot No	NA Block No. NA
WELL USE WIRTDAWN		_ Status	IN U86	
WATER USE LAGATION	Average	2000 gals.	, daily Ma	ximum gals. daily
BOREHOLE DIMENSIONS Depths:	ell completed 10 / 26 Total 45 ft. er: Top 6,5 in, Elevation wa	Finished 4 Bottom 8 Bottermined usin	5 ft.	Seaphic Maf
DEPTH TO TOP (FT.)	LENGTH DI/ (FT.)	AMETER (IN.)		YPE AND MATERIAL reems: Note Slot Size(s)
Casing 1 Casing 2		<u></u>	School	the 40 pur
Casing 3 Screen 1	30 1	10	Schooli	tope /0.020
Screen 2			1075 PM	END, grANT PACK
Tail Piece Gravel Pack 13,5	315	35	30 MES	4 BENTONITE
Grout Sunface	13.5		7	
Grouting Method	- thou	IRE, THE	w Then	1115
		•		
WELL FLOWS NATURALLY Water rises to ft, above the land	gals, per min. at	_ tt. above the lar	id surrace.	
11 above the land		,		
RECORD OF TEST Test Da	te 10 / 76 / 91	4 4		1/2
Static water-level before pumping	ft. below land surface. Wi	nter level		and surface after 12 hrs. of pumping.
Water level was measured using	ED CONTAINER DI	awdown	ft.	
Discharge rate measured usingAURI		scharge Kate ecific Capacity _	9 gals. per o	min. Der min, per ft, of drawdown
Observed effects on nearby wells	vone	ecinic depacity _	ya.,	or man, per tt. or utawoown
Water Quality (taste, odor, color, etc.)	Suro			
Mail	INSTALLED AT	THIS TIN	1E	
PERMANENT PUMPING EQUIPMENT	Installed by		Pump Type	
Mfrs. Name	501		odel	
CAPACITY: Pump delivers GPI POWER: HP at	d at PSI press RPM Power Soul			
DEPTHS: Pump ft.	Footpieceft		ft.	
FLOW METER: Model	, ,	stalled on	in, diameter	pipe.
CUNTRACTUR - Name of Urilling Contractor	ICKNICK WELL DRILLI	NG	·	
Address FO BOYE	· · · · · · · · · · · · · · · · · · ·	State	U.T	Zip Code <u>87727</u>
Name of Driller		SIERE		o. M/o.//
CAND PIO	UMOST			., .
Signature of Contractor	mos		Date	0 130 194
COPIES: / Wh	in - DEPE Canany - Driller 1 10194 110194	Pink - Punt	Goldenrod - Health F	Pept 79

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

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Well Permit No. $\frac{29}{29} - \frac{32141}{13597}$

Driller: Please use the space below for the log description. Note water bearing or geological formation.	Zones <u>DEP USE ONLY</u>
Are samples available? Sives INO ISW## Drilling Method Mul Rotaky Type of Rig Molake B 47 Aquifer/Geo., Fm. KNS	Storet Hydrogeo Code USGS Hydrogeo Code Depth to Bedrock ft. Bedrock Lith. Code Bedrock Fm. Code Completed by
10-30 MED & FINE BLACK SOND 10-30 MED & FINE BLACK SOND USM MI Shells 30-40 FINE BLACK SAND USS 40-45 V/Silty Black Sono; Brown Clay @ Both	Thick. Lith. Fm.
Catitude	NJPDES No ' ''
OTHER FILES: Lithologic Log Samples Available Geophysical Logs Water Chemistry	County/Municipality Code Aquifer Test Pollution Case
Checked by	Date//

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New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation





WELL RECORD

		Well Permit		13 597
		Atlas Sheet	Coordinates:	10: 001
OWNER IDENTIFICATION - Owner	FORT MONHOUTH G	OF A COURSE		
	TINTON AVE.	ME COULES		
, ta c	EATONTOWN	State	NJ	Zip Code
City	ZZZ CZCZ CZ			Zip Code
WELL LOCATION - If not the same owner please	give address. Owner	r's Well No	W #5	
Address	TAIM	ATTICON TOO	N/	NA NA
County Munic	cipality <u>EATC</u>	NTOWN BORD	Lot No. N	Block No. NA
WELL USE WITHOLAWM		Status	IN USE	
WATER USE / MUGATION	Average	8000 gals	. daily Maximu	ım gals, daily
INTELL CONCERNICATION DATE OF		27 .00		
	completed/. Totalft.	Finished 4	ek u	
	Top 65 in.	Bottom	Zi Cin	1
Land Surface Elevation at wellft.	. ,,, -	ion was determined usin	na TOPO SA	Aphic MAP
Casing Height (stick-up) above land surface	Ø ft.	01, 1100 0020111111100 001	10	
Annual London forton obligation in the designed				
DEPTH TO TOP	LENGTH (FT.)	DIAMETER {IN.}	TYPE	AND MATERIAL :: Note Siat Size(e)
(FT.)		<u> </u>	<i></i>	
Casing 1	16	4.0	Scholuts	40 PVC
Casing 2				
Casing 3				16 Dun / 0 019 -
Screen 1	30_	40	Schoole	40 PR 10.020
Screen 2				
Tail Piece	7.4	4.0	000	5 Marina
Gravel Pack	<u> </u>		20 1100	1- B13-10-1715
Grout >014.4			_ so mest	PIDENTOMICE
Grouting Method	- Phes	sole 1HM	TREMIE	
	,	•	•	
	ıls. per min. at	ft. above the lai	nd surface.	
Water rises toft. above the land s	HI FTACE.			
RECORD OF TEST Jest Date	10,21	and	•	
Static water-level before pumping	ft. below land surface.	Water level	36 ft halow land e	urface after hrs. of pumping.
Water level was measured using ETIMA		Drawdown	32 ft.	urious arter ma. or pumping.
Discharge rate measured using MEASURED		- Discharge Rate	16 gals. per min.	
Well was pumped using AIR LIF	_ •	Specific Capacity	32.01 PO. (11)	in. per ft. of drawdown
	e_			por tal or allateous.
Water Quality (taste, odor, color, etc.)	Bea D			
AA'	* Verton 1 =	AT THIS	Ctus	
PERMANENT PUMPING EQUIPMENT	Installed by	AT IND	Pump Type	
Mfrs. Name		Mc	odel	
CAPACITY: Pump delivers GPM	at PS	l pressure.	··· •	
POWER: HP at		r Source		
DEPTHS: Pump ft.	Footpiece	ft. Airline	ft.	
FLOW METER: Model	·	installed on	in. diameter pipe.	
ਹਾ	CKWICK WELL DR	FLING		
CONTRACTOR - Name of Drilling Contractor	CANALOR HERED DEC			
Address	<u> </u>		1/4	
city	<u> </u>	State		Code
Name of Driller	IMOST		License No	M/0-//-
	, , , , , , , , , , , , , , , , , , ,			
On Jak	5		. 1/1	30 01
Signature of Contractor	WW		Date	130 194
COPIES: (White	- DEPE Canary - Dri	ler Pink-Owner	Goldenrod,- Health Dept.	
	0194 118194	190	1 11/01/94	

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New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

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WELL RECORD

Well Permit No. $\frac{29}{9} - \frac{32142}{13590}$

As samples wellable?	Driller: Please use the space below for the log description. Note water bearing or geological formation.	ZONES <u>DEP USE ONLY</u>
Drilling Method MUD	Ara camples quellable? Was No. 191145	Storet Hydrogeo Code
Type of Rig		
Type of Rig Aquifer/Geo, Fm. April Log Completed by Date / / / / Thick. Lith. Fm. Thick. Lith. Fm.	Drilling Method	Depth to Bedrock ft.
Date	Type of Rig B-47 MotalE Day	
Company of the control of the contro	Aquifer/Geo, FmK	Completed by
GWPI No	•	Date//
GWPI No NJPDES No Latitude O ' Longitude O ' ' Lat-Long Accuracy 1"	0- 10 Green y gran Sand	Thick. Lith. Fm.
GWPI No NJPDES No Latitude O ' Longitude O ' ' Lat-Long Accuracy 1"	10-30 MED & PINTE BLACK JAME	
GWPI No NJPDES No Latitude O ' Longitude O ' ' Lat-Long Accuracy 1"	2.16	
GWPI No	30-40 GNE BLACK JAND WAR	
GWPI No	0// 1/	
GWPI No	WO-48 V. Silm Block - AND RATION	
County/Municipelity Code County/Municipelity	PI O III	
Latitude	Clay & Paylom	
Latitude		
Lat-Long Accuracy	GWPI No	NJPDES No.
Drainege Basin Code County/Municipality Code OTHER FILES:	Lat-Long Accuracy 🔲 1" 🔲 5" 🔲 10" 🔲 20"	Longitude ' ' ' '
Geophysical Logs Water Chemistry Pollution Case		County/Municipality Code
Checked by / /		,
	Checked by	Date//

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11/01/94

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WELL RÉCORD

Well Permit No. 29 32-163 Atles Sheet Coordinates 29: 13: 50 OWNER IDENTIFICATION - Owner FORT MONMOUTH GOLF GULSE Address FORTON AVE City State VI Zip Code City State VI Zip Code City State VI Zip Code City State VI Zip Code City State VI Zip Code City State VI Zip Code City State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City Months State VI Zip Code City City City City City City City City	<i></i>
Address TONTON AND State NO COLSE City EA-TON TOWN State NO Code Of Course WELL LOCATION - If not the same owner please give address. Owner's Well No. 15W 1/4 Address County MENAUUTIA Municipality ATONTOWN BORO Lot No. 1/4 WELL USE WITHOLAWAC Status NOSE WATER USE NOTE OF TOTAL AVERAGE BOOD Gals, daily Meximum WELL CONSTRUCTION Determined 10 / 20 / 9V BOREHOLE DIMENSIONS Depths: Total 15 ft. Finished 15 ft. Diameter: Top 25 in. Bottom 15 in. Elevation was determined using 10 / 10 / 10 / 10 / 10 / 10 / 10 / 10	<i></i>
Address TINTON AFE City State NJ Zip Code D WELL LOCATION - If not the same owner please give address. Owner's Well No. 15W 1 Address County MPNMOTH Municipality ATONION BORO Lot No. NA Black No. 14 WELL USE WITHOLAWAC Status NOSE WATER USE / ROLL GATION Date well completed 10 / 20 / 94 WELL CONSTRUCTION Detwell completed 10 / 20 / 94 BOREHOLE DIMENSIONS Depths: Total 45 ft. Finished 45 ft. Finished 45 ft. Finished 45 ft. Elevation was determined using 10 page	<i></i>
City BA-FONTOWN State WT Zip Code Comparison of the same owner please give address. Owner's Well No. 15W 1 Address County MDVMOTA Municipality ATONTOWN BORO Lot No. 14A Block No. 14A Block No. 15W 1 Address County MDVMOTA Municipality ATONTOWN BORO Lot No. 14A Block N	<i></i>
WELL LOCATION - If not the same owner please give address. Owner's Well No	<i></i>
Address County MPNNOUTH Municipality MONOW BORO Lot No. NA Block No. NA WELL USE WATER USE WATER USE Status Word Boro gals, daily Maximum WELL CONSTRUCTION Date well completed 10 / 20 / 94 BOREHOLE DIMENSIONS Depths: Total 45 ft. Finished 45 ft. Diameter: Top 6.5 in. Bottom 9.5 in. Land Surface Elevation at well 70 ft. Elevation was determined using Topo 30 Monow Inc. Casing Height (stick-up) above land surface 5 ft. DEPTH TO TOP LENGTH (FT.) Claims Note Siot Size(e) Casing 1	ta
WATER USE WITHOLAWAL Status N OSE WATER USE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE WATER USE Status N OSE In Solution Status S	TA
WATER USE	
WELL CONSTRUCTION BOREHOLE DIMENSIONS Depths: Total 45 ft. Finished 45 ft. Diameter: Top 6.5 in. Bottom 6.5 in. Land Surface Elevation at well 6.5 ft. Casing Height (stick-up) above land surface 7.5 ft. DEPTH TO TOP 1.5 LENGTH 1.5 (FT.) Casing 1 6.5 A.0 Subplif 40 PM 1.5 Screen 2 Tail Piece 12.6 The series of Supplies 1.5 ft. Topo 30 Manual PM 1.5 ft. Finished 45 ft.	
BOREHOLE DIMENSIONS Depths: Total 45 ft. Finished 45 ft. Diameter: Top 6.5 in. Bottom 6.5 in. Belevation was determined using 1.5 pp	gals, daily
BOREHOLE DIMENSIONS Depths: Total 45 ft. Finished 45 ft. Diameter: Top 6.5 in. Bottom 6.5 in. Belevation was determined using 1.5 pp	
Diameter: Top Gr in. Bottom G: Sin. Topo Maple C Assing Height (stick-up) above land surface to ft. Depth to top (FT.) Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Top Gr in. Bottom G: Sin. Topo Maple C Assing In. Topo Maple C Assing In. Topo Maple C Assing In. Bottom G: Sin. Topo Maple C Assing In. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type and material C Screen In. Bottom G: Sin. Type In. Bottom G: Sin. Type In. Bottom G: Sin. Type In. Bottom G: Sin. Type In. Bottom G: Sin. Type In. Bottom G: Sin. Type In.	
Casing Height (stick-up) above land surface	
Casing Height (stick-up) above land surface	UDD
Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece (FT.) (FT.) (FT.) (IN.) Screens: Note Slot Size(e) 4.0 Schelluft 40 PVC Schelluft 40 PVC Screen 2 Tail Piece	
Casing 1 Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece (FT.) (FT.) (FT.) (IN.) Screens: Note Slot Size(e) 4.0 Schelluft 40 PVC Schelluft 40 PVC Screen 2 Tail Piece	
Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Casing 2 Casing 3 Casing 4	
Casing 2 Casing 3 Screen 1 Screen 2 Tail Piece Casing 2 Casing 3 Casing 4	
Casing 3 Screen 1 Screen 2 Tail Piece 12.6 Casing 3 Screen 2 Tail Piece	
Screen 1	
Screen 2 Tail Piece 12.0	0.020
Tail Piece 12.6 Manage	
Grout GARAGE 13.5 30 MESH BENT	DALME
Grouting Method PRESSULE THAY TREMIE	01142
WELL FLOWS NATURALLY gals. per min. at ft. above the land surface.	
Water rises to ft. above the land surface.	
RECORD OF TEST Test Date 10, 20, 94	
Static water-level before pumping ft. below land surface. Water level ft. below land surface after hr	- ofi
Water level was measured using water first the control of the cont	s. or pumping.
Discharge rate measured using <u>MEASWAED CONTINER</u> Discharge Rate <u>12</u> gals, per min. Well was pumped using <u>ALR LIFT</u> Specific Capacity <u>0, 4</u> gals, per min, per ft, of drawdo	
Observed effects on nearby wells	Ail
Water Quality (taste, odor, color, etc.)	
PERMANENT PUMPING EQUIPMENT NOT INSTALLED AT THIS TO PUMP Type	
Mfrs. Name Model	
CAPACITY: Pump delivers GPM at PSI pressure.	
POWER: HP at RPM Power Source	
DEPTHS: Pump ft. Footpiece ft. Airline ft.	
FLOW METER: Model in. diameter pipe.	
2	
CONTRACTOR - Name of Drilling Contractor Vickwill WEU DRILLING	
Addrase P.O. Bes 4	
City PARMINEDAIC, NJ State NJ Zip Code 07727	
Name of Driller David Da MacT License No. MA 104	1
New the Edition as I	•
0.40	
Signature of Contractor Date 10 , 30 , 94	,
	Ł
COPIES: White - DEPE Canary - Driller (Pink - Owner) Goldenrod - Health Dept.	£

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PAGE 2 OF 2

WELL RECORD	WELL D	FCORD Well Permit No. 29 - 32103
Are samples evallable? Are samples evallable? Are samples evallable? Are samples evallable? Are samples evallable? Are samples evallable? Are samples evallable? Are samples evallable? Are samples evallable? Are samples occide USGS Hydrogeo Code USGS Hydrogeo USGS USGS Hydrogeo USGS USGS USGS Hydrogeo USGS USGS USGS USGS USGS USGS USGS USG	WELLIN	ECOND
Drilling Method MVD KOTRAY Type of Rig MO Pale B-4 Aquifer/Geo. Fm. KNG LOG Thick. Lith. Fm. 10-40 Method MVD KOTRAY 10-40 Method Bedrock Fm. Code Completed by Date / / / Thick. Lith. Fm. 30-40 PANE Mark Sand WS. H. 40-45 V. S. H. Bark Sand MS. H. Completed by Date / / / Thick. Lith. Fm. We Shark Sand WS. H. Up - 45 V. S. H. Bark Sand MS. H. Completed by Date / / / Thick. Lith. Fm. NJPDES No	or contaginal formation	
Type of Rig MORIE B-47 Aquifer/Geo, Fm. KNS LOG Thick. Lith. Fm. D-10 Gullay W Fran Javo 10-30 Med Lyskell Javo 10-30 Med	Alux V	USGS Hydrogeo Code
Aquifer/Geo. Fm. KNS LOG Thick. Lith. Fm. D-10 Gootlay in Frank Jano 10-30 Met Title Stack Jano N SMARS Stack Jano 40 Pane Mack Jano in SMARS C Borlom. GWPI No		Bedrock Lith, Code
GWPI No NJPDES No Letitude	V	Completed by
ID-30 MeD 1, CINE (SLACK SAND Med SAND	LOG	Thick. Lith. Fm.
GWPI No	0-10 Gullay of graw Sano	
GWPI No NJPDES No Latitude ° '' Longitude ° '' Lat-Long Accuracy	10-30 MED & FINE PSLACK JAN MY SMARK Shells.	
GWPI No NJPDES No Latitude o '' Longitude o '' Lat-Long Accuracy	30-40 FINE BLACK SAMD WITH	
GWPI No NJPDES No Latitude o '' Longitude o '' Lat-Long Accuracy	C Bolom.	
GWPI No NJPDES No Latitude o '' Longitude o '' Lat-Long Accuracy		
LatitudeO ' ' LongitudeO ' '' Lat-Long Accuracy		
LatitudeO ' ' LongitudeO ' '' Lat-Long Accuracy		
LatitudeO ' ' LongitudeO ' '' Lat-Long Accuracy		
LatitudeO ' ' LongitudeO ' '' Lat-Long Accuracy		
Lat-Long Accuracy	GWPI No	NJPDES No
Drainage Basin Code County/Municipality Code OTHER FILES: ☐ Lithologic Log ☐ Samples Available ☐ Aquifer Test ☐ Water Level Data	Lat-Long Accuracy 1" 5" 10" 20"	_ongitude 0 1 11
	OTHER FILES: Lithologic Log Samples Available	☐ Aquifer Test ☐ Water Level Data
Checked by / / /	Checked by	Date//

11/01/4

11/01/94

11/01/94

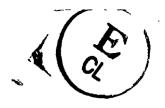
New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

			Permit No.			- 004	Γ
		Aua	s Sheet Coord	inates	<u> 29 : 13 </u>	: 824	
OWNER IDENTIFICATION - Owner _	- O. D. Men (Dr	RECTORATE		·			_
Address							
City	FT. MONMOUTH	·	State	NJ	_ Zip Code	07703	_
WELL LOCATION - If not the same as	s owner please give addr	ess. Ow	ner's Well No.	CNOL	MW26		
						ck No.	
Address HONEOUTIS ame	_ Municipality	ONTOWN BO	RO		1,1,8.01	ck No	3,5
• -					. 10 10	OH	_
TYPE OF WELL (as per Well Permit Co	ategories) MONITORIN	G .			ed 12/19		
Regulatory Program Requiring Well	OWNER INVESTIG	ATION	•				
CONSULTING FIRM/FIELD SUPERVI	iSOR (if applicable)				Tele. #		
WELL CONSTRUCTION		Depth to	Depth to	Diameter			7
Total depth drilledft.		Top (ft.)	Bottom (ft.)	Diameter (inches)		nd Material	1
Well finished to15ft.		[From lai	nd surface]	(,			╛
	Inner Casing		1.5	4	flushion	+ ove	
Borehole diameter: Top 12in.	Outer Casing	 		 	1001301	Physics	1
Bottom 12 in.	(Not Protective Casing)	<u> </u>					_}
	Screen (Note slot size)		15	4	fiji olo	Shtare	
Well was finished: Above grade	Tail Piece				THE STATE OF	- Cocpac	1
flush mounted		+	<u> </u>		<u> </u>		┨
If finished above grade, casing	Gravel Paci	4 4	16		#1mo	ne	_
height (stick up) above land surface _2.0_ft.	Annular Seal/Grout	2	14		Comont -	hentonite	ł
	Method of Grouting	1		!	CHELIF	CANCILLY.	1
Was steel protective casing installed? Yes No	Westion of Grouning	<u>I re</u> r	nie_				L
_	~ "	GF	OLOGIC LOG	(Copie	s of other geolo	ogic logs and/or uld be attached.	
Static water level after drilling Water level was measured using			- 1				1
	11		Depty	<u>De</u>	scription	L	
			0-16	Yello	oil deice	ht brown	
Method of development	~~ <u>~</u>			Sar	29	5.	
Was permanent pumping equipment in	ıstalled? L Yes M	0		•			ł
Pump capacity V/A gpm							
Pump type: N/M		1					l
Drilling Method HSH	of Rig CME 55	-					
4 - 11 - 1	Reeve	'					
	Yes No						1
Level of Protection used on site (circle o			•••				
N.J. License No. <u>31455</u>	NIE, NOILE (D)O B A	'	••••	•			ľ
Name of Drilling Company							
	JAMES C. ANDERSO	N ASSOC.	INC.				
I certify that I have drilled the above	-referenced well in acc	cordance wit	h all well peri	mit require	ments and all	applicable	
State rules and regulations.	•		_				
Driller's Sign:	ature Wellings	ton Rece	e (Ju)) _n	ate4-1	19-95	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



			Well Atla	Permit No s Sheet Coord	inates	29 : 13 : 824
OWNER IDENTIFICATION - Owner			ECTORATE			
Address	BLDG.	167 ATT:	SELEM-PW	<u>-RA</u>		
City	Fr. E	ONMOUTH		StateN	<u> </u>	Zip Code <u>07703</u>
WELL LOCATION - If not the same as	owner ple	ase give addre	ss. Ow	ner's Well No.	MV	N 28
County	Municis	pality			Lot No.	Block No.
County MONHOUTH Address Same	as a	boye_	NICHE BU			1,1,8.91
TYPE OF WELL (as per Well Permit Ca	riedoues)	MONITORING		Date w	en complen	
Regulatory Program Requiring Well						
CONSULTING FIRM/FIELD SUPERVI	SOR (if ap	oplicable)				Tele. #
WELL CONSTRUCTION			Depth to	Depth to	Diameter	
Total depth drilled 15 ft.			Top (ft.)	Bottom (ft.)		
Well finished to 15 ft.			[From lai	nd surface]	(
		Inner Casing	0	5	4	flust joint pre
Borehole diameter:		Outer Casing			<u></u>	The state of the s
Top 12 in. Bottom 12 in.	(Not Pro	tective Casing)		<u></u>		
		Screen (Note slot size)	5	15	4	f.joloslot pv
Well was finished: Above grade		Tail Piece				1. J. Oldskiepa
flush mounted				 		
f finished above grade, casing		Gravei Pack	3	15		#1morie
neight (stick up) above land	Annu	lar Seal/Grout		3		
surface <u>2.0</u> ft.			<u> </u>			cement-bentonite
Was steel protective casing installed?	Metho	od of Grouting	Trem	ie		
X Yes ☐ No					(Copie	s of other geologic logs and/o
Static water level after drilling 7.5			GE	OLOGIC LOG	geoph	s of other geologic logs and/o ysical logs should be attached
Nater level was measured using		· · · · · · · · · · · · · · · · · · ·		Depth		escription_
Vell was developed for 2.0 hou				05	Brow	on sandy silt
Method of development	bind-			.5'-6'	Uran	gelolive brown
Vas permanent pumping equipment in	stalled?	Yes 🔯 No	,	•0 6	Sar	Ä
ump capacity NA gpm			Ï	6'-8'		ve sand
oump type: NA]		_	
Orilling Method HSA		_		8-15	' Yel	low brown sand
Prilling Fluid none Type	of Rig	<u> Nobile B</u>	<u>57 </u>			
lame of Driller Steve Burg	چے					
lealth and Safety Plan submitted?	Yes [No				
evel of Protection used on site (circle o	ne) Non	D C B A	[
I.J. License No. 00 1624		_		Lu 1., ji	•	
lame of Drilling Company						
certify that I have drilled the above state rules and regulations.		ed well in acc			nit require	ments and all applicable
Driller's Signa	iture	Steve B	unger	90	D	ate <u>4-19-95</u>
COPIES: Whit	e & Green	- DEPE Cana	ry - Driller	Pink - Owner	Goldenrod -	- Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

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			`` Wel	Permit No	<u>29</u>	32593			·
			Atla	s Sheet Coord	inates	<u>29</u> : 1	<u>3</u> :	824	_1_
OWNER IDENTIFICATION - Owner	пѕ	ARMY (DI	RECTYORATE						_
Address	HLDG.	167 ATT:	SELEM-PW	-RV	,				_
City	FT. H	HTUOHMO		State	IJ	Zip Code	_0_	770	<u>3</u>
MELLICOTTON KANA					ΑΛ \. /	20			
WELL LOCATION - If not the same as				ner's Well No.					
County HONGOUTH Same	_ Municipa	Ality KAT	ONTOWN BO	RO	_ Lot No	1,1,8.	Block No	1,5	3,54
								-	_
TYPE OF WELL (as per Well Permit Ca	ategories) _		· · · · · · · · · · · · · · · · · · ·	Date w	ell complete	₩ <u>12 / 1</u>	19 /3	브	
Regulatory Program Requiring Well			ai Autoni						
CONSULTING FIRMFIELD SUPERVIS						Tele. #			
		,							- -
WELL CONSTRUCTION			Depth to		Diameter				1
Total depth drilledft.			Top (ft.)	Bottom (ft.) nd surface]	(inches)	Type	and Ma	ateriai	
Well finished toft.				1	11				1
Borehole diameter:		Inner Casing		5_	4_	7.7.	DVC	.	4
Top 12in.	(Not Prote	Outer Casing ctive Casing)]		, ,	1		
Bottom 12 in.	(1101 1101	Screen		1,72	,1	0.			1
Well was finished: above grade	(1)	Note slot size)	5	15	4	Sijie c	NOSI	ot bac	╆
flush mounted		Tail Piece	ĺ			U		•	
If finished above grade, casing		Gravel Pack	3	12		#100	\: ^		1
height (stick up) above land			<u> </u>	72		1.0	lone		1
surface <u>2.0</u> ft.	Annula	ar Seal/Grout	0	<u> </u>		cemen	1-bec	<u>lmite</u>	4
Was steel protective casing installed?	Method	of Grouting	Tren	nie					
X Yes No					/Conin	4 -4b	با دادداد		
Static water level after drilling 7.5	ft.		GE	ologic log	geophy	s of other ge ysical logs s	should be	ogs and/or attached.)	ļ
Water level was measured using		<u>و</u>		Dept	h 7	escrip	tim	-	1
Well was developed for 2 hou	rs at	<u>5</u> gpm	j						
Method of development	DOC		<u></u>	05		own sa			
Was permanent pumping equipment in	stalled?	Yes No	,	•5'-	1.5° 0	range /	olive	brown .	ı
Pump capacity N/A gpm				. 4	5	any,	wet	at	l
Pump type: N/A				7.5	10' 0	6,		_	Ì
Drilling Method HSA						d. yara	KWOTK	L	ł
Drilling Fluid None Type	of Rig N	Dobite B-	57	10'-1	<u> </u>	V4110)		1
	ger					olive b	ioni	i Sana	ļ
Health and Safety Plan submitted?	∰es [No	,			Silty 8	pues	at	
Level of Protection used on site (circle o	ne) None	OC B A			ì	51.			ł
N.J. License No. 30 1624									
Name of Drilling Company				1 1					
certify that I have drilled the above	JAMES C	. ANDERSOI	N ASSOC.	INC. h all well perr	nit require:	ments and	all annli	cable	
State rules and regulations.	101010100		0.00.00	a o por			an app	Jubio	
	_	- , .	_					,	
Driller's Signa	ture	steve E	surger.	(Ja)	D	ate <u>4-</u>	14-4	5	
				B: 1 C	au .	71 -t-1 P			
COPIES: Whit	e & Green -	DEPE Cana	ıry - Driller	Pink - Owner	Goldenrod	- Health Dept	I.		

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

	_		Permit No s Sheet Coord		32594 29 · 13	824	Г
				mares		_;	_1_
OWNER IDENTIFICATION - Owner							
Address	LOP MANAGEMENT	OBLETT		NJ	Zip Code	07703	รั
City					· · · · -		ير
WELL LOCATION - If not the same as							
County MONIOUTH	Municipality	ONTOWN BO)BO	_ Lot No	-1,1,8 .9	ick No	53,54
Address Same as a	30006						_
TYPE OF WELL (as per Well Permit Ca					nd 15/10		
Regulatory Program Requiring Well	OWNER INVESTIG	ATION	Case I.	D. #			
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	······································			Tele. #		_
WELL CONSTRUCTION		Depth to	Depth to	Diameter			٦
Total depth drilledft.		Top (ft.)	Bottom (ft.)		T	nd Material	1
Well finished toft.			nd surface]		<u> </u>		┨
Borehole diameter:	Inner Casing	0	(o	14	Flushio	int pra	_
Top 12in.	Outer Casing (Not Protective Casing)				'	•	
Bottom 12_in.	Screen		16	4	0		1
Well was finished: above grade	(Note slot size)	9	16		ty. 010	sbtpre	-
I flush mounted	Tail Plece		ļ				4
If finished above grade, casing	Gravel Pack	4	17		#IMO	rie	_
height (stick up) above land surface 2.0 ft.	Annular Seal/Grout	0	14			c-bentonite].
Was steel protective casing installed?	Method of Grouting	Trem	:0	' _		<u> </u>	1
Yes No		па	116				1
Static water level after drilling	O_ft.	GE	OLOGIC LOG	i (Copie geoph)	s of other geol /sical logs sho	logic logs and/or ould be attached.))
Water level was measured using	-scope	-	Depth		scription		1
Well was developed forhou	rs at 1.5 gpm		0-1'	Box	on silty		
Method of development	/1		1'-2'	المراد ا	E plomu	sand	
Was permanent pumping equipment in	stalled? LYes XNo	,	1 1	$ ^{\prime}$ $^{\prime}$ $^{\prime}$ $^{\prime}$ $^{\prime}$	th silt.	_	
Pump capacity NA gpm		1	2'-4'	Dark	gray s	silty sand	4
Pump type: N/A			4-6		r grows	silty	
Drilling Method HSH Type	of Rig CME 5	5	., • •	san	_	_	
Name of Driller Wellington	Reeve		6'-14'			tay sand	1
Health and Safety Plan submitted?	Yes No	i		Sil	F	ray sandy ar sand	
Level of Protection used on site (circle of	ne) None DC B A		14-15	Gree	erich Ar	कर १८वा प्रव	
N.J. License No. 3 1455			15-17	Dark	drak s	当に	
Name of Drilling Company	JAMES C. ANDERSOI	ASSOC.	INC.	1	7		J
I certify that I have drilled the above State rules and regulations.	-referenced well in acc	ordance witi	h all well perr	nit requirer	ments and all	applicable	
Driller's Signa	nture Welling	ton Pa	ave g	D D	ate	9-95	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No.

29 - 32595

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_	824	

				inates	29 : 13 : 824
OWNER IDENTIFICATION - Owner_	U.S. APMY (DI	PECTORATE	· · · · · · · · · · · · · · · · · · ·		
Address	BLDG 167 ATT:	SKLFM-PW	-KV		
City	FT. HONMOUTH		State	NU	Zip Code <u>07703</u>
WELL LOCATION - If not the same as	owner please give addre	ss. Ow	ner's Well No.	MW	131
County	Municipality			Lot No.	Block No.
County HONOUTH Same	as above MAT	DATOWN BO			1,1,8.01 1,5
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	ategories) HONITORIA	ATTON			od 12/16/94
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #
WELL CONSTRUCTION		Depth to	Depth to	Diameter	
Total depth drilled 15 ft.		Top (ft.)	Bottom (ft.)	(inches)	There is a much \$10 a.k 1 - 1
Well finished to 15 ft.		[From la	nd surface]	<u> </u>	
Borehole diameter:	Inner Casing	0	5	14	flushjointpuc
Top 12in.	Outer Casing (Not Protective Casing)		[1 1
Bottomin.	Screen	5	100		0
Well was finished: X above grade	(Note slot size)	5	15	7	fijo10slotpvc
flush mounted	Tail Piece				
If finished above grade, casing	Gravel Pack	3	15		#1 Marie
height (stick up) above land surfaceft.	Annular Seal/Grout	0_	3		cement-hentonite
Was steel protective casing installed?	Method of Grouting	Y	nie		
Yes No	<u> </u>	116	• 110		
Static water level after drilling	<u>ft.</u>	GE	OLOGIC LOG	(Copie geoph	s of other geologic logs and/or ysical logs should be attached.)
Water level was measured usingm			Depth	De	scription
Well was developed forhou	irs atgpm			_	
Method of development	i 0 9		0-3'		wn silty sand
Was permanent pumping equipment in	stalled? 🗌 Yes 🛛 No	·	3'-7'	Gra	ry silty sand
Pump capacity NA gpm			H' 12/		
Pump type: N/A			7-13	Gra	r green Sand
Drilling Method HSH	~ ~ ~	m	13'-15	of Da	rk graysilt
	of Rig Mobile B-	21			9 6
Name of Driller Steve Burger Health and Safety Plan submitted?					
Level of Protection used on site (circle of	_				
N.J. License No. DIG2H	NIE) NONE D C B A	<u> </u>	• ;		*
Name of Drilling Company					
l certify that I have drilled the above State rules and regulations.	JAMES C. ANDERSO -referenced well in acc	N ASSOC. ordance wit	h all well pen	mit require	ments and all applicable
Driller's Signa	ature Steve B	enger	(QD)	D	Pate <u>4-19-95</u>
COPIES: Whit	le & Green - DEPE Cana	ary - Driller	Pink - Owner	Goldenrod	- Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



				Permit No Sheet Coordi		29 13	824
OWNER IDENTIFICATION - Owner	U.S. ARMY (DIREC	TOPATE		,		
Address	HLDG. 167 AT	r: SE		-EA			
City	FT. HOMOUTH			State	W	Žip Code	103
WELL LOCATION - If not the same as							
County	_ Municipality		our ro	DQ	Lot No	Block No.	1_53_5
County	. as abovê	PI COM	OHEN DO			1,1,0.51	
TYPE OF WELL (as per Well Permit Ca	ategories)			Date w	ell complete	× 12/16/94	Ł
Regulatory Program Requiring Well		edia Ecate		Case J.	D. #		
CONSULTING FIRM/FIELD SUPERVI							
WELL CONSTRUCTION		,				Γ	
			pth to p (ft.)	Depth to Bottom (ft.)	Diameter	Type and Ma	terial
Total depth drilledft.				id surface]	(inches)	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Well finished toft.	Inner Casir		0	5	H	Chap, each	
Borehole diameter:	Outer Casin	<u> </u>	<u> </u>	<u> </u>	1	flustiont 7	300
Top 12 in. Bottom 12 in.	(Not Protective Casin	g)					
	Scree (Note slot size	ze)	5	15	4	fij. OLOSIO	LOVO .
Well was finished: Above grade	Tail Pie					0	
If finished above grade, casing	Gravel Pa	ack (3	15		# 1 Morie	,
height (stick up) above land	Annular Seal/Gro	_	\sim	2			
surface 2.0 ft.	Allitular SeavGro	, iii	<u> </u>			cement-he	storte
Was steel protective casing installed?	Method of Groutin	g	Tren	rie			
Yes No					(Copie	s of other geologic lo	gs and/or
Static water level after drilling 5.			GEC	DLOGIC LOG	geoph	s of other geologic lo ysical logs should be	attached.)
Water level was measured using				Depth	$\overline{\mathcal{D}}$	escription	
•	rs at <u>1.5 g</u> pn	1		0-41	Bro	wn siltysa	ind
Method of development	- T		-	4'-6'		ay silty se	. 1
Was permanent pumping equipment in	stalled? 🔲 Yes 🔀	.No			_	•	1
Pump capacity N/A gpm			ı	6'-8'		tis yerg, no	-Y_
Pump type:			ļ	0191		ng,	1154
Drilling Method HSA			_	0,1	Oli	ve/graz si	1EV
·	of Rig Mobile	B-5	2	91-10		J1 4_3	
Name of Driller Steve Burg			—I	-	, pro	own siltxs	מוום
-	Yes No		1	10-15	Gr.	ay sandy s	114
Level of Protection used on site (circle of	one) None (D) C B	A	ļ			_	
N.J. License No. <u>JD 1624</u>			1.:	نا ئانا	1744		ļ
Name of Drilling Company	TAMPE C ANTOPO	CON A	SSOC.	THE			
I certify that I have drilled the above State rules and regulations.					nit require	ments and all applic	able
Driller's Signa	ature <u>Stave</u>	. Bu	rgel	6	0	ate <u>4-19-9</u>	<u>5</u>
CODIEC. WILL	to & Creen DEPE C		Triller	Dink Owner	Coldonnod	Health Dent	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation

MONITORING WELL RECORD

	1	2	•
' \ (')	∢(
\	•		
			7

		We	ll Permit No	<u>29</u>	32597	
		Atia	s Sheet Coord	inates	<u>29</u> : <u>13</u> :	824
OWNER IDENTIFICATION - Owner	U.S. APMY (DI	RECTORAT	P	.3.2		
Address	HDG. 167 ATT:	SELEM-P	N-RV			
City	FT. MONNOUTH		State	nj	Žip CodeC	EOFTC
WELL LOCATION - If not the same as	ovener planes sino addre		vner's Well No.	MW	3 3	
						, No
County Moterourii Same	as above	ONTOWN B	OENC -	LOI NO	1,1,8 .01	1,53
TYPE OF WELL (as per Well Permit Ca	ategories)	G			m 12/15/	-
Regulatory Program Requiring Well	- CHER INVESTIG	ATION	Case I.	D. #		·
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #	
WELL CONSTRUCTION	!	Depth to	Depth to	Dia	<u> </u>	
Total depth drilled 15 ft.		Top (ft.)	Bottom (ft.)	Diameter (inches)	The second Advantuation	
Well finished to 15 ft.		[From la	ind surface]	(
	Inner Casing		5	14	Austian	L 7040
Borehole diameter: Top 12 in.	Outer Casing				1000	1
Bottom 2 in.	(Not Protective Casing) Screen					
	(Note slot size)	5	15	14	fij. oos	dat ova
Well was finished: Above grade If flush mounted If finished above grade, casing	Tail Piece				J	
	Gravel Pack	3	15		#1 Mon	
height (stick up) above land surface 2.0 ft.	Annular Seal/Grout	0	3		cement-	
	Method of Grouting	4	<u>.</u>			
Was steel protective casing installed? Yes No	inditiod of Glodling	ITEN	nie_			
	5 ft.	GE	OLOGIC LOG	(Copie	s of other geolog ysical logs shouk	ic logs and/or
	rscobe_		~)		
Well was developed forhou		Depth		<u>Description</u> Brown silty sand		
Method of development	ļ	0-41	Bro			
Was permanent pumping equipment in	,	4'-7'	_	y silty	. 1	
Pump capacity N/A gpm	l	7'-15'		•		
Pump type: NA			1-12	Gre	een silty	(sand
Drilling Method HSH		<u>~</u>				1
	of Rig Mobile B-	21				
Name of Driller Steve Burge				. 14		j
Health and Safety Plan submitted?				:;		1
Level of Protection used on site (circle o	ne) None(D)C B A]
N.J. License No. <u>JD 1624</u>			The state of	J.,		[
Name of Drilling Company	JAMES C. ANDERSO	N ASSOC.	·DIC-	ŗ		
I certify that I have drilled the above State rules and regulations.	-referenced well in acc	ordance wit	h all well perr	mit require	ments and all ap	oplicable
gas 224 . Albert	c+ 1	2	60	_	ata 4-19	-95
Driller's Signa	ature <u>Steve</u> (surger	ر د د د د	0	ate	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



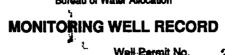
			l Permit No s Sheet Coord		<u>32598 </u>		
OWNER IDENTIFICATION - Owner	U.S. APRY (DI	RECTORATE	.	······································			
Address	HDG 167 ATT:		KV	 			
Dity	FT. MORMOUTH		State	NJ	Zip Code <u>07703</u>		
VELL LOCATION - If not the same as county	• -				088		
YPE OF WELL (as per Well Permit Ca legulatory Program Requiring Well ONSULTING FIRM/FIELD SUPERVIS	ategories) HONITORIA CAMER INVESTIG	G LATION	Date v	D. #	nd 1 /10 /95		
ONSOLTING FINMFIELD SUPERVI	SON (ii applicable)				1 810. #		
VELL CONSTRUCTION Total depth drilled 15 ft.		Depth to Top (ft.) [From la	Depth to Bottom (ft.) nd surface]	Diameter (inches)	Type and Material		
Vell finished toft.	Inner Casing	0	5	4	flustipint pre		
Top <u>12</u> in. Bottom <u>12</u> in.	Outer Casing (Not Protective Casing)				J 1		
Soπomn. Vell was finished: X above grade	Screen (Note slot size)		15	4	f.j010 stat pvc		
flush mounted	Tail Piece	,			<u> </u>		
finished above grade, casing	Gravel Paci	k 3	15		#1 Morie		
eight (stick up) above land urface <u>2.0</u> ft.	Annular Seal/Grout	0	3_		cement-bentonite		
Vas steel protective casing installed? XYes No		Trem	ie_	(Conie	s of other geologic logs and/or		
tatic water level after drilling $\underline{3}$,		GE	OLOGIC LOG	geoph	s of other geologic logs and/or ysical logs should be attached		
/ater level was measured using <u>m-Scope</u>			Depth Description				
Vell was developed for 2.0 hours atgpm			05' Brown sandy silt				
Method of development Pumping			.5'-15' Yellow brown silty				
as permanent pumping equipment in	staliĕd? 🔲 Yes 💢 N	io	•0 10	. –	and		
ump capacity N/A gpm				30	31 /4		
ump type:							
rilling Method HSH	— ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~						
	of Rig Mobile B	<u>-01</u>					
ame of Driller Steve Burge		—— <u> </u>					
•	Yes LINo		* 1 * 1 * 2 * 1 * 1	11			
vel of Protection used on site (circle o	ue) Moue (n)CR Y			,			
J. License No. <u>70 (624</u>		. ,,,,	, , , , , ,				
ame of Drilling Company certify that I have drilled the above tate rules and regulations.	JAMES C. ANDERSO -referenced well in acc	ON ASSOC. cordance wit	INC. h all well per	mit require	ments and all applicable		
Driller's Signa	ature <u>Stave</u> (Burgar	4	0	ate <u>4-19-95</u>		
COPIES: Whit	ie & Green - DEPE – Can	ary - Driller	Pink - Owner	Goldenrod	- Health Dept.		

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



			Permit No Sheet Coord		32599 29: 13: 831	
				mates	. 10 . 001	
OWNER IDENTIFICATION - Owner						
Address	FT. MONMOUTH	SKL/M-P		NJ	- A A A A A A A A A A A A A A A A A A A	
City	er. Extendin		State	140	Zip Code <u>07703</u>	
WELL LOCATION - If not the same as	owner please give addre	ss. Owi	ner's Well No.	MW	34	
County	Municipality				1,1,8 Block No. 1,	
County MONITORIA	as above man	OUTOWN DO	186C)		1,1,0.01 1,	
				ell complete	± 1 / 3 / 95	
TYPE OF WELL (as per Well Permit Ca	HONITORIN	G			~	
Regulatory Program Requiring Well						
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)				Tele. #	
WELL CONSTRUCTION		Depth to	Depth to	Diameter	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
Total depth drilled 15.5 ft.		Top (ft.)	Bottom (ft.)	(inches)	**************************************	
Well finished to 14.5 ft.	·	[From lar	d surface]			
	Inner Casing	\wedge	4.5	4	flush joint pre	
rehole diameter: Top <u>12</u> in.	Outer Casing		1-0		The property of the property o	
Bottom 12 in.	(Not Protective Casing)					
	Screen ((Note slot size)	4.5	14.5	4	ficolosbtox	
Well was finished: above grade	Tail Piece		1 - 1 - 0		j	
L_ flush mounted						
f finished above grade, casing	Gravel Pack	3.5	15.5		#1 Morie	
height (stick up) above land	Annular Seal/Grout		25		cement-hentonite	
surface 2.0_ft.	34 1 1 2 1		0.0		CELLENE DELLOUISE	
Was steel protective casing installed?	Method of Grouting	Tren	rie_			
X Yes ☐ No	_			(Copie	s of other geologic logs and/or	
Static water level after drilling		GEO	DLOGIC LOG	geoph	s of other geologic logs and/or ysical logs should be attached.	
Water level was measured using			Depth	D	escription	
Well was developed forhou	· · · · · · · · · · · · · · · · · · ·		0-21	. –	on silty sand with	
Method of developmentpum	— —		0-2.	DIO	de i	
Was permanent pumping equipment in	stalled Yes 🔀 No	·	2-41	gra	ist professory	
Pump capacity NA gpm				•	ish brown sand	
Pump type: N/A			4-6	Olive	green sand	
Drilling Method HSA		_	(d-15)	1-Rose	green sand on to light brown nd	
Drilling Fluid <u>hone</u> Type	of Rig CME 55		W 10.1	, 0100 32	7 10 1.0 m 0.000 .	
Name of Driller Wellington_	Keeve			981	'C	
Health and Safety Plan submitted?	X Yes ∐No	.	16.1. **			
Level of Protection used on site (circle o	ne) None (D) C B A		' 			
N.J. License No. <u>71455</u>		, ,				
Name of Drilling Company		<u> </u>				
certify that I have drilled the above State rules and regulations.	JAMES C. ANDERSO referenced well in acc	N ASSOC, ordance with	INC. a all well per	nit require	ments and all applicable	
Driller's Signa	ature <u>Welling</u>	ton Re	we Qu	a <u>C</u>	ate <u>4-19-95</u>	
COPIES: Whit	te & Green - DEPE Cana	ry - Driller	Pink - Owner	Goldenrod	- Health Dept.	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



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(CI	
1		

			∴Permit No s Sheet Coord		326 22 _29:13	 931 [
OWNED IDENTIFICATION O						_ ·		
OWNER IDENTIFICATION - Owner Address	U. D. AMERI (MI	RECTORATE	<u> </u>					
			State	NLT .	Zin Code	07703		
City								
WELL LOCATION - If not the same as	owner please give addre	ss. Ow						
Address HONOUTH Same	Municipality			_ Lot No	Bl	ock No		
			ASI/		1,1,0.	<u> </u>		
TYPE OF WELL (as per Well Permit Co	ategories)		Date w	ell complete	md <u>1/3</u>	195		
Regulatory Program Requiring Well	HONITORIN	G	,					
CONSULTING FIRM/FIELD SUPERVI		BILLIN						
	0011 (ii appiioasio)							
WELL CONSTRUCTION		Depth to	Depth to	Diameter				
Total depth drilled 15.5 ft.		Top (ft.)	Bottom (ft.) nd surface]	(inches)	Type a	ind Material		
Well finished to 14.5 ft.	1 0 :		T		0 .			
Borehole diameter:	Inner Casing	0	4.5	<u> </u>	4 Jush ic	int puc		
Top <u>12</u> in.	Outer Casing (Not Protective Casing)				•	•		
Bottomin.	Screen	1	111 2	4	C			
Well was finished: above grade	(Note slot size)	4.5	14.5	14	7.j. • 019	oslot pvc		
flush mounted	Tail Piece		<u> </u>					
If finished above grade, casing	Gravel Pack	3.5	15.5		#1000	rie_		
height (stick up) above land surface _2ft.	Annular Seal/Grout	0	3.			L-bentonite		
	Method of Grouting	7						
Was steel protective casing installed? Yes No		113	mie.		· · · · · · · · · · · · · · · · · · ·			
Static water level after drilling 3	ft.	GE	OLOGIC LOG	(Copie	s of other geo	logic logs and/or ould be attached.)		
Water level was measured using		Γ-	Alma T		_			
Well was developed for 2 hou	3 . 1 <u>.</u> 8		Depth	~	<u>escript</u>			
Method of development			0-1'. Dark brown sitty					
Was permanent pumping equipment in	· /	,	1'-2'	Sar	nd brow	n sand		
Pump capacity NA gpm			2'-H'			1,600017		
Pump type: N/A				Sil	ty san	7000017		
Drilling Method HSA			4-15.5		ve how.	id on silty		
Drilling Fluid None Type	of Rig CME 55	<u> </u>			negio	013/1CE		
Name of Driller Wellington	Reeve			Ü	1110			
Health and Safety Plan submitted?	Yes No			,				
Level of Protection used on site (circle of	one) None(D) C B A	1.1	•	- 1				
N.J. License No. 31455	_		•					
Name of Drilling Company			<u></u>					
I certify that I have drilled the above State rules and regulations.	JAMES C. ANDERSO -referenced well in acc	N ASSOC Cordance With	TAC Tall well perr	mit require	ments and al	l applicable		
Driller's Signa	ature Wellung	gton Re	we O	<u> </u>	ate <u>4-</u>	19-95		
COPIES: Whit	te & Green - DEPE Cana	ary - Driller	Pink - Owner	Goldenrod	- Health Dept.			

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



				Permit No Sheet Coord				[
OWNER IDENTIFICATION - Owner _	U.S. ARMY (D	IRECTO	MTE-			·····		
Address	HLDG. 167 ATT	SIL		KV	1 .			
City	FT. HONMOUTH		_	State	NJ	Zip Code	07703	<u>3</u>
WELL LOCATION - If not the same as	owner please give addr	ess.	Owne	er's Well No.	CNO9	MW36		
County	Municipality	NA PROPERTY			_ Lot No	Bloc 1,1,8.01	k No	- ~
Address HORHOUTH	as above	IUNIUM.	BUR	D		1,1,8.61	1,	,53, —
TYPE OF WELL (as per Well Permit Co	atecories)			Date w	ell complete	od <u>1/4</u>	195	
Regulatory Program Requiring Well	HONITORII	E.	*,					
CONSULTING FIRM/FIELD SUPERVI	SOR (if applicable)	MILLON			-	Tele. #		
CONSULTING FIRMFIELD SUFERVI	SOH (II applicable)					100.#		_
WELL CONSTRUCTION		Depth 1	to	Depth to	Diameter			
Total depth drilled 15.5 ft.		Top (f		Bottom (ft.)	(inches)	Type and	d Material	1
Well finished to 14.5 ft.		 	m land	surface]				-
Borehole diameter:	Inner Casing)	4.5	4	flush joir	# DVC	
Top 12in.	Outer Casing (Not Protective Casing)				' '	J	•	1
Bottom 12 in.	Screen			1.1.	.,	_		\dashv
Well was finished: above grade	(Note slot size)		1	14.5	4_	£.jo.o.	Slotpyc	_
flush mounted	Tail Piece	,				J	1	1
If finished above grade, casing	Gravel Pad	3.5	-	15.5		#1 Mori	P	7
height (stick up) above land	Annular Seal/Grout	Ϊ . –						7
surface 2,0 ft.		1 .		3.5		cement-I	entonite	4
Was steel protective casing installed? XYes No	Method of Grouting	To	സ	<u>e</u>		<u>-</u> -		┙
Static water level after drilling	ft.		GEO	LOGIC LOG	(Copie	s of other geological sections in the section of th	gic logs and/or ld be attached	.)
Water level was measured using	- Scope	ſ		Depth		Descriptions wn to black sand		
Well was developed for 2 hou		- 1	-	0-2'				
Method of development	ng		•	J- Z.				
Was permanent pumping equipment in	statted? Tyes NN	lo	_	1 61) silt		
Pump capacity WA gpm			F	5'- G'		F promu	Sand,	j
Pump type:N/A		ŀ	_		Wes	£ 5'.	1	
Drilling Method HSA		İ	G	710	Oran	ge prow	rsand	
· · · · · · · · · · · · · · · · · · ·	of Rig CME 55		ic	'-10' 5'-12'	Velle	om pron	on sand	
	Reeve							'
lealth and Safety Plan submitted?	Yes No		10	2'-15.5'	High	nt promi	7 Salku	1
evel of Protection used on site (circle o	ne) None DCBA				7			
N.J. License No. <u>7 1455</u>								
Name of Drilling Company	- · · · · · · · · · · · · · · · · · · ·	[<u> </u>	1141				L
certify that I have drilled the above State rules and regulations.	JAMES C. AND RESC -referenced well in acc	N ASSO cordance	C I	all well perr	nit require:	ments and all a	pplicable	
Driller's Signa	ature Welling	ton F	<u>Pew</u>	e (90)	<u> </u>	ate 4-19	1-95	
CODIES. Whi	to & Green - DEPE - Con	anı . Deill.	4. D.	ink . Owner	Goldenrod	. Health Dent		

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



				Permit No Sheet Coord		32602 29: 13:	831
OWNER IDENTIFICATION - Owner	. 0. (S. ARMY (DI	RECTORATE				
Address	BED	3 167 ATT:	SKLPM-P	<u></u>			
City	FT.	MONMOUTH		State	NJ	Zip Code	7703
WELL LOCATION - If not the same as	owner p	lease give addre	ss. Ow	ners Well No.	86 M	WOGB	
						Bjock 1,1,8.201	No.
County HONHOUTH Same	as	above KAT	ONTOWN BO	RO		1,1,8.01	1,53
TYPE OF WELL (as per Well Permit Ca	tegories)		Date w	ell complete	ed <u>1/10/</u>	9.5
Regulatory Program Regulating Well		MONITORIN	G				
Regulatory Program Requiring Well			ATTON				<u></u>
CONSULTING FIRMFIELD SUPERVIS	SOR (if a	pplicable)				Tele. #	
WELL CONSTRUCTION		!	Depth to	Depth to	Diameter		····
Total depth drilled 15 ft.			Top (ft.)	Bottom (ft.)	Diameter (inches)	Type and	Material
				nd surface]	(IIICHes)		i
Well finished to 14 ft.		Inner Casing	0	14	11	01	
Borehole diameter:						flush joint	DYC
Top <u>12</u> in.	(Not Pro	Outer Casing otective Casing)	1			•	
Bottom 12 in.		Screen	3.1	0.1	П	C-	
Well was finished: 🔀 above grade		(Note slot size)	4	14		fix ans	OF DAC
tlush mounted		Tail Piece				0	
finished above grade, casing		Gravei Pack	3.5	15		# Morie	
neight (stick up) above land			5.0				
urface <u>2.0</u> ft.	Ann	ular Seal/Grout	0_	3.5	~	rement-be	DtoDite
Was steel protective casing installed?	Meth	od of Grouting	Tren	nie			
X Yes D No							
Static water level after drilling 3.5) ft.		GEO	DLOGIC LOG	(Copie deoph	s of other geologi ysical logs should	c logs and/or l be attached.)
Vater level was measured using		re_		77-24	$\overline{}$		
		2 gpm		Dept	-	scriptia	
Method of development		3000 8F		0-6,		llow light	promis
	σ					and 0	
Vas permanent pumping equipment in	stalfed?	L Yes IXIN	·	6'-8'	Bus	wn sand	1 with
ump capacity NA gpm			i		, si	1 上	_[
ump type: N/A				8-15	BI	ack silt	
rilling Method <u>HSA</u>							
rilling Fluid <u>ODC</u> Type	of Rig	CME 55					ľ
Jame of Driller Wellinston	Ree	re					
	Yes	No					
evel of Protection used on site (circle o	ne) Nor	ne DC B A	. '	· , 11 · · ·			
J. License No. 3 1455	•		i	. ,			
ame of Drilling Company		(1			
certify that I have drilled the above tate rules and regulations.	JAMES referen	C. ANDERSO ced well in acc	N ASSOC ordance with	TRC all well per	nit require	ments and all ap	plicable
Driller's Signa	iture	Welling	ton Row	re Op	<u> </u>	ate <u>4-19-</u>	95
COPIES: Whit	e & Gree	n - DEPE Cana	ry - Driller	Pink - Owner	Goldenrod	- Health Dept.	

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



WNER IDENTIFICATION - Owner_	U. S. APMY (D)	ERECTORATE		<u></u>			
ddress	HLDG. 187 ATT		I–KV	<u> </u>			
ity	FT. MONMOUTH		State	NJ	Zip Code <u>07703</u>		
/ELL LOCATION - If not the same a ounty	s owner please give address. Municipality AS above	ess. Owi	ner's Well No.	MW_ Lot No	098 1,1,8 ^B lock No. 1		
YPE OF WELL (as per Well Permit C egulatory Program Requiring Well ONSULTING FIRM/FIELD SUPERV	ategories)	RG PATION	Date w	D. #	ed/10/9.5		
TELL CONSTRUCTION otal depth drilled 15 ft.		Depth to Top (ft.) [From lar	Depth to Bottom (ft.) id surface]	Diameter (inches)	Type and Material		
/ell finished toft.	Inner Casing	0	5	4	flush joint pyc		
Top 12 in. Bottom 12 in.	Outer Casing (Not Protective Casing)			,			
/ell was finished: X above grade	Screen (Note slot size)		15	H	fij. · O10 slot pvo		
flush mounted	Tail Piece				7		
finished above grade, casing eight (stick up) above land	Gravel Pack	∮ 3	15		#1 Morie		
urface <u>2.0</u> ft.	Annular Seal/Grout	0	3		cement-bentoni		
as steel protective casing installed Yes No tatic water level after drilling 5		•	mie DLOGIC LOG	(Copie	s of other geologic logs and/or		
Static water level after drillingft. Water level was measured usingSCOPE			Depth Description 0-2' Brown silty sale 2'-4' Green-brown s 4'-9.5' Green-brown s 9.5'-15' Dark brown- Silt				
illing Fluid	Yes No						
ertify that I have drilled the above ate rules and regulations.	JAMES C. ANDERSO -referenced well in acc	ON ASSOC Cordance with	INC. all well per	nit requirer	ments and all applicable		

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



MONITORING WELL RECORD

	•		il Permit No					
		Atla	s Sheet Coord	linates	_29_:	13 :_	821	_1_
OWNER IDENTIFICATION - Owner _	U.S. APMY (DI	DESCRIPTION	P					
Address				·····				_
City				NJ	Zip Cod	le	1703	<u> </u>
		_				-		
WELL LOCATION - If not the same as								
County HONOUTH Same	Municipality KAT	ONTOWN B	ORO	_ Lot No	1,1,8	Block No .Ø1	D	53,5
						_	_	
TYPE OF WELL (as per Well Permit Ca	ategories)		Date w	reli complet	ed/_	10/s	5	
Regulatory Program Requiring Well	CONTRACTOR CONTRACTOR	ATION	Case I.	D. #				
CONSULTING FIRM/FIELD SUPERVI					Tele. #			_
WELL CONSTRUCTION		<u> </u>	D 15 4 .	1				7
		Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter	I	e and M	storial	1
Total depth drilled 6 ft.	;		nd surface]	(inches)	Type and Material		atel lai	1
Well finished to 15 ft.	Inner Casing	0	15	4	Clark			7
Borehole diameter:	Outer Casing		 3 -		flush	lon+	pvc	┨
Top 12in. Bottom 12in.	(Not Protective Casing)							_
	Screen (Note slot size)	.5	15	14	Ω.		-F - N - N	1
Well was finished: above grade	Tail Piece		10		11). «		ofbac	1
flush mounted	Tall Piece		ļ					┦
If finished above grade, casing	Gravel Pack	H	16		#12	orie		
height (stick up) above land surface _2,ft.	Annular Seal/Grout		4				otooite]
	Method of Grouting	<u> </u>	' ' '		CCAIPL	re_ne	1.111.2.11.75	1
Was steel protective casing installed? Yes No	Metriod of Grouting	ren	rie_					
Static water level after drilling	5	GF	OLOGIC LOG	(Copie	s of other g	jeologic l	ogs and/or e attached.)	
Water level was measured using							e attached.)) 1
Well was developed forhou		Ī	Depth		criptic			ĺ
Method of developmentno			0-2.5	grou	ur sa	nd		
	Λ — —		2.5'-4'	yello	in pro	S	sand	
Was permanent pumping equipment in Pump capacity NIA gpm	staned? LLI Yes KM No	'	4-10	•	e sa			
Pump type: N/A gpin			7-10				boae	
Drilling Method H.S.A.			10'-16	rigi	it Die		3011	
	of Rig CME 55	-						İ
	Perue							
	Yes No							
Level of Protection used on site (circle of	ne) None DC B A							
N.J. License No. 31455								
Name of Drilling Company			· · · · · ·	 				_
I certify that I have drilled the above State rules and regulations.	JAMES C. ANDERSO -referenced well in acc	N ASSOC. ordance wit	INC. h all well peri	mit require	ments and	l all appl	icable	
Driller's Signa	ature Wellwigt	Ton Re	ve @	<u>)</u> 0	ate <u>4-</u>	19-91	5	

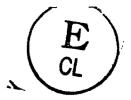
COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

New Jersey Department of Environmental Protection and Energy Bureau of Water Allocation



			Sheet Coord		29: <u>13</u> : <u>821</u>
OWNER IDENTIFICATION - Owner _					
Address	BLDG. 167 ATT:	SOLM-P	- EV		
City	FT. MONMOUTH	·	State	NJ	Zip Code <u>07783</u>
WELL LOCATION - If not the same as County	owner please give addre Municipality RAT	ss. Ow	ner's Well No.	MW _ Lot No	1,1,8 ^B lock No. 1,1
TYPE OF WELL (as per Well Permit Ca					od 1/10/95
Regulatory Program Requiring Well	MONITORIA	G			—·· -
CONSULTING FIRM/FIELD SUPERVI					
		r		,	
WELL CONSTRUCTION Total depth drilled 14.5 ft.	Depth to		Depth to Bottom (ft.)	Diameter (inches)	
all finished to 14.5 ft.	· · · · · · · · · · · · · · · · · · ·	[From lar	nd surface]	<u> </u>	
Borehole diameter:	Inner Casing	٥	4.5	14	flust joint pre
Top 12in.	Outer Casing (Not Protective Casing)			•	J -1
Bottom 12in.	Screen	11 5	111 =	4	0
Well was finished: 🔀 above grade	(Note slot size)	4.5	14.5	7	fij ooslotpic
flush mounted	Tail Piece				,
f finished above grade, casing	Gravel Pack	2.5	14.5		# morie
height (stick up) above land	Annular Seal/Grout		2.5		cement-hentonite
surface <u>2.0</u> ft.	24 11 1 - 1 0 - 11	$-\frac{1}{2}$		l	Cement Bentonife
Was steel protective casing installed? X Yes No	Method of Grouting	100	mie		
LOJ Yes LOJ No Static water level after drilling3	5 "	GEO	DLOGIC LOG	(Copie	s of other geologic logs and/or ysical logs should be attached.)
Water level was measured using					
Well was developed for 2.0 hou		li li	<u>Depth</u> 0-4'	_	cription
Method of development			0-4	4	n/olive brown
Vas permanent pumping equipment in	^	, ,	4'-6'		y sand
Pump capacity N/A gpm		Į.			outherson promus
Pump type: NA			~ !l e	,, S11t	y sánd x silty sand
Drilling Method HSA			6-140	Gray	i silty sand
	of Rig Mobile B-	<u> </u>			
Name of Driller Steve Burge					
lealth and Safety Plan submitted?				••	
evel of Protection used on site (circle o	ne) None (D) C B A	'	, , , , , , , ,	••	
I.J. License No. <u>TD 1624</u>		· •		1	
Name of Drilling Company	JAMES C. ANDERSO	N ASSOC	INC.	<u></u>	
certify that I have drilled the above State rules and regulations.				mit require	ments and all applicable
Driller's Signa	ature <u>Steve</u>	Burge	L (90)	D	ate <u>4-19-95</u>
COPIES: Whit	e & Green - DEPE Cana	ıry - Driller	Pink - Owner	Goldenrod	- Health Dept.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER ALLOCATION



			Well Permit N				
			Atlas Sheet C	oordinates	29	13:	843
VNER IDENTIFICATION - Owner	MONMOUTHI CO	PERC	& CDO				
dress	250 CINTICE ST	RICKT					
ty	FRIGHOLD		State	NJ_	Z ip	Code	
ELL LOCATION - If not the same as	owner please give addre		Owner's Well	No	MW_A		
	• -						
ountyBONJOUTH_PINE	BROOK ROAD	NION	FALLS BO		**·	21.01	
YPE OF WELL (as per Well Permit Ca	tegories)	NG	Da	ate well com	pleted	3 , 29 , 95	-
egulatory Program Requiring Well	UST		Ca	se I.D. #			_
ONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable) P	MK			Te	le. # <u>908–68</u>	36-004
ELL CONSTRUCTION		Depth t	to Depth t	o Diame			
otal depth drilled17ft.		Top (f	t.) Bottom	(ft.) (inch		Type and Ma	terial
ell finished to 17 ft.		[Fror	m land surface	9]			
orehole diameter:	Inner Casing	.8	5	4	PVC	<u> </u>	
Top 11 in.	Outer Casing						
Bottom 11 in.	(Not Protective Casing) Screen					<u></u>	
/ell was finished: ☐ above grade	(Note slot size)	5	17	4	#20	SLOT PV	/C
y flush mounted	Tail Piece				_		
finished above grade, casing eight (stick up) above land urfaceft.	Gravel Pack	4	17			GRAVEL	
	Annular Seal/Grout	0	4		_	AT CEMENT BENTONITE	
	Method of Grouting		AUTMU DT	CDI ACE			
as steel protective casing installed?		GK/	AVITY DI				
atic water level after drilling9	ft.		GEOLOGIC	LOG (C	opies of ot	her geologic log logs should be	gs and/or
ater level was measured usingM		Γ			ا المحاد (۱۱۰م -	-30 0110010 00	~
ell was developed for30hou			0 -	6" BI	LACKTO	•	
ethod of developmentSUBMERS			6" -		AND & C		
as permanent pumping equipment ins		,	15' -		AND & C	_	
ump capacitygpm		l	19. =			ME SILT	
ump type:							
rilling Method HOLLOW STEM	AUGER	ĺ					
• • • • • • • • • • • • • • • • • • • •	of Rig <u>CT450</u>						
ame of Driller MICHAEL ASS							
ealth and Safety Plan submitted?	Yes X No						
vel of Protection used on site (circle o	ne) None <u>D</u> C B A						
J. License No. 775			T TAY'				
ame of Drilling Company	PAINFIED WELL	TIXIL	dell'e				
certify that I have drilled the above tate rules and regulations.	-referenced well in acco	ordance	with all well	permit req	uirements	and all applic	able
	Ole	. /			 -		
Driller's Signa	iture	_			Date _	4/10/9	15
COPIES: V	Vhite - DEP Canary - L)riller	Pink - Owner	Goldeni	rod - Health	Dept.	
00, 1E0.					I TURNET	ـ - حود ·	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER ALLOCATION



		Wel	Permit No	29 _	32895	200
		Atla	s Sheet Coord	inates	29 13	843
OWNER IDENTIFICATION - Owner	HONMOUTH CO. E	IDGS. &	GRO			ż _p
Address	250 CENTER STE	æcr				
Address	FREEDOLD		State	NJ	Zip Code	
WELL LOCATION - If not the same as County	Municipality	TON FALL				No. <u> </u>
TYPE OF WELL (as per Well Permit Ca	ategories) HONTTORIN	G	Date w	vell complete	od 3 /29 /	95
CONSULTING FIRM/FIELD SUPERVI						
			·	· · · · · · · · · · · · · · · · · · ·		
VELL CONSTRUCTION Fotal depth drilled 17 ft.		Depth to Top (ft.) [From lat	Depth to Bottom (ft.) nd surface]	Diameter (inches)	Type and	Material
Well finished to17_ft.	Inner Casing	.5	5	4	PVC	
Borehole diameter: Top 11 in.	Outer Casing (Not Protective Casing)					
Bottom 11 in.	Screen (Note slot size)	5	17	4	#20 SLOT	PVC
Vell was finished: above grade X flush mounted	Tail Piece					
finished above grade, casing	Gravel Pack	4	17		#2 GRAVE	L
neight (stick up) above land ourface ft.	Annular Seal/Grout	0	4		NEAT CEM	
Vas steel protective casing installed?	Method of Grouting	CDXVI	TY DISPI	.acemen	т	
Yes No		GIAVI	TOPI		s of other geologic	loge and/e-
tatic water level after drilling 8	ft.	GE	OLOGIC LOG	geophy	s of other geologic rsical logs should	be attached
Vater level was measured using M S						
Vell was developed forhou				5" BLA	CKTOP	
lethod of development <u>SUBMERS</u>	IBLE PUMP		6" - 12	2' SAN	D & GRAVEL	
Vas permanent pumping equipment in	stalled? 🔲 Yes 🔣 No	,	12' - 17	7' SAN	D AND GRAV	EL
tump capacitygpm				WIT	H SOME SIL	T
ump type:						
orilling Method HOLLOW STE	M AUGER					
Prilling Fluid Type	of Rig <u>CT450</u>					
lame of Driller MICHAEL AS						
	Yes X No					
evel of Protection used on site (circle o	ne) None D C B A				ι.	
I.J. License No	PLAINFIELD WELL	DOTT I THE	<u>.</u>			
lame of Drilling Company	LIVILLETPIN APPIN	TATION IN		· · · · · ·		
certify that I have drilled the above state rules and regulations.	-referenced well in acc	ordance wit	h all well peri	mit requirei	ments and all ap	plicable
Driller's Signa	ature <u>ffr</u>	le		- P	ate <u>4/10/9</u>	5
COPIES: V	Vhite - DEP Canary - l	Driller Pir	nk - Owner	Goldenrod -	Health Dept	

511

		V	Vell Permit No Atlas Sheet Coord	29-	<u>32896</u>	3 13:	843	
							<u> </u>	
OWNER IDENTIFICATION - Owner	MONMOUTH CO.	HIXE.	& CIRO					
Address				NT				
City	FREEHOLD		State	100	Zip Cod	e		
WELL LOCATION - If not the same as	owner please give addre	ss. (Owner's Well No.	SVE-	L			
County	Municipality			Lot No.		 Block No.		
County HORTOUTH PINE	BROOK ROAD	NION F	ALLS BO		21.k	<u>л</u>	जा	
TYPE OF WELL (as per Well Permit Ca				ell complete				
Regulatory Program Requiring Well	GAS VEN			D. #			_	
OONOUT THO SIDMEST DOUBERNE	UST PMF	ζ		U. #	-	908-68	— 36-0044	
CONSULTING FIRM/FIELD SUPERVIS	SOH (if applicable)				1 ele. #_	500 00	70 0044	
WELL CONSTRUCTION		Depth to	Depth to	Diameter			·	
Total depth drilled 11 ft.		Top (ft.			Тур	e and Ma	terial	
Well finished toft.			[From land surface]					
Borehole diameter:	Inner Casing	0	-8					
Top 11 in.	Outer Casing							
Bottom 11 in.	(Not Protective Casing)				_			
,	Screen (Note-slot size)	.8	10	4	PVC	#20		
Well was finished: above grade	Tail Piece							
X flush mounted	Gravel Pack	. 3	10		#2 G	RAVEL		
If finished above grade, casing height (stick up) above land	Graver Pack				π2 0			
surfaceft.	Annular Seal/Grout	0			NEAT	CEME	ŊŢ	
Was steel protective casing installed?	Method of Grouting	GDA	VITY DISP	ACEMEN				
Yes No		GIVE	VIII DIOF					
Static water level after drilling7	ft		GEOLOGIC LOG	(Copies	of other o	geologic lo should be	gs and/or attached.)	
Water level was measured using M	SCOPE	Г	, ·	goopiii	ologi logo	Onodia po	andonou.j	
Well was developed for 30 hou	rs at 2.5 gom		0 -	5" BLA	CKTOP			
Method of development SUBMERS	IBLE PUMP		6" - 1	l' SAN	D & GR	AVEL		
Was permanent pumping equipment in		·	TOP 6" OF WELL SCREEN IS NOT SLOTTED.					
Pump capacitygpm	stalled; [] Tes [] INC	'	THAT PART OF SCREEN WAS GROUTED AS WAS					
Pump type:		Ī	FLUSH MOUNT		· 1		<u> </u>	
Drilling Method HOLLOW STEM	 L AUCED	1		GROU		4 I I 3 P	X 🕏	
	of Rig CT450					\$ \ \ \	2 2	
Name of Driller MICHAEL ASS	O. 1.119			PACK	`.'			
	Yes X No				2/2	以三以		
Level of Protection used on site (circle of				E	}	KEN.		
N.J. License No. 775	To Holle D. Q. B. A.	1		FRAVEL	1.	KIEKI		
Name of Drilling Company	PLAINFIELD WEE	L DRII	LING	<u></u>		松 村以		

I certify that I have drilled the above State rules and regulations.	-referenced well in acc	cordance	with all well per	mit require	nents and	all appli	cable	
Driller's Signa	atura Men	K			ate	4/10/	95	
Driller's Signa	aluie				alt	-, -0/		
COPIES: V	White - DEP Canary -	Driller	Pink - Owner	Goldenrod -	Health Dep	t.		

DWR-138 M。 • 11/94

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER ALLOCATION



			ll Permit No as Sheet Coord			843		
OWNER IDENTIFICATION - Owner	MONTHOUSE CO.							
Address	250 CIONTICK ST	RKKT						
City			State	ŊJ	Zip Code			
WELL LOCATION - If not the same as	owner please give addre	ss. Ov	vner's Well No.	AS-	·1			
). o .		
County HONDOTH PINE	BROOK ROAD TI	NTON FAL	IS BO		21.01	- 91		
TYPE OF WELL (as per Well Permit Ca					ed 3 / 30 / 9			
Regulatory Program Requiring Well	T-1/1000		Case I.	D. #				
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)	MK			Tele. #_908-6	86-0044		
WELL CONSTRUCTION	1	Depth to	Depth to	1				
	1			Diameter		aterial		
Total depth drilled 30 ft.			Bottom (ft.) and surface]	(inches)	Type and Material			
Well finished toft.	Inner Casing	• 5	18	2	PVC			
Borehole diameter: Top 8 • 5 in.	Outer Casing				·			
Bottom 8.5 in.	(Not Protective Casing) Screen							
Well was finished: above grade	(Note slot size)	18	23	2	#20 SLOT	PVC		
I flush mounted	Tail Piece							
If finished above grade, casing	Gravel Pack	16	23		#2 GRAVEL			
neight (stick up) above land surfaceft.	Annular Seal/Grout	0	16		NEAT CEME			
Surraceit. Was steel protective casing installed?	Method of Grouting	PRES	SURE PUMI	PED	& BENTONI	<u>PS</u>		
Yes X No								
Static water level after drilling7	, ft.	GE	OLOGIC LOG	(Copie:	s of other geologic k /sical logs should be	gs and/or attached.)		
Water level was measured usingM								
Well was developed for . 30 hou			0 - 6'	" TOPS	OIL	,		
Method of development <u>SUBMERS</u>		j	6" - 15	SAND	& GRAVEL			
Was permanent pumping equipment in			15' - 23	SAND	& GRAVEL W	/SILT		
Pump capacitygpm			23' - 30	SAND	& LARGE GR	AVEL		
Pump type:		ı			D WITH BENT			
Drilling Method HOLLOW STEM	AUGER				AYER FROM 3			
	 of Rig <u>CT450</u>		23'					
Name of Driller <u>MICHAEL ASS</u>								
Health and Safety Plan submitted?		j						
evel of Protection used on site (circle o								
N.J. License No. 775	ite) Noile D O. D A							
Name of Drilling Company	PLAINFIED WELL	L DRILLI	NG					
certify that I have drilled the above State rules and regulations.	· · · · · · · · · · · · · · · · · · ·		•1	mit require	ments and all appli	cable		
Driller's Signa	ature <u> </u>		<u> </u>		Pate 4/10/9	5		
COPIES: V	Vhite - DEP Canary - l	Driller Pi	ink - Owner	Goldenrod -	Health Dept.			

, DWR-138 M

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER ALLOCATION



			Permit No.			_ ~
		Atlas	Sheet Coordi	nates	<u>29: 13: 59</u>	7١
OWNER IDENTIFICATION - Owner	TIC ADMY _ TROOT	P. MONMOTPP	g			
Address			Q			
City			State	NJ	Zip Code	
WELL LOCATION - If not the same as	owner please give addres	ss. Owr	ner's Well No.	2018	mwl	
County	Municipality		~~~	_ Lot No	Block No	
County HOSTOUTH Address BCDC 2011	DEA FLY	MONT	M. Mo	NAROU	7AT N/A	N/A
, -			•		d 9/12/95	
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	HONITOKII	NG				
					9 0-29-25-1618	
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)				Tele. #	
WELL CONSTRUCTION		Depth to	Depth to			
Total depth drilled 16 ft.		Top (ft.)	Bottom (ft.)	Diameter (inches)	**************************************	ս ի
·			d surface]	(IIICH85)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1
Well finished toft.	Inner Casing		4	4	Prc	
Borehole diameter:		0	9		11/	
Top <u>12</u> in.	Outer Casing (Not Protective Casing)					
Bottom (Q in.	Screen		11.	4	Dir.	
Well was finished: above grade	(Note slot size)	4	16	7	Prc 020	
Ilush mounted	Tail Piece					
If finished above grade, casing	Gravel Pack	3	16	12	#2 Sand	
height (stick up) above land	Annular Seal/Grout		3			
surfaceft.	Annual Seal/Grout	0	<u></u>	15	Bent Slumy	
Was steel protective casing installed?	Method of Grouting	1	remire	Pipe		1
Yes No				ı		
Static water level after drilling	ft.	GE	ologic Log	geoph	s of other geologic logs a ysical logs should be atta	na/or iched.)
Water level was measured using	Tapl		-1' top			
Well was developed forhou	rs at 3 gpm					1
Method of development Moy			- 5' Tan	Sund	y Silt	
Was permanent pumping equipment in						1
Pump capacity <u>NA</u> gpm	Stalled: [165 K] !#	5 5	-10 110	alles gre	en/tan Silty clay	
A A A		102	-16 de	K guee	h silty clay	Ī
		"	•	7	or it's city	1
·	of Rig A 300					
						}
	ent Tu Mu]
Health and Safety Plan submitted?	_ Yes ⊠ No					
Level of Protection used on site (circle of N.J. License No. 1275	one) None (D) C B A					
Name of Drilling Company	GARY PARIOTE/SHO	HE DRUG	DIC			
I certify that I have drilled the above State rules and regulations.	e-referenced well in acc	cordance wit	th all well per	mit require	ments and all applicabl	e
Driller's Signa	ature <u>acuf</u>	qui	2004	[Date <u>9//3/95</u>	
COPIES: W	White - DEP Canary	Dhiller Pin	k - Owner	Goldenrod -	į ί Health Dept.	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER ALLOCATION



DIM		Weil i Atlas	Permit No Sheet Coordi		
OWNER IDENTIFICATION - Owner	MID MONMOUTH I				
Address	1 COLDSTREAM V	MAY & PINE			
City					Zip Code
WELL LOCATION - If not the same as County	owner please give addre	ss. Own	er's Well No. BO		- 1 /A 13B, 1201Block No. 114
Address1 COLDSTREAM WA				<u> </u>	
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	ategories) MONITORIN	G	Date w		d <u>2 / 10 / 9/6</u>
CONSULTING FIRMFIELD SUPERVI	SOR (if applicable)	··			Tele. #
WELL CONSTRUCTION Total depth drilledft.		Depth to Top (ft.)	Depth to Bottom (ft.) d surface]	Diameter (inches)	Type and Material
Well finished to 10.5 ft.	Inner Casing		,5	4	PVC
Borehole diameter: Topin.	Outer Casing (Not Protective Casing)			_	
Bottom <u> </u>	Screen (Note slot size)	, 5	10.5	4	PVC 020
Well was finished: Above grade	Tail Piece				
If finished above grade, casing	Gravel Pack	.25	10.5	12	#2 Sand
height (stick up) above land surfaceft.	Annular Seal/Grout	٥	.25	/2	Beat Sluvet
Was steel protective casing installed? Yes No	Method of Grouting	Tren	ic ?:		s of other geologic logs and/or
Static water level after drilling		GEO	PLOGIC LOG	geoph	ysical logs should be attached.)
Water level was measured using		0	-3'	<i>t: 11</i>	
Method of development		2	ات دا	med .	Same + 511+
Was permanent pumping equipment in			- 40.5	, -()	- 3117
Pump capacity					
Pump type: 154					
Drilling Method	of Rig A 300				
Name of Driller Care					
Health and Safety Plan submitted?	Yes No				
Level of Protection used on site (circle	one) None 🕭 C B A				
N.J. License No. 1275					
Name of Drilling CompanyGA	RY PARENT/SHOPE D	RLG INC.	<u> </u>		······································
I certify that I have drilled the above State rules and regulations.	e-referenced well in acc	cordance wit	h all well per	mit require	ments and all applicable
Driller's Sign	nature <u>Ocue</u>	1 Qu	211		Date 2/13/96
COPIES: V	White - DEP Canaly - L	Driller Pini	c - Owner	Goldenrod -	Health Dept.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER ALLOCATION



/ DWH	· <i>]</i>		Permit No		29: 13:	829
		Allas	Sheet Coordi	nates	::	020
OWNER IDENTIFICATION - Owner			· · · · · · · · · · · · · · · · · · ·			
Address	1 COLDSTREAM	MAY & PIN	E BROOK			
City	TIMON FALLS		State	NJ	Zip Code	
WELL LOCATION if not the same as County		non fall	ers Well No. 5 BO			
	MONITORI	NG			7 10 0	
TYPE OF WELL (as per Well Permit Ca	itego ries)				od <u>2,10,91</u>	
Regulatory Program Requiring Well			Case I.	D. #	·	
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)				Tele. #	
WELL CONSTRUCTION	ı				 	
WELL CONSTRUCTION Total depth drilledft.			Depth to Bottom (ft.) d surface]	Diameter (inches)		eriai
Well finished toft.	Inner Casing		,	2	Puc	
Borehole diameter: Topin.	Outer Casing (Not Protective Casing)					
Bottomin.	Screen (Note slot size)	/	11	2	Puc oao	
Well was finished: Above grade	Tail Piece				7 7 6 020	
If finished above grade, casing	Gravel Pack	15	1/	4	#2 Send	
height (stick up) above land	Annular Seal/Grout		,5°		But Slury	
surface 2.5 ft.	Mathad of Counting				inc. i sparry	
Was steel protective casing installed?	Method of Grouting	Irenie	- Liek			
Yes No		GEO	DLOGIC LOG	(Copie	s of other geologic lo	gs and/or
Static water level after drilling3				Aeghii	ysical logs should be	attached.)
Water level was measured using		ō	- 1' Too	54.1		
Well was developed for 15 hou	irs at <u> </u>		- 1' Top - 11' Me	-9,1		i
Method of developmentCewtrif	igal Things		- 11 phe	d Shud	+511	j
Was permanent pumping equipment in	stalled? Yes N	>				
Pump capacity /// gpm						
Pump type:						1
Drilling Method Hand Britis	_Casing	1				
A A	of Rig					į
Name of Driller Carry Par	ent					
Health and Safety Plan submitted?	Yes 🔀 No					
Level of Protection used on site (circle of	one) None 🗗 C B A					1
N.J. License No. 12 75	•					ł
	RY PARENT/SHORE I	RIG. INC.	<u> </u>			
I certify that I have drilled the above State rules and regulations.	e-referenced well in acc	cordance with	h all well per	mit require	ments and all applic	able
Driller's Sign	ature <u>Occup</u>	aro		0	Date 2/13/90	<u> </u>
COPIES: W	hite - DEP Canay -) Driller Pink	r - Owner	Goldenrod - i	/ Health Dect	

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER ALLOCATION

MONITORING WELL RECORD

34755

29 _

	/ DML	/ '		Permit No		34755 29 · 13 · 829
			Atlas	Sheet Coordi	nates	29 13 829
	ENTIFICATION - Owner_	TITE LIGHTS OF SECTION ASSESSMENT				
		1 COLDSTREAM W		BROOK	M 7	
City		TINTON FALLS		State	NJ	Zip Code
WELL LOCA	ATION - If not the same a	s owner blease give addres	ss. Owi	ers Well No.	MW	7
County	MONMOUTH	Municipality TIN	TON FALLS	ВО	Lot No.	7 13B,1201 114 Block No
	1 COLDSTRUM W	AY & PINE BROOK	G	D-4		17 10 101
TYPE OF W	ELL (as per Well Permit (Categories) MONITORIN				d 2 /10/94
	Program Requiring Well _				<u> </u>	
CONSULTIN	IG FIRMFIELD SUPER\	/ISOR (if applicable)				Tele. #
WELL CONS	STRUCTION	!	Depth to	Depth to	Diameter	
Total depth	drilled <u>9,5</u> ft.		Top (ft.)	Bottom (ft.)		Town a small filled a last
	to 9,5 ft.			d surface]		
		Inner Casing	+2,5	/	2	Pvc
Borehole dia Top	in	Outer Casing				
Bottom		(Not Protective Casing) Screen		<u> </u>		
	′ —	(Note slot size)	1	9,5	2	Puc 020
Well was fin	ished: above grade	Tail Piece				
re et 1 h . 1 . 1	flush mounted	Gravel Pack	l	6 -	4	11 2 5 3
	bove grade, casing up) above land		15	9.5		# 2 Sand
surface		Annular Seal/Grout	0	15	4	Bent Slumy
Was steel p	rotective casing installed	Method of Grouting	Tremit	Piec		·
Yes [_				(Coole	
Static water	level after drilling	3 ft.	GE	orogic roc	geoph	is of other geologic logs and/or ysical logs should be attached
Water level	was measured using	a tape		-1' Tol	26-11	
		ours at3gpm				
Method of d	evelopment <u>Ce M ty</u>	ifagel Pump	1',	- 9.5 '	med s	ind + 511+
		installed? Yes No		• •		• •
Pump caipad	city NA gpm					
Pump type:	~ ^^					
Drilling Meth	od Hand Briven	<u>Casing</u>				
Drilling Fluid	NA Ty	pe of Rig NA				
Name of Dri	ller Gay Tan	ent				
	Safety Plan submitted?	☐ Yes ☒ No		•		
Level of Pro	tection used on site (circle	eone) None 🗘 C B A				
N.J. License	No. 1275					
Name of Dri	Iling Company	CARY PARKNT/SHORE	DRIG, LIN			
	t I have drilled the aborand regulations.	ve-referenced well in acc	condance wi	th all well per	mit require	ements and all applicable
	Driller's Sig	nature Couf	100	HI.		Date 2/13/96
	COPIES:	White - DEP Canary -	niller Pin	k - Owner	Goldenrod -	Health Dept.

DWR-138 5/95



New Jersey Department of Environmental Protection Bureau of Water Allocation

	,	•

l iac	WELL	RECORD			Veil Permit Numbe	
\ LAS /				_		35236
Pode stad Private	. A ot			A	tias Sheet Coordin	nates
OWNERRedacted - Privac					2 9 -13	-:-883
Address 22 SHERWOOD DR			377			
City <u>EATONIWON</u>		State			Zip Code	
WELL LOCATION ADDRESS22	SHERWOOD DR.			Owner's	Well No.	
WELL LOCATION ADDRESS 22 County MONMOUTH	Municipality <u>EATON</u>	TOWN BOR	O Lot N	o. <u>1</u>	Block No.	93.7
WELL USEIRRIGATION					, 06 ,96	
WELL USE TRAIGATION		DAT	E WELL COM	PLETED	/ 06 /96	•
•						W m
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Total Depth Drilledft.	Single/Inner Casing	+1.0	94	4	PVC	Sched. 40
Finished Well Depth 119 ft.	Middle Casing					
	Outer Casing (largest diameter)					
Borehole Diameter: 8.5 In. Bottom 8.5 in.	Open Hole or Screen (No. Used)	94	114	4	PVC	Sched. 40
Well Casing Begins:	Blank Casings (No. Used)					
Well Casing Begins: ft. above grade orft, below grade	Tail Piece	114	119	4	PVC	Sched, 40
	Gravel Pack	84	119	8.5	Blended	.025
	Grout	3.5	84	8.5	Neat Cement Bentonite	0 lbs
RECORD OF TEST		<u> </u>		<u> </u>		
Test Date 3 /6 /96		Grou	ting Method	Press	ure through tremic	pipe
Static Water Level1	t. below land surface Measured Tane	Drilli	ng Method		Mud rotary	
Test Date 5 / 6 / 96 Static Water Level 11 Water Level Measured Using 75	ft. below land surface				10100	·
Well Was Pumped Using	Air lift	 			SIC LOG	
Well Yieldgpm			•	water was	encountered in cons	olidated
If Pump Tested: Discharge Rate	map	formatic 0- 40	Med ochre	sand		
Duration of Test	hours	40- 50	Green med			······································
	_	50- 65			en sand	
PERMANENT PUMPING EQUIPMENT	='	65- 70				
Installed by M. Cantillo Pump Type Submer	Reg. No. 001571	_ 70- 90				
runp type	00	90-95 95-100				
Depth of Pump below land surface		100-119				
Capacity 12 gpm	Horsepower3/4	-		o orașe sur	Z	
I certify that I have constructed the aboaccordance with all well permit require rules and regulations.			1611			
Drilling Company PICKWICK WEL	L DRILLING					
•	pin/Primost	<u> </u>		-		
Driller's Signature By M	mit					
1 1	te 5 /23 96	W				
U	J					

DWR-138 5/95



New Jersey Department of Environmental Protection Bureau of Water Allocation

WELL RECORD

5/29/	196
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Well Permit Number

CIVIR /			_		<u> 29 – 3</u>	5462
				Δ+1	as Sheet Coordii	natoe
OWNER <u>MATZKI, & MIMFOR</u>	D & MILTON				29: 13	
Address 122 VILLAGE CT. HAZLET		Chah	NJ		Zin Ondo	
		State	9	 	Zip Code	
	D VIEW DR.			_ Owner's	Well No Block No.	F.E.
County MONMOUTH	Municipality	LWITE 1	Lot N	lo	Block No.	
WELL USE DOMESTIC		DA*	DATE WELL 81	FARTED 8	, 22 ,96 , 22 ,96	-
	Note: Messure all depths	Depth to	Depth to	Diameter	Material	Wgt./Reting
WELL CONSTRUCTION	from land surface	Top (ft.)	Bottom (ft.)	(Inches)		(fbs/sch no.)
Total Depth Drilledft.	Single/Inner Casing	+1.0	156	4	PVC	Sched. 40
Finished Well Depth 181 ft.	Middle Casing (for triple cased wells only)					
	Outer Casing			<u> </u>		
Borehole Diameter:	(largest diameter)		<u> </u>			
Borehole Diameter: Top 8.5 in. Bottom 8.5 in.	Open Hole or Screen (No. Used)	156	176	4	PVC	Sched. 40
Well Casing Begins:ft. above grade or	Blank Casings (No. Used)					
ft. below grade	Tail Piece	176	181	4	PVC	Schod. 40
	Gravel Pack	146	181	8.5	Blended	.025
	Grout	3.5	146	8.5	Neat Cement Bentonite	0 lbs 600 lbs
RECORD OF TEST			<u> </u>			
Test Date 8 /22 /96					re through tremie	pipe
Static Mater Fevel	it. below land surface	Drilli	ng Method _		Mud rotary	
	Measured Tape	_				
, ,	ft. below land surface			GEOLOG	IC LOG	
Well Was Pumped Usinggpm	WILLI				ncountered in cons	olidated
		formati	Clayey	מעט		
If Pump Tested: Discharge Rate Duration of Test		3- 10	Tan-green	clay w/blac	c sand	
Duration of Lear		10- 40	Silty green	clay w/fine	black sand	
PERMANENT PUMPING EQUIPMENT		40- 14			· · · · · · · · · · · · · · · · · · ·	·· ·····
Installed by D. Ulbricht	Reg. No. <u>JD0523</u>	40-150	Fine & me	d black sand		
Pump Type Submer		50-18	1 Fine & me	ed gray sand		
Depth of Pump below land surface	100 ft.	 				
Capacity 20 gpm	Horsepower	.				
		ļ 	 		· · · · · · · · · · · · · · · · · · ·	
I certify that I have constructed the aboaccordance with all well permit require rules and regulations.		,				
Drilling Company PICKWICK WKI	DRILLING					
• • • • • • • • • • • • • • • • • • • •	nin Primost	·	 			
6 10	. /	·				
Driller's Signature	pate 10 / 4 96	} /=				
Registration No. JD13762	MIN 10 / 7 70	· L			······································	<i></i>
	ite - DEP Canary - Drille 010196 1010190		Owner Go	oldenrod - Hea	alth Dept.	
JC	10/1/96 10/1/96	ν		$\iota \circ \iota$	11170	

New Jersey Department of Environmental Protection Bureau of Water Allocation

WELL RECORD



Well Permit Number

/ -	29-	5178							
Atlas Sheet Coordinates									
	29 13	- : 579							
	Zip Code								
Owner's	Well No.								
o. <u>1.19</u>	Block No.	00							
ARTED1	/ 22 / 97 / 22 / 97								
LETED <u>1</u>	/ 22 / 97								
Diameter (inches)	Material	Wgt./Rating (ibs/sch no.)							
4	PVC	Sched. 40							
4	PVC	Sched. 40							
4	PVC	Sched. 40							
8.5	Blended	.025							
8.5	Neat Cement Bentonite	0 lbs 600 lbs							
6.5	Bontonia	3550 100							
Pressu	re through tremie	pipe							
	Mud rotary								
		· · · · · · · · · · · · · · · · · · ·							
GEOLOG		 -							
water was er	ncountered in consc	lidated							

				At	las Sheet Coordi	nates
OWNER MATZEL & MONFOR	D & WILLOW				29[:]13	— [:] — 579 —
Address 100 VIII.ACE (T						
City HAZIET	· · · · · · · · · · · · · · · · · · ·	State	, NJ		_ Zip Code	
WELL LOCATION ADDRESS <u>PON</u> County <u>MOREOUTH</u>	Municipality TINTO	FALLS	BO Lot N	o. 1.10	Block No.	55
WELL USE <u>DOMESTIC</u>		I	DATE WELL ST	ARTED	<u>l / 22 / 97</u>	-
		DA	LE MELL COM	PLETED	/ 22 / 97	<u>-</u>
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (ibe/sch no.)
Total Depth Drilled 182 ft.	Single/Inner Casing	+1.0	157	4	PVC	Sched. 40
Total Deptit DrilledIt.	Middle Casing				 	
Finished Well Depth 182 ft.	(for triple cased wells only)		<u> </u>			
Borehole Diameter:	Outer Casing (largest diameter)					
Top 8.5 in.	Open Hole or Screen		ļ	-	 	
Top <u>8.5</u> in. Bottom <u>8.5</u> in.	(No. Used)	157	177	4	PVC	Sched, 40
Wall Ocales Casino	Blank Casings					
Well Casing Begins: 1.0 ft. above grade or	(No. Used)					
ft. below grade	Tail Piece	177	182	4	PVC	Sched, 40
	Gravel Pack	147	182	8.5	Blended	.025
	Grout				Neat Cement	lbs
RECORD OF TEST		3.5	147	8.5	Bentonite	<u>600</u> lbs
		Grou	ting Method	Press	ure through tremi	e nine
Test Date 1 / 22 / 97 Static Water Level 17	t, below land surface				Mud rotary	o jayo
Water Level Measured Using	Measured Tape	_				
Pumping Water Level126				GFOLOG	IC LOG	
Well Was Pumped Using	Air lift	- Nata				-1:
Well Yield 50 gpm		formati	ons.		encountered in cons	Olioateo
If Pump Tested: Discharge Rate			5 Clayey gre			
Duration of Test	hours	5- 4	O Green da	<u> </u>		
PERMANENT PUMPING EQUIPMENT	т	150-16	O Gray clay O Med. blac	k send		
	Reg. No. <u>MD 1115</u>	1	2 Fine & me		đ	
Pump Type Subme	nsible	-				
Depth of Pump below land surface	100 ft.					
Capacitygpm	Horsepower1	_				
		 				
I certify that I have constructed the abo	ove referenced well in					
accordance with all well permit require		,	· · · · · · · · · · · · · · · · · · ·			
rules and regulations.	, i					
Drilling Company PICKWICK WILL	L DRILLING			-		
	min Primost	- 				
The M	hand.	-				
Driller's Signature		M				
Registration No. 1013752	eate 3 / 19 97					
(*)						
COPIES: Whi	te - DEP Canary - Drille	r Pink -	Owner Go	oldenrod - He	alth Dept.	

White - DEP Canary - Driller 3/21/97

3/21/90

New Jersey Department of Environmental Protection Bureau of Water Allocation

	WELL F	RECORD		w is	ell Permit Numbe	or
			E		—— 29 — — 3€ as Sheet Coordir	nates
OWNER MATZEL & MONFORD	O & WILLOW		DMR	/- -	29 : 13	— :579
Address 100 VIIIAGE CT			NT	·		
City HAZLET		State	NJ		Zip Code	
WELL LOCATION ADDRESS PON	D VIEW DR.			Owner's	Weli No.	
County HOMOUTH	Municipality TINTON	FALLS B	O Lot N	o. 1.29	Well No Block No.	55
WELL USE DOMESTIC		D	ATE WELL ST	ARTED	15 97 	_
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating (lbe/sch no.)
Total Depth Drilledft.	Single/Inner Casing	+1.0	163	4	PVC	School, 40
188 Finished Well Depthft.	Middle Casing (for triple cased wells only)					
Borehole Diameter:8,5	Outer Casing (largest diameter)					
Top <u>8.5</u> in. Bottom in.	Open Hole or Screen (No. Used)	163	183	4	PVC	Sched. 40
Well Casing Begins:ft. above grade or	Blank Casings (No. Used)					
ft. below grade	Tail Piece	183	188	4	PVC	Sched. 40
	Gravel Pack	153	188	8,5	Blended	.025
	Grout	3.5	153	8.5	Neat Cement Bentonite	625 lbs
RECORD OF TEST ₁₅ 97		_		Pressu	re through tremic Mud rotary	pipe
Test Date//7Static Water Level	th holow land curtage	Grou	ung Meunoa . na Method		Misd rotary	
Water Level Measured Using 30	Mennied Habe, ace	D; IIII	i& married			
Pumping Water Level	#: below land surface			GEOLOG	CLOG	
Well Was PumpediJsing		- Noto or	oh dooth whor		ncountered in cons	olidatod
Well Yieldgpm			ins Clayey bro		ICOURTER BO III COMS	Ulldated
If Pump Tested: Discharge Rate	gpm	-5-10	Tan-green			
Duration of Test	hours			_		
PERMANENT PUMPING EQUIPMEN	T MD1115	1	O Gray clay			_
Installed bySubme			5 Fine & m S Fine & m			
Pump Type	120	133-14	- Pine (C)	ea. gray san		
Depth of Pump below land surface	1 ft.					
	Horsepower	- Ì <u></u> -				
I certify that I have constructed the aboaccordance with all well permit require rules and regulations.	ments and applicable State	· -	• ^*!			
Drilling Company PICKWICK WILL	DRILLING					
Well Driller (Print)	min Primost	7 1 3:	(J.)			
Driller's Signature				· · · · · · · · · · · · · · · · · · ·		
JD13762	3 12 97 Pate / /		 		· · · · · · · · · · · · · · · · · · ·	

New Jersey Department of Environmental Protection Bureau of Water Allocation

	WELL F	RECORD	A Parish Lines -	W-	ell Permit Numbe	361 79
OWNER MATZEL & M				Atl	as Sheet Coordir	nates :
Address	100 VI	LLAGEC		Later V. 188		
Address HAZLE	T	State	, <u>NJ</u>		Zip Code	
WELL LOCATION ADDRESS CountyMONMOUTH	POND VIEW I	OR.				
County	Municipality					
WELL USE DOI	MESTIC	D Dat	ATE WELL ST	PLETED 1		
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Total Depth Drilled 188 ft.	Single/Inner Casing	+ 1.0	163	4	PVC	Sched. 40
Finished Well Depth 188 ft.	Middle Casing (for triple cased wells only)					
,	Outer Casing (largest diameter)					
Borehole Diameter: Top 8.5 in. Bottom 8.5 in.	Open Hole or Screen (No. Used)	163	183	4	PVC	Sched. 40
Well Casing Begins: 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.	Blank Casings (No. Used)					
ft. below grade	Tail Piece	183	188	4	PVC	School 40
	Gravel Pack	153	188	8.5	Blended	.025
	Grout	3.5	153	8.5	Neat Cement Bentonite	0 lbs
Test Date / 15 / 97 Static Water Level 17	it, below land surface casured Tape	Grout Drillir	ting Method ng Method	Pre	ssure through tree Mud Rotary	mie
Pumping Water Level 130				GEOLOG	IC LOG	
Well Was Pumped Usinggpm Well Yieldgpm If Pump Tested: Discharge Rate			ach depth where		ncountered in cons	olidated
Duration of Test	gpm hours	5- 1	O Tan-green	n clay		
PERMANENT PUMPING EQUIPMENT S. Foster Pump Type Subme	Reg. No. MD1115	40- 14 140-15	O Gray clay 5 Fine & m	ed. black se		
Depth of Pump below land surface	Horsepower1 ^{ft.}	-				
I certify that I have constructed the abo accordance with all well permit require rules and regulations.	ments and applicable State	.				
Drilling Company	vell Drilling nin Primost					· · · · · · · · · · · · · · · · · · ·
h- M-		· 1 33 -				
Driller's Signature	late 03 / 12 / 97	e =				

COPIES:

White - DEP Canary - Driller 3/14/90

Pink - Owner

New Jersey Department of Environmental Protection Bureau of Water Allocation

WELL RECORD



Well Permit Number 29 __ 36222

Atlas	Sheet (Coordin	nates	
	29 .	13		579

			. 1	····· /	Alias Cristi Octionales	CDO.
OWNER	MATZKI & M	MPORD 8 WILLOW			29:13:	<u>579</u>
Address	100 VILLAGE	CT				
City	HAZLET		State		Zip Code	
WELL LOC	CATION ADDRESS _	POND VIEW DR	TINTON FALLS BO	Owne	Well No55	
County	HOMBOUTH	Municipality _	LINION PAIRS IO	ot No.	Block No	
WELL USE	DOMESTIC		DATE WELL	STARTED	5 , 1 , 97	
			DATE WELL CO	OMPLETED	5 / 1 / 97	

WELL CONSTRUCTION	ON	
Total Depth Drilled	182	fi
Finished Well Depth _	182	f
Borehole Diameter:	_	

Borehole Diamete Top Bottom	8.5	in. in.
Well Casing Begin	ns:	

grade	0
grade	
	grade grade

	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Ì	Single/Inner Casing	+1.0	157	4	PVC	Sched. 40
I	Middle Casing (for triple cased wells only)	-				
I	Outer Casing (largest diameter)					
I	Open Hole or Screen (No. Used)	157	177	4	PVC	Sched. 40
	Blank Casings (No. Used)	-		,		
	Tail Piece	177	182	4	PVC	Sched. 40
	Gravel Pack	147	182	8.5	Blended	.025
Ì	Grout	3.5	147	8.5	Neat Cement Bentonite	0 lbs 625 lbs

Test Date 5 Static Water Leve	_/_1	/ 97 17	_ft. below land surface
Water Level Mea	sured Us	ina	Measured Tape
Pumping Water I		126	ft. below land surface
Well Was Pumpe	d Using		Air lift
Well Yield	50	gpm	
If Pump Tested:	Dischar	ge Rate _	gpm
	Duration	of Test	hours

Installed by	T. Wheaton	Reg. No.	0016656
Pump Type	Sub	mersible	
Depth of Pump belo		110	ft.
Capacity 20	gpm	Horsepower _	1

I certify that I have constructed the above referenced well in
accordance with all well permit requirements and applicable State
rules and regulations.

Drilling Company	P	CKMIC	C WELL DR	пти	G —	
Well Driller (Print)_	I		Projenia P	Mocet		
Driller's Signature	7	n m	1 h			
Registration No.	P	\$76Z	Date _	<u> 6 </u> /	9	_/97

Grouting Method	Pressure through tremie pipe
Drilling Method	Mad rulary

	GEOLOGIC LOG
	pth where water was encountered in consolidated
formations.	Clayey brown send
10- 30	Black sand w/green clay
30- 150	
150- 182	Fine & medium gray sand wiblack sand
<i>}</i>	
/	

New Jersey Department of Environmental Protection
Bureau of Water Allocation

WELL RECORD

Well Permit Number

	<u></u>			.) _	<u>29</u> 3	6204
			\ DMR	/ A.	las Sheet Coordir	ates
OWNER <u>MATZEL</u> & MUMPOE	AD 6 MILLON			Al Al	29. 13	
4/20/ 1977 1 4/20 / 6/20						
Address HAZLET			NJ			
Jity		Stat	θ		Zip Code	····
WELL LOCATION ADDRESS POR	ED VIEW DR TENTO	FALLS	B0	_ Owner's	Well No	55
County	Municipality		Lot N	o	Block No.	
WELL USE		1	DATE WELL ST	ARTED 4	7 ,97	-
_		DA	I E WELL COMI	PLEIED		
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (ibs/sch no.)
Fotal Depth Drilledft.	Single/Inner Casing	+1.0	156	4	PVC	Sched. 40
Finished Well Depth 181 ft.	Middle Casing (for triple cased wells only)					
	Outer Casing		 			
Borehole Diameter:	(largest diameter)		ļ			
Borehole Diameter: Top 8.5 in. Bottom 8.5 in.	Open Hole or Screen (No. Used)	156	176	4	PVC	Sched. 40
Well Casing Begins: 1.0ft. above grade or	Blank Casings (No. Used)					
ft. below grade	Tail Piece	176	181	4	PVC	Sched. 40
	Gravel Pack	146	181	8.5	Blended	.025
	Grout	3.5	146	8.5	Neat Cement Bentonite	0 lbs 600 lbs
RECORD OF TEST		·				
Test Date / / /					are through tremi	o pipo
Static Water Level1	it, below land surface	Drilli	ng Method		Mad rotary	
Tratel Cevel Measured Osing	Measured Tape					
Pumping Water Level	ft. below land surface Air lift			GEOLOG	IC LOG	
Well Was Pumped Using Well Yieldgpm	7211 1110				ncountered in cons	olidated
		format	Clayey bro	no and		
If Pump Tested: Discharge Rate		3-10	0 Silly press	detr		
Duration of Test	hours	10- 3	Silly grom	day while	k sand	
PERMANENT PUMPING EQUIPMENT		30-13	0 Grey day			
Installed by D. Ulbricht	Reg. No. JD 0523		I Fine gray :	mod		
Pump Type Subme	rable					
Depth of Pump below land surface	120 ft.					
Capacitygpm	Horsepower	-			·	
I certify that I have constructed the abo accordance with all well permit require		, =				
rules and regulations. PICKNICK WILL	J. TYRTTJ.TNE					
Drilling Company		.				
Well Driller (Print)	min Primost	_				
150. 310.		_				
Driller's Signature	ate 6 / 12 97	$\mathbb{V} =$				
Registration No.	Pate 6 / 12 97		·			<u></u>
	ite - DEP Canary - Drille Canary - Drille		Owner Go	oldenrod - He		

PCL XL error

Subsystem: KERNEL

Error: IllegalTag

Operator: 0x82

Position: 13

New Jersey Department of Environmental Protection Bureau of Water Allocation MONITORING WELL RECORD

		 		Well Perm	nit No	<u> 29</u> - <u>36563</u>	
		/		Atlas Shee	et Coordina	tes:1	2 : 2/2
		ONMOUTH CTY DEPT OF	BLDG			20 1	
Address	25Ø CINTER	ST State	37.7			Zin Code	.
City	- KKROHOLD	State	- N-	 	·	2η Code	
WELL LOCATION - If no	ot the same as own	ner please give address. Municipality <u>'PTNTO</u>	Owners	Well No			
CountyMONMOU	TH	Municipality <u>ттито</u>	FALLS				
AddressPINE_B	ROOK_RD				DATE WE	LL STARTED 3. COMPETED 3	13 194
TYPE OF WELL (as per	Well Permit Cate	gories) <u>GAS VENT</u>			ATE WELL	COMPETED 3	13197
Regulatory Program Red	quiring Well	5T		Case I.I	D.# <u>92</u> -	-11-23-131752	<u></u>
CONSULTING FIRM/FI	ELD SUPERVISO	R (if applicable)				Tele. #	
WELL CONSTRUCTION							
	, 	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Total depth drilled	ft.	Single/Inner Casing	-0-		4	DNC	SCH. 40
Borehole diameter:		Middle Casing		a		700	
Top 10 Bottom 10	in.	(for triple cased wells only)					
_		Outer Casing					
Well was finished: ☐abov	re grade mounted	(largest diameter) Open Hole or Screen			. 4		52.H.40
If finished above grade, ca		(No. Used)	2	10	4	PVC	.020 SLOT
up) above land surface	ft.	Blank Casings (No. Used)					
Was steel protective casing XYes ☐ No Static water level after drill		Tail Piece	10	11	4	PVC	504,40
		Gravel Pack	1	11	10	MORIE #2	
Water level was measured		Grout	D	1	1D	Neat Cement	
Well was developed for at gpm	NP hours			athered &O	<u> </u>	Bentonite	lbs.
Method of development _	NA			thod 4.S.		Placement.	
Was permanent pumping	equipment installed	? ∐Yes ⊠No			GEOLO	GIC LOG	
Pump capacityN	<u>R</u> gpm		Note e	ach depth wh		as encountered in	consolidated
Pump type:N	A		format	tions.			
Drilling Fluid WATER	Туре с	of Rig <u>0-5</u> 0	0		 		
Health and Safety Plan s	ubmitted? 첩 Yes 🛭] No		MEN-F	UE GRE	EN SAND	
Level of Protection used of	on site (circle one)	None OC B A					
accordance with all		bove referenced well in rements and applicable	9 -	- MATER			
	BASCO DRILLIN		- 11	MBD-FIN	E GROS	NO SANDE	
Well Driller (Print)	Well Driller (Print) <u>LOICUAM A.SKINN</u> 可た.						
Driller's Signature	1.S. J.	11 1	-				
Registration No. Mo	1289	Date <u>3 / 3 /97</u>			· · · · · ·		

COPIES: White - DEP Canary - Driller Pink - Owner Goldenrod - Health Dept.



New Jersey Department of Environmental Protection Bureau of Water Allocation

(2)		MONITORING W	ELL RI				
						<u>29</u> - <u>36564</u>	
OWNER IDENTIFICATION -	صرر Owner عم	CAMACATERI (WIRE TYPETI (NZ	יעוזמי	Atlas Shee	et Coordina	tes <u>29 : 1</u>	3:_843
Address 25/	משייונים א	C fr					
City	dd (OLD)	State	ŊJ	-		Zip Code	
WELL I OCATION - if not the	camo ac ow	ner nlesse dive address	Owners	: Wall No	1/P-	. /	
WELL LOCATION - If not the County		Municipality <u>TINTON</u>	FALLS	BOLot	No. 21 @	Block N	10.97
Address PINK BROOK	RD						
	.			n	DAIL WE	LL STARTED 2 COMPETED 2	197 197
TYPE OF WELL (as per Well Regulatory Program Requirin	n Well 17	egories) <u>GAS Vienti"</u> Istr					
riogulatory Program Hoquiin	g Won			0030 1.1	J.# <u>- 4721</u>	11 20 102102	
CONSULTING FIRM/FIELD S	SUPERVISO	R (if applicable)		<u></u>	 	Tele. #	
WELL CONSTRUCTION		Note: Measure all depths	Depth to	Depth to	Diameter	B. d. a. a. a. a. a. a. a. a. a. a. a. a. a.	Wgt./Rating
Total depth drilled Well finished to	ft.	from land surface	Top (ft.)		(inches)	Material	(lbs/sch no.)
well finished to	к.	Single/Inner Casing	0	3	jor	PUC	Sch for
Borehole diameter:	:_	Middle Casing					
Top Bottom	in. in.	(for triple cased wells only)					ļ —
Well was finished: above grad		Outer Casing (largest diameter)					
Filush moul		Open Hole or Screen			/"	- A-C	1
If finished above grade, casing h		(No. Used)	3	1	/	IVC	do Sta
up) above land surface	ft.	Blank Casings (No. Used)		·			
Was steel protective casing insta ☑ Yes ☐ No	alled?	Tail Piece					1
Static water level after drilling	<u>,</u> ft.	Gravel Pack	7	<i></i>	Δ.	It was	
Water level was measured using			<u> </u>	 	<i>I</i>	Neat Cement	
Well was developed for	hours	Grout	/	3		Bentonite	lbs.
atgpm /	,	G	routing M	ethod #		pac Pr.	essine
Method of development	V/#	D	rilling Me	thod //) /-		
Was permanent pumping equip		i? ☐Yes ☐ No			GEOLO	GIC LOG	
Pump capacity	gpm				ere water w	as encountered in	consolidated
Pump type:///			format	tions.		\sim /	
Drilling Fluid N/A	Туре	of Rig D-50		76	Te/ -	26.	
Health and Safety Plan submitt	ted? 🛛 Yes [□ No	- Ca	-54	Pea	FRAME	1
Level of Protection used on site	_				11	and it	
Lagrify that I have some	tminted the e	hour referenced well in	i	(0,	<u>u / / / / / / / / / / / / / / / / / / /</u>	4-1UK JAAC	
I certify that I have cons accordance with all well							
State ru	les and regu	ılations.	\ <u> </u>				
Drilling Company TABASCO	DRILLIN	G CORP.	_				
Moll Drillor (Brint)	ules H	Lelbin					
Well Driller (Print)			·				
Driller's Signature (fac	la ff	felliga	.				
Registration No. MD 10	66	Date 2 127 137	_L				

COPIES:

White - DEP

Canary - Driller

Pink - Owner

New Jersey Department of Environmental Protection Bureau of Water Allocation MONITORING WELL RECORD Well Permit No.

				Well Permit No					
· "				Atlas She	et Coordina	tes;;1	3 :_9/3_		
OWNER IDENTIFICATION - C	wner	NMOUTH CITY DEPT OF	BLDG						
Address 250 City FRE	CONTER S	Tr State				Zin Code			
City	7010(1)	Sidle	-NJ	· • • • • • • • • • • • • • • • • • • •	·	Zip Code			
WELL LOCATION - If not the s County	same as own	ner please give address.	Owners	s Well No	1/2-	-2			
County MONMOUTH		Municipality <u>'TTNTO</u>	PALLS	BO Lot	t No. 21 @	n Block N	ło. 97		
Address PTNR PROOK	RD				DATE WE	LI STARTED 2	127197		
TYPE OF WELL (as per Well I	Permit Cated	nories) CAS VENT			ATE WELL	LL STARTED 2.2. COMPETED 2	127 197		
TYPE OF WELL (as per Well F Regulatory Program Requiring	Well0\$	T		Case I.	D.# <u>92</u> -	11-23-131752			
CONSULTING FIRM/FIELD S									
WELL CONSTRUCTION	- [Note: Measure all depths	Darah da	Depth to	Diameter		Wgt./Rating		
Total depth drilled	ft.	from land surface	Depth to Top (ft.)	•		Material	(lbs/sch no.)		
Well finished to	_ ft.	Single/Inner Casing	0	4	1"	POC	Sch De		
Borehole diameter:	1	Middle Casing							
Borehole diameter: Topir Bottomi	n. n.	(for triple cased wells only)							
Well was finished: □ above grade	1	Outer Casing (largest diameter)							
flush mounted	Open Hole or Screen (No. Used)	4	5	1"	prc	20			
If finished above grade, casing height (stick up) above land surface ft.		Blank Casings							
Was steel protective casing installed? Yes No Static water level after drilling	(No. Used)								
	Tail Piece								
		Gravel Pack	3.5	5-	f	THON'C	04		
Water level was measured using		Grout	0	سبی،جج		Neat Cement	lbs.		
Well was developed for at gpm	hours [A C OCCC	Bentonite			
Method of development	4	D	routing Me Prilling Me	thod	SA	C Bentonite			
Was permanent pumping equipm		Yes No							
Pump capacity	gpm		Note e	ach denth wh		GIC LOG ras encountered in	consolidated		
Pump type:		· 	format	tions.					
Drilling Fluid	Type of	IRia D-50	0	-5-1		Lime La			
Health and Safety Plan submitte	1	- /		514	Car	La Sand	<i>-</i>		
Level of Protection used on site		· ~							
Loorlife that I have constr	ustad the abo	ance referenced well in	1				 		
I certify that I have constr accordance with all well p	octeo the ac permit require	ements and applicable							
State rule	es and regula	ations.	 						
Drilling Company TABASCO	DRILLING	CORPUMENT	_						
Well Driller (Print)	le Hit	zellen.							
	1 1					·····			
Driller's Signature	in the	Selveye							
Registration No. MD 100	66	Date 2 107 197							

COPIES:

White - DEP

Canary - Driller

Pink - Owner

COPIES:

White - DEP

Canary - Driller

Pink - Owner

New Jersey Department of Environmental Protection Jersey Department of Environmental. Bureau of Water Allocation MONITORING WELL RECORD Well Permit No.

			Well Perm	nit No	<u> 29 - 36566</u>		
The second secon			Atlas Shee	et Coordina	tes <u>29</u> :_1	3:-843	
OWNER IDENTIFICATION - Owner	MOUTH CTY DEPT OF	BLIG		·			
Address 250 CENTER (State	NI			Zip Code		
		•			_		
WELL LOCATION - If not the same as own	ner please give address. Municipality אריידיי	Owners	SWell No TAO Lot	No. 21 0	Block N	lo. 97	
Address PINK BROOK RD							
TYPE OF WELL (as per Well Permit Cate	norice) CAS VENT			DATE WE ATE WELL	LL STARTED 2 COMPETED 2	D) 199	
Regulatory Program Requiring Well	ST CAD VISIT						
CONSULTING FIRM/FIELD SUPERVISO	R (if applicable)				Tele. #		
WELL CONSTRUCTION					·		
Total depth drilledft. Well finished toft.	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)	
	Single/Inner Casing	0	4	12	Pac	Sch 40	
Borehole diameter: Top in. Bottom in.	Middle Casing (for triple cased wells only)		/				
Well was finished: ☐ above grade	Outer Casing (largest diameter)						
If finished above grade, casing height (stick	Open Hole or Screen (No. Used)	4	5	/"	pre	20	
up) above land surface ft.	Blank Casings (No. Used)		_				
Was steel protective casing installed? No Static water level after drilling t.	Tail Piece						
•	Gravel Pack	3,5	5	F"	#2 Mon		
Water level was measured using	Grout	0	32,5		Neat Cement	9/_ lbs. lbs,	
Well was developed for hours at gpm		Grouting Method Drilling Method					
Method of development		rilling Me	thod	13/1			
Was permanent pumping equipment installed	? ∐Yes □ No			GEOLO	GIC LOG		
Pump capacitygpm					as encountered in	consolidated	
Pump type:	_	forma	tions.				
Drilling FluidType of	of Rig D50	(2-5	M	ein fin	12	
Health and Safety Plan submitted? V Yes] No		Mal	San	el freez	/	
Level of Protection used on site (circle one)	None D C B A		5:6	+			
I certify that I have constructed the a accordance with all well permit requi State rules and regu	rements and applicable						
Drilling Company TARASCO DRILLING		_					
Well Driller (Print) Chife of Virginia Virginia							
Driller's Signature	Elleyre)			·			
Registration No. 100 1066	Date <u>2 127 197</u>				······································		

DWR-138_M 11/96

New Jersey Department of Environmental Protection Bureau of Water Allocation MONITORING WELL RECORD Well Permit No.

				Well Pern	nit No	<u> 2936567</u>	<u> </u>
	100			Atlas She	et Coordina	tes:	9 : 049
OWNER IDE	NTIFICATION - Owner	MONMOUTH CITY DEPT OF	F BLDG				
Address	250 CKNTTKR	ST					
City	FREGHOLD	State	-NJ		 '	Zip Gode	
WELL LOCA	TION - If not the same as ow	ner please give address.	Owners	s Well No	1/8-	4	
County	TION - If not the same as ow MONMOTH	Municipality <u>TTMT</u>	N FALLS	BOLo	No. 21 (Block N	lo. <u>97</u>
Address	PINE BROOK RD						
TVDE OE W	ELL (se per Well Permit Cate	ngoriae) CAS VENT		[DATE WELL	LL STARTED 2	125195
Regulatory F	ELL (as per Well Permit Cate Program Requiring Well	USI'					
_							
CONSULTIN	IG FIRM/FIELD SUPERVISO	PR (if applicable)				Tele. #	
	DNSTRUCTION	Note: Measure all depths	Depth to	Depth to	Diameter	Material	Wgt./Rating
Total depth dri Well finished t	illedft.	from land surface	Top (ft.)	Bottom (ft.)	(inches)	Wiaterial	(lbs/sch no.)
		Single/Inner Casing	0	4	1"	PUC	40
Borehole diam	neter:	Middle Casing		,			
Botto	in.	(for triple cased wells only)	ļ				
Well was finish	hed: above grade	Outer Casing (largest diameter)					
11011 1100 111101	flush mounted	Open Hole or Screen			4		
If finished abo	ve grade, casing height (stick	(No. Used)	7	5	/	PUC	.20
up) above land surface ft.	Blank Casings (No. Used)					•	
Was steel pro	tective casing installed?	Tail Plece		l			
	evel after drilling					14.	
	as measured using /////	Gravel Pack	5,5	5	£"	+ 2 Mens	9/ lbs.
	eloped forhours	Grout	0	3-5		Neat Cement Bentonite	lbs.
at	gpm	G	routing M		2.188cm	<u> </u>	
Method of de	velopment			thod	51		
	ent pumping equipment installed	i? ∐Yes ⊠ No			0501.04	210100	
	tygpm		Note e	ach depth wh		GIC LOG as encountered in	consolidated
Pump type: _	'. 7		forma	tions.		_	•
	.17		0	1-5-1	neen	Sand	ut.
Drilling Fluid	, , , , , , , , , , , , , , , , , , ,	of Rig <u>D-50</u>			7		
	Safety Plan submitted? 🔀 Yes [\bigcirc		te f	ias 2	Jsilly	Jayer
Level of Prote	ection used on site (circle one)	None (D/C B A				/	
I certify	that I have constructed the a	bove referenced well in					
	ance with all well permit requi	irements and applicable	\ <u></u> -				
	State rules and regu TABASCO DRILLIN						
Drilling Com	npany	January Control	-				
Well Driller	(Print) (banks 180	bellens -		·	· · · · · · · · · · · · · · · · · · ·		
	3// // 21						
Driller's Sign	nature (facts 19	Min	-				
Registration	No. MT 1066	Date 2 /27/97	L		············		

COPIES:

White - DEP

Canary - Driller

Pink - Owner

New Jersey Department of Environmental Protection

Bureau of Water Allocation MONITORING WELL RECORD

			Well Pern	nit No	<u> 29</u> - <u>36568</u>	· · · · · · · · · · · · · · · · · · ·		
	/		Atlas Shee	et Coordina	tes <u>29 : 1</u> :	3:_843		
OWNER IDENTIFICATION - Owner Address 250 CENTED	MONMOUTH CTY DEPT OF	BLDG						
City	State	ŊJ			Zip Code			
WELL LOCATION - If not the same as a CountyMONMOUTH	owner please give address. Municipality <u>TTNTON</u>	Owners LEALLS	PO LLO	No.21 Ø	Block N	No.97		
Address PINE BROOK RD	. ,				LL STARTED	1 .		
TVPE OF WELL (as par Wall Parmit Co	ntogorios) CAC VIDE		E	DATE WELL	COMPETED	124 21		
TYPE OF WELL (as per Well Permit Ca Regulatory Program Requiring Well	UST UST							
CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable)				1ele. #			
WELL CONSTRUCTION Total depth drilled \$0 ft	Note: Measure all depths from land surface	Depth to	Depth to	Diameter	Material	Wgt./Rating		
Total depth drilled 30 ft. Well finished to 50 ft.		Top (ft.)	Bottom (ft.)	<u> </u>	0	(lbs/sch no.)		
Borehole diameter:	Single/Inner Casing Middle Casing	0	25	2	puc	Sch. 40		
Top in. Bottom in.	(for triple cased wells only)							
	Outer Casing							
Well was finished: ☐ above grade ☐ flush mounted	(largest diameter) Open Hole or Screen		<u> </u>			305/0		
If finished above grade, casing height (stick	(No. Used)	25	28	2	PVC-	S		
up) above land surface ft.	Blank Casings (No. Used)							
Was steel protective casing installed?	Tail Piece	4 G				51.40		
Static water level after drillingft.	Gravel Pack	28	30	2	Puc.	201.40		
Water level was measured using	2	22	30	<u> </u>	Neat Cement	2/2 lbs.		
Well was developed for hours	Grout	C 22 Bentonite Below						
atgpm				eggen	<u> </u>	-		
Method of development		mling Me	thod	<i></i>				
Was permanent pumping equipment instal	•				GIC LOG			
Pump capacitygpn	n	Note e format	•	ere water w	as encountered in	consolidated		
Pump type: X/H					0-1			
Drilling Fluid Typ	pe of Rig	-0	- 12 W	1 Le 1	p Jank			
Health and Safety Plan submitted? Ye	s No							
Level of Protection used on site (circle one	n) None OC BA	12:	30 F	Shegi	ries ich yr	11cu		
I certify that I have constructed the	above referenced well in		Mec	11	Cones	4		
accordance with all well permit red		 	The		Cilt	<u> </u>		
State rules and re Drilling Company TABASCO DRILLI	guiations. NG CORP			6-14 C.	2 3 / / /			
Drilling Company Tabasco Datistic	1 / //	-						
Well Driller (Print) (haples	1+20/Bige							
Driller's Signature	Lulies							
Registration No. Mp 1066	Date		·	·				

COPIES:

White - DEP

Canary - Driller

Pink - Owner

New Jersey Department of Environmental Protection Bureau of Water Allocation MONITORING WELL RECORD

				Well Pem	nit No	<u> 29 - 36569</u>	
				Atlas She	et Coordina	tes <u>29 : 13</u>	843
	ITIFICATION - Owner		BLDG				
City	FREGROLD	State	NJ			Zip Code	
WELL LOCAT	ION - If not the same as ow	ner please give address.	Owners	s Well No	MS-	3	
Address	PINE BROOK RD						
TYPE OF WE Regulatory Pro	LL (as per Well Permit Cate ogram Requiring Well	ogories) <u>GAS VENT</u> ST				LL STARTED <u>2</u> . COMPETED <u>2</u> 11–23–131752	,
CONSULTING	FIRM/FIELD SUPERVISO	PR (if applicable)				Tele. #	
Total depth drille	NSTRUCTION edft.	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Well finished to	ft.	Single/Inner Casing	0	23	2	Die	50.40
Borehole diame Top _ Botton	eter: in. m in.	Middle Casing (for triple cased wells only)					·
	ed: □above grade	Outer Casing (largest diameter)		<u></u>			
	flush mounted	Open Hole or Screen (No. Used)	23	26	2	PUC	,205/c
up) above land	e grade, casing height (stick I surface ft.	Blank Casings (No. Used)					
Yes No		Tail Piece	26	28	૪	Pac	Sch 40
	el after drilling f. 5 ft.	Gravel Pack	20	28	P	# Monie	
	s measured using <u>TAPC</u> oped for <u>W/H</u> hours	Grout	12	20	<i></i>	Neat Cement Bentonite	Ibs.
at	gpm elopment N/A		routing M Prilling Me	ethodP	Topic	<u> </u>	
	nt pumping equipment installed	l? ∐Yes ፟ Ž No			0501.04	20100	
			Note e	•		GIC LOG as encountered in	consolidated
Pump type:	N/A				0		
Drilling Fluid_	WasaType	of Rig D-5		3 - /- W	11/2	Necr Sono	·/
Health and Sa	afety Plan submitted? 🛛 Yes [□ No					
Level of Protec	ction used on site (circle one)	None DC B A	10	2-28	Lish	1 Concension	1
	hat I have constructed the a nce with all well permit requi			7	Hen	Band, Ma	1 Le
Drilling Comp	State rules and regu	lations.			Loron	If The	
Well Driller (F		tes/ben,a			<u> </u>	<i>. .</i>	
Driller's Signa	0/1/1/	Lecture	-				
Registration I	No. <u>MN 1066</u>	Date 2 128 197					

COPIES:

White - DEP

Canary - Driller

Pink - Owner

New Jersey Department of Environmental Protection
Bureau of Water Allocation
MONITORING WELL RECORD

			Well Perr	nit No	293657	Ø <u>·</u>
	/		Atlas She	et Coordina	tes;	19 : 049.
OWNER IDENTIFICATION - Owner_		OF BLDG				
Address 250 CEN City RESERVOL	TER ST	NT.T			Zin Code	
	_					
WELL LOCATION - If not the same as County	s owner please give address.	Owners	s Well No	115-	7	
County MONMOUTH	Municipality	ON FALLS	5_BO Lo	(No. <u>21</u>	Ø1 Block N	ło. <u>97</u>
Address PINK BROOK RD				DATE WE	LL STARTED 3	13 194
TYPE OF WELL (as per Well Permit	Categories) GAS VENT			OATE WELL	COMPETED 3	13197
Regulatory Program Requiring Well _	UST		Case I.	D.#92	<u>-11-23-13175</u>	2
	(IOOD (if anniinatus)				Tala #	
CONSULTING FIRM/FIELD SUPERV	15OH (II applicable)				Tele. #	
WELL CONSTRUCTION	Note: Measure all depths	Depth to		Diameter	Material	Wgt./Rating
Total depth drilledft. Well finished toft.	from land surface	Top (ft.)	Bottom (ft.)	(inches)		(lbs/sch no.)
	Single/Inner Casing	O	23	a_	PUL	SC# 40
Borehole diameter:	Middle Casing (for triple cased wells only)			ļ		
Top in. Bottom in.	Outer Casing					
Well was finished: 🔲 above grade	(largest diameter)					1
₹ flush mounted	Open Hole or Screen	23	26	D.	PUC	5CH.40
If finished above grade, casing height (sti	(No. Used) Blank Casings	100	20	0		म्बार वर
up) above land surface ft.	(No. Used)					
Was steel protective casing installed? XYes ☐ No	Tail Piece	26	28	a	PUL	SCH.40
Static water level after drilling 4 ft.	Gravel Pack	 		8	MORIE #2	
Water level was measured using 🕰. 🏗	<u>ve</u>	20	18	0	Neat Cement	ABZ lbs.
Well was developed forNA hou	Grout	0	20	පි_	Bentonite	_LB_ lbs.
atgpm					TREMIE GA	72x
Method of developmentNK		Prilling Me	thodHS	3.A.		
Was permanent pumping equipment inst	alled? □YesᢂNo		······································	GEOLO	SIC LOG	
Pump capacity NA gr	om	Note e	ach depth wh		as encountered in	consolidated
Pump type: NA	· · · · · · · · · · · · · · · · · · ·	forma	tions.			
Drilling Fluid NA T	ype of Rig <u>0-5</u> 2	D				
Health and Safety Plan submitted?		1-1-	74.00	- A		
	200	1	MFD-FI	NE GR	een san	<u> </u>
Level of Protection used on site (circle of	ue) Moue (D) C B A					
I certify that I have constructed to	he above referenced well in	12	- ,			
accordance with all well permit requirements and applicable State rules and regulations.			LIGHT G	REENSI	yeupu .	Sarah
PADACOVA TYDT () CDAQ	St with	tones
Drilling Company		- -	€	· SILT.		
Well Driller (Print) WILLIAM A.	SHINN JR.	28				
Deillara Signatura	A HILL					
Driller's Signature	-1.	-				
Registration No. MO1289 U	Date <u>3 /3 /97</u>	_ــــــــــــــــــــــــــــــــــــــ				

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Canary - Driller

Pink - Owner

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DWR-138 M 11/96



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Pink - Owner

New Jersey Department of Environmental Protection Bureau of Water Allocation MONITORING WELL RECORD

				Well Pem	nit No	2936 57	71		
				Atlas She	et Coordina	tes:	13 : 843		
OWNER IDENTIFICATION	l - Owner	NMOUTH CTY DEPT C	F BLDG						
AddressCity	250 CENTER S	State	N.T			Zip Code			
			•						
WELL LOCATION - If not to	he same as owne	er please give address. Municipality	Owner's	S Well No	///W	an Block I	VO 07		
Address PTNR TR	UUK BD	- Marinoipanty	AN PALLE	- B.J C	 21 -	DIOCK I	0. 91		
Address <u>PTNE BR</u> TYPE OF WELL (as per W Regulatory Program Requi	ell Permit Catego	ories) <u>MONTTORTN</u> ST	G	Case I.	DATE WELL D.#92	LL STARTED A COMPETED 3 2-11-23-1317	127,71 181,91		
CONSULTING FIRM/FIEL									
WELL CONSTRUCTION	! "	Note: Measure all depths	Donah to	Depth to	Diameter		Wgt./Rating		
Total depth drilled	ft'	from land surface	Depth to Top (ft.)	•	Diameter (inches)	Material	(lbs/sch no.)		
Well finished to	π. s	Single/Inner Casing	0	5-	2	PUC	Sch 40		
Borehole diameter: Top Bottom	in. (1)	diddle Casing for triple cased wells only)							
Well was finished: above o	grade (Outer Casing (largest diameter)				· · · · · · · · · · · · · · · · · · ·			
Ø flush m	10	Open Hole or Screen No. Used)	5	15	2	Pac	1205/0		
If finished above grade, casin up) above land surface	ft.	Blank Casings (No. Used)		-25					
Was steel protective casing ir ☑Yes ☐ No	. 1	Tail Piece				-			
Static water level after drilling		Gravel Pack	3	15	P	#2 Menry			
Water level was measured us		Grout	(2)	7	F	Neat Cement	<u>99</u> lbs.		
Well was developed forgpm	hours L	G	Grouting Method Drilling Method H Bentonite IDS.						
Method of development		D	rilling Me	thod	SP				
Was permanent pumping eq	uipment installed?	∐Yes 🗖 No	Γ			GIC LOG			
Pump capacity			1 .	•		as encountered in	n consolidated		
Pump type: /////	<i>⊈</i>	_	forma	tions.			_		
Drilling Fluid	Type of	Rig D-30	0	- <i>y</i>	Tep.	5:1			
Health and Safety Plan sub-	mitted? 🖄 Yes 🗌	No			· / / /	(-1)	,		
Level of Protection used on	site (circle one) No	one DC B A	4-1	15-	Mult	in the	green		
I certify that I have co accordance with all w	ell permit require	ments and applicable			8.	16			
	rules and regular ASCO DRILLING								
Well Driller (Print)	unles Hist	ze/bengu					·		
Driller's Signature	will fit	elleyu	.						
Registration No. Mrz	1066 C	Date <u> </u>							

WELL RECORD



Well Permit Number

				Atl	as Sheet Coordina			
OWNER <u>MATZKI. & MUMFOR</u>					<u> 29: 13</u>	_: <u>579</u>		
Address 100 VILLAGE COU	RT		NJ -					
City	N WIEW DOTTE	State	EN) 9		Zip Code			
	D VIEW DRIVE		1	0				
WELL LOCATATILADURESS	MITATION.	FALLS 1	BO		Well No	5		
	Municipality		LOI N	10	BIOCK NO			
WELL USE DOMESTIC		ī	DATE WELL ST	ARTED _	19,97			
		DAT	LE METT COW	PLETED 8	19 197			
(Note: Measure all depths	Depth to	Depth to	Diameter		Wgt/Rating		
WELL CONSTRUCTION	from land surface	Top (ft.)	Bottom (ft.)	(inches)	Material	(lbs/sch no.)		
(Pn	Olas Is the con Oceans	+1.0	مي ر	4	Ruc	San - 11-		
Total Depth Drilledft.	Single/Inner Casing Middle Casing	770	155	7	700	Scheo_40		
Finished Well Depthft.	(for triple cased wells only)		1					
	Outer Casing	·	 	-		 		
Borehole Diameter:	(largest diameter)		<u> </u>		<u> </u>			
Borehole Diameter: Topin. Bottomin.	Open Hole or Screen	155	175	4	Pre	SCHED,40		
5-15 min	(No. Used) Blank Casings	120	I I I	<u> </u>	7.00	340,10		
Well Casing Begins:	(No. Used)	ļ				ļ <u>ļ</u>		
ft. above grade orft. below grade	Tail Piece	175	180	4	Pvc	SCHED.40		
	· · · · · · · · · · · · · · · · · · ·			+				
	Gravel Pack	145	180	8,5	BLEWDED Neat Cement	1025		
	Grout	3.5	145	8.5	Bentonite	bs lbs		
RECORD OF TEST	L							
Test Date 8 / 19 / 97		Grou	iting Method	Pressure	THEOUGH TRE	ME PIPE		
Static Water Level		Drilli	ng Method _	muo	ROTARY			
Water Level Measured Using MHAS	IVEED TAKE							
Pumping Water Level	ff. below land surface		GEOLOGIC LOG					
Well Yieldgpm				e water was e	ncountered in conso	lidated		
If Pump Tested: Discharge Rate	apm	formati	ions. CLAYES	men.	BROWN SAN	م ا		
Duration of Test	hours	5-3	O GERSO	CLAY W	BLACK SAR	<u> </u>		
		30-1	45 GRAY	CLAY	BLACK SAN			
PERMANENT PUMPING EQUIPMENT		145	50 GRA	y alay	W/SAMD			
	Reg. No. <u>00/6/55</u>	9 150.	-INU FINE	= GRAY	AND ME	rugk suud		
Pump Type Susmercs Depth of Pump below land surface	720 tt.	-						
· <u>`</u>	Horsepower 1				 			
<u> </u>								
I certify that I have constructed the abo	wa safasanaad wall ia]						
accordance with all well permit require		,						
rules and regulations.	• •			· · · · · · · · · · · · · · · · · · ·				
Drilling Company	DRILLING							
0	J Peimost	·	 .	· · ·				
110 m/	<u> </u>	-						
Driller's Signature	<u></u>	.						
Registration No. Mol. 18742	ate 9/29/97	- ~						

COPIES:

DWR-138 5/95

New Jersey Department of Environmental Protection Bureau of Water Allocation



Well Permit Number

			1	Phas)	<u> </u>	004
				DMR	, Δ +1	as Sheet Coordir	natae
OWNER	MATZKI, & MIM	MODE A WILLIAM	`			29: 13	
Address	100 VILLAGE (NJ .			
City						Zip Code	
WELL LOCA	TION ADDRESS	POND VIEW DRIVE Municipality TINTON	74770 TV		Оупрег'я	Well No.	_
County	ONMOUTH —	Municipality TINION	FALLS IX	Lot N	o. 1.24	Block No.	5
WELL USE	DOMESTIC	30-00-00-00	•			/ 23 / 97	-
			DAT	E WELL COM	PLETED	23 / 97	•
WELL CONS	STRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
	Drilled 181	ft. Single/Inner Casing	+1.0	156	4	PVC	Schod, 40
וטומו טפטוווו	Dillied	Middle Casing					1
Finished We	II Depth181	ft. (for triple cased wells only)					
Danahaia Dia		Outer Casing					
	ameter: 8.5 in. om8.5 in.	(largest diameter) Open Hole or Screen					
Botte	om <u>8.5</u> in.	(No. Used)	156	176	4	PVC	Sched. 40
		Blank Casings	150	170			St. 70
Well Casing	Begins: <mark>.0 </mark>	de or (No. Used)					
	ft. below grad	le Tail Piece	176	181	4	PVC	School, 40
		Gravel Pack	146	181	8.5	Pleaded	.025
		Grout	3.5	146	8.5	Neat Cement Bentonite	lbs
RECORD O	F TEST		3.3	140	0.3	Comonic	900
Test Date	5 / 23 / 97	_	Grout	ing Method	Prese	ne through tremi	o mino
Static Water	Level 19	ft. below land surface	Drillir	g Method _		Med setacy	
Water Level	Measured Using	Measured Tape					
Pumping Wa	ater Level 144	ft. below land surface			GEOLOG	IC LOG	
Well Was Pu	Imped Using	Air lift	Note es	ch death where		ncountered in cons	olidated
	gpn		formation	ons.		icountered in cons	Oliganea
If Pump Tes		gpm		Clayey bn			
	Duration of Test	thours		Hock ma			
PERMANEN	T PUMPING EQUIP	MENT		O Gray day			
Installed by		Reg. No. 0016656	130-11	1 Pint m	anna Suh	and whick me	<u> </u>
Pump Type		lubmerrible	- 			 	
	mp below land surfac	te 115 ft.	_	·····			
Capacity	20 gpm		_				
l aartifu that	I have constructed th	as above referenced well in					
		ne above referenced well in equirements and applicable State	,		····································		
rules and re		•					
Drillian Com	PICKWICK W	WELL DRILLING					
Drilling Com			-				
Well Driller	(Print)	enjamin Primont	- /				<u> </u>
Driller's Sign		- / ₂	(<u></u>			
Registration	No. 1772	Date ⁽ 6 / 2497	W				
	V		_	_			
	COPIES:	White DEP Canary - Drille		Dwner Go	oldenrod - Hea	· ·	
		4/25/97 6/25/9	' i		6/25/	91	

WELL RECORD

1010	STATE OF THE PARTY	<u>6</u>
	Ti	
		Well Permit Number
(MAR	
	DIALL	
		Atlas Sheet Coordinates

OWNER <u>MATZEL & MOMPOR</u>	o e william		100		29 :13 -	:- -579		
Address 100 VIIIAGE COU	RT				20	0.0		
		State	te NJ Zip Code					
County MONMOUTH	FALLS F	Owner's Well No. FALLS BO Lot No. 1.05 Block No. 55						
WELL USE DOMESTIC					/ 18 / 97			
					/ 18 / 97			
1	Note: Measure all depths	Depth to	Depth to	Diameter	Diameter Wgt./Ratin			
WELL CONSTRUCTION	from land surface	Top (ft.)	Bottom (ft.)	(inches)	Material	(ibs/sch no.)		
Total Depth Drilledft.	Single/Inner Casing	+1.0	140	4	PVC	Sched. 40		
	Middle Casing							
Finished Well Depthft.	(for triple cased wells only)	<u> </u>	<u> </u>					
Borehole Diameter:	Outer Casing (largest diameter)							
Top 8.5 in. Bottom 8.5 in.	Open Hole or Screen							
Boπomin.	(No. Used)	140	160	4	PVC	Sched. 40		
Well Casing Begins:ft. above grade or	Blank Casings (No. Used)	<u> </u> -						
tt. below grade or	Tail Piece	160	165	4	PVC	Sched. 40		
	Gravel Pack	130	165	8.5	Blended	.025		
	Grout	3.5	130	8.5	Neat Cement Bentonite	lbs 550 lbs		
RECORD OF TEST		3.3	130	0.5] 334		
Test Date 6 /18 /97	Grou	Grouting Method Pressure through tremie pipe						
Static Water Level 13		Drilli	ng Method $_$		Mind setary			
	Measured Tape							
Pumping Water Level 112				GEOLOG	IC LOG			
Well Was Pumped Using	WI III	- Note ea	ach depth where	e water was e	ncountered in cons	olidated		
Well Yieldgpm		formati	ons.					
If Pump Tested: Discharge Rategpm								
Duration of 19st	IIOUIS				ed w/gray clay			
PERMANENT PUMPING EQUIPMENT	Т				d			
Installed by D. Ulbricht	Reg. No. JD 0523		5 Fine & m					
Pump Type Subme					w/black and			
Depth of Pump below land surface	130 ft.							
Capacity 29 gpm	Horsepower 1	_						
						· · · · · · · · · · · · · · · · · · ·		
I and the short have a section of the st		<u> </u>						
I certify that I have constructed the aboaccordance with all well permit require		,						
rules and regulations.	mome and applicable state							
Drilling Company PICKWICK WELL	DRILLING							
Well Driller (Print) Penjamin Primost								
Driller's Signature	4							
// Land. Q/f	ate 7 /14 97	v_{\parallel}						

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White - DEP 7/21/90

Canary - Driller

Pink - Owner

New Jersey Department of Environmental Protection
Bureau of Water Allocation
MONITORING WELL RECORD
Well Permit No.

			Well Permit No.		<u> 293675</u>	L 		
			Atlas She	et Coordina	tes:	19 : 852		
OWNER IDENTIFICATION - Owner	LAMONTS CORP							
Address19413 WILL	ONG DU NE							
City KIRKIAND	State	- AW			Zip Code			
WELL LOCATION - If not the same as ow	ner please give address.	Owners	s Well No	MW)-7R			
County MONNOUTH	Municipality TINI (N FALLS	BO Lo	t No. 31.	22 Block i	Vo <u>114.Ø1</u> _		
Address46 PARK PD		·····		DATE WE	LL STARTED	10197		
TVDE OF MELL (on nor Moll Bornit Coto	agorica) MONTHIONTA	373			COMPETED 4			
TYPE OF WELL (as per Well Permit Cate Regulatory Program Requiring Well	tydnes) <u>plantilakte</u> T yda styr	<u> </u>						
riogalatory riogram rioquiling troil	14800 10110				WED WALLS			
CONSULTING FIRM/FIELD SUPERVISO	R (if applicable) Fluo	Daniel	GTI		Tele. # <u>609</u> -	<u>587-0300</u>		
WELL CONSTRUCTION	Note: Measure all depths	Depth to	Depth to	Diameter	<u> </u>	Wgt./Rating		
Total depth drilled ft. Well finished to ft.	from land surface	Top (ft.)			i ivialeriai	(lbs/sch no.)		
Well finished toft.	Single/Inner Casing	0	11/2	411	A.16	Sch.40		
Borehole diameter:	Middle Casing		1/2		Puc	Son.40		
Top in. Bottomin.	(for triple cased wells only)	,	[ļ				
Bottomin.	Outer Casing							
Well was finished: 🔲 above grade	(largest diameter)	ļ	<u> </u>	<u> </u>		<u> </u>		
If finished above grade, casing height (stick	Open Hole or Screen (No. Used)	1/2	8'	44	PUC. 020	Sch. 40		
up) above land surface ft.	Blank Casings (No. Used)							
Was steel protective casing installed? XYes ☐ No	Tail Piece	<u> </u>						
Myes No Static water level after drilling 3' ft.	Gravel Pack	11	81	#1	Morie	<u> </u>		
Water level was measured using <u>M-5 copc</u>	Grout	 	-0,	4/_	Neat Cement	Ibs.		
Well was developed for hours	L	0		Ĺ	Bentonite			
at 3 gpm	G	routing M	lethod	RAVITY				
Method of development fumfing		Orilling Me	thod	4.5.14				
Was permanent pumping equipment installed	l? ∐Yes X No			GEOLO:	SIC LOG			
Pump capacity gpm	•	GEOLOGIC LOG Note each depth where water was encountered in consolidated						
Pump type:		formations. O-6' ORANGE MED. SAND						
	of Rig B57 Mobile	O-6 UKANGE MEB SONO						
_	6-8' Grey Med. sound							
Health and Safety Plan submitted? Yes	• 🔼	\		/	<u> </u>			
Level of Protection used on site (circle one)	None D C B A	ļ						
I certify that I have constructed the a	bove referenced well in							
accordance with all well permit requi								
State rules and regu		<u> </u>						
Drilling Company TOTAL QUALITY	DRILLING	_						
Well Driller (Print) Michael J	Karlunas							
	Na.							
Driller's Signature Washauf	1 wyunas	-						
Registration No. <u>Mo 1328</u>	Date 4 / 10 / 97	ـــــ						

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Canary - Driller

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		`		/ At	tlas Sheet Coord	linates
OWNERRedacted - Priva	cy Act				2 9 -1 :	
Address 1 SHKRHOOD DRI	VE					
CityEATONTOWN	(1)	State	, NJ		Zip Code	
WELL LOCATION ADDRESS 1	SHERWOOD DRIVE			Owner's	Well No.	
County MONMOUTH	SHERWOOD DRIVE Municipality EATON	TOWN BOR	D Lot N	lo. 7	Block No.	93.8
WELL USE IRRIGATION					, 18, 9	_
WELL USE		. DAT	E WELL COM	PLETED ?	11819	う
		 				
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)		Material	Wgt/Rating (lbs/sch no.)
Total Depth Drilledft.	Single/Inner Casing		70	4	PUC	Sch 40
_	Middle Casing (for triple cased wells only)	<u> </u>				
Finished Well Depthft.	Outer Casing		 			
Borehole Diameter:	(largest diameter)					
Topin. Bottom5.5in.	Open Hole or Screen		80	4	PVC	540
	(No. Used) Blank Casings	70	80	-	1 100	1300 10
Well Casing Begins:	(No. Used)	<u> -</u>]	
ft. above grade or ft. below grade	Tail Piece					
	Gravel Pack	65	80		Dodow S	and
	Grout	1			Neat Cement	
RECORD OF TEST	Ciou		65	<u> </u>	Bentonite	140 lbs
Test Date _ 7 / 18 / 97		Grou	tina Method	Freezu.	e thm +	remie
Static Water Level 10 Water Level Measured Using 1	ft. below land surface	Drillin	ng Method <u>1</u>	Just 7	Soterey	>
Water Level Measured Using	pe measure				8	
Pumping Water Level25	ft. below land surface			GEOLOG	IC LOG	
Well Was Pumped Using CW	174	Note ea	ach depth where	e water was e	encountered in con	solidated .
Well Yield 30 gpm	75	formatic	ons.			<i>1</i> 1
If Pump Tested: Discharge Rate Duration of Test	gpm hours	0.3			rse brows	
Dorallon or 18st	- Ilouis	ZO~	40 mo	a Cour	se Orange	Solid truck
PERMANENT PUMPING EQUIPMEN	•	40-	60 30f	+ stell.	T III	
Installed by Karl Putman	Reg. No. 51654	- 60-		<u>e ned</u>		rema Sand
Pump Type Submersible	78 ft.	_ 65-	-50 Viol	3. bro	en sand	
Depth of Pump below land surface Capacity gpm	Horsepowerft.	<u> </u>				·
Опраску ури		-				
I certify that I have constructed the ab accordance with all well permit require		,		,,,,,		
rules and regulations.	monte and applicable didit	´		· · · · · · · · · · · · · · · · · · ·		
_	JERSKY WELL DRIG.	IX				
V 10	tuan ? res!	A				
Driller's Signature	Cotmen	7				
<u> </u>	Date 8 / (/ 9	\ <u> </u>				
Registration No. 5054	Date 8 / (/ 9	-/				

COPIES:

White - DEP

Canary - Driller

Pink - Owner



Well Permit Number 20

			Y&	. } -		0808	
OWNED Redacted - Privacy	Act	/	ONE	A	tlas Sheet Coordin		
OWRER		· · · · · · · · · · · · · · · · · · ·			2913	_: <u>862_</u>	
Address 5 SHERWOOD DRT	VB		N.)				
City	***************************************	State			_ Zip Code		
WELL LOCATION ADDRESS 5 1	SHERWOOD DRIVE		_	Owner's	Well No.		
WELL LOCATION ADDRESS 5 5 COUNTY	Municipality KATON	ROWN BOR	D Lot N	lo	Block No.	93.8	
WELL USEIRRIGATION					1 , 26, 97		
WELL USE		DAT	E WELL COM	PLETED 7	126197		
1			T	, 	1	· · · · · · · · · · · · · · · · · · ·	1
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)	
Total Depth Drilled7 _ ft.	Single/Inner Casing	1	65	4	PUC	Sch 40	
	Middle Casing	•					
Finished Well Depth 75 ft.	(for triple cased wells only)					ļ	
Borehole Diameter:	Outer Casing (largest diameter)						
Borehole Diameter: 5.5 in. Bottom 8.5 in.	Open Hole or Screen		245	11	 		
Bottom <u>გ. ≲</u> in.	(No. Used)	65	75	4	702	S440	
Well Casing Begins:	Blank Casings (No. Used)			ļ	j		
ft. above grade or ft. below grade					 		
it. below grade	Tail Piece						
	Gravel Pack	60	75		Natural Sand		
	Grout	1	60	}	Neat Cement Bentonite	130 lbs	
RECORD OF TEST			·			<u> </u>	ı
Test Date 7 / 26 / 97		Grou	ting Method	(1ess	Ire thought	remie	
	ft. below land surface	Drillin	ng Method	my,	dury		
Water Level Measured Using <u>lape</u> Pumping Water Level <u>24</u>							ī
	The beach fairs surface	<u> </u>		GEOLOG			
Well Yield 30 gpm		formatic	nne .		incountered in conso	_	
If Pump Tested: Discharge Rate	ZO gpm	0	<u>5</u> γγ	red. co	wise Brow	sand	
Duration of Test	l hours	5-	20 m	ed co	urse Brow	n sand-	Black
PERMANENT PUMPING EQUIPMENT	т			ed . 35c.	sand trad	e saro-	clay
Installed by Karl Rotman	Reg. No. 31054	60	- 62 K		. Green son	ditace-	sholk
Pump Type Submersible		-20			ray son		
Depth of Pump below land surface	<u>65</u> ft.				7		
Capacity <u>20</u> gpm	Horsepowerl	-					
I certify that I have constructed the abo				· · · · · · · · · · · · · · · · · · ·			
accordance with all well permit require rules and regulations.	теть апо аррісавів State	<u> </u>					1
-KANT-PUTBAN	JERSEY WELL DRIG.	inc			- · · · · · · · · · · · · · · · · · · ·		'
Drilling Company		$\langle \equiv $					1
Well Driller (Print) Karl P. Im	` / (ha/	-)					1
	man Tus						
Registration No. 3184 Date 8 / 1 / 97							

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11/96



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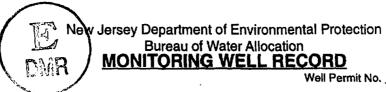
White - DEP

Canary - Driller

New Jersey Department of Environmental Protection
Bureau of Water Allocation
MONITORING WELL RECORD
Well Permit No.

OWNER IDEN	TIFICATION - Owner	MONMOUTH CO. DEPT.	AIR DITT			tes:	13:843
Address	OCA CITATUR	या त्या					
City	FREGIOLD	State	NJ -			Zip Code	
		wner please give address.				_	
VELL LOCATI	VIV- II HOL HE Same as o	Municipality <u>TIMIX</u>	WHEN	s pon Loi	No. 21	Ø1 Block N	0. 97
Address	PINE BROOK RD.						_
				_	DATE WE	ELL STARTED 6	120197
TYPE OF WEL	LL (as per Well Permit Cat	tegories) <u>CAS VENT</u>		_			
Regulatory Pro	ogram Hequiring Well	UST		Case i.i	J.# <u> </u>	Z-11-Z9-191(9	<u> </u>
CONSULTING	FIRM/FIELD SUPERVIS	OR (if applicable) <u>Acqu</u>	4 BELLA	THC.		Tele. #	
	ISTRUCTION	Note: Measure all depths	Depth to	Depth to	Diameter	Material	Wgt./Rating
Fotal depth drille	ed 8 ft.	from land surface	Top (ft.)		(inches)	Material	(lbs/sch no.)
Men musiled to		Single/Inner Casing	٥	3.6	4	PUC_	SCH 40_
Borehole diamet	ter:	Middle Casing					
lop Bottom	in. nin.	(for triple cased wells only)					
	ed: above grade	Outer Casing (largest diameter)		ľ			
Wen was misne	wash mounted	Open Hole or Screen	0 0		.1	SCH4D PUC	2011/10
f finished above	e grade, casing height (stick	(No. Used . D L D)	3.0	7. D	4	SCO TO PUC	sch 40
	surface NA ft.	Blank Casings (No. Used)]	
	ctive casing installed?						<u> </u>
Yes Andrews	-1 -4 dilling /- 2 4	Tail Piece					
	el after drilling <u>6 · 2</u> ft.	Gravel Pack	7.0	7.0	10	mori∈	# 2
	measured using TAPE	Grout	1.0	2.0 2.0	10	Neat Cement Bentonite	lbslbs
Well was develo at	oped for hours		7.0			we Trem	
-	elopment			ethod thod	$A_{i}u$	ger.	<u>. E</u>
	it pumping equipment installe						
•	7					GIC LOG	
	N/A gpm		Note e		ere water w	as encountered in	consolidated
	N/A				- 		
Drilling Fluid	<u> </u>	of Rig D-(20	1-0	<u>- 5'</u>	Claye	4 SILT O	onie
	fety Plan submitted? Yes					SAIUD	
	tion used on site (circle one)						
l cortific th	and I have constructed the	obove referenced well in	5	- 8	Greek	I MED.	GAND
	nat I have constructed the ce with all well permit requ						377.43
	State rules and reg		<u> </u>				
Drilling Comp	any TABASCO DRILL	ING CORP.	_				
Well Driller (P	Print) Audre H. Bo	m sylven					
Driller's Signa	ature	XU	.				
Registration N	NOTD 1466	Date 6 21 , 9					
i iogiotiation i	10. 1 U 1 (12/2)		-				

Pink - Owner



	No. of the land of	•					
OWNER IDENTIFICATION	N - Owner	MONMOUTH CO. DEPT.	OF BUI	Atlas Shee	et Coordinat	es <u>29</u> :	13 · 843
Address City	250 CENTER	St State	N7		7	Zip Code	
WELL LOCATION - If not seconds	the same as own	ner please give address.	Owners	s Well No	NI-	Disales	
Address MONMOU	TH	municipalityTINK	ON FALL	S-BO — LOT	No21.	Ø1 BIOCK N	^{10.} — 97 ——
AddressPINE B	ROOK RD.				DATE WE	LL STARTED	120197
TYPE OF WELL (as per V Regulatory Program Requ	Vell Permit Cate	gories) <u>CAS VENT</u>					
CONSULTING FIRM/FIEL	D SUPERVISO	R (if applicable) <u>Acqua</u>	BELLA,	INC.	······································	Tele. #	
WELL CONSTRUCTION	7	Note: Measure all depths	Depth to	Depth to	Diameter		Wgt./Rating
Total depth drilled 23 Well finished to 23	ft.	from land surface	Top (ft.)	Bottom (ft.)		Material	(lbs/sch no.)
Well finished to <u>∠ 3</u>	ft.	Single/Inner Casing	0	19.0	2	PUC	SCH 40
Borehole diameter: Top	in.	Middle Casing (for triple cased wells only)					
Well was finished: ☐ above	grade	Outer Casing (largest diameter)					
If finished above grade, casin		Open Hole or Screen (No. Used , D / D)	19.0	22.0	2	PUC	SC# 40
up) above land surface Nas steel protective casing i	<u>4</u> ft.	Blank Casings (No. Used)					
☐Yes ☐ No	. =	Tail Piece	22.0	23.0	2	PUC	SCH 40
Static water level after drilling	_	Gravel Pack	18.0	22.0	8	MoriE	#2
Water level was measured u	-	Grout	D	18.0	8	Neat Cement Bentonite	260 lbs.
Well was developed for at gpm	hours	L	ZZ.a	23.0 ethod		sure Tre	
Method of development	NIA			thod	A	TO GY	mre.
Was permanent pumping ed							
Pump capacityNA	-		Notes	ook donth wh	GEOLOG	SIC LOG as encountered in	senselidated
Pump type:			forma		ele watel w	as encountered in	Consolidated
Drilling Fluid NA		D- (ZD	: D	-5' (AYEY	SILT Son	ne
Health and Safety Plan sub			 		1 1	SAUL	,
Level of Protection used on	_						
			5	- 23.0	OFE	EN MED.	JAND
accordance with all v		bove referenced well in rements and applicable					
	BASCO DRILLI		_				
Well Driller (Print)	Dre H. BO	TI surique					
Driller's Signature	M. Du	KY					
Registration No	14tole	Date 6 21 197					
COPIES	· White - DEF	Canary - Driller	Pink -	Owner	Goldenro	d - Health Dent	

MITORING WELL RECORD

ום /	MR		Well Permit No. Atlas Sheet Coo	-	37899 2 9 		
	DIRACTORATE OF			Jiamatos			
OWNER IDENTIFICATION - Twiner BUILDING	167			 			
Address FORT HONE	ETUD		NJ				
City		s	tate		Zip Code		
WELL LOCATION OF THE Same as County BLIG167	Municipality		Lot	No	Block No		
Address					id 12 / 8 / 9 7		
TYPE OF WELL (as per Well Permit Ca	ategories)		_ Da	te well com	pleted /2, 8, 97		
Regulatory Program Requiring Well CONSULTING FIRM/FIELD SUPERVIS	SOR (if applicable) _M	ILLER. D	yce Speak	se I.D. # 2S_Zve.	Tele. #		
WELL CONSTRUCTION		Depth to	Depth to	Diameter			
Total depth drilled 47 tt.		Top (ft.)	Bottom (ft.) land surface)	(inches)	Type and Material		
Well finished toft.	Inner Casing	-	· -	-			
Borehole diameter:	Outer Casing (Not Protective Casing)	_					
Bottom in.	Screen (Note slot size)	_	_				
Well was finished: above grade	Tail Piece	_					
N/Aflush mounted	Gravel Pack		-				
If finished above grade, casing height (stick up) above land	Annular Seal/Grout	O	47'		Bartente/ Carrent		
surfaceft. Was steel protective casing installed? YesNo	Method of Grouting	TRens	<u> </u>				
Static water level after drilling 30	// ft.	(GEOLOGIC L		ies of other geologic logs and/or		
Water level was measured using		_		geop	hysical logs strough be attached.)		
Well was developed for hours	at gpm		-3" A5PA	ben HIC	SALA d CAMP 40 SING		
Method of development		1	1-4.5 GREEN	ed BLK.	SAND & GUAL HR. SUFFCAY Sury five sand the Some su Sand TR. Surt Wet		
Was permanent pumping equipment in		100 4	5-6.5 GRE	en fine	SALA TR. SUT WAST		
Pump capacity gpm		4	5-9.5 BAN	I.TR: Ge	can five Sons to Sut		
Pump type: Nove		9	5-12' BLK.	Sur f	THE SOLATO GOALL		
Drilling Method Augers		/2	-18 Buc	Sur.			
	ype of Rig Mobile	B-53 1	1 11/17 170		THE SACT.		
Pump capacity N/A gpm Pump type: None Drilling Method Augels Type of Rig Mobile B-53 Name of Driller Michael Appart None Pump installed? Lyes Lyo 6.5-9.5 Ban. TR. Green Fine San TR. Sixt 9.5-12' Blk. Sixty Fine San TR. Granl 12-18 Blk. Sixty Fine San TR. Granl 18-47 Blk. 4 Green Sixty Fine San TR. Cray TR. Cray							
Health and Safety Plan submitted?	Yes No		176,	cay,			
Level of Protection used on site (circle		深10月					
N. I. Davistantian No.		:					
Name of Drilling Company	ا المالية	<u> </u>					
I certify that I have drilled the above rules and regulations.		ccordance	with all well po	ermit requi	rements and applicable State		

COPIES:

Driller's Signature

White - DEP

Canary - Driller

Pink - Owner

Goldenrod - Health Dept.

Date 12/12/97

Well Permit Number

COPIES:

New Jersey Department of Environmental Protection Bureau of Water Allocation

WELL RECORD	
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				_	<u> 29 – 3</u>	8654		
				٨٠	tlas Sheet Coordir	satae		
OWNER NONMOUTH FREE H	TCH_SCHOOL				29:13_			
Address ONE MORMAN J FI	TORY-COMMONS							
TINTON FALLS	IMA (GII		NJ					
City			•		_ Zip Code			
WELL LOCATION ADDRESS ONE	NORMAN J FIELD W	Y		_ Owner's	Well No	55		
County MONMOUTH	Municipality TINION	FALLS 1	50 Lot N	lo. 1.11	Block No.	ວວ 		
WELL USE NON PUBLIC			DATE WELL ST	ABTED /	1,04,98	1		
WELL USE INA TOLDIO			TE WELL COM		1 104 198	/		
		····	 	1		<u> </u>	ı	
	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)	ĺ	
WELL CONSTRUCTION			ļ	, ,	1	<u> </u>		
Total Depth Drilledft.	Single/Inner Casing	+1.0	158	4	PVC	SCHED,40	ĺ	
103	Middle Casing							
Finished Well Depthft.	(for triple cased wells only) Outer Casing		 		 			
Borehole Diameter: 85 in.	(largest diameter)							
	Open Hole or Screen	150	11.0	1.	Pica			
Bottomin.	(No. Used)	158	168	4	PVC	SCHEO.40	ĺ	
Well Casing Begins:	Blank Casings							
ft. above grade or	(No. Used)	4	100	7.6	10.14			
ft. below grade	Tail Piece	168	173	4	PVC	SCH&D,40		
	Gravel Pack	148	173	8.5	BLEWDED	.025		
	Grout	35	148	85	Neat Cement	/ Ibs	<i>~</i>	
RECORD OF TEST		<i>w</i>	/ 10	0.0	Bentonite	<u>600</u> lbs	,	
Test Date 11 / 04 / 98		Grout	ing Method	PRESSUR	3 THEOUGH TH	CEMIE PIPE	5 /	
· · · · · · · · · · · · · · · · · · ·	t. below land surface		ng Method	•	UD LOTARY			
	ASURBIO TAPE	_						
Pumping Water Level <u> </u>	ft. below land surface			GEOLOG	IC LOG			
Well Was Pumped Using	This below land surface	Note es	ch denth where		ncountered in conso	lidated		
Well Yieldgpm		formatio	ns.	Water Was er	nodamorod in domo		ļ	
If Pump Tested: Discharge Rate	- ··· ·· — ·	7 -	TEA OCAL					
Duration of Test	hours	5-15	TOPSOI				İ	
PERMANENT PUMPING EQUIPMENT			5-15 GP== OLAY D-BO GLAY CLAY 20-1006AY CLAY WIGHAYSILT4SOME					
Installed by D. VLBRICHT	Reg. No. <u>JD 0523</u>	20-1			RELAY SILT 45	one	ı	
Pump Type SUB MESIE	NE CO			beay sa				
Depth of Pump below land surface	100 tt.	1/0-13	30 GRAYC		SOME MEDA WIGRAY SIL			
Capacitygpm F	lorsepower 3/4 HP	130	- 3 - 3 3 - 3	SEA WE		ND		
		7000	WISO		EN PEBB		_	
I certify that I have constructed the above referenced well in								
accordance with all well permit requirent rules and regulations.	nents and applicable State			 -				
	motition /							
Drilling Company PICKWICK WILL								
Well Driller (Print) NOEMAY PL	emost *							
Driller's Signature	most							
Registration No. MID4D Da	te <u>12, 43, 98</u>							
registration No D8		Ш.,						

Pink - Owner

OWNER

Address

County

WELL USE

City

Redacted - Privacy Act

_ft. above grade or

ft. below grade

EATONIONN

IRRIGATION

WELL LOCATION ADDRESS
COUNTY HONOUTH

WELL CONSTRUCTION

Total Depth Drilled

Finished Well Depth

Borehole Diameter: Top.

Well Casing Begins:

RECORD OF TEST Test Date

Static Water Level

Capacity _

Water Level Measured Using **Pumping Water Level**

If Pump Tested: Discharge Rate

PERMANENT PUMPING EQUIPMENT

Pump Type SVAMPASIB (# Depth of Pump below land surface

Duration of Test

Installed by MILHAGE SPANNOTO Reg. No. 1

Well Was Pumped Using

Well Yield _ +50 →

Bottom_

145 NOTTINGHAM DRIVE

145 NOTTINGHAM DRIVE

Note: Measure all depths

from land surface

Single/Inner Casing

Open Hole or Screen

(No. Used -015) **Blank Casings**

Middle Casing (for triple cased wells only)

Outer Casing (largest diameter)

(No. Used

Tail Piece

Grout

Horsepower

Gravel Pack

ft. below land surface

ft. below land surface

gpm

hours

ft.

Municipality

WELL RECORD

EATONIOWN BORO

Depth to

Top (ft.)

54

Grouting Method

Note each depth where water

Drilling Method

formations.

State

ironn Iloca	nental Protect tion	ion			
RD	!	w	ell Permit Numbe		
		At	as Sheet Coordir	nates :862	
State	NJ		Zip Code 7	7724	
ORC	Lot N	_ Owners	WAII NO. '	93.6	
	ATE WELL ST E WELL COMI		0,2,98	<u>.</u>	
to L)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt/Rating (ibs/sch no.)	
5	2Å	4	PUL	Se4.40	
1	74	¥	PVL	Sen. 4	
Ļ	80	4	PVL	Seu 40	
	50	8.5	Futen Gna Neat Cement	lbs	
	ing Method	6	Bentonite The The	17, Tibs	-
matia.	th depth where		countered in consc		
16	Persons	. Gm	1120) 120 F-11 14/ Sur h	L.ANT	,
	Sond .	The han	4/ out 1	more	7
- 2	Lecur	m /~1	UNATED	moter	
2 -	THE F-	Mh	AUDURATE)	NEHMA	eroì
	GADON	(Com	TE Some	VIMO	
74	- 80 //	sty	POUR HTE)	DAMALA	W 17

l certify that I have accordance with a rules and regulatio	li well permit ı	the above referen requirements and	ced well in applicable State
Drilling Company	TIGER O	NSTRUCTION	CORP.
Well Driller (Print)	DEN N	115 15.50	10/05
Driller's Signature	12	e. (b).	Clade
Registration No.	10987	Date	1 15 198
	COPIES:	White - DEP	Canary - Driller

gpm

Pink - Owner

COPIES:

New Jersey Department of Environmental Protection Bureau of Water Allocation

WE	RE	CO	RD

		WELL I	RECORD	2	W	/ell Permit Numbe	r 19 <i>0</i> 128
							3020
OWNED	Redacted - Privacy	Act				das Sheet Coordin	
OWNER	521 TINTON AVE					2913	 ∶ <u>-587</u> -
Address	TINTON FALLS			ŊĴ			
City			State	·		Zip Code	
	111011 VADDITEGO	TINTON AVE	FALLS	Th/A	_ 7	Well No	E à
County	MONMOUTH	Municipality 11110	Y PALLS	Lot N	lo 7	Block No.	04
WELL USE	DOMESTIC REPLACE	MENT		OATE WELL ST		8,6,48	
	,			T Trees Com		· · · · · · · · · · · · · · · · · · ·	
WELL CON	STRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Total Depth I	Drilled 186 ft.	Single/Inner Casing	41.0	166	4	PVC	SCHCD.40
Finished We	186	Middle Casing (for triple cased wells only)					
	imeter: 8.5_ in.	Outer Casing (largest diameter)					
Top Botto	om 8.5 in.	Open Hole or Screen (No. Used)	166	181	4	PVC	SCHED.40
Well Casing	Begins: //O ft. above grade or	Blank Casings (No. Used)					
	ft. below grade	Tail Piece_	181	186	14	PVC	SCHED, YO
		Gravel Pack	154	186	85	BLENDED	-025
		Grout	3.5	156	8.5	Neat Cement Bentonite	lbs 650 lbs
RECORD OI Test Date _ Static Water	8 / 6 / 98 Level	t. below land surface	Grout Drillin	ing Method	Peissue Mu	e Through Tr O Rotary	EMIE PIPE
	Measured Using <u>Mど</u> ter Level <u>円</u> 4	ft. below land surface	- ,				
	mped Using AIR	WFT			GEOLOG		
Well Yield			formatio	vns.		ncountered in conso	Ildated
If Pump Test	ed: Discharge Rate		0-5	TAN-68	2000 SI	LIY OLAY	
	Duration of Test	hours	15-35		regn ch	LLAY WIBL	ACK SANO
PERMANEN	T PUMPING EQUIPMENT		35-4		been c		LACK SANO
• -	T. CASTELLAND	Reg. No. <u>0016656</u>	40-7	5 CEMEN	07e0 6	LEEN SAND	
Pump Type _	SUBMERSIBL	105	12-1	SD SILTY	6CAY C		
Deptn of Pur Capacity	np below land surface		120-	100 TIVE	= beay.	3/11-0	
	9P	<u></u>					
l certify that i	have constructed the above	ve referenced well in	l				
	vith all well permit requiren						
Drilling Comp	eany PICKWICK WELL	DRILLING					
Well Driller (Print) BENJAMIN	PRIMOST					
Driller's Signa	ature My m/l	No					
Registration I	300	te 9,15,98					
		<i>[</i> 1	1)				

Pink - Owner



WELL RECORD

Well Pe	ermit Nu	mber	
-	o	20276	

OWNED BITTON THE C. TO	OH PRINT				las Sheet Coordin			
OWNER TINTON FALLS BD Address 658 TINTON AVE	CH. RING				<u>29</u> : <u>13</u>	-·- 5/// _		
TINTON FALLS			NJ					
City		State	9		Zip Code			
WELL LOCATION ADDRESS 674	TINTON AVE			_ Owner's	Well No Block No. 7			
County MONMOUTH	_ MunicipalityTINTON	FALLS B	Lot N	lo. <u>1</u>	Block No. <u>/</u>	3		
WELL USE _IRRIGATION			ATE WELL ST	ARTED I	0,1,98			
		DAT	E WELL COM	PLETED 1	0,1,98			
	Note: Measure all depths	Depth to	Depth to	Diameter		Wgt./Rating		
WELL CONSTRUCTION	from land surface	Top (ft.)	Bottom (ft.)	(inches)	Material	(lbs/sch no.)		
7.015 11.511 . 329 .	Single/Inner Casing	1.0	304	4	PVC	SCHED.40		
Total Depth Drilledft.	Middle Casing		70.7	17	1 00	Benell, 10		
Finished Well Depth 329 ft.	(for triple cased wells only)							
Parahala Diameter	Outer Casing (largest diameter)							
Borehole Diameter: 3.5 in. Bottom 8.5 in.	Open Hole or Screen			<u> </u>	<u> </u>			
Bottom 8.5 in.	(No. Used)	304	324	4	Pra	SCHED.40		
Well Casing Begins:	Blank Casings							
ft. above grade or	(No. Used)		D D C	<u> </u>				
ft. below grade	Tail Piece	324	329	4	PVC	SCHED.40		
	Gravel Pack	294	329	8,5	BLENDED	.025		
	Grout	3.5	294	8.5	Neat Cement Bentonite			
Test Date		Grouting Method PRESSURE THROUGH TREMIE PIPE Drilling Method MUO ROTARY						
~~	A feeless I a d							
Water Level Measured Using	t. below land surface	Drillin	ig Method	1110	DD KUITH			
Pumping Water Level <u>243</u>	ft, below land surface			0501.00	101.00			
Well Was Pumped Using A1	e LIFT		GEOLOGIC LOG					
Well Yield 150 gpm			Note each depth where water was encountered in consolidated formations.					
If Pump Tested: Discharge Rate	gpm		0-10 CLAYEY OCH CE MED SAND					
Duration of Test	hours		10-40 GLEW CLAY					
PERMANENT PUMPING EQUIPMENT			40-40 GLETHICLAY & COARSE GLETH SAND 60-90 COALSEA MED GLETH SAND WELTE GREEN					
Installed by O. VLBCICHT	Reg. No. <u>JO 052,3</u>	-	SILTY CLAY					
Pump Type SUBMERSI		90-100	90-100 COAPSEYMED. GREEN SAND WISOMEGREEN					
Depth of Pump below land surface	169	100-15			e bray clay			
Capacity					Y SILTY SANO			
					SILTYSAND W			
I certify that I have constructed the about		1 20 0		ITAA Gru				
accordance with all well permit requirent rules and regulations.	nents and applicable State	12/25-24	885-240 FINEY MED GRAY SILTY SAND WIFINE GRAY SAND					
Drilling Company PICKWICK WELL DRILLING			LO GEAY		·····			
Well Driller (Print) NORMAN A	20	260-0	260-285 blay clay whome fine bray Sand 285-300 bray clay whome Lenses of Fine					
Driller's Signature 2	11100	<u> </u>	CAAA	1400 A	TRACE LIGHT	of five		
Begistration No. M 1040	10 128,98	300-	329 FIN					

New Jersey Department of Environmental Protection

Bureau of Water Allocati
MONITORING WELL RI

ion ECORD Well Permit No. <u>29</u> - <u>39917</u>	
Atlas Sheet Coordinates29:13	843
N.J Zip Code	

OWNER IDENTIFICATION - OV	vner	MONMOUTH CTY DEPT	BLDG &					
Address2	Ø CENTE	R ST		_				
City	SEEHOLD.	State		N.J		Zip Code		
WELL LOCATION - If not the sa CountyMONMOUTH AddressPINEBROOK		Municipality <u>TTN</u> T	Owner's	S BO Lo	t No. <u>21</u>			
TYPE OF WELL (as per Well Pe Regulatory Program Requiring V	ermit Cate Vell	gories) MONITORI UST	ING			_STARTED2 DMPLETED2 2-11-23-1317		
CONSULTING FIRM/FIELD SU	PERVISO	R (if applicable) PMK Gr	oup Cons	sulting Engir	neers	Tele. #		
WELL CONSTRUCTION Total depth drilled 11' Well finished to 11'	_ ft.	Note: Measure all depths from land surface	Depth to Top (ft.)		, ,	Material	Wgt./Rating (lbs/sch no.)	
	11.	Single/Inner Casing	0'	1'	2"	PVC	Sch. 40	
Borehole diameter: Top 6" in. Bottom 6" in.		Middle Casing (for triple cased wells only)						
Well was finished: above grade		Outer Casing (largest diameter)					020	
া flush mounted If finished above grade, casing heig		Open Hole or Screen (No. Used)	1'	11'	2"	PVC	S.h 40	
up) above land surface ft.		Blank Casings (No. Used)						
Was steel protective casing installed No		Tail Piece						
Static water level after drilling <u>3'</u>		Gravel Pack	6"	11'		Morie #2		
Water level was measured using Tape Well was developed for 1 Hour hours		Grout	0'	6"		Neat Cement Bentonite	94 5 lbs. lbs.	
at gpm	,	Gr	outing Me	ethod Grav	vity		<u></u>	
Method of development Pump		D	rilling Met	hod Aug	er			
Was permanent pumping equipmen	nt installed?	Yes X No						
Pump capacity		, (GEOLOGIC LOG Note each depth where water was encountered in consolidated					
Pump type:			formati	•	Sie Water W	as encountered in	consondated	
Drilling Fluid	Type of	RigB-57						
Health and Safety Plan submitted?	Yes 🗆	No	See Attached					
Level of Protection used on site (cire	cle one) N	lone CC B A						
I certify that I have construct accordance with all well per State rules a	mit require	ements and applicable						
Drilling Company	MMIT WE	ations. LL DRILLING CO INC						
Well Driller (Print) John Vogt	./ ~							
Driller's Signature	Vogt	,						
Registration No1544		Date 2 / 16 / 99						

ENVIRONMENTAL SPECIALISTS

Central Jersey Industrial Park Chimney Rock Road, Bldg. 9W Bound Brook, NJ 08805

Telephone: Toll Free:

(908) 722-4266 (800) 242-6648

FAX:

(732) 356-1009

WELL LOG

WELL: MW7

DATE DRILLED: 02/12/1999 COORD #1: 29.13.843

PERMIT #1: 29-39917

COORD #2:

DEVELOPMENT METHOD: Pump

DEVELOPMENT TIME: 1 Hour

PERMIT #2: SITE: Monmouth Cty Hwy District #3/6, Pinebrook Road, , Tinton Falls, NJ

XSTREET:

DRILLING METHOD: Auger

USE: Monitoring

COUNTY: Monmouth

INNER CASING: PVC 2"

DIAMETER: LENGTH:

SET WELL:

OUTER CASING:

OWNER: Monmouth County Dept. of , 250 Center Street, , Freehold, NJ 07728

DIAMETER: LENGTH:

SCREEN TYPE 1: PVC SCREEN TYPE 2:

2"

SAMPLING METHOD:

LENGTH 1: LENGTH 2:

DIAMETER:

10'

HOLE DIA: 6", 6" TOTAL DEPTH: 11'

GRAVEL PK SZ: Morie #2

11

11'

DRILLER: John Vogt SURFACE COMPLETION: M

GAL PER MIN: 2 STAT H20 LVL: 3'

SLOT SIZE:

.020

CASING SEAL: Portland

OPEN HOLE:

DEPTH BELOW SURFACE

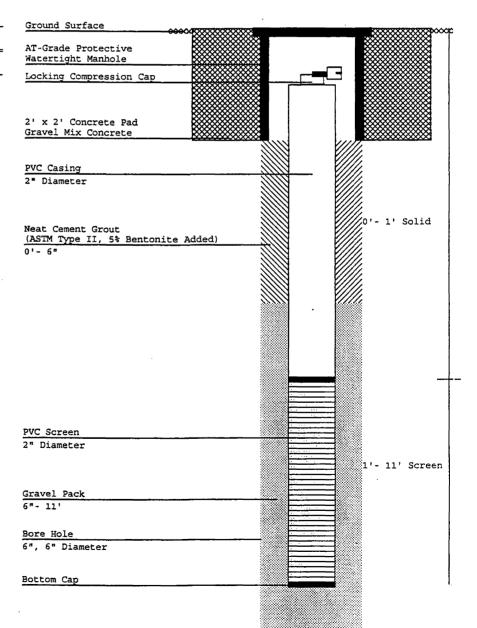
BLOWS PER 6"

FROM - TO

ON SAMPLER

REMARKS / SOILS IDENTIFICATION

0'- 11' Brown sand & gravel.



DWR-138 5/95



New Jersey Department of Environmental Protection Bureau of Water Allocation

WELL RECORD

Well Permit Number 29 __40203

				_				
OWNER UNITED STATES GOV. FORT MONMOUTH GOV. RESERVATION				A	tlas Sheet Coordi 29 :13			
Address	OTT REDERITION				-			
CityTINTON FALLS		Stat	e NJ		_ Zip Code			
WELL LOCATION ADDRESS	RLES WOOD AREA			Owner's	Well No. <u>#1-6</u>	2		
County <u>MONMOUTH</u>		EALLS E	Lot N	_ Owners	Block No.	N/A		
GENTHERMAI/HEAT O								
WELL USE	-		DATE WELL ST	ARTED	<u>4 / 2 / 99</u> l2 / 01 / 99	_		
		DA	IE WELL COM	PLETED	12 / 01 / 99	-		
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)		
Total Depth Drilled 304 ft.	Single/Inner Casing	0	304	1"	HDPE	SDR11		
Finished Well Depth 304 ft.	Middle Casing (for triple cased wells only)							
Borehole Diameter:	Outer Casing (largest diameter)							
Top <u> 6 </u>	Open Hole or Screen (No. Used)							
Well Casing Begins:	Blank Casings (No. Used)							
ft. above grade or ft. below grade	Tail Piece							
	Gravel Pack				Geothermals.	nd .		
	Grout Bentonite				_Neat_Cement_	2600_ lbs		
RECORD OF TEST	Thermal	0	304	6"	Bentonite	_650_ lbs		
Test Date N/A //		Grou	tina Method	tremi	e grout			
Static Water Levelf					otary			
Water Level Measured Using		_	-					
Pumping Water Level				GEOLOG	IC LOG	*		
Well Was Pumped Using		Note each depth where water was encountered in consolidated						
Well Yieldgpm		formation	formations.					
If Pump Tested: Discharge Rate Duration of Test	gpm hours	0 -	0 - 304 Gray silty fine to medium					
Duration of Yest	nouis			sand.	· · · · · · · · · · · · · · · · · · ·			
PERMANENT PUMPING EQUIPMENT	,							
	Reg. No							
Depth of Pump below land surface		-						
gpin - H	lorsepower							
I certify that I have constructed the above accordance with all well permit requiren rules and regulations.	e referenced well in nents and applicable State		- contest					
Drilling Company HARDIN-HUBER, I	NC.							
Well Driller (Print) Jeff Corro	n							
Driller's Signature								
Registration No. 1428-1176 Da	te <u>1 / 13 / 99</u>							



New Jersey Department of Environmental Protection

Bureau of Water Allocation

MONITORING WELL RECORD

			Well Pern	nit No. <u>29</u>	- 40281	
			Atlas She	et Coordinat	es <u>29</u> : <u>13</u>	677 _
OWNER IDENTIFICATION - Owner	Redacted - Privacy Act					
Address84 HIGH STORTOWN	State		דא		Zip Code	
WELL LOCATION - If not the same as ow	ner please give address.	Owners	s Well No	MW-	- (
County <u>MONMOUTH</u> Address 84 HIGH ST.	MunicipalityEATO	MIOMM 8				
TYPE OF WELL (as per Well Permit Cate Regulatory Program Requiring Well	gories) MONITORI	NG N			STARTED <u>4</u> OMPLETED <u>4</u>	= = = = = = = = = = = = = = = = = = =
CONSULTING FIRM/FIELD SUPERVISO	R (if applicable)			•	Tele. #	
WELL CONSTRUCTION	Note: Measure all depths	D45-4-	Donth to	Diameter	· · · · · · · · · · · · · · · · · · ·	Wgt./Rating
Total depth drilled 30 ft. Well finished to 30 ft.	from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	(lbs/sch no.)
	Single/Inner Casing	0	15	4	PUC	SCH,40
Borehole diameter: Top/ in. Bottom/ in.	Middle Casing (for triple cased wells only)	79				
Well was finished: □above grade	Outer Casing (largest diameter)	NA				
☑flush mounted If finished above grade, casing height (stick	Open Hole or Screen (No. Used)	15	30	Ť	PUC	10050601
up) above land surface <u>NA</u> ft. <u>Was steel protective casing installed?</u>	Blank Casings (No. Used)	NA				
Yes No	Tail Piece	NA				
Static water level after drilling 18 ft.	Gravel Pack	14	30	12	#2 SA	G_{M}
Water level was measured using <u>TAPE</u>	Grout	0	14	12	Neat Cement	ibs. // // // // // // // // // // // // //
Well was developed for hours at gpm		Grouting Method TREMIE Bentonite 105 lbs.				
Method of development	D	rilling Met	thod HS	SA		
Was permanent pumping equipment installed					NO.1.00	
Pump capacity MA gpm		GEOLOGIC LOG Note each depth where water was encountered in consolidated				
Pump type:	_	formations.				
Drilling Fluid / YONE Type o	f Rig <u>A 3 0</u> 0	0-6" GRASS/TOPSOIL				
Health and Safety Plan submitted? Yes	ĹNo	6"-10' BRN MD SD.				
Level of Protection used on site (circle one) None (D) C B A		10'-25' LT BRN MD SD				
I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.		25'-30' DRK GREY/BUK CLAYEE SILT				
Drilling CompanyGARY PARENT/SHORE DRLG. INC.						
Well Driller (Print) GARY PARENT						
Driller's Signature Care a Text						
Registration No. MD 1540	Date 5 / 2 / 99					

COPIES:

White - DEP

Canary - Driller

Pink - Owner



WELL RECORD

Well Permit Number 29 __40296

				_				
Redacted - Privacy Act OWNER				At	las Sheet Coordina 29 _: 13			
Address 525 TINTON AVE.			· · · · · · · · · · · · · · · · · · ·		·			
CityTINTON FALLS		State	Н		Zip Code	- '		
	TINTON AVE.				Well No.			
County MONMOUTH				_				
DOMESTIC			-					
WELL USE		ם מח	OATE WELL ST TE WELL COMI	ARTED	5,05,99 5,05,99	/		
i			1	1				
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)		
Total Depth Drilledft.	Single/Inner Casing	41.0	166	H	PVC	SCHED. 40		
Finished Well Depth 191 ft.	Middle Casing (for triple cased wells only)							
	Outer Casing (largest diameter)							
Borehole Diameter: 8.5 in. Bottom in.	Open Hole or Screen (No. Used)	166	186	4	PVC	SCHED.40		
Well Casing Begins:ft. above grade or	Blank Casings (No. Used)							
ft. below grade	Tail Piece	186	191	4	PVC	SCHEO.40		
	Gravel Pack	156	191	8.5	BLENDED	,0a5		
	Grout	3.5	156	8.5	Neat Cement Bentonite	650 lbs		
RECORD OF TEST Test Date 5 / 05 / 99		Grout	Grouting Method Plessule THROUGH TREMIE PIRE					
Static Water Level of	t. below land surface	Drillir	ng Method	Mu	D ROTARY			
Water Level Measured Using MEAS	OKED IMPE							
Pumping Water Level	Tt. below land surface		GEOLOGIC LOG					
Well Was Pumped Using f	110 1011 1			water was e	ncountered in conso	lidated		
If Pump Tested: Discharge Rate	gpm	formatio	ons. GA z	א אלבבר				
Duration of Test	hours	0-1						
PERMANENT PUMPING EQUIPMENT		10-	1 - 79					
Installed by S. FOSTER	Reg. No. M1115	150.	150-170 FINE & MED. LELACK SAND					
Pump Type SUBMERS	JBLE TO	1-10	171 - 110	E QNI	7 8/1102 2/3	DEBALES		
Depth of Pump below land surface	120 ft.					10000		
Capacity <u>20</u> gpm F	Horsepower							
I certify that I have constructed the abo accordance with all well permit requiren rules and regulations.								
Drilling Company PICKWICK WELL	DRILLING /							
Well Driller (Print) ByNSAMIN	LPEIMOST A-	· (·			
Driller's Signature	L-1							
Registration No. M 15762 de	1 6,09,99							



WELL RECORD

Well	Permit	Number
2	9	_40473

Atlas Sheet Coordinates 29 :13 :813 UNITED STATES GOV OWNER FORT MONMOUTH GOV RESERVATION Address State NJ Zip Code City _____ TINTON FALLS WELL LOCATION ADDRESS CHARLES WOOD AREA MAIN ST Owner's Well No. #1-24 County Municipality TINTON FALLS BO Lot No. N/A Block No. N/A WELL USE _____CLOSED LOOP DATE WELL STARTED _ 5 / 10 / 99 DATE WELL COMPLETED 12 / 15 / 99 Note: Measure all depths Depth to Depth to Diameter Wgt/Rating Material from land surface Bottom (ft.) (inches) (lbs/sch no.) Top (ft.) **WELL CONSTRUCTION** Single/Inner Casing 1" Total Depth Drilled ______ 304 ft. 0 304 HDPE SDR11 Middle Casing Finished Well Depth _____304 ft. (for triple cased wells only) Outer Casing Borehole Diameter: (largest diameter) Top _____ Open Hole or Screen Bottom _____ in. (No. Used Blank Casings Well Casing Begins: (No. Used _____ft. above grade or _____ ft. below grade Tail Piece Gravel Pack sand <u>Geothermal</u> Neat Cement _2600 lbs Bentonite Grout 6" 0 304 Bentonite <u>__გვი</u> lbs Thermal **RECORD OF TEST** Test Date <u>N/A</u>/____/ Grouting Method tremie grout Static Water Level ______ft. below land surface Drilling Method ____ mud rotary Water Level Measured Using _____ Pumping Water Level ______ft. below land surface GEOLOGIC LOG Well Was Pumped Using _____ Note each depth where water was encountered in consolidated Well Yield _____gpm If Pump Tested: Discharge Rate _____ 0 - 304 Gray silty fine to medium sand Duration of Test hours PERMANENT PUMPING EQUIPMENT Installed by _____N/A Reg. No. ____ Pump Type _____ Depth of Pump below land surface _____ Capacity _____ gpm Horsepower ___ I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations. Drilling Company HARDIN-HUBER, INC. Jeff Corron Well Driller (Print)____ Driller's Signature Registration No. 1428-1176

Date _1 / 13 / 00



WELL RECORD

Well Permit Number 29 _40917

					<u> </u>	17
Redacted - Privacy Act				Atl	as Sheet Coordi	
OWNER 151 NOTTINGHAM D	DTVE				<u> 29 13 </u>	<u>868</u>
Address		 				
City <u>EATONTOWN</u>		State	• <u>NJ</u>		Zip Code	7724
WELL LOCATION ADDRESS 151	NOTTINGHAM DRIVE			Owner's	Well No.	1
County HONMOUTH	Municipality	HM_BOBO	Lot N	0177101 0	Block No.	07 4
WELL USE IRRIGATION	EHIONIC					
WELL USE			DATE WELL ST	ARTED _/	0, 6,99 0,6,99	-
,	/	, DAI	E WELL COM			-
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)
Total Depth Drilled 80 ft.	Single/Inner Casing	11元	57	4	PVL	Seitt
Finished Well Depth &o ft.	Middle Casing (for triple cased wells only)					
Borehole Diameter:	Outer Casing (largest diameter)					
Top	Open Hole or Screen (No. Used , 🗸 , 🕥)	57	77	4	PUL	Set 40
Well Casing Begins:	Blank Casings (No. Used)					
ft. above grade or tt. below grade	Tail Piece	77	80	4		52440
	Gravel Pack	53	80	8.5	FUTER bAA	
	Grout	4	53	8.5	Neat Cement Bentonite	lbs
RECORD OF TEST	•	!	<u> </u>	0.	7	
Test Date		Grout	ting Method ,	March	no Ther	<u> 1(판</u>
Water Level Measured Using 7-5a	t. below land surface	Drillir	ng Method	2) (Corney	
Pumping Water Level	ft below land surface		···			
Well Was Pumped Using	it. below latte surface	<u> </u>		GEOLOG	IC LOG	
Well Yield /50 gpm		Note ea		water was e	ncountered in cons	olidated
If Pump Tested: Discharge Rate	gpm					
Duration of Test	hours		-2 /3	· bianu	SAND	
PERMANENT PUMPING EQUIPMENT	•	7	-19 Good	31.3	NOW N F-M	QUART .
Installed by the Van Um			5100	In. les	15,- (/NEVAL-
Pump Type SUBMENSIBLE			750 /s	7-19	- /- OUI	
Depth of Pump below land surface	56ft.	19	7-1-	1/00	444	100 F-17
Capacity gpm F	lorsepower/	.	WEATH	ms (brow word	10 -
			SAND			
I certify that I have constructed the abo	ve referenced well in	7	5.77.F-1	7 Linux	DONITIC WEA	Honor
accordance with all well permit requiren			Grow	and 77	- Jones /	VINCONTOWN
rules and regulations.		-	77-80 Sic	A FINE	540 W/	Legions
Drilling Company TIGER CONSTRUC	PTON CORP	I	GAUC	VNIVE	In an	7
Well Driller (Print)	B. DAULC					<u>' </u>
Driller's Signature	1					
Registration No. M70987 Da	ote 10 / 7 / 99	,				
DEGISTATION NO 1 / 1 U / U / U / Da	are 101 / 171					

DWR-138 5/95



New Jersey Department of Environmental Protection Bureau of Water Allocation

WELL RECORD

				_		·		
Redacted - Privacy Act OWNER				A1	las Sheet Coordir	nates .857 :		
Address2516 AUTUMN DRIV	'F							
		State	, NJ		Zip Code			
WELL LOCATION ADDRESS2516	AUTUMN DRIVE			_ Owner's	Well No			
County MONMOUTH	Municipality WALL TH	IP.	Lot N	o. <u>37</u>	Block No.	876		
WELL USE IRRIGATION		DAT	DATE WELL ST E WELL COMI	ARTED <u>0</u> 0	2,17,00 2,17,00			
WELL CONSTRUCTION	Note: Measure all depths from land surface	Depth to Top (ft.)	Depth to Bottom (ft.)	Diameter (inches)	Material	Wgt./Rating (lbs/sch no.)		
Total Depth Drilled $\frac{125}{125}$ ft.	Single/Inner Casing	1.0	110	4	PVC	SCHED.40		
Finished Well Depth 125 ft.	Middle Casing (for triple cased wells only)	,		_	_			
•	Outer Casing (largest diameter)							
Borehole Diameter: Top s.O in. Bottom s.O in.	Open Hole or Screen (No. Used)	110	120	4	PUC	SCHEO.40		
Well Casing Begins:ft. above grade or	Blank Casings (No. Used)							
1.0 ft. below grade	Tail Piece	120	125	4	PVC	ScHEO, 40		
	Gravel Pack	100	125	8.0	Brended	.025		
	Grout	3.5	100	8.0	Neat Cement Bentonite	HOO lbs		
Materia and Maren and Heim Mitt	t. below land surface		Grouting Method PLESSING THROUGH TRANSPIP					
Pumping Water Level	ft. below land surface	CEOLOGIC LOC						
Well Was Pumped Using ATC	LIFT	_	GEOLOGIC LOG					
Well Yieldgpm		Note each depth where water was encountered in consolidated formations.						
If Pump Tested: Discharge Rate	gpm	1						
Duration of Test	hours	10-10	0-10 TAN SANO W/ OCHRE CLAY					
PERMANENT PUMPING EQUIPMENT		60-6	60-60 COARSE TANSANO					
Installed by W. HOLMSTROM	<u>n</u> Reg. No. <u>DOI1919</u>	65-	65-80 TAN SANO					
Pump Type SUBMERSI	/		100		LAY			
Depth of Pump below land surface	65 ft.		100-105 FINE BLAY SAND 105-125 FINEYMED BLAY SAND W/					
Capacity gpm F	Horsepower	1 700-		217€ 317€	TOTTO	υ ω/		
I certify that I have constructed the abo	vo referenced well in	İ	····					
I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations.								
Drilling Company PICKWICK WELL DRILLING /								
Well Driller (Print) John Mu	ETHA INT							
Driller's Signature John Mu								
Registration No. 3021245 Date 04, 10, 60								

Goldenrod - Health Dept. 4 [2]00

White - DEP

Canany - Driller

4/12/00

Pink - Owner

COPIES:

(E ML

New Jersey Department of Environmental Protection

Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. <u>29</u> -42585 Atlas Sheet Coordinates 29:13 822 OWNER IDENTIFICATION - Owner _____US_ARMY_ Address______173 RIVERSIDE AVE City _____ Zip Code _____ County MONMOUTH Municipality TINTON FALLS BO Lot No. N/A Block No. N/A Address _____2567 LABORATORY RD DATE WELL STARTED 5 1/2 1000 DATE WELL COMPLETED 5 1/2 1000 TYPE OF WELL (as per Well Permit Categories) _____MONITORING____ Regulatory Program Requiring Well _____ Case I.D.# WELL CONSTRUCTION Note: Measure all depths | Depth to Depth to Wgt./Rating Diameter Material Total depth drilled from land surface Bottom (ft.) (lbs/sch no.) Top (ft.) (inches) Well finished to RVC Single/Inner Casing 51440 Borehole diameter: Middle Casing Top _____ Bottom ____ (for triple cased wells only) Outer Casing (largest diameter) Well was finished: \(\subseteq \text{above grade} \) flush mounted Open Hole or Screen PVC (No. Used / Schill If finished above grade, casing height (stick Blank Casings up) above land surface (No. Used Was steel protective casing installed? Tail Piece Yes No Static water level after drilling _____ ft. Gravel Pack morris#1 Water level was measured using MEAR Neat Cement Grout Well was developed for _____ hours Bentonite at _____gpm Grouting Method 6-muts Method of development School Drilling Method _____ Was permanent pumping equipment installed? Yes No GEOLOGIC LOG Pump capacity ______gpm Note each depth where water was encountered in consolidated Pump type: _____ Drilling Fluid None Type of Rig R-59 0-13 Mod-Fine Sound Health and Safety Plan submitted? ☐ Yes M No Level of Protection used on site (circle one) None D C B A I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations. Drilling Company INLAND POLLUTION SERVICES INC Well Driller (Print) Mr layer A Kemosins Driller's Signature Registration No. ______ Date _ 5 /

COPIES:

White - DEP

Canary - Driller

Pink - Owner



New Jersey Department of Environmental Protection

Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 42586 Atlas Sheet Coordinates 29:13 822 OWNER IDENTIFICATION - Owner _____US_ARMY__ Address______173 RIVERSIDE AVE_ City _____ State ____ Zip Code _____ County Municipality TINTON FALLS BO Lot No. N/A Block No. N/A Address _____2567 LABORATORY RD DATE WELL STARTED 5 / 12 / CO TYPE OF WELL (as per Well Permit Categories) ______MONITORING Regulatory Program Requiring Well _____ _____ Case I.D.# _____ WELL CONSTRUCTION Note: Measure all depths | Depth to Wgt./Rating Depth to Diameter I Material Total depth drilled from land surface Bottom (ft.) (inches) (lbs/sch no.) Top (ft.) Well finished to 5-44 Single/Inner Casing Puc Borehole diameter: Middle Casing Top ____ (for triple cased wells only) Bottom Outer Casing (largest diameter) Well was finished: Dabove grade flush mounted Open Hole or Screen PL (No. Used /) If finished above grade, casing height (stick Blank Casings up) above land surface ______ft. (No. Used Was steel protective casing installed? Tail Piece Yes No Static water level after drilling _____ ft. Gravel Pack mrrc#1 Water level was measured using m-Supe Neat Cement Grout Well was developed for _____ hours Bentonite at _____gpm Grouting Method _____ Ly Drilling Method Method of development Sch pomp Was permanent pumping equipment installed? Yes No GEOLOGIC LOG Pump capacity gpm Note each depth where water was encountered in consolidated formations Pump type: Drilling Fluid ______ None ____ Type of Rig 13-59 0-13 Mad Fine Send Health and Safety Plan submitted? ☐ Yes√7 No Level of Protection used on site (circle one) Mone D C B A I certify that I have constructed the above referenced well in accordance with all well permit requirements and applicable State rules and regulations. Drilling Company _____ INLAND POLLUTION SERVICES INC Well Driller (Print) Mirhael Akonsosina Driller's Signature / Land Kenne

Registration No. 52420 Date



New Jersey Department of Environmental Protection

Bureau of Water Allocation MONITORING WELL RECORD Well Permit No. 29 - 44268

			Atlas She	et Coordinat	es 29 - :- <u>-1</u> 4	<u> </u>	
OWNER IDENTIFICATION - Owner	NEW JERSEY NATURAL	GAS			27 1	786	
Address 1415 WYCK	OFF RD				in Code		
City WALL TWP.	State		_NJ		Lip Code		
WELL LOCATION - If not the same as of County MONMOUTH Address OFF LONG BRANCH A	wner please give address MunicipalityLONG	Owner's	s Well No <u>N</u> CIT Lot	MW35 t No. <u>6.0</u>	1 Block	No	
Address OFF LONG BRANCH A	VE				-	/ 22 / 21	
TYPE OF WELL (as per Well Permit Cat Regulatory Program Requiring Well			DAT Case I.I	E WELL CC D.#	STARTED 1 MPLETED 1		
CONSULTING FIRM/FIELD SUPERVISO	OR (if applicable) ARCADI	S Geragh	ty & Miller, I	nc	Геlе. #		
WELL CONSTRUCTION Total depth drilled15'ft.	Note: Measure all depths from land surface		,	Diameter	Material	Wgt./Rating (Ibs/sch no.)	
Well finished toft.	Single/Inner Casing	0'	5'	2"	DVC		
Borehole diameter: Top 10" in.	Middle Casing (for triple cased wells only)		<u> </u>		PVC	sch 40	
Bottom <u>10"</u> in. Well was finished: □ above grade	Outer Casing (largest diameter)						
flush mounted If finished above grade, casing height (stick	Open Hole or Screen (No. Used)	5'	15'	2"	PVC	.010 sch 40	
up) above land surface ft. Was steel protective casing installed?	Blank Casings (No. Used)						
☐Yes ☑ No	Tail Piece						
Static water level after drilling 6' ft.	Gravel Pack	3'	15'		Morie #2		
Water level was measured using <u>Tape</u> Well was developed for <u>1/2</u> hours	Grout	0'	3'		Neat Cement Bentonite	—94—lbs. —5—lbs.	
at gpm	Gi	routing M	ethod gravit	у			
Method of development <u>pump</u>	D	rilling Me	thod <u>Auge</u>	Γ			
Was permanent pumping equipment installed	l? ∐Yes x⊠ No			GEOLOG	IC LOG		
Pump capacity gpm		Note each depth where water was encountered in consolidated					
Pump type:		format	ions.				
Drilling FluidType	of Rig <u>CME</u>						
Health and Safety Plan submitted? 🔀 Yes [☐ No	See Attached					
Level of Protection used on site (circle one)	None C B A						
I certify that I have constructed the a accordance with all well permit requi State rules and regu	rements and applicable						
Drilling Company SUMMIT WELL DRI	LLING CO INC						
Well Driller (Print) Jim Burton			· · ·				
Oriller's Signature <u> </u>	ton						
Registration NoJ13752	Date 2 / 22 /01			-			



ENVIRONMENTAL SPECIALISTS

Chimney Rock Road, Bldg. 9W Bound Brook, NJ 08805

Telephone: (908) 722-4266 (800) 242-6648 Toll Free:

FAX: (732) 356-1009

http://www.summitdrilling.com email: info@summitdrilling.com

WELL LOG

WELL: MW35

DATE DRILLED: 01/29/2001 COORD #1: 29.14.586

SITE: Vacant Property, Off Long Branch Avenue, , Long Branch, NJ

OWNER: New Jersey Natural Gas, 1415 Wyckoff Road, , Wall, NJ 07719

COORD #2:

PERMIT #1: 29-44268

PERMIT #2:

COUNTY: XSTREET:

USE: Monitor

INNER CASING: PVC DIAMETER: 2"

OUTER CASING:

SCREEN TYPE 1: PVC SCREEN TYPE 2:

DRILLING METHOD: Auger SAMPLING METHOD:

LENGTH:

DIAMETER: LENGTH:

DIAMETER: 10' LENGTH 1: LENGTH 2:

HOLE DIA: 10", 10" TOTAL DEPTH: 15'

SET WELL: 15' GRAVEL PK SZ: Morie #2 GAL PER MIN: 1/2 STAT H20 LVL: 6'

SLOT SIZE: .010

CASING SEAL: Portland

DRILLER: Jim Burton SURFACE COMPLETION: M

DEVELOPMENT METHOD: pump DEVELOPMENT TIME: 1/2

OPEN HOLE:

SURFACE	ON SAMPLER			
FROM - TO	·			
0' - 2'	3-4-5-4			
2' - 4'	4-3-4-2			
4' - 6'	2-3-2-3			
6' - 8'	2-1-1-1			
8' - 10'	WOH			
10' - 12'	WOh			

1-3-3-4

REMARKS / SOILS IDENTIFICATION

0'- 4' Fill material.

12' - 14'

4'- 9' Light brown f/m sand some silt.

9'- 13' Light brown silty clay.

13'- 15' Black silty clay.

Ground Surface	00000000000000000000000000000000000000			************	00000
am dunda Dunha	************************************	×			
AT-Grade Protective Watertight Manhole	*************************************	Š			1
	-				
Locking Compression Cap	-‱	9			
2' x 2' Concrete Pad Gravel Mix Concrete					
				//,	- 1
PVC Casing		<i>,,,,,,,</i>	[//	// _/ ,	
2" Diameter				// <u>;</u>	- 1
			<i>///</i>	//,	1
				///.	- 1
				///0'- 5' Solid	ı
Neat Cement Grout				///	
(ASTM Type II, 5% Bentonite	Added)	<i>WIII</i>	<i>(//</i>	// <u>/</u> .	
0'- 3'				<i>//,</i>	
			<i>\(\lambda\)</i>	//,	1
			<i>\(\lambda\)</i>	///	- 1
		<i>VIIII</i> .		<i>///.</i>	
					i
					1
					- 1
		E			
					- 1
		- E			
PVC Screen		**************************************			1
" Diameter					
					1
		E		5'- 15' Scre	en

ravel Pack					
		****			- 1
'- 15'		2698666		8888	- 1
'- 15'				50606	- 1
		E			
Sore Hole					
Sore Hole					
Sore Hole					