Formerly Utilized Sites Remedial
Action Program (FUSRAP)

# Maywood Chemical Company Superfund Site

# ADMINISTRATIVE RECORD

## Document Number

## MISS- 022.

US Army Corps
of Engineers®

045046

Bechtel National, Inc.
Engineers — Constructors

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MAY 21 1987

U.S. Department of Energy
Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Attention: S. W. Ahrends, Director
Technical Services Division

Subject: Bechtel Job No. 14501, FUSRAP Project
DOE Contract No. DE-AC05-81OR20722
Publication Copies of the Sears
Characterization Report
Code: 7310/WBS: 138

Dear Mr. Ahrends:

The following is the response to your letter dated May 20, 1987, DOE No. 87-327 (our CCN 045032).

Enclosed are 25 final copies of the subject report. All comments from Bob Atkin and Steve Oldham have been incorporated.

If there are any questions, please contact Tom Pravecky at 576-4274.

Very truly yours,

for G. K. Hovey
J. R. Kannard
Program Manager - FUSRAP

Enclosures: As stated

cc: R.G. Atkin
J.D. Berger - ORAU (w/enclosure)
G.K. Hovey
B.A. Hughlett
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J.F. Wing

0966x

CONCURRENCE

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DOE/OR/20722-140

# CHARACTERIZATION REPORT FOR THE SEARS PROPERTY MAYWOOD, NEW JERSEY

MAY 1987

Prepared for

UNITED STATES DEPARTMENT OF ENERGY

OAK RIDGE OPERATIONS OFFICE

Under Contract No. DE-AC05-81OR20722

By

C.P. Leichtweis, J.A. Liberatore,

and T.M. Dravecky

Bechtel National, Inc.

Oak Ridge, Tennessee

Bechtel Job No. 14501

## ABSTRACT

This report summarizes the procedures and results of the radiological and limited chemical characterization of the property occupied by Sears, Roebuck and Co. in Maywood, New Jersey. The characterization was performed by Bechtel National, Inc. (BNI) for the Department of Energy (DOE). The radiological characterization was performed to identify the extent of contamination exceeding DOE radiological guidelines. The limited chemical characterization was performed to assist in planning personnel protection requirements during remedial action. Ultimately, the data generated during the radiological and chemical characterizations will be used in defining the complete scope of remedial action.

The radiological characterization confirmed that thorium-232 is the primary radioactive contaminant. Elevated levels of radium-226 and uranium-238 were also identified. Analysis of surface soil samples showed maximum concentrations of thorium-232, radium-226, and uranium-238 to be 70, 10, and less than 77 pCi/g, respectively.

The results of the subsurface soil sample analyses showed the maximum concentrations of thorium-232, radium-226, and uranium-238 to be 180, 37, and less than 232 pCi/g, respectively. These concentrations were measured under the Sears warehouse.

In sediment samples, the maximum concentration of thorium-232 was 93 pCi/g, and 9 pCi/g for radium-226. The maximum uranium-238 concentration was less than 57 pCi/g. However, guidelines for radionuclides in sediment have not yet been established; these guidelines are developed on a site-specific basis.

Gross alpha counting was used to determine the radioactivity of water samples. This method measures radioactivity without identifying specific radionuclides. The maximum concentration exhibited in these samples was 18.4 pCi/l.

Radon/thoron concentrations in air were measured in the Sears warehouse; two measuring techniques were used. Concentrations measured using the Lucas cell method were 0.2 and 2.2 pCi/l. Measurements taken with the continuous-monitoring Pylon detector showed concentrations at the interior borehole locations ranging from 0 to 0.9 pCi/l before drilling, 5 to 30 pCi/l immediately after drilling, and 50 to 300 pCi/l 72 h after drilling. The average exposure rate was 13 uR/h (including background).

Results of the limited chemical characterization indicate chemical contamination at the Sears property, and that it is commingled with the radioactive contamination. The BNI chemical analyses were performed on composited samples because the purpose of the investigation was to detect the presence of chemical contamination rather than to provide a detailed account of contaminants and concentrations.

Results of volatile organics analyses indicated the presence of chemical contamination; however, because the laboratory exceeded the allowable holding times for these analyses, only a general evaluation of the data was possible. Analyses for base neutral/acid extractables showed contamination at certain locations, where radioactive contamination also exists. Analyses of priority pollutant metals indicated a number of constituents with concentrations above published background levels and that are listed as hazardous by the New Jersey Department of Environmental Protection.

Results of the analyses for pesticides and polychlorinated biphenyls (PCBs) showed no detectable levels of these constituents; analyses for Environmental Protection Agency-specified hazardous waste characteristics (40 CFR 261) indicated trace levels of some of these contaminants.

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# ABBREVIATIONS

| | |
|---|---|
| cm | centimeter |
| $cm^2$ | square centimeter |
| cpm | counts per minute |
| dpm | disintegrations per minute |
| ft | foot |
| h | hour |
| in. | inch |
| l | liter |
| m | meter |
| $m^2$ | square meter |
| uR/h | microroentgens per hour |
| mi | mile |
| $mi^2$ | square mile |
| mrad/h | millirad per hour |
| mrem | millirem |
| mrem/yr | millirem per year |
| min | minute |
| ppb | parts per billion |
| ppm | parts per million |
| pCi/g | picocuries per gram |
| pCi/l | picocuries per liter |
| WL | working level |
| yd | yard |
| $yd^3$ | cubic yards |

# 1.0 INTRODUCTION AND SUMMARY

## 1.1 INTRODUCTION

The 1984 Energy and Water Appropriations Act directed the Department of Energy (DOE) to conduct a decontamination research and development project at four sites, including the site of the former Maywood Chemical Works [now owned by the Stepan Company (SC)] and its vicinity properties. The act was reauthorized in 1985. DOE now owns 11.7 acres of land east of the SC property and has constructed the Maywood Interim Storage Site (MISS) on that land. The Sears, Roebuck and Co. leases property (hereinafter referred to as the Sears property) adjacent to the SC property that is included as one of the Maywood vicinity properties. The work is being administered by the Formerly Utilized Sites Remedial Action Program (FUSRAP), one of two remedial action programs under the direction of the DOE Division of Facility and Site Decommissioning Projects.

The United States Government initiated FUSRAP in 1974 to identify, clean up, or otherwise control sites where low activity radioactive contamination (exceeding current guidelines) remains from the early years of the nation's atomic energy program or from commercial operations that resulted in conditions Congress has mandated DOE to remedy (Ref. 1).

FUSRAP is currently being managed by the DOE Oak Ridge Operations Office. As the Project Management Contractor for FUSRAP, Bechtel National, Inc. (BNI) is the DOE representative for planning, managing, and implementing FUSRAP.

## 1.2 PURPOSE AND OBJECTIVES

A radiological characterization of the Sears property has been conducted to determine the horizontal and vertical limits of contamination and ranges of radionuclide concentrations, and to estimate the volume of contamination at the property. The information obtained from this characterization work will be used in

planning any required remedial action. A limited chemical characterization was also performed; the objective was to provide the information necessary to develop appropriate employee health protection measures to be implemented during any remedial action at the Sears property.

## 1.3 SUMMARY

This report summarizes the procedures and results of the radiological and limited chemical characterization of Sears conducted from May through August 1986.

### 1.3.1 Radiological Summary

The radiological characterization confirmed that thorium-232 is the primary radioactive contaminant. Elevated levels of radium-226 and uranium-238 were also identified. The surface soil sample results showed maximum concentrations of thorium-232, radium-226, and uranium-238 to be 70, 10, and less than 77 pCi/g, respectively. Maximum concentrations in sediment samples for thorium-232, radium-226, and uranium-238 were 93, 9, and less than 57 pCi/g, respectively. However, no DOE guidelines for radionuclides in sediment have been developed yet for the Sears property.

The results of the subsurface soil sample analysis showed the maximum concentrations of thorium-232, radium-226, and uranium-238 to be 180, 37, and less than 232 pCi/g, respectively. These concentrations were measured under the Sears warehouse.

Gross alpha counting was used to determine the amount of radioactivity in the water samples. This method measures radioactivity without identifying specific radionuclides. The maximum concentration exhibited in these samples was 18.4 pCi/l.

Radon/thoron concentrations in air were measured in the Sears warehouse; two measuring techniques were used. Concentrations measured using the Lucas cell method were 0.2 and 2.2 pCi/l.

Measurements taken with the continuous-monitoring Pylon detector showed concentrations at the interior borehole locations ranging from 0 to 0.9 pCi/l before drilling, 5 to 30 pCi/l immediately after drilling, and 50 to 300 pCi/l 72 h after drilling. The average exposure rate was 13 uR/h (including background).

### 1.3.2 Chemical Summary

Results of the limited chemical characterization indicate chemical contamination at the Sears property, and that it is commingled with the radioactive contamination. Results of volatile organics analysis (VOA) indicate the presence of chemical contamination; however, because the laboratory exceeded the allowable holding times for these analyses, only a general evaluation of the data is possible. Analyses for base neutral/acid extractables (BNAE) showed contamination at certain locations. The results of the priority pollutant metals analyses indicated a number of constituents with concentrations above background levels and that are listed as hazardous by the New Jersey Department of Environmental Protection (NJDEP).

Results of the analyses for pesticides and PCBs showed no detectable levels of these constituents; analyses for Resource Conservation and Recovery Act (RCRA) hazardous waste characteristics indicated trace levels of some contaminants.

The Environmental Protection Agency (EPA) conducted chemical characterization in parallel with the DOE characterization effort.

# 2.0 SITE DESCRIPTION AND HISTORY

## 2.1 LOCATION AND DESCRIPTION

The Sears property lies in a highly developed area in the Borough of Maywood and the Township of Rochelle Park, in the County of Bergen, New Jersey. The population of the area averages approximately 10,000 people per $mi^2$. It is located approximately 12 mi north-northwest of downtown Manhattan (New York City) and 13 mi northeast of Newark, New Jersey (Figure 2-1). The Sears property is bounded by New Jersey Route 17 on the west; on the south by Gulf and Sunoco Service Stations as well as the Federal Express and Hunter Douglas properties; on the east by the DeSaussure property and Maywood Avenue; and on the north by the MISS and the Stepan Company. Figure 2-2 shows the locations of these properties.

Sears, Roebuck and Co. presently holds a long-term lease on the 31-acre, fenced lot used for commercial purposes.

## 2.2 HISTORY OF SITE AND VICINITY

From 1916 through 1956, the Maywood Chemical Works processed monazite sand (thorium ore) for use in the manufacture of industrial products such as mantles for gas lanterns. During this time, slurry containing process wastes from the thorium operations was pumped to diked areas west of the plant. The area west of the plant was generally swampy and, at that time, contained the origin of Lodi Brook. In 1932, New Jersey Route 17 was built through this disposal area. Some of these process wastes were removed from the Maywood Chemical Works for use as mulch and fill on nearby properties, thereby contaminating them with radioactive thorium (Ref. 2).

In 1954, the Atomic Energy Commission (AEC) issued License R-103 to the Maywood Chemical Works allowing it to continue to ship, receive, possess, and process radioactive materials under the authority of the Atomic Energy Act of 1954. The Maywood Chemical Works stopped

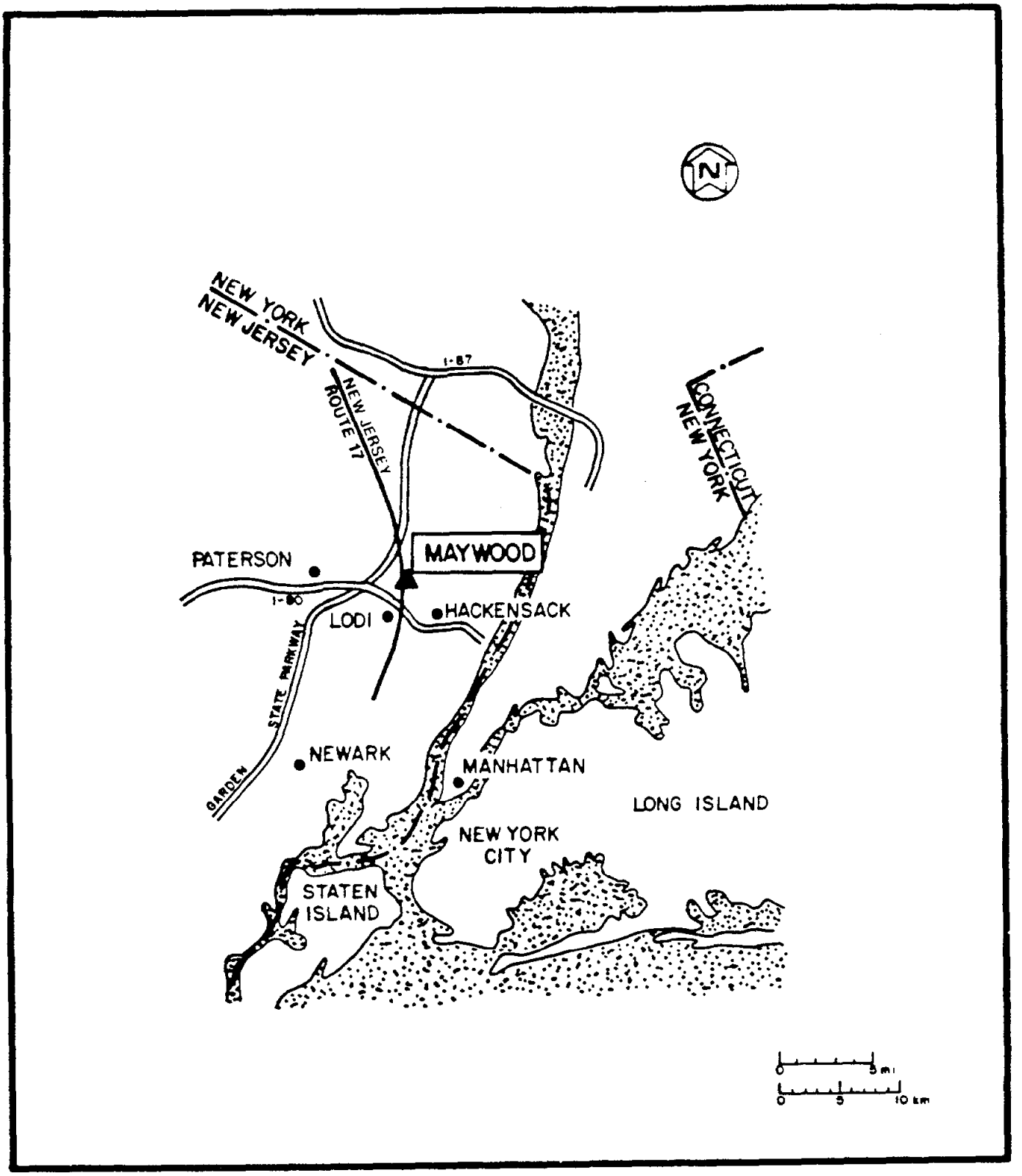


FIGURE 2-1 LOCATION OF MAYWOOD, NEW JERSEY

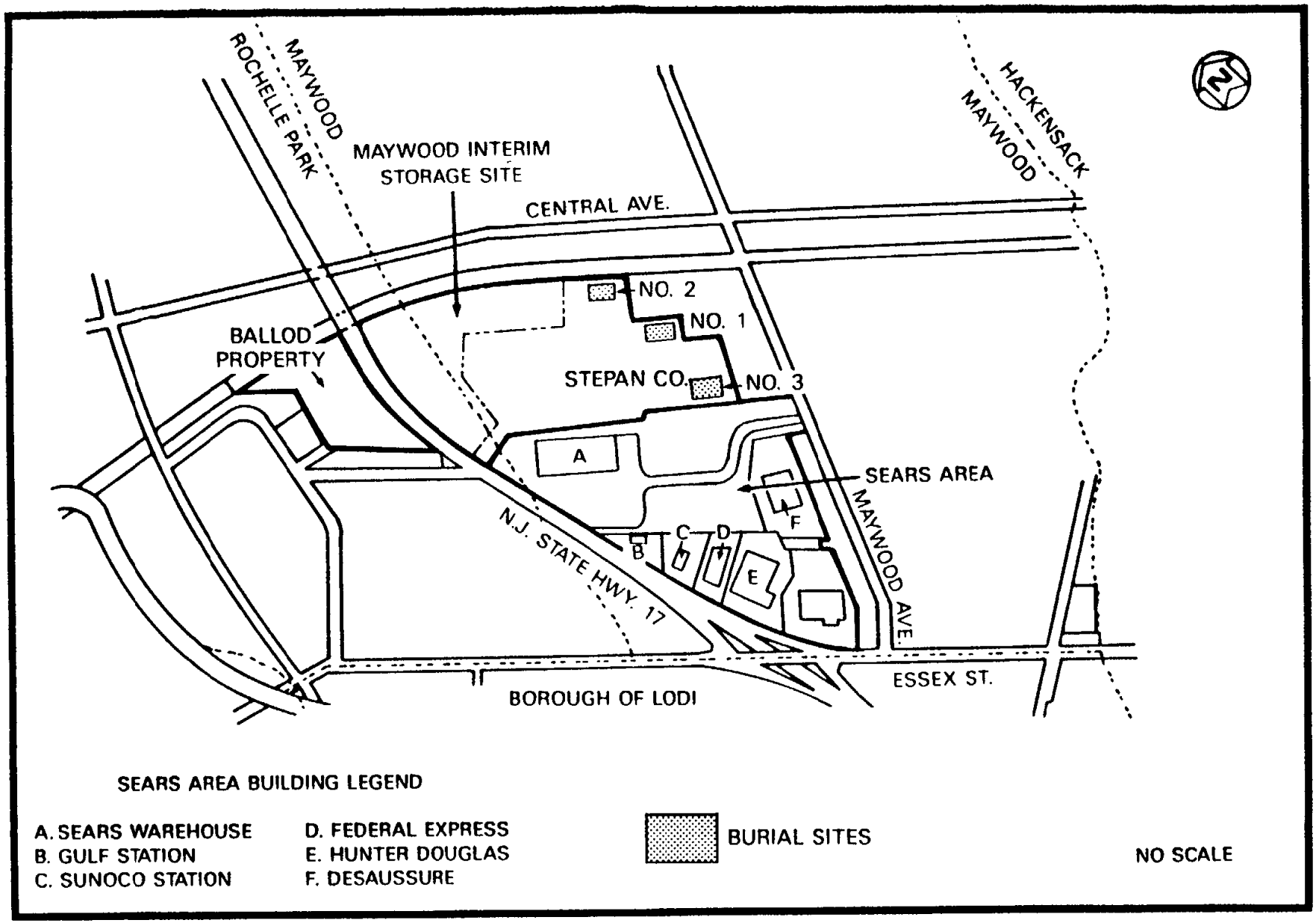


FIGURE 2-2 LOCATION OF SEARS AND ADJACENT PROPERTIES

processing thorium in 1956 after approximately 40 years of production. The Maywood Chemical Works was sold to the Stepan Company (SC) in 1959 (Ref. 2).

In 1961, the SC was issued an AEC radioactive materials license (STC-130). Based on AEC inspections and information regarding the property on the west side of New Jersey State Route 17 (the Ballod property), the SC agreed to take certain remedial actions. The cleanup began in 1963; in 1966, 8360 $yd^3$ of waste was removed from the area west of Route 17 and buried on SC property at Burial Site No. 1, which is now overlain by grass. In 1967, 2050 $yd^3$ of waste were removed from the same general area and buried on SC property at Burial Site No. 2, which is now a parking lot. In 1968, the SC transferred an additional 8600 $yd^3$ of waste from the south end of the Ballod property and buried it on SC property at Burial Site No. 3, an area where a warehouse was later built (Ref. 2).

At the request of the SC, a radiological survey of the south end of the Ballod property was conducted by the AEC in 1968. Based on the findings of that survey, clearance was granted for release of the property for unrestricted use. At the time of the survey, the AEC was not aware of contaminated waste materials still present in the northeast corner of the property (across Route 17). In 1968, this portion of the SC property was sold to a private citizen who later sold it to Ballod Associates (Ref. 2).

In 1980, the U.S. Nuclear Regulatory Commission (NRC) was notified of elevated radiation levels on the Ballod Associates' property (Ref. 3). This information prompted the NRC to conduct a survey in late 1980 and then direct that a comprehensive survey be conducted to assess the radiological condition of the property. The survey was performed in February 1981 by Oak Ridge Associated Universities (ORAU) with the assistance of a representative from the Region I office of the NRC (Ref. 4). In addition, an aerial radiological survey of the SC site, the Ballod Associates' property, and the surrounding area was conducted by EG&G Energy Measurements Group for

the NRC in January 1981 (Ref. 5). EG&G reported elevated levels of radiation on the Sears property. The NUS Corporation also conducted a radiological survey of the Sears and adjacent properties in 1983 (Ref. 6).

## 2.3 PREVIOUS RADIOLOGICAL SURVEYS

Two radiological surveys of the Sears property have been conducted.

January 1981 - The NRC directed that an aerial survey be conducted using the SC plant as its center. The survey was conducted by EG&G and covered a 4-$mi^2$ area. Anomalous concentrations of thorium-232 were identified in areas to the north and south of the SC, which included the Sears property (Ref. 5).

November 1983 - The NUS Corporation conducted a survey for the EPA in July and August of 1983 and concluded that there are several contaminated areas on the Sears property: at the north end of the property behind the warehouse and on either side of the access road (Ref. 6).

## 2.4 PRESENT SITE CONDITIONS

The Sears warehouse covers approximately 480,000 $ft^2$ and occupies approximately one-third of the site. A railroad spur runs through the MISS and ends at the northeast corner of the Sears warehouse. Concrete parking and storage areas are around the building, and grassy areas cover the rest of the property (Figure 2-3). A swampy area lies east of the Sears warehouse.

## 2.5 REMEDIAL ACTION GUIDELINES

Previous radiological characterizations indicated the presence of radioactive contamination on this property; principally thorium-232, with lesser amounts of radium-226 and uranium-238. Table 2-1 summarizes the DOE guidelines for residual contamination. The thorium-232 and radium-226 limits listed in Table 2-1 will be

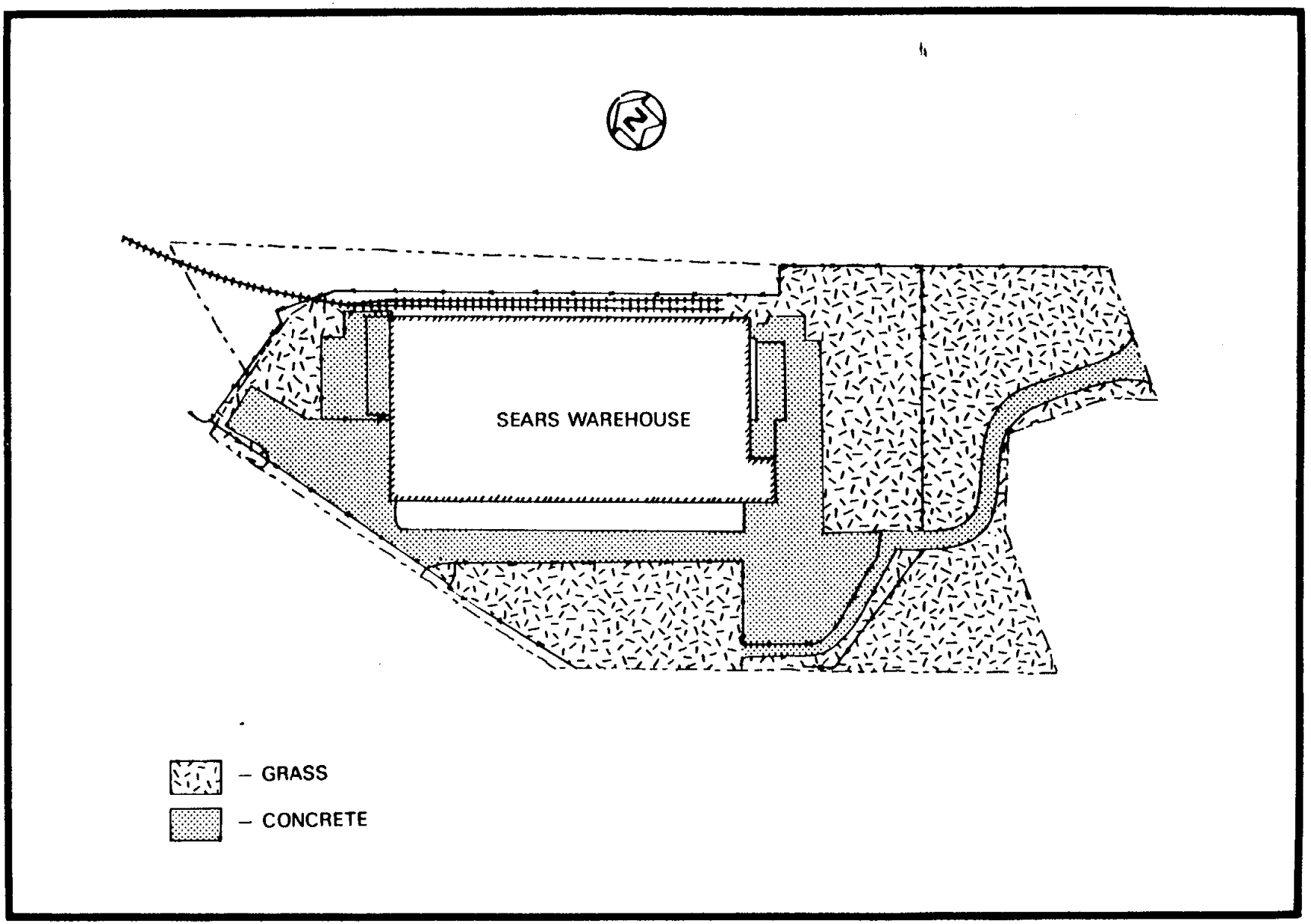


FIGURE 2-3 SEARS PROPERTY

TABLE 2-1
SUMMARY OF RESIDUAL CONTAMINATION GUIDELINES AT THE SEARS PROPERTY



BASIC DOSE LIMITS

The basic limit for the annual radiation dose received by an individual member of the general public is 100 mrem/yr.

SOIL (LAND) GUIDELINES (MAXIMUM LIMITS FOR UNRESTRICTED USE)

| Radionuclide | Soil Concentration (pCi/g) above background[a,b,c] |
|---|---|
| Radium-226<br>Radium-228<br>Thorium-230<br>Thorium-232 | 5 pCi/g, averaged over the first 15 cm of soil below the surface; 15 pCi/g when averaged over any 15-cm-thick soil layer below the surface layer. |
| Other radionuclides | Soil guidelines will be calculated on a site-specific basis using the DOE manual developed for this use. |

STRUCTURE GUIDELINES (MAXIMUM LIMITS FOR UNRESTRICTED USE)

Airborne Radon Decay Products

Generic guidelines for concentrations of airborne radon decay products shall apply to existing occupied or habitable structures on private property that are intended for unrestricted use; structures that will be demolished or buried are excluded. The applicable generic guideline (40 CFR 192) is: In any occupied or habitable building, the objective of remedial action shall be, and reasonable effort shall be made to achieve, an annual average (or equivalent) radon decay product concentration (including background) not to exceed 0.02 WL.[d] In any case, the radon decay product concentration (including background) shall not exceed 0.03 WL. Remedial actions are not required in order to comply with this guideline when there is reasonable assurance that residual radioactive materials are not the cause.

External Gamma Radiation

The average level of gamma radiation inside a building or habitable structure on a site to be released for unrestricted use shall not exceed the background level by more than 20 uR/h.

Indoor/Outdoor Structure Surface Contamination

| | Allowable Surface Residual Contamination[e] (dpm/100 $cm^2$) | | |
|---|---|---|---|
| Radionuclide[f] | Average[g,h] | Maximum[h,i] | Removable[h,j] |
| Transuranics, Ra-226, Ra-228, Th-230, Th-228 Pa-231, Ac-227, I-125, I-129 | 100 | 300 | 20 |
| Th-Natural, Th-232, Sr-90, Ra-223, Ra-224 U-232, I-126, I-131, I-133 | 1,000 | 3,000 | 200 |

TABLE 2-1

(continued)



Indoor/Outdoor Structure Surface Contamination (continued)

| Radionuclide[f] | Allowable Surface Residual Contamination[e] (dpm/100 $cm^2$) Average[g,h] | Maximum[h,I] | Removable[h,J] |
|---|---|---|---|
| U-Natural, U-235, U-238, and associated decay products | 5,000 $\alpha$ | 15,000 $\alpha$ | 1,000 $\alpha$ |
| Beta-gamma emitters (radionuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above | 5,000 $\beta-\gamma$ | 15,000 $\beta-\gamma$ | 1,000 $\beta-\gamma$ |

[a]These guidelines take into account ingrowth of radium-226 from thorium-230 and of radium-228 from thorium-232, and assume secular equilibrium. If either thorium-230 and radium-226 or thorium-232 and radium-228 are both present, not in secular equilibrium, the guidelines apply to the higher concentration. If other mixtures of radionuclides occur, the concentrations of individual radionuclides shall be reduced so that the dose for the mixtures will not exceed the basic dose limit.

[b]These guidelines represent unrestricted-use residual concentrations above background averaged across any 15-cm-thick layer to any depth and over any contiguous 100-$m^2$ surface area.

[c]Localized concentrations in excess of these limits are allowable provided that the average over a 100-$m^2$ area is not exceeded.

[d]A working level (WL) is any combination of short-lived radon decay products in 1 liter of air that will result in the ultimate emission of $1.3 \times 10^5$ MeV of potential alpha energy.

[e]As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.

[f]Where surface contamination by both alpha- and beta-gamma-emitting radionuclides exists, the limits established for alpha- and beta-gamma-emitting radionuclides should apply independently.

[g]Measurements of average contamination should not be averaged over more than 1 $m^2$. For objects of less surface area, the average shall be derived for each such object.

[h]The average and maximum radiation levels associated with surface contamination resulting from beta-gamma emitters should not exceed 0.2 mrad/h and 1.0 mrad/h, respectively, at 1 cm.

[I]The maximum contamination level applies to an area of not more than 100 $cm^2$.

[J]The amount of removable radioactive material per 100 $cm^2$ of surface area should be determined by wiping that area with dry filter or soft absorbent paper, applying moderate pressure, and measuring the amount of radioactive material on the wipe with an appropriate instrument of known efficiency. When removable contamination on objects of surface area less than 100 $cm^2$ is determined, the activity per unit area should be based on the actual area and the entire surface should be wiped. The numbers in this column are maximum amounts.

used to determine the extent of remedial action required at the Sears property. DOE implemented these guidelines on the basis of their compatibility with EPA criteria.

Although the concentrations for uranium-238 have higher values than thorium-232 concentrations (see Section 5.0), thorium-232 is considered the primary contaminant. As shown in Table 2-1, the guidelines for thorium-232 are 5 pCi/g for surface soil and 15 pCi/g for subsurface soil. Although no specific guidelines have been determined for uranium-238, using a typical (as opposed to a site-specific) value to calculate the guideline would result in a guideline of approximately 75 pCi/g. Because the measured concentrations of thorium-232 exceed its guidelines by a greater percentage than uranium-238, thorium-232 is considered the primary contaminant.

Chemical contamination will also be subject to remedial action. To the extent that it is commingled with radioactive contamination, no additional guidelines are required because all commingled waste will be removed. Guidelines to determine the extent of remedial action required for chemical contamination that is not commingled with radioactive contamination are the responsibility of the EPA and will be subject to review by the State of New Jersey.

# 3.0 HEALTH AND SAFETY PLAN

BNI is responsible for the health protection of personnel assigned to work at the site. As such, all subcontractors and their personnel were required to comply with the provisions of the applicable project instructions cited in this section or as directed by the on-site BNI representative.

## 3.1 SUBCONTRACTOR TRAINING

Before the start of work, all subcontractor personnel attended an orientation session presented by the BNI representative to explain the nature of the material to be encountered in the work and the required personnel monitoring and safety measures.

## 3.2 SAFETY REQUIREMENTS

Subcontractor personnel complied with the following BNI requirements.

- Bioassay - Subcontractor personnel submitted bioassay samples before or at the beginning of on-site activity, upon completion of the activity, and periodically during site activities as requested by BNI.
- Protective Clothing/Equipment - Subcontractor personnel wore the protective clothing/equipment specified in the subcontract or as directed by the BNI representative.
- Dosimetry - Subcontractor personnel were required to wear, and return daily, the dosimeters and monitors issued by BNI.
- Controlled Area Access/Egress - Subcontractor personnel and equipment entering areas wherein access and egress are controlled for radiation and/or chemical safety purposes were surveyed by the BNI representative for contamination before leaving those areas.
- Medical Surveillance - Upon written direction from BNI, subcontractor personnel, who worked in areas where hazardous chemicals may exist, were given a baseline and periodic health assessment defined in BNI's Medical Surveillance Program.

Radiation and/or chemical safety surveillance of all activities related to the scope of work was under the direct supervision of personnel representing BNI.

The health physics requirements for all activities involving radiation or radioactive material are defined in Project Instruction No. 20.01, the Project Radiation Protection Manual, and implementing procedures.

The industrial hygiene requirements for activities involving chemicals or chemically contaminated materials are defined in Project Instruction No. 26.00, the Environmental Hygiene Manual, and implementing procedures.

Copies of these project instructions were located on-site for subcontractors use.

Environmental hygiene monitoring was conducted continuously during drilling operations with an ENMET CGS-100 and Draeger pump using gas-specific detector tubes. The monitoring was conducted to develop appropriate employee health protection measures to be implemented during any remedial action at the Sears property.

There were no reported injuries or lost-time accidents during the characterization activities.

# 4.0 SURVEY PROCEDURES

A land survey of the Sears property was carried out in April 1986. The locations of rubble, surface obstructions, buried utility lines, culverts, drainage ditches, and other features were noted and mapped.

A civil surveyor established a 50-ft grid over the entire Sears property by staking the intersections of a series of perpendicular lines. The grid was a continuation of the one established at the MISS. This grid is shown in Figure 4-1. Establishing the grid allowed BNI to collect data in a systematic manner. This grid is tied to the New Jersey state grid system so that it can be reestablished during any remedial action. All data given in this report correspond to the coordinates of the grid.

## 4.1 FIELD CHARACTERIZATION

### 4.1.1 Measurements Taken and Methods Used

Surface characterization was conducted using a shielded gamma scintillation detector. Near-surface gamma radiation measurements were taken 12 in. from the ground at the intersections of perpendicular grid lines spaced at least 10 ft apart. Using the shielded detector ensured that any radiation detected by the probe was originating from the ground directly beneath the unit. By shielding against lateral gamma flux, or shine, from nearby areas of contamination, the shielded detector minimized potential sources of error in the measurements. Furthermore, this detector was calibrated at the Technical Measurements Center (TMC) in Grand Junction, Colorado, to provide a correlation of counts per minute (cpm) to picocuries per gram (pCi/g). This calibration showed that 11,000 cpm corresponds to the DOE surface soil guideline of 5 pCi/g for thorium-232. This correlation has been corroborated in other characterization work (Ref. 7).

Additional gamma radiation measurements were taken at the swampy area east of the Sears warehouse.

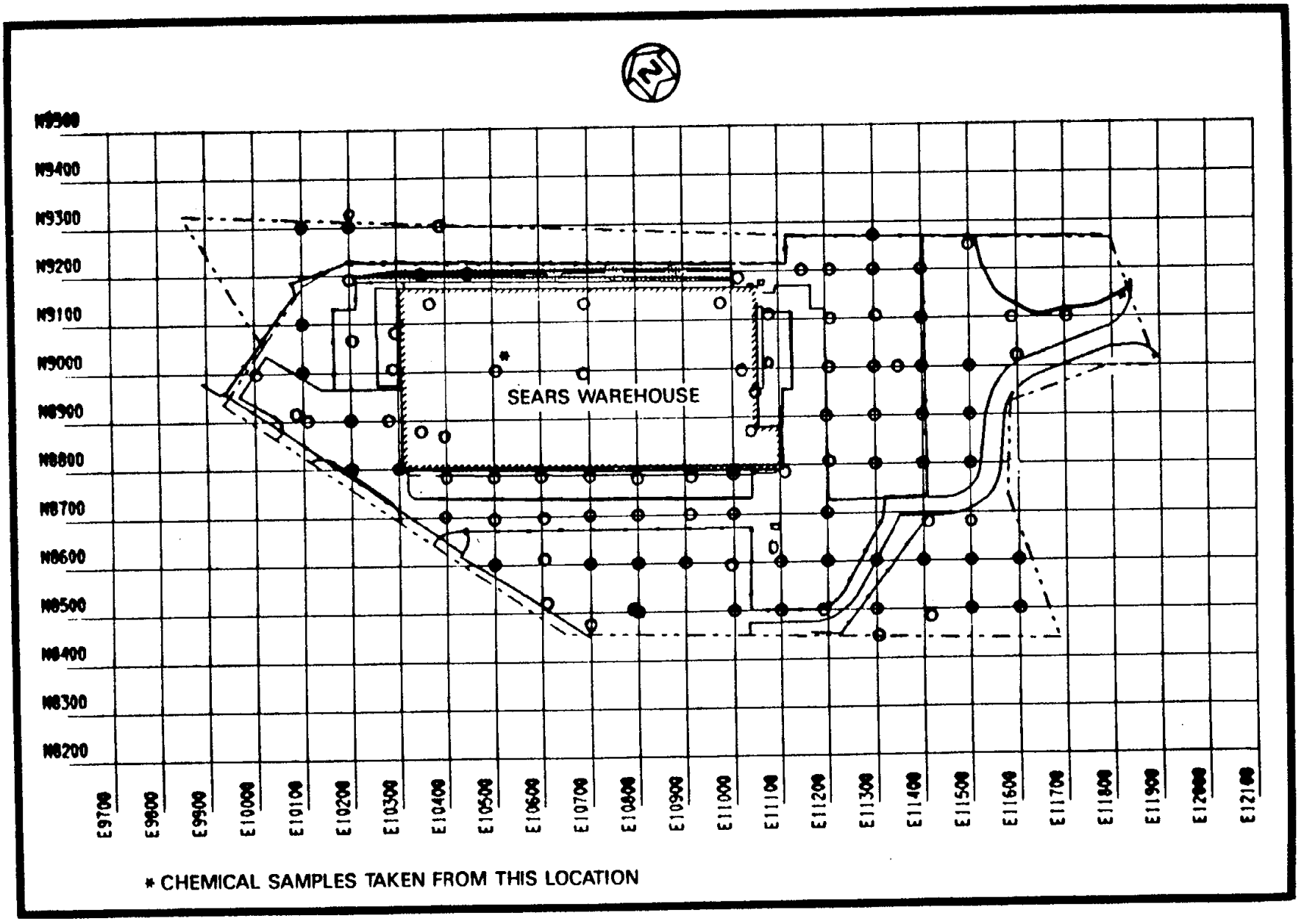


FIGURE 4-1 GRID AND BOREHOLE LOCATIONS AT THE SEARS PROPERTY

The subsurface investigation was conducted using downhole gamma logging. This technique is significantly more cost effective than soil sampling because it can be completed more quickly, and eliminates the need for laboratory analysis. A 2-in. by 2-in. sodium iodide gamma scintillation detector was used to perform the downhole logging. This instrument was also calibrated at TMC where it was determined that a count rate of approximately 40,000 cpm is approximately equal to the 15-pCi/g DOE subsurface guideline for thorium-232. This relationship has also been confirmed in previous characterization work (Ref. 7).

During the course of the subsurface investigation, 100 boreholes were drilled and gamma logged to determine the depth and concentrations of radioactive contamination. The borehole logs were reviewed to identify trends, regardless of whether concentrations exceeded the guidelines. Borehole locations (interior and exterior) are shown in Figure 4-1.

### 4.1.2 Sample Collection and Analysis

To better define the areas of contamination, locations where surface readings exceeded 11,000 cpm (or 5 pCi/g) were plotted on a drawing. Surface soil samples were collected from areas where gamma readings were at or near 11,000 cpm and required additional analyses, from areas with standing water, and at locations where the EPA had taken split-spoon samples for chemical analysis. Surface soil samples were taken at the 12 on-site locations shown in Figure 4-2 and analyzed for thorium-232, radium-226, and uranium-238. Each sample was dried, pulverized, and counted for 10 min using an intrinsic germanium detector housed in a lead counting cave lined with cadmium and copper. The pulse height distribution was sorted using a computer-based, multichannel analyzer. Radionuclide concentrations were determined by comparing the gamma spectrum of each sample with the spectrum of a certified counting standard for that radionuclide.

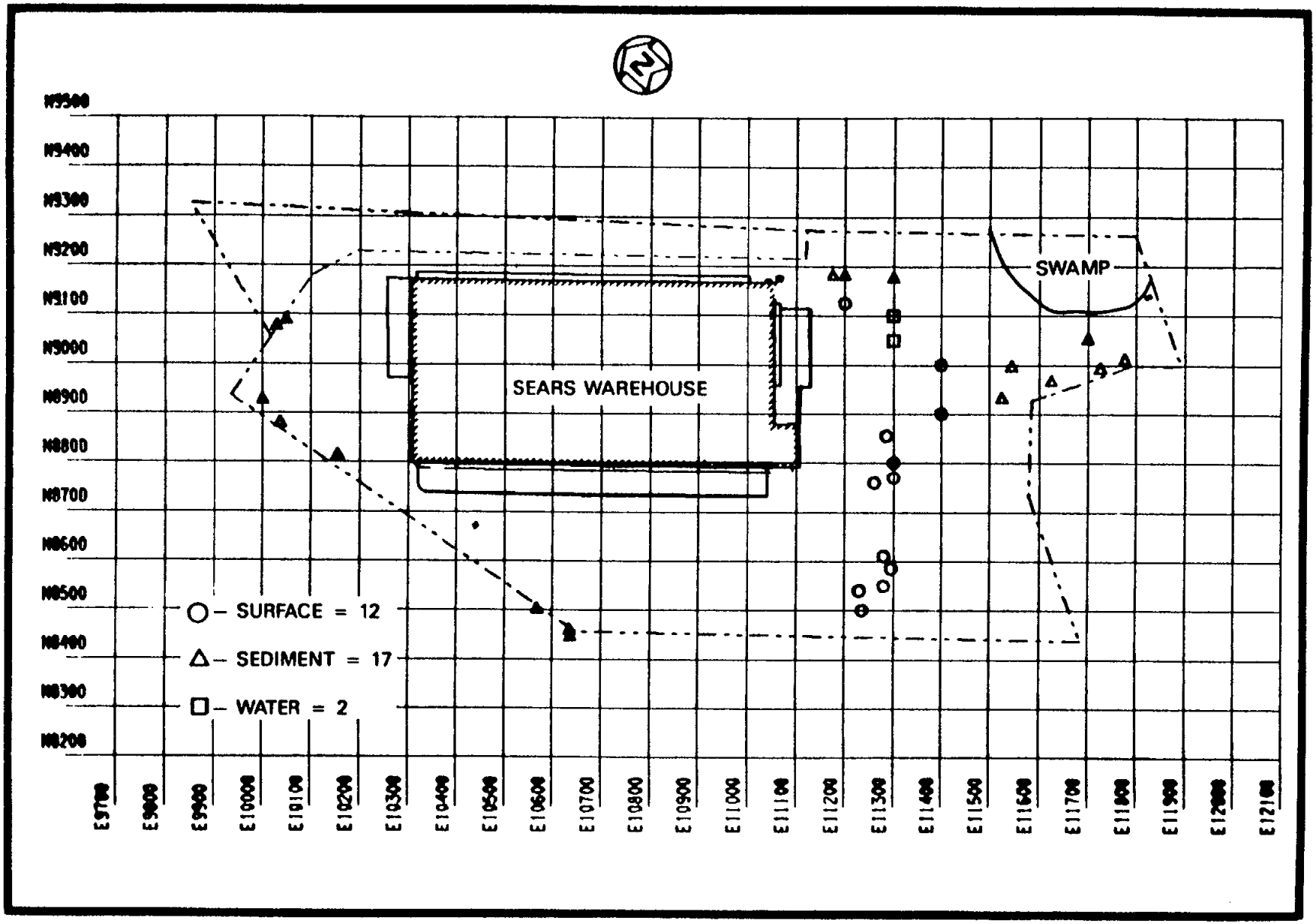


FIGURE 4-2 SURFACE SOIL, SEDIMENT, AND WATER SAMPLING LOCATIONS AT THE SEARS PROPERTY

Because of the overgrown vegetation in the drainage ditches and a large swampy (standing water) area due east of the Sears warehouse, characterization of these areas consisted of sediment sampling and gamma measurements through the water. Sediment samples were taken from 17 locations and water samples were taken from two locations (Figure 4-2). Each sediment sample was placed in a 0.5-liter plastic container, capped, and labeled. The sediment samples were analyzed for uranium-238, radium-226, and thorium-232 using the counting procedure described for surface soil samples.

Gross alpha counting was used to determine the amount of radioactivity in the water samples. Samples used for gross alpha counting typically contain 1 liter of water that has been filtered through a 9-cm filter paper. The sample is then acidified with nitric acid, heated, and weighed to determine the residue load. The gross alpha activity is then counted in an alpha counting instrument for 50 min. If the result exceeds 30 pCi/l, the sample is processed further to determine the uranium, radium, and thorium activity.

Using the split-spoon sampling method, subsurface soil samples were collected at six locations to compare laboratory soil sample results to downhole gamma radiation measurements. Figure 4-3 shows the subsurface sampling locations (one of these sampling locations is inside the warehouse). Because drilling could not be carried out in the swampy area, radiological boreholes were drilled around the perimeter of the standing water to obtain data.

## 4.2 BUILDING CHARACTERIZATION

### 4.2.1 Measurements Taken and Methods Used

Interior radon/thoron measurements were taken using two different methods. First, radon/thoron measurements were taken in the building before drilling using the Lucas cell technique. With this method, samples were obtained by pumping air into a Lucas cell at a rate of approximately 2 l/min. The samples were transferred directly into scintillation cells with an interior coating of zinc

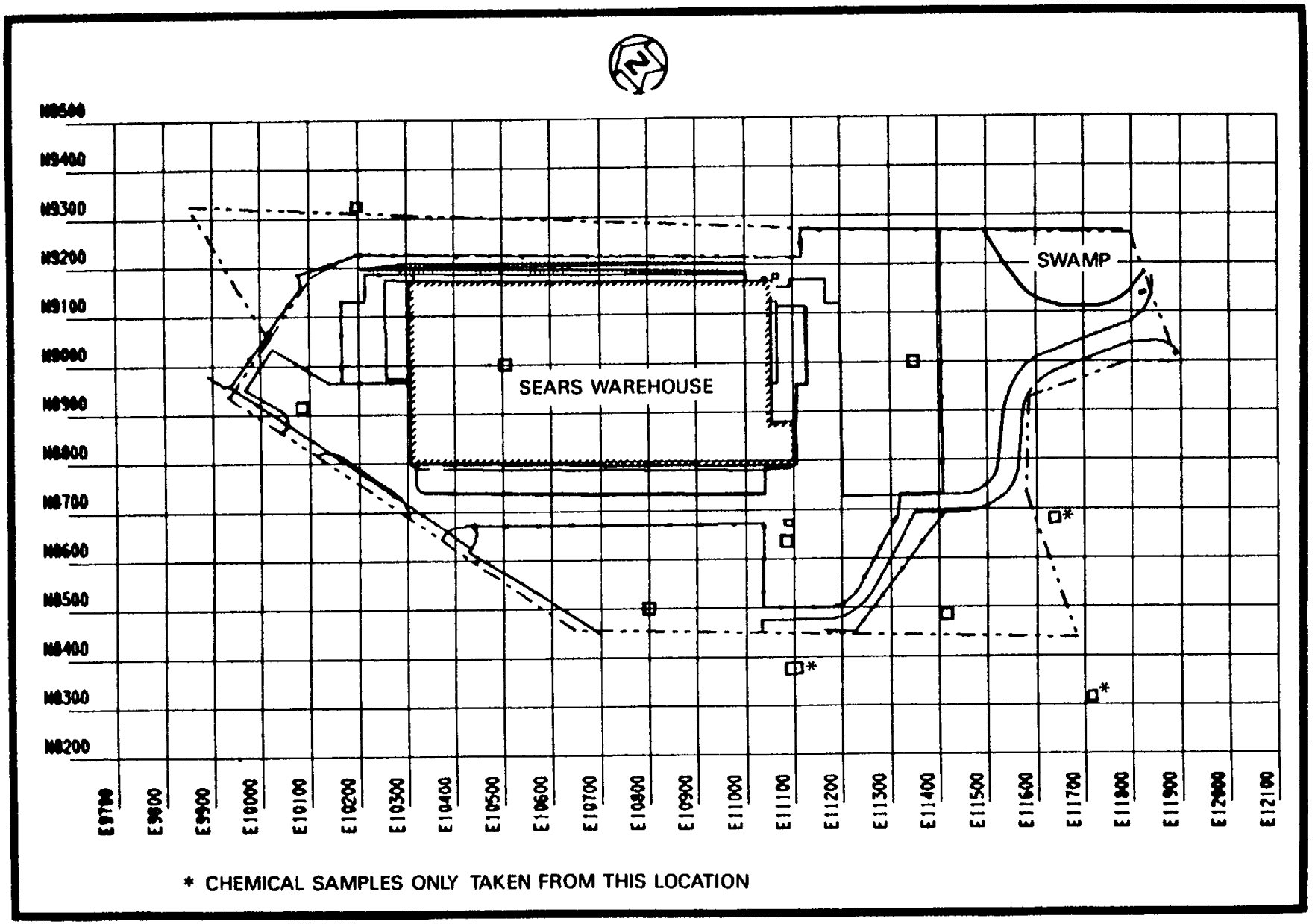


FIGURE 4-3 SUBSURFACE RADIOLOGICAL AND CHEMICAL SAMPLING LOCATIONS AT THE SEARS PROPERTY

sulfide and end windows for detecting the scintillations. Analysis of the sample was simplified by allowing the radon decay products to reach equilibrium with their parent radioisotopes. The end window of the scintillation cell was placed in contact with a photomultiplier tube, and the scintillations were counted using standard nuclear counting instrumentation.

Radon/thoron measurements were also obtained using a continuous monitoring radon (Pylon) detector. With this method, radon measurements are taken before, immediately after, and 72 hours after drilling. The predrilling measurement establishes a base level, the measurement immediately after drilling is used to determine the occupational exposure level, and the post-drilling measurement (or transient equilibrium measurement) indicates the amount of radon/thoron that was released by the drilling. Measurements were taken at the interior locations shown in Figure 4-1.

Sears presently employs approximately 225 office and dock workers who spend the majority of their 40-h work week inside the building. Because it was suspected that contamination exists beneath the building, nine exposure measurements were taken. The measurement were taken with a pressurized ionization chamber (PIC) 1 m above the floor. The measurements were taken at locations determined to be representative of the entire building interior.

### 4.2.2 Sample Collection and Analysis

Nine boreholes were drilled inside the Sears warehouse and gamma logged; Figure 4-1 shows the locations. Seven subsurface soil samples were taken from one location under the Sears warehouse, and analyzed for the same radionuclides as the surface soil samples. This is the same location from which the interior chemical sample identified in Figures 4-1 and 4-2 was taken.

## 4.3 CHEMICAL CHARACTERIZATION

Limited chemical characterization of the Sears property was performed to determine whether hazardous waste is commingled with the radioactive waste, and to provide the information needed to design an employee health protection program appropriate to the nature of the materials to be encountered during any future remedial action activities. To identify hazardous chemicals on-site, soil samples were collected from 10 boreholes at the same locations as the subsurface soil samples taken for radiological analyses. Samples were acquired by continuous split-spoon methodology, i.e., driving a split-spoon sampler in advance of the auger. The spoon had a 1.4-in. inside diameter and was 2 ft long. Before each sample was taken, spoons were decontaminated pursuant to EPA methods using methylene chloride, acetone, and steam washing. Because the purpose of this investigation was to perform a limited chemical characterization, samples were composited to a maximum drill hole depth of 16 ft. Volatile organic samples were placed on ice in the field to minimize volatilization of the samples during compositing. Ten samples were taken for chemical analyses and include three samples taken just outside the Sears property to provide a more complete profile of the area. Sampling locations are shown in Figure 4-3.

Samples were analyzed for volatile organics, acid extractables, base/neutral extractables, priority pollutant metals, pesticides, PCBs, mercury, and EPA-specified hazardous waste characteristics [i.e., extraction procedure (EP) toxicity, corrosivity, reactivity, and ignitability). These parameters were selected to meet the requirements in RCRA (40 CFR 261, Appendix VIII). This limited chemical characterization was planned and implemented in accordance with the methods described by the EPA in "Test Methods for Evaluating Solid Waste" (SW-846, 2nd ed., 1982). The sampling plan was coordinated with the EPA Region II.

Quality assurance and quality control procedures were used during soil sampling and analysis to verify the precision and accuracy of the analytical results from the chemical characterization.

Method/reagent blank samples were analyzed to identify interferences associated with chemical reagents and analytical methods at the laboratory. Potential sources of laboratory interferences include contaminants in solvents, reagents, glassware, and other sample processing hardware that could lead to discrete artifacts (false positive results) and/or elevated chemical results.

For water samples, a method/reagent blank is a volume of deionized, distilled laboratory water; for soil or sediment samples, it consists of a purified solid matrix (kaolin) that is carried through the entire analytical process. Acceptable limits for common laboratory solvents are established by the laboratory. A method/reagent blank analysis for VOA must not contain more than five times the detection limit for common laboratory solvents (i.e., methylene chloride, acetone, and toluene).

For semi-volatile analysis, the method/reagent blank must not contain more than five times the detection limit for any phthalate.

Duplicate sample analyses are performed to demonstrate the reproducibility of the analytical method and to determine the degree of analytical precision obtained. Spiked sample analyses are performed to verify that acceptable recovery was attained and to identify possible matrix interferences in the sample.

# 5.0 SURVEY RESULTS

## 5.1 FIELD RADIOLOGICAL CHARACTERIZATION

Gamma levels measured on the property ranged from background (5,000 cpm) to 244,000 cpm. These levels indicate a 940,000-$ft^2$ area of surface contamination (Figure 5-1). The near-surface gamma measurements were used to select bias soil sample locations to better define the area of contamination.

The biased surface soil samples were collected from areas where gamma readings were marginal and required additional analyses. Surface soil samples were taken at 12 on-site locations (shown in Figure 4-2) and analyzed for thorium-232, radium-226, and uranium-238. Analytical results are presented in Table 5-1. Use of the "less than" ( < ) notation indicates that the radionuclide was not present in measurable concentrations. The value following the less than notation is the minimum detectable amount (MDA). The MDA is based on various factors including the volume, size, and weight of the sample; the type of detector used; the counting time, and the background count rate. In addition, since radioactive decay is a random process, a correlation between the rate of disintegration and a given radionuclide concentration cannot be precisely established. For this reason, the exact concentration of the radionuclide cannot be determined. As such, each value that is equal to or greater than the MDA has an associated uncertainty term ($\pm$), which represents the maximum amount by which the actual value can be expected to differ from the value given in the table. (The discussion of the "less than" and "uncertainty term" also applies to Tables 5-2 and 5-5.)

Analysis of the samples indicated concentrations of thorium-232 and radium-226 in excess of DOE guidelines, with maximum concentrations of 70 and 10 pCi/g, respectively. The maximum uranium-238 concentration was less than 77 pCi/g.

Seventeen sediment samples were taken from areas with standing water (Figure 4-2). The samples were analyzed for the same parameters as

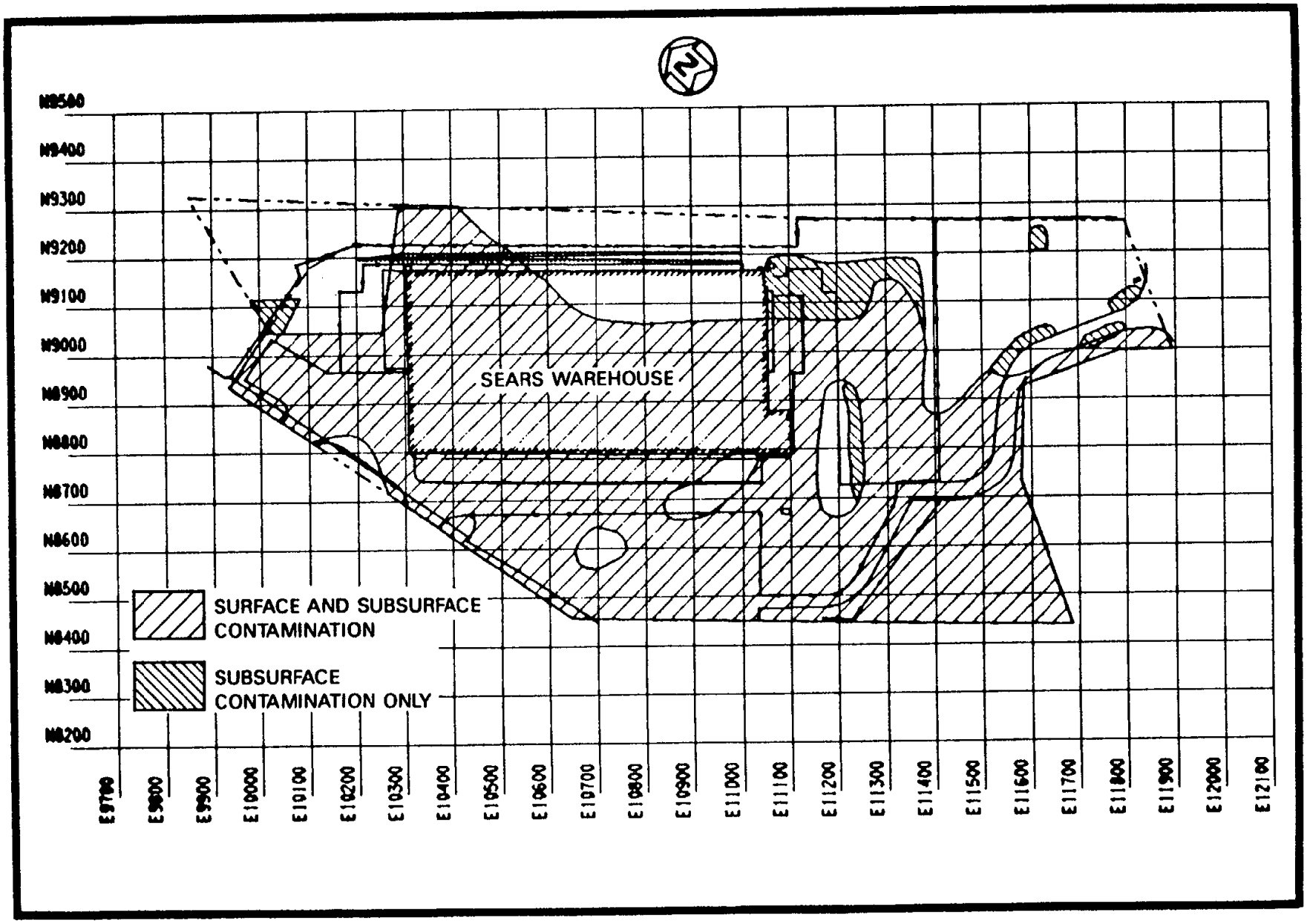


FIGURE 5-1 AREAS OF CONTAMINATION AT THE SEARS PROPERTY

the surface and subsurface samples. The analysis results showed the maximum concentration of thorium-232 to be 93 pCi/g and 9 pCi/g for radium-226. The maximum uranium-238 concentration was less than 57 pCi/g. Results of this analysis are given in Table 5-2. Since there are no DOE guidelines for sediment, the guidelines for soil may be used for comparison.

Gross alpha counting was used to determine the level of radioactivity in the water samples (Figure 4-2). This method measures the amount of radioactivity without identifying specific radionuclides. Table 5-3 gives the results of this analysis. The most restrictive concentration measured in these samples was 18.4 pCi/l. For the radionuclides of concern (thorium-232, radium-226, and uranium-238), the most restrictive DOE guideline is 50 pCi/l for thorium-232.

Using the split-spoon sampling method, subsurface soil samples were collected at six locations (Figure 4-3) to compare laboratory soil sample results to downhole gamma radiation measurements. Gamma logging data are presented in Table 5-4. Table 5-5 presents the results of the laboratory analysis of the subsurface soil samples. The comparison of the data from these tables provided another check on the validity of the correlation between 40,000 cpm and the 15-pCi/g DOE guideline for subsurface soil.

The vertical and horizontal limits of contamination are being evaluated to determine the volume of contaminated material that will require remedial action. To develop this estimate, BNI will consider the location of the contamination, construction techniques, and safety procedures in its evaluation.

The drilling data reflect the site geologic history and subsequent changes made by man. Drill data throughout the site show either a sequence of 2 to 5 ft of fill over indigenous soil and sandstone, or fill over 1 to 3 ft of black silt and sandstone.

The Sears property is underlain by the sandstone of the deltaic Brunswick Formation. Before site development, this bedrock was covered with two types of topsoil. The slightly elevated areas were covered with 3 to 6 ft of brown residual soil, while approximately 60 percent of the site was covered with 1 to 6 ft of black, silty, organic soil characteristic of a wetlands environment. When the area was prepared for construction, most of this organic silt was drained and covered with fill to bring the warehouse and parking lot areas to a flat grade.

Aerial photographs and historical tax maps show that two creeks, which formerly drained the site, converged just south of where Route 17 is now located. The creek on the western portion of the property drained wetlands present in the northwestern area of the site before construction. During construction, these wetlands were covered with fill, and the surface water from the far western area now flows southward in a man-made channel along the site's western border. Surface water from behind the warehouse now flows through the railroad ballast behind the warehouse to join the eastern drainage system. Currently, a buried conduit in the western channel also helps drain surface water from the asphalt parking lot.

The headwaters of the eastern creek are still evident in the surviving wetlands east of the warehouse where the water table meets the land surface. The northern portion of the eastern drainage has been improved with man-made trenches to help control the shallow groundwater level. The main drainage of this swampy area passes under the Sears access road and joins another trench draining the southeastern area before leaving the property along the Federal Express-Sunoco property line. This information will help in evaluating migration pathways and identifying locations on the property where contaminated sediment might accumulate.

Geologic borehole logs show thick accumulations of organic-rich silt and the lower elevation sandstone contacts which coincide with the presumed channel locations. One exception to this is known: tax

maps show the western creek approximately 100 ft farther west than the drilling data indicate. Evidence that the channel was actually located farther east, toward N8500, E11000, is the linear alignment of suspected and known barrels buried in this area where the channel served as a burial pit.

Two thick layers of industrial white tailings were found. The thickest was 4.5 ft at the Sears-DeSaussure property line (N8800, E11600). Another layer was found at a depth of 2 ft at N8877, E10347 beneath the Sears warehouse. Numerous other holes showed small amounts of the white tailings mixed with fill and indigenous surface materials. Other contaminated holes showed no visual evidence of the tailings, but small quantities may have been masked by the darker sediments.

During drilling operations, barrels were encountered at N8505, E10790 and similar barrels were believed to have been the source of organic vapors from the borehole at N8700, E10700. Drilling was stopped at N8700, E10700 immediately after fumes were detected; consequently, no metal was found in the auger spoils (Refs. 8 and 9).

The location of barrels encountered during drilling and by the metal detector suggests that barrels were dumped in the former creek channels. Data obtained along N8500 show thicker stream sediments and natural material occurring at greater depths, suggesting the location of the former eastern stream channel. Using a metal detector, numerous metallic items buried in the former western creek channel were found (near N8600, E10800); however, no additional drums were encountered while drilling.

The transport of contamination could have occurred when bulldozers graded the site to prepare for development. This would account for the stratification of clean and contaminated fill, and the surface contamination above natural, undisturbed materials.

## 5.2 BUILDING RADIOLOGICAL CHARACTERIZATION

As mentioned earlier, the Sears warehouse is the dominant feature of the site. To identify the presence of radioactivity under the building, nine radiological boreholes and one chemical borehole were drilled inside the building (Figure 4-1). The data from the downhole gamma measurements are given in Table 5-4 and are consistent with the analysis results from the subsurface soil samples. Table 5-5 gives the results of the subsurface soil sample analysis, and shows the maximum concentrations of thorium-232, radium-226, and uranium-238 to be 180, 37, and less than 232 pCi/g, respectively.

Radon/thoron concentrations obtained using the Lucas cell method were 0.2 and 2.2 pCi/l. Measurements taken with the continuous-monitoring Pylon detector showed concentrations at the interior borehole locations ranging from 0 to 0.9 pCi/l before drilling, 5 to 30 pCi/l immediately after drilling, and 50 to 300 pCi/l 72 h after drilling. These measurements are given in Table 5-6.

The average exposure rate was 13 uR/h (including background). The exposures ranged from 11 to 15 uR/h. These measurements are given in Table 5-7.

## 5.3 CHEMICAL CHARACTERIZATION

### 5.3.1 Volatile Organics Analysis

Only a general evaluation of these data can be presented because the holding time protocols for all of the VOA were exceeded by the laboratory. Analyses were performed on 10 soil samples for volatile organics. Two volatile organics, methylene chloride and acetone, were identified at levels above the laboratory's specified detection limit in two samples. Including levels below the laboratory's detection limit, methylene chloride and acetone were detected in half of the samples analyzed for volatile organics.

Because these chemicals were used during field decontamination procedures and are common chemical contaminants in laboratory operations, these results are probably artifacts (i.e., false positive results) inherent in the sampling and analytical procedures.

The mass spectral (MS) data for two soil samples indicated the presence of two other volatile organics, methyl ethyl ketone (MEK) and ethyl/benzene, that met the analytical identification criteria, but the results were below the laboratory's specified detection limit. Analysis indicated that MEK was present in the blank of one of these samples. According to USEPA Contractor Laboratory Program (CLP) Statement of Work for Organic Analyses (May 1984), only analytical results greater than or equal to the laboratory's specified detection limit are required to be reported. Because the allowable holding times were exceeded, the magnitude of these VOA results would probably be greater had the CLP protocols been followed.

On two occasions during drilling operations in the vicinity of boreholes at N8485, E11415 and N8635, E11085, subsurface containers were apparently penetrated. Sludge samples from these containers were collected and analyzed at each location. The following volatile organic concentrations were identified in the sludge material taken from the borehole at N8485, E11415: benzene, 120 ppm; toluene, 240 ppm; and xylene, 1200 ppm. The only volatile organic identified at N8635, E11085 was xylene at 210 ppb. These chemicals are constituents of petroleum-based products (i.e., gasoline). In addition, benzene and toluene are listed under the New Jersey Administrative Code (NJAC) 7:26 - 8:16 as hazardous constituents (Refs. 8 and 9).

In summary, the VOA results from unbiased characterization sampling activities and the analyses results from the sludge material taken from two boreholes indicate the presence of volatile organic chemical contamination at the Sears property.

### 5.3.2 Base Neutral/Acid Extractable Organic Analysis

There were 10 soil samples analyzed for BNAE (semi-volatile) organics (Figure 4-3). In four soil samples, semi-volatiles were identified but were below the laboratory's specified detection limit. As mentioned previously, these results are not required to be reported, but they do indicate the presence of semi-volatiles that met MS identification criteria.

The majority of the semi-volatiles were found at borehole N8690, E11650, which is adjacent to the DeSaussure building. Analyses revealed the following results: phenol, 190 ppb; 2-chlorophenol, 170 ppb; 1,4-dichlorobenzene, 74 ppb; N-nitroso-di-n-propylamine, 92 ppb; 1,2,4-trichlorobenzene, 80 ppb; 4-chloro-3-methylphenol, 210 ppb; acenaphthene, 97 ppb; 4-nitrophenol, 420 ppb; 2,4-dinitrotoluene, 89 ppb; pentachlorophenol, 260 ppb; pyrene, 90 ppb; and bis (2-ethylhexyl) phthalate, 27 ppb. With the exception of acenaphthene and pyrene, all of the semi-volatiles identified in this borehole are listed under the NJAC as hazardous constituents. Most of these semi-volatiles are chlorinated hydrocarbons, specifically chlorinated phenols, benzenes, and toluenes.

At borehole N8303, E11705, adjacent to the Hunter Douglas building, the following semi-volatiles were identified: naphthalene, 80 ppb; 2-methylnaphthalene, 88 ppb; and bis (2-ethylhexyl) phthalate. Naphthalene and bis (2-ethylhexyl) phthalate are listed as hazardous constituents under the NJAC.

These two boreholes are near each other as well as being in the vicinity of the first borehole (N8485, E11415) in which a subsurface container filled with sludge material and containing volatile organic constituents was apparently penetrated. As a result, the presence of semi-volatiles at these locations appear to confirm the presence of chemical contamination in this area.

Benzoic acid was identified at borehole N9305, E10200 north of the Sears warehouse at a concentration of 8 ppm. This is the highest semi-volatile concentration identified during this chemical survey.

Bis (2-ethylhexyl) phthalate, a component of most plastic materials used in laboratory operations and a common laboratory contaminant, was identified in three soil samples.

### 5.3.3 Pesticides and PCBs

There were 10 soil samples analyzed for priority pollutant pesticides and PCBs (Figure 4-3). One soil sample, at borehole N8915, E10085 west of the Sears building, contained the pesticides D-BHC (hexachlorocyclohexane) and 4,4-DDD (dichlorodiphenyldichloroethane) at 47 ppb and 45 ppb, respectively. They are both chlorinated pesticides and are present at concentrations commonly found in soil in agricultural areas.

There were no PCBs detected in any of the soil samples analyzed.

### 5.3.4 Priority Pollutant Metals Analysis

There were 10 soil samples analyzed for priority pollutant metals (Figure 4-3). Table 5-8 summarizes these results, and compares the range of concentrations (ppm) found in soil samples to published background soil concentration ranges for each priority pollutant metal. The number of soil sample results that exceeded the published background range is also noted. The maximum priority pollutant metal concentration observed was compared with the EP toxicity result for that metal.

The following priority pollutant metals exceeded the range for published background soil concentrations and are also listed by the NJDEP as hazardous constituents under the NJAC: cadmium, copper, lead, thallium, zinc, and antimony. Cadmium results exceeded the range for background soils in four samples. Although the antimony

results exceeded the range for background soils in only one sample, five other sample results were in the upper portion of the background range. Almost half of the results exceeding the background range for specific metals were found in borehole N9305, E10200, which is north of the Sears building and closest to the Stepan Company. Soil sample results from borehole N8690, E11650, adjacent to the DeSaussure building, exceeded the background range for a specific metal on two occasions. The priority pollutant metal results at borehole N8690, E11650 (adjacent to the DeSaussure building) are consistent with the BNAE results for that location, which indicated the presence of semi-volatile chemical contamination in the area.

A comparison of the maximum priority pollutant metal results with their respective EP toxicity results shows all such results to be well below the criteria level (40 CFR 261.24) that would classify the material as a hazardous waste. This may be an indication that these metals are not readily leachable from the soil or are not present in concentrations high enough to produce leachate that exceeds the EPA criteria.

The maximum metal concentration (lead at 4200 ppm) occurred at borehole location N9305, E10200. This result is approximately 22 times the background range for lead; however, the EP toxicity result was 0.2 ppm, well below the criteria level of 5.0 ppm.

### 5.3.5 Hazardous Waste Characteristic Analysis

There were 10 soil samples analyzed for EP toxic pesticides and metals (Figure 4-3). In addition, these samples were analyzed for the hazardous waste characteristics of corrosivity, reactivity, and ignitability.

There were no detectable quantities of pesticides identified in the EP toxicity analyses. There were trace levels of metals, namely

arsenic, barium, and lead that were well below the maximum concentration specified under 40 CFR 261.24. In addition, no samples exhibited the hazardous waste characteristics of corrosivity, reactivity, or ignitability.

Complete results of the chemical characterization are on file with DOE (Ref. 10).

TABLE 5-1

SURFACE SOIL SAMPLING RESULTS

AT SEARS

| Grid Coordinates E,W | Grid Coordinates N,S | Concentrations (pCi/g +/- 2 sigma)[a] Uranium-238 | Radium-226 | Thorium-232 |
|---|---|---|---|---|
| E11200 | N09125 | <46.0 | 3.0 ± 1.0 | 32.0 ± 6.0 |
| E11237 | N08500 | <23.0 | 6.0 ± 1.0 | 54.0 ±10.0 |
| E11237 | N08525 | <33.0 | 9.0 ± 1.0 | 63.0 ± 6.0 |
| E11275 | N08562 | <28.0 | 7.0 ± 1.0 | 45.0 ± 6.0 |
| E11275 | N08575 | <33.0 | 6.0 ± 1.0 | 60.0 ± 7.0 |
| E11280 | N08765 | <62.0 | 8.0 ± 1.0 | 57.0 ± 4.0 |
| E11287 | N08600 | <33.0 | 6.0 ± 1.0 | 50.0 ± 8.0 |
| E11287 | N08862 | <9.0 | <3.0 | 25.0 ± 3.0 |
| E11295 | N08762 | <77.0 | 10.0 ± 1.0 | 49.0 ±14.0 |
| E11300 | N08800 | <48.0 | 10.0 ± 1.0 | 70.0 ± 8.0 |
| E11400 | N08900 | <24.0 | 1.0 ± 1.0 | 2.0 ± 1.0 |
| E11400 | N09000 | <26.0 | 1.0 ± 1.0 | 5.0 ± 1.0 |

[a]The low level of detectability was proportional to the quantity of the sample, the heterogeneity of the sample, moisture content, and counting geometry.

TABLE 5-2

SEDIMENT SAMPLING RESULTS

AT SEARS

| Grid Coordinates E,W | Grid Coordinates N,S | Concentrations (pCi/g +/- 2 sigma)[a] Uranium-238 | Radium-226 | Thorium-232 |
|---|---|---|---|---|
| E10000 | N08925 | <21.0 | 2.0 ± 1.0 | 42.0 ± 3.0 |
| E10030 | N09075 | <46.0 | 1.0 ± 1.0 | 10.0 ± 1.0 |
| E10037 | N08878 | <57.0 | 4.0 ± 1.0 | 31.0 ± 3.0 |
| E10050 | N09087 | <13.0 | 1.0 ± 1.0 | 6.0 ± 1.0 |
| E10155 | N08812 | <38.0 | 9.0 ± 2.0 | 93.0 ± 2.0 |
| E10568 | N08500 | 16.9 ± 6.8 | 1.1 ± 0.1 | 7.9 ± 2.0 |
| E10635 | N08458 | <9.8 | 0.5 ± 0.6 | 1.1 ± 1.5 |
| E10637 | N08445 | 17.8 ± 2.3 | 0.9 ± 0.7 | 9.1 ± 2.7 |
| E11175 | N09180 | <33.0 | 2.0 ± 1.0 | 7.0 ± 2.0 |
| E11200 | N09180 | <26.0 | 2.0 ± 1.0 | 18.0 ± 2.0 |
| E11300 | N09175 | <27.0 | 1.0 ± 1.0 | 7.0 ± 1.0 |
| E11525 | N08930 | <31.0 | 1.0 ± 1.0 | 5.0 ± 1.0 |
| E11545 | N08995 | <15.0 | 1.0 ± 1.0 | 1.0 ± 1.0 |
| E11625 | N08965 | <22.0 | 3.0 ± 1.0 | 26.0 ± 2.0 |
| E11700 | N09050 | <42.0 | 2.0 ± 1.0 | 14.0 ± 2.0 |
| E11725 | N08990 | <31.0 | 3.0 ± 1.0 | 23.0 ± 2.0 |
| E11775 | N09010 | <29.0 | 3.0 ± 1.0 | 17.0 ± 3.0 |

[a] The low level of detectability was proportional to the quantity of the sample, the heterogeneity of the sample, moisture content, and counting geometry.

TABLE 5-3

SURFACE WATER SAMPLING RESULTS

| Location | | Gross Alpha Concentration |
|---|---|---|
| North | East | (pCi/l) |
| 9100 | 11300 | 15.8 |
| 9050 | 11300 | 18.4 |

TABLE 5-4

DOWNHOLE GAMMA LOGGING RESULTS[a]

AT SEARS



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10003 | N08997 | 0.5 | 20,000 |
| E10003 | N08997 | 1.0 | 90,000 |
| E10003 | N08997 | 1.5 | 77,000 |
| E10003 | N08997 | 2.0 | 29,000 |
| E10003 | N08997 | 2.5 | 14,000 |
| E10003 | N08997 | 3.0 | 11,000 |
| E10003 | N08997 | 3.5 | 11,000 |
| E10003 | N08997 | 4.0 | 11,000 |
| E10003 | N08997 | 4.5 | 12,000 |
| E10003 | N08997 | 5.0 | 13,000 |
| E10003 | N08997 | 5.5 | 13,000 |
| E10003 | N08997 | 6.0 | 14,000 |
| E10003 | N08997 | 6.5 | 13,000 |
| E10003 | N08997 | 7.0 | 13,000 |
| E10003 | N08997 | 7.5 | 13,000 |
| E10003 | N08997 | 8.0 | 12,000 |
| E10085 | N08915 | 0.5 | 25,000 |
| E10085 | N08915 | 1.0 | 59,000 |
| E10085 | N08915 | 1.5 | 102,000 |
| E10085 | N08915 | 2.0 | 41,000 |
| E10085 | N08915 | 2.5 | 35,000 |
| E10085 | N08915 | 3.0 | 37,000 |
| E10100 | N09000 | 0.5 | 96,000 |
| E10100 | N09000 | 1.0 | 126,000 |
| E10100 | N09000 | 1.5 | 88,000 |
| E10100 | N09000 | 2.0 | 28,000 |
| E10100 | N09000 | 2.5 | 16,000 |
| E10100 | N09000 | 3.0 | 15,000 |
| E10100 | N09000 | 3.5 | 13,000 |
| E10100 | N09000 | 4.0 | 12,000 |
| E10100 | N09000 | 4.5 | 12,000 |
| E10100 | N09000 | 5.0 | 13,000 |
| E10100 | N09000 | 5.5 | 14,000 |
| E10100 | N09000 | 6.0 | 13,000 |
| E10100 | N09100 | 0.5 | 13,000 |
| E10100 | N09100 | 1.0 | 15,000 |
| E10100 | N09100 | 1.5 | 19,000 |
| E10100 | N09100 | 2.0 | 27,000 |
| E10100 | N09100 | 2.5 | 15,000 |
| E10100 | N09100 | 3.0 | 10,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10100 | N09100 | 3.5 | 9,000 |
| E10100 | N09100 | 4.0 | 7,000 |
| E10100 | N09100 | 4.5 | 5,000 |
| E10100 | N09100 | 5.0 | 7,000 |
| E10100 | N09300 | 0.5 | 23,000 |
| E10100 | N09300 | 1.0 | 22,000 |
| E10100 | N09300 | 1.5 | 18,000 |
| E10100 | N09300 | 2.0 | 14,000 |
| E10100 | N09300 | 2.5 | 14,000 |
| E10100 | N09300 | 3.0 | 13,000 |
| E10100 | N09300 | 3.5 | 13,000 |
| E10100 | N09300 | 4.0 | 13,000 |
| E10100 | N09300 | 4.5 | 13,000 |
| E10100 | N09300 | 5.0 | 14,000 |
| E10100 | N09300 | 5.5 | 15,000 |
| E10100 | N09300 | 6.0 | 14,000 |
| E10100 | N09300 | 6.5 | 14,000 |
| E10100 | N09300 | 7.0 | 13,000 |
| E10100 | N09300 | 7.5 | 11,000 |
| E10100 | N09300 | 8.0 | 12,000 |
| E10100 | N09300 | 8.5 | 13,000 |
| E10100 | N09300 | 9.0 | 14,000 |
| E10100 | N09300 | 9.5 | 14,000 |
| E10110 | N08900 | 0.5 | 16,000 |
| E10110 | N08900 | 1.0 | 51,000 |
| E10110 | N08900 | 1.5 | 118,000 |
| E10110 | N08900 | 2.0 | 105,000 |
| E10110 | N08900 | 2.5 | 39,000 |
| E10110 | N08900 | 3.0 | 16,000 |
| E10110 | N08900 | 3.5 | 12,000 |
| E10110 | N08900 | 4.0 | 13,000 |
| E10110 | N08900 | 4.5 | 15,000 |
| E10200 | N08800 | 0.5 | 10,000 |
| E10200 | N08800 | 1.0 | 20,000 |
| E10200 | N08800 | 1.5 | 25,000 |
| E10200 | N08800 | 2.0 | 14,000 |
| E10200 | N08800 | 2.5 | 10,000 |
| E10200 | N08800 | 3.0 | 11,000 |
| E10200 | N08800 | 3.5 | 11,000 |
| E10200 | N08800 | 4.0 | 9,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10200 | N08800 | 4.5 | 9,000 |
| E10200 | N08800 | 5.0 | 8,000 |
| E10200 | N08800 | 5.5 | 9,000 |
| E10200 | N08800 | 6.0 | 9,000 |
| E10200 | N08800 | 6.5 | 9,000 |
| E10200 | N08900 | 0.5 | 8,000 |
| E10200 | N08900 | 1.0 | 18,000 |
| E10200 | N08900 | 1.5 | 41,000 |
| E10200 | N08900 | 2.0 | 34,000 |
| E10200 | N08900 | 2.5 | 28,000 |
| E10200 | N08900 | 3.0 | 23,000 |
| E10200 | N08900 | 3.5 | 19,000 |
| E10200 | N08900 | 4.0 | 16,000 |
| E10200 | N08900 | 4.5 | 14,000 |
| E10200 | N08900 | 5.0 | 15,000 |
| E10200 | N09190 | 0.5 | 11,000 |
| E10200 | N09190 | 1.0 | 11,000 |
| E10200 | N09190 | 1.5 | 14,000 |
| E10200 | N09190 | 2.0 | 16,000 |
| E10200 | N09190 | 2.5 | 15,000 |
| E10200 | N09190 | 3.0 | 15,000 |
| E10200 | N09190 | 3.5 | 16,000 |
| E10200 | N09190 | 4.0 | 15,000 |
| E10200 | N09190 | 4.5 | 15,000 |
| E10200 | N09300 | 0.5 | 20,000 |
| E10200 | N09300 | 1.0 | 21,000 |
| E10200 | N09300 | 1.5 | 18,000 |
| E10200 | N09300 | 2.0 | 13,000 |
| E10200 | N09300 | 2.5 | 12,000 |
| E10200 | N09300 | 3.0 | 11,000 |
| E10200 | N09300 | 3.5 | 14,000 |
| E10200 | N09300 | 4.0 | 13,000 |
| E10200 | N09300 | 4.5 | 13,000 |
| E10200 | N09300 | 5.0 | 14,000 |
| E10200 | N09300 | 5.5 | 14,000 |
| E10200 | N09300 | 6.0 | 14,000 |
| E10200 | N09300 | 6.5 | 14,000 |
| E10200 | N09300 | 7.0 | 13,000 |
| E10200 | N09305 | 0.5 | 18,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10200 | N09305 | 1.0 | 21,000 |
| E10200 | N09305 | 1.5 | 17,000 |
| E10200 | N09305 | 2.0 | 15,000 |
| E10200 | N09305 | 2.5 | 14,000 |
| E10200 | N09305 | 3.0 | 15,000 |
| E10200 | N09305 | 3.5 | 18,000 |
| E10200 | N09305 | 4.0 | 17,000 |
| E10200 | N09305 | 4.5 | 15,000 |
| E10200 | N09305 | 5.0 | 15,000 |
| E10200 | N09305 | 5.5 | 15,000 |
| E10200 | N09305 | 6.0 | 15,000 |
| E10200 | N09305 | 6.5 | 16,000 |
| E10200 | N09305 | 7.0 | 16,000 |
| E10200 | N09305 | 7.5 | 16,000 |
| E10200 | N09305 | 8.0 | 14,000 |
| E10205 | N09065 | 0.5 | 9,000 |
| E10205 | N09065 | 1.0 | 18,000 |
| E10205 | N09065 | 1.5 | 20,000 |
| E10205 | N09065 | 2.0 | 14,000 |
| E10205 | N09065 | 2.5 | 12,000 |
| E10205 | N09065 | 3.0 | 12,000 |
| E10205 | N09065 | 3.5 | 13,000 |
| E10205 | N09065 | 4.0 | 13,000 |
| E10205 | N09065 | 4.5 | 14,000 |
| E10205 | N09065 | 5.0 | 13,000 |
| E10205 | N09065 | 5.5 | 14,000 |
| E10205 | N09065 | 6.0 | 15,000 |
| E10205 | N09065 | 6.5 | 13,000 |
| E10280 | N08900 | 0.5 | 70,000 |
| E10280 | N08900 | 1.0 | 273,000 |
| E10280 | N08900 | 1.5 | 380,000 |
| E10280 | N08900 | 2.0 | 284,000 |
| E10280 | N08900 | 2.5 | 147,000 |
| E10280 | N08900 | 3.0 | 41,000 |
| E10280 | N08900 | 3.5 | 21,000 |
| E10280 | N08900 | 4.0 | 15,000 |
| E10280 | N08900 | 4.5 | 14,000 |
| E10280 | N08900 | 5.0 | 15,000 |
| E10280 | N08900 | 5.5 | 18,000 |
| E10290 | N09005 | 0.5 | 112,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10290 | N09005 | 1.0 | 183,000 |
| E10290 | N09005 | 1.5 | 82,000 |
| E10290 | N09005 | 2.0 | 26,000 |
| E10290 | N09005 | 2.5 | 19,000 |
| E10290 | N09005 | 3.0 | 13,000 |
| E10290 | N09005 | 3.5 | 10,000 |
| E10290 | N09005 | 4.0 | 9,000 |
| E10290 | N09005 | 4.5 | 8,000 |
| E10290 | N09005 | 5.0 | 8,000 |
| E10290 | N09005 | 5.5 | 10,000 |
| E10290 | N09005 | 6.0 | 11,000 |
| E10290 | N09005 | 6.5 | 10,000 |
| E10290 | N09005 | 7.0 | 11,000 |
| E10296 | N09080 | 0.5 | 69,000 |
| E10296 | N09080 | 1.0 | 160,000 |
| E10296 | N09080 | 1.5 | 88,000 |
| E10296 | N09080 | 2.0 | 26,000 |
| E10296 | N09080 | 2.5 | 13,000 |
| E10296 | N09080 | 3.0 | 10,000 |
| E10296 | N09080 | 3.5 | 8,000 |
| E10296 | N09080 | 4.0 | 9,000 |
| E10296 | N09080 | 4.5 | 12,000 |
| E10296 | N09080 | 5.0 | 14,000 |
| E10296 | N09080 | 5.5 | 14,000 |
| E10300 | N08805 | 0.5 | 22,000 |
| E10300 | N08805 | 1.0 | 62,000 |
| E10300 | N08805 | 1.5 | 130,000 |
| E10300 | N08805 | 2.0 | 174,000 |
| E10300 | N08805 | 2.5 | 68,000 |
| E10300 | N08805 | 3.0 | 34,000 |
| E10300 | N08805 | 3.5 | 20,000 |
| E10300 | N08805 | 4.0 | 16,000 |
| E10300 | N08805 | 4.5 | 14,000 |
| E10347 | N08877[b] | 0.5 | 11,000 |
| E10347 | N08877 | 1.0 | 13,000 |
| E10347 | N08877 | 1.5 | 14,000 |
| E10347 | N08877 | 2.0 | 27,000 |
| E10347 | N08877 | 2.5 | 228,000 |
| E10347 | N08877 | 3.0 | 359,000 |
| E10347 | N08877 | 3.5 | 387,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10347 | N08877 | 4.0 | 377,000 |
| E10347 | N08877 | 4.5 | 349,000 |
| E10347 | N08877 | 5.0 | 219,000 |
| E10347 | N08877 | 5.5 | 80,000 |
| E10347 | N08877 | 6.0 | 76,000 |
| E10347 | N08877 | 6.5 | 58,000 |
| E10347 | N08877 | 7.0 | 56,000 |
| E10350 | N09200 | 0.5 | 19,000 |
| E10350 | N09200 | 1.0 | 29,000 |
| E10350 | N09200 | 1.5 | 36,000 |
| E10350 | N09200 | 2.0 | 21,000 |
| E10350 | N09200 | 2.5 | 12,000 |
| E10350 | N09200 | 3.0 | 11,000 |
| E10350 | N09200 | 3.5 | 12,000 |
| E10350 | N09200 | 4.0 | 12,000 |
| E10350 | N09200 | 4.5 | 13,000 |
| E10350 | N09200 | 5.0 | 13,000 |
| E10350 | N09200 | 5.5 | 13,000 |
| E10350 | N09200 | 6.0 | 13,000 |
| E10368 | N09140 | 0.5 | 17,000 |
| E10368 | N09140 | 1.0 | 21,000 |
| E10368 | N09140 | 1.5 | 36,000 |
| E10368 | N09140 | 2.0 | 49,000 |
| E10368 | N09140 | 2.5 | 47,000 |
| E10368 | N09140 | 3.0 | 34,000 |
| E10368 | N09140 | 3.5 | 40,000 |
| E10368 | N09140 | 4.0 | 91,000 |
| E10368 | N09140 | 4.5 | 84,000 |
| E10368 | N09140 | 5.0 | 24,000 |
| E10368 | N09140 | 5.5 | 14,000 |
| E10368 | N09140 | 6.0 | 12,000 |
| E10368 | N09140 | 6.5 | 13,000 |
| E10368 | N09140 | 7.0 | 13,000 |
| E10368 | N09140 | 7.5 | 13,000 |
| E10368 | N09140 | 8.0 | 14,000 |
| E10368 | N09140 | 8.5 | 16,000 |
| E10368 | N09140 | 9.0 | 15,000 |
| E10368 | N09140 | 9.5 | 15,000 |
| E10390 | N09300 | 0.5 | 17,000 |
| E10390 | N09300 | 1.0 | 17,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10390 | N09300 | 1.5 | 17,000 |
| E10390 | N09300 | 2.0 | 17,000 |
| E10390 | N09300 | 2.5 | 18,000 |
| E10390 | N09300 | 3.0 | 20,000 |
| E10390 | N09300 | 3.5 | 27,000 |
| E10390 | N09300 | 4.0 | 32,000 |
| E10390 | N09300 | 4.5 | 39,000 |
| E10390 | N09300 | 5.0 | 57,000 |
| E10390 | N09300 | 5.5 | 66,000 |
| E10390 | N09300 | 6.0 | 45,000 |
| E10390 | N09300 | 6.5 | 40,000 |
| E10390 | N09300 | 7.0 | 42,000 |
| E10390 | N09300 | 7.5 | 41,000 |
| E10390 | N09300 | 8.0 | 38,000 |
| E10390 | N09300 | 8.5 | 34,000 |
| E10390 | N09300 | 9.0 | 24,000 |
| E10390 | N09300 | 9.5 | 17,000 |
| E10390 | N09300 | 10.0 | 17,000 |
| E10390 | N09300 | 10.5 | 19,000 |
| E10390 | N09300 | 11.0 | 18,000 |
| E10390 | N09300 | 11.5 | 18,000 |
| E10390 | N09300 | 12.0 | 18,000 |
| E10390 | N09300 | 12.5 | 18,000 |
| E10397 | N08700 | 0.5 | 18,000 |
| E10397 | N08700 | 1.0 | 68,000 |
| E10397 | N08700 | 1.5 | 110,000 |
| E10397 | N08700 | 2.0 | 94,000 |
| E10397 | N08700 | 2.5 | 69,000 |
| E10397 | N08700 | 3.0 | 34,000 |
| E10397 | N08700 | 3.5 | 28,000 |
| E10397 | N08700 | 4.0 | 13,000 |
| E10397 | N08700 | 4.5 | 12,000 |
| E10397 | N08700 | 5.0 | 11,000 |
| E10397 | N08700 | 5.5 | 11,000 |
| E10397 | N08866 | 0.5 | 11,000 |
| E10397 | N08866 | 1.0 | 10,000 |
| E10397 | N08866 | 1.5 | 13,000 |
| E10397 | N08866 | 2.0 | 27,000 |
| E10397 | N08866 | 2.5 | 163,000 |
| E10397 | N08866 | 3.0 | 206,000 |
| E10397 | N08866 | 3.5 | 230,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10397 | N08866 | 4.0 | 266,000 |
| E10397 | N08866 | 4.5 | 299,000 |
| E10397 | N08866 | 5.0 | 214,000 |
| E10397 | N08866 | 5.5 | 217,000 |
| E10397 | N08866 | 6.0 | 56,000 |
| E10397 | N08866 | 6.5 | 38,000 |
| E10397 | N08866 | 7.0 | 24,000 |
| E10397 | N08866 | 7.5 | 19,000 |
| E10397 | N08866 | 8.0 | 19,000 |
| E10400 | N08800 | 0.5 | 14,000 |
| E10400 | N08800 | 1.0 | 24,000 |
| E10400 | N08800 | 1.5 | 42,000 |
| E10400 | N08800 | 2.0 | 52,000 |
| E10400 | N08800 | 2.5 | 86,000 |
| E10400 | N08800 | 3.0 | 145,000 |
| E10400 | N08800 | 3.5 | 90,000 |
| E10400 | N08800 | 4.0 | 28,000 |
| E10400 | N08800 | 4.5 | 14,000 |
| E10400 | N08800 | 5.0 | 12,000 |
| E10400 | N08800 | 5.5 | 11,000 |
| E10400 | N08800 | 6.0 | 10,000 |
| E10400 | N08800 | 6.5 | 8,000 |
| E10400 | N08800 | 7.0 | 10,000 |
| E10400 | N08800 | 7.5 | 10,000 |
| E10400 | N08800 | 8.0 | 12,000 |
| E10400 | N08800 | 8.5 | 12,000 |
| E10400 | N08800 | 9.0 | 11,000 |
| E10400 | N08800 | 9.5 | 12,000 |
| E10450 | N09200 | 0.5 | 19,000 |
| E10450 | N09200 | 1.0 | 26,000 |
| E10450 | N09200 | 1.5 | 50,000 |
| E10450 | N09200 | 2.0 | 50,000 |
| E10450 | N09200 | 2.5 | 43,000 |
| E10450 | N09200 | 3.0 | 26,000 |
| E10450 | N09200 | 3.5 | 17,000 |
| E10450 | N09200 | 4.0 | 11,000 |
| E10450 | N09200 | 4.5 | 10,000 |
| E10450 | N09200 | 5.0 | 9,000 |
| E10450 | N09200 | 5.5 | 8,000 |
| E10450 | N09200 | 6.0 | 7,000 |
| E10450 | N09200 | 6.5 | 7,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10450 | N09200 | 7.0 | 7,000 |
| E10450 | N09200 | 7.5 | 7,000 |
| E10450 | N09200 | 8.0 | 7,000 |
| E10450 | N09200 | 8.5 | 7,000 |
| E10500 | N08600 | 0.5 | 21,000 |
| E10500 | N08600 | 1.0 | 55,000 |
| E10500 | N08600 | 1.5 | 72,000 |
| E10500 | N08600 | 2.0 | 52,000 |
| E10500 | N08600 | 2.5 | 38,000 |
| E10500 | N08600 | 3.0 | 50,000 |
| E10500 | N08600 | 3.5 | 51,000 |
| E10500 | N08600 | 4.0 | 20,000 |
| E10500 | N08600 | 4.5 | 11,000 |
| E10500 | N08600 | 5.0 | 11,000 |
| E10500 | N08600 | 5.5 | 10,000 |
| E10500 | N08600 | 6.0 | 9,000 |
| E10500 | N08600 | 6.5 | 8,000 |
| E10500 | N08694 | 0.5 | 79,000 |
| E10500 | N08694 | 1.0 | 179,000 |
| E10500 | N08694 | 1.5 | 368,000 |
| E10500 | N08694 | 2.0 | 536,000 |
| E10500 | N08694 | 2.5 | 441,000 |
| E10500 | N08694 | 3.0 | 286,000 |
| E10500 | N08694 | 3.5 | 132,000 |
| E10500 | N08694 | 4.0 | 53,000 |
| E10500 | N08694 | 4.5 | 29,000 |
| E10500 | N08694 | 5.0 | 17,000 |
| E10500 | N08694 | 5.5 | 10,000 |
| E10500 | N08694 | 6.0 | 9,000 |
| E10500 | N08694 | 6.5 | 7,000 |
| E10500 | N08694 | 7.0 | 6,000 |
| E10500 | N08694 | 7.5 | 6,000 |
| E10500 | N08694 | 8.0 | 7,000 |
| E10500 | N08694 | 8.5 | 7,000 |
| E10500 | N08694 | 9.0 | 8,000 |
| E10500 | N08780 | 0.5 | 92,000 |
| E10500 | N08780 | 1.0 | 241,000 |
| E10500 | N08780 | 1.5 | 321,000 |
| E10500 | N08780 | 2.0 | 327,000 |
| E10500 | N08780 | 2.5 | 250,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10500 | N08780 | 3.0 | 247,000 |
| E10500 | N08780 | 3.5 | 234,000 |
| E10500 | N08780 | 4.0 | 90,000 |
| E10500 | N08780 | 4.5 | 31,000 |
| E10500 | N08780 | 5.0 | 16,000 |
| E10500 | N08780 | 5.5 | 11,000 |
| E10500 | N08780 | 6.0 | 10,000 |
| E10500 | N08780 | 6.5 | 11,000 |
| E10500 | N08780 | 7.0 | 13,000 |
| E10500 | N08780 | 7.5 | 12,000 |
| E10500 | N08780 | 8.0 | 12,000 |
| E10500 | N08780 | 8.5 | 13,000 |
| E10500 | N08780 | 9.0 | 12,000 |
| E10506 | N09000 | 0.5 | 19,000 |
| E10506 | N09000 | 1.0 | 18,000 |
| E10506 | N09000 | 1.5 | 41,000 |
| E10506 | N09000 | 2.0 | 82,000 |
| E10506 | N09000 | 2.5 | 160,000 |
| E10506 | N09000 | 3.0 | 421,000 |
| E10506 | N09000 | 3.5 | 435,000 |
| E10506 | N09000 | 4.0 | 526,000 |
| E10506 | N09000 | 4.5 | 458,000 |
| E10506 | N09000 | 5.0 | 449,000 |
| E10506 | N09000 | 5.5 | 292,000 |
| E10506 | N09000 | 6.0 | 185,000 |
| E10506 | N09000 | 6.5 | 84,000 |
| E10506 | N09000 | 7.0 | 93,000 |
| E10506 | N09000 | 7.5 | 96,000 |
| E10506 | N09000 | 8.0 | 36,000 |
| E10506 | N09000 | 8.5 | 19,000 |
| E10506 | N09000 | 9.0 | 14,000 |
| E10600 | N08780 | 0.5 | 28,000 |
| E10600 | N08780 | 1.0 | 62,000 |
| E10600 | N08780 | 1.5 | 62,000 |
| E10600 | N08780 | 2.0 | 34,000 |
| E10600 | N08780 | 2.5 | 18,000 |
| E10600 | N08780 | 3.0 | 18,000 |
| E10600 | N08780 | 3.5 | 18,000 |
| E10600 | N08780 | 4.0 | 13,000 |
| E10600 | N08780 | 4.5 | 10,000 |
| E10600 | N08780 | 5.0 | 9,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10600 | N08780 | 5.5 | 8,000 |
| E10600 | N08780 | 6.0 | 7,000 |
| E10605 | N08610 | 0.5 | 15,000 |
| E10605 | N08610 | 1.0 | 30,000 |
| E10605 | N08610 | 1.5 | 52,000 |
| E10605 | N08610 | 2.0 | 132,000 |
| E10605 | N08610 | 2.5 | 256,000 |
| E10605 | N08610 | 3.0 | 368,000 |
| E10605 | N08610 | 3.5 | 193,000 |
| E10605 | N08610 | 4.0 | 79,000 |
| E10605 | N08610 | 4.5 | 22,000 |
| E10605 | N08610 | 5.0 | 11,000 |
| E10605 | N08610 | 5.5 | 9,000 |
| E10605 | N08610 | 6.0 | 9,000 |
| E10605 | N08610 | 6.5 | 9,000 |
| E10605 | N08610 | 7.0 | 7,000 |
| E10605 | N08610 | 7.5 | 6,000 |
| E10605 | N08610 | 8.0 | 7,000 |
| E10605 | N08610 | 8.5 | 7,000 |
| E10605 | N08695 | 0.5 | 14,000 |
| E10605 | N08695 | 1.0 | 30,000 |
| E10605 | N08695 | 1.5 | 65,000 |
| E10605 | N08695 | 2.0 | 40,000 |
| E10605 | N08695 | 2.5 | 28,000 |
| E10605 | N08695 | 3.0 | 16,000 |
| E10605 | N08695 | 3.5 | 12,000 |
| E10605 | N08695 | 4.0 | 10,000 |
| E10605 | N08695 | 4.5 | 8,000 |
| E10605 | N08695 | 5.0 | 8,000 |
| E10605 | N08695 | 5.5 | 8,000 |
| E10605 | N08695 | 6.0 | 7,000 |
| E10605 | N08695 | 6.5 | 7,000 |
| E10605 | N08695 | 7.0 | 7,000 |
| E10610 | N08520 | 0.5 | 24,000 |
| E10610 | N08520 | 1.0 | 71,000 |
| E10610 | N08520 | 1.5 | 124,000 |
| E10610 | N08520 | 2.0 | 148,000 |
| E10610 | N08520 | 2.5 | 165,000 |
| E10610 | N08520 | 3.0 | 171,000 |
| E10610 | N08520 | 3.5 | 112,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10610 | N08520 | 4.0 | 50,000 |
| E10610 | N08520 | 4.5 | 25,000 |
| E10610 | N08520 | 5.0 | 16,000 |
| E10610 | N08520 | 5.5 | 14,000 |
| E10610 | N08520 | 6.0 | 13,000 |
| E10610 | N08520 | 6.5 | 14,000 |
| E10610 | N08520 | 7.0 | 14,000 |
| E10690 | N08992 | 0.5 | 7,000 |
| E10690 | N08992 | 1.0 | 9,000 |
| E10690 | N08992 | 1.5 | 18,000 |
| E10690 | N08992 | 2.0 | 43,000 |
| E10690 | N08992 | 2.5 | 150,000 |
| E10690 | N08992 | 3.0 | 275,000 |
| E10690 | N08992 | 3.5 | 89,000 |
| E10690 | N08992 | 4.0 | 44,000 |
| E10690 | N08992 | 4.5 | 13,000 |
| E10690 | N08992 | 5.0 | 13,000 |
| E10692 | N09136 | 0.5 | 11,000 |
| E10692 | N09136 | 1.0 | 12,000 |
| E10692 | N09136 | 1.5 | 12,000 |
| E10692 | N09136 | 2.0 | 12,000 |
| E10692 | N09136 | 2.5 | 12,000 |
| E10692 | N09136 | 3.0 | 12,000 |
| E10692 | N09136 | 3.5 | 12,000 |
| E10692 | N09136 | 4.0 | 14,000 |
| E10692 | N09136 | 4.5 | 14,000 |
| E10692 | N09136 | 5.0 | 13,000 |
| E10692 | N09136 | 5.5 | 14,000 |
| E10692 | N09136 | 6.0 | 15,000 |
| E10692 | N09136 | 6.5 | 15,000 |
| E10692 | N09136 | 7.0 | 14,000 |
| E10692 | N09136 | 7.5 | 13,000 |
| E10692 | N09136 | 8.0 | 12,000 |
| E10692 | N09136 | 8.5 | 16,000 |
| E10692 | N09136 | 9.0 | 27,000 |
| E10692 | N09136 | 9.5 | 27,000 |
| E10700 | N08475 | 0.5 | 100,000 |
| E10700 | N08475 | 1.0 | 221,000 |
| E10700 | N08475 | 1.5 | 366,000 |
| E10700 | N08475 | 2.0 | 492,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10700 | N08475 | 2.5 | 556,000 |
| E10700 | N08475 | 3.0 | 558,000 |
| E10700 | N08475 | 3.5 | 236,000 |
| E10700 | N08475 | 4.0 | 45,000 |
| E10700 | N08475 | 4.5 | 21,000 |
| E10700 | N08475 | 5.0 | 13,000 |
| E10700 | N08475 | 5.5 | 11,000 |
| E10700 | N08475 | 6.0 | 10,000 |
| E10700 | N08475 | 6.5 | 11,000 |
| E10700 | N08475 | 7.0 | 11,000 |
| E10700 | N08475 | 7.5 | 10,000 |
| E10700 | N08475 | 8.0 | 11,000 |
| E10700 | N08475 | 8.5 | 10,000 |
| E10700 | N08600 | 0.5 | 7,000 |
| E10700 | N08600 | 1.0 | 19,000 |
| E10700 | N08600 | 1.5 | 17,000 |
| E10700 | N08600 | 2.0 | 11,000 |
| E10700 | N08600 | 2.5 | 9,000 |
| E10700 | N08600 | 3.0 | 6,000 |
| E10700 | N08600 | 3.5 | 7,000 |
| E10700 | N08600 | 4.0 | 7,000 |
| E10700 | N08600 | 4.5 | 9,000 |
| E10700 | N08600 | 5.0 | 8,000 |
| E10700 | N08600 | 5.5 | 8,000 |
| E10700 | N08600 | 6.0 | 10,000 |
| E10700 | N08600 | 6.5 | 10,000 |
| E10700 | N08600 | 7.0 | 10,000 |
| E10700 | N08700 | 0.5 | 11,000 |
| E10700 | N08700 | 1.0 | 23,000 |
| E10700 | N08700 | 1.5 | 56,000 |
| E10700 | N08700 | 2.0 | 122,000 |
| E10700 | N08700 | 2.5 | 146,000 |
| E10700 | N08700 | 3.0 | 116,000 |
| E10700 | N08700 | 3.5 | 60,000 |
| E10700 | N08700 | 4.0 | 21,000 |
| E10700 | N08780 | 0.5 | 29,000 |
| E10700 | N08780 | 1.0 | 59,000 |
| E10700 | N08780 | 1.5 | 64,000 |
| E10700 | N08780 | 2.0 | 52,000 |
| E10700 | N08780 | 2.5 | 55,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10700 | N08780 | 3.0 | 65,000 |
| E10700 | N08780 | 3.5 | 35,000 |
| E10700 | N08780 | 4.0 | 15,000 |
| E10700 | N08780 | 4.5 | 12,000 |
| E10700 | N08780 | 5.0 | 12,000 |
| E10700 | N08780 | 5.5 | 11,000 |
| E10700 | N08780 | 6.0 | 11,000 |
| E10700 | N08780 | 6.5 | 12,000 |
| E10700 | N08780 | 7.0 | 8,000 |
| E10790 | N08505 | 0.5 | 50,000 |
| E10790 | N08505 | 1.0 | 183,000 |
| E10790 | N08505 | 1.5 | 269,000 |
| E10790 | N08505 | 2.0 | 272,000 |
| E10790 | N08505 | 2.5 | 279,000 |
| E10790 | N08505 | 3.0 | 319,000 |
| E10790 | N08505 | 3.5 | 330,000 |
| E10790 | N08505 | 4.0 | 265,000 |
| E10790 | N08505 | 4.5 | 170,000 |
| E10790 | N08505 | 5.0 | 57,000 |
| E10790 | N08505 | 5.5 | 28,000 |
| E10790 | N08505 | 6.0 | 15,000 |
| E10790 | N08505 | 6.5 | 10,000 |
| E10790 | N08505 | 7.0 | 9,000 |
| E10790 | N08505 | 7.5 | 10,000 |
| E10790 | N08505 | 8.0 | 12,000 |
| E10800 | N08500 | 0.5 | 29,000 |
| E10800 | N08500 | 1.0 | 68,000 |
| E10800 | N08500 | 1.5 | 89,000 |
| E10800 | N08500 | 2.0 | 77,000 |
| E10800 | N08500 | 2.5 | 44,000 |
| E10800 | N08500 | 3.0 | 21,000 |
| E10800 | N08500 | 3.5 | 16,000 |
| E10800 | N08500 | 4.0 | 16,000 |
| E10800 | N08600 | 0.5 | 54,000 |
| E10800 | N08600 | 1.0 | 151,000 |
| E10800 | N08600 | 1.5 | 178,000 |
| E10800 | N08600 | 2.0 | 190,000 |
| E10800 | N08600 | 2.5 | 72,000 |
| E10800 | N08600 | 3.0 | 37,000 |
| E10800 | N08600 | 3.5 | 12,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10800 | N08600 | 4.0 | 10,000 |
| E10800 | N08600 | 4.5 | 11,000 |
| E10800 | N08600 | 5.0 | 11,000 |
| E10800 | N08600 | 5.5 | 12,000 |
| E10800 | N08600 | 6.0 | 13,000 |
| E10800 | N08600 | 6.5 | 12,000 |
| E10800 | N08600 | 7.0 | 12,000 |
| E10800 | N08600 | 7.5 | 14,000 |
| E10800 | N08700 | 0.5 | 9,000 |
| E10800 | N08700 | 1.0 | 19,000 |
| E10800 | N08700 | 1.5 | 23,000 |
| E10800 | N08700 | 2.0 | 41,000 |
| E10800 | N08700 | 2.5 | 36,000 |
| E10800 | N08700 | 3.0 | 24,000 |
| E10800 | N08700 | 3.5 | 13,000 |
| E10800 | N08700 | 4.0 | 12,000 |
| E10800 | N08700 | 4.5 | 12,000 |
| E10800 | N08700 | 5.0 | 12,000 |
| E10800 | N08700 | 5.5 | 13,000 |
| E10800 | N08700 | 6.0 | 12,000 |
| E10800 | N08700 | 6.5 | 14,000 |
| E10800 | N08700 | 7.0 | 13,000 |
| E10800 | N08775 | 0.5 | 20,000 |
| E10800 | N08775 | 1.0 | 43,000 |
| E10800 | N08775 | 1.5 | 36,000 |
| E10800 | N08775 | 2.0 | 21,000 |
| E10800 | N08775 | 2.5 | 15,000 |
| E10800 | N08775 | 3.0 | 13,000 |
| E10800 | N08775 | 3.5 | 11,000 |
| E10800 | N08775 | 4.0 | 11,000 |
| E10800 | N08775 | 4.5 | 11,000 |
| E10800 | N08775 | 5.0 | 10,000 |
| E10800 | N08775 | 5.5 | 8,000 |
| E10800 | N08775 | 6.0 | 6,000 |
| E10800 | N08775 | 6.5 | 6,000 |
| E10900 | N08600 | 0.5 | 51,000 |
| E10900 | N08600 | 1.0 | 140,000 |
| E10900 | N08600 | 1.5 | 150,000 |
| E10900 | N08600 | 2.0 | 72,000 |
| E10900 | N08600 | 2.5 | 22,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10900 | N08600 | 3.0 | 14,000 |
| E10900 | N08600 | 3.5 | 14,000 |
| E10900 | N08600 | 4.0 | 12,000 |
| E10900 | N08600 | 4.5 | 12,000 |
| E10900 | N08600 | 5.0 | 13,000 |
| E10900 | N08600 | 5.5 | 13,000 |
| E10910 | N08700 | 0.5 | 11,000 |
| E10910 | N08700 | 1.0 | 18,000 |
| E10910 | N08700 | 1.5 | 16,000 |
| E10910 | N08700 | 2.0 | 13,000 |
| E10910 | N08700 | 2.5 | 14,000 |
| E10910 | N08700 | 3.0 | 13,000 |
| E10910 | N08700 | 3.5 | 12,000 |
| E10910 | N08700 | 4.0 | 11,000 |
| E10910 | N08700 | 4.5 | 11,000 |
| E10910 | N08700 | 5.0 | 11,000 |
| E10910 | N08700 | 5.5 | 12,000 |
| E10910 | N08700 | 6.0 | 11,000 |
| E10910 | N08700 | 6.5 | 12,000 |
| E10910 | N08700 | 7.0 | 12,000 |
| E10913 | N08777 | 0.5 | 15,000 |
| E10913 | N08777 | 1.0 | 30,000 |
| E10913 | N08777 | 1.5 | 42,000 |
| E10913 | N08777 | 2.0 | 45,000 |
| E10978 | N09134 | 0.5 | 14,000 |
| E10978 | N09134 | 1.0 | 13,000 |
| E10978 | N09134 | 1.5 | 12,000 |
| E10978 | N09134 | 2.0 | 12,000 |
| E10978 | N09134 | 2.5 | 11,000 |
| E10978 | N09134 | 3.0 | 12,000 |
| E10978 | N09134 | 3.5 | 10,000 |
| E10978 | N09134 | 4.0 | 10,000 |
| E10978 | N09134 | 4.5 | 9,000 |
| E10978 | N09134 | 5.0 | 8,000 |
| E10978 | N09134 | 5.5 | 8,000 |
| E10978 | N09134 | 6.0 | 10,000 |
| E10978 | N09134 | 6.5 | 11,000 |
| E10978 | N09134 | 7.0 | 11,000 |
| E10995 | N08595 | 0.5 | 75,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E10995 | N08595 | 1.0 | 294,000 |
| E10995 | N08595 | 1.5 | 268,000 |
| E10995 | N08595 | 2.0 | 157,000 |
| E10995 | N08595 | 2.5 | 114,000 |
| E10995 | N08595 | 3.0 | 66,000 |
| E10995 | N08595 | 3.5 | 30,000 |
| E10995 | N08595 | 4.0 | 18,000 |
| E10995 | N08595 | 4.5 | 14,000 |
| E10995 | N08595 | 5.0 | 13,000 |
| E10995 | N08595 | 5.5 | 14,000 |
| E10995 | N08595 | 6.0 | 9,000 |
| E10995 | N08595 | 6.5 | 8,000 |
| E10995 | N08595 | 7.0 | 9,000 |
| E10995 | N08595 | 7.5 | 10,000 |
| E10995 | N08595 | 8.0 | 10,000 |
| E10995 | N08595 | 8.5 | 10,000 |
| E10995 | N08595 | 9.0 | 10,000 |
| E10995 | N08595 | 9.5 | 10,000 |
| E11000 | N08500 | 0.5 | 221,000 |
| E11000 | N08500 | 1.0 | 390,000 |
| E11000 | N08500 | 1.5 | 420,000 |
| E11000 | N08500 | 2.0 | 282,000 |
| E11000 | N08500 | 2.5 | 280,000 |
| E11000 | N08500 | 3.0 | 160,000 |
| E11000 | N08500 | 3.5 | 61,000 |
| E11000 | N08500 | 4.0 | 25,000 |
| E11000 | N08500 | 4.5 | 18,000 |
| E11000 | N08500 | 5.0 | 20,000 |
| E11000 | N08500 | 5.5 | 22,000 |
| E11000 | N08500 | 6.0 | 23,000 |
| E11000 | N08500 | 6.5 | 13,000 |
| E11000 | N08500 | 7.0 | 12,000 |
| E11000 | N08500 | 7.5 | 11,000 |
| E11000 | N08500 | 8.0 | 11,000 |
| E11000 | N08500 | 8.5 | 8,000 |
| E11000 | N08500 | 9.0 | 7,000 |
| E11000 | N08500 | 9.5 | 8,000 |
| E11000 | N08700 | 0.5 | 15,000 |
| E11000 | N08700 | 1.0 | 33,000 |
| E11000 | N08700 | 1.5 | 30,000 |
| E11000 | N08700 | 2.0 | 43,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11000 | N08700 | 2.5 | 28,000 |
| E11000 | N08700 | 3.0 | 16,000 |
| E11000 | N08700 | 3.5 | 13,000 |
| E11000 | N08700 | 4.0 | 13,000 |
| E11000 | N08700 | 4.5 | 14,000 |
| E11000 | N08700 | 5.0 | 15,000 |
| E11000 | N08700 | 5.5 | 17,000 |
| E11000 | N08700 | 6.0 | 16,000 |
| E11000 | N08700 | 6.5 | 14,000 |
| E11000 | N08781 | 0.5 | 13,000 |
| E11000 | N08781 | 1.0 | 22,000 |
| E11000 | N08781 | 1.5 | 26,000 |
| E11000 | N08781 | 2.0 | 23,000 |
| E11000 | N08781 | 2.5 | 26,000 |
| E11000 | N08781 | 3.0 | 22,000 |
| E11000 | N08781 | 3.5 | 18,000 |
| E11000 | N08781 | 4.0 | 16,000 |
| E11000 | N08781 | 4.5 | 14,000 |
| E11000 | N08781 | 5.0 | 13,000 |
| E11000 | N08781 | 5.5 | 12,000 |
| E11000 | N08781 | 6.0 | 12,000 |
| E11000 | N08781 | 6.5 | 13,000 |
| E11000 | N08781 | 7.0 | 11,000 |
| E11000 | N08781 | 7.5 | 11,000 |
| E11000 | N08781 | 8.0 | 11,000 |
| E11015 | N09185 | 0.5 | 17,000 |
| E11015 | N09185 | 1.0 | 17,000 |
| E11015 | N09185 | 1.5 | 14,000 |
| E11015 | N09185 | 2.0 | 11,000 |
| E11015 | N09185 | 2.5 | 9,000 |
| E11015 | N09185 | 3.0 | 9,000 |
| E11015 | N09185 | 3.5 | 8,000 |
| E11015 | N09185 | 4.0 | 9,000 |
| E11015 | N09185 | 4.5 | 11,000 |
| E11015 | N09185 | 5.0 | 12,000 |
| E11015 | N09185 | 5.5 | 12,000 |
| E11015 | N09185 | 6.0 | 13,000 |
| E11015 | N09185 | 6.5 | 12,000 |
| E11021 | N08995 | 0.5 | 9,000 |
| E11021 | N08995 | 1.0 | 8,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11021 | N08995 | 1.5 | 8,000 |
| E11021 | N08995 | 2.0 | 7,000 |
| E11021 | N08995 | 2.5 | 8,000 |
| E11021 | N08995 | 3.0 | 8,000 |
| E11021 | N08995 | 3.5 | 8,000 |
| E11021 | N08995 | 4.0 | 8,000 |
| E11021 | N08995 | 4.5 | 11,000 |
| E11021 | N08995 | 5.0 | 18,000 |
| E11021 | N08995 | 5.5 | 37,000 |
| E11021 | N08995 | 6.0 | 39,000 |
| E11021 | N08995 | 6.5 | 74,000 |
| E11021 | N08995 | 7.0 | 131,000 |
| E11021 | N08995 | 7.5 | 108,000 |
| E11021 | N08995 | 8.0 | 18,000 |
| E11040 | N08870 | 0.5 | 13,000 |
| E11040 | N08870 | 1.0 | 9,000 |
| E11040 | N08870 | 1.5 | 8,000 |
| E11040 | N08870 | 2.0 | 8,000 |
| E11040 | N08870 | 2.5 | 9,000 |
| E11040 | N08870 | 3.0 | 9,000 |
| E11040 | N08870 | 3.5 | 10,000 |
| E11040 | N08870 | 4.0 | 11,000 |
| E11040 | N08870 | 4.5 | 13,000 |
| E11040 | N08870 | 5.0 | 52,000 |
| E11040 | N08870 | 5.5 | 157,000 |
| E11040 | N08870 | 6.0 | 237,000 |
| E11040 | N08870 | 6.5 | 241,000 |
| E11040 | N08870 | 7.0 | 192,000 |
| E11040 | N08870 | 7.5 | 50,000 |
| E11040 | N08870 | 8.0 | 20,000 |
| E11040 | N08870 | 8.5 | 16,000 |
| E11040 | N08870 | 9.0 | 16,000 |
| E11040 | N08870 | 9.5 | 12,000 |
| E11050 | N08950 | 0.5 | 10,000 |
| E11050 | N08950 | 1.0 | 10,000 |
| E11050 | N08950 | 1.5 | 12,000 |
| E11050 | N08950 | 2.0 | 14,000 |
| E11050 | N08950 | 2.5 | 18,000 |
| E11050 | N08950 | 3.0 | 33,000 |
| E11050 | N08950 | 3.5 | 32,000 |
| E11050 | N08950 | 4.0 | 17,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11050 | N08950 | 4.5 | 14,000 |
| E11050 | N08950 | 5.0 | 12,000 |
| E11050 | N08950 | 5.5 | 13,000 |
| E11050 | N08950 | 6.0 | 13,000 |
| E11050 | N08950 | 6.5 | 12,000 |
| E11050 | N08950 | 7.0 | 12,000 |
| E11050 | N08950 | 7.5 | 11,000 |
| E11050 | N08950 | 8.0 | 11,000 |
| E11050 | N08950 | 8.5 | 11,000 |
| E11050 | N08950 | 9.0 | 10,000 |
| E11050 | N08950 | 9.5 | 11,000 |
| E11075 | N09003 | 0.5 | 9,000 |
| E11075 | N09003 | 1.0 | 8,000 |
| E11075 | N09003 | 1.5 | 12,000 |
| E11075 | N09003 | 2.0 | 20,000 |
| E11075 | N09003 | 2.5 | 41,000 |
| E11075 | N09003 | 3.0 | 36,000 |
| E11075 | N09003 | 3.5 | 19,000 |
| E11075 | N09003 | 4.0 | 14,000 |
| E11075 | N09003 | 4.5 | 13,000 |
| E11075 | N09003 | 5.0 | 14,000 |
| E11075 | N09003 | 5.5 | 12,000 |
| E11075 | N09003 | 6.0 | 11,000 |
| E11080 | N09110 | 0.5 | 6,000 |
| E11080 | N09110 | 1.0 | 10,000 |
| E11080 | N09110 | 1.5 | 11,000 |
| E11080 | N09110 | 2.0 | 12,000 |
| E11080 | N09110 | 2.5 | 12,000 |
| E11080 | N09110 | 3.0 | 12,000 |
| E11080 | N09110 | 3.5 | 14,000 |
| E11080 | N09110 | 4.0 | 15,000 |
| E11080 | N09110 | 4.5 | 15,000 |
| E11085 | N08635 | 0.5 | 48,000 |
| E11085 | N08635 | 1.0 | 91,000 |
| E11085 | N08635 | 1.5 | 92,000 |
| E11085 | N08635 | 2.0 | 113,000 |
| E11085 | N08635 | 2.5 | 151,000 |
| E11085 | N08635 | 3.0 | 160,000 |
| E11085 | N08635 | 3.5 | 134,000 |
| E11085 | N08635 | 4.0 | 92,000 |

TABLE 5-4
(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11085 | N08635 | 4.5 | 75,000 |
| E11085 | N08635 | 5.0 | 73,000 |
| E11085 | N08635 | 5.5 | 63,000 |
| E11085 | N08635 | 6.0 | 49,000 |
| E11085 | N08635 | 6.5 | 37,000 |
| E11085 | N08635 | 7.0 | 25,000 |
| E11085 | N08635 | 7.5 | 20,000 |
| E11085 | N08635 | 8.0 | 18,000 |
| E11085 | N08635 | 8.5 | 16,000 |
| E11085 | N08635 | 9.0 | 13,000 |
| E11085 | N08635 | 9.5 | 14,000 |
| E11100 | N08500 | 0.5 | 130,000 |
| E11100 | N08500 | 1.0 | 347,000 |
| E11100 | N08500 | 1.5 | 496,000 |
| E11100 | N08500 | 2.0 | 566,000 |
| E11100 | N08500 | 2.5 | 583,000 |
| E11100 | N08500 | 3.0 | 504,000 |
| E11100 | N08500 | 3.5 | 323,000 |
| E11100 | N08500 | 4.0 | 123,000 |
| E11100 | N08500 | 4.5 | 47,000 |
| E11100 | N08500 | 5.0 | 19,000 |
| E11100 | N08500 | 5.5 | 14,000 |
| E11100 | N08500 | 6.0 | 14,000 |
| E11100 | N08500 | 6.5 | 13,000 |
| E11100 | N08500 | 7.0 | 13,000 |
| E11100 | N08500 | 7.5 | 12,000 |
| E11100 | N08500 | 8.0 | 12,000 |
| E11100 | N08600 | 0.5 | 111,000 |
| E11100 | N08600 | 1.0 | 281,000 |
| E11100 | N08600 | 1.5 | 300,000 |
| E11100 | N08600 | 2.0 | 214,000 |
| E11100 | N08600 | 2.5 | 152,000 |
| E11100 | N08600 | 3.0 | 130,000 |
| E11100 | N08600 | 3.5 | 123,000 |
| E11100 | N08600 | 4.0 | 102,000 |
| E11100 | N08600 | 4.5 | 62,000 |
| E11100 | N08600 | 5.0 | 25,000 |
| E11100 | N08600 | 5.5 | 14,000 |
| E11100 | N08600 | 6.0 | 11,000 |
| E11100 | N08600 | 6.5 | 10,000 |
| E11100 | N08600 | 7.0 | 10,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11100 | N08600 | 7.5 | 10,000 |
| E11100 | N08600 | 8.0 | 9,000 |
| E11100 | N08600 | 8.5 | 9,000 |
| E11100 | N08600 | 9.0 | 8,000 |
| E11100 | N08600 | 9.5 | 7,000 |
| E11110 | N08785 | 0.5 | 13,000 |
| E11110 | N08785 | 1.0 | 15,000 |
| E11110 | N08785 | 1.5 | 16,000 |
| E11110 | N08785 | 2.0 | 16,000 |
| E11110 | N08785 | 2.5 | 14,000 |
| E11110 | N08785 | 3.0 | 16,000 |
| E11110 | N08785 | 3.5 | 17,000 |
| E11110 | N08785 | 4.0 | 34,000 |
| E11110 | N08785 | 4.5 | 109,000 |
| E11110 | N08785 | 5.0 | 98,000 |
| E11110 | N08785 | 5.5 | 33,000 |
| E11110 | N08785 | 6.0 | 15,000 |
| E11110 | N08785 | 6.5 | 13,000 |
| E11110 | N08785 | 7.0 | 14,000 |
| E11110 | N08785 | 7.5 | 12,000 |
| E11110 | N08785 | 8.0 | 12,000 |
| E11150 | N09200 | 0.5 | 11,000 |
| E11150 | N09200 | 1.0 | 13,000 |
| E11150 | N09200 | 1.5 | 13,000 |
| E11150 | N09200 | 2.0 | 14,000 |
| E11150 | N09200 | 2.5 | 13,000 |
| E11150 | N09200 | 3.0 | 12,000 |
| E11150 | N09200 | 3.5 | 11,000 |
| E11150 | N09200 | 4.0 | 11,000 |
| E11150 | N09200 | 4.5 | 11,000 |
| E11190 | N08500 | 0.5 | 94,000 |
| E11190 | N08500 | 1.0 | 170,000 |
| E11190 | N08500 | 1.5 | 183,000 |
| E11190 | N08500 | 2.0 | 130,000 |
| E11190 | N08500 | 2.5 | 117,000 |
| E11190 | N08500 | 3.0 | 139,000 |
| E11190 | N08500 | 3.5 | 83,000 |
| E11190 | N08500 | 4.0 | 34,000 |
| E11190 | N08500 | 4.5 | 16,000 |
| E11190 | N08500 | 5.0 | 12,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11190 | N08500 | 5.5 | 11,000 |
| E11190 | N08500 | 6.0 | 11,000 |
| E11190 | N08500 | 6.5 | 10,000 |
| E11190 | N08500 | 7.0 | 9,000 |
| E11190 | N08500 | 7.5 | 9,000 |
| E11190 | N08500 | 8.0 | 9,000 |
| E11190 | N08500 | 8.5 | 10,000 |
| E11190 | N08500 | 9.0 | 10,000 |
| E11190 | N08500 | 9.5 | 11,000 |
| E11190 | N08500 | 10.0 | 12,000 |
| E11200 | N08600 | 0.5 | 64,000 |
| E11200 | N08600 | 1.0 | 161,000 |
| E11200 | N08600 | 1.5 | 161,000 |
| E11200 | N08600 | 2.0 | 120,000 |
| E11200 | N08600 | 2.5 | 79,000 |
| E11200 | N08600 | 3.0 | 70,000 |
| E11200 | N08600 | 3.5 | 56,000 |
| E11200 | N08600 | 4.0 | 37,000 |
| E11200 | N08600 | 4.5 | 24,000 |
| E11200 | N08600 | 5.0 | 19,000 |
| E11200 | N08600 | 5.5 | 15,000 |
| E11200 | N08600 | 6.0 | 14,000 |
| E11200 | N08600 | 6.5 | 14,000 |
| E11200 | N08600 | 7.0 | 11,000 |
| E11200 | N08600 | 7.5 | 10,000 |
| E11200 | N08600 | 8.0 | 10,000 |
| E11200 | N08600 | 8.5 | 9,000 |
| E11200 | N08600 | 9.0 | 9,000 |
| E11200 | N08600 | 9.5 | 11,000 |
| E11200 | N08700 | 0.5 | 12,000 |
| E11200 | N08700 | 1.0 | 17,000 |
| E11200 | N08700 | 1.5 | 15,000 |
| E11200 | N08700 | 2.0 | 18,000 |
| E11200 | N08700 | 2.5 | 23,000 |
| E11200 | N08700 | 3.0 | 27,000 |
| E11200 | N08700 | 3.5 | 30,000 |
| E11200 | N08700 | 4.0 | 25,000 |
| E11200 | N08700 | 4.5 | 13,000 |
| E11200 | N08700 | 5.0 | 11,000 |
| E11200 | N08700 | 5.5 | 9,000 |
| E11200 | N08700 | 6.0 | 9,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11200 | N08700 | 6.5 | 9,000 |
| E11200 | N08700 | 7.0 | 9,000 |
| E11200 | N08700 | 7.5 | 10,000 |
| E11200 | N08700 | 8.0 | 11,000 |
| E11200 | N08700 | 8.5 | 11,000 |
| E11200 | N08700 | 9.0 | 10,000 |
| E11200 | N08900 | 0.5 | 8,000 |
| E11200 | N08900 | 1.0 | 11,000 |
| E11200 | N08900 | 1.5 | 20,000 |
| E11200 | N08900 | 2.0 | 15,000 |
| E11200 | N08900 | 2.5 | 15,000 |
| E11200 | N08900 | 3.0 | 14,000 |
| E11200 | N08900 | 3.5 | 13,000 |
| E11200 | N08900 | 4.0 | 12,000 |
| E11200 | N08900 | 4.5 | 13,000 |
| E11200 | N08900 | 5.0 | 13,000 |
| E11200 | N08900 | 5.5 | 12,000 |
| E11200 | N08900 | 6.0 | 10,000 |
| E11200 | N08900 | 6.5 | 9,000 |
| E11200 | N08900 | 7.0 | 10,000 |
| E11200 | N08900 | 7.5 | 10,000 |
| E11200 | N08900 | 8.0 | 10,000 |
| E11200 | N08900 | 8.5 | 9,000 |
| E11200 | N08900 | 9.0 | 8,000 |
| E11200 | N08900 | 9.5 | 9,000 |
| E11205 | N08806 | 0.5 | 14,000 |
| E11205 | N08806 | 1.0 | 14,000 |
| E11205 | N08806 | 1.5 | 18,000 |
| E11205 | N08806 | 2.0 | 16,000 |
| E11205 | N08806 | 2.5 | 13,000 |
| E11205 | N08806 | 3.0 | 12,000 |
| E11205 | N08806 | 3.5 | 13,000 |
| E11205 | N08806 | 4.0 | 13,000 |
| E11205 | N08806 | 4.5 | 14,000 |
| E11205 | N08806 | 5.0 | 14,000 |
| E11205 | N08806 | 5.5 | 15,000 |
| E11205 | N08806 | 6.0 | 13,000 |
| E11205 | N08806 | 6.5 | 10,000 |
| E11205 | N08806 | 7.0 | 9,000 |
| E11205 | N08806 | 7.5 | 9,000 |
| E11205 | N08806 | 8.0 | 8,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11205 | N08806 | 8.5 | 8,000 |
| E11205 | N08806 | 9.0 | 8,000 |
| E11205 | N08806 | 9.5 | 9,000 |
| E11207 | N09000 | 0.5 | 27,000 |
| E11207 | N09000 | 1.0 | 49,000 |
| E11207 | N09000 | 1.5 | 88,000 |
| E11207 | N09000 | 2.0 | 80,000 |
| E11207 | N09000 | 2.5 | 44,000 |
| E11207 | N09000 | 3.0 | 27,000 |
| E11207 | N09000 | 3.5 | 33,000 |
| E11207 | N09000 | 4.0 | 30,000 |
| E11207 | N09000 | 4.5 | 18,000 |
| E11207 | N09000 | 5.0 | 16,000 |
| E11210 | N09100 | 0.5 | 24,000 |
| E11210 | N09100 | 1.0 | 20,000 |
| E11210 | N09100 | 1.5 | 16,000 |
| E11210 | N09100 | 2.0 | 15,000 |
| E11210 | N09100 | 2.5 | 13,000 |
| E11210 | N09100 | 3.0 | 13,000 |
| E11210 | N09100 | 3.5 | 14,000 |
| E11210 | N09100 | 4.0 | 13,000 |
| E11210 | N09200 | 0.5 | 14,000 |
| E11210 | N09200 | 1.0 | 13,000 |
| E11210 | N09200 | 1.5 | 13,000 |
| E11210 | N09200 | 2.0 | 12,000 |
| E11210 | N09200 | 2.5 | 10,000 |
| E11210 | N09200 | 3.0 | 10,000 |
| E11210 | N09200 | 3.5 | 11,000 |
| E11210 | N09200 | 4.0 | 10,000 |
| E11210 | N09200 | 4.5 | 12,000 |
| E11210 | N09200 | 5.0 | 10,000 |
| E11300 | N08500 | 0.5 | 233,000 |
| E11300 | N08500 | 1.0 | 441,000 |
| E11300 | N08500 | 1.5 | 480,000 |
| E11300 | N08500 | 2.0 | 432,000 |
| E11300 | N08500 | 2.5 | 212,000 |
| E11300 | N08500 | 3.0 | 79,000 |
| E11300 | N08500 | 3.5 | 41,000 |
| E11300 | N08500 | 4.0 | 34,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11300 | N08500 | 4.5 | 25,000 |
| E11300 | N08500 | 5.0 | 18,000 |
| E11300 | N08500 | 5.5 | 17,000 |
| E11300 | N08500 | 6.0 | 13,000 |
| E11300 | N08500 | 6.5 | 10,000 |
| E11300 | N08600 | 0.5 | 97,000 |
| E11300 | N08600 | 1.0 | 89,000 |
| E11300 | N08600 | 1.5 | 75,000 |
| E11300 | N08600 | 2.0 | 112,000 |
| E11300 | N08600 | 2.5 | 125,000 |
| E11300 | N08600 | 3.0 | 65,000 |
| E11300 | N08600 | 3.5 | 28,000 |
| E11300 | N08600 | 4.0 | 16,000 |
| E11300 | N08600 | 4.5 | 12,000 |
| E11300 | N08600 | 5.0 | 11,000 |
| E11300 | N08600 | 5.5 | 10,000 |
| E11300 | N08600 | 6.0 | 11,000 |
| E11300 | N08600 | 6.5 | 11,000 |
| E11300 | N08600 | 7.0 | 10,000 |
| E11300 | N08600 | 7.5 | 10,000 |
| E11300 | N08600 | 8.0 | 9,000 |
| E11300 | N08600 | 8.5 | 9,000 |
| E11300 | N08600 | 9.0 | 8,000 |
| E11300 | N08800 | 0.5 | 136,000 |
| E11300 | N08800 | 1.0 | 199,000 |
| E11300 | N08800 | 1.5 | 191,000 |
| E11300 | N08800 | 2.0 | 117,000 |
| E11300 | N08800 | 2.5 | 85,000 |
| E11300 | N08800 | 3.0 | 71,000 |
| E11300 | N08800 | 3.5 | 57,000 |
| E11300 | N08800 | 4.0 | 39,000 |
| E11300 | N08800 | 4.5 | 24,000 |
| E11300 | N08800 | 5.0 | 17,000 |
| E11300 | N08800 | 5.5 | 16,000 |
| E11300 | N08800 | 6.0 | 13,000 |
| E11300 | N08800 | 6.5 | 10,000 |
| E11300 | N08800 | 7.0 | 9,000 |
| E11300 | N08800 | 7.5 | 8,000 |
| E11300 | N08800 | 8.0 | 9,000 |
| E11300 | N08800 | 8.5 | 11,000 |
| E11300 | N08800 | 9.0 | 11,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11300 | N08800 | 9.5 | 11,000 |
| E11300 | N08800 | 10.0 | 10,000 |
| E11300 | N08800 | 10.5 | 9,000 |
| E11300 | N08800 | 11.0 | 9,000 |
| E11300 | N08800 | 11.5 | 10,000 |
| E11300 | N08900 | 0.5 | 43,000 |
| E11300 | N08900 | 1.0 | 60,000 |
| E11300 | N08900 | 1.5 | 80,000 |
| E11300 | N08900 | 2.0 | 37,000 |
| E11300 | N08900 | 2.5 | 20,000 |
| E11300 | N08900 | 3.0 | 16,000 |
| E11300 | N08900 | 3.5 | 14,000 |
| E11300 | N08900 | 4.0 | 12,000 |
| E11300 | N08900 | 4.5 | 10,000 |
| E11300 | N08900 | 5.0 | 10,000 |
| E11300 | N08900 | 5.5 | 10,000 |
| E11300 | N08900 | 6.0 | 10,000 |
| E11300 | N09000 | 0.5 | 28,000 |
| E11300 | N09000 | 1.0 | 36,000 |
| E11300 | N09000 | 1.5 | 41,000 |
| E11300 | N09000 | 2.0 | 18,000 |
| E11300 | N09000 | 2.5 | 14,000 |
| E11300 | N09000 | 3.0 | 11,000 |
| E11300 | N09000 | 3.5 | 9,000 |
| E11300 | N09000 | 4.0 | 9,000 |
| E11300 | N09000 | 4.5 | 10,000 |
| E11300 | N09000 | 5.0 | 10,000 |
| E11300 | N09000 | 5.5 | 10,000 |
| E11300 | N09000 | 6.0 | 9,000 |
| E11300 | N09000 | 6.5 | 10,000 |
| E11300 | N09000 | 7.0 | 11,000 |
| E11300 | N09000 | 7.5 | 11,000 |
| E11300 | N09000 | 8.0 | 11,000 |
| E11300 | N09200 | 0.5 | 12,000 |
| E11300 | N09200 | 1.0 | 20,000 |
| E11300 | N09200 | 1.5 | 19,000 |
| E11300 | N09200 | 2.0 | 20,000 |
| E11300 | N09200 | 2.5 | 21,000 |
| E11300 | N09200 | 3.0 | 24,000 |
| E11300 | N09200 | 3.5 | 30,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11300 | N09200 | 4.0 | 30,000 |
| E11300 | N09200 | 4.5 | 20,000 |
| E11300 | N09200 | 5.0 | 15,000 |
| E11300 | N09200 | 5.5 | 13,000 |
| E11300 | N09270 | 0.5 | 14,000 |
| E11300 | N09270 | 1.0 | 20,000 |
| E11300 | N09270 | 1.5 | 20,000 |
| E11300 | N09270 | 2.0 | 14,000 |
| E11300 | N09270 | 2.5 | 12,000 |
| E11300 | N09270 | 3.0 | 12,000 |
| E11300 | N09270 | 3.5 | 13,000 |
| E11300 | N09270 | 4.0 | 12,000 |
| E11300 | N09270 | 4.5 | 13,000 |
| E11300 | N09270 | 5.0 | 12,000 |
| E11300 | N09270 | 5.5 | 12,000 |
| E11300 | N09270 | 6.0 | 11,000 |
| E11305 | N08445 | 0.5 | 236,000 |
| E11305 | N08445 | 1.0 | 349,000 |
| E11305 | N08445 | 1.5 | 361,000 |
| E11305 | N08445 | 2.0 | 426,000 |
| E11305 | N08445 | 2.5 | 420,000 |
| E11305 | N08445 | 3.0 | 380,000 |
| E11305 | N08445 | 3.5 | 343,000 |
| E11305 | N08445 | 4.0 | 296,000 |
| E11305 | N08445 | 4.5 | 205,000 |
| E11305 | N08445 | 5.0 | 82,000 |
| E11305 | N08445 | 5.5 | 40,000 |
| E11305 | N08445 | 6.0 | 18,000 |
| E11305 | N08445 | 6.5 | 12,000 |
| E11305 | N08445 | 7.0 | 10,000 |
| E11305 | N08445 | 7.5 | 10,000 |
| E11305 | N08445 | 8.0 | 9,000 |
| E11305 | N08445 | 8.5 | 9,000 |
| E11305 | N08445 | 9.0 | 10,000 |
| E11305 | N08445 | 9.5 | 9,000 |
| E11305 | N08445 | 10.0 | 8,000 |
| E11305 | N09105 | 0.5 | 37,000 |
| E11305 | N09105 | 1.0 | 37,000 |
| E11305 | N09105 | 1.5 | 22,000 |
| E11305 | N09105 | 2.0 | 13,000 |

TABLE 5-4
(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11305 | N09105 | 2.5 | 13,000 |
| E11305 | N09105 | 3.0 | 11,000 |
| E11305 | N09105 | 3.5 | 10,000 |
| E11305 | N09105 | 4.0 | 10,000 |
| E11305 | N09105 | 4.5 | 10,000 |
| E11350 | N09000 | 0.5 | 25,000 |
| E11350 | N09000 | 1.0 | 41,000 |
| E11350 | N09000 | 1.5 | 41,000 |
| E11350 | N09000 | 2.0 | 34,000 |
| E11350 | N09000 | 2.5 | 18,000 |
| E11350 | N09000 | 3.0 | 13,000 |
| E11350 | N09000 | 3.5 | 12,000 |
| E11350 | N09000 | 4.0 | 11,000 |
| E11350 | N09000 | 4.5 | 11,000 |
| E11350 | N09000 | 5.0 | 11,000 |
| E11350 | N09000 | 5.5 | 11,000 |
| E11350 | N09000 | 6.0 | 11,000 |
| E11400 | N08600 | 0.5 | 142,000 |
| E11400 | N08600 | 1.0 | 185,000 |
| E11400 | N08600 | 1.5 | 171,000 |
| E11400 | N08600 | 2.0 | 130,000 |
| E11400 | N08600 | 2.5 | 69,000 |
| E11400 | N08600 | 3.0 | 30,000 |
| E11400 | N08600 | 3.5 | 15,000 |
| E11400 | N08600 | 4.0 | 14,000 |
| E11400 | N08600 | 4.5 | 11,000 |
| E11400 | N08600 | 5.0 | 10,000 |
| E11400 | N08600 | 5.5 | 10,000 |
| E11400 | N08600 | 6.0 | 10,000 |
| E11400 | N08600 | 6.5 | 10,000 |
| E11400 | N08600 | 7.0 | 9,000 |
| E11400 | N08600 | 7.5 | 10,000 |
| E11400 | N08800 | 0.5 | 50,000 |
| E11400 | N08800 | 1.0 | 38,000 |
| E11400 | N08800 | 1.5 | 21,000 |
| E11400 | N08800 | 2.0 | 16,000 |
| E11400 | N08800 | 2.5 | 13,000 |
| E11400 | N08800 | 3.0 | 11,000 |
| E11400 | N08800 | 3.5 | 10,000 |
| E11400 | N08800 | 4.0 | 9,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11400 | N08800 | 4.5 | 10,000 |
| E11400 | N08800 | 5.0 | 10,000 |
| E11400 | N08800 | 5.5 | 9,000 |
| E11400 | N08800 | 6.0 | 9,000 |
| E11400 | N08900 | 0.5 | 22,000 |
| E11400 | N08900 | 1.0 | 30,000 |
| E11400 | N08900 | 1.5 | 31,000 |
| E11400 | N08900 | 2.0 | 22,000 |
| E11400 | N08900 | 2.5 | 15,000 |
| E11400 | N08900 | 3.0 | 12,000 |
| E11400 | N08900 | 3.5 | 9,000 |
| E11400 | N08900 | 4.0 | 10,000 |
| E11400 | N08900 | 4.5 | 10,000 |
| E11400 | N08900 | 5.0 | 10,000 |
| E11400 | N09000 | 0.5 | 23,000 |
| E11400 | N09000 | 1.0 | 22,000 |
| E11400 | N09000 | 1.5 | 14,000 |
| E11400 | N09000 | 2.0 | 13,000 |
| E11400 | N09000 | 2.5 | 12,000 |
| E11400 | N09000 | 3.0 | 12,000 |
| E11400 | N09000 | 3.5 | 12,000 |
| E11400 | N09000 | 4.0 | 11,000 |
| E11400 | N09000 | 4.5 | 10,000 |
| E11400 | N09000 | 5.0 | 11,000 |
| E11400 | N09000 | 5.5 | 11,000 |
| E11400 | N09000 | 6.0 | 10,000 |
| E11400 | N09000 | 6.5 | 9,000 |
| E11400 | N09100 | 0.5 | 13,000 |
| E11400 | N09100 | 1.0 | 13,000 |
| E11400 | N09100 | 1.5 | 12,000 |
| E11400 | N09100 | 2.0 | 11,000 |
| E11400 | N09100 | 2.5 | 12,000 |
| E11400 | N09100 | 3.0 | 11,000 |
| E11400 | N09100 | 3.5 | 10,000 |
| E11400 | N09100 | 4.0 | 11,000 |
| E11400 | N09100 | 4.5 | 10,000 |
| E11400 | N09100 | 5.0 | 11,000 |
| E11400 | N09100 | 5.5 | 11,000 |
| E11400 | N09100 | 6.0 | 11,000 |
| E11400 | N09100 | 6.5 | 10,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11400 | N09100 | 7.0 | 10,000 |
| E11400 | N09100 | 7.5 | 10,000 |
| E11400 | N09200 | 0.5 | 11,000 |
| E11400 | N09200 | 1.0 | 14,000 |
| E11400 | N09200 | 1.5 | 12,000 |
| E11400 | N09200 | 2.0 | 11,000 |
| E11400 | N09200 | 2.5 | 10,000 |
| E11400 | N09200 | 3.0 | 10,000 |
| E11400 | N09200 | 3.5 | 10,000 |
| E11400 | N09200 | 4.0 | 9,000 |
| E11400 | N09200 | 4.5 | 9,000 |
| E11410 | N08680 | 0.5 | 167,000 |
| E11410 | N08680 | 1.0 | 305,000 |
| E11410 | N08680 | 1.5 | 361,000 |
| E11410 | N08680 | 2.0 | 349,000 |
| E11410 | N08680 | 2.5 | 213,000 |
| E11410 | N08680 | 3.0 | 71,000 |
| E11410 | N08680 | 3.5 | 27,000 |
| E11410 | N08680 | 4.0 | 16,000 |
| E11410 | N08680 | 4.5 | 12,000 |
| E11410 | N08680 | 5.0 | 10,000 |
| E11410 | N08680 | 5.5 | 10,000 |
| E11410 | N08680 | 6.0 | 9,000 |
| E11410 | N08680 | 6.5 | 10,000 |
| E11410 | N08680 | 7.0 | 10,000 |
| E11410 | N08680 | 7.5 | 10,000 |
| E11410 | N08680 | 8.0 | 11,000 |
| E11410 | N08680 | 8.5 | 10,000 |
| E11410 | N08680 | 9.0 | 9,000 |
| E11410 | N08680 | 9.5 | 9,000 |
| E11410 | N08680 | 10.0 | 9,000 |
| E11410 | N08680 | 10.5 | 10,000 |
| E11410 | N08680 | 11.0 | 10,000 |
| E11410 | N08680 | 11.5 | 10,000 |
| E11410 | N08680 | 12.0 | 11,000 |
| E11410 | N08680 | 12.5 | 11,000 |
| E11410 | N08680 | 13.0 | 10,000 |
| E11410 | N08680 | 13.5 | 10,000 |
| E11415 | N08485 | 0.5 | 74,000 |
| E11415 | N08485 | 1.0 | 62,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11415 | N08485 | 1.5 | 97,000 |
| E11415 | N08485 | 2.0 | 154,000 |
| E11415 | N08485 | 2.5 | 177,000 |
| E11415 | N08485 | 3.0 | 122,000 |
| E11415 | N08485 | 3.5 | 47,000 |
| E11415 | N08485 | 4.0 | 28,000 |
| E11415 | N08485 | 4.5 | 13,000 |
| E11415 | N08485 | 5.0 | 11,000 |
| E11500 | N08500 | 0.5 | 98,000 |
| E11500 | N08500 | 1.0 | 154,000 |
| E11500 | N08500 | 1.5 | 195,000 |
| E11500 | N08500 | 2.0 | 137,000 |
| E11500 | N08500 | 2.5 | 69,000 |
| E11500 | N08500 | 3.0 | 33,000 |
| E11500 | N08500 | 3.5 | 16,000 |
| E11500 | N08500 | 4.0 | 14,000 |
| E11500 | N08500 | 4.5 | 11,000 |
| E11500 | N08500 | 5.0 | 10,000 |
| E11500 | N08500 | 5.5 | 10,000 |
| E11500 | N08500 | 6.0 | 9,000 |
| E11500 | N08500 | 6.5 | 10,000 |
| E11500 | N08500 | 7.0 | 10,000 |
| E11500 | N08500 | 7.5 | 10,000 |
| E11500 | N08600 | 0.5 | 73,000 |
| E11500 | N08600 | 1.0 | 93,000 |
| E11500 | N08600 | 1.5 | 54,000 |
| E11500 | N08600 | 2.0 | 22,000 |
| E11500 | N08600 | 2.5 | 16,000 |
| E11500 | N08600 | 3.0 | 21,000 |
| E11500 | N08600 | 3.5 | 25,000 |
| E11500 | N08600 | 4.0 | 33,000 |
| E11500 | N08600 | 4.5 | 49,000 |
| E11500 | N08600 | 5.0 | 50,000 |
| E11500 | N08600 | 5.5 | 34,000 |
| E11500 | N08600 | 6.0 | 14,000 |
| E11500 | N08600 | 6.5 | 11,000 |
| E11500 | N08600 | 7.0 | 11,000 |
| E11500 | N08600 | 7.5 | 10,000 |
| E11500 | N08600 | 8.0 | 10,000 |
| E11500 | N08600 | 8.5 | 10,000 |
| E11500 | N08600 | 9.0 | 11,000 |

TABLE 5-4

(continued)

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| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11500 | N08600 | 9.5 | 10,000 |
| E11500 | N08680 | 0.5 | 47,000 |
| E11500 | N08680 | 1.0 | 38,000 |
| E11500 | N08680 | 1.5 | 20,000 |
| E11500 | N08680 | 2.0 | 16,000 |
| E11500 | N08680 | 2.5 | 17,000 |
| E11500 | N08680 | 3.0 | 30,000 |
| E11500 | N08680 | 3.5 | 86,000 |
| E11500 | N08680 | 4.0 | 140,000 |
| E11500 | N08680 | 4.5 | 128,000 |
| E11500 | N08680 | 5.0 | 111,000 |
| E11500 | N08680 | 5.5 | 108,000 |
| E11500 | N08680 | 6.0 | 71,000 |
| E11500 | N08680 | 6.5 | 30,000 |
| E11500 | N08680 | 7.0 | 16,000 |
| E11500 | N08680 | 7.5 | 13,000 |
| E11500 | N08680 | 8.0 | 12,000 |
| E11500 | N08680 | 8.5 | 11,000 |
| E11500 | N08680 | 9.0 | 10,000 |
| E11500 | N08680 | 9.5 | 11,000 |
| E11500 | N08680 | 10.0 | 11,000 |
| E11500 | N08680 | 10.5 | 11,000 |
| E11500 | N08680 | 11.0 | 11,000 |
| E11500 | N08680 | 11.5 | 11,000 |
| E11500 | N08680 | 12.0 | 11,000 |
| E11500 | N08680 | 12.5 | 10,000 |
| E11500 | N08680 | 13.0 | 10,000 |
| E11500 | N08680 | 13.5 | 10,000 |
| E11500 | N08680 | 14.0 | 10,000 |
| E11500 | N08800 | 0.5 | 43,000 |
| E11500 | N08800 | 1.0 | 26,000 |
| E11500 | N08800 | 1.5 | 15,000 |
| E11500 | N08800 | 2.0 | 13,000 |
| E11500 | N08800 | 2.5 | 10,000 |
| E11500 | N08800 | 3.0 | 10,000 |
| E11500 | N08800 | 3.5 | 13,000 |
| E11500 | N08800 | 4.0 | 12,000 |
| E11500 | N08800 | 4.5 | 11,000 |
| E11500 | N08800 | 5.0 | 10,000 |
| E11500 | N08800 | 5.5 | 10,000 |
| E11500 | N08800 | 6.0 | 10,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11500 | N08800 | 6.5 | 10,000 |
| E11500 | N08800 | 7.0 | 11,000 |
| E11500 | N08800 | 7.5 | 10,000 |
| E11500 | N08800 | 8.0 | 11,000 |
| E11500 | N08800 | 8.5 | 11,000 |
| E11500 | N08900 | 0.5 | 30,000 |
| E11500 | N08900 | 1.0 | 35,000 |
| E11500 | N08900 | 1.5 | 33,000 |
| E11500 | N08900 | 2.0 | 22,000 |
| E11500 | N08900 | 2.5 | 17,000 |
| E11500 | N08900 | 3.0 | 12,000 |
| E11500 | N08900 | 3.5 | 12,000 |
| E11500 | N08900 | 4.0 | 14,000 |
| E11500 | N08900 | 4.5 | 13,000 |
| E11500 | N08900 | 5.0 | 12,000 |
| E11500 | N08900 | 5.5 | 11,000 |
| E11500 | N08900 | 6.0 | 11,000 |
| E11500 | N08900 | 6.5 | 12,000 |
| E11500 | N08900 | 7.0 | 11,000 |
| E11500 | N08900 | 7.5 | 11,000 |
| E11500 | N08900 | 8.0 | 11,000 |
| E11500 | N08900 | 8.5 | 10,000 |
| E11500 | N08900 | 9.0 | 10,000 |
| E11500 | N08900 | 9.5 | 9,000 |
| E11500 | N08900 | 10.0 | 9,000 |
| E11500 | N09000 | 0.5 | 16,000 |
| E11500 | N09000 | 1.0 | 16,000 |
| E11500 | N09000 | 1.5 | 12,000 |
| E11500 | N09000 | 2.0 | 12,000 |
| E11500 | N09000 | 2.5 | 12,000 |
| E11500 | N09000 | 3.0 | 16,000 |
| E11500 | N09000 | 3.5 | 19,000 |
| E11500 | N09000 | 4.0 | 22,000 |
| E11500 | N09000 | 4.5 | 14,000 |
| E11500 | N09000 | 5.0 | 10,000 |
| E11500 | N09000 | 5.5 | 9,000 |
| E11500 | N09000 | 6.0 | 9,000 |
| E11500 | N09000 | 6.5 | 8,000 |
| E11500 | N09000 | 7.0 | 8,000 |
| E11500 | N09000 | 7.5 | 8,000 |
| E11500 | N09000 | 8.0 | 8,000 |

TABLE 5-4

(continued)

Page 35 of 37

| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11500 | N09000 | 8.5 | 8,000 |
| E11500 | N09000 | 9.0 | 9,000 |
| E11500 | N09000 | 9.5 | 9,000 |
| E11500 | N09000 | 10.0 | 9,000 |
| E11500 | N09000 | 10.5 | 10,000 |
| E11500 | N09000 | 11.0 | 10,000 |
| E11500 | N09000 | 11.5 | 10,000 |
| E11500 | N09000 | 12.0 | 11,000 |
| E11500 | N09000 | 12.5 | 10,000 |
| E11500 | N09250 | 0.5 | 22,000 |
| E11500 | N09250 | 1.0 | 25,000 |
| E11500 | N09250 | 1.5 | 21,000 |
| E11500 | N09250 | 2.0 | 16,000 |
| E11500 | N09250 | 2.5 | 14,000 |
| E11500 | N09250 | 3.0 | 15,000 |
| E11500 | N09250 | 3.5 | 16,000 |
| E11590 | N09100 | 0.5 | 11,000 |
| E11590 | N09100 | 1.0 | 13,000 |
| E11590 | N09100 | 1.5 | 12,000 |
| E11590 | N09100 | 2.0 | 11,000 |
| E11590 | N09100 | 2.5 | 10,000 |
| E11590 | N09100 | 3.0 | 10,000 |
| E11590 | N09100 | 3.5 | 11,000 |
| E11590 | N09100 | 4.0 | 10,000 |
| E11590 | N09100 | 4.5 | 9,000 |
| E11600 | N08600 | 0.5 | 109,000 |
| E11600 | N08600 | 1.0 | 154,000 |
| E11600 | N08600 | 1.5 | 200,000 |
| E11600 | N08600 | 2.0 | 335,000 |
| E11600 | N08600 | 2.5 | 496,000 |
| E11600 | N08600 | 3.0 | 504,000 |
| E11600 | N08600 | 3.5 | 349,000 |
| E11600 | N08600 | 4.0 | 84,000 |
| E11600 | N08600 | 4.5 | 74,000 |
| E11600 | N08600 | 5.0 | 23,000 |
| E11600 | N08600 | 5.5 | 15,000 |
| E11600 | N08600 | 6.0 | 12,000 |
| E11600 | N08600 | 6.5 | 11,000 |
| E11600 | N08600 | 7.0 | 11,000 |
| E11600 | N08600 | 7.5 | 12,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11600 | N08600 | 8.0 | 11,000 |
| E11600 | N08600 | 8.5 | 11,000 |
| E11600 | N08600 | 9.0 | 11,000 |
| E11600 | N08600 | 9.5 | 12,000 |
| E11600 | N08600 | 10.0 | 14,000 |
| E11600 | N08600 | 10.5 | 14,000 |
| E11600 | N08600 | 11.0 | 10,000 |
| E11600 | N08600 | 11.5 | 8,000 |
| E11600 | N08600 | 12.0 | 9,000 |
| E11600 | N08600 | 12.5 | 10,000 |
| E11600 | N08600 | 13.0 | 9,000 |
| E11600 | N08600 | 13.5 | 10,000 |
| E11600 | N08600 | 14.0 | 10,000 |
| E11600 | N09020 | 0.5 | 12,000 |
| E11600 | N09020 | 1.0 | 20,000 |
| E11600 | N09020 | 1.5 | 20,000 |
| E11600 | N09020 | 2.0 | 16,000 |
| E11600 | N09020 | 2.5 | 16,000 |
| E11600 | N09020 | 3.0 | 14,000 |
| E11600 | N09020 | 3.5 | 16,000 |
| E11600 | N09020 | 4.0 | 17,000 |
| E11600 | N09020 | 4.5 | 14,000 |
| E11600 | N09020 | 5.0 | 12,000 |
| E11600 | N09020 | 5.5 | 11,000 |
| E11600 | N09020 | 6.0 | 11,000 |
| E11600 | N09020 | 6.5 | 11,000 |
| E11600 | N09020 | 7.0 | 10,000 |
| E11600 | N09020 | 7.5 | 10,000 |
| E11602 | N08500 | 0.5 | 174,000 |
| E11602 | N08500 | 1.0 | 237,000 |
| E11602 | N08500 | 1.5 | 211,000 |
| E11602 | N08500 | 2.0 | 199,000 |
| E11602 | N08500 | 2.5 | 146,000 |
| E11602 | N08500 | 3.0 | 78,000 |
| E11602 | N08500 | 3.5 | 40,000 |
| E11602 | N08500 | 4.0 | 19,000 |
| E11602 | N08500 | 4.5 | 13,000 |
| E11602 | N08500 | 5.0 | 12,000 |
| E11602 | N08500 | 5.5 | 18,000 |
| E11602 | N08500 | 6.0 | 16,000 |
| E11705 | N09100 | 0.5 | 11,000 |

TABLE 5-4

(continued)



| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Counts per Minute |
|---|---|---|---|
| E11705 | N09100 | 1.0 | 13,000 |
| E11705 | N09100 | 1.5 | 13,000 |
| E11705 | N09100 | 2.0 | 12,000 |
| E11705 | N09100 | 2.5 | 10,000 |
| E11705 | N09100 | 3.0 | 10,000 |
| E11705 | N09100 | 3.5 | 10,000 |
| E11705 | N09100 | 4.0 | 11,000 |
| E11705 | N09100 | 4.5 | 10,000 |

[a]The variations in the depths of bore- and corresponding results given in this table are based on the boreholes penetrating the contamination or the drill reaching refusal.

[b]Contamination not penetrated because the borehole collapsed.

# TABLE 5-5
## SUBSURFACE SOIL SAMPLING RESULTS AT SEARS

| Grid Coordinates E,W | Grid Coordinates N,S | Depth (ft) | Concentrations (pCi/g +/- 2 sigma)[a] Uranium-238 | Radium-226 | Thorium-232 |
|---|---|---|---|---|---|
| E10085 | N08915 | 0-1 | <40.0 | 6.0 ± 1.0 | 44.0 ± 5.0 |
| E10085 | N08915 | 1-2 | <60.0 | 3.0 ± 1.0 | 9.0 ± 2.0 |
| E10085 | N08915 | 2-3 | <17.0 | <6.0 | 8.0 ± 1.0 |
| E10085 | N08915 | 3-4 | <43.0 | 2.0 ± 1.0 | 4.0 ± 1.0 |
| E10506 | N09000 | 0-1 | <12.0 | 4.0 ± 1.0 | 21.0 ± 8.0 |
| E10506 | N09000 | 3-4 | <46.0 | 23.0 ± 3.0 | 108.0 ± 11.0 |
| E10506 | N09000 | 4-5 | <86.0 | 37.0 ± 10.0 | 180.0 ± 13.0 |
| E10506 | N09000 | 6-7 | <57.0 | 10.0 ± 1.0 | 53.0 ± 10.0 |
| E10506 | N09000 | 7-8 | <38.0 | 2.0 ± 1.0 | 3.0 ± 1.0 |
| E10506 | N09000 | 8-9 | <25.0 | 1.0 ± 1.0 | 2.0 ± 1.0 |
| E10506 | N09000 | 9-10 | <30.0 | 2.0 ± 1.0 | <3.0 |
| E10800 | N08500 | 2-3 | <75.0 | 5.0 ± 1.0 | 34.0 ± 5.0 |
| E10800 | N08500 | 3-4 | <17.0 | <5.0 | <7.0 |
| E10800 | N08500 | 4-5 | <37.0 | 1.0 ± 1.0 | 2.0 ± 1.0 |
| E10800 | N08500 | 5-6 | <9.0 | 1.0 ± 1.0 | 1.0 ± 1.0 |
| E10800 | N08500 | 6-7 | <37.0 | <2.0 | <4.0 |
| E11085 | N08635 | 1-2 | <88.0 | 7.0 ± 1.0 | 25.0 ± 3.0 |
| E11085 | N08635 | 2-3 | <32.0 | 4.0 ± 2.0 | 21.0 ± 2.0 |
| E11085 | N08635 | 3-4 | <32.0 | 13.0 ± 4.0 | 61.0 ± 5.0 |
| E11085 | N08635 | 5-6 | <18.0 | 5.0 ± 1.0 | 13.0 ± 2.0 |
| E11085 | N08635 | 6-7 | <31.0 | 3.0 ± 1.0 | 14.0 ± 3.0 |
| E11085 | N08635 | 7-8 | <64.0 | 2.0 ± 1.0 | 4.0 ± 1.0 |
| E11085 | N08635 | 8-9 | <33.0 | 2.0 ± 1.0 | 3.0 ± 1.0 |
| E11085 | N08635 | 9-10 | <9.0 | 1.0 ± 1.0 | <4.0 |
| E11350 | N09000 | 0-1 | <56.0 | 4.0 ± 1.0 | 8.0 ± 1.0 |
| E11350 | N09000 | 1-2 | <22.0 | <5.0 | 16.0 ± 2.0 |
| E11350 | N09000 | 2-3 | <13.0 | 5.0 ± 2.0 | 13.0 ± 3.0 |
| E11350 | N09000 | 3-4 | <13.0 | <4.0 | <6.0 |
| E11350 | N09000 | 4-5 | <14.0 | 2.0 ± 1.0 | <5.0 |
| E11350 | N09000 | 5-6 | <13.0 | 2.0 ± 1.0 | <3.0 |
| E11350 | N09000 | 6-7 | <33.0 | 3.0 ± 1.0 | 2.0 ± 1.0 |
| E11350 | N09000 | 7-8 | <38.0 | 2.0 ± 1.0 | <4.0 |
| E11415 | N08485 | 0-1 | <70.0 | 6.0 ± 2.0 | 15.0 ± 3.0 |
| E11415 | N08485 | 1-2 | <84.0 | 2.0 ± 2.0 | 17.0 ± 4.0 |
| E11415 | N08485 | 2-3 | <185.0 | 16.0 ± 2.0 | 68.0 ± 6.0 |
| E11415 | N08485 | 3-4 | <232.0 | 12.0 ± 4.0 | 87.0 ± 3.0 |
| E11415 | N08485 | 4-5 | <13.0 | <4.0 | 2.0 ± 1.0 |
| E11415 | N08485 | 5-6 | <40.0 | 1.0 ± 1.0 | 3.0 ± 1.0 |
| E11415 | N08485 | 6-7 | 40.0 ± 18.0 | 1.0 ± 1.0 | <3.0 |

[a]The low level of detectability was proportional to the quantity of the sample, the heterogeneity of the sample, moisture content, and counting geometry.

TABLE 5-6

RADON MEASUREMENTS IN SEARS WAREHOUSE

| Method | pCi/l |
|---|---|
| Lucas Cell (predrilling) | |
| Employee washroom | 2.2 |
| Supervisor's office | 0.6 |
| Radon Pylon | |
| Borehole locations - predrilling | 0 - 0.9 |
| Borehole locations - immediately after drilling | 5 - 30 |
| Borehole locations - 72 hours after drilling[a] | 50 - 300 |

[a]Concentrations returned to background levels after the holes were sealed.

TABLE 5-7

GAMMA RADIATION EXPOSURE RATE MEASUREMENTS

AT SEARS

| Grid Coordinates E,W | Grid Coordinates N,S | Exposure Rate (uR/h) |
|---|---|---|
| E10400 | N08900 | 12 |
| E10400 | N09000 | 14 |
| E10400 | N09100 | 14 |
| E10700 | N08900 | 11 |
| E10700 | N09000 | 12 |
| E10700 | N09100 | 14 |
| E11000 | N08900 | 11 |
| E11000 | N09000 | 13 |
| E11000 | N09100 | 15 |

TABLE 5-8

SUMMARY OF PRIORITY POLLUTANT METALS ANALYSIS AT THE SEARS PROPERTY

| | Range of Sample Concentrations (ppm) | Maximum Metal Results of EP Toxicity Test/ EPA Standard (ppm) | Mean (Range) of Background[a] Concentrations (ppm) | Number of Results Greater Than Background Range | Sample Location |
|---|---|---|---|---|---|
| Arsenic | <2 - 10 | 0.04/5 | 2 (1-50) | 0 | N9000, E10506 |
| Cadmium | <0.08 - 2 | <0.04/1 | 0.06 (0.01-0.7) | 4 | -b- |
| Chromium | 6 - 99 | <0.04/5 | 100 (5-3000) | 0 | N9305, E10200 |
| Lead | 10 - 4200 | 0.2/5 | 10 (2-200) | 1 | N9305 E10200 |
| Mercury | <0.1 - 0.8 | <0.001/0.2 | 0.03 (0.01-3) | 0 | N8500, E10800 |
| Selenium | <1 - <4 | <0.01/1 | (0.01-2) | 0 | N8500, E10800 |
| Silver | <0.2 | <0.03/5 | 0.1 (0.01-5) | 0 | N9930, E9800 |
| Beryllium | <0.01 | NA | 6 (0.1-40) | 0 | N9300, E9700 |
| Copper | 6 - 140 | NA | 20 (2-100) | 1 | N9305, E10200 |
| Nickel | 5.7 - 18 | NA | 40 (10-1000) | 0 | N8690, E11650 |
| Thallium | <2 - 8 | NA | 0.1 | 1 | N8690, E11650 |
| Zinc | 22 - 430 | NA | 50 (10-300) | 1 | N9305, E10200 |
| Antimony | <2 - 14 | NA | (2-10) | 1 | N8690, E11650 |

[a]See Reference 11.

[b]Coordinates for this constituent are N9305, E10200; N8915, E10200; N8380, E11000 and N8690, E11650.

REFERENCES

1. U.S. Department of Energy. Description of the Formerly Utilized Sites Remedial Action Program, ORO-777, Oak Ridge, TN, September 1980 (as modified by DOE in October 1983).

2. Morton, Henry W. Natural Thorium in Maywood, New Jersey, Nuclear Safety Associates, Inc., Potomac, MD, September 29, 1982.

3. U.S. Nuclear Regulatory Commission Office of Inspection and Enforcement, Region I. Inspection Report No. 40-8610/80-01, February 18, 1981.

4. Oak Ridge Associated Universities. Radiological Assessment of Ballod Associates Property (Stepan Chemical Company) Maywood, New Jersey, Oak Ridge, TN, July, 30, 1981.

5. EG&G Energy Measurements Group. An Aerial Radiologic Survey of the Stepan Chemical Company and Surrounding Area, Maywood, New Jersey, NRC-8109, Oak Ridge, TN, September 1981.

6. NUS Corporation. Radiological Study of Maywood Chemical, Maywood, New Jersey, November 7, 1983.

7. Trip Report, C.P. Leichtweis, Bechtel National, Inc., to File. "Calibration and Functional Checks of Eberline Instrumentation," CCN 35677, March 25, 1986.

8. Letter, S.W. Ahrends, Program Director, Technical Services Division, Oak Ridge Operations Office, Department of Energy, to W.J. Librizzi, Environmental Protection Agency. "Buries Waste at Maywood Project - Sears Property," July 31, 1986.

9. Letter, S.W. Ahrends, Program Director, Technical Services Division, Oak Ridge Operations Office, Department of Energy, to W.J. Librizzi, Environmental Protection Agency. "Buried Container at Maywood, Sears Project," August 5, 1986.

10. Memorandum, C.P. Leichtweis, Bechtel National, Inc., to T.M. Dravecky, Bechtel National, Inc. "Sears and Vicinity Property Characterization Results (Chemical Data)," CCN 042662, January 16, 1987.

11. Braunstein, N.M. Ed. Health and Control Aspects of Coal Conversion, Ann Arbor Science, Ann Arbor, MI, 1981.

# APPENDIX A

## GEOLOGIC DRILL LOGS

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-128R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8600,E11600 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/23/86 | COMPLETED: 6/23/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 7.0' |
| ROCK (FT.): 6.5' | TOTAL DEPTH: 13.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.8 | DEPTH/EL. GROUND WATER: 6.0'/39.8' |
| DEPTH/EL. TOP OF ROCK: 7.0'/38.8' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P.YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' (GPM) | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 5' | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.8 | 0 | | | | |
| | | | | | | | 44.8 | 1.0 | | | 0.0-1.0': SILT (ML); DUSKY BROWN (5YR2/2), SANDY, RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 1.0-7.0': SAND (SC-SM); FINE GRAINED, NON-PLASTIC, DRY TO MOIST.<br>1.0-2.0': DUSKY BROWN (5YR2/2), VERY SILTY.<br>2.0-4.0': VERY LIGHT GRAY AND WHITE (N8,N9), WITH SLUDGE.<br>4.0-5.0': BLACK TO DARK GRAY (N1-N3).<br>5.0-7.0': PALE OLIVE (10Y6/2). | 6/25/86 |
| | | | | | | | 38.8 | 7.0 | | | 7.0-13.5': SANDSTONE; SOFT, FINE-GRAINED, SILTY, MOIST TO 8.0', SATURATED TO 13.5'.<br>7.0-8.0': DARK REDDISH BROWN (10R3/4).<br>8.0-13.5': DUSKY RED (5R3/4). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 32.3 | 13.5 | | | BOTTOM OF HOLE AT 13.5 FT.<br>HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 6/25/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-128R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-129R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8600, E11500 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/24/86 | COMPLETED: 6/24/86 | DRILLER: MORE TRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 8.0' |
| ROCK (FT.): 2.0' | TOTAL DEPTH: 10.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.7 | DEPTH/EL. GROUND WATER: 3.0'/42.7' |
| DEPTH/EL. TOP OF ROCK: 8.0'/37.7' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE, LENGTH CORE RUN | SAMPLE RECOVERY, CORE RECOVERY | SAMPLE BLOWS "N", PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' PSI | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.7 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 45.2 | | | | 0.0-0.5': SILT(ML): DUSKY BROWN (5YR2/2), RESIDUAL SOIL. | |
| | | | | | | | | | | | 0.5-8.0': SAND: FINE GRAINED, SILTY. | |
| | | | | | | | | | | | 0.5-1.0': MODERATE BROWN (5YR3/4). | |
| | | | | | | | | | | | 1.0-4.0': LIGHT GRAY WITH WHITE SPECKS (HT WITH N9), WITH SLUDGE. | |
| | | | | | | | | | | | 4.0-8.0': GRAYISH BROWN (5YR3/2), MOIST TO SATURATED (7.0-8.0 FT). | ▽ 6/25/86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | 5 | | | | |
| | | | | | | | 37.7 | | | | 8.0-10.0': SANDSTONE: DARK YELLOWISH BROWN TO DUSKY RED (10YR4/2 TO 5YR3/4), SOFT, FINE GRAINED, SILTY, WEATHERED, SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 35.7 | 10 | | | | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 10.0 FT. | |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 6/25/86. | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-129R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-130R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8600,E11400 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/24/86 | COMPLETED: 6/24/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 6.0' |
| ROCK (FT.): 1.5' | TOTAL DEPTH: 7.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.2 | DEPTH/EL. GROUND WATER: 6.0'/39.2' |
| DEPTH/EL. TOP OF ROCK: 6.0'/39.2' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.2 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 44.7 | | | | 0.0-0.5': SILT (ML); DUSKY BROWN (5YR2/2) RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.5-6.0': SAND; FINE GRAINED, SILTY, DRY. | |
| | | | | | | | | | | | 0.5-2.0': PALE BROWN WITH WHITE SPECKS (5YR5/2 WITH N9), WITH SLUDGE. | |
| | | | | | | | | | | | 2.0-3.0': DUSKY BROWN (5YR2/2). | |
| | | | | | | | | | | | 3.0-4.0': DARK GRAY (N3), WITH SLUDGE. | |
| | | | | | | | | 5 | | | 4.0-6.0': PALE YELLOWISH BROWN (10YR5/2). | ▽ 6/25/86 |
| | | | | | | | 39.2 | | | | 6.0-7.5': SANDSTONE; GRAYISH RED (10R4/2), SOFT, FINE GRAINED, SILTY, WEATHERED, SATURATED. | |
| | | | | | | | 37.7 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT. | |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 6/25/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-130R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-131R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8500, E11300 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/24/86 | COMPLETED: 6/24/86 | DRILLER: MORE TRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.5' |
| ROCK (FT.): 1.0' | TOTAL DEPTH: 6.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.2' | DEPTH/EL. GROUND WATER: 6.0'/39.2' |
| DEPTH/EL. TOP OF ROCK: 5.5'/39.7' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.2 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 44.7 | 0.5 | | | 0.0-0.5': SILT (ML); DUSKY BROWN (5YR2/2) RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.5-5.5': SAND (SC-SM); FINE GRAINED, SILTY, SLIGHTLY PLASTIC, MOIST. | |
| | | | | | | | | | | | 0.5-1.0': DUSKY BROWN WITH WHITE SPECKS (5YR2/2 WITH N9), WITH SLUDGE. | |
| | | | | | | | | | | | 1.0-3.0': VERY PALE ORANGE (10YR8/4), WITH SLUDGE. | |
| | | | | | | | | | | | 3.0-4.0': BLACK (NIL | |
| | | | | | | | 39.7 | 5.5 | | | 4.0-5.5': LIGHT OLIVE GRAY (5Y5/2). | ▽ 6/25/86 |
| | | | | | | | 38.7 | 6.5 | | | 5.5-5.5': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, DRY TO MOIST. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 6.5 FT. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 6/25/86. | |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

* DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-131R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-132R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8445,E11305 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 6/24/86 | 6/24/86 | MORE TRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 8.5' | 1.5' | 10.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.0 | 9.0'/38.0' | 8.5'/38.5' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' PSI | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | 4 | | | | | 47.0 | 0 | | | 0.0-0.5': SILT (ML); DUSKY BROWN (5YR2/2) RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 46.5 | | | | 0.5-8.5': SAND (SC-SM); FINE GRAINED, SILTY, SLIGHTLY PLASTIC TO NON-PLASTIC, DRY TO SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 5 | | | 0.5-2.0': DUSKY BROWN WITH WHITE SPECKS (5YR2/2 WITH N9). | |
| | | | | | | | | | | | 0.5-6.0': WITH SLUDGE. | |
| | | | | | | | | | | | 2.0-6.0': WHITE (N9). | |
| | | | | | | | | | | | 6.0-7.5': BLACK (N1). | |
| | | | | | | | | | | | 7.5-8.5': PALE YELLOWISH BROWN (10YR6/2). | ▽ 6/25/86 |
| | | | | | | | 38.5 | 8.5 | | | 8.5-10.0': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, SATURATED. | |
| | | | | | | | 37.0 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. | |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 6/25/86. | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-132R |

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-134R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8500,E11500 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/25/86 | COMPLETED: 6/25/86 | DRILLER: MORE TRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 6.0' |
| ROCK (FT.): 1.5' | TOTAL DEPTH: 7.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.3 | DEPTH/EL. GROUND WATER: 3.5'/41.8' |
| DEPTH/EL. TOP OF ROCK: 6.0'/39.3' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.3 | 0 | | | 0.0-3.0': SILT (ML); MODERATE BROWN (5YR3/4) RESIDUAL SOIL TO 0.5 FT, NON-PLASTIC (0.5-3.0 FT). | |
| | | | | | | | 42.3 | 3.0 | | | 3.0-6.0': SAND (SC-SM); FINE GRAINED, SILTY, NON-PLASTIC, DRY TO MOIST. 3.0-4.5': BLACK (N1). 4.5-6.0': LIGHT GRAY (N7). | ▽ 7/3/86 |
| | | | | | | | 39.3 | 6.0 | | | 6.0-7.5': SANDSTONE; LIGHT ORANGE BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, SATURATED. | |
| | | | | | | | 37.8 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-134R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-135R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8500,E11602 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/26/86 | COMPLETED: 6/26/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.0' |
| ROCK (FT.): 1.5' | TOTAL DEPTH: 6.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 46.7 | DEPTH/EL. GROUND WATER: 3.5'/43.2' |
| DEPTH/EL. TOP OF ROCK: 5.0'/41.7' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N"/PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | PRESSURE P.S.I. 2ND 5' | TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 46.7 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 46.2 | 0.5 | | | 0.0-0.5': SILT (ML); MODERATE BROWN (5YR3/4) RESIDUAL SOIL. | |
| | | | | | | | | | | | 0.5-5.0': SAND; FINE GRAINED, SILTY, NON-PLASTIC TO SLIGHTLY PLASTIC. | |
| | | | | | | | | | | | 0.5-1.5': MODERATE BROWN (5YR3/4) WITH WHITE SPECKS, WITH SLUDGE. | ▽ 7/3/86 |
| | | | | | | | | | | | 1.5-3.5': LIGHT OLIVE GRAY (5Y5/2), TIMBER DEBRIS. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 3.5-5.0': BROWNISH BLACK (5YR2/1). | |
| | | | | | | | 41.7 | 5 | | | 5.0-6.5': SANDSTONE; GRAYISH ORANGE PINK (5YR7/2) AND PALE RED (10R6/2), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | 40.2 | 6.5 | | | BOTTOM OF HOLE AT 6.5 FT. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-135R

045848

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-136R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8680,E11500 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 6/26/86 | 6/26/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 9.0' | 3.0' | 12.0' |

| CORE RECOVERY(FT.)/%D | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 45.7 | 2.5'/43.2' | 9.0'/36.7' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE: LENGTH CORE RUN | SAMPLE RECOVERY: CORE RECOVERY | SAMPLE BLOWS "N": PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | PRESSURE P.S.I. 2ND 5' | TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.7 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 45.2 | | | | 0.0-0.5': CRUSHED ROCK AND SILT (FILL); MODERATE BROWN (5YR3/4), RESIDUAL SOIL AND ROCK. | ▽ 7/3/86 |
| | | | | | | | | | | | 0.5-9.0': SAND (SC-SM); FINE GRAINED, SILTY, NON-PLASTIC TO SLIGHTLY PLASTIC, DRY TO MOIST. 0.5-4.0': DUSKY RED (5YR3/4). 4.0-7.0': BLACK WITH TRACE WHITE SPECKS AND LIGHT GRAY STRINGERS (20%) (N1 WITH N9, N7), WITH SLUDGE. 7.0-9.0': LIGHT OLIVE GRAY (5Y5/2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | 5 | | | | |
| | | | | | | | 36.7 | 9.0 | | | | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | 9.0-12.0': SANDSTONE; PALE REDDISH BROWN (10R5/4), SOFT TO MODERATE HARDNESS, FINE GRAINED, SILTY, WEATHERED, MOIST, SATURATED AT 11-12.0 FT. | |
| | | | | | | | 33.7 | 12.0 | | | | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 12.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | AUGER REFUSAL AT 12.0 FT. |
| | | | | | | | | 15 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-136R |

045848

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-137R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8680,E11410 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 6/26/86 | 6/26/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.0' | 7.0' | 13.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 45.7 | 2.5'/43.2 | 6.0'/39.7' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.7 | 0 | | | 0.0-4.0': SILT (ML); MODERATE BROWN (5YR3/4), RESIDUAL SOIL (0.0-0.5 FT), MIXED SILT AND WHITE SLUDGE. | ▽ 7/3/86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 41.7 | 4.0 | | | 4.0-6.0': SAND; FINE GRAINED, SILTY, DRY TO MOIST. 4.0-4.5': BLACK (N0). 4.5-6.0': LIGHT OLIVE GRAY (5Y5/2). | |
| | | | | | | | 39.7 | 6.0 | | | 6.0-13.0': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST TO SATURATED. | |
| | | | | | | | 32.7 | 13.0 | | | BOTTOM OF HOLE AT 13.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-137R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-138R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8800,E11500 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 6/26/86 | 6/26/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 7.0' | 2.0' | 9.0' |

| CORE RECOVERY(FT.)/%D | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 46.0 | 2.0'/44.0' | 7.0'/39.0' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 46.0 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 45.5 | 0.5 | | | 0.0-0.5': SILT (ML), MODERATE BROWN (5YR3/4), RESIDUAL SOIL. | ▽ 7/3/86 |
| | | | | | | | | 5 | | | 0.5-7.0': SAND (SC-SM); FINE GRAINED, SILTY, SLIGHTLY PLASTIC TO NON-PLASTIC. 0.5-4.0': MODERATE BROWN (5YR3/4) WITH WHITE SPECKS (5YR3/4 WITH N9), WITH SLUDGE. 4.0-5.0': DUSKY BROWN (5YR2/2). 5.0-7.0': LIGHT OLIVE GRAY (5Y5/2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 39.0 | 7.0 | | | 7.0-9.0': SANDSTONE: LIGHT BROWN (5YR6/4), SOFT TO MODERATELY HARD, FINE GRAINED, WEATHERED, MOIST. | |
| | | | | | | | 37.0 | 9.0 | | | BOTTOM OF HOLE AT 9.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | AUGER REFUSAL AT 9.0 FT. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

* DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-138R |

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-139R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8900,E11500 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/26/86 | COMPLETED: 6/26/86 | DRILLER: MORE TRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 7.0' |
| ROCK (FT.): 3.0' | TOTAL DEPTH: 10.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.5 | DEPTH/EL. GROUND WATER: 2.0'/43.5' |
| DEPTH/EL. TOP OF ROCK: 7.0'/38.5' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.5 | 0 | | | | |
| | | | | | | | 44.5 | 1.0 | | | 0.0-1.0': SILT (ML): GRAYISH BROWN (5YR3/2), RESIDUAL SOIL. | |
| | | | | | | | | | | | 1.0-7.0': SAND (SC-SW): FINE GRAINED, VERY SILTY, NON-PLASTIC. | ▽ 7/3/86 |
| | | | | | | | | | | | 1.0-3.0': DUSKY BROWN AND LIGHT BLUE (5YR2/2 AND 5B7/6), CONTAINS HIDES. | |
| | | | | | | | | | | | 3.0-6.0': BROWNISH BLACK (5YR2/1). | |
| | | | | | | | | 5 | | | 6.0-7.0': PALE YELLOWISH BROWN (10YR6/2). | |
| | | | | | | | 38.5 | 7.0 | | | 7.0-10.0': SANDSTONE: LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, SATURATED (9.0-10.0 FT). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 35.5 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. | |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-139R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-142R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9000,E11500 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/27/86 | COMPLETED: 6/27/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 3.5' |
| ROCK (FT.): 4.5' | TOTAL DEPTH: 8.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.5 | DEPTH/EL. GROUND WATER: 2.0'/43.5' |
| DEPTH/EL. TOP OF ROCK: 3.5'/42.0' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N"/PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.5 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 45.0 | 0.5 | | | 0.0-0.5': SILT (ML); MODERATE BROWN (5YR3/4), RESIDUAL SOIL. | |
| | | | | | | | | | | | 0.5-3.5': SAND (SC-SM); FINE GRAINED, SILTY, SLIGHTLY PLASTIC. | ▽ 7/9/86 |
| | | | | | | | | | | | 0.5-1.5': BLACK (ND). | |
| | | | | | | | 42.0 | 3.5 | | | 1.5-3.5': PALE OLIVE (10Y6/2), WITH SLUDGE. | |
| | | | | | | | | 5 | | | 3.5-8.0': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT FINE GRAINED, SILTY, WEATHERED, SATURATED. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 37.5 | 8.0 | | | | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 8.0 FT. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-142R

045848

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-143R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9100,E11590 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/27/86 | COMPLETED: 6/27/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 3.5' |
| ROCK (FT.): 1.5' | TOTAL DEPTH: 5.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.9 | DEPTH/EL. GROUND WATER: 0.5'/45.4' |
| DEPTH/EL. TOP OF ROCK: 3.5'/42.4' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5'); PRESSURE PSI (2ND 5'); TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | 45.9 | 0 | | | | ▽ 7/3/86 |
| | | | | | 45.4 | 0.5 | | | 0.0-0.5': SILT (ML); MODERATE BROWN (5YR3/4), RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | 42.4 | 3.5 | | | 0.5-3.5': SAND (SC-SM); DUSKY BROWN (5YR2/2), FINE GRAINED, SILTY, NON-PLASTIC, DRY. | |
| | | | | | 40.9 | 5 | | | 3.5-5.0': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | | | BOTTOM OF HOLE AT 5.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | 10 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | 15 | | | | |
| | | | | | | 20 | | | | |
| | | | | | | 25 | | | | |
| | | | | | | 30 | | | | |
| | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-143R

045848

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-144R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9100,E11705 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/27/86 | COMPLETED: 6/27/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 3.5' |
| ROCK (FT.): 1.5' | TOTAL DEPTH: 5.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.9 | DEPTH/EL. GROUND WATER: 2.5'/43.4' |
| DEPTH/EL. TOP OF ROCK: 3.5'/42.4' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' G.P.M. | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 5' | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.9 | 0 | | | | |
| | | | | | | | 45.4 | 0.5 | | | 0.0-0.5': SILT (ML), MODERATE BROWN (5YR3/4), RESIDUAL SOIL. | |
| | | | | | | | | | | | 0.5-3.5': SAND (SC-SM): BROWNISH BLACK (5YR2/0, FINE GRAINED, SILTY, DRY TO MOIST. | ▽ 7/9/86 |
| | | | | | | | 42.4 | 3.5 | | | 3.5-5.0': SANDSTONE: LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | 40.9 | 5 | | | BOTTOM OF HOLE AT 5.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-144R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-145R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9020,E11600 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 6/27/86 | 6/27/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 4.5' | 2.5' | 7.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 45.5' | 1.5'/44.0' | 4.5'/41.0' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE, LENGTH CORE RUN / SAMPLE RECOVERY, CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 45.5 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | 45.0 | | | | 0.0-0.5': SILT (ML), MODERATE BROWN (5YR3/4), RESIDUAL SOIL. | ▽ 7-3-86 |
| | | | | | | | | | | 0.5-4.5': SAND (SC-SM); FINE GRAINED, SILTY, MOIST. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | 0.5-2.5': BROWNISH BLACK (5YR2/0. | |
| | | | | | | | | | | 2.5-3.0': LIGHT GRAY (N7), WITH SLUDGE. | |
| | | | | | | 41.0 | 5 | | | 3.0-4.5': DUSKY BROWN WITH LIGHT GRAY SPECKS (5YR2/2, WITH N7). | |
| | | | | | | | | | | 4.5-7.0': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, DRY TO MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | 38.5 | 7 | | | BOTTOM OF HOLE AT 7.0 FT. | |
| | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | 10 | | | | |
| | | | | | | | 15 | | | | |
| | | | | | | | 20 | | | | |
| | | | | | | | 25 | | | | |
| | | | | | | | 30 | | | | |
| | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO. MISS-145R

045046

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-146R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8900,E11300 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 6/30/86 | 6/30/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.0' | 0.5' | 6.5' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 46.8 | 3.0'/43.8' | 6.0'/40.8' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / % PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5'); PRESSURE PSI (2ND 5'); TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | 46.8 | 0 | | | | |
| | | | | | 46.3 | | | | 0.0-0.5': SILT (ML): GRAYISH BROWN (5YR3/2), RESIDUAL SOIL. | |
| | | | | | | | | | 0.5-6.0': SAND (SC-SM): FINE GRAINED, SILTY, DRY TO MOIST. | |
| | | | | | | | | | 0.5-3.0': MODERATE BROWN (5YR3/4). | ▽ 7-9-86 |
| | | | | | | | | | 3.0-3.5': MEDIUM DARK GRAY (N4), WITH ASH. | |
| | | | | | | | | | 3.5-4.5': BLACK WITH WHITE SPECKS (N1 WITH N9). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | 5 | | | 4.5-5.0': MODERATE BROWN (5YR3/4). | |
| | | | | | 40.8 | | | | 5.0-6.0': LIGHT OLIVE GRAY (5Y5/2), CLAYEY AND SEMI-PLASTIC. | |
| | | | | | 40.3 | 6.5 | | | 6.0-6.5': SANDSTONE: LIGHT BROWN (5YR6/4) TO DUSKY RED (5YR3/4), SOFT TO MODERATELY HARD, FINE TO MEDIUM GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | 10 | | | BOTTOM OF HOLE AT 6.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 6.5 FT. |
| | | | | | | 15 | | | | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | 20 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | 25 | | | | |
| | | | | | | 30 | | | | |
| | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-146R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-147R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8800,E11300 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 6/30.86 | 6/30/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 9.0' | 2.5' | 11.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 45.3 | 4.0'/41.3' | 9.0'/36.3' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N"/PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM 1ST 5' | WATER PRESSURE TESTS: PRESSURE PSI 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.3 | 0 | | | 0.0-3.0': SILT (ML); GRAYISH BROWN (5YR3/2), RESIDUAL SOIL, DRY TO MOIST. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. 7-9-86 |
| | | | | | | | 42.3 | 5 | | | 3.0-9.0': SAND (SC-SM); FINE GRAINED, SILTY, SLIGHTLY PLASTIC TO NON-PLASTIC. 3.0-5.5': VERY LIGHT GRAY (N8), WITH ASH. 5.5-6.0': BLACK WITH PALE YELLOWISH BROWN SPECKS (N1 WITH 10YR6/2). 6.0-9.0': LIGHT OLIVE GRAY (5Y5/2), WITH CLAYEY SLUDGE. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 36.3 | 10 | | | 9.0-11.5': SANDSTONE: LIGHT BROWN (5YR6/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, SATURATED. | |
| | | | | | | | 33.8 | 11.5 | | | BOTTOM OF HOLE AT 11.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 11.5 FT. |
| | | | | | | | | 15 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-147R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-148R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8800,E11400 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/30/86 | COMPLETED: 6/30/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 4.5' |
| ROCK (FT.): 2.0' | TOTAL DEPTH: 6.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.3 | DEPTH/EL. GROUND WATER: 1.5'/43.8' |
| DEPTH/EL. TOP OF ROCK: 4.5'/40.8' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.3 | 0 | | | 0.0-1.5': SILT (ML); MODERATE BROWN (5YR3/4), RESIDUAL SOIL. |
| | | | | | | | 43.8 | | | | 1.5-4.5': SAND (SC-SM); FINE GRAINED, SILTY, NON-PLASTIC, DRY. |
| | | | | | | | | | | | 1.5-3.0': BLACK (N1). |
| | | | | | | | | | | | 3.0-4.0': LIGHT OLIVE GRAY (5Y5/2), WITH SLUDGE. |
| | | | | | | | 40.8 | 5 | | | 4.0-4.5': GREENISH GRAY (5GY6/1). |
| | | | | | | | | | | | 4.5-6.5': SANDSTONE; PALE RED (5R6/2) TO GRAYISH RED (5R4/2), SOFT, FINE GRAINED, SILTY, WEATHERED, DRY TO MOIST. |
| | | | | | | | 38.8 | 6.5 | | | BOTTOM OF HOLE AT 6.5 FT. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. |
| | | | | | | | | 10 | | | |
| | | | | | | | | 15 | | | |
| | | | | | | | | 20 | | | |
| | | | | | | | | 25 | | | |
| | | | | | | | | 30 | | | |
| | | | | | | | | 35 | | | |

NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC.

▽ 7-9-86

SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION.

EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING.

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-148R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-149R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8900,E11400 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 6/30/86 | 6/30/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 4.0' | 1.5' | 5.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 44.2 | 1.0'/43.2' | 4.0'/40.2' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 44.2 | 0 | | | | |
| | | | | | | | 43.2 | | | | 0.0-1.0': SILT (ML); DUSKY BROWN (5YR2/2), RESIDUAL SOIL. | ▽ 7-9-86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 1.0-4.0': SAND (SC-SM); FINE GRAINED, SILTY AND CLAYEY, SLIGHTLY PLASTIC, DRY TO MOIST. | |
| | | | | | | | | | | | 1.0-2.5': BLACK WITH LIGHT GRAY SPECKS (N1 WITH N7). | |
| | | | | | | | 40.2 | 5 | | | 2.5-4.0': LIGHT GRAY (N7), WITH CLAY SEAM. | |
| | | | | | | | 38.7 | 5.5 | | | 4.0-5.5': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, DRY TO MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-149R

045048

# GEOLOGIC DRILL LOG

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-150R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8900, E11200 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |
| BEGUN: 6/30/86 | COMPLETED: 6/30/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 8.0' | ROCK (FT.): 2.0' | TOTAL DEPTH: 10.0' |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 46.8 | DEPTH/EL. GROUND WATER: 0.5'/46.3' | DEPTH/EL. TOP OF ROCK: 8.0'/38.8' |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5'); PRESSURE PSI (2ND 5'); TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | 46.8 | 0 | | | | 7-3-86 |
| | | | | | 46.6 | | | | 0.0-0.2': ASPHALT; GRAYISH BLACK (N2). | |
| | | | | | | | | | 0.2-8.0': SAND (SC-SM); FINE GRAINED, SILTY, MOIST. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | 5 | | | 6.5-8.0': GREENISH GRAY (5GY6/1). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | 38.8 | | | | 8.0-10.0': SANDSTONE; MODERATE BROWN (5YR3/4), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST TO SATURATED. | |
| | | | | | 36.8 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | |
| | | | | | | 15 | | | | |
| | | | | | | 20 | | | | |
| | | | | | | 25 | | | | |
| | | | | | | 30 | | | | |
| | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-150R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-151R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9000,E11300 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/30/86 | COMPLETED: 6/30/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 7.2' |
| ROCK (FT.): 0.3' | TOTAL DEPTH: 7.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.7 | DEPTH/EL. GROUND WATER: 1.5'/44.2' |
| DEPTH/EL. TOP OF ROCK: 7.2'/38.5' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P.YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE, LENGTH CORE RUN | SAMPLE RECOVERY, CORE RECOVERY | SAMPLE BLOWS "N", PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 5' | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | 4½ | | | | | 45.7 | 0 | | | 0.0-2.0': SILT (ML); BROWNISH GRAY (5YR4/1), RESIDUAL SOIL. | ▽ 7-9-86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 43.7 | 5 | | | 2.0-7.2': SAND (SC-SM); FINE GRAINED, SILTY, DRY. 2.0-3.0': BLACK (N1). 3.0-4.0': LIGHT GRAY (N7), WITH SLUDGE. 4.0-7.0': LIGHT OLIVE GRAY (5Y5/2). | |
| | | | | | | | 38.5 | | | | | |
| | | | | | | | 38.2 | 7.5 | | | 7.2-7.5': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 7.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT. 7/9/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIEDRICH; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-151R

045848

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-152R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9105,E11305 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 6/30/86 | COMPLETED: 6/30/86 | DRILLER: MORE TRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 3.0' |
| ROCK (FT.): 2.0' | TOTAL DEPTH: 5.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 44.7 | DEPTH/EL. GROUND WATER: 1.5'/43.2' |
| DEPTH/EL. TOP OF ROCK: 3.0'/41.7' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N"/PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 44.7 | 0 | | | 0.0-1.0': SILT (ML); GRAYISH BROWN (5YR3/2), RESIDUAL SOIL. | ▽ 7-9-86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 43.7 | | | | 1.0-3.0': SAND (SC-SM); BLACK (N1), FINE GRAINED, SILTY, DRY. | |
| | | | | | | | 41.7 | | | | 3.0-5.0': SANDSTONE; DUSKY RED (5YR3/4), SOFT, FINE GRAINED, SILTY, WEATHERED, DRY TO MOIST. | |
| | | | | | | | 39.7 | 5 | | | BOTTOM OF HOLE AT 5.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-152R

045648

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-153R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9000,E11207 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/1/86 | 7/1/86 | MORE TRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.0' | 0.5' | 6.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 45.7 | 0.5'/45.2' | 6.0'/39.7' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER: ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.7 | 0 | | | | 7-3-86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 45.4 | | | | 0.0-0.3': CRUSHED ROCK; MEDIUM GRAY (N5), ANGULAR BASALT, 2" MINUS. | |
| | | | | | | | | | | | 0.3-4.0': SILT (ML); DUSKY BROWN (5YR2/2), SANDY, NON-PLASTIC TO SLIGHTLY PLASTIC, DRY. | |
| | | | | | | | 41.7 | 4 | | | | |
| | | | | | | | | 5 | | | 4.0-6.0': SAND (SC-SM); DUSKY RED (5YR3/4), FINE GRAINED, SILTY, WITH BROKEN SANDSTONE FRAGMENTS, MIXED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 39.7 | | | | | |
| | | | | | | | 39.2 | 6.5 | | | 6.0-6.5': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 6.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | AUGER REFUSAL AT 6.5 FT. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-153R |

045848

# GEOLOGIC DRILL LOG

| | | | | | | |
|---|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-154R | | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9100,E11210 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | | |
| BEGUN: 7/1/86 | COMPLETED: 7/1/86 | DRILLER: MORE TRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.0' | ROCK (FT.): 0.5' | TOTAL DEPTH: 5.5' |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 47.2 | DEPTH/EL. GROUND WATER: 0.5'/46.7' | DEPTH/EL. TOP OF ROCK: 5.0'/42.2' | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 47.2 | 0 | | | | ▽ 7-3-86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 46.7 | | | | 0.0-0.5': CRUSHED ROCK; MEDIUM LIGHT GRAY (N6), 2" MINUS ANGULAR BASALT. | |
| | | | | | | | | | | | 0.5-5.0': SAND (SC-SM); FINE GRAINED, SILTY, MOIST, NON-PLASTIC, MIXED WITH 10% 1" MINUS SUBROUNDED GRAVEL. 0.5-3.0': DUSKY RED (5YR3/4). 3.0-5.0': DUSKY BROWN (5YR2/2). | |
| | | | | | | | 42.2 | 5 | | | | |
| | | | | | | | 41.7 | 5.5 | | | 5.0-5.5': SANDSTONE; DUSKY RED (5YR3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-154R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-155R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9100,E11400 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/1/86 | COMPLETED: 7/1/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 2.5' |
| ROCK (FT.): 5.0' | TOTAL DEPTH: 7.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 44.7 | DEPTH/EL. GROUND WATER: 1.0'/43.7' |
| DEPTH/EL. TOP OF ROCK: 2.5'/42.2' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 6' | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 6' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 6' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 44.7 | 0 | | | 0.0-2.5': SILT (ML); DUSKY BROWN (5YR2/2), SANDY, SLIGHTLY PLASTIC TO NON-PLASTIC. | ▽ 7-9-86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 42.2 | 5 | | | 2.5-7.5': SANDSTONE; DARK YELLOWISH ORANGE (10YR6/6), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, SATURATED AT 6.0-7.5 FT. | |
| | | | | | | | 37.2 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 7.5 FT. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-155R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-156R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9000,E11400 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/1/86 | 7/1/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 5.5' | 1.0' | 6.5' |

| CORE RECOVERY(FT.)/% | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 45.7 | 1.0'/44.7' | 5.5'/40.2' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.7 | 0 | | | 0.0-2.5': SILT (ML); BROWNISH BLACK (5YR2/1). RESIDUAL SOIL. | ▽ 7-9-86 |
| AUGER, 6", THROUGHOUT. | | | | | | | 43.2 | 2.5 | | | 2.5-5.5': SAND (SC-SM); LIGHT BROWN (5YR6/4), FINE GRAINED, SILTY, DRY TO MOIST, TRACE OF GRAVEL (1/8-1/4"), SLIGHT RESISTANCE AT 4.5 FT. CLAYEY LAYER (GRAYISH BLACK, N2) AT 5.0 FT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 40.2 | 5 | | | | |
| | | | | | | | 39.2 | 6.5 | | | 5.5-6.5': SANDSTONE; LIGHT BROWN (5YR6/4) AND DUSKY RED (5YR3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, SATURATED. BOTTOM OF HOLE AT 6.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-156R

045848

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-157R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9200,E11150 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/1/86 | COMPLETED: 7/1/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 0.5' |
| ROCK (FT.): 4.5' | TOTAL DEPTH: 5.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 47.2 | DEPTH/EL. GROUND WATER: 1.0'/46.2' |
| DEPTH/EL. TOP OF ROCK: 0.5'/46.7' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 47.2 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 46.7 | | | | 0.0-0.5': SILT (ML); MODERATE BROWN (5YR3/4), RESIDUAL SOIL. | ▽ 7-9-86 |
| | | | | | | | | | | | 0.5-5.0': SANDSTONE; MODERATE REDDISH BROWN (10R4/6), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, MOIST WITH 30% ¾" MINUS GRAVEL AND CRUSHED ROCK AT 2.0-4.0 FT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 42.2 | 5 | | | BOTTOM OF HOLE AT 5.0 FT. | AUGER REFUSAL AT 5.0 FT. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-157R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-158R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9200, E11210 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/1/86 | COMPLETED: 7/1/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.0' |
| ROCK (FT.): 0.5' | TOTAL DEPTH: 5.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.4 | DEPTH/EL. GROUND WATER: 1.0'/44.4' |
| DEPTH/EL. TOP OF ROCK: 5.0'/40.4' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' P.S.I | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.4 | 0 | | | 0.0-2.0': SILT (ML); GRAYISH BROWN (5YR3/2), RESIDUAL SOIL. | ▽ 7-9-86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 43.4 | | | | 2.0-5.0': SAND (SC-SM); LIGHT BROWN (5YR6/4), FINE GRAINED, SILTY, DRY, NON-PLASTIC. | |
| | | | | | | | 40.4 | 5 | | | | |
| | | | | | | | 39.9 | 5.5 | | | 5.0-5.5': SANDSTONE; DUSKY RED (5YR3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, SATURATED. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 5.5 FT. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIAMOND; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-158R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-159R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9200,E11300 | | ANGLE FROM HORIZ.: 90° | BEARING: N/A | |
| BEGUN: 7/1/86 | COMPLETED: 7/1/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.0' |
| ROCK (FT.): 1.0' | TOTAL DEPTH: 6.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 45.4 | DEPTH/EL. GROUND WATER: 1.0'/44.4' |
| DEPTH/EL. TOP OF ROCK: 5.0'/40.4' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.4 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 44.9 | | | | 0.0-0.5': SILT (ML): MODERATE BROWN (5YR3/4), RESIDUAL SOIL. | ▽ 7-9-86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.5-5.0': SAND (SC-SM): DUSKY BROWN (5YR2/2), FINE GRAINED, VERY SILTY, VERY MOIST TO SATURATED. | |
| | | | | | | | 40.4 | 5 | | | 5.0-6.0': SANDSTONE: DUSKY RED (5YR3/4), MODERATELY HARD, FINE GRAINED, SILTY, SATURATED. | |
| | | | | | | | 39.4 | 6 | | | BOTTOM OF HOLE AT 6.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 6.0 FT. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-159R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-160R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9200,E11400 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/1/86 | 7/1/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 2.0' | 2.5' | 4.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 45.4 | 1.0'/44.4' | 2.0'/43.3' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE, LENGTH CORE RUN | SAMPLE RECOVERY, CORE RECOVERY | SAMPLE BLOWS "N", PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 45.4 | 0 | | | 0.0-2.0': SILT (ML); GRAYISH BROWN (5YR3/2), RESIDUAL SOIL. | ▽ 7-9-86 |
| | | | | | | | 43.4 | | | | 2.0-4.5': SANDSTONE; MODERATE REDDISH BROWN (10R4/6), SOFT TO MODERATELY HARD, POORLY TO MODERATELY CEMENTED, SILTY, FINE GRAINED, WEATHERED, MOIST, MODERATELY HARD BELOW 4.0 FT. | |
| | | | | | | | 40.9 | 4.5 | | | BOTTOM OF HOLE AT 4.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 4.5 FT. SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

5 10 15 20 25 30 35

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIEDRICH; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO. MISS-160R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-161R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9270, E11300 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/1/86 | 7/1/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 3.5' | 3.5' | 7.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.2 | 2.0'/45.2' | 3.5'/43.7' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS/" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' (GPM) | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 47.2 | 0 | | | 0.0-3.5': MIXED SILT, SAND, GRAVEL, AND SLAG (GM); GRAYISH BROWN (5YR3/2), MIXED FILL. | ▽ 7-9-86 |
| | | | | | | | 43.7 | 5 | | | 3.5-7.0': SANDSTONE: DARK YELLOWISH ORANGE (10YR6/6); SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, MOIST. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 40.2 | 7.0 | | | BOTTOM OF HOLE AT 7.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 7.0 FT. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO. MISS-161R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-162R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8500,E11000 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/3/86 | 7/3/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.5' | 3.5' | 10.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 46.3 | 6.5'/39.8' | 6.5'/39.8' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' P.S.I | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 46.3 | 0 | | | 0.0-1.0': ASPHALT AND CRUSHED ROCK. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 45.3 | | | | 1.0-3.5': SILT (ML): DUSKY BROWN (5YR2/2), SOFT, SANDY, MOIST, WITH BLACK SLUDGE (2.0-3.5 FT) CONTAINING LIGHT GRAY (N7) SPECKS. | |
| | | | | | | | 42.8 | | | | 3.5-6.5': SAND (SC-SM): FINE GRAINED, SILTY, SEMI-PLASTIC, WITH ¾" MINUS GRAVEL LENSE AT 3.5 FT, MOIST. | |
| | | | | | | | | 5 | | | 3.5-5.0': BLACK (ND. | |
| | | | | | | | 39.8 | | | | 5.0-6.5': LIGHT OLIVE GRAY (5Y5/2), CLAYEY SLUDGE (5.0-6.5 FT). | ▽ 7-3-86 EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | 6.5-10.0': SANDSTONE: MODERATE BROWN (5YR3/4), SOFT, FINE GRAINED, SILTY, NON-PLASTIC, DRY TO 7.0 FT, THEN SATURATED. | |
| | | | | | | | 36.3 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO. MISS-162R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-164R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8505,E10790 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/3/86 | 7/3/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 2.5' | 0.0' | 2.5' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 46.5 | 1.5'/45.0' | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | 1/4 | | | | | 46.5 | 0 | | | 0.0-0.4': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 44.0 | 2.5 | | | 0.4-2.5': GRAVEL (GM); MEDIUM DARK GRAY (N4), 1 1/2" MINUS, WITH SILT AND SAND. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 2.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/3/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 5 | | | | ENCOUNTERED SHEET METAL AT 1.0 FT; DRUM PLUG AND PORTION OF LID RECOVERED AT 2.5 FT; DRILLING WAS TERMINATED. |
| | | | | | | | | 10 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO. MISS-164R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-165R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9100,E10100 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/7/86 | COMPLETED: 7/7/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.0' |
| ROCK (FT.): 1.5' | TOTAL DEPTH: 6.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.7 | DEPTH/EL. GROUND WATER: 5.0'/43.7' |
| DEPTH/EL. TOP OF ROCK: 5.0'/43.7' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P.YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' G.P.M. | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.7 | 0 | | | | |
| | | | | | | | 47.7 | | | | 0.0-1.0': SILT (ML); GRAYISH BROWN (5YR3/2), RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 1.0-5.0': SAND (SC-SM); FINE TO MEDIUM GRAINED, SILTY, NON-PLASTIC, MOIST. 1.0-2.0': DUSKY BROWN (5YR2/2). 2.0-5.0': BROWNISH BLACK (5YR2/1), OILY APPEARANCE (4.0-5.0 FT). | |
| | | | | | | | 43.7 | 5 | | | 5.0-6.5': SANDSTONE; DUSKY RED (5YR3/4), SOFT TO MODERATELY HARD, FINE TO MEDIUM GRAINED, SILTY. | |
| | | | | | | | 42.2 | 6.5 | | | BOTTOM OF HOLE AT 6.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 6.5 FT. |
| | | | | | | | | 10 | | | | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 15 | | | | DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-165R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-166R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9000,E10100 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/7/86 | 7/7/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 5.0' | 2.5' | 7.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.8 | 4.0'/44.8' | 5.0'/43.8' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.8 | 0 | | | 0.0-3.0': SILT (ML); GRAYISH BROWN (5YR3/2), RESIDUAL SOIL, SANDY, MOIST. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. 7-9-86 |
| | | | | | | | 45.8 | | | | 3.0-5.0': SAND (SC-SM); MODERATE BROWN (5YR3/4), FINE TO MEDIUM GRAINED, SILTY, SLIGHTLY CLAYEY, MOIST. | |
| | | | | | | | 43.8 | 5 | | | 5.0-7.0': SANDSTONE; DUSKY RED (5YR3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 41.3 | 7 | | | BOTTOM OF HOLE AT 7.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO. MISS-166R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-167R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8900,E10110 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/7/86 | 7/7/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 5.0' | 0.5' | 5.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 50.0 | NONE OBSERVED | 5.0'/45.0' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N"/PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 50.0 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 49.1 | | | | 0.0-0.9': ASPHALT; DARK GRAY (N3). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 48.0 | | | | 0.9-2.0': CRUSHED ROCK; MEDIUM GRAY (N5), ANGULAR BASALT, 2" MINUS. | |
| | | | | | | | | | | | 2.0-5.0': SAND (SC-SM); GRAYISH BROWN (5YR3/2), FINE TO MEDIUM GRAINED, NON-PLASTIC, SLIGHTLY CLAYEY AND SILTY, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 45.0 | 5 | | | | |
| | | | | | | | 44.5 | 5.5 | | | 5.0-5.5': SANDSTONE; DUSKY RED (5YR3/4), SOFT, FINE GRAINED, SILTY, MOIST, WEATHERED. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO. MISS-167R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-168R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8900,E10200 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/7/86 | COMPLETED: 7/7/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.5' | ROCK (FT.): 0.0' | TOTAL DEPTH: 5.5' |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.6 | DEPTH/EL. GROUND WATER: NONE OBSERVED | DEPTH/EL. TOP OF ROCK: N/A | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / N* / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.6 | 0 | | | | |
| | | | | | | | 48.2 | | | | 0.0-0.4': ASPHALT; BLACK (N0). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 47.5 | | | | 0.4-1.0': CRUSHED ROCK; MEDIUM GRAY (N5) ANGULAR BASALT. | |
| | | | | | | | | | | | 1.0-5.5': SAND (SC-SM); FINE TO COARSE GRAINED, SILTY AND CLAYEY, SEMI-PLASTIC, MOIST. | |
| | | | | | | | | | | | 1.0-2.0': DUSKY RED (5YR3/4). | |
| | | | | | | | | | | | 2.0-4.5': BLACK WITH WHITE SPECKS (N1 WITH N9), CONTAINS A TRACE OF FINE GRAVEL. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 43.6 | 5 | | | | |
| | | | | | | | 43.1 | 5.5 | | | 4.5-5.5': DUSKY YELLOW GREEN (5GY5/2). | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.5 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-168R

045648

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-169R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8800,E10200 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/7/86 | 7/7/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 7.0' | 0.0' | 7.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 49.3 | NONE OBSERVED | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' P.S.I | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 49.3 | 0 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 49.0 | | | | 0.3-1.5': CRUSHED ROCK; MEDIUM DARK GRAY (N4). | |
| | | | | | | | 47.8 | | | | 1.5-7.0': SAND (SC-SM); FINE GRAINED, SILTY AND CLAYEY. | |
| | | | | | | | | | | | 1.5-4.0': GRAYISH BROWN (5YR3/2), WITH 1" MINUS GRAVEL. | |
| | | | | | | | | 5 | | | 4.0-7.0': PALE YELLOWISH BROWN (10YR6/2), LESS SILT AND CLAY FROM 5.0-7.0 FT. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 42.3 | 7 | | | BOTTOM OF HOLE AT 7.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-169R |

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-170R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8805,E10300 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/7/86 | 7/7/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 4.0' | 1.5' | 5.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 49.3 | 2.0'/47.3' | 4.0'/45.3' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | 4 | | | | | 49.3 | 0 | | | | |
| | | | | | | | 49.0 | | | | 0.0-0.3': ASPHALT. | |
| | | | | | | | 48.3 | | | | 0.3-1.0': CRUSHED ROCK; MEDIUM GRAY (N5), ANGULAR BASALT. | ▽ 7-9-86 |
| | | | | | | | | | | | 1.0-4.0': SAND (SC-SM); FINE GRAINED, SILTY, MOIST. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 1.0-3.0': BLACK (N1). | |
| | | | | | | | 45.3 | | | | 3.0-4.0': DUSKY BROWN (5YR2/2). | |
| | | | | | | | | 5 | | | 4.0-5.5': SANDSTONE; GRAYISH RED (10R4/2), SOFT, FINE GRAINED, SILTY, WEATHERED, DRY TO MOIST. | |
| | | | | | | | 43.8 | 5.5 | | | BOTTOM OF HOLE AT 5.5 FT. | |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-170R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-171R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9185, E11015 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/8/86 | COMPLETED: 7/8/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.5' |
| ROCK (FT.): 2.5' | TOTAL DEPTH: 8.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 47.2 | DEPTH/EL. GROUND WATER: 0.0'/47.2' |
| DEPTH/EL. TOP OF ROCK: 5.5'/41.7' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS/" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE PSI (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 47.2 | 0 | | | | ▽ 7-9-86 |
| AUGER, 6", THROUGHOUT. | | | | | | | 46.7 | 5 | | | 0.0-0.5': CRUSHED ROCK; MEDIUM GRAY (N5), ANGULAR BASALT, RAILROAD BALLAST.<br>0.5-5.5': SAND (SC-SM); FINE TO MEDIUM GRAINED, SILTY AND CLAYEY, MOIST.<br>0.5-2.5': DUSKY BROWN (5YR2/2).<br>2.5-4.0': MODERATE BROWN (5YR3/4).<br>4.0-4.5': GRAYISH GREEN (10GY5/2); MOIST WITH A CLAY LENSE.<br>4.5-5.5': GRAYISH BROWN (5YR3/2).<br>5.5-8.0': SANDSTONE; DUSKY RED (5YR3/4), SOFT, FINE GRAINED, SILTY, WEATHERED, SATURATED. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION.<br><br>EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 41.7 | | | | | |
| | | | | | | | 39.3 | | | | | |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 8.0 FT.<br><br>HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-171R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-172R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9100,E11080 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/8/86 | 7/8/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 3.8' | 1.7' | 5.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.2 | 1.0'/46.2' | 3.8'/43.4' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A 43.45' | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 47.2 | 0 | | | 0.0-0.2': ASAPHALT; GRAYISH BLACK (N2). | ▽ 7-9-86 |
| | | | | | | | 46.7 | | | | 0.2-0.5': CRUSHED ROCK; DARK GRAY (N3), ANGULAR BASALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.5-3.8': SAND (SP-SC); FINE GRAINED, SILTY AND CLAYEY, MOIST. | |
| | | | | | | | 43.4 | | | | 0.5-2.5': DARK REDDISH BROWN (10R3/4). | |
| | | | | | | | | | | | 2.5-3.5': MODERATE BROWN (5YR3/4). | |
| | | | | | | | | | | | 3.5-3.8': GRAYISH GREEN (10GY5/2), WITH A CLAY LENS. | |
| | | | | | | | 41.7 | 5.5 | | | 3.8-5.5': SANDSTONE; DUSKY RED (5YR3/4), SOFT, FINE GRAINED, SILTY, WEATHERED, DRY. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | |
| | | | | | | | | 10 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-172R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-173R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8900,E10280 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/8/86 | COMPLETED: 7/8/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 5.5' |
| ROCK (FT.): 2.0' | TOTAL DEPTH: 7.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.6 | DEPTH/EL. GROUND WATER: 7.0'/41.6' |
| DEPTH/EL. TOP OF ROCK: 5.5'/43.1' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P.YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' P.S.I | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 48.6 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 48.2 | | | | 0.0-0.4': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 47.8 | | | | 0.4-0.8': CRUSHED ROCK; MEDIUM DARK GRAY (N4), ANGULAR BASALT. | |
| | | | | | | | | | | | 0.8-5.5': SAND (SC-SM); FINE GRAINED, SILTY, MOIST. | |
| | | | | | | | | | | | 0.8-1.5': DUSKY RED (5R3/4). | |
| | | | | | | | | | | | 1.5-2.5': DUSKY BROWN (5YR2/2). | |
| | | | | | | | | | | | 2.5-3.0': MEDIUM LIGHT GRAY (N6), WITH ASH AND SLUDGE. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. 7-9-86 |
| | | | | | | | 43.1 | 5 | | | 3.0-5.5': OLIVE GRAY (5Y4/1), WITH SANDSTONE FRAGMENTS. | |
| | | | | | | | 41.1 | | | | 5.5-7.5': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 7.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 7.5 FT. |
| | | | | | | | | 10 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-173R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-174R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9190,E10200 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/8/86 | COMPLETED: 7/8/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 3.5' |
| ROCK (FT.): 1.5' | TOTAL DEPTH: 5.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.7 | DEPTH/EL. GROUND WATER: NONE OBSERVED |
| DEPTH/EL. TOP OF ROCK: 3.5'/45.2' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | *DESCRIPTION AND CLASSIFICATION | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER 6" THROUGHOUT | | | | | | | 48.7 | 0 | | | | |
| | | | | | | | 47.2 | 1.5 | | | 0.0-1.5': CRUSHED ROCK; MEDIUM GRAY (N5), ANGULAR BASALT, RAILROAD BALLAST. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 45.2 | 3.5 | | | 1.5-3.5': SAND (SC-SM); MODERATE BROWN (5YR3/4), FINE GRAINED, SILTY, DRY. | |
| | | | | | | | 43.7 | 5.0 | | | 3.5-5.0': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, DRY. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-174R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-175R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8695,E10605 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/8/86 | 7/8/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.5' | 1.0' | 7.5' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.3 | 7.0'/41.3' | 6.5'/41.8' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 48.3 | 0 | | | | |
| AUGER 6" THROUGHOUT | | | | | | | 47.9 | 0.4 | | | 0.0-0.4': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.4-6.5': SAND (SC-SM); FINE GRAINED, SILTY, CLAYEY. | |
| | | | | | | | | | | | 0.4-6.5': DUSKY YELLOWISH BROWN (10YR2/2), WITH BLACK (N1) SLUDGE AND DARK GOLD STREAKS (4.0-6.5 FT). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. ▽ 7-9-86 |
| | | | | | | | | 5 | | | | |
| | | | | | | | 41.8 | 6.5 | | | 6.5-7.5': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | 40.8 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | AUGER REFUSAL AT 7.5 FT. |
| | | | | | | | | 10 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-175R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-176R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8700,E10700 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/8/86 | 7/8/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 4.0' | 0.0' | 4.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.3 | NONE OBSERVED | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN / SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' G.P.M. | WATER PRESSURE TESTS: PRESSURE 2ND 5' P.S.I. | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 48.3 | 0 | | | | |
| AUGER 6" THROUGHOUT | | | | | | 48.0 | 0.3 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | 47.8 | 0.5 | | | 0.3-0.5': CRUSHED ROCK; MEDIUM DARK GRAY (N4), ANGULAR BASALT. | |
| | | | | | | | | | | 0.5-4.0': SAND (SC-SM); BROWNISH BLACK (5YR2/1), FINE GRAINED, MOIST. | |
| | | | | | | 44.3 | 4.0 | | | BOTTOM OF HOLE AT 4.0 FT. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | STOPPED DRILL ADVANCE AT 4.0 FT DUE TO FUMES ABOVE THE HOLE. |
| | | | | | | | 5 | | | | FUMES VENTED RAPIDLY AND NO MEASUREMENT COULD BE MADE OF THE CONCENTRATION ABOVE THE HOLE. |
| | | | | | | | 10 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | 15 | | | | |
| | | | | | | | 20 | | | | |
| | | | | | | | 25 | | | | |
| | | | | | | | 30 | | | | |
| | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-176R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-177R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8700,E10800 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/8/86 | 7/8/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.0' | 1.5' | 7.5' |

| CORE RECOVERY(FT.)/% | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.4 | 7.0'/41.4' | 6.0'/42.4' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P.YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER 6" THROUGHOUT | | | | | | | 48.4 | 0 | | | | |
| | | | | | | | 48.0 | 0.4 | | | 0.0-0.4': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | 0.8 | | | 0.4-0.8': CRUSHED ROCK; MEDIUM DARK GRAY (N4), ANGULAR BASALT, 2" MINUS. | |
| | | | | | | | | | | | 0.8-6.0': SAND (SC-SM); FINE GRAINED, SILTY, DRY. | |
| | | | | | | | | | | | 0.8-1.5': DUSKY RED (5R3/4). | |
| | | | | | | | | | | | 1.5-2.0': BLACK (N1), WITH SLUDGE. | |
| | | | | | | | | | | | 2.0-6.0': MODERATE BROWN (5YR3/4). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. ▽ 7-9-86 |
| | | | | | | | | 5 | | | | |
| | | | | | | | 42.4 | 6.0 | | | | |
| | | | | | | | 40.9 | 7.5 | | | 6.0-7.5': SANDSTONE; VERY DUSKY RED (10R2/2), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 7.5 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-177R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-178R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8700,E10910 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/9/86 | 7/10/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 5.0' | 2.5' | 7.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.4 | 5.0'/43.4' | 5.0'/43.4' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY/ CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' PSI | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.4 | 0 | | | | |
| | | | | | | | 46.9 | 1.5 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2).<br>0.3-1.5': P.C. CONCRETE; VERY LIGHT GRAY (N8), HARD.<br>1.5-5.0': SAND (SC-SM); FINE GRAINED, SILTY.<br>1.5-2.5': VERY DUSKY RED (10R2/2), WITH MINOR 1 1/2" MINUS GRAVEL.<br>2.5-5.0': GRAYISH BROWN (5YR3/2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 43.4 | 5 | | | 5.0-7.5': SANDSTONE; BLACKISH RED (5R2/2), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY. | 7-17-86 EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 40.9 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT.<br>HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-178R |

045848

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-179R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8700, E11000 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/9/86 | 7/9/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 3.0' | 4.5' | 7.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.6 | 5.5'/41.1' | 3.0'/44.6' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER 6" THROUGHOUT | | | | | | | 47.6 | 0 | | | 0.0-0.8': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 46.8 | 0.8 | | | 0.8-3.0': SAND (SC-SM); DUSKY BROWN (5YR2/2) TO BLACK (N1), FINE GRAINED, SILTY, MOIST. | |
| | | | | | | | 44.6 | 3.0 | | | 3.0-7.5': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, SILTY, WEATHERED. DRY TO 6.0 FT. THEN MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. ▽ 7-9-86 |
| | | | | | | | 40.1 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/9/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-179R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-180R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8700, E11200 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/10/86 | COMPLETED: 7/10/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 10.0' | ROCK (FT.): 0.0' | TOTAL DEPTH: 10.0' |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 47.6 | DEPTH/EL. GROUND WATER: DRY | DEPTH/EL. TOP OF ROCK: N/A | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 47.6 | 0 | | | | |
| AUGER 6" THROUGHOUT | | | | | | | 47.3 | 0.3 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 47.1 | 0.5 | | | 0.3-0.5': CRUSHED ROCK; MEDIUM GRAY (N5), ANGULAR BASALT. | |
| | | | | | | | | | | | 0.5-10.0': SAND (SC-SM); FINE GRAINED, SILTY. | |
| | | | | | | | | | | | 0.5-1.0': MODERATE BROWN (5YR3/4), WITH TRACE OF GRAVEL. | |
| | | | | | | | | 5.0 | | | 1.0-2.0': GRAYISH BROWN (5YR3/2), WITH CONCRETE FRAGMENTS. | |
| | | | | | | | | | | | 2.0-3.0': DUSKY RED (5R3/4), WITH CONCRETE FRAGMENTS. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | 3.0-6.5': DUSKY BROWN (5YR2/2). | |
| | | | | | | | | | | | 6.5-10.0': PALE YELLOWISH BROWN (10YR6/2), WITH CLAY SEAM (7.5-7.8 FT.). | |
| | | | | | | | 37.6 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-180R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-182R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8600,E11100 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/10/86 | 7/10/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 7.5' | 2.5' | 10.0' |

| CORE RECOVERY(FT.)/% | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 46.4 | 5.0'/41.4' | 7.5'/38.9' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' G.P.M. | WATER PRESSURE TESTS: PRESSURE 2ND 5' P.S.I. | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 46.4 | 0 | | | | |
| AUGER 6" THROUGHOUT | | | | | | | 46.1 | 0.3 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2).<br>0.3-7.5': SILT AND SLUDGE; MOIST.<br>0.3-4.0': BROWNISH BLACK (5YR2/1) SANDY SILT, ASH (N7).<br>4.0-7.2': BLACK (N1) SLUDGE WITH FIBERS.<br>7.2-7.5': GREENISH GRAY (5GY6/1). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION.<br>▽ 7-17-86 |
| | | | | | | | | 5 | | | | |
| | | | | | | | 38.9 | 7.5 | | | 7.5-10.0': SAND (SC-SM); PALE YELLOWISH BROWN (10YR6/2) TO LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST TO SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 36.4 | 10 | | | BOTTOM OF HOLE AT 10.0 FT.<br>HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-182R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-183R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8600,E11200 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/10/86 | COMPLETED: 7/10/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 7.5' |
| ROCK (FT.): 2.5' | TOTAL DEPTH: 10.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 46.4 | DEPTH/EL. GROUND WATER: 6.0'/40.4' |
| DEPTH/EL. TOP OF ROCK: 7.5'/38.9' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE, LENGTH CORE RUN | SAMPLE RECOVERY, CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. | PRESSURE P.S.I. | TIME IN MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 46.4 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 46.2 | 0.2 | | | 0.0-0.2': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.2-7.5': SAND (SC-SM); FINE GRAINED, SILTY, MOIST, WITH LIGHT COLORED ASH, ROOTS, AND WOOD FRAGMENTS. | |
| | | | | | | | | 5.0 | | | 0.2-1.5': MODERATE BROWN (5YR3/4). | ▽ 7-17-86 |
| | | | | | | | | | | | 1.5-7.5': BLACK (N1). | |
| | | | | | | | 38.9 | 7.5 | | | 7.5-10.0': SANDSTONE; PALE REDDISH BROWN (10R5/4), SOFT, FINE GRAINED, SILTY, WEATHERED, SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 36.4 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIEDRICH; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-183R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 1450:-138 | 1 OF 1 | MISS-184R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8500,E11100 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/10/86 | 7/10/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.5' | 1.5' | 8.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 46.4 | 4.5'/41.9' | 6.5'/39.9' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER 6" THROUGHOUT | | | | | | | 46.4 | 0 | | | | |
| | | | | | | | 46.1 | 0.3 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.3-6.5': SAND (SC-SM); FINE GRAINED, SILTY, CLAYEY. | |
| | | | | | | | | | | | 0.3-2.0': MODERATE BROWN (5YR3/4). | |
| | | | | | | | | | | | 2.0-4.0': GRAYISH BLACK (N2), WITH ASH FROM 2.0-6.5 FT. AND BRICK FRAGMENTS AT 4.0 FT. | ▽ 7-17-86 |
| | | | | | | | | 5 | | | 4.0-5-6.5': MEDIUM DARK GRAY (N4). | |
| | | | | | | | 39.9 | 6.5 | | | 6.5-8.0': SANDSTONE; DARK REDDISH BROWN (10R 3/4) SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 38.4 | 8.0 | | | BOTTOM OF HOLE AT 8.0 FT. | |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-184R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-185R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8500,E11190 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/10/86 | COMPLETED: 7/10/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 7.5' | ROCK (FT.): 2.5' | TOTAL DEPTH: 10.0' |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 46.3 | DEPTH/EL. GROUND WATER: 4.0'/42.3' | DEPTH/EL. TOP OF ROCK: 7.5'/38.8' | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P.YEN | | | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N"/PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I, 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES, 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 46.3 | 0 | | | | |
| AUGER 6" THROUGHOUT | | | | | | | 46.0 | 0.3 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2).<br>0.3-7.5': SAND (SC-SM); FINE GRAINED, SILTY.<br>0.3-1.0': MODERATE BROWN (5YR3/4).<br>1.0-2.0': DUSKY BROWN (5YR2/2).<br>2.0-5.0': BLACK (N1), WITH AN OILY APPEARANCE.<br>5.0-7.5': VERY LIGHT GRAY (N8), WITH SLUDGE AND ASH. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. 7-17-86<br>ODOR OF BENZENE FROM 2.0-7.5 FT. |
| | | | | | | | | 5.0 | | | | |
| | | | | | | | 38.8 | 7.5 | | | 7.5-10.0': SANDSTONE; PALE YELLOWISH BROWN (10YR6/2), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 36.3 | 10 | | | BOTTOM OF HOLE AT 10.0 FT.<br>HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-185R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-186R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8595, 10995 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/10/86 | 7/10/86 | MORE TRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.5' | 3.5' | 10.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.4 | DRY | 6.5'/40.9' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / % PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5', 2ND 5', 3RD 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER 6" THROUGHOUT | | | | | | | 47.4 | 0 | | | | |
| | | | | | | | 47.1 | 0.3 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.3-6.5': SAND (SC-SM); FINE GRAINED, SILTY, MOIST. 0.3-4.0': DARK GRAY (N3). 4.0-5.5': DUSKY BROWN (5YR2/2). 5.5-6.5': MEDIUM DARK GRAY (N4). | |
| | | | | | | | | 5.0 | | | | |
| | | | | | | | 40.9 | 6.5 | | | 6.5-10.0': SANDSTONE; GRAYISH ORANGE (10YR7/4), SOFT, FINE GRAINED, SILTY, WEATHERED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 37.4 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIEDRICH; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-186R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-187R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8600, E10900 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/11/86 | 7/11/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 4.5' | 1.5' | 6.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.2 | DRY | 4.5'/42.7' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 47.2 | 0 | | | | |
| | | | | | | | 46.9 | 0.3 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 45.7 | 1.5 | | | 0.3-1.5': CRUSHED ROCK; MEDIUM GRAY (N5). ANGULAR BASALT, 2" MINUS. | |
| | | | | | | | | | | | 1.5-4.0': SILT (ML); DUSKY BROWN (5YR2/2), VERY SANDY, SLIGHTLY PLASTIC TO NON-PLASTIC, MOIST. | |
| | | | | | | | 43.2 | 4.0 | | | 4.0-4.5': SAND (SC-SM); PALE YELLOWISH BROWN (10YR6/2), FINE GRAINED, SILTY, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 42.7 | 4.5 | | | | |
| | | | | | | | | 5 | | | | |
| | | | | | | | 41.2 | 6.0 | | | 4.5-6.0': SANDSTONE; DUSKY RED (5 R3/4) SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 6.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-187R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-188R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8600,E10700 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/11/86 | 7/11/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 7.0' | 1.0' | 8.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.3 | 5.0'/42.2' | 7.0'/40.3' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE, LENGTH CORE RUN | SAMPLE RECOVERY, CORE RECOVERY | SAMPLE BLOWS "N", PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER 6" THROUGHOUT | | | | | | | 47.3 | 0 | | | | |
| | | | | | | | | 0.3 | | | 0.0-0.3': ASPHALT; GRAYISH BLACK (N2). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 45.8 | 1.5 | | | 0.3-1.5': CRUSHED ROCK; MEDIUM GRAY (N5), ANGULAR BASALT. | |
| | | | | | | | | | | | 1.5-4.0': SILT (ML); VERY SANDY, MOIST. | |
| | | | | | | | | | | | 1.5-2.0': DUSKY RED (5 R3/4). | |
| | | | | | | | 43.3 | 4.0 | | | 2.0-4.0': DUSKY BROWN (5YR2/2). | 7-17-86 |
| | | | | | | | | 5 | | | 4.0-7.0': SAND (SC-SM); FINE GRAINED, SILTY, CLAYEY, MOIST. | |
| | | | | | | | | | | | 4.0-6.5': GREENISH GRAY (5GY6/1, WITH A LIGHT GRAY (N7) CLAY SEAM (6.0-6.3 FT). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 40.3 | 7.0 | | | 6.5-7.0': LIGHT BROWN (5YR 5/6). | |
| | | | | | | | 39.3 | 8.0 | | | 7.0-8.0': SANDSTONE; LIGHT BROWN (5YR 5/6), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 8.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-188R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-189R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8610,E10605 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/11/86 | COMPLETED: 7/11/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 10.0' | ROCK (FT.): 0.0' | TOTAL DEPTH: 10.0' |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 47.1 | DEPTH/EL. GROUND WATER: 5.5'/41.6' | DEPTH/EL. TOP OF ROCK: N/A | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5'; PRESSURE P.S.I. 2ND 5'; TIME IN MIN. 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|
| AUGER 6" THROUGHOUT | | | | | 47.1 | 0 | | | | |
| | | | | | 46.1 | 1.0 | | | 0.0-1.0': ASPHALT AND CRUSHED ROCK: GRAYISH BLACK TO MEDIUM GRAY (N2 TO N5), 1 1/2" MINUS BASALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | 1.0-5.5': SILT (ML); SANDY. | |
| | | | | | | | | | 1.0-4.5': WHITE TO VERY LIGHT GRAY (N9 TO N8), WITH ASH AND SLUDGE. | |
| | | | | | | | | | 4.5-5.5': DUSKY BROWN (5YR2/2), WITH RESIDUAL SOIL AND ROOTS AT 5.0 FT. | |
| | | | | | 41.6 | 5.5 | | | 5.5-10.0': SAND (SC-SM): MODERATE YELLOWISH BROWN (10YR5/4); FINE GRAINED, SILTY, NON-PLASTIC, SATURATED. | ▽ 7-17-86 EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | 37.1 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | 15 | | | | |
| | | | | | | 20 | | | | |
| | | | | | | 25 | | | | |
| | | | | | | 30 | | | | |
| | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-189R

045848

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-190R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8520,E10610 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/11/86 | COMPLETED: 7/11/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 6.0' |
| ROCK (FT.): 2.0' | TOTAL DEPTH: 8.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 46.5 | DEPTH/EL. GROUND WATER: 4.0'/42.5' |
| DEPTH/EL. TOP OF ROCK: 6.0'/40.5' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS FT. G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 46.5 | 0 | | | 0.0-1.5': ASPHALT AND CRUSHED ROCK; MEDIUM GRAY TO GRAYISH BLACK (N5 TO N2), 1 1/2" MINUS ANGULAR BASALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. 7-17-86 ▽ |
| | | | | | | | 45.0 | 1.5 | | | 1.5-5.5': SILT (ML); SANDY, MOIST. 1.5-3.5': MEDIUM GRAY (N5). 3.5-4.5': WHITE TO VERY LIGHT GRAY (N8 TO N9), WITH ASH AND SLUDGE (3.5-5.5 FT). 4.5-5.5': LIGHT GREENISH GRAY (5GY5/1), WITH ASH AND SLUDGE (3.5-5.5 FT). | |
| | | | | | | | 41.0 / 40.5 | 5.5 / 6.0 | | | 5.5-6.0': SAND (SC-SM); PALE YELLOWISH BROWN (10YR6/2), FINE GRAINED, SILTY, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 38.5 | 8.0 | | | 6.0-8.0': SANDSTONE; LIGHT BROWN (5YR6/4), SOFT, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 8.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-190R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-191R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8600,E10500 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/11/86 | 7/11/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 5.0' | 3.0' | 8.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.3' | 6.0/41.3 | 5.0/39.3 |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' P.S.I | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 47.3 | 0 | | | | |
| | | | | | | | 47.0 | | | | 0.0-0.3': ASPHALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 45.8 | | | | 0.3-3.5': SILTY SAND (SM-SC) MODERATE BROWN (5YR3/4); CLAY BINDER; FINE TO MEDIUM GRAINED; SOFT. DENSE IN PLACE. (FILL). | |
| | | | | | | | | | | | 0.3-1.5': CONTAINS MODERATELY HARD, DARK REDDISH BROWN (10R3/4) SANDSTONE GRAVEL AND PEBBLES. | |
| | | | | | | | 42.3 | 5 | | | 3.5-5.0': SANDY SILT (ML-CL); DARK GRAY (N3); OCCASIONAL PIECES OF HARD, WHITE, VESSICULAR, SILICIOUS GRAVEL; SOFT; FEW ORGANICS; CLAY BINDER (SLUDGEY FILL). | ▽ 7/17/86 |
| | | | | | | | 39.3 | 8.0 | | | 5.0-8.0': DECOMPOSED SANDSTONE; OLIVE GRAY (5Y4/1); FINE TO MEDIUM GRAINED; SILTY; TOTALLY DECOMPOSED, NONCEMENTED; DENSE IN PLACE. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 8.0 FT. | |
| | | | | | | | | | | | BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86 | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-191R

045848

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-192R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8694,E10500 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/11/86 | 7/11/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 7.0' | 3.0' | 10.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.1' | 6.5FT/41.6FT | 7.0FT/41.1FT |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. MCGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5'); PRESSURE PSI (2ND 5'); TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | 48.1 | 0 | | | 0.0-0.3': ASPHALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BE EBERLINE ANALYTICAL CORPORATION. |
| | | | | | 47.8 | | | | 0.3-3.0': SILTY SAND (SM-SC); GRAYISH RED (5R4/2) FINE TO MEDIUM GRAINED; CLAY BINDER (~10%); DENSE IN PLACE; MOIST (FILL). | |
| | | | | | 45.1 | | | | 0.3-1.0': DARK REDDISH BROWN (10R3/4). | |
| | | | | | | | | | 1.0-3.0': MODERATE BROWN (5YR3/4). | |
| | | | | | | 5 | | | 3.0-7.0': SANDY SILT (ML-CL) DARK GRAY (N3) MOTTLED WITH ZONES OF MEDIUM BLUISH GRAY (5B5/1), DARK GREENISH GRAY (5G6/1), AND GRAYISH RED PURPLE (5RP4/2) COLORED MATERIAL; SPECKLED THROUGHOUT WITH A WHITE SILICIOUS MATERIAL (ASH?); CLAY BINDER; VERY MOIST (SLUDGY FILL) | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. 7/17/86 |
| | | | | | 41.1 | | | | | |
| | | | | | 38.1 | 10 | | | 7.0-10.0': DECOMPOSED SANDSTONE, GRAYISH BLACK (N2); FINE TO MEDIUM GRAINED, SILTY; TOTALLY DECOMPOSED (SOIL); UNCEMENTED; DENSE IN PLACE (NO REFUSAL); MOIST WITH VERY MOIST AUGER SPOILS FROM 8.0-10.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | BOTTOM OF HOLE AT 10.0 FT. | |
| | | | | | | | | | BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | 15 | | | | |
| | | | | | | 20 | | | | |
| | | | | | | 25 | | | | |
| | | | | | | 30 | | | | |
| | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-192R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-193R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE-ROUTE 17 | COORDINATES: N9065,E10205 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/11/86 | COMPLETED: 7/11/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 0.6' |
| ROCK (FT.): 6.4' | TOTAL DEPTH: 7.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.8' | DEPTH/EL. GROUND WATER: 2.5 FT/46.3 FT |
| DEPTH/EL. TOP OF ROCK: 0.6 FT/48.2 FT | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.8 | 0 | | | | |
| | | | | | | | 48.5 | | | | 0.0-0.3': ASPHALT. | |
| | | | | | | | 48.2 | | | | 0.3-0.6': CONCRETE. | |
| | | | | | | | | 5 | | | 0.6-7.0': DECOMPOSED SANDSTONE; GRAYISH RED (10R4/2); FINE TO MEDIUM GRAINED; SILTY; TOTALLY DECOMPOSED; NONCEMENTED; DENSE IN PLACE (NO REFUSAL); MOIST. | ▽ 7/17/86 SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 41.8 | 7.0 | | | BOTTOM OF HOLE AT 7.0 FT. BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE-ROUTE 17

HOLE NO.: MISS-193R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-194R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8700,E10397 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/11/86 | 7/11/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 4.0' | 2.0' | 6.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.0' | NONE OBSERVED | 4.0 FT/44.0 FT |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE PSI (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.0 | 0 | | | 0.0-0.3': ASPHALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 47.7 | | | | 0.3-3.0': SILTY SAND (SM-SC); MODERATE BROWN (5YR3/4), SPECKLED WITH A WHITE SILICIOUS MATERIAL (ASH?); FINE TO MEDIUM GRAINED; SOFT; POORLY CONSOLIDATED; MOIST; OCCASIONAL MODERATELY HARD, DARK REDDISH BROWN (10R3/4) SANDSTONE GRAVEL AND PEBBLES (FILL). | |
| | | | | | | | 45.0 | | | | | |
| | | | | | | | 44.0 | 5 | | | | |
| | | | | | | | 42.0 | 6.0 | | | 3.0-4.0': SANDY SILT (ML-CL) DARK GRAY (N3), OCCASIONAL PIECES OF HARD, WHITE, VESICULAR GRAVEL; CLAY BINDER; SOFT; VERY MOIST (SLUDGEY FILL). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | 4.0-6.0': DECOMPOSED SANDSTONE, GRAYISH RED (10R 4/2); FINE-MEDIUM GRAINED; SILTY; SOFT; TOTALLY DECOMPOSED, MOSTLY NONCEMENTED WITH OCCASIONAL WEAKLY CEMENTED PIECES IN THE AUGER SPOILS; DENSE IN PLACE (NEAR REFUSAL AT 6.0'); MOIST. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | BOTTOM OF HOLE AT 6.0 FT. BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-194R |

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-195R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8806,E11205 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/14/86 | 7/14/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 6.0' | 4.0' | 10.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 46.8' | 5.0/41.8 | 6.0/40.8 |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 46.8 | 0 | | | | |
| | | | | | | | 46.5 | | | | 0.0-0.3': GRAVEL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BE EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 46.2 | | | | 0.3-0.6': ASPHALT. | |
| | | | | | | | | | | | 0.6-5.0': SILTY SAND (SM-SC); MODERATE BROWN (5YR3/4); FINE TO MEDIUM GRAINED; SOFT; OCCASIONAL PEBBLES; POORLY SORTED; DENSE IN PLACE; CLAY BINDER; MOIST (FILL). | ▽ 7/17/86 |
| | | | | | | | 41.8 | 5 | | | 5.0-6.0': SANDY SILT (ML-CL) DARK GREENISH GRAY (5G4/1); SOFT. DENSE SATURATED. | |
| | | | | | | | 40.8 | | | | 6.0-10.0': DECOMPOSED SANDSTONE; MODERATE YELLOWISH BROWN (10YR5/4); FINE TO MEDIUM GRAINED; SILTY; SOFT; TOTALLY DECOMPOSED; NONCEMENTED; DENSE IN PLACE; SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 36.8 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | | | | BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-195R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-196R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8785,E11110 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/15/86 | COMPLETED: 7/15/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 4.5' |
| ROCK (FT.): 3.0' | TOTAL DEPTH: 7.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 47.9' | DEPTH/EL. GROUND WATER: 7.0/40.9 |
| DEPTH/EL. TOP OF ROCK: 4.5/43.4 | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 5' | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | 1/4 | | | | | 47.9 | 0 | | | | |
| | | | | | | | 47.6 | | | | 0.0-0.3': CONCRETE. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BE EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 43.4 | 5 | | | 0.3-4.5': SILTY SAND (SM-SC); MODERATE BROWN (5YR3/4) WITH A SMALL AMOUNT OF DUSKY GREEN (5G3/2) SILTY MATERIAL AND PIECES OF DARK REDDISH BROWN (10R3/4) SANDSTONE ; UNCONSOLIDATED; MOIST; (MIXED FILL AND DECOMPOSED SANDSTONE?). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. ▽ 7/17/86 |
| | | | | | | | 40.4 | 7.5 | | | 4.5-7.5': DECOMPOSED SANDSTONE; DARK REDDISH BROWN (10R3/4); FINE TO MEDIUM GRAINED; TOTALLY DECOMPOSED; SOFT; DENSE IN PLACE; MOIST. | |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 7.5 FT. BACKFILLED WITH CEMENT-BENTONITE GROUT. 7/17/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-196R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-197R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8781,E11000 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/14/86 | 7/14/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 7.5' | 0.0 | 7.5' |

| CORE RECOVERY (FT.)/ID | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.6' | 5.0'/42.6' | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N"/PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 47.6 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 47.3<br>47.0<br>46.6 | | | | 0.0-0.3': ASPHALT.<br>0.3-0.6': SANDY SILT (ML-CL); LIGHT BROWN (5YR6/4); SOFT; DRY (FILL?).<br>0.6-1.0': CONCRETE.<br>1.0-7.5': SILTY SAND (SM-SC); MOSTLY MODERATE BROWN (5YR3/4) WITH A SMALL AMOUNT OF DUSKY GREEN (5G3/2) SILTY MATERIAL; OCCASIONAL PEBBLES AND SMALL COBBLES; SOFT; FINE TO MEDIUM GRAINED; DENSE IN PLACE; MOIST TO SATURATED AT 5.0 FT; OCCASIONAL SHARDS OF HARD PLASTIC AND SMALL PIECES OF RUBBER (MIXED FILL AND DECOMPOSED SANDSTONE?). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION.<br>▽ 7/17/86<br>EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 40.1 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT.<br>BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |

5 10 15 20 25 30 35

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-197R |

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-198R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8777,E10913 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/14/86 | COMPLETED: 7/14/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 3.0' |
| ROCK (FT.): 0.0 | TOTAL DEPTH: 3.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.9' | DEPTH/EL. GROUND WATER: NONE OBSERVED |
| DEPTH/EL. TOP OF ROCK: N/A | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.9 | 0 | | | | SITE CHECKED FOR RADIOACTIVE CONTAMINATION AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 48.7 | | | | 0.0-0.2': ASPHALT. | |
| | | | | | | | 48.3 | | | | 0.2-0.6': SANDY SILT (ML); LIGHT BROWN (10YR4/2); SOFT; POORLY CONSOLIDATED BUT DENSE; DRY; FILL. | |
| | | | | | | | 47.9 | | | | 0.6-1.0': CONCRETE. | |
| | | | | | | | 45.9 | 3.0 | | | 1.0-3.0': SANDY SILT (ML); AS 0.2-0.6 FT EXCEPT: MODERATE BROWN (5YR3/4); NUMEROUS ROUNDED PEBBLES OF VARIOUS LITHOLOGIES; DIFFICULT AUGERING, FILL?. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 3.0 FT. BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | | | 5 | | | | |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

* DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-198R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-200R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9003,E11075 | ANGLE FROM HORZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/15/86 | COMPLETED: 7/15/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 4.0' |
| ROCK (FT.): 1.5' | TOTAL DEPTH: 5.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.0' | DEPTH/EL. GROUND WATER: 3.5'/44.5' |
| DEPTH/EL. TOP OF ROCK: 4.0'/44.0' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.0 | 0 | | | 0.0-1.0': CONCRETE. | |
| | | | | | | | 47.0 | | | | 1.0-4.0': SILTY SAND (SM-SC); DARK REDDISH BROWN (10R3/4) WITH A SMALL AMOUNT OF DUSKY GREEN (5G3/2) SILTY MATERIAL; MOSTLY FINE GRAINED WITH OCCASIONAL PIECES OF GRAVEL AND PEBBLES; SOFT; DENSE IN PLACE; MOIST; (MIXED FILL AND DECOMPOSED SANDSTONE?). | ▽ 7/17/86 |
| | | | | | | | 42.5 | 5.5 | | | 4.0-5.5': DECOMPOSED SANDSTONE; DARK REDDISH BROWN (10R3/4); FINE TO MEDIUM GRAINED; WEAKLY CEMENTED; DENSE IN PLACE (REFUSAL AT 5.5 FT); SOFT TO MODERATELY HARD; HIGHLY WEATHERED TO TOTALLY DECOMPOSED; SILTY WITH A CLAY BINDER; SATURATED. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.5 FT. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-200R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-201R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8997,E10003 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/15/86 | 7/15/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 10.0' | 0.0 | 10.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 49.0' | 7.5'/41.5' | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN / SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | 49.0 | 0 | | | | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | 48.7 | | | | 0.0-0.3': ASPHALT. | |
| | | | | | | 48.0 | | | | 0.3-1.0': SANDY SILT (ML-CL); DARK REDDISH BROWN (10R3/4); CLAY BINDER; UNCONSOLIDATED; SOFT; DENSE IN PLACE; MOIST. | |
| | | | | | | | 5 | | | 1.0-10.0': SILTY SAND (SM-SC); MODERATE BROWN (5YR3/4) WITH PIECES OF DARK REDDISH BROWN SANDSTONE (BRICK?) AND A SMALL AMOUNT OF DUSKY GREEN (5G3/2) SILTY MATERIAL; OCCASIONAL GRAVEL AND PEBBLES (MIXED FILL AND NATIVE DECOMPOSED SANDSTONE?); SOFT; FINE-MEDIUM GRAINED; POORLY SORTED; DENSE IN PLACE; CLAY BINDER; MOIST-SATURATED AT 7.5 FEET | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. ▽ 7/17/86 |
| | | | | | | 39.0 | 10.0 | | | BOTTOM OF HOLE AT 10.0 FT. BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | | 15 | | | | |
| | | | | | | | 20 | | | | |
| | | | | | | | 25 | | | | |
| | | | | | | | 30 | | | | |
| | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-201R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-202R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8775,E10800 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/15/86 | COMPLETED: 7/15/86 | DRILLER: MORE TRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 6.5' |
| ROCK (FT.): 2.5' | TOTAL DEPTH: 9.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.0' | DEPTH/EL. GROUND WATER: 5.0'/43.0' |
| DEPTH/EL. TOP OF ROCK: 6.5'/41.5' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE, LENGTH CORE RUN | SAMPLE RECOVERY, CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 48.0 | 0 | | | 0.0-0.6': CONCRETE. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| AUGER, 6", THROUGHOUT. | | | | | | | 47.4 | | | | 0.6-6.5': SILTY SAND (SM-SC); FINE TO MEDIUM GRAINED; POORLY SORTED; SOFT; DENSE IN PLACE; CLAY BINDER; MOIST; (FILL).<br>0.6-1.5': GRAYISH BLACK (N2); NUMEROUS ORGANICS.<br>1.5-5.5': DARK REDDISH BROWN (10R3/4).<br>5.5-6.5': CONTAINS LENSES OF DARK GREENISH YELLOW (10Y6/6) AND DARK YELLOWISH GREEN (10GY4/4). | ▽ 7/17/86 |
| | | | | | | | 41.5 | 5 | | | 6.5-9.0': DECOMPOSED SANDSTONE; MODERATE BROWN (5YR3/4); FINE-MEDIUM GRAINED; TOTALLY DECOMPOSED; SOFT; NONCEMENTED (SOIL); SILTY WITH A CLAY BINDER; DENSE IN PLACE; SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 39.0 | 9.0 | | | BOTTOM OF HOLE AT 9.0 FT.<br>BACKFILLED WITH CEMENT-BENTONITE GROUT, 7/17/86. | |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-202R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-203R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9300,E10100 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/16/86 | 7/16/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 7.0' | 3.0' | 10.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 54.7' | 1.5'/53.2' | 7.0'/47.70' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | 4 | | | | | 54.7 | 0 | | | | |
| | | | | | | | 53.2 | | | | 0.0-1.5': SANDY SILT (ML-CL); POORLY SORTED; SOFT; DENSE IN PLACE; CLAY BINDER; MOIST. 0.0-0.5': MODERATE YELLOWISH BROWN (10YR5/4). 0.5-1.5': GRAYISH BLACK (N2); NUMEROUS ORGANICS. | ▽ 8/10/86 |
| | | | | | | | | 5 | | | 1.5-6.0': SILTY SAND (SM-SC); MODERATE BROWN (5YR3/4); FINE TO MEDIUM GRAINED; POORLY SORTED; SOFT; DENSE IN PLACE; CLAY BINDER; FEW ORGANICS SATURATED. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 48.7 | | | | | |
| | | | | | | | 47.7 | | | | 6.0-7.0': SANDY SILT (ML-CL) AS ABOVE; GRAYISH BLACK; NUMEROUS ORGANICS; SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | 7.0-10.0': DECOMPOSED SANDSTONE; DARK REDDISH BROWN (10R3/4); FINE TO MEDIUM GRAINED, TOTALLY DECOMPOSED; SOFT; SILTY WITH A CLAY BINDER; POORLY CONSOLIDATED (NO REFUSAL); SATURATED. | |
| | | | | | | | 44.7 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-203R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-204R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9300,E10200 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 7/16/86 | COMPLETED: 7/16/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 7.5' |
| ROCK (FT.): 0.0' | TOTAL DEPTH: 7.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 54.6' | DEPTH/EL. GROUND WATER: 0.0'/54.6' |
| DEPTH/EL. TOP OF ROCK: N/A | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 54.6 | 0 | | | | ▽ 8/10/86 |
| AUGER, 6", THROUGHOUT. | | | | | | | 53.6 | | | | 0.0-1.0': SILTY SAND (SM-SC); MODERATE BROWN (5YR3/4); POORLY SORTED; SOFT; DENSE IN PLACE; CLAY BINDER; FEW ORGANICS; MOIST. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 51.6 | | | | 1.0-3.0': SANDY SILT (ML-CL) GRAYISH BLACK (N2) WITH A FEW SMALL DARK REDDISH BROWN (10R3/4) SANDSTONE COBBLES; FINE TO MEDIUM GRAINED; POORLY SORTED; SOFT; DENSE IN PLACE; CLAY BINDER; SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 5 | | | | |
| | | | | | | | 48.1 | 7.5 | | | 3.0-7.5': SILTY SAND (SM-SC); AS BETWEEN 0.0-1.0 FT; SATURATED.<br>3.0-4.5': MODERATE BROWN.<br>4.5-5.5': BLACK; OILY LUSTER.<br>5.5-7.5': DUSKY RED (10R2/2) WITH LENSES OF DARK REDDISH BROWN.<br>BOTTOM OF HOLE AT 7.5 FT.<br>BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIDGEON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-204R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-205R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9300,E10390 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/16/86 | 7/16/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 13.0' | 0.0' | 13.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 54.4' | NOT MEASURED | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 54.4 | 0 | | | 0.0-0.5': GRAVEL (ROAD MATERIAL). | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBEPLINE ANALYTICAL CORPORATION. |
| | | | | | | | 53.9 | | | | 0.5-2.5': SILTY SAND (SM-SC); MODERATE BROWN (5YR3/4); FINE TO MEDIUM GRAINED; POORLY SORTED; SOFT; DENSE IN PLACE; CLAY BINDER; NUMEROUS ORGANICS; MOIST. | |
| | | | | | | | 51.9 | 5 | | | 2.5-9.0': SANDY SILT (ML-CL); GRAYISH BLACK (N2) WITH OCCASIONAL PIECES OF RED BRICK; POORLY SORTED; SOFT; DENSE IN PLACE; CLAY BINDER; OILY LUSTER (OILY SLUDGEY FILL); NUMEROUS ORGANICS; MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 45.4 | 10 | | | 9.0-13.0': SILTY SAND (SM-SC); AS BETWEEN 0.5-2.5 FT; VERY DUSKY RED (10R2/2); NO VISIBLE ORGANICS (MIXED FILL AND NATIVE DECOMPOSED SANDSTONE). | NO WATER LEVEL AVAILABLE (8/10/86) BECAUSE SOMEONE BACKFILLED THE HOLE. |
| | | | | | | | 41.4 | 13.0 | | | BOTTOM OF HOLE AT 13.0 FT. | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | BACKFILLED. | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-205R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-207R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9200,E10350 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/18/86 | 7/18/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 3.0' | 4.5' | 7.5' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.3' | 1.0'/47.3' | 3.0'/45.3' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5' | PRESSURE P.S.I. 2ND 5' | TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.3 | 0 | | | 0.0-0.5': GRAVEL; RAILROAD BALLAST. | ▽ 8/10/86 |
| | | | | | | | 47.8 | | | | 0.5-3.0': SILTY SAND (SM-SC); FINE TO MEDIUM GRAINED; DENSE IN PLACE; CLAY BINDER; MOIST; SOFT. | |
| | | | | | | | 45.3 | | | | 0.5-1.0': MODERATE BROWN (5YR3/4); NUMEROUS ORGANICS. | |
| | | | | | | | | 5 | | | 1.0-3.0': MODERATE YELLOWISH BROWN (10YR5/4) WITH MODERATE BROWN LENSES; OCCASIONAL PEBBLES. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 40.8 | 7.5 | | | 3.0-7.5': DECOMPOSED SANDSTONE: DARK REDDISH BROWN (10R3/4); FINE TO MEDIUM GRAINED; TOTALLY DECOMPOSED; SOFT; NONCEMENTED; SILTY WITH A CLAY BINDER; DENSE IN PLACE (NO REFUSAL); SATURATED. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 7.5 FT. | |
| | | | | | | | | | | | HOLE CAVED IN; BACKFILLING NOT POSSIBLE. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO. MISS-207R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-208R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9200,E10450 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/18/86 | 7/18/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 10.0' | 0.0' | 10.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 54.6' | 0.0'/54.6' | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/ LENGTH CORE RUN | SAMPLE RECOVERY/ CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM 1ST 5' | WATER PRESSURE TESTS: PRESSURE PSI 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 54.6 | 0 | | | | ▽ 8/10/86 |
| AUGER, 6", THROUGHOUT. | | | | | | | 54.1 | | | | 0.0-0.5': GRAVEL; RAILROAD BALLAST. | |
| | | | | | | | | 5 | | | 0.5-10.0': SILTY SAND (SM-SC); FINE GRAINED; SOFT; DENSE IN PLACE; CLAY BINDER; NUMEROUS ORGANICS; SATURATED (WATER TABLE AT SURFACE). 0.5-4.0': MODERATE BROWN (5YR3/4); WITH PIECES OF RED BRICK (FILL). 4.0-10.0': GRAYISH BLACK (N2) POSSIBLE REDUCING ENVIRONMENT?. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 44.6 | 10.0 | | | BOTTOM OF HOLE AT 10.0 FT. HOLE CAVED IN; BACKFILLING NOT POSSIBLE. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-208R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-259R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8475,E10700 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/29/86 | 7/29/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 10.0' | 0.0 | 10.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 46.7' | 9.0'/37.7' | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY/ CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 46.7 | 0 | | | 0.0-0.3': ASPHALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 44.7 | 0.3 / 2.0 | | | 0.3-2.0': SILTY SAND (SM); MODERATE BROWN (5YR3/4); FINE TO MEDIUM GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE); DRY. | |
| | | | | | | | 42.7 | 4.0 / 5 | | | 2.0-4.0': SANDY SILT (ML-CL); MULTICOLORED; FINE GRAINED; POORLY CONSOLIDATED BUT DENSE IN PLACE, MOIST. 2.0-2.5': CLAYEY SEAM (ML); PALE GREEN (5GY7/2). 2.5-4.0': GRAY (N4). | |
| | | | | | | | 36.7 | 10.0 | | | 4.0-10.0': SILTY SAND (SM-SC); MULTICOLORED; FINE TO MEDIUM GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE) WITH ONE DENSE, PALE GREEN, CLAYEY SEAM (4.5-5.5 FT); MOIST TO SATURATED AT 9.0 FT. 4.0-6.0': MOTTLED DARK REDDISH BROWN (10R3/4) AND DARK YELLOWISH ORANGE (10YR6/6). 6.0-10.0': DARK YELLOWISH BROWN (10YR4/2); STICKY. | ▽ 7/29/86 |
| | | | | | | | | 15 / 20 / 25 / 30 / 35 | | | BOTTOM OF HOLE AT 10.0 FT. AUGER SPOILS WERE IMMEDIATELY REPLACED IN THE HOLE AND HOLE WAS RESEALED WITH ASPHALT. | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-259R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-260R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8600, 10800 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 7/29/86 | 7/29/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 10.0' | 0.0 | 10.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 47.7' | 6.0'/41.7' | N/A |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 47.7 | 0 | | | | |
| | | | | | | | 47.4 | 0.3 | | | 0.0-ASPHALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.3-10.0': ~~SILTY SAND~~ (SM-SC); MULTICOLORED; FINE TO COARSE GRAINED; SOFT; UNCONSOLIDATED (LOOSE) WITH OCCASIONAL DENSE ZONES; MOIST TO SATURATED AT 6.0 FT. | |
| | | | | | | | | 5 | | | 0.3-3.5': GRAYISH BLACK (N2) SPECKLED WITH A WHITE CLAYEY MATERIAL, NUMEROUS PEBBLES (FILL). | 7/29/86 |
| | | | | | | | | | | | 3.5-4.0': BLACK, VERY SILTY; DENSE IN PLACE. | |
| | | | | | | | | | | | 4.0-7.0': DARK YELLOWISH BROWN (10YR4/2) WITH A FEW 1.0" GRAY (N5) ZONES. | |
| | | | | | | | 37.7 | 10.0 | | | 7.0-10.0': DARK REDDISH BROWN (10R3/4); NUMEROUS PIECES OF SANDSTONE GRAVEL (DECOMPOSED SANDSTONE); DENSE IN PLACE. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 10.0 FT. | |
| | | | | | | | | | | | AUGER SPOILS WERE IMMEDIATELY REPLACED IN THE HOLE AND THE HOLE WAS RESEALED WITH ASPHALT. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-260R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-289R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8780,E10400 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/6/86 | COMPLETED: 8/6/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 10.0' |
| ROCK (FT.): 0.0 | TOTAL DEPTH: 10.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.9' | DEPTH/EL. GROUND WATER: 7.0'/41.9' |
| DEPTH/EL. TOP OF ROCK: N/A | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN (ST @ GPM) | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND @) | WATER PRESSURE TESTS: TIME IN MINUTES (3RD @) | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.9 | 0 | | | 0.0-0.3': ASPHALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION, AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 48.6 | | | | 0.3-10.0': SILTY SAND (SM-SC); COLOR STRATIFIED; MOSTLY FINE GRAINED WITH OCCASIONAL PEBBLES (0.3-4.0 FT); SOFT; POORLY CONSOLIDATED (LOOSE) WITH ONE DENSE CLAYEY LAYER (4.0-4.5 FT); DRY TO SATURATED AT 7.0 FT. | ▽ 8/6/86 |
| | | | | | | | | 5 | | | 0.3-4.0': BLACK; POSSIBLE ORGANIC-RICH, REDUCING ENVIRONMENT; DRY. | |
| | | | | | | | | | | | 4.0-4.5': GRAY (N3-7), CLAYEY; MOIST. | |
| | | | | | | | | | | | 4.5-7.5': DARK YELLOWISH BROWN (10YR4/2) WITH A FEW PALE GREEN (5GY7/2) SILTY LENSES; CLAY BINDER. | |
| | | | | | | | 38.9 | 10 | | | 7.5-10.0': DARK REDDISH BROWN (10R3/4); VERY SILTY. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 10.0 FT. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-289R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-290R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N3005, E10290 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/6/86 | COMPLETED: 8/6/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 7.5' |
| ROCK (FT.): 0.0 | TOTAL DEPTH: 7.5' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 48.8' | DEPTH/EL. GROUND WATER: 4.5'/44.3' |
| DEPTH/EL. TOP OF ROCK: N/A | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/ LENGTH CORE RUN | SAMPLE RECOVERY/ CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 48.8 | 0 | | | | |
| AUGER, 6", THROUGHOUT. | | | | | | | 48.5 | | | | 0.0-0.3': ASPHALT.<br>0.3-7.5': SILTY SAND (SM-SC); COLOR STRATIFIED SOIL HORIZONS; FINE TO MEDIUM GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE) WITH A FEW DENSE SILTY LENSES (1.0-3.5 FT); SLIGHTLY MOIST TO SATURATED AT 4.5 FT.<br>0.3-1.0': BLACK, POSSIBLE ORGANIC-RICH, REDUCING ENVIRONMENT?.<br>1.0-3.5': DARK YELLOWISH ORANGE (10YR6/6) WITH VERY SILTY, GRAY (N6-7) ZONES.<br>3.5-5.5': DARK YELLOWISH BROWN (10YR4/2).<br>5.5-7.5': DARK REDDISH BROWN (10R3/4); DECOMPOSED SANDSTONE?. | ▽ 8/10/86 |
| | | | | | | | 41.3 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT.<br>HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION.<br><br>*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-290R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-291R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9080,E10296 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/6/86 | 8/6/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 5.0' | 1.0' | 6.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.8' | 3.0'/45.3' | 5.0'/43.8' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.8 | 0 | | | | |
| | | | | | | | | 0.3 | | | 0.0-0.3': ASPHALT. | |
| | | | | | | | | 2.0 | | | 0.3-2.0': SILTY SAND (SM-SC); DARK YELLOWISH ORANGE (10YR6/6) WITH ZONES OF GRAY (N6-7); FINE GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE); MOIST. | ▽ 8/10/86 |
| | | | | | | | | 5 | | | 2.0-5.0': SILTY SAND (SM); DARK YELLOWISH BROWN (10YR4/2); FINE TO MEDIUM GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE); MOIST TO SATURATED AT 3.0 FT. | |
| | | | | | | | 42.8 | 6.0 | | | 4.0-5.0': BLACK WITH AN OILY LUSTER (FILL OR LEAKAGE?). | |
| | | | | | | | | | | | 5.0-6.0': DECOMPOSED SANDSTONE; DARK REDDISH BROWN (5R3/4); FINE GRAINED (ARGILLECEOUS); SOFT TO MODERATELY HARD; POORLY TO WELL CEMENTED; TOTALLY DECOMPOSED TO HIGHLY WEATHERED; DRILL SPOILS CONSIST OF SILTY SAND (SM) AND GRAVEL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION, AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 6.0 FT. | AUGER REFUSAL AT 6.0 FT. |
| | | | | | | | | 15 | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS: SPLIT SPOON; ST: SHELBY TUBE; D: DENNISON; P: PITCHER; O: OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-291R |

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-292R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8780,E10600 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/6/86 | 8/6/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 10.0' | 2.5' | 12.5' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.9' | 6.0'/42.9' | 10.0'/38.9' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5' | PRESSURE PSI, 2ND 5' | TIME IN MINUTES, 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.9 | 0 | | | | |
| | | | | | | | | 0.3 | | | 0.0-0.3': CONCRETE. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION, AND HOLE GAMMA LOGGED, BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.3-10.0': SILTY SAND (SM-SC); MOTTLED BLACK AND GRAYISH BLACK (N2) AND SPECKLED WITH WHITE PEBBLES (0.3-4.0 FT); FINE GRAINED SOFT; POORLY CONSOLIDATED (LOOSE); CLAY BINDER; NUMEROUS ORGANICS; MOIST TO SATURATED AT 6.0 FT; POSSIBLE REDUCING ENVIRONMENT. | ▽ 8/10/86 |
| | | | | | | | | 5 | | | | |
| | | | | | | | 38.8 | 10 | | | 10.0-12.5': DECOMPOSED SANDSTONE; DARK REDDISH BROWN (10R3/4); FINE GRAINED (ARGILLECEOUS); SOFT TO MODERATELY HARD; POORLY TO WELL CEMENTED; TOTALLY DECOMPOSED TO HIGHLY WEATHERED; AUGER SPOILS CONSIST OF SILTY SAND AND GRAVEL; SATURATED. | |
| | | | | | | | 36.4 | 12.5 | | | BOTTOM OF HOLE AT 12.5 FT. | AUGER REFUSAL AT 12.5 FT. |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-292R

045048

# GEOLOGIC DRILL LOG

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-293R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8780, E10700 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/6/86 | 8/6/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 5.0' | 2.5' | 7.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.9' | 6.5'/42.4' | 5.0'/43.9' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 48.9 | 0 | | | | |
| | | | | | | | | 0.3 | | | 0.0-0.3': CONCRETE. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION, AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.3-5.0': SILTY SAND (SM-SC); MOTTLED BLACK AND GRAYISH BLACK (N2); FINE GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE); CLAY BINDER; NUMEROUS ORGANICS; MOIST; POSSIBLE REDUCING ENVIRONMENT. | |
| | | | | | | | 43.9 | 5 | | | 5.0-7.5': DECOMPOSED SANDSTONE; DARK REDDISH BROWN (KOR3/4); FINE GRAINED (ARGILLACEOUS); SOFT TO MODERATELY HARD (NEAR REFUSAL AT 7.5 FT); POORLY TO WELL CEMENTED; TOTALLY DECOMPOSED TO HIGHLY WEATHERED; AUGER SPOILS CONSIST OF SILTY SAND (SM) AND GRAVEL. | ▽ 8/10/86 |
| | | | | | | | 41.4 | 7.5 | | | BOTTOM OF HOLE AT 7.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-293R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-294R |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8780,E10500 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/7/86 | 8/7/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 6" | 10.0' | 0.0 | 10.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 48.9 | 6.5'/42.4' | N/A |

| SAMPLE NUMBER/WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | D. McGRANE |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | PRESSURE P.S.I. 2ND 5' | TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | 4 | | | | | 48.9 | 0 | | | | |
| | | | | | | | 48.6 | 0.3 | | | 0.0-0.3': CONCRETE. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION, AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | 5 | | | 0.3-10.0': SILTY SAND (SM-SC); COLOR STRATIFIED; FINE TO MEDIUM GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE) WITH ONE DENSE CLAYEY SEAM (3.5-4.5 FT); MOIST TO SATURATED AT 6.5 FT. 0.3-3.5': BLACK SPECKLED WITH A WHITE CLAYEY MATERIAL. 3.5-4.5': CLAYEY SEAM; MOTTLED PALE GREEN (5G7/2) AND DUSKY YELLOW (5Y6/4); DENSE IN PLACE. 4.5-6.5': MODERATE BROWN (5YR3/4); SPECKLED WITH A WHITE CLAYEY MATERIAL (6.0-6.5 FT). 6.5-10.0': DARK REDDISH BROWN (10R3/4); VERY SILTY; DECOMPOSED SANDSTONE? | ▽ 8/10/86. |
| | | | | | | | 38.9 | 10.0 | | | BOTTOM OF HOLE AT 10.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-294R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-295R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8600,E11300 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/7/86 | COMPLETED: 8/7/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 6" | OVERBURDEN (FT.): 10.0' |
| ROCK (FT.): 0.0 | TOTAL DEPTH: 10.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 47.0 | DEPTH/EL. GROUND WATER: 6.0'/41.0' |
| DEPTH/EL. TOP OF ROCK: N/A | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: D. McGRANE | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/LENGTH CORE RUN | SAMPLE RECOVERY/CORE RECOVERY | SAMPLE BLOWS "N"/PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AUGER, 6", THROUGHOUT. | | | | | | | 47.0 | 0 | | | 0.0-6.0': SILTY SAND (SM); COLOR STRATIFIED SOIL HORIZONS; FINE GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE); MOIST TO SATURATED AT 6.0 FT. 0.0-3.5': MODERATE BROWN (5YR3/4); NUMEROUS GRASS ROOTS AND ORGANICS. 3.5-4.5': BLACK; NUMEROUS ORGANICS. 4.5-6.0': GRAY (N6-7) SPECKLED WITH BLACK. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION, AND HOLE GAMMA LOGGED BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | 5 | | | | ▽ 8/10/86 |
| | | | | | | | 41.0 | 6.0 | | | 6.0-10.0': SILTY SAND (SM-SC); COLOR STRATIFIED; FINE TO MEDIUM GRAINED; SOFT; POORLY CONSOLIDATED (LOOSE); SATURATED. 6.0-7.5': DARK YELLOWISH BROWN (10YR4/2); CLAYEY. 7.5-10.0': DARK REDDISH BROWN (10R3/4) WITH ONE BLACK ORGANIC LAYER CONTAINING LENSES OF PALE GREEN (5GY7/2); SILT (8.0-9.5 FT). BOTTOM OF HOLE AT 10.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 8/10/86. | *DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |
| | | | | | | | 37.0 | 10.0 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-295R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-325C | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8485,E11415 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/26/86 | COMPLETED: 8/26/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 8" | OVERBURDEN (FT.): 7.0' |
| ROCK (FT.): 0.0' | TOTAL DEPTH: 7.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: 1 | EL. TOP OF CASING: N/A | GROUND EL.: 45.3' | DEPTH/EL. GROUND WATER: 5.0'/40.3' |
| DEPTH/EL. TOP OF ROCK: N/A | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GAL. (ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.3 | 0 | | | | |
| | | | | | | | 44.3 | 0.5 | | | 0.0-0.5': SILT (ML); DUSKY BROWN (5YR2/2) RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| SS 1.5" | 24" | N/A | N/A | | | | 43.3 | 2.0 | | 1 | 0.5-2.0': SILT AND SLUDGE; LIGHT GRAY (N7) HETEROGENEOUS, SLIGHTLY PLASTIC, SOFT. | |
| | | | | | | | | | | | 2.0-4.0': SAND; GRAYISH BROWN (5YR3/2), FINE GRAINED, SILTY. | |
| | | | | | | | 41.3 | 4.0 | | | | |
| | | | | | | | 40.8 | 4.5 | | | 4.0-4.5': SLUDGE; MEDIUM GRAY (N5), SILTY, SOFT. DUSKY YELLOWISH BROWN (10YR2/2), FINE GRAINED, SILTY, SATURATED. | ▽ 9/5/86 |
| | | | | | | | | 5 | | | | |
| | | | | | | | 38.3 | 7.0 | | | 4.5-7.0': SAND (SC-SM); PALE YELLOWISH BROWN (10YR6/2), FINE GRAINED, SILTY, SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 7.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/5/86. | ADVANCED HOLE WITH HOLLOW STEM AUGER (4x8 INCH). |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-325C

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-326C |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8500,E10800 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/27/86 | 8/27/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 8" | 4.5' | 2.5' | 7.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | 1 | N/A | 45.3' | 5.0'/40.3' | 4.5'/40.8' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.3 | 0 | | | | |
| | | | | | | | 44.3 | 1.0 | | | 0.0-1.0': ASPHALT AND CRUSHED ROCK; PAVEMENT AND ROAD BASE. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| SS 1.5' | 24" | N/A | N/A | | | | | | | 1 | 1.0-3.0': SILT (ML); DUSKY BROWN (5YR2/2), SANDY, MOIST. | |
| | | | | | | | 42.3 | 3.0 | | | 3.0-4.5': SAND (SC-SM); PALE YELLOWISH BROWN (10YR6/2), FINE GRAINED, SILTY, MOIST. | ▽ 9/5/86 |
| | | | | | | | 40.8 | 4.5 5 | | | 4.5-7.0': SANDSTONE; SOFT, FINE GRAINED, SILTY, WEATHERED, ROCK FRAGMENTS. | |
| | | | | | | | 38.3 | 7.0 | | | 4.5-5.0': BROWNISH GRAY (5YR3/0. 5.0-7.0': DUSKY RED (5R3/4). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 7.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/5/86. | ADVANCED HOLE WITH HOLLOW STEM AUGER (4x8 INCH). |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIDDBISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-326C

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-327C |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8635,E11085 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/27/86 | 8/27/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 8" | 10.0' | 1.0' | 11.0' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | 1 | N/A | 45.3' | 8.0'/37.3' | 10.0'/35.3' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.3 | 0 | | | 0.0-1.0': ASPHALT AND CRUSHED ROCK; PAVEMENT AND ROAD BASE. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| SS 1.5" | 24" | N/A | N/A | | | | 44.3 | | | 1 | 1.0-10.0': SAND (SC-SM); FINE GRAINED, SILTY, MOIST, GRAVELLY TO 8.0 FT. 1.0-2.0': PALE YELLOWISH BROWN (10YR6/2). 2.0-6.0': DUSKY BROWN (5YR2/2). 6.0-8.0': DARK GRAY (N3), SLIGHT GASOLINE ODOR. 8.0-10.0': PALE BROWN (5YR5/2), SATURATED BELOW 8.0 FT. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. ▽ 9/5/86 |
| | | | | | | | 34.3 | 10 / 11.0 | | | 10.0-11.0': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, SATURATED. | ADVANCED HOLE WITH HOLLOW STEM AUGER (4x8 INCH). |
| | | | | | | | | | | | BOTTOM OF HOLE AT 11.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/5/86. | |
| | | | | | | | | 5 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-327C

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-330C | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9000,E11350 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 9/2/86 | COMPLETED: 9/2/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: MOBILE B-33 | HOLE SIZE: 8" | OVERBURDEN (FT.): 6.0' |
| ROCK (FT.): 2.0' | TOTAL DEPTH: 8.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: 1 | EL. TOP OF CASING: N/A | GROUND EL.: 45.7' | DEPTH/EL. GROUND WATER: 6.0'/39.7' |
| DEPTH/EL. TOP OF ROCK: 6.0'/39.7' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 45.7 | 0 | | | | |
| SS 1.5" | 24" | N/A | N/A | | | | 45.2 | 0.5 | | 1 | 0.0-0.5': SILT (ML); DUSKY BROWN (5YR2/2) RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | 1.5 | | | 0.5-1.5': SILT AND CLAY (ML); DUSKY YELLOWISH BROWN (10YR2/2), SLIGHTLY PLASTIC. | |
| | | | | | | | | | | | 1.5-6.0': SAND (SC-SW); FINE GRAINED, SILTY, MOIST. | |
| | | | | | | | | | | | 1.5-3.0': BLACK (N0). | |
| | | | | | | | | 5 | | | 3.0-5.5': LIGHT GRAY (N7). | |
| | | | | | | | | | | | 5.5-6.0': PALE YELLOWISH BROWN (10YR6/2). | ▽ 9/5/86 |
| | | | | | | | 39.7 | 6.0 | | | | |
| | | | | | | | | | | | 6.0-8.0': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 37.7 | 8.0 | | | | |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 8.0 FT. | ADVANCED HOLE WITH HOLLOW STEM AUGER (4x8 INCH). |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/5/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-330C

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-332C |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8915,E10085 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 9/2/86 | 9/2/86 | MORETRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 8" | 5.0' | 0.5' | 5.5' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | 1 | N/A | 48.6' | 5.0'/43.6' | 5.0'/43.6' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5' | PRESSURE P.S.I. 2ND 5' | TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 48.6 | 0 | | | | |
| SS 1.5" | 24" | N/A | N/A | | | | 48.3 | 0.3 | | 1 | 0.0-3.0': ASPHALT AND GRAVEL FILL; BLACK (N0 TO MODERATE REDDISH BROWN (10R4/6), SILTY, SANDY, GRAVELLY FILL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 45.6 | 3.0 | | | 3.0-5.0': SAND; DUSKY BROWN (5YR2/2), FINE GRAINED, SILTY, WITH SOME ZONES STAINED GRAYISH ORANGE (10YR7/4). | ▽ 9/5/86 |
| | | | | | | | 43.6 | 5 | | | | |
| | | | | | | | 43.1 | 5.5 | | | 5.0-5.5': SANDSTONE; DUSKY RED (5R3/4), MODERATELY HARD, FINE GRAINED, WEATHERED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | | | | BOTTOM OF HOLE AT 5.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/5/86. | ADVANCED HOLE WITH HOLLOW STEM AUGER (4x8 INCH). |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIEDRISON; P=PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-332C |

045048

# GEOLOGIC DRILL LOG

| | | | | |
|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-333C |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9305,E10200 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 9/3/86 | 9/3/86 | MORE TRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 8" | 6.5' | 1.5' | 8.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | 1 | N/A | 54.6' | 5.5'/49.1' | 6.5'/48.1' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE; DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/ LENGTH CORE RUN | SAMPLE RECOVERY/ CORE RECOVERY | SAMPLE BLOWS/ 6" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM | WATER PRESSURE TESTS: PRESSURE PSI | WATER PRESSURE TESTS: TIME IN MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 54.6 | 0 | | | | |
| SS L5' | 24" | N/A | N/A | | | | 53.6 | 1.0 | | 1 | 0.0-1.0': CRUSHED ROCK; MEDIUM GRAY (N5), BASALT. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 50.6 | 4.0 | | | 1.0-4.0': SAND (SC-SM); MODERATE BROWN (5YR3/4) TO DUSKY BROWN (5YR2/2), FINE GRAINED, SILTY, MOIST. | |
| | | | | | | | 48.1 | 5 6.5 | | | 4.0-6.5': SILT (ML); DUSKY YELLOWISH BROWN (10YR2/2), CONTAINS SLUDGE, OILY APPEARANCE, SLIGHTLY PLASTIC, MOIST. | ▽ 9/5/86 |
| | | | | | | | 46.6 | 8.0 | | | 6.5-8.0': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 8.0 FT. | ADVANCED HOLE WITH HOLLOW STEM AUGER (4x8 INCH). |
| | | | | | | | | 15 | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/5/86. | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

*DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-333C

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-334C |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9250,E11500 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 9/3/86 | 9/3/86 | MORE TRENCH ENVIRONMENTAL SERVICES | MOBILE B-33 | 8" | 3.0' | 3.0' | 6.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | 1 | N/A | 47.4' | 5.0'/42.4' | 3.0'/44.4' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE, DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLE OR ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY/ CORE RECOVERY | SAMPLE BLOWS /6" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. | WATER PRESSURE TESTS: PRESSURE P.S.I. | WATER PRESSURE TESTS: TIME IN MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 47.4 | 0 | | | | |
| SS 1.5' | 24" | N/A | N/A | | | | 46.9 | 0.5 | | 1 | 0.0-0.5': SILT GRAVEL; DUSKY BROWN (5YR2/2) RESIDUAL SOIL. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | | 0.5-3.0': SAND; DUSKY BROWN (5YR2/2), FINE GRAINED, SILTY, GRAVELLY, ORLY APPEARANCE. | |
| | | | | | | | 44.4 | 3.0 | | | | ▽ 9/5/86 |
| | | | | | | | | 5 | | | 3.0-6.0': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, MOIST. | |
| | | | | | | | 41.4 | 6.0 | | | | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 6.0 FT. | ADVANCED HOLE WITH HOLLOW STEM AUGER (4x8 INCH). |
| | | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/5/86. | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | |

* DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS.

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIEDRICH; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-334C

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-417C |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9140,E10368 | ANGLE FROM HORIZ.: 90° | BEARING: N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/18/86 | 8/18/86 | MORE TRENCH ENVIRONMENTAL SERVICES | ACKER ELECTRIC CATHEAD | 4.5" | 10.5' | 1.0' | 11.5' |

| CORE RECOVERY (FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | 4 | N/A | 53.0 | 9.5'/43.5' | 10.5'/42.5' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/ LENGTH CORE RUN | SAMPLE RECOVERY/ CORE RECOVERY | SAMPLE BLOWS PER 6" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE PSI (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 53.0 | 0 | | | | |
| DROVE CASING 4.5 IN. DIA. | | CORE | 6" | | | | 52.5 | 0.5 | | | 0.0-0.5': CONCRETE FLOOR SLAB. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| SS 1.5' | 24" | N/A | N/A | | | | | | | | 0.5-5.5': SAND (SC-SM); MODERATE REDDISH BROWN (10R4/6), FINE GRAINED, SILTY, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 5 | | 1 | | |
| SS 1.5' | 24" | N/A | N/A | | | | 47.5 | 5.5 | | 2 | 5.5-10.5': SILT (ML); BLACK (N1), SANDY, MOIST, CONTAINS SLUDGE. | ▽ 9/8/86. |
| SS 1.5' | 24" | N/A | N/A | | | | | | | 3 | | |
| SS 1.5' | 24" | N/A | N/A | | | | 42.5 | 10 | | | | |
| | | | | | | | 41.5 | 11.5 | | 4 | 10.5-11.5': SANDSTONE; GRAYISH RED (5Y4/2), FINE TO MEDIUM GRAINED, SILTY, POORLY TO MODERATELY CEMENTED, SOFT TO MODERATELY HARD. | |
| | | | | | | | | | | | BOTTOM OF HOLE AT 11.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT. HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | • DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIESEL; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-417C

045848

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-418R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8992,E10690 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/19/86 | COMPLETED: 8/19/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: ACKER ELECTRIC CATHEAD | HOLE SIZE: 4.5" | OVERBURDEN (FT.): 4.5' |
| ROCK (FT.): 0.5' | TOTAL DEPTH: 5.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 53.0' | DEPTH/EL. GROUND WATER: DRY |
| DEPTH/EL. TOP OF ROCK: 4.5'/48.5' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P.YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM, 1ST 5'; PRESSURE PSI, 2ND 5'; TIME IN MINUTES, 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION * | NOTES ON: WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|
| DROVE CASING, 4.5 IN. DIA. | | | CORE 6' | | 53.0 | 0 | | | 0.0-0.5': CONCRETE FLOOR SLAB. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | 52.5 | | | | 0.5-4.5': SAND (SC-SM); MODERATE BROWN (5YR4/4), FINE GRAINED, SILTY, DRY TO MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | 48.5 | | | | 4.5-5.0': SANDSTONE; DUSKY RED (5R3/4), SOFT, FINE GRAINED, SILTY, WEATHERED. | |
| | | | | | 48.0 | 5 | | | BOTTOM OF HOLE AT 5.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | GROUND WATER LEVEL MEASURED ON 9-8-86. CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT. HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | 10 | | | | |
| | | | | | | 15 | | | | |
| | | | | | | 20 | | | | |
| | | | | | | 25 | | | | |
| | | | | | | 30 | | | | |
| | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-418R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-419R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8866,E10397 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/19/86 | COMPLETED: 8/19/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: ACKER ELECTRIC CATHEAD | HOLE SIZE: 4.5" | OVERBURDEN (FT.): 8.0' |
| ROCK (FT.): 0.5' | TOTAL DEPTH: 8.5' | | | | |
| CORE RECOVERY(FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 53.0' | DEPTH/EL. GROUND WATER: DRY |
| DEPTH/EL. TOP OF ROCK: 8.0'/45.0' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM 1ST 5' | WATER PRESSURE TESTS: PRESSURE PSI 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | 53.0 | 0 | | | 0.0-0.5': CONCRETE FLOOR SLAB. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| DROVE CASING, 4.5 IN. DIA. | ← | CORE | 6" | | | | 52.5 | | | | 0.5-8.0': SAND (SC-SM); LIGHT BROWN (5YR5/6), FINE GRAINED, SILTY, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 5 | | | | GROUND WATER LEVEL MEASURED ON 9/8/86. |
| | | | | | | | 45.0 44.5 | 8.5 | | | 8.0-8.5': SANDSTONE; DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, MOIST. | |
| | | | | | | | | 10 | | | BOTTOM OF HOLE AT 8.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT. |
| | | | | | | | | 15 | | | | HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-419R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 14501-138 | 1 OF 1 | MISS-420R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N9134,E10978 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/20/86 | 8/20/86 | MORETRENCH ENVIRONMENTAL SERVICES | ACKER ELECTRIC CATHEAD | 4.5" | 7.0' | 3.0' | 10.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 53.0' | DRY | 7.0'/46.0' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P.YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS / % PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5'); PRESSURE PSI (2ND 5'); TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|
| DRIVE CASING, 4.5 IN. DIA. | CORE 6' | | | | 53.0 | 0 | | | 0.0-0.5': CONCRETE FLOOR SLAB. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | 52.5 | | | | 0.5-7.0': SAND (SP-SM) FINE GRAINED, SILTY, WEATHERED, DRY. 0.5-4.0': LIGHT BROWN (5YR6/4). 4.0-7.0': MODERATE BROWN (5YR3/4). | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | 5 | | | | |
| | | | | | 46.0 | | | | 7.0-10.0': SANDSTONE: DUSKY RED (5R3/4), MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, DRY TO MOIST. | GROUND WATER LEVEL MEASURED ON 9-8-86. |
| | | | | | 43.0 | 10 | | | | |
| | | | | | | | | | BOTTOM OF HOLE AT 10.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT. HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | 15 | | | | |
| | | | | | | 20 | | | | |
| | | | | | | 25 | | | | |
| | | | | | | 30 | | | | |
| | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-420R

045048

# GEOLOGIC DRILL LOG

| PROJECT | JOB NO. | SHEET NO. | HOLE NO. |
|---|---|---|---|
| FUSRAP | 1450;-138 | 1 OF 1 | MISS-421R |

| SITE | COORDINATES | ANGLE FROM HORIZ. | BEARING |
|---|---|---|---|
| MAYWOOD INTERIM STORAGE SITE | N8870,E11040 | 90° | N/A |

| BEGUN | COMPLETED | DRILLER | DRILL MAKE AND MODEL | HOLE SIZE | OVERBURDEN (FT.) | ROCK (FT.) | TOTAL DEPTH |
|---|---|---|---|---|---|---|---|
| 8/20/86 | 8/20/86 | MORETRENCH ENVIRONMENTAL SERVICES | ACKER ELECTRIC CATHEAD | 4.5" | 6.0' | 4.0' | 10.0' |

| CORE RECOVERY(FT./%) | CORE BOXES | SAMPLES | EL. TOP OF CASING | GROUND EL. | DEPTH/EL. GROUND WATER | DEPTH/EL. TOP OF ROCK |
|---|---|---|---|---|---|---|
| N/A | N/A | N/A | N/A | 53.0' | DRY | 6.0'/47.0' |

| SAMPLE HAMMER WEIGHT/FALL | CASING LEFT IN HOLE: DIA./LENGTH | LOGGED BY: |
|---|---|---|
| N/A | N/A | P. YEN |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE LENGTH CORE RUN | SAMPLE RECOVERY CORE RECOVERY | SAMPLE BLOWS "N" PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (1ST 5') | PRESSURE P.S.I. (2ND 5') | TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ← CORE | 6" | | | | | 53.0 | 0 | | | 0.0-0.5': CONCRETE: FLOOR SLAB. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| DROVE CASING, 4.5 IN. DIA. | | | | | | | 52.5 | | | | 0.5-3.0': SILT (ML): BLACK (N1) WITH WHITE SPECKS (N9), SANDY, SLUDGE, DRY. | |
| | | | | | | | 50.0 | 5 | | | 3.0-6.0': SAND (SC-SM): LIGHT BROWN (5YR6/4), FINE GRAINED, SILTY, DRY. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 47.0 | | | | 6.0-10.0': SANDSTONE: DUSKY RED (5R3/4), SOFT TO MODERATELY HARD, FINE GRAINED, SILTY, DRY. | GROUND WATER LEVEL MEASURED ON 9-8-86 |
| | | | | | | | 43.0 | 10 | | | BOTTOM OF HOLE AT 10.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT. |
| | | | | | | | | 15 | | | | HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON PITCHER; O=OTHER

| SITE | HOLE NO. |
|---|---|
| MAYWOOD INTERIM STORAGE SITE | MISS-421R |

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-422R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8995,E11021 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/20/86 | COMPLETED: 8/20/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: ACKER ELECTRIC CATHEAD | HOLE SIZE: 4.5" | OVERBURDEN (FT.): 8.0 |
| ROCK (FT.): 0.0' | TOTAL DEPTH: 8.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 53.0' | DEPTH/EL. GROUND WATER: 8.0'/45.0' |
| DEPTH/EL. TOP OF ROCK: 8.0'/45.0' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS / % PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. 1ST 5' | WATER PRESSURE TESTS: PRESSURE P.S.I. 2ND 5' | WATER PRESSURE TESTS: TIME IN MINUTES 3RD 5' | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DROVE CASING, 4.5 IN. DIA. | CORE | CORE 6" | | | | | 53.0 | 0 | | | 0.0-0.5': CONCRETE FLOOR SLAB. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | 52.5 | | | | 0.5-6.0': SAND AND SANDSTONE FILL; DUSKY RED (5R3/4), FINE GRAINED, SILTY, HETEROGENEOUS FILL, MODERATELY COMPACTED, DRY. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | | 5 | | | | |
| | | | | | | | 47.0 | | | | 6.0-7.5': SILT (ML); BLACK (N1) WITH WHITE SPECKS (N9), SLUDGE, DRY. | ▽ 9/8/86 |
| | | | | | | | 45.5 | | | | 7.5-8.0': SAND (SC-SM); DUSKY RED (5R3/4), MOIST, MODERATELY HARD. | |
| | | | | | | | 45.0 | 8.0 | | | BOTTOM OF HOLE AT 8.0 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT. |
| | | | | | | | | 10 | | | | HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-422R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-423R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9136,E10692 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/21/86 | COMPLETED: 8/21/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: ACKER ELECTRIC CATHEAD | HOLE SIZE: 4.5" | OVERBURDEN (FT.): 4.0' |
| ROCK (FT.): 5.0' | TOTAL DEPTH: 9.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 53.0' | DEPTH/EL. GROUND WATER: 4.0'/49.0' |
| DEPTH/EL. TOP OF ROCK: 4.0'/49.0' | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P.YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE / LENGTH CORE RUN | SAMPLE RECOVERY / CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN 1ST 5' GPM | WATER PRESSURE TESTS: PRESSURE 2ND 5' P.S.I. | WATER PRESSURE TESTS: TIME IN 3RD 5' MINUTES | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CORE | 6" | | | | 53.0 | 0 | | | | |
| DROVE CASING, 4.5 IN. DIA. | | | | | | | 52.5 | 0.5 | | | 0.0-0.5': CONCRETE FLOOR SLAB.<br>0.5-4.0': SAND (SC-SW); LIGHT BROWN (5YR6/4), FINE GRAINED, SILTY, DRY. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. ▽ 9/8/86. |
| | | | | | | | 49.0 | 4.0 | | | 4.0-9.0': SANDSTONE; DUSKY RED (5R3/4), MODERATELY HARD, FINE GRAINED, SILTY, WEATHERED, SATURATED. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | | 44.0 | 9.0 | | | BOTTOM OF HOLE AT 9.0 FT.<br>HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT.<br>HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | | | 10 | | | | |
| | | | | | | | | 15 | | | | |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-423R

045048

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-425R | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N8877,E10347 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/21/86 | COMPLETED: 8/21/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: ACKER ELECTRIC CATHEAD | HOLE SIZE: 4.5" | OVERBURDEN (FT.): 7.0' |
| ROCK (FT.): 0.0' | TOTAL DEPTH: 7.0' | | | | |
| CORE RECOVERY (FT./%): N/A | CORE BOXES: N/A | SAMPLES: N/A | EL. TOP OF CASING: N/A | GROUND EL.: 53.0' | DEPTH/EL. GROUND WATER: DRY |
| DEPTH/EL. TOP OF ROCK: N/A | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE: DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE - LENGTH CORE RUN / SAMPLE RECOVERY - CORE RECOVERY | SAMPLE BLOWS "N" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN GPM (1ST 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | 53.0 | 0 | | | | |
| DROVE CASING, 4.5 IN. DIA. | CORE 6' | | | | | 52.5 | 0.5 | | | 0.0-0.5': CONCRETE FLOOR SLAB. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| | | | | | | | | | | 0.5-5.0': SAND (SC-SM); GRAYISH ORANGE (10YR7/4), FINE GRAINED, SILTY, DRY. | |
| | | | | | | 48.0 | 5 | | | 5.0-7.0': SILT (ML); WHITE (N9), SLIGHTLY PLASTIC, SLIGHTLY SANDY SLUDGE, MOIST. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| | | | | | | 46.0 | 7.0 | | | BOTTOM OF HOLE AT 7.0 FT. | |
| | | | | | | | | | | HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | GROUND WATER LEVEL MEASURED ON 9-8-86. |
| | | | | | | | 10 | | | | CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT. |
| | | | | | | | 15 | | | | HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | | 20 | | | | |
| | | | | | | | 25 | | | | |
| | | | | | | | 30 | | | | |
| | | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DENNISON; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-425R

045848

# GEOLOGIC DRILL LOG

| | | | | | |
|---|---|---|---|---|---|
| PROJECT: FUSRAP | JOB NO.: 14501-138 | SHEET NO.: 1 OF 1 | HOLE NO.: MISS-426C | | |
| SITE: MAYWOOD INTERIM STORAGE SITE | COORDINATES: N9000,E10506 | ANGLE FROM HORIZ.: 90° | BEARING: N/A | | |
| BEGUN: 8/22/86 | COMPLETED: 8/22/86 | DRILLER: MORETRENCH ENVIRONMENTAL SERVICES | DRILL MAKE AND MODEL: ACKER ELECTRIC CATHEAD | HOLE SIZE: 4.5" | OVERBURDEN (FT.): 10.5' |
| ROCK (FT.): 0.0' | TOTAL DEPTH: 10.5' | | | | |
| CORE RECOVERY FT./%: N/A | CORE BOXES: N/A | SAMPLES: 1 | EL. TOP OF CASING: N/A | GROUND EL.: 53.0' | DEPTH/EL. GROUND WATER: DRY |
| DEPTH/EL. TOP OF ROCK: N/A | | | | | |
| SAMPLE HAMMER WEIGHT/FALL: N/A | CASING LEFT IN HOLE; DIA./LENGTH: N/A | LOGGED BY: P. YEN | | | |

| SAMPLE TYPE AND DIAMETER | SAMPLER ADVANCE/ LENGTH CORE RUN | SAMPLE RECOVERY/ CORE RECOVERY | SAMPLE BLOWS/ 6" / PERCENT CORE RECOVERY | WATER PRESSURE TESTS: LOSS IN G.P.M. (INT 5') | WATER PRESSURE TESTS: PRESSURE P.S.I. (2ND 5') | WATER PRESSURE TESTS: TIME IN MINUTES (3RD 5') | ELEVATION | DEPTH | GRAPHIC LOG | SAMPLE | DESCRIPTION AND CLASSIFICATION* | NOTES ON WATER LEVELS, WATER RETURN, CHARACTER OF DRILLING, ETC. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | CORE | 6" | | | | 53.0 | 0 | | | 0.0-0.5': CONCRETE FLOOR SLAB. | SITE CHECKED FOR RADIOACTIVE CONTAMINATION BY EBERLINE ANALYTICAL CORPORATION. |
| SS 1.5' | 24" | N/A | N/A | | | | | 0.5 | | 1 | 0.5-10.5': SAND (SC-SM); FINE GRAINED, SILTY, MOIST TO 6.8 FT, SATURATED 6.8-10.5 FT WITH SLIGHTLY PLASTIC SLUDGE. | EBERLINE ANALYTICAL CORPORATION PERFORMED GAMMA LOGGING. |
| DROVE CASING, 4.5 IN. DIA. | | | | | | | | 5 | | | 0.5-1.5': PALE BROWN (5YR2/2). 1.5-5.0': MEDIUM GRAY (N5). 5.0-6.4': LIGHT GRAY (N7). 6.4-6.6': BLACK (N1). 6.6-6.8': PALE YELLOWISH BROWN (10YR6/2). 6.8-10.5': MEDIUM GRAY (N5). | GROUND WATER LEVEL MEASURED ON 9-8-86. |
| | | | | | | | 42.5 | 10.5 | | | BOTTOM OF HOLE AT 10.5 FT. HOLE BACKFILLED WITH CEMENT-BENTONITE GROUT, 9/8/86. | CONCRETE FLOOR SLAB CORED WITH AN ELECTRIC CORE DRILL AND A 6" DIA BIT. |
| | | | | | | | | 15 | | | | HOLE ADVANCED USING A 300 lb CASING HAMMER DRIVING 4.5" DIA CASING. |
| | | | | | | | | 20 | | | | |
| | | | | | | | | 25 | | | | |
| | | | | | | | | 30 | | | | |
| | | | | | | | | 35 | | | | * DESCRIPTION AND CLASSIFICATION BY VISUAL EXAMINATION OF CUTTINGS. |

SS=SPLIT SPOON; ST=SHELBY TUBE; D=DIEDRICH; P=PITCHER; O=OTHER

SITE: MAYWOOD INTERIM STORAGE SITE

HOLE NO.: MISS-426C