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FINAL REPORT

GAITHERSBURG NIKE CONTROL AND LAUNCH AREA
PRELIMINARY ASSESSMENT/SITE INSPECTION
GAITHERSBURG, MARYLAND

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Prepared for

U.S. Army Toxic and Hazardous Materials Agency
Aberdeen Proving Ground
Aberdeen, Maryland 21010-5401

Prepared by

EA Mid-Atlantic Regional Operations
EA Engineering, Science, and Technology, Inc.

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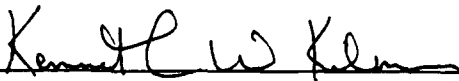
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30 JANUARY 1990
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19. ABSTRACT (Continue on reverse if necessary and identify by block number) This report summarizes the findings of the Preliminary Assessment/Site Inspection study completed at the former Gaithersburg Nike Launch and Control Site by EA under contract to USATHAMA. This study was conducted to assess the environmental conditions at this facility relative to past Army operations. The control area has been identified for closure in the Base Realignment and Closures report completed by the Defense Secretary's Commission in December 1988. The Launch and Control Sites are located 1.5 miles apart and a separate, though similar, sampling plan was developed for each site. Ground-water, surface water, surface sediment and soil samples were collected and analyzed for priority pollutant parameters at these sites. The assessment of the data collected indicates that no compounds exceeded current maximum contaminant levels (MCL). The future use of ground-water at these sites should be considered when decisions are made relative to conducting additional sampling or studies at these sites. During the course of this PA/SI a number of potential environmental areas of concern that were not addressed in the scope of this PA/SI are also cited in the report. Additional work is planned by USATHAMA to address these concerns. <i>Keywords: Guided missiles, Environmental impact</i>						
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EXECUTIVE SUMMARY

EA Engineering, Science, and Technology, Inc. (EA) conducted a Preliminary Assessment/Site Inspection (PA/SI) at the former Gaithersburg NIKE Control and Launch areas located in Gaithersburg, Maryland for the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) under Contract No. DAAA15-88-0005. The objective of this PA/SI was to evaluate the site environmental conditions relative to the past Army operations. An update of the Initial Installation Assessment (IIA) was conducted in 1987 at the study areas and consisted of a records search. The purpose of the update report was to review the 1980 report in terms of changes in environmental regulations or mission relative to the findings of the previous report. Based on the information reviewed during these assessments and other USATHAMA NIKE reports, the waste solvents, petroleum, oil and lubricants used during normal Army operations were disposed of in rock-lined gravel pits and in the septic system. These waste disposal practices have led to ground-water and soil contamination at other former NIKE sites. This potential for contamination and the excessing actions that have been proposed for the former Gaithersburg Launch and Control sites have led to the undertaking of this PA/SI project.

The NIKE Control and Launch areas are located approximately 1.5 mi apart and a separate, though similar, work scope was developed for each site. The respective sampling plans were designed to address the potential ground-water, surface water and soil contamination associated with past Army operations. Four ground-water monitoring wells were installed at both sites from which ground-water samples were collected and analyzed. Eight soil samples were collected for analysis, five at the Launch and three at the Control site. A surface water and surface sediment sample were collected from a stream located close to the Launch area. Also included in the scope-of-work at the Launch site was an inspection of the three missile storage structures to evaluate the potential for environmental problems.

Site features of additional environmental concern not fully addressed in this PA/SI included five underground storage tanks; four at the Control Area and one at the Launch Area, an asbestos survey of the buildings, a lead paint survey, a dry well at the Control area and PCB transformers. These concerns are to be addressed in a subsequent investigation to this PA/SI, conducted by USATHAMA.

The samples collected during this PA/SI study were analyzed for the complete Priority Pollutant Parameter List, which includes volatile and semi-volatile organics, total cyanide and phenols, pesticides, PCBs, and dissolved metals. The assessment of the data obtained from these samples involved comparing the data to the established regulatory criteria to characterize the potential for contamination that may be attributed to past Army operations. The evaluation of this data indicates that no compounds were detected above any current Maximum Contaminant Levels (MCL). Low levels of a phthalate compound were detected in six samples, however, there are no regulatory criteria for these compounds. These compounds are common components of plastics and their detection is probably due to laboratory contamination. Cadmium was detected in nine of ten water samples including the field blank at levels between the current MCL of 10 $\mu\text{g/L}$ and the proposed MCL and MCLG (Maximum Contaminant Level Goal) of 5 $\mu\text{g/L}$. The source of this metal is indeterminate and the detection of cadmium in the field blank brings into question the validity of the data. Lead was detected in the ground-water sample from GNL-3 at 35 $\mu\text{g/L}$. This level is lower than the current MCL of 50 $\mu\text{g/L}$ but higher than the proposed MCL of 5 $\mu\text{g/L}$ and proposed MCLG of 0 $\mu\text{g/L}$. If the current MCL is lowered in the future to the proposed MCL, the lead level detected in GNL-3 during this study would be an excessive value. Heptachlor, a pesticide compound, was detected at low levels in five field samples at the Launch site, plus the field and method blank. The detection of this compound can be attributed to laboratory contamination based on the detection of the compound in the method blank. The soil sample analytical data exhibited values within the expected background ranges for soils typical of the site.

The future use of these sites and in particular the potential for ground-water use should be considered when decisions are made concerning the need for additional ground-water monitoring. Both of these sites are in close proximity to a municipal water system and it is likely that this system would supply water to the sites instead of relying on ground-water. If, however, the future site development plans include ground-water use, an additional comprehensive ground-water sampling event is recommended to provide a greater level of assurance beyond a single sampling round. Additional sampling, if performed, should attempt to confirm or deny the cadmium levels in the water samples and provide additional data on the lead level in the ground-water sample from GNL-3.

1. INTRODUCTION

The former Gaithersburg NIKE Launch and Control area is located northeast of Gaithersburg, Maryland, in Montgomery County, approximately 30 mi north of Washington, D.C. as shown on Figure 1-1. The combined area of the facility, less easements, is approximately 30 acres. The facility consists of two separate sites, the NIKE Control and Launch areas located approximately 1.5 miles apart. Detailed Launch and Control area site maps are provided as Figures 1-2 and 1-3, respectively. These figures are on plan sheets and are located in separate back pockets.

The Control Area is surrounded by single-family residences and is not being used in any capacity at the present time. The Control area was identified for closure in the Base Realignments and Closures Report completed by the Defense Secretary's Commission in December 1988. In this report the Control area was referred to as the Army Reserve Center, Gaithersburg, Maryland. The surrounding land use at the Launch Area presently consists of a mixture of single-family residences and farm land. An active U.S. Army Reserve Headquarters office has been constructed on the front portion of the Launch Site.

Three missile launching pads and separate fueling, generator, assembly, storage, and wastewater disposal areas can be identified at the former Launch Area. The missile launching pads consist of three concrete structures, approximately 17 ft deep, used to store the missiles. In addition to these features, a 1,000-gal fuel oil underground storage tank (UST) was not removed from the Launch area during the course of this investigation. Surface runoff is directed towards a small surface stream located along the southern site boundary.

The former mess hall, barracks, administration, engine generator and frequency changer buildings are located at the Control area, along with the wastewater treatment and disposal areas. Three fuel oil (two 1,500 and one 2,000 gallon) and one 6,000 gallon gasoline UST were located at the Control area and were removed during this investigation.

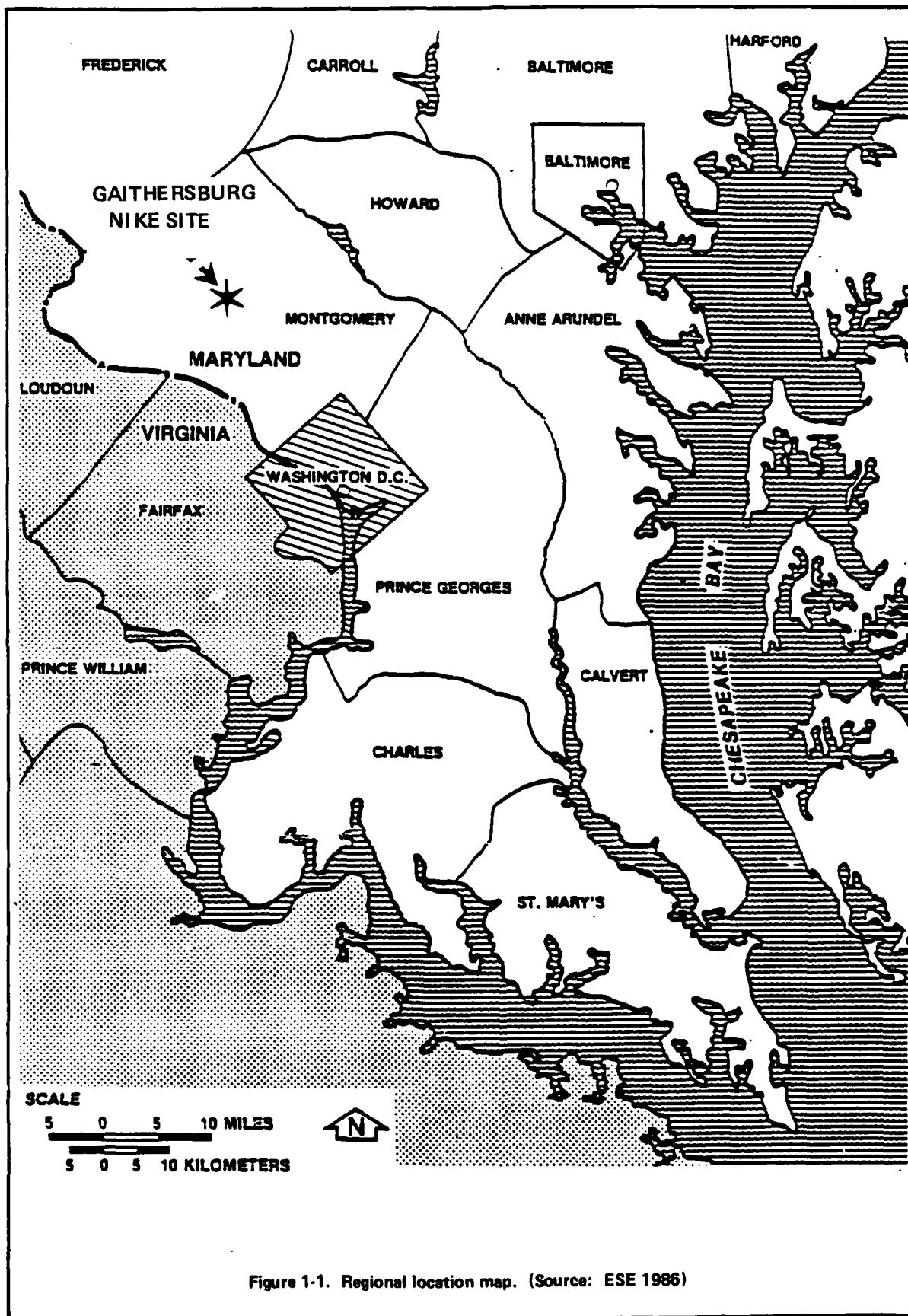


Figure 1-1. Regional location map. (Source: ESE 1986)

The former Gaithersburg NIKE Launch and Control area was owned and operated by the Department of the Army (DA) from 1956 to 1962. During this time the Army constructed the NIKE-Ajax Missile Control and Launch Areas at this site. The site was named the Gaithersburg Support Facility--NIKE Ajax Site W-94. In 1962, the DA transferred this facility to the Department of the Navy (DN), which used the facility for communications research. In 1968 the Harry Diamond Laboratories (HDL) began using the former Launch facility for radar research. In March 1972, the property was transferred to HDL and named Gaithersburg Research Facility (GRF). HDL activities involved constructing, maintaining, and testing of electronic and mechanical systems to track aircraft. HDL utilized this site until 1979, after which it was transferred to Fort George G. Meade (FGGM).

The purpose of the Preliminary Assessment/Site Inspection (PA/SI) was to design and conduct a field sampling plan that included ground-water, surface water, surface sediment, and soil sample collection and chemical analysis to address the potential for environmental contamination associated with past Army operations. The assessment of this data focused on whether there was a need for further environmental work.

Section 2 of this report provides an overview of the NIKE Missile System including a description of site features, operations, and types of waste generated. Section 3 includes information on the geology and topography from a regional and local perspective. Section 4 describes the various field methods and procedures utilized during the field investigation. Section 5 includes the assessment of environmental conditions at the Launch and Control areas. Each site has been characterized relative to specific site features and the analytical data and results of field activities and are provided in this section. Section 5 is followed by conclusions and recommendations that were developed based on the findings from this PA/SI study.

2. NIKE MISSILE SYSTEM OVERVIEW

2.1 GENERAL

Between 1954 and the early 1970s, NIKE Ajax and NIKE Hercules missile batteries were constructed throughout the continental United States. Maintenance of the batteries by the U.S. Army required the storage, handling, and disposal of missile components and propellants as well as solvents, fluids, fuels, and other materials necessary for support activities. General operation procedures used at the NIKE sites were relatively consistent from site to site although specifics of material handling and disposal varied from individual batteries. (McMasters et al., 1983)

2.2 DESCRIPTION OF MISSILES, BATTERIES, AND EQUIPMENT

NIKE Ajax missiles were first deployed in 1954 and remained in use until 1964. The NIKE Ajax was a two-stage supersonic missile armed with three high-explosive warheads. The missile utilized a solid-fueled booster and a liquid-fueled sustainer motor to deliver the high explosive warheads to a radar-determined point. The first stage was powered by the XM-5 booster, which burned a cast, double-based solid propellant. The second stage burned JP-4 jet fuel with inhibited red fuming nitric acid (IRFNA) as an oxidizer. The starter fluid originally consisted of aniline/furfuryl alcohol, later replaced by unsymmetrical dimethyl hydrazine (UDMH).

The NIKE Hercules missile, introduced in 1958, gradually replaced the Ajax and remained in use until the mid-1970s. The NIKE Hercules was a two-stage missile which differed from the Ajax in that the sustainer motor was solid fueled and the warhead was primarily nuclear. The first stage of the missile was powered by a solid-propellant XM-5 cluster. The second stage sustainer motor initially burned a mixture of 40 percent UDMH and 60 percent JP-4, which was replaced by motors fueled by JP-4 with IRFNA as an oxidizer. However, continual malfunction of the motors

led to replacement by a solid-propellant sustainer motor of the XM-30 series. This model was fueled by an ammonium perchlorate-type propellant.

Typical NIKE batteries consisted of two main operating areas: the Control Area and the Launch Area. Equipment limitation necessitated that the two areas could not be closer to each other than 900 meters and could be no farther than 3.5 kilometers apart. The Control Area contained all radar, guidance, electronic, and communication equipment for missile guidance and fire control. In addition, an electric generator building and motor pool may have been located on the site. The Launch Area contained the facilities and equipment required to assemble, test, and maintain the missiles and associated launchers. Maintenance facilities generally included the motor pool and generator buildings in addition to the defuel/refuel facilities. The generator building and motor pool were normally equipped with a 1-2 m³ gravel pit sump where oil, solvents, and paints were routinely dumped and allowed to soak into the ground. Some Launch batteries had an additional rock-filled pit in the defuel/refuel area which was used for IRFNA disposal. Fuel storage tanks were common at both the Control and Launch Areas. Most bulk storage was in USTs, although above-ground tanks were also used.

2.3 GENERAL WASTE SOURCES

Past NIKE operations utilized and generated a significant quantity of hazardous material and waste. Consequently, the potential for pollution of surface water, ground water, soil, and sediment is a matter of concern. Table 2-1 is a summary of potential environmental releases at a NIKE missile battery. Past operations included fueling and defueling, support equipment maintenance and repair, and material handling and storage. There were several categories of hazardous waste associated with past NIKE operations, including liquid missile fuel (JP-4); starter

TABLE 2-1 SUMMARY OF POTENTIAL ENVIRONMENTAL RELEASES AT A NIKE MISSILE BATTERY

Contaminant	Quantity Used (L/year)	Area of Use (a)	Routine Disposal Methods		Incidental Releases	Dates
			Primary	Secondary		
Carbon tetrachloride	1,000-2,000	LA, Motor Pool	Sump	Surface Dump	—	1954-1962
Trichlorethylene	360-1,400	LA, Motor Pool	Sump	Surface Dump	—	1956-1970
Trichlorethylene	1,000-2,000	LA, Motor Pool	Sump	Surface Dump	—	1958-1964
IRFNA (b)	500-1,500	Fuel/Defuel	Sump	Turn-in	Line Rupture	1954-1964
Aniline-furfuryl alcohol (b)	20-30	Fuel/Defuel	Turn-in	Dump/Burial	Line Rupture	1954-1958
UDMH (b)	20-30	Fuel/Defuel	Turn-in	Dump/Burial	Line Rupture	1956-1964
Battery Electrolyte	100-300	LA, Motor Pool	Sump	Sewer	—	1954-1978
JP-4 (b)	2,000-3,000	Fuel/Defuel	Turn-in	—	Leakage	1954-1978
Diesel/Gasoline	50,000-100,000	Motor Pool, Generator	Consumptive Use	Consumptive Use	Leakage	1954-1978
Stoddard Type II	2,000-4,000	LA, Motor Pool	Sump	Turn-in	—	1965-1978
No. 2 Fuel Oil	20,000-50,000	LA, Housing	Consumptive Use	Consumptive Use	Leakage	1954-1978
Motor Oil	400-600	Motor Pool	Turn-in	Sump	—	1954-1978
Hydraulic Fluid	1,900-3,780	LA, Motor Pool	Sump	—	Line Rupture	1954-1978

(a) LA = Launch area.

(b) Ajax only.

Source: McMaster et al. 1983.

fluids (UDMH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The most common liquids disposed of onsite were solvents used in maintenance operations. These were routinely dumped into sumps where they soaked into the ground. Fuel components were sometimes disposed of in this manner, but to a more limited extent.

2.4 WASTE CATEGORIES

2.4.1 Chlorinated Solvents

A variety of chlorinated organic solvents were used at former NIKE installations. Solvents were utilized for support vehicle, generator, missile, and launcher maintenance and cleaning. Initially, carbon tetrachloride was widely used as a multipurpose solvent, gradually being replaced by trichloroethylene and trichloroethane. These compounds are nonreactive in the environment and can be persistent once introduced into ground water, especially where ground-water movement is slow.

2.4.2 Hydrocarbons

A wide variety of hydrocarbon products were used or stored on NIKE sites. Common types included JP-4, gasoline, diesel fuel, fuel oil, motor oil, and hydraulic fluid. A large portion of the petroleum products were used for missile and support equipment operation. Most of the hydraulic fluid used was contained in the missile launchers.

2.4.3 Inhibited Red Fuming Nitric Acid (IRFNA)

The sustainer propellant for the NIKE Ajax missile consisted of JP-4 and IRFNA. IRFNA consists of nitrogen dioxide dissolved in nitric acid.

Aniline-furfuryl alcohol, later replaced by UDMH, was used as a starter fluid for Ajax missiles.

2.4.4 Other Wastes

In addition to the previous three categories, there are other hazardous materials and wastes that are not associated with any of the other categories. These include battery electrolyte (containing lead), and possibly PCB transformer fluid.

2.4.5 Use and Disposal Practices

The contaminants reported were generated primarily by maintenance activities. In general, the missile fuels and oxidizers were carefully controlled; however, some batteries reportedly disposed of IRFNA routinely onsite.

Most NIKE sites were equipped with sumps for disposing liquid waste. The liquid disposed of in these sumps was allowed to soak into the ground. The wastes used and generated at the former Gaithersburg NIKE Control and Launch sites were reportedly disposed of in the septic system or leach pits present at each site. The extent of disposal operations at most NIKE sites is unknown.

3. GEOLOGY/TOPOGRAPHY

3.1 REGIONAL

The project area lies within the Eastern Division of the Piedmont Physiographic Province. The Piedmont in the project area is underlain by closely folded rocks of sedimentary origin which have been metamorphosed and intruded by granite and mafic rocks. The complex generally trends northeast - southwest, approximately parallel to the Fall Line which marks the boundary between the crystalline rocks of the Piedmont Province and the sedimentary rocks of the Coastal Plain Province. Figure 3-1 shows the physiographic provinces of Maryland and the location of the Fall Line. Figure 3-2 shows the geology of the Gaithersburg NIKE Launch and Control area which is underlain by the upper pelitic schist facies of the Wissahickon Group. This facies is described as a low-grade metamorphic rock containing albite, chlorite, muscovite, quartz, and accessory minerals. The Wissahickon strata have been severely deformed and contorted (Geologic Map of Maryland 1968). Soil types developed on this rock are well drained, strongly sloping, and micaceous with a silt loam texture (Soil Conservation Service 1961).

The landscape developed on these rock and soil units is characterized by undulating topography deeply dissected by streams. Figure 3-3 shows the locations and topography of the Launch and Control sites. The Control Area is located within the Whetstone Run Basin. The Launch Area is located within the Cabin Branch drainage basin. Both of these streams flow west into Great Seneca Creek. The surface elevations of the former NIKE Control and Launch Areas are both about 510 ft above mean sea level.

3.2 SITE GEOLOGY

Data from the monitoring well borings at the site (Appendix A) reveals that both the Control and Launch Areas are underlain by a relatively

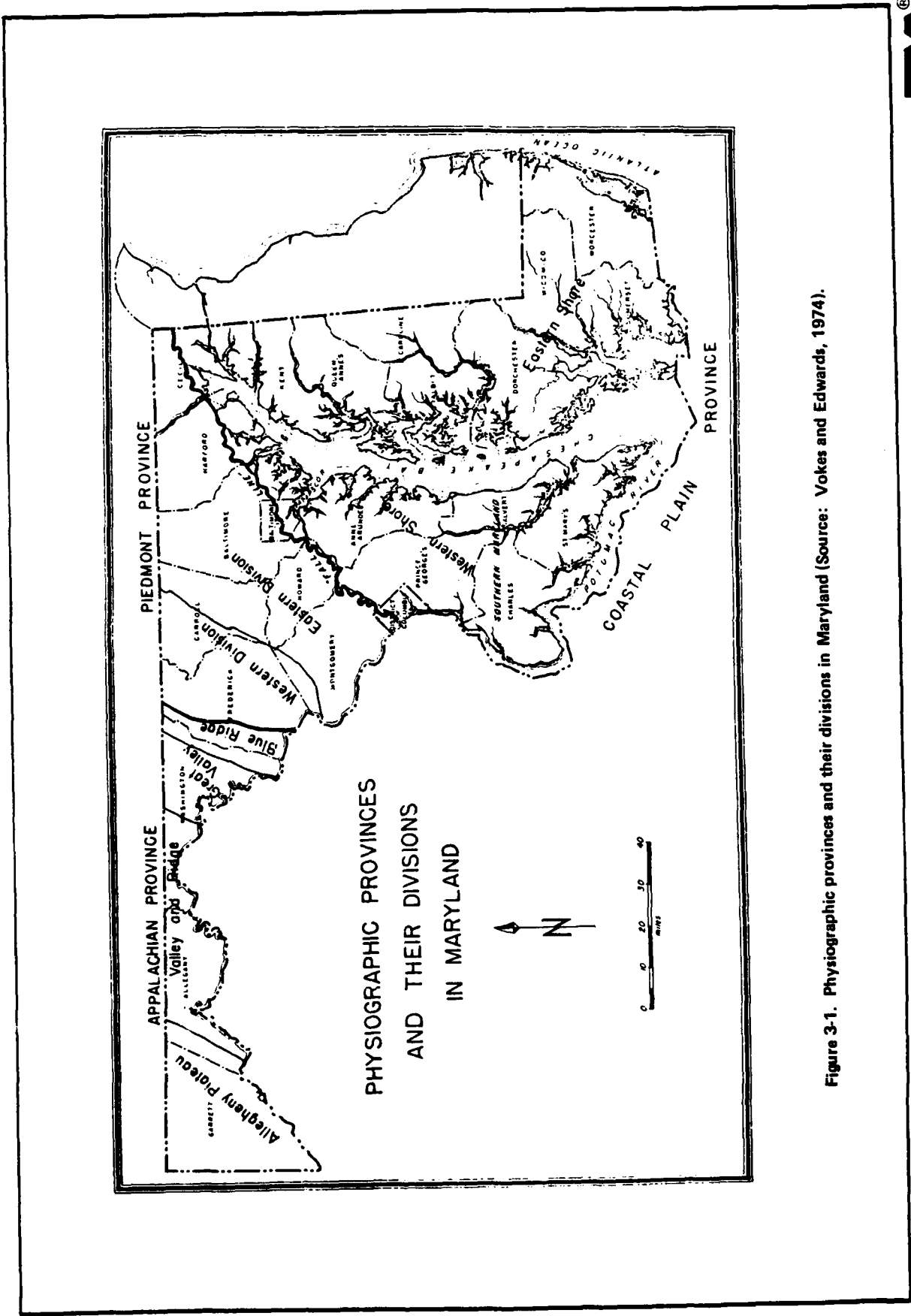


Figure 3-1. Physiographic provinces and their divisions in Maryland (Source: Vokes and Edwards, 1974).



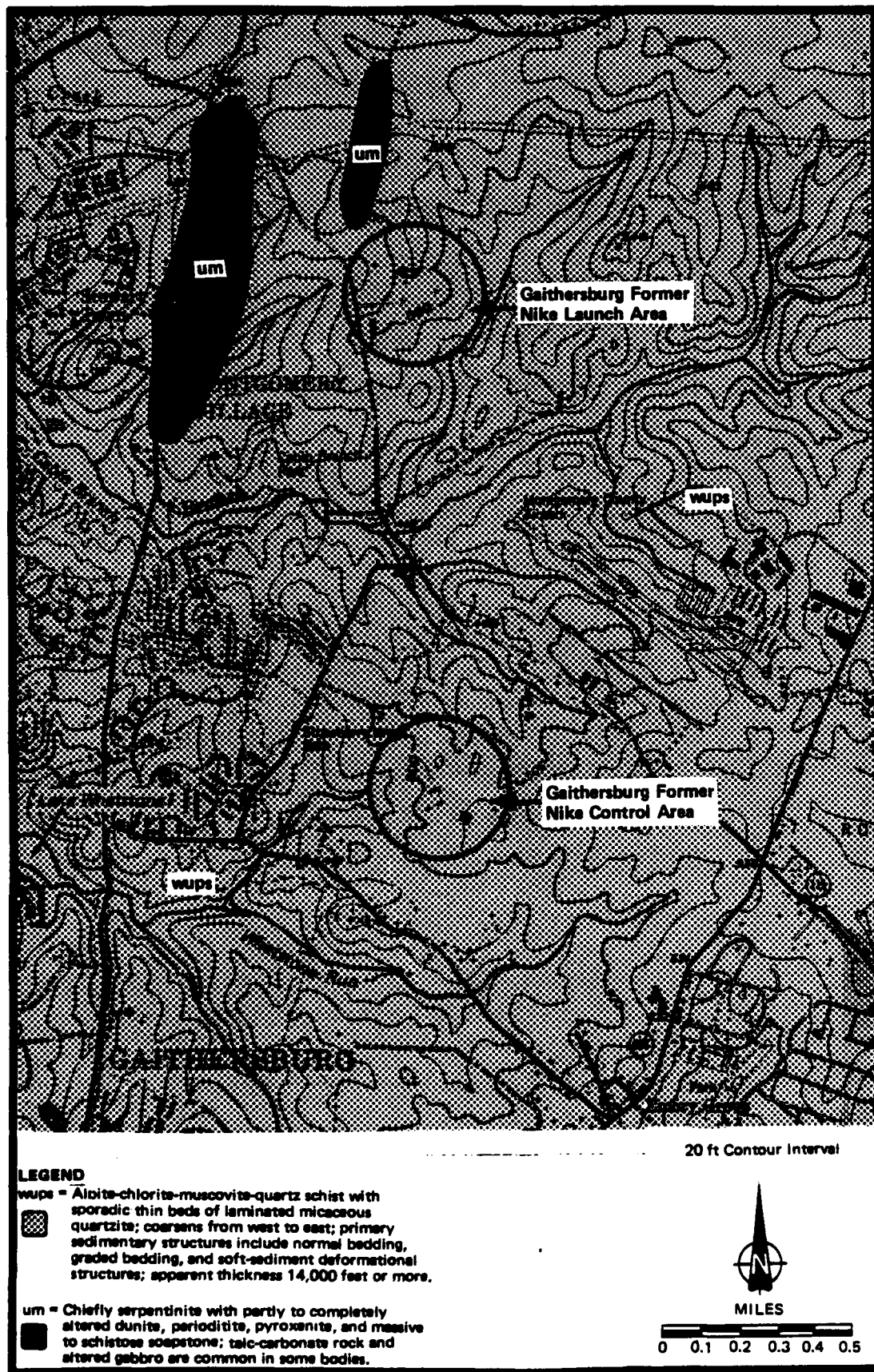


Figure 3-2. Geology of the former Gaithersburg Nike Launch and Control areas.
 (Source: Modified from MD Geologic Map 1968)

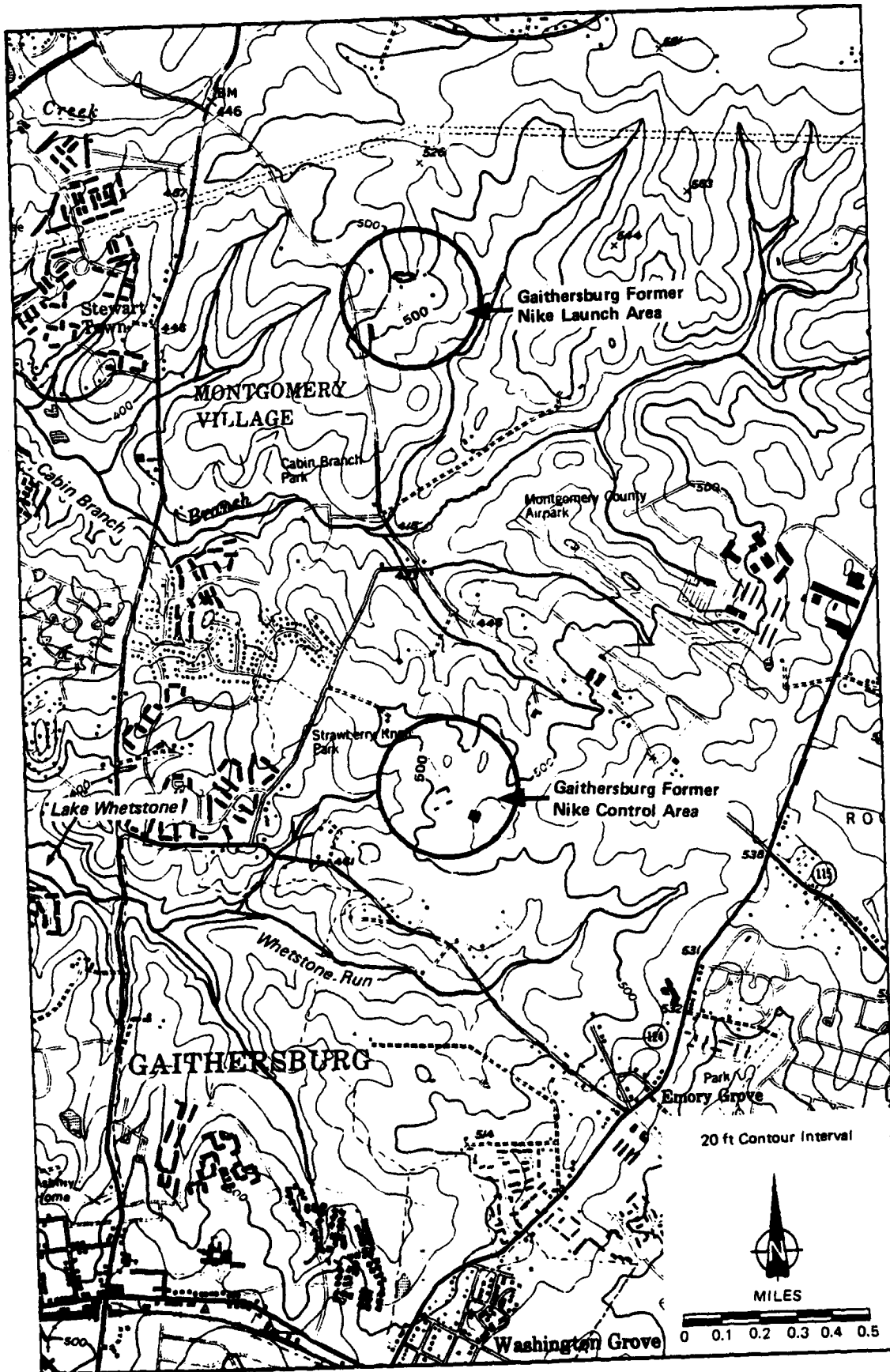


Figure 3-3. Locations and topography of Gaithersburg former Nike Launch and Control areas.
 (Source: Gaithersburg Topographic Quadrangle, 1979, U.S.G.S.)

thick sequence of decomposed (weathered) bedrock (saprolite). The saprolite consists of clayey silt and fine sand. Relic schistose texture was present in most samples. Bedrock was encountered in only one well (GNC-7) at an elevation of 484.66 ft above MSL and consisted of a greenish gray, quartz mica schist. Overlying bedrock at this location is 12-ft of saprolite.

3.3 HYDROLOGY

The relatively impermeable rock of the Wissahickon Group yields little or no interstitial water to wells. However, significant supplies are found in the faults, joints, and fractures within the rock and in the mantle of saprolite overlying bedrock. The bedrock aquifer is an important water source in Montgomery County. The average well yield of the upper pelitic schist facies of the Wissahickon Group is 11 gpm. An aquifer test near the project area indicated that the transmissivity of the bedrock aquifer is about 3,000 gal/day/ft² (Ground-Water Occurrence in the Maryland Piedmont 1969; Water Resources of Howard and Montgomery Counties 1954). Monitoring wells at both the Control and Launch Areas were screened in the saprolite (clayey silt and sand), except for GNC-7 which is partially screened (= 8-ft) in competent bedrock.

4. FIELD INVESTIGATION

4.1 MONITORING WELL INSTALLATION

A total of eight monitoring wells were installed at the former Gaithersburg NIKE Control and Launch sites. At each site four monitoring wells, one upgradient well and three wells positioned downgradient of potential sources of onsite contamination were installed. Well installation was performed by Hardin-Huber Associates under subcontract to EA. Well installation, development, and sampling were performed in accordance with the Geotechnical Requirements for Drilling, Monitoring Wells, Data Acquisition, and Report, U.S. Army Toxic and Hazardous Materials Agency (revised March 1987). Wells were used for ground-water sampling and to evaluate water-table gradient, general ground-water flow directions, and in situ permeabilities.

4.2 BORINGS

The soil borings for monitoring wells were advanced through overburden using a Mobile B-61 drill rig equipped with hollow-stem augers (8-in. O.D., 3-3/8-in. I.D.). When competent bedrock was encountered (auger refusal), the hole was reamed with 12-in. O.D., 8-in. I.D. hollow stem augers. The large augers were left in the hole to serve as temporary casing and a 7-7/8-in. roller bit was inserted inside the augers in order to drill to the necessary depth for monitoring well installation. The drill rig, drill tools, and associated equipment were steam cleaned prior to drilling at each monitoring well location. No grease or oil was applied to drill rods, augers, or tools used in the boreholes.

Soil samples were collected at the surface and at 5-ft intervals thereafter utilizing a 24-in. long, 2-in. O.D., 1-3/8 I.D. split-spoon sampler. The sampler was driven 18 in. with a 140-lb. drop hammer, free falling 30 in., in accordance with ASTM-D 1586-84 specifications. The

subcontractor provided EA's supervising geologist with the number of blows required to drive the sampler each 6 in. of penetration. All split-spoon samples were screened in the field using a photo-ionization detector (PID), classified in accordance with Unified Soil Classification System (USCS) specifications and Munsell Color Chart, and logged (Appendix A). The samples were placed in glass jars and appropriately labeled and will be retained by EA until final report acceptance.

4.3 WELL CONSTRUCTION

Upon completion of the borehole, a monitoring well was installed using the following material and methods.

- . Monitoring well borings were 7-7/8-in. in diameter to permit approximately 2 in. of annular space between boring and centered well casing and screen.
- . All monitoring well riser casing and screen consisted of 4-in. I.D., Schedule 40 polyvinylchloride (PVC), flush joint, threaded pipe.
- . The screened interval consisted of 10 to 15-ft factory slotted (0.01-in.) well screen sealed at the bottom with a PVC cap or plug.
- . All screen-to-riser and riser-to-riser sections were joined by flush-joint, threaded coupling. No solvents or glues were used.
- . The well screen and riser casing were installed and a No. 2 quartz sand filter pack was placed around the screen and casing from the base to a minimum of 5 ft above the top of the screen.

- . A minimum 5-ft thick impervious seal of bentonite pellets was placed directly on top of the sand pack. The seal was measured immediately after placement, without allowance for swelling.
- . Following bentonite seal emplacement, the well annulus was continuously pressure-grouted via tremie pipe from the top of the bentonite seal to the ground surface with a 20:1 cement-bentonite grout with a maximum 7 gal of approved water per 94-lb bag of cement.
- . 6-in. steel outer casing was placed around the PVC well stickup and secured in grout. The steel casing, rising 24-36 in. above ground level, was provided with lock and cap.
- . A 3 ft², 6-in.-thick concrete pad was constructed around the well casing at final ground-level elevation. Three 5-ft-long, 3-in. O.D. steel protective posts filled with concrete were placed 2.5 ft above ground, equally spaced around the well and embedded in the concrete pad.

4.4 WELL DEVELOPMENT

After well installation, but no sooner than 48 hours after grouting was completed, development was accomplished by air lift/surge, pumping and bailing. During development, pH, temperature, and specific conductance were monitored and recorded. Development continued until a minimum of five well volumes were removed, the water was clear to the unaided eye, and three consecutive pH, temperature, and specific conductivity measurements did not vary by more than 10 percent.

4.5 AQUIFER TEST

In situ hydraulic conductivities were calculated for selected wells at the Launch and Control areas utilizing the slug test method developed by Bouwer and Rice (1978). This procedure is applicable to fully and partially penetrating wells within an unconfined aquifer. The test method involved the removal of a known volume (slug) of ground water and the measurement of elapsed time during the recovery phase. Water level measurements and elapsed time intervals were recorded utilizing an In-situ, Inc. Hermit Model SE-1000B remote data logger and pressure transducer. The data logger recorded depth to water measurements during the recovery phase at logarithmic time intervals immediately after slug removal. Water levels were recorded until at least 90 percent recovery to the static water level was achieved. A computer program based on Bouwer's slug test methodology was used. Elapsed time versus residual water level was computer graphed and used to calculate hydraulic conductivity (K) according to the following equation:

$$K = \frac{R_c^2 \ln (R_e/R_w)}{2 L_e} \frac{1}{t} \frac{\ln y_o}{y_t}$$

where

R_e = effective radial distance over which the head difference y is dissipated

R_w = radial distance between well center and undisturbed aquifer (r_c plus thickness of gravel envelope or developed zone outside casing)

L_e = height of perforated, screened, uncased, or otherwise open section of well through which ground water enters

y_0 = y at time zero

y_t = y at time t

t = time since y_0

R_c = radial distance of well casing

4.6 GROUND-WATER SAMPLING

Prior to sampling, a physical inspection of each well and surrounding area was performed. This included, but was not limited to, an inspection for evidence of tampering, physical damage, and breakage or heaving of the concrete pad. Such information was recorded on well purging and sampling forms. After the inspection, static water levels were determined from all wells prior to initiation of any purging and sampling activities. The water level determinations were made to the nearest 0.01 ft relative to the top of the PVC well casing utilizing an electric water-level sounder. Between each well, the probe and cable were cleaned by wiping with a paper towel saturated with DI water as the probe was retrieved. Water level data were used to prepare water-level contour maps and to calculate the static volume of water in the casing.

Prior to sample collection, the wells were purged in order to ensure that the sample collected was representative of the ground water. Purging was accomplished with the use of a stainless steel submersible pump or polyvinylchloride (PVC) bailer. Purging continued until five well volumes of water were removed or the well was purged dry. In the event that the well purged dry, the well was allowed to recover and was purged dry a second time before sampling. Purged water was discharged from the well in a downgradient direction to minimize the potential for surface infiltration. Only sample gear that had been properly cleaned in accordance

with USATHAMA Reference QA Plan was used. Between wells, the pump and associated plumbing were pressure jetted with clean water. The pump and hose interior was cleaned by pumping water through the entire system. Ground-water sampling was accomplished with a dedicated, laboratory-cleaned, bottom-filling Teflon bailer. A clean, dedicated piece of polypropylene or nylon line was used to lower each bailer into the well. Samples for volatile organic compounds were collected in a manner that minimized aeration and were stored in containers free of bubbles and headspace. Samples collected for metals analysis were filtered using a 0.45- μ membrane filter. During sampling, an aliquot of ground water was monitored to determine pH, temperature, and specific conductance utilizing calibrated and standardized instruments. Field sampling records are presented in Appendix B. After collection, all samples were placed securely on ice in a cooler for transport to the laboratory. To ensure sample integrity, all ground-water sampling was accomplished under the protocol for chain-of-custody and sample handling established in the QA/QC Plan.

4.7 SURFICIAL SOIL SAMPLING

Soil samples were collected 1-3 ft below the surface at selected sampling locations. Samples were obtained by advancing a 4-in. stainless steel hand auger to the top of the sample interval. Next, a stainless steel trowel was used to collect the sample. Between each sample, all sampling equipment was cleaned as follows: (1) wash with detergent; (2) rinse with deionized (DI) water; (3) rinse with DI water. Upon collection, samples were placed in the specified containers, labeled, and placed on ice.

5. ENVIRONMENTAL CONTAMINATION INVESTIGATIONS

This section provides information on the field sampling plan, site characterization, and data assessment relative to the separate Launch and Control area environmental investigations. A field sampling plan was designed for each site that included installation of monitoring wells for ground-water and soil sample collection and analysis to address the potential for environmental problems associated with past Army operations. All samples were analyzed for the complete Priority Pollutant parameter list including: volatile organic compounds (VOC), semivolatile organic compounds (SVOC), total cyanide and phenols, dissolved metals, pesticides, and polychlorinated biphenyls (PCB). Table 5-1 provides the certified reporting limit (CRL) for certified compounds and detection limit for non-certified compounds for the Priority Pollutant list compounds. Table 5-2 exhibits the ground water quality regulatory criteria which were used to evaluate the data obtained during this study.

5.1 FORMER NIKE LAUNCH AREA SITE

5.1.1 Field Sampling Plan

The NIKE Launch Area sampling plan included the installation of four monitoring wells from which ground-water samples were collected and analyzed. Four soil samples and one surface water and sediment sample were also collected for analysis. An inspection of the missile storage structures was performed to evaluate the environmental conditions and potential problems. Locations of the monitoring wells are shown on Figure 1-2. Well GNL-1 was located upgradient of the acid storage and refueling platform and serves as the upgradient well for the entire site. The three remaining wells were installed downgradient of potential sources of contamination. Monitoring wells GNL-2, GNL-3, and GNL-4 are located downgradient of the electric shop, missile storage structures, and wastewater disposal area, respectively. Well completion diagrams and soil boring logs are provided in Appendix A.

TABLE 5-1 CERTIFIED REPORTING LIMITS (CRL) FOR CERTIFIED COMPOUNDS AND
DETECTION LIMITS FOR NON-CERTIFIED COMPOUNDS FOR PRIORITY
POLLUTANT PARAMETER LIST.

Analytical Method	WATER (µg/L) CRL		SOIL (µg/g) CRL	
	ICP	GFAA	ICP	GFAA
INORGANICS				
<u>Group A - Metals</u>				
Antimony	2.1700			0.3730
Arsenic	2.9200			2.2200
Beryllium	2.9200		0.3310	
Cadmium	4.0900		0.9510	
Chromium	4.4400		9.3100	
Copper	6.2000		6.2900	
Lead		2.1600	92.3000	
Nickel	16.2000		1.8200	
Selenium		6.5200		1.9500
Silver	5.5600		0.6990	
Thallium	90.4000			2.3200
Zinc	5.3500		8.3800	
CVAA				
Mercury	.1000	0.0179		
<u>Group A - Non-Metals</u>				
Cyanide	5.0000		19.8000	
Phenols	39.3000		3.6200	

Note:

ICP - Inductively Coupled Plasma

GFAA - Graphite Furnace Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

TABLE 5-1 (Continued) - VOLATILE ORGANICS

VOLATILE ORGANICS	Water (µg/L)		Soil (µg/g)	
	CRL	Detection Limit	CRL	Detection Limit
<u>Group B - Purgeable Organics</u> ⁽¹⁾				
Benzene	1.70000		.00480	
Carbon tetrachloride	1.00000		.00200	
Chlorobenzene	1.20000		.00200	
1,2-Dichloroethane	1.00000		.00480	
1,1,1-Trichloroethane	1.00000		.00590	
1,1-Dichloroethane	2.70000		.00730	
1,1,2-Trichloroethane	1.70000		.00280	
1,1,2,2-Tetrachloroethane	5.00000		.00500	
Chloroethane	6.90000		.12000	
2-Chloroethylvinyl ether	1.60000		.00500	
Chloroform	1.00000		.01500	
1,1-Dichloroethylene	6.80000		.01200	
trans-1,2-Dichloroethylene	2.20000		.00610	
1,2-Dichloropropane	3.20000		.01000	
1,3-Dichloropropene (cis and trans)		5		.005
Ethylbenzene	1.40000		.0100	
Methylene Chloride		5		.005
Chloromethane	1.80000		.00450	
Bromomethane		10		.01
Bromoform	3.70000		.00390	
Bromodichloromethane		5		.005
Fluorotrichloromethane		5		.005
Chlorodibromomethane	1.80000		.00230	
Tetrachloroethene	2.30000		.00790	
Toluene	1.80000		.00620	
Trichloroethylene	1.00000		.00200	

Note:

- 1) EPA Method 624 by GCMS
- 2) EPA Method 625 by GCMS
- 3) EPA Method 608 by GC

TABLE 5-1 (Continued) - SEMIVOLATILE ORGANICS

	Water (ug/L)		Soil (ug/g)	
	CRL	Detection Limit	CRL	Detection Limit
SEMIVOLATILE ORGANICS				
<u>Group C - Base/Neutral Extractables⁽²⁾</u>				
Bis(2-chloroethyl)ether	1.60000		.38000	
1,3-Dichlorobenzene	5.50000		.30000	
1,4-Dichlorobenzene	6.00000		.29000	
1,2-Dichlorobenzene	5.20000		.33000	
Bis(2-chloroisopropyl)ether		10		.3
Hexachloroethane	8.20000		.14000	
N-Nitroso-di-n-propylamine	6.70000		.11000	
Nitrobenzene	4.15000		5.58000	
Isophorone		10		.3
Bis(2-chloroethoxy)methane		10		.3
1,2,4-Trichlorobenzene	4.60000		.17000	
Naphthalene	4.00000		.28000	
Hexachlorobutadiene	6.00000		.29000	
Hexachlorocyclopentadiene		10		.3
2-Chloronaphthalene	1.70000		.32000	
Acenaphthalene	3.70000		.31000	
Dimethyl phthalate		10		.3
Acenaphthene	1.30000		.34000	
Fluorene		10		.3
Diethyl phthalate		10		.3
2,4-Dinitrotoluene	5.40000		.46000	
2,6-Dinitrotoluene	5.10000		.20000	
4-Chlorophenyl phenyl ether		10		.3
N-Nitrosodiphenylamine	1.66000		.84900	
4-Bromophenyl phenyl ether		10		.3
Hexachlorobenzene	2.80000		.35000	
Phenanthrene	.85000		1.60000	
Anthracene	1.10000		.29000	
Di-n-butyl phthalate		10		.3
Fluoranthene	1.20000		.21000	
Pyrene	12.00000		.53000	
Butyl benzyl phthalate		10		3.
Benzo(aq)anthracene	.83000		.27000	
3,3'-Dichlorobenzidine		20		.7
Chrysene	1.00000		.190000	
Bis(2-ethylhexyl)phthalate	34.00000		.65000	
Di-n-octyl phthlate	18.00000		.35000	
Benzo(a)pyrene	4.50000		.16000	
Indeno(1,2,3-ced)pyrene	86.00000		.45000	
Dibenzo(a,h)anthracene	4.90000		.57000	
Benzo(g,h,i)perylene	38.0000		.52000	
Benzo(b)fluoranthene+	2.40000		.25000	
Benzo(k)fluoranthene	2.90000		.22000	

TABLE 5-1 (Continued) - SEMIVOLATILE ORGANICS

SEMIVOLATILE ORGANICS	Water (µg/L)		Soil (µg/g)	
	CRL	Detection Limit	CRL	Detection Limit
<u>Group D - Acid Extractables</u> ⁽²⁾				
Phenol	.92000		.06580	
2-Chlorophenol	1.31000		.06040	
2-Nitrophenol	10.0000		.30000	
2,4-Dimethylphenol	7.11000		.09930	
2,4-Dichlorophenol	1.80000		.02470	
p-Chloro-m-cresol		10		.3
2,4,6-Trichlorophenol	10.0000		.30000	
2,4-Dinitrophenol	50.0000		2.00000	
4-Nitrophenol	5.57000		.07090	
4,6-Dinitro-o-cresol	7.50000		5.46000	
Pentachlorophenol	3.50000		1.25000	

TABLE 5-1 (Continued) - PESTICIDES

PESTICIDES	Water (ug/L)		Soil (ug/g)	
	CRL	Detection Limit	CRL	Detection Limit
<u>Group E - Pesticides/PCB⁽³⁾</u>				
Aldrin	0.01240		0.01070	
Alpha - BHC		0.05000		0.00800
Beta - BHC		0.05000		0.00800
Gamma - BHC	0.02220		0.04390	
Delta - BHC		0.05000		0.00800
Chlordane	0.02650		0.02760	
4,4'-DDD	0.00785		0.01740	
4,4'-DDE	0.01390		0.01430	
4,4'-DDT	0.02150		0.01700	
Dieldrin	0.00261		0.00637	
Endosulfan I		0.05000		0.00800
Endosulfan II		0.10000		0.01600
Endosulfan Sulfate		0.10000		0.01600
Endrin		0.10000		0.01600
Endrin aldehyde		0.10000		0.01600
Heptachlor	0.01300		0.01300	
Heptachlor epoxide	0.06500		0.09440	
Toxaphene		1.00000		0.1600
PCB-1016	0.14000		0.06290	
PCB-1221		0.50000		0.0800
PCB-1232		0.50000		0.08000
PCB-1242		0.50000		0.08000
PCB-1248		0.50000		0.08000
PCB-1254		1.00000		0.16000
PCB-1260	0.07420		0.04860	

TABLE 5-2 GROUND-WATER QUALITY REGULATORY CRITERIA

Parameters	Safe Drinking Water Act (ug/L)		
	MCL	SMCL	MCLG
<u>Volatile organics</u>			
Vinyl chloride	2	-	0
trans-1,2-Dichloroethylene	100*	-	100*
1,2-Dichloroethane	5	-	0
1,1,1-Trichloroethane	200	-	200
1,2-Dichloropropane	5*	-	0*
Trichloroethylene	5	-	0
Tetrachloroethene	5.0*	-	0*
1,4-Dichlorobenzene	75	5*	75
Bromoform	100 ^(a)	-	-
Chlorodibromomethane	100 ^(a)	-	-
Chloroform	100 ^(a)	-	-
Dichlorobromomethane	100 ^(a)	-	-
Carbon Tetrachloride	5	-	0
1,1-Dichloroethylene	7	-	7
Benzene	5	-	0
Toluene	2,000*	40*	2,000*
Ethylbenzene	700*	30*	700*
1,3-Dichlorobenzene	600*	10*	600*
<u>Semi-volatile Organics</u>			
Pentachlorophenol	200*	30*	200*

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

SMCL = Secondary Maximum Contaminant Level

(a) Value is for individual chemicals or for combination of these chemicals.

(b) The silver MCL is proposed to be deleted.

* = Proposed

Sources: Federal Register, Vol. 54, No. 97, Monday, May 22, 1989.
p.22160 and 22064-5.

Federal Register, Vol. 53, No. 160, Thurs., August 18, 1988,
p. 31518, 31530

Federal Register, Vol. 52, No. 130, Weds., July 8, 1987,
p. 25694.

TABLE 5-2 (Cont.)

Parameters	Safe Drinking Water Act			
	MCL		SMC	MCLG
	Current	Proposed		
<u>Inorganics</u>				
Arsenic	50	-	-	-
Beryllium	-	-	-	-
Cadmium	10	5	-	5*
Chromium (total)	50	100	-	100*
Copper	-	-	1000	-
Lead	50	5	-	0*
Mercury	-	2	-	2*
Nickel	-	-	-	-
Selenium	10	50	-	50*
Silver	-	50 ^(b)	90*	-
Thallium	-	-	-	-
Zinc	-	-	5,000	-

A surface water sample (SW-1) and stream sediment sample (SS-1) were collected from a stream located near the southeastern corner of the site. This sample was collected downstream of an outfall for the site wastewater treatment system.

Four soil samples were obtained from 1 to 3 ft below grade to assess potential soil contamination. SS-2 was collected south of the acid storage shed, SS-3 was collected near the acid refueling platform, SS-4 was collected near a stormwater drainage pipe outfall, and SS-5 was collected at the sewage disposal filter bed outfall.

5.1.2 Site Characterization

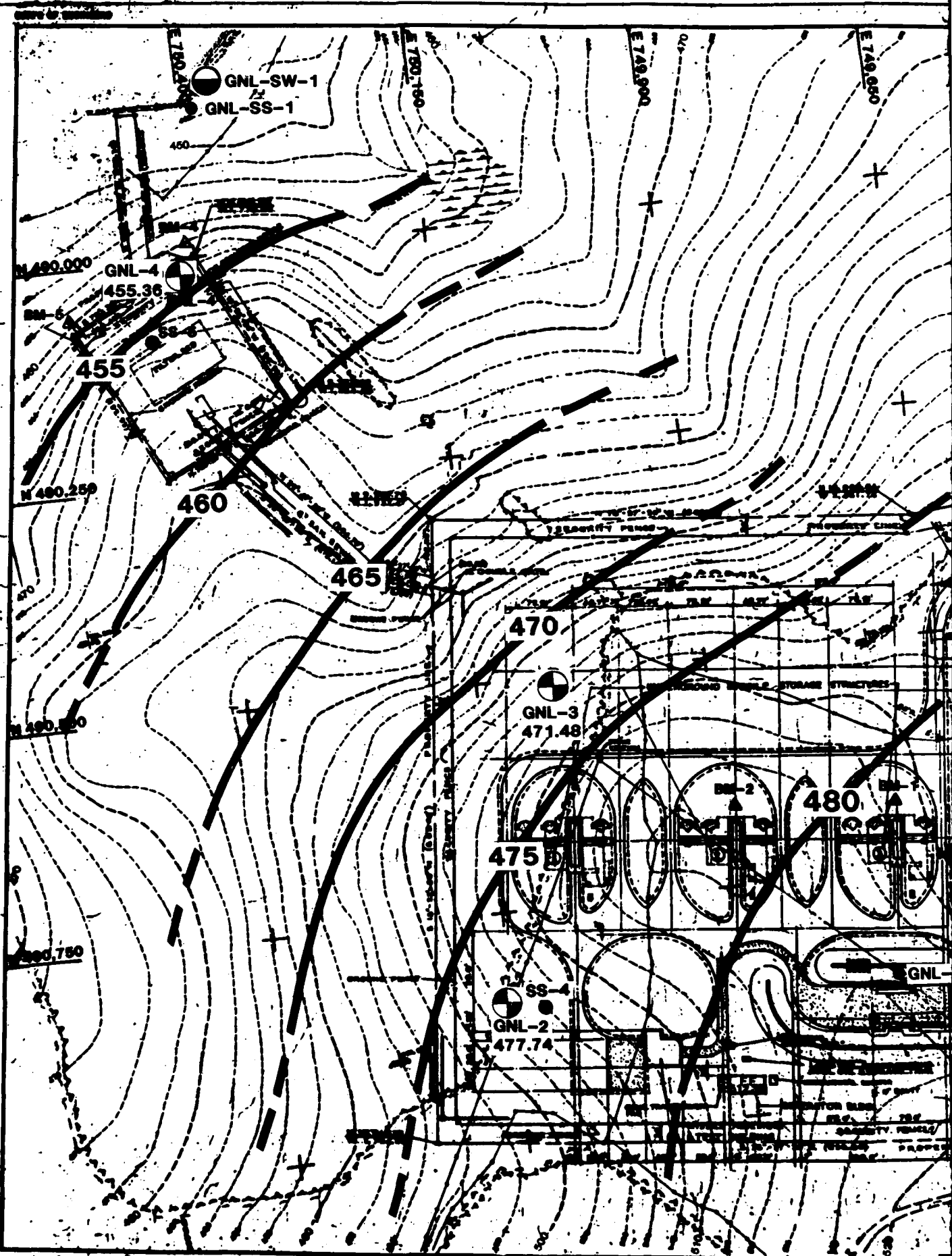
The Launch area is located approximately 1.5 mi north of the Control area. Surrounding land use consists of a mixture of single-family residences and farm land. An active U.S. Army Reserve Headquarters office occupies the front portion of the Launch area.

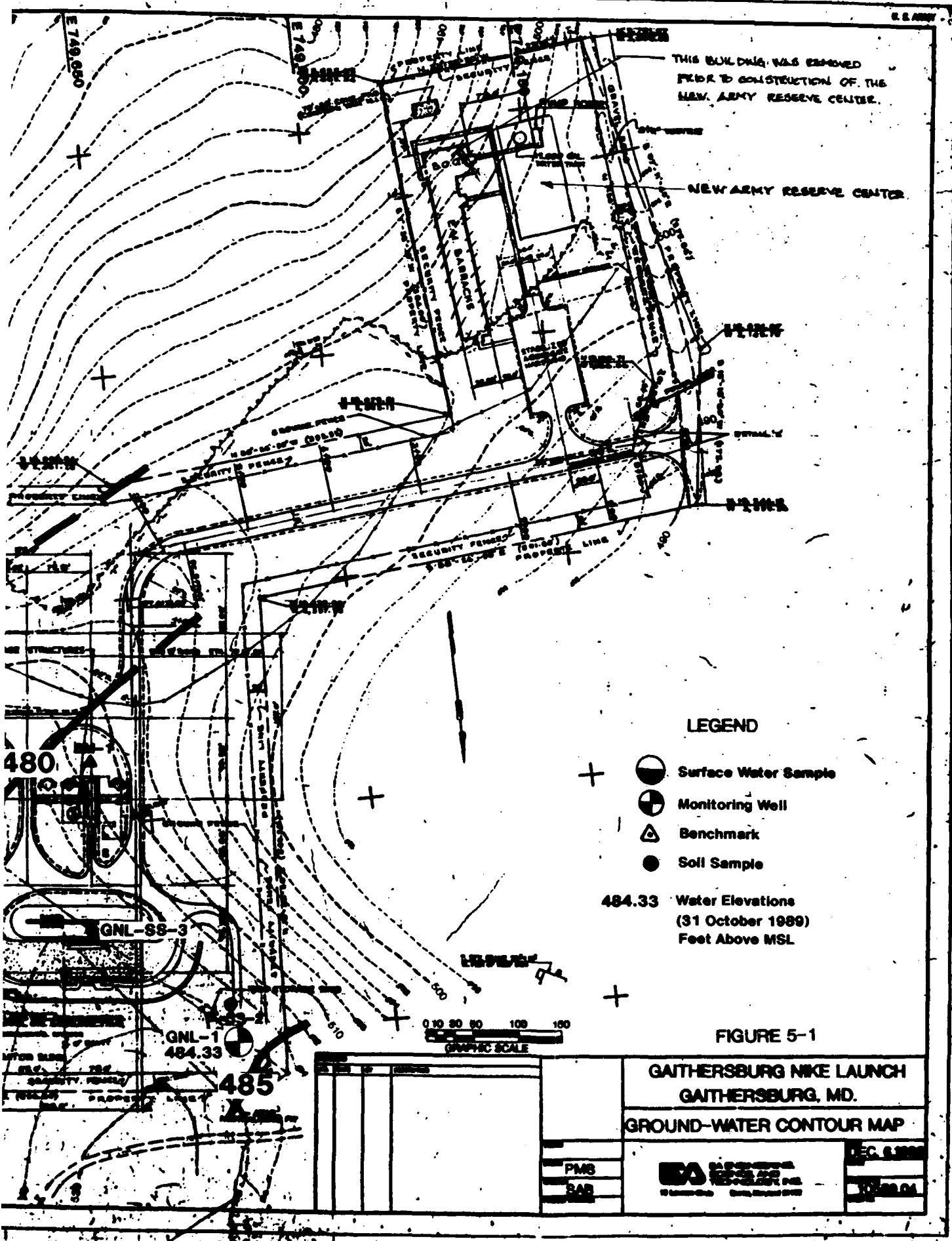
Important site features associated with past Army operations include three missile storage structures, acid refueling area, missile assembly and test building, generator building, acid storage shed, and wastewater disposal area. The locations of these features are shown on Figure 1-2. Four borings were drilled at this site and completed as monitoring wells. The soil samples collected from these borings indicate that the subsurface material consists primarily of clayey silt and fine sand (saprolite). All monitoring wells were screened in the saprolite. Depth to water measurements and water elevations obtained between 14 April 1989 and 19 December 1989 for the four onsite monitoring wells are shown on Table 5-3. A ground-water contour map was constructed for the site using static water-level measurements obtained on 31 October 1989 (Figure 5-1). Ground-water flow direction trends to the southeast towards a small southwesterly flowing surface stream.

TABLE 5-3 WATER LEVEL ELEVATIONS IN MONITORING WELLS AT THE GAITHERSBURG NIKE LAUNCH AREA

Well No.	Reference Elevation (ft above MSL)	Depth to Water (ft)				Water Elevation (ft. above MSL)											
		14 APR 1989	25 MAY 1989	2 JUN 1989	31 OCT 1989	14 APR 1989	25 MAY 1989	2 JUN 1989	31 OCT 1989								
GML-1	518.49	33.82	31.50	31.17	33.60	34.16	34.20	32.94	34.43	484.67	486.99	487.32	484.89	484.33	484.29	485.55	484.06
GML-2	505.91	25.95	23.05	23.10	28.07	28.17	28.21	28.00	28.29	479.96	482.86	482.81	477.84	477.74	477.70	477.91	477.62
GML-3	506.52	33.92	31.73	31.55	35.15	35.04	35.20	35.15	35.59	472.60	474.79	474.97	471.37	471.48	471.32	471.37	470.93
GML-4	467.22	--	0.55	9.03	12.96	11.86	11.84	11.33	11.60	--	458.67	458.19	454.26	455.36	455.89	455.89	455.62

Note: Reference elevation = top of PVC casing.





THIS BUILDING WAS REMOVED PRIOR TO CONSTRUCTION OF THE NEW ARMY RESERVE CENTER.

NEW ARMY RESERVE CENTER

SECURITY FENCE

SECURITY FENCE

SECURITY FENCE

LEGEND

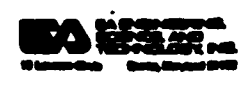
- + (circle with cross) Surface Water Sample
- ⊕ (circle with cross) Monitoring Well
- △ (triangle) Benchmark
- (circle) Soil Sample

484.33 Water Elevations (31 October 1989) Feet Above MSL

FIGURE 5-1

**GAITHERSBURG NIKE LAUNCH
GAITHERSBURG, MD.
GROUND-WATER CONTOUR MAP**

PMS
SAS



DEC. 6 1989
10/22/04

Slug tests were performed in monitoring wells GNL-3 and GNL-4 in order to estimate hydraulic properties of the water table (saprolite) aquifer (Section 4.5 Aquifer Tests). Permeability values calculated from slug test data ranged from 5.17×10^{-4} ft/min to 1.59×10^{-3} ft/min (Table 5-4). These permeability values are typical for fine sand and mixtures of sand, silt, and clayey material.

Table 5-5 is a partial record of water supply wells within a 1.5 mi radius of the Launch area. Figure 5-2 shows the approximate location of the wells listed in Table 5-5. Small residential communities surrounding the Launch area account for the majority of domestic wells. All domestic wells utilize the Wissahickon and associated saprolite aquifer.

5.1.3 Storage Structure Investigation

On 25 May 1989, EA staff accessed the three missile storage structures located at the Launch Area. The structures were entered by EA personnel utilizing hand-held instrumentation to detect organic vapors, explosive fumes, and oxygen level. No elevated organic vapors or explosive fume levels were detected, and oxygen levels in the structures did not differ from atmospheric levels. The main entrance of storage structure #2 was blocked with debris consisting mainly of furniture and garbage.

The missile storage structures are approximately 59 ft wide, 62 ft long, and 17 ft high. The hydraulic lift platform and associated pumps and motors were still in place at all storage facilities. Aluminum cans, glass bottles, wood debris, and furniture were scattered throughout the storage area. A red oily film was observed near the hydraulic lift pumps. A small amount of standing water was noted below the missile lift platform.

The control room cabinet is approximately 19 ft wide, 20 ft long, and 17 ft high. The walls are lined with sound insulation and are paneled.

TABLE 5-4 PERMEABILITY VALUES DERIVED FROM SLUG TESTS CONDUCTED IN
GAITHERSBURG NIKE LAUNCH MONITORING WELLS

<u>Well</u>	<u>ft/min</u>	<u>ft/sec</u>	<u>cm/sec</u>	<u>gpd/ft²</u>
GNL-3 (TEST 1)	5.17×10^{-4}	8.62×10^{-6}	2.63×10^{-4}	5.57
GNL-3 (TEST 2)	6.84×10^{-4}	1.14×10^{-5}	3.48×10^{-4}	7.37
GNL-4 (TEST 1)	1.59×10^{-3}	2.65×10^{-5}	8.06×10^{-4}	17.1
GNL-4 (TEST 2)	1.49×10^{-3}	2.48×10^{-5}	7.55×10^{-4}	16.0

TABLE 5-5 PARTIAL RECORD OF WATER SUPPLY WELLS WITHIN A 1.5 MILE RADIUS OF THE GAITHERSBURG NIKE LAUNCH AREA

State Permit No.	Owner	Approximate Location	Date Completed	Depth of Well (ft)	Casing Depth (ft)	Screen Depth (ft)
MO-73-1350	James B. Gross	Lockhaven Dr., Laytonsville	4/77	70	50	50-70
MO-73-0248	Joseph Dobson	Emory Grove, Gaithersburg	3/73	350	46	
MO-73-3655	Wilbur R. Hines	Strawberry Knoll, Gaithersburg	5/83	145	81	
MO-81-1736	Vernon Murphy	Brethren Dr., Gaithersburg	--	--	--	
MO-72-0225	Fairfield Const. Co.	Exodus Dr., Laytonsville	9/72	90	40	40-90
MO-73-0890	Pettit & Griffin Inc.	Fatcroft Ct., Laytonsville	12/75	200	72	
MO-73-1061	Richard J. Larz	Lochaven Ct., Goshen	7/76	90	67	67-90
MO-73-1352	James Zeck	Plum Ck. Ct., Laytonsville	4/77	130	51	
MO-81-1338	Glenn Brake, Jr.	Plum Ck. Dr., Goshen	--	--	--	
MO-81-0538	William E. Norman	Goshen Ct., Goshen	8/83	150	65	
MO-81-1954	Norsab Inc.	Pompano Te., Laytonsville	10/86	140	100	
MO-81-0921	Larry Orth	Warfield Rd., Gaithersburg	--	--	--	
MO-81-0922	Larry Orth	Warfield Rd., Gaithersburg	--	--	--	
MO-81-1194	John McEleney	Warfield Rd., Gaithersburg	7/85	285	62	
MO-81-2088	Ralph Mollet	Warfield Rd., Gaithersburg	12/86	180	48	
MO-73-0037	Pulte Home Corp.	Brethren Rd., Goshen	9/72	115	60	
MO-73-0039	Pulte Home Corp.	Goshen Rd., Goshen	9/72	140	60	
MO-73-0242	Calvin Burton	Warfield Rd., Goshen	7/73	120	60	
MO-73-1919	Ward V. Buzzell	Warfield Rd., Goshen	5/78	90	57	57-90
MO-81-0730	Kettler Bros. Inc.	Snouffer School Rd., Goshen	--	--	--	
MO-73-2151	Glen Kopenick Jr.	Warfield Rd., Goshen	6/78	160	46	
MO-73-3298	Barbara Massengill	Warfield Rd., Goshen	7/81	240	31	

TABLE 5-5 EXTENDED

State Permit No.	Owner	(Before Test) Static Water Level Below Surface (ft)	(After Test) Water Level When Pumping (ft)	(Test) Pumping Rate (gpm)	Aquifer	Water Use
MO-73-1350	James B. Gross	36	61	12	Wissahickon	D
MO-73-0248	Joseph Dobson	40	350	10	Wissahickon	D
MO-73-3655	Wilbur R. Hines	30	53	8	Wissahickon	D
MO-81-1736	Vernon Murphy	--	--	--	Wissahickon	D
MO-72-0225	Fairfield Const. Co.	48	81	5	Wissahickon	D
MO-73-0890	Pettit & Griffin Inc.	45	200	4	Wissahickon	D
MO-73-1061	Richard J. Larz	57	76	8	Wissahickon	D
MO-73-1352	James Zeck	37	109	5	Wissahickon	D
MO-81-1338	Glenn Brake, Jr.	--	--	--	Wissahickon	D
MO-81-0536	William E. Norman	20	80	8	Wissahickon	D
MO-81-1954	Norsab Inc.	36	46	10	Wissahickon	D
MO-81-0921	Larry Orth	--	--	--	Wissahickon	D
MO-81-0922	Larry Orth	--	--	--	Wissahickon	D
MO-81-1194	John McEleney	32	180	4	Wissahickon	D
MO-81-2086	Ralph Mollet	35	45	10	Wissahickon	D
MO-73-0037	Pulte Home Corp.	34	96	10	Wissahickon	D
MO-73-0039	Pulte Home Corp.	43	121	8	Wissahickon	D
MO-73-0242	Calvin Burton	40	120	15	Wissahickon	D
MO-73-1919	Ward V. Buzzell	37	61	6	Wissahickon	D
MO-81-0730	Kettler Bros. Inc.	--	--	--	Wissahickon	F
MO-73-2151	Glen Koepenick Jr.	40	160	4	Wissahickon	D
MO-73-3298	Barbara Massengill	30	240	20	Wissahickon	D

D = Domestic
F = Farming

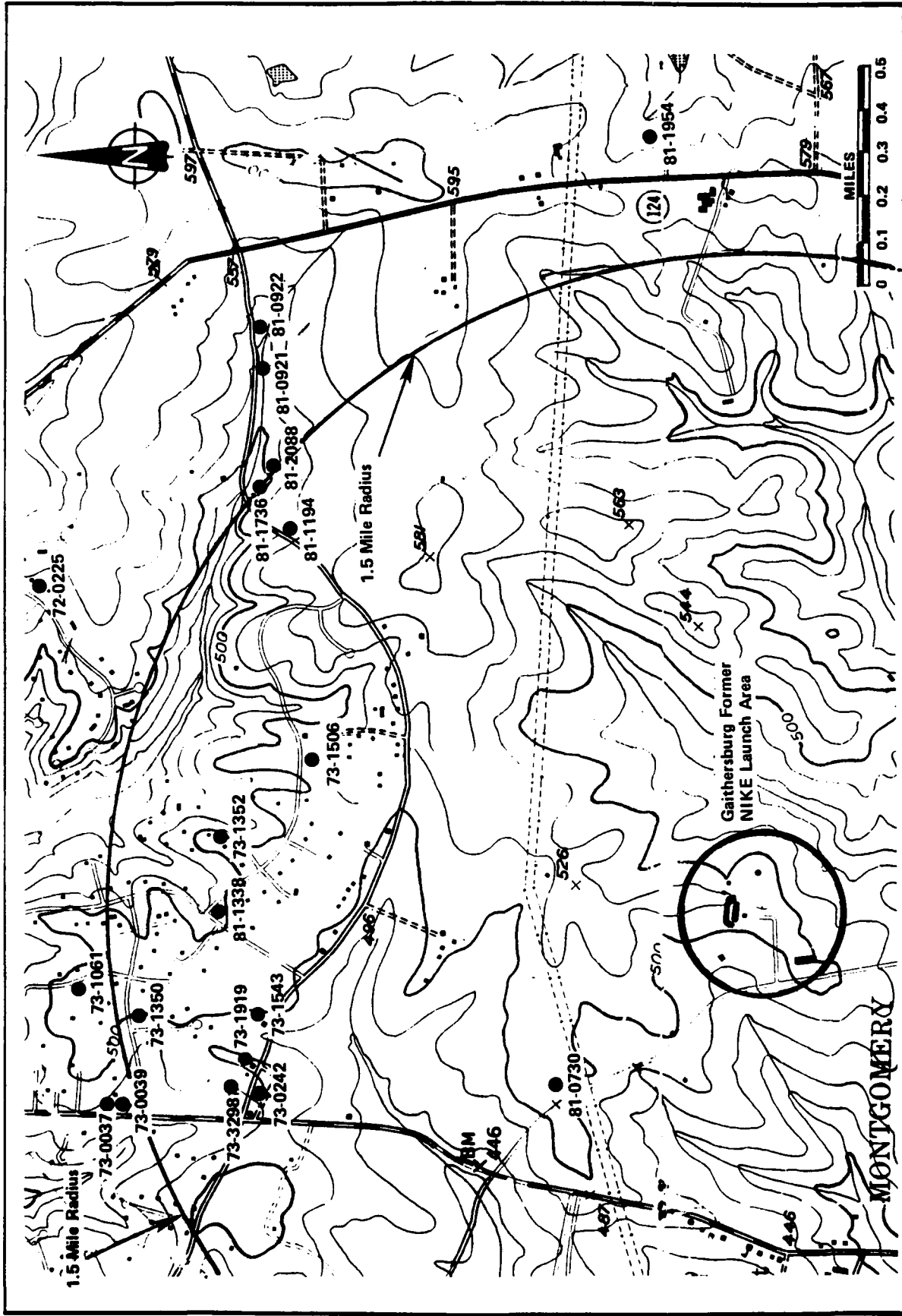


Figure 5-2. Approximate location of domestic water wells within a 1.5 mile radius of the Gaithersburg NIKE Launch Area. (Source: Gaithersburg Topographic Quadrangle, 1979, U.S.G.S.)



Much of the paneling has been ripped out and scattered about the floor. Insulation is exposed and may contain asbestos.

5.1.4 Data Assessment

5.1.4.1 Ground Water And Surface Water

Analytical results for ground water and surface water samples collected at the Launch site are summarized in Table 5-6 and presented in Appendix D. No volatile compounds were detected in the samples above the CRLs. The semivolatile compounds detected were Bis(2-Ethylhexyl) phthalate in GNL-4 at a concentration of 115.0 µg/L and Di-n-octyl phthalate in the surface water sample (SW-1) at a concentration of 43.9 µg/L. There are no regulatory criteria available to evaluate the two phthalate compounds that were detected in GNL-4 and GNL SW-1. Phthalates are a common component of plastics and detection of these compounds probably is attributable to field or laboratory contamination. A pesticide compound, heptachlor, was detected in all water samples including the field and method blank samples ranging in concentration from 0.080 µg/L (SW-1) to 0.107 µg/L (GNL-3 and 4). The detection of low levels of heptachlor, a pesticide, in the method blank sample indicates that the detection of this compound can be attributed to laboratory contamination.

A review of the dissolved metals data indicates that none of the detected levels exceed the current MCL criteria. However, the cadmium levels in all samples including the field blank exceed the proposed MCL and MCLG of 5 µg/L. The detection of cadmium in the field blank and not the method blank raises the question of data validity and may be attributed to field contamination. The lead level (35 µg/L) for the GNL-3 ground-water sample is below the current MCL of 50 µg/L, but exceeds the proposed MCL of 5 µg/L and proposed MCLG of 0 µg/L. If the current MCL for lead is lowered to the proposed values in the future, the lead level in GNL-3 will be excessive and additional work to further document the problem should be considered.

TABLE 5-6 SUMMARY OF ANALYTICAL RESULTS (µg/L) FOR GROUND WATER AND SURFACE WATER SAMPLES COLLECTED AT THE GAITHERSBURG NIKE LAUNCH SITE

	Trip Blank	Field Blank	Method Blank	Monitoring Well Number			Surface Water GNL-SW-1
				GNL-1	GNL-2	GNL-3	
VOLATILE ORGANICS	<CRL	<CRL		<CRL	<CRL	<CRL	<CRL
SEMIVOLATILES	NA	<CRL	9.3	<CRL	<CRL	<CRL	<CRL
bis(2-Ethylhexyl)phthalate		<CRL		<CRL	<CRL	115.0	<CRL
Di-n-octyl phthalate		<CRL		<CRL	<CRL	<CRL	43.9
PESTICIDES/PCBs	NA	0.08		0.104	0.100	0.107	0.087
Heptachlor							
DISSOLVED METALS	NA	<CRL		2.88	<CRL	<CRL	<CRL
Antimony		<CRL		<CRL	<CRL	<CRL	<CRL
Arsenic		<CRL		<CRL	<CRL	<CRL	<CRL
Beryllium		6.01		7.4	7.83	8.48	6.65
Cadmium		<CRL		<CRL	<CRL	<CRL	<CRL
Chromium (total)		<CRL		17.7	10.4	14.4	9.60
Copper		<CRL		4.57	<CRL	<CRL	<CRL
Lead		0.1		0.15	0.11	0.12	0.10
Mercury		<CRL		<CRL	<CRL	<CRL	<CRL
Nickel		<CRL		<CRL	<CRL	<CRL	<CRL
Selenium		<CRL		<CRL	<CRL	<CRL	<CRL
Silver		<CRL		<CRL	<CRL	<CRL	<CRL
Thallium		<CRL		39.3	42.6	62.6	14.5
Zinc		7.42					
NON-METALS	NA	<CRL		<CRL	<CRL	<CRL	<CRL
Cyanide (total)		<CRL		<CRL	<CRL	<CRL	<CRL
Phenols (total)		<CRL		<CRL	<CRL	<CRL	<CRL

(1) Preliminary Data
 CRL = Certified Reporting Limit
 ND = Not Detected
 NA = Not Analyzed

All samples were also analyzed for PCB total phenols and cyanide and results indicate that none of these constituents were detected.

5.1.3.2 Soil

Analytical results for soil samples are summarized in Table 5-7 and presented in Appendix D. No volatile or semivolatile organic compounds were detected in the samples above the CRLs. Detected metals include Arsenic (SS-4), Beryllium (SS-1, 2, 3, 4, 5), total Chromium (SS-1, 2, 4, 5), Copper (SS-1, 2, 3, 4, 5), Mercury (SS-2, 4, 5), Nickel (SS-1, 2, 3, 4, 5) and Zinc (SS-1, 2, 3, 4, 5). Observed levels are well within the expected background ranges for soils typical of the site.

5.2 FORMER NIKE CONTROL AREA SITE

5.2.1 Field Sampling Plan

In order to evaluate the nature of contamination as a result of past activities at the site, four monitoring wells were installed and sampled and three soil samples were collected for chemical analysis. The upgradient well (GNC-5) is located along the eastern boundary of the site. Wells GNC-6, GNC-7, and GNC-8 are located downgradient of potential contaminant sources (Figure 1-3). GNC-6 was installed downgradient of the engine generator and frequency changer building, dry well, and 6,000-gal gasoline UST. Wells GNC-7 and GNC-8 were placed downgradient of the wastewater disposal area and the 2,000-gal fuel oil UST, respectively.

Two surficial soil samples were obtained for chemical analysis from 1 to 3 ft below grade, near potential source areas of onsite contamination. Soil sample SS-1 was collected in a grassy surface drainage swale downgradient of the gasoline UST, engine generator and frequency changer building, and dry well. SS-2 was collected near the waste disposal

TABLE 5-7 SUMMARY OF ANALYTICAL RESULTS ($\mu\text{g/g}$) FOR SOIL SAMPLES
COLLECTED AT THE GAITHERSBURG NIKE LAUNCH SITE

	<u>SS-1</u>	<u>SS-2</u>	<u>SS-3</u>	<u>SS-4</u>	<u>SS-5</u>
VOLATILE ORGANICS	<CRL	<CRL	<CRL	<CRL	<CRL
SEMIVOLATILES	<CRL	<CRL	<CRL	<CRL	<CRL
PESTICIDES/PCBs	<CRL	<CRL	<CRL	<CRL	<CRL
DISSOLVED METALS					
Antimony	<CRL	<CRL	<CRL	<CRL	<CRL
Arsenic	<CRL	<CRL	<CRL	2.71	<CRL
Beryllium	0.487	0.792	0.670	1.040	0.823
Cadmium	<CRL	<CRL	<CRL	<CRL	<CRL
Chromium (total)	10.90	12.90	<CRL	20.00	27.30
Copper	10.20	32.00	18.20	35.10	81.00
Lead	<CRL	<CRL	<CRL	<CRL	<CRL
Mercury	<CRL	0.027	<CRL	0.018	0.033
Nickel	9.14	8.59	4.76	8.45	21.40
Selenium	<CRL	<CRL	<CRL	<CRL	<CRL
Silver	<CRL	<CRL	<CRL	<CRL	<CRL
Thallium	<CRL	<CRL	<CRL	<CRL	<CRL
Zinc	27.90	37.30	28.20	34.80	89.80
NON-METALS					
Cyanide (total)	<CRL	<CRL	<CRL	<CRL	<CRL
Phenols (total)	<CRL	<CRL	<CRL	<CRL	<CRL

CRL = Certified Reporting Limit

filter bed area. SS-3 was collected from the boring for monitoring well GNL-6 at a depth of 30 ft, which roughly corresponds to the water-table surface.

5.2.2 Site Characterization

The Control area was formerly utilized as the Army Reserve Center in Gaithersburg, Maryland, and is not being used in any capacity at the present time. This site has been identified for closure in the Base Realignment and Closures Report prepared by the Defense Secretary's Commission in December 1988. It is located adjacent to several residential communities. The existing buildings onsite include the former mess hall, administration, barracks, and engine generator and frequency changer buildings. Other important site features include a dry well located northeast of the engine generator and frequency changer building and the wastewater disposal area. The components of the disposal area include the septic tank and siphon chamber, filter bed, and chlorinator house. The locations of these features are shown on Figure 1-3. Four USTs, one gasoline and three fuel oil, were also located onsite. All of these USTs were removed during the course of this PA/SI. Four borings were drilled at the site and completed as monitoring wells. Soil samples collected from the boring indicate that the site is underlain by a sequence of clayey silt and fine sand (saprolite). All monitoring wells at the site are screened in this material except GNC-8, which is partially screened within competent bedrock. Depth to water and water elevations obtained between 14 April 1989 to 19 December 1989 for the four onsite monitoring wells are shown in Table 5-8. A water table contour map was constructed for the site using static water-level measurements obtained on 31 October 1989 (Figure 5-3). Ground-water flow direction generally trends to the west.

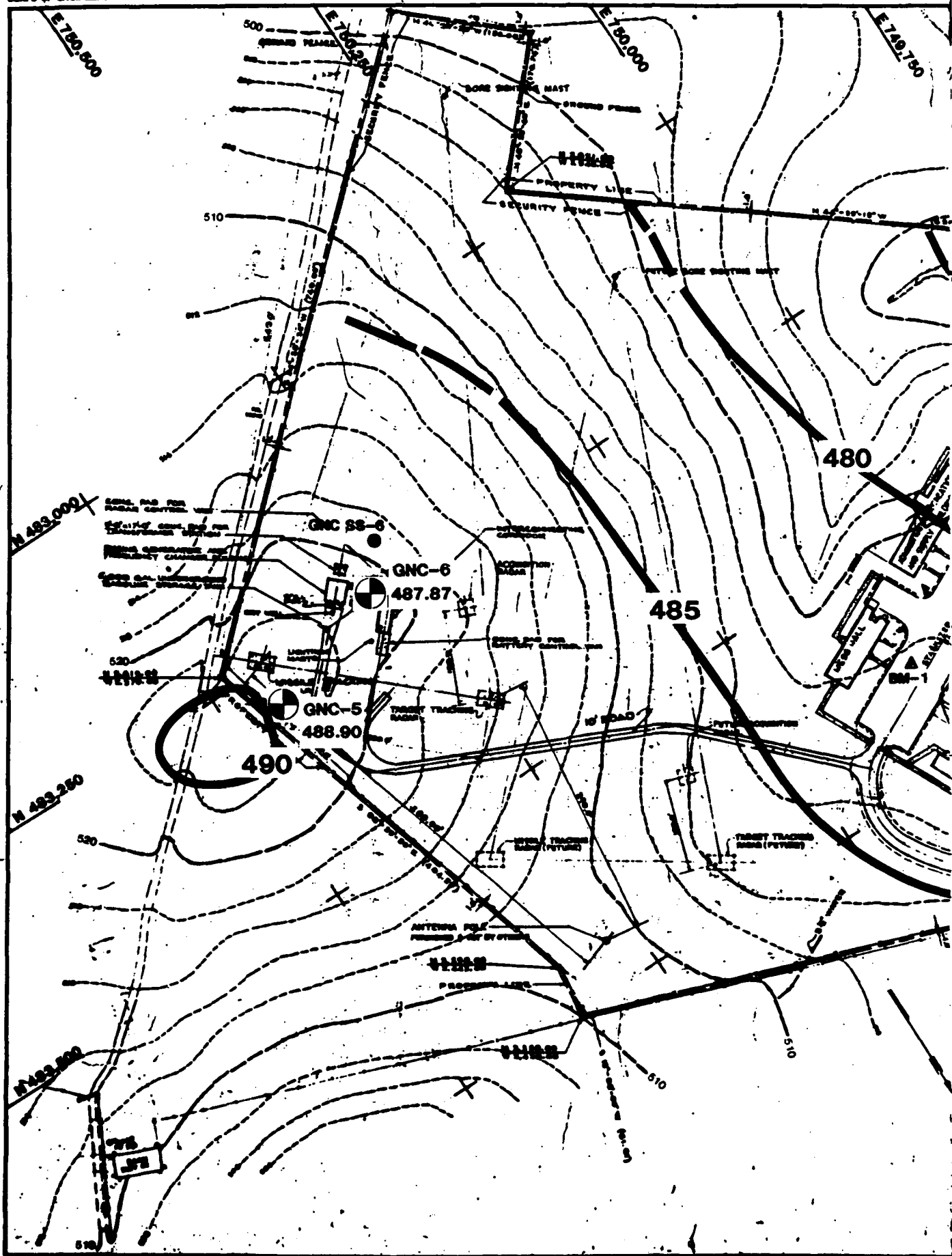
Slug tests were performed on monitoring wells GNC-6 and GNC-8 in order to estimate the permeability of the water table (saprolite) aquifer (Section 4.5, Aquifer Tests). Calculated permeability values ranged from 6.30×10^{-4} ft/min to 2.13×10^{-3} ft/min (Table 5-9). The permeability values

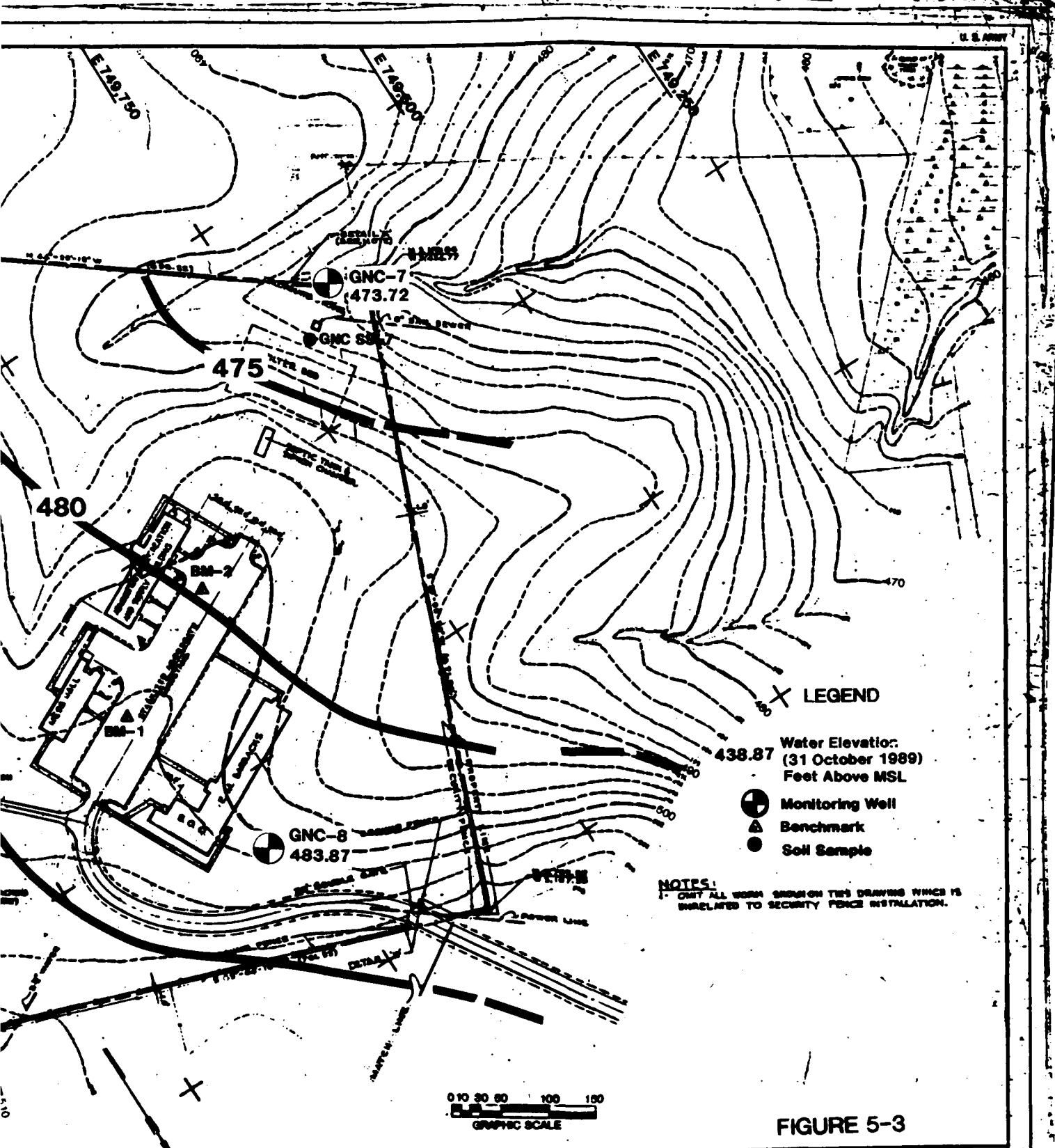
TABLE 5-8 WATER LEVEL ELEVATIONS IN MONITORING WELLS AT THE GAITHERSBURG NIKE CONTROL SITE

Well No.	Reference Elevation (ft above MSL)	Depth to Water (ft)				Water Elevation (ft. above MSL)											
		14 APR 1989	25 MAY 1989	29 SEP 1989	31 OCT 1989	14 APR 1989	25 MAY 1989	29 SEP 1989	31 OCT 1989								
GMC-5	524.68	36.84	--	35.05	35.01	35.78	35.93	36.24	36.48	487.84	--	489.63	489.67	488.90	488.75	488.44	488.20
GMC-6	522.19	--	--	33.41	33.46	34.32	34.47	34.76	35.00	--	--	488.78	488.73	487.87	487.72	487.43	487.19
GMC-7	488.70	14.17	13.50	13.96	15.65	14.98	15.10	15.01	15.42	474.53	475.20	474.74	473.05	473.72	473.60	473.69	473.28
GMC-8	503.84	19.20	17.48	17.16	19.58	19.97	20.04	20.13	20.44	484.64	486.36	486.68	484.26	483.87	483.80	483.71	483.40

Note: Reference elevation = top of PVC casing.

Contour of elevation





- LEGEND**
- 438.87 Water Elevation:
(31 October 1989)
Feet Above MSL
 - Monitoring Well
 - Benchmark
 - Soil Sample

NOTES:
1. OMIT ALL WORK SHOWN ON THIS DRAWING WHICH IS UNRELATED TO SECURITY FENCE INSTALLATION.

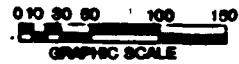


FIGURE 5-3

			<p>GAITHERSBURG NIKE CONTROL GAITHERSBURG, MD.</p>
			<p>GROUND-WATER CONTOUR MAP</p>
<p>FMS SAB</p>			<p>DEC 6 1989 10 59 04</p>

TABLE 5-9 PERMEABILITY VALUES DERIVED FROM SLUG TESTS CONDUCTED IN
GAITHERSBURG NIKE CONTROL AREA MONITORING WELLS

<u>Well</u>	<u>ft/min</u>	<u>ft/sec</u>	<u>cm/sec</u>	<u>gpd/ft²</u>
GNC-6 (TEST 1)	1.98×10^{-3}	3.29×10^{-5}	1.00×10^{-3}	21.3
GNC-6 (TEST 2)	2.13×10^{-3}	3.56×10^{-5}	1.08×10^{-3}	23.0
GNC-8 (TEST 1)	6.30×10^{-4}	1.05×10^{-5}	3.20×10^{-4}	6.79
GNC-8 (TEST 2)	9.20×10^{-4}	1.53×10^{-5}	4.67×10^{-4}	9.91

are typical for aquifers composed of fine sand and mixtures of sand, silt, and clay.

Table 5-10 is a partial record of water supply wells within a 1-mi radius of the Control area. Figure 5-4 shows the approximate location of the wells listed in Table 5-10. Nearby residential communities account for the majority of domestic wells. All wells utilize the Wissahickon and associated saprolite aquifer.

5.2.3 Data Assessment

5.2.3.1 Ground Water

The analytical results from ground-water samples collected at the Control site are summarized in Table 5-11 and presented in Appendix D. No volatile organic, pesticide/PCB, total phenols or cyanide compounds were detected above the CRLs. Di-n-octyl phthalate, a semivolatile organic compound, was detected in monitoring wells GNC-6, 7 and 8 at concentrations ranging between 23.7 $\mu\text{g/L}$ to 36.8 $\mu\text{g/L}$. As stated in Section 5.1.4.1, there are no regulatory criteria for the phthalates and these compounds are a common component of plastics. The levels detected probably are attributable to field and/or laboratory contamination. Dissolved metals detected in the samples at levels above the CRLs include Antimony (GNC-7 and 8), Cadmium (GNC-5, 6, 7, and field blank), Copper (GNC-8), Nickel (GNC-7), and Zinc (GNC-5, 6, 7, 8). The cadmium levels in GNC-5, 6, 7 and the field blank range from 5.6 to 8.15 $\mu\text{g/L}$. These cadmium levels do not exceed the current MCL but slightly exceed the proposed MCL and MCLG of 5 $\mu\text{g/L}$; however, the detection of cadmium in the field blank suggests that these cadmium levels could be attributed to field contamination.

Potable water supply samples were obtained from raw and treated water points at the control area of the Gaithersburg ARC in December 1983 by USAEHA. These samples were analyzed for volatile organic compounds, metals, and the inorganic parameters. The only potential problem noted

TABLE 5-10 PARTIAL RECORD OF WATER WELLS WITHIN A 1-MILE RADIUS OF THE GAITHERSBURG NIXE CONTROL SITE

<u>State Permit No.</u>	<u>Owner</u>	<u>Approximate Location</u>	<u>Date Completed</u>	<u>Depth of Well (ft)</u>	<u>Casing Depth (ft)</u>	<u>Screen Depth (ft)</u>
MO-73-0248	Joseph Dobson	Emory Grove Rd., Gaithersburg	3/73	350	46	
MO-81-0604	Pettit & Griffin Inc.	Emory Grove Rd., Gaithersburg	10/83	200	29	
MO-81-1278	John A. Canterbury	Emory Grove Rd., Gaithersburg	9/85	90	75	75-90
MO-73-3655	Wilbur R. Hines	Strauberry Knoll, Gaithersburg	5/83	145	81	
MO-81-1328	William T. Duvall	Emory Grove Rd., Gaithersburg	10/85	90	72	
MO-73-3144	Larry Sanders	Emory Grove Rd., Emory Grove	6/81	200	89	

TABLE 5-10 EXTENDED

State Permit No.	Owner	(Before Test) Static Water Level Below Surface (ft)	(After Test) Water Level When Pumping (ft)	(Test) Pumping Rate (gpm)	Aquifer	Water Use
MO-73-0248	Joseph Dobson	40	350	10	Wissahickon	D
MO-81-0604	Pettit & Griffin Inc.	19	126	4	Wissahickon	D
MO-81-1278	John A. Canterbury	35	80	50	Wissahickon	D
MO-73-3655	Wilbur R. Hines	30	58	8	Wissahickon	D
MO-81-1328	William T. Duvall	30	88	20	Wissahickon	D
MO-73-3144	Larry Sanders	60	200	7	Wissahickon	D

D = Domestic

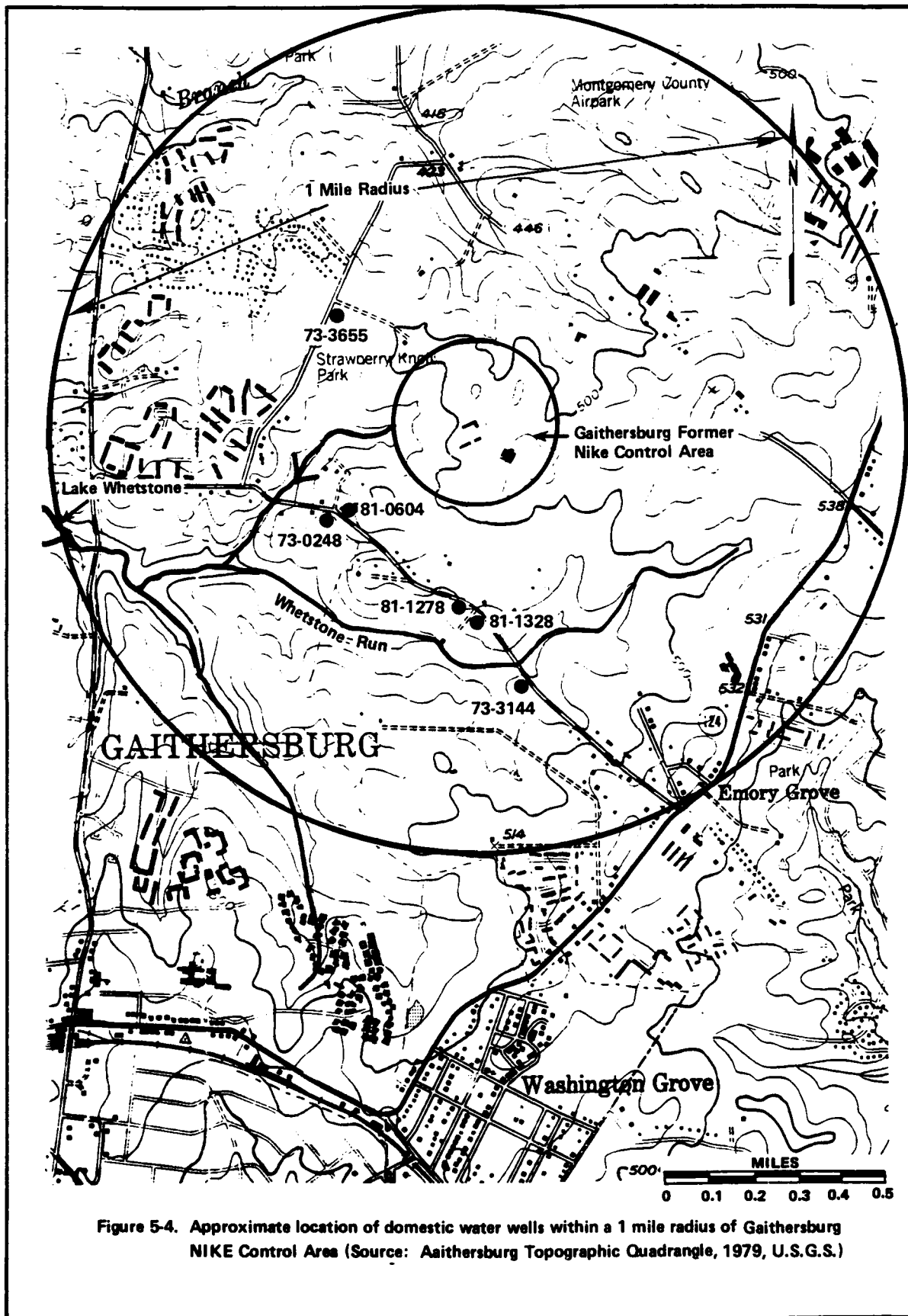


Figure 5-4. Approximate location of domestic water wells within a 1 mile radius of Gaithersburg Nike Control Area (Source: Aaithersburg Topographic Quadrangle, 1979, U.S.G.S.)

TABLE 5-11 GROUND-WATER ANALYTICAL RESULTS ($\mu\text{g/L}$) FOR SAMPLES COLLECTED AT THE GAITHERSBURG NIKE CONTROL SITE

	Monitoring Well Numbers			
	<u>GNC-5</u>	<u>GNC-6</u>	<u>GNC-7</u>	<u>GNC-8</u>
VOLATILE ORGANICS	<CRL	<CRL	<CRL	<CRL
SEMIVOLATILES				
Di-n-octyl phthalate	<CRL	23.7	36.8	24.9
PESTICIDES/PCB	<CRL	<CRL	<CRL	<CRL
DISSOLVED METALS				
Antimony	<CRL	<CRL	<CRL	3.0
Arsenic	<CRL	<CRL	<CRL	<CRL
Beryllium	<CRL	<CRL	<CRL	<CRL
Cadmium	8.15	6.97	6.65	<CRL
Chromium (total)	<CRL	<CRL	<CRL	<CRL
Copper	<CRL	<CRL	<CRL	8.00
Lead	<CRL	<CRL	<CRL	<CRL
Mercury	0.16	0.11	0.10	0.15
Nickel	<CRL	<CRL	33.3	<CRL
Selenium	<CRL	<CRL	<CRL	<CRL
Silver	<CRL	<CRL	<CRL	<CRL
Thallium	<CRL	<CRL	<CRL	<CRL
Zinc	30.5	19.4	19.4	21.1
NON-METALS				
Cyanide (total)	<CRL	<CRL	<CRL	<CRL
Phenols (total)	<CRL	<CRL	<CRL	<CRL

CRL = Certified Reporting Limit

was elevated iron concentrations--particularly in the treated/distributed water supply. No VOCs were detected. These data are included in Appendix D.

5.2.3.2 Soils

Analytical results for soil samples are summarized in Table 5-12 and presented in Appendix D. Volatile organic compounds were not detected above the CRLs. A semivolatile organic compound, Bis(2-ethylhexyl) phthalate, was detected in soil sample SS-8 at a concentration of 6.82 µg/g. Phthalates are a common component of plastics and the detection of this compound is probably due to laboratory or field contamination and is not likely an indication of contamination. Metals detected above the CRLs include Antimony (SS-8), Arsenic (SS-7), Beryllium (SS-6, 7, 8), total Chromium (SS-6, 7, 8), Copper (SS-6, 7, 8), Mercury (SS-7), Nickel (SS-6, 7, 8), and Zinc (SS-6, 7, 8).

These levels are well within the expected background range for soils typical of the site.

TABLE 5-12 SUMMARY OF ANALYTICAL RESULTS ($\mu\text{g/g}$) FOR SOIL SAMPLES
COLLECTED AT THE GAITHERSBURG NIKE CONTROL SITE

	<u>SS-6</u>	<u>SS-7</u>	<u>SS-8</u>
VOLATILE ORGANICS	<CRL	<CRL	<CRL
SEMIVOLATILES			
bis(2-Ethylhexyl)phthalate	<CRL	<CRL	6.82
PESTICIDES/PCB	<CRL	<CRL	<CRL
DISSOLVED METALS			
Antimony	<CRL	<CRL	1.17
Arsenic		2.55	
Beryllium	0.731	1.58	1.60
Cadmium	<CRL	<CRL	<CRL
Chromium (total)	10.4	40.3	24.2
Copper	20.5	100.0	29.5
Lead	<CRL	<CRL	<CRL
Mercury	<CRL	0.02	<CRL
Nickel	4.07	36.1	29.4
Selenium	<CRL	<CRL	<CRL
Silver	<CRL	<CRL	<CRL
Thallium	<CRL	<CRL	<CRL
Zinc	20.8	100.0	151.0
NON-METALS			
Cyanide (total)	<CRL	<CRL	<CRL
Phenols (total)	<CRL	<CRL	<CRL

CRL = Certified Reporting Limit

6. CONCLUSIONS

The overall objective and scope of this PA/SI study were to evaluate the available information relative to past Army operations, review the initial installation assessment document, and develop a field sampling plan to address the potential for contamination problems associated with past Army operations. The field sampling plan for this PA/SI study was developed with the idea of obtaining sufficient data to ascertain the need for further environmental work. Ground-water, surface water, and soil samples were collected for analysis in proximity to potential contaminant source areas located at each site. The following sections provide the conclusions that have been drawn from the chemical analysis of the samples collected.

6.1 GAITHERSBURG NIKE LAUNCH SITE

The Launch area data assessment indicates that there is no evidence of volatile organic contamination in any of the samples collected. The low level detection of the two phthalate compounds Bis(2-ethylhexyl)phthalate in GNL-4 and Di-n-octyl phthalate in GNL-SW-1, a surface water sample, probably is due to field or laboratory contamination. Phthalate compounds in general are ubiquitous in nature and it is likely that the detection of the compounds is not due to past Army operations. The detection of cadmium in all samples including the field blank suggests that field contamination is the likely source of the cadmium and not due to past Army operations. The detection of lead in GNL-3 at 35 ppb is below the current MCL of 50 ppb, but is higher than the proposed MCL and MCLG of 5 and 0 $\mu\text{g}/\text{L}$, respectively. The lead level in the GNL-3 water sample may be a problem in the future if the proposed MCL or MCLG is classified as final. Items not addressed fully, during this PA/SI at the launch area include the 1,000-gal fuel oil UST, and the potential for PCBs to be in the hydraulic fluid in the missile storage structures. Also, the potential for asbestos material in the missile storage structures has not been evaluated.

6.2 GAITHERSBURG NIKE CONTROL

The Control area data assessment also indicates that there is no evidence of volatile organic, pesticide, PCB, or total cyanide and phenol contamination in any of the samples collected at the site. As was the case at the Launch site, a semivolatile compound, Di-n-octyl phthalate, was detected at low levels in ground-water samples collected from GNC-6, 7, and 8 ranging from 23.7 to 36.8 ppb. As stated in the Launch area conclusions, the presence of this compound may be attributed to field or laboratory contamination and is not likely due to past Army operations. The detected cadmium levels in GNC-5, 6, and 7 also are viewed consistent with the Launch area data assessment and conclusions because the sampling at both sites was performed as one sampling event. Again, the field blank contained approximately equal levels of cadmium, thus suggesting field contamination.

Items not fully addressed by this PA/SI study include the four USTs, dry well, transformers, asbestos, and lead paint.

7. RECOMMENDATIONS

The future use of these sites, and in particular the potential for ground-water use, should be considered when decisions are made concerning the need for additional ground-water monitoring. Both of these sites are in close proximity to a municipal water system and it is likely that this system would supply water to the sites instead of relying on ground-water. If, however, the future development plans include ground-water use, an additional comprehensive ground-water sampling event is recommended to further define the low level of lead detected in well GNL-3, confirm or deny the cadmium levels detected, and to provide a greater level of assurance beyond a single sampling round.

The other potential areas of concern not addressed fully during this PA/SI include the dry well and four former USTs at the Control area and one UST at the Launch area, plus the potential for asbestos materials at both sites. Also the hydraulic fluid in the hydraulic lift systems in the missile storages structures at the Launch area and the transformers at the Control area should be sampled and analyzed for PCB. It is understood that USATHAMA intends to address these items during a follow-up investigation.

REFERENCES

- McMaster, B.N., et al., 1983, Historical Overview of the NIKE Missile System; Environmental Science and Engineering, Inc. Gainesville, Florida.
- Soil Conservation Service, 1961, Soil Survey of Montgomery County, Maryland: Soil Survey Science. 1958. No. 7. U.S. Department of Agriculture. Washington, D.C. 97p. 53 maps.
- Weaver, K.N., dir, 1968, Geologic Map of Maryland: Maryland Geological Survey.
- Bower, H. and Rice, R.C., 1967, A slug test for determining hydraulic conductivity of unconfined aquifers with completely or partially penetrating wells: Water Resources Research.
- Bonds, J.D., et al., Update of the Initial Installation Assessment of Fort George G. Meade and Gaithersburg Research Facility, Final Report, December 1987 completed by Environmental Science and Engineering, Inc. for Commander, Fort Meade, and USATHAMA.
- Water Resources of Howard & Montgomery Counties, 1964. Maryland Geological Survey, E. Cloos, Director.
- Nutter, L.J. and Otton, E.G., Ground-water Occurrence in the Maryland Piedmont, 1969. Maryland Geological Survey, Report of Investigations No. 10.
- Vokes, H.E., and Edwards, J., 1974. Geography and Geology of Maryland, Maryland Geological Survey, Bulletin 19.

APPENDIX A
SOIL BORING LOGS AND WELL COMPLETION DIAGRAMS

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-1

Coordinates:

Location: GAITHERSBURG LAUNCH AREA

Geologist: M. ROMANAK

Job No. 10559.03

Surface Elevation: 516.36 FT.

Client: USATHAMA

Casing Above Surface: 2.13 FT.

Drilling Method: MOBILE B-61 DRILL RIG,

Reference Elevation:

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Reference Description: GROUND

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 11 APRIL 1989

Completion Date: 12 APRIL 1989

SAMP TYPE	IN DRVN	IN RCVD	SAMP NO.	SAMP DPTH	BLOWS/6"	DVA PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
									LEVEL GRASSY FIELD, SUNNY HIGH 50'S
									SOIL DESCRIPTION
SPT	18	8	1	1	3-4-4	0	X	ML	MODERATE BROWN (5YR4/4), S. MOIST CLAYEY SILT, MICACEOUS MEDIUM STIFF
SPT	18	15	2	6	3-4-7	0	X	ML SH	MOTTLED, LIGHT BROWN (5YR5/6) TO BLACK (N1), S. MOIST, CLAYEY SILT WITH FINE SAND, MICACEOUS, MEDIUM STIFF LIGHT BROWN (5YR5/6), S. MOIST, SILTY FINE SAND WITH CLAY, MED. DENSE
SPT	18	18	3	11	15-11-9	0	X	ML	MOTTLED GREENISH GRAY (5GY6/1), BLACK (N1), LIGHT BROWN (5YR5/6) S. MOIST, SILT WITH CLAY AND SAND, SOAPY SCHISTOSE TEXTURE, MICACEOUS, VERY STIFF, SAPROLITE
SPT	18	14	4	16	7-14-15	0	X	ML	MOTTLED MODERATE YELLOW BROWN (10YR5/4), LIGHT BROWN (5YR 5/6), BLACK (N1), S. MOIST, CLAYEY SILT WITH SAND, QUARTZITE ROCK FRAGMENT SAPROLITE

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVEYON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. ENL-1

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 516.36 FT.

Casing Above Surface: 2.13 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

RSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 11 APRIL 1989

Completion Date: 12 APRIL 1989

SAMP TYPE	IN DRWN	IN RCVD	SAMP NO.	SAMP DEPTH	BLOWS/6"	DVA PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
LEVEL GRASSY FIELD, SUNNY HIGH 50'S									
SOIL DESCRIPTION									
SPT	18	18	5	21	10-16-16	0	X	ML	GREENISH GRAY (56Y6/1), TO LIGHT BROWN (5YR5/6), S. MOIST, CLAYEY SILT WITH SAND, HARD, SAPROLITE
SPT	18	18	6	26	7-12-15	0	X	ML	MODERATE YELLOWISH BROWN (10YR5/4), S. MOIST, CLAYEY SILT, VERY STIFF, SAPROLITE, INCREASE IN MOISTURE AT BASE OF SPOON
SPT	18	18	7	31	10-10-11	0	X	ML	S. MOIST SAPROLITE, SAME AS ABOVE
SPT	18	18	8	36	4-7-9	0	X	ML	MOTTLED GREENISH GRAY (56Y6/1), LIGHT BROWN (5YR5/6), BLACK (N1), MOIST, CLAYEY SILT, STIFF, SAPROLITE

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOMETON CIRCLE SPARKS, MARYLAND 21152 TELE: 301-771-4950

BORING NO. GNL-1

Coordinates:
Geologist: M. ROMANAK
Surface Elevation: 516.36 FT.
Casing Above Surface: 2.13 FT.
Reference Elevation:
Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA
Job No. 10559.03
Client: USATHAMA
Drilling Method: MOBILE B-61 DRILL RIG,
HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.
SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

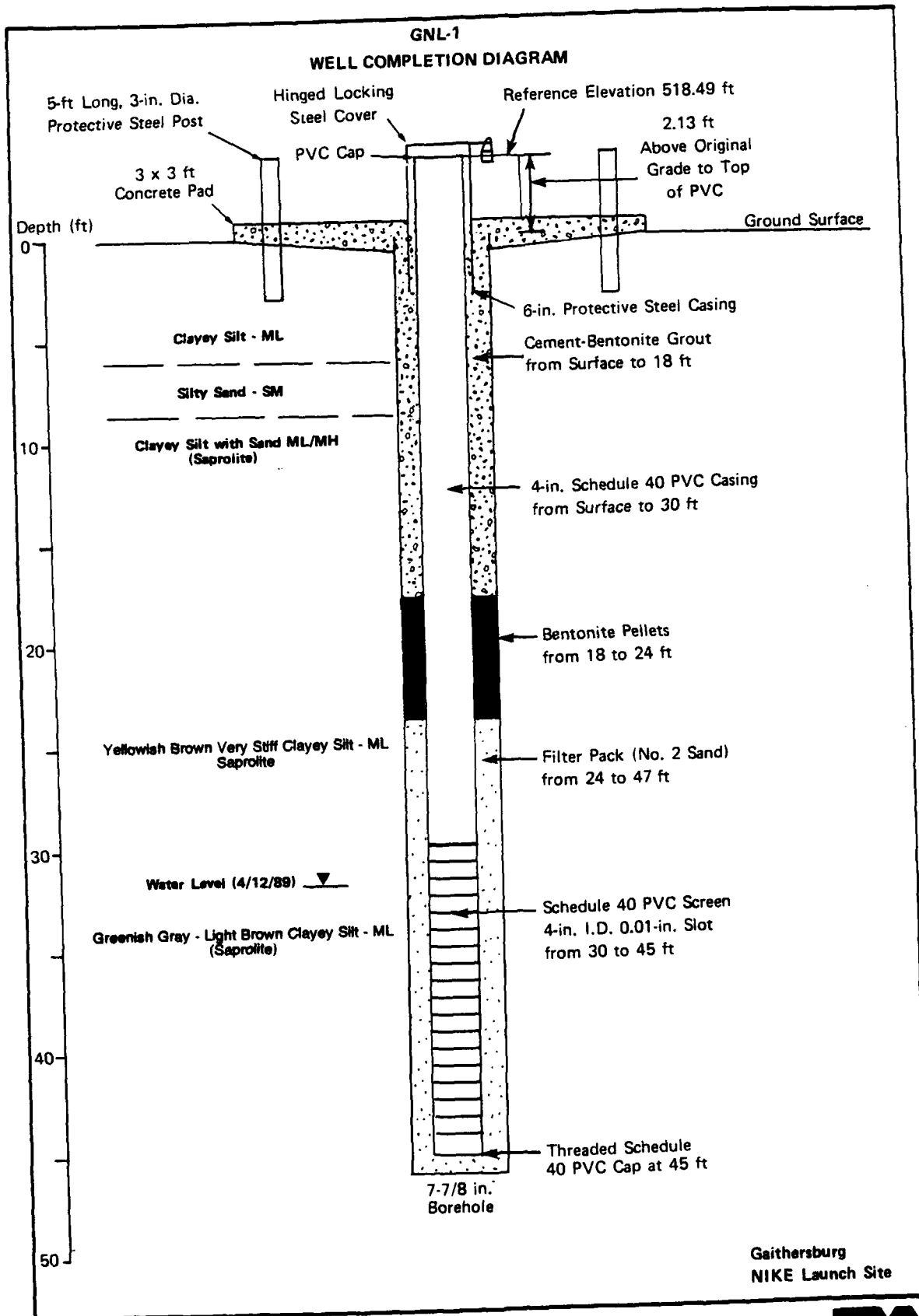
Start Date: 11 APRIL 1989

Completion Date: 12 APRIL 1989

SAMP TYPE	IN DRWN	IN RCVD	SAMP NO.	SAMP DPTH	BLOWS/6"	OVA PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
									LEVEL GRASSY FIELD, SUNNY HIGH 50'S
SOIL DESCRIPTION									
SPT	9	9	9	41	15-51/3"	0	X	ML	NET SPOON GREENISH GRAY (56Y6/1), TO LIGHT BROWN (5YR5/6), MOIST, CLAYEY SILT WITH SAND, HARD, SAPROLITE
SPT	13	8	10	46	14- 55/5"	0	X	ML	SAPROLITE , SAME AS ABOVE AUGERS TO 45', LEAVE IN HOLE OVERNIGHT INORDER TO MEASURE STATIC WATER LEVEL HOLE CAVED TO 40', REEMED HOLE TO 50', PULLED AUGERS HOLE CAVED TO 47', BACKFILL HOLE W/ SAND PACK TO 45' INSTALL MONITORING WELL 4-12-89 NO. 10 SLOT 4" ID PVC SCREEN 45-30' (15') 4" PVC RISER CASING 30'-SURFACE (30') NO. 2 SAND PACK 47'-24' (23') BENTONITE PELLETS 24'-18' (6') BENT.-CEMENT GROUT 18'-SURFACE (18') 6" PROTECTIVE STEEL CASING AND LOCKING CAP

SAMPLER TYPE
SS-DRIVEN SPLIT SPOON
SH-PRESSED SHELBY TUBE
OST-OSTENBURG PISTON SAMPLER
DEN-DENISON CORE BARREL SAMPLER
SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION
AFTER HRS.
AFTER 24 HRS.
FT.
FT.
FT.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-2

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 503.74 FT.

Casing Above Surface: 2.17 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 12 APRIL 1989

Completion Date: 13 APRIL 1989

SAMP TYPE	IN DRN	IN RCVD	SAMP NG.	SAMP DPTH	BLOWS/6"	OVA PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS LEVEL GRASSY FIELD, SUNNY HIGH 50'S
SOIL DESCRIPTION									
							0		
SPT	18	9	1	1	2-3-5	0	X	CL	MODERATE BROWN (5YR4/4), S. MOIST, SILTY CLAY, WITH MINOR GRAVEL AT TOP, MICACEOUS, MEDIUM STIFF
							5		
SPT	18	18	2	6	2-4-4	0	X	ML	MOTTLED, LIGHT BROWN (5YR5/6), GREENISH GRAY (5GY6/1), TO BLACK (N1) S. MOIST, CLAYEY SILT, MICACEOUS, MEDIUM STIFF, SCHISTOSE TEXTURE, SAPROLITE
							10		
SPT	18	18	3	11	4-6-11	0	X	ML	MOTTLED GREENISH GRAY (5GY6/1), BLACK (N1), LIGHT BROWN (5YR5/6) S. MOIST, CLAYEY SILT, SOAPY SCHISTOSE TEXTURE, MICACEOUS, STIFF, SAPROLITE
							15		
SPT	18	18	4	16	9-11-16	0	X	ML	MOTTLED MODERATE YELLOW BROWN (10YR5/4), GREENISH GRAY (5GY 6/1), BLACK (N1), MOIST, CLAYEY SILT, MICACEOUS, VERY STIFF, SAPROLITE
							20		

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVELTON CIRCLE SPARKS, MARYLAND 21152 TELE: 301-771-4950

BORING NO. GNL-2

Coordinates:
Geologist: M. ROMANAK
Surface Elevation: 503.74 FT.
Casing Above Surface: 2.17 FT.
Reference Elevation:
Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA
Job No. 10559.03
Client: USATHAMA
Drilling Method: MOBILE B-61 DRILL RIG.
HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.
SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

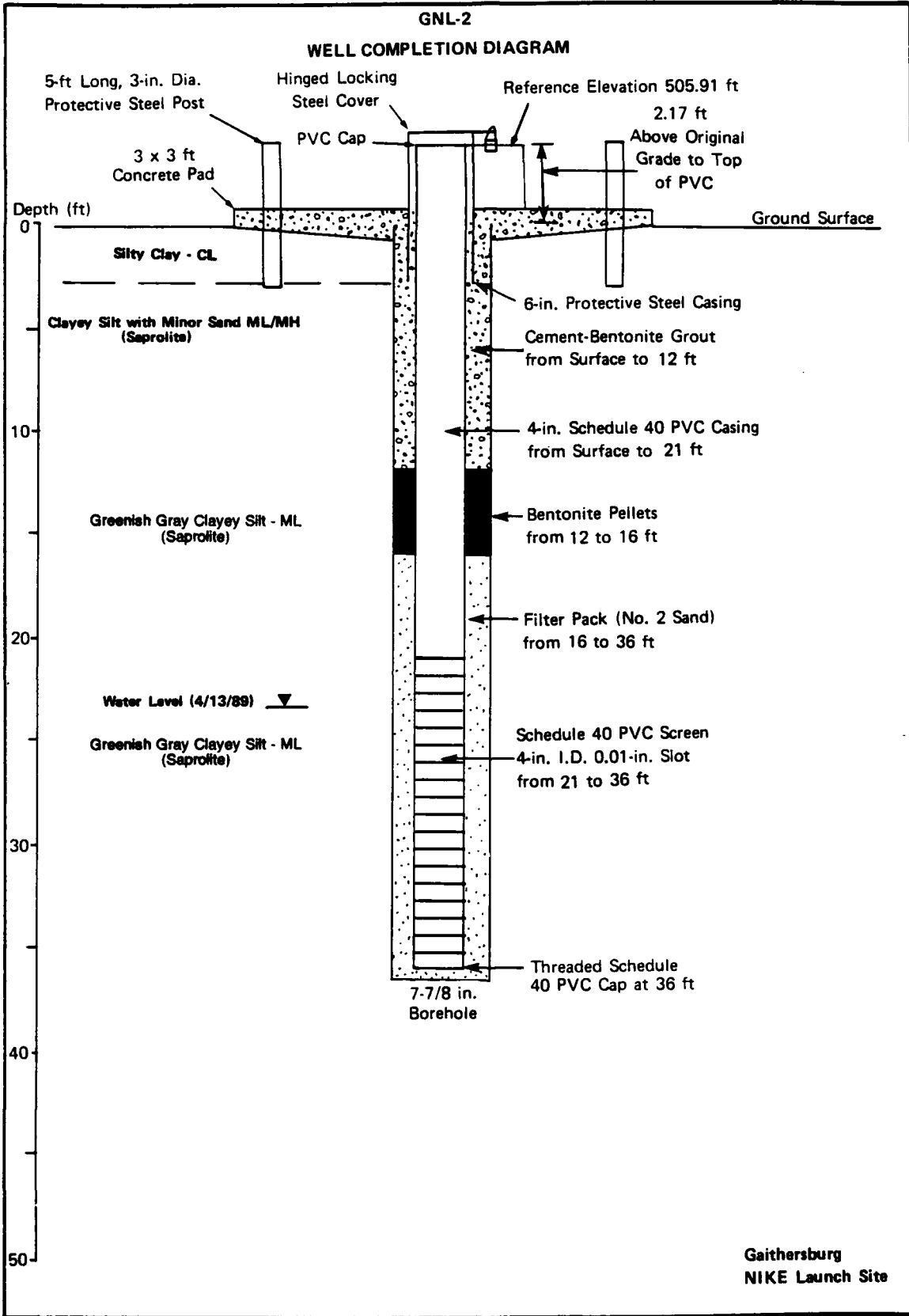
Start Date: 12 APRIL 1989

Completion Date: 13 APRIL 1989

SAMP TYPE	IN DRVN	IN RCVD	SAMP NO.	SAMP DPTH	BLOWS/6"	DVA PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
									LEVEL GRASSY FIELD, SUNNY HIGH 50'S
									SOIL DESCRIPTION
SPT	18	18	5	21	14-11-12	0	X	ML	MOIST SAPROLITE, SAME AS ABOVE WITH MINOR GRAVEL
SPT	18	18	6	26	18-12-15	0	X	ML	MOTTLED, LIGHT BROWN (5YR5/6), GREENISH GRAY (5GY6/1), TO BLACK (N1) MOIST, CLAYEY SILT, MICACEOUS, VERY STIFF, SCHISTOSE TEXTURE, SAPROLITE
SPT	18	18	7	31	14-14-16	0	X	ML	MOTTLED GREENISH GRAY (5GY6/1), BLACK (N1), LIGHT BROWN (5YR5/6) V. MOIST, CLAYEY SILT, SOAPY SCHISTOSE TEXTURE, MICACEOUS, VERY STIFF, SAPROLITE
									AUGERS TO 39', PULLED AUGERS HOLE CAVED TO 36'
									INSTALLED MONITORING WELL 4-13-89
									NO. 10 SLOT 4" PVC SCREEN 36'-21' (15')
									4" PVC RISER CASING 21"-SURFACE (21')
									NO. 2 SAND PACK 36'-16' (20')
									BENTONITE PELLETS 16'-12' (4')
									BENT.-CEMENT GROUT 12'-SURFACE (12')
									6" PROTECTIVE STEEL CASING AND LOCKING CAP

SAMPLER TYPE
SS-DRIVEN SPLIT SPOON
SH-PRESSED SHELBY TUBE
OST-OSTENBURG PISTON SAMPLER
DEN-DENISON CORE BARREL SAMPLER
SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION
AFTER HRS.
AFTER 24 HRS.
FT.
FT.
FT.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. BNL-3

Location: GAITHERSBURG LAUNCH AREA

Coordinates:

Job No. 10559.03

Geologist: M. ROMANAK

Client: USATHAMA

Surface Elevation: 504.29 FT.

Drilling Method: MOBILE B-61 DRILL RIG,

Casing Above Surface: 2.23 FT.

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Reference Elevation:

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

Reference Description: GROUND

SPLIT SPOON. DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 13 APRIL 1989

Completion Date: 13 APRIL 1989

SAMP TYPE	IN DRVN	IN RCVD	SAMP NO.	SAMP DPTH	BLOWS/6"	OVA PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
									SLOPPING GRASSY FIELD, PARTLY CLOUDY MID 50'S
									SOIL DESCRIPTION
SPT	18	18	1	1	2-2-2	0	X	CL	MODERATE BROWN (5YR4/4), S. MOIST, SILTY CLAY, WITH MINOR GRAVEL, SOFT
SPT	18	18	2	6	3-3-5	0	X	ML	MOTTLED, GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR5/6) TO BLACK (N1) CLAYEY SILT, MICACEOUS, SCHISTOSE TEXTURE, MEDIUM STIFF, SAPROLITE
SPT	18	18	3	11	3-4-5	0	X	ML	MOTTLED GREENISH GRAY (5GY6/1), BLACK (N1), LIGHT BROWN (5YR5/6) S.MOIST, CLAYEY SILT, SOAPY SCHISTOSE TEXTURE, MEDIUM STIFF, SAPROLITE
SPT	18	18	4	16	4-5-9	0	X	ML	MOTTLED GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR 5/6), BLACK (N1), S. MOIST, CLAYEY SILT, STIFF, SAPROLITE

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

15 LAMETON CIRCLE SPARKS, MARYLAND 21152 TELE: 301-771-4950

BORING NO. GNL-3

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 504.29 FT.

Casing Above Surface: 2.23 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 13 APRIL 1989

Completion Date: 13 APRIL 1989

SAMP TYPE	IN DRVN	IN RCVD	SAMP NO.	SAMP DPTH	BLOWS/6"	GRA PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS SLOPPING GRASSY FIELD, PARTLY CLOUDY MID 50'S
SOIL DESCRIPTION									
							20		
SPT	18	18	5	21	7-9-11	0	X	ML	LIGHT BROWN (5YR5/6), GREENISH GRAY (5GY6/1), BLACK (N1), S. MOIST, CLAYEY SILT, VERY STIFF, SAPROLITE
							25		
SPT	18	18	6	26	8-9-11	0	X	ML	MOTTLED, GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR5/6) TO BLACK (N1), CLAYEY SILT, MICACEOUS, SCHISTOSE TEXTURE, VERY STIFF, SAPROLITE
							30		
SPT	18	18	7	31	7-13-20	0	X	ML	MOTTLED GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR5/6) S.MOIST, CLAYEY SILT, SOAPY SCHISTOSE TEXTURE, HARD, SAPROLITE INCREASING MOISTURE @ BASE OF SPOON
							35		
SPT	18	18	8	35	9-15-26	0	X	ML	WET SPOON MOTTLED GREENISH GRAY (5GY6/1), LIGHT BROWN (5YR 5/6), BLACK (N1), MOIST, CLAYEY SILT, HARD, SAPROLITE
							40		

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS. FT.
 AFTER 24 HRS. FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOMETON CIRCLE SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-3

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 504.29 FT.

Casing Above Surface: 2.23 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

RSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 13 APRIL 1989

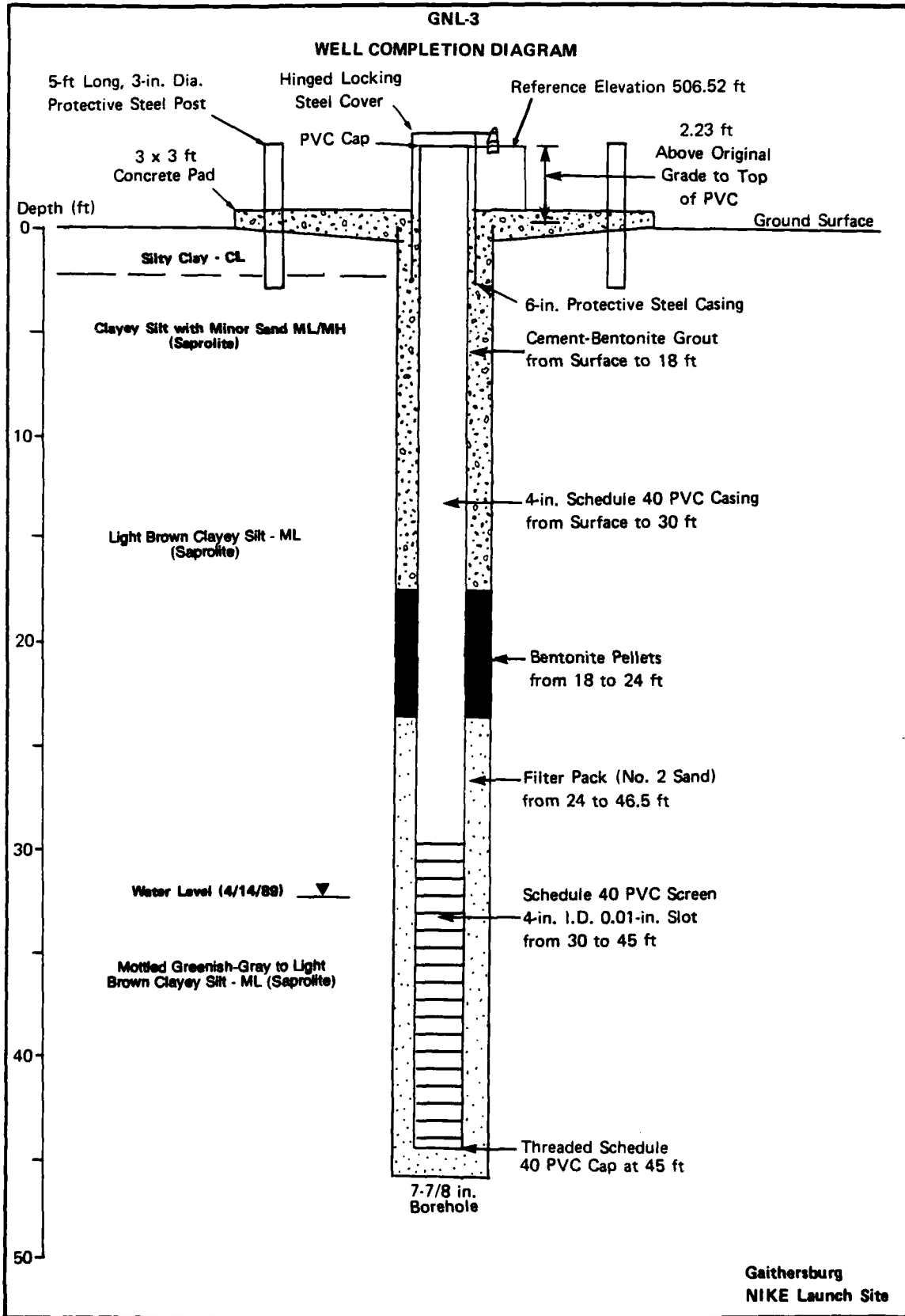
Completion Date: 13 APRIL 1989

SAMP TYPE	IN DRW	IN RCVD	SAMP NO.	SAMP DEPTH	BLOWS/6"	OVA PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
									SLOPPING GRASSY FIELD, PARTLY CLOUDY MID 50'S
							40		SOIL DESCRIPTION
SPT	18	18	9	41	11-12-18	0	X	ML	LIGHT BROWN (5YR5/6), GREENISH GRAY (5GY6/1), BLACK (N1), MOIST, CLAYEY SILT, VERY STIFF, SAPROLITE, MINOR METAMORPHIC ROCK FRAG.
							45		AUGERS TO 47', PULLED AUGERS, HOLE CAVED TO 46.5', BACKFILL WITH NO.2 SAND TO 45' INSTALLED MONITORING WELL 4-13-89 NO. 10 SLOT 4" ID PVC SCREEN 45'-30' (15') 4" PVC RISER CASING 30'-SURFACE (30') NO.2 SAND PACK 46.5'-24' (22.5') BENTONITE PELLETS 24'-18' (6') BENT.-CEMENT GROUT 18'-SURFACE 6" PROTECTIVE SREEL CASING AND LOCKING CAP
							50		
							55		
							60		

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.



Gaithersburg
NIKE Launch Site



EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNL-4

Coordinates:

Geologist: S. BROWN

Surface Elevation: 464.81 FT.

Casing Above Surface: 2.41 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: AC = AUGER CUTTINGS, SOIL SAMPLES COLLECTED FROM
 AUGER CUTTINGS DUE TO RIG POSITION

Start Date: 18 APRIL 1989

Completion Date: 18 APRIL 1989

SAMP TYPE	IN DRN	IN CVD	SAMP NO.	SAMP DPTH	BLOWS/6"	PID PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS FLAT, DRY, GRASSY AREA, DOWN GRADIENT OF FILTER BED
							0		SOIL DESCRIPTION
AC			1	1		0	X	ML	MODERATE REDDISH BROWN (10R4/6), S. MOIST CLAYEY SILT, MICACEOUS
							5		
AC			2	6		0	X	ML	MODERATE OLIVE BROWN(5Y4/4), MOIST, SILT WITH LITTLE CLAY, MICACEOUS
							10		
AC			3	11		0	X	ML	MODERATE OLIVE BROWN(5Y4/4), MOIST, SILT, LITTLE FINE SAND, TRACE CLAY, MICACEOUS
							15		
AC			4	16		0	X	ML	INCREASING MOISTURE GRAYISH OLIVE (10Y4/2), MOIST, SILT AND V.FINE SAND, TRACE CLAY
							20		

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEY-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER 1 HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LLOYDSON CIRCLE SPARKS, MARYLAND 21152 TELE: 301-771-4950

BORING NO. GNL-4

Coordinates:
Geologist: S. BROWN
Surface Elevation: 464.81 FT.
Casing Above Surface: 2.41 FT.
Reference Elevation:
Reference Description: GROUND

Location: GAITHERSBURG LAUNCH AREA
Job No. 10559.03
Client: USATHAMA
Drilling Method: MOBILE B-61 DRILL RIG.
HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
Sampling Method: AC = AUGER CUTTINGS, SOIL SAMPLES COLLECTED FROM AUGER CUTTINGS DUE TO RIG POSITION

Start Date: 18 APRIL 1989

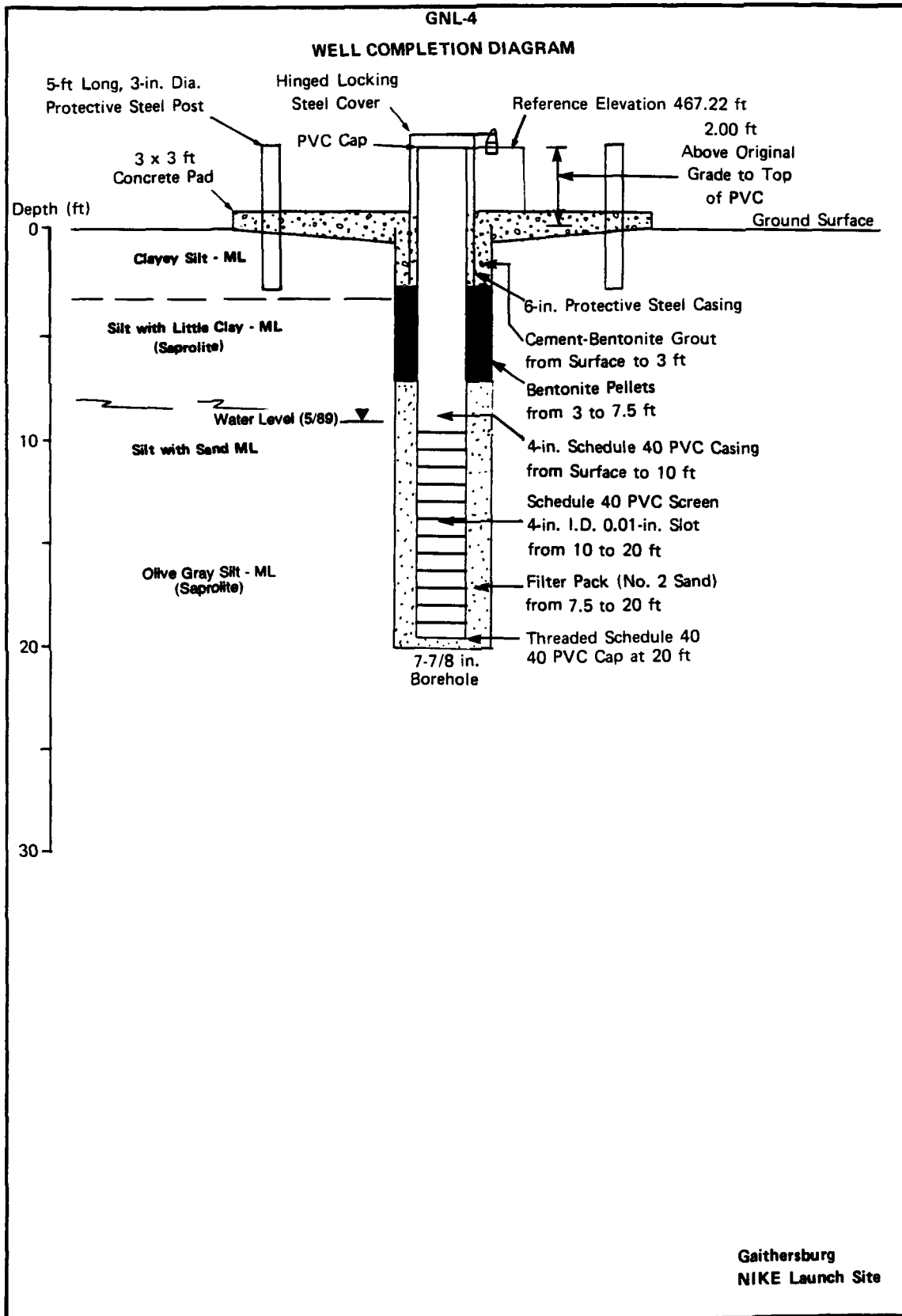
Completion Date: 18 APRIL 1989

SAMP TYPE	IN DRW	IN RCVD	SAMP NO.	SAMP DEPTH	BLOWS/6"	FID PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
									FLAT, DRY, GRASSY AREA, DOWN GRADIENT OF FILTER BED
									SOIL DESCRIPTION
AC			5	21		0	X	ML	OLIVE GRAY (5Y3/2), MOIST, SILT. MINOR ROCK FRAGMENTS, MICACEOUS
									VERY HARD DRILLING @ 20'
									INSTALL MONITORING WELL 4-18-89
							25		NO. 10 SLOT 4" ID PVC SCREEN 20'-10' (10')
									4" PVC RISER CASING 10'-SURFACE (10')
									NO. 2 SAND PACK 20'-7.5' (12.5')
									BENTONITE PELLETS 7.5'-3' (4.5')
									BENT.-CEMENT GROUT 3'-SURFACE (3')
									6" PROTECTIVE STEEL CASING AND LOCKING CAP
							30		
							35		
							40		

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED GHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON COPE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNC-5

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 520.82 FT.

Casing Above Surface: 1.93 FT.

Reference Elevation:

Reference Description: GROUND

Location: GAITHERSBURG CONTROL AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 10 APRIL 1989

Completion Date: 10 APRIL 1989

SAMP TYPE	IN DRWN	IN RCVD	SAMP NO.	SAMP DPTH	BLOWS/6"	PID PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS LEVEL GRASSY FIELD, CLOUDY, MID 40'S
SOIL DESCRIPTION									
							0		
SPT	18	10	1	1	3-4-5	0	X	CL	MODERATE BROWN (5YR4/4), S. MOIST SILTY CLAY, MEDIUM STIFF
							5		
SPT	18	16	2	6	6-7-6	0	X	SM	MODERATE REDDISH BROWN (10R4/6), DRY, SILTY FINE SAND, MEDIUM DENSE, MICACEOUS
							10		
SPT	18	11	3	11	6-8-12	0	X	ML	MOTTLED MODERATE YELLOWISH BROWN (10YR5/4) TO LIGHT BROWN (5YR5/6) S. MOIST, SANDY SILT WITH LITTLE CLAY, SOAPY SCHISTOSE TEXTURE, MICACEOUS, MEDIUM DENSE, SAPROLITE
							15		
SPT	18	14	4	16	7-9-11	0	X	ML	MOTTLED LIGHT BROWN (5YR 5/6) TO GREENISH GRAY (5GY6/1), S. MOIST, CLAYEY SILT WITH TRACE SAND, VERY STIFF, SCHISTOSE TEXTURE, SAPROLITE
							20		

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 OST-OSTENBURG PISTON SAMPLER
 DEN-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.
 FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE SPARKS, MARYLAND 21152 TELE: 301-771-4950

BORING NO. GNC-5

Coordinates:
Geologist: M. ROMANAK
Surface Elevation: 520.82 FT.
Casing Above Surface: 1.93 FT.
Reference Elevation:
Reference Description: GROUND

Location: GAITHERSBURG CONTROL AREA
Job No. 10559.03
Client: USATHAMA
Drilling Method: MOBILE B-61 DRILL RIG,
HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.
SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 10 APRIL 1989

Completion Date: 10 APRIL 1989

SAMP TYPE	IN DRVN	IN RCD	SAMP NO.	SAMP DPTH	BLOWS/6"	PID PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
									LEVEL GRASSY FIELD, CLOUDY, MID 40'S
									SOIL DESCRIPTION
SPT	18	9	5	21	18-11-16	0	X	ML	MOTTLED MODERATE YELLOWISH BROWN (10YR4/4) TO GREENISH GRAY (5GY6/1) S. MOIST, CLAYEY SILT, VERY STIFF, MICACEOUS, SAPROLITE
SPT	18	12	6	26	14-10-16	0	X	ML	MOTTLED MODERATE BROWN (5YR4/4) TO GREENISH GREY (5GY6/1), S. MOIST CLAYEY SILT WITH LITTLE FINE SAND, VERY STIFF, MICACEOUS, MINOR ROCK FRAGMENTS, SAPROLITE
SPT	18	10	7	31	13-12-22	0	X	ML	S. MOIST SAPROLITE, SAME @ ABOVE
SPT	11	19	8	36	21-51/5"	0	X	ML	MOTTLED GRAYISH ORANGE (10YR7/4) TO GREENISH GRAY (5GY6/1), S. MOIST, CLAYEY SILT WITH TRACE SAND, HARD, SCHISTOSE TEXTURE, MICACEOUS. MINOR PHYLLITE ROCK FRAGMENTS, SAPROLITE

SAMPLER TYPE
SS-DRIVEN SPLIT SPOON
SH-PRESSED SHELBY TUBE
OST-OSTENBURG PISTON SAMPLER
DEN-DENISON CORE BARREL SAMPLER
SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION
AFTER HRS.
AFTER 24 HRS.
FT.
FT.
FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LOVETON CIRCLE SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. GNC-5

Coordinates:
Geologist: M. ROMANAK
Surface Elevation: 520.82 FT.
Casing Above Surface: 1.93 FT.
Reference Elevation:
Reference Description: GROUND

Location: GAITHERSBURG CONTROL AREA
Job No. 10559.03
Client: USATHAMA
Drilling Method: MOBILE B-61 DRILL RIG,
HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.
SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 10 APRIL 1989

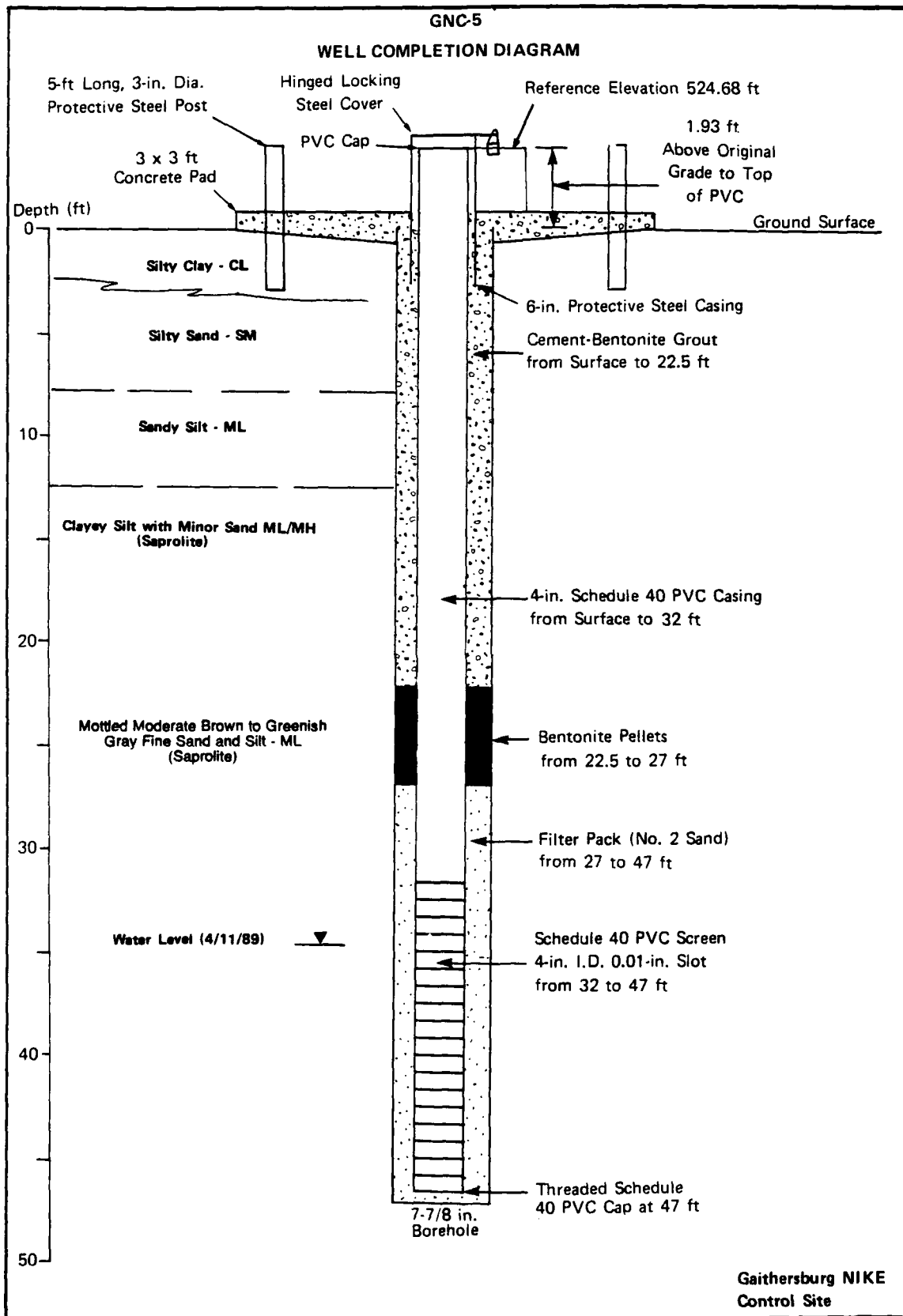
Completion Date: 10 APRIL 1989

SAMP TYPE	IN DRVN	IN RCVD	SAMP NO.	SAMP DEPTH	BLOWS/6"	PID PPM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS
									LEVEL GRASSY FIELD, CLOUDY, MID 40'S
									SOIL DESCRIPTION
SPT	18	16	9	41	16-26-38	0	X	ML	MOTTLED MODERATE YELLOWISH BROWN (10YR4/4), GREENISH GRAY (5GY6/1) TO BLACK (N1), S. MOIST, CLAYEY SILT, HARD, MINOR ROCK FRAGGS., MICACEOUS, SAPROLITE, SPOON WET @ 41'
SPT	18	18	10	46	44-34-50	0	X	SM	MOTTLED GRAYISH ORANGE (10YR7/4) TO GREENISH GREY (5GY6/1), MOIST, SILTY SAND WITH LITTLE CLAY, VERY DENSE, MICACEOUS ROCK FRAGMENTS, SAPROLITE
SPT	18	18	11	51	20-30-38	0	X	ML	GRAYISH ORANGE (10YR7/4), MOIST, CLAYEY SILT WITH LITTLE SAND HARD, METAMORPHIC ROCK FRAGMENTS, MICACEOUS
									AUGERS TO 50', PULLED AUGERS, HOLE CAVED TO 47'
									INSTALLED MONITORING WELL 4-10-89
									NO.10 SLOT 4" PVC SCREEN 47'-32' (15')
									4" ID PVC RISER CASING 32'-SURFACE (32')
									NO.2 SAND PACK 47'-27' (20')
									BENTONITE PELLETS 27'-22.5' (4.5')
									BENT.-CEMENT GROUT 22.5'-SURFACE (22.5')
									6" ID PROTECTIVE STEEL CASING AND LOCKING CAP

SAMPLER TYPE
SS-DRIVEN SPLIT SPOON
SH-PRESSED SHELBY TUBE
OST-OSTENBURG PISTON SAMPLER
DEN-DENISON CORE BARREL SAMPLER
SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
AT COMPLETION
AFTER HRS.
AFTER 24 HRS.

FT.
FT.
FT.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4750

BORING NO. BNC-6

Coordinates:
 Geologist: E. BROWN
 Surface Elevation: 517.45 FT.
 Casing Above Surface: 0.77 FT.
 Reference Elevation:
 Reference Description: GROUND

Location: GAITHERSBURG CONTROL AREA
 Job No. 10559.03
 Client: USATHAMA
 Drilling Method: MOBILE B-61 DRILL RIG,
 HSA: 7 7/8 IN. O.D., 2 1/2 IN. I.D.
 Sampling Method: EFT - 24 IN. LONG, 1 3/8 IN. I.D.
 SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 17 APRIL 1989

Completion Date: 17 APRIL 1989

SOIL TYPE	IN	IN	SAPPHIRE	BLWS/FT	FTD	DEPTH	GRAPH	SURFACE CONDITIONS
TYPE	DRWN	ROUNDING	DEPTH		FTD	FEET	LOGS	GRASSY AREA DOWNGRADIENT OF UST, DRY WELL, ENGINE GEN. BLDG.
						0		SOIL DESCRIPTION
EFT	18	7	1	1	0	0	ML	MODERATE BROWN (5YR4/4), S. MOIST, SILT, MEDIUM STIFF, MICACEOUS
						5		
EFT	18	18	2	5	0	5	ML-SM	DARK YELLOWISH ORANGE (10YR5/6), S. MOIST, SILT AND W.F. SAND, LOOSE
						10		
EFT	18	18	3	11	0	10	ML-SM	DARK YELLOWISH ORANGE (10YR5/6), S. MOIST, SILT AND W.F. SAND, LOOSE
						15		
EFT	18	18	4	16	0	15	ML	MODERATE YELLOW BROWN (10YR5/4), S. MOIST, SILT WITH TRACE W.F. SAND, MICACEOUS, MEDIUM DENSE, SMALL ROCK FRAGMENTS, SAPROLITE
						20		

SAMPLER TYPE
 01-OPEN END SPLIT SPOON
 02-COMPRESSION SHELL TUBE
 03-DETENTED LG PISTON SAMPLER
 04-DETENTED CORE BARREL SAMPLER
 05-STANDARD PENETRATION TEST ASTM D 1586-84

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
 LOG OF SOIL BORING

15 LOVELAND CIRCLE SPARKS, MARYLAND 21152 TELE: 301-771-4400

BORING NO. BNC-7
 Coordinates: Location: GAITHERSBURG CONTROL AREA
 Geologist: S. BROWN Job No. 10589.03
 Client: USATHAMA
 Surface Elevation: 517.45 FT. Drilling Method: MOBILE B-61 DRILL RIG,
 Casing Above Surface: 2.07 FT. BSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
 Reference Elevation: Sampling Method: SST - 24 IN. LONG, 1 3/8 IN. I.D.
 Reference Description: GROUND SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 10 IN. PROF.
 Start Date: 17 APRIL 1989 Completion Date: 17 APRIL 1989

BORING NO.	IN.	FEET	DEPTH	DATE	TIME	SOIL TYPE	MOISTURE	LOG	SURFACE CONDITIONS
									GRASSY AREA DOWNGRADIENT OF 1ST. DRY WELL, ENGINE GEN. BLDG.
									SOIL DESCRIPTION
SPT	18	18	5	01	10-13-19	0	X	ML	LIGHT ORANGE BROWN (5YR5/5), S. MOIST, SILT, HARD, MURDREOUS
SPT	18	18	5	25	23-41-25	0	X	ML	LIGHT BROWN (5YR5/5), S. MOIST, SILT, HARD, SCHISTOSE TEXTURE, SAPROLITE
SPT	18	18	7	01	19-10-22	0	X	ML	DARK YELLOWISH ORANGE (10YR5/6), MOIST, SILT, HARD, SAPROLITE
									COMPOSITE S-7 AND S-8 FOR CHEMICAL ANALYSIS
SPT	18	18	8	16	8-12-15	0	X	ML	DARK YELLOWISH ORANGE (10YR5/6), MOIST, SILT, VERY STIFF, SAPROLITE

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PASSSED BELLY TUBE
 10"-STENBURG PISTON SAMPLER
 DEW-DENISON CORE BARREL SAMPLER
 SST-STANDARD PENETRATION TEST ASTM D 1586-64

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION _____ FT.
 AFTER _____ FT.
 AFTER 24 HRS. _____ FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

15 LIVERON CIRCLE SPRING, MARYLAND 21152 TELE: 301-771-4900

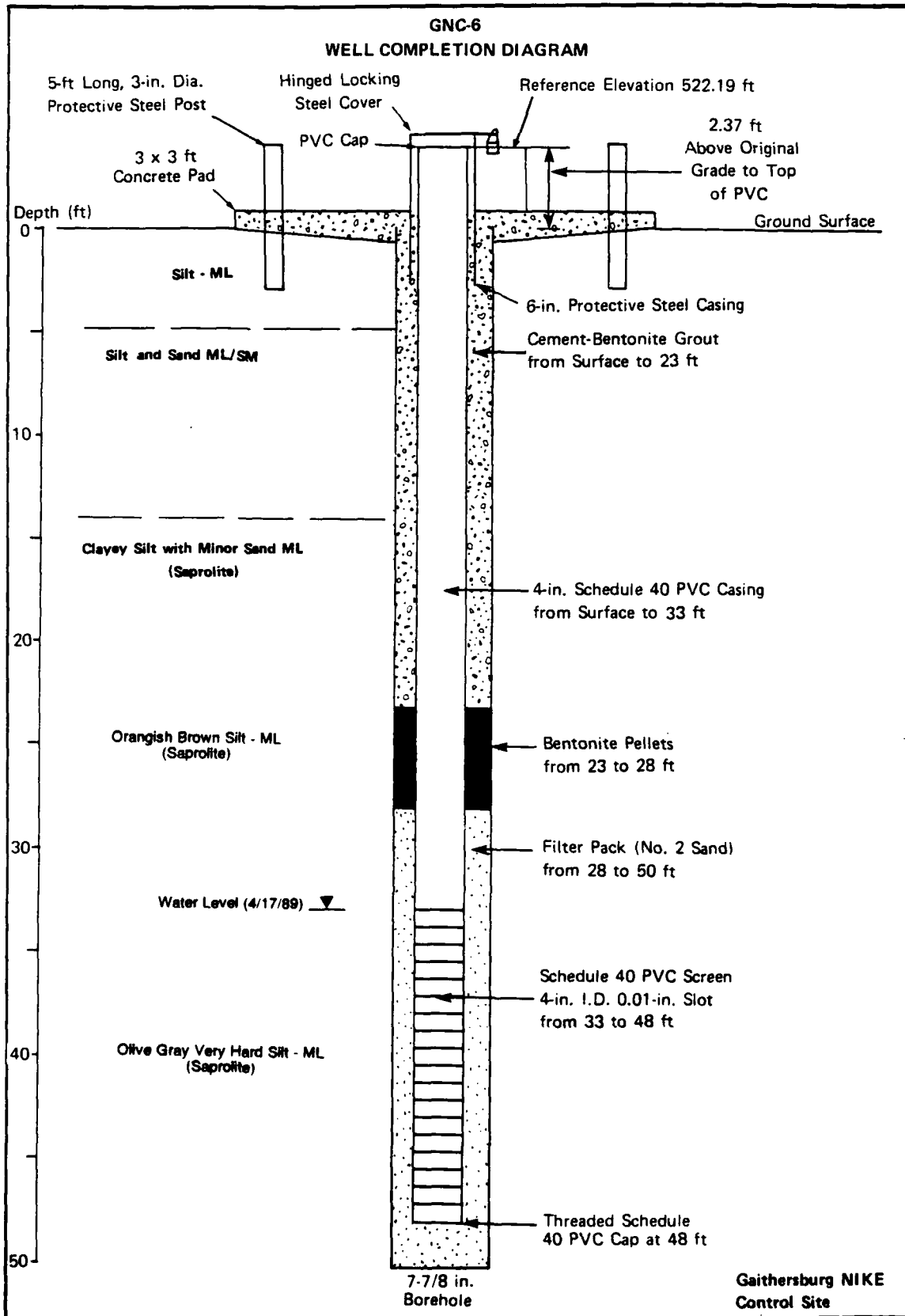
BORING NO. GW-6 Coordinates: Geologist: S. BROWN Surface Elevation: 517.45 FT. Casing Above Surface: 2.07 FT. Reference Elevation: Reference Description: GROUND	Location: GAITHERSBURG CONTROL AREA Job No. 10559.03 Client: USATHAMA Drilling Method: MOBILE B-61 DRILL RIG. RPA: 7 7/8 IN. O.D., 2 3/8 IN. I.D. Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D. SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 20 IN. DROP
Start Date: 17 APRIL 1989	Completion Date: 17 APRIL 1989

DEPTH TYPE	IN	IN	BLKS	DEPTH (INCH)	BLKS e"	FT FROM	DEPTH FEET	GRAPH LOG	SURFACE CONDITIONS GRASSY AREA DOWNGRADIENT OF UST, DRY WELL, ENGINE GEN. BLDG.
SOIL DESCRIPTION									
							40		
SPT	18	5	9	40	51/5"	0	X	ML	LIGHT OLIVE GRAY (5Y5/2), MOIST, SILT, HARD, MICACEOUS
							45		
SPT	18	5	10	45	51/6"	0	X	ML	DARK OLIVE GRAY (5Y5/2), MOIST, SILT, HARD, MICACEOUS, SAPROLITE
							50		AUGERS TO 50 FT. INSTALLED MONITORING WELL 4-17-89 NO. 10 SLOT 4" ID PVC SCREEN 48'-53' (15') 4" PVC RISER CASING 57'-SURFACE TO 110' NO. 2 SAND PACK 50'-53' (15') BENTONITE PELLETS 25'-53' (15') BENTONITE GROUT TO SURFACE (120') 6" PROTECTIVE STEEL CASING AND LOCKING CAP
							55		
							60		

SAMPLES TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 PST-OSTENBURG PISTON SAMPLER
 DPT-DENTON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST - ASTM D 1586-84

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 WATER HRS.
 WATER 24 HRS.

FT.
 IN.



EA ENGINEERING, SCIENCE, AND TECHNOLOGY

LOG OF SOIL BORING

15 LYNETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. BND-7

Coordinates:
 Geologist: M. ROMANAK
 Surface Elevation: 466.68 FT.
 Casing Above Surface: 2.02 FT.
 Reference Elevation:
 Reference Description: GROUND

Location: GAITHERSBURG CONTROL AREA
 Job No. 10559.03
 Client: USATHAMA
 Drilling Method: MOBILE 8-61 DRILL RIG.
 HSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
 Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.
 SPLIT SPOON, DRIVEN 16 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Bore Date: 11 APRIL 1989

Completion Date: 14 APRIL 1989

DEPTH FEET	DEPTH METERS	BLOWS/SF	DEPTH FEET	DEPTH METERS	DEPTH FEET	DEPTH METERS	SURFACE CONDITIONS
							LEVEL GRASSY FIELD, SUNNY HIGH 50'S
							SOIL DESCRIPTION
0	0						
0	0	10-10-6					MODERATE BROWN (5YR4/4), S. MOIST, CLAYEY SILT, MICROBLE SOME GRAVEL @ TOP, VERY STIFF
5	5						
5	5	1-1-2					MODERATE BROWN (5YR4/4), S. MOIST, CLAYEY SILT TO SILTY CLAY, SOFT, MICROBLE, MINOR ROCK FRAGMENTE
10	10						
10	10	15-20-10					MOTTLED GREENISH GRAY (5YR4/4), S. MOIST, CLAYEY SILT, LIGHT BROWN (5YR4/4) S. MOIST, SILTY SAND BAND WITH LITTLE CLAY, SOAPY SCHISTOSE TEXTURE, MICROBLE, HARD, BARRELITE
15	15						COMPETENT BEDROCK (FELTIC SCHIST)
15	15						NO SAMPLE RECOVERED, AUGER REFUSAL @ 15', OFFSET HOLE 10", AUGER REFUSAL @ 17', CHANGE TO LARGER AUGERS 18" I.D. 18" I.D. @ 18', CHANGE AUGERS TO 15" I.D. LEAVE IN HOLE AND CHANGE TO ROLLER BIT, ROLLER BIT TO 20'
20	20						INSTALL MONITORING WELL 4-14-89 NO. 10 SLOT 4" I.D. AND SCREEN 20'-10" I.D. 4" PVC RISER CASING 10'-SURFACE TO 10' MOLE SAND PACK 10'-10" I.D. ECONOMITE PELLETS 3'-E 10' BENT-CEMENT GROUT 5'-SURFACE TO 10', 6" PROTECTIVE STEEL CASING

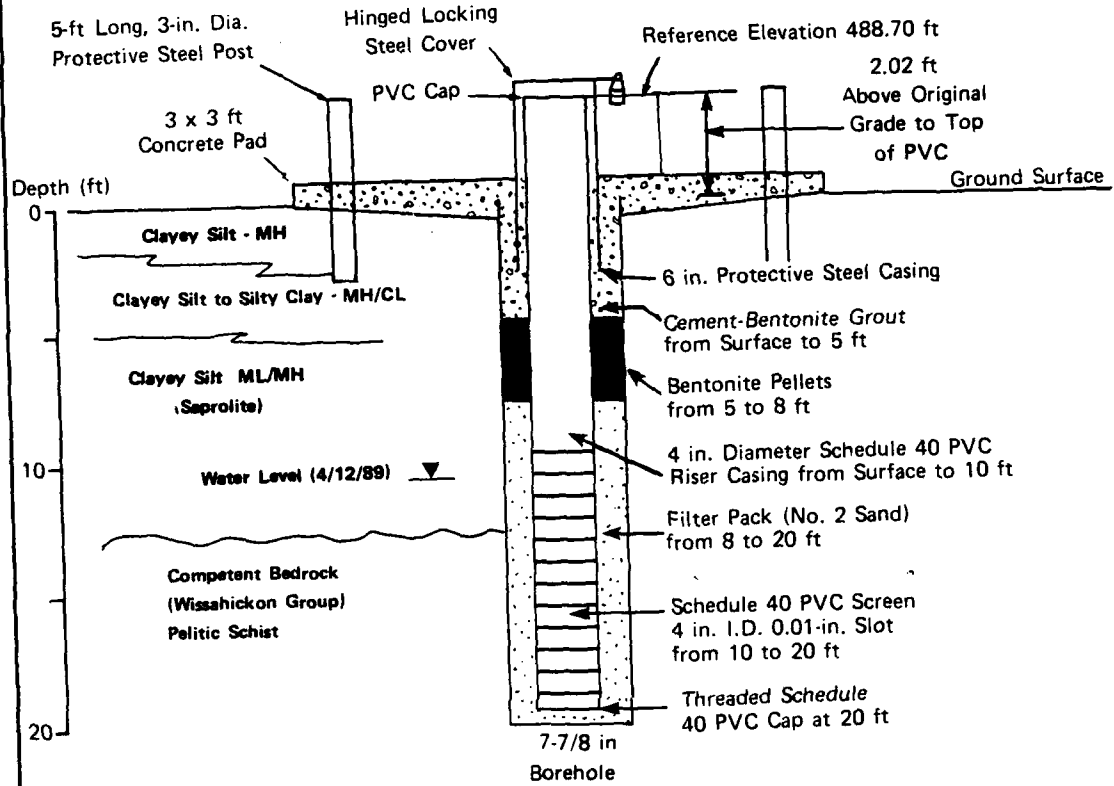
SAMPLER TYPE
 60-CRUISEN SPLIT SPOON
 24-NEEDED SHELBY TUBE
 127-OSTENBURG PISTON SAMPLER
 60-GENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER 48 HRS.
 AFTER 24 HRS.

FT.
 FT.
 FT.

GNC-7

WELL COMPLETION DIAGRAM



Gaithersburg NIKE Control Site



EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

15 LOVETON CIRCLE

SPARKS, MARYLAND 21152

TELE: 301-771-4950

BORING NO. SNC-8

Coordinates:

Geologist: M. ROMANAK

Surface Elevation: 501.49 FT.

Casing Above Surface: 2.35 FT.

Reference Elevation:

Reference Description: BFOUND

Location: GAITHERSBURG CONTROL AREA

Job No. 10559.03

Client: USATHAMA

Drilling Method: MOBILE B-61 DRILL RIG,

PSA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.

Sampling Method: SPT - 34 IN. LONG, 1 3/8 IN. I.D.

SPLIT SPOON, DRIVEN 19 IN. WITH 140 LB. HAMMER, 30 IN. DROP

Start Date: 11 APRIL 1989

Completion Date: 11 APRIL 1989

SPT TYPE	IN DRWN	IN FOUL NO.	EMPT SPACE DEPTH	ELDS/S/S	FTD PPM	DEPTH FEET	GRAFI LOG	SURFACE CONDITIONS
						0		SLIGHTLY SLOPING GRASS FIELD, SUNNY, LOW WIND
SOIL DESCRIPTION								
SPT	18	12	1	1	0	0	MH	MODERATE BROWN (5YR4/4), S. MOIST CLAYEY SILT, MEDIUM STIFF, MINOR MICA
SPT	18	18	2	5	0	5	ML	MOTTLED, LIGHT BROWN (5YR5/6) TO BLACK (M1), S. MOIST, CLAYEY SILT WITH FINE SAND, MICACEOUS, MEDIUM STIFF SAPROLITE
SPT	18	18	3	11	0	10	ML	MOTTLED GREENISH GRAY (5GY5/1), BLACK (M1), LIGHT BROWN (5YR 5/6) S. MOIST, CLAYEY SILT WITH LITTLE FINE SAND, SCARF SCHISTOSE TEXTURE, MICACEOUS, VERY STIFF, SAPROLITE
SPT	18	18	4	16	0	15	SC	MOTTLED MODERATE YELLOW BROWN (10YR5/4), LIGHT BROWN (5YR 5/6), MOIST, CLAYEY FINE SAND WITH SILT, MICACEOUS, HARD
						20		

SAMPLER TYPE
 SS-DRIVEN SPLIT SPOON
 SH-PRESSED SHELBY TUBE
 1ST-DEJENBURG PISTON SAMPLER
 DEW-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST ASTM D 1586-84

GROUND-WATER DEPTH BELOW GROUND SURFACE
 AT COMPLETION
 AFTER 198.
 AFTER 24-48.
 FT.
 FT.
 FT.

EA ENGINEERING, SCIENCE, AND TECHNOLOGY
LOG OF SOIL BORING

LOCATION: GAITHERSBURG CONTROL AREA SPARKS, MARYLAND 21152 TELE: 301-771-4950

BORING NO. B-1-B
 Coordinates: Location: GAITHERSBURG CONTROL AREA
 Geologist: M. ROMANAK Job No. 10559.03
 Surface Elevation: 501.49 FT. Client: USATHAMA
 Casing Above Surface: 1.15 FT. Drilling Method: MOBILE B-61 DRILL PIG.
 Reference Elevation: ASA: 7 7/8 IN. O.D., 3 3/8 IN. I.D.
 Reference Description: GROUND Sampling Method: SPT - 24 IN. LONG, 1 3/8 IN. I.D.
 SPLIT SPOON, DRIVEN 18 IN. WITH 140 LB. HAMMER, 30 IN. DROP
 Start Date: 11 APRIL 1989 Completion Date: 11 APRIL 1989

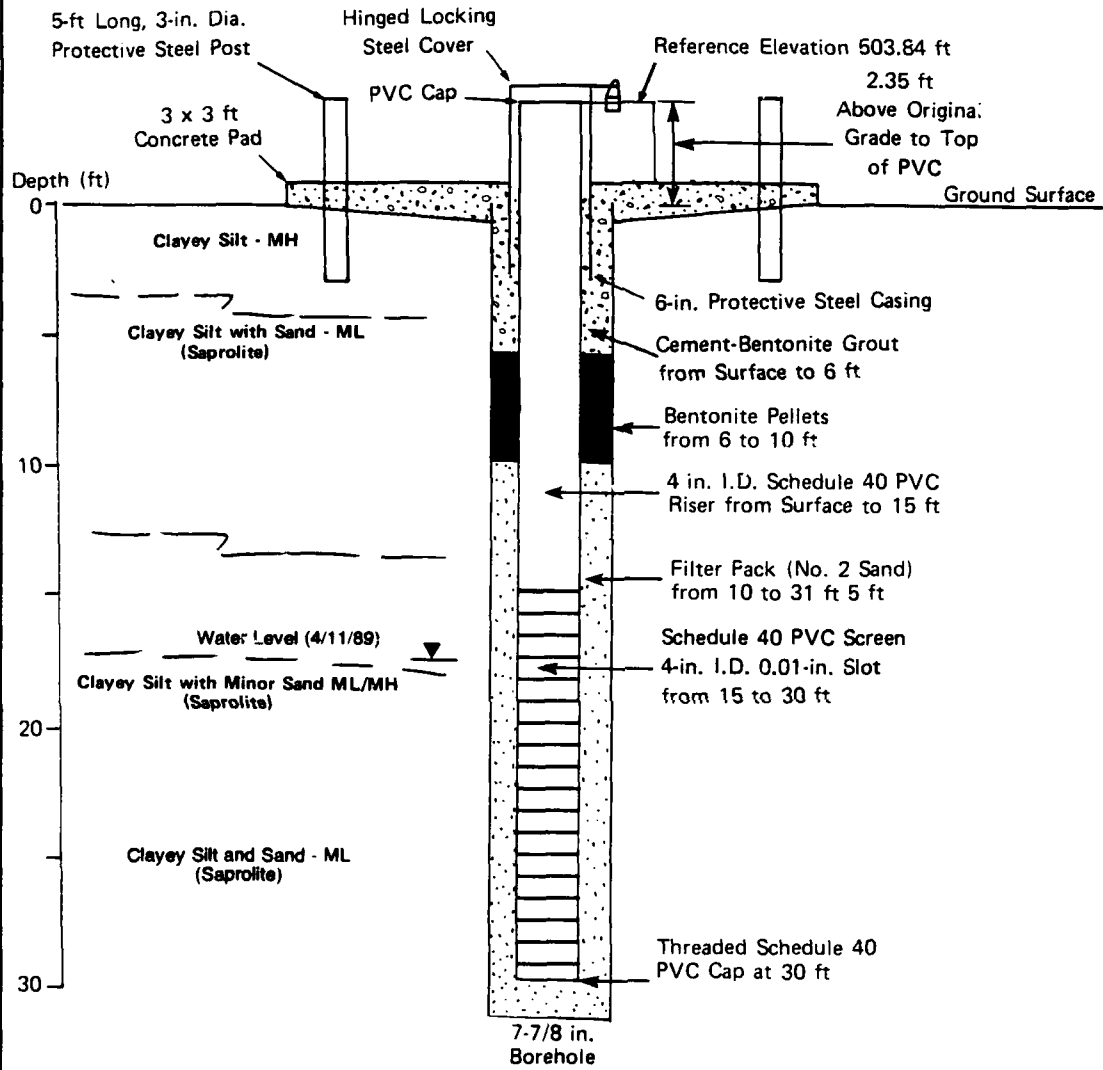
DEPTH FEET	GRAIN SIZE	IN	IN	SHAPE	SOIL NO.	DATE	PLI PER	DEPTH FEET	GRAIN LOG	SURFACE CONDITIONS
										SLIGHTLY SLOPING GRASS FIELD, SUNNY LOW 50% SOIL DESCRIPTION
20										
20	SPT	18	18	5	21	12-12-70	0	X	ML	MODERATE BROWN (5YR4/4) TO GREENISH GRAY (5GY6/1), S. MOIST, CLAYEY SILT WITH LITTLE SAND, HARD, MICACEOUS, SAPPOLITE
25										
25	SPT	18	18	6	28	12-27-17	0	X	ML	MOTTLED, LIGHT BROWN (5Y5/6) TO GREENISH GRAY (5GY6/1), MOIST, CLAYEY SILT WITH FINE SAND, MICACEOUS, HARD, SAPPOLITE
30										
30	SPT	3	3	7	20	12-11-71	0	X	ML	LIGHT BROWN (5Y5/6), MOIST, CLAYEY SILT WITH FINE SAND, HARD MICACEOUS, SAPPOLITE
35										
35										RUBBERS TO 22" REFUSAL, PULLED RUBBERS, HOLE DAVED TO 21"
40										INSTALLED MONITORING WELL 4-11-89
40										NO. 10 SLOT 4" ID PVC SCREEN 30'-15" (15') 4" ID PVC RISER CASING 15'-SURFACE (15') NO. 2 SAND PACK 21'-15" (21') BENTONITE PELLETS 10'-15" (4') BENT.-CEMENT GROUT 6'-SURFACE (6') 5" PROTECTIVE STEEL CASING AND LOCKING CAP

SAMPLER TYPE
 33-DRIVEN SPLIT SPOON
 5H-PRESSED SHELBY TUBE
 35T-OSTENBURG PISTON SAMPLER
 60H-DENISON CORE BARREL SAMPLER
 SPT-STANDARD PENETRATION TEST (ASTM D 1586-84)

GROUND-WATER DEPTH BELOW GRADE
 AT COMPLETION
 AFTER HFS.
 AFTER 24 HFS.
 FT.
 FT.

GNC-8

WELL COMPLETION DIAGRAM



Gaithersburg NIKE
Control Site



APPENDIX B
FIELD SAMPLING RECORDS



FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE LAUNCH SITE

Well No: GNL-1 Gauge Date: 5-25-89 Time: 13:49

Weather: Sunny, Low 70's

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick up/down (ft): _____

(1) Well Depth (ft): 46.4 Purge Date: 5-25-84 Time: 13:50

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub pump

(3) Depth to Water (ft): 31.5 Purge Rate (gpm): 1.8

(4) Liquid Depth [(1)-(2)]: 14.9 Purge Time (min): 43

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 77

Did Well Pump Dry? Describe: yes, purged @ 5gpm for 5 min. - well purged dry. Total purged 77 + 25 = 102 gal.

Samplers: _____

Sampling Date: 5-25-89 Time: 1206

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp 15°C, SG = 90, pH = 5.70



FIELD RECORD OF GROUND-WATER SAMPLING

Site: BATHERSBURG NIKE LAUNCH SITE

Well No: GNL-2 Gauge Date: 5-25-89 Time: _____

Weather: SUNNY

Well Condition: GOOD

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick up/down (ft): _____

(1) Well Depth (ft): 37.9 Purge Date: 5-25-89 Time: _____

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub. pump

(3) Depth to Water (ft): 23.05 Purge Rate (gpm): see below

(4) Liquid Depth [(1)-(2)]: 14.85 Purge Time (min): 20.5

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 68.5

Did Well Pump Dry? Describe: 8.5 min @ 5gpm = 42.5 gal.

4 min. @ 2.5gpm = 10 gal., 8 min. @ 2gpm = 16 gal.

Samplers: _____

Sampling Date: 5-25-89 Time: 1743

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp. = 15°C, SC = 45, pH = 5.25



FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE LAUNCH SITE

Well No: GNL-3 Gauge Date: 5-25-89 Time: _____

Weather: Sunny

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick up/down (ft): _____

(1) Well Depth (ft): 46.6 Purge Date: 5-25-89 Time: _____

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub pump

(3) Depth to Water (ft): 31.73 Purge Rate (gpm): See below

(4) Liquid Depth [(1)-(2)]: 14.87 Purge Time (min): 30

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 87.5

Did Well Pump Dry? Describe: 5 min @ 5 gpm = 25 gal.

well purged dry, 25 min @ 2.5 gpm = 62.5 gal

Samplers: _____

Sampling Date: 5-25-89 Time: _____

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

T = 18°C, SC = 60, PH = 5.34



FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE LAUNCH SITE

Well No: GNL-4 Gauge Date: 5-25-89 Time: _____

Weather: partly cloudy

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick up/down (ft): _____

(1) Well Depth (ft): 21.9 Purge Date: 5-25-89 Time: _____

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub. pump

(3) Depth to Water (ft): 8.55 Purge Rate (gpm): see below

(4) Liquid Depth [(1)-(2)]: 13.35 Purge Time (min): 10.5

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 65

Did Well Pump Dry? Describe: 2.5 min. @ 10 gpm = 25 gal.

8 min. @ 5 gpm = 40 gal.

Samplers: _____

Sampling Date: 5-25-89 Time: _____

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp = 17°C, SC = 50, pH = 5.70



FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE CONTROL AREA

Well No: GNC-5 Gauge Date: 5-25-89 Time: _____

Weather: Sunny, High 60's

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: _____ Measurement Reference: _____

Stick up/down (ft): _____

(1) Well Depth (ft): _____ Purge Date: 5-25-89 Time: 845

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub pump

(3) Depth to Water (ft): _____ Purge Rate (gpm): 5 gpm

(4) Liquid Depth [(1)-(2)]: _____ Purge Time (min): 40

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 200

Did Well Pump Dry? Describe: No

Samplers: _____

Sampling Date: 5-25-89 Time: 1545

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp = 17°C, SC = 39, pH = 5.19



FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE CONTROL AREA

Well No: GNC-6 Gauge Date: 5-25-89 Time: _____

Weather: Sunny, high 60's

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: _____ Measurement Reference: _____

Stick up/down (ft): _____

(1) Well Depth (ft): _____ Purge Date: _____ Time: 856

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub. pump

(3) Depth to Water (ft): _____ Purge Rate (gpm): 10 gpm

(4) Liquid Depth [(1)-(2)]: _____ Purge Time (min): 50

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 500

Did Well Pump Dry? Describe: NO

Samplers: _____

Sampling Date: 5-25-89 Time: 1546

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

T = 18.5, SC = 38, pH = 5.62



FIELD RECORD OF GROUND-WATER SAMPLING

Site: CAITHERSBURG NIKE CONTROL AREA

Well No: GMG-7 Gauge Date: 5-25-89 Time: _____

Weather: Sunny

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick up/Down (ft): _____

(1) Well Depth (ft): 21.5 Purge Date: _____ Time: _____

(2) Depth to Liquid (ft): _____ Purge Method: 4" Bailor

(3) Depth to Water (ft): 13.5 Purge Rate (gpm): _____

(4) Liquid Depth [(1)-(2)]: 8 Purge Time (min): _____

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 26.5

Did Well Pump Dry? Describe: yes, after 10 gal.;

wait 15 min - well purged dry after 10 gal; removed
additional 6.5 gal.

Samplers: _____

Sampling Date: 5-25-89 Time: _____

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp = 17°C, SG = 250, pH = 5.84



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FIELD RECORD OF GROUND-WATER SAMPLING

Site: GAITHERSBURG NIKE CONTROL AREA

Well No: GNC-8 Gauge Date: 5-25-89 Time: 1056

Weather: Sunny

Well Condition: Good

Well Diameter (inches): 4"

Odor (describe): NONE

Sounding Method: W.L.I. Measurement Reference: T/PVC

Stick (up/down) (ft): _____

(1) Well Depth (ft): 31.35 Purge Date: 5-25-89 Time: 1056

(2) Depth to Liquid (ft): _____ Purge Method: 4" sub. pump

(3) Depth to Water (ft): 17.48 Purge Rate (gpm): 1.6 gpm

(4) Liquid Depth [(1)-(2)]: _____ Purge Time (min): 17

(5) Liquid Volume [(4)xF] (gal): _____ Purge Volume (gal): 30.6

Did Well Pump Dry? Describe: yes

Samplers: _____

Sampling Date: _____ Time: _____

Sample Type: _____ Split? _____ With Whom: _____

Comments and Observations: _____

Temp = 16°C, σ_t = 199, pH = 5.74

APPENDIX C
SLUG TEST DATA

IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-7 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 33.10 (Ft)
 H(0) : 6.55 (Ft)
 T(0) : .03 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(0)
.0000	DA: 1 15:08	39.64	6.54	-.0333	.998
.0077	15:08	39.64	6.54	-.0300	.998
.0088	15:08	39.64	6.54	-.0267	.998
.0099	15:08	39.64	6.54	-.0234	.998
.0133	15:08	39.64	6.54	-.0200	.998
.0166	15:08	39.64	6.54	-.0167	.998
.0200	15:08	39.64	6.54	-.0133	.998
.0233	15:08	39.64	6.54	-.0100	.998
.0266	15:08	39.64	6.54	-.0067	.998
.0300	15:08	39.64	6.54	-.0033	.998
.0333	15:08	39.65	6.55	.0000	1.000
.0500	15:08	39.62	6.52	.0167	.995
.0666	15:08	39.53	6.43	.0333	.982
.0833	15:08	39.45	6.35	.0500	.969
.1000	15:08	39.37	6.27	.0667	.957
.1166	15:08	39.29	6.19	.0833	.945
.1333	15:08	39.22	6.12	.1000	.934
.1500	15:08	39.13	6.03	.1167	.921
.1666	15:08	39.06	5.96	.1333	.910
.1833	15:08	38.97	5.87	.1500	.896
.2000	15:08	38.89	5.79	.1667	.884
.2166	15:08	38.82	5.72	.1833	.873
.2333	15:08	38.74	5.64	.2000	.861
.2500	15:08	38.67	5.57	.2167	.850
.2666	15:08	38.60	5.50	.2333	.840
.2833	15:08	38.54	5.44	.2500	.831
.3000	15:08	38.48	5.38	.2667	.821
.3166	15:08	38.43	5.33	.2833	.814
.3333	15:08	38.38	5.28	.3000	.806
.4167	15:08	38.15	5.05	.3834	.771
.5000	15:08	37.93	4.83	.4667	.737
.5833	15:08	37.71	4.61	.5500	.704
.6667	15:08	37.51	4.41	.6334	.673
.7500	15:08	37.29	4.19	.7167	.640

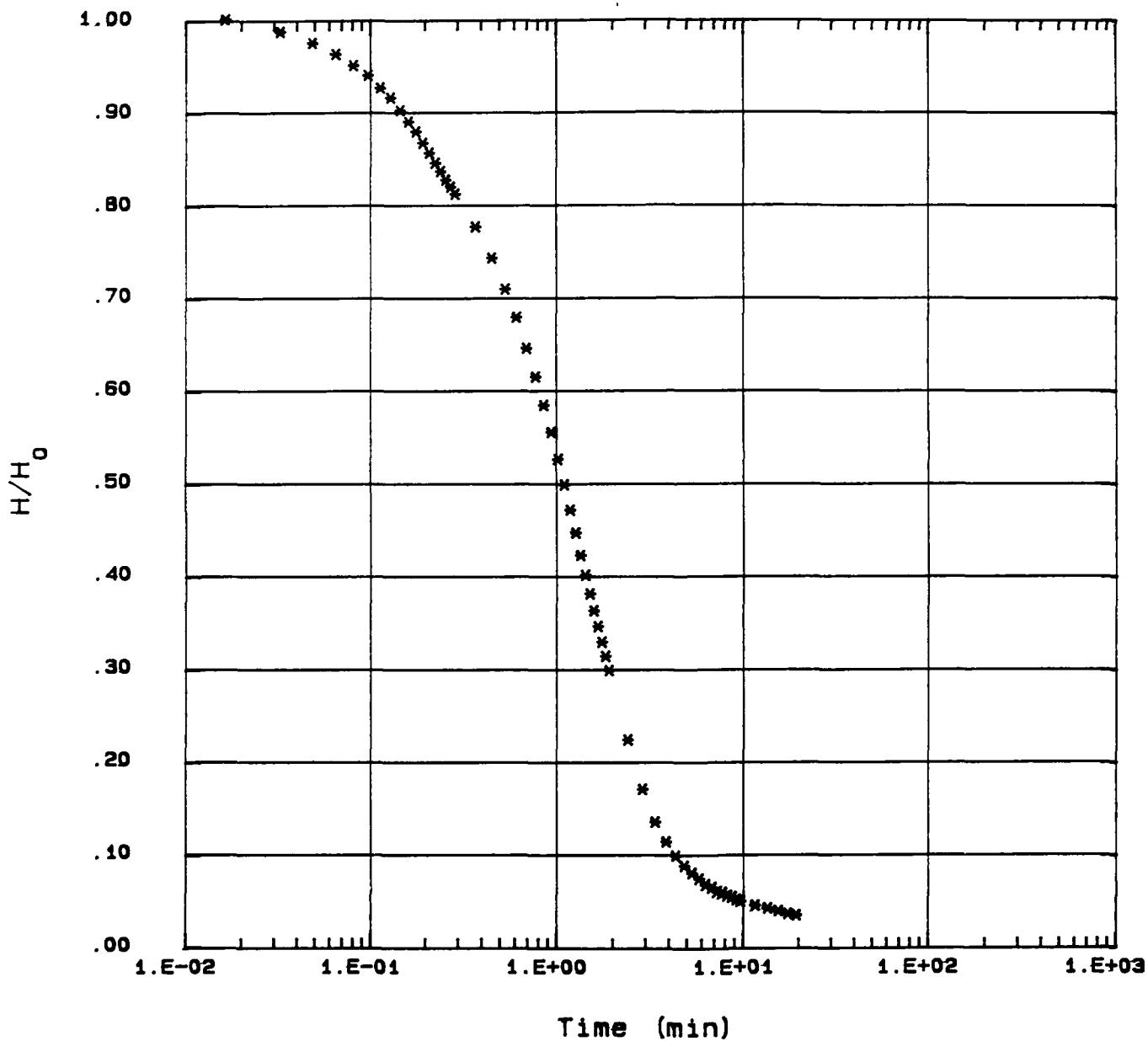
GNL-3 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 33.10 (Ft)
 H(O) : 6.55 (Ft)
 T(O) : .03 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.3333	15:08	37.09	3.99	.8000	.609
.9167	15:08	36.89	3.79	.8834	.579
1.0000	15:08	36.70	3.60	.9667	.550
1.0833	15:09	36.51	3.41	1.0500	.521
1.1667	15:09	36.33	3.23	1.1334	.493
1.2500	15:09	36.15	3.05	1.2167	.466
1.3333	15:09	35.99	2.89	1.3000	.441
1.4166	15:09	35.83	2.73	1.3833	.417
1.5000	15:09	35.69	2.59	1.4667	.395
1.5833	15:09	35.56	2.46	1.5500	.376
1.6667	15:09	35.44	2.34	1.6334	.357
1.7500	15:09	35.33	2.23	1.7167	.340
1.8333	15:09	35.22	2.12	1.8000	.324
1.9167	15:09	35.12	2.02	1.8834	.308
2.0000	15:09	35.02	1.92	1.9667	.293
2.5000	15:10	34.53	1.43	2.4667	.218
3.0000	15:10	34.18	1.08	2.9667	.165
3.5000	15:11	33.95	.85	3.4667	.130
4.0000	15:11	33.81	.71	3.9667	.108
4.5000	15:12	33.71	.61	4.4667	.093
5.0000	15:12	33.64	.54	4.9667	.082
5.5000	15:13	33.59	.49	5.4667	.075
6.0000	15:13	33.55	.45	5.9667	.069
6.5000	15:14	33.51	.41	6.4667	.063
7.0000	15:14	33.49	.39	6.9667	.060
7.5000	15:15	33.46	.36	7.4667	.055
8.0000	15:15	33.45	.35	7.9667	.053
8.5000	15:16	33.43	.33	8.4667	.050
9.0000	15:16	33.42	.32	8.9667	.049
9.5000	15:17	33.40	.30	9.4667	.046
10.0000	15:17	33.39	.29	9.9667	.044
12.0000	15:19	33.36	.26	11.9667	.040
14.0000	15:21	33.34	.24	13.9667	.037
16.0000	15:23	33.32	.22	15.9667	.034
18.0000	15:25	33.30	.20	17.9667	.031
20.0000	15:27	33.29	.19	19.9667	.029

GNL-3 SLUG TEST 1



IN-SITU INC. PERMIT DATA MANAGEMENT PACKAGE

GNL-2 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 15.18 (Ft)
 H(O) : 3.58 (Ft)
 T(O) : 1.00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.0000	DAY 15:35	40.78	5.58	-.0033	1.000
.0033	15:35	40.76	5.58	.0000	1.000
.0066	15:35	40.73	5.55	.0033	.995
.0099	15:35	40.72	5.54	.0066	.993
.0133	15:35	40.71	5.53	.0100	.991
.0166	15:35	40.69	5.51	.0133	.987
.0200	15:35	40.69	5.51	.0167	.987
.0233	15:35	40.66	5.48	.0200	.982
.0266	15:35	40.65	5.47	.0233	.980
.0300	15:35	40.63	5.45	.0267	.977
.0333	15:35	40.62	5.44	.0300	.975
.0500	15:35	40.55	5.37	.0467	.962
.0666	15:35	40.49	5.31	.0633	.952
.0833	15:35	40.44	5.26	.0800	.943
.1000	15:35	40.39	5.21	.0967	.934
.1166	15:35	40.36	5.18	.1133	.928
.1333	15:35	40.30	5.12	.1300	.918
.1500	15:35	40.25	5.07	.1467	.909
.1666	15:35	40.22	5.04	.1633	.903
.1833	15:35	40.18	5.00	.1800	.896
.2000	15:35	40.14	4.96	.1967	.889
.2166	15:35	40.11	4.93	.2133	.884
.2333	15:35	40.07	4.89	.2300	.876
.2500	15:35	40.03	4.85	.2467	.869
.2666	15:35	39.99	4.81	.2633	.862
.2833	15:35	39.95	4.77	.2800	.855
.3000	15:35	39.91	4.73	.2967	.848
.3166	15:35	39.87	4.69	.3133	.841
.3333	15:35	39.83	4.65	.3300	.833
.4167	15:35	39.65	4.47	.4134	.801
.5000	15:35	39.46	4.28	.4967	.767
.5833	15:35	39.28	4.10	.5800	.735
.6667	15:35	39.10	3.92	.6634	.703
.7500	15:35	38.92	3.74	.7467	.670

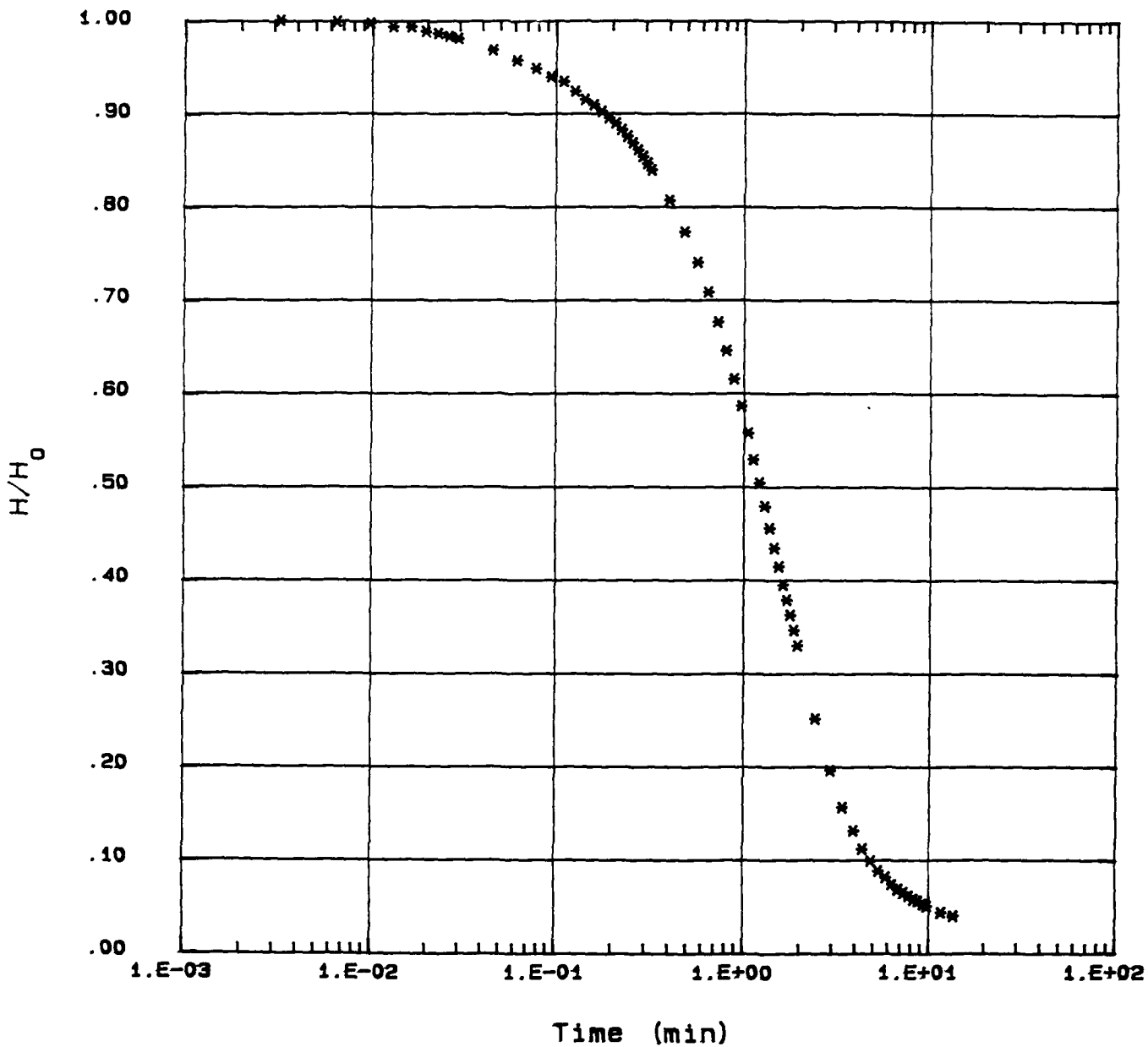
GNL-3 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 35.18 (Ft)
 H(O) : 5.58 (Ft)
 T(O) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.3333	15:35	38.75	3.57	.8300	.640
.9167	15:35	38.58	3.40	.9134	.609
1.0000	15:35	38.42	3.24	.9967	.581
1.0833	15:36	38.26	3.08	1.0800	.552
1.1667	15:36	38.10	2.92	1.1634	.523
1.2500	15:36	37.96	2.76	1.2467	.498
1.3333	15:36	37.82	2.64	1.3300	.473
1.4166	15:36	37.69	2.51	1.4133	.450
1.5000	15:36	37.57	2.39	1.4967	.428
1.5833	15:36	37.46	2.28	1.5800	.409
1.6667	15:36	37.35	2.17	1.6634	.389
1.7500	15:36	37.26	2.08	1.7467	.373
1.8333	15:36	37.17	1.99	1.8300	.357
1.9167	15:36	37.08	1.90	1.9134	.341
2.0000	15:36	36.99	1.81	1.9967	.324
2.5000	15:37	36.55	1.37	2.4967	.246
3.0000	15:37	36.24	1.06	2.9967	.190
3.5000	15:38	36.02	.84	3.4967	.151
4.0000	15:38	35.88	.70	3.9967	.125
4.5000	15:39	35.77	.59	4.4967	.106
5.0000	15:39	35.70	.52	4.9967	.093
5.5000	15:40	35.64	.46	5.4967	.082
6.0000	15:40	35.60	.42	5.9967	.075
6.5000	15:41	35.56	.38	6.4967	.068
7.0000	15:41	35.53	.35	6.9967	.063
7.5000	15:42	35.51	.33	7.4967	.059
8.0000	15:42	35.49	.31	7.9967	.056
8.5000	15:43	35.47	.29	8.4967	.052
9.0000	15:43	35.46	.28	8.9967	.050
9.5000	15:44	35.44	.26	9.4967	.047
10.0000	15:44	35.43	.25	9.9967	.045
12.0000	15:46	35.39	.21	11.9967	.038
14.0000	15:48	35.37	.19	13.9967	.034

GNL-3 SLUG TEST 2



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

3NL-4 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 9.45 (Ft)
 H(0) : 3.19 (Ft)
 T(0) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(0)
.0000	DAY 1 13:29	12.64	3.19	.0000	1.000
.0033	13:29	12.63	3.18	.0033	.997
.0066	13:29	12.60	3.15	.0066	.987
.0099	13:29	12.58	3.13	.0099	.981
.0133	13:29	12.56	3.11	.0133	.975
.0166	13:29	12.54	3.09	.0166	.969
.0200	13:29	12.52	3.07	.0200	.962
.0233	13:29	12.49	3.04	.0233	.953
.0266	13:29	12.48	3.03	.0266	.950
.0300	13:29	12.46	3.01	.0300	.944
.0333	13:29	12.43	2.98	.0333	.934
.0500	13:29	12.34	2.89	.0500	.906
.0666	13:29	12.26	2.81	.0666	.881
.0833	13:29	12.19	2.74	.0833	.859
.1000	13:29	12.12	2.67	.1000	.837
.1166	13:29	12.06	2.61	.1166	.818
.1333	13:29	12.00	2.55	.1333	.799
.1500	13:29	11.95	2.50	.1500	.784
.1666	13:29	11.90	2.45	.1666	.768
.1833	13:29	11.85	2.40	.1833	.752
.2000	13:29	11.81	2.36	.2000	.740
.2166	13:29	11.77	2.32	.2166	.727
.2333	13:29	11.73	2.28	.2333	.715
.2500	13:29	11.70	2.25	.2500	.705
.2666	13:29	11.66	2.21	.2666	.693
.2833	13:29	11.63	2.18	.2833	.683
.3000	13:29	11.60	2.15	.3000	.674
.3166	13:29	11.57	2.12	.3166	.665
.3333	13:29	11.54	2.09	.3333	.655
.4167	13:29	11.39	1.94	.4167	.608
.5000	13:29	11.24	1.79	.5000	.561
.5833	13:29	11.09	1.64	.5833	.514
.6667	13:29	10.96	1.51	.6667	.473
.7500	13:29	10.82	1.37	.7500	.429

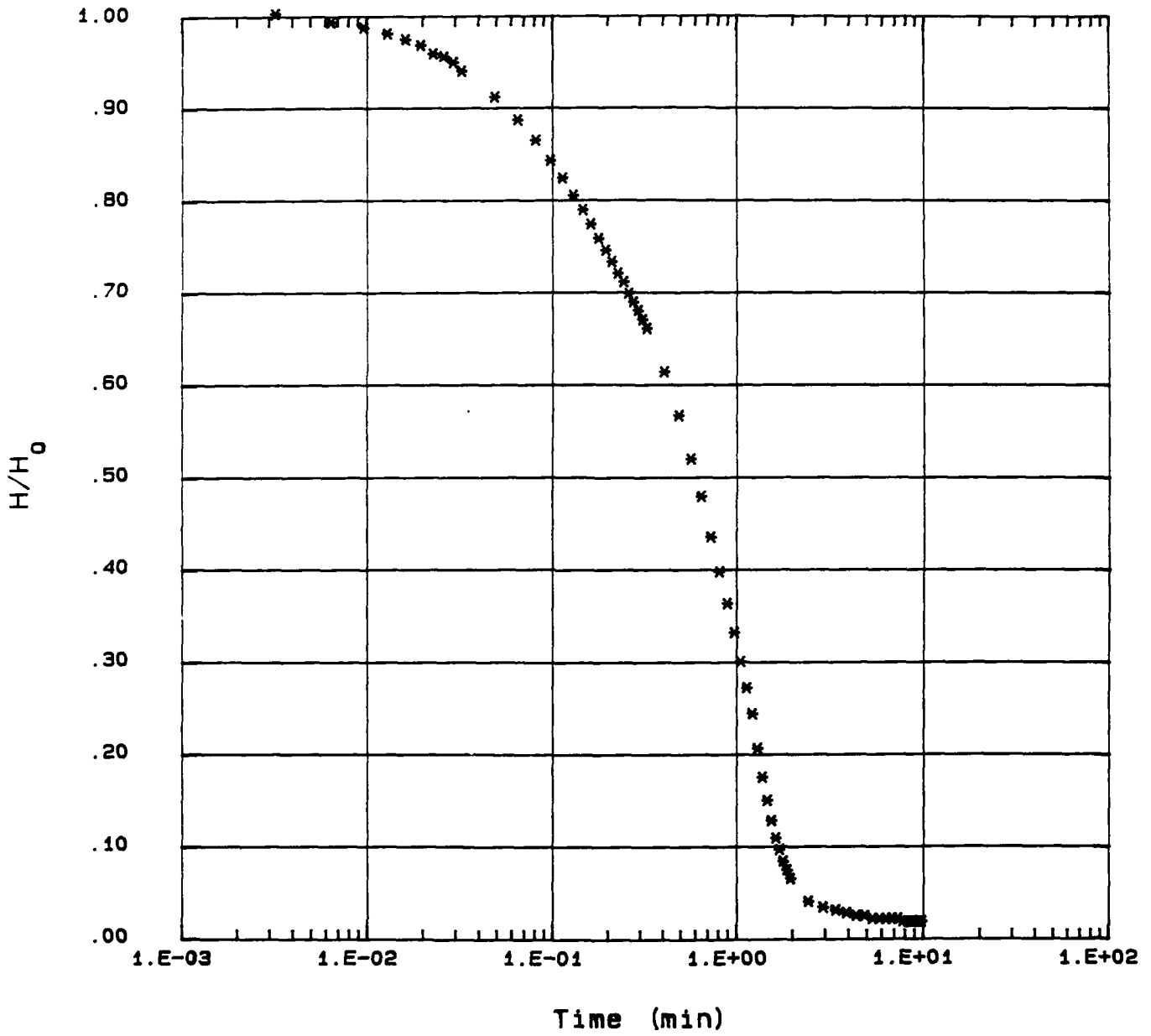
GNL-4 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 9.45 (Ft)
 H(O) : 3.19 (Ft)
 T(O) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.8333	13:29	10.70	1.25	.8333	.392
.9167	13:29	10.59	1.14	.9167	.357
1.0000	13:30	10.49	1.04	1.0000	.326
1.0833	13:30	10.39	.94	1.0833	.295
1.1667	13:30	10.30	.85	1.1667	.266
1.2500	13:30	10.21	.76	1.2500	.238
1.3333	13:30	10.09	.64	1.3333	.201
1.4166	13:30	9.99	.54	1.4166	.169
1.5000	13:30	9.91	.46	1.5000	.144
1.5833	13:30	9.84	.39	1.5833	.122
1.6667	13:30	9.78	.33	1.6667	.103
1.7500	13:30	9.74	.29	1.7500	.091
1.8333	13:30	9.70	.25	1.8333	.078
1.9167	13:30	9.67	.22	1.9167	.069
2.0000	13:31	9.64	.19	2.0000	.060
2.5000	13:31	9.56	.11	2.5000	.034
3.0000	13:32	9.54	.09	3.0000	.028
3.5000	13:32	9.53	.08	3.5000	.025
4.0000	13:33	9.52	.07	4.0000	.022
4.5000	13:33	9.51	.06	4.5000	.019
5.0000	13:34	9.51	.06	5.0000	.019
5.5000	13:34	9.50	.05	5.5000	.016
6.0000	13:35	9.50	.05	6.0000	.016
6.5000	13:35	9.50	.05	6.5000	.016
7.0000	13:36	9.50	.05	7.0000	.016
7.5000	13:36	9.50	.05	7.5000	.016
8.0000	13:37	9.49	.04	8.0000	.013
8.5000	13:37	9.49	.04	8.5000	.013
9.0000	13:38	9.49	.04	9.0000	.013
9.5000	13:38	9.49	.04	9.5000	.013
10.0000	13:39	9.49	.04	10.0000	.013

GNL-4 SLUG TEST 1



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-4 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 9.45 (Ft)
 H(0) : 3.37 (Ft)
 T(0) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(0)
.0000	13:43	12.82	3.37	.0000	1.000
.0033	13:43	12.80	3.35	.0033	.994
.0066	13:43	12.78	3.33	.0066	.988
.0099	13:43	12.76	3.31	.0099	.982
.0133	13:43	12.74	3.29	.0133	.976
.0166	13:43	12.72	3.27	.0166	.970
.0200	13:43	12.71	3.26	.0200	.967
.0233	13:43	12.69	3.24	.0233	.961
.0266	13:43	12.67	3.22	.0266	.955
.0300	13:43	12.66	3.21	.0300	.953
.0333	13:43	12.64	3.19	.0333	.947
.0500	13:43	12.56	3.11	.0500	.923
.0666	13:43	12.49	3.04	.0666	.902
.0833	13:43	12.41	2.96	.0833	.878
.1000	13:43	12.34	2.89	.1000	.858
.1166	13:43	12.27	2.82	.1166	.837
.1333	13:43	12.20	2.75	.1333	.816
.1500	13:43	12.13	2.68	.1500	.795
.1666	13:43	12.07	2.62	.1666	.777
.1833	13:43	12.01	2.56	.1833	.760
.2000	13:43	11.96	2.51	.2000	.745
.2166	13:43	11.91	2.46	.2166	.730
.2333	13:43	11.86	2.41	.2333	.715
.2500	13:43	11.82	2.37	.2500	.703
.2666	13:43	11.78	2.33	.2666	.691
.2833	13:43	11.75	2.30	.2833	.682
.3000	13:43	11.71	2.26	.3000	.671
.3166	13:43	11.68	2.23	.3166	.662
.3333	13:43	11.65	2.20	.3333	.653
.4167	13:43	11.50	2.05	.4167	.608
.5000	13:43	11.35	1.90	.5000	.564
.5833	13:43	11.21	1.76	.5833	.522
.6667	13:43	11.07	1.62	.6667	.481
.7500	13:43	10.94	1.49	.7500	.442

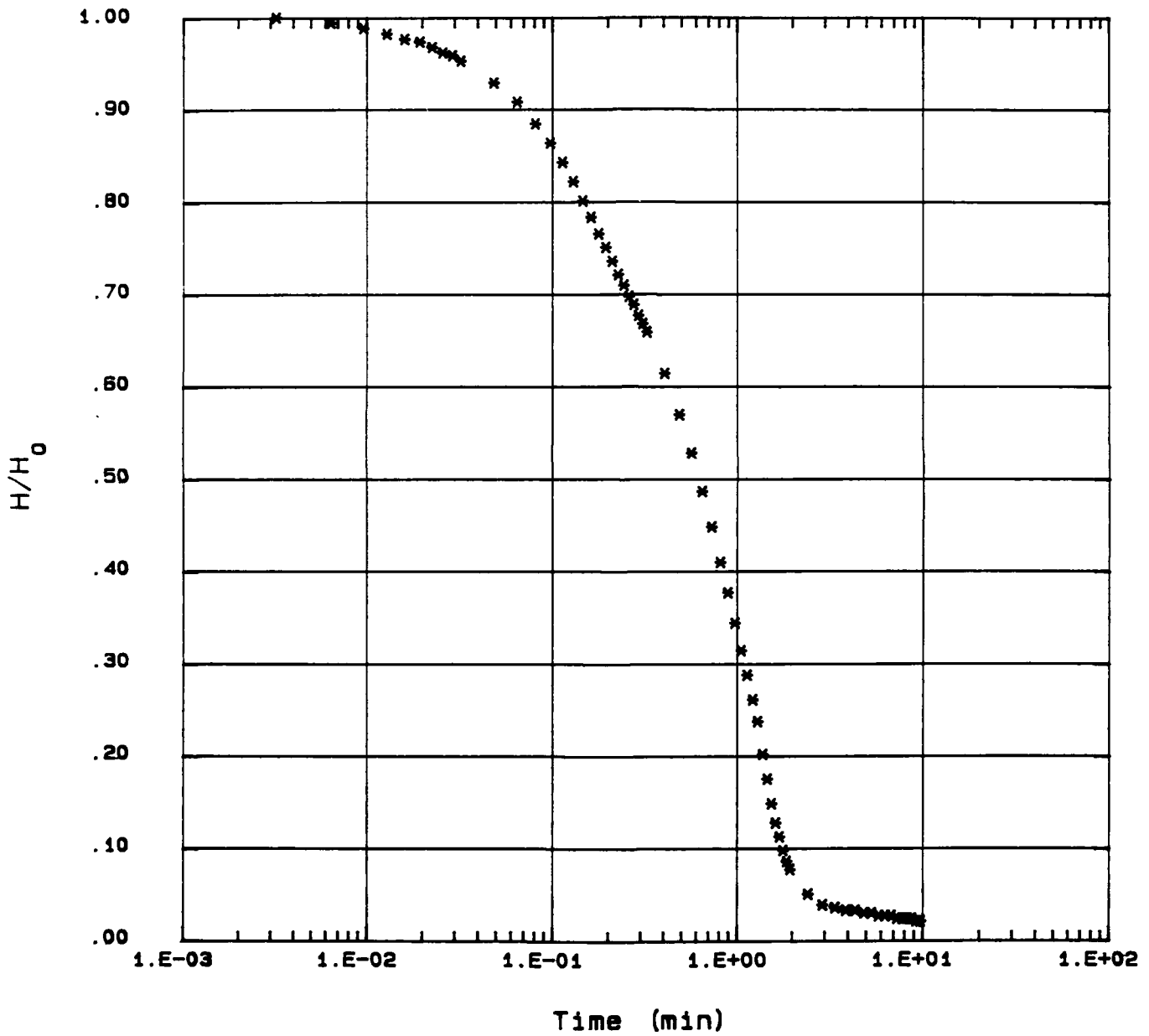
GNL-4 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 9.45 (Ft)
 H(O) : 3.37 (Ft)
 T(O) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.8333	13:43	10.81	1.36	.8333	.404
.9167	13:43	10.70	1.25	.9167	.371
1.0000	13:44	10.59	1.14	1.0000	.338
1.0833	13:44	10.49	1.04	1.0833	.309
1.1667	13:44	10.40	.95	1.1667	.282
1.2500	13:44	10.31	.86	1.2500	.255
1.3333	13:44	10.23	.78	1.3333	.231
1.4166	13:44	10.11	.66	1.4166	.196
1.5000	13:44	10.02	.57	1.5000	.169
1.5833	13:44	9.93	.48	1.5833	.142
1.6667	13:44	9.86	.41	1.6667	.122
1.7500	13:44	9.81	.36	1.7500	.107
1.8333	13:44	9.76	.31	1.8333	.092
1.9167	13:44	9.72	.27	1.9167	.080
2.0000	13:45	9.69	.24	2.0000	.071
2.5000	13:45	9.60	.15	2.5000	.045
3.0000	13:46	9.56	.11	3.0000	.033
3.5000	13:46	9.55	.10	3.5000	.030
4.0000	13:47	9.54	.09	4.0000	.027
4.5000	13:47	9.54	.09	4.5000	.027
5.0000	13:48	9.53	.08	5.0000	.024
5.5000	13:48	9.53	.08	5.5000	.024
6.0000	13:49	9.52	.07	6.0000	.021
6.5000	13:49	9.52	.07	6.5000	.021
7.0000	13:50	9.52	.07	7.0000	.021
7.5000	13:50	9.51	.06	7.5000	.018
8.0000	13:51	9.51	.06	8.0000	.018
8.5000	13:51	9.51	.06	8.5000	.018
9.0000	13:52	9.51	.06	9.0000	.018
9.5000	13:52	9.50	.05	9.5000	.015
10.0000	13:53	9.50	.05	10.0000	.015

GNL-4 SLUG TEST 2



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNC-6 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 34.47 (Ft)
 H(0) : 3.44 (Ft)
 T(0) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(0)
.0000	DAY 1 11:34	37.91	3.44	.0000	1.000
.0033	11:34	37.80	3.33	.0033	.968
.0066	11:34	37.79	3.32	.0066	.965
.0099	11:34	37.75	3.28	.0099	.953
.0133	11:34	37.74	3.27	.0133	.951
.0166	11:34	37.70	3.23	.0166	.939
.0200	11:34	37.65	3.18	.0200	.924
.0233	11:34	37.65	3.18	.0233	.924
.0266	11:34	37.61	3.14	.0266	.913
.0300	11:34	37.57	3.10	.0300	.901
.0333	11:34	37.55	3.08	.0333	.895
.0500	11:34	37.41	2.94	.0500	.855
.0666	11:34	37.28	2.81	.0666	.817
.0833	11:34	37.16	2.69	.0833	.782
.1000	11:34	37.04	2.57	.1000	.747
.1166	11:34	36.94	2.47	.1166	.718
.1333	11:34	36.84	2.37	.1333	.689
.1500	11:34	36.75	2.28	.1500	.663
.1666	11:34	36.66	2.19	.1666	.637
.1833	11:34	36.58	2.11	.1833	.613
.2000	11:34	36.49	2.02	.2000	.587
.2166	11:34	36.42	1.95	.2166	.567
.2333	11:34	36.36	1.89	.2333	.549
.2500	11:34	36.30	1.83	.2500	.532
.2666	11:34	36.24	1.77	.2666	.515
.2833	11:34	36.18	1.71	.2833	.497
.3000	11:34	36.13	1.66	.3000	.483
.3166	11:34	36.08	1.61	.3166	.468
.3333	11:34	36.04	1.57	.3333	.456
.4167	11:34	35.85	1.38	.4167	.401
.5000	11:34	35.71	1.24	.5000	.360
.5833	11:34	35.60	1.13	.5833	.328
.6667	11:34	35.52	1.05	.6667	.305
.7500	11:34	35.46	.99	.7500	.288

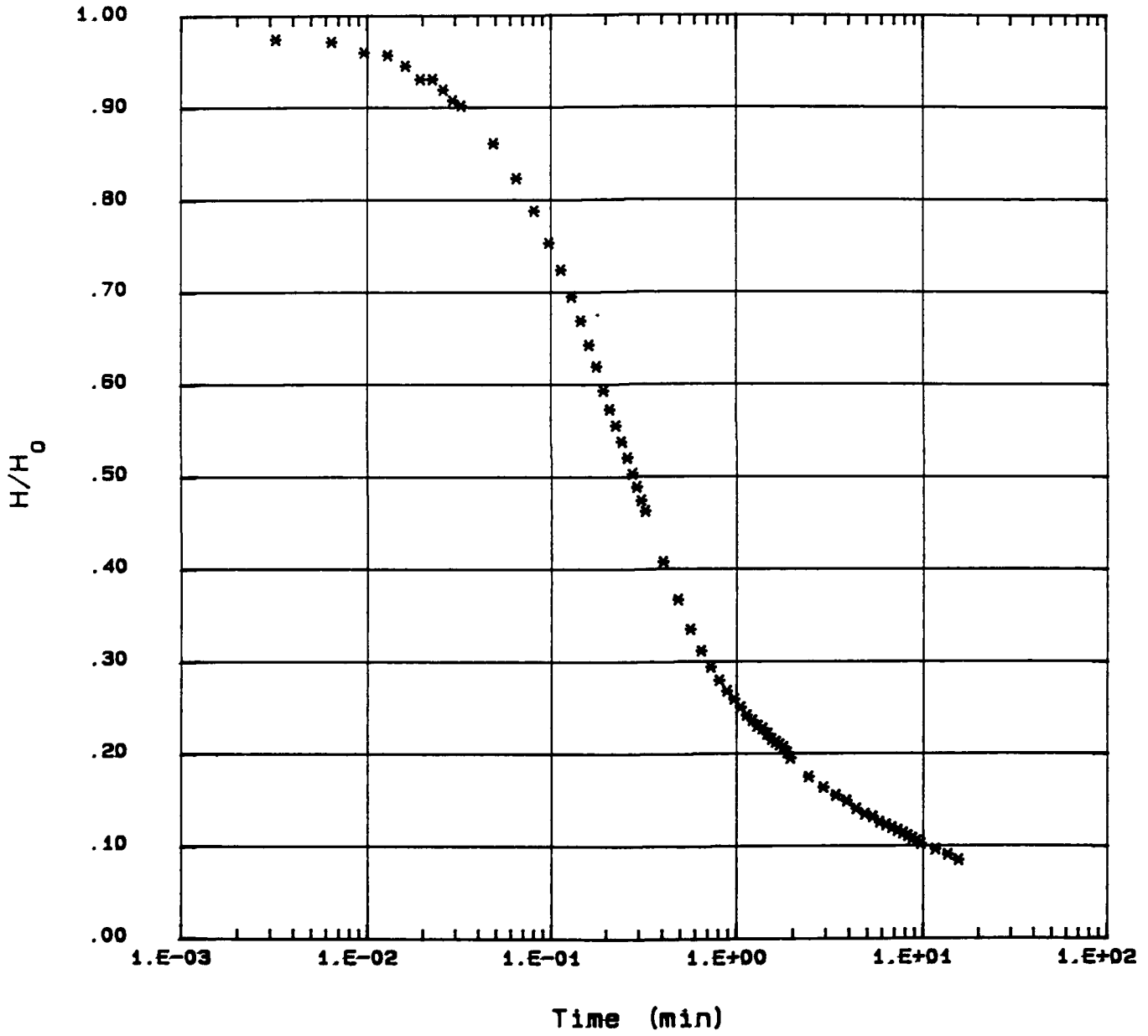
GNC-6 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 34.47 (Ft)
 H(0) : 3.44 (Ft)
 T(0) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(0)
.8333	11:34	35.41	.94	.8333	.273
.9167	11:34	35.37	.90	.9167	.262
1.0000	11:35	35.34	.87	1.0000	.253
1.0833	11:35	35.31	.84	1.0833	.244
1.1667	11:35	35.28	.81	1.1667	.235
1.2500	11:35	35.26	.79	1.2500	.230
1.3333	11:35	35.24	.77	1.3333	.224
1.4166	11:35	35.23	.76	1.4166	.221
1.5000	11:35	35.21	.74	1.5000	.215
1.5833	11:35	35.19	.72	1.5833	.209
1.6667	11:35	35.18	.71	1.6667	.206
1.7500	11:35	35.17	.70	1.7500	.203
1.8333	11:35	35.16	.69	1.8333	.201
1.9167	11:35	35.14	.67	1.9167	.195
2.0000	11:36	35.12	.65	2.0000	.189
2.5000	11:36	35.05	.58	2.5000	.169
3.0000	11:37	35.01	.54	3.0000	.157
3.5000	11:37	34.98	.51	3.5000	.148
4.0000	11:38	34.96	.49	4.0000	.142
4.5000	11:38	34.93	.46	4.5000	.134
5.0000	11:39	34.91	.44	5.0000	.128
5.5000	11:39	34.90	.43	5.5000	.125
6.0000	11:40	34.88	.41	6.0000	.119
6.5000	11:40	34.87	.40	6.5000	.116
7.0000	11:41	34.86	.39	7.0000	.113
7.5000	11:41	34.85	.38	7.5000	.110
8.0000	11:42	34.84	.37	8.0000	.108
8.5000	11:42	34.83	.36	8.5000	.105
9.0000	11:43	34.82	.35	9.0000	.102
9.5000	11:43	34.81	.34	9.5000	.099
10.0000	11:44	34.80	.33	10.0000	.096
12.0000	11:46	34.78	.31	12.0000	.090
14.0000	11:48	34.76	.29	14.0000	.084
16.0000	11:50	34.74	.27	16.0000	.078

GNL-6 SLUG TEST 1



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-6 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 37.85 (Ft)
 H(O) : 3.12 (Ft)
 T(O) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.0000	DAY 1 12:01	40.97	3.12	.0000	1.000
.0033	12:01	40.94	3.09	.0033	.990
.0066	12:01	40.91	3.06	.0066	.981
.0099	12:01	40.88	3.03	.0099	.971
.0133	12:01	40.86	3.01	.0133	.965
.0166	12:01	40.83	2.98	.0166	.955
.0200	12:01	40.79	2.94	.0200	.942
.0233	12:01	40.76	2.91	.0233	.933
.0266	12:01	40.74	2.89	.0266	.926
.0300	12:01	40.71	2.86	.0300	.917
.0333	12:01	40.69	2.84	.0333	.910
.0500	12:01	40.56	2.71	.0500	.869
.0666	12:01	40.44	2.59	.0666	.830
.0833	12:01	40.33	2.48	.0833	.795
.1000	12:01	40.22	2.37	.1000	.760
.1166	12:01	40.12	2.27	.1166	.728
.1333	12:01	40.03	2.18	.1333	.699
.1500	12:01	39.95	2.10	.1500	.673
.1666	12:01	39.86	2.01	.1666	.644
.1833	12:01	39.79	1.94	.1833	.622
.2000	12:01	39.71	1.86	.2000	.596
.2166	12:01	39.65	1.80	.2166	.577
.2333	12:01	39.58	1.73	.2333	.554
.2500	12:01	39.52	1.67	.2500	.535
.2666	12:01	39.46	1.61	.2666	.516
.2833	12:01	39.41	1.56	.2833	.500
.3000	12:01	39.36	1.51	.3000	.484
.3166	12:01	39.32	1.47	.3166	.471
.3333	12:01	39.27	1.42	.3333	.455
.4167	12:01	39.10	1.25	.4167	.401
.5000	12:01	38.97	1.12	.5000	.359
.5833	12:01	38.87	1.02	.5833	.327
.6667	12:01	38.79	.94	.6667	.301
.7500	12:01	38.73	.88	.7500	.282

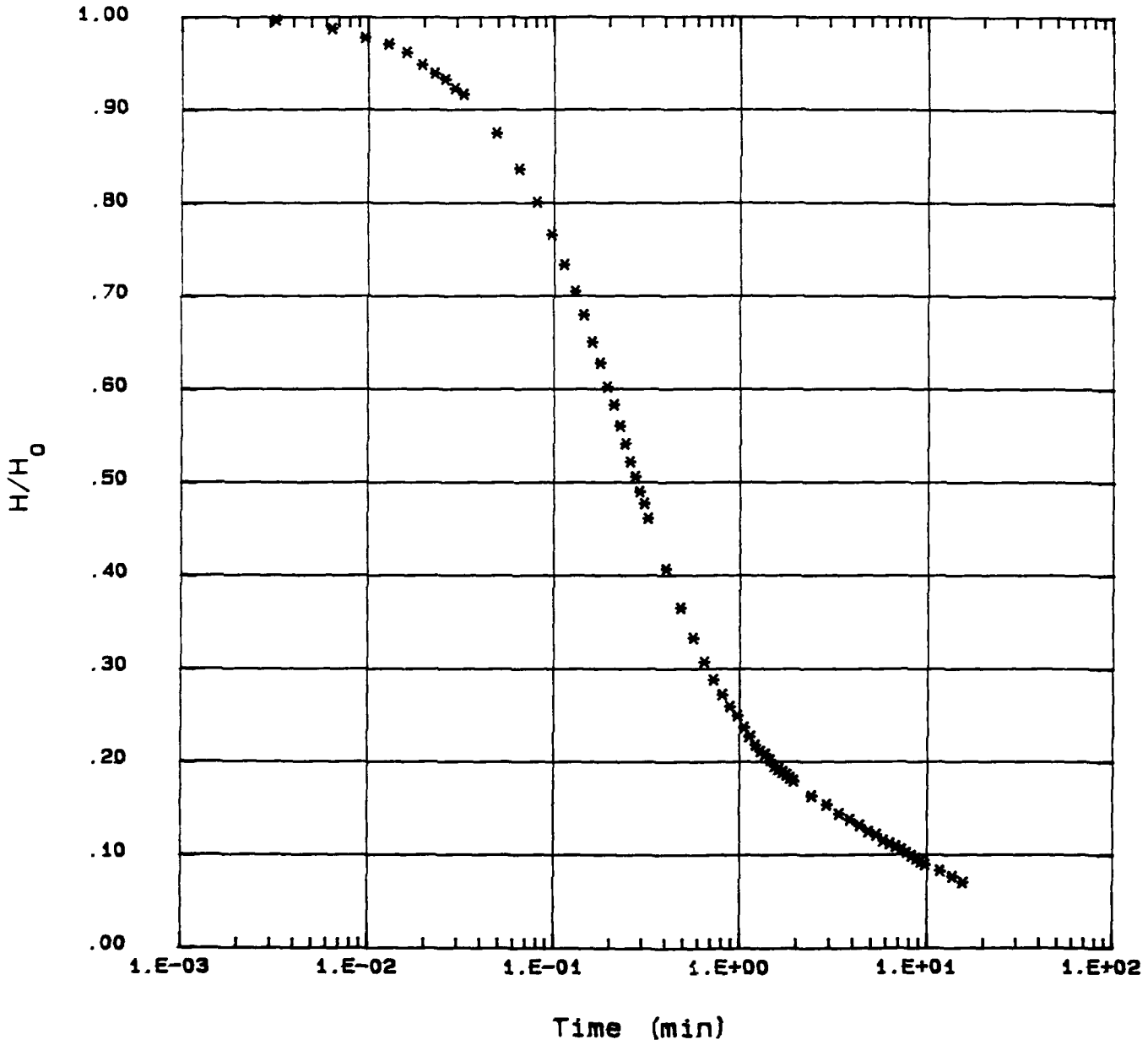
GNL-6 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 37.85 (Ft)
 H(0) : 3.12 (Ft)
 T(0) : .00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(0)
.8333	12:01	38.68	.83	.8333	.266
.9167	12:01	38.64	.79	.9167	.253
1.0000	12:02	38.61	.76	1.0000	.244
1.0833	12:02	38.57	.72	1.0833	.231
1.1667	12:02	38.54	.69	1.1667	.221
1.2500	12:02	38.51	.66	1.2500	.212
1.3333	12:02	38.49	.64	1.3333	.205
1.4166	12:02	38.48	.63	1.4166	.202
1.5000	12:02	38.46	.61	1.5000	.196
1.5833	12:02	38.44	.59	1.5833	.189
1.6667	12:02	38.43	.58	1.6667	.186
1.7500	12:02	38.42	.57	1.7500	.183
1.8333	12:02	38.41	.56	1.8333	.179
1.9167	12:02	38.40	.55	1.9167	.176
2.0000	12:03	38.39	.54	2.0000	.173
2.5000	12:03	38.34	.49	2.5000	.157
3.0000	12:04	38.31	.46	3.0000	.147
3.5000	12:04	38.28	.43	3.5000	.138
4.0000	12:05	38.26	.41	4.0000	.131
4.5000	12:05	38.24	.39	4.5000	.125
5.0000	12:06	38.22	.37	5.0000	.119
5.5000	12:06	38.21	.36	5.5000	.115
6.0000	12:07	38.19	.34	6.0000	.109
6.5000	12:07	38.18	.33	6.5000	.106
7.0000	12:08	38.17	.32	7.0000	.103
7.5000	12:08	38.16	.31	7.5000	.099
8.0000	12:09	38.15	.30	8.0000	.096
8.5000	12:09	38.14	.29	8.5000	.093
9.0000	12:10	38.13	.28	9.0000	.090
9.5000	12:10	38.12	.27	9.5000	.087
10.0000	12:11	38.11	.26	10.0000	.083
12.0000	12:13	38.09	.24	12.0000	.077
14.0000	12:15	38.07	.22	14.0000	.071
16.0000	12:17	38.05	.20	16.0000	.064

GNL-6 SLUG TEST 2



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-B SLUG TEST 1

SLUG/SWAB TEST

Ref. value : 20.04 (Ft)
 H(O) : 6.04 (Ft)
 T(O) : .01 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.0000	DAY 1 13:08	26.08	6.04	-.0066	1.000
.0033	13:08	26.07	6.03	-.0033	.998
.0066	13:08	26.08	6.04	.0000	1.000
.0099	13:08	26.06	6.02	.0033	.997
.0133	13:08	26.04	6.00	.0067	.993
.0166	13:08	26.03	5.99	.0100	.992
.0200	13:08	26.02	5.98	.0134	.990
.0233	13:08	26.01	5.97	.0167	.988
.0266	13:08	26.00	5.96	.0200	.987
.0300	13:08	25.99	5.95	.0234	.985
.0333	13:08	25.98	5.94	.0267	.983
.0500	13:08	25.93	5.89	.0434	.975
.0666	13:08	25.88	5.84	.0600	.967
.0833	13:08	25.83	5.79	.0767	.959
.1000	13:08	25.79	5.75	.0934	.952
.1166	13:08	25.74	5.70	.1100	.944
.1333	13:08	25.69	5.65	.1267	.935
.1500	13:08	25.64	5.60	.1434	.927
.1666	13:08	25.60	5.56	.1600	.921
.1833	13:08	25.55	5.51	.1767	.912
.2000	13:08	25.51	5.47	.1934	.906
.2166	13:08	25.46	5.42	.2100	.897
.2333	13:08	25.42	5.38	.2267	.891
.2500	13:08	25.38	5.34	.2434	.884
.2666	13:08	25.33	5.29	.2600	.876
.2833	13:08	25.29	5.25	.2767	.869
.3000	13:08	25.25	5.21	.2934	.863
.3166	13:08	25.21	5.17	.3100	.856
.3333	13:08	25.17	5.13	.3267	.849
.4167	13:08	24.97	4.93	.4101	.816
.5000	13:08	24.77	4.73	.4934	.783
.5833	13:08	24.63	4.59	.5767	.760
.6667	13:08	24.51	4.47	.6601	.740
.7500	13:08	24.39	4.35	.7434	.720

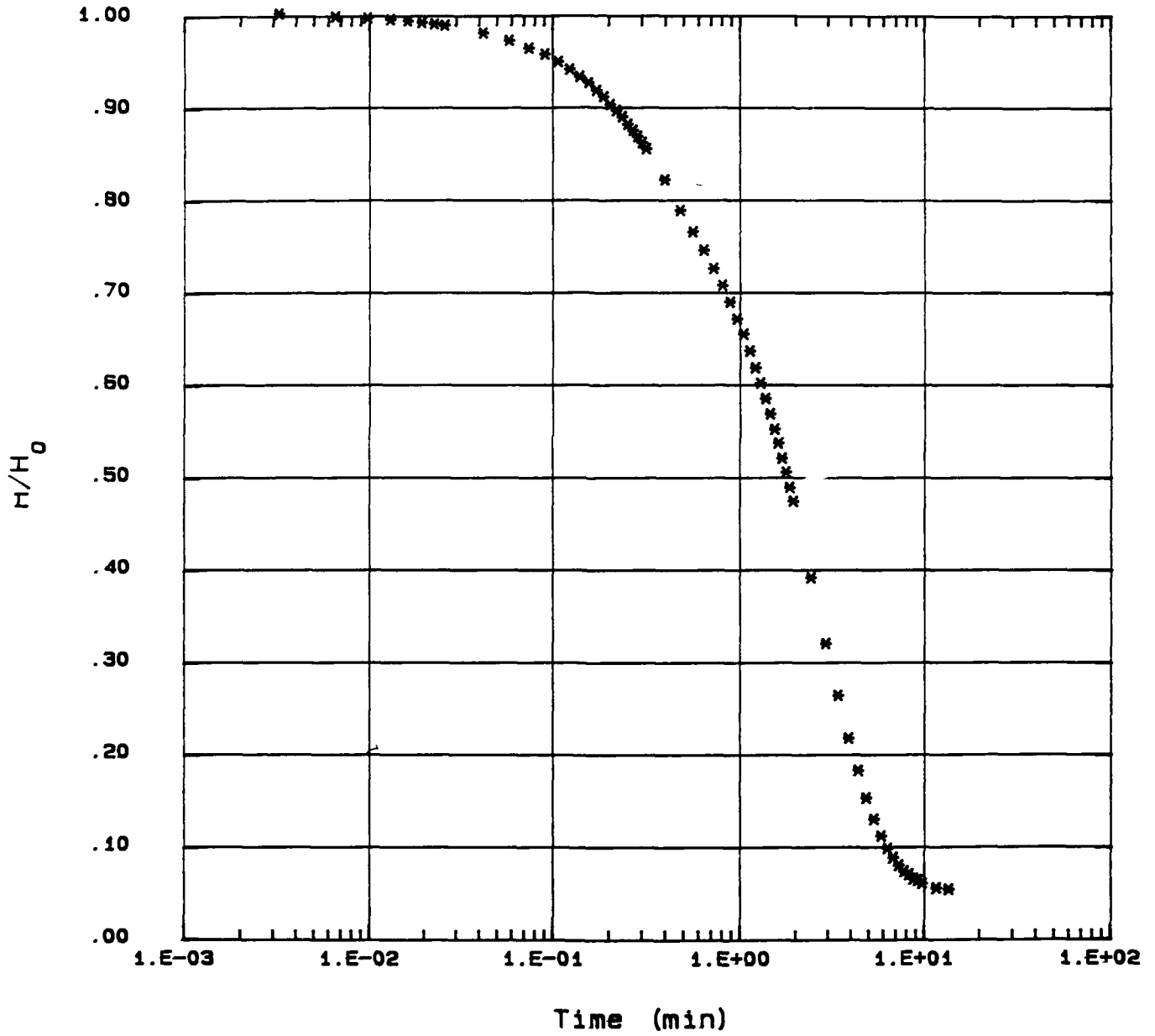
GNL-8 SLUG TEST 1

SLUG/SWAB TEST

Ref. Value : 20.04 (Ft)
 H(O) : 6.04 (Ft)
 T(O) : .01 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.8333	13:08	24.28	4.24	.8267	.702
.9167	13:08	24.17	4.13	.9101	.684
1.0000	13:08	24.06	4.02	.9934	.666
1.0833	13:09	23.96	3.92	1.0767	.649
1.1667	13:09	23.85	3.81	1.1601	.631
1.2500	13:09	23.74	3.70	1.2434	.613
1.3333	13:09	23.64	3.60	1.3267	.596
1.4166	13:09	23.54	3.50	1.4100	.579
1.5000	13:09	23.44	3.40	1.4934	.563
1.5833	13:09	23.34	3.30	1.5767	.546
1.6667	13:09	23.25	3.21	1.6601	.531
1.7500	13:09	23.15	3.11	1.7434	.515
1.8333	13:09	23.06	3.02	1.8267	.500
1.9167	13:09	22.96	2.92	1.9101	.483
2.0000	13:09	22.87	2.83	1.9934	.469
2.5000	13:10	22.37	2.33	2.4934	.386
3.0000	13:10	21.94	1.90	2.9934	.315
3.5000	13:11	21.60	1.56	3.4934	.258
4.0000	13:11	21.32	1.28	3.9934	.212
4.5000	13:12	21.11	1.07	4.4934	.177
5.0000	13:12	20.93	.89	4.9934	.147
5.5000	13:13	20.79	.75	5.4934	.124
6.0000	13:13	20.68	.64	5.9934	.106
6.5000	13:14	20.60	.56	6.4934	.093
7.0000	13:14	20.54	.50	6.9934	.083
7.5000	13:15	20.49	.45	7.4934	.075
8.0000	13:15	20.45	.41	7.9934	.068
8.5000	13:16	20.43	.39	8.4934	.065
9.0000	13:16	20.40	.36	8.9934	.060
9.5000	13:17	20.39	.35	9.4934	.058
10.0000	13:17	20.37	.33	9.9934	.055
12.0000	13:19	20.34	.30	11.9934	.050
14.0000	13:21	20.33	.29	13.9934	.048

GNL-8 SLUG TEST 1



IN-SITU INC. HERMIT DATA MANAGEMENT PACKAGE

GNL-8 SLUG TEST I

SLUG/SWAB TEST

Ref. Value : 20.08 (Ft)
 H(O) : 5.48 (Ft)
 T(O) : 1.00 (Min)

ELAPSED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.0000	DAY 1 13:25	25.56	5.48	.0000	1.000
.0033	13:25	25.54	5.46	.0033	.996
.0066	13:25	25.53	5.45	.0066	.995
.0099	13:25	25.54	5.46	.0099	.996
.0133	13:25	25.53	5.45	.0133	.995
.0166	13:25	25.53	5.45	.0166	.995
.0200	13:25	25.51	5.43	.0200	.991
.0233	13:25	25.50	5.42	.0233	.989
.0266	13:25	25.49	5.41	.0266	.987
.0300	13:25	25.48	5.40	.0300	.985
.0333	13:25	25.47	5.39	.0333	.984
.0500	13:25	25.43	5.35	.0500	.976
.0666	13:25	25.39	5.31	.0666	.969
.0833	13:25	25.34	5.26	.0833	.960
.1000	13:25	25.30	5.22	.1000	.953
.1166	13:25	25.25	5.17	.1166	.943
.1333	13:25	25.21	5.13	.1333	.936
.1500	13:25	25.17	5.09	.1500	.929
.1666	13:25	25.13	5.05	.1666	.922
.1833	13:25	25.08	5.00	.1833	.912
.2000	13:25	25.04	4.96	.2000	.905
.2166	13:25	25.00	4.92	.2166	.898
.2333	13:25	24.96	4.88	.2333	.891
.2500	13:25	24.92	4.84	.2500	.883
.2666	13:25	24.88	4.80	.2666	.876
.2833	13:25	24.84	4.76	.2833	.869
.3000	13:25	24.80	4.72	.3000	.861
.3166	13:25	24.76	4.68	.3166	.854
.3333	13:25	24.72	4.64	.3333	.847
.4167	13:25	24.54	4.46	.4167	.814
.5000	13:25	24.40	4.32	.5000	.788
.5833	13:25	24.28	4.20	.5833	.766
.6667	13:25	24.16	4.08	.6667	.745
.7500	13:25	24.06	3.98	.7500	.726

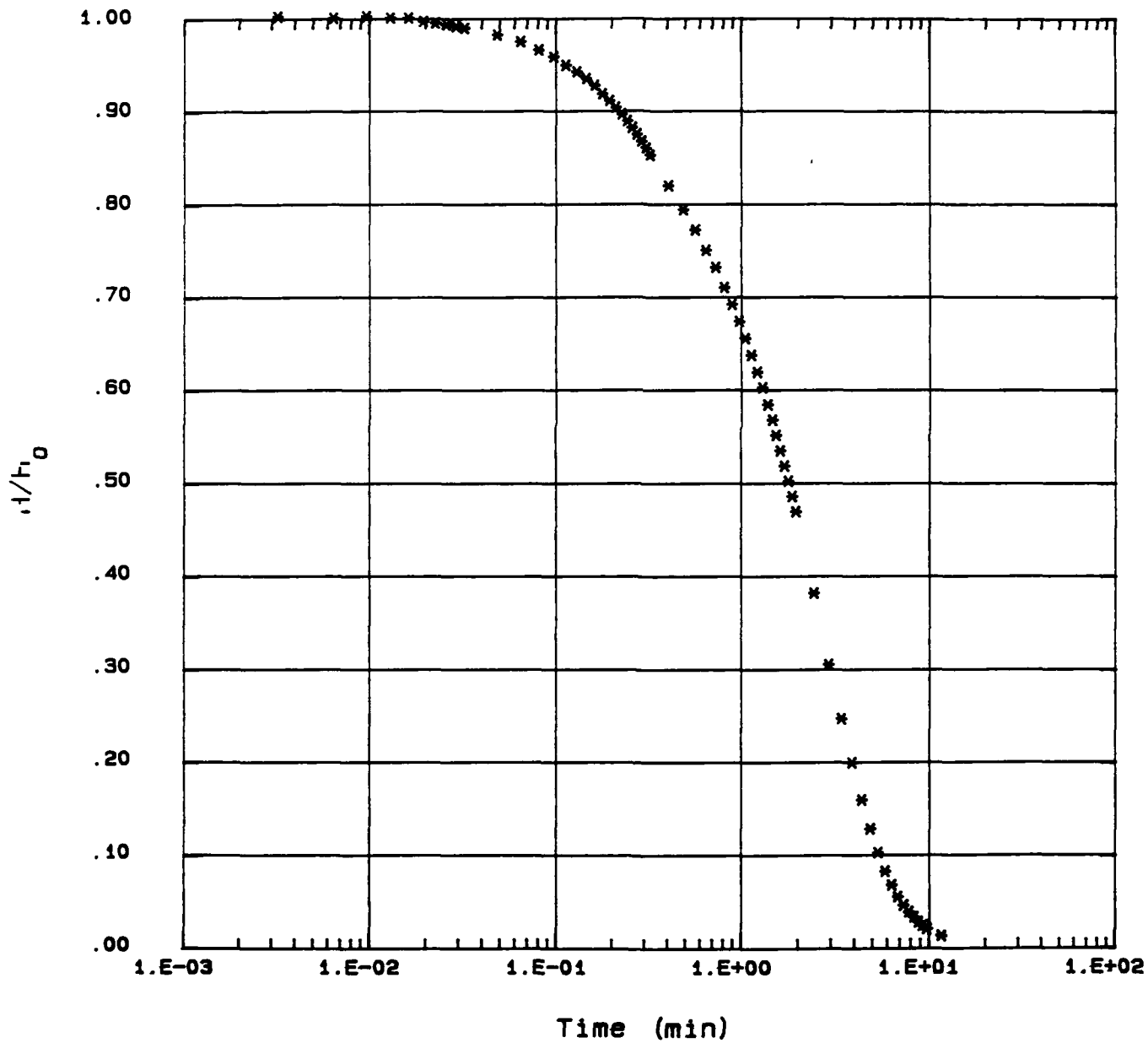
GNL-8 SLUG TEST 2

SLUG/SWAB TEST

Ref. Value : 20.08 (Ft)
 H(O) : 5.48 (Ft)
 T(O) : .00 (Min)

ELAP ED TIME (Min)	REAL TIME (hh:mm)	VALUE (Ft)	HD/DRWDN (Ft)	DELTA TIME (Min)	H/H(O)
.8333	13:25	23.94	3.86	.8333	.704
.9167	13:25	23.84	3.76	.9167	.686
1.0000	13:26	23.74	3.66	1.0000	.668
1.0833	13:26	23.64	3.56	1.0833	.650
1.1667	13:26	23.54	3.46	1.1667	.631
1.2500	13:26	23.44	3.36	1.2500	.613
1.3333	13:26	23.35	3.27	1.3333	.597
1.4166	13:26	23.25	3.17	1.4166	.578
1.5000	13:26	23.16	3.08	1.5000	.562
1.5833	13:26	23.07	2.99	1.5833	.546
1.6667	13:26	22.98	2.90	1.6667	.529
1.7500	13:26	22.89	2.81	1.7500	.513
1.8333	13:26	22.80	2.72	1.8333	.496
1.9167	13:26	22.71	2.63	1.9167	.480
2.0000	13:27	22.62	2.54	2.0000	.464
2.5000	13:27	22.14	2.06	2.5000	.376
3.0000	13:28	21.72	1.64	3.0000	.299
3.5000	13:28	21.40	1.32	3.5000	.241
4.0000	13:29	21.14	1.06	4.0000	.193
4.5000	13:29	20.92	.84	4.5000	.153
5.0000	13:30	20.75	.67	5.0000	.122
5.5000	13:30	20.61	.53	5.5000	.097
6.0000	13:31	20.50	.42	6.0000	.077
6.5000	13:31	20.42	.34	6.5000	.062
7.0000	13:32	20.35	.27	7.0000	.049
7.5000	13:32	20.30	.22	7.5000	.040
8.0000	13:33	20.26	.18	8.0000	.033
8.5000	13:33	20.23	.15	8.5000	.027
9.0000	13:34	20.20	.12	9.0000	.022
9.5000	13:34	20.18	.10	9.5000	.018
10.0000	13:35	20.16	.08	10.0000	.015
12.0000	13:37	20.12	.04	12.0000	.007

GNL-8 SLUG TEST 2



APPENDIX D
ANALYTICAL RESULTS

INSTALLATION RESTORATION PROGRAM

CHEMICAL REPORT

Thu Dec 7 09:42:42 1989

For Parameters :

Installation = Gaithersburg Research Facility
Beginning Date = 01/01/75
Ending Date = 12/7/89
Media Type = Chemical Ground Water (CGW)
Booleans = Y

Dec 7, 1989

IR Installation: Gaithersburg Research Facility Page 1
 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNC-5

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	99	111TCE	LT	1.000	UGL
35.0	25-may-1989	99	112TCE	LT	1.700	UGL
35.0	25-may-1989	99	11DCE	LT	6.800	UGL
35.0	25-may-1989	99	11DCLC	LT	2.700	UGL
35.0	25-may-1989	UM13	124TCB	LT	4.420	UGL
35.0	25-may-1989	99	12DCE	LT	2.200	UGL
35.0	25-may-1989	UM13	12DCLB	LT	7.320	UGL
35.0	25-may-1989	99	12DCLC	LT	1.000	UGL
35.0	25-may-1989	99	12DCLP	LT	3.200	UGL
35.0	25-may-1989	UM13	13DCLB	LT	8.270	UGL
35.0	25-may-1989	UM13	14DCLB	LT	7.970	UGL
35.0	25-may-1989	UM13	246TCP	ND	10.000	UGL
35.0	25-may-1989	UM13	24DCLP	ND	10.000	UGL
35.0	25-may-1989	UM13	24DMPN	ND	10.000	UGL
35.0	25-may-1989	UM13	24DNP	ND	50.000	UGL
35.0	25-may-1989	UM13	24DNT	LT	5.840	UGL
35.0	25-may-1989	UM13	26DNT	LT	5.520	UGL
35.0	25-may-1989	99	2CLEVE	LT	1.600	UGL
35.0	25-may-1989	UM13	2CLP	ND	10.000	UGL
35.0	25-may-1989	UM13	2CNAP	LT	2.070	UGL
35.0	25-may-1989	UM13	2NP	ND	50.000	UGL
35.0	25-may-1989	UM13	33DCBD	ND	20.000	UGL
35.0	25-may-1989	UM13	46DN2C	ND	50.000	UGL
35.0	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
35.0	25-may-1989	UM13	4CL3C	ND	10.000	UGL
35.0	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
35.0	25-may-1989	UM13	4NP	ND	50.000	UGL
35.0	25-may-1989	UH09	ABHC	ND	0.050	UGL
35.0	25-may-1989	UM13	ABHC	ND	3.000	UGL
35.0	25-may-1989	99	ACROLN	ND	100.000	UGL
35.0	25-may-1989	99	ACRYLO	ND	100.000	UGL
35.0	25-may-1989	UH09	AENSLF	ND	0.050	UGL
35.0	25-may-1989	UM13	AENSLF	ND	3.000	UGL
35.0	25-may-1989	SS06	AG	LT	5.450	UGL
35.0	25-may-1989	UH09	ALDRN	LT	0.022	UGL
35.0	25-may-1989	UM13	ALDRN	LT	5.780	UGL
35.0	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
35.0	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
35.0	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
35.0	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
35.0	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
35.0	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
35.0	25-may-1989	UM13	B2EHP	LT	32.700	UGL
35.0	25-may-1989	UM13	BAANTR	LT	0.906	UGL
35.0	25-may-1989	UM13	BAPYR	LT	8.290	UGL
35.0	25-may-1989	UM13	BBFANT	LT	2.650	UGL
35.0	25-may-1989	UH09	BBHC	ND	0.050	UGL

Dec 7, 1989

IR Installation: Gaithersburg Research Facility Page 2
Analytical Results for Chemical Ground Water
From: 01/01/75 and 12/7/89

Site: WELL GNC-5 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	UM13	BBHC	LT	3.170	UGL
35.0	25-may-1989	UM13	BBZP	ND	10.000	UGL
35.0	25-may-1989	SS06	BE	LT	2.860	UGL
35.0	25-may-1989	UH09	BENSLF	ND	0.100	UGL
35.0	25-may-1989	UM13	BENSLF	ND	6.000	UGL
35.0	25-may-1989	UM13	BENZID	ND	50.000	UGL
35.0	25-may-1989	UM13	BGHIPY	LT	64.600	UGL
35.0	25-may-1989	UM13	BKFANT	LT	3.280	UGL
35.0	25-may-1989	99	BRDCLM	ND	5.000	UGL
35.0	25-may-1989	UM13	BZALC	ND	0.100	UGL
35.0	25-may-1989	99	C13DCP	LT	1.800	UGL
35.0	25-may-1989	99	C2H3CL	LT	13.000	UGL
35.0	25-may-1989	99	C2H5CL	LT	6.900	UGL
35.0	25-may-1989	99	C6H6	LT	1.700	UGL
35.0	25-may-1989	99	CCL4	LT	1.000	UGL
35.0	25-may-1989	SS06	CD		8.150	UGL
35.0	25-may-1989	99	CH2CL2	LT	23.000	UGL
35.0	25-may-1989	99	CH3BR	ND	10.000	UGL
35.0	25-may-1989	99	CH3CL	LT	1.800	UGL
35.0	25-may-1989	99	CHBR3	LT	3.700	UGL
35.0	25-may-1989	99	CHCL3	LT	1.000	UGL
35.0	25-may-1989	UM13	CHRY	LT	1.150	UGL
35.0	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
35.0	25-may-1989	UM13	CL6CP	ND	10.000	UGL
35.0	25-may-1989	UM13	CL6ET	LT	13.300	UGL
35.0	25-may-1989	99	CLC6H5	LT	1.200	UGL
35.0	25-may-1989	UH09	CLDAN	LT	0.046	UGL
35.0	25-may-1989	UM13	CLDAN	LT	10.200	UGL
35.0	25-may-1989	SS06	CR	LT	4.440	UGL
35.0	25-may-1989	SS06	CU	LT	6.200	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
35.0	25-may-1989	UM13	DBAHA	LT	12.300	UGL
35.0	25-may-1989	UH09	DBHC	ND	0.050	UGL
35.0	25-may-1989	UM13	DBHC	LT	621.000	UGL
35.0	25-may-1989	99	DBRCLM	LT	1.800	UGL
35.0	25-may-1989	UM13	DEP	ND	10.000	UGL
35.0	25-may-1989	UH09	DLDRN	LT	0.005	UGL
35.0	25-may-1989	UM13	DLDRN	LT	2.550	UGL
35.0	25-may-1989	UM13	DMP	ND	10.000	UGL
35.0	25-may-1989	UM13	DNBP	ND	10.000	UGL
35.0	25-may-1989	UM13	DNOP	LT	21.400	UGL
35.0	25-may-1989	UH09	ENDRN	ND	0.100	UGL
35.0	25-may-1989	UM13	ENDRN	LT	34.200	UGL
35.0	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
35.0	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
35.0	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
35.0	25-may-1989	99	ETC6H5	LT	1.400	UGL
35.0	25-may-1989	UM13	FANT	LT	1.150	UGL

Dec 7, 1989

IR Installation: Gaithersburg Research Facility Page 3
 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNC-5 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	UM13	FLRENE	ND	10.000	UGL
35.0	25-may-1989	UM13	HCBD	LT	7.890	UGL
35.0	25-may-1989	99	HG		0.160	UGL
35.0	25-may-1989	UH09	HPCL	LT	0.019	UGL
35.0	25-may-1989	UM13	HPCL	LT	4.910	UGL
35.0	25-may-1989	UH09	HPCLE	LT	0.086	UGL
35.0	25-may-1989	UM13	HPCLE	LT	6.440	UGL
35.0	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
35.0	25-may-1989	UH09	ISODR	LT	0.041	UGL
35.0	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
35.0	25-may-1989	UH09	LIN	LT	0.029	UGL
35.0	25-may-1989	UM13	LIN	LT	26.000	UGL
35.0	25-may-1989	99	MEC6H5	LT	1.800	UGL
35.0	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
35.0	25-may-1989	UM13	NAP	LT	3.510	UGL
35.0	25-may-1989	UM13	NB	ND	10.000	UGL
35.0	25-may-1989	SS06	NI	LT	15.300	UGL
35.0	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
35.0	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
35.0	25-may-1989	UM13	NNDPA	ND	6.700	UGL
35.0	25-may-1989	SD11	PB	LT	1.700	UGL
35.0	25-may-1989	UH09	PCB016	LT	0.133	UGL
35.0	25-may-1989	UM13	PCB016	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB221	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB221	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB232	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB232	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB242	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB242	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB248	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB248	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB254	ND	1.000	UGL
35.0	25-may-1989	UM13	PCB254	ND	60.000	UGL
35.0	25-may-1989	UH09	PCB260	LT	0.087	UGL
35.0	25-may-1989	UM13	PCB260	ND	60.000	UGL
35.0	25-may-1989	UM13	PCP	ND	50.000	UGL
35.0	25-may-1989	UM13	PHANTR	LT	0.759	UGL
35.0	25-may-1989	UH09	PPDDD	LT	0.013	UGL
35.0	25-may-1989	UM13	PPDDD	LT	5.610	UGL
35.0	25-may-1989	UH09	PPDDE	LT	0.022	UGL
35.0	25-may-1989	UM13	PPDDE	LT	11.200	UGL
35.0	25-may-1989	UH09	PPDDT	LT	0.037	UGL
35.0	25-may-1989	UM13	PPDDT	LT	5.070	UGL
35.0	25-may-1989	UM13	PYR	LT	9.380	UGL
0.0	25-may-1989	SD11	SB	LT	2.500	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
35.0	25-may-1989	99	TCLEA	LT	7.100	UGL
35.0	25-may-1989	99	TCLEE	LT	2.300	UGL

Dec 7, 1989

IR Installation: Gaithersburg Research Facility Page 4
 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNC-5 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	SS06	TL	LT	59.900	UGL
35.0	25-may-1989	99	TRCLE	LT	1.000	UGL
35.0	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
35.0	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
35.0	25-may-1989	UM13	UNK536		9.530	UGL
35.0	25-may-1989	UM13	UNK538		12.000	UGL
35.0	25-may-1989	UM13	UNK541		32.500	UGL
35.0	25-may-1989	UM13	UNK542		6.150	UGL
35.0	25-may-1989	UM13	UNK542		6.890	UGL
35.0	25-may-1989	UM13	UNK543		5.430	UGL
35.0	25-may-1989	UM13	UNK544		16.400	UGL
35.0	25-may-1989	SS06	ZN		30.500	UGL

Site: WELL GNC-6

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
40.0	25-may-1989	99	111TCE	LT	1.000	UGL
40.0	25-may-1989	99	112TCE	LT	1.700	UGL
40.0	25-may-1989	99	11DCE	LT	6.800	UGL
40.0	25-may-1989	99	11DCLE	LT	2.700	UGL
40.0	25-may-1989	UM13	124TCB	LT	4.420	UGL
40.0	25-may-1989	99	12DCE	LT	2.200	UGL
40.0	25-may-1989	UM13	12DCLB	LT	7.320	UGL
40.0	25-may-1989	99	12DCLE	LT	1.000	UGL
40.0	25-may-1989	99	12DCLP	LT	3.200	UGL
40.0	25-may-1989	UM13	13DCLB	LT	8.270	UGL
40.0	25-may-1989	UM13	14DCLB	LT	7.970	UGL
40.0	25-may-1989	UM13	246TCP	ND	10.000	UGL
40.0	25-may-1989	UM13	24DCLP	ND	10.000	UGL
40.0	25-may-1989	UM13	24DMPN	ND	10.000	UGL
40.0	25-may-1989	UM13	24DNP	ND	50.000	UGL
40.0	25-may-1989	UM13	24DNT	LT	5.840	UGL
40.0	25-may-1989	UM13	26DNT	LT	5.520	UGL
40.0	25-may-1989	99	2CLEVE	LT	1.600	UGL
40.0	25-may-1989	UM13	2CLP	ND	10.000	UGL
40.0	25-may-1989	UM13	2CNAP	LT	2.070	UGL
40.0	25-may-1989	UM13	2NP	ND	50.000	UGL
40.0	25-may-1989	UM13	33DCBD	ND	20.000	UGL
40.0	25-may-1989	UM13	46DN2C	ND	50.000	UGL
40.0	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
40.0	25-may-1989	UM13	4CL3C	ND	10.000	UGL
40.0	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
40.0	25-may-1989	UM13	4NP	ND	50.000	UGL
40.0	25-may-1989	UH09	ABHC	ND	0.050	UGL
40.0	25-may-1989	UM13	ABHC	ND	3.000	UGL

Dec 7, 1989

IR Installation: Gaithersburg Research Facility Page 5
 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNC-6 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
40.0	25-may-1989	99	ACROLN	ND	100.000	UGL
40.0	25-may-1989	99	ACRYLO	ND	100.000	UGL
40.0	25-may-1989	UH09	AENSLF	ND	0.050	UGL
40.0	25-may-1989	UM13	AENSLF	ND	3.000	UGL
40.0	25-may-1989	SS06	AG	LT	5.450	UGL
40.0	25-may-1989	UH09	ALDRN	LT	0.022	UGL
40.0	25-may-1989	UM13	ALDRN	LT	5.780	UGL
40.0	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
40.0	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
40.0	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
40.0	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
40.0	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
40.0	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
40.0	25-may-1989	UM13	B2EHP	LT	32.700	UGL
40.0	25-may-1989	UM13	BAANTR	LT	0.906	UGL
40.0	25-may-1989	UM13	BAPYR	LT	8.290	UGL
40.0	25-may-1989	UM13	BBFANT	LT	2.650	UGL
40.0	25-may-1989	UH09	BBHC	ND	0.050	UGL
40.0	25-may-1989	UM13	BBHC	LT	3.170	UGL
40.0	25-may-1989	UM13	BBZP	ND	10.000	UGL
40.0	25-may-1989	SS06	BE	LT	2.860	UGL
40.0	25-may-1989	UH09	BENSLF	ND	0.100	UGL
40.0	25-may-1989	UM13	BENSLF	ND	6.000	UGL
40.0	25-may-1989	UM13	BENZID	ND	50.000	UGL
40.0	25-may-1989	UM13	BGH .PY	LT	64.600	UGL
40.0	25-may-1989	UM13	BKFANT	LT	3.280	UGL
40.0	25-may-1989	99	BRDCLM	ND	5.000	UGL
40.0	25-may-1989	UM13	BZALC	ND	0.100	UGL
40.0	25-may-1989	99	C13DCP	LT	1.800	UGL
40.0	25-may-1989	99	C2H3CL	LT	13.000	UGL
40.0	25-may-1989	99	C2H5CL	LT	6.900	UGL
40.0	25-may-1989	99	C6H6	LT	1.700	UGL
40.0	25-may-1989	99	CCL4	LT	1.000	UGL
40.0	25-may-1989	SS06	CD		6.970	UGL
40.0	25-may-1989	99	CH2CL2	LT	23.000	UGL
40.0	25-may-1989	99	CH3BR	ND	10.000	UGL
40.0	25-may-1989	99	CH3CL	LT	1.800	UGL
40.0	25-may-1989	99	CHBR3	LT	3.700	UGL
40.0	25-may-1989	99	CHCL3	LT	1.000	UGL
40.0	25-may-1989	UM13	CHRY	LT	1.150	UGL
40.0	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
40.0	25-may-1989	UM13	CL6CP	ND	10.000	UGL
40.0	25-may-1989	UM13	CL6ET	LT	13.300	UGL
40.0	25-may-1989	99	CLC6H5	LT	1.200	UGL
40.0	25-may-1989	UH09	CLDAN	LT	0.046	UGL
40.0	25-may-1989	UM13	CLDAN	LT	10.200	UGL
40.0	25-may-1989	SS06	CR	LT	4.440	UGL

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 From: 01/01/75 and 12/7/89

Site: WELL GNC-6 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
40.0	25-may-1989	SS06	CU	LT	6.200	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
40.0	25-may-1989	UM13	DBAHA	LT	12.300	UGL
40.0	25-may-1989	UH09	DBHC	ND	0.050	UGL
40.0	25-may-1989	UM13	DBHC	LT	621.000	UGL
40.0	25-may-1989	99	DBRCLM	LT	1.800	UGL
40.0	25-may-1989	UM13	DEP	ND	10.000	UGL
40.0	25-may-1989	UH09	DLDRN	LT	0.005	UGL
40.0	25-may-1989	UM13	DLDRN	LT	2.550	UGL
40.0	25-may-1989	UM13	DMP	ND	10.000	UGL
40.0	25-may-1989	UM13	DNBP	ND	10.000	UGL
40.0	25-may-1989	UM13	DNOP		23.700	UGL
40.0	25-may-1989	UH09	ENDRN	ND	0.100	UGL
40.0	25-may-1989	UM13	ENDRN	LT	34.200	UGL
40.0	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
40.0	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
40.0	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
40.0	25-may-1989	99	ETC6H5	LT	1.400	UGL
40.0	25-may-1989	UM13	FANT	LT	1.150	UGL
40.0	25-may-1989	UM13	FLRENE	ND	10.000	UGL
40.0	25-may-1989	UM13	HCBBD	LT	7.890	UGL
40.0	25-may-1989	99	HG		0.110	UGL
40.0	25-may-1989	UH09	HPCL	LT	0.019	UGL
40.0	25-may-1989	UM13	HPCL	LT	4.910	UGL
40.0	25-may-1989	UH09	HPCLE	LT	0.086	UGL
40.0	25-may-1989	UM13	HPCLE	LT	6.440	UGL
40.0	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
40.0	25-may-1989	UH09	ISODR	LT	0.041	UGL
40.0	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
40.0	25-may-1989	UH09	LIN	LT	0.029	UGL
40.0	25-may-1989	UM13	LIN	LT	26.000	UGL
40.0	25-may-1989	99	MEC6H5	LT	1.800	UGL
40.0	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
40.0	25-may-1989	UM13	NAP	LT	3.510	UGL
40.0	25-may-1989	UM13	NB	ND	10.000	UGL
40.0	25-may-1989	SS06	NI	LT	15.300	UGL
40.0	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
40.0	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
40.0	25-may-1989	UM13	NNDPA	ND	6.700	UGL
40.0	25-may-1989	SD11	PB	LT	1.700	UGL
40.0	25-may-1989	UH09	PCB016	LT	0.133	UGL
40.0	25-may-1989	UM13	PCB016	ND	30.000	UGL
40.0	25-may-1989	UH09	PCB221	ND	0.500	UGL
40.0	25-may-1989	UM13	PCB221	ND	30.000	UGL
40.0	25-may-1989	UH09	PCB232	ND	0.500	UGL
40.0	25-may-1989	UM13	PCB232	ND	30.000	UGL
40.0	25-may-1989	UH09	PCB242	ND	0.500	UGL
40.0	25-may-1989	UM13	PCB242	ND	30.000	UGL

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Analytical Results for Chemical Ground Water
From: 01/01/75 and 12/7/89

Site: WELL GNC-6 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
40.0	25-may-1989	UH09	PCB248	ND	0.500	UGL
40.0	25-may-1989	UM13	PCB248	ND	30.000	UGL
40.0	25-may-1989	UH09	PCB254	ND	1.000	UGL
40.0	25-may-1989	UM13	PCB254	ND	60.000	UGL
40.0	25-may-1989	UH09	PCB260	LT	0.087	UGL
40.0	25-may-1989	UM13	PCB260	ND	60.000	UGL
40.0	25-may-1989	UM13	PCP	ND	50.000	UGL
40.0	25-may-1989	UM13	PHANTR	LT	0.759	UGL
40.0	25-may-1989	UH09	PPDDD	LT	0.013	UGL
40.0	25-may-1989	UM13	PPDDD	LT	5.610	UGL
40.0	25-may-1989	UH09	PPDDE	LT	0.022	UGL
40.0	25-may-1989	UM13	PPDDE	LT	11.200	UGL
40.0	25-may-1989	UH09	PPDDT	LT	0.037	UGL
40.0	25-may-1989	UM13	PPDDT	LT	5.070	UGL
40.0	25-may-1989	UM13	PYR	LT	9.380	UGL
0.0	25-may-1989	SD11	SB	LT	2.500	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
40.0	25-may-1989	99	TCLEA	LT	7.100	UGL
40.0	25-may-1989	99	TCLEE	LT	2.300	UGL
40.0	25-may-1989	SS06	TL	LT	59.900	UGL
40.0	25-may-1989	99	TRCLE	LT	1.000	UGL
40.0	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
40.0	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
40.0	25-may-1989	UM13	UNK536		7.750	UGL
40.0	25-may-1989	UM13	UNK538		9.250	UGL
40.0	25-may-1989	UM13	UNK541		31.000	UGL
40.0	25-may-1989	UM13	UNK542		5.150	UGL
40.0	25-may-1989	UM13	UNK542		7.700	UGL
40.0	25-may-1989	UM13	UNK543		4.420	UGL
40.0	25-may-1989	UM13	UNK544		17.100	UGL
40.0	25-may-1989	UM13	UNK619		8.620	UGL
40.0	25-may-1989	UM13	UNK620		16.200	UGL
40.0	25-may-1989	UM13	UNK620		9.030	UGL
40.0	25-may-1989	UM13	UNK620		4.310	UGL
40.0	25-may-1989	UM13	UNK621		15.400	UGL
40.0	25-may-1989	UM13	UNK621		11.900	UGL
40.0	25-may-1989	UM13	UNK623		10.200	UGL
40.0	25-may-1989	UM13	UNK628		5.800	UGL
40.0	25-may-1989	UM13	UNK631		9.800	UGL
40.0	25-may-1989	UM13	UNK636		5.060	UGL
40.0	25-may-1989	UM13	UNK648		4.090	UGL
40.0	25-may-1989	UM13	UNK655		8.490	UGL
40.0	25-may-1989	SS06	ZN		19.400	UGL

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Site: WELL GNC-7

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
18.0	25-may-1989	99	111TCE	LT	1.000	UGL
18.0	25-may-1989	99	112TCE	LT	1.700	UGL
18.0	25-may-1989	99	11DCE	LT	6.800	UGL
18.0	25-may-1989	99	11DCLE	LT	2.700	UGL
18.0	25-may-1989	UM13	124TCB	LT	4.420	UGL
18.0	25-may-1989	99	12DCE	LT	2.200	UGL
18.0	25-may-1989	UM13	12DCLB	LT	7.320	UGL
18.0	25-may-1989	99	12DCLE	LT	1.000	UGL
18.0	25-may-1989	99	12DCLP	LT	3.200	UGL
18.0	25-may-1989	UM13	13DCLB	LT	8.270	UGL
18.0	25-may-1989	UM13	14DCLB	LT	7.970	UGL
18.0	25-may-1989	UM13	246TCP	ND	10.000	UGL
18.0	25-may-1989	UM13	24DCLP	ND	10.000	UGL
18.0	25-may-1989	UM13	24DMPN	ND	10.000	UGL
18.0	25-may-1989	UM13	24DNP	ND	50.000	UGL
18.0	25-may-1989	UM13	24DNT	LT	5.840	UGL
18.0	25-may-1989	UM13	26DNT	LT	5.520	UGL
18.0	25-may-1989	99	2CLEVE	LT	1.600	UGL
18.0	25-may-1989	UM13	2CLP	ND	10.000	UGL
18.0	25-may-1989	UM13	2CNAP	LT	2.070	UGL
18.0	25-may-1989	UM13	2NP	ND	50.000	UGL
18.0	25-may-1989	UM13	33DCBD	ND	20.000	UGL
18.0	25-may-1989	UM13	46DN2C	ND	50.000	UGL
18.0	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
18.0	25-may-1989	UM13	4CL3C	ND	10.000	UGL
18.0	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
18.0	25-may-1989	UM13	4NP	ND	50.000	UGL
18.0	25-may-1989	UH09	ABHC	ND	0.050	UGL
18.0	25-may-1989	UM13	ABHC	ND	3.000	UGL
18.0	25-may-1989	99	ACROLN	ND	100.000	UGL
18.0	25-may-1989	99	ACRYLO	ND	100.000	UGL
18.0	25-may-1989	UH09	AENSLF	ND	0.050	UGL
18.0	25-may-1989	UM13	AENSLF	ND	3.000	UGL
18.0	25-may-1989	SS06	AG	LT	5.450	UGL
18.0	25-may-1989	UH09	ALDRN	LT	0.022	UGL
18.0	25-may-1989	UM13	ALDRN	LT	5.780	UGL
18.0	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
18.0	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
18.0	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
18.0	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
18.0	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
18.0	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
18.0	25-may-1989	UM13	B2EHP	LT	32.700	UGL
18.0	25-may-1989	UM13	BAANTR	LT	0.906	UGL
18.0	25-may-1989	UM13	BAPYR	LT	8.290	UGL
18.0	25-may-1989	UM13	BBFANT	LT	2.650	UGL
18.0	25-may-1989	UH09	BBHC	ND	0.050	UGL

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Site: WELL GNC-7 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
18.0	25-may-1989	UM13	BBHC	LT	3.170	UGL
18.0	25-may-1989	UM13	BBZP	ND	10.000	UGL
18.0	25-may-1989	SS06	BE	LT	2.860	UGL
18.0	25-may-1989	UH09	BENSLF	ND	0.100	UGL
18.0	25-may-1989	UM13	BENSLF	ND	6.000	UGL
18.0	25-may-1989	UM13	BENZID	ND	50.000	UGL
18.0	25-may-1989	UM13	BGHI PY	LT	64.600	UGL
18.0	25-may-1989	UM13	BKFANT	LT	3.280	UGL
18.0	25-may-1989	99	BRDCLM	ND	5.000	UGL
18.0	25-may-1989	UM13	BZALC	ND	0.100	UGL
18.0	25-may-1989	99	C13DCP	LT	1.800	UGL
18.0	25-may-1989	99	C2H3CL	LT	13.000	UGL
18.0	25-may-1989	99	C2H5CL	LT	6.900	UGL
18.0	25-may-1989	99	C6H6	LT	1.700	UGL
18.0	25-may-1989	99	CCL4	LT	1.000	UGL
18.0	25-may-1989	SS06	CD		6.650	UGL
18.0	25-may-1989	99	CH2CL2	LT	23.000	UGL
18.0	25-may-1989	99	CH3BR	ND	10.000	UGL
18.0	25-may-1989	99	CH3CL	LT	1.800	UGL
18.0	25-may-1989	99	CHBR3	LT	3.700	UGL
18.0	25-may-1989	99	CHCL3	LT	1.000	UGL
18.0	25-may-1989	UM13	CHRY	LT	1.150	UGL
18.0	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
18.0	25-may-1989	UM13	CL6CP	ND	10.000	UGL
18.0	25-may-1989	UM13	CL6ET	LT	13.300	UGL
18.0	25-may-1989	99	CLC6H5	LT	1.200	UGL
18.0	25-may-1989	UH09	CLDAN	LT	0.046	UGL
18.0	25-may-1989	UM13	CLDAN	LT	10.200	UGL
18.0	25-may-1989	SS06	CR	LT	4.440	UGL
18.0	25-may-1989	SS06	CU	LT	6.200	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
18.0	25-may-1989	UM13	DBAHA	LT	12.300	UGL
18.0	25-may-1989	UH09	DBHC	ND	0.050	UGL
18.0	25-may-1989	UM13	DBHC	LT	621.000	UGL
18.0	25-may-1989	99	DBRCLM	LT	1.800	UGL
18.0	25-may-1989	UM13	DEP	ND	10.000	UGL
18.0	25-may-1989	UH09	DLDRN	LT	0.005	UGL
18.0	25-may-1989	UM13	DLDRN	LT	2.550	UGL
18.0	25-may-1989	UM13	DMP	ND	10.000	UGL
18.0	25-may-1989	UM13	DNBP	ND	10.000	UGL
18.0	25-may-1989	UM13	DNOP		36.800	UGL
18.0	25-may-1989	UH09	ENDRN	ND	0.100	UGL
18.0	25-may-1989	UM13	ENDRN	LT	34.200	UGL
18.0	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
18.0	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
18.0	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
18.0	25-may-1989	99	ETC6H5	LT	1.400	UGL
18.0	25-may-1989	UM13	FANT	LT	1.150	UGL

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Site: WELL GNC-7

(continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
18.0	25-may-1989	UM13	FLRENE	ND	10.000	UGL
18.0	25-may-1989	UM13	HCBBD	LT	7.890	UGL
18.0	25-may-1989	99	HG		0.100	UGL
18.0	25-may-1989	UH09	HPCL	LT	0.019	UGL
18.0	25-may-1989	UM13	HPCL	LT	4.910	UGL
18.0	25-may-1989	UH09	HPCLE	LT	0.086	UGL
18.0	25-may-1989	UM13	HPCLE	LT	6.440	UGL
18.0	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
18.0	25-may-1989	UH09	ISODR	LT	0.041	UGL
18.0	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
18.0	25-may-1989	UH09	LIN	LT	0.029	UGL
18.0	25-may-1989	UM13	LIN	LT	26.000	UGL
18.0	25-may-1989	99	MEC6H5	LT	1.800	UGL
18.0	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
18.0	25-may-1989	UM13	NAP	LT	3.510	UGL
18.0	25-may-1989	UM13	NB	ND	10.000	UGL
18.0	25-may-1989	SS06	NI		33.300	UGL
18.0	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
18.0	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
18.0	25-may-1989	UM13	NNDPA	ND	6.700	UGL
18.0	25-may-1989	SD11	PB	LT	1.700	UGL
18.0	25-may-1989	UH09	PCB016	LT	0.133	UGL
18.0	25-may-1989	UM13	PCB016	ND	30.000	UGL
18.0	25-may-1989	UH09	PCB221	ND	0.500	UGL
18.0	25-may-1989	UM13	PCB221	ND	30.000	UGL
18.0	25-may-1989	UH09	PCB232	ND	0.500	UGL
18.0	25-may-1989	UM13	PCB232	ND	30.000	UGL
18.0	25-may-1989	UH09	PCB242	ND	0.500	UGL
18.0	25-may-1989	UM13	PCB242	ND	30.000	UGL
18.0	25-may-1989	UH09	PCB248	ND	0.500	UGL
18.0	25-may-1989	UM13	PCB248	ND	30.000	UGL
18.0	25-may-1989	UH09	PCB254	ND	1.000	UGL
18.0	25-may-1989	UM13	PCB254	ND	60.000	UGL
18.0	25-may-1989	UH09	PCB260	LT	0.087	UGL
18.0	25-may-1989	UM13	PCB260	ND	60.000	UGL
18.0	25-may-1989	UM13	PCP	ND	50.000	UGL
18.0	25-may-1989	UM13	PHANTR	LT	0.759	UGL
18.0	25-may-1989	UH09	PPDDD	LT	0.013	UGL
18.0	25-may-1989	UM13	PPDDD	LT	5.610	UGL
18.0	25-may-1989	UH09	PPDDE	LT	0.022	UGL
18.0	25-may-1989	UM13	PPDDE	LT	11.200	UGL
18.0	25-may-1989	UH09	PPDDT	LT	0.037	UGL
18.0	25-may-1989	UM13	PPDDT	LT	5.070	UGL
18.0	25-may-1989	UM13	PYR	LT	9.380	UGL
18.0	25-may-1989	SD11	SB	LT	2.500	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
18.0	25-may-1989	99	TCLEA	LT	7.100	UGL
18.0	25-may-1989	99	TCLEE	LT	2.300	UGL

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Site: WELL GNC-7 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
18.0	25-may-1989	SS06	TL	LT	59.900	UGL
18.0	25-may-1989	99	TRCLE	LT	1.000	UGL
18.0	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
18.0	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
18.0	25-may-1989	UM13	UNK536		11.400	UGL
18.0	25-may-1989	UM13	UNK538		11.600	UGL
18.0	25-may-1989	UM13	UNK541		34.800	UGL
18.0	25-may-1989	UM13	UNK542		8.610	UGL
18.0	25-may-1989	UM13	UNK543		6.800	UGL
18.0	25-may-1989	UM13	UNK543		5.910	UGL
18.0	25-may-1989	UM13	UNK544		17.700	UGL
18.0	25-may-1989	UM13	UNK619		20.200	UGL
18.0	25-may-1989	UM13	UNK619		11.600	UGL
18.0	25-may-1989	UM13	UNK620		34.300	UGL
18.0	25-may-1989	UM13	UNK620		20.200	UGL
18.0	25-may-1989	UM13	UNK620		11.400	UGL
18.0	25-may-1989	UM13	UNK621		32.200	UGL
18.0	25-may-1989	UM13	UNK621		25.500	UGL
18.0	25-may-1989	UM13	UNK623		20.200	UGL
18.0	25-may-1989	UM13	UNK628		10.500	UGL
18.0	25-may-1989	UM13	UNK630		17.400	UGL
18.0	25-may-1989	UM13	UNK648		7.560	UGL
18.0	25-may-1989	UM13	UNK655		11.400	UGL
18.0	25-may-1989	SS06	ZN		19.400	UGL

Site: WELL GNC-8

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25.0	25-may-1989	99	111TCE	LT	1.000	UGL
25.0	25-may-1989	99	112TCE	LT	1.700	UGL
25.0	25-may-1989	99	11DCE	LT	6.800	UGL
25.0	25-may-1989	99	11DCLE	LT	2.700	UGL
25.0	25-may-1989	UM13	124TCB	LT	4.420	UGL
25.0	25-may-1989	99	12DCE	LT	2.200	UGL
25.0	25-may-1989	UM13	12DCLB	LT	7.320	UGL
25.0	25-may-1989	99	12DCLE	LT	1.000	UGL
25.0	25-may-1989	99	12DCLP	LT	3.200	UGL
25.0	25-may-1989	UM13	13DCLB	LT	8.270	UGL
25.0	25-may-1989	UM13	14DCLB	LT	7.970	UGL
25.0	25-may-1989	UM13	246TCP	ND	10.000	UGL
25.0	25-may-1989	UM13	24DCLP	ND	10.000	UGL
25.0	25-may-1989	UM13	24DMPN	ND	10.000	UGL
25.0	25-may-1989	UM13	24DNP	ND	50.000	UGL
25.0	25-may-1989	UM13	24DNT	LT	5.840	UGL
25.0	25-may-1989	UM13	26DNT	LT	5.520	UGL

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 Analytical Results for Chemical Ground Water
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Site: WELL GNC-8 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25.0	25-may-1989	99	2CLEVE	LT	1.600	UGL
25.0	25-may-1989	UM13	2CLP	ND	10.000	UGL
25.0	25-may-1989	UM13	2CNAP	LT	2.070	UGL
25.0	25-may-1989	UM13	2NP	ND	50.000	UGL
25.0	25-may-1989	UM13	33DCBD	ND	20.000	UGL
25.0	25-may-1989	UM13	46DN2C	ND	50.000	UGL
25.0	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
25.0	25-may-1989	UM13	4CL3C	ND	10.000	UGL
25.0	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
25.0	25-may-1989	UM13	4NP	ND	50.000	UGL
25.0	25-may-1989	UH09	ABHC	ND	0.050	UGL
25.0	25-may-1989	UM13	ABHC	ND	3.000	UGL
25.0	25-may-1989	99	ACROLN	ND	100.000	UGL
25.0	25-may-1989	99	ACRYLO	ND	100.000	UGL
25.0	25-may-1989	UH09	AENSLF	ND	0.050	UGL
25.0	25-may-1989	UM13	AENSLF	ND	3.000	UGL
25.0	25-may-1989	SS06	AG	LT	5.450	UGL
25.0	25-may-1989	UH09	ALDRN	LT	0.022	UGL
25.0	25-may-1989	UM13	ALDRN	LT	5.780	UGL
25.0	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
25.0	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
25.0	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
25.0	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
25.0	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
25.0	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
25.0	25-may-1989	UM13	B2EHP	LT	32.700	UGL
25.0	25-may-1989	UM13	BAANTR	LT	0.906	UGL
25.0	25-may-1989	UM13	BAPYR	LT	8.290	UGL
25.0	25-may-1989	UM13	BBFANT	LT	2.650	UGL
25.0	25-may-1989	UH09	BBHC	ND	0.050	UGL
25.0	25-may-1989	UM13	BBHC	LT	3.170	UGL
25.0	25-may-1989	UM13	BBZP	ND	10.000	UGL
25.0	25-may-1989	SS06	BE	LT	2.860	UGL
25.0	25-may-1989	UH09	BENSLF	ND	0.100	UGL
25.0	25-may-1989	UM13	BENSLF	ND	6.000	UGL
25.0	25-may-1989	UM13	BENZID	ND	50.000	UGL
25.0	25-may-1989	UM13	BGHIPY	LT	64.600	UGL
25.0	25-may-1989	UM13	BKFANT	LT	3.280	UGL
25.0	25-may-1989	99	BRDCLM	ND	5.000	UGL
25.0	25-may-1989	UM13	BZALC	ND	0.100	UGL
25.0	25-may-1989	99	C13DCP	LT	1.800	UGL
25.0	25-may-1989	99	C2H3CL	LT	13.000	UGL
25.0	25-may-1989	99	C2H5CL	LT	6.900	UGL
25.0	25-may-1989	99	C6H6	LT	1.700	UGL
25.0	25-may-1989	99	CCL4	LT	1.000	UGL
25.0	25-may-1989	SS06	CD	LT	4.390	UGL
25.0	25-may-1989	99	CH2CL2	LT	23.000	UGL

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Site: WELL GNC-8 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25.0	25-may-1989	99	CH3BR	ND	10.000	UGL
25.0	25-may-1989	99	CH3CL	LT	1.800	UGL
25.0	25-may-1989	99	CHBR3	LT	3.700	UGL
25.0	25-may-1989	99	CHCL3	LT	1.000	UGL
25.0	25-may-1989	UM13	CHRY	LT	1.150	UGL
25.0	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
25.0	25-may-1989	UM13	CL6CP	ND	10.000	UGL
25.0	25-may-1989	UM13	CL6ET	LT	13.300	UGL
25.0	25-may-1989	99	CLC6H5	LT	1.200	UGL
25.0	25-may-1989	UH09	CLDAN	LT	0.046	UGL
25.0	25-may-1989	UM13	CLDAN	LT	10.200	UGL
25.0	25-may-1989	SS06	CR	LT	4.440	UGL
25.0	25-may-1989	SS06	CU		8.000	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
25.0	25-may-1989	UM13	DBAHA	LT	12.300	UGL
25.0	25-may-1989	UH09	DBHC	ND	0.050	UGL
25.0	25-may-1989	UM13	DBHC	LT	621.000	UGL
25.0	25-may-1989	99	DBRCLM	LT	1.800	UGL
25.0	25-may-1989	UM13	DEP	ND	10.000	UGL
25.0	25-may-1989	UH09	DLDRN	LT	0.005	UGL
25.0	25-may-1989	UM13	DLDRN	LT	2.550	UGL
25.0	25-may-1989	UM13	DMP	ND	10.000	UGL
25.0	25-may-1989	UM13	DNBP	ND	10.000	UGL
25.0	25-may-1989	UM13	DNOP		24.900	UGL
25.0	25-may-1989	UH09	ENDRN	ND	0.100	UGL
25.0	25-may-1989	UM13	ENDRN	LT	34.200	UGL
25.0	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
25.0	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
25.0	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
25.0	25-may-1989	99	ETC6H5	LT	1.400	UGL
25.0	25-may-1989	UM13	FANT	LT	1.150	UGL
25.0	25-may-1989	UM13	FLRENE	ND	10.000	UGL
25.0	25-may-1989	UM13	HCBD	LT	7.890	UGL
25.0	25-may-1989	99	HG		0.150	UGL
25.0	25-may-1989	UH09	HPCL	LT	0.019	UGL
25.0	25-may-1989	UM13	HPCL	LT	4.910	UGL
25.0	25-may-1989	UH09	HPCLE	LT	0.086	UGL
25.0	25-may-1989	UM13	HPCLE	LT	6.440	UGL
25.0	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
25.0	25-may-1989	UH09	ISODR	LT	0.041	UGL
25.0	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
25.0	25-may-1989	UH09	LIN	LT	0.029	UGL
25.0	25-may-1989	UM13	LIN	LT	26.000	UGL
25.0	25-may-1989	99	MEC6H5	LT	1.800	UGL
25.0	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
25.0	25-may-1989	UM13	NAP	LT	3.510	UGL
25.0	25-may-1989	UM13	NB	ND	10.000	UGL
25.0	25-may-1989	SS06	NI	LT	15.300	UGL

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Site: WELL GNC-8 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25.0	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
25.0	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
25.0	25-may-1989	UM13	NNDPA	ND	6.700	UGL
25.0	25-may-1989	SD11	PB	LT	1.700	UGL
25.0	25-may-1989	UH09	PCB016	LT	0.133	UGL
25.0	25-may-1989	UM13	PCB016	ND	30.000	UGL
25.0	25-may-1989	UH09	PCB221	ND	0.500	UGL
25.0	25-may-1989	UM13	PCB221	ND	30.000	UGL
25.0	25-may-1989	UH09	PCB232	ND	0.500	UGL
25.0	25-may-1989	UM13	PCB232	ND	30.000	UGL
25.0	25-may-1989	UH09	PCB242	ND	0.500	UGL
25.0	25-may-1989	UM13	PCB242	ND	30.000	UGL
25.0	25-may-1989	UH09	PCB248	ND	0.500	UGL
25.0	25-may-1989	UM13	PCB248	ND	30.000	UGL
25.0	25-may-1989	UH09	PCB254	ND	1.000	UGL
25.0	25-may-1989	UM13	PCB254	ND	60.000	UGL
25.0	25-may-1989	UH09	PCB260	LT	0.087	UGL
25.0	25-may-1989	UM13	PCB260	ND	60.000	UGL
25.0	25-may-1989	UM13	PCP	ND	50.000	UGL
25.0	25-may-1989	UM13	PHANTR	LT	0.759	UGL
25.0	25-may-1989	UH09	PPDDD	LT	0.013	UGL
25.0	25-may-1989	UM13	PPDDD	LT	5.610	UGL
25.0	25-may-1989	UH09	PPDDE	LT	0.022	UGL
25.0	25-may-1989	UM13	PPDDE	LT	11.200	UGL
25.0	25-may-1989	UH09	PPDDT	LT	0.037	UGL
25.0	25-may-1989	UM13	PPDDT	LT	5.070	UGL
25.0	25-may-1989	UM13	PYR	LT	9.380	UGL
0.0	25-may-1989	SD11	SB		3.000	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
25.0	25-may-1989	99	TCLEA	LT	7.100	UGL
25.0	25-may-1989	99	TCLEE	LT	2.300	UGL
25.0	25-may-1989	SS06	TL	LT	59.900	UGL
25.0	25-may-1989	99	TRCLE	LT	1.000	UGL
25.0	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
25.0	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
25.0	25-may-1989	UM13	UNK536		13.200	UGL
25.0	25-may-1989	UM13	UNK538		13.000	UGL
25.0	25-may-1989	UM13	UNK540		4.320	UGL
25.0	25-may-1989	UM13	UNK540		4.250	UGL
25.0	25-may-1989	UM13	UNK541		42.800	UGL
25.0	25-may-1989	UM13	UNK542		8.650	UGL
25.0	25-may-1989	UM13	UNK543		8.290	UGL
25.0	25-may-1989	UM13	UNK543		7.130	UGL
25.0	25-may-1989	UM13	UNK544		21.600	UGL
25.0	25-may-1989	UM13	UNK599		4.850	UGL
25.0	25-may-1989	UM13	UNK619		12.900	UGL
25.0	25-may-1989	UM13	UNK620		22.000	UGL
25.0	25-may-1989	UM13	UNK620		11.900	UGL

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Site: WELL GNC-8 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25.0	25-may-1989	UM13	UNK621		21.300	UGL
25.0	25-may-1989	UM13	UNK621		17.100	UGL
25.0	25-may-1989	UM13	UNK622		13.600	UGL
25.0	25-may-1989	UM13	UNK628		6.310	UGL
25.0	25-may-1989	UM13	UNK630		10.700	UGL
25.0	25-may-1989	SS06	ZN		21.100	UGL

Site: WELL GNL-1

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	99	111TCE	LT	1.000	UGL
35.0	25-may-1989	99	112TCE	LT	1.700	UGL
35.0	25-may-1989	99	11DCE	LT	6.800	UGL
35.0	25-may-1989	99	11DCLE	LT	2.700	UGL
35.0	25-may-1989	UM13	124TCB	LT	4.420	UGL
35.0	25-may-1989	99	12DCE	LT	2.200	UGL
35.0	25-may-1989	UM13	12DCLB	LT	7.320	UGL
35.0	25-may-1989	99	12DCLE	LT	1.000	UGL
35.0	25-may-1989	99	12DCLP	LT	3.200	UGL
35.0	25-may-1989	UM13	13DCLB	LT	8.270	UGL
35.0	25-may-1989	UM13	14DCLB	LT	7.970	UGL
35.0	25-may-1989	UM13	246TCP	ND	10.000	UGL
35.0	25-may-1989	UM13	24DCLP	ND	10.000	UGL
35.0	25-may-1989	UM13	24DMPN	ND	10.000	UGL
35.0	25-may-1989	UM13	24DNP	ND	50.000	UGL
35.0	25-may-1989	UM13	24DNT	LT	5.840	UGL
35.0	25-may-1989	UM13	26DNT	LT	5.520	UGL
35.0	25-may-1989	99	2CLEVE	LT	1.600	UGL
35.0	25-may-1989	UM13	2CLP	ND	10.000	UGL
35.0	25-may-1989	UM13	2CNAP	LT	2.070	UGL
35.0	25-may-1989	UM13	2NP	ND	50.000	UGL
35.0	25-may-1989	UM13	33DCBD	ND	20.000	UGL
35.0	25-may-1989	UM13	46DN2C	ND	50.000	UGL
35.0	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
35.0	25-may-1989	UM13	4CL3C	ND	10.000	UGL
35.0	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
35.0	25-may-1989	UM13	4NP	ND	50.000	UGL
35.0	25-may-1989	UH09	ABHC	ND	0.050	UGL
35.0	25-may-1989	UM13	ABHC	ND	3.000	UGL
35.0	25-may-1989	99	ACROLN	ND	100.000	UGL
35.0	25-may-1989	99	ACRYLO	ND	100.000	UGL
35.0	25-may-1989	UH09	AENSLF	ND	0.050	UGL
35.0	25-may-1989	UM13	AENSLF	ND	3.000	UGL
35.0	25-may-1989	SS06	AG	LT	5.450	UGL
35.0	25-may-1989	UH09	ALDRN	LT	0.022	UGL

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Site: WELL GNL-1 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	UM13	ALDRN	LT	5.780	UGL
35.0	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
35.0	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
35.0	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
35.0	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
35.0	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
35.0	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
35.0	25-may-1989	UM13	B2EHP	LT	32.700	UGL
35.0	25-may-1989	UM13	BAANTR	LT	0.906	UGL
35.0	25-may-1989	UM13	BAPYR	LT	8.290	UGL
35.0	25-may-1989	UM13	BBFANT	LT	2.650	UGL
35.0	25-may-1989	UH09	BBHC	ND	0.050	UGL
35.0	25-may-1989	UM13	BBHC	LT	3.170	UGL
35.0	25-may-1989	UM13	BBZP	ND	10.000	UGL
35.0	25-may-1989	SS06	BE	LT	2.860	UGL
35.0	25-may-1989	UH09	BENSLF	ND	0.100	UGL
35.0	25-may-1989	UM13	BENSLF	ND	6.000	UGL
35.0	25-may-1989	UM13	BENZID	ND	50.000	UGL
35.0	25-may-1989	UM13	BGHIPY	LT	64.600	UGL
35.0	25-may-1989	UM13	BKFANT	LT	3.280	UGL
35.0	25-may-1989	99	BRDCLM	ND	5.000	UGL
35.0	25-may-1989	UM13	BZALC	ND	0.100	UGL
35.0	25-may-1989	99	C13DCP	LT	1.800	UGL
35.0	25-may-1989	99	C2H3CL	LT	13.000	UGL
35.0	25-may-1989	99	C2H5CL	LT	6.900	UGL
35.0	25-may-1989	99	C6H6	LT	1.700	UGL
35.0	25-may-1989	99	CCL4	LT	1.000	UGL
35.0	25-may-1989	SS06	CD		7.400	UGL
35.0	25-may-1989	99	CH2CL2	LT	23.000	UGL
35.0	25-may-1989	99	CH3BR	ND	10.000	UGL
35.0	25-may-1989	99	CH3CL	LT	1.800	UGL
35.0	25-may-1989	99	CHBR3	LT	3.700	UGL
35.0	25-may-1989	99	CHCL3	LT	1.000	UGL
35.0	25-may-1989	UM13	CHRY	LT	1.150	UGL
35.0	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
35.0	25-may-1989	UM13	CL6CP	ND	10.000	UGL
35.0	25-may-1989	UM13	CL6ET	LT	13.300	UGL
35.0	25-may-1989	99	CLC6H5	LT	1.200	UGL
35.0	25-may-1989	UH09	CLDAN	LT	0.046	UGL
35.0	25-may-1989	UM13	CLDAN	LT	10.200	UGL
35.0	25-may-1989	SS06	CR	LT	4.440	UGL
35.0	25-may-1989	SS06	CU		17.700	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
35.0	25-may-1989	UM13	DBAHA	LT	12.300	UGL
35.0	25-may-1989	UH09	DBHC	ND	0.050	UGL
35.0	25-may-1989	UM13	DBHC	LT	621.000	UGL
35.0	25-may-1989	99	DBRCLM	LT	1.800	UGL

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Site: WELL GNL-1 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	UM13	DEP	ND	10.000	UGL
35.0	25-may-1989	UH09	DLDRN	LT	0.005	UGL
35.0	25-may-1989	UM13	DLDRN	LT	2.550	UGL
35.0	25-may-1989	UM13	DMP	ND	10.000	UGL
35.0	25-may-1989	UM13	DNBP	ND	10.000	UGL
35.0	25-may-1989	UM13	DNOP	LT	21.400	UGL
35.0	25-may-1989	UH09	ENDRN	ND	0.100	UGL
35.0	25-may-1989	UM13	ENDRN	LT	34.200	UGL
35.0	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
35.0	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
35.0	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
35.0	25-may-1989	99	ETC6H5	LT	1.400	UGL
35.0	25-may-1989	UM13	FANT	LT	1.150	UGL
35.0	25-may-1989	UM13	FLRENE	ND	10.000	UGL
35.0	25-may-1989	UM13	HCBD	LT	7.890	UGL
35.0	25-may-1989	99	HG		0.150	UGL
35.0	25-may-1989	UH09	HPCL		0.104	UGL
35.0	25-may-1989	UM13	HPCL	LT	4.910	UGL
35.0	25-may-1989	UH09	HPCLE	LT	0.086	UGL
35.0	25-may-1989	UM13	HPCLE	LT	6.440	UGL
35.0	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
35.0	25-may-1989	UH09	ISODR	LT	0.041	UGL
35.0	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
35.0	25-may-1989	UH09	LIN	LT	0.029	UGL
35.0	25-may-1989	UM13	LIN	LT	26.000	UGL
35.0	25-may-1989	99	MEC6H5	LT	1.800	UGL
35.0	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
35.0	25-may-1989	UM13	NAP	LT	3.510	UGL
35.0	25-may-1989	UM13	NB	ND	10.000	UGL
35.0	25-may-1989	SS06	NI	LT	15.300	UGL
35.0	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
35.0	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
35.0	25-may-1989	UM13	NNDPA	ND	6.700	UGL
35.0	25-may-1989	SD11	PB		4.570	UGL
35.0	25-may-1989	UH09	PCB016	LT	0.133	UGL
35.0	25-may-1989	UM13	PCB016	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB221	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB221	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB232	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB232	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB242	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB242	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB248	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB248	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB254	ND	1.000	UGL
35.0	25-may-1989	UM13	PCB254	ND	60.000	UGL
35.0	25-may-1989	UH09	PCB260	LT	0.087	UGL
35.0	25-may-1989	UM13	PCB260	ND	60.000	UGL

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Site: WELL GNL-1 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	UM13	PCP	ND	50.000	UGL
35.0	25-may-1989	UM13	PHANTR	LT	0.759	UGL
35.0	25-may-1989	UH09	PPDDD	LT	0.013	UGL
35.0	25-may-1989	UM13	PPDDD	LT	5.610	UGL
35.0	25-may-1989	UH09	PPDDE	LT	0.022	UGL
35.0	25-may-1989	UM13	PPDDE	LT	11.200	UGL
35.0	25-may-1989	UH09	PPDDT	LT	0.037	UGL
35.0	25-may-1989	UM13	PPDDT	LT	5.070	UGL
35.0	25-may-1989	UM13	PYR	LT	9.380	UGL
0.0	25-may-1989	SD11	SB		2.880	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
35.0	25-may-1989	99	TCLEA	LT	7.100	UGL
35.0	25-may-1989	99	TCLEE	LT	2.300	UGL
35.0	25-may-1989	SS06	TL	LT	59.900	UGL
35.0	25-may-1989	99	TRCLE	LT	1.000	UGL
35.0	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
35.0	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
35.0	25-may-1989	UM13	UNK536		10.000	UGL
35.0	25-may-1989	UM13	UNK538		11.300	UGL
35.0	25-may-1989	UM13	UNK541		36.600	UGL
35.0	25-may-1989	UM13	UNK542		9.600	UGL
35.0	25-may-1989	UM13	UNK543		7.510	UGL
35.0	25-may-1989	UM13	UNK543		6.380	UGL
35.0	25-may-1989	UM13	UNK544		19.700	UGL
35.0	25-may-1989	UM13	UNK599		4.190	UGL
35.0	25-may-1989	SS06	ZN		39.300	UGL

Site: WELL GNL-2

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
30.0	25-may-1989	99	111TCE	LT	1.000	UGL
30.0	25-may-1989	99	112TCE	LT	1.700	UGL
30.0	25-may-1989	99	11DCE	LT	6.800	UGL
30.0	25-may-1989	99	11DCLE	LT	2.700	UGL
30.0	25-may-1989	UM13	124TCB	LT	4.420	UGL
30.0	25-may-1989	99	12DCE	LT	2.200	UGL
30.0	25-may-1989	UM13	12DCLB	LT	7.320	UGL
30.0	25-may-1989	99	12DCLE	LT	1.000	UGL
30.0	25-may-1989	99	12DCLP	LT	3.200	UGL
30.0	25-may-1989	UM13	13DCLB	LT	8.270	UGL
30.0	25-may-1989	UM13	14DCLB	LT	7.970	UGL
30.0	25-may-1989	UM13	246TCP	ND	10.000	UGL
30.0	25-may-1989	UM13	24DCLP	ND	10.000	UGL
30.0	25-may-1989	UM13	24DMPN	ND	10.000	UGL
30.0	25-may-1989	UM13	24DNP	ND	50.000	UGL

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Site: WELL GNL-2 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
30.0	25-may-1989	UM13	24DNT	LT	5.840	UGL
30.0	25-may-1989	UM13	26DNT	LT	5.520	UGL
30.0	25-may-1989	99	2CLEVE	LT	1.600	UGL
30.0	25-may-1989	UM13	2CLP	ND	10.000	UGL
30.0	25-may-1989	UM13	2CNAP	LT	2.070	UGL
30.0	25-may-1989	UM13	2NP	ND	50.000	UGL
30.0	25-may-1989	UM13	33DCBD	ND	20.000	UGL
30.0	25-may-1989	UM13	46DN2C	ND	50.000	UGL
30.0	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
30.0	25-may-1989	UM13	4CL3C	ND	10.000	UGL
30.0	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
30.0	25-may-1989	UM13	4NP	ND	50.000	UGL
30.0	25-may-1989	UH09	ABHC	ND	0.050	UGL
30.0	25-may-1989	UM13	ABHC	ND	3.000	UGL
30.0	25-may-1989	99	ACROLN	ND	100.000	UGL
30.0	25-may-1989	99	ACRYLO	ND	100.000	UGL
30.0	25-may-1989	UH09	AENSLF	ND	0.050	UGL
30.0	25-may-1989	UM13	AENSLF	ND	3.000	UGL
30.0	25-may-1989	SS06	AG	LT	5.450	UGL
30.0	25-may-1989	UH09	ALDRN	LT	0.022	UGL
30.0	25-may-1989	UM13	ALDRN	LT	5.780	UGL
30.0	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
30.0	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
30.0	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
30.0	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
30.0	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
30.0	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
30.0	25-may-1989	UM13	B2EHP	LT	32.700	UGL
30.0	25-may-1989	UM13	BAANTR	LT	0.906	UGL
30.0	25-may-1989	UM13	BAPYR	LT	8.290	UGL
30.0	25-may-1989	UM13	BBFANT	LT	2.650	UGL
30.0	25-may-1989	UH09	BBHC	ND	0.050	UGL
30.0	25-may-1989	UM13	BBHC	LT	3.170	UGL
30.0	25-may-1989	UM13	BBZP	ND	10.000	UGL
30.0	25-may-1989	SS06	BE	LT	2.860	UGL
30.0	25-may-1989	UH09	BENSLF	ND	0.100	UGL
30.0	25-may-1989	UM13	BENSLF	ND	6.000	UGL
30.0	25-may-1989	UM13	BENZID	ND	50.000	UGL
30.0	25-may-1989	UM13	BGHIPY	LT	64.600	UGL
30.0	25-may-1989	UM13	BKFANT	LT	3.280	UGL
30.0	25-may-1989	99	BRDCLM	ND	5.000	UGL
30.0	25-may-1989	UM13	BZALC	ND	0.100	UGL
30.0	25-may-1989	99	C13DCP	LT	1.800	UGL
30.0	25-may-1989	99	C2H3CL	LT	13.000	UGL
30.0	25-may-1989	99	C2H5CL	LT	6.900	UGL
30.0	25-may-1989	99	C6H6	LT	1.700	UGL
30.0	25-may-1989	99	CCL4	LT	1.000	UGL

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Site: WELL GNL-2 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
30.0	25-may-1989	SS06	CD		7.830	UGL
30.0	25-may-1989	99	CH2CL2	LT	23.000	UGL
30.0	25-may-1989	99	CH3BR	ND	10.000	UGL
30.0	25-may-1989	99	CH3CL	LT	1.800	UGL
30.0	25-may-1989	99	CHBR3	LT	3.700	UGL
30.0	25-may-1989	99	CHCL3	LT	1.000	UGL
30.0	25-may-1989	UM13	CHRY	LT	1.150	UGL
30.0	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
30.0	25-may-1989	UM13	CL6CP	ND	10.000	UGL
30.0	25-may-1989	UM13	CL6ET	LT	13.300	UGL
30.0	25-may-1989	99	CLC6H5	LT	1.200	UGL
30.0	25-may-1989	UH09	CLDAN	LT	0.046	UGL
30.0	25-may-1989	UM13	CLDAN	LT	10.200	UGL
30.0	25-may-1989	SS06	CR	LT	4.440	UGL
30.0	25-may-1989	SS06	CU		10.400	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
30.0	25-may-1989	UM13	DBAHA	LT	12.300	UGL
30.0	25-may-1989	UH09	DBHC	ND	0.500	UGL
30.0	25-may-1989	UM13	DBHC	LT	621.000	UGL
30.0	25-may-1989	99	DBRCLM	LT	1.800	UGL
30.0	25-may-1989	UM13	DEP	ND	10.000	UGL
30.0	25-may-1989	UH09	DLDRN	LT	0.005	UGL
30.0	25-may-1989	UM13	DLDRN	LT	2.550	UGL
30.0	25-may-1989	UM13	DMP	ND	10.000	UGL
30.0	25-may-1989	UM13	DNBP	ND	10.000	UGL
30.0	25-may-1989	UM13	DNOP	LT	21.400	UGL
30.0	25-may-1989	UH09	ENDRN	ND	0.100	UGL
30.0	25-may-1989	UM13	ENDRN	LT	34.200	UGL
30.0	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
30.0	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
30.0	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
30.0	25-may-1989	99	ETC6H5	LT	1.400	UGL
30.0	25-may-1989	UM13	FANT	LT	1.150	UGL
30.0	25-may-1989	UM13	FLRENE	ND	10.000	UGL
30.0	25-may-1989	UM13	HCBD	LT	7.890	UGL
30.0	25-may-1989	99	HG		0.110	UGL
30.0	25-may-1989	UH09	HPCL		0.100	UGL
30.0	25-may-1989	UM13	HPCL	LT	4.910	UGL
30.0	25-may-1989	UH09	HPCLE	LT	0.086	UGL
30.0	25-may-1989	UM13	HPCLE	LT	6.440	UGL
30.0	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
30.0	25-may-1989	UH09	ISODR	LT	0.041	UGL
30.0	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
30.0	25-may-1989	UH09	LIN	LT	0.029	UGL
30.0	25-may-1989	UM13	LIN	LT	26.000	UGL
30.0	25-may-1989	99	MEC6H5	LT	1.800	UGL
30.0	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
30.0	25-may-1989	UM13	NAP	LT	3.510	UGL

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Site: WELL GNL-2 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
30.0	25-may-1989	UM13	NB	ND	10.000	UGL
30.0	25-may-1989	SS06	NI	LT	15.300	UGL
30.0	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
30.0	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
30.0	25-may-1989	UM13	NNDPA	ND	6.700	UGL
30.0	25-may-1989	SD11	PB	LT	1.700	UGL
30.0	25-may-1989	UH09	PCB016	LT	0.133	UGL
30.0	25-may-1989	UM13	PCB016	ND	30.000	UGL
30.0	25-may-1989	UH09	PCB221	ND	0.500	UGL
30.0	25-may-1989	UM13	PCB221	ND	30.000	UGL
30.0	25-may-1989	UH09	PCB232	ND	0.500	UGL
30.0	25-may-1989	UM13	PCB232	ND	30.000	UGL
30.0	25-may-1989	UH09	PCB242	ND	0.500	UGL
30.0	25-may-1989	UM13	PCB242	ND	30.000	UGL
30.0	25-may-1989	UH09	PCB248	ND	0.500	UGL
30.0	25-may-1989	UM13	PCB248	ND	30.000	UGL
30.0	25-may-1989	UH09	PCB254	ND	1.000	UGL
30.0	25-may-1989	UM13	PCB254	ND	60.000	UGL
30.0	25-may-1989	UH09	PCB260	LT	0.087	UGL
30.0	25-may-1989	UM13	PCB260	ND	60.000	UGL
30.0	25-may-1989	UM13	PCP	ND	50.000	UGL
30.0	25-may-1989	UM13	PHANTR	LT	0.759	UGL
30.0	25-may-1989	UH09	PPDDD	LT	0.013	UGL
30.0	25-may-1989	UM13	PPDDD	LT	5.610	UGL
30.0	25-may-1989	UH09	PPDDE	LT	0.022	UGL
30.0	25-may-1989	UM13	PPDDE	LT	11.200	UGL
30.0	25-may-1989	UH09	PPDDT	LT	0.037	UGL
30.0	25-may-1989	UM13	PPDDT	LT	5.070	UGL
30.0	25-may-1989	UM13	PYR	LT	9.380	UGL
0.0	25-may-1989	SD11	SB	LT	2.500	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
30.0	25-may-1989	99	TCLEA	LT	7.100	UGL
30.0	25-may-1989	99	TCLEE	LT	2.300	UGL
30.0	25-may-1989	SS06	TL	LT	59.900	UGL
30.0	25-may-1989	99	TRCLE	LT	1.000	UGL
30.0	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
30.0	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
30.0	25-may-1989	UM13	UNK536		16.500	UGL
30.0	25-may-1989	UM13	UNK538		16.000	UGL
30.0	25-may-1989	UM13	UNK540		4.240	UGL
30.0	25-may-1989	UM13	UNK540		4.180	UGL
30.0	25-may-1989	UM13	UNK541		41.700	UGL
30.0	25-may-1989	UM13	UNK542		8.980	UGL
30.0	25-may-1989	UM13	UNK543		6.760	UGL
30.0	25-may-1989	UM13	UNK543		8.260	UGL
30.0	25-may-1989	UM13	UNK544		20.800	UGL
30.0	25-may-1989	SS06	ZN		42.600	UGL

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Site: WELL GNL-3

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	99	111TCE	LT	1.000	UGL
35.0	25-may-1989	99	112TCE	LT	1.700	UGL
35.0	25-may-1989	99	11DCE	LT	6.800	UGL
35.0	25-may-1989	99	11DCLE	LT	2.700	UGL
35.0	25-may-1989	UM13	124TCB	LT	4.420	UGL
35.0	25-may-1989	99	12DCE	LT	2.200	UGL
35.0	25-may-1989	UM13	12DCLB	LT	7.320	UGL
35.0	25-may-1989	99	12DCLE	LT	1.000	UGL
35.0	25-may-1989	99	12DCLP	LT	3.200	UGL
35.0	25-may-1989	UM13	13DCLB	LT	8.270	UGL
35.0	25-may-1989	UM13	14DCLB	LT	7.970	UGL
35.0	25-may-1989	UM13	246TCP	ND	10.000	UGL
35.0	25-may-1989	UM13	24DCLP	ND	10.000	UGL
35.0	25-may-1989	UM13	24DMPN	ND	10.000	UGL
35.0	25-may-1989	UM13	24DNP	ND	50.000	UGL
35.0	25-may-1989	UM13	24DNT	LT	5.840	UGL
35.0	25-may-1989	UM13	26DNT	LT	5.520	UGL
35.0	25-may-1989	99	2CLEVE	LT	1.600	UGL
35.0	25-may-1989	UM13	2CLP	ND	10.000	UGL
35.0	25-may-1989	UM13	2CNAP	LT	2.070	UGL
35.0	25-may-1989	UM13	2NP	ND	50.000	UGL
35.0	25-may-1989	UM13	33DCBD	ND	20.000	UGL
35.0	25-may-1989	UM13	46DN2C	ND	50.000	UGL
35.0	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
35.0	25-may-1989	UM13	4CL3C	ND	10.000	UGL
35.0	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
35.0	25-may-1989	UM13	4NP	ND	50.000	UGL
35.0	25-may-1989	UH09	ABHC	ND	0.050	UGL
35.0	25-may-1989	UM13	ABHC	ND	3.000	UGL
35.0	25-may-1989	99	ACROLN	ND	100.000	UGL
35.0	25-may-1989	99	ACRYLO	ND	100.000	UGL
35.0	25-may-1989	UH09	AENSLF	ND	0.050	UGL
35.0	25-may-1989	UM13	AENSLF	ND	3.000	UGL
35.0	25-may-1989	SS06	AG	LT	5.450	UGL
35.0	25-may-1989	UH09	ALDRN	LT	0.022	UGL
35.0	25-may-1989	UM13	ALDRN	LT	5.780	UGL
35.0	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
35.0	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
35.0	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
35.0	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
35.0	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
35.0	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
35.0	25-may-1989	UM13	B2EHP	LT	32.700	UGL
35.0	25-may-1989	UM13	BAANTR	LT	0.906	UGL
35.0	25-may-1989	UM13	BAPYR	LT	8.290	UGL
35.0	25-may-1989	UM13	BBFANT	LT	2.650	UGL
35.0	25-may-1989	UH09	BBHC	ND	0.050	UGL

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Site: WELL GNL-3 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	UM13	BBHC	LT	3.170	UGL
35.0	25-may-1989	UM13	BBZP	ND	10.000	UGL
35.0	25-may-1989	SS06	BE	LT	2.860	UGL
35.0	25-may-1989	UH09	BENSLF	ND	0.100	UGL
35.0	25-may-1989	UM13	BENSLF	ND	6.000	UGL
35.0	25-may-1989	UM13	BENZID	ND	50.000	UGL
35.0	25-may-1989	UM13	BGHIPY	LT	64.600	UGL
35.0	25-may-1989	UM13	BKFANT	LT	3.280	UGL
35.0	25-may-1989	99	BRDCLM	ND	5.000	UGL
35.0	25-may-1989	UM13	BZALC	ND	0.100	UGL
35.0	25-may-1989	99	C13DCP	LT	1.800	UGL
35.0	25-may-1989	99	C2H3CL	LT	13.000	UGL
35.0	25-may-1989	99	C2H5CL	LT	6.900	UGL
35.0	25-may-1989	99	C6H6	LT	1.700	UGL
35.0	25-may-1989	99	CCL4	LT	1.000	UGL
35.0	25-may-1989	SS06	CD		8.480	UGL
35.0	25-may-1989	99	CH2CL2	LT	23.000	UGL
35.0	25-may-1989	99	CH3BR	ND	10.000	UGL
35.0	25-may-1989	99	CH3CL	LT	1.800	UGL
35.0	25-may-1989	99	CHBR3	LT	3.700	UGL
35.0	25-may-1989	99	CHCL3	LT	1.000	UGL
35.0	25-may-1989	UM13	CHRY	LT	1.150	UGL
35.0	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
35.0	25-may-1989	UM13	CL6CP	ND	10.000	UGL
35.0	25-may-1989	UM13	CL6ET	LT	13.300	UGL
35.0	25-may-1989	99	CLC6H5	LT	1.200	UGL
35.0	25-may-1989	UH09	CLDAN	LT	0.046	UGL
35.0	25-may-1989	UM13	CLDAN	LT	10.200	UGL
35.0	25-may-1989	SS06	CR	LT	4.440	UGL
35.0	25-may-1989	SS06	CU		14.400	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
35.0	25-may-1989	UM13	DBAHA	LT	12.300	UGL
35.0	25-may-1989	UH09	DBHC	ND	0.050	UGL
35.0	25-may-1989	UM13	DBHC	LT	621.000	UGL
35.0	25-may-1989	99	DBRCLM	LT	1.800	UGL
35.0	25-may-1989	UM13	DEP	ND	10.000	UGL
35.0	25-may-1989	UH09	DLDRN	LT	0.005	UGL
35.0	25-may-1989	UM13	DLDRN	LT	2.550	UGL
35.0	25-may-1989	UM13	DMP	ND	10.000	UGL
35.0	25-may-1989	UM13	DNEP	ND	10.000	UGL
35.0	25-may-1989	UM13	DNOP	LT	21.400	UGL
35.0	25-may-1989	UH09	ENDRN	ND	0.100	UGL
35.0	25-may-1989	UM13	ENDRN	LT	34.200	UGL
35.0	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
35.0	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
35.0	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
35.0	25-may-1989	99	ETC6H5	LT	1.400	UGL
35.0	25-may-1989	UM13	FANT	LT	1.150	UGL

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Site: WELL GNL-3 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	UM13	FLRENE	ND	10.000	UGL
35.0	25-may-1989	UM13	HCB D	LT	7.890	UGL
35.0	25-may-1989	99	HG		0.120	UGL
35.0	25-may-1989	UH09	HPCL		0.107	UGL
35.0	25-may-1989	UM13	HPCL	LT	4.910	UGL
35.0	25-may-1989	UH09	HPCLE	LT	0.086	UGL
35.0	25-may-1989	UM13	HPCLE	LT	6.440	UGL
35.0	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
35.0	25-may-1989	UH09	ISODR	LT	0.041	UGL
35.0	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
35.0	25-may-1989	UH09	LIN	LT	0.029	UGL
35.0	25-may-1989	UM13	LIN	LT	26.000	UGL
35.0	25-may-1989	99	MEC6H5	LT	1.800	UGL
35.0	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
35.0	25-may-1989	UM13	NAP	LT	3.510	UGL
35.0	25-may-1989	UM13	NB	ND	10.000	UGL
35.0	25-may-1989	SS06	NI	LT	15.300	UGL
35.0	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
35.0	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
35.0	25-may-1989	UM13	NNDPA	ND	6.700	UGL
35.0	25-may-1989	SD11	PB		35.000	UGL
35.0	25-may-1989	UH09	PCB016	LT	0.133	UGL
35.0	25-may-1989	UM13	PCB016	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB221	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB221	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB232	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB232	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB242	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB242	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB248	ND	0.500	UGL
35.0	25-may-1989	UM13	PCB248	ND	30.000	UGL
35.0	25-may-1989	UH09	PCB254	ND	1.000	UGL
35.0	25-may-1989	UM13	PCB254	ND	60.000	UGL
35.0	25-may-1989	UH09	PCB260	LT	0.087	UGL
35.0	25-may-1989	UM13	PCB260	ND	60.000	UGL
35.0	25-may-1989	UM13	PCP	ND	50.000	UGL
35.0	25-may-1989	UM13	PHANTR	LT	0.759	UGL
35.0	25-may-1989	UH09	PPDDD	LT	0.013	UGL
35.0	25-may-1989	UM13	PPDDD	LT	5.610	UGL
35.0	25-may-1989	UH09	PPDDE	LT	0.022	UGL
35.0	25-may-1989	UM13	PPDDE	LT	11.200	UGL
35.0	25-may-1989	UH09	PPDDT	LT	0.037	UGL
35.0	25-may-1989	UM13	PPDDT	LT	5.070	UGL
35.0	25-may-1989	UM13	PYR	LT	9.380	UGL
0.0	25-may-1989	SD11	SB	LT	2.500	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
35.0	25-may-1989	99	TCLEA	LT	7.100	UGL
35.0	25-may-1989	99	TCLEE	LT	2.300	UGL

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 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNL-3 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
35.0	25-may-1989	SS06	TL	LT	59.900	UGL
35.0	25-may-1989	99	TRCLE	LT	1.000	UGL
35.0	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
35.0	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
35.0	25-may-1989	UM13	UNK536		11.200	UGL
35.0	25-may-1989	UM13	UNK538		11.700	UGL
35.0	25-may-1989	UM13	UNK541		36.400	UGL
35.0	25-may-1989	UM13	UNK542		8.880	UGL
35.0	25-may-1989	UM13	UNK543		6.940	UGL
35.0	25-may-1989	UM13	UNK543		6.080	UGL
35.0	25-may-1989	UM13	UNK544		18.300	UGL
35.0	25-may-1989	UM13	UNK599		4.830	UGL
35.0	25-may-1989	SS06	ZN		62.600	UGL

Site: WELL GNL-4

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
15.0	25-may-1989	99	111TCE	LT	1.000	UGL
15.0	25-may-1989	99	112TCE	LT	1.700	UGL
15.0	25-may-1989	99	11DCE	LT	6.800	UGL
15.0	25-may-1989	99	11DCLE	LT	2.700	UGL
15.0	25-may-1989	UM13	124TCB	LT	4.420	UGL
15.0	25-may-1989	99	12DCE	LT	2.200	UGL
15.0	25-may-1989	UM13	12DCLB	LT	7.320	UGL
15.0	25-may-1989	99	12DCLE	LT	1.000	UGL
15.0	25-may-1989	99	12DCLP	LT	3.200	UGL
15.0	25-may-1989	UM13	13DCLB	LT	8.270	UGL
15.0	25-may-1989	UM13	14DCLB	LT	7.970	UGL
15.0	25-may-1989	UM13	246TCP	ND	10.000	UGL
15.0	25-may-1989	UM13	24DCLP	ND	10.000	UGL
15.0	25-may-1989	UM13	24DMPN	ND	10.000	UGL
15.0	25-may-1989	UM13	24DNP	ND	50.000	UGL
15.0	25-may-1989	UM13	24DNT	LT	5.840	UGL
15.0	25-may-1989	UM13	26DNT	LT	5.520	UGL
15.0	25-may-1989	99	2CLEVE	LT	1.600	UGL
15.0	25-may-1989	UM13	2CLP	ND	10.000	UGL
15.0	25-may-1989	UM13	2CNAP	LT	2.070	UGL
15.0	25-may-1989	UM13	2NP	ND	50.000	UGL
15.0	25-may-1989	UM13	33DCBD	ND	20.000	UGL
15.0	25-may-1989	UM13	46DN2C	ND	50.000	UGL
15.0	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
15.0	25-may-1989	UM13	4CL3C	ND	10.000	UGL
15.0	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
15.0	25-may-1989	UM13	4NP	ND	50.000	UGL
15.0	25-may-1989	UH09	ABHC	ND	0.050	UGL

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 Analytical Results for Chemical Ground Water
 From: 01/01/75 and 12/7/89

Site: WELL GNL-4 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
15.0	25-may-1989	UM13	ABHC	ND	3.000	UGL
15.0	25-may-1989	99	ACROLN	ND	100.000	UGL
15.0	25-may-1989	99	ACRYLO	ND	100.000	UGL
15.0	25-may-1989	UH09	AENSLF	ND	0.050	UGL
15.0	25-may-1989	UM13	AENSLF	ND	3.000	UGL
15.0	25-may-1989	SS06	AG	LT	5.450	UGL
15.0	25-may-1989	UH09	ALDRN	LT	0.022	UGL
15.0	25-may-1989	UM13	ALDRN	LT	5.780	UGL
15.0	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
15.0	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
15.0	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
15.0	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
15.0	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
15.0	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
15.0	25-may-1989	UM13	B2EHP		115.000	UGL
15.0	25-may-1989	UM13	BAANTR	LT	0.906	UGL
15.0	25-may-1989	UM13	BAPYR	LT	8.290	UGL
15.0	25-may-1989	UM13	BBFANT	LT	2.650	UGL
15.0	25-may-1989	UH09	BBHC	ND	0.050	UGL
15.0	25-may-1989	UM13	BBHC	LT	3.170	UGL
15.0	25-may-1989	UM13	BBZP	ND	10.000	UGL
15.0	25-may-1989	SS06	BE	LT	2.860	UGL
15.0	25-may-1989	UH09	BENSLF	ND	0.100	UGL
15.0	25-may-1989	UM13	BENSLF	ND	6.000	UGL
15.0	25-may-1989	UM13	BENZID	ND	50.000	UGL
15.0	25-may-1989	UM13	BGHIPY	LT	64.600	UGL
15.0	25-may-1989	UM13	BKFANT	LT	3.280	UGL
15.0	25-may-1989	99	BRDCLM	ND	5.000	UGL
15.0	25-may-1989	UM13	BZALC	ND	0.100	UGL
15.0	25-may-1989	99	C13DCP	LT	1.800	UGL
15.0	25-may-1989	99	C2H3CL	LT	13.000	UGL
15.0	25-may-1989	99	C2H5CL	LT	6.900	UGL
15.0	25-may-1989	99	C6H6	LT	1.700	UGL
15.0	25-may-1989	99	CCL4	LT	1.000	UGL
15.0	25-may-1989	SS06	CD		7.730	UGL
15.0	25-may-1989	99	CH2CL2	LT	23.000	UGL
15.0	25-may-1989	99	CH3BR	ND	10.000	UGL
15.0	25-may-1989	99	CH3CL	LT	1.800	UGL
15.0	25-may-1989	99	CHBR3	LT	3.700	UGL
15.0	25-may-1989	99	CHCL3	LT	1.000	UGL
15.0	25-may-1989	UM13	CHRY	LT	1.150	UGL
15.0	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
15.0	25-may-1989	UM13	CL6CP	ND	10.000	UGL
15.0	25-may-1989	UM13	CL6ET	LT	13.300	UGL
15.0	25-may-1989	99	CLC6H5	LT	1.200	UGL
15.0	25-may-1989	UH09	CLDAN	LT	0.046	UGL
15.0	25-may-1989	UM13	CLDAN	LT	10.200	UGL

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Analytical Results for Chemical Ground Water
From: 01/01/75 and 12/7/89

Site: WELL GNL-4 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
15.0	25-may-1989	SS06	CR	LT	4.440	UGL
15.0	25-may-1989	SS06	CU		14.400	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
15.0	25-may-1989	UM13	DBAHA	LT	12.300	UGL
15.0	25-may-1989	UH09	DBHC	ND	0.050	UGL
15.0	25-may-1989	UM13	DBHC	LT	621.000	UGL
15.0	25-may-1989	99	DBRCLM	LT	1.800	UGL
15.0	25-may-1989	UM13	DEP	ND	10.000	UGL
15.0	25-may-1989	UH09	DLDRN	LT	0.005	UGL
15.0	25-may-1989	UM13	DLDRN	LT	2.550	UGL
15.0	25-may-1989	UM13	DMP	ND	10.000	UGL
15.0	25-may-1989	UM13	DNBP	ND	10.000	UGL
15.0	25-may-1989	UM13	DNOP	LT	21.400	UGL
15.0	25-may-1989	UH09	ENDRN	ND	0.100	UGL
15.0	25-may-1989	UM13	ENDRN	LT	34.200	UGL
15.0	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
15.0	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
15.0	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
15.0	25-may-1989	99	ETC6H5	LT	1.400	UGL
15.0	25-may-1989	UM13	FANT	LT	1.150	UGL
15.0	25-may-1989	UM13	FLRENE	ND	10.000	UGL
15.0	25-may-1989	UM13	HCBD	LT	7.890	UGL
15.0	25-may-1989	99	HG		0.100	UGL
15.0	25-may-1989	UH09	HPCL		0.107	UGL
15.0	25-may-1989	UM13	HPCL	LT	4.910	UGL
15.0	25-may-1989	UH09	HPCLE	LT	0.086	UGL
15.0	25-may-1989	UM13	HPCLE	LT	6.440	UGL
15.0	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
15.0	25-may-1989	UH09	ISODR	LT	0.041	UGL
15.0	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
15.0	25-may-1989	UH09	LIN	LT	0.029	UGL
15.0	25-may-1989	UM13	LIN	LT	26.000	UGL
15.0	25-may-1989	99	MEC6H5	LT	1.800	UGL
15.0	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
15.0	25-may-1989	UM13	NAP	LT	3.510	UGL
15.0	25-may-1989	UM13	NB	ND	10.000	UGL
15.0	25-may-1989	SS06	NI	LT	15.300	UGL
15.0	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
15.0	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
15.0	25-may-1989	UM13	NNDPA	ND	6.700	UGL
15.0	25-may-1989	SD11	PB	LT	1.700	UGL
15.0	25-may-1989	UH09	PCB016	LT	0.133	UGL
15.0	25-may-1989	UM13	PCB016	ND	30.000	UGL
15.0	25-may-1989	UH09	PCB221	ND	0.500	UGL
15.0	25-may-1989	UM13	PCB221	ND	30.000	UGL
15.0	25-may-1989	UH09	PCB232	ND	0.500	UGL
15.0	25-may-1989	UM13	PCB232	ND	30.000	UGL
15.0	25-may-1989	UH09	PCB242	ND	0.500	UGL

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Analytical Results for Chemical Ground Water
From: 01/01/75 and 12/7/89

Site: WELL GNL-4 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
15.0	25-may-1989	UM13	PCB242	ND	30.000	UGL
15.0	25-may-1989	UH09	PCB248	ND	0.500	UGL
15.0	25-may-1989	UM13	PCB248	ND	30.000	UGL
15.0	25-may-1989	UH09	PCB254	ND	1.000	UGL
15.0	25-may-1989	UM13	PCB254	ND	60.000	UGL
15.0	25-may-1989	UH09	PCB260	LT	0.087	UGL
15.0	25-may-1989	UM13	PCB260	ND	60.000	UGL
15.0	25-may-1989	UM13	PCP	ND	50.000	UGL
15.0	25-may-1989	UM13	PHANTR	LT	0.759	UGL
15.0	25-may-1989	UH09	PPDDD	LT	0.013	UGL
15.0	25-may-1989	UM13	PPDDD	LT	5.610	UGL
15.0	25-may-1989	UH09	PPDDE	LT	0.022	UGL
15.0	25-may-1989	UM13	PPDDE	LT	11.200	UGL
15.0	25-may-1989	UH09	PPDDT	LT	0.037	UGL
15.0	25-may-1989	UM13	PPDDT	LT	5.070	UGL
15.0	25-may-1989	UM13	PYR	LT	9.380	UGL
0.0	25-may-1989	SD11	SB	LT	2.500	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
15.0	25-may-1989	99	TCLEA	LT	7.100	UGL
15.0	25-may-1989	99	TCLEE	LT	2.300	UGL
15.0	25-may-1989	SS06	TL	LT	59.900	UGL
15.0	25-may-1989	99	TRCLE	LT	1.000	UGL
15.0	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
15.0	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
15.0	25-may-1989	UM13	UNK536		11.300	UGL
15.0	25-may-1989	UM13	UNK538		13.600	UGL
15.0	25-may-1989	UM13	UNK541		36.300	UGL
15.0	25-may-1989	UM13	UNK542		7.890	UGL
15.0	25-may-1989	UM13	UNK543		5.980	UGL
15.0	25-may-1989	UM13	UNK543		7.190	UGL
15.0	25-may-1989	UM13	UNK544		18.200	UGL
15.0	25-may-1989	UM13	UNK599		12.200	UGL
15.0	25-may-1989	UM13	UNK619		11.200	UGL
15.0	25-may-1989	UM13	UNK620		19.900	UGL
15.0	25-may-1989	UM13	UNK620		12.000	UGL
15.0	25-may-1989	UM13	UNK620		5.680	UGL
15.0	25-may-1989	UM13	UNK621		20.800	UGL
15.0	25-may-1989	UM13	UNK621		16.200	UGL
15.0	25-may-1989	UM13	UNK621		12.200	UGL
15.0	25-may-1989	UM13	UNK623		23.500	UGL
15.0	25-may-1989	SS06	ZN			

Program ended normally.

INSTALLATION RESTORATION PROGRAM

CHEMICAL REPORT

Thu Dec 7 09:43:56 1989

For Parameters :

Installation = Gaithersburg Research Facility
Beginning Date = 01/01/75
Ending Date = 12/7/89
Media Type = Chemical Surface Water (CSW)
Booleans = Y

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 Analytical Results for Chemical Surface Water
 From: 01/01/75 and 12/7/89

Site: STRM GNL-SW-1

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.5	25-may-1989	99	111TCE	LT	1.000	UGL
0.5	25-may-1989	99	112TCE	LT	1.700	UGL
0.5	25-may-1989	99	11DCE	LT	6.800	UGL
0.5	25-may-1989	99	11DCLE	LT	2.700	UGL
0.5	25-may-1989	UM13	124TCB	LT	4.420	UGL
0.5	25-may-1989	99	12DCE	LT	2.200	UGL
0.5	25-may-1989	UM13	12DCLB	LT	7.320	UGL
0.5	25-may-1989	99	12DCLE	LT	1.000	UGL
0.5	25-may-1989	99	12DCLP	LT	3.200	UGL
0.5	25-may-1989	UM13	13DCLB	LT	8.270	UGL
0.5	25-may-1989	UM13	14DCLB	LT	7.970	UGL
0.5	25-may-1989	UM13	246TCP	ND	10.000	UGL
0.5	25-may-1989	UM13	24DCLP	ND	10.000	UGL
0.5	25-may-1989	UM13	24DMPN	ND	10.000	UGL
0.5	25-may-1989	UM13	24DNP	ND	50.000	UGL
0.5	25-may-1989	UM13	24DNT	LT	5.840	UGL
0.5	25-may-1989	UM13	26DNT	LT	5.520	UGL
0.5	25-may-1989	99	2CLEVE	LT	1.600	UGL
0.5	25-may-1989	UM13	2CLP	ND	10.000	UGL
0.5	25-may-1989	UM13	2CNAP	LT	2.070	UGL
0.5	25-may-1989	UM13	2NP	ND	50.000	UGL
0.5	25-may-1989	UM13	33DCBD	ND	20.000	UGL
0.5	25-may-1989	UM13	46DN2C	ND	50.000	UGL
0.5	25-may-1989	UM13	4BRPPE	ND	10.000	UGL
0.5	25-may-1989	UM13	4CL3C	ND	10.000	UGL
0.5	25-may-1989	UM13	4CLPPE	ND	10.000	UGL
0.5	25-may-1989	UM13	4NP	ND	50.000	UGL
0.5	25-may-1989	UH09	ABHC	ND	0.050	UGL
0.5	25-may-1989	UM13	ABHC	ND	3.000	UGL
0.5	25-may-1989	99	ACROLN	ND	100.000	UGL
0.5	25-may-1989	99	ACRYLO	ND	100.000	UGL
0.5	25-may-1989	UH09	AENSLF	ND	0.050	UGL
0.5	25-may-1989	UM13	AENSLF	ND	3.000	UGL
0.5	25-may-1989	SS06	AG	LT	5.450	UGL
0.5	25-may-1989	UH09	ALDRN	LT	0.022	UGL
0.5	25-may-1989	UM13	ALDRN	LT	5.780	UGL
0.5	25-may-1989	UM13	ANAPNE	LT	1.260	UGL
0.5	25-may-1989	UM13	ANAPYL	LT	3.300	UGL
0.5	25-may-1989	UM13	ANTHRC	LT	1.110	UGL
0.0	25-may-1989	SD11	AS	LT	4.190	UGL
0.5	25-may-1989	UM13	B2CEXM	ND	10.000	UGL
0.5	25-may-1989	UM13	B2CIPE	ND	10.000	UGL
0.5	25-may-1989	UM13	B2CLEE	LT	1.500	UGL
0.5	25-may-1989	UM13	B2EHP	LT	32.700	UGL
0.5	25-may-1989	UM13	BAANTR	LT	0.906	UGL
0.5	25-may-1989	UM13	BAPYR	LT	8.290	UGL
0.5	25-may-1989	UM13	BBFANT	LT	2.650	UGL
0.5	25-may-1989	UH09	BBHC	ND	0.050	UGL

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IR Installation: Gaithersburg Research Facility Page 2
 Analytical Results for Chemical Surface Water
 From: 01/01/75 and 12/7/89

Site: STRM GNL-SW-1 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.5	25-may-1989	UM13	BBHC	LT	3.170	UGL
0.5	25-may-1989	UM13	BBZP	ND	10.000	UGL
0.5	25-may-1989	SS06	BE	LT	2.860	UGL
0.5	25-may-1989	UH09	BENSLF	ND	0.100	UGL
0.5	25-may-1989	UM13	BENSLF	ND	6.000	UGL
0.5	25-may-1989	UM13	BENZID	ND	50.000	UGL
0.5	25-may-1989	UM13	BGHIPY	LT	64.600	UGL
0.5	25-may-1989	UM13	BKFANT	LT	3.280	UGL
0.5	25-may-1989	99	BRDCLM	ND	5.000	UGL
0.5	25-may-1989	UM13	BZALC	ND	0.100	UGL
0.5	25-may-1989	99	C13DCP	LT	1.800	UGL
0.5	25-may-1989	99	C2H3CL	LT	13.000	UGL
0.5	25-may-1989	99	C2H5CL	LT	6.900	UGL
0.5	25-may-1989	99	C6H6	LT	1.700	UGL
0.5	25-may-1989	99	CCL4	LT	1.000	UGL
0.5	25-may-1989	SS06	CD		6.650	UGL
0.5	25-may-1989	99	CH2CL2	LT	23.000	UGL
0.5	25-may-1989	99	CH3BR	ND	10.000	UGL
0.5	25-may-1989	99	CH3CL	LT	1.800	UGL
0.5	25-may-1989	99	CHBR3	LT	3.700	UGL
0.5	25-may-1989	99	CHCL3	LT	1.000	UGL
0.5	25-may-1989	UM13	CHRY	LT	1.150	UGL
0.5	25-may-1989	UM13	CL6BZ	LT	2.850	UGL
0.5	25-may-1989	UM13	CL6CP	ND	10.000	UGL
0.5	25-may-1989	UM13	CL6ET	LT	13.300	UGL
0.5	25-may-1989	99	CLC6H5	LT	1.200	UGL
0.5	25-may-1989	UH09	CLDAN	LT	0.046	UGL
0.5	25-may-1989	UM13	CLDAN	LT	10.200	UGL
0.5	25-may-1989	SS06	CR	LT	4.440	UGL
0.5	25-may-1989	SS06	CU		9.600	UGL
0.0	25-may-1989	TF19	CYN	LT	5.500	UGL
0.5	25-may-1989	UM13	DBAHA	LT	12.300	UGL
0.5	25-may-1989	UH09	DBHC	ND	0.050	UGL
0.5	25-may-1989	UM13	DBHC	LT	621.000	UGL
0.5	25-may-1989	99	DBRCLM	LT	1.800	UGL
0.5	25-may-1989	UM13	DEP	ND	10.000	UGL
0.5	25-may-1989	UH09	DLDRN	LT	0.005	UGL
0.5	25-may-1989	UM13	DLDRN	LT	2.550	UGL
0.5	25-may-1989	UM13	DMP	ND	10.000	UGL
0.5	25-may-1989	UM13	DNBP	ND	10.000	UGL
0.5	25-may-1989	UM13	DNOP		43.900	UGL
0.5	25-may-1989	UH09	ENDRN	ND	0.100	UGL
0.5	25-may-1989	UM13	ENDRN	LT	34.200	UGL
0.5	25-may-1989	UH09	ENDRNK	ND	0.100	UGL
0.5	25-may-1989	UH09	ESFSO4	ND	0.100	UGL
0.5	25-may-1989	UM13	ESFSO4	ND	6.000	UGL
0.5	25-may-1989	99	ETC6H5	LT	1.400	UGL
0.5	25-may-1989	UM13	FANT	LT	1.150	UGL

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IR Installation: Gaithersburg Research Facility Page 3
 Analytical Results for Chemical Surface Water
 From: 01/01/75 and 12/7/89

Site: STRM GNL-SW-1 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.5	25-may-1989	UM13	FLRENE	ND	10.000	UGL
0.5	25-may-1989	UM13	HCBBD	LT	7.890	UGL
0.5	25-may-1989	99	HG		0.100	UGL
0.5	25-may-1989	UH09	HPCL		0.087	UGL
0.5	25-may-1989	UM13	HPCL	LT	4.910	UGL
0.5	25-may-1989	UH09	HPCLE	LT	0.086	UGL
0.5	25-may-1989	UM13	HPCLE	LT	6.440	UGL
0.5	25-may-1989	UM13	ICDPYR	LT	128.000	UGL
0.5	25-may-1989	UH09	ISODR	LT	0.041	UGL
0.5	25-may-1989	UM13	ISOPHR	ND	0.100	UGL
0.5	25-may-1989	UH09	LIN	LT	0.029	UGL
0.5	25-may-1989	UM13	LIN	LT	26.000	UGL
0.5	25-may-1989	99	MEC6H5	LT	1.800	UGL
0.5	25-may-1989	UH09	MEXCLR	ND	0.500	UGL
0.5	25-may-1989	UM13	NAP	LT	3.510	UGL
0.5	25-may-1989	UM13	NB	ND	10.000	UGL
0.5	25-may-1989	SS06	NI	LT	15.300	UGL
0.5	25-may-1989	UM13	NNDMEA	ND	10.000	UGL
0.5	25-may-1989	UM13	NNDNPA	LT	5.630	UGL
0.5	25-may-1989	UM13	NNDPA	ND	6.700	UGL
0.5	25-may-1989	SD11	PB	LT	1.700	UGL
0.5	25-may-1989	UH09	PCB016	LT	0.133	UGL
0.5	25-may-1989	UM13	PCB016	ND	30.000	UGL
0.5	25-may-1989	UH09	PCB221	ND	0.500	UGL
0.5	25-may-1989	UM13	PCB221	ND	30.000	UGL
0.5	25-may-1989	UH09	PCB232	ND	0.500	UGL
0.5	25-may-1989	UM13	PCB232	ND	30.000	UGL
0.5	25-may-1989	UH09	PCB242	ND	0.500	UGL
0.5	25-may-1989	UM13	PCB242	ND	30.000	UGL
0.5	25-may-1989	UH09	PCB248	ND	0.500	UGL
0.5	25-may-1989	UM13	PCB248	ND	30.000	UGL
0.5	25-may-1989	UH09	PCB254	ND	1.000	UGL
0.5	25-may-1989	UM13	PCB254	ND	60.000	UGL
0.5	25-may-1989	UH09	PCB260	LT	0.087	UGL
0.5	25-may-1989	UM13	PCB260	ND	60.000	UGL
0.5	25-may-1989	UM13	PCP	ND	50.000	UGL
0.5	25-may-1989	UM13	PHANTR	LT	0.759	UGL
0.5	25-may-1989	UH09	PPDDD	LT	0.013	UGL
0.5	25-may-1989	UM13	PPDDD	LT	5.610	UGL
0.5	25-may-1989	UH09	PPDDE	LT	0.022	UGL
0.5	25-may-1989	UM13	PPDDE	LT	11.200	UGL
0.5	25-may-1989	UH09	PPDDT	LT	0.037	UGL
0.5	25-may-1989	UM13	PPDDT	LT	5.070	UGL
0.5	25-may-1989	UM13	PYR	LT	9.380	UGL
0.0	25-may-1989	SD11	SB	LT	2.500	UGL
0.0	25-may-1989	SD11	SE	LT	6.940	UGL
0.5	25-may-1989	99	TCLEA	LT	7.100	UGL
0.5	25-may-1989	99	TCLEE	LT	2.300	UGL

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IR Installation: Gaithersburg Research Facility Page 4
Analytical Results for Chemical Surface Water
From: 01/01/75 and 12/7/89

Site: STRM GNL-SW-1 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.5	25-may-1989	SS06	TL	LT	59.900	UGL
0.5	25-may-1989	99	TRCLE	LT	1.000	UGL
0.5	25-may-1989	UH09	TXPHEN	ND	1.000	UGL
0.5	25-may-1989	UM13	TXPHEN	ND	60.000	UGL
0.5	25-may-1989	UM13	UNK536		12.300	UGL
0.5	25-may-1989	UM13	UNK538		15.300	UGL
0.5	25-may-1989	UM13	UNK540		4.050	UGL
0.5	25-may-1989	UM13	UNK541		39.600	UGL
0.5	25-may-1989	UM13	UNK542		7.300	UGL
0.5	25-may-1989	UM13	UNK543		8.140	UGL
0.5	25-may-1989	UM13	UNK543		6.650	UGL
0.5	25-may-1989	UM13	UNK544		20.100	UGL
0.5	25-may-1989	UM13	UNK619		24.600	UGL
0.5	25-may-1989	UM13	UNK620		45.700	UGL
0.5	25-may-1989	UM13	UNK620		20.200	UGL
0.5	25-may-1989	UM13	UNK621		45.500	UGL
0.5	25-may-1989	UM13	UNK621		29.400	UGL
0.5	25-may-1989	UM13	UNK623		32.100	UGL
0.5	25-may-1989	UM13	UNK628		9.980	UGL
0.5	25-may-1989	UM13	UNK648		10.200	UGL
0.5	25-may-1989	UM13	UNK655		18.600	UGL
0.5	25-may-1989	SS06	ZN		14.500	UGL

Program ended normally.

INSTALLATION RESTORATION PROGRAM

CHEMICAL REPORT

Thu Dec 7 09:45:32 1989

For Parameters :

Installation = Gaithersburg Research Facility
Beginning Date = 01/01/75
Ending Date = 12/7/89
Media Type = Chemical Sediment (CSE)
Booleans = Y

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IR Installation: Gaithersburg Research Facility Page 1
 Analytical Results for Chemical Sediment
 From: 01/01/75 and 12/7/89

Site: STRM GNL-SS-1

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.5	02-jun-1989	99	111TCE	LT	0.008	UGG
0.5	02-jun-1989	99	112TCE	LT	0.004	UGG
0.5	02-jun-1989	99	11DCE	LT	0.016	UGG
0.5	02-jun-1989	99	11DCLE	LT	0.010	UGG
0.5	02-jun-1989	99	12DCE	LT	0.008	UGG
0.5	02-jun-1989	99	12DCLE	LT	0.006	UGG
0.5	02-jun-1989	99	12DCLP	LT	0.013	UGG
0.5	02-jun-1989	99	2CLEVE	LT	0.007	UGG
0.5	02-jun-1989	LH08	ABHC	ND	0.008	UGG
0.5	02-jun-1989	99	ACROLN	ND	0.130	UGG
0.5	02-jun-1989	99	ACRYLO	ND	0.130	UGG
0.5	02-jun-1989	LH08	AENSLF	ND	0.008	UGG
0.0	02-jun-1989	JS05	AG	LT	0.783	UGG
0.5	02-jun-1989	LH08	ALDRN	LT	0.013	UGG
0.0	02-jun-1989	JD11	AS	LT	1.980	UGG
0.5	02-jun-1989	LH08	BBHC	ND	0.008	UGG
0.0	02-jun-1989	JS05	BE		0.487	UGG
0.5	02-jun-1989	LH08	BENSLF	ND	0.016	UGG
0.5	02-jun-1989	99	BRDCLM	ND	6.520	UGG
0.5	02-jun-1989	99	C13DCP	LT	0.004	UGG
0.5	02-jun-1989	99	C2H3CL	LT	0.010	UGG
0.5	02-jun-1989	99	C2H5CL	LT	0.013	UGG
0.5	02-jun-1989	99	C6H6	LT	0.006	UGG
0.5	02-jun-1989	99	CCL4	LT	0.003	UGG
0.0	02-jun-1989	JS05	CD	LT	1.090	UGG
0.5	02-jun-1989	99	CH2CL2	ND	0.007	UGG
0.5	02-jun-1989	99	CH3BR	ND	0.013	UGG
0.5	02-jun-1989	99	CH3CL	LT	0.006	UGG
0.5	02-jun-1989	99	CHBR3	LT	0.005	UGG
0.5	02-jun-1989	99	CHCL3	LT	0.020	UGG
0.5	02-jun-1989	99	CLC6H5	LT	0.003	UGG
0.5	02-jun-1989	LH08	CLDAN	LT	0.032	UGG
0.0	02-jun-1989	JS05	CR		10.900	UGG
0.0	02-jun-1989	JS05	CU		10.200	UGG
0.0	02-jun-1989	KF12	CYN	LT	22.300	UGG
0.5	02-jun-1989	LH08	DBHC	ND	0.008	UGG
0.5	02-jun-1989	99	DBRCLM	LT	0.003	UGG
0.5	02-jun-1989	LH08	DLDRN	LT	0.008	UGG
0.5	02-jun-1989	LH08	ENDRN	ND	0.016	UGG
0.5	02-jun-1989	LH08	ENDRNK	ND	0.016	UGG
0.5	02-jun-1989	LH08	ESFSO4	ND	0.016	UGG
0.5	02-jun-1989	99	ETC6H5	LT	0.013	UGG
0.0	02-jun-1989	99	HG	LT	0.018	UGG
0.5	02-jun-1989	LH08	HPCL	LT	0.014	UGG
0.5	02-jun-1989	LH08	HPCLE	LT	0.094	UGG
0.5	02-jun-1989	LH08	ISODR	LT	0.140	UGG
0.5	02-jun-1989	LH08	LIN	LT	0.041	UGG
0.5	02-jun-1989	99	MEC6H5	LT	0.008	UGG

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IR Installation: Gaithersburg Research Facility Page 2
Analytical Results for Chemical Sediment
From: 01/01/75 and 12/7/89

Site: STRM GNL-SS-1 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.5	02-jun-1989	LH08	MEXCLR	ND	0.080	UGG
0.0	02-jun-1989	JS05	NI		9.140	UGG
0.0	02-jun-1989	JS05	PB	LT	96.100	UGG
0.5	02-jun-1989	LH08	PCB016	LT	0.092	UGG
0.5	02-jun-1989	LH08	PCB221	ND	0.080	UGG
0.5	02-jun-1989	LH08	PCB232	ND	0.080	UGG
0.5	02-jun-1989	LH08	PCB242	ND	0.080	UGG
0.5	02-jun-1989	LH08	PCB248	ND	0.080	UGG
0.5	02-jun-1989	LH08	PCB254	ND	0.160	UGG
0.5	02-jun-1989	LH08	PCB260	LT	0.065	UGG
0.5	02-jun-1989	LH08	PPDDD	LT	0.020	UGG
0.5	02-jun-1989	LH08	PPDDE	LT	0.016	UGG
0.5	02-jun-1989	LH08	PPDDT	LT	0.018	UGG
0.0	02-jun-1989	JS05	SB	ND	11.000	UGG
0.0	02-jun-1989	JD11	SB	LT	0.513	UGG
0.0	02-jun-1989	JS05	SE	LT	103.000	UGG
0.0	02-jun-1989	JD11	SE	LT	1.880	UGG
0.5	02-jun-1989	99	TCLEA	LT	0.004	UGG
0.5	02-jun-1989	99	TCLEE	LT	0.010	UGG
0.0	02-jun-1989	JS05	TL	LT	67.600	UGG
0.0	02-jun-1989	JD11	TL	LT	2.150	UGG
0.5	02-jun-1989	99	TRCLE	LT	0.003	UGG
0.5	02-jun-1989	LH08	TXPHEN	ND	0.160	UGG
0.0	02-jun-1989	JS05	ZN		27.900	UGG

Program ended normally.

INSTALLATION RESTORATION PROGRAM

CHEMICAL REPORT

Thu Dec 7 09:46:39 1989

For Parameters :

Installation = Gaithersburg Research Facility

Beginning Date = 01/01/75

Ending Date = 12/7/89

Media Type = Chemical Soil (CSO)

Booleans = Y

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IR Installation: Gaithersburg Research Facility Page 1
Analytical Results for Chemical Soil
From: 01/01/75 and 12/7/89

Site: BORE GNC-SS-8

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
914.0	17-apr-1989	99	111TCE	LT	0.007	UGG
914.0	17-apr-1989	99	112TCE	LT	0.003	UGG
914.0	17-apr-1989	99	11DCE	LT	0.015	UGG
914.0	17-apr-1989	99	11DCLE	LT	0.009	UGG
0.0	17-apr-1989	99	124TCB	LT	0.207	UGG
914.0	17-apr-1989	99	12DCE	LT	0.007	UGG
0.0	17-apr-1989	99	12DCLB	LT	0.402	UGG
914.0	17-apr-1989	99	12DCLE	LT	0.006	UGG
914.0	17-apr-1989	99	12DCLP	LT	0.012	UGG
0.0	17-apr-1989	99	13DCLB	LT	0.365	UGG
0.0	17-apr-1989	99	14DCLB	LT	0.353	UGG
0.0	17-apr-1989	99	246TCP	ND	0.402	UGG
0.0	17-apr-1989	99	24DCLP	ND	0.402	UGG
0.0	17-apr-1989	99	24DMPN	ND	0.402	UGG
0.0	17-apr-1989	99	24DNP	ND	2.440	UGG
0.0	17-apr-1989	99	24DNT	LT	0.560	UGG
0.0	17-apr-1989	99	26DNT	LT	0.244	UGG
914.0	17-apr-1989	99	2CLEVE	LT	0.006	UGG
0.0	17-apr-1989	99	2CLP	ND	0.402	UGG
0.0	17-apr-1989	99	2CNAP	LT	0.390	UGG
0.0	17-apr-1989	99	2NP	ND	0.402	UGG
0.0	17-apr-1989	99	33DCBD	ND	0.853	UGG
0.0	17-apr-1989	99	46DN2C	ND	2.440	UGG
0.0	17-apr-1989	99	4BRPPE	ND	0.402	UGG
0.0	17-apr-1989	99	4CL3C	ND	0.353	UGG
0.0	17-apr-1989	99	4CLPPE	ND	0.402	UGG
0.0	17-apr-1989	99	4NP	ND	2.440	UGG
0.0	17-apr-1989	99	ABHC	ND	0.609	UGG
914.0	17-apr-1989	99	ABHC	ND	0.008	UGG
914.0	17-apr-1989	99	ACROLN	ND	0.122	UGG
914.0	17-apr-1989	99	ACRYLO	ND	0.122	UGG
0.0	17-apr-1989	99	AENSLF	ND	0.609	UGG
914.0	17-apr-1989	99	AENSLF	ND	0.008	UGG
914.0	17-apr-1989	JS05	AG	LT	0.953	UGG
0.0	17-apr-1989	99	ALDRN	LT	0.512	UGG
914.0	17-apr-1989	99	ALDRN	LT	0.011	UGG
0.0	17-apr-1989	99	ANAPNE	LT	0.414	UGG
0.0	17-apr-1989	99	ANAPYL	LT	0.378	UGG
0.0	17-apr-1989	99	ANTRC	LT	0.353	UGG
914.0	17-apr-1989	JD11	AS	LT	2.410	UGG
0.0	17-apr-1989	99	B2CEXM	ND	0.402	UGG
0.0	17-apr-1989	99	B2CIPE	ND	0.402	UGG
0.0	17-apr-1989	99	B2CLEE	LT	0.463	UGG
0.0	17-apr-1989	99	B2EHP		6.820	UGG
0.0	17-apr-1989	99	BAANTR	LT	0.329	UGG
0.0	17-apr-1989	99	BAPYR	LT	0.195	UGG
0.0	17-apr-1989	99	BBFANT	LT	0.304	UGG
0.0	17-apr-1989	99	BBHC	LT	0.402	UGG

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IR Installation: Gaithersburg Research Facility Page 2
 Analytical Results for Chemical Soil
 From: 01/01/75 and 12/7/89

Site: BORE GNC-SS-8 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
914.0	17-apr-1989	99	BBHC	ND	0.008	UGG
0.0	17-apr-1989	99	BBZP	ND	0.402	UGG
914.0	17-apr-1989	JS05	BE		1.600	UGG
0.0	17-apr-1989	99	BENSLF	ND	1.220	UGG
914.0	17-apr-1989	99	BENSLF	ND	0.016	UGG
0.0	17-apr-1989	99	BENZID	ND	1.950	UGG
0.0	17-apr-1989	99	BGHIPY	LT	0.633	UGG
0.0	17-apr-1989	99	BKFANT	LT	0.268	UGG
914.0	17-apr-1989	99	BRDCLM	ND	6.090	UGG
0.0	17-apr-1989	99	BZALC	ND	0.402	UGG
914.0	17-apr-1989	99	C13DCP	LT	0.003	UGG
914.0	17-apr-1989	99	C2H3CL	LT	0.009	UGG
914.0	17-apr-1989	99	C2H5CL	LT	0.012	UGG
914.0	17-apr-1989	99	C6H6	LT	0.006	UGG
914.0	17-apr-1989	99	CCL4	LT	0.002	UGG
914.0	17-apr-1989	JS05	CD	LT	1.330	UGG
914.0	17-apr-1989	99	CH2CL2	ND	0.012	UGG
914.0	17-apr-1989	99	CH3BR	ND	0.012	UGG
914.0	17-apr-1989	99	CH3CL	LT	0.005	UGG
914.0	17-apr-1989	99	CHBR3	LT	0.005	UGG
914.0	17-apr-1989	99	CHCL3	LT	0.018	UGG
0.0	17-apr-1989	99	CHRY	LT	0.231	UGG
0.0	17-apr-1989	99	CL6BZ	LT	0.426	UGG
0.0	17-apr-1989	99	CL6CP	ND	0.402	UGG
0.0	17-apr-1989	99	CL6ET	LT	0.171	UGG
914.0	17-apr-1989	99	CLC6H5	LT	0.002	UGG
0.0	17-apr-1989	99	CLDAN	LT	0.987	UGG
914.0	17-apr-1989	99	CLDAN	LT	0.028	UGG
914.0	17-apr-1989	JS05	CR		24.200	UGG
914.0	17-apr-1989	JS05	CU		29.500	UGG
914.0	17-apr-1989	KF12	CYN	LT	22.300	UGG
0.0	17-apr-1989	99	DBAHA	LT	0.694	UGG
0.0	17-apr-1989	99	DBHC	LT	0.694	UGG
914.0	17-apr-1989	99	DBHC	ND	0.008	UGG
914.0	17-apr-1989	99	DBRCLM	LT	0.003	UGG
0.0	17-apr-1989	99	DEP	ND	0.402	UGG
0.0	17-apr-1989	99	DLDRN	LT	1.050	UGG
914.0	17-apr-1989	99	DLDRN	LT	0.006	UGG
0.0	17-apr-1989	99	DMP	ND	0.402	UGG
0.0	17-apr-1989	99	DNBP	ND	0.402	UGG
0.0	17-apr-1989	99	DNOP	LT	0.426	UGG
0.0	17-apr-1989	99	ENDRN	LT	0.463	UGG
914.0	17-apr-1989	99	ENDRN	ND	0.016	UGG
914.0	17-apr-1989	99	ENDRNK	ND	0.016	UGG
0.0	17-apr-1989	99	ESFSO4	ND	1.220	UGG
914.0	17-apr-1989	99	ESFSO4	ND	0.016	UGG
914.0	17-apr-1989	99	ETC6H5	LT	0.012	UGG
0.0	17-apr-1989	99	FANT	LT	0.256	UGG

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IR Installation: Gaithersburg Research Facility Page 3
 Analytical Results for Chemical Soil
 From: 01/01/75 and 12/7/89

Site: BORE GNC-SS-8 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.0	17-apr-1989	99	FLRENE	ND	0.402	UGG
0.0	17-apr-1989	99	HCBD	LT	0.353	UGG
1.0	17-apr-1989	JB09	HG	LT	0.018	UGG
0.0	17-apr-1989	99	HPCL	LT	0.329	UGG
914.0	17-apr-1989	99	HPCL	LT	0.013	UGG
0.0	17-apr-1989	99	HPCLE	LT	0.901	UGG
914.0	17-apr-1989	99	HPCLE	LT	0.094	UGG
0.0	17-apr-1989	99	ICDPYR	LT	0.548	UGG
914.0	17-apr-1989	99	ISODR	LT	0.120	UGG
0.0	17-apr-1989	99	ISOPHR	ND	0.402	UGG
0.0	17-apr-1989	99	LIN	LT	0.365	UGG
914.0	17-apr-1989	99	LIN	LT	0.044	UGG
914.0	17-apr-1989	99	MEC6H5	LT	0.008	UGG
914.0	17-apr-1989	99	MEXCLR	ND	0.080	UGG
0.0	17-apr-1989	99	NAP	LT	0.341	UGG
0.0	17-apr-1989	99	NB	ND	0.402	UGG
914.0	17-apr-1989	JS05	NI		29.400	UGG
0.0	17-apr-1989	99	NNDMEA	ND	0.402	UGG
0.0	17-apr-1989	99	NNDNPA	LT	0.134	UGG
0.0	17-apr-1989	99	NNDPA	ND	0.402	UGG
914.0	17-apr-1989	JS05	PB	LT	117.000	UGG
0.0	17-apr-1989	99	PCB016	ND	6.090	UGG
914.0	17-apr-1989	LH08	PCB016	LT	0.092	UGG
0.0	17-apr-1989	99	PCB221	ND	6.090	UGG
914.0	17-apr-1989	LH08	PCB221	ND	0.080	UGG
0.0	17-apr-1989	99	PCB232	ND	6.090	UGG
914.0	17-apr-1989	LH08	PCB232	ND	0.080	UGG
0.0	17-apr-1989	99	PCB242	ND	6.090	UGG
914.0	17-apr-1989	LH08	PCB242	ND	0.080	UGG
0.0	17-apr-1989	99	PCB248	ND	6.090	UGG
914.0	17-apr-1989	LH08	PCB248	ND	0.080	UGG
0.0	17-apr-1989	99	PCB254	ND	12.200	UGG
914.0	17-apr-1989	LH08	PCB254	ND	0.160	UGG
0.0	17-apr-1989	99	PCB260	ND	12.200	UGG
914.0	17-apr-1989	LH08	PCB260	LT	0.065	UGG
0.0	17-apr-1989	99	PCP	ND	2.440	UGG
0.0	17-apr-1989	99	PHANTR	LT	1.950	UGG
0.0	17-apr-1989	99	PPDDD	LT	0.475	UGG
914.0	17-apr-1989	99	PPDDD	LT	0.017	UGG
0.0	17-apr-1989	99	PPDDE	LT	0.487	UGG
914.0	17-apr-1989	99	PPDDE	LT	0.014	UGG
0.0	17-apr-1989	99	PPDDT	LT	0.585	UGG
914.0	17-apr-1989	99	PPDDT	LT	0.017	UGG
0.0	17-apr-1989	99	PYR	LT	0.646	UGG
914.0	17-apr-1989	JD11	SB		1.170	UGG
914.0	17-apr-1989	JD11	SE	LT	2.280	UGG
914.0	17-apr-1989	99	TCLEA	LT	0.003	UGG
914.0	17-apr-1989	99	TCLEE	LT	0.010	UGG

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Site: BORE GNC-SS-8 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
914.0	17-apr-1989	JD11	TL	LT	2.620	UGG
914.0	17-apr-1989	99	TRCLE	LT	0.002	UGG
0.0	17-apr-1989	99	TXPHEN	ND	12.200	UGG
914.0	17-apr-1989	99	TXPHEN	ND	0.160	UGG
0.0	17-apr-1989	99	UNK519		0.459	UGG
0.0	17-apr-1989	99	UNK523		1.500	UGG
0.0	17-apr-1989	99	UNK524		0.441	UGG
0.0	17-apr-1989	99	UNK524		0.496	UGG
0.0	17-apr-1989	99	UNK525		0.421	UGG
0.0	17-apr-1989	99	UNK528		6.570	UGG
0.0	17-apr-1989	99	UNK530		0.692	UGG
0.0	17-apr-1989	99	UNK531		0.552	UGG
0.0	17-apr-1989	99	UNK535		0.565	UGG
0.0	17-apr-1989	99	UNK538		0.603	UGG
0.0	17-apr-1989	99	UNK538		0.803	UGG
0.0	17-apr-1989	99	UNK539		0.963	UGG
0.0	17-apr-1989	99	UNK545		1.620	UGG
0.0	17-apr-1989	99	UNK591		0.432	UGG
0.0	17-apr-1989	99	UNK601		0.481	UGG
0.0	17-apr-1989	99	UNK609		0.382	UGG
0.0	17-apr-1989	99	UNK619		1.470	UGG
0.0	17-apr-1989	99	UNK628		0.865	UGG
0.0	17-apr-1989	99	UNK629		18.600	UGG
914.0	17-apr-1989	JS05	ZN		151.000	UGG

Site: BORE GNL-SS-2

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
3.0	02-jun-1989	99	111TCE	LT	0.007	UGG
3.0	02-jun-1989	99	112TCE	LT	0.003	UGG
3.0	02-jun-1989	99	11DCE	LT	0.014	UGG
3.0	02-jun-1989	99	11DCLE	LT	0.009	UGG
3.0	02-jun-1989	99	12DCE	LT	0.007	UGG
3.0	02-jun-1989	99	12DCLE	LT	0.006	UGG
3.0	02-jun-1989	99	12DCLP	LT	0.012	UGG
3.0	02-jun-1989	99	2CLEVE	LT	0.006	UGG
3.0	02-jun-1989	LH08	ABHC	ND	0.008	UGG
3.0	02-jun-1989	99	ACROLN	ND	0.121	UGG
3.0	02-jun-1989	99	ACRYLO	ND	0.121	UGG
3.0	02-jun-1989	LH08	AENSLF	ND	0.008	UGG
0.0	02-jun-1989	JS05	AG	LT	0.783	UGG
3.0	02-jun-1989	LH08	ALDRN	LT	0.013	UGG
0.0	02-jun-1989	JD11	AS	LT	1.980	UGG
3.0	02-jun-1989	LH08	BBHC	ND	0.008	UGG
0.0	02-jun-1989	JS05	BE		0.792	UGG

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Site: BORE GNL-SS-2 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
3.0	02-jun-1989	LH08	BENSLF	ND	0.016	UGG
3.0	02-jun-1989	99	BRDCLM	ND	6.050	UGG
3.0	02-jun-1989	99	C13DCP	LT	0.003	UGG
3.0	02-jun-1989	99	C2H3CL	LT	0.009	UGG
3.0	02-jun-1989	99	C2H5CL	LT	0.012	UGG
3.0	02-jun-1989	99	C6H6	LT	0.006	UGG
3.0	02-jun-1989	99	CCL4	LT	0.002	UGG
0.0	02-jun-1989	JS05	CD	LT	1.090	UGG
3.0	02-jun-1989	99	CH2CL2	ND	0.006	UGG
3.0	02-jun-1989	99	CH3BR	ND	0.012	UGG
3.0	02-jun-1989	99	CH3CL	LT	0.005	UGG
3.0	02-jun-1989	99	CHBR3	LT	0.005	UGG
3.0	02-jun-1989	99	CHCL3	LT	0.018	UGG
3.0	02-jun-1989	99	CLC6H5	LT	0.002	UGG
3.0	02-jun-1989	LH08	CLDAN	LT	0.032	UGG
0.0	02-jun-1989	JS05	CR		12.900	UGG
0.0	02-jun-1989	JS05	CU		32.000	UGG
0.0	02-jun-1989	KF12	CYN	LT	22.300	UGG
3.0	02-jun-1989	LH08	DBHC	ND	0.008	UGG
3.0	02-jun-1989	99	DBRCLM	LT	0.003	UGG
3.0	02-jun-1989	LH08	DLDRN	LT	0.008	UGG
3.0	02-jun-1989	LH08	ENDRN	ND	0.016	UGG
3.0	02-jun-1989	LH08	ENDRNK	ND	0.016	UGG
3.0	02-jun-1989	LH08	ESFSO4	ND	0.016	UGG
3.0	02-jun-1989	99	ETC6H5	LT	0.012	UGG
0.0	02-jun-1989	99	HG		0.027	UGG
3.0	02-jun-1989	LH08	HPCL	LT	0.014	UGG
3.0	02-jun-1989	LH08	HPCLE	LT	0.094	UGG
3.0	02-jun-1989	LH08	ISODR	LT	0.140	UGG
3.0	02-jun-1989	LH08	LIN	LT	0.041	UGG
3.0	02-jun-1989	99	MEC6H5	LT	0.007	UGG
3.0	02-jun-1989	LH08	MEXCLR	ND	0.080	UGG
0.0	02-jun-1989	JS05	NI		8.590	UGG
0.0	02-jun-1989	JS05	PB	LT	96.100	UGG
3.0	02-jun-1989	LH08	PCB016	LT	0.092	UGG
3.0	02-jun-1989	LH08	PCB221	ND	0.080	UGG
3.0	02-jun-1989	LH08	PCB232	ND	0.080	UGG
3.0	02-jun-1989	LH08	PCB242	ND	0.080	UGG
3.0	02-jun-1989	LH08	PCB248	ND	0.080	UGG
3.0	02-jun-1989	LH08	PCB254	ND	0.160	UGG
3.0	02-jun-1989	LH08	PCB260	LT	0.065	UGG
3.0	02-jun-1989	LH08	PPDDD	LT	0.020	UGG
3.0	02-jun-1989	LH08	PPDDE	LT	0.016	UGG
3.0	02-jun-1989	LH08	PPDDT	LT	0.018	UGG
0.0	02-jun-1989	JS05	SB	ND	11.000	UGG
0.0	02-jun-1989	JD11	SB	LT	0.476	UGG
0.0	02-jun-1989	JS05	SE	LT	103.000	UGG
0.0	02-jun-1989	JD11	SE	LT	1.880	UGG

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Site: BORE GNL-SS-2 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
3.0	02-jun-1989	99	TCLEA	LT	0.003	UGG
3.0	02-jun-1989	99	TCLEE	LT	0.010	UGG
0.0	02-jun-1989	JS05	TL	LT	67.600	UGG
0.0	02-jun-1989	JD11	TL	LT	2.150	UGG
3.0	02-jun-1989	99	TRCLE	LT	0.002	UGG
3.0	02-jun-1989	LH08	TXPHEN	ND	0.160	UGG
0.0	02-jun-1989	JS05	ZN		37.300	UGG

Site: BORE GNL-SS-3

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
3.0	02-jun-1989	99	111TCE	LT	0.007	UGG
3.0	02-jun-1989	99	112TCE	LT	0.003	UGG
3.0	02-jun-1989	99	11DCE	LT	0.014	UGG
3.0	02-jun-1989	99	11DCLE	LT	0.009	UGG
3.0	02-jun-1989	99	12DCE	LT	0.007	UGG
3.0	02-jun-1989	99	12DCLE	LT	0.006	UGG
3.0	02-jun-1989	99	12DCLP	LT	0.012	UGG
3.0	02-jun-1989	99	2CLEVE	LT	0.006	UGG
3.0	02-jun-1989	LH08	ABHC	ND	0.008	UGG
3.0	02-jun-1989	99	ACROLN	ND	0.121	UGG
3.0	02-jun-1989	99	ACRYLO	ND	0.121	UGG
3.0	02-jun-1989	LH08	AENSLF	ND	0.008	UGG
0.0	02-jun-1989	JS05	AG	LT	0.783	UGG
3.0	02-jun-1989	LH08	ALDRN	LT	0.013	UGG
0.0	02-jun-1989	JD11	AS	LT	1.980	UGG
3.0	02-jun-1989	LH08	BBHC	ND	0.008	UGG
0.0	02-jun-1989	JS05	BE		0.670	UGG
3.0	02-jun-1989	LH08	BENSLF	ND	0.016	UGG
3.0	02-jun-1989	99	BRDCLM	ND	6.040	UGG
3.0	02-jun-1989	99	C13DCP	LT	0.003	UGG
3.0	02-jun-1989	99	C2H3CL	LT	0.009	UGG
3.0	02-jun-1989	99	C2H5CL	LT	0.012	UGG
3.0	02-jun-1989	99	C6H6	LT	0.006	UGG
3.0	02-jun-1989	99	CCL4	LT	0.002	UGG
0.0	02-jun-1989	JS05	CD	LT	1.090	UGG
3.0	02-jun-1989	99	CH2CL2	ND	0.006	UGG
3.0	02-jun-1989	99	CH3BR	ND	0.012	UGG
3.0	02-jun-1989	99	CH3CL	LT	0.005	UGG
3.0	02-jun-1989	99	CHBR3	LT	0.005	UGG
3.0	02-jun-1989	99	CHCL3	LT	0.018	UGG
3.0	02-jun-1989	99	CLC6H5	LT	0.002	UGG
3.0	02-jun-1989	LH08	CLDAN	LT	0.032	UGG
0.0	02-jun-1989	JS05	CR	LT	9.630	UGG
0.0	02-jun-1989	JS05	CU		18.200	UGG

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Site: BORE GNL-SS-3 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.0	02-jun-1989	KF12	CYN	LT	22.300	UGG
3.0	02-jun-1989	LH08	DBHC	ND	0.008	UGG
3.0	02-jun-1989	99	DBRCLM	LT	0.003	UGG
3.0	02-jun-1989	LH08	DLDRN	LT	0.008	UGG
3.0	02-jun-1989	LH08	ENDRN	ND	0.016	UGG
3.0	02-jun-1989	LH08	ENDRNK	ND	0.016	UGG
3.0	02-jun-1989	LH08	ESFSO4	ND	0.016	UGG
3.0	02-jun-1989	99	ETC6H5	LT	0.012	UGG
0.0	02-jun-1989	99	HG		0.091	UGG
3.0	02-jun-1989	LH08	HPCL	LT	0.014	UGG
3.0	02-jun-1989	LH08	HPCLE	LT	0.094	UGG
3.0	02-jun-1989	LH08	ISODR	LT	0.140	UGG
3.0	02-jun-1989	LH08	LIN	LT	0.041	UGG
3.0	02-jun-1989	99	MEC6H5	LT	0.007	UGG
3.0	02-jun-1989	LH08	MEXCLR	ND	0.080	UGG
0.0	02-jun-1989	JS05	NI		4.760	UGG
0.0	02-jun-1989	JS05	PB	LT	96.100	UGG
3.0	02-jun-1989	LH08	PCB016	LT	0.092	UGG
3.0	02-jun-1989	LH08	PCB221	ND	0.080	UGG
3.0	02-jun-1989	LH08	PCB232	ND	0.080	UGG
3.0	02-jun-1989	LH08	PCB242	ND	0.080	UGG
3.0	02-jun-1989	LH08	PCB248	ND	0.080	UGG
3.0	02-jun-1989	LH08	PCB254	ND	0.160	UGG
3.0	02-jun-1989	LH08	PCB260	LT	0.065	UGG
3.0	02-jun-1989	LH08	PPDDD	LT	0.020	UGG
3.0	02-jun-1989	LH08	PPDDE	LT	0.016	UGG
3.0	02-jun-1989	LH08	PPDDT	LT	0.018	UGG
0.0	02-jun-1989	JS05	SB	ND	11.000	UGG
0.0	02-jun-1989	JD11	SB	LT	0.476	UGG
0.0	02-jun-1989	JS05	SE	LT	103.000	UGG
0.0	02-jun-1989	JD11	SE	LT	1.880	UGG
3.0	02-jun-1989	99	TCLEA	LT	0.003	UGG
3.0	02-jun-1989	99	TCLEE	LT	0.010	UGG
0.0	02-jun-1989	JS05	TL	LT	67.600	UGG
0.0	02-jun-1989	JD11	TL	LT	2.150	UGG
3.0	02-jun-1989	99	TRCLE	LT	0.002	UGG
3.0	02-jun-1989	LH08	TXPHEN	ND	0.160	UGG
0.0	02-jun-1989	JS05	ZN		28.200	UGG

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Site: DTCH GNC-SS-6

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
4.0	02-jun-1989	99	111TCE	LT	0.007	UGG
4.0	02-jun-1989	99	112TCE	LT	0.003	UGG
4.0	02-jun-1989	99	11DCE	LT	0.015	UGG
4.0	02-jun-1989	99	11DCLE	LT	0.009	UGG
4.0	02-jun-1989	99	12DCE	LT	0.007	UGG
4.0	02-jun-1989	99	12DCLE	LT	0.006	UGG
4.0	02-jun-1989	99	12DCLP	LT	0.012	UGG
4.0	02-jun-1989	99	2CLEVE	LT	0.006	UGG
4.0	02-jun-1989	LH08	ABHC	ND	0.008	UGG
4.0	02-jun-1989	99	ACROLN	ND	0.122	UGG
4.0	02-jun-1989	99	ACRYLO	ND	0.122	UGG
4.0	02-jun-1989	LH08	AENSLF	ND	0.008	UGG
0.0	02-jun-1989	JS05	AG	LT	0.783	UGG
4.0	02-jun-1989	LH08	ALDRN	LT	0.013	UGG
0.0	02-jun-1989	JD11	AS	LT	1.980	UGG
4.0	02-jun-1989	LH08	BBHC	ND	0.008	UGG
0.0	02-jun-1989	JS05	BE		0.731	UGG
4.0	02-jun-1989	LH08	BENSLF	ND	0.016	UGG
4.0	02-jun-1989	99	BRDCLM	ND	6.090	UGG
4.0	02-jun-1989	99	C13DCP	LT	0.003	UGG
4.0	02-jun-1989	99	C2H3CL	LT	0.010	UGG
4.0	02-jun-1989	99	C2H5CL	LT	0.012	UGG
4.0	02-jun-1989	99	C6H6	LT	0.006	UGG
4.0	02-jun-1989	99	CCL4	LT	0.002	UGG
0.0	02-jun-1989	JS05	CD	LT	1.090	UGG
4.0	02-jun-1989	99	CH2CL2	ND	0.006	UGG
4.0	02-jun-1989	99	CH3BR	ND	0.012	UGG
4.0	02-jun-1989	99	CH3CL	LT	0.005	UGG
4.0	02-jun-1989	99	CHBR3	LT	0.005	UGG
4.0	02-jun-1989	99	CHCL3	LT	0.018	UGG
4.0	02-jun-1989	99	CLC6H5	LT	0.002	UGG
4.0	02-jun-1989	LH08	CLDAN	LT	0.032	UGG
0.0	02-jun-1989	JS05	CR		10.400	UGG
0.0	02-jun-1989	JS05	CU		20.500	UGG
0.0	02-jun-1989	KF12	CYN	LT	22.300	UGG
4.0	02-jun-1989	LH08	DBHC	ND	0.008	UGG
4.0	02-jun-1989	99	DBRCLM	LT	0.003	UGG
4.0	02-jun-1989	LH08	DLDRN	LT	0.008	UGG
4.0	02-jun-1989	LH08	ENDRN	ND	0.016	UGG
4.0	02-jun-1989	LH08	ENDRNK	ND	0.016	UGG
4.0	02-jun-1989	LH08	ESFSO4	ND	0.016	UGG
4.0	02-jun-1989	99	ETC6H5	LT	0.012	UGG
0.0	02-jun-1989	99	HG	LT	0.018	UGG
4.0	02-jun-1989	LH08	HPCL	LT	0.014	UGG
4.0	02-jun-1989	LH08	HPCLE	LT	0.094	UGG
4.0	02-jun-1989	LH08	ISODR	LT	0.140	UGG
4.0	02-jun-1989	LH08	LIN	LT	0.041	UGG
4.0	02-jun-1989	99	MEC6H5	LT	0.008	UGG

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Site: DTCH GNC-SS-6 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
4.0	02-jun-1989	LH08	MEXCLR	ND	0.080	UGG
0.0	02-jun-1989	JS05	NI		4.070	UGG
0.0	02-jun-1989	JS05	PB	LT	96.100	UGG
4.0	02-jun-1989	LH08	PCB016	LT	0.092	UGG
4.0	02-jun-1989	LH08	PCB221	ND	0.080	UGG
4.0	02-jun-1989	LH08	PCB232	ND	0.080	UGG
4.0	02-jun-1989	LH08	PCB242	ND	0.080	UGG
4.0	02-jun-1989	LH08	PCB248	ND	0.080	UGG
4.0	02-jun-1989	LH08	PCB254	ND	0.160	UGG
4.0	02-jun-1989	LH08	PCB260	LT	0.065	UGG
4.0	02-jun-1989	LH08	PPDDD	LT	0.020	UGG
4.0	02-jun-1989	LH08	PPDDE	LT	0.016	UGG
4.0	02-jun-1989	LH08	PPDDT	LT	0.018	UGG
0.0	02-jun-1989	JS05	SB	ND	11.000	UGG
0.0	02-jun-1989	JD11	SB	LT	0.480	UGG
0.0	02-jun-1989	JS05	SE	LT	103.000	UGG
0.0	02-jun-1989	JD11	SE	LT	1.880	UGG
4.0	02-jun-1989	99	TCLEA	LT	0.003	UGG
4.0	02-jun-1989	99	TCLEE	LT	0.010	UGG
0.0	02-jun-1989	JS05	TL	LT	67.600	UGG
0.0	02-jun-1989	JD11	TL	LT	2.150	UGG
4.0	02-jun-1989	99	TRCLE	LT	0.002	UGG
4.0	02-jun-1989	LH08	TXPHEN	ND	0.160	UGG
0.0	02-jun-1989	JS05	ZN		20.800	UGG

Site: DTCH GNC-SS-7

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
2.0	02-jun-1989	99	111TCE	LT	0.007	UGG
2.0	02-jun-1989	99	112TCE	LT	0.003	UGG
2.0	02-jun-1989	99	11DCE	LT	0.014	UGG
2.0	02-jun-1989	99	11DCLE	LT	0.008	UGG
2.0	02-jun-1989	99	12DCE	LT	0.007	UGG
2.0	02-jun-1989	99	12DCLE	LT	0.005	UGG
2.0	02-jun-1989	99	12DCLP	LT	0.011	UGG
2.0	02-jun-1989	99	2CLEVE	LT	0.006	UGG
2.0	02-jun-1989	LH08	ABHC	ND	0.008	UGG
2.0	02-jun-1989	99	ACROLN	ND	0.114	UGG
2.0	02-jun-1989	99	ACRYLO	ND	0.114	UGG
2.0	02-jun-1989	LH08	AENSLF	ND	0.008	UGG
0.0	02-jun-1989	JS05	AG	LT	0.783	UGG
2.0	02-jun-1989	LH08	ALDRN	LT	0.013	UGG
0.0	02-jun-1989	JD11	AS		2.550	UGG
2.0	02-jun-1989	LH08	BBHC	ND	0.008	UGG
0.0	02-jun-1989	JS05	BE		1.580	UGG

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 Analytical Results for Chemical Soil
 From: 01/01/75 and 12/7/89

Site: DTCH GNC-SS-7 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
2.0	02-jun-1989	LH08	BENSLF	ND	0.016	UGG
2.0	02-jun-1989	99	BRDCLM	ND	5.700	UGG
2.0	02-jun-1989	99	C13DCP	LT	0.003	UGG
2.0	02-jun-1989	99	C2H3CL	LT	0.009	UGG
2.0	02-jun-1989	99	C2H5CL	LT	0.011	UGG
2.0	02-jun-1989	99	C6H6	LT	0.005	UGG
2.0	02-jun-1989	99	CCL4	LT	0.002	UGG
2.0	02-jun-1989	99	CD	LT	1.090	UGG
0.0	02-jun-1989	JS05	CH2CL2	ND	0.006	UGG
2.0	02-jun-1989	99	CH3BR	ND	0.011	UGG
2.0	02-jun-1989	99	CH3CL	LT	0.005	UGG
2.0	02-jun-1989	99	CHBR3	LT	0.004	UGG
2.0	02-jun-1989	99	CHCL3	LT	0.017	UGG
2.0	02-jun-1989	99	CLC6H5	LT	0.002	UGG
2.0	02-jun-1989	LH08	CLDAN	LT	0.032	UGG
2.0	02-jun-1989	JS05	CR		40.300	UGG
0.0	02-jun-1989	JS05	CU		100.000	UGG
0.0	02-jun-1989	KF12	CYN	LT	22.300	UGG
2.0	02-jun-1989	LH08	DBHC	ND	0.008	UGG
2.0	02-jun-1989	99	DBRCLM	LT	0.003	UGG
2.0	02-jun-1989	LH08	DLDRN	LT	0.008	UGG
2.0	02-jun-1989	LH08	ENDRN	ND	0.016	UGG
2.0	02-jun-1989	LH08	ENDRNK	ND	0.016	UGG
2.0	02-jun-1989	LH08	ESFSO4	ND	0.016	UGG
2.0	02-jun-1989	LH08	ETC6H5	LT	0.011	UGG
2.0	02-jun-1989	99	HG		0.020	UGG
0.0	02-jun-1989	99	HPCL	LT	0.014	UGG
2.0	02-jun-1989	LH08	HPCLE	LT	0.094	UGG
2.0	02-jun-1989	LH08	ISODR	LT	0.140	UGG
2.0	02-jun-1989	LH08	LIN	LT	0.041	UGG
2.0	02-jun-1989	LH08	MEC6H5	LT	0.007	UGG
2.0	02-jun-1989	99	MEXCLR	ND	0.080	UGG
2.0	02-jun-1989	LH08	NI		36.100	UGG
0.0	02-jun-1989	JS05	PB	LT	96.100	UGG
2.0	02-jun-1989	LH08	PCB016	LT	0.092	UGG
2.0	02-jun-1989	LH08	PCB221	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB232	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB242	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB248	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB254	ND	0.160	UGG
2.0	02-jun-1989	LH08	PCB260	LT	0.065	UGG
2.0	02-jun-1989	LH08	PFDDD	LT	0.020	UGG
2.0	02-jun-1989	LH08	PFDDDE	LT	0.016	UGG
2.0	02-jun-1989	LH08	PFDDT	LT	0.018	UGG
2.0	02-jun-1989	LH08	SB	ND	11.000	UGG
0.0	02-jun-1989	JS05	SB	LT	0.448	UGG
0.0	02-jun-1989	JD11	SE	LT	103.000	UGG
0.0	02-jun-1989	JS05	SE	LT	1.880	UGG
0.0	02-jun-1989	JD11	SE	LT		

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Analytical Results for Chemical Soil
From: 01/01/75 and 12/7/89

Site: DTCH GNC-SS-7 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
2.0	02-jun-1989	99	TCLEA	LT	0.003	UGG
2.0	02-jun-1989	99	TCLEE	LT	0.009	UGG
0.0	02-jun-1989	JS05	TL	LT	67.600	UGG
0.0	02-jun-1989	JD11	TL	LT	2.150	UGG
2.0	02-jun-1989	99	TRCLE	LT	0.002	UGG
2.0	02-jun-1989	LH08	TXPHEN	ND	0.160	UGG
0.0	02-jun-1989	JS05	ZN		100.000	UGG

Site: DTCH GNL-SS-4

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
2.0	02-jun-1989	99	111TCE	LT	0.007	UGG
2.0	02-jun-1989	99	112TCE	LT	0.003	UGG
2.0	02-jun-1989	99	11DCE	LT	0.014	UGG
2.0	02-jun-1989	99	11DCLE	LT	0.009	UGG
2.0	02-jun-1989	99	12DCE	LT	0.007	UGG
2.0	02-jun-1989	99	12DCLE	LT	0.006	UGG
2.0	02-jun-1989	99	12DCLP	LT	0.012	UGG
2.0	02-jun-1989	99	2CLEVE	LT	0.006	UGG
2.0	02-jun-1989	LH08	ABHC	ND	0.008	UGG
2.0	02-jun-1989	99	ACROLN	ND	0.120	UGG
2.0	02-jun-1989	99	ACRYLO	ND	0.120	UGG
2.0	02-jun-1989	LH08	AENSLF	ND	0.008	UGG
0.0	02-jun-1989	JS05	AG	LT	0.783	UGG
2.0	02-jun-1989	LH08	ALDRN	LT	0.013	UGG
0.0	02-jun-1989	JD11	AS		2.710	UGG
2.0	02-jun-1989	LH08	BBHC	ND	0.008	UGG
0.0	02-jun-1989	JS05	BE		1.040	UGG
2.0	02-jun-1989	LH08	BENSLF	ND	0.016	UGG
2.0	02-jun-1989	99	BRDCLM	ND	5.990	UGG
2.0	02-jun-1989	99	C13DCP	LT	0.003	UGG
2.0	02-jun-1989	99	C2H3CL	LT	0.009	UGG
2.0	02-jun-1989	99	C2H5CL	LT	0.012	UGG
2.0	02-jun-1989	99	C6H6	LT	0.006	UGG
2.0	02-jun-1989	99	CCL4	LT	0.002	UGG
0.0	02-jun-1989	JS05	CD	LT	1.090	UGG
2.0	02-jun-1989	99	CH2CL2	ND	0.006	UGG
2.0	02-jun-1989	99	CH3BR	ND	0.012	UGG
2.0	02-jun-1989	99	CH3CL	LT	0.005	UGG
2.0	02-jun-1989	99	CHBR3	LT	0.005	UGG
2.0	02-jun-1989	99	CHCL3	LT	0.018	UGG
2.0	02-jun-1989	99	CLC6H5	LT	0.002	UGG
2.0	02-jun-1989	LH08	CLDAN	LT	0.032	UGG
0.0	02-jun-1989	JS05	CR		20.000	UGG
0.0	02-jun-1989	JS05	CU		35.100	UGG

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 Analytical Results for Chemical Soil
 From: 01/01/75 and 12/7/89

Site: DTCH GNL-SS-4 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
0.0	02-jun-1989	KF12	CYN	LT	22.300	UGG
2.0	02-jun-1989	LH08	DBHC	ND	0.008	UGG
2.0	02-jun-1989	99	DBRCLM	LT	0.003	UGG
2.0	02-jun-1989	LH08	DLDRN	LT	0.008	UGG
2.0	02-jun-1989	LH08	ENDRN	ND	0.016	UGG
2.0	02-jun-1989	LH08	ENDRNK	ND	0.016	UGG
2.0	02-jun-1989	LH08	ESFSO4	ND	0.016	UGG
2.0	02-jun-1989	99	ETC6H5	LT	0.012	UGG
0.0	02-jun-1989	99	HG		0.018	UGG
2.0	02-jun-1989	LH08	HPCL	LT	0.014	UGG
2.0	02-jun-1989	LH08	HPCLE	LT	0.094	UGG
2.0	02-jun-1989	LH08	ISODR	LT	0.140	UGG
2.0	02-jun-1989	LH08	LIN	LT	0.041	UGG
2.0	02-jun-1989	99	MEC6H5	LT	0.007	UGG
2.0	02-jun-1989	LH08	MEXCLR	ND	0.080	UGG
0.0	02-jun-1989	JS05	NI		8.450	UGG
0.0	02-jun-1989	JS05	PB	LT	96.100	UGG
2.0	02-jun-1989	LH08	PCB016	LT	0.092	UGG
2.0	02-jun-1989	LH08	PCB221	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB232	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB242	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB248	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB254	ND	0.160	UGG
2.0	02-jun-1989	LH08	PCB260	LT	0.065	UGG
2.0	02-jun-1989	LH08	PPDD	LT	0.020	UGG
2.0	02-jun-1989	LH08	PPDDE	LT	0.016	UGG
2.0	02-jun-1989	LH08	PPDDT	LT	0.018	UGG
0.0	02-jun-1989	JS05	SB	ND	11.000	UGG
0.0	02-jun-1989	JD11	SB	LT	0.471	UGG
0.0	02-jun-1989	JS05	SE	LT	103.000	UGG
0.0	02-jun-1989	JD11	SE	LT	1.880	UGG
2.0	02-jun-1989	99	TCLEA	LT	0.003	UGG
2.0	02-jun-1989	99	TCLEE	LT	0.009	UGG
0.0	02-jun-1989	JS05	TL	LT	67.600	UGG
0.0	02-jun-1989	JD11	TL	LT	2.150	UGG
2.0	02-jun-1989	99	TRCLE	LT	0.002	UGG
2.0	02-jun-1989	LH08	TXPHEN	ND	0.160	UGG
0.0	02-jun-1989	JS05	ZN		34.800	UGG

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Site: DTCH GNL-SS-5

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
2.0	02-jun-1989	99	111TCE	LT	0.007	UGG
2.0	02-jun-1989	99	112TCE	LT	0.003	UGG
2.0	02-jun-1989	99	11DCE	LT	0.014	UGG
2.0	02-jun-1989	99	11DCLE	LT	0.009	UGG
2.0	02-jun-1989	99	12DCE	LT	0.007	UGG
2.0	02-jun-1989	99	12DCLE	LT	0.006	UGG
2.0	02-jun-1989	99	12DCLP	LT	0.012	UGG
2.0	02-jun-1989	99	2CLEVE	LT	0.006	UGG
2.0	02-jun-1989	LH08	ABHC	ND	0.008	UGG
2.0	02-jun-1989	99	ACROLN	ND	0.119	UGG
2.0	02-jun-1989	99	ACRYLO	ND	0.119	UGG
2.0	02-jun-1989	LH08	AENSLF	ND	0.008	UGG
0.0	02-jun-1989	JS05	AG	LT	0.783	UGG
2.0	02-jun-1989	LH08	ALDRN	LT	0.013	UGG
0.0	02-jun-1989	JD11	AS	LT	1.980	UGG
2.0	02-jun-1989	LH08	BBHC	ND	0.008	UGG
0.0	02-jun-1989	JS05	BE		0.823	UGG
2.0	02-jun-1989	LH08	BENSLF	ND	0.016	UGG
2.0	02-jun-1989	99	BRDCLM	ND	5.970	UGG
2.0	02-jun-1989	99	C13DCP	LT	0.003	UGG
2.0	02-jun-1989	99	C2H3CL	LT	0.009	UGG
2.0	02-jun-1989	99	C2H5CL	LT	0.012	UGG
2.0	02-jun-1989	99	C6H6	LT	0.006	UGG
2.0	02-jun-1989	99	CCL4	LT	0.002	UGG
0.0	02-jun-1989	JS05	CD	LT	1.090	UGG
2.0	02-jun-1989	99	CH2CL2	ND	0.006	UGG
2.0	02-jun-1989	99	CH3BR	ND	0.012	UGG
2.0	02-jun-1989	99	CH3CL	LT	0.005	UGG
2.0	02-jun-1989	99	CHBR3	LT	0.005	UGG
2.0	02-jun-1989	99	CHCL3	LT	0.018	UGG
2.0	02-jun-1989	99	CLC6H5	LT	0.002	UGG
2.0	02-jun-1989	LH08	CLDAN	LT	0.032	UGG
0.0	02-jun-1989	JS05	CR		27.300	UGG
0.0	02-jun-1989	JS05	CU		81.000	UGG
0.0	02-jun-1989	KF12	CYN	LT	22.300	UGG
2.0	02-jun-1989	LH08	DBHC	ND	0.008	UGG
2.0	02-jun-1989	99	DBRCLM	LT	0.003	UGG
2.0	02-jun-1989	LH08	DLDRN	LT	0.008	UGG
2.0	02-jun-1989	LH08	ENDRN	ND	0.016	UGG
2.0	02-jun-1989	LH08	ENDRNK	ND	0.016	UGG
2.0	02-jun-1989	LH08	ESFSO4	ND	0.016	UGG
2.0	02-jun-1989	99	ETC6H5	LT	0.012	UGG
0.0	02-jun-1989	99	HG		0.033	UGG
2.0	02-jun-1989	LH08	HPCL	LT	0.014	UGG
2.0	02-jun-1989	LH08	HPCLE	LT	0.094	UGG
2.0	02-jun-1989	LH08	ISODR	LT	0.140	UGG
2.0	02-jun-1989	LH08	LIN	LT	0.041	UGG
2.0	02-jun-1989	99	MEC6H5	LT	0.007	UGG

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Analytical Results for Chemical Soil
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Site: DTCH GNL-SS-5 (continued)

SAMPLE DEPTH (ft)	SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
					0.080	UGG
2.0	02-jun-1989	LH08	MEXCLR	ND	21.400	UGG
0.0	02-jun-1989	JS05	NI		96.100	UGG
0.0	02-jun-1989	JS05	PB	LT	0.092	UGG
2.0	02-jun-1989	LH08	PCB016	LT	0.080	UGG
2.0	02-jun-1989	LH08	PCB221	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB232	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB242	ND	0.080	UGG
2.0	02-jun-1989	LH08	PCB248	ND	0.160	UGG
2.0	02-jun-1989	LH08	PCB254	ND	0.065	UGG
2.0	02-jun-1989	LH08	PCB260	LT	0.020	UGG
2.0	02-jun-1989	LH08	PPDDD	LT	0.016	UGG
2.0	02-jun-1989	LH08	PPDDE	LT	0.018	UGG
2.0	02-jun-1989	LH08	PPDDT	LT	11.000	UGG
2.0	02-jun-1989	JS05	SB	ND	0.470	UGG
0.0	02-jun-1989	JD11	SB	LT	103.000	UGG
0.0	02-jun-1989	JS05	SE	LT	1.880	UGG
0.0	02-jun-1989	JD11	SE	LT	0.003	UGG
2.0	02-jun-1989	99	TCLEA	LT	0.009	UGG
2.0	02-jun-1989	99	TCLEE	LT	67.600	UGG
0.0	02-jun-1989	JS05	TL	LT	2.150	UGG
0.0	02-jun-1989	JD11	TL	LT	0.002	UGG
0.0	02-jun-1989	99	TRCLE	LT	0.160	UGG
2.0	02-jun-1989	LH08	TXPHEN	ND	89.800	UGG
2.0	02-jun-1989	JS05	ZN			

Program ended normally.

QA/QC
ANALYTICAL DATA

TABLES

Site: TRIP BLANK

SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25-MAY-1989	99	111TCE	LT	1.000	UGL
25-MAY-1989	99	112TCE	LT	1.700	UGL
25-MAY-1989	99	11DCE	LT	6.800	UGL
25-MAY-1989	99	11DCLE	LT	2.700	UGL
25-MAY-1989	99	12DCE	LT	2.200	UGL
25-MAY-1989	99	12DCLE	LT	1.000	UGL
25-MAY-1989	99	12DCLP	LT	3.200	UGL
25-MAY-1989	99	2CLEVE	LT	1.600	UGL
25-MAY-1989	99	ACROLN	ND	100.000	UGL
25-MAY-1989	99	ACRYLO	ND	100.000	UGL
25-MAY-1989	99	BRDCLM	ND	5.000	UGL
25-MAY-1989	99	C13DCP	LT	1.800	UGL
25-MAY-1989	99	C2H3CL	LT	13.000	UGL
25-MAY-1989	99	C2H5CL	LT	6.900	UGL
25-MAY-1989	99	C6H6	LT	1.700	UGL
25-MAY-1989	99	CCL4	LT	1.000	UGL
25-MAY-1989	99	CH2CL2	LT	23.000	UGL
25-MAY-1989	99	CH3BR	ND	10.000	UGL
25-MAY-1989	99	CH3CL	LT	1.800	UGL
25-MAY-1989	99	CHBR3	LT	3.700	UGL
25-MAY-1989	99	CHCL3	LT	1.000	UGL
25-MAY-1989	99	CLC6H5	LT	1.200	UGL
25-MAY-1989	99	DBRCLM	LT	1.800	UGL
25-MAY-1989	99	ETC6H5	LT	1.400	UGL
25-MAY-1989	99	MEC6H5	LT	1.800	UGL
25-MAY-1989	99	TCLEA	LT	7.100	UGL
25-MAY-1989	99	TCLEE	LT	2.300	UGL
25-MAY-1989	99	TRCLE	LT	1.000	UGL

Site: FIELD BLANK

25-MAY-1989	99	111TCE	LT	1.000	UGL
25-MAY-1989	99	112TCE	LT	1.700	UGL
25-MAY-1989	99	11DCE	LT	6.800	UGL
25-MAY-1989	99	11DCLE	LT	2.700	UGL
25-MAY-1989	UM13	124TCB	LT	4.420	UGL
25-MAY-1989	99	12DCE	LT	2.200	UGL
25-MAY-1989	UM13	12DCLB	LT	7.320	UGL
25-MAY-1989	99	12DCLE	LT	1.000	UGL
25-MAY-1989	99	12DCLP	LT	3.200	UGL
25-MAY-1989	UM13	13DCLB	LT	8.270	UGL

TABLES (cont.)

Site: FIELD BLANK

SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25-MAY-1989	UM13	14DCLB	LT	7.970	UGL
25-MAY-1989	UM13	246TCP	ND	10.000	UGL
25-MAY-1989	UM13	24DCLP	ND	10.000	UGL
25-MAY-1989	UM13	24DMPN	ND	10.000	UGL
25-MAY-1989	UM13	24DNP	ND	50.000	UGL
25-MAY-1989	UM13	24DNT	LT	5.840	UGL
25-MAY-1989	UM13	26DNT	LT	5.520	UGL
25-MAY-1989	99	2CLEVE	LT	1.600	UGL
25-MAY-1989	UM13	2CLF	ND	10.000	UGL
25-MAY-1989	UM13	2CNAP	LT	2.070	UGL
25-MAY-1989	UM13	2NP	ND	50.000	UGL
25-MAY-1989	UM13	33DCBD	ND	20.000	UGL
25-MAY-1989	UM13	46DN2C	ND	50.000	UGL
25-MAY-1989	UM13	4BRPPE	ND	10.000	UGL
25-MAY-1989	UM13	4CL3C	ND	10.000	UGL
25-MAY-1989	UM13	4CLPPE	ND	10.000	UGL
25-MAY-1989	UM13	4NP	ND	50.000	UGL
25-MAY-1989	UM13	ABHC	ND	3.000	UGL
25-MAY-1989	UH09	ABHC	ND	0.050	UGL
25-MAY-1989	99	ACROLN	ND	100.000	UGL
25-MAY-1989	99	ACRYLO	ND	100.000	UGL
25-MAY-1989	UM13	AENSLF	ND	3.000	UGL
25-MAY-1989	UH09	AENSLF	ND	0.050	UGL
25-MAY-1989	SS06	AG	LT	5.450	UGL
25-MAY-1989	UM13	ALDRN	LT	5.780	UGL
25-MAY-1989	UH09	ALDRN	LT	0.022	UGL
25-MAY-1989	UM13	ANAPNE	LT	1.260	UGL
25-MAY-1989	UM13	ANAPYL	LT	3.300	UGL
25-MAY-1989	UM13	ANTHRC	LT	1.110	UGL
25-MAY-1989	SD11	AS	LT	4.190	UGL
25-MAY-1989	UM13	B2CEXM	ND	10.000	UGL
25-MAY-1989	UM13	B2CIPE	ND	10.000	UGL
25-MAY-1989	UM13	B2CLEE	LT	1.500	UGL
25-MAY-1989	UM13	B2EHP	LT	32.700	UGL
25-MAY-1989	UM13	BAANTR	LT	0.906	UGL
25-MAY-1989	UM13	BAPYR	LT	8.290	UGL
25-MAY-1989	UM13	BBFANT	LT	2.650	UGL
25-MAY-1989	UM13	BBHC	LT	3.170	UGL
25-MAY-1989	UH09	BBHC	ND	0.050	UGL
25-MAY-1989	UM13	BBZP	ND	10.000	UGL
25-MAY-1989	SS06	BE	LT	2.860	UGL
25-MAY-1989	UM13	BENSLF	ND	6.000	UGL
25-MAY-1989	UH09	BENSLF	ND	0.100	UGL
25-MAY-1989	UM13	BENZID	ND	50.000	UGL
25-MAY-1989	UM13	BGHIPY	LT	64.600	UGL

TABLES (cont.)

Site: FIELD BLANK

SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25-MAY-1989	UM13	BKFANT	LT	3.280	UGL
25-MAY-1989	99	BRDCLM	ND	5.000	UGL
25-MAY-1989	UM13	BZALC	ND	0.100	UGL
25-MAY-1989	99	C13DCP	LT	1.800	UGL
25-MAY-1989	99	C2H3CL	LT	13.000	UGL
25-MAY-1989	99	C2H5CL	LT	6.900	UGL
25-MAY-1989	99	C6H6	LT	1.700	UGL
25-MAY-1989	99	CCL4	LT	1.000	UGL
25-MAY-1989	SS06	CD		6.010	UGL
25-MAY-1989	99	CH2CL2	LT	23.000	UGL
25-MAY-1989	99	CH3BR	ND	10.000	UGL
25-MAY-1989	99	CH3CL	LT	1.800	UGL
25-MAY-1989	99	CHBR3	LT	3.700	UGL
25-MAY-1989	99	CHCL3	LT	1.000	UGL
25-MAY-1989	UM13	CHRY	LT	1.150	UGL
25-MAY-1989	UM13	CL6BZ	LT	2.850	UGL
25-MAY-1989	UM13	CL6CP	ND	10.000	UGL
25-MAY-1989	UM13	CL6ET	LT	13.300	UGL
25-MAY-1989	99	CLC6H5	LT	1.200	UGL
25-MAY-1989	UM13	CLDAN	LT	10.200	UGL
25-MAY-1989	UH09	CLDAN	LT	0.046	UGL
25-MAY-1989	SS06	CR	LT	4.440	UGL
25-MAY-1989	SS06	CU	LT	6.200	UGL
25-MAY-1989	TF19	CYN	LT	5.500	UGL
25-MAY-1989	UM13	DBAHA	LT	12.300	UGL
25-MAY-1989	UM13	DBHC	LT	621.000	UGL
25-MAY-1989	UH09	DBHC	ND	0.050	UGL
25-MAY-1989	99	DBRCLM	LT	1.800	UGL
25-MAY-1989	UM13	DEP	ND	10.000	UGL
25-MAY-1989	UM13	DLDRN	LT	2.550	UGL
25-MAY-1989	UH09	DLDRN	LT	0.005	UGL
25-MAY-1989	UM13	DMP	ND	10.000	UGL
25-MAY-1989	UM13	DNBP	ND	10.000	UGL
25-MAY-1989	UM13	DNOP	LT	21.400	UGL
25-MAY-1989	UM13	ENDRN	LT	34.200	UGL
25-MAY-1989	UH09	ENDRN	ND	0.100	UGL
25-MAY-1989	UH09	ENDRNK	ND	0.100	UGL
25-MAY-1989	UM13	ESFS04	ND	6.000	UGL
25-MAY-1989	UH09	ESFS04	ND	0.100	UGL
25-MAY-1989	99	ETC6H5	LT	1.400	UGL
25-MAY-1989	UM13	FANT	LT	1.150	UGL
25-MAY-1989	UM13	FLRENE	ND	10.000	UGL
25-MAY-1989	UM13	HCBD	LT	7.890	UGL
25-MAY-1989	99	HG		0.100	UGL
25-MAY-1989	UM13	HPCL	LT	4.910	UGL

TABLES (cont.)

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SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25-MAY-1989	UH09	HPCL		0.118	UGL
25-MAY-1989	UM13	HPCLE	LT	6.440	UGL
25-MAY-1989	UH09	HPCLE	LT	0.086	UGL
25-MAY-1989	UM13	ICDPYR	LT	128.000	UGL
25-MAY-1989	UH09	ISODR	LT	0.041	UGL
25-MAY-1989	UM13	ISOPHR	ND	0.100	UGL
25-MAY-1989	UM13	LIN	LT	26.000	UGL
25-MAY-1989	UH09	LIN	LT	0.029	UGL
25-MAY-1989	99	MEC6H5	LT	1.800	UGL
25-MAY-1989	UH09	MEXCLR	ND	0.500	UGL
25-MAY-1989	UM13	NAP	LT	3.510	UGL
25-MAY-1989	UM13	NB	ND	10.000	UGL
25-MAY-1989	SS06	NI	LT	15.300	UGL
25-MAY-1989	UM13	NNDMEA	ND	10.000	UGL
25-MAY-1989	UM13	NNDNPA	LT	5.630	UGL
25-MAY-1989	UM13	NNDPA	ND	6.700	UGL
25-MAY-1989	SD11	PB	LT	1.700	UGL
25-MAY-1989	UM13	PCB016	ND	30.000	UGL
25-MAY-1989	UH09	PCB016	LT	0.133	UGL
25-MAY-1989	UM13	PCB221	ND	30.000	UGL
25-MAY-1989	UH09	PCB221	ND	0.500	UGL
25-MAY-1989	UM13	PCB232	ND	30.000	UGL
25-MAY-1989	UH09	PCB232	ND	0.500	UGL
25-MAY-1989	UM13	PCB242	ND	30.000	UGL
25-MAY-1989	UH09	PCB242	ND	0.500	UGL
25-MAY-1989	UM13	PCB248	ND	30.000	UGL
25-MAY-1989	UH09	PCB248	ND	0.500	UGL
25-MAY-1989	UM13	PCB254	ND	60.000	UGL
25-MAY-1989	UH09	PCB254	ND	1.000	UGL
25-MAY-1989	UM13	PCB260	ND	60.000	UGL
25-MAY-1989	UH09	PCB260	LT	0.087	UGL
25-MAY-1989	UM13	PCP	ND	50.000	UGL
25-MAY-1989	UM13	PHANTR	LT	0.759	UGL
25-MAY-1989	UM13	PPDD	LT	5.610	UGL
25-MAY-1989	UH09	PPDD	LT	0.013	UGL
25-MAY-1989	UM13	PPDDE	LT	11.200	UGL
25-MAY-1989	UH09	PPDDE	LT	0.022	UGL
25-MAY-1989	UM13	PPDDT	LT	5.070	UGL
25-MAY-1989	UH09	PPDDT	LT	0.037	UGL
25-MAY-1989	UM13	PYR	LT	9.380	UGL
25-MAY-1989	SD11	SB	LT	2.500	UGL
25-MAY-1989	SD11	SE	LT	6.940	UGL
25-MAY-1989	99	TCLEA	LT	7.100	UGL
25-MAY-1989	99	TCLEE	LT	2.300	UGL
25-MAY-1989	SS06	TL	LT	59.900	UGL

TABLES (cont.)

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SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
25-MAY-1989	99	TRCLE	LT	1.000	UGL
25-MAY-1989	UM13	TXPHEN	ND	60.000	UGL
25-MAY-1989	UH09	TXPHEN	ND	1.000	UGL
25-MAY-1989	UM13	UNK536		10.900	UGL
25-MAY-1989	UM13	UNK538		14.300	UGL
25-MAY-1989	UM13	UNK541		38.700	UGL
25-MAY-1989	UM13	UNK542		7.960	UGL
25-MAY-1989	UM13	UNK543		7.710	UGL
25-MAY-1989	UM13	UNK543		6.220	UGL
25-MAY-1989	UM13	UNK544		19.500	UGL
25-MAY-1989	SS06	ZN		7.420	UGL

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17-JUL-1989	99	111TCE	LT	1.000	UGL
17-JUL-1989	99	111TCE	LT	0.006	UGG
17-JUL-1989	99	111TCE	LT	0.006	UGG
17-JUL-1989	99	112TCE	LT	1.700	UGL
17-JUL-1989	99	112TCE	LT	0.003	UGG
17-JUL-1989	99	112TCE	LT	0.003	UGG
17-JUL-1989	99	11DCE	LT	6.800	UGL
17-JUL-1989	99	11DCE	LT	0.012	UGG
17-JUL-1989	99	11DCE	LT	0.012	UGG
17-JUL-1989	99	11DCLE	LT	2.700	UGL
17-JUL-1989	99	11DCLE	LT	0.007	UGG
17-JUL-1989	99	11DCLE	LT	0.007	UGG
17-JUL-1989	99	124TCB	LT	0.170	UGG
17-JUL-1989	UM13	124TCB	LT	4.420	UGL
17-JUL-1989	99	12DCE	LT	2.200	UGL
17-JUL-1989	99	12DCE	LT	0.006	UGG
17-JUL-1989	99	12DCE	LT	0.006	UGG
17-JUL-1989	99	12DCLB	LT	0.330	UGG
17-JUL-1989	UM13	12DCLB	LT	7.320	UGL
17-JUL-1989	99	12DCLE	LT	1.000	UGL
17-JUL-1989	99	12DCLE	LT	0.005	UGG
17-JUL-1989	99	12DCLE	LT	0.005	UGG
17-JUL-1989	99	12DCLP	LT	3.200	UGL
17-JUL-1989	99	12DCLP	LT	0.010	UGG
17-JUL-1989	99	12DCLP	LT	0.010	UGG
17-JUL-1989	99	13DCLB	LT	0.300	UGG
17-JUL-1989	UM13	13DCLB	LT	8.270	UGL
17-JUL-1989	99	14DCLB	LT	0.290	UGG
17-JUL-1989	UM13	14DCLB	LT	7.970	UGL
17-JUL-1989	99	246TCP	ND	0.330	UGG
17-JUL-1989	UM13	246TCP	ND	10.000	UGL

TABLES (cont.)

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SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	99	24DCLP	ND	0.330	UGG
17-JUL-1989	UM13	24DCLP	ND	10.000	UGL
17-JUL-1989	99	24DMPN	ND	0.330	UGG
17-JUL-1989	UM13	24DMPN	ND	10.000	UGL
17-JUL-1989	99	24DNP	ND	2.000	UGG
17-JUL-1989	UM13	24DNP	ND	50.000	UGL
17-JUL-1989	99	24DNT	LT	0.460	UGG
17-JUL-1989	UM13	24DNT	LT	5.840	UGL
17-JUL-1989	99	26DNT	LT	0.200	UGG
17-JUL-1989	UM13	26DNT	LT	5.520	UGL
17-JUL-1989	99	2CLEVE	LT	1.600	UGL
17-JUL-1989	99	2CLEVE	LT	0.005	UGG
17-JUL-1989	99	2CLEVE	LT	0.005	UGG
17-JUL-1989	99	2CLP	ND	0.330	UGG
17-JUL-1989	UM13	2CLP	ND	10.000	UGL
17-JUL-1989	99	2CNAP	LT	0.320	UGG
17-JUL-1989	UM13	2CNAP	LT	2.070	UGL
17-JUL-1989	99	2NP	ND	0.330	UGG
17-JUL-1989	UM13	2NP	ND	50.000	UGL
17-JUL-1989	99	33DCBD	ND	0.700	UGG
17-JUL-1989	UM13	33DCBD	ND	20.000	UGL
17-JUL-1989	99	46DN2C	ND	2.000	UGG
17-JUL-1989	UM13	46DN2C	ND	50.000	UGL
17-JUL-1989	99	4BRPPE	ND	0.330	UGG
17-JUL-1989	UM13	4BRPPE	ND	10.000	UGL
17-JUL-1989	99	4CL3C	ND	0.290	UGG
17-JUL-1989	UM13	4CL3C	ND	10.000	UGL
17-JUL-1989	99	4CLPPE	ND	0.330	UGG
17-JUL-1989	UM13	4CLPPE	ND	10.000	UGL
17-JUL-1989	99	4NP	ND	2.000	UGG
17-JUL-1989	UM13	4NP	ND	50.000	UGL
17-JUL-1989	99	ABHC	ND	8000.000	UGG
17-JUL-1989	99	ABHC	ND	0.500	UGG
17-JUL-1989	UM13	ABHC	ND	3.000	UGL
17-JUL-1989	UH09	ABHC	ND	0.050	UGL
17-JUL-1989	LH08	ABHC	ND	0.008	UGG
17-JUL-1989	99	ACROLN	ND	100.000	UGL
17-JUL-1989	99	ACROLN	ND	0.100	UGG
17-JUL-1989	99	ACROLN	ND	0.100	UGG
17-JUL-1989	99	ACRYLO	ND	100.000	UGL
17-JUL-1989	99	ACRYLO	ND	0.100	UGG
17-JUL-1989	99	ACRYLO	ND	0.100	UGG
17-JUL-1989	99	AENSLF	ND	0.008	UGG
17-JUL-1989	99	AENSLF	ND	0.500	UGG
17-JUL-1989	UM13	AENSLF	ND	3.000	UGL

TABLES (cont.)

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SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	UH09	AENSLF	ND	0.050	UGL
17-JUL-1989	LH08	AENSLF	ND	0.008	UGG
17-JUL-1989	JS05	AG	LT	0.953	UGG
17-JUL-1989	SS06	AG	LT	5.450	UGL
17-JUL-1989	JS05	AG	LT	0.783	UGG
17-JUL-1989	99	ALDRN	LT	0.011	UGG
17-JUL-1989	99	ALDRN	LT	0.420	UGG
17-JUL-1989	UM13	ALDRN	LT	5.780	UGL
17-JUL-1989	UH09	ALDRN	LT	0.022	UGL
17-JUL-1989	LH08	ALDRN	LT	0.013	UGG
17-JUL-1989	99	ANAPNE	LT	0.340	UGG
17-JUL-1989	UM13	ANAPNE	LT	1.260	UGL
17-JUL-1989	99	ANAPYL	LT	0.310	UGG
17-JUL-1989	UM13	ANAPYL	LT	3.300	UGL
17-JUL-1989	UM13	ANTHRC	LT	1.110	UGL
17-JUL-1989	99	ANTRC	LT	0.290	UGG
17-JUL-1989	JD11	AS		4.650	UGG
17-JUL-1989	SD11	AS	LT	4.190	UGL
17-JUL-1989	JD11	AS		4.050	UGG
17-JUL-1989	99	B2CEXM	ND	0.330	UGG
17-JUL-1989	UM13	B2CEXM	ND	10.000	UGL
17-JUL-1989	99	B2CIPE	ND	0.330	UGG
17-JUL-1989	UM13	B2CIPE	ND	10.000	UGL
17-JUL-1989	99	B2CLEE	LT	0.380	UGG
17-JUL-1989	UM13	B2CLEE	LT	1.500	UGL
17-JUL-1989	99	B2EHP		9.300	UGG
17-JUL-1989	UM13	B2EHP	LT	32.700	UGL
17-JUL-1989	99	BAANTR	LT	0.270	UGG
17-JUL-1989	UM13	BAANTR	LT	0.906	UGL
17-JUL-1989	99	BAPYR	LT	0.160	UGG
17-JUL-1989	UM13	BAPYR	LT	8.290	UGL
17-JUL-1989	99	BBFANT	LT	0.250	UGG
17-JUL-1989	UM13	BBFANT	LT	2.650	UGL
17-JUL-1989	99	BBHC	ND	8000.000	UGG
17-JUL-1989	99	BBHC	LT	0.330	UGG
17-JUL-1989	UM13	BBHC	LT	3.170	UGL
17-JUL-1989	UH09	BBHC	ND	0.050	UGL
17-JUL-1989	LH08	BBHC	ND	0.008	UGG
17-JUL-1989	99	BBZP	ND	0.330	UGG
17-JUL-1989	UM13	BBZP	ND	10.000	UGL
17-JUL-1989	JS05	BE		0.608	UGG
17-JUL-1989	SS06	BE	LT	2.860	UGL
17-JUL-1989	JS05	BE		0.487	UGG
17-JUL-1989	99	BENSLF	ND	0.016	UGG
17-JUL-1989	99	BENSLF	ND	1.000	UGG

TABLES (cont.)

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SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	UM13	BENSLF	ND	6.000	UGL
17-JUL-1989	UH09	BENSLF	ND	0.100	UGL
17-JUL-1989	LH08	BENSLF	ND	0.016	UGG
17-JUL-1989	99	BENZID	ND	1.600	UGG
17-JUL-1989	UM13	BENZID	ND	50.000	UGL
17-JUL-1989	99	BGHIPY	LT	0.520	UGG
17-JUL-1989	UM13	BGHIPY	LT	64.600	UGL
17-JUL-1989	99	BKFANT	LT	0.220	UGG
17-JUL-1989	UM13	BKFANT	LT	3.280	UGL
17-JUL-1989	99	BRDCLM	ND	5.000	UGL
17-JUL-1989	99	BRDCLM	ND	5.000	UGG
17-JUL-1989	99	BRDCLM	ND	5.000	UGG
17-JUL-1989	99	BZALC	ND	0.330	UGG
17-JUL-1989	UM13	BZALC	ND	0.100	UGL
17-JUL-1989	99	C13DCP	LT	1.800	UGL
17-JUL-1989	99	C13DCP	LT	0.003	UGG
17-JUL-1989	99	C13DCP	LT	0.003	UGG
17-JUL-1989	99	C2H3CL	LT	13.000	UGL
17-JUL-1989	99	C2H3CL	LT	0.008	UGG
17-JUL-1989	99	C2H3CL	LT	0.008	UGG
17-JUL-1989	99	C2H5CL	LT	6.900	UGL
17-JUL-1989	99	C2H5CL	LT	0.010	UGG
17-JUL-1989	99	C2H5CL	LT	0.010	UGG
17-JUL-1989	99	C6H6	LT	1.700	UGL
17-JUL-1989	99	C6H6	LT	0.005	UGG
17-JUL-1989	99	C6H6	LT	0.005	UGG
17-JUL-1989	99	CCL4	LT	1.000	UGL
17-JUL-1989	99	CCL4	LT	0.002	UGG
17-JUL-1989	99	CCL4	LT	0.002	UGG
17-JUL-1989	JS05	CD	LT	1.330	UGG
17-JUL-1989	SS06	CD	LT	4.390	UGL
17-JUL-1989	JS05	CD	LT	1.090	UGG
17-JUL-1989	99	CH2CL2	LT	23.000	UGL
17-JUL-1989	99	CH2CL2	ND	0.005	UGG
17-JUL-1989	99	CH2CL2	ND	0.010	UGG
17-JUL-1989	99	CH3BR	ND	10.000	UGL
17-JUL-1989	99	CH3BR	ND	0.010	UGG
17-JUL-1989	99	CH3BR	ND	0.010	UGG
17-JUL-1989	99	CH3CL	LT	1.800	UGL
17-JUL-1989	99	CH3CL	LT	0.005	UGG
17-JUL-1989	99	CH3CL	LT	0.005	UGG
17-JUL-1989	99	CHBR3	LT	3.700	UGL
17-JUL-1989	99	CHBR3	LT	0.004	UGG
17-JUL-1989	99	CHBR3	LT	0.004	UGG
17-JUL-1989	99	CHCL3		4.100	UGL

TABLES (cont.)

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SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	99	CHCL3	LT	0.015	UGG
17-JUL-1989	99	CHCL3	LT	0.015	UGG
17-JUL-1989	99	CHRY	LT	0.190	UGG
17-JUL-1989	UM13	CHRY	LT	1.150	UGL
17-JUL-1989	99	CL6BZ	LT	0.350	UGG
17-JUL-1989	UM13	CL6BZ	LT	2.850	UGL
17-JUL-1989	99	CL6CP	ND	0.330	UGG
17-JUL-1989	UM13	CL6CP	ND	10.000	UGL
17-JUL-1989	99	CL6ET	LT	0.140	UGG
17-JUL-1989	UM13	CL6ET	LT	13.300	UGL
17-JUL-1989	99	CLC6H5	LT	1.200	UGL
17-JUL-1989	99	CLC6H5	LT	0.002	UGG
17-JUL-1989	99	CLC6H5	LT	0.002	UGG
17-JUL-1989	99	CLDAN	LT	0.028	UGG
17-JUL-1989	99	CLDAN	LT	0.810	UGG
17-JUL-1989	UM13	CLDAN	LT	10.200	UGL
17-JUL-1989	UH09	CLDAN	LT	0.046	UGL
17-JUL-1989	LH08	CLDAN	LT	0.032	UGG
17-JUL-1989	JS05	CR		15.900	UGG
17-JUL-1989	SS06	CR	LT	4.440	UGL
17-JUL-1989	JS05	CR		9.640	UGG
17-JUL-1989	JS05	CU		21.700	UGG
17-JUL-1989	SS06	CU		9.700	UGL
17-JUL-1989	JS05	CU		16.700	UGG
17-JUL-1989	KF12	CYN	LT	22.300	UGG
17-JUL-1989	TF19	CYN	LT	5.500	UGL
17-JUL-1989	KF12	CYN	LT	22.300	UGG
17-JUL-1989	99	DBAHA	LT	0.570	UGG
17-JUL-1989	UM13	DBAHA	LT	12.300	UGL
17-JUL-1989	99	DBHC	ND	0.008	UGG
17-JUL-1989	99	DBHC	LT	0.570	UGG
17-JUL-1989	UM13	DBHC	LT	621.000	UGL
17-JUL-1989	UH09	DBHC	ND	0.050	UGL
17-JUL-1989	LH08	DBHC	ND	0.008	UGG
17-JUL-1989	99	DBRCLM	LT	1.800	UGL
17-JUL-1989	99	DBRCLM	LT	0.002	UGG
17-JUL-1989	99	DBRCLM	LT	0.002	UGG
17-JUL-1989	99	DEP	ND	0.330	UGG
17-JUL-1989	UM13	DEP	ND	10.000	UGL
17-JUL-1989	99	DLDRN	LT	0.006	UGG
17-JUL-1989	99	DLDRN	LT	0.860	UGG
17-JUL-1989	UM13	DLDRN	LT	2.550	UGL
17-JUL-1989	UH09	DLDRN	LT	0.005	UGL
17-JUL-1989	LH08	DLDRN	LT	0.008	UGG
17-JUL-1989	99	DMP	ND	0.330	UGG

TABLES (cont.)

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SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	UM13	DMP	ND	10.000	UGL
17-JUL-1989	99	DNBP	ND	0.330	UGG
17-JUL-1989	UM13	DNBP	ND	10.000	UGL
17-JUL-1989	99	DNOP	LT	0.350	UGG
17-JUL-1989	UM13	DNOP	LT	21.400	UGL
17-JUL-1989	99	ENDRN	ND	0.016	UGG
17-JUL-1989	99	ENDRN	LT	0.380	UGG
17-JUL-1989	UM13	ENDRN	LT	34.200	UGL
17-JUL-1989	UH09	ENDRN	ND	0.100	UGL
17-JUL-1989	LH08	ENDRN	ND	0.016	UGG
17-JUL-1989	99	ENDRNK	ND	0.016	UGG
17-JUL-1989	UH09	ENDRNK	ND	0.100	UGL
17-JUL-1989	LH08	ENDRNK	ND	0.016	UGG
17-JUL-1989	99	ESFS04	ND	0.016	UGG
17-JUL-1989	99	ESFS04	ND	1.000	UGG
17-JUL-1989	UM13	ESFS04	ND	6.000	UGL
17-JUL-1989	UH09	ESFS04	ND	0.100	UGL
17-JUL-1989	LH08	ESFS04	ND	0.016	UGG
17-JUL-1989	99	ETC6H5	LT	1.400	UGL
17-JUL-1989	99	ETC6H5	LT	0.010	UGG
17-JUL-1989	99	ETC6H5	LT	0.010	UGG
17-JUL-1989	99	FANT	LT	0.210	UGG
17-JUL-1989	UM13	FANT	LT	1.150	UGL
17-JUL-1989	99	FLRENE	ND	0.330	UGG
17-JUL-1989	UM13	FLRENE	ND	10.000	UGL
17-JUL-1989	99	HCBD	LT	0.290	UGG
17-JUL-1989	UM13	HCBD	LT	7.890	UGL
17-JUL-1989	JB09	HG		0.045	UGG
17-JUL-1989	99	HG		0.110	UGL
17-JUL-1989	99	HG		0.043	UGG
17-JUL-1989	99	HPCL	LT	0.013	UGG
17-JUL-1989	99	HPCL	LT	0.270	UGG
17-JUL-1989	UM13	HPCL	LT	4.910	UGL
17-JUL-1989	UH09	HPCL		0.118	UGL
17-JUL-1989	LH08	HPCL	LT	0.014	UGG
17-JUL-1989	99	HPCLE	LT	0.094	UGG
17-JUL-1989	99	HPCLE	LT	0.740	UGG
17-JUL-1989	UM13	HPCLE	LT	6.440	UGL
17-JUL-1989	UH09	HPCLE	LT	0.086	UGL
17-JUL-1989	LH08	HPCLE	LT	0.093	UGG
17-JUL-1989	99	ICDPYR	LT	0.450	UGG
17-JUL-1989	UM13	ICDPYR	LT	128.000	UGL
17-JUL-1989	99	ISODR	LT	0.120	UGG
17-JUL-1989	UH09	ISODR	LT	0.041	UGL
17-JUL-1989	LH08	ISODR	LT	0.140	UGG

TABLES (cont.)

Site: METHOD BLANK

SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	99	ISOPHR	ND	0.330	UGG
17-JUL-1989	UM13	ISOPHR	ND	0.100	UGL
17-JUL-1989	99	LIN	LT	0.044	UGG
17-JUL-1989	99	LIN	LT	0.300	UGG
17-JUL-1989	UM13	LIN	LT	26.000	UGL
17-JUL-1989	UH09	LIN	LT	0.029	UGL
17-JUL-1989	LH08	LIN	LT	0.041	UGG
17-JUL-1989	99	MEC6H5	LT	1.800	UGL
17-JUL-1989	99	MEC6H5	LT	0.006	UGG
17-JUL-1989	99	MEC6H5	LT	0.006	UGG
17-JUL-1989	99	MEXCLR	ND	0.080	UGG
17-JUL-1989	UH09	MEXCLR	ND	0.500	UGL
17-JUL-1989	LH08	MEXCLR	ND	0.080	UGG
17-JUL-1989	99	NAP	LT	0.280	UGG
17-JUL-1989	UM13	NAP	LT	3.510	UGL
17-JUL-1989	99	NB	ND	0.330	UGG
17-JUL-1989	UM13	NB	ND	10.000	UGL
17-JUL-1989	JS05	NI		1.930	UGG
17-JUL-1989	SS06	NI	LT	15.300	UGL
17-JUL-1989	JS05	NI		11.100	UGG
17-JUL-1989	99	NNDMEA	ND	0.330	UGG
17-JUL-1989	UM13	NNDMEA	ND	10.000	UGL
17-JUL-1989	99	NNDNPA	LT	0.110	UGG
17-JUL-1989	UM13	NNDNPA	LT	5.630	UGL
17-JUL-1989	99	NNDPA	ND	0.330	UGG
17-JUL-1989	UM13	NNDPA	ND	6.700	UGL
17-JUL-1989	JS05	PB	LT	117.000	UGG
17-JUL-1989	SD11	PB	LT	1.700	UGL
17-JUL-1989	JS05	PB	LT	96.100	UGG
17-JUL-1989	LH08	PCB016	LT	0.092	UGG
17-JUL-1989	99	PCB016	ND	5.000	UGG
17-JUL-1989	UM13	PCB016	ND	30.000	UGL
17-JUL-1989	UH09	PCB016	LT	0.133	UGL
17-JUL-1989	LH08	PCB016	LT	0.092	UGG
17-JUL-1989	LH08	PCB221	ND	0.080	UGG
17-JUL-1989	99	PCB221	ND	5.000	UGG
17-JUL-1989	UM13	PCB221	ND	30.000	UGL
17-JUL-1989	UH09	PCB221	ND	0.500	UGL
17-JUL-1989	LH08	PCB221	ND	0.080	UGG
17-JUL-1989	LH08	PCB232	ND	0.080	UGG
17-JUL-1989	99	PCB232	ND	5.000	UGG
17-JUL-1989	UM13	PCB232	ND	30.000	UGL
17-JUL-1989	UH09	PCB232	ND	0.500	UGL
17-JUL-1989	LH08	PCB232	ND	0.080	UGG
17-JUL-1989	LH08	PCB242	ND	0.080	UGG

TABLES (cont.)

Site: METHOD BLANK

SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	99	PCB242	ND	5.000	UGG
17-JUL-1989	UM13	PCB242	ND	30.000	UGL
17-JUL-1989	UH09	PCB242	ND	0.500	UGL
17-JUL-1989	LH08	PCB242	ND	0.080	UGG
17-JUL-1989	LH08	PCB248	ND	0.080	UGG
17-JUL-1989	99	PCB248	ND	5.000	UGG
17-JUL-1989	UM13	PCB248	ND	30.000	UGL
17-JUL-1989	UH09	PCB248	ND	0.500	UGL
17-JUL-1989	LH08	PCB248	ND	0.080	UGG
17-JUL-1989	LH08	PCB254	ND	0.160	UGG
17-JUL-1989	99	PCB254	ND	10.000	UGG
17-JUL-1989	UM13	PCB254	ND	60.000	UGL
17-JUL-1989	UH09	PCB254	ND	1.000	UGL
17-JUL-1989	LH08	PCB254	ND	0.160	UGG
17-JUL-1989	LH08	PCB260	LT	0.065	UGG
17-JUL-1989	99	PCB260	ND	10.000	UGG
17-JUL-1989	UM13	PCB260	ND	60.000	UGL
17-JUL-1989	UH09	PCB260	LT	0.087	UGL
17-JUL-1989	LH08	PCB260	LT	0.065	UGG
17-JUL-1989	99	PCP	ND	2.000	UGG
17-JUL-1989	UM13	PCP	ND	50.000	UGL
17-JUL-1989	99	PHANTR	LT	1.600	UGG
17-JUL-1989	UM13	PHANTR	LT	0.759	UGL
17-JUL-1989	99	PPDDD	LT	0.017	UGG
17-JUL-1989	99	PPDDD	LT	0.390	UGG
17-JUL-1989	UM13	PPDDD	LT	5.610	UGL
17-JUL-1989	UH09	PPDDD	LT	0.013	UGL
17-JUL-1989	LH08	PPDDD	LT	0.020	UGG
17-JUL-1989	99	PPDDE	LT	0.014	UGG
17-JUL-1989	99	PPDDE	LT	0.400	UGG
17-JUL-1989	UM13	PPDDE	LT	11.200	UGL
17-JUL-1989	UH09	PPDDE	LT	0.022	UGL
17-JUL-1989	LH08	PPDDE	LT	0.016	UGG
17-JUL-1989	99	PPDDT	LT	0.017	UGG
17-JUL-1989	99	PPDDT	LT	0.480	UGG
17-JUL-1989	UM13	PPDDT	LT	5.070	UGL
17-JUL-1989	UH09	PPDDT	LT	0.037	UGL
17-JUL-1989	LH08	PPDDT	LT	0.018	UGG
17-JUL-1989	99	PYR	LT	0.530	UGG
17-JUL-1989	UM13	PYR	LT	9.380	UGL
17-JUL-1989	JD11	SB		0.654	UGG
17-JUL-1989	SD11	SB	LT	2.500	UGL
17-JUL-1989	JD11	SB	LT	0.393	UGG
17-JUL-1989	JS05	SB	ND	11.000	UGG
17-JUL-1989	JD11	SE	LT	1.880	UGG

TABLES (cont.)

Site: METHOD BLANK

SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	SD11	SE	LT	6.940	UGL
17-JUL-1989	JD11	SE	LT	1.880	UGG
17-JUL-1989	JS05	SE	LT	103.000	UGG
17-JUL-1989	99	TCLEA	LT	7.100	UGL
17-JUL-1989	99	TCLEA	LT	0.003	UGG
17-JUL-1989	99	TCLEA	LT	0.003	UGG
17-JUL-1989	99	TCLEE		0.302	UGG
17-JUL-1989	99	TCLEE	LT	2.300	UGL
17-JUL-1989	99	TCLEE	LT	0.008	UGG
17-JUL-1989	99	TCLEE	LT	0.008	UGG
17-JUL-1989	JD11	TL	LT	2.150	UGG
17-JUL-1989	SS06	TL	LT	59.900	UGL
17-JUL-1989	JD11	TL	LT	2.150	UGG
17-JUL-1989	JS05	TL	LT	67.600	UGG
17-JUL-1989	99	TRCLE	LT	1.000	UGL
17-JUL-1989	99	TRCLE	LT	0.002	UGG
17-JUL-1989	99	TRCLE	LT	0.002	UGG
17-JUL-1989	99	TXPHEN	ND	0.160	UGG
17-JUL-1989	99	TXPHEN	ND	10.000	UGG
17-JUL-1989	UM13	TXPHEN	ND	60.000	UGL
17-JUL-1989	UH09	TXPHEN	ND	1.000	UGL
17-JUL-1989	LH08	TXPHEN	ND	0.160	UGG
17-JUL-1989	99	UNK519		0.379	UGG
17-JUL-1989	99	UNK524		0.348	UGG
17-JUL-1989	99	UNK524		0.423	UGG
17-JUL-1989	99	UNK528		4.710	UGG
17-JUL-1989	99	UNK530		0.537	UGG
17-JUL-1989	99	UNK531		0.435	UGG
17-JUL-1989	99	UNK535		0.471	UGG
17-JUL-1989	UM13	UNK536		11.200	UGL
17-JUL-1989	99	UNK538		0.581	UGG
17-JUL-1989	99	UNK538		0.648	UGG
17-JUL-1989	UM13	UNK538		10.700	UGL
17-JUL-1989	99	UNK539		0.315	UGG
17-JUL-1989	UM13	UNK541		35.700	UGL
17-JUL-1989	UM13	UNK542		6.890	UGL
17-JUL-1989	UM13	UNK542		7.830	UGL
17-JUL-1989	UM13	UNK543		6.100	UGL
17-JUL-1989	UM13	UNK544		18.100	UGL
17-JUL-1989	99	UNK545		1.190	UGG
17-JUL-1989	99	UNK601		0.500	UGG
17-JUL-1989	99	UNK609		0.398	UGG
17-JUL-1989	99	UNK617		0.320	UGG
17-JUL-1989	99	UNK619		1.280	UGG
17-JUL-1989	99	UNK628		0.709	UGG

TABLES (cont.)

Site: METHOD BLANK

SAMPLE DATE	TEST METHOD	COMPOUND	BOOL	CONCENTRATION	UNITS
17-JUL-1989	99	UNK629		2.580	UGG
17-JUL-1989	99	UNK641		0.473	UGG
17-JUL-1989	JS05	ZN		60.600	UGG
17-JUL-1989	SS06	ZN	LT	5.440	UGL
17-JUL-1989	JS05	ZN		58.700	UGG

AEHA DATA

GAITHERSBURG
 ARMY RESERVE
 SAMPLE CENTER

SAMPLING 16 DEC 1983
 DATE ANALYSIS 22 DEC 1983

122205164/
 MS FILE 122205165

<u>COMPOUND</u>	<u>AQAD #</u> <u>SAMPLE #</u>	<u>D5164</u> <u>83-41a</u>	<u>D5165</u> <u>83-41b</u>
BENZENE		<3	<3
BROMOMETHANE		<3	<3
BROMODICHLOROMETHANE		<3	<3
BROMOFORM		<3	<3
CARBON TETRACHLORIDE		<3	<3
CHLOROBENZENE		<3	<3
CHLOROETHANE		<3	<3
2-CHLOROETHYL VINYL ETHER		<3	<3
CHLOROFORM		<3	<3
CHLOROMETHANE		<3	<3
DIBROMOCHLOROMETHANE		<3	<3
1,1-DICHLOROETHANE		<3	<3
1,2-DICHLOROETHANE		<3	<3
1,1-DICHLOROETHENE		<3	<3
1,2-DICHLOROETHENE (TRANS)		<3	<3
1,2-DICHLOROPROPANE		<3	<3
1,3-DICHLOROPROPENE (CIS)		<3	<3
1,3-DICHLOROPROPENE (TRANS)		<3	<3
ETHYLBENZENE		<3	<3
METHYLENE CHLORIDE		<3	<3
1,1,2,2-TETRACHLOROETHANE		<3	<3
TETRACHLOROETHYLENE		<3	<3
1,1,1-TRICHLOROETHANE		<3	<3
1,1,2-TRICHLOROETHANE		<3	<3
TRICHLOROETHYLENE		<3	<3
TRICHLOROFLUOROMETHANE		<3	<3
TOLUENE		<3	<3
VINYL CHLORIDE		<3	<3
OTHER COMPOUNDS:		NONE	NONE

Notes

Samples 83-41a was collected from an inlet valve to pressure tank at potable well head.

Sample 83-41b was collected from the cold-water tap in the men's latrine at the engine and frequency changer building.

RUN DATE: 16Feb84

RADIOLOGICAL AND INORGANIC CHEMISTRY DIVISION

Proj. Officer: Runyon

Division: WQED

Installation: Gaithersburg

Timekeeping #: 31

Sample Description: Treated H2O

Remarks: Sample ID not legible.

Date Received: 23DEC83

Date Reviewed: 16FEB84

SPL ID	Lab#	pH	F	AQA0#
		Method#	105A02	230B02
		pH	mg/L	
83-41C	TW 293	6.7	<.1	D5166
Analyst		DR	MH	
DateComp				

USAEHA

Proj. Officer: Runyon

Installation: Gaithersburg

Sample Description: Potable Water

Remarks:

Date Received: 22DEC83

Date Reviewed: 23JAN84

		Fe	Zn	Cu
	Method #	501C08	501C08	501C08
SPL ID	Lab#	mg/L	mg/L	mg/L
D5166 83-41C	TW823	13.7	4.19	<.025
Analyst		GM	GM	GM

USAR Center
8510 Snouffers School Road
Gaithersburg, Maryland 20760

Bldg. 14-1, Water Sample Data

Field Analysis

pH	6.2
Chlorine Residual	0

Lab Analysis

Bacteriological
Coliform Colories (per 100 ml) - 0

Chemical

pH	6.5
Copper	0.03 mg/l
Zinc	7.3 mg/l
Iron	0.74 mg/l
Fluoride	0.20 mg/l

Incl 1

APPENDIX E
CHEMICAL COMPOUND ABBREVIATIONS

**** TEST NAME ****

ABBREVIATION: ELEMENT NAME:

TEST NAME TEST NAME

ELEMENT IS USED IN THE FOLLOWING IR FILES: DB#: DB NAME:

CHEMICAL (89-94) C301 IR

ELEMENT SIZE AND CHARACTERISTICS:

6 (ALPHANUMERIC) LEFT JUSTIFY

ELEMENT DESCRIPTION:

UP TO 6 CHARACTERS (NUMBERS AND LETTERS) TO IDENTIFY THE PARAMETER BEING MEASURED.

NOTE: FOR UNKNOWN COMPOUNDS, USE THE CODE UNKXXX WHERE XXX IS THE NUMBER OF MINUTES FOR THE RETENTION TIME MULTIPLIED BY TEN. THE NUMBERS ARE FULL FIELD SO THAT UNKNOWN #1 WOULD BE EXPRESSED AS UNK001 WITH THE ZEROS INCLUDED. A RETENTION TIME OF 3.2 MINUTES MULTIPLIED BY TEN WOULD BE 32 AND REPORTED AS UNK032.

ACCEPTABLE CRITERIA:

- REQUIRED ON ALL CHEMICAL RECORDS
- MUST MATCH ONE OF THE ACCEPTABLE CODES BELOW
- FOR UNKNOWN, MUST BE WITHIN THE RANGE OF UNK001 THRU UNK999
- LAB MUST BE CERTIFIED IN THE METHOD CERTIFICATION TABLE FOR THE SPECIFIC TEST NAME EXCEPT FOR THE FOLLOWING TEST NAMES:
PH, COND, TEMP, OILGR, BOD, COD, TOC, HARD, ASBEST, TSS
- LAB DOES NOT REQUIRE CERTIFICATION FOR A SPECIFIC TEST NAME FOR METHOD NUMBER OF 99 OR MEASUREMENT BASED ON INTERNAL STANDARD

ACCEPTABLE ENTRIES AND CONDITIONS:

(ALPHABETIC SORT BY CODES)

AACHXE	ACETIC ACID, CYCLOHEXYL ESTER
ABHC	ALPHA-BENZENEHEXACHLORIDE / ALPHA-HEXACHLOROCYCLOHEXANE
AC	HYDROGEN CYANIDE / HYDROCYANIC ACID
ACDHMW	*ACIDS (HIGH MOLECULAR WEIGHT)
ACET	ACETONE
ACEE	ANTICHOLINESTERASE
ACIDIT	*ACIDITY
ACND10	ACENAPHTHENE-D10
ACPHN	ACETOPHENONE
ACROLN	ACROLEIN
ACRYLO	ACRYLONITRILE
ADHP	AMMONIUM DIHYDROGEN PHOSPHATE
AENSLF	ALPHA-ENDOSULFAN / ENDOSULFAN I
AG	SILVER

AL	ALUMINUM
ALAL	*ALIPHATIC ALCOHOLS
ALDEHY	*ALDEHYDES
ALDRN	ALDRIN
ALHC	*ALIPHATIC HYDROCARBONS
ALHMW	*ALCOHOLS (HIGH MOLECULAR WEIGHT)
ALK	*ALKALINITY
ALKBIC	*ALKALINITY, BICARBONATE
ALKCAR	*ALKALINITY, CARBONATE
ALKHYD	*ALKALINITY, HYDROXIDE
ALKN	*ALKANES
ANAPNE	ACENAPHTHENE
ANAPYL	ACENAPHTHYLENE
ANELNT	*ANION ELUENT
ANIL	ANILINE
ANTRC	ANTHRACENE
ANTRCN	9-ANTHRACENECARBONITRILE
ANTRQU	ANTHRAQUINONE / 9,10-ANTHRACENEDIONE
AS	ARSENIC
ASBEST	ASBESTOS
ASEXT	*ARSENIC, EXTRACTABLE
ASTOT	*ARSENIC, TOTAL
ATNBA	2,4,6-TRINITROBENZALDEHYDE
ATZ	ATRAZINE
AYLETH	ALLYL ETHER
AZACN	AZACYLONONANE
B	BORON
BA	BARIUM
BAANTR	BENZO [A] ANTHRACENE
BAHXE	BUTANOIC ACID, 1-HEXYL ESTER
BAPYR	BENZO [A] PYRENE
BBFANT	BENZO [B] FLUORANTHENE
BBFLRE	BENZO [B] FLUORENE
BBHC	BETA-BENZENEHEXACHLORIDE / BETA-HEXACHLOROCYCLOHEXANE
BBNTHP	BENZO [B] NAPHTHO [1,2-D] THIOPHENE
BEZP	BUTYLBENZYL PHTHALATE
BCHPD	BICYCLO [2,2,1] HEPTA-2,5-DIENE
BCLME	BIS (CHLOROMETHYL) ETHER
BCMSO	BIS (CARBOXYMETHYL) SULFOXIDE
BCMSO2	BIS (CARBOXYMETHYL) SULFONE
BCPHCE	2,2-BIS (CHLOROPHENYL) CHLOROETHYLENE
BCY3HX	BICYCLO [3,1,0] HEXANE
BDADME	BUTANEDIOIC ACID, DIMETHYL ESTER
BE	BERYLLIUM
BEETO	1-(2-BUTOXYETHOXY) ETHANOL
BENSLF	BETA-ENDOSULFAN / ENDOSULFAN II
BENZA	BENZANTHRONE
BENZAL	BENZALDEHYDE
BENZID	BENZIDINE
BENZOA	BENZOIC ACID
BEP	2-BUTOXYETHANOL PHOSPHATE
BF2ANT	BENZOBIFLUOROANTHENE
BGHIFA	BENZO [G,H,I] FLUROANTHENE
BGHIPY	BENZO [G,H,I] PERYLENE
BICYHX	BICYCLOHEXYL
BIDBI	1,5-BIS (1,1-DIMETHYLETHYL)-3,3-DIMETHYLBICYCLO [3.1.0] HEXANE-2-ONE
BINAP	BINAPHTHYL
BJFANT	BENZO [J] FLUORANTHENE
BKFANT	BENZO [K] FLUORANTHENE

BLDX	SLADEX
BMP	BUTYLMETHYL PHTHALATE
BOD	*BIOLOGICAL OXYGEN DEMAND
BPBG	BUTYLPHTHALYL BUTYLGLYCOLATE
BRCLM	BROMOCHLOROMETHANE
BRC6H5	BROMOBENZENE
BRDCLM	BROMODICHLOROMETHANE
BRMCIL	BROMACIL
BTZ	BENZOTHAZOLE
BTMSOA	BIS (TRIMETHYLSILYL) OXALIC ACID
BUC6H5	BUTYLBENZENE
BUEETH	BUTYLETHYL ETHER
BZ	3-QUINUCLIDINYL BENZILATE
BZALC	BENZYL ALCOHOL
BZAL2M	ALPHA,ALPHA-DIMETHYLBENZENEMETHANOL
BZAPAN	BENZO [A] PHENANTHRENE
BZCPAN	BENZO [C] PHENANTHRENE
BZFANT	BENZFLUORANTHENE
BZHQUN	BENZO [H] QUINOLINE
BZOAME	BENZOIC ACID, METHYL ESTER / METHYL BENZOATE
BZOTHP	BENZO [B] THIOPHENE
BZOTRZ	1H-BENZOTRIAZOLE / 1,2,3-BENZOTRIAZOLE
BZPA	BENZENEPHOSPHONIC ACID
BZYLBR	BENZYLBROMIDE / ALPHA-BROMOTOLUENE
B2CEXM	BIS (2-CHLOROETHOXY) METHANE
B2CIPE	BIS (2-CHLOROISOPROPYL) ETHER
B2CLEE	BIS (2-CHLOROETHYL) ETHER
B2EHP	BIS (2-ETHYLHEXYL) PHTHALATE
CA	CALCIUM
CACO3S	*CALCIUM CARBONATE SOLUTION
CALLMW	*HYDROCARBONS (ALL MOLECULAR WEIGHTS)
CAME	CARBAMIC ACID, METHYL ESTER
CAMP	CAMPHOR
CAPLCT	CAPROLACTAM / 6-AMINOHEXANOIC ACID LACTAM
CARBAZ	9H-CARBAZOLE
CBA	2-CHLOROBENZALDEHYDE
CBCCH	CIS-1-BROMO-2-CHLOROCYCLOHEXANE
CBOA	2-CHLOROBENZOIC ACID
CCLF2	CHLORODIFLUOROMETHANE
CCLF3	TRIFLUOROCHLOROMETHANE
CCL2F2	DICHLORODIFLUOROMETHANE
CCL3F	TRICHLOROFLUOROMETHANE
CCL4	CARBON TETRACHLORIDE
CC3	XXCC3
CD	CADMIUM
CDACH	CIS-1,2-DIACETOXYCYCLOHEXANE
CDCL3	CHLOROFORM-D
CDNBIS	*CHLORODINITROBENZENE ISOMER
CD2CL2	METHYLENE CHLORIDE-D2
CEC	*CATION EXCHANGE CAPACITY
CG	PHOSGENE / CARBONYL CHLORIDE
CHBR3	BROMOFORM
CHCL3	CHLOROFORM
CHO	1,2-CYCLOHEXANE OXIDE
CHOLA	CHOLESTANE
CHONE	CYCLOHEXANONE
CHRY	CHRYSENE
CH2BR2	METHYLENE BROMIDE
CH2CL2	METHYLENE CHLORIDE
CH3BR	BROMOMETHANE

CH3CL	CHLOROMETHANE
CH3CN	ACETONITRILE
CK	CYANOGEN CHLORIDE
CL	CHLORIDE
CLCYHX	CHLOROCYCLOHEXANE
CLC2A	CHLOROACETIC ACID
CLC6D5	CHLOROBENZENE-D5
CLC6H5	CHLOROBENZENE
CLD	*CHLORINE DEMAND
CLDAN	CHLORDANE
CLDEN	CHLORDENE
CLNAP	*CHLORO NAPHTHALENES
CLO3	CHLORATE
CLP	*CHLORO PHENOLS
CLVRA	2-CHLOROVINYL ARSONIC ACID
CLXB	*CHLORINATED BENZENES
CLXNAP	*CHLORINATED NAPHTHALENES
CL2	CHLORINE
CL2ACN	DICHLOROACETONITRILE
CL2BP	*DICHLORO BIPHENYLS
CL2BZ	*DICHLORO BENZENES
CL2NAP	*DICHLORO NAPHTHALENES
CL3BP	*TRICHLORO BIPHENYLS
CL3C3E	*TRICHLORO PROPENES
CL3NAP	*TRICHLORO NAPHTHALENES
CL3P	*TRICHLORO PHENOLS
CL4BP	*TETRACHLORO BIPHENYLS
CL4NAP	*TETRACHLORO NAPHTHALENES
CL5B	PENTACHLOROBENZENE
CL5BP	*PENTACHLORO BIPHENYLS
CL5ET	PENTACHLOROETHANE
CL6BP	*HEXACHLORO BIPHENYLS
CL6BZ	HEXACHLOROBENZENE
CL6CP	HEXACHLOROCYCLOPENTADIENE
CL6ET	HEXACHLOROETHANE
CL7BP	*HEPTACHLORO BIPHENYLS
CL7NB	*HEPTACHLORO NORBORNADIENES
CMONOX	CARBON MONOXIDE
CN	CHLOROACETOPHENONE
CO	COBALT
COD	*CHEMICAL OXYGEN DEMAND
COND	*SPECIFIC CONDUCTIVITY
COUMRN	COUMARAN / 2,3-DIHYDROBENZOFURAN
CO3	CARBONATE
CPCXAL	CYCLOPENTANECARBOXALDEHYDE
CPMS	4-CHLOROPHENYLMETHYL SULFIDE
CPMSO	4-CHLOROPHENYLMETHYL SULFOXIDE
CPMSO2	4-CHLOROPHENYLMETHYL SULFONE
CPO	CYCLOPENTANONE
CR	CHROMIUM
CRHEX	HEXAVALENT CHROMIUM
CRO4	CHROMATE
CS	CESIUM
CSOL	*CRESOLS
CS2	CARBON DISULFIDE
CU	COPPER
CUEXT	*COPPER, EXTRACTABLE
CUTOT	*COPPER, TOTAL
CX	PHOSGENE OXIME / DICHLOROFORMOXIME
CYDODC	CYCLODODECANE

CYHX	CYCLOHEXANE
CYHXB	CYCLOHEXYLBENZENE / PHENLYCYCLOHEXANE
CYN	CYANIDE
CYNF	*CYANIDE, FREE FORM
CYOCTE	CYCLOOCTATETRAENE
CYPD	CYCLOPENTADIENE
CYPNE	CYCLOPENTENE
CYSD12	CHRYSENE-D12
C1ADME	CARBONIC ACID, DIMETHYL ESTER
C10	DECANE
C11	HENDECANE
C12	DODECANE
C12AMM	8-METHYLDECANOIC ACID, METHYL ESTER
C12DCE	CIS-1,2-DICHLOROETHENE
C13	TRIDECANE
C13DCP	CIS-1,3-DICHLOROPROPYLENE / CIS-1,3-DICHLOROPROPENE
C14	TETRADECANE
C14A	TETRADECANOIC ACID / MYRISTIC ACID
C14AME	TETRADECANOIC ACID, METHYL ESTER
C15	PENTADECANE
C15A	PENTADECANOIC ACID
C16	HEXADECANE
C16A	HEXADECANOIC ACID / PALMITIC ACID
C16ABE	HEXADECANOIC ACID, BUTYL ESTER
C16ADM	HEXADECANOIC ACID, DIMETHYL ESTER
C16AEH	HEXADECANOIC ACID, BIS (2-ETHYLHEXYL) ESTER
C16AME	HEXADECANOIC ACID, METHYL ESTER
C16SAT	*SATURATED HYDROCARBONS (C16)
C17	HEPTADECANE
C17AM	HEPTADECANOIC ACID, METHYL ESTER
C18	OCTADECANE
C18ABE	OCTADECANOIC ACID, BUTYL ESTER
C18AE	OCTADECANOIC ACID, ETHYL ESTER
C18AME	OCTADECANOIC ACID, METHYL ESTER
C18AOD	OCTADECANOIC ACID, OCTADECYL ESTER
C18UNS	*C18H300 UNKNOWN
C185FP	BIS (PENTAFLUOROPHENYL) PHENYL PHOSPHINE
C19	NONADECANE
C19A	NONADECANOIC ACID
C2AEE	ACETIC ACID, ETHYL ESTER / ETHYL ACETATE
C2AVE	ACETIC ACID, VINYL ESTER / VINYL ACETATE
C2H3CL	CHLOROETHENE / VINYL CHLORIDE
C2H5CL	CHLOROETHANE
C20	EICOSANE
C21	HENEICOSANE
C22UNS	*C22H400 UNKNOWN
C25	PENTACOSANE
C3AME	PROPANOIC ACID, METHYL ESTER
C3A2MB	PROPANOIC ACID, 2-METHYLBUTYL ESTER
C30AME	TRIACONTANOIC ACID, METHYL ESTER
C36	HEXATRIACONTANE
C4	BUTANE
C4HX1L	CIS-4-HEXEN-1-OL
C5A	PENTANOIC ACID / VALERIC ACID
C6D6	BENZENE-D6
C6HOH	CYCLOHEXANOL
C6H6	BENZENE
C7	HEPTANE
C7A	HEPTANOIC ACID
C7NB1	HEPTACHLORONORBORNENE

C8	OCTANE
C8AME	OCTANOIC ACID, METHYL ESTER
C9	NONANE
DBABA	DIBENZ [A,B] ANTHRACENE
DBAHA	DIBENZ [A,H] ANTHRACENE
DBATTS	2,4-DIHYDROXYBENZOIC ACID, TRIS-TRIMETHYSILYL
DBCP	DIBROMOCHLOROPROPANE
DBHC	DELTA-BENZENEHEXACHLORIDE / DELTA-HEXACHLOROCYCLOHEXANE
DBRCLM	DIBROMOCHLOROMETHANE
DBTSPY	4,5-DIMETHYL-2,6-BIS (TRIMETHYLSILOXY) PYRIMIDINE
DBUCLE	DIBUTYLCHLORENDATE
DBZFUR	DIBENZOFURAN
DBZTHP	DIBENZOTHIOPHENE
DCAMBA	2-METHOXY-3,6-DICHLOROBENZOIC ACID
DCBPH	DICHLOROBENZOPHENONE
DCHP	DICYCLOHEXYL PHTHALATE
DCMBF	5,7-DICHLORO-2-METHYLBENZOFURAN
DCMPSX	DECAMETHYLCYCLOPENTASILOXANE
DCPD	DICYCLOPENTADIENE
DDVP	VAPONA
DEA	DIETHYLAMINE
DECYLB	DECYLBENZENE
DEDMP	DIETHYL DIMETHYL DIPHOSPHONATE
DEETH	DIETHYL ETHER
DEGLYC	DIETHYLENE GLYCOL / 2,2-OXY BIS [ETHANOL]
DEP	DIETHYL PHTHALATE
DEPD4	DIETHYL PHTHALATE-D4
DHBZPY	3,4-DIHYDRO-2H-1-BENZOPYRAN
DHDMAC	9,10-DIHYDRO-9,9-DIMETHYLACRIDINE
DIACAL	DIACETONE ALCOHOL / 4-HYDROXY-4-METHYL-2-PENTANONE
DIADS	BIS (DIISOPROPYLAMINO) ETHYLDISULFIDE
DIAEL	BIS (DIISOPROPYLAMINO) ETHANOL
DIAEP	S-DIISOPROPYLAMINOETHYLMETHYL PHOSPHONOTHIOATE
DIAET	BIS (DIISOPROPYLAMINO) ETHANETHIOL
DIAS	BIS (DIISOPROPYLAMINO) ETHYLSULFIDE
DIASO2	BIS (DIISOPROPYLAMINO) ETHYLSULFONATE
DIAZ	DIAZINON
DIBP	DIISOBUTYL PHTHALATE
DICLP	*DICHLORO PHENOLS
DIDDP	DIISOPROPYL DIMETHYL DIPHOSPHONATE
DIH2O	DEIONIZED WATER
DIMP	DIISOPROPYLMETHYL PHOSPHONATE
DIOP	DIISOOCTYL PHTHALATE
DIPETH	DIISOPROPYL ETHER
DIPUR	DIISOPROPYL UREA
DITH	DITHIANE
DLDRN	DIELDRIN
DL2HPG	DL-2-(3-HYDROXYPHENYL) GLYCINE
DM	ADAMSITE
DMCAR	DIMETHYL DITHIOCARBONATE
DMCPDE	1,2-DIMETHYLCYCLOPENTADIENE
DMDS	DIMETHYL DISULFIDE
DMETH	DIMETHYL ETHER
DMIP	DIMETHYL ISOPHTHALATE
DMMP	DIMETHYLMETHYL PHOSPHATE
DMP	DIMETHYL PHTHALATE
DMPCHE	3-(2,2-DIMETHYLPROPOXY) CYCLOHEXENE
DMPTHF	2,2-DIMETHYL-5-(1-METHYLPROPYL) TETRAHYDROFURAN
DMXDMS	DIMETHOXY DIMETHYLSILANE
DMIACH	2,2-DIMETHYL-1-ACETYLCYCLOHEXANE

DNBEE	1,1-DI-N-BUTYLETHYLENE / 1,1-DI-N-BUTYLETHENE
DNBP	DI-N-BUTYL PHTHALATE
DNOP	DI-N-OCTYL PHTHALATE
DNOPD4	DI-N-OCTYL PHTHALATE-D4
DNPP	DI-N-PENTYL PHTHALATE
DNTISO	*DINITROTOLUENE ISOMER
DO	*DISSOLVED OXYGEN
DOAD	DIOCTYL ADIPATE
DOAZ	DIOCTYL AZELATE
DODECB	DODECYLBENZENE
DOETH	DIOCTYL ETHER
DOPAM	DOPAMINE / 4-(2-AMINOETHYL) PYROCATECHOL
DPA	DIPHENYLAMINE
DPETH	DIPHENYL ETHER
DPETYN	1,1-(1,2-ETHYNYEDIYL) BIS (BENZENE)
DPHNY	DIPHENYL
DPNTLL	D-(-)-PANTOLYL LACTONE
DPSO	DIPHENYL SULFOXIDE
DPSULF	DIPHENYL SULFIDE / 1,1-THIO BIS (BENZENE)
DSEDIN	DISELENO DIINDOLE
DTB4C	2,6-DI-TERT-BUTYL-4-CRESOL
DTCHBO	1.ALPHA.(E),4.ALPHA.-1-(1,4-DIHYDROXY-2,6,6-TRIMETHYL-2-CYCLOHEXEN-1-YL)-2-BUTEN-1-ONE
DURS	DURSBAN
DYSCAN	*GC-MS DYE SCAN
EBCPGL	ETHYL-2,2-BIS (4-CHLOROPHENYL) GLYCOLATE
ED	DICHLOROETHYL ARSINE
EDBDAS	3-PHENYLPROPANOL
EICOSL	1-EICOSANOL
EMPA	ETHYLMETHYL PHOSPHONIC ACID / ETHYLMETHYL PHOSPHONATE
ENDRN	ENDRIN
ENDRNA	ENDRIN ALDEHYDE
ENDRNK	ENDRIN KETONE
ENHETH	ETHYL-N-HEXYL ETHER
ESFSO4	ENDOSULFAN SULFATE
ETBD10	ETHYLBENZENE-D10
ETCYHX	ETHYLCYCLOHEXANE
ETC6H5	ETHYLBENZENE
ETOH	ETHANOL
F	FLUORIDE
FABPEE	FORMIC ACID, BETA-PHENYLETHYL ESTER
FACHXE	FORMIC ACID, CYCLOHEXYL ESTER
FANT	FLUORANTHENE
FARN	FARNESOL
FATAL	*FATTY ALCOHOLS
FC2A	FLUOROACETIC ACID
FE	IRON
FLRENE	FLUORENE
FREON	FREON / DICHLOROFLUOROMETHANE
F10BP	DECAFLUOROBIPHENYL
GA	TABUN / ETHYL-N,N-DIMETHYL PHOSPHORAMIDOCYANIDATE
GB	SARIN / ISOPROPYLMETHYL PHOSPHONOFUORIDATE
GD	SOMAN / PINACOLYLMETHYL PHOSPHONOFUORIDATE
GRNDY	GREEN DYE
H	LEVINSTEIN MUSTARD
HARD	*TOTAL HARDNESS
HCBD	HEXACHLOROBUTADIENE
HCNB	HEXACHLORONORBORNADIENE
HCO3	BICARBONATE
HD	DISTILLED MUSTARD / BIS (2-CHLOROETHYL) SULFIDE

HEXANE	HEXANE
HG	MERCURY
HGEXT	*MERCURY, EXTRACTABLE
HGTOT	*MERCURY, TOTAL
HMTCHE	2,6,10,15,19,23-HEXAMETHYL-2,6,10,14,18,22-TETRACOSAHEXAENE
HMX	CYCLOTETRAMETHYLENETETRAMINE
HN	NITROGEN MUSTARD
HPCL	HEPTACHLOR
HPCLE	HEPTACHLOR EPOXIDE
HPLH2O	HPLC GRADE WATER
HPO4	*HYDROLYZABLE PHOSPHATE
HWX013	HALOWAX 1013
HWX099	HALOWAX 1099
HXAB2E	HEXANEDIOIC ACID, BIS (2-ETHYLHEXYL) ESTER
HXADBE	HEXANEDIOIC ACID, DIBUTYL ESTER / DIBUTYL ADIPATE
HXADME	HEXANEDIOIC ACID, DIMETHYL ESTER / DIMETHYL ADIPATE
HXADOE	HEXANEDIOIC ACID, DIOCTYL ESTER / DIOCTYL ADIPATE
HXCOS	HEXACOSANE
HXHMAZ	4,5,6,7,8,8A-HEXAHYDRO-8A-METHYL-2-[1H]-AZULENONE
HXMETA	HEXAMETHYLENETETRAMINE / 1,3,5,7-TETRAAZATRICYCLO {3.3.13.7} DECANE
HXMTSX	HEXAMETHYLCYCLOTRISILOXANE
HYDRND	HYDRINDANE / OCTAHYDRO-1H-INDENE
HYDRZ	HYDRAZINE
HYNB	7-HYDROXYNORBORNADIENE
H2S	HYDROGEN SULFIDE
H3PO4	PHOSPHORIC ACID
ICDPYR	INDENO [1,2,3-C,D] PYRENE
IMPA	ISOPROPYLMETHYL PHOSPHONIC ACID / ISOPROPYLMETHYL PHOSPHONATE
INDAN	1-HYDROXY-2,3-METHYLENE INDAN
INDENE	INDENE
INDOLE	INDOLE / 2,3-BENZOPYRROLE
ISODR	ISODRIN
ISOPBZ	ISOPROPYLBENZENE / CUMENE
ISOPHR	ISOPHORONE
ISOQUN	ISOQUINOLINE
K	POTASSIUM
KEND	KETO-ENDRIN
L	LEWISITE
LACYBB	LACTIC ACID, CYCLIC BUTANEBORONATE
LAURIC	LAURIC ACID
LIN	LINDANE / GAMA-BENZENEHEXACHLORIDE / GAMMA-HEXACHLOROCYCLOHEXANE
LIPID	*% LIPIDS
LO	LEWISITE OXIDE
MALO	MALONONITRILE
MBADOE	3-METHYLBUTANOIC ACID, 3,7-DIMETHYL-2,4,6-OCTATRIENYL ESTER
MBAS	*FOAMING AGENTS / METHYALYNE BLUE ACTIVE SUBSTANCE
MBOH	ALPHA-METHYLBENZYL ALCOHOL
MBZA	ALPHA-METHYLBENZYL ACETOACETATE
MBZCAC	5-METHYLBENZO [C] ACRIDINE
MBZCL	ALPHA-METHYLBENZYL-2-CHLOROACETOACETATE
MDCL	2-METHYLHENDECANAL / 2-METHYLUDECANAL
MEAOA	METHYL ARSONIC ACID
MEBPIP	1,1'-METHYLENE BIS [PIPERIDINE]
MECC6	METHYLCYCLOHEXANE
MECYBU	METHYLCYCLOBUTANE
MECYDC	METHYLCYCLODECANE
MECYPE	METHYLCYCLOPENTANE

MEC6D8	TOLUENE-D8
MEC6H5	TOLUENE
MEHG	METHYL MERCURY
MEHGCL	METHYL MERCURY CHLORIDE
MEK	METHYLETHYL KETONE / 2-BUTANONE
MEOH	METHANOL
MEPOH	2-METHYLPENTANOL
MESTOX	MESITYL OXIDE / 4-METHYL-3-PENTEN-2-ONE
METLAP	*METHYL NAPHTHALENES
MEXCLR	METHOXYCHLOR
ME2AEA	DIMETHYL ARSENIC ACID
ME2C11	*DIMETHYL UNDECANES
ME2HG	DIMETHYL MERCURY
ME2HPL	*METHYL-2-HEPTANOLS
ME2HPO	*METHYL-2-HEPTANONES
ME2NAP	*DIMETHYL NAPHTHALENES
ME3C10	*TRIMETHYL DECANES
ME3C11	*TRIMETHYL UNDECANES
ME3C6	*TRIMETHYL HEXANES
ME3NAP	*TRIMETHYL NAPHTHALENES
MG	MAGNESIUM
MHYDRZ	METHYLHYDRAZINE
MIBK	METHYLISOBUTYL KETONE
MIPK	METHYLISOPROPYL KETONE
MIREX	MIREX
MLTHN	MALATHION
MN	MANGANESE
MNBK	METHYL-N-BUTYL KETONE / 2-HEXANONE
MO	MOLYBDENUM
MP	*METHYL PHENOLS
MPA	METHYLPHOSPHONIC ACID
MPDDD	2-(META-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHANE
MPK	METHYLPROPYL KETONE / 2-PENTANONE
MQFH20	MILLI-Q-FILTERED WATER
MSSCAN	*GC-MS ORGANIC SCAN
MTRZL	METRAZOL / CARDIAZOLE
NA	SODIUM
NAOHME	50% 1M NAOH - 50% METHANOL
NAP	NAPHTHALENE
NAPD8	NAPHTHALENE-D8
NB	NITROBENZENE
NBD5	NITROBENZENE-D5
NBMBSA	N-BUTYL-4-METHYLBENZENESULFONAMIDE
NBUETH	N-BUTYL ETHER / 1,1'-OXY BIS (BUTANE)
NC	NITROCELLULOSE
NCLN	NORTRICYCLANOL
NCPPPA	N-(4-CHLOROPHENYL)-3-PHENYL-2-PROPENAMIDE
NC1	NITROCELLULOSE, 12% N
NC2	NITROCELLULOSE, 13.4% N
NDHXA	N-NITRO DIHEXYLAMINE
NDIOX	NITROGEN DIOXIDE
NDMBSA	N,4-DIMETHYLBENZENESULFONAMIDE
NDNPA	NITROSO DI-N-PROPYLAMINE
NECHXA	N-ETHYLCYCLOHEXYLAMINE
NE2PEA	N-ETHYL-2-PROPENAMIDE
NG	NITROGLYCERINE
NHEDCA	N-(2-HYDROXYETHYL)-DECANAMIDE
NH3	AMMONIA
NH3N2	AMMONIA NITROGEN

NI	NICKEL
NIT	*NITRITE, NITRATE-NON SPECIFIC
NITARO	*NITRO AROMATICS
NMANIL	N-METHYLANILINE
NMCANE	N-METHYLCARBAMIC ACID, 1-NAPHTHYL ESTER
NMNSOA	N-METHYL-N-NITROSOANILINE
NNADME	NONANEDIOIC ACID, DIMETHYL ESTER
NNDMA	N,N-DIMETHYLANILINE
NNDMEA	N-NITROSO DIMETHYLAMINE
NNDNPA	N-NITROSO DI-N-PROPYLAMINE
NNDPA	N-NITROSO DIPHENYLAMINE
NNPIPA	N-NITROSOPENTYLISOPENTYLAMINE
NN4HPL	N-NITROSO-4-HYDROXYPROLINE
NO2	NITRITE
NO3	NITRATE
NQ	NITROQUANIDINE
N2KJEL	*NITROGEN BY KJELDAHL METHOD
OCADME	OCTANEDIOIC ACID, DIMETHYL ESTER
ODAPDM	OCTADECANOIC ACID, (2-PHENYL-1,3-DIOXOLAN-4-YL)METHYL ESTER
ODECA	OCTADECANOIC ACID / STEARIC ACID
ODMNSX	OCTADECAMETHYLCYCLONONASILOXANE
OEMP	O-ETHYLMETHYL PHOSPHONATE
OILGR	*OIL & GREASE
OMCTSX	OCTAMETHYLCYCLOTETRASILOXANE
OPDDD	2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHANE
OPDDE	2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1-DICHLOROETHENE
OPDDT	2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)- 1,1,1-TRICHLOROETHANE
OPO4	*ORGANOPHOSPHATES
OQAT	1,4-OXATHIANE
OXCN	OXACYCLONONANE
OZONE	OZONE
PAD4NE	PHOSPHORIC ACID, DIETHYL-4-NITROPHENYL ESTER
PAH	*POLYNUCLEAR AROMATIC HYDROCARBONS
PAODPE	PHOSPHORIC ACID, OCTYL DIPHENYL ESTER
PARTIC	*PARTICULATE MATTER
PATBUE	PROPANOIC ACID, T-BUTYL ESTER
PATPE	PHOSPHORIC ACID, TRIPHENYL ESTER
PAZHDE	PROPANOIC ACID, 2-HYDROXYDECYL ESTER
PAZMBE	PENTANOIC ACID, 2-METHYLBUTYL ESTER
PB	LEAD
PBSTY	LEAD STYPHNATE
PCB016	PCB 1016
PCB221	PCB 1221
PCB232	PCB 1232
PCB242	PCB 1242
PCB248	PCB 1248
PCB254	PCB 1254
PCB260	PCB 1260
PCB262	PCB 1262
PCP	PENTACHLOROPHENOL
PCYMEN	4-CYMENE / 4-(1-METHYLETHYL) TOLUENE
PD	DICHLOROPHENYL ARSINE
PDMSLX	POLYDIMETHYL SILOXANE / DIMETHYLPOLY SILOXANE
PEGE	*POLYETHYLENEGLYCOL ETHERS
PENAMD	N-PENTAMIDE
PENTAN	PENTANE
PETN	PENTAERYTHRITOL TETRANITRATE

PFP	PENTAFLUOROPHENOL
PH	*PH
PHAD10	PHENANTHRENE-D10
PHANTR	PHENANTHRENE
PHENAA	PHENYLACETIC ACID
PHEND5	PHENOL-D5
PHEND6	PHENOL-D6
PHENLC	*PHENOLICS (NON-SPECIFIC)
PHENOL	PHENOL
PHTHA	PHTHALIC ACID / 1,2-BENZENEDICARBOXYLIC ACID
PHTHL	*PHTHALATES
PHXAA	PHENOXYACETIC ACID
PHYCP	1,2,3,4,5-PENTAHYDROXYCYCLOPENTANE
PIPER	PIPERIDINE
POX	*PURGEABLE ORGANIC HALOGENS
PO4	PHOSPHATE
PO4ORT	ORTHOPHOSPHATE
PPDDD	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE
PPDDE	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE
PPDDT	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE
PPTDE	2,2-BIS (PARA-CHLOROPHENYL)-2-PHENYL-1,1-DICHLOROETHENE
PRC6H5	PROPYLBENZENE
PRTHN	PARATHION
PYLD12	PERYLENE-D12
PYR	PYRENE
PYRD10	PYRENE-D10
P4	PHOSPHORUS
RDX	CYCLOTRIMETHYLENETRINITRAMINE / CYCLONITE
REDDY	RED DYE
RESACI	*RESIN ACIDS
S	SULFUR
SB	ANTIMONY
SCN	THIOCYANATE
SE	SELENIUM
SIL	SILICONE
SILVEX	SILVEX
SN	TIN
SO3	SULFITE
SO4	SULFATE
SPIRO	(1',5 TRANS)-7-CHLORO-6-HYDROXY-2',4-DIMETHOXY-6'-METHYL-SPIRO [BENZOFURAN-2-(3H)-1'-(2)-CYCLOHEXENE]-3,4'-DIONE
SQUAL	SQUALENE
SR	STRONTIUM
STERO	*STEROIDS
STIGMA	STIGMASTENAL
STYPH	STYPHNATE ION
STYPHA	STYPHNIC ACID
STYR	STYRENE
SUADME	SULFURIC ACID, DIMETHYL ESTER
SULFID	SULFIDE
SUPONA	SUPONA / 2-CHLORO-1-(2,4-DICHLOROPHENYL) VINYL DIETHYL PHOSPHATE
S2CL2	SULFUR MONOCHLORIDE
TBA	TRIBUTYLAMINE
TBASDE	THIOBUTYRIC ACID, S-DECYL ESTER
TBP	TRIBUTYL PHOSPHATE
TCB	*TETRCCHLORO BENZENES
TCB1	1,2,4,5-TETRACHLOROBENZENE
TCB2	1,2,3,4-TETRACHLOROBENZENE
TCB3	1,2,3,5-TETRACHLOROBENZENE

TCDD	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN / DIOXIN
TCHDCS	TRANS-1,2-CYCLOHEXANDIOL, CYCLIC SULFITE
TCLEA	1,1,2,2-TETRACHLOROETHANE
TCLEE	TETRACHLOROETHYLENE / TETRACHLOROETHENE
TCLTFE	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
TCOS	TETRACOSANE
TCSAME	15-TETRACOSENOIC ACID, METHYL ESTER
TCST	*TRICHLORO STYRENES
TDGCL	THIODIGLYCOL
TDGCLA	THIODIGLYCOLIC ACID
TDMHSX	TETRADECAMETHYL HEXASILOXANE
TDODTL	TERT-DODECANETHIOL
TDS	*TOTAL DISSOLVED SOLIDS
TEGLME	TRIETHYLENE GLYCOL, METHYL ETHER
TEGLYC	TRIETHYLENE GLYCOL / 2,2'-[1,2-ETHANEDIYL BIS (OXY)] BIS {ETHANOL}
TEMP	*TEMPERATURE
TEPO4	TRIETHYL PHOSPHATE
TETPT	*TETRACHLORO CYCLOPENTENES
TETR	TETRAZENE
TETRYL	N-METHYL-N,2,4,6-TETRANITROANILINE / NITRAMINE
TFAAPE	TRIFLUOROACETIC ACID, 1,5-PENTANEDIYL ESTER
TFDCLE	1,1,2-TRIFLUORO-1,2-DICHLOROETHANE
TGLYME	TETRAGLYME
THF	TETRAHYDROFURAN
THNAP	1,2,3,4-TETRAHYDRONAPHTHALENE / TETRALIN
THP2ML	TETRAHYDROPYRANYL-2-METHANOL
TL	THALLIUM
TMHPDO	3,3,6-TRIMETHYL-1,5-HEPTADIEN-4-ONE
TMHXL	3,5,5-TRIMETHYL-1-HEXANOL
TMODEO	2,2,7,7-TETRAMETHYL-4,5-OCTADIEN-3-ONE
TMPHAN	TETRAMETHYLPHENANTHRENE
TMPO3	TRIMETHYL PHOSPHITE
TMPO4	TRIMETHYL PHOSPHATE
TMTCON	3,5,24-TRIMETHYLTETRACONTANE
TMUR	TETRAMETHYLUREA
TM3PL	2,3,4-TRIMETHYL-3-PENTANOL
TNBISO	*TRINITROBENZENE ISOMER
TNTISO	*TRINITROTOLUENE ISOMER
TOC	*TOTAL ORGANIC CARBON
TOTDDT	*TOTAL VALUE OF ALL DDT, DDE, DDD ISOMERS
TOTGAF	*TOTAL GRAVIMETRIC, ACID FRACTION
TOTHG2	*TOTAL MERCURY
TOTPCB	*TOTAL PCBS
TOX	*TOTAL ORGANIC HALOGENS
TPH	THIOPHENE
TPO4	*TOTAL PHOSPHATES
TRCLE	TRICHLOROETHYLENE / TRICHLOROETHENE
TRIBZ	*TRICHLORO BENZENES
TRIMBZ	*TRIMETHYL BENZENES
TRIPT	TRICHLOROCYCLOPENTENE
TRMTDE	2,3,4-TRIMETHYL-4-TETRADECENE
TRPD14	TERPHENYL-d14
TRPHEN	TRIPHENYLENE
TRXMET	*TRIALO METHANES
TS	*TOTAL SULFUR
TSAPHE	4-TOLUENESULFONIC ACID, HEPTYL ESTER
TSS	*TOTAL SUSPENDED SOLIDS
TVS	*TOTAL VOLATILE SOLIDS
TXPHEN	TOXAPHENE

T1B2BC	TRANS-1-BROMO-2-BUTYLCYCLOPROPANE
T12DCE	TRANS-1,2-DICHLOROETHYLENE / TRANS-1,2-DICHLOROETHENE
T13DCP	TRANS-1,3-DICHLOROPROPENE
T2DEC	TRANS-2-DECENE
UDMH	UNSYMMETRICAL DIMETHYL HYDRAZINE
UNKXXX	*UNKNOWN COMPOUND, XXX = 001 THRU 999
V	VANADIUM
VARHY	*VARIOUS HYDROCARBONS WITH INCREASING M.W.
VFA	VINYL FORMATE
VM	O-ETHYL-S-(2-DIETHYLAMINOETHYL) METHYL PHOSPHONOTHIOLATE
VX	O-ETHYL-S-(2-DIISOPROPYLAMINOETHYL) METHYLPHOSPHONOTHIOLATE
WP	WHITE PHOSPHORUS
XPLOSV	*EXPLOSIVE SPRAY
XYLEN	*XYLENES
YELDY	YELLOW DYE
ZN	ZINC
ZR	ZIRCONIUM
01NHCL	0.1 N HYDROCHLORIC ACID
1A3MPZ	1-ACETYL-3-METHYL-5-PYRAZOLONE
1A4HMB	1-ACETYL-4-(1-HYDROXY-1-METHYLETHYL) BENZENE
1BY4HB	1-BENZYL-4-HYDROXYBENZIMIDAZOLE
1CDMPZ	1-CARBAMOYL-3,5-DIMETHYL-2-PYRAZOLINE
1CLODC	1-CHLOROCTADECANE
1CL24H	1-CHLORO-2,4-HEXADIENE
1C3L	1-PROPANOL
1C4L	1-BUTANOL
1DODCL	1-DODECANOL
1EHB	1-ETHYLHEXYLBENZENE
1EPB	1-ETHYLPROPYLBENZENE
1E2MB	1-ETHYL-2-METHYLBENZENE
1E24DB	1-ETHYL-2,4-DIMETHYLBENZENE
1FNAP	1-FLUORONAPHTHALENE
1HPDOL	1-HEPTADECANOL
1HXE	1-HEXENE
1HX3OL	1-HEXEN-3-OL
1MBAAN	1-METHYLBENZ [A] ANTHRACENE
1MCPNE	1-METHYLCYCLOPENTENE
1MDB	1-METHYLDECYLBENZENE
1MECHX	1-METHYLETHYLCYCLOHEXANE
1MECPR	1-METHYLETHYLCYCLOPROPANE
1MEIND	1-METHYLINDAN
1MFLRE	1-METHYL-9H-FLUORENE
1MNAP	1-METHYLNAPHTHALENE
1MNB	1-METHYLNONYLBENZENE
1MPRB	(1-METHYLPROPYL) BENZENE
1MPYR	1-METHYLPYRENE
1MX1PE	1-METHOXY-1-PROPENE
1M2PEC	1-METHYL-2-(2-PROPENYL) CYCLOPENTANE
1M7MEN	1-METHYL-7-(1-METHYLETHYL) NAPHTHALENE
1NHP	1-NITROHEPTANE
1NKCL	1.0 N POTASSIUM CHLORIDE
1N2ONE	1-NITRO-2-OCTANONE
1OCTOL	1-OCTANOL
1PECHX	1-PROPENYLCYCLOHEXANE
1PNAP	1-PHENYLNAPHTHALENE
1TBCHA	1-T-BUTYLCYCLOHEXANECARBOXYLIC ACID
1OCUDM	10-CYCLOPENTYLUDECANOIC ACID, METHYL ESTER
10MEOH	10% METHANOL
10MUDM	10-METHYLUDECANOIC ACID, METHYL ESTER
10OEME	10-OCTADECENOIC ACID, METHYL ESTER

11C1PE	1,1-DICHLORO-1-PROPENE
11DCE	1,1-DICHLOROETHYLENE / 1,1-DICHLOROETHENE
11DCLE	1,1-DICHLOROETHANE
11DMEB	(1,1-DIMETHYLETHYL) BENZENE
11DPH	1,1-DIPHENYLHYDRAZINE
111TCE	1,1,1-TRICHLOROETHANE
112TCE	1,1,2-TRICHLOROETHANE
113MCH	1,1,3-TRIMETHYLCYCLOHEXANE
12DBD4	1,2-DICHLOROBENZENE-D4.
12DBRE	1,2-DIBROMOETHANE
12DCD4	1,2-DICHLOROETHANE-D4
12DCE	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)
12DCLB	1,2-DICHLOROBENZENE
12DCLE	1,2-DICHLOROETHANE
12DCLP	1,2-DICHLOROPROPANE
12DMB	1,2-DIMETHYLBENZENE / O-XYLENE
12DNAP	1,2-DIMETHYLNAPHTHALENE
12DPB	1,2-DIPHENYLBENZENE
12DPH	1,2-DIPHENYLHYDRAZINE
12EPCH	1,2-EPOXYCYCLOHEXENE / CYCLOHEXENE OXIDE
12EPEB	1,2-EPOXYETHYLBENZENE / STYRENE OXIDE
12MTDM	12-METHYLTETRADECANOIC ACID, METHYL ESTER
12TMCP	1,1,2,2-TETRAMETHYLCYCLOPROPANE
123CPR	1,2,3-TRICHLOROPROPANE
123MCH	1,2,3-TRIMETHYLCYCLOHEXANE
123TCB	1,2,3-TRICHLOROBENZENE
123TMB	1,2,3-TRIMETHYLBENZENE
1234MB	1,2,3,4-TETRAMETHYLBENZENE
124MCH	1,2,4-TRIMETHYLCYCLOHEXANE
124TCB	1,2,4-TRICHLOROBENZENE
124TMB	1,2,4-TRIMETHYLBENZENE
13CPDO	1,3-CYCLOPENTADIONE
13DBD4	1,3-DICHLOROBENZENE-D4
13DCLB	1,3-DICHLOROBENZENE
13DCP	1,3-DICHLOROPROPANE
13DCPE	1,3-DICHLOROPROPENE
13DEB	1,3-DIETHYLBENZENE
13DFB	1,3-DIFLUOROBENZENE
13DMB	1,3-DIMETHYLBENZENE / M-XYLENE
13DMBB	(1,3-DIMETHYLBUTYL) BENZENE
13DMCH	1,3-DIMETHYLCYCLOHEXANE
13DNAP	1,3-DIMETHYLNAPHTHALENE
13DNB	1,3-DINITROBENZENE
13DPPR	1,3-DIPHENYLPROPANE / 1,1'-(1,3-PROPANEDIYL) BIS (BENZENE-
13TDAM	13-TETRADECYNOIC ACID, METHYL ESTER
135MCH	1,3,5-TRIMETHYLCYCLOHEXANE
135TMB	1,3,5-TRIMETHYLBENZENE
135TNB	1,3,5-TRINITROBENZENE
14DACB	1,4-DIACETYLBENZENE
14DBD4	1,4-DICHLOROBENZENE-D4
14DCBU	1,4-DICHLOROBUTANE
14DCLB	1,4-DICHLOROBENZENE
14DFB	1,4-DIFLUOROBENZENE
14DIOX	1,4-DIOXANE
14DMCH	1,4-DIMETHYLCYCLOHEXANE
14DMNP	1,4-DIHYDRO-1,4-METHANONAPHTHALENE
14DMXA	1,4-DIMETHOXYANTHRACENE
14DNB	1,4-DINITROBENZENE
14D2EB	1,4-DIMETHYL-2-ETHYLBENZENE
14HXDE	1,4-HEXADIENE

14MPME	14-METHYLPENTADECANIC ACID, METHYL ESTER
15DNAP	1,5-DIMETHYLNAPHTHALENE
15MRME	15-METHYLHEXADECANOIC ACID, METHYL ESTER
16DMIN	1,6-DIMETHYLINDAN
16DNAP	1,6-DIMETHYLNAPHTHALENE
16MHME	16-METHYLHEPTADECANOIC ACID, METHYL ESTER
167TMN	1,6,7-TRIMETHYLNAPHTHALENE
17PTCE	17-PENTATRIACONTENE
18DNAP	1,8-DIMETHYLNAPHTHALENE
18018D	1,2,3,4,4A,5,8,8A-OCTAHYDRO-1,4,5,8-DIMETHANOLNAPHTHALEN-2-OL
2A46DA	2-AMINO-4,6-DINITROANILINE
2A46DT	2-AMINO-4,6-DINITROTOLUENE
2BEETO	2-(2-N-BUTOXYETHOXY) ETHANOL
2BEMDE	2,2-BIS (ETHYLMERCAPTO) DIETHYL ETHER
2BMMPR	2,2-BIS (METHYLMERCAPTO) PROPANE
2BNMNM	2-BUTYL-N-METHYLNORLEUCINE, METHYL ESTER
2BRHXA	2-BROMOHEXANOIC ACID
2BUTHF	2-BUTYLTETRAHYDROFURAN
2BUXEL	2-BUTOXYETHANOL
2B1CP	2-BROMO-1-CHLOROPROPANE
2B1OOL	2-BUTYL-1-OCTANOL
2B4MFU	2-(T-BUTYL)-4-METHYLFURAN
2CBMN	2-CHLOROBENZYLIDINEMALONONITRILE
2CECHO	2-(2-CYANOETHYL) CYCLOHEXANONE
2CHAE	2-CYCLOPENTENE-1-HENDECANOIC ACID, ETHYL ESTER
2CHE1L	2-CYCLOHEXEN-1-OL
2CHE1O	2-CYCLOHEXEN-1-ONE
2CLBP	2-CHLOROBIPHENYL
2CLEVE	2-CHLOROETHYLVINYL ETHER / (2-CHLOROETHOXY) ETHENE
2CLP	2-CHLOROPHENOL
2CLPD4	2-CHLOROPHENOL-D4
2CLT	2-CHLOROTOLUENE
2CMCHO	2-(CYANOMETHYL) CYCLOHEXANONE
2CNAP	2-CHLORONAPHTHALENE
2C4E	2-BUTENE
2C6MPZ	2-CHLORO-6-METHOXY-10H-PHENOTHIAZINE
2C7O	2-HEPTANONE / METHYLPENTYL KETONE
2DMPEN	2,2-DIMETHYLPENTANE
2ECYBL	2-ETHYLCYCLOBUTANOL
2EC6A	2-ETHYLHEXANOIC ACID
2EP	2-ETHYLPHENOL
2E1HXL	2-ETHYL-1-HEXANOL
2E2HPD	2-ETHYL-2-HYDROXYMETHYL-1,3-PROPANEDIOL
2E4MPL	2-ETHYL-4-METHYL-1-PENTANOL
2FBP	2-FLUOROBIPHENYL
2FNAP	2-FLUORONAPHTHALENE
2FP	2-FLUOROPHENOL
2HBDDM	2-HYDROXYBUTANEDIOIC ACID, DIMETHYL ESTER
2HBNZL	2-HYDROXYBENZALDEHYDE / SALICYLALDEHYDE
2HNDOL	2-HENDECANOL / 2-UNDECANOL
2HYBP	2-HYDROXYBIPHENYL
2MBZA	2-METHYLBENZYL ALCOHOL
2MCPNE	2-METHYLCYCLOPENTANONE
2MCYPL	2-METHYLCYCLOPENTANOL
2MC3	2-METHYLPROPANE / ISOBUTANE
2MC4	2-METHYLBUTANE / ISOPENTANE
2MC6	2-METHYLHEXANE / ISOHEPTANE
2MC7	2-METHYLHEPTANE / ISOCTANE
2MDEC	2-METHYLDECANE

2MDOD	2-METHYLDODECANE
2MENAP	2-(1-METHYLETHYL) NAPHTHALENE
2MEPEN	2-METHYLPENTANE
2MMECO	2-METHYL-5-(1-METHYLETHYL)-2-CYCLOHEXEN-1-ONE
2MNAP	2-METHYLNAPHTHALENE
2MP	2-METHYLPHENOL / 2-CRESOL
2MPAHT	2-METHYLPROPANOIC ACID, 3-HYDROXY-2,4,4-TRIMETHYLPENTYL ESTER
2MPAME	2-METHYLPROPANOIC ACID, METHYL ESTER
2MPAIE	2-METHYLPROPANOIC ACID, 1-(1,1-DIMETHYLETHYL)-2-METHYL- 1,3-PROPANEDIYL ESTER
2MPEAE	2-METHYL-2-PROPENOIC ACID, 1,2-ETHANEDIYL ESTER
2MPYR	2-METHYLPYRENE
2MTETD	2-METHYLTETRADECANE
2MTHF	2-METHYLTETRAHYDROFURAN
2MTHPM	2-METHYLTHIO-4-HYDROXYPYRIMIDINE
2MXEXL	2-(2-METHOXYETHOXY) ETHANOL / DIETHYLENEGYLCO MONOMETHYLETHER
2MXMC3	2-METHOXY-2-METHYLPROPANE / TERT-BUTYLMETHYL ETHER
2MXTMB	2-METHOXY-2,3,3-TRIMETHYLBUTANE
2MX1PE	2-METHOXY-1-PROPENE
2M1DDL	2-METHYL-1-DODECANOL
2M1PNE	2-METHYL-1-PENTENE
2M2BDA	2-METHYL-2-BUTENEDIAMIDE
2M2C3L	2-METHYL-2-PROPANOL / TERT-BUTANOL
2M2H3B	2-METHYL-2-HYDROXY-3-BUTYNE
2M24P	2-METHYL-2,4-PENTANEDIOL
2M3HXE	2-METHYL-3-HEXENE
2M3PNO	2-METHYL-3-PENTANONE
2NANIL	2-NITROANILINE
2NBZLZ	2-NITROBENZALAZINE
2NKCL	2.0 N POTASSIUM CHLORIDE
2NNDPA	2-NITRO-N-NITROSODIPHENYLAMINE
2NODCO	2-NONADECANONE
2NP	2-NITROPHENOL
2NT	2-NITROTOLUENE
2N3C	2-NITRO-3-CRESOL / 3-METHYL-2-NITROPHENOL
2PETOH	2-PHENYLETHANOL
2PHXEL	2-PHENOXYETHANOL
2PNAP	2-PHENYLNAPHTHALENE
2PROL	2-PROPANOL
2PXEXL	2-(2-PHENOXYETHOXY) ETHANOL
2TCLEA	1,1,1,2-TETRACHLOROETHANE
2TMHPD	2,6,10,14-TETRAMETHYLHEPTADECANE
2TMPD	2,6,10,14-TETRAMETHYLPENTADECANE
210DMU	2,10-DIMETHYLUNDECANE
22DMC4	2,2-DIMETHYLBUTANE
225TCB	2,2',5-TRICHLOROBIPHENYL
2255CB	2,2',5,5'-TETRACHLOROBIPHENYL
226TMO	2,2,6-TRIMETHYLOCTANE
23C1PE	2,3-DICHLORO-1-PROPENE
23DCLP	2,3-DICHLOROPHENOL
23DMC4	2,3-DIMETHYLBUTANE
23DMC5	2,3-DIMETHYLPENTANE
23DMP	2,3-DIMETHYLPHENOL
23DNAP	2,3-DIMETHYLNAPHTHALENE
23D2HL	2,3-DIMETHYL-2-HEXANOL
23TMP	2,2,3,3-TETRAMETHYLPENTANE
2345CB	2,3,4,5-TETRACHLOROBIPHENYL
2346CP	2,3,4,6-TETRACHLOROPHENOL

235TMD	2,3,5-TRIMETHYLDECANE
2356CP	2,3,5,6-TETRACHLOROPHENOL
236TMN	2,3,6-TRIMETHYLNAPHTHALENE
237TMO	2,3,7-TRIMETHYLOCTANE
24D	2,4-DICHLOROPHENOXYACETIC ACID
24DCB	2,4'-DICHLOROBIPHENYL
24DCLP	2,4-DICHLOROPHENOL
24DMC5	2,4-DIMETHYLPENTANE
24DMD	2,4-DIMETHYLDECANE
24DMHX	2,4-DIMETHYLHEXANE
24DMPN	2,4-DIMETHYLPHENOL
24DNP	2,4-DINITROPHENOL
24DNT	2,4-DINITROTOLUENE
24M2PL	2,4-DIMETHYL-2-PENTANOL
24NPD3	2,4-DINITROPHENOL-D3
24T13P	2,2,4-TRIMETHYL-1,3-PENTANEDIOL
245PCB	2,2',4,5,5'-PENTACHLOROBIPHENYL
245T	2,4,5-TRICHLOROPHENOXYACETIC ACID
245TCP	2,4,5-TRICHLOROPHENOL
246MPY	2,4,6-TRIMETHYLPYRIDINE
246TBP	2,4,6-TRIBROMOPHENOL
246TCA	2,4,6-TRICHLOROANILINE
246TCP	2,4,6-TRICHLOROPHENOL
246TMO	2,4,6-TRIMETHYLOCTANE
246TNP	2,4,6-TRINITROPHENOL / PICRIC ACID
246TNR	2,4,6-TRINITRORESORCINOL / STYPHNIC ACID
246TNT	2,4,6-TRINITROTOLUENE
247HOI	2,2,4,4,7,7-HEXAMETHYLOCTAHYDRO-15-INDENE
247TMO	2,4,7-TRIMETHYLOCTANE
25C14D	2,5-CYCLOHEXADIEN-1,4-DIONE
25DCLP	2,5-DICHLOROPHENOL
25DMP	2,5-DIMETHYLPHENOL
25DMPA	2,5-DIMETHYLPHENANTHRENE
25DTHF	2,5-DIMETHYLTETRAHYDROFURAN
25HPCB	2,2',3,4,5,5',6-HEPTACHLOROBIPHENYL
25HXCB	2,2',3,4,5,5'-HEXACHLOROBIPHENYL
25OCCB	2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL
256TMD	2,5,6-TRIMETHYLDECANE
26DBMP	2,6-DI-T-BUTYL-4-METHYLPHENOL
26DCLP	2,6-DICHLOROPHENOL
26DMO	2,6-DIMETHYLOCTANE
26DMP	2,6-DIMETHYLPHENOL
26DMST	2,6-DIMETHYLSTYRENE
26DMUD	2,6-DIMETHYLUDECANE
26DNA	2,6-DINITROANILINE
26DNT	2,6-DINITROTOLUENE
26HPCB	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL
2611MD	2,6,11-TRIMETHYLDODECANE
27DMO	2,7-DIMETHYLOCTANE
27DNAP	2,7-DIMETHYLNAPHTHALENE
29DMUD	2,9-DIMETHYLUDECANE
3BPETH	3-BUTENYLPENTYL ETHER
3CHXD	3-CYCLOHEXYLDECANE
3CLP	3-CHLOROPHENOL
3CLT	3-CHLOROTOLUENE
3CMCH	3-(CHLOROMETHYL) CYCLOHEXENE
3C1C3E	3-CHLORO-1-PROPENE / ALLYL CHLORIDE
3DCHEO	3,5-DIMETHYL-2-CYCLOHEXEN-1-ONE
3EEBOD	3-ETHYL-5-(2-ETHYLBUTYL) OCTADECANE
3EE2BO	3,4-EPOXY-3-ETHYL-2-BUTANONE

3EHXDE	3-ETHYL-1,4-HEXADIENE
3EP	3-ETHYLPHENOL
3E22MP	3-ETHYL-2,2-DIMETHYLPENTANE / 3-(T-BUTYL)-PENTANE
3E25DH	3-ETHYL-2,5-DIMETHYL-3-HEXENE
3HDMPL	3-(HYDROXYMETHYL)-4,4-DIMETHYLPENTANAL
3HDMPT	3-HYDROXY-2,7-DIMETHYL-4-{3H}-PTERIDINONE
3HXE2O	3-HEXEN-2-ONE
3MBP	3-METHYLBIPHENYL
3MCHRY	3-METHYLCHRYSENE
3MC6	3-METHYLHEXANE
3MEPEN	3-METHYLPENTANE
3MP	3-METHYLPHENOL / 3-CRESOL
3MPANR	3-METHYLPHENANTHRENE
3MUND	3-METHYLUNDECANE
3MXIMZ	3-METHOXYIMIDAZOLE
3MXT	3-METHOXYTOLUENE
3M1PL	3-METHYL-1-PENTANOL
3M2CHO	3-METHYL-2-CYCLOHEXEN-1-ONE
3M2C1O	3-METHOXY-2-CYCLOPENTEN-1-ONE
3M2C5E	3-METHYL-2-PENTENE
3M2HXL	3-METHYL-2-HEXANOL
3M5PNN	3-METHYL-5-PROPYLNONANE
3NANIL	3-NITROANILINE
3NT	3-NITROTOLUENE
3OCTOL	3-OCTANOL
3OPPAE	3-OXO-3-PHENYLPROPANOIC ACID, ETHYL ESTER
3PC3AC	3-PHENYLPROPANOYL CHLORIDE / HYDROCINNAMYL CHLORIDE
3PT	3-PROPYLTOLUENE
3S5E3L	(3BETA)-STIGMAST-5-EN-3-OL
3TBUP	3-(T-BUTYL) PHENOL
3TCHEO	3,5,5-TRIMETHYL-2-CYCLOHEXEN-1-ONE
33DCBD	3,3'-DICHLOROBENZIDINE
33DMHX	3,3-DIMETHYLHEXANE
33DMPN	3,3-DIMETHYLPENTANE
34CBD6	3,3',4,4'-TETRACHLOROBIPHENYL-D6
34DCLP	3,4-DICHLOROPHENOL
34DMP	3,4-DIMETHYLPHENOL
34D1DE	3,4-DIMETHYL-1-DECENE
344TPE	3,4,4-TRIMETHYL-2-PENTENE
345T1H	3,4,5-TRIMETHYL-1-HEXENE
35DMP	3,5-DIMETHYLPHENOL
35DNA	3,5-DINITROANILINE
35DNP	3,5-DINITROPHENOL
35DNT	3,5-DINITROTOLUENE
35M3HL	3,5-DIMETHYL-3-HEXANOL
36DF9O	3,6-DICHLOROFLUOREN-9-ONE
36TMPA	3,4,5,6-TETRAMETHYLPHENANTHRENE
37DMNN	3,7-DIMETHYLNONANE
38DMUD	3,8-DIMETHYLUNDECANE
4AMORP	4-ACETYLMORPHOLINE
4A35DT	4-AMINO-3,5-DINITROTOLUENE
4BFB	4-BROMOFLUOROBENZENE
4BRPPE	4-BROMOPHENYLPHENYL ETHER
4B3P2O	4-BUTOXY-3-PENTEN-2-ONE
4CANIL	4-CHLOROANILINE
4CCHXL	4-CHLOROCYCLOHEXANOL
4CLPPE	4-CHLOROPHENYLPHENYL ETHER
4CLT	4-CHLOROTOLUENE
4CL2C	4-CHLORO-2-CRESOL / 2-METHYL-4-CHLOROPHENOL
4CL3C	4-CHLORO-3-CRESOL / 3-METHYL-4-CHLOROPHENOL

4C3MBE	4-CHLORO-3-METHYL-1-BUTENE
4DM2PL	4,4-DIMETHYL-2-PENTANOL
4ETMHP	4-ETHYL-2,2,6,6-TETRAMETHYLHEPTANE
4E2OCE	4-ETHYL-2-OCTENE
4FANIL	4-FLUOROANILINE
4FT	4-FLUOROTOLUENE
4HAZOB	4-HYDROXYAZOBENZENE
4HYBA	4-HYDROXYBENZALDEHYDE
4H3MBA	4-HYDROXY-3-METHOXYBENZALDEHYDE / VANILLIN
4H35BA	4-HYDROXY-3,5-DIMETHOXYBENZALDEHYDE
4IOMQU	4-IODOMETHYLQUINULCIDINE
4MBP	4-METHYLBIPHENYL
4MBSA	4-METHYLBENZENE SULFONAMIDE
4MC7	4-METHYLHEPTANE
4MDBFU	4-METHYLDIBENZOFURAN
4MENPA	4-(1-METHYLETHYL)-N-PHENYLANILINE
4MFLRE	4-METHYL-9H-FLUORENE
4MMBHE	4-METHYL-1-(1-METHYLETHYL)-BICYCLO {3.1.0} HEX-2-ENE
4MP	4-METHYLPHENOL / 4-CRESOL
4MPANR	4-METHYLPHENANTHRENE
4MPYR	4-METHYLPYRENE
4MXCHL	4-METHOXYCYCLOHEXANOL
4MXP	4-METHOXYPHENOL
4M2PPL	4-METHYL-2-PROPYL-1-PENTANOL
4NANIL	4-NITROANILINE
4NP	4-NITROPHENOL
4TBU2C	4-T-BUTYL-2-CRESOL / METHYL-4-(T-BUTYL) PHENOL
4TOP	4-T-OCTYLPHENOL
41MEHP	4-(1-METHYLETHYL) HEPTANE
44DCBZ	4,4'-DICHLOROBENZOPHENONE
44DFBZ	4,4'-DIFLUOROBENZOPHENONE
44DMPE	4,4-DIMETHYL-2-PENTENE
44DMUD	4,4-DIMETHYLUNDECANE
46DN2C	4,6-DINITRO-2-CRESOL / METHYL-4,6-DINITROPHENOL
468T1N	4,6,8-TRIMETHYL-1-NONENE
47DMUD	4,7-DIMETHYLUNDECANE
48DMHD	4,8-DIMETHYLHENDECANE
5CL2C	5-CHLORO-2-CRESOL / 2-METHYL-5-CHLOROPHENOL
5E2MHP	5-ETHYL-2-METHYLHEPTANE
5E5MD	5-ETHYL-5-METHYLDECANE
5M2HXO	5-METHYL-2-HEXANONE
5M5HAL	5-METHYL-5-HYDROXYHEXANOIC ACID LACTONE
5N2OL	5-NORBORNEN-2-OL
5PTRID	5-PROPYLTRIDECANE
50H50A	50% HEXANE - 50% ACETONE
50M50A	50% METHYLENE CHLORIDE - 50% ACETONE
50WMAN	50% WATER - 25% METHANOL - 25% ACETONITRILE
6CL3C	6-CHLORO-3-CRESOL / 3-METHYL-6-CHLOROPHENOL
6E6MFV	6-ETHYL-6-METHYLFULVENE
6MEPUR	6-METHYLPURINE
6MTRID	6-METHYLTRIDECANE
6M3HPL	6-METHYL-3-HEPTANOL
6TBU2C	6-T-BUTYL-2-CRESOL / 2-METHYL-6-(T-BUTYL) PHENOL
7MTRID	7-METHYLTRIDECANE
8MNNDL	8-METHYL-1,8-NONANEDIOL
9FLENO	9-FLUORENONE
9MBAAN	9-METHYLBENZ [A] ANTHRACENE
9MXANT	9-METHOXYANTHRACENE

* DENOTES GENERIC TEST NAME

(ALPHABETIC SORT BY TEST-NAMES)

ANAPNE	ACENAPHTHENE
ACND10	ACENAPHTHENE-D10
ANAPYL	ACENAPHTHYLENE
AACHXE	ACETIC ACID, CYCLOHEXYL ESTER
C2AEE	ACETIC ACID, ETHYL ESTER / ETHYL ACETATE
C2AVE	ACETIC ACID, VINYL ESTER / VINYL ACETATE
ACET	ACETONE
CH3CN	ACETONITRILE
ACPHN	ACETOPHENONE
ACIDIT	*ACIDITY
ACDHMW	*ACIDS (HIGH MOLECULAR WEIGHT)
ACROLN	ACROLEIN
ACRYLO	ACRYLONITRILE
DM	ADAMSITE
ALHMW	*ALCOHOLS (HIGH MOLECULAR WEIGHT)
ALDEHY	*ALDEHYDES
ALDRN	ALDRIN
ALAL	*ALIPHATIC ALCOHOLS
ALHC	*ALIPHATIC HYDROCARBONS
ALK	*ALKALINITY
ALKBIC	*ALKALINITY, BICARBONATE
ALKCAR	*ALKALINITY, CARBONATE
ALKHYD	*ALKALINITY, HYDROXIDE
ALKN	*ALKANES
AYLETH	ALLYL ETHER
ABHC	ALPHA-BENZENEHEXACHLORIDE / ALPHA-HEXACHLOROCYCLOHEXANE
AENSLF	ALPHA-ENDOSULFAN / ENDOSULFAN I
MBZA	ALPHA-METHYLBENZYL ACETOACETATE
MBOH	ALPHA-METHYLBENZYL ALCOHOL
MBZCL	ALPHA-METHYLBENZYL-2-CHLOROACETOACETATE
BZAL2M	ALPHA, ALPHA-DIMETHYLBENZENEMETHANOL
AL	ALUMINUM
NH3	AMMONIA
NH3N2	AMMONIA NITROGEN
ADHP	AMMONIUM DIHYDROGEN PHOSPHATE
ANIL	ANILINE
ANELNT	*ANION ELUENT
ANTRC	ANTHRACENE
ACHE	ANTICHOLINESTERASE
SB	ANTIMONY
AS	ARSENIC
ASEXT	*ARSENIC, EXTRACTABLE
ASTOT	*ARSENIC, TOTAL
ASBEST	ASBESTOS
ANTRQU	ATHRAQUINONE / 9,10-ANTHRACENEDIONE
ATZ	ATRAZINE
AZACN	AZACYLONONANE
BA	BARIUM
BENZAL	BENZALDEHYDE
BENZA	BENZANTHRONE
C6H6	BENZENE
BZPA	BENZENEPHOSPHONIC ACID
C6D6	BENZENE-D6
BZFANT	BENZFLUORANTHENE
BENZID	BENZIDINE
BAANTR	BENZO (A) ANTHRACENE
BZAPAN	BENZO (A) PHENANTHRENE

BAPYR	BENZO [A] PYRENE
BBFANT	BENZO [B] FLUORANTHENE
BBFLRE	BENZO [B] FLUORENE
BBNTHP	BENZO [B] NAPHTHO [1,2-D] THIOPHENE
BZOTHP	BENZO [B] THIOPHENE
BZCPAN	BENZO [C] PHENANTHRENE
BGHIFA	BENZO [G,H,I] FLUROANTHENE
BGHIPY	BENZO [G,H,I] PERYLENE
BZHQUN	BENZO [H] QUINOLINE
BJFANT	BENZO [J] FLUORANTHENE
BKFANT	BENZO [K] FLUORANTHENE
BF2ANT	BENZOBIFLUOROANTHENE
BENZO	BENZOIC ACID
BZOAME	BENZOIC ACID, METHYL ESTER / METHYL BENZOATE
BTZ	BENZOTHAZOLE
BZALC	BENZYL ALCOHOL
BZYLBR	BENZYL BROMIDE / ALPHA-BROMOTOLUENE
BE	BERYLLIUM
BBHC	BETA-BENZENEHEXACHLORIDE / BETA-HEXACHLOROCYCLOHEXANE
BENSLF	BETA-ENDOSULFAN / ENDOSULFAN II
HCO3	BICARBONATE
BCHPD	BICYCLO [2,2,1] HEPTA-2,5-DIENE
BCY3HX	BICYCLO [3,1,0] HEXANE
BICYHX	BICYCLOHEXYL
BINAP	BINAPHTHYL
BOD	*BIOLOGICAL OXYGEN DEMAND
BCMSO2	BIS (CARBOXYMETHYL) SULFONE
BCMSO	BIS (CARBOXYMETHYL) SULFOXIDE
BCLME	BIS (CHLOROMETHYL) ETHER
DIAET	BIS (DIISOPROPYLAMINO) ETHANETHIOL
DIAEL	BIS (DIISOPROPYLAMINO) ETHANOL
DIADS	BIS (DIISOPROPYLAMINO) ETHYLDISULFIDE
DIAS	BIS (DIISOPROPYLAMINO) ETHYLSULFIDE
DIASO2	BIS (DIISOPROPYLAMINO) ETHYLSULFONATE
C185FP	BIS (PENTAFLUOROPHENYL) PHENYL PHOSPHINE
BTMSOA	BIS (TRIMETHYLSILYL) OXALIC ACID
B2CEXM	BIS (2-CHLOROETHOXY) METHANE
B2CLEE	BIS (2-CHLOROETHYL) ETHER
B2CIPE	BIS (2-CHLOROISOPROPYL) ETHER
B2EHP	BIS (2-ETHYLHEXYL) PHTHALATE
BLDX	BLADEX
B	BORON
BRMCIL	BROMACIL
BRC6H5	BROMOBENZENE
BRCLM	BROMOCHLOROMETHANE
BRDCLM	BROMODICHLOROMETHANE
CHBR3	BROMOFORM
CH3BR	BROMOMETHANE
C4	BUTANE
BDADME	BUTANEDIOIC ACID, DIMETHYL ESTER
BAHXE	BUTANOIC ACID, 1-HEXYL ESTER
BUC6H5	BUTYLBENZENE
BBZP	BUTYLBENZYL PHTHALATE
BUEETH	BUTYLETHYL ETHER
BMP	BUTYLMETHYL PHTHALATE
BPBG	BUTYLPHTHALYL BUTYLGLYCOLATE
CD	CADMIUM
CA	CALCIUM
CACO3S	*CALCIUM CARBONATE SOLUTION
CAMP	CAMPHOR

CAPLCT	CAPROLACTAM / 6-AMINOHEXANOIC ACID LACTAM
CAME	CARBAMIC ACID, METHYL ESTER
CS2	CARBON DISULFIDE
CMONOX	CARBON MONOXIDE
CCL4	CARBON TETRACHLORIDE
CO3	CARBONATE
ClADME	CARBONIC ACID, DIMETHYL ESTER
CEC	*CATION EXCHANGE CAPACITY
CS	CESIUM
COD	*CHEMICAL OXYGEN DEMAND
CLO3	CHLORATE
CLDAN	CHLORDANE
CLDEN	CHLORDENE
CL	CHLORIDE
CLXB	*CHLORINATED BENZENES
CLXNAP	*CHLORINATED NAPHTHALENES
CL2	CHLORINE
CLD	*CHLORINE DEMAND
CLNAP	*CHLORO NAPHTHALENES
CLP	*CHLORO PHENOLS
CLC2A	CHLOROACETIC ACID
CN	CHLOROACETOPHENONE
CLC6H5	CHLOROBENZENE
CLC6D5	CHLOROBENZENE-D5
CLCYHX	CHLOROCYCLOHEXANE
CCLF2	CHLORODIFLUOROMETHANE
CDNBIS	*CHLORODINITROBENZENE ISOMER
C2H5CL	CHLOROETHANE
C2H3CL	CHLOROETHENE / VINYL CHLORIDE
CHCL3	CHLOROFORM
CDCL3	CHLOROFORM-D
CH3CL	CHLOROMETHANE
CHOLA	CHOLESTANE
CRO4	CHROMATE
CR	CHROMIUM
CHRY	CHRYSENE
CYSD12	CHRYSENE-D12
CBCCH	CIS-1-BROMO-2-CHLOROCYCLOHEXANE
CDACH	CIS-1,2-DIACETOXYCYCLOHEXANE
C12DCE	CIS-1,2-DICHLOROETHENE
C13DCP	CIS-1,3-DICHLOROPROPYLENE / CIS-1,3-DICHLOROPROPENE
C4HX1L	CIS-4-HEXEN-1-OL
CO	COBALT
CU	COPPER
CUEXT	*COPPER, EXTRACTABLE
CUTOT	*COPPER, TOTAL
COUMRN	COUMARAN / 2,3-DIHYDROBENZOFURAN
CSOL	*CRESOLS
CYN	CYANIDE
CYNF	*CYANIDE, FREE FORM
CK	CYANOGEN CHLORIDE
CYDODC	CYCLODODECANE
CYHX	CYCLOHEXANE
C6HOH	CYCLOHEXANOL
CHONE	CYCLOHEXANONE
CYHXB	CYCLOHEXYLBENZENE / PHENLYCYCLOHEXANE
CYOCTE	CYCLOOCTATETRAENE
CYPD	CYCLOPENTADIENE
CPCXAL	CYCLOPENTANECARBOXALDEHYDE
CPO	CYCLOPENTANONE

CYPNE	CYCLOPENTENE
HMX	CYCLOTETRAMETHYLENETETRANITRAMINE
RDX	CYCLOTRIMETHYLENETRINITRAMINE / CYCLONITE
C18UNS	*C18H300 UNKNOWN
C22UNS	*C22H400 UNKNOWN
F10BP	DECAFLUOROBIPHENYL
DCMPSX	DECAMETHYLCYCLOPENTASILOXANE
C10	DECANE
DECYLB	DECYLBENZENE
DIH2O	DEIONIZED WATER
DBHC	DELTA-BENZENEHEXACHLORIDE / DELTA-HEXACHLOROCYCLOHEXANE
DIACAL	DIACETONE ALCOHOL / 4-HYDROXY-4-METHYL-2-PENTANONE
DIAZ	DIAZINON
DBABA	DIBENZ [A,B] ANTHRACENE
DBAHA	DIBENZ [A,H] ANTHRACENE
DBZFU	DIBENZOFURAN
DBZTHP	DIBENZOTHIOPHENE
DBRCLM	DIBROMOCHLOROMETHANE
DBCP	DIBROMOCHLOROPROPANE
DBUCLE	DIBUTYLCHLORENDATE
CL2BZ	*DICHLORO BENZENES
CL2BP	*DICHLORO BIPHENYLS
CL2NAP	*DICHLORO NAPHTHALENES
DICLP	*DICHLORO PHENOLS
CL2ACN	DICHLOROACETONITRILE
DCBPH	DICHLOROBENZOPHENONE
CCL2F2	DICHLORODIFLUOROMETHANE
ED	DICHLOROETHYL ARSINE
PD	DICHLOROPHENYL ARSINE
DCHP	DICYCLOHEXYL PHTHALATE
DCPD	DICYCLOPENTADIENE
DLDRN	DIELDRIN
DEDMP	DIETHYL DIMETHYL DIPHOSPHONATE
DEETH	DIETHYL ETHER
DEP	DIETHYL PHTHALATE
DEPD4	DIETHYL PHTHALATE-D4
DEA	DIETHYLAMINE
DEGLYC	DIETHYLENE GLYCOL / 2,2-OXY BIS {ETHANOL}
DIBP	DIISOBUTYL PHTHALATE
DIOP	DIISOOCTYL PHTHALATE
DIDDP	DIISOPROPYL DIMETHYL DIPHOSPHONATE
DIPETH	DIISOPROPYL ETHER
DIPUR	DIISOPROPYL UREA
DIMP	DIISOPROPYLMETHYL PHOSPHONATE
DMXDMS	DIMETHOXY DIMETHYLSILANE
ME2AEA	DIMETHYL ARSENIC ACID
DMDS	DIMETHYL DISULFIDE
DMCAR	DIMETHYL DITHIOCARBONATE
DMETH	DIMETHYL ETHER
DMIP	DIMETHYL ISOPHTHALATE
ME2HG	DIMETHYL MERCURY
ME2NAP	*DIMETHYL NAPHTHALENES
DMP	DIMETHYL PHTHALATE
ME2C11	*DIMETHYL UNDECANES
DMMP	DIMETHYLMETHYL PHOSPHATE
DNTISO	*DINITROTOLUENE ISOMER
DOAD	DIOCTYL ADIPATE
DOAZ	DIOCTYL AZELATE
DOETH	DIOCTYL ETHER
DPHNY	DIPHENYL

DPETH	DIPHENYL ETHER
DPSULF	DIPHENYL SULFIDE / 1,1-THIO BIS (BENZENE)
DPSO	DIPHENYL SULFOXIDE
DPA	DIPHENYLAMINE
DSEDIN	DISELENO DIINDOLE
DO	*DISSOLVED OXYGEN
HD	DISTILLED MUSTARD / BIS (2-CHLOROETHYL) SULFIDE
DITH	DITHIANE
DNBP	DI-N-BUTYL PHTHALATE
DNOP	DI-N-OCTYL PHTHALATE
DNOPD4	DI-N-OCTYL PHTHALATE-D4
DNPP	DI-N-PENTYL PHTHALATE
DL2HPG	DL-2-(3-HYDROXYPHENYL) GLYCINE
C12	DODECANE
DODECB	DODECYLBENZENE
DOPAM	DOPAMINE / 4-(2-AMINOETHYL) PYROCATECHOL
DURS	DURSBAN
DPNTLL	D-(-)-PANTOLYL LACTONE
C20	EICOSANE
ESFSO4	ENDOSULFAN SULFATE
ENDRN	ENDRIN
ENDRNA	ENDRIN ALDEHYDE
ENDRNK	ENDRIN KETONE
ETOH	ETHANOL
ETC6R5	ETHYLBENZENE
ETBD10	ETHYLBENZENE-D10
ETCYHX	ETHYLCYCLOHEXANE
EMPA	ETHYLMETHYL PHOSPHONIC ACID / ETHYLMETHYL PHOSPHONATE
ENHETH	ETHYL-N-HEXYL ETHER
EBCPGL	ETHYL-2,2-BIS (4-CHLOROPHENYL) GLYCOLATE
XPLOSV	*EXPLOSIVE SPRAY
FARN	FARNESOL
FATAL	*FATTY ALCOHOLS
FANT	FLUORANTHENE
FLRENE	FLUORENE
F	FLUORIDE
FC2A	FLUOROACETIC ACID
MBAS	*FOAMING AGENTS / METHYALYNE BLUE ACTIVE SUBSTANCE
FABPEE	FORMIC ACID, BETA-PHENYLETHYL ESTER
FACHXE	FORMIC ACID, CYCLOHEXYL ESTER
FREON	FREON / DICHLOROFLUOROMETHANE
DYSCAN	*GC-MS DYE SCAN
MSSCAN	*GC-MS ORGANIC SCAN
GRNDY	GREEN DYE
HWX013	HALOWAX 1013
HWX099	HALOWAX 1099
C11	HENDECANE
C21	HENEICOSANE
HPCL	HEPTACHLOR
HPCLE	HEPTACHLOR EPOXIDE
CL7BP	*HEPTACHLORO BIPHENYLS
CL7NB	*HEPTACHLORO NORBORNADIENES
C7NB1	HEPTACHLORONORBORNENE
C17	HEPTADECANE
C17AM	HEPTADECANOIC ACID, METHYL ESTER
C7	HEPTANE
C7A	HEPTANOIC ACID
CL6BP	*HEXACHLORO BIPHENYLS
CL6BZ	HEXACHLOROBENZENE
HCBD	HEXACHLOROBUTADIENE

CL6CP	HEXACHLOROCYCLOPENTADIENE
CL6ET	HEXACHLOROETHANE
HCNB	HEXACHLORONORBORNADIENE
HXCOS	HEXACOSANE
C16	HEXADECANE
C16A	HEXADECANOIC ACID / PALMITIC ACID
C16AEH	HEXADECANOIC ACID, BIS (2-ETHYLHEXYL) ESTER
C16ABE	HEXADECANOIC ACID, BUTYL ESTER
C16ADM	HEXADECANOIC ACID, DIMETHYL ESTER
C16AME	HEXADECANOIC ACID, METHYL ESTER
HXMTSX	HEXAMETHYLCYCLOTRISILOXANE
HXMETA	HEXAMETHYLENETETRAMINE / 1,3,5,7-TETRAAZATRICYCLO (3.3.13.7) DECANE
HEXANE	HEXANE
HXAB2E	HEXANEDIOIC ACID, BIS (2-ETHYLHEXYL) ESTER
HXADBE	HEXANEDIOIC ACID, DIBUTYL ESTER / DIBUTYL ADIPATE
HXADME	HEXANEDIOIC ACID, DIMETHYL ESTER / DIMETHYL ADIPATE
HXADOE	HEXANEDIOIC ACID, DIOCTYL ESTER / DIOCTYL ADIPATE
C36	HEXATRIACONTANE
CRHEX	HEXAVALENT CHROMIUM
HPLH2O	HPLC GRADE WATER
HYDRZ	HYDRAZINE
HYDRND	HYDRINDANE / OCTAHYDRO-1H-INDENE
CALLMW	*HYDROCARBONS (ALL MOLECULAR WEIGHTS)
AC	HYDROGEN CYANIDE / HYDROCYANIC ACID
H2S	HYDROGEN SULFIDE
HPO4	*HYDROLYZABLE PHOSPHATE
INDENE	INDENE
ICDPYR	INDENO {1,2,3-C,D} PYRENE
INDOLE	INDOLE / 2,3-BENZOPYRROLE
FE	IRON
ISODR	ISODRIN
ISOPHR	ISOPHORONE
ISOPBZ	ISOPROPYLBENZENE / CUMENE
IMPA	ISOPROPYLMETHYL PHOSPHONIC ACID / ISOPROPYLMETHYL PHOSPHONATE
ISOQUN	ISOQUINOLINE
KEND	KETO-ENDRIN
LACYBB	LACTIC ACID, CYCLIC BUTANEBORONATE
LAURIC	LAURIC ACID
PB	LEAD
PBSTY	LEAD STYPHNATE
H	LEVINSTEIN MUSTARD
L	LEWISITE
LO	LEWISITE OXIDE
LIN	LINDANE / GAMA-BENZENEHEXACHLORIDE / GAMMA- HEXACHLOROCYCLOHEXANE
MG	MAGNESIUM
MLTHN	MALATHION
MALO	MALONONITRILE
MN	MANGANESE
HG	MERCURY
HGEXT	*MERCURY, EXTRACTABLE
HGTOT	*MERCURY, TOTAL
MESTOX	MESITYL OXIDE / 4-METHYL-3-PENTEN-2-ONE
MEOH	METHANOL
MEXCLR	METHOXYCHLOR
MEAOA	METHYL ARSONIC ACID
MEHG	METHYL MERCURY
MEHGCL	METHYL MERCURY CHLORIDE

METLAP	*METHYL NAPHTHALENES
MP	*METHYL PHENOLS
MECYBU	METHYLCYCLOBUTANE
MECYDC	METHYLCYCLODECANE
MECC6	METHYLCYCLOHEXANE
MECYPE	METHYLCYCLOPENTANE
CH2BR2	METHYLENE BROMIDE
CH2CL2	METHYLENE CHLORIDE
CD2CL2	METHYLENE CHLORIDE-D2
MEK	METHYLETHYL KETONE / 2-BUTANONE
MHYDRZ	METHYLHYDRAZINE
MIBK	METHYLISOBUTYL KETONE
MIPK	METHYLISOPROPYL KETONE
MPA	METHYLPHOSPHONIC ACID
MPK	METHYLPROPYL KETONE / 2-PENTANONE
MNBK	METHYL-N-BUTYL KETONE / 2-HEXANONE
ME2HPL	*METHYL-2-HEPTANOLS
ME2HPO	*METHYL-2-HEPTANONES
MTRZL	METRAZOL / CARDIAZOLE
MQFH2O	MILLI-Q-FILTERED WATER
MIREX	MIREX
MO	MOLYBDENUM
NAP	NAPHTHALENE
NAPD8	NAPHTHALENE-D8
NI	NICKEL
NO3	NITRATE
NO2	NITRITE
NIT	*NITRITE, NITRATE-NON SPECIFIC
NITARO	*NITRO AROMATICS
NB	NITROBENZENE
NBD5	NITROBENZENE-D5
NC	NITROCELLULOSE
NC1	NITROCELLULOSE, 12% N
NC2	NITROCELLULOSE, 13.4% N
N2KJEL	*NITROGEN BY KJELDAHL METHOD
NDIOX	NITROGEN DIOXIDE
HN	NITROGEN MUSTARD
NG	NITROGLYCERINE
NQ	NITROQUANIDINE
NDNPA	NITROSO DI-N-PROPYLAMINE
C19	NONADECANE
C19A	NONADECANOIC ACID
C9	NONANE
NNADME	NONANEDIOIC ACID, DIMETHYL ESTER
NCLN	NORTRICYCLANOL
NBUETH	N-BUTYL ETHER / 1,1'-OXY BIS (BUTANE)
NBMBSA	N-BUTYL-4-METHYLBENZENESULFONAMIDE
NECHXA	N-ETHYLCYCLOHEXYLAMINE
NE2PEA	N-ETHYL-2-PROPENAMIDE
NMANIL	N-METHYLANILINE
NMCANE	N-METHYLCARBAMIC ACID, 1-NAPHTHYL ESTER
NMNSOA	N-METHYL-N-NITROSOANILINE
TETRYL	N-METHYL-N,2,4,6-TETRANITROANILINE / NITRAMINE
NDHXA	N-NITRO DIHEXYLAMINE
NNDMEA	N-NITROSO DIMETHYLAMINE
NNDPA	N-NITROSO DIPHENYLAMINE
NNDNPA	N-NITROSO DI-N-PROPYLAMINE
NNPIPA	N-NITROSOPENTYLISOPENTYLAMINE
NN4HPL	N-NITROSO-4-HYDROXYPROLINE
PENAMD	N-PENTAMIDE

NHEDCA	N-(2-HYDROXYETHYL)-DECANAMIDE
NCPPPA	N-(4-CHLOROPHENYL)-3-PHENYL-2-PROPENAMIDE
NNDMA	N,N-DIMETHYLANILINE
NDMBSA	N,4-DIMETHYLBENZENESULFONAMIDE
ODMNSX	OCTADECAMETHYLCYCLONONASILOXANE
C18	OCTADECANE
ODECA	OCTADECANOIC ACID / STEARIC ACID
C18ABE	OCTADECANOIC ACID, BUTYL ESTER
C18AE	OCTADECANOIC ACID, ETHYL ESTER
C18AME	OCTADECANOIC ACID, METHYL ESTER
C18AOD	OCTADECANOIC ACID, OCTADECYL ESTER
ODAPDM	OCTADECANOIC ACID, (2-PHENYL-1,3-DIOXOLAN-4-YL)METHYL ESTER
OMCTSX	OCTAMETHYLCYCLOTETRASILOXANE
C8	OCTANE
CCADME	OCTANEDIOIC ACID, DIMETHYL ESTER
C8AME	OCTANOIC ACID, METHYL ESTER
OILGR	*OIL & GREASE
OPO4	*ORGANOPHOSPHATES
PO4ORT	ORTHOPHOSPHATE
OXCN	OXACYCLONONANE
OZONE	OZONE
CEMP	O-ETHYLMETHYL PHOSPHONATE
VM	O-ETHYL-S-(2-DIETHYLAMINOETHYL) METHYL PHOSPHONOTHIOLATE
VX	O-ETHYL-S-(2-DIISOPROPYLAMINOETHYL) METHYLPHOSPHONOTHIOLATE
PRTHN	PARATHION
PARTIC	*PARTICULATE MATTER
PCB016	PCB 1016
PCB221	PCB 1221
PCB232	PCB 1232
PCB242	PCB 1242
PCB248	PCB 1248
PCB254	PCB 1254
PCB260	PCB 1260
PCB262	PCB 1262
CL5BP	*PENTACHLORO BIPHENYLS
CL5B	PENTACHLOROBENZENE
CL5ET	PENTACHLOROETHANE
PCP	PENTACHLOROPHENOL
C25	PENTACOSANE
C15	PENTADECANE
C15A	PENTADECANOIC ACID
PETN	PENTAERYTHRITOL TETRANITRATE
PFP	PENTAFLUOROPHENOL
PENTAN	PENTANE
C5A	PENTANOIC ACID / VALERIC ACID
PA2MBE	PENTANOIC ACID, 2-METHYLBUTYL ESTER
PYLD12	PERYLENE-D12
PH	*PH
PHANTR	PHENANTHRENE
PHAD10	PHENANTHRENE-D10
PHENOL	PHENOL
PHENLC	*PHENOLICS (NON-SPECIFIC)
PHEND5	PHENOL-D5
PHEND6	PHENOL-D6
PHXAA	PHENOXYACETIC ACID
PHENAA	PHENYLACETIC ACID
CX	PHOSGENE OXIME / DICHLOROFORMOXIME
CG	PHOSGENE / CARBONYL CHLORIDE
PO4	PHOSPHATE
H3PO4	PHOSPHORIC ACID

PAD4NE	PHOSPHORIC ACID, DIETHYL-4-NITROPHENYL ESTER
PAODPE	PHOSPHORIC ACID, OCTYL DIPHENYL ESTER
PATPE	PHOSPHORIC ACID, TRIPHENYL ESTER
P4	PHOSPHORUS
PHTHL	*PHTHALATES
PHTHA	PHTHALIC ACID / 1,2-BENZENEDICARBOXYLIC ACID
PIPER	PIPERIDINE
PDMSLX	POLYDIMETHYL SILOXANE / DIMETHYLPOLY SILOXANE
PEGE	*POLYETHYLENEGLYCOL ETHERS
PAH	*POLYNUCLEAR AROMATIC HYDROCARBONS
K	POTASSIUM
C3AME	PROPANOIC ACID, METHYL ESTER
C3A2MB	PROPANOIC ACID, 2-METHYLBUTYL ESTER
PATBUE	PROPANOIC ACID, T-BUTYL ESTER
PA2HDE	PROPANOIC ACID, 2-HYDROXYDECYL ESTER
PRC6H5	PROPYLBENZENE
POX	*PURGEABLE ORGANIC HALOGENS
PYR	PYRENE
PYRD10	PYRENE-D10
REDDY	RED DYE
RESACI	*RESIN ACIDS
GB	SARIN / ISOPROPYLMETHYL PHOSPHONOFUORIDATE
C16SAT	*SATURATED HYDROCARBONS (C16)
SE	SELENIUM
SIL	SILICONE
AG	SILVER
SILVEX	SILVEX
NA	SODIUM
GD	SOMAN / PINACOLYLMETHYL PHOSPHONOFUORIDATE
COND	*SPECIFIC CONDUCTIVITY
SQUAL	SQUALENE
STERO	*STERIODS
STIGMA	STIGMASTENAL
SR	STRONTIUM
STYPH	STYPHNATE ION
STYPHA	STYPHNIC ACID
STYR	STYRENE
SO4	SULFATE
SULFID	SULFIDE
SO3	SULFITE
S	SULFUR
S2CL2	SULFUR MONOCHLORIDE
SUADME	SULFURIC ACID, DIMETHYL ESTER
SUPONA	SUPONA / 2-CHLORO-1-(2,4-DICHLOROPHENYL) VINYL DIETHYL PHOSPHATE
DIAEP	S-DIISOPROPYLAMINOETHYLMETHYL PHOSPHONOTHIOATE
GA	TABUN / ETHYL-N,N-DIMETHYL PHOSPHORAMIDOCYANIDATE
TEMP	*TEMPERATURE
TRPD14	TERPHENYL-d14
TDODTL	TERT-DODECANETHIOL
TCB	*TETRACHLORO BENZENES
CL4BP	*TETRACHLORO BIPHENYLS
TETPT	*TETRACHLORO CYCLOPENTENES
CL4NAP	*TETRACHLORO NAPHTHALENES
TCLEE	TETRACHLOROETHYLENE / TETRACHLOROETHENE
TCOS	TETRACOSANE
TDMHSX	TETRADECAMETHYL HEXASILOXANE
C14	TETRADECANE
C14A	TETRADECANOIC ACID / MYRISTIC ACID
C14AME	TETRADECANOIC ACID, METHYL ESTER

TGLYME	TETRAGLYME
THF	TETRAHYDROFURAN
THP2ML	TETRAHYDROPYRANYL-2-METHANOL
TMUR	TETRAMETHYL UREA
TMPHAN	TETRAMETHYLPHENANTHRENE
TETR	TETRAZENE
TL	THALLIUM
TBASDE	THIOBUTYRIC ACID, S-DECYL ESTER
SCN	THIOCYANATE
TDGCL	THIODIGLYCOL
TDGCLA	THIODIGLYCOLIC ACID
TPH	THIOPHENE
SN	TIN
MEC6H5	TOLUENE
MEC6D8	TOLUENE-D8
TDS	*TOTAL DISSOLVED SOLIDS
TOTGAF	*TOTAL GRAVIMETRIC, ACID FRACTION
HARD	*TOTAL HARDNESS
TOTHG2	*TOTAL MERCURY
TOC	*TOTAL ORGANIC CARBON
TOX	*TOTAL ORGANIC HALOGENS
TOTPCB	*TOTAL PCBS
TPO4	*TOTAL PHOSPHATES
TS	*TOTAL SULFUR
TSS	*TOTAL SUSPENDED SOLIDS
TOTDDT	*TOTAL VALUE OF ALL DDT, DDE, DDD ISOMERS
TVS	*TOTAL VOLATILE SOLIDS
TXPHEN	TOXAPHENE
T1B2BC	TRANS-1-BROMO-2-BUTYLCYCLOPROPANE
TCHDCS	TRANS-1,2-CYCLOHEXANDIOL, CYCLIC SULFITE
T12DCE	TRANS-1,2-DICHLOROETHYLENE / TRANS-1,2-DICHLOROETHENE
T13DCP	TRANS-1,3-DICHLOROPROPENE
T2DEC	TRANS-2-DECENE
C30AME	TRIACONTANOIC ACID, METHYL ESTER
TBP	TRIBUTYL PHOSPHATE
TBA	TRIBUTYLAMINE
TRIBZ	*TRICHLORO BENZENES
CL3BP	*TRICHLORO BIPHENYLS
CL3NAP	*TRICHLORO NAPHTHALENES
CL3P	*TRICHLORO PHENOLS
CL3C3E	*TRICHLORO PROPENES
TCST	*TRICHLORO STYRENES
TRIPT	TRICHLOROCYCLOPENTENE
TRCLE	TRICHLOROETHYLENE / TRICHLOROETHENE
CCL3F	TRICHLOROFLUOROMETHANE
C13	TRIDECANE
TEPO4	TRIETHYL PHOSPHATE
TEGLYC	TRIETHYLENE GLYCOL / 2,2'-([1,2-ETHANEDIYL BIS (OXY)] BIS {ETHANOL})
TEGLME	TRIETHYLENE GLYCOL, METHYL ETHER
TFAAPE	TRIFLUOROACETIC ACID, 1,5-PENTANEDIYL ESTER
CCLF3	TRIFLUOROCHLOROMETHANE
TRXMET	*TRIALO METHANES
TRIMBZ	*TRIMETHYL BENZENES
ME3C10	*TRIMETHYL DECANES
ME3C6	*TRIMETHYL HEXANES
ME3NAP	*TRIMETHYL NAPHTHALENES
TMPO4	TRIMETHYL PHOSPHATE
TMPO3	TRIMETHYL PHOSPHITE
ME3C11	*TRIMETHYL UNDECANES

TNBISO	*TRINITROBENZENE ISOMER
TNTISO	*TRINITROTOLUENE ISOMER
TRPHEN	TRIPHENYLENE
UNKXXX	*UNKNOWN COMPOUND, XXX = 001 THRU 999
UDMH	UNSYMMETRICAL DIMETHYL HYDRAZINE
V	VANADIUM
DDVP	VAPONA
VARHY	*VARIOUS HYDROCARBONS WITH INCREASING M.W.
VFA	VINYL FORMATE
WP	WHITE PHOSPHORUS
CC3	XXCC3
XYLEN	*XYLENES
YELDY	YELLOW DYE
ZN	ZINC
ZR	ZIRCONIUM
01NHCL	0.1 N HYDROCHLORIC ACID
1MPRB	(1-METHYLPROPYL) BENZENE
11DMEB	(1,1-DIMETHYLETHYL) BENZENE
13DMBB	(1,3-DIMETHYLBUTYL) BENZENE
SPIRO	(1',5 TRANS)-7-CHLORO-6-HYDROXY-2',4-DIMETHOXY-6'-METHYL- SPIRO [BENZOFURAN-2-(3H)-1'-(2)-CYCLOHEXENE]-3,4'-DIONE
3S5E3L	(3BETA)-STIGMAST-5-EN-3-OL
LIPID	*8 LIPIDS
BZOTRZ	1H-BENZOTRIAZOLE / 1,2,3-BENZOTRIAZOLE
1A3MPZ	1-ACETYL-3-METHYL-5-PYRAZOLONE
1A4HMB	1-ACETYL-4-(1-HYDROXY-1-METHYLETHYL) BENZENE
1BY4HB	1-BENZYL-4-HYDROXYBENZIMIDAZOLE
1C4L	1-BUTANOL
1CDMPZ	1-CARBAMOYL-3,5-DIMETHYL-2-PYRAZOLINE
1CLODC	1-CHLOROCTADECANE
1CL24H	1-CHLORO-2,4-HEXADIENE
1DODCL	1-DODECANOL
EICOSL	1-EICOSANOL
1EHB	1-ETHYLHEXYLBENZENE
1EPB	1-ETHYLPROPYLBENZENE
1E2MB	1-ETHYL-2-METHYLBENZENE
1E24DB	1-ETHYL-2,4-DIMETHYLBENZENE
1FNAP	1-FLUORONAPHTHALENE
1HPDOL	1-HEPTADECANOL
1HXE	1-HEXENE
1HX3OL	1-HEXEN-3-OL
INDAN	1-HYDROXY-2,3-METHYLENE INDAN
1MX1PE	1-METHOXY-1-PROPENE
1MBAAN	1-METHYLBENZ [A] ANTHRACENE
1MCPNE	1-METHYLCYCLOPENTENE
1MDB	1-METHYLDECYLBENZENE
1MECHX	1-METHYLETHYLCYCLOHEXANE
1MECPR	1-METHYLETHYLCYCLOPROPANE
1MEIND	1-METHYLINDAN
1MNAP	1-METHYLNAPHTHALENE
1MNB	1-METHYLNONYLBENZENE
1MPYR	1-METHYLPYRENE
1M2PEC	1-METHYL-2-(2-PROPENYL) CYCLOPENTANE
1M7MEN	1-METHYL-7-(1-METHYLETHYL) NAPHTHALENE
1MFLRE	1-METHYL-9H-FLUORENE
1NHP	1-NITROHEPTANE
1N2ONE	1-NITRO-2-OCTANONE
1OCTOL	1-OCTANOL
1PNAP	1-PHENYLNAPHTHALENE
1C3L	1-PROPANOL

1PECHX	1-PROPENYLCYCLOHEXANE
1TBCHA	1-T-BUTYLCYCLOHEXANECARBOXYLIC ACID
BEETO	1-(2-BUTOXYETHOXY) ETHANOL
11DCLE	1,1-DICHLOROETHANE
11DCE	1,1-DICHLOROETHYLENE / 1,1-DICHLOROETHENE
11C1PE	1,1-DICHLORO-1-PROPENE
11DPH	1,1-DIPHENYLHYDRAZINE
DNBEE	1,1-DI-N-BUTYLETHYLENE / 1,1-DI-N-BUTYLETHENE
DPETYN	1,1-(1,2-ETHYNEEDIYL) BIS {BENZENE}
111TCE	1,1,1-TRICHLOROETHANE
2TCLEA	1,1,1,2-TETRACHLOROETHANE
112TCE	1,1,2-TRICHLOROETHANE
TCLTFE	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE
TFDCLE	1,1,2-TRIFLUORO-1,2-DICHLOROETHANE
TCLEA	1,1,2,2-TETRACHLOROETHANE
12TMCP	1,1,2,2-TETRAMETHYLCYCLOPROPANE
113MCH	1,1,3-TRIMETHYLCYCLOHEXANE
MEBPIP	1,1'-METHYLENE BIS {PIPERIDINE}
CHO	1,2-CYCLOHEXANE OXIDE
12DBRE	1,2-DIBROMOMETHANE
12DCLB	1,2-DICHLOROBENZENE
12DBD4	1,2-DICHLOROBENZENE-D4
12DCLE	1,2-DICHLOROETHANE
12DCD4	1,2-DICHLOROETHANE-D4
12DCE	*1,2-DICHLOROETHYLENES (CIS AND TRANS ISOMERS)
12DCLP	1,2-DICHLOROPROPANE
12DMB	1,2-DIMETHYLBENZENE / O-XYLENE
DMCPDE	1,2-DIMETHYLCYCLOPENTADIENE
12DNAP	1,2-DIMETHYLNAPHTHALENE
12DPB	1,2-DIPHENYLBENZENE
12DPH	1,2-DIPHENYLHYDRAZINE
12EPCH	1,2-EPOXYCYCLOHEXENE / CYCLOHEXENE OXIDE
12EPEB	1,2-EPOXYETHYLBENZENE / STYRENE OXIDE
123TCB	1,2,3-TRICHLOROBENZENE
123CPR	1,2,3-TRICHLOROPROPANE
123TMB	1,2,3-TRIMETHYLBENZENE
123MCH	1,2,3-TRIMETHYLCYCLOHEXANE
TCB2	1,2,3,4-TETRACHLOROBENZENE
THNAP	1,2,3,4-TETRAHYDRONAPHTHALENE / TETRALIN
1234MB	1,2,3,4-TETRAMETHYLBENZENE
18018D	1,2,3,4,4A,5,8,8A-OCTAHYDRO-1,4,5,8-DIMETHANOLNAPHTHALEN-2-OL
PHYCP	1,2,3,4,5-PENTAHYDROXYCYCLOPENTANE
TCB3	1,2,3,5-TETRACHLOROBENZENE
124TCB	1,2,4-TRICHLOROBENZENE
124TMB	1,2,4-TRIMETHYLBENZENE
124MCH	1,2,4-TRIMETHYLCYCLOHEXANE
TCB1	1,2,4,5-TETRACHLOROBENZENE
13CPDO	1,3-CYCLOPENTADIONE
13DCLB	1,3-DICHLOROBENZENE
13DBD4	1,3-DICHLOROBENZENE-D4
13DCP	1,3-DICHLOROPROPANE
13DCPE	1,3-DICHLOROPROPENE
13DEB	1,3-DIETHYLBENZENE
13DFB	1,3-DIFLUOROBENZENE
13DMB	1,3-DIMETHYLBENZENE / M-XYLENE
13DMCH	1,3-DIMETHYLCYCLOHEXANE
13DNAP	1,3-DIMETHYLNAPHTHALENE
13DNB	1,3-DINITROBENZENE
13DPPR	1,3-DIPHENYLPROPANE / 1,1'-(1,3-PROPANEDIYL) BIS {BENZENE}

135TMB	1,3,5-TRIMETHYLBENZENE
135MCH	1,3,5-TRIMETHYLCYCLOHEXANE
135TNB	1,3,5-TRINITROBENZENE
14DACB	1,4-DIACETYL BENZENE
14DCLB	1,4-DICHLOROBENZENE
14DBD4	1,4-DICHLOROBENZENE-D4
14DCBU	1,4-DICHLOROBUTANE
14DFB	1,4-DIFLUOROBENZENE
14DMNP	1,4-DIHYDRO-1,4-METHANONAPHTHALENE
14DMXA	1,4-DIMETHOXYANTHRACENE
14DMCH	1,4-DIMETHYLCYCLOHEXANE
14D2EB	1,4-DIMETHYL-2-ETHYLBENZENE
14DNB	1,4-DINITROBENZENE
14DIOX	1,4-DIOXANE
14HXDE	1,4-HEXADIENE
OXAT	1,4-OXATHIANE
BIDBI	1,5-BIS (1,1-DIMETHYLETHYL)-3,3-DIMETHYLBICYCLO {3.1.0} HEXANE-2-ONE
15DNAP	1,5-DIMETHYLNAPHTHALENE
16DMIN	1,6-DIMETHYLLINDAN
16DNAP	1,6-DIMETHYLNAPHTHALENE
167TMN	1,6,7-TRIMETHYLNAPHTHALENE
18DNAP	1,8-DIMETHYLNAPHTHALENE
10CUDM	10-CYCLOPENTYLUNDECANOIC ACID, METHYL ESTER
10MUDM	10-METHYLUNDECANOIC ACID, METHYL ESTER
10OEME	10-OCTADECENOIC ACID, METHYL ESTER
10MEOH	10% METHANOL
12MTDM	12-METHYLTETRADECANOIC ACID, METHYL ESTER
13TDAM	13-TETRADECENOIC ACID, METHYL ESTER
14MPME	14-METHYLPENTADECANIC ACID, METHYL ESTER
15MHME	15-METHYLHEXADECANOIC ACID, METHYL ESTER
TCSAME	15-TETRACOSENOIC ACID, METHYL ESTER
16MHME	16-METHYLHEPTADECANOIC ACID, METHYL ESTER
17PTCE	17-PENTATRIACONTENE
DTCHBO	1.ALPHA.(E),4.ALPHA.-1-(1,4-DIHYDROXY-2,6,6-TRIMETHYL-2-CYCLOHEXEN-1-YL)-2-BUTEN-1-ONE
1NKCL	1.0 N POTASSIUM CHLORIDE
2NKCL	2.0 N POTASSIUM CHLORIDE
2A46DA	2-AMINO-4,6-DINITROANILINE
2A46DT	2-AMINO-4,6-DINITROTOLUENE
2BRHXA	2-BROMOHEXANOIC ACID
2B1CP	2-BROMO-1-CHLOROPROPANE
2C4E	2-BUTENE
2BUXEL	2-BUTOXYETHANOL
BEP	2-BUTOXYETHANOL PHOSPHATE
2BUTHF	2-BUTYLTETRAHYDROFURAN
2BNMNM	2-BUTYL-N-METHYLNORLEUCINE, METHYL ESTER
2B1OOL	2-BUTYL-1-OCTANOL
CBA	2-CHLOROBENZALDEHYDE
CBOA	2-CHLOROBENZOIC ACID
2CBMN	2-CHLOROBENZYLIDINEMALONONITRILE
2CLBP	2-CHLOROBIPHENYL
2CLEVE	2-CHLOROETHYLVINYL ETHER / (2-CHLOROETHOXY) ETHENE
2CNAP	2-CHLORONAPHTHALENE
2CLP	2-CHLOROPHENOL
2CLPD4	2-CHLOROPHENOL-D4
2CLT	2-CHLOROTOLUENE
CLVRA	2-CHLOROVINYL ARSONIC ACID
2C6MPZ	2-CHLORO-6-METHOXY-10H-PHENOTHIAZINE
2CHE1L	2-CYCLOHEXEN-1-OL

2CHE10	2-CYCLOHEXEN-1-ONE
2CHAE	2-CYCLOPENTENE-1-HEXANOIC ACID, ETHYL ESTER
2ECYBL	2-ETHYLCYCLOBUTANOL
2EC6A	2-ETHYLHEXANOIC ACID
2EP	2-ETHYLPHENOL
MPDDD	2-(META-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE
OPDDD	2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE
OPDDE	2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE
OPDDT	2-(ORTHO-CHLOROPHENYL)-2-(PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE
2B4MFU	2-(T-BUTYL)-4-METHYLFURAN
2MENAP	2-(1-METHYLETHYL) NAPHTHALENE
2CECHO	2-(2-CYANOETHYL) CYCLOHEXANONE
2MXEXL	2-(2-METHOXYETHOXY) ETHANOL / DIETHYLENEGLYCOL MONOMETHYLETHER
2BEETO	2-(2-N-BUTOXYETHOXY) ETHANOL
2PXEXL	2-(2-PHENOXYETHOXY) ETHANOL
210DMU	2,10-DIMETHYLUDECANE
BCPHCE	2,2-BIS (CHLOROPHENYL) CHLOROETHYLENE
2BEMDE	2,2-BIS (ETHYLMERCAPTO) DIETHYL ETHER
2BMMPR	2,2-BIS (METHYLMERCAPTO) PROPANE
PPDDD	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHANE
PPDDE	2,2-BIS (PARA-CHLOROPHENYL)-1,1-DICHLOROETHENE
PPDDT	2,2-BIS (PARA-CHLOROPHENYL)-1,1,1-TRICHLOROETHANE
PPTDE	2,2-BIS (PARA-CHLOROPHENYL)-2-PHENYL-1,1-DICHLOROETHENE
22DMC4	2,2-DIMETHYLBUTANE
2DMPEN	2,2-DIMETHYLPENTANE
DM1ACH	2,2-DIMETHYL-1-ACETYLCYCLOHEXANE
DMPHF	2,2-DIMETHYL-5-(1-METHYLPROPYL) TETRAHYDROFURAN
23TMP	2,2,3,3-TETRAMETHYLPENTANE
24T13P	2,2,4-TRIMETHYL-1,3-PENTANEDIOL
247HOI	2,2,4,4,7,7-HEXAMETHYLOCTAHYDRO-1H-INDENE
226TMO	2,2,6-TRIMETHYLOCTANE
TMODEO	2,2,7,7-TETRAMETHYL-4,5-OCTADIEN-3-ONE
25OCCB	2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL
26HPCB	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL
25HXCB	2,2',3,4,5,5',6-HEPTACHLOROBIPHENYL
25HPCB	2,2',3,4,5,5',6-HEPTACHLOROBIPHENYL
245PCB	2,2',4,5,5'-PENTACHLOROBIPHENYL
225TCB	2,2',5-TRICHLOROBIPHENYL
2255CB	2,2',5,5'-TETRACHLOROBIPHENYL
23DCLP	2,3-DICHLOROPHENOL
23C1PE	2,3-DICHLORO-1-PROPENE
23DMC4	2,3-DIMETHYLBUTANE
23DNAP	2,3-DIMETHYLNAPHTHALENE
23DMC5	2,3-DIMETHYLPENTANE
23DMP	2,3-DIMETHYLPHENOL
23D2HL	2,3-DIMETHYL-2-HEXANOL
TM3PL	2,3,4-TRIMETHYL-3-PENTANOL
TRMTDE	2,3,4-TRIMETHYL-4-TETRADECENE
2345CB	2,3,4,5-TETRACHLOROBIPHENYL
2346CP	2,3,4,6-TETRACHLOROPHENOL
235TMD	2,3,5-TRIMETHYLDECANE
2356CP	2,3,5,6-TETRACHLOROPHENOL
236TMN	2,3,6-TRIMETHYLNAPHTHALENE
237TMO	2,3,7-TRIMETHYLOCTANE
TCDD	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN / DIOXIN

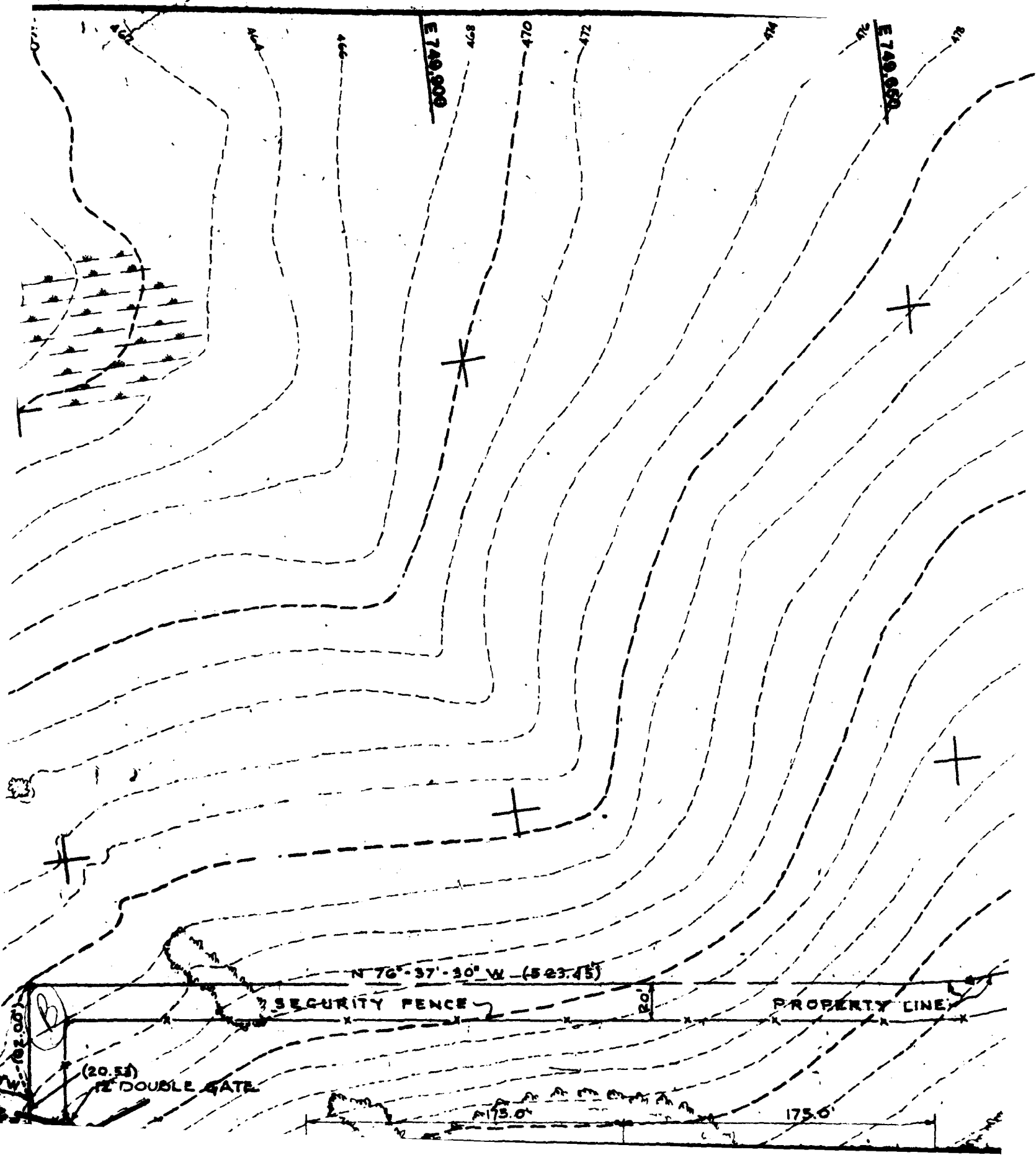
24DCLP	2,4-DICHLOROPHENOL
24D	2,4-DICHLOROPHENOXYACETIC ACID
DBATTS	2,4-DIHYDROXYBENZOIC ACID, TRIS-TRIMETHYSILYL
24DMD	2,4-DIMETHYLDECANE
24DMHX	2,4-DIMETHYLHEXANE
24DMC5	2,4-DIMETHYLPENTANE
24DMPN	2,4-DIMETHYLPHENOL
24M2PL	2,4-DIMETHYL-2-PENTANOL
24DNP	2,4-DINITROPHENOL
24NPD3	2,4-DINITROPHENOL-D3
24DNT	2,4-DINITROTOLUENE
245TCP	2,4,5-TRICHLOROPHENOL
245T	2,4,5-TRICHLOROPHENOXYACETIC ACID
246MPY	2,4,6-TRIMETHYLPYRIDINE
246TBP	2,4,6-TRIBROMOPHENOL
246TCA	2,4,6-TRICHLOROANILINE
246TCP	2,4,6-TRICHLOROPHENOL
246TMO	2,4,6-TRIMETHYLOCTANE
ATNBA	2,4,6-TRINITROBENZALDEHYDE
246TNP	2,4,6-TRINITROPHENOL / PICRIC ACID
246TNR	2,4,6-TRINITRORESORCINOL / STYPNIC ACID
246TNT	2,4,6-TRINITROTOLUENE
247TMO	2,4,7-TRIMETHYLOCTANE
24DCB	2,4'-DICHLOROBIPHENYL
25C14D	2,5-CYCLOHEXADIEN-1,4-DIONE
25DCLP	2,5-DICHLOROPHENOL
25DMPA	2,5-DIMETHYLPHENANTHRENE
25DMP	2,5-DIMETHYLPHENOL
25DTHF	2,5-DIMETHYLTETRAHYDROFURAN
256TMD	2,5,6-TRIMETHYLDECANE
26DCLP	2,6-DICHLOROPHENOL
26DMO	2,6-DIMETHYLOCTANE
26DMP	2,6-DIMETHYLPHENOL
26DMST	2,6-DIMETHYLSTYRENE
26DMUD	2,6-DIMETHYLUNDECANE
26DNA	2,6-DINITROANILINE
26DNT	2,6-DINITROTOLUENE
DTB4C	2,6-DI-TERT-BUTYL-4-CRESOL
26DBMP	2,6-DI-T-BUTYL-4-METHYLPHENOL
2TMHPD	2,6,10,14-TETRAMETHYLHEPTADECANE
2TMPD	2,6,10,14-TETRAMETHYLPENTADECANE
HMTCHE	2,6,10,15,19,23-HEXAMETHYL-2,6,10,14,18,22-TETRACOSAHEXAENE
2611MD	2,6,11-TRIMETHYLDODECANE
27DNAP	2,7-DIMETHYLNAPHTHALENE
27DMO	2,7-DIMETHYLOCTANE
29DMUD	2,9-DIMETHYLUNDECANE
3BPETH	3-BUTENYLPENTYL ETHER
3CLP	3-CHLOROPHENOL
3CLT	3-CHLOROTOLUENE
3C1C3E	3-CHLORO-1-PROPENE / ALLYL CHLORIDE
3CHXD	3-CYCLOHEXYLDECANE
3EP	3-ETHYLPHENOL
3EHXDE	3-ETHYL-1,4-HEXADIENE
3E22MP	3-ETHYL-2,2-DIMETHYLPENTANE / 3-(T-BUTYL)-PENTANE
3E25DH	3-ETHYL-2,5-DIMETHYL-3-HEXENE
3EEBOD	3-ETHYL-5-(2-ETHYLBUTYL) OCTADECANE
3HXE2O	3-HEXEN-2-ONE
3HDMPT	3-HYDROXY-2,7-DIMETHYL-4-{3H}-PTERIDINONE
3MXIMZ	3-METHOXYIMIDAZOLE
3MXT	3-METHOXYTOLUENE

3M2C10	3-METHOXY-2-CYCLOPENTEN-1-ONE
3MBP	3-METHYLBIPHENYL
MBADOE	3-METHYLBUTANOIC ACID, 3,7-DIMETHYL-2,4,6-OCTATRIENYL ESTER
3MCHRY	3-METHYLCHRYSENE
3MC6	3-METHYLHEXANE
3MEPEN	3-METHYLPENTANE
3MPANR	3-METHYLPHENANTHRENE
3MP	3-METHYLPHENOL / 3-CRESOL
3MUND	3-METHYLUNDECANE
3MIPL	3-METHYL-1-PENTANOL
3M2CHO	3-METHYL-2-CYCLOHEXEN-1-ONE
3M2HXL	3-METHYL-2-HEXANOL
3M2C5E	3-METHYL-2-PENTENE
3M5PNN	3-METHYL-5-PROPYLNONANE
3NANIL	3-NITROANILINE
3NT	3-NITROTOLUENE
3OCTOL	3-OCTANOL
3OPPAE	3-OXO-3-PHENYLPROPANOIC ACID, ETHYL ESTER
EDBDAS	3-PHENYLPROPANOL
3PC3AC	3-PHENYLPROPANOYL CHLORIDE / HYDROCINNAMYL CHLORIDE
3PT	3-PROPYLTOLUENE
BZ	3-QUINUCLIDINYL BENZILATE
3CMCH	3-(CHLOROMETHYL) CYCLOHEXENE
3HDMPL	3-(HYDROXYMETHYL)-4,4-DIMETHYLPENTANAL
3TBUP	3-(T-BUTYL) PHENOL
DMPCHE	3-(2,2-DIMETHYLPROPOXY) CYCLOHEXENE
33DMHX	3,3-DIMETHYLHEXANE
33DMPN	3,3-DIMETHYLPENTANE
TMHPDO	3,3,6-TRIMETHYL-1,5-HEPTADIEN-4-ONE
33DCBD	3,3'-DICHLOROBENZIDINE
34CBD6	3,3',4,4'-TETRACHLOROBIPHENYL-D6
34DCLP	3,4-DICHLOROPHENOL
DHBZPY	3,4-DIHYDRO-2H-1-BENZOPYRAN
34DMP	3,4-DIMETHYLPHENOL
34D1DE	3,4-DIMETHYL-1-DECENE
3EE2BO	3,4-EPOXY-3-ETHYL-2-BUTANONE
344TPE	3,4,4-TRIMETHYL-2-PENTENE
345T1H	3,4,5-TRIMETHYL-1-HEXENE
36TMPA	3,4,5,6-TETRAMETHYLPHENANTHRENE
35DMF	3,5-DIMETHYLPHENOL
3DCHEO	3,5-DIMETHYL-2-CYCLOHEXEN-1-ONE
35M3HL	3,5-DIMETHYL-3-HEXANOL
35DNA	3,5-DINITROANILINE
35DNP	3,5-DINITROPHENOL
35DNT	3,5-DINITROTOLUENE
TMTCON	3,5,24-TRIMETHYLTETRACONTANE
TMHXL	3,5,5-TRIMETHYL-1-HEXANOL
3TCHEO	3,5,5-TRIMETHYL-2-CYCLOHEXEN-1-ONE
36DF9O	3,6-DICHLOROFLUOREN-9-ONE
37DMNN	3,7-DIMETHYLNONANE
38DMUD	3,8-DIMETHYLUNDECANE
4AMORP	4-ACETYLMORPHOLINE
4A35DT	4-AMINO-3,5-DINITROTOLUENE
4BFB	4-BROMOFLUOROBENZENE
4BRPPE	4-BROMOPHENYLPHENYL ETHER
4B3P2O	4-BUTOXY-3-PENTEN-2-ONE
4CANIL	4-CHLOROANILINE
4CCHXL	4-CHLOROCYCLOHEXANOL
CPMS	4-CHLOROPHENYLMETHYL SULFIDE
CPMSO2	4-CHLOROPHENYLMETHYL SULFONE

CPMSO	4-CHLOROPHENYLMETHYL SULFOXIDE
4CLPPE	4-CHLOROPHENYLPHENYL ETHER
4CLT	4-CHLOROTOLUENE
4CL2C	4-CHLORO-2-CRESOL / 2-METHYL-4-CHLOROPHENOL
4CL3C	4-CHLORO-3-CRESOL / 3-METHYL-4-CHLOROPHENOL
4C3MBE	4-CHLORO-3-METHYL-1-BUTENE
PCYMEN	4-CYMENE / 4-(1-METHYLETHYL) TOLUENE
4E2OCE	4-ETHYL-2-OCTENE
4ETMHP	4-ETHYL-2,2,6,6-TETRAMETHYLHEPTANE
4FANIL	4-FLUOROANILINE
4FT	4-FLUOROTOLUENE
4HAZOB	4-HYDROXYAZOBENZENE
4HYBA	4-HYDROXYBENZALDEHYDE
4H3MBA	4-HYDROXY-3-METHOXYBENZALDEHYDE / VANILLIN
4H35BA	4-HYDROXY-3,5-DIMETHOXYBENZALDEHYDE
4IOMQU	4-IODOMETHYLQUINULCIDINE
4MXCHL	4-METHOXYCYCLOHEXANOL
4MXP	4-METHOXYPHENOL
4MBSA	4-METHYLBENZENE SULFONAMIDE
4MBP	4-METHYLBIPHENYL
4MDBFU	4-METHYLDIBENZOFURAN
4MC7	4-METHYLHEPTANE
4MPANR	4-METHYLPHENANTHRENE
4MP	4-METHYLPHENOL / 4-CRESOL
4MPYR	4-METHYLPYRENE
4MMBHE	4-METHYL-1-(1-METHYLETHYL)-BICYCLO {3.1.0} HEX-2-ENE
4M2PPL	4-METHYL-2-PROPYL-1-PENTANOL
4MFLRE	4-METHYL-9H-FLUORENE
4NANIL	4-NITROANILINE
4NP	4-NITROPHENOL
TSAHPE	4-TOLUENESULFONIC ACID, HEPTYL ESTER
4TBU2C	4-T-BUTYL-2-CRESOL / 2-METHYL-4-(T-BUTYL)-PHENOL
4TOP	4-T-OCTYLPHENOL
41MEHP	4-(1-METHYLETHYL) HEPTANE
4MENPA	4-(1-METHYLETHYL)-N-PHENYLANILINE
44DCBZ	4,4'-DICHLOROBENZOPHENONE
44DFBZ	4,4'-DIFLUOROBENZOPHENONE
44DMUD	4,4-DIMETHYLUNDECANE
4DM2PL	4,4-DIMETHYL-2-PENTANOL
44DMPE	4,4-DIMETHYL-2-PENTENE
DBTSPY	4,5-DIMETHYL-2,6-BIS (TRIMETHYLSILOXY) PYRIMIDINE
HXHMAZ	4,5,6,7,8,8A-HEXAHYDRO-8A-METHYL-2-{1H}-AZULENONE
46DN2C	4,6-DINITRO-2-CRESOL / 2-METHYL-4,6-DINITROPHENOL
468T1N	4,6,8-TRIMETHYL-1-NONENE
47DMUD	4,7-DIMETHYLUNDECANE
48DMHD	4,8-DIMETHYLHENDECANE
5CL2C	5-CHLORO-2-CRESOL / 2-METHYL-5-CHLOROPHENOL
5E2MHP	5-ETHYL-2-METHYLHEPTANE
5E5MD	5-ETHYL-5-METHYLDECANE
MBZCAC	5-METHYLBENZO {C} ACRIDINE
5M2HXO	5-METHYL-2-HEXANONE
5M5HAL	5-METHYL-5-HYDROXYHEXANOIC ACID LACTONE
5N2OL	5-NORBORNEN-2-OL
5PTRID	5-PROPYLTRIDECANE
DCMBF	5,7-DICHLORO-2-METHYLBENZOFURAN
50H50A	50% HEXANE - 50% ACETONE
50M50A	50% METHYLENE CHLORIDE - 50% ACETONE
50WMAN	50% WATER - 25% METHANOL - 25% ACETONITRILE
NAOHME	50% 1M NAOH - 50% METHANOL
6CL3C	6-CHLORO-3-CRESOL / 3-METHYL-6-CHLOROPHENOL

6E6MFV	6-ETHYL-6-METHYLFULVENE
6MEPUR	6-METHYLPURINE
6MTRID	6-METHYLTRIDECANE
6M3HPL	6-METHYL-3-HEPTANOL
6TBU2C	6-T-BUTYL-2-CRESOL / 2-METHYL-6-(T-BUTYL) PHENOL
HYNB	7-HYDROXYNORBORNADIENE
7MTRID	7-METHYLTRIDECANE
C12AMM	8-METHYLDECANOIC ACID, METHYL ESTER
8MNNDL	8-METHYL-1,8-NONANEDIOL
CARBAZ	9H-CARBAZOLE
ANTRCN	9-ANTHRACENECARBONITRILE
9FLENO	9-FLUORENONE
9MXANT	9-METHOXYANTHRACENE
9MBAAN	9-METHYLBENZ [A] ANTHRACENE
DHDMAC	9,10-DIHYDRO-9,9-DIMETHYLACRIDINE

*DENOTES GENERIC TEST NAME



E 749.909

E 749.950

N 76°-37'-30" W (523.45)

SECURITY FENCE

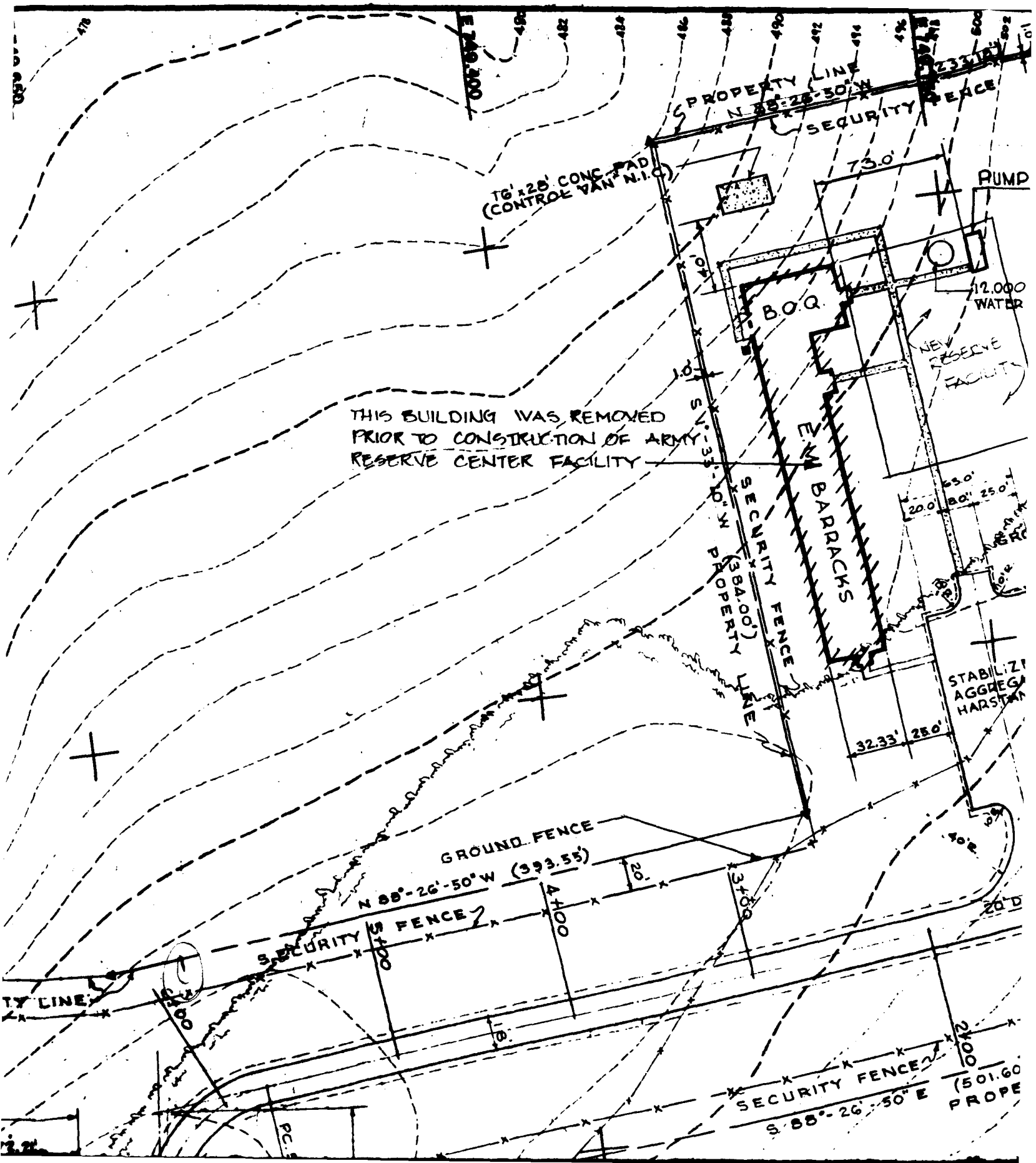
PROPERTY LINE

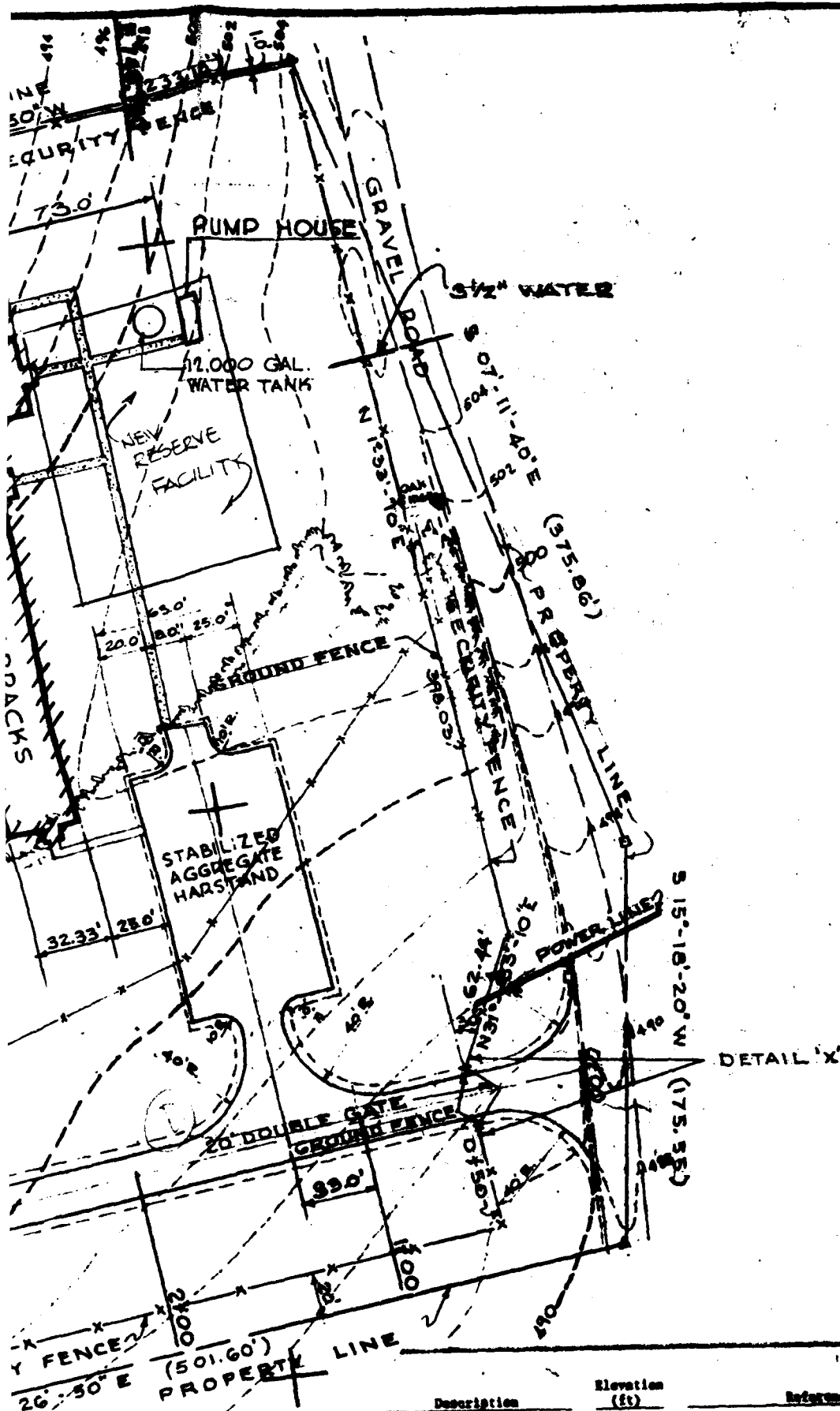
(20.53)
12' DOUBLE GATE

100.20

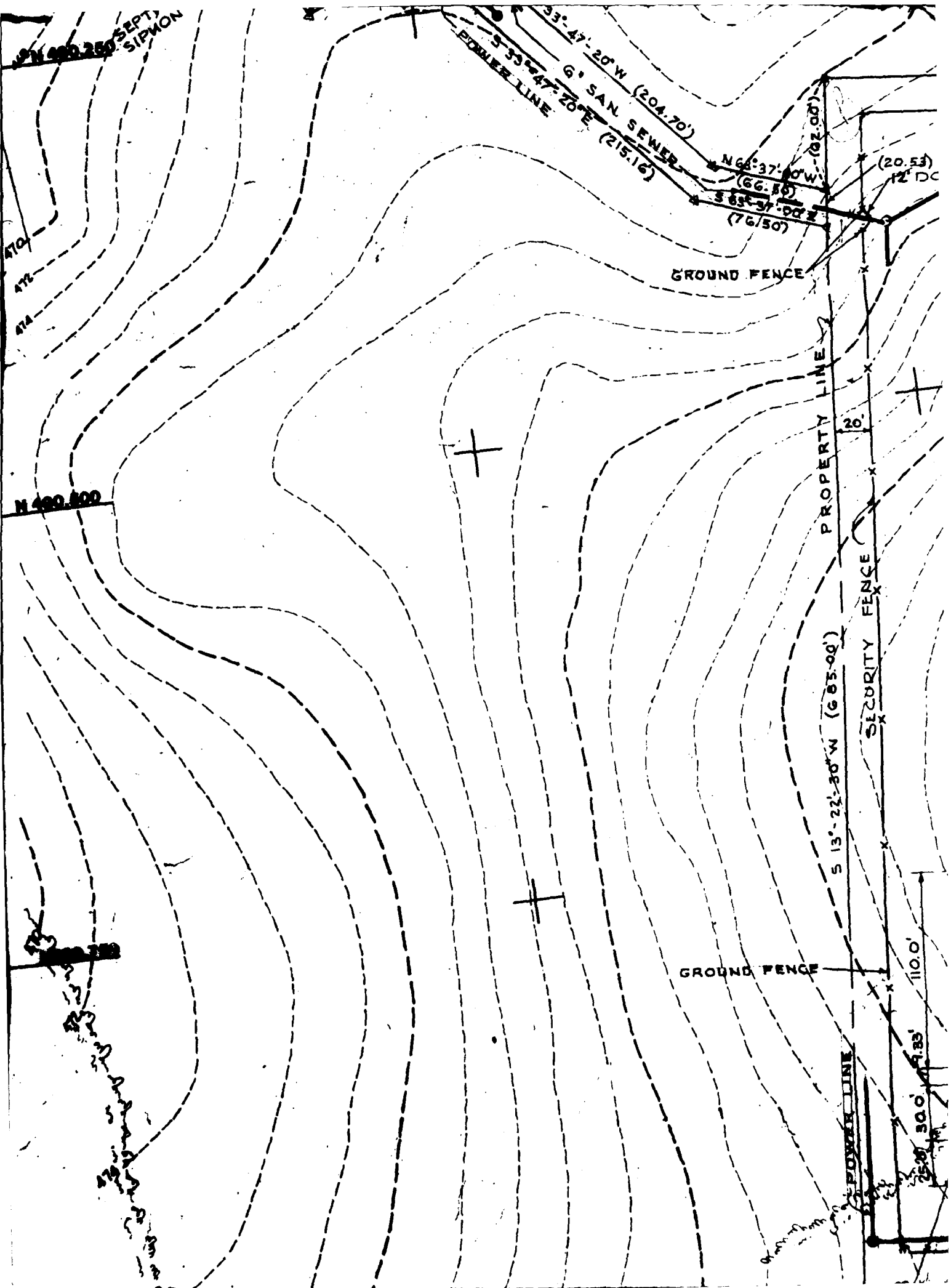
175.0'

175.0'





Description	Elevation (ft)	Reference	Stick Up Above End (ft)	Notes
CNL-1	518.49	Top PVC casing	2.13	8498005 8749504



N 490.250 SEPT. SIPWON

470
472
474

N 490.400

33-47-20 W (204.70)
S 33° 47' 20" W (204.70)
G° SAN SEWER
EOMER LINE

N 68° 37' 00" W (66.50)
S 63° 37' 00" E (76.50)

(62.00)

(20.53)
12' DC

GROUND FENCE

PROPERTY LINE

SECURITY FENCE

S 13° 22' 30" W (665.00)

GROUND FENCE

POWER LINE

110.0'

50.0'

11.83'

N 76°-37'-30" W (523.45)

SECURITY FENCE

PROPERTY LINE

(20.53)
12" DOUBLE GATE

175.0'

175.0'

72.21'

48.77'

54.02'

72.21'

48.77'

54.02'

72.21'

GNL-3

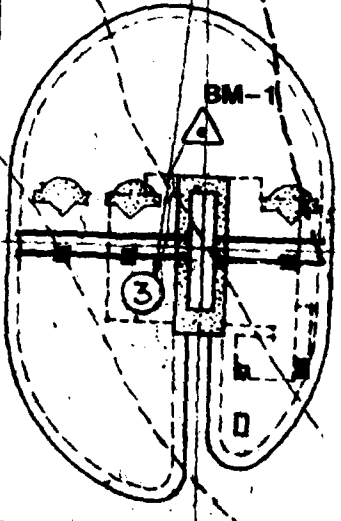
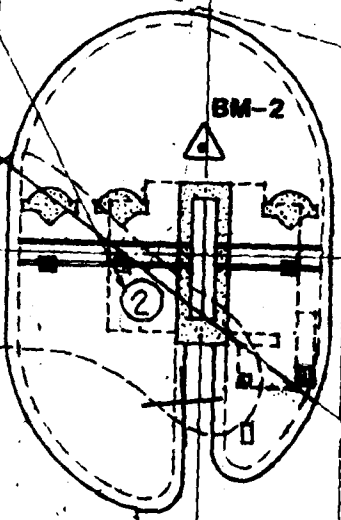
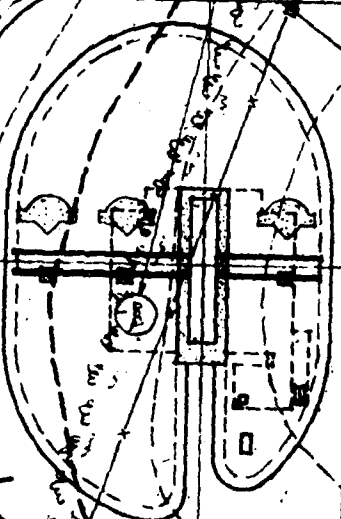
UNDERGROUND MISSILE STORAGE STRUCTURES

STONE STATION

BM-2

BM-1

PROPERTY LINE
SECURITY FENCE
5 13°-22'-30" W (683.00)



GNL-SS-4

GNL-2

EARTH MOUND

CONC. TRANSFORMER PAD

GNL-SS-3

FF 512.33

1,000 GAL. UNDERGROUND FUEL OIL STORAGE TANK

OPERATOR'S SHELTER

E. W. DAVITT

CONC. TRANSFORMER PAD

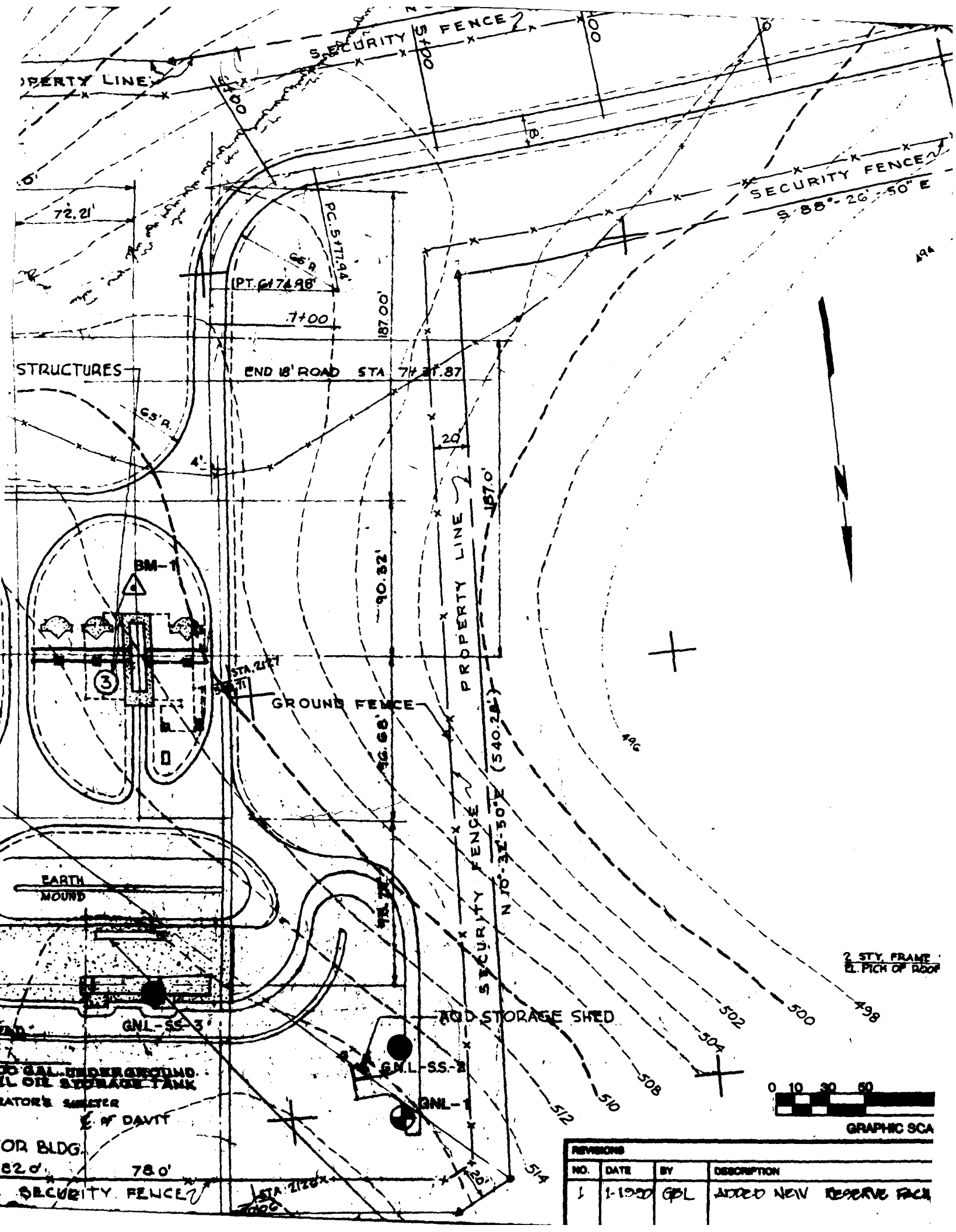
GENERATOR BLDG.

MISSILE ASSEMBLY & TEST BUILDING

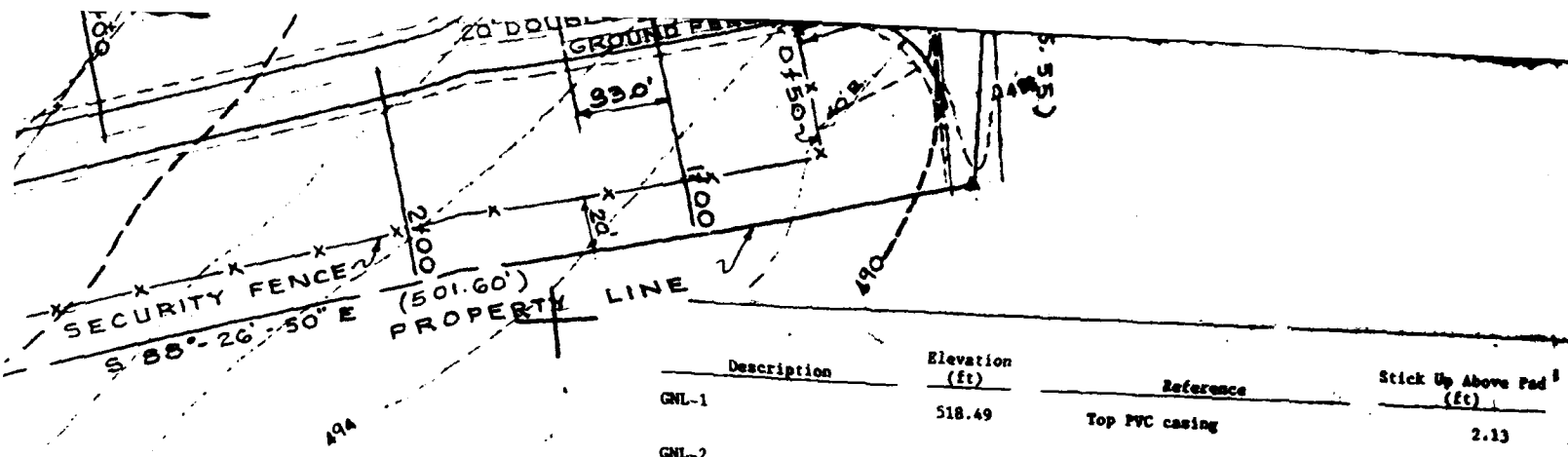
62.0'

78.0'

SECURITY FENCE



REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	1-1957	GFL	ADDED NEW RESERVE FENCE



Description	Elevation (ft)	Reference	Stick Up Above Pad (ft)
GNL-1	518.49	Top PVC casing	2.13
GNL-2	505.91	Top PVC casing	2.17
GNL-3	506.52	Top PVC casing	2.23
GNL-4	467.22	Top PVC casing	2.42
GNL SS-1	445.00	Ground surface	--
GNL SS-2	515.90	Ground surface	--
GNL SS-3	514.89	Ground surface	--
GNL SS-4	505.78	Ground surface	--
GNL SS-5	469.70	Ground surface	--
GNL SW-1	445.00	Ground surface	--

Description	Elevation (ft)	Reference	Stick Up Above Pad (ft)	Cod
BM 1	--	Paint mark on concrete	--	N45 E74
BM 2	--	Paint mark on concrete	--	N45 E74
Finished Floor of Transformer Generator Bldg.	512.33	Generator bldg. finished floor	--	--
Finished Floor of Chlorination House	469.48	Finished floor of Chlorination House	--	--

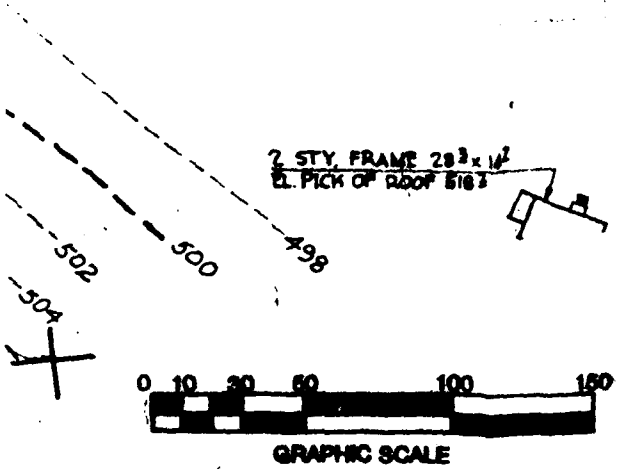
GENERAL NOTES:

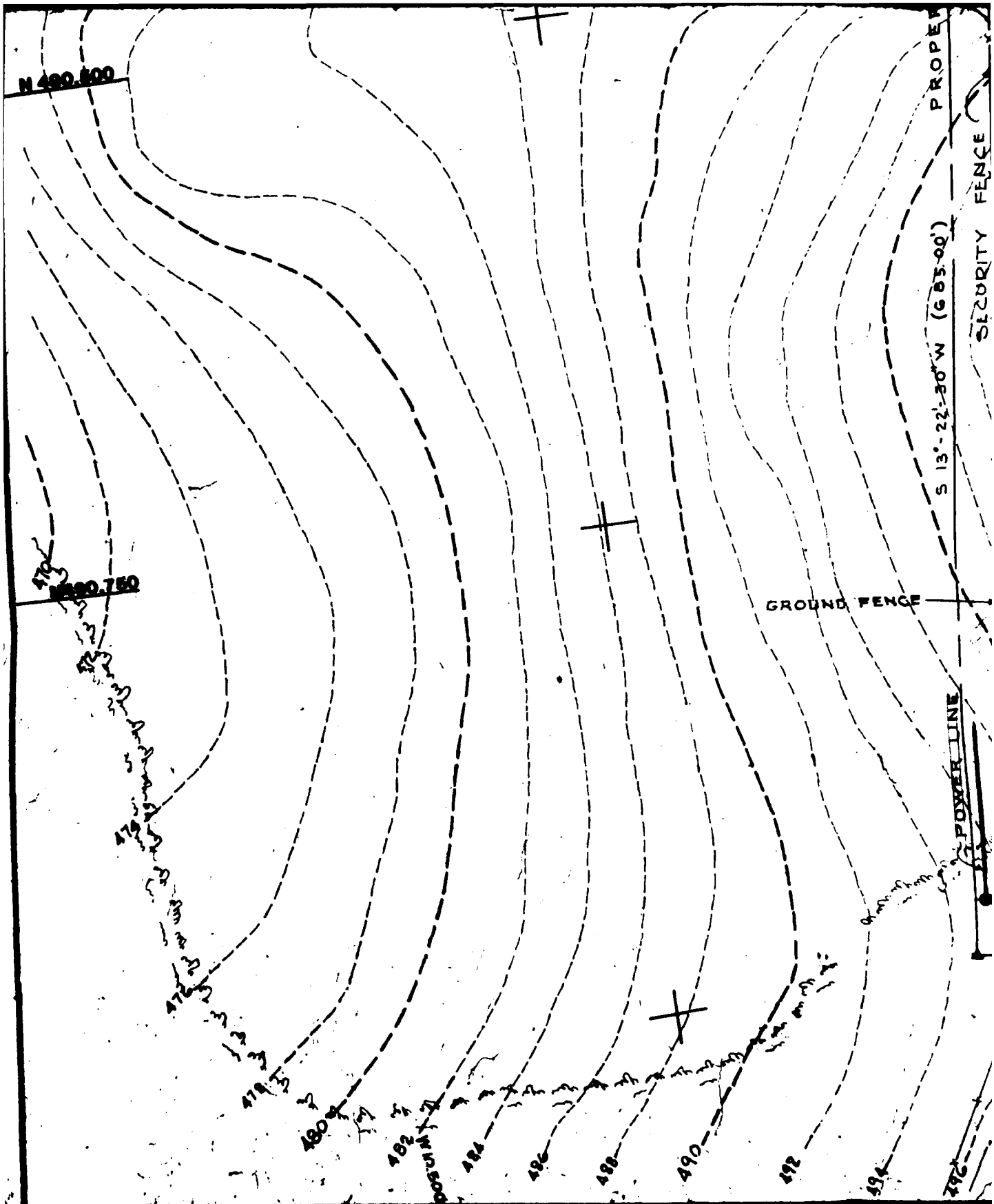
1. Drawing based on Army Corps of Engineers, Washington District, Washington, D.C., Master Plan, Information Maps, Detail Boundary Map, Drawing Number 18-02-67.
2. Coordinates established by EA Survey May 1989. Based on State Planar Coordinate System. Site was established from off site BM A572 and BM 17232 using Washington Suburban Sanitary Commis. Datum.
3. All elevations refer to Mean Sea Level Datum.
4. Finished floor elevation of generator building was used to establish elevations of those well launch site. Finished floor elevation of chlorination house was used to establish elevation and SS-5.
5. GNL designation refers to Gaithersburg NIKK Launch.

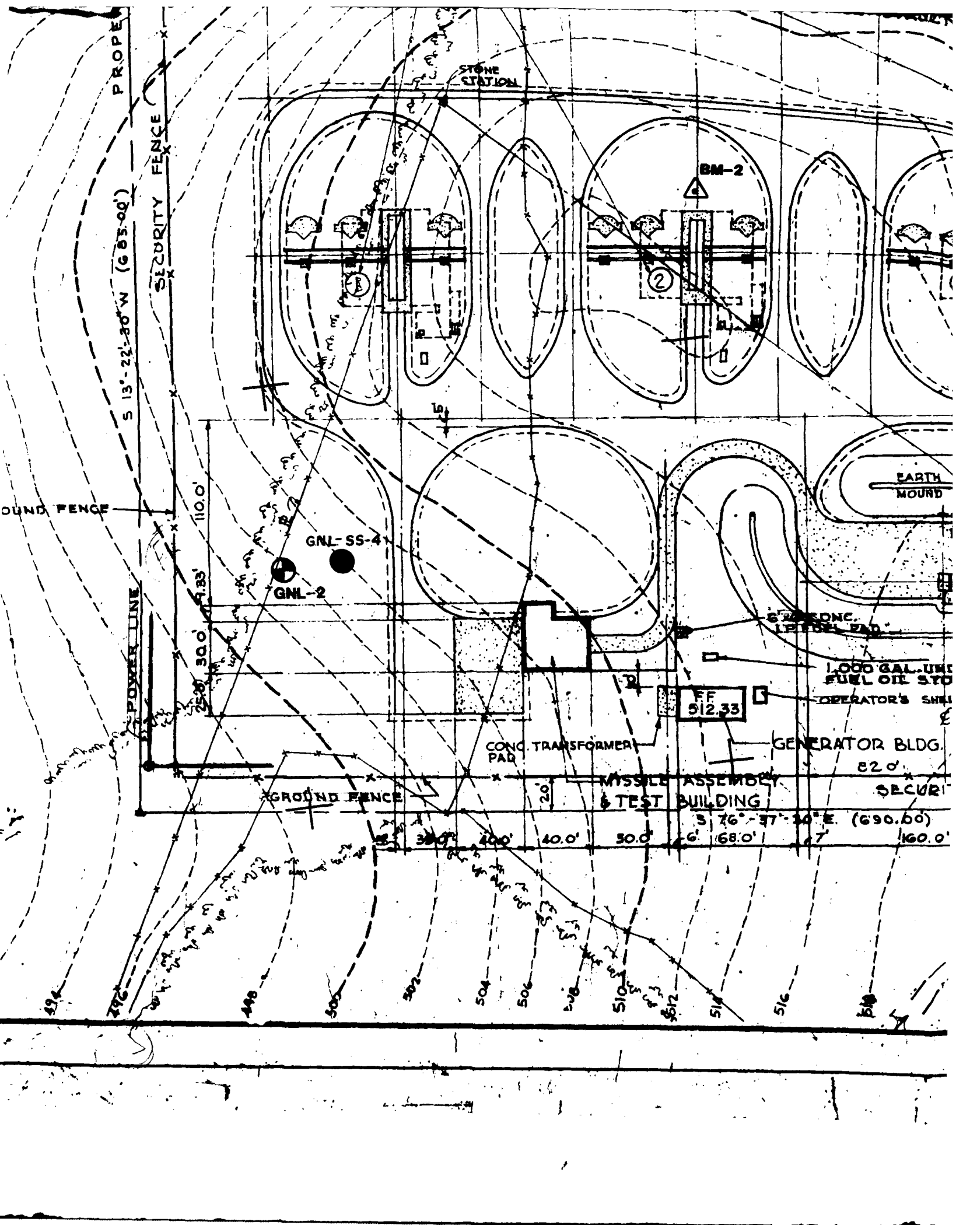
LEGEND

- SOIL SAMPLE
- SURFACE WATER
- ⊕ MONITORING WELL
- △ BENCH MARK

2 STY. FRAME 283 x 142
E. PICK OF ROOF 5183







PROPE
S 13°-22'-30"W (693.00')

SECURITY FENCE

STONE STATION

BM-2

GROUND FENCE

GNL-SS-4

GNL-2

EARTH MOUND

POWER LINE

110.0'
193.3'
30.0'

CONC. LITTON PAD

1,000 GAL. LIQUID FUEL OIL STORAGE

OPERATOR'S SHED

FF 512.33

CONC. TRANSFORMER PAD

GENERATOR BLDG.

GROUND FENCE

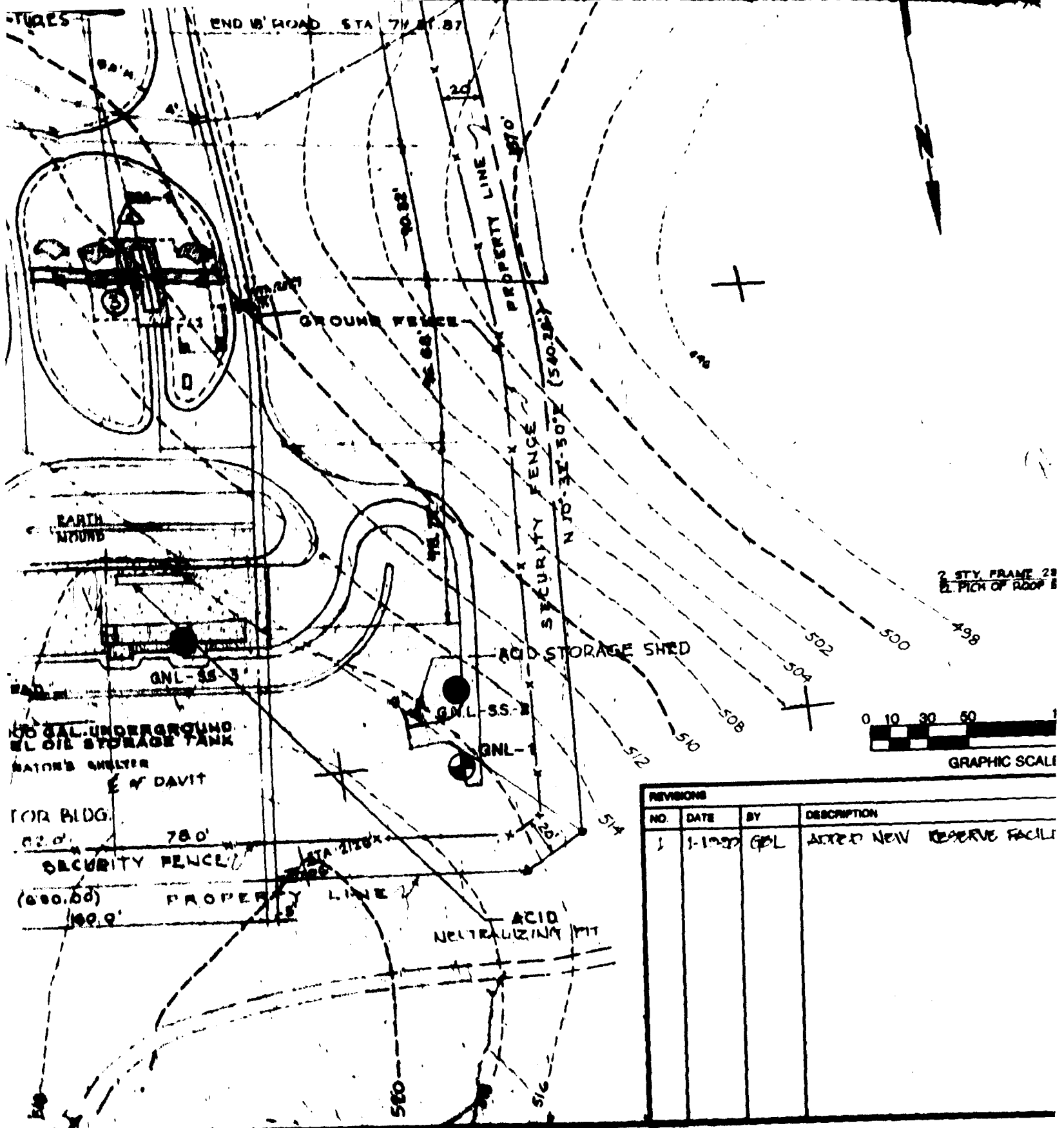
MISSILE ASSEMBLY & TEST BUILDING

SECURITY FENCE

S 76°-37'-30"E (690.00')

300' 400' 40.0' 50.0' 6' 68.0' 27' 160.0'

494 496 498 500 502 504 506 508 510 512 514 516 518



2. STY. FRAME 28
 2. PICK OF ROOF E



REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	1-19-97	GPL	ADDED NEW RESERVE FACILI

GNL SS-4	505.78	Ground surface	--	E749724 N490859 E750114
GNL SS-5	469.70	Ground surface	--	N490089 E750460
GNL SW-1	445.00	Ground surface	--	N490830 E750400

Description	Elevation (ft)	Reference	Stick Up Above Pad (ft)	Coordinates
BM 1	--	Paint mark on concrete	--	N490680 E749789
BM 2	--	Paint mark on concrete	--	N490662 E749884
Finished Floor of Transformer Generator Bldg.	512.33	Generator bldg. finished floor	--	
Finished Floor of Chlorination House	469.48	Finished floor of Chlorination House	--	

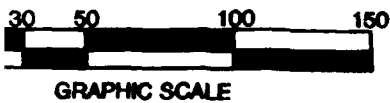
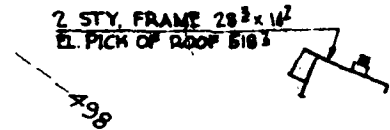
GENERAL NOTES:

- Drawing based on Army Corps of Engineers, Washington District, Washington, D.C., Master Plan, Basic Information Maps, Detail Boundary Map, Drawing Number 18-02-67.
- Coordinates established by EA Survey May 1989. Based on State Planar Coordinate System. Site control was established from off site BM A572 and BM 17232 using Washington Suburban Sanitary Commission 1973 Datum.
- All elevations refer to Mean Sea Level Datum.
- Finished floor elevation of generator building was used to establish elevations of those wells at the launch site. Finished floor elevation of chlorination house was used to establish elevations of GNL-4 and SS-5.
- GNL designation refers to Gaithersburg NIKÉ Launch.

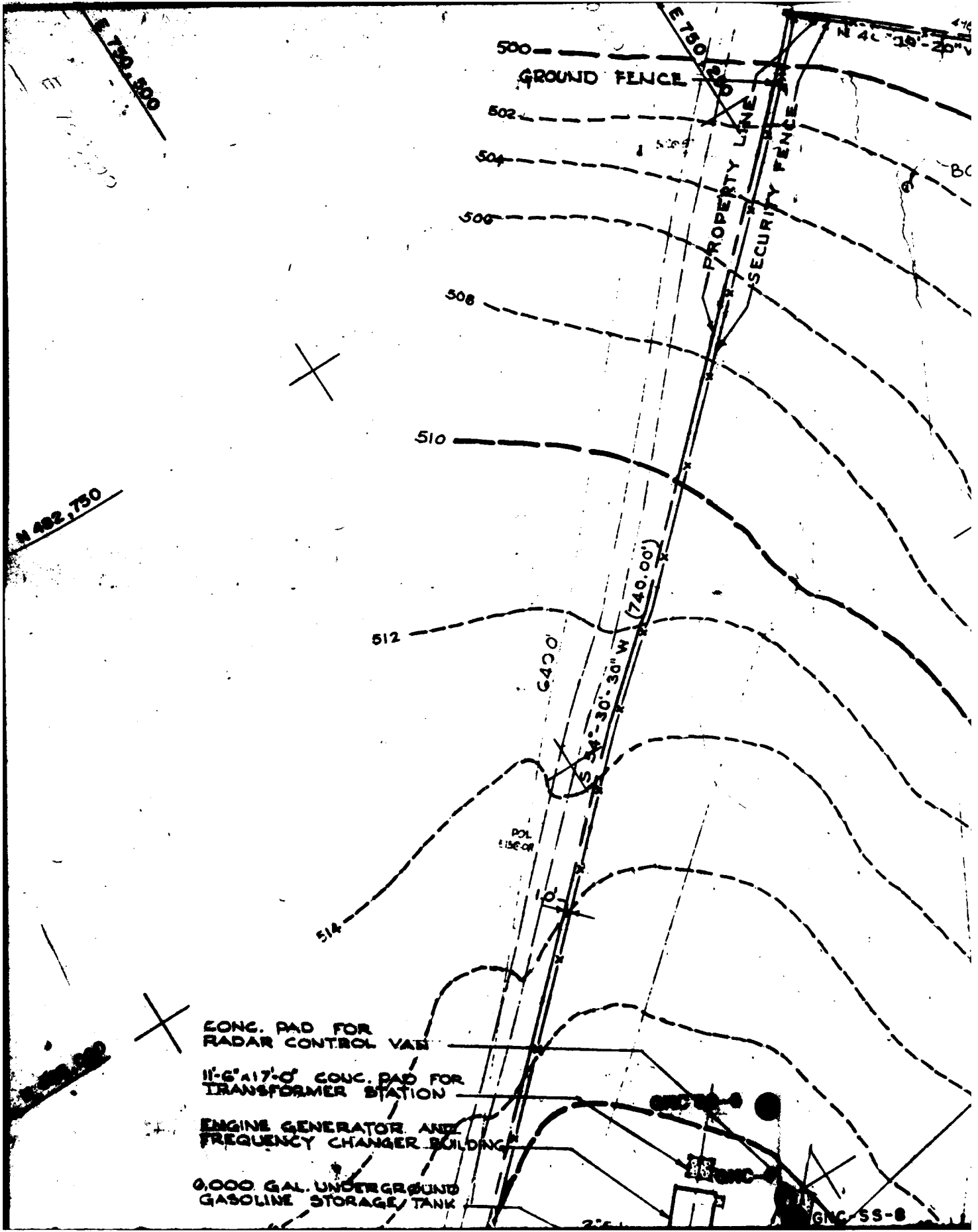
LEGEND

- SOIL SAMPLE
- ◐ SURFACE WATER
- ⊕ MONITORING WELL
- △ BENCH MARK

2 STY. FRAME 28' x 14'
EL. PICH OF ROOF 516'



RESERVE FACILITY	GAITHERSBURG NIKE LAUNCH GAITHERSBURG, MD.		
	SITE MAP		
	DRAWN PMS CHECKED SAS PROJECT ENGINEER		DATE OCT. 6, 1989 SCALE 1" = 100' PROJECT NO. 18-02-67



500 - - - - -
GROUND FENCE

502 - - - - -

504 - - - - -

506 - - - - -

508 - - - - -

510 - - - - -

512 - - - - -

514 - - - - -

PROPERTY LINE

SECURITY FENCE

N 42° 30'

E 750

N 42° 30' 20" V

G 400'

2 34° 30' 30" W (740.00')

POL
EISECR

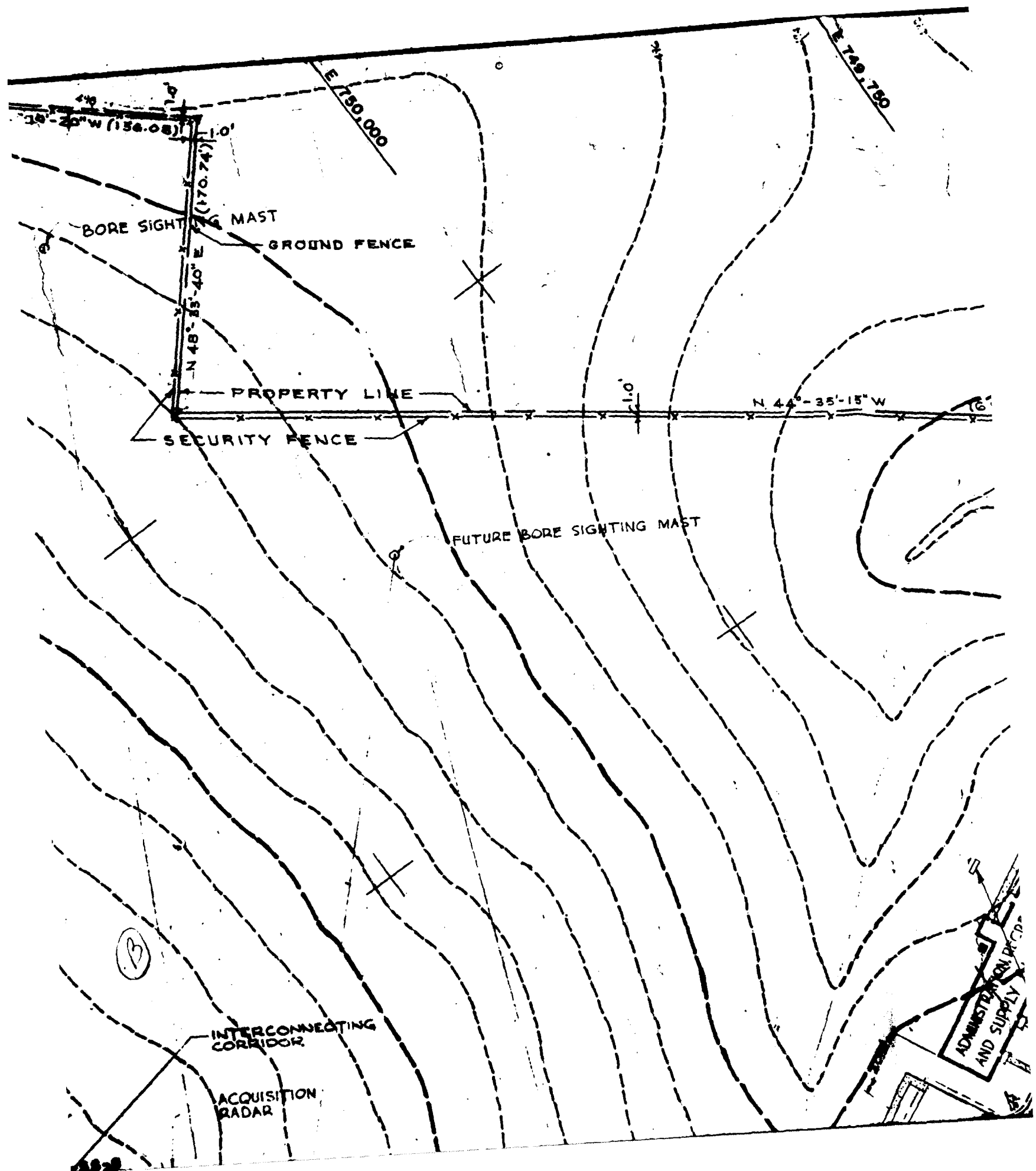
CONC. PAD FOR
RADAR CONTROL VAN

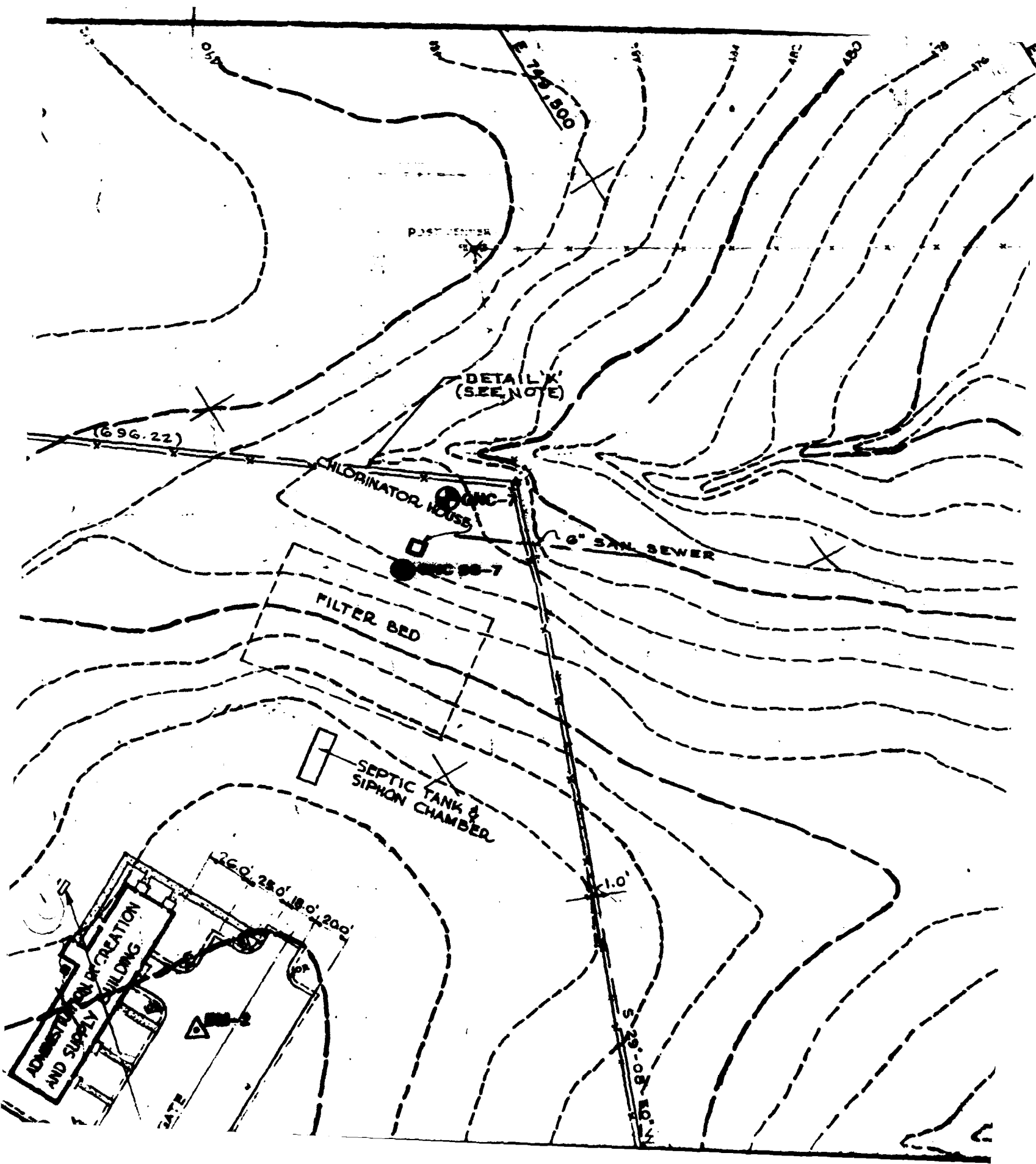
11'-6" x 17'-0" CONC. PAD FOR
TRANSFORMER STATION

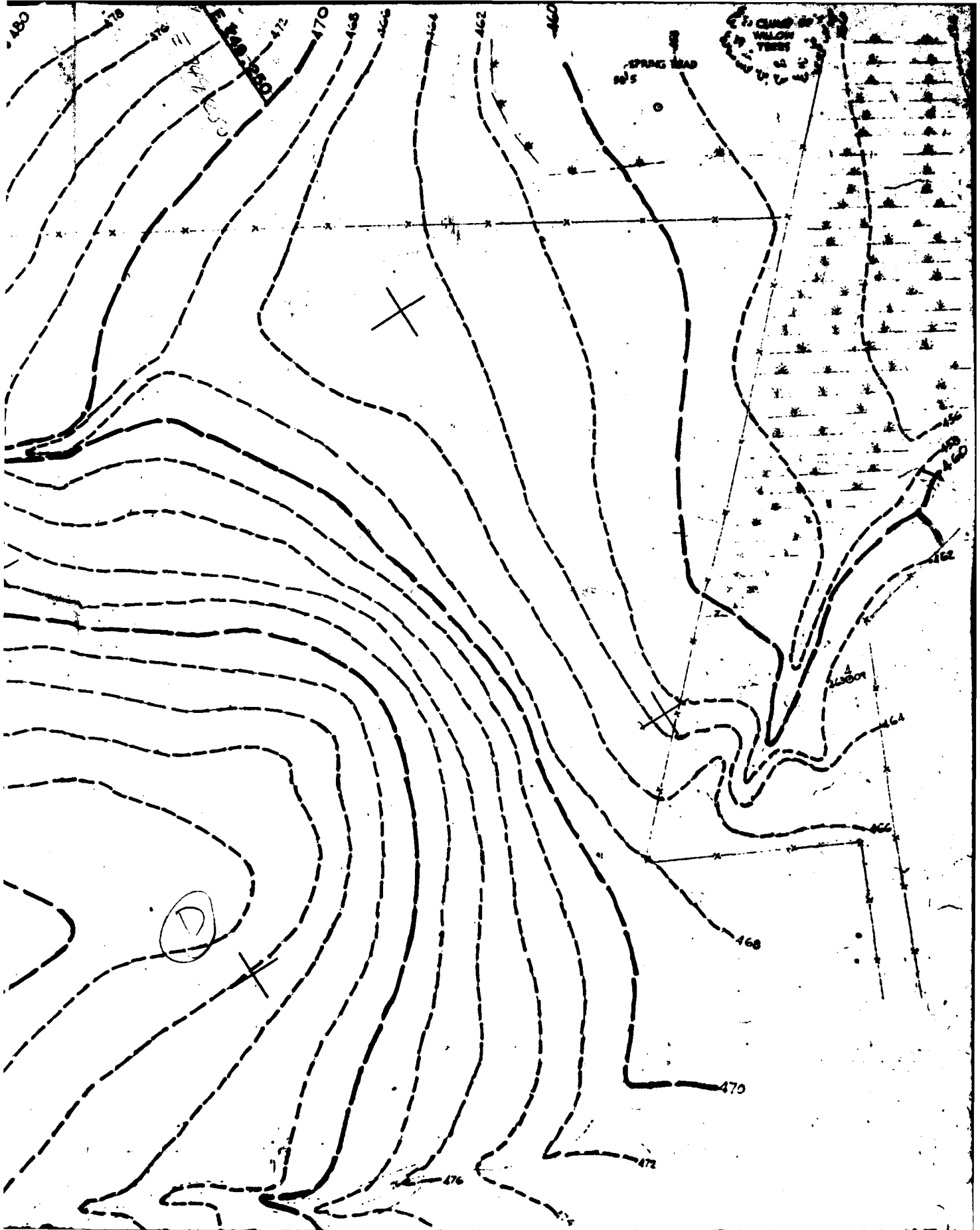
ENGINE GENERATOR AND
FREQUENCY CHANGER BUILDING

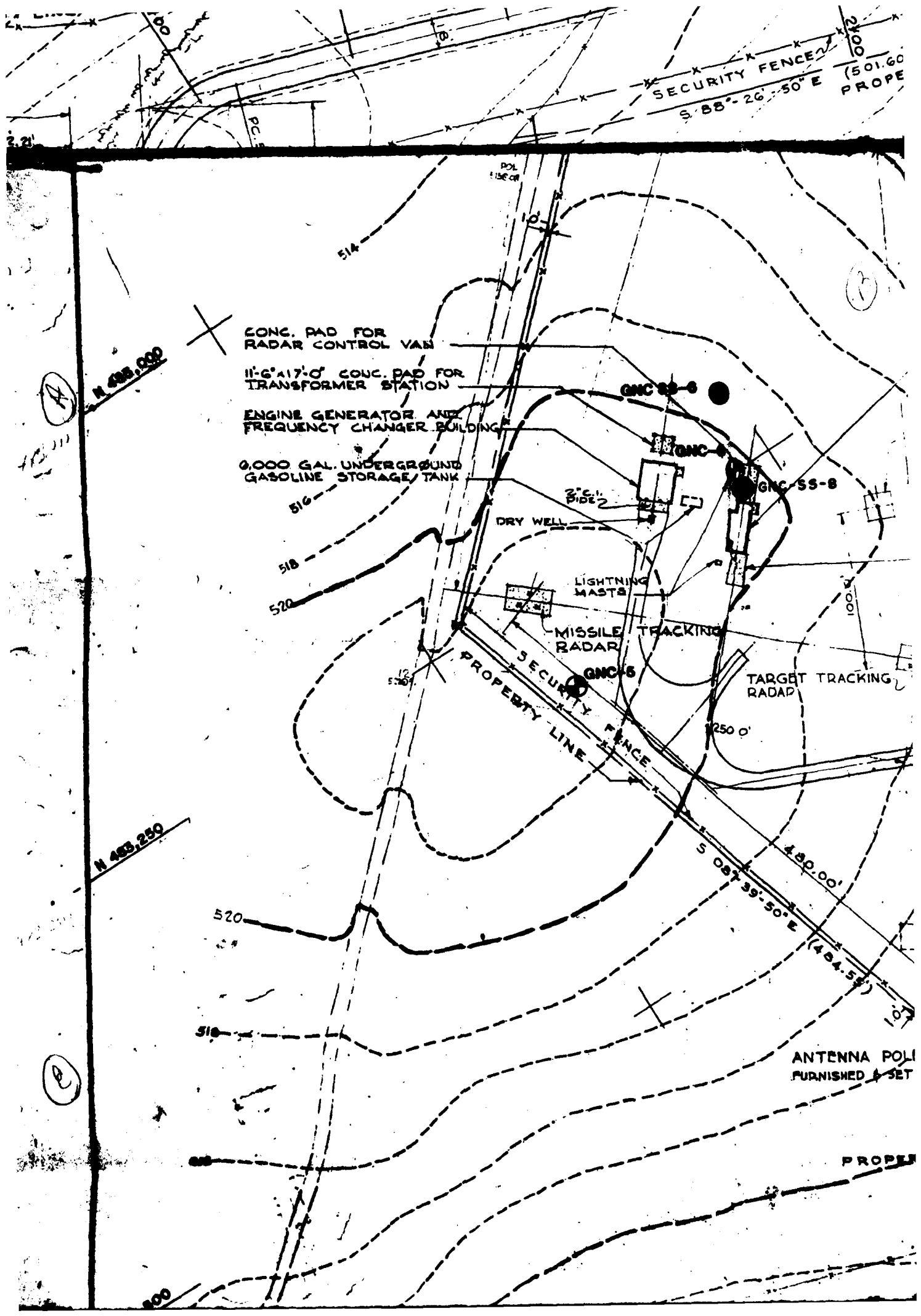
9,000 GAL. UNDERGROUND
GASOLINE STORAGE TANK

GNC SS-8









SECURITY FENCE
S 88°-26'-50" E (501.60 PROPE

CONC. PAD FOR
RADAR CONTROL VAN

11'-6" x 17'-0" CONC. PAD FOR
TRANSFORMER STATION

ENGINE GENERATOR AND
FREQUENCY CHANGER BUILDING

9,000 GAL. UNDERGROUND
GASOLINE STORAGE TANK

DRY WELL

LIGHTNING
MASTS

MISSILE TRACKING
RADAR

TARGET TRACKING
RADAR

SECURITY FENCE
PROPERTY LINE

ANTENNA POLI
FURNISHED & SET

PROPE

N 488,000

N 488,250

S 88°-26'-50" E (484.50)

(A)

(B)

(C)

100

100

100

100

100

100

514

516

518

520

520

520

518

POL
LINE

3" S. PIPE

GNC SS-8

GNC SS-8

GNC-6

250 0'

480.00'

100

100

100

100

100

100

100

100

100

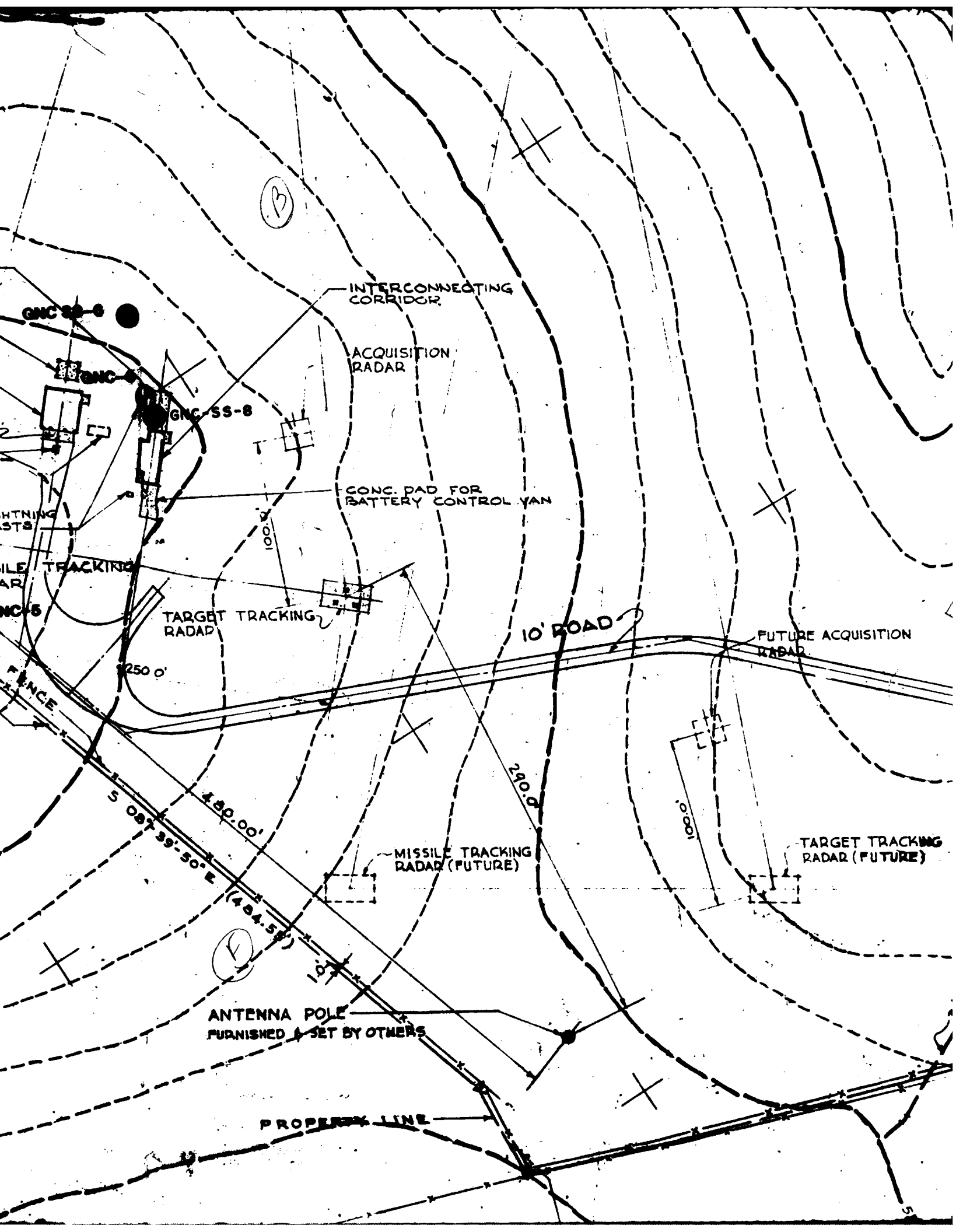
100

100

100

100

100



(B)

INTERCONNECTING CORRIDOR

ACQUISITION RADAR

GNC 55-8

CONC. PAD FOR BATTERY CONTROL VAN

MISSILE TRACKING RADAR

TARGET TRACKING RADAR

10' ROAD

FUTURE ACQUISITION RADAR

250'

100'

220'

100'

MISSILE TRACKING RADAR (FUTURE)

TARGET TRACKING RADAR (FUTURE)

S 087 39' 50" E
480.00'
(484.5')

ANTENNA POLE
FURNISHED & SET BY OTHERS

PROPERTY LINE

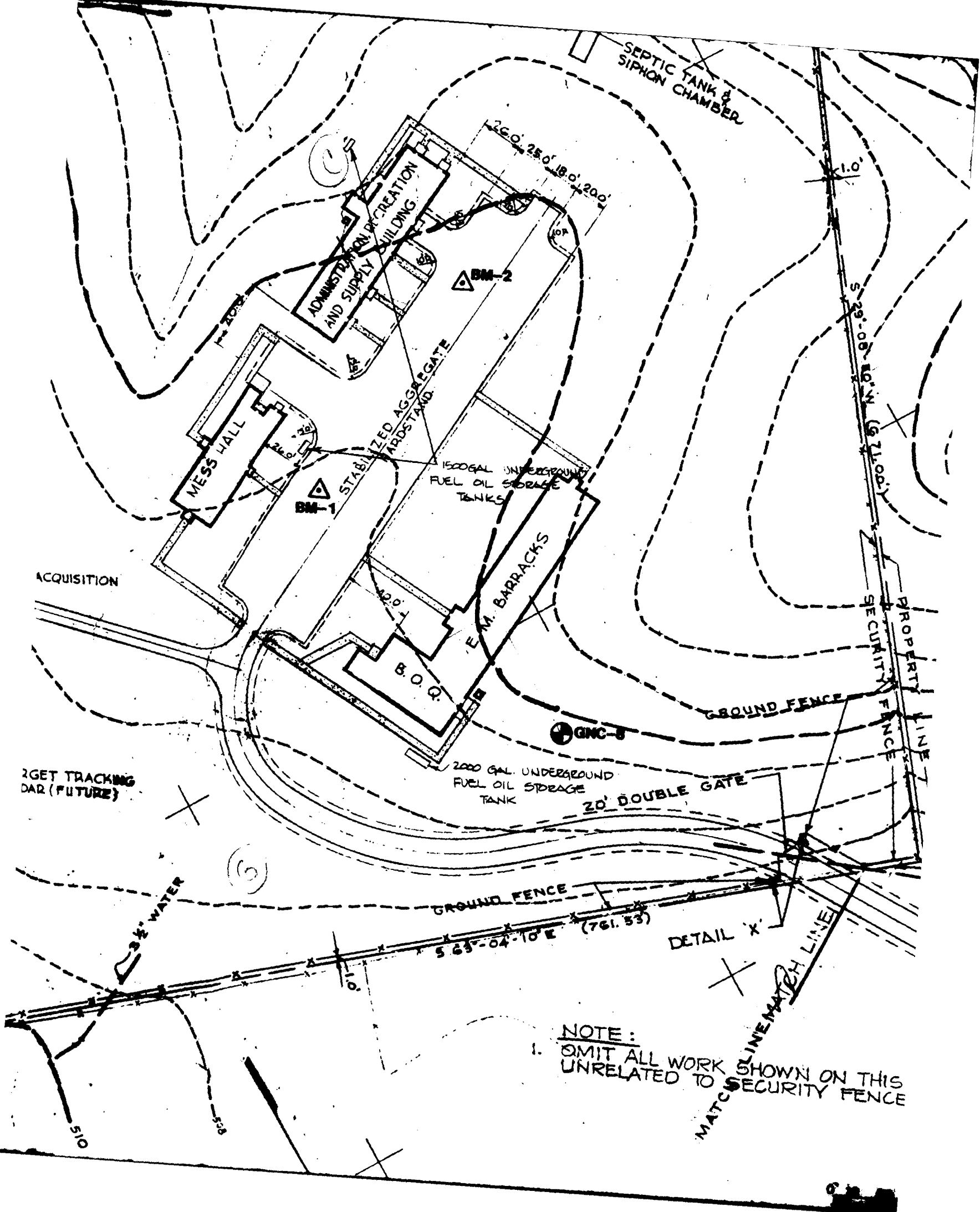
LIGHTNING
POSTS

MISSILE TRACKING
RADAR

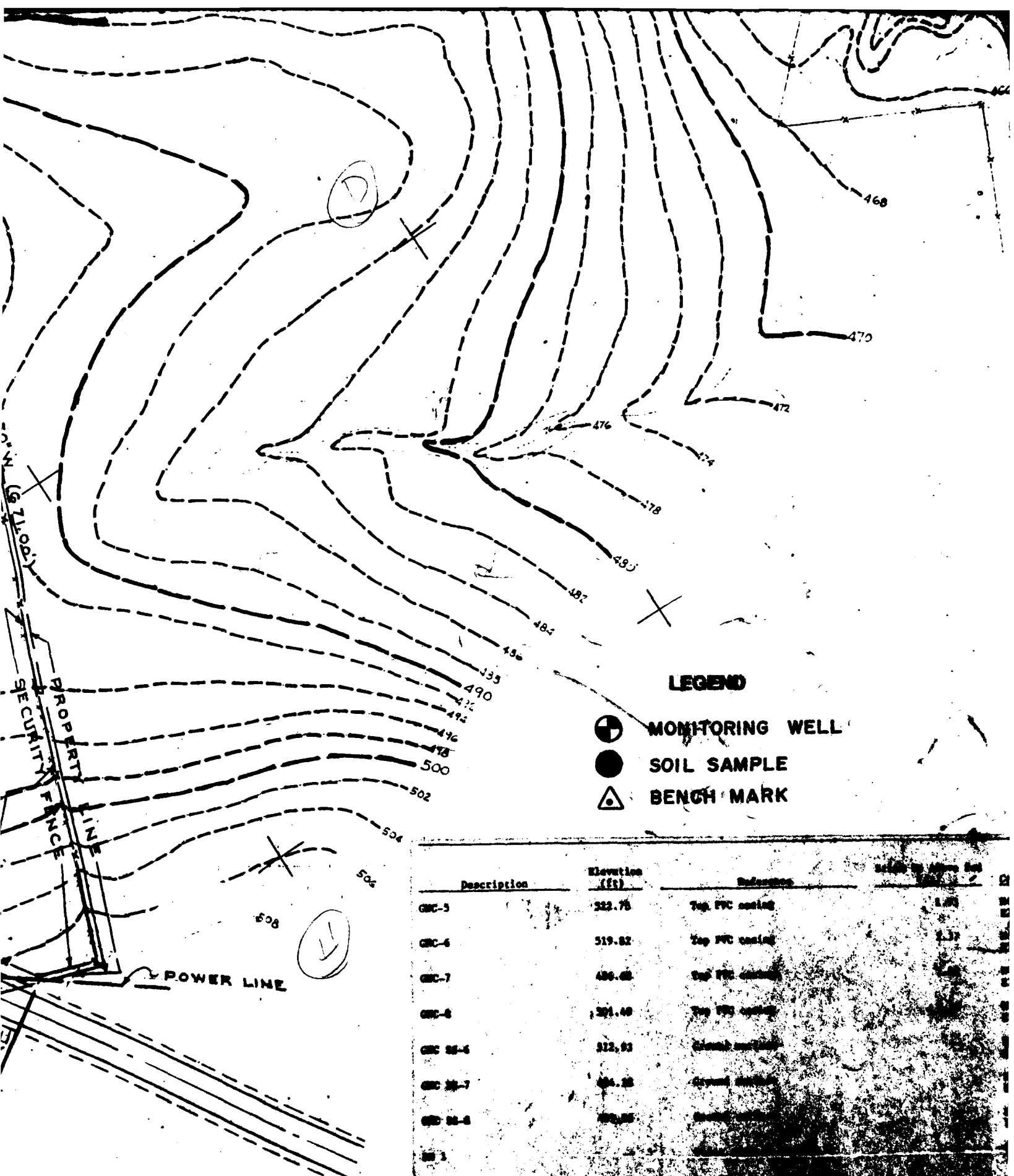
GNC 5

FENCE




5



NOTE:
 1. OMIT ALL WORK SHOWN ON THIS UNRELATED TO SECURITY FENCE



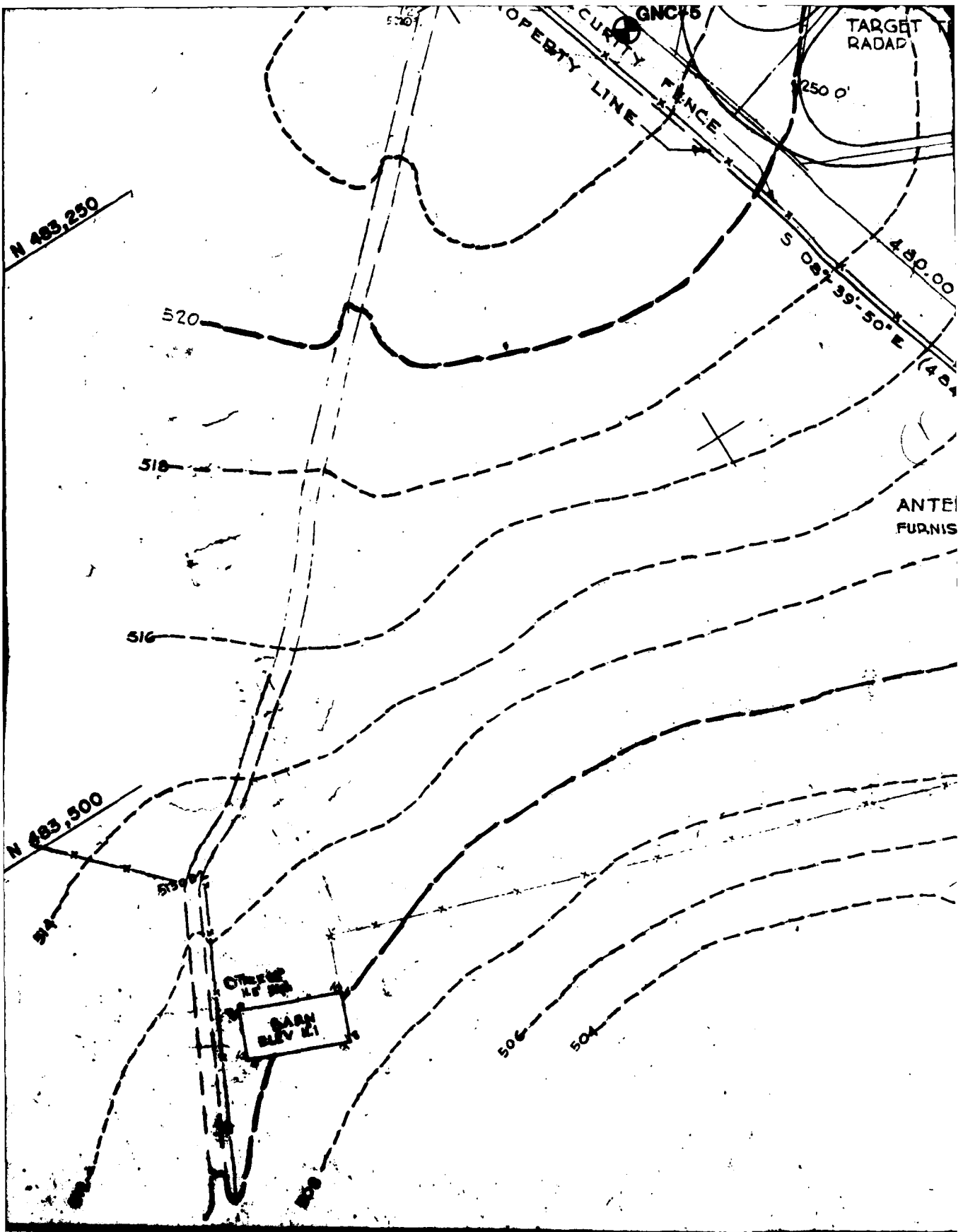
LEGEND

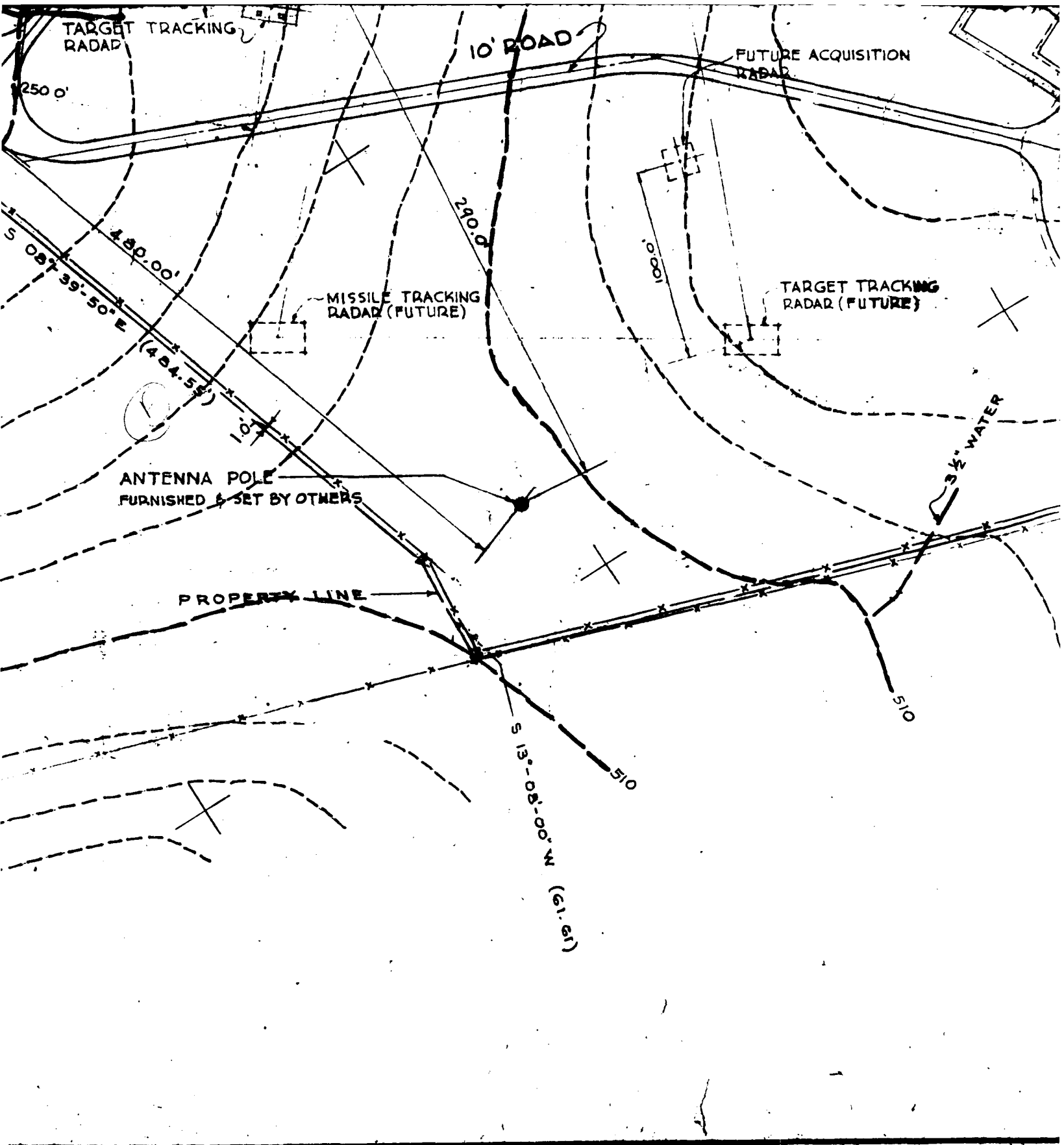
-  MONITORING WELL
-  SOIL SAMPLE
-  BENCH MARK

Description	Elevation (ft)	Reference	Notes
GRC-3	322.75	Top PVC casing	
GRC-4	519.82	Top PVC casing	
GRC-7	486.68	Top PVC casing	
GRC-8	391.48	Top PVC casing	
GRC 26-6	312.63	Ground surface	
GRC 26-7	484.28	Ground surface	
GRC 26-8	480.85	Ground surface	
BM 1			
BM 2			

ON THIS DRAWING WHICH IS
Y FENCE INSTALLATION.

Printed Name of
Surveyor





TARGET TRACKING RADAR

10' ROAD

FUTURE ACQUISITION RADAR

250 0'

180.00'

MISSILE TRACKING RADAR (FUTURE)

TARGET TRACKING RADAR (FUTURE)

S 08° 39' 50" E

(4.84.58)

ANTENNA POLE
FURNISHED & SET BY OTHERS

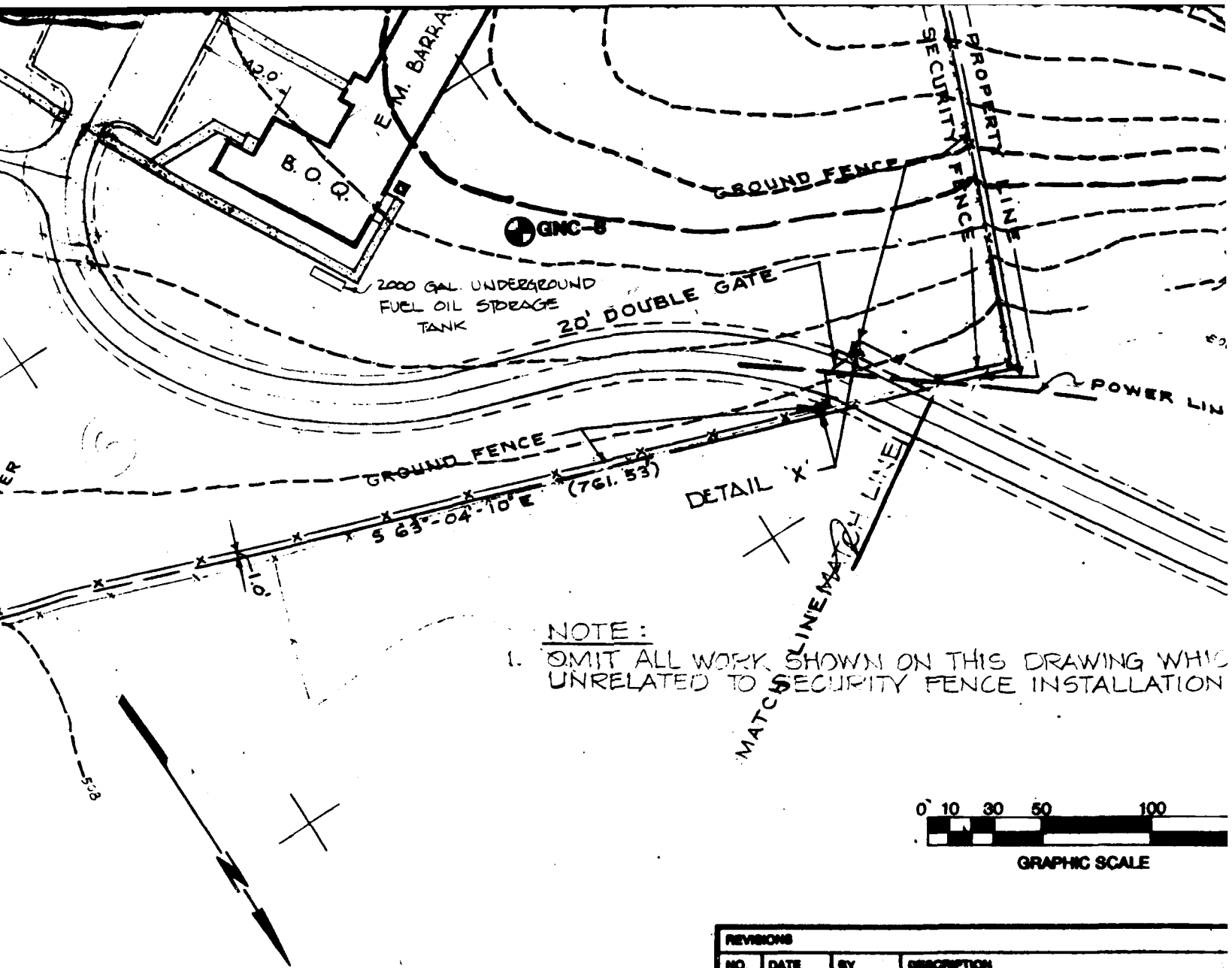
PROPERTY LINE

3 1/2" WATER

S 13° 08' 00" W (61.61)

510

510



NOTE:
 1. OMIT ALL WORK SHOWN ON THIS DRAWING WHICH UNRELATED TO SECURITY FENCE INSTALLATION



REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	1-15-50	GPL	

LEGEND



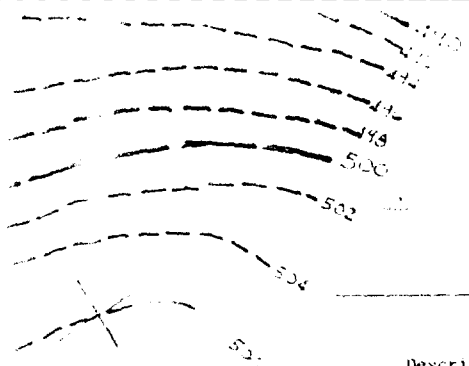
MONITORING WELL



SOIL SAMPLE



BENCH MARK



Description	Elevation (ft)	Reference	Stick Up Above Pad (ft)	Coordinates
GNC-5	522.75	Top PVC casing	1.93	N483311 E750688
GNC-6	519.82	Top PVC casing	2.37	N483247 E750522
GNC-7	486.68	Top PVC casing	2.02	N483369 E749673
GNC-8	501.49	Top PVC casing	2.35	N483822 E750026
GNC SS-6	512.93	Ground surface	--	N483213 E750479
GNC SS-7	484.18	Ground surface	--	N483385 E749709
GNC SS-8	489.82	Ground surface	--	N483247 E750522
BH 1	--	Paint mark on asphalt	--	N483621 E750086
BH 2	--	Paint mark on asphalt	--	N483546 E749946
Finished Floor of Barracks	504.00	Finished floor of EM Barracks	--	--

GENERAL NOTES:

- Drawing based on Army Corps of Engineers, Washington District, Washington, D.C., Master Plan, Basic Information Maps, Detail Boundary Map, Drawing Number 18-02-67.
- Coordinates established by EA Survey May 1989. Based on State Planar Coordinate System. Site control was established from off site BM A572 and BM 17232 using Washington Suburban Sanitary Commission 1973 Datum.
- All elevations refer to Mean Sea Level Datum.
- Finished floor of EM Barracks was used to establish well elevations.
- GNC designation refers to Gaitnersburg NIKE Control.

1:0

GAITHERSBURG NIKE CONTROL
GAITHERSBURG, MD.

SITE MAP

DESIGN

DRAWN

PMS

CHECKED

SAB

PROJECT ENGINEER



**EA ENGINEERING,
SCIENCE, AND
TECHNOLOGY, INC.**

15 Loveton Circle

Sparks, Maryland 21152

DATE

DEC. 6, 1989

SCALE

PROJECT NO.

10559.04

FIG. 1-3