U.S. Department of the Interior
U.S. Geological Survey

# Results of Soil, Ground-Water, Surface-Water, and Streambed-Sediment Sampling at Air Force Plant 85, Columbus, Ohio, 1996

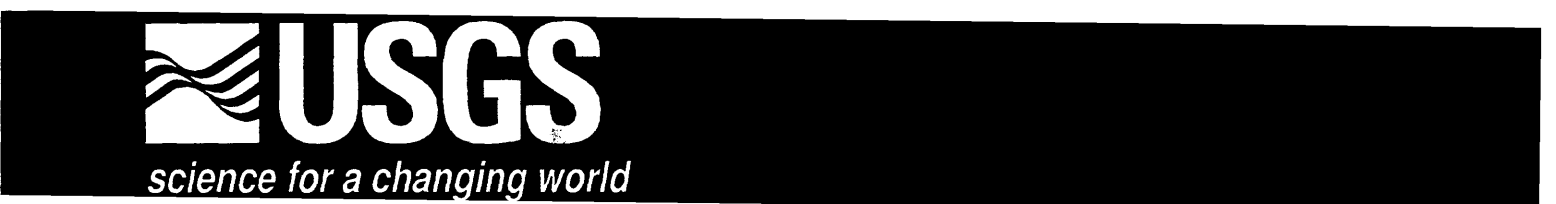
By James M. Parnell

---

Open-File Report 97-641

Prepared in cooperation with the
Department of the U.S. Air Force
Aeronautical Systems Center

Columbus, Ohio
1997



U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY
Mark Schaefer, Acting Director



---

For additional information write to:

District Chief
U.S. Geological Survey
975 West Third Avenue
Columbus, Ohio 43212-3192

Copies of this report can be purchased from:

U.S. Geological Survey
Information Services
Box 25286
Denver Federal Center
Denver, CO 80225-0286

# CONTENTS



## FIGURES

## TABLES



## CONVERSION FACTORS, VERTICAL DATUM, AND ABBREVIATED WATER-QUALITY UNITS

| Multiply | By | To obtain |
|---|---|---|
| inch | 25.4 | millimeter |
| foot | 0.3048 | meter |
| acre | 0.4047 | square hectometer |
| gallon | 3.785 | liter |
| pound, avoirdupois | 0.4536 | kilogram |

Temperature is given in degrees Celsius (°C), which can be converted to degrees Fahrenheit (°F) by use of the following equation:

$$°F = 1.8(°C) + 32$$

**Sea level:** In this report, "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

**Abbreviated chemical and physical units used in this report:** Chemical concentrations and water temperature are given in metric units. Chemical concentration is given in milligrams per liter (mg/L) or micrograms per liter (µg/L). Milligrams per liter is a unit expressing the concentration of chemical constituents in solution as weight (milligrams) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter. For concentrations less than 7,000 mg/L, the numerical value is approximately the same as for concentrations in parts per million. Specific conductance of water is expressed in microsiemens per centimeter at 25 degrees Celsius (µS/cm). This unit is equivalent to micromhos per centimeter at 25 degrees Celsius (µmho/cm), formerly used by the U.S. Geological Survey.

Chemical concentrations of constituents in a solid matrix are given in milligrams per kilogram (mg/kg). These units are used to express the concentrations of chemical constituents as weight of consituent concentrations in soils. Volumes of headspace gas screenings are given in microliters (µL).

## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| AFP 85 | Air Force Plant 85 |
| DOD | Department of Defense |
| I.D. | Inside diameter |
| IRP | Installation Restoration Program |
| O.D. | Outside Diameter |
| PCB's | Polychlorinated biphenyls |
| Plant | Air Force Plant 85 |
| PVC | Polyvinyl chloride |
| QA/QC | Quality assurance and quality control |
| SVOC's | Semivolatile organic compounds |
| USEPA | U.S. Environmental Protection Agency |
| USGS | U.S. Geological Survey |
| VOC's | Volatile organic compounds |

# Results of Soil, Ground-Water, Surface-Water, and Streambed-Sediment Sampling at Air Force Plant 85, Columbus, Ohio, 1996

*By* James M. Parnell

## ABSTRACT

The U.S. Geological Survey (USGS), in cooperation with Aeronautical Systems Center, Environmental Management Directorate, Restoration Division, prepared the Surface-Water and Ground-Water Monitoring Plan for Air Force Plant 85 (AFP 85 or Plant), Columbus, Ohio, under the Air Force Installation Restoration Program to characterize any ground-water, surface-water, and soil contamination that may exist at AFP 85. The USGS began the study in November 1996.

The Plant was divided into nine sampling areas, which included some previously investigated study sites. The investigation activities included the collection and presentation of data taken during drilling and water-quality sampling. Data collection focused on the saturated and unsaturated zones and surface water. Twenty-three soil borings were completed. Ten monitoring wells (six existing wells and four newly constructed monitoring wells) were selected for water-quality sampling. Surface-water and streambed-sediment sampling locations were chosen to monitor flow onto and off of the Plant. Seven sites were sampled for both surface-water and streambed-sediment quality.

This report presents data on the selected inorganic and organic constituents in soil, ground water, surface water, and streambed sediments at AFP 85. The methods of data collection and analysis also are included. Knowledge of the geologic and hydrologic setting could aid Aeronautical Systems Center, Environmental Management Directorate, Restoration Division, and its governing regulatory agencies in future remediation studies.

## INTRODUCTION

In 1980, the Department of Defense (DOD) devised a comprehensive Installation Restoration Program (IRP) to assess and to control the migration of environmental contamination that may have resulted from past operations and (or) disposal practices at DOD facilities. The IRP underwent changes under the Superfund Amendment/Reauthorization Act in 1986, which required all DOD facilities to follow guidelines and procedures set forth by the U.S. Environmental Protection Agency (USEPA). The U.S. Geological Survey (USGS), in cooperation with Aeronautical Systems Center, Environmental Management Directorate, Restoration Division, prepared the Surface-Water and Ground-Water Monitoring Plan (Parnell, 1996) for Air Force Plant 85 (AFP 85 or Plant), Columbus, Ohio, under the Air Force IRP to characterize any ground-water, surface-water, and soil contamination that may exist at AFP 85. The USGS began the study in November 1996.

### Purpose and Scope

This report presents data on selected inorganic and organic constituents in soil, ground water, surface water, and streambed sediments at AFP 85. The methods of data collection and analysis also are included. Knowledge of the hydrogeologic system could aid Aeronautical Systems Center, Environmental Management Directorate, Restoration Division, and its governing regulatory agencies during future remediation sutides in determining the potential pathways for

contaminant migration into the underlying water-bearing zones or nearby surface waters

## Description and History of Study Area

AFP 85 is in Franklin County in the eastern part of Columbus, Ohio. The 288-acre site is in an urban industrial area adjacent to Port Columbus International Airport (fig. 1). AFP 85 began operations in 1941 as a naval aircraft production and maintenance facility. In 1982, the Plant was transferred to the U.S. Air Force from the U.S. Navy. Shortly thereafter, Rockwell International was awarded the contract to produce the B-1 bomber at AFP 85. Starting in 1988, the Plant was operated for the U.S. Air Force by McDonnell-Douglas for the production of aircraft parts. In 1994, McDonnell-Douglas ceased operations. Since that time, the facility has been used for administration purposes only by the Defense Finance Accounting Service.

Over the years at AFP 85, operations included machining, metal finishing and electroplating, forming, painting and coating, and assembly. Waste associated with these activities included concentrated acids for metal cleaning and electroplating, process-tank sludges, cyanide wastes, chromium solutions, lime sludges, spent degreasers, and paint strippers. Waste oils, solvents, and aviation fuels were also collected and stored as part of the operations.

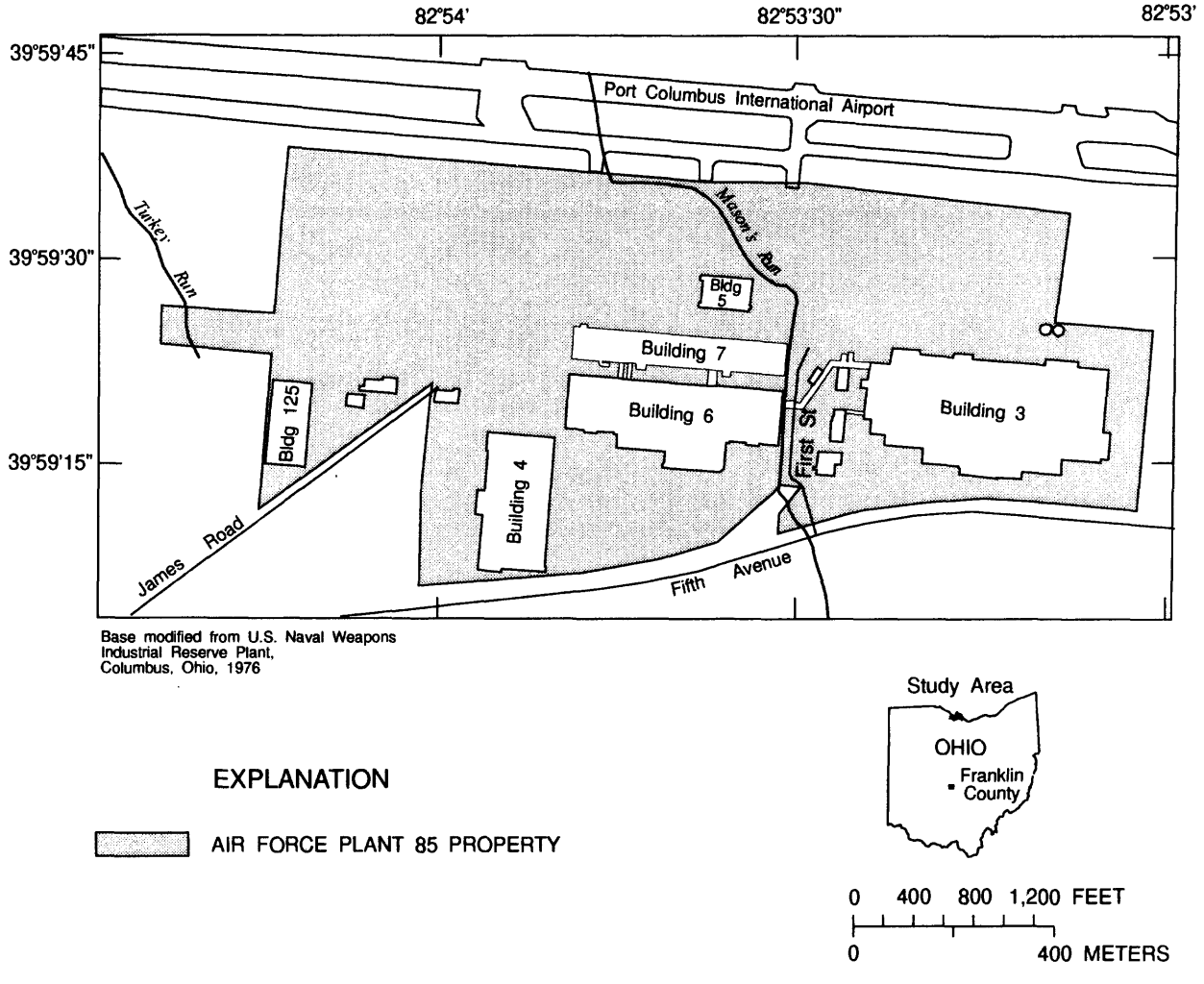



**Figure 1.** Location of Air Force Plant 85, Columbus, Ohio.

## Previous Investigations

AFP 85 has been the subject of a several investigations since 1982. The following briefs are based on a review of reports and supporting documents submitted by consultants and from project files (U.S. Air Force Aeronautical Systems Center, 1994); existing sites are shown in figure 2.

The IRP began in 1982 under a Phase I Hazardous Materials Disposal Site Records Search. The purpose of this study was to identify sites of potential environmental concern. Nine sites (1, 2, 3, 4, 5, 6, 7, 9, and 11) at AFP 85 were identified in the Phase I report.

A Phase II, Stage I, Investigation Confirmation and Quantification was completed in 1988. During the investigation, limited sampling was done at Sites 2 through 5 and 8.

A Phase II, Stage II, Remedial Investigation and Feasibility Study was completed in 1990. The work was completed in accordance with the National Contingency Plan enacted under the Comprehensive Environmental Response, Compensation, and Liability Act. This work involved Sites 3, 4, 5, 8, and 10 and resulted in No Further Action Decision Documents.

In 1993, a Phase II Stage 2A study was done at Sites 3 and 4. Additional work was done at Site 11 under the Toxic Substances Control Act.

Site characterization work at Site 4 by the USGS and U.S. Army Corps of Engineers was done in September 1994. A U.S. Army Corps of Engineers data report was used to define the extent of possible contamination by organic compounds at Site 4.

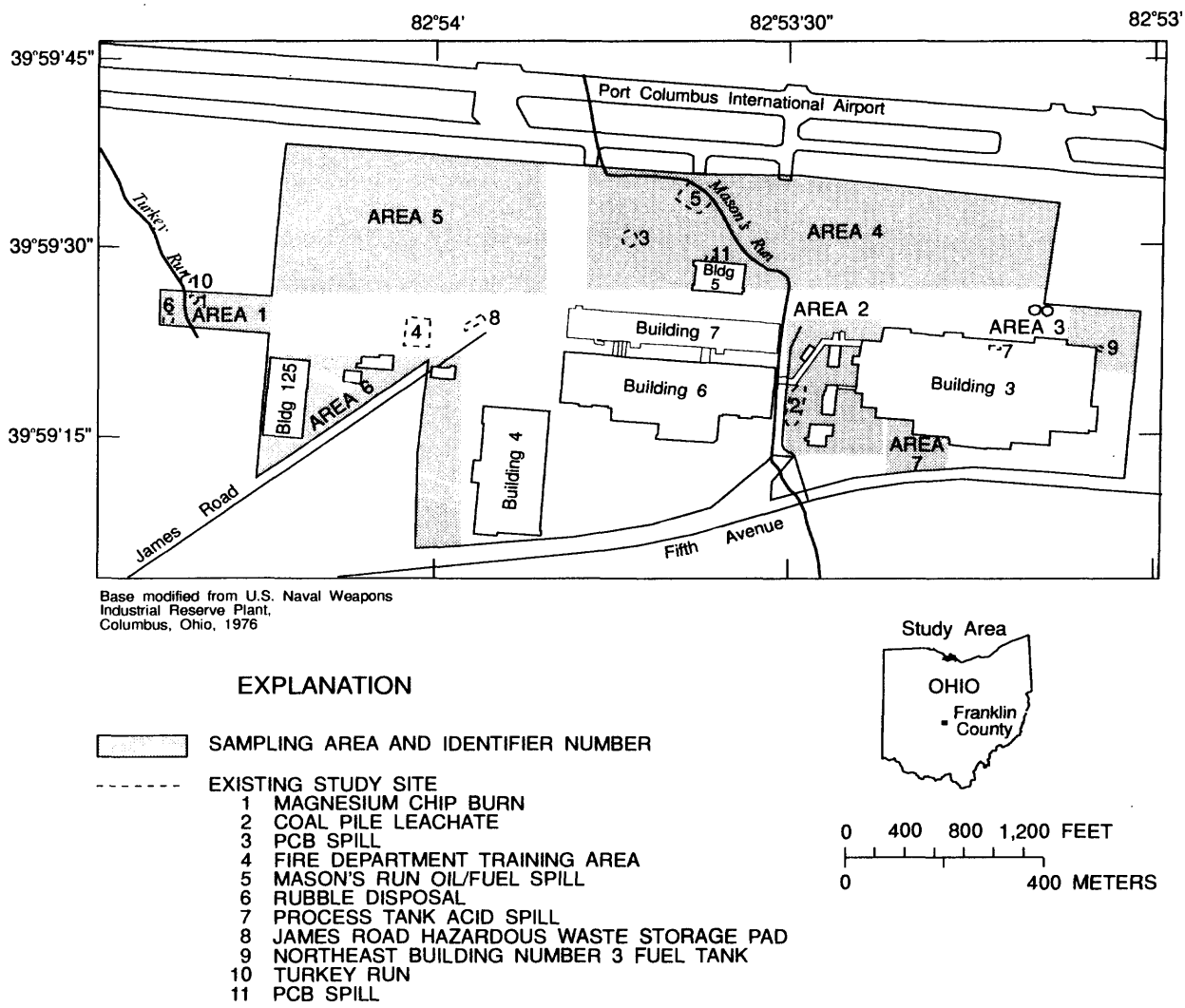



**Figure 2.** Location of sampling areas and existing study sites, Air Force Plant 85, Columbus, Ohio.

## METHODS OF STUDY

This report presents the data collected during drilling and water-quality sampling. Data collection focused on the saturated and unsaturated zones and surface water. The various Plant areas are listed in table 1 and are shown in detail in figures 3 through 11 (at back of report).

### Soil Sampling

A total of 23 soil borings were completed to determine the levels of anthropogenic and nonanthropogenic chemical compounds in the vicinity of the selected Plant areas. The size and specific location of each area was determined from previous investigations and (or) from aerial photographs if they were available. The total number of borings for each area were selected to be vertically and areally representative of the area. Two samples were selected from each boring on the basis of field-screening criteria described below and were sent to the contract laboratory for analysis. Total depths range from 2.3 to 95 feet.

Borehole drilling was done by use of an 8-1/2-inch-inside-diameter (I.D.) hollow-stem auger. The continuous soil samples were collected for analysis by use of a 60-inch-long, 4-inch-outer-diameter (O.D.) core-barrel sampler. The sampler was driven 30 inches or to refusal. Once driven, the barrel and rod were withdrawn from the auger and the sampler was removed from the rods. USGS personnel recorded descriptive (lithologic) logs in the field notebook (Appendix 1). Soil samples for chemical analysis consisted of qualitative field screening followed by quantitative laboratory analyses. For the field screening, a portable organic vapor analyzer equipped with a flame ionization detector and a photoionization detector was used to analyze the borehole samples for volatile organic compounds (VOC's), progressing from one end of the core to the other. Sections of core identified as potentially contaminated by the analysis were preferentially selected for the subsequent laboratory analyses. Other samples were collected and sent to the laboratory on the basis of lithology. All borehole cuttings were drummed for later analysis and disposal by the Plant. All boreholes were grouted by injecting a bentonite/cement slurry until it overflowed at the surface. Analyses for soil samples are listed in table 2. Analytical procedures used are outlined in the Surface-water and Ground-water Monitoring Plan (Parnell, 1996). The results of the borehole screening are included on the boring logs in Appendix 1.

### Monitoring Well Installation and Development

When a sufficient volume of ground water available to run selective chemical analysis was found during soil-sampling drilling, a new monitoring well was installed within the significantly permeable zone. A total of four new monitoring wells were drilled for this study. Monitoring wells were constructed of 2-inch-I.D. polyvinyl chloride (PVC) Schedule 40 well casing and screens. The screens were flush threaded with a bottom plug. Slot size was 0.010 inch. Both 5-foot and 10-foot screen lengths were used, as determined by the borehole lithology. The screen was packed with a clean silica sand to 3 feet above the top of the screen. The final depth of the filter pack was sounded with a weighted metal tape. At least 2.5 feet of bentonite pellets was placed on top of the filter pack. The annulus was grouted with a cement/bentonite grout to the frost line. The grout mix consisted of one 94-pound sack of Portland cement, 3 pounds of bentonite, and 6.5 gallons of potable water. Above-ground and below-ground monitoring (flush-mount) well completions were used. A 5-foot protective casing with a hinged lockable lid was used for above-ground completions, whereas a 10-inch flush-mount casing with a locking top was used for below-ground completions. A sloping concrete pad was constructed around each well to prevent surface-water intrusion. As-built well-construction diagrams showing the placement of the well screen, sand pack, bentonite seal, and grouting are compiled in Appendix 2. Construction details of existing wells are not presented in this report; for additional information, see U.S. Air Force Aeronautical Systems Center (1994).

All monitoring wells were developed by use of a precleaned disposable bailer and (or) a low-flow submersible pump. A minimum of 24 hours was allowed between well installation and well development. When the well was purged dry, the well was sampled upon recovery and within 24 hours. Specific conductance, pH, temperature, and turbidity were monitored during the development. Development continued until three consecutive readings of pH, specific conductance,

**Table 1.** Location, area, and site identification of boring, ground-water, and surface-water sites, Air Force Plant 85, Columbus Ohio

| Location | Area[1] | Site identification of soil boring[2] | Site identification of ground-water site | Site identification of surface-water site |
|---|---|---|---|---|
| Magnesium-Chip Burning Area | 1 | USB15 | | |
| | 1 | USB16 | USW16 | |
| | 1 | USB17 | | |
| Coal Pile Area | 2 | USB11 | | |
| | 2 | USB12 | | |
| | 2 | USB13 | USW13 | |
| Rubble-Disposal Area | 1 | USB180A | | |
| | 1 | USB180B | | |
| | 1 | USB180C | | |
| Fuel Tank Area east of Bldg. 3 | 3 | USB05 | | |
| | 3 | USB06 | | |
| North boundary near 1st Street | 4 | USB09 | | |
| North-central boundary area | 4 | USB01 | | |
| Wash Rack Area | 4 | USB10 | | |
| Stationary Radar Site | 5 | USB21 | | |
| North of Bldg. 3 | 3 | USB07 | | |
| | 3 | USB08 | | |
| North of Bldg. 10 | 2 | USB02 | USW02 | |
| South of Bldg. 124 | 6 | USB20 | | |
| South of Bldg. 125 | 6 | USB04 | | |
| Parking Lot near Bldg. 3 | 7 | USB14 | | |
| North of Bldg. 40 | 6 | USB03 | | |
| Leach Field area | 5 | USB19 | USW19 | |

**Table 1.** Location, area, and site identification of boring, ground-water, and surface-water sites, Air Force Plant 85, Columbus Ohio—Continued

| Location | Area[1] | Site identification of soil boring[2] | Site identification of ground-water site | Site identification of surface-water site |
|---|---|---|---|---|
| Northwest Perimeter Road | 4 | | 9MW1[3] | |
| Northeast Perimeter Road | 5 | | 9MW3[3] | |
| Near Mason's Run | 5 | | PG501[3] | |
| Southwest Bldg 4 parking lot | 6 | | 9MW7[3] | |
| Near collection pit near Coal Pile | 2 | | PG201[3] | |
| Fuel Tank Area east of Bldg. 3 | 3 | | BLD3[3] | |
| Turkey Run at airport fence | | | | TR01 |
| Turkey Run at bottling fence line | | | | TR02 |
| Mason's Run at airport fence | | | | MR01 |
| Mason's Run near well PG501 | | | | MR02 |
| Mason's Run below weir | | | | MR03 |
| Mason's Run north of 5th Ave. | | | | MR04 |
| Mason's Run south of 5th Ave | | | | MR05 |

[1] Sampling area corresponding to figures 1-9; see figures 10 and 11 for information on surface-water sites.
[2] USGS soil borings, USB; if converted to a ground-water monitoring well, USW.
[3] Existing wells; see U.S. Air Force Aeronautical Systems Center Environmental Restoration Program, 1994, Management Action Plan, for additional information.

temperature, and turbidity stabilized. Field-measured characteristics were considered stable when pH's were within ± 0.1 unit, specific conductances were within± 10 µS/cm, and temperatures were within ± 0.5°C. Development time, volume of water produced, and field measurements were recorded in the field logbook. All water produced during development, and later during decontamination activities, was contained at the field site. All equipment was thoroughly cleaned and decontaminated between locations to prevent cross-contamination, as outlined in the Surface-Water and Ground-Water Monitoring Plan (Parnell, 1996).

## Ground-Water Sampling

Ground-water sampling locations were selected to determine the levels of anthropogenic and nonanthropogenic chemical compounds in the vicinity of the selected Plant areas. A total of 10 monitoring wells were selected for this study. Six existing wells were inventoried and selected for sampling, and the four newly constructed monitoring wells also were selected.

Prior to purging and sampling, depth to water was measured to the nearest 0.01 foot. The volume of standing water in the well and in the sand pack below the grout seal were then calculated as one purge volume. Three purge volumes were removed in each well to replace the stagnant water with fresh water from the water-bearing formation. All monitoring wells were purged by use of a precleaned disposable bailer and (or) a low-flow submersible pump. If the well was purged dry, the well was sampled upon recovery and within 24 hours. A minimum of 10 well volumes of water, if possible, was removed from each well before sampling where turbidity was persistent (Ohio Environmental Protection Agency, 1995). The water samples were collected by filling the pre-preserved sample container either directly from the precleaned or dedicated bailer and (or) from a low-flow-rate discharge tube from the submersible pump. After collection, the samples were chilled and shipped by overnight courier to the contract laboratory (Quanterra Environmental Services, Denver, Colo.) for analysis. Analyses for ground-water samples are listed in table 2. Analytical procedures and standard operating procedures are outlined in the Surface-Water and Ground-Water Monitoring Plan (Parnell, 1996).

**Table 2.** Analyte group, analytical method, and sample matrix.

| Analyte group[1] | Analytical method[2] | Sample matrix[3] |
|---|---|---|
| Volatile organic compounds by GC/MS | SW8260/8240 | S-GW-SW-BM |
| Semivolatile organic compounds by GC/MS | SW8270 | S-GW-SW-BM |
| Pesticides and PCB's | SW8080 | S-GW-SW-BM |
| Metals | SW6010 | S-GW-SW-BM |
| Common anions | E300.0 | GW-SW |
| Cyanide | SW9012 | SW-GW |

[1] GC/MS, gas chromatography/mass spectrometry; PCB's, polychlorinated biphenyls.
[2] Analytical methods SW and E are found in U.S. Environmental Protection Agency (1986) test methods for evaluating solid waste, physical/chemical methods SW-846.
[3] S, soil samples; GW, ground-water samples, SW, surface-water samples; BM, streambed-sediment samples.

## Surface-Water and Streambed-Sediment Sampling

Surface-water and streambed-sediment sampling locations were chosen to monitor flow onto and off of the Plant. The seven sampling sites are shown in figures 10 and 11 (at back of report). Mason's Run (fig. 10) is channeled with a concrete culvert through most of its extent within the Plant boundaries. It drains from the Port Columbus Airport, flows underground southward through the facility, and reemerges and exits the Plant entrance under Fifth Avenue. Turkey Run (fig. 11) is an intermittent stream that crosses the westernmost segment of the Plant after passing through Port Columbus Airport. Approximately 375 feet of Turkey Run traverses the Plant property. An extensive onsite stormwater drainage system has been constructed throughout the plant property and drains into Mason's Run in the central part of the Plant, whereas some stormwater from the western part of the Plant drains into Turkey Run.

Surface-water and streambed-sediment samples were collected from the same sampling location, the surface-water sample being done first to minimize the collection of unnaturally suspended streambed sediments. Surface-water samples were collected as a grab sample from one point in the stream and put directly into the pre-preserved containers. Streambed-sediment samples were collected using a stainless steel scoop, transferred to a stainless steel bowl, and composited

using the scoop. Sample jars were filled with the composited material from the bowl. Samples for VOC analysis were not composited but were grabbed directly from the streambed. Field measurements of specific conductance, pH, temperature, and alkalinity were made directly from the surface-water body and are on file at the USGS office in Columbus, Ohio.

After collection, the surface-water and streambed-sediment samples were chilled and shipped by overnight courier to a contract laboratory for analysis. Analyses for surface-water and streambed-sediment samples are listed in table 2.

## Quality-Assurance and Quality-Control Measures

Many measures were implemented by the USGS during data collection to ensure that the appropriate levels of quality assurance and quality control (QA/QC) were achieved. These measures served to ensure quality, precision, accuracy, completeness, and representativeness of the data generated during the study. The QA/QC measures were followed in accordance with the Surface-Water and Ground-Water Monitoring Plan (Parnell, 1996). For all sampling types during the study, 100 percent of the analytical data generated by the laboratory were validated to determine completeness of the data-package deliverables and achievement of the specific data objectives. An independent environmental firm was contracted by the USGS to perform the data validation; a summary of the data-validation process is presented in the Technical Memorandum for the Surface-Water and Ground-Water Monitoring Plan (Parnell, 1997). The results of samples analyses for soil, ground-water, surface-water, streambed sediment, and QA/QC samples are presented in Appendix 3.

## GEOLOGY AND HYDROLOGY

The Plant lies within the Till Plains section of the Central Lowland Physiographic Province (Fenneman, 1938). Till Plains were formed through glaciation and burial of preglacial topography. Soils belonging to the Bennington-Pewamo Association are present at AFP 85 (U.S. Department of Agriculture, 1977). The soils range from a yellowish-brown silty loam to a gray clay loam and are generally wet to ponded, easily eroded, and poorly permeable.

Glacial till interbedded with glacial outwash is the predominant surficial material at AFP 85 (fig. 12, at back of report). The glacial outwash is composed of fine, well-sorted sand and gravel-sized material, whereas the glacial till is unstratified, poorly sorted material composed of a mixture of clay, sand, gravel, and various sizes of boulders (Battelle Denver Operations, 1989). Glacial tills and outwash deposits were cut by more recent outwash channels, resulting in complex interbedding and lateral and vertical facies changes within relatively short distances. This glacial interfingered outwash and till results in laterally and horizontally discontinuous water-bearing zones beneath the Plant but does not form a continuous aquifer (Battelle Denver Operations, 1989). Geologic logs of the boreholes indicate that the glacial till ranges in thickness from 10 to 85 feet and that average thickness is about 25 feet across the Plant. It has been reported that a major tributary to the main buried channel of a preglacial river flowed beneath what is now the southern boundary of AFP 85 (Battelle Denver Operations, 1989). Drill logs (USB04 and USB20) in this area, however, indicate that the lithology is clay with some gravel and cobbles to the top of the shale bedrock, not indicative of a buried channel. The preglacial river noted in the same report was reported to cut a channel approximately 200 feet below land surface. Logs of the new borings in this area (USB04 and USB15), however, indicate that the depth to the shale bedrock was 83 feet and 95 feet, respectively.

Three major aquifer systems are present in Franklin County: Devonian limestone aquifers, Mississippian sandstone aquifers, and glacial aquifers. Thin, discontinuous, glacial water-bearing units underlie AFP 85, as described above. Well yields in the glacial system are as much as 2 gallons per minute from the two water-bearing zones underlying the Plant (U.S. Air Force Aeronautical Systems Center, 1994).

Isolated water-bearing zones also lie within till as a discontinuous basal deposit of coarse sand and gravel just above the shale bedrock. This discontinuous unit is of varied thickness, according to information in drilling logs. Beneath the glacial till at AFP 85 lies the Ohio Shale, which is generally considered to be a poorly permeable unit. This black to dark-brown, sandy, fissile shale has a high organic content.

The gross lithologies recorded for previous wells and borings at the Plant are similar to those found in the new borings, but proportions of clays, sands, and gravels differ greatly from area to area. Figure 13 (at back

of report) shows a cross section of monitoring wells across the Plant and its variability in geology. The variability in lithologies and the discontinuity between sand and gravel lenses makes mapping of any specific unit extremely difficult. Because of this heterogeneity of the unconsolidated deposits, no attempt was made to interpolate the stratigraphy between the wells and borings.

Infiltration from creeks and streams may recharge the water-bearing units; however, much of the surface water is collected and diverted by tile drainage into concrete channels in and around the Plant.

## SOIL DATA

Two soil samples were collected at selected intervals during drilling and one sample was taken at each of the three hand-auger borings. Forty-nine regular/environmental soil samples and nine QA/QC samples were collected and analyzed.

## Volatile Organic Compounds

The only unqualified VOC detection was 1,1,1-trichloroethane at USB12 (0.0099 mg/kg), whereas detections in 13 other samples were qualified. Acetone and methylene chloride were found in method blanks and not considered. The qualified VOC data are listed in the following table. ("Unqualified" data are those that require no qualifier after data validation, whereas "qualified" data are subject to qualification after validation.) A list of validated VOC's found in the soil is given in Appendix 3.

| Location | Analyte | Concentration (mg/kg) | Sample depth (ft) | Data qualifier |
|---|---|---|---|---|
| USB02 | Tetrachloroethene | 0.0056 | 30 | J[1] |
| USB02 | Toluene | 0.0069 | 30 | J |
| USB03 | 2-Butanone | 0.047 | 4 | J |
| USB05 | Benzene | 0.097 | 12 | J |
| USB05 | Vinyl chloride | 0.014 | 12 | J |
| USB05 | Benzene | 0.0091 | 12 | J |
| USB05 | Ethylbenzene | 0.0051 | 12 | J |
| USB05 | Xylenes | 0.015 | 12 | J |
| USB06 | Benzene | 0.0088 | 9 | J |
| USB07 | Carbon disulfide | 0.0055 | 4 | J |
| USB08 | 2-Butanone | 0.078 | 4 | J |
| USB09 | 2-Butanone | 0.037 | 2 | J |
| USB1302 | Toluene | 0.041 | 2 | J |
| USB1302 | Xylene | 0.0054 | 2 | J |
| USB15 | 2-Butanone | 0.022 | 19 | J |
| USB15 | Toluene | 0.010 | 19 | J |
| USB18A | 2-Butanone | 0.065 | 2 | J |
| USB18B | Toluene | 0.0089 | 2 | J |
| USB18C | Toluene | 0.0088 | 2 | J |
| USB19 | Toluene | 0.0090 | 27 | J |

[1] J, estimated value.

## Semivolatile Organic Compounds

Unqualified semivolatile organic compounds (SVOC's) were detected in soil samples from five borings, and one qualified detection of sample of bis(2-ethylhexyl)phthalate, at 0.35 mg/kg was found at USB 19; results are given in the following table. A list of validated SVOC's found in the soil is given in Appendix 3.

| Location | Analyte | Concentration (mg/kg) | Sample Depth (ft) |
|---|---|---|---|
| USB01 | Phenanthrene | 0.40 | 6 |
| USB01 | Fluoranthene | 0.79 | 6 |
| USB01 | Pyrene | 0.78 | 6 |
| USB01 | Chrysene | 0.37 | 6 |
| USB01 | Benzo(k)fluoranthene | 0.41 | 6 |
| USB05 | 2-Methylnaphthalene | 0.61 | 12 |
| USB07 | 2-Methylnaphthalene | 0.42 | 6.5 |
| USB07 | Phenanthrene | 0.40 | 6.5 |
| USB07 | Pyrene | 0.47 | 6.5 |
| USB07 | Fluoranthene | 0.46 | 6.5 |
| USB08 | Napthalene | 0.99 | 4 |
| USB08 | 2-Methylnaphthalene | 1.4 | 4 |
| USB21 | Fluoranthene | 0.61 | 3 |
| USB21 | Phenanthrene | 0.46 | 3 |
| USB21 | Pyrene | 0.57 | 3 |

## Pesticides and Polychlorinated Biphenyls

Unqualified pesticides and polychlorinated biphenyls (PCB's) were detected in soil samples from nine borings; results are given in the following table. A list of validated pesticides and PCB's found in the soil is given in Appendix 3.

| Location | Analyte | Concentration (mg/kg) | Sample Depth (ft) |
|---|---|---|---|
| USB01 | Arochlor 1248 | 0.040 | 6 |
| USB01 | Endrin ketone | 0.0091 | 6 |
| USB03 | delta BHC | 0.0058 | 4 |
| USB04 | Heptachlor epoxide | 0.057 | 35 |
| USB05 | Heptachlor epoxide | 0.030 | 12 |
| USB07 | delta BHC | 0.0029 | 6.5 |
| USB07 | Heptachlor epoxide | 0.063 | 6.5 |
| USB08 | Heptachlor epoxide | 0.037 | 9 |
| USB10 | delta BHC | 0.0023 | 14 |
| USB11 | Arochlor 1248 | 0.056 | 2 |
| USB11 | delta BHC | 0.0077 | 2 |
| USB12 | delta BHC | 0.012 | 5 |
| USB12 | delta BHC | 0.051 | 9 |

## Selected Metals and Trace Elements

Soils contaminated by metals and trace elements are common at many industrial sites in Ohio. The presence of trace elements, however, does not necessarily indicate contamination because all soils contain at least some trace concentrations. Contamination by metals and trace elements are commonly determined by comparing background concentrations from nearby locations to site-specific locations. Background metals concentrations for soils in Ohio were compiled by Cox-Colvin & Associates (1995); arsenic, barium, chromium, lead, and mercury are listed as common industrial background metals in Franklin County. These metals were also common to AFP 85.

Of the 23 analytes, 11 were detected in all soil sampled: aluminium, barium, calcium, cobalt, chromium, copper, iron, magnesium, manganese, vanadium, and zinc. Other metals — beryllium, potassium, molybdenum, nickel, and lead — were found in more than 70 percent of the samples. Silver, sodium, thallium, antimony, and selenium were below the detection limit in all soil samples. A list of validated selected metals and trace elements found in soil are given in Appendix 3.

# GROUND-WATER QUALITY

Ground water was sampled from six existing and four recently installed monitoring wells. Ten regular ground-water samples and nine QA/QC samples were collected. Ground water is not a source of potable drinking water for the Plant.

## Volatile Organic Compounds

Only one VOC was detected in all water from the 10 wells sampled: benzene, at 1.9 mg/L in USW02.

## Semivolatile Organic Compounds

Only one SVOC was detected in all ground-water samples from the 10 well: bis(2-ethyl-hexyl)phthalate, at 31mg/L in PG-201.

## Pesticides and Polychlorinated Biphenyls

Only two unqualified pesticides were detected in all ground-water samples: delta BHC, at 0.088 mg/L in PG201, and heptachlor expoxide, at 0.070 mg/L in USW02. All PCB concentrations were below the detection limit.

## Selected Metals and Trace Elements

Of the 23 analytes, 3 were detected in all wells sampled— calcium, magnesium, and manganese. Beryllium, silver, cobalt, copper, nickel, antimony, selenium, vanadium, and thallium concentrations were below the detection limit. Cadmium (0.0083 mg/L) at PG201 and chromium (1.4 mg/L) at USW16 exceeded the Maximum Contaminant Levels of 0.0050 mg/L and 0.100 mg/L, respectively. A list of validated selected metals and trace elements in ground water is given in Appendix 3.

## Common Anions and Cyanide

Chloride and sulfate were found in every ground-water sample. Cyanide was selectively sampled for at BLD3, PG-201, USW02, USW16, and USW19. A list of validated common anions and cyanide in ground water is given in Appendix 3.

## SURFACE-WATER QUALITY

Seven regular surface-water samples and three QA/QC samples were collected and analyzed.

### Volatile Organic Compounds

Unqualified VOC's were detected in surface-water samples from three sites; concentrations are listed in the following table. A list of validated VOC's found in surface water is given in Appendix 3.

| Location | Analyte | Concentration (µg/L) |
|---|---|---|
| MR04 | Chloroform | 1.5 |
| MR05 | Chloroform | 1.6 |
| TR02 | 1,2-Dichloroethene | 1.4 |
| TR02 | Trichloroethene | 1.2 |

### Semivolatile Organic Compounds

Concentrations of SVOC's were below the detection limits in all surface-water samples.

### Pesticides and Polychlorinated Biphenyls

Pesticides and PCB's were below the detection limits in all surface-water samples.

### Selected Metals and Trace Elements

Of the 23 analytes, 6 were detected in all surface water samples — barium, calcium, iron, magnesium, manganese, and sodium. Silver, arsenic, beryllium, cadmium, cobalt, chromium, copper, potassium, molybdenum, nickel, lead, vanadium, thallium, antimony, and selenium were not detected in any sample. A list of validated selected metals and trace elements in surface water is given in Appendix 3.

### Common Anions and Cyanide

Chloride, nitrate, and sulfate were found in the surface-water samples. Cyanide concentrations determined for sites MR1, MR 5, and TR 2 were below the detection limits in all water. A validated list of common ions in surface water is given in Appendix 3.

## STREAMBED-SEDIMENT DATA

Seven regular streambed-sediments samples and five QA/QC samples were collected and analyzed.

### Volatile Organic Compounds

Only two qualified VOC's, flagged as estimated (J), were detected in streambed-sediment samples: concentrations are listed in the following table. No unqualified VOC's were found. (Acetone was flagged because of calibration failure and not is reported here.) A list of validated VOC's found in streambed-sediment samples is presented in Appendix 3.

| Location | Analyte | Concentration (mg/kg) | Data qualifier |
|---|---|---|---|
| MR03 | 1,2-Dichloroethene | 0.0056 | J |
| MR04 | Toluene | 0.15 | J |

### Semivolatile Organic Compounds

No qualified SVOC's were found. Sixteen unqualified SVOC's were detected at all seven sites. A list of validated SVOC's found in streambed-sediment samples is given in Appendix 3.

### Pesticides and Polychlorinated Biphenyls

Unqualified pesticides were detected in streambed-sediment samples; results are given in the following table. A list of validated pesticides and PCB's found in the streambed sediment samples is given in Appendix 3.

| Location | Analyte | Concentration (mg/kg) |
|---|---|---|
| MR04 | Endrin ketone | 1.0 |
| TR02 | Aldrin | 0.0057 |
| TR02 | Endrin ketone | 0.0039 |

### Selected Metals and Trace Elements

Of the 23 metals included in the analyte list, 16 were detected in all streambed sediments sampled — aluminium, barium, beryllium, calcium, cadmium, cobalt, chromium, copper, iron, magnesium, manganese, molybdenum, nickel, lead, vanadium, and zinc.

Silver, thallium, antimony, sodium, and selenium concentrations were below the detection limits. A list of selected metals and trace elements in streambed sediments is given in Appendix 3.

## CONCLUSIONS

The Surface-Water and Ground-Water Monitoring Plan for AFP 85 was designed to characterize any ground-water, surface-water, and soil contamination that may exist at AFP 85. The investigation activities done by the USGS included the collection of data during drilling and during sampling of ground water, surface water, and streambed sediments.

This report presents data on the selected inorganic and organic constituents in soil, ground water, surface water, and streambed sediments at AFP 85. The methods of data collection and analysis are also included. The analytical results of the soil, ground water, surface water, and streambed sediments could aid Aeronautical Systems Center, Environmental Management Directorate, Restoration Division, and its governing regulatory agencies in determining the potential pathways for contaminant migration into the underlying water-bearing zones or nearby surface waters and will provide background information for future remediation studies.

The unconsolidated glacial till deposits at the Plant consist of poorly sorted outwash; very fine to coarse sand and gravel is intermingled with poorly permeable clay and cobbled till. Because of this heterogeneity of the unconsolidated deposits, no attempt was made to interpolate the stratigraphy between the wells and borings.

## REFERENCES CITED


Battele Denver Operations, 1989, Installation Restoration Program Stage 2, informal technical information report: Columbus, Ohio, 22 p.

Cox, C.A., and Colvin, G.H., 1995, Investigation of background metal concentrations in Ohio soils: Hillard, Ohio, Cox-Colvin and Associates, Inc. [various pagination].

Fenneman, N.M., 1938, Physiography of eastern United States: New York, McGraw-Hill, p. 449-536.

Ohio Environmental Protection Agency, 1995, Technical guidance manual for hydrogeologic investigations and ground water monitoring: Division of Drinking and Ground Waters, 21 p.

Parnell, J.M., 1996, Surface-water and ground-water monitoring plan for Air Force Plant 85, Columbus, Ohio: On file at the Columbus office of the U.S. Geological Survey [various pagination].

Parnell, J.M., 1997, Technical memorandum for the surface-water and ground-water monitoring plan for Air Force Plant 85, Columbus, Ohio: On file at the Columbus office of the U.S. Geological Survey [various pagination].

Schmidt, J.J., and Goldthwait, R.P., 1958, The ground-water resources of Franklin County, Ohio: Ohio Department of Natural Resources Bulletin 30, 24 p.

U.S. Air Force Aeronautical Systems Center, 1994, Management action plan: Environmental Restoration Program [various pagination].

U.S. Department of Agriculture, 1980, Soil survey of Franklin County: Soil Conservation Service, p. 7.

U.S. Environmental Protection Agency, 1986, Test methods for evaluating solid waste, physical chemical methods, SW-846 (3rd ed.): Washington, D.C., 88 p.

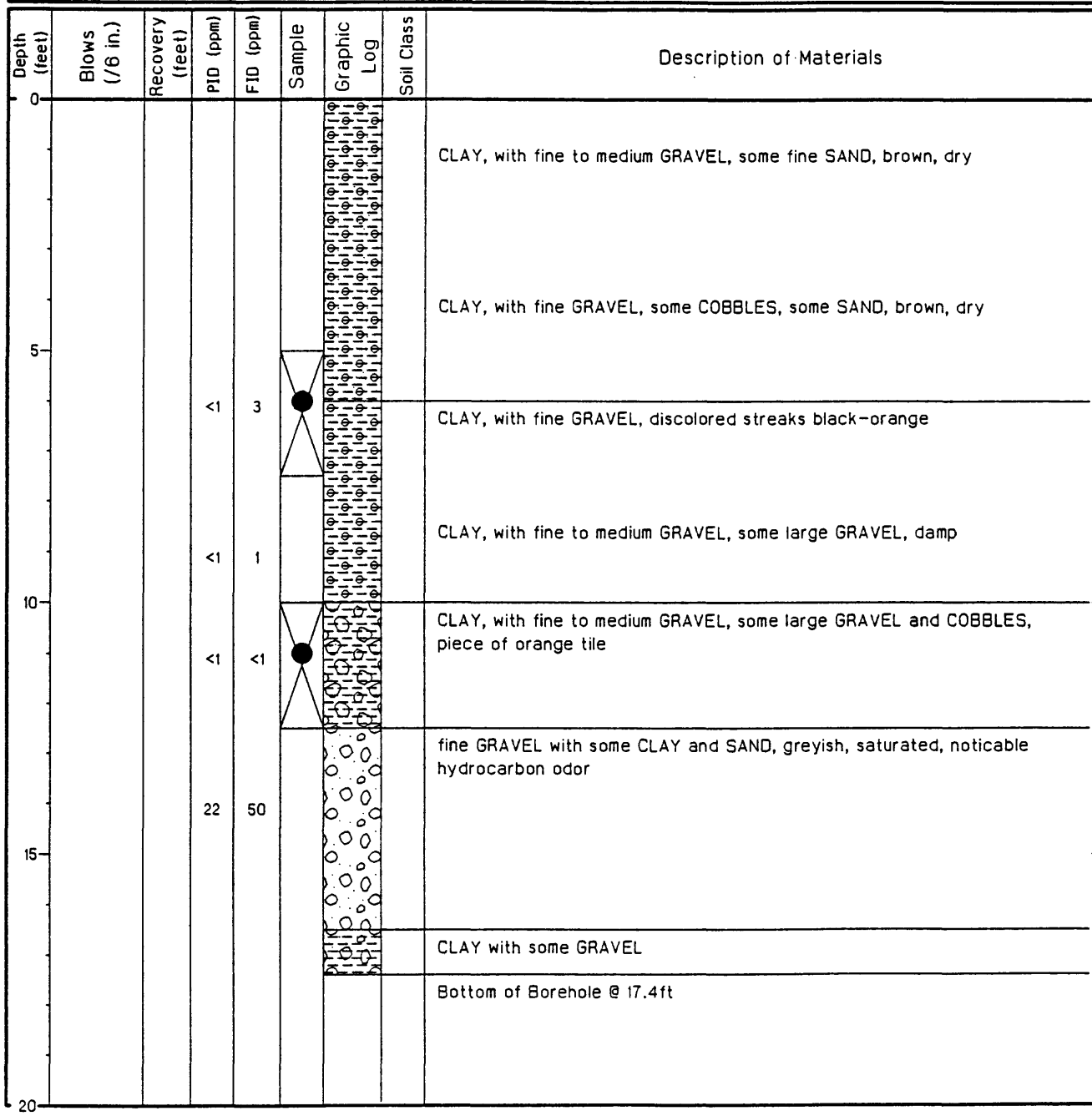
# APPENDIXES

# APPENDIX 1. LOGS OF BORINGS AT AIR FORCE PLANT 85, COLUMBUS, OHIO, 1996

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-01** **Map ID #: USB-01**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

Begin Drilling: 11/16/96
End Drilling: 11/16/96
Borehole TD: 17.4
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-01
Converted to Well? NO

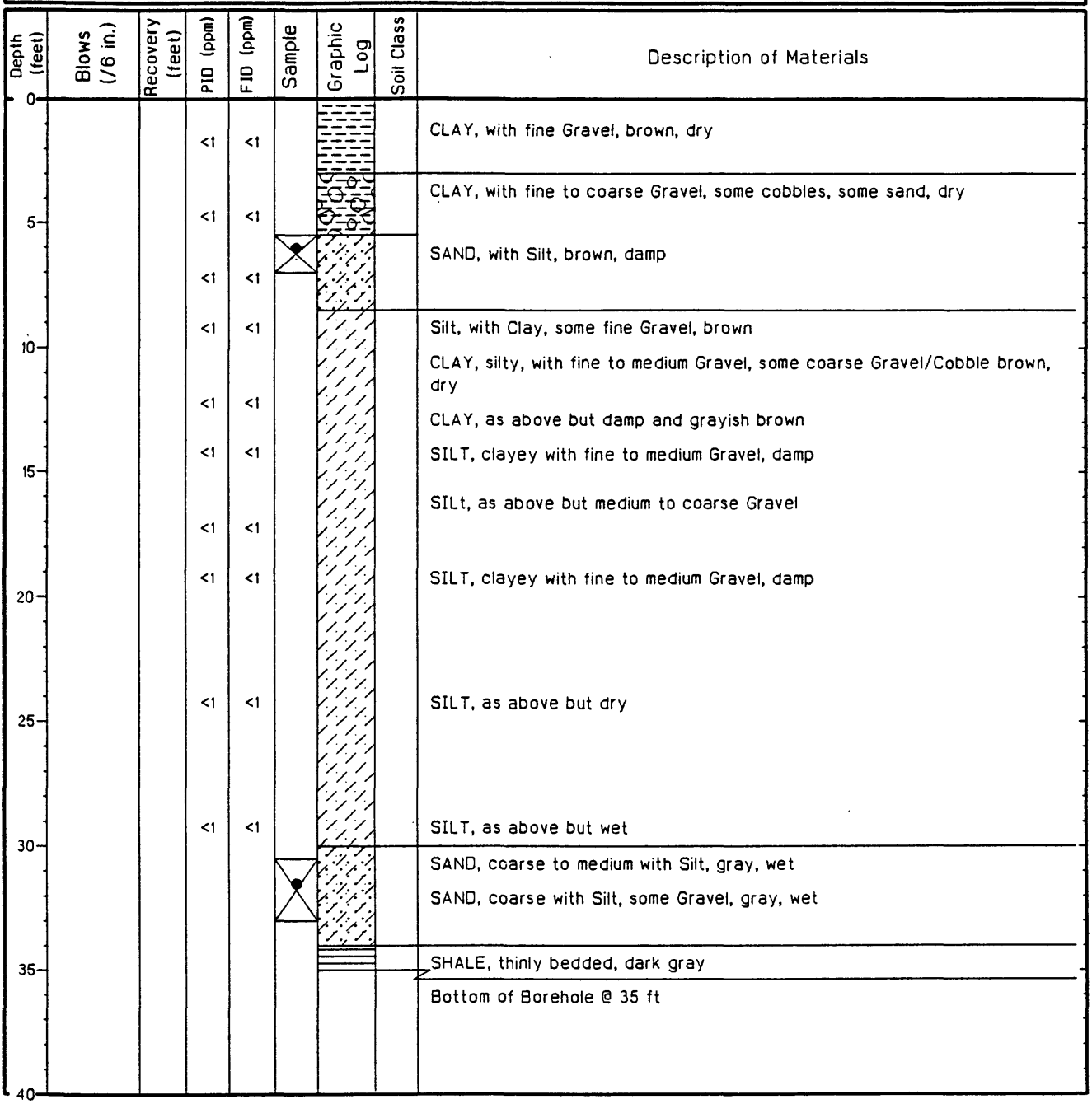
USGS Well Name:
Northing: 725998.23
Easting: 1889324.36
Surface Elev: 804
Datum: ft, NGVD

Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

## Borehole Log: USB-02 **Map ID #: USW-02**

AIR FORCE PLANT 85 — Columbus, Ohio



| Depth (feet) | Blows (/6 in.) | Recovery (feet) | PID (ppm) | FID (ppm) | Sample | Graphic Log | Soil Class | Description of Materials |
|---|---|---|---|---|---|---|---|---|
| 0 | | | <1 | <1 | | | | CLAY, with fine Gravel, brown, dry |
| | | | | | | | | CLAY, with fine to coarse Gravel, some cobbles, some sand, dry |
| 5 | | | <1 | <1 | | | | |
| | | | <1 | <1 | | | | SAND, with Silt, brown, damp |
| | | | <1 | <1 | | | | Silt, with Clay, some fine Gravel, brown |
| 10 | | | | | | | | CLAY, silty, with fine to medium Gravel, some coarse Gravel/Cobble brown, dry |
| | | | <1 | <1 | | | | CLAY, as above but damp and grayish brown |
| | | | <1 | <1 | | | | SILT, clayey with fine to medium Gravel, damp |
| 15 | | | | | | | | SILt, as above but medium to coarse Gravel |
| | | | <1 | <1 | | | | |
| | | | <1 | <1 | | | | SILT, clayey with fine to medium Gravel, damp |
| 20 | | | | | | | | |
| | | | | | | | | |
| | | | <1 | <1 | | | | SILT, as above but dry |
| 25 | | | | | | | | |
| | | | | | | | | |
| | | | <1 | <1 | | | | SILT, as above but wet |
| 30 | | | | | | | | SAND, coarse to medium with Silt, gray, wet |
| | | | | | | | | SAND, coarse with Silt, some Gravel, gray, wet |
| | | | | | | | | SHALE, thinly bedded, dark gray |
| 35 | | | | | | | | Bottom of Borehole @ 35 ft |
| 40 | | | | | | | | |

Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

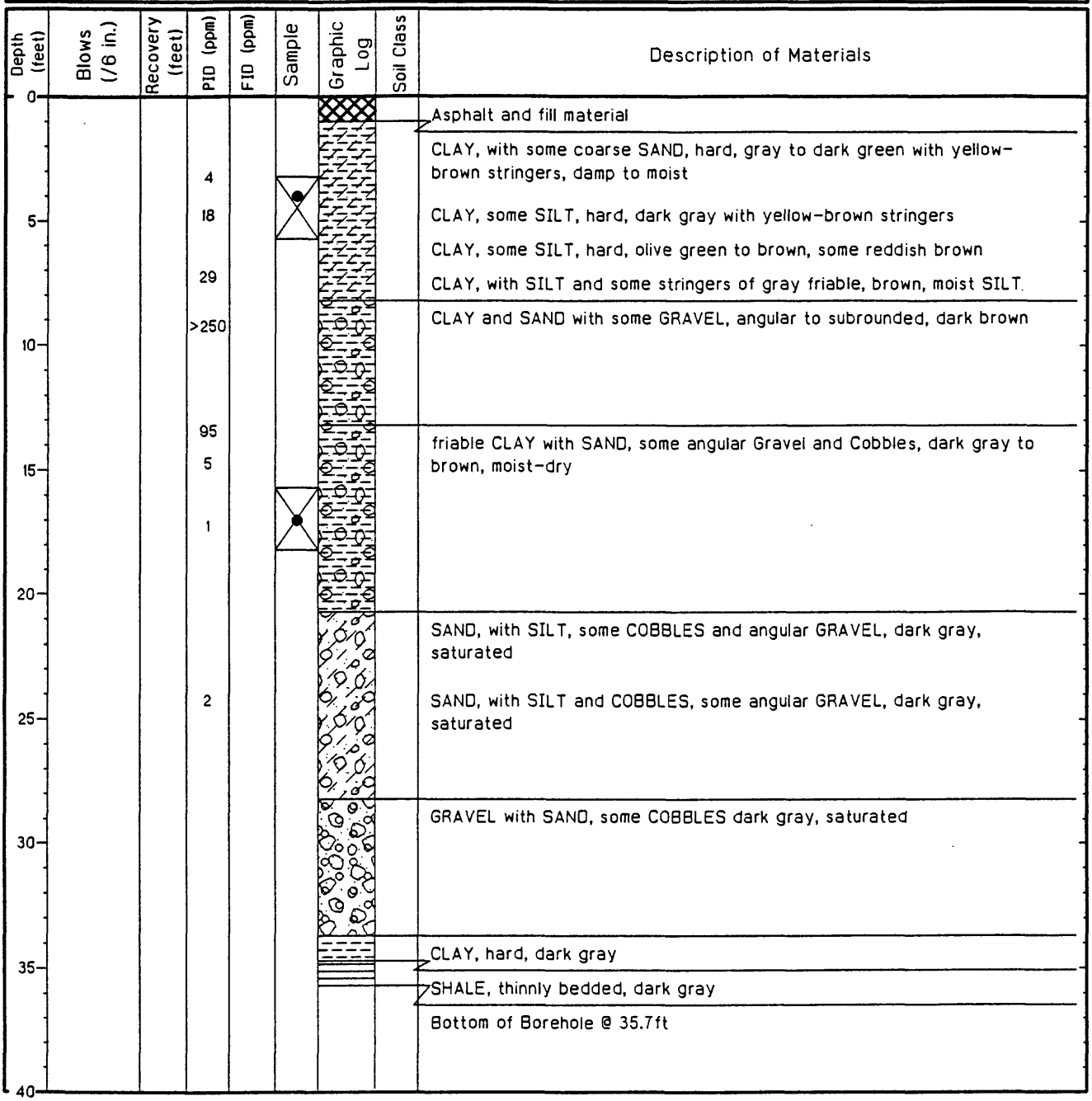
Begin Drilling: 11/16/96
End Drilling: 11/17/96
Borehole TD: 35
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-02
Converted to Well? Yes

USGS Well Name: USW-02
Northing: 725067.47
Easting: 1890680.09
Surface Elev: 806
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-03** **Map ID #: USB-03**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

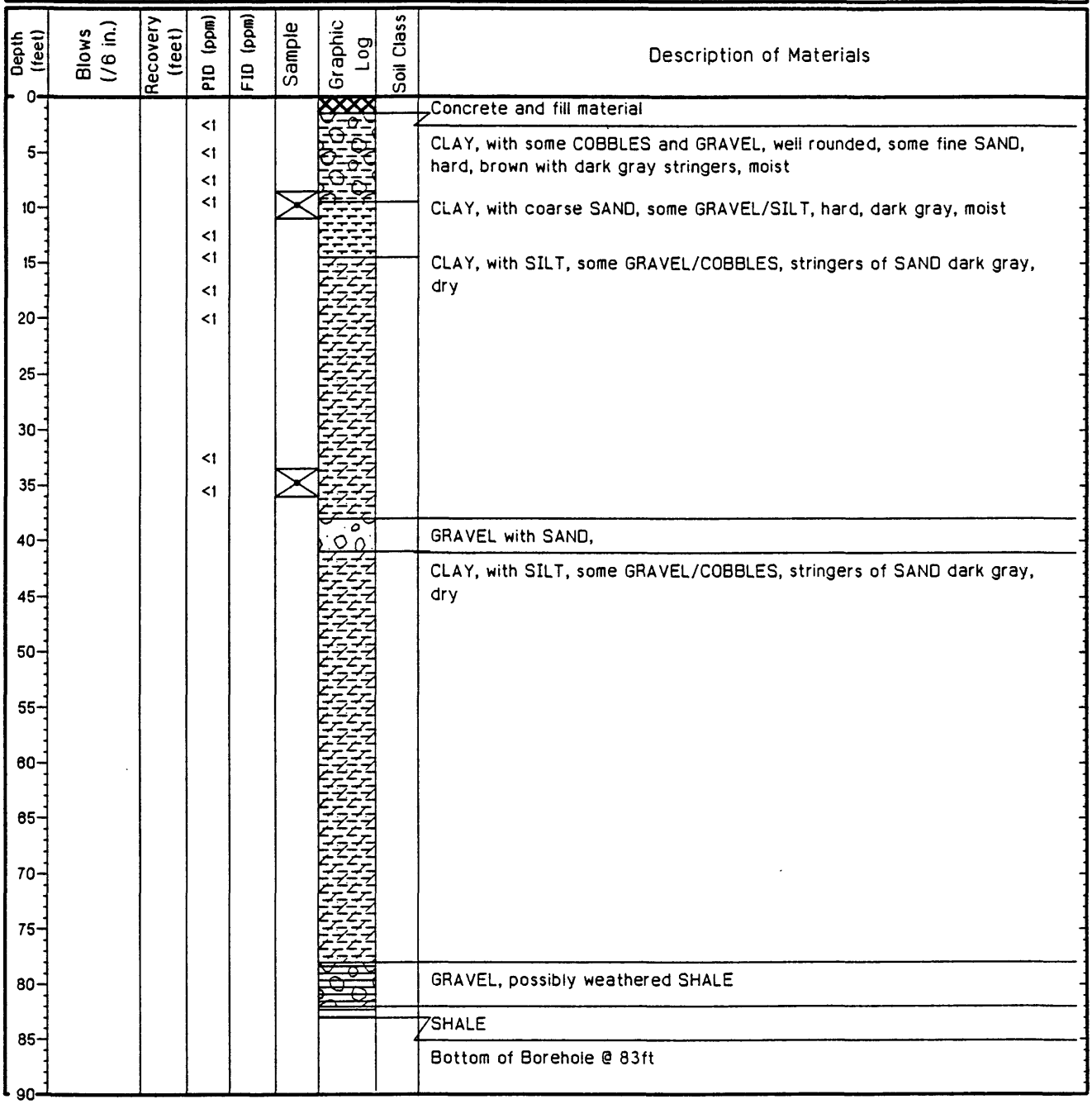
Begin Drilling: 11/17/96
End Drilling: 11/18/96
Borehole TD: 35.7
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-03
Converted to Well? NO

USGS Well Name:
Northing: 725112.12
Easting: 1890416.42
Surface Elev: 805
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-04** **Map ID #: USB-04**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

Begin Drilling: 11/19/96
End Drilling: 11/20/96
Borehole TD: 83
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-04
Converted to Well? NO

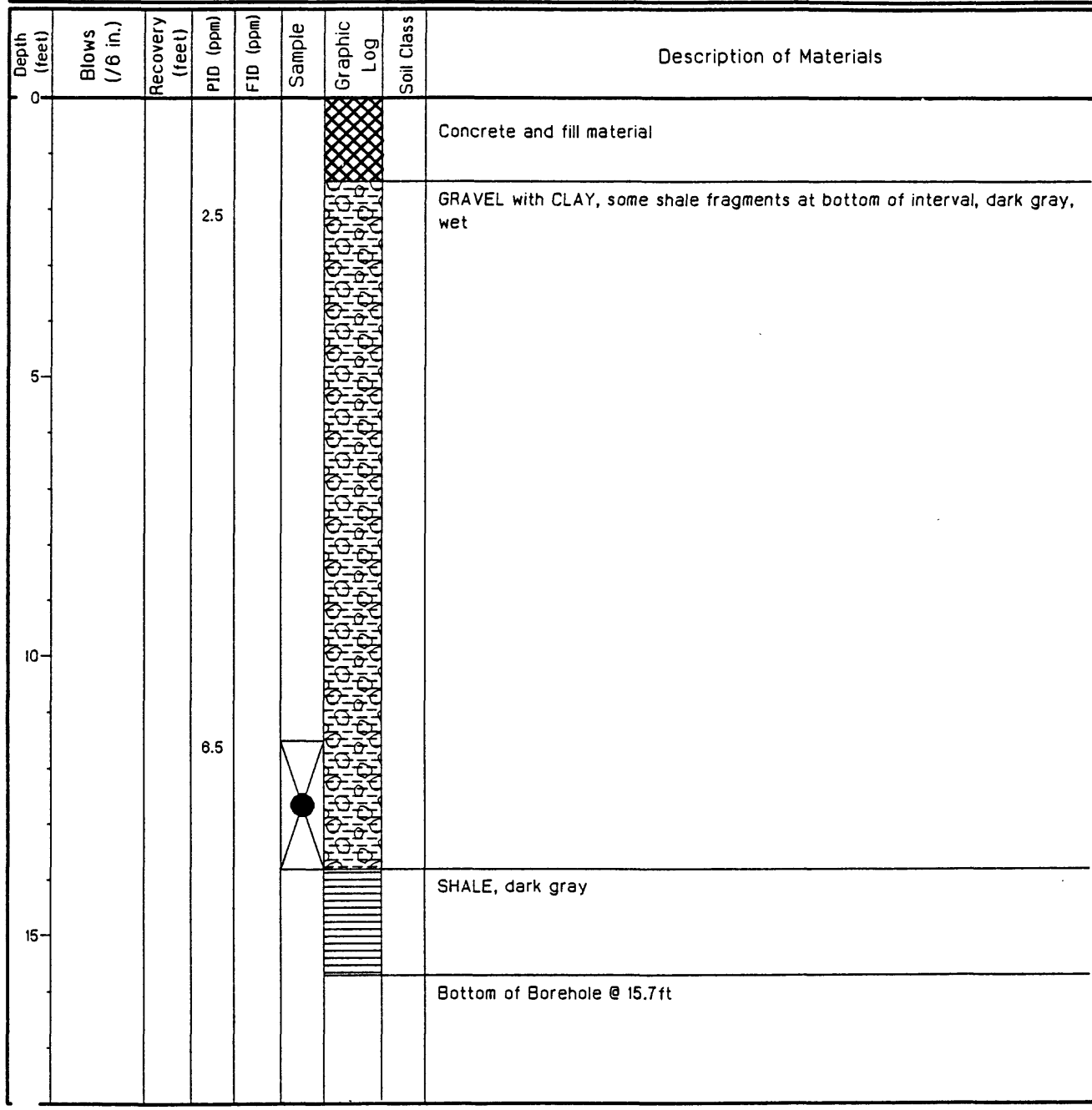
USGS Well Name:
Northing: 724347.53
Easting: 1886877.68
Surface Elev: 800
Datum: ft, NGVD

Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-05** **Map ID #: USB-05**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

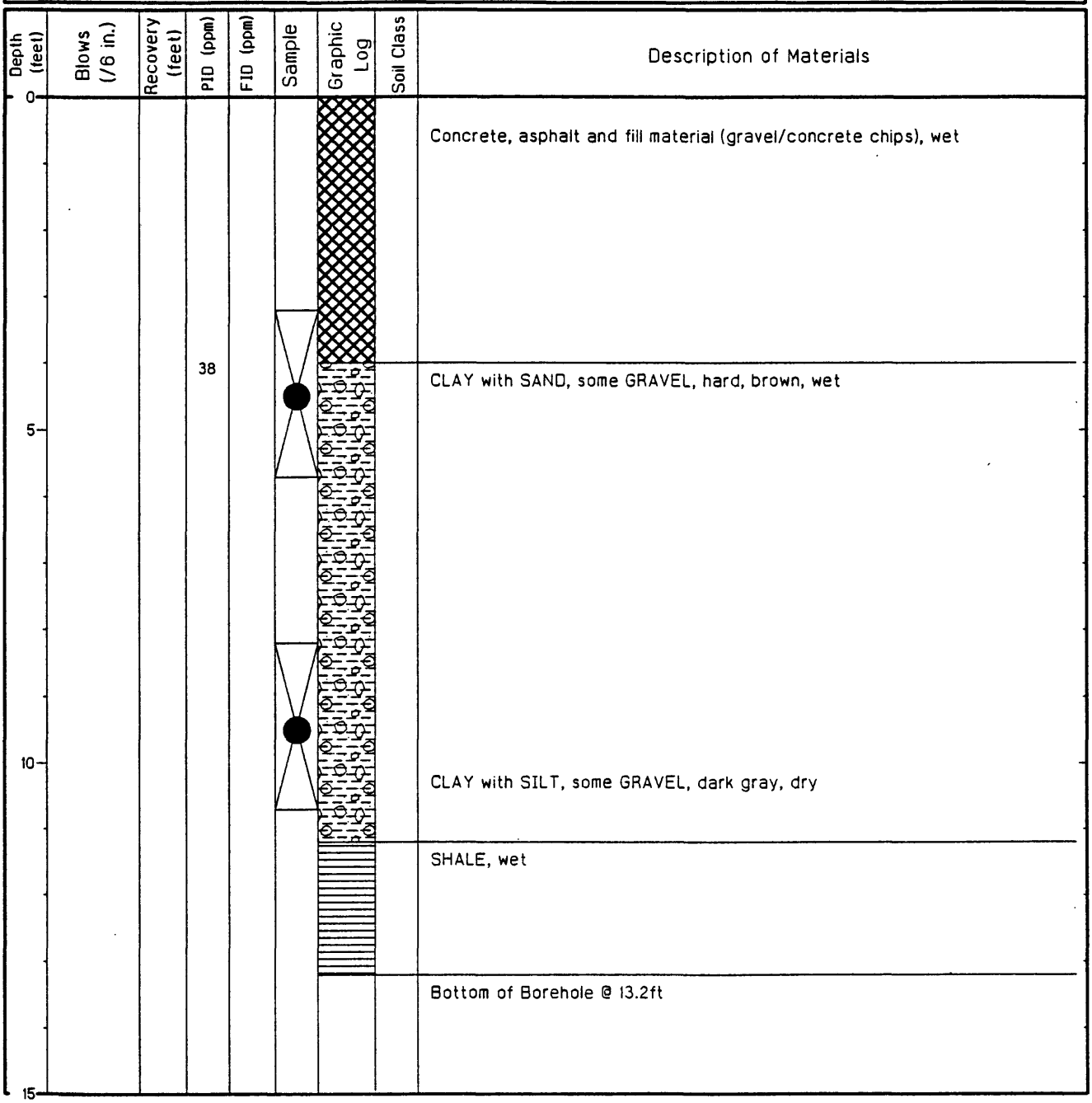
Begin Drilling: 11/21/96
End Drilling: 11/21/96
Borehole TD: 15.7
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-05
Converted to Well? NO

USGS Well Name:
Northing: 724918.66
Easting: 1892346.72
Surface Elev: 808
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-06** **Map ID #: USB-06**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

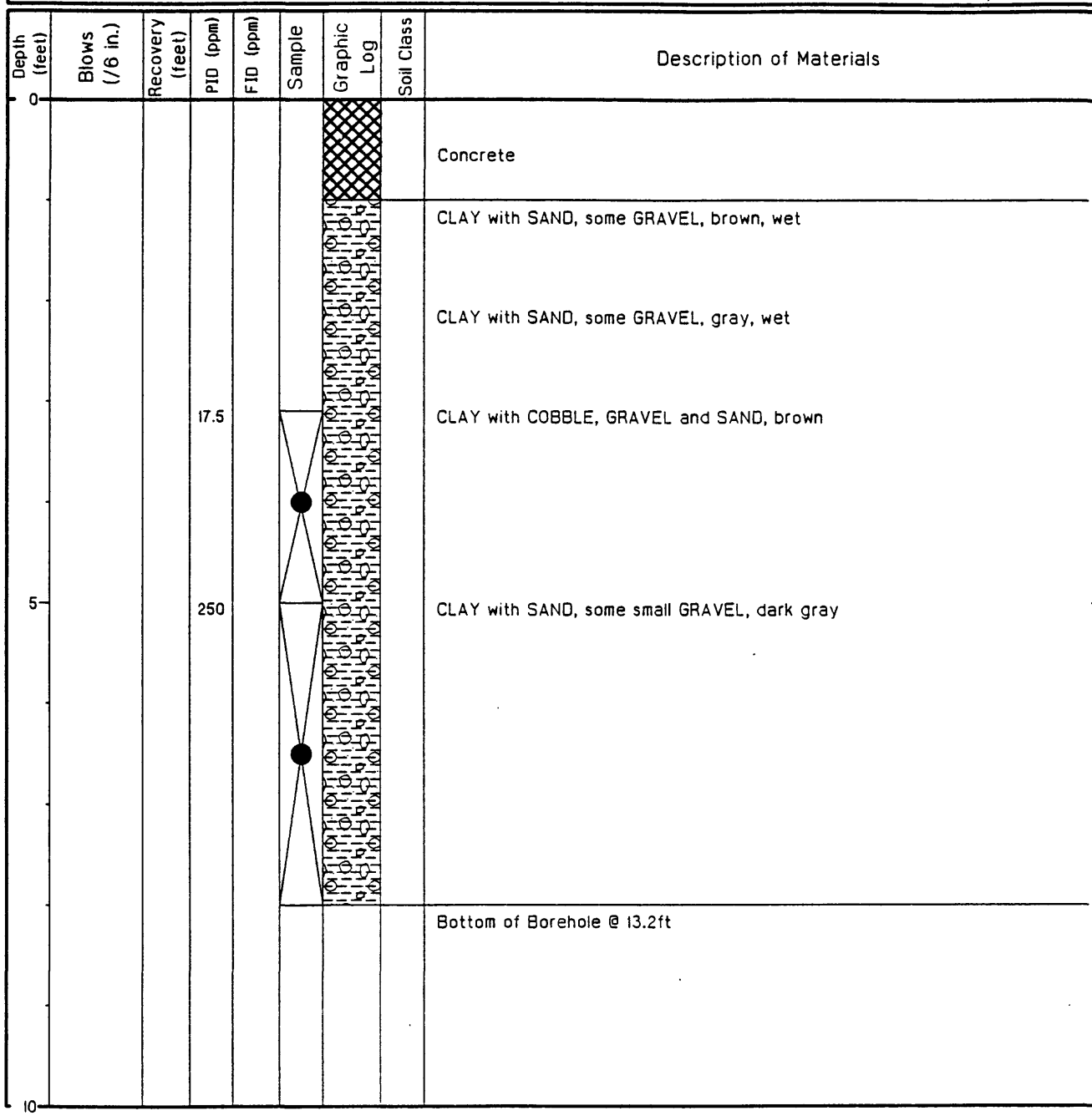
Begin Drilling: 11/21/96
End Drilling: 11/21/96
Borehole TD: 13.2
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-06
Converted to Well? NO

USGS Well Name:
Northing: 724923.94
Easting: 1892295.37
Surface Elev: 808
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-07** **Map ID #: USB-07**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

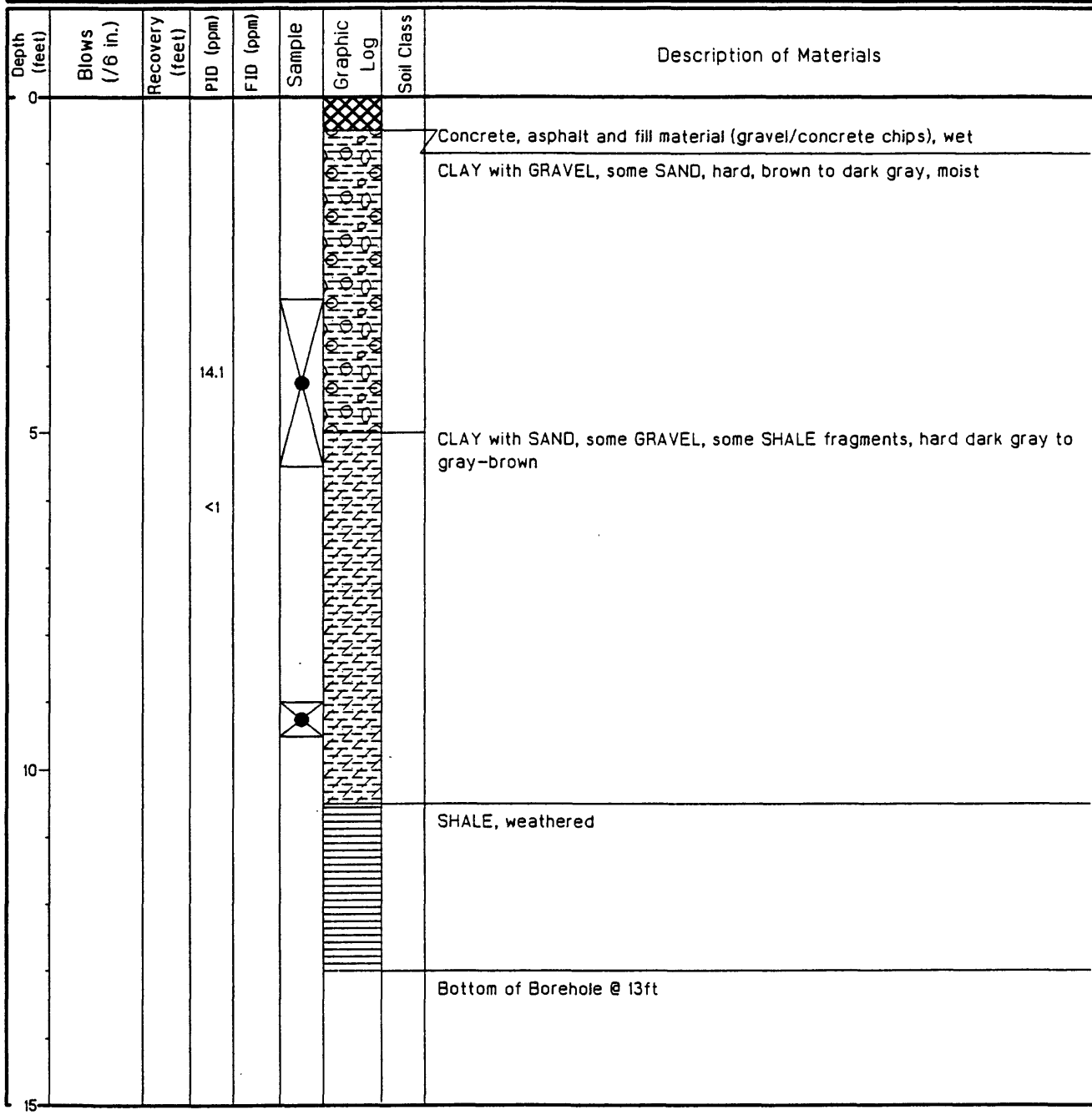
Begin Drilling: 11/21/96
End Drilling: 11/21/96
Borehole TD: 8
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-07
Converted to Well? NO

USGS Well Name:
Northing: 725032.08
Easting: 1892088.00
Surface Elev: 807
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-08** **Map ID #: USB-08**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

Begin Drilling: 11/21/96
End Drilling: 11/21/96
Borehole TD: 13
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-08
Converted to Well? NO

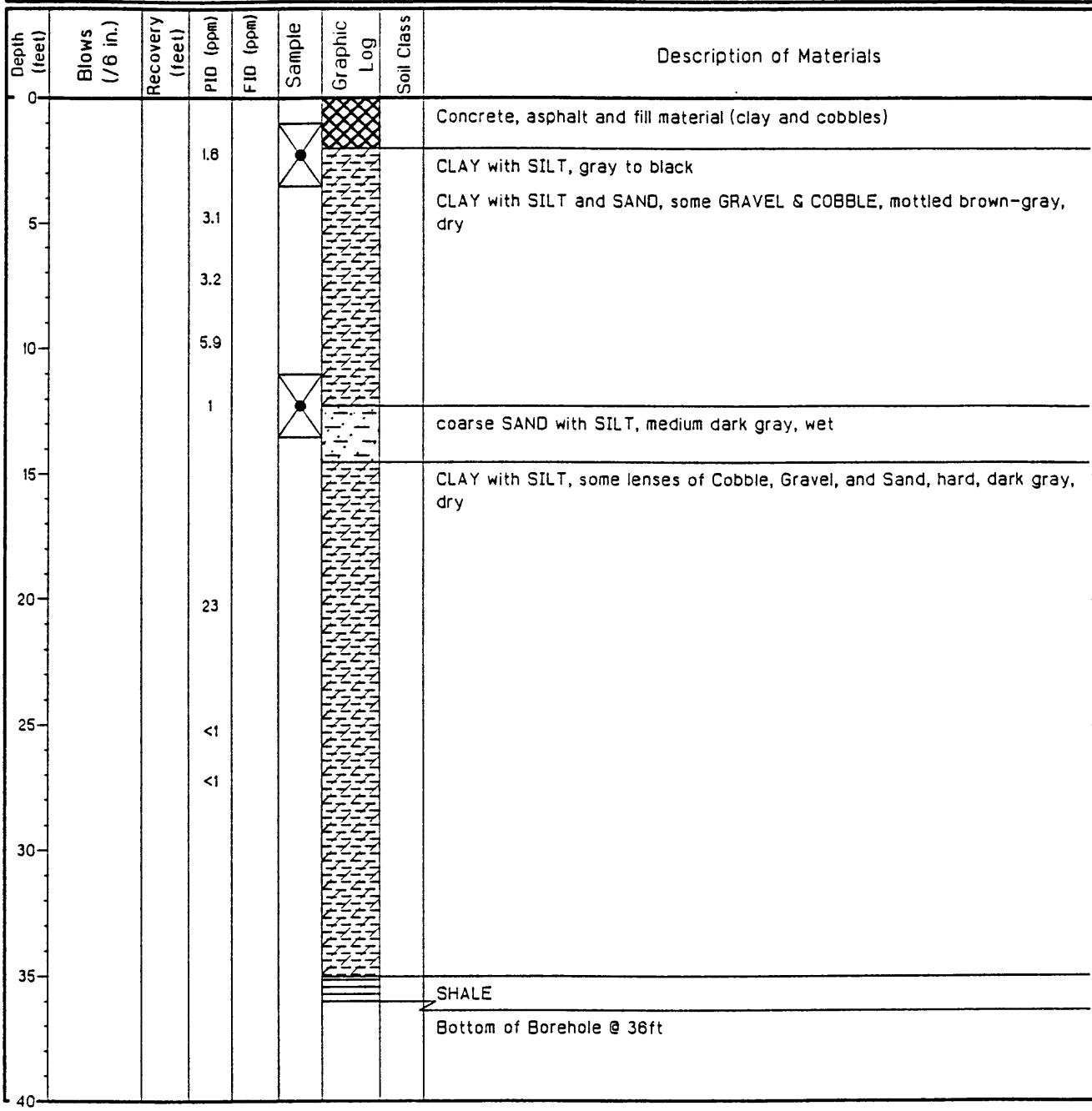
USGS Well Name:
Northing: 725066.46
Easting: 1892092.82
Surface Elev: 807
Datum: ft, NGVD

Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

## Borehole Log: USB-09 **Map ID #: USB-09**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

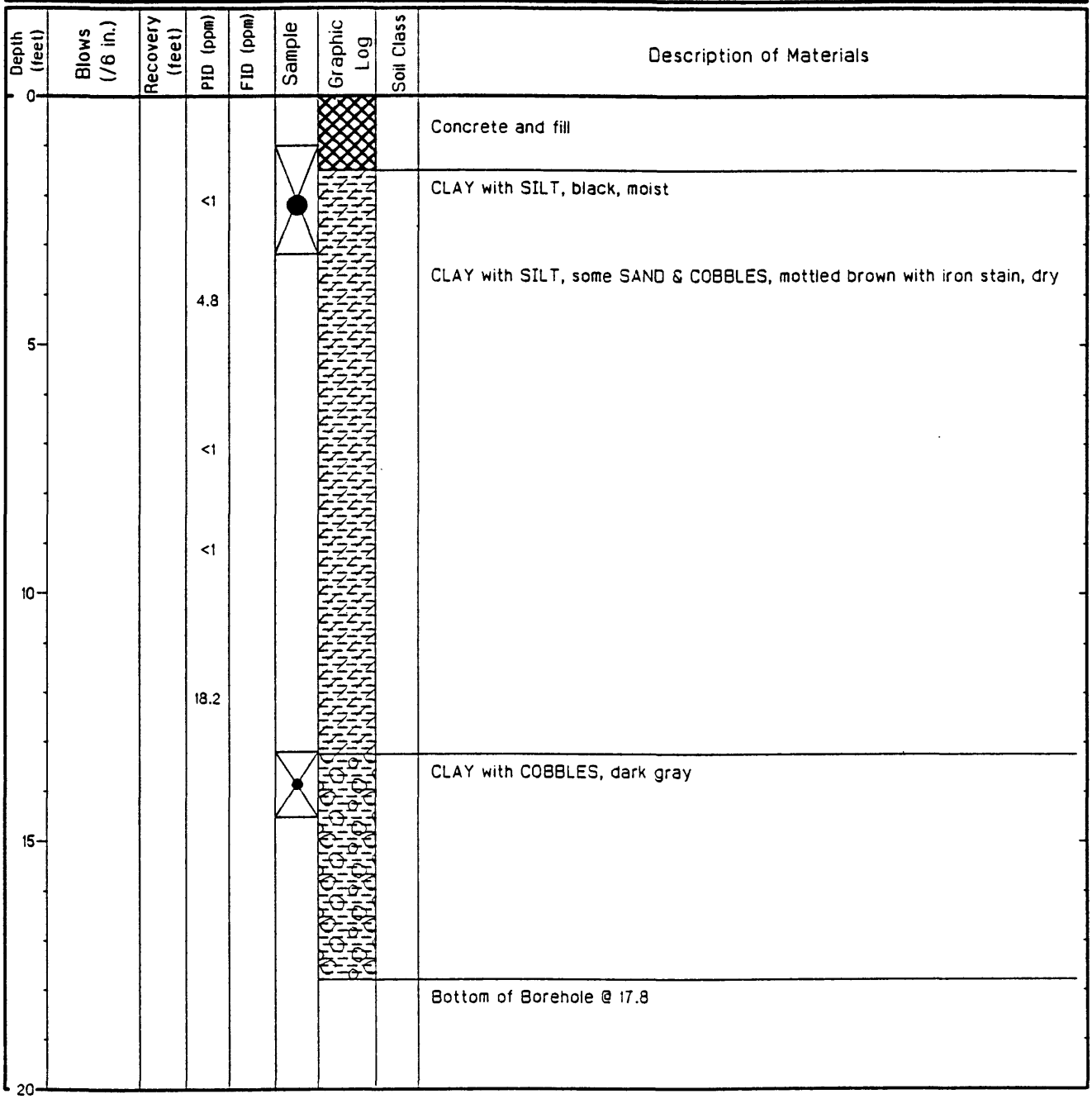
Begin Drilling: 11/22/96
End Drilling: 11/22/96
Borehole TD: 36
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-09
Converted to Well? NO

USGS Well Name:
Northing: 726041.22
Easting: 1890840.75
Surface Elev: 806
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-10** **Map ID #: USB-10**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

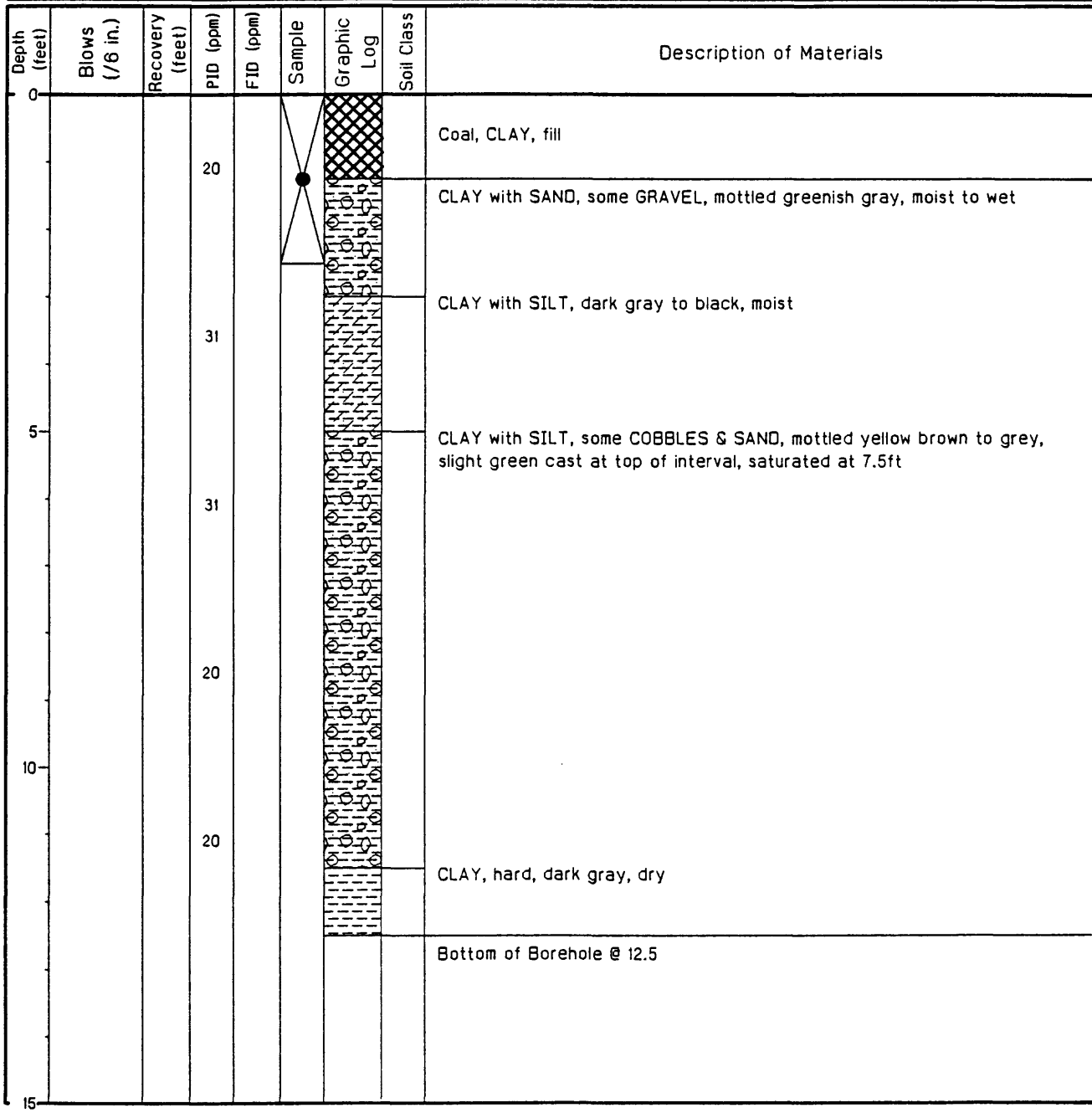
Begin Drilling: 11/23/96
End Drilling: 11/23/96
Borehole TD: 17.8
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-10
Converted to Well? NO

USGS Well Name:
Northing: 725448.21
Easting: 1890150.12
Surface Elev: 805
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-11** **Map ID #: USB-11**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

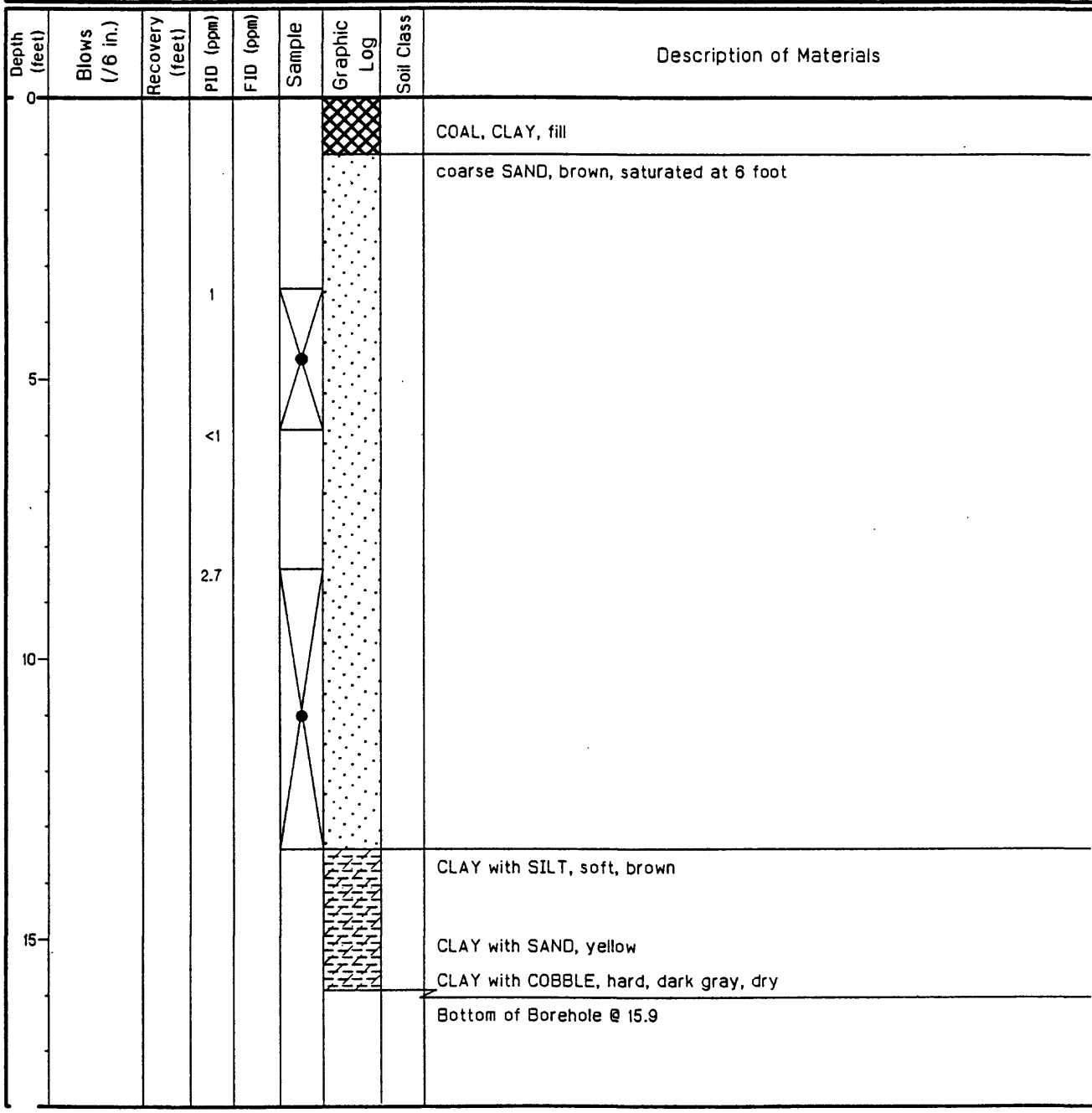
Begin Drilling: 11/23/96
End Drilling: 11/23/96
Borehole TD: 12.5
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-11
Converted to Well? NO

USGS Well Name:
Northing: 724772.63
Easting: 1890273.72
Surface Elev: 805
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-12** **Map ID #: USB-12**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

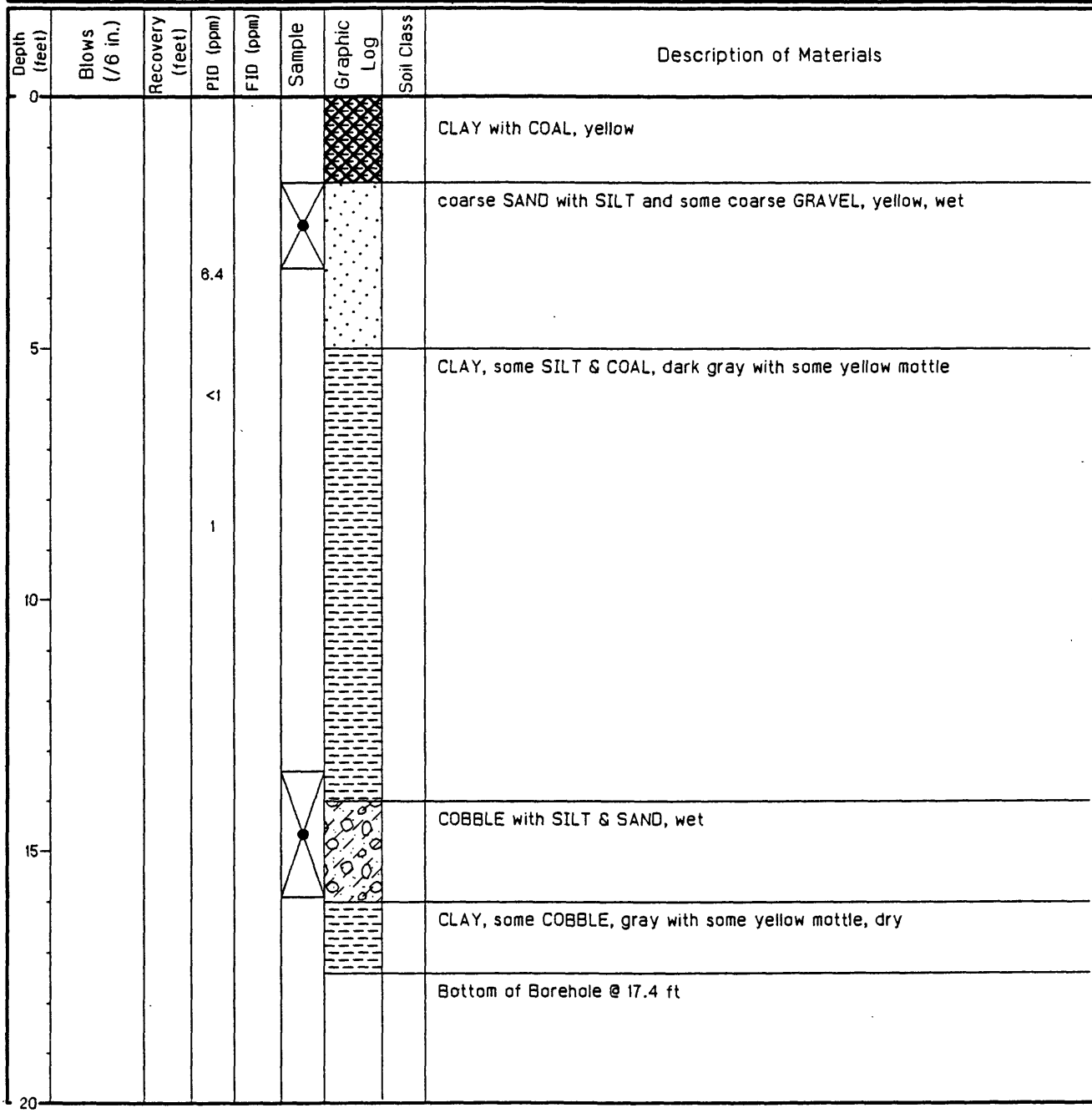
Begin Drilling: 11/24/96
End Drilling: 11/24/96
Borehole TD: 15.9
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-12
Converted to Well? NO

USGS Well Name:
Northing: 724511.05
Easting: 1890332.94
Surface Elev: 805
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-13** **Map ID #: USW-13**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

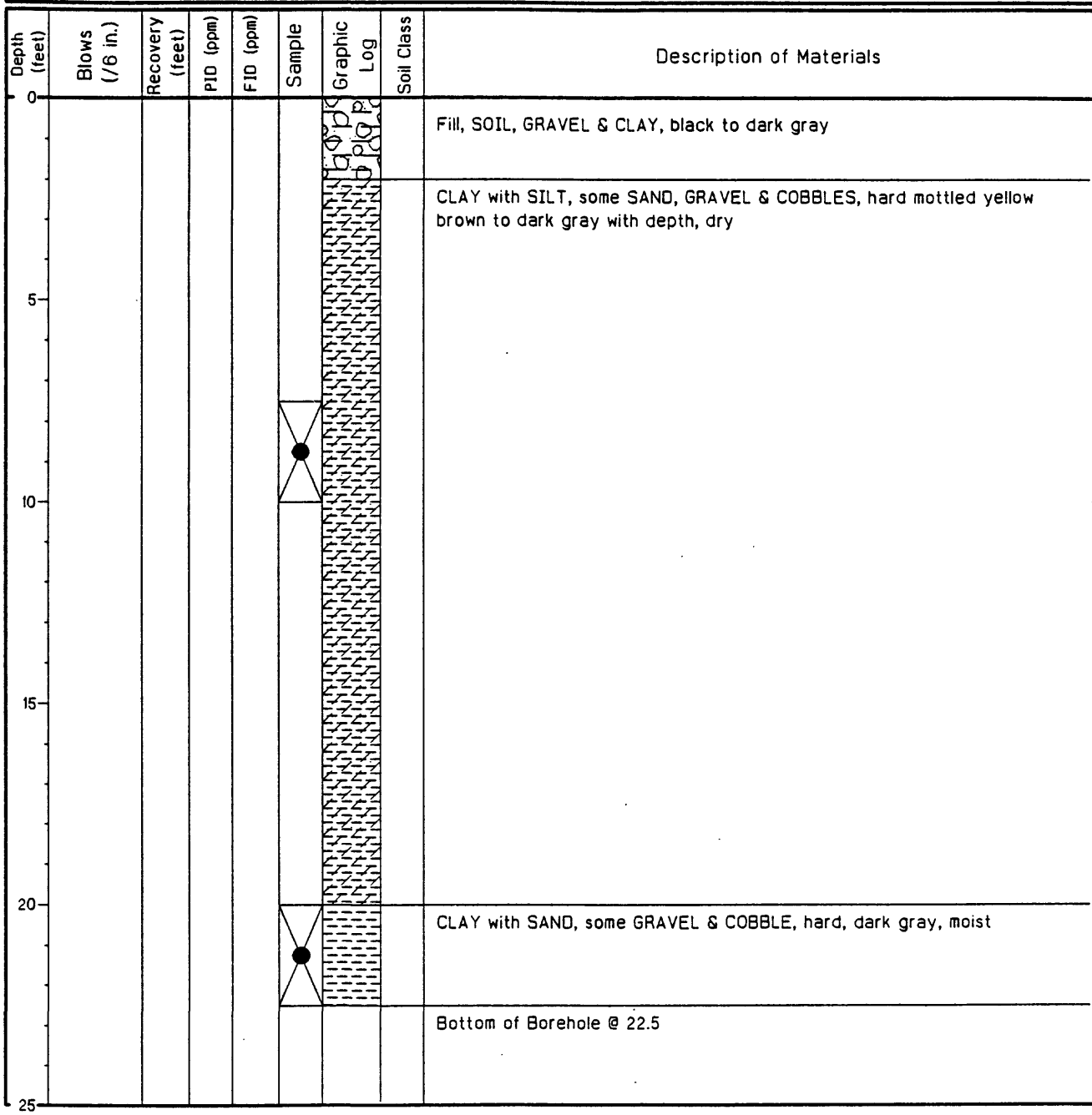
Begin Drilling: 11/24/96
End Drilling: 11/24/96
Borehole TD: 17.4
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-13
Converted to Well? Yes

USGS Well Name: USW-13
Northing: 724700.80
Easting: 1890296.33
Surface Elev: 805
Datum: ft, NGVD
Air Force Plant 85

U.S. Geological Survey -- Ohio District

**Borehole Log: USB-14** **Map ID #: USB-14**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

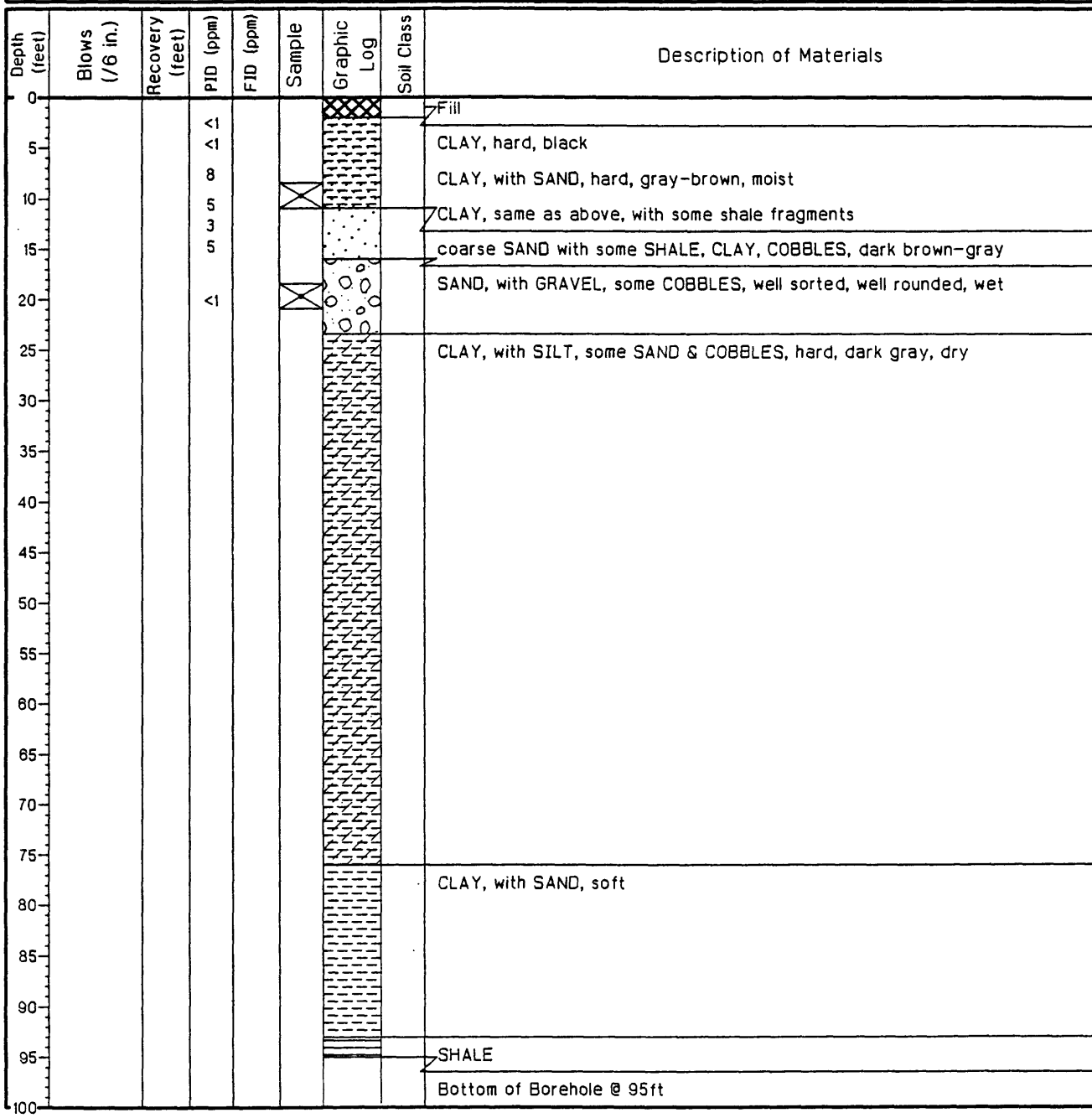
Begin Drilling: 11/25/96
End Drilling: 11/25/96
Borehole TD: 22.9
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-14
Converted to Well? NO

USGS Well Name:
Northing: 724224.06
Easting: 1890966.79
Surface Elev: 805
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-15** **Map ID #: USB-15**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

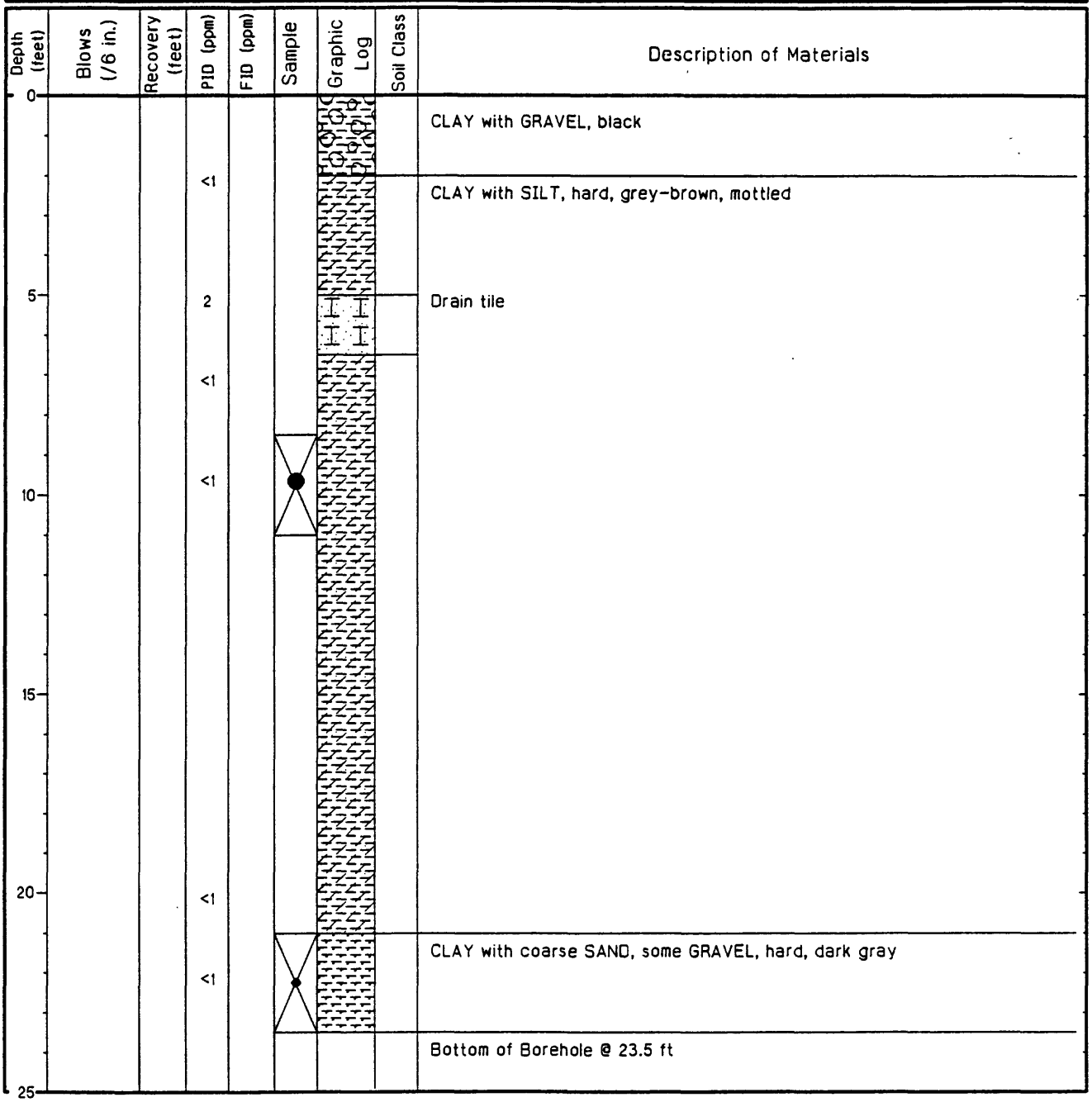
Begin Drilling: 12/3/96
End Drilling: 12/3/96
Borehole TD: 95
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-15
Converted to Well? NO

USGS Well Name:
Northing: 725370.29
Easting: 1886257.23
Surface Elev: 800
Datum: ft, NGVD
Air Force Plant 85

U.S. Geological Survey -- Ohio District

**Borehole Log: USB-16** **Map ID #: USW-16**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

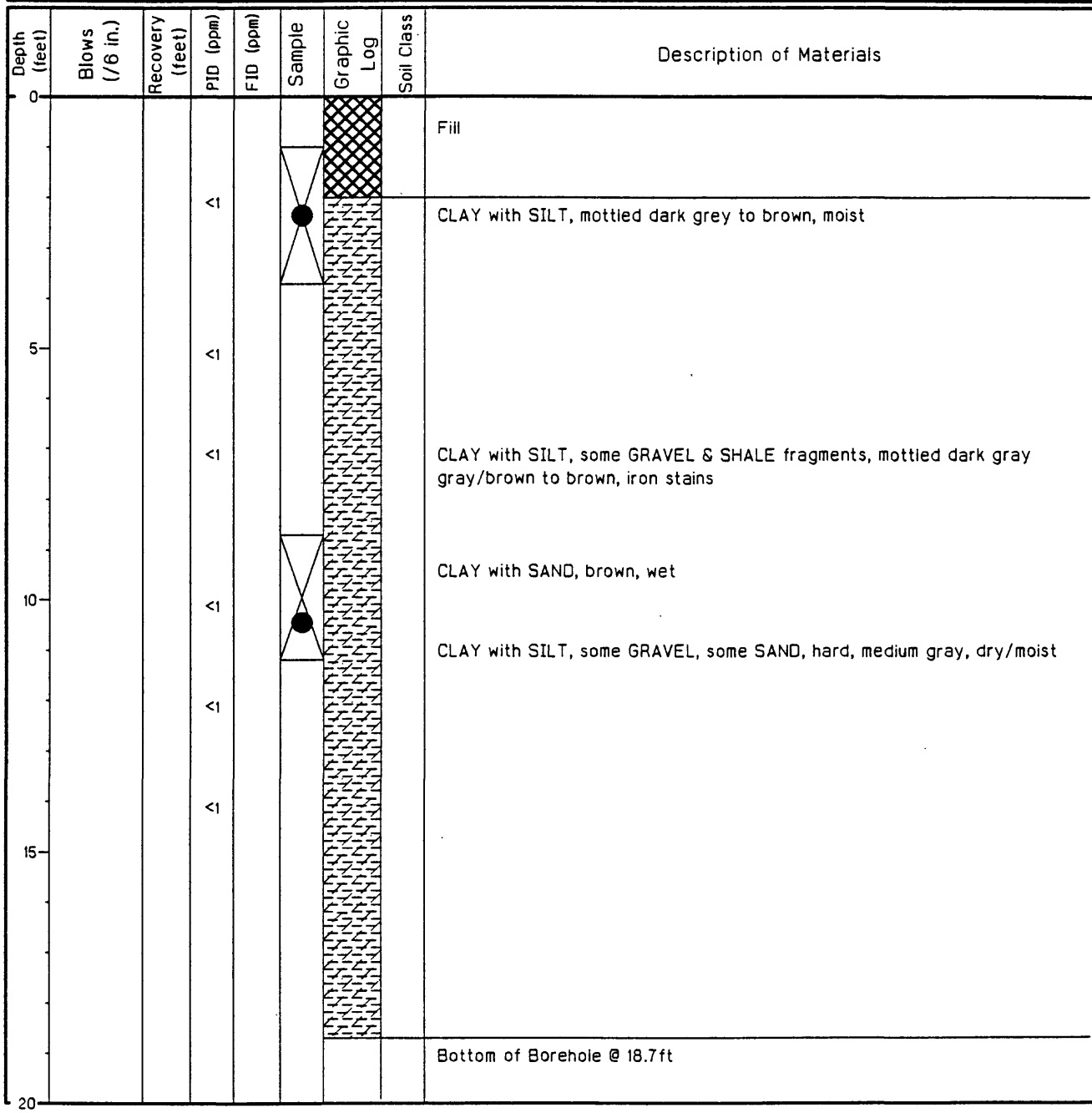
Begin Drilling: 12/04/96
End Drilling: 12/04/96
Borehole TD: 23.5
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-16
Converted to Well? Yes

USGS Well Name: USW-16
Northing: 725350.85
Easting: 1886531.12
Surface Elev: 801
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-17** **Map ID #: USB-17**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

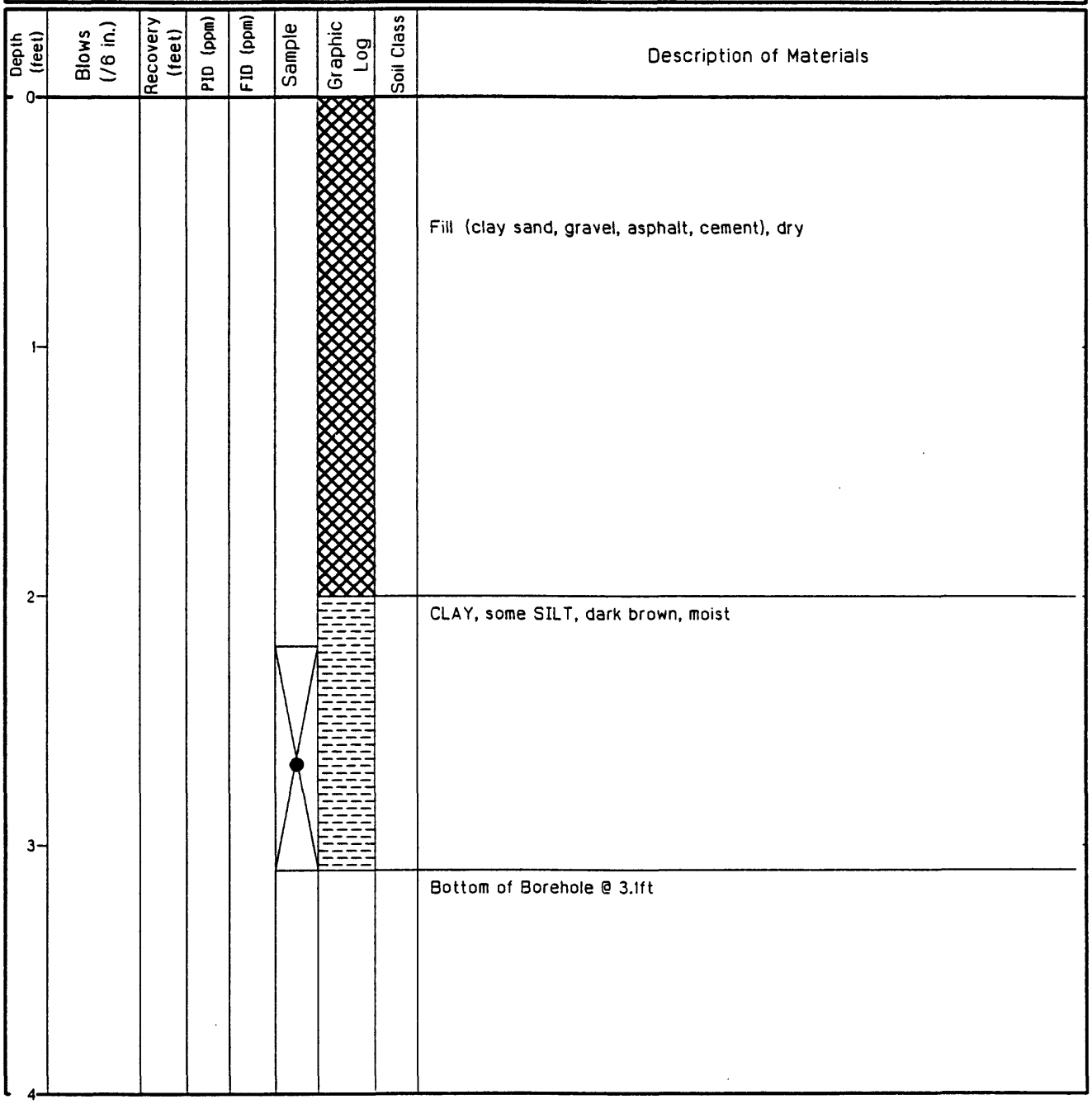
Begin Drilling: 12/5/96
End Drilling: 12/5/96
Borehole TD: 18.7
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-17
Converted to Well? NO

USGS Well Name:
Northing: 725224.12
Easting: 1886360.87
Surface Elev: 801
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-180A Map ID #: USB-180A**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: _____ Begin Drilling: 12/5/96 USGS Well Name: _____

Driller: _____ End Drilling: 12/5/96 Northing: 725157.81

Drilling Method: Hand Auger Borehole TD: 3.1 Easting: 1886068.65

Drilling Fluid: None Logged By: G. Nalley/J. Parnell Surface Elev: 800

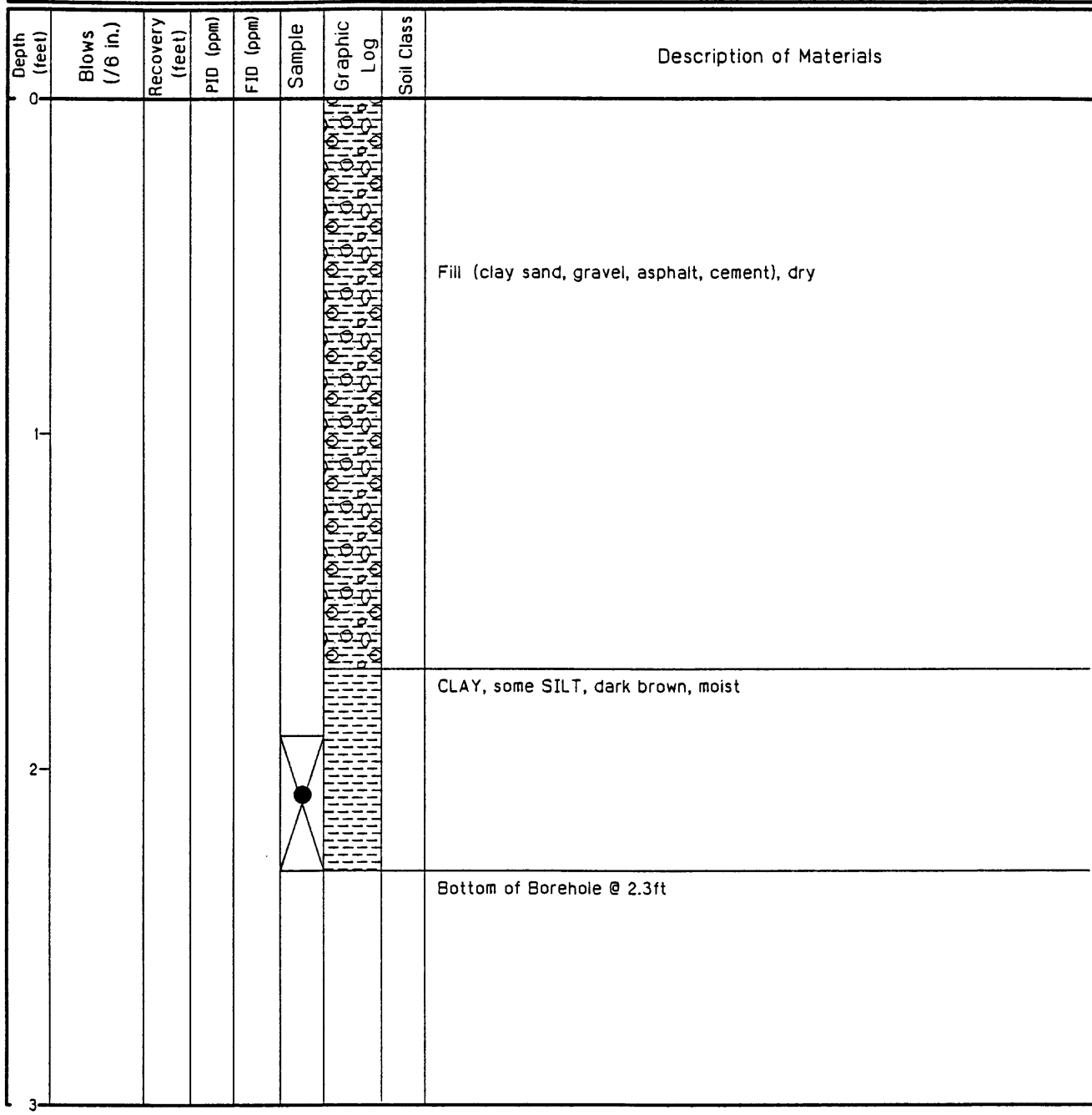
Borehole Diam: 3 inch Orig Borehole #: USB-180A Datum: ft, NGVD

Contractor: USGS - Ohio District Converted to Well? NO Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-180B Map ID #: USB-180B**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

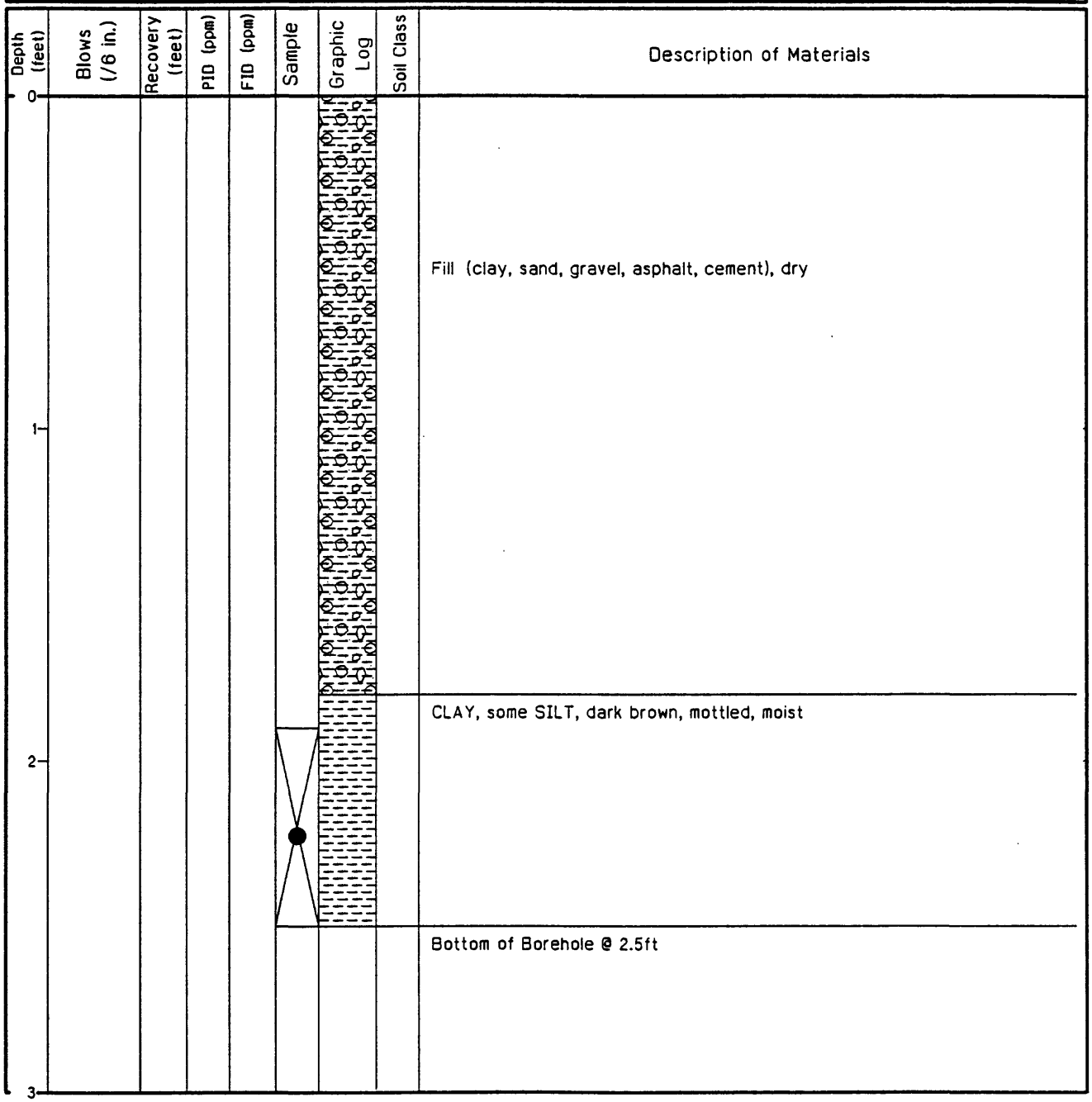
Begin Drilling: 12/5/96
End Drilling: 12/5/96
Borehole TD: 2.3
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-180B
Converted to Well? NO

USGS Well Name:
Northing: 725248.42
Easting: 1886131.37
Surface Elev: 800
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-180C Map ID #: USB-180C**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: _____ Begin Drilling: 12/5/96 USGS Well Name: _____

Driller: _____ End Drilling: 12/5/96 Northing: 725319.51

Drilling Method: Hand Auger Borehole TD: 2.5 Easting: 1886074.09

Drilling Fluid: None Logged By: S. Coen Surface Elev: 800

Borehole Diam: 3 inch Orig Borehole #: USB-180C Datum: ft, NGVD

Contractor: USGS - Ohio District Converted to Well? NO Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-19** **Map ID #: USW-19**

AIR FORCE PLANT 85 Columbus, Ohio

| Depth (feet) | Blows (/6 in.) | Recovery (feet) | PID (ppm) | FID (ppm) | Sample | Graphic Log | Soil Class | Description of Materials |
|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | | TOP SOIL, brown |
| | | | 101 | | | | | CLAY, with SAND, yellow brown, moist |
| | | | | | | | | CLAY with SILT, some SAND, hard, gray to black, moist |
| 5 | | | 85 | | | | | |
| | | | 41 | | | | | |
| | | | | | | | | CLAY with SAND & GRAVEL, some COBBLE & SHALE fragments, saturated |
| 10 | | | 21 | | | | | |
| | | | | | | | | CLAY with SILT, some COBBLES & SHALE fragments, hard, friable, medium gray, dry |
| 15 | | | 22 | | | | | |
| | | | 23 | | | | | |
| 20 | | | | | | | | |
| 25 | | | | | | | | |
| | | | | | | | | coarse SAND with CLAY, some GRAVEL, dark gray, saturated |
| 30 | | | | | | | | CLAY with SAND, some COBBLE & GRAVEL, dark gray, saturated |
| | | | | | | | | Bottom of Borehole @ 33.5 ft |
| 35 | | | | | | | | |

Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

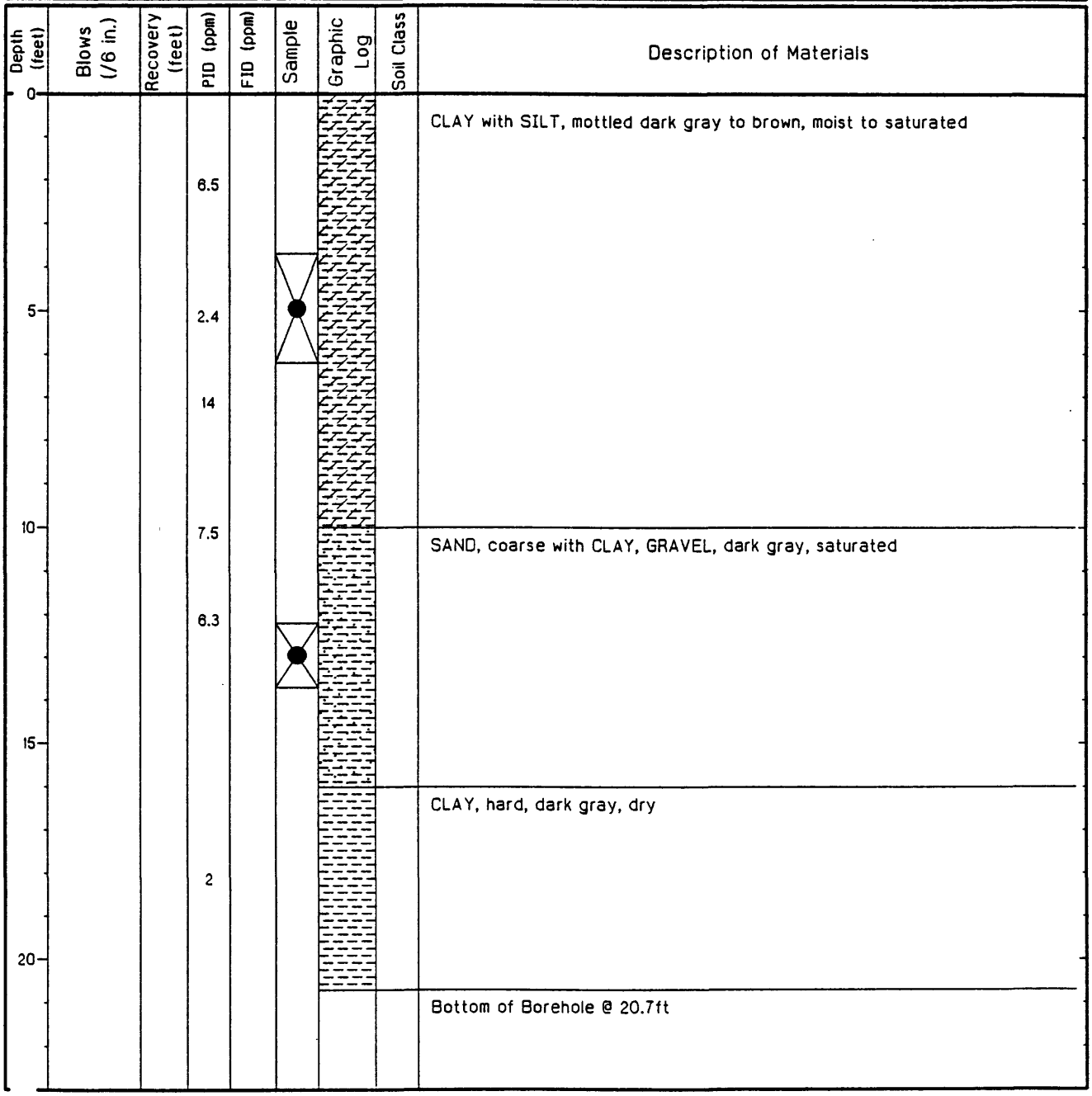
Begin Drilling: 12/5/96
End Drilling: 12/5/96
Borehole TD: 33.5
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-19
Converted to Well? Yes

USGS Well Name: USW-19
Northing: 725582.18
Easting: 1887071.56
Surface Elev: 801
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-20** **Map ID #: USB-20**

AIR FORCE PLANT 85 Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

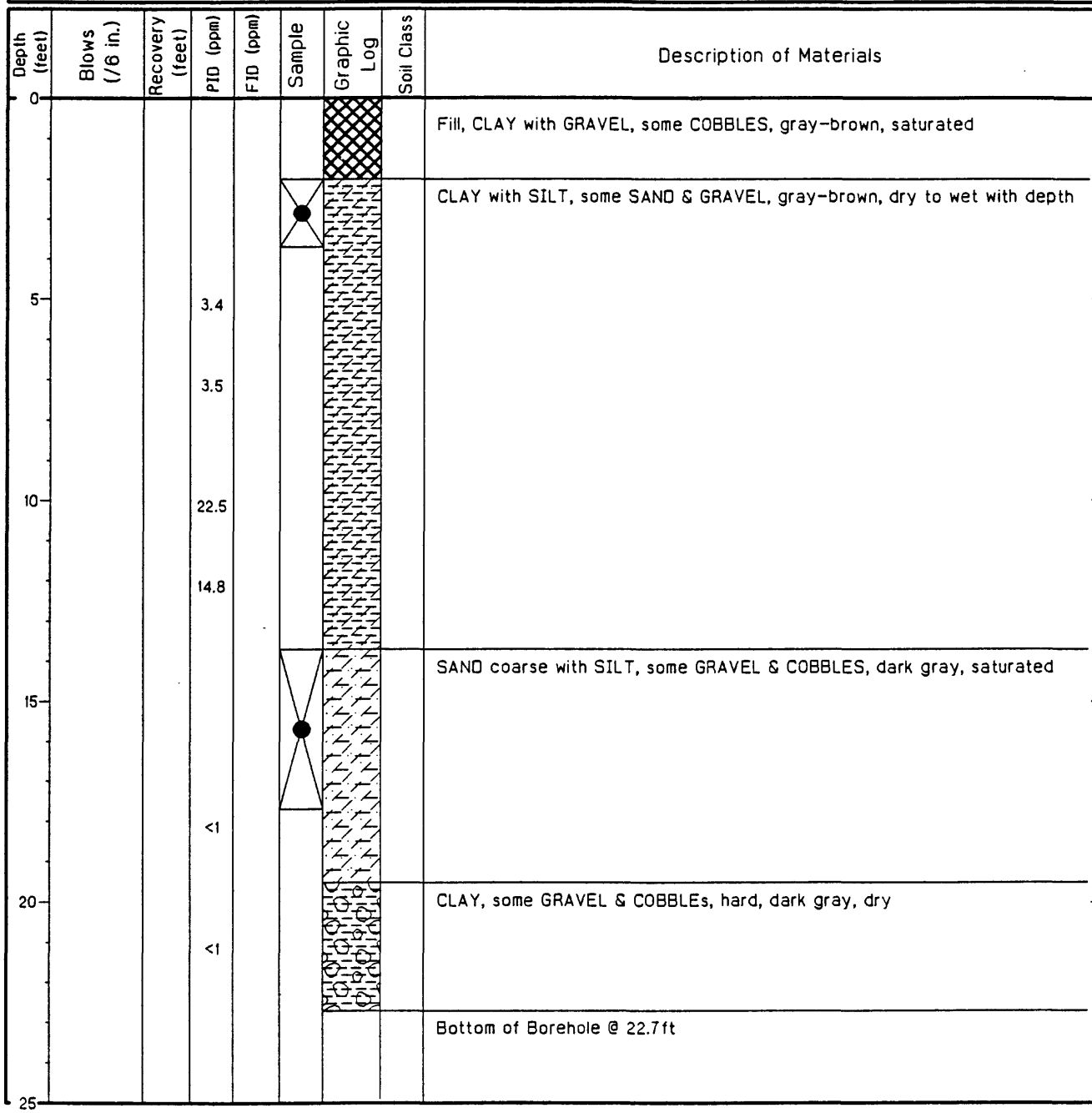
Begin Drilling: 12/6/96
End Drilling: 12/6/96
Borehole TD: 20.7
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-20
Converted to Well? NO

USGS Well Name:
Northing: 724719.55
Easting: 1887866.32
Surface Elev: 801
Datum: ft, NGVD
Air Force Plant 85

*U.S. Geological Survey -- Ohio District*

**Borehole Log: USB-21** **Map ID #: USB-21**

AIR FORCE PLANT 85 — Columbus, Ohio




Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Borehole Diam: 8.5 inch
Contractor: USGS - Ohio District

Begin Drilling: 12/7/96
End Drilling: 12/7/96
Borehole TD: 22.7
Logged By: G. Nalley/J. Parnell
Orig Borehole #: USB-21
Converted to Well? NO

USGS Well Name:
Northing: 725591.58
Easting: 1887914.55
Surface Elev: 802
Datum: ft, NGVD
Air Force Plant 85

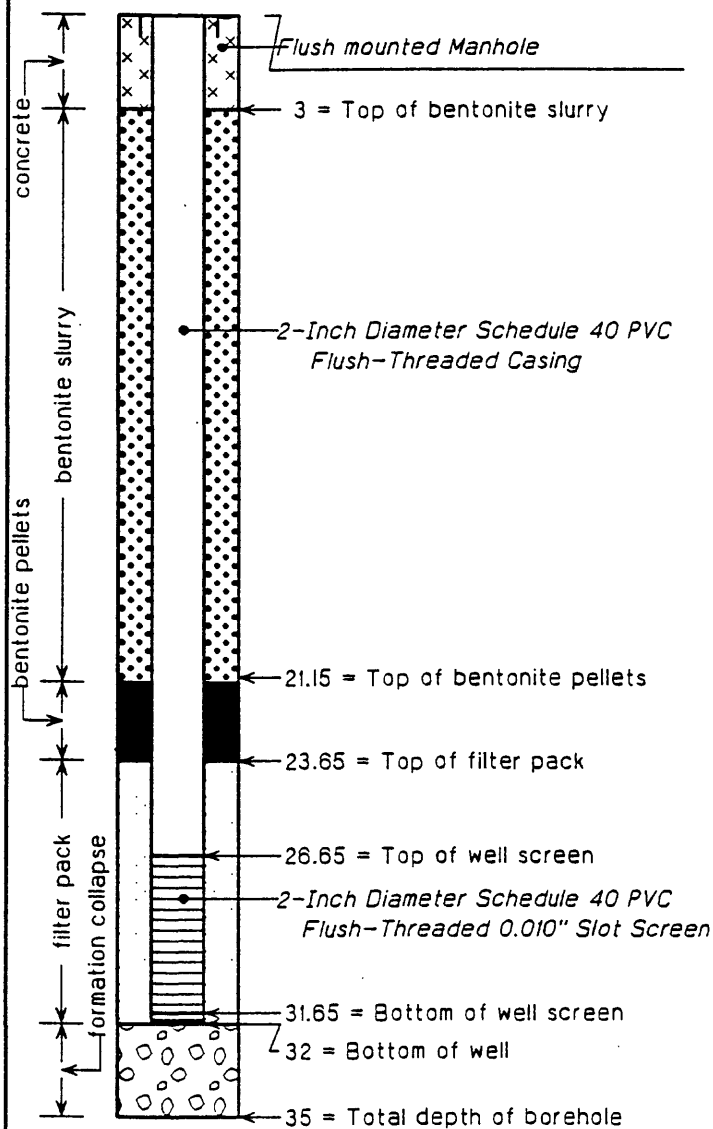
# APPENDIX 2. CONSTRUCTION DIAGRAMS FOR OBSERVATION WELLS AT AIR FORCE PLANT 85, COLUMBUS, OHIO, 1996

*U.S. Geological Survey -- Ohio District*

## Well Construction Log: USW02

AIR FORCE PLANT 85 — Columbus, Ohio

Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Begin Drilling: 11/16/96
End Drilling: 11/17/96
Begin Well Install: 11/17/96
End Well Install: 11/17/96
Logged By: G. Nalley/J. Parnell
Borehole Diam: 8.5 inch
Northing: 725067.47
Easting: 1890680.09




* *Depths are feet below land surface*

Map ID #: USW02
Filter Pack Type: #5 Quartz Sand
Amount Used: 8 bags
Seal Type: Bentonite Pellets
Hydration Time: 48 hours
Emplacement Method: Pour
Grout Comp/Prop: Cement/bentonite
Emplacement Method: Pour
Centralizer Depth (s): None
Protective Casing Type: Steel
Diameter: 8-inch
Date Installed: 11/18/96
Weep Hole?: no
Number of Guard Posts: None
DTW (bmp) upon completion:
Date:
Development Technique: Bail
Begin Development: 12/16/96
End Development: 12/17/96
Vol Fluid Removed: 26 gallons
Measuring Pt Elev:
Ground Surface Elev: 806
Measuring Pt Desc: Top of PVC
Datum: ft, NGVD
Surveyed By:
IRP Well #:
Contractor: USGS - Ohio District
Remarks:

For Lithologic Descriptions See Log of Borehole: USB02

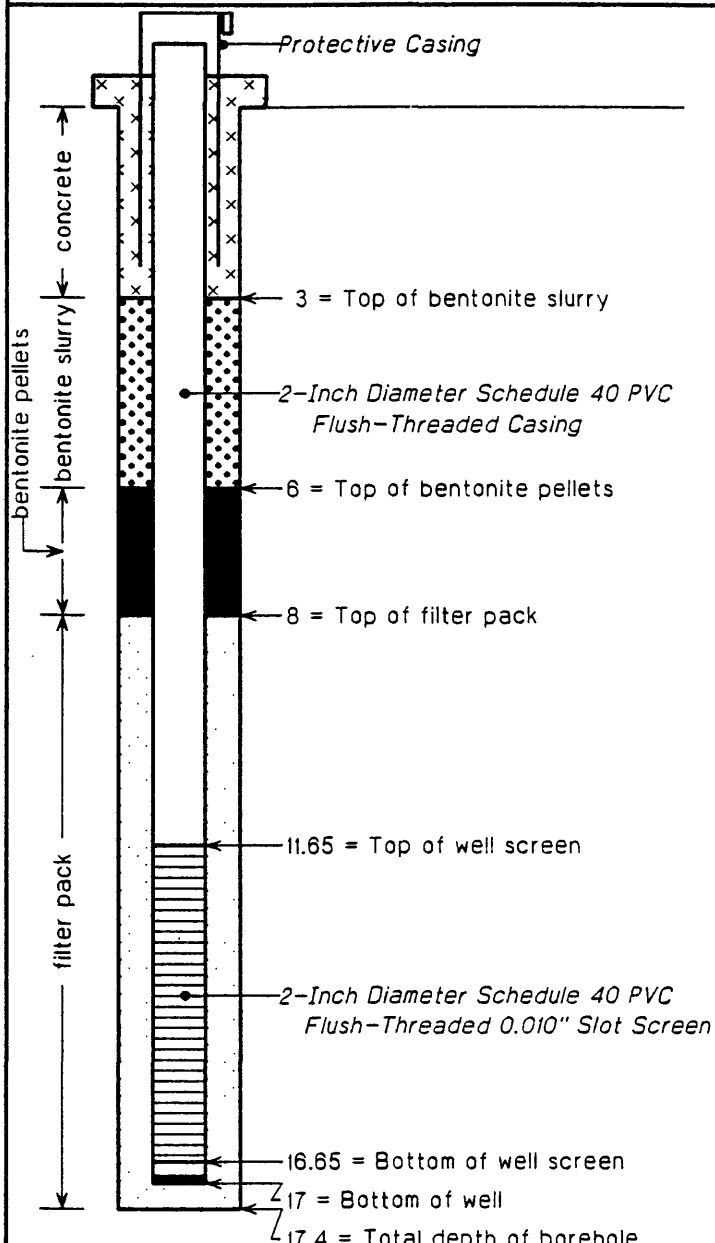
*Air Force Plant 85*

*U.S. Geological Survey -- Ohio District*

## Well Construction Log: USW13

AIR FORCE PLANT 85 — Columbus, Ohio

Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Begin Drilling: 11/24/96
End Drilling: 11/24/96
Begin Well Install: 11/24/96
End Well Install: 11/24/96
Logged By: G. Nalley/J. Parnell
Borehole Diam: 8.5 inch
Northing: 724700.80
Easting: 1890296.33




* Depths are feet below land surface

Map ID #: USW13
Filter Pack Type: #5 Quartz Sand
Amount Used: 7 bags
Seal Type: Bentonite Pellets
Hydration Time: 48 hours
Emplacement Method: Pour
Grout Comp/Prop: Cement/bentonite
Emplacement Method: Pour
Centralizer Depth (s): None
Protective Casing Type: Steel
Diameter: 4-inch
Date Installed: 11/24/96
Weep Hole?: no
Number of Guard Posts: None
DTW (bmp) upon completion:
Date:
Development Technique: Pump
Begin Development: 12/16/96
End Development: 12/17/97
Vol Fluid Removed: 35 gallons
Measuring Pt Elev:
Ground Surface Elev: 805
Measuring Pt Desc: Top of PVC
Datum: ft, NGVD
Surveyed By:
IRP Well #:
Contractor: USGS - Ohio District
Remarks:

For Lithologic Descriptions See Log of Borehole: USB13

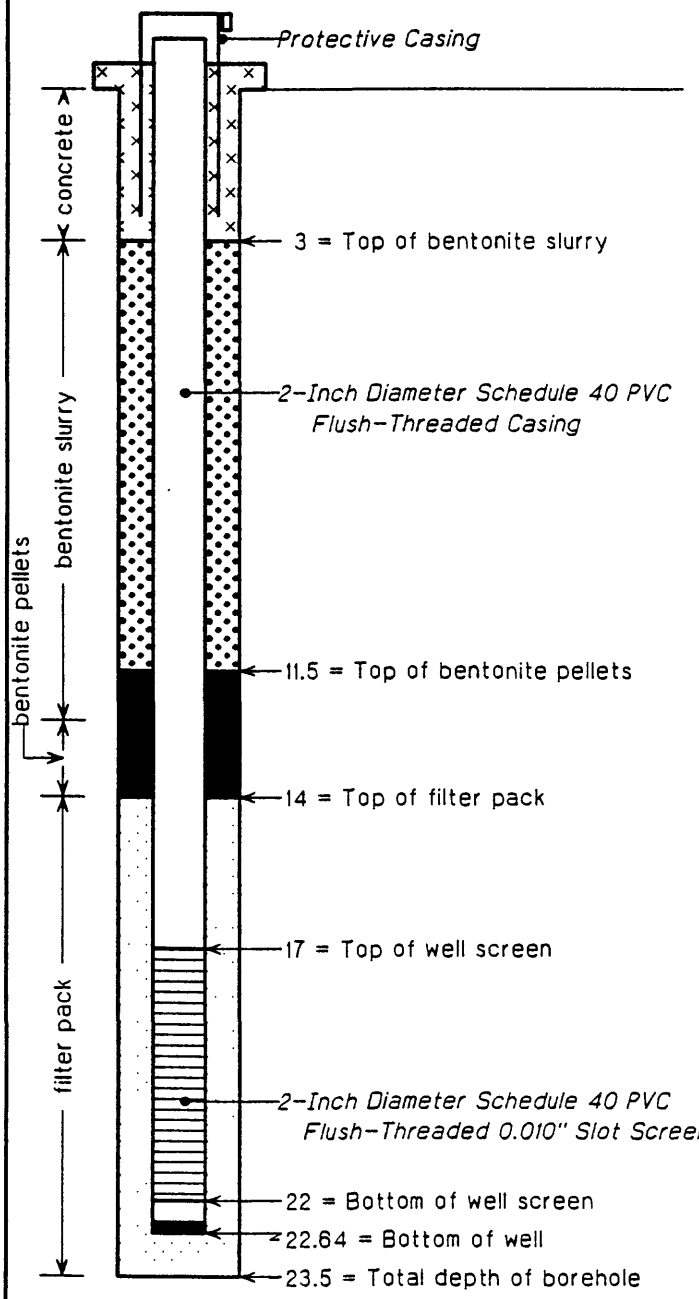
*Air Force Plant 85*

*U.S. Geological Survey -- Ohio District*

## Well Construction Log: USW16

AIR FORCE PLANT 85 — Columbus, Ohio

Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Begin Drilling: 12/04/96
End Drilling: 12/04/96
Begin Well Install: 12/04/96
End Well Install: 12/04/96
Logged By: G. Nalley/J. Parnell
Borehole Diam: 8.5 inch
Northing: 725350.85
Easting: 1886531.12




* *Depths are feet below land surface*

Map ID #: USW16
Filter Pack Type: #5 Quartz Sand
Amount Used: 6 bags
Seal Type: Bentonite Pellets
Hydration Time: 48 hours
Emplacement Method: Pour
Grout Comp/Prop: Cement bentonite
Emplacement Method: Pour
Centralizer Depth (s): None
Protective Casing Type: Steel
Diameter: 4-inch
Date Installed: 12/04/96
Weep Hole?: no
Number of Guard Posts: None
DTW (bmp) upon completion:
Date:
Development Technique: Pump
Begin Development: 12/16/96
End Development: 12/17/96
Vol Fluid Removed: 60 gallons
Measuring Pt Elev:
Ground Surface Elev: 801
Measuring Pt Desc: Top of PVC
Datum: ft, NGVD
Surveyed By:
IRP Well #:
Contractor: USGS - Ohio District
Remarks:

For Lithologic Descriptions See Log of Borehole: USB16

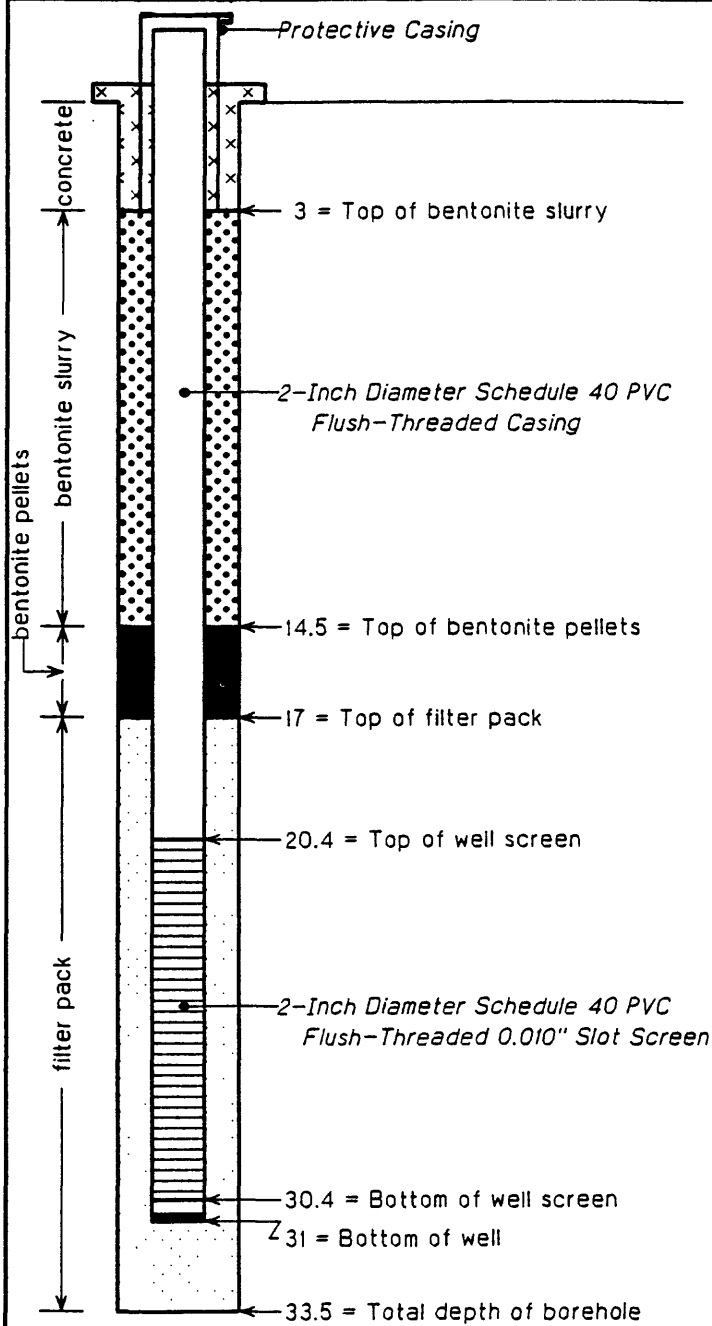
*Air Force Plant 85*

*U.S. Geological Survey -- Ohio District*

## Well Construction Log: USW19

AIR FORCE PLANT 85 — Columbus, Ohio

Drilling Co: U.S.G.S Rocky Mountain
Driller: Bill Gilman
Drilling Method: Hollow Stem Auger
Drilling Fluid: City of Columbus Water
Begin Drilling: 12/5/96
End Drilling: 12/5/96
Begin Well Install: 12/5/96
End Well Install: 12/5/96
Logged By: G. Nalley/J. Parnell
Borehole Diam: 8.5 inch
Northing: 725582.18
Easting: 1887071.56




* Depths are feet below land surface

Map ID #: USW19
Filter Pack Type: #5 Quartz Sand
Amount Used: 8 bags
Seal Type: Bentonite Pellets
Hydration Time: 48 hours
Emplacement Method: Pour
Grout Comp/Prop: Cement/bentonite
Emplacement Method: Pour
Centralizer Depth (s): None
Protective Casing Type: Steel
Diameter: 4-inch
Date Installed: 12/5/96
Weep Hole?: no
Number of Guard Posts: None
DTW (bmp) upon completion:
Date:
Development Technique: Bail, Pump
Begin Development: 12/16/96
End Development: 12/17/96
Vol Fluid Removed: 50 gallons
Measuring Pt Elev:
Ground Surface Elev: 801
Measuring Pt Desc: Top of PVC
Datum: ft, NGVD
Surveyed By:
IRP Well #: USW19
Contractor: USGS - Ohio District
Remarks:

For Lithologic Descriptions See Log of Borehole: USB19

*Air Force Plant 85*

# APPENDIX 3. SUMMARY DATA - ANALYTICAL RESULTS FOR SOIL, GROUND WATER, SURFACE WATER, AND STREAMBED SEDIMENT AT AIR FORCE PLANT 85, COLUMBUS, OHIO, 1996

# Summary Data

## Analytical Results for Soil, Ground Water, Surface Water, and Streambed Sediment At Air Force Plant 85, Columbus, Ohio, 1996

Explanation of Codes

| | | |
|---|---|---|
| Units: | µg/L | Micrograms per liter |
| | mg/L | Milligrams per liter |
| | mg/kg | Milligrams per kilogram |
| Sample Codes | REG | Regular/environmental sample |
| | DUP | Duplicate sample |
| | REP | Replicate sample |
| Data Qualifiers | -- | Not analyzed for |
| | U | Undetected; reporting limits listed |
| | J | Estimated |
| | UJ | Undetected, at an estimated detection limit |
| | R | Rejected |

## *Soil*

| **Location** | **USB01** | **USB01** | **USB03** | **USB03** | **USB04** | **USB04** | **USB05** | **USB05** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 5.0 | 10.0 | 3.2 | 15.7 | 8.5 | 33.5 | 11.5 | 11.5 |
| End Depth (feet) | 7.5 | 12.5 | 5.7 | 18.2 | 11.0 | 36.0 | 13.8 | 13.8 |
| Date | 11/16/96 | 11/16/96 | 11/17/96 | 11/17/96 | 11/19/96 | 11/19/96 | 11/21/96 | 11/21/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| VOLATILE ORGANICS | | | | | | | | |
| Acetone | 0.010 U | 0.020 UJ | 0.19 J | 0.010 U | 0.010 UJ | 0.013 J | 0.034 J | 0.025 J |
| Benzene | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.097 J | 0.0091 J |
| Bromodichloromethane | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Bromoform | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Bromomethane | 0.010 U | 0.020 U | 0.020 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 UJ |
| 2-Butanone | 0.010 U | 0.020 UJ | 0.047 J | 0.010 U | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Carbon disulfide | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Carbon tetrachloride | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Chlorobenzene | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Chloroethane | 0.010 U | 0.020 U | 0.020 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 UJ |
| Chloroform | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Chloromethane | 0.010 U | 0.020 U | 0.020 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 UJ |
| Dibromochloromethane | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,1-Dichloroethane | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloroethane | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,1-Dichloroethene | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloroethene (total) | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloropropane | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| cis-1,3-Dichloropropene | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| trans-1,3-Dichloropropene | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Ethylbenzene | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0051 J |
| 2-Hexanone | 0.010 UJ | 0.020 UJ | 0.020 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| 4-Methyl-2-pentanone | 0.010 UJ | 0.020 UJ | 0.020 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Methylene chloride | 0.0050 U | 0.010 U | 0.010 U | 0.0063 | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Styrene | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,1,2,2-Tetrachloroethane | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Tetrachloroethene (Tetrachloroethylene) | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Toluene | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,1,1-Trichloroethane | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,1,2-Trichloroethane | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Trichloroethene (Trichloroethylene) | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Vinyl acetate | 0.010 UJ | 0.020 UJ | 0.020 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Vinyl chloride | 0.010 U | 0.020 U | 0.020 U | 0.010 U | 0.010 U | 0.010 U | 0.014 J | 0.010 UJ |
| Xylenes (total) | 0.0050 U | 0.010 U | 0.010 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.015 J |

## Soil

| Location | USB06 | USB06 | USB07 | USB07 | USB08 | USB08 | USB09 | USB09 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.2 | 8.2 | 3.1 | 5.0 | 3.0 | 9.0 | 1.0 | 11.0 |
| End Depth (feet) | 5.7 | 10.7 | 5.0 | 8.0 | 5.5 | 9.5 | 3.5 | 13.5 |
| Date | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/22/96 | 11/22/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| VOLATILE ORGANICS | | | | | | | | |
| Acetone | 0.045 J | 0.010 UJ | 0.047 J | 0.092 J | 0.15 J | 0.059 J | 0.17 J | 0.010 U |
| Benzene | 0.0050 U | 0.0088 J | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| Bromodichloromethane | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| Bromoform | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U |
| Bromomethane | 0.010 U | 0.010 UJ | 0.010 UJ | 0.025 U | 0.020 U | 0.010 UJ | 0.010 U | 0.010 U |
| 2-Butanone | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.025 UJ | 0.078 J | 0.010 UJ | 0.037 J | 0.010 U |
| Carbon disulfide | 0.0050 U | 0.0050 UJ | 0.0055 J | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ |
| Carbon tetrachloride | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U |
| Chlorobenzene | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| Chloroethane | 0.010 U | 0.010 UJ | 0.010 UJ | 0.025 U | 0.020 U | 0.010 UJ | 0.010 U | 0.010 U |
| Chloroform | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| Chloromethane | 0.010 U | 0.010 UJ | 0.010 UJ | 0.025 U | 0.020 U | 0.010 UJ | 0.010 U | 0.010 U |
| Dibromochloromethane | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| 1,1-Dichloroethane | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| 1,2-Dichloroethane | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U |
| 1,1-Dichloroethene | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| 1,2-Dichloroethene (total) | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| 1,2-Dichloropropane | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| cis-1,3-Dichloropropene | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| trans-1,3-Dichloropropene | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U |
| Ethylbenzene | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| 2-Hexanone | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.025 UJ | 0.020 UJ | 0.010 UJ | 0.010 UJ | 0.010 U |
| 4-Methyl-2-pentanone | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.025 UJ | 0.020 UJ | 0.010 UJ | 0.010 UJ | 0.010 U |
| Methylene chloride | 0.0050 U | 0.0050 UJ | 0.0067 J | 0.012 U | 0.010 U | 0.011 J | 0.0050 U | 0.0050 U |
| Styrene | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| 1,1,2,2-Tetrachloroethane | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U |
| Tetrachloroethene (Tetrachloroethylene) | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| Toluene | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| 1,1,1-Trichloroethane | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| 1,1,2-Trichloroethane | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| Trichloroethene (Trichloroethylene) | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |
| Vinyl acetate | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.025 UJ | 0.020 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Vinyl chloride | 0.010 U | 0.010 UJ | 0.010 UJ | 0.025 U | 0.020 U | 0.010 UJ | 0.010 U | 0.010 U |
| Xylenes (total) | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.012 U | 0.010 U | 0.0050 UJ | 0.0050 U | 0.0050 U |

## *Soil*

| **Location** | **USB10** | **USB10** | **USB11** | **USB12** | **USB12** | **USB1302** | **USB1302** | **USB14** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 1.0 | 13.2 | 0.0 | 3.4 | 8.4 | 13.4 | 1.9 | 7.5 |
| End Depth (feet) | 3.2 | 14.5 | 2.5 | 5.9 | 13.4 | 15.9 | 2.2 | 10.0 |
| Date | 11/23/96 | 11/23/96 | 11/23/96 | 11/24/96 | 11/24/96 | 11/24/96 | 12/05/96 | 11/25/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| VOLATILE ORGANICS | | | | | | | | |
| Acetone | 0.014 J | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.038 J | 0.013 U |
| Benzene | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromodichloromethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromoform | 0.0050 UJ | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromomethane | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| 2-Butanone | 0.010 UJ | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 UJ | 0.020 UR | 0.010 UJ |
| Carbon disulfide | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Carbon tetrachloride | 0.0050 UJ | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Chlorobenzene | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Chloroethane | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Chloroform | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| Chloromethane | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Dibromochloromethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,1-Dichloroethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,2-Dichloroethane | 0.0050 UJ | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,1-Dichloroethene | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,2-Dichloroethene (total) | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,2-Dichloropropane | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| cis-1,3-Dichloropropene | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| trans-1,3-Dichloropropene | 0.0050 UJ | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Ethylbenzene | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 2-Hexanone | 0.010 UJ | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 UJ | 0.020 UR | 0.010 UJ |
| 4-Methyl-2-pentanone | 0.010 UJ | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 UJ | 0.020 UJ | 0.010 UJ |
| Methylene chloride | 0.0050 U | 0.0085 U | 0.0050 U | 0.0052 U | 0.0050 UJ | 0.0094 U | 0.012 J | 0.019 J |
| Styrene | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1,2,2-Tetrachloroethane | 0.0050 UJ | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Tetrachloroethene (Tetrachloroethylene) | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Toluene | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.041 J | 0.0050 UJ |
| 1,1,1-Trichloroethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.0099 | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1,2-Trichloroethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Trichloroethene (Trichloroethylene) | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Vinyl acetate | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | -- | 0.010 UJ |
| Vinyl chloride | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Xylenes (total) | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0054 J | 0.0050 UJ |

## Soil

| Location | USB14 | USB15 | USB15 | USB17 | USB17 | USB180A | USB180B | USB180C |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 20.0 | 8.4 | 18.4 | 1.0 | 8.7 | 2.2 | 1.9 | 1.9 |
| End Depth (feet) | 22.5 | 10.9 | 20.9 | 3.7 | 11.2 | 3.1 | 2.3 | 2.5 |
| Date | 11/25/96 | 12/03/96 | 12/03/96 | 12/05/96 | 12/05/96 | 12/04/96 | 12/04/96 | 12/04/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| VOLATILE ORGANICS | | | | | | | | |
| Acetone | 0.019 U | 0.020 UR | 0.12 J | 0.020 UR | 0.020 UR | 0.25 J | 0.020 UR | 0.020 UR |
| Benzene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromodichloromethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromoform | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromomethane | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| 2-Butanone | 0.010 UJ | 0.020 UR | 0.022 J | 0.020 UR | 0.020 UR | 0.065 J | 0.020 UR | 0.020 UR |
| Carbon disulfide | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Carbon tetrachloride | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Chlorobenzene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Chloroethane | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Chloroform | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Chloromethane | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Dibromochloromethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1-Dichloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1-Dichloroethene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloroethene (total) | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloropropane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| cis-1,3-Dichloropropene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| trans-1,3-Dichloropropene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Ethylbenzene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 2-Hexanone | 0.010 UJ | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR |
| 4-Methyl-2-pentanone | 0.010 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ |
| Methylene chloride | 0.019 J | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0062 J | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Styrene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1,2,2-Tetrachloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Tetrachloroethene (Tetrachloroethylene) | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Toluene | 0.0050 UJ | 0.0050 UJ | 0.010 J | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0089 J | 0.0088 J |
| 1,1,1-Trichloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1,2-Trichloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Trichloroethene (Trichloroethylene) | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Vinyl acetate | 0.010 UJ | -- | -- | -- | -- | -- | -- | -- |
| Vinyl chloride | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Xylenes (total) | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |

## *Soil*

| **Location** | **USB20** | **USB20** | **USB21** | **USB21** | **USB21** | **USW02** | **USW02** | **USW13** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.7 | 12.2 | 2.0 | 13.7 | 13.7 | 5.5 | 30.5 | 1.7 |
| End Depth (feet) | 6.2 | 13.7 | 3.7 | 17.7 | 17.7 | 7.0 | 33.0 | 3.4 |
| Date | 12/06/96 | 12/06/96 | 12/07/96 | 12/07/96 | 12/07/96 | 11/16/96 | 11/17/96 | 11/24/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REP | REG | REG | REG |
| VOLATILE ORGANICS | | | | | | | | |
| Acetone | 0.14 J | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR | 0.025 J | 0.021 J | 0.010 U |
| Benzene | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Bromodichloromethane | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Bromoform | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Bromomethane | 0.050 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| 2-Butanone | 0.10 UR | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR | 0.010 U | 0.010 UJ | 0.010 UJ |
| Carbon disulfide | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Carbon tetrachloride | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Chlorobenzene | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Chloroethane | 0.050 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Chloroform | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| Chloromethane | 0.050 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Dibromochloromethane | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,1-Dichloroethane | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,2-Dichloroethane | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,1-Dichloroethene | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,2-Dichloroethene (total) | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 U |
| 1,2-Dichloropropane | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| cis-1,3-Dichloropropene | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| trans-1,3-Dichloropropene | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Ethylbenzene | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 2-Hexanone | 0.10 UR | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| 4-Methyl-2-pentanone | 0.10 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Methylene chloride | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0067 | 0.010 J | 0.0078 U |
| Styrene | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,1,2,2-Tetrachloroethane | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Tetrachloroethene (Tetrachloroethylene) | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0056 J | 0.0050 UJ |
| Toluene | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0069 J | 0.0050 UJ |
| 1,1,1-Trichloroethane | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| 1,1,2-Trichloroethane | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Trichloroethene (Trichloroethylene) | 0.025 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |
| Vinyl acetate | -- | -- | -- | -- | -- | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Vinyl chloride | 0.050 U | 0.010 U | 0.010 U | 0.010 U | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Xylenes (total) | 0.025 U | 0.0050 UR | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 U | 0.0050 UJ | 0.0050 UJ |

## Soil

| Location | USW16 | USW16 | USW19 | USW19 |
|---|---|---|---|---|
| Begin Depth (feet) | 8.5 | 21.0 | 1.0 | 26.0 |
| End Depth (feet) | 11.0 | 23.5 | 3.5 | 28.0 |
| Date | 12/04/96 | 12/04/96 | 12/05/96 | 12/05/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG |
| VOLATILE ORGANICS | | | | |
| Acetone | 0.020 UR | 0.027 J | 0.020 UR | 0.032 J |
| Benzene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromodichloromethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromoform | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Bromomethane | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| 2-Butanone | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR |
| Carbon disulfide | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Carbon tetrachloride | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Chlorobenzene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Chloroethane | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Chloroform | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Chloromethane | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Dibromochloromethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1-Dichloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1-Dichloroethene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloroethene (total) | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,2-Dichloropropane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| cis-1,3-Dichloropropene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| trans-1,3-Dichloropropene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Ethylbenzene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 2-Hexanone | 0.020 UR | 0.020 UR | 0.020 UR | 0.020 UR |
| 4-Methyl-2-pentanone | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ |
| Methylene chloride | 0.0050 UJ | 0.0089 J | 0.0050 UJ | 0.0082 J |
| Styrene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1,2,2-Tetrachloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Tetrachloroethene (Tetrachloroethylene) | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Toluene | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0090 J |
| 1,1,1-Trichloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| 1,1,2-Trichloroethane | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Trichloroethene (Trichloroethylene) | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |
| Vinyl acetate | -- | -- | -- | -- |
| Vinyl chloride | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ |
| Xylenes (total) | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ |

## Soil

| Location | USB01 | USB01 | USB03 | USB03 | USB04 | USB04 | USB05 | USB05 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 5.0 | 10.0 | 3.2 | 15.7 | 8.5 | 33.5 | 11.5 | 11.5 |
| End Depth (feet) | 7.5 | 12.5 | 5.7 | 18.2 | 11.0 | 36.0 | 13.8 | 13.8 |
| Date | 11/16/96 | 11/16/96 | 11/17/96 | 11/17/96 | 11/19/96 | 11/19/96 | 11/21/96 | 11/21/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Acenaphthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Acenapthylene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(a)anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(a)pyrene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(b)fluoranthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(g,h,i)perylene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(k)fluoranthene | 0.41 | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzoic acid | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ |
| Benzyl alcohol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Bis(2-chloroethoxy) methane | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Bis(2-chloroethyl) ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Bis(2-chloroisopropyl) ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Bis(2-ethylhexyl) phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Bromophenyl phenyl ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Butyl benzyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Carbazole | -- | -- | -- | -- | -- | -- | -- | -- |
| 4-Chloro-3-methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Chloroaniline | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Chloronaphthalene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Chlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Chlorophenyl phenyl ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Chrysene | 0.37 | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Cresols, m & p | -- | -- | -- | -- | -- | -- | -- | -- |
| Di-n-butyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Di-n-octyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Dibenz(a,h)anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Dibenzofuran | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 1,2-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 1,3-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 1,4-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 3,3'-Dichlorobenzidine | 0.66 U | 0.66 U | 0.66 U | 0.66 U | 0.66 U | 0.66 U | 0.66 U | 0.66 U |
| 2,4-Dichlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Diethyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |

## Soil

| Location | USB01 | USB01 | USB03 | USB03 | USB04 | USB04 | USB05 | USB05 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 5.0 | 10.0 | 3.2 | 15.7 | 8.5 | 33.5 | 11.5 | 11.5 |
| End Depth (feet) | 7.5 | 12.5 | 5.7 | 18.2 | 11.0 | 36.0 | 13.8 | 13.8 |
| Date | 11/16/96 | 11/16/96 | 11/17/96 | 11/17/96 | 11/19/96 | 11/19/96 | 11/21/96 | 11/21/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Dimethyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2,4-Dimethylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4,6-Dinitro-2-methylphenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 2,4-Dinitrophenol | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 2,4-Dinitrotoluene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2,6-Dinitrotoluene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Fluoranthene | 0.79 | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Fluorene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Hexachlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Hexachlorobutadiene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Hexachlorocyclopentadiene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Hexachloroethane | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Indeno(1,2,3-c,d)pyrene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Isophorone | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Methylnaphthalene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.61 |
| 2-Methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Naphthalene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 3-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 4-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| Nitrobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Nitrophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Nitrophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| N-Nitrosodi-n-propylamine | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| N-Nitrosodiphenylamine | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Pentachlorophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| Phenanthrene | 0.40 | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Phenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Pyrene | 0.78 | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 1,2,4-Trichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2,4,5-Trichlorophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 2,4,6-Trichlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |

## Soil

| Location | USB06 | | USB06 | | USB07 | | USB07 | | USB08 | | USB08 | | USB09 | | USB09 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.2 | | 8.2 | | 3.1 | | 5.0 | | 3.0 | | 9.0 | | 1.0 | | 11.0 | |
| End Depth (feet) | 5.7 | | 10.7 | | 5.0 | | 8.0 | | 5.5 | | 9.5 | | 3.5 | | 13.5 | |
| Date | 11/21/96 | | 11/21/96 | | 11/21/96 | | 11/21/96 | | 11/21/96 | | 11/21/96 | | 11/22/96 | | 11/22/96 | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Sample Type | REG | | REG | | REG | | REG | | REG | | REG | | REG | | REG | |
| SEMIVOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| Acenaphthene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Acenapthylene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Anthracene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Benzo(a)anthracene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Benzo(a)pyrene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Benzo(b)fluoranthene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Benzo(g,h,i)perylene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Benzo(k)fluoranthene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Benzoic acid | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UR | 1.6 | UR |
| Benzyl alcohol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | U | 0.33 | U |
| Bis(2-chloroethoxy) methane | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Bis(2-chloroethyl) ether | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Bis(2-chloroisopropyl) ether | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Bis(2-ethylhexyl) phthalate | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 4-Bromophenyl phenyl ether | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Butyl benzyl phthalate | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Carbazole | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| 4-Chloro-3-methylphenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 4-Chloroaniline | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 2-Chloronaphthalene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 2-Chlorophenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 4-Chlorophenyl phenyl ether | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Chrysene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Cresols, m & p | -- | | -- | | -- | | -- | | -- | | -- | | -- | | -- | |
| Di-n-butyl phthalate | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Di-n-octyl phthalate | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Dibenz(a,h)anthracene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Dibenzofuran | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 1,2-Dichlorobenzene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 1,3-Dichlorobenzene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 1,4-Dichlorobenzene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 3,3'-Dichlorobenzidine | 0.66 | U | 0.66 | U | 0.66 | U | 0.66 | U | 0.66 | U | 0.66 | U | 0.66 | U | 0.66 | U |
| 2,4-Dichlorophenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Diethyl phthalate | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |

## Soil

| Location | USB06 | USB06 | USB07 | USB07 | USB08 | USB08 | USB09 | USB09 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.2 | 8.2 | 3.1 | 5.0 | 3.0 | 9.0 | 1.0 | 11.0 |
| End Depth (feet) | 5.7 | 10.7 | 5.0 | 8.0 | 5.5 | 9.5 | 3.5 | 13.5 |
| Date | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/22/96 | 11/22/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Dimethyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2,4-Dimethylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4,6-Dinitro-2-methylphenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 2,4-Dinitrophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 UJ | 1.6 UJ |
| 2,4-Dinitrotoluene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2,6-Dinitrotoluene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Fluoranthene | 0.33 U | 0.33 U | 0.33 U | 0.46 | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Fluorene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Hexachlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Hexachlorobutadiene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Hexachlorocyclopentadiene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Hexachloroethane | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Indeno(1,2,3-c,d)pyrene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Isophorone | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Methylnaphthalene | 0.33 U | 0.33 U | 0.33 U | 0.42 | 1.4 | 0.33 U | 0.33 U | 0.33 U |
| 2-Methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Naphthalene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.99 | 0.33 U | 0.33 U | 0.33 U |
| 2-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 3-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 4-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| Nitrobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Nitrophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Nitrophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 UJ | 1.6 UJ |
| N-Nitrosodi-n-propylamine | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| N-Nitrosodiphenylamine | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Pentachlorophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| Phenanthrene | 0.33 U | 0.33 U | 0.33 U | 0.40 | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Phenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Pyrene | 0.33 U | 0.33 U | 0.33 U | 0.47 | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 1,2,4-Trichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2,4,5-Trichlorophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U |
| 2,4,6-Trichlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |

## Soil

| Location | USB10 | USB10 | USB11 | USB12 | USB12 | USB1302 | USB1302 | USB14 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 1.0 | 13.2 | 0.0 | 3.4 | 8.4 | 13.4 | 1.9 | 7.5 |
| End Depth (feet) | 3.2 | 14.5 | 2.5 | 5.9 | 13.4 | 15.9 | 2.2 | 10.0 |
| Date | 11/23/96 | 11/23/96 | 11/23/96 | 11/24/96 | 11/24/96 | 11/24/96 | 12/05/96 | 11/25/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Acenaphthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Acenapthylene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Benzo(a)anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Benzo(a)pyrene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Benzo(b)fluoranthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Benzo(g,h,i)perylene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Benzo(k)fluoranthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Benzoic acid | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | -- | 1.6 UR |
| Benzyl alcohol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | -- | 0.33 U |
| Bis(2-chloroethoxy) methane | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Bis(2-chloroethyl) ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Bis(2-chloroisopropyl) ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UR | 0.33 U |
| Bis(2-ethylhexyl) phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 4-Bromophenyl phenyl ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Butyl benzyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Carbazole | -- | -- | -- | -- | -- | -- | 0.33 UJ | -- |
| 4-Chloro-3-methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 4-Chloroaniline | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2-Chloronaphthalene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2-Chlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 4-Chlorophenyl phenyl ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Chrysene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Cresols, m & p | -- | -- | -- | -- | -- | -- | 0.33 UJ | -- |
| Di-n-butyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Di-n-octyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Dibenz(a,h)anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Dibenzofuran | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 1,2-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 1,3-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 1,4-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 3,3'-Dichlorobenzidine | 0.66 U | 0.66 U | 0.66 U | 0.66 U | 0.66 U | 0.66 U | 1.6 UJ | 0.66 U |
| 2,4-Dichlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Diethyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |

## Soil

| Location | USB10 | USB10 | USB11 | USB12 | USB12 | USB1302 | USB1302 | USB14 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 1.0 | 13.2 | 0.0 | 3.4 | 8.4 | 13.4 | 1.9 | 7.5 |
| End Depth (feet) | 3.2 | 14.5 | 2.5 | 5.9 | 13.4 | 15.9 | 2.2 | 10.0 |
| Date | 11/23/96 | 11/23/96 | 11/23/96 | 11/24/96 | 11/24/96 | 11/24/96 | 12/05/96 | 11/25/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Dimethyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2,4-Dimethylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 4,6-Dinitro-2-methylphenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 UR | 1.6 U |
| 2,4-Dinitrophenol | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UR | 1.6 UJ |
| 2,4-Dinitrotoluene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2,6-Dinitrotoluene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Fluoranthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Fluorene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Hexachlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Hexachlorobutadiene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Hexachlorocyclopentadiene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 1.6 UR | 0.33 U |
| Hexachloroethane | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Indeno(1,2,3-c,d)pyrene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Isophorone | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2-Methylnaphthalene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2-Methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 4-Methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Naphthalene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 UJ | 1.6 U |
| 3-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 UJ | 1.6 U |
| 4-Nitroaniline | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 UJ | 1.6 U |
| Nitrobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2-Nitrophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 4-Nitrophenol | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ |
| N-Nitrosodi-n-propylamine | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| N-Nitrosodiphenylamine | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Pentachlorophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 UJ | 1.6 U |
| Phenanthrene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Phenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| Pyrene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 1,2,4-Trichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |
| 2,4,5-Trichlorophenol | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 0.33 UJ | 1.6 U |
| 2,4,6-Trichlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 U |

## Soil

| Location | USB14 | USB15 | USB15 | USB17 | USB17 | USB180A | USB180B | USB180C |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 20.0 | 8.4 | 18.4 | 1.0 | 8.7 | 2.2 | 1.9 | 1.9 |
| End Depth (feet) | 22.5 | 10.9 | 20.9 | 3.7 | 11.2 | 3.1 | 2.3 | 2.5 |
| Date | 11/25/96 | 12/03/96 | 12/03/96 | 12/05/96 | 12/05/96 | 12/04/96 | 12/04/96 | 12/04/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Acenaphthene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Acenapthylene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Anthracene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Benzo(a)anthracene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Benzo(a)pyrene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Benzo(b)fluoranthene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Benzo(g,h,i)perylene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Benzo(k)fluoranthene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Benzoic acid | 1.6 UR | -- | -- | -- | -- | -- | -- | -- |
| Benzyl alcohol | 0.33 U | -- | -- | -- | -- | -- | -- | -- |
| Bis(2-chloroethoxy) methane | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Bis(2-chloroethyl) ether | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Bis(2-chloroisopropyl) ether | 0.33 U | 0.33 UR | 0.33 UR | 0.33 UR | 0.33 UR | 0.33 UR | 0.33 UR | 0.33 UR |
| Bis(2-ethylhexyl) phthalate | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 4-Bromophenyl phenyl ether | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Butyl benzyl phthalate | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Carbazole | -- | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 4-Chloro-3-methylphenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 4-Chloroaniline | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2-Chloronaphthalene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2-Chlorophenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 4-Chlorophenyl phenyl ether | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Chrysene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Cresols, m & p | -- | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Di-n-butyl phthalate | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Di-n-octyl phthalate | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Dibenz(a,h)anthracene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Dibenzofuran | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 1,2-Dichlorobenzene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 1,3-Dichlorobenzene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 1,4-Dichlorobenzene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 3,3'-Dichlorobenzidine | 0.66 U | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ |
| 2,4-Dichlorophenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Diethyl phthalate | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |

## Soil

| Location | USB14 | USB15 | USB15 | USB17 | USB17 | USB180A | USB180B | USB180C |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 20.0 | 8.4 | 18.4 | 1.0 | 8.7 | 2.2 | 1.9 | 1.9 |
| End Depth (feet) | 22.5 | 10.9 | 20.9 | 3.7 | 11.2 | 3.1 | 2.3 | 2.5 |
| Date | 11/25/96 | 12/03/96 | 12/03/96 | 12/05/96 | 12/05/96 | 12/04/96 | 12/04/96 | 12/04/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Dimethyl phthalate | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2,4-Dimethylphenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 4,6-Dinitro-2-methylphenol | 1.6 U | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR |
| 2,4-Dinitrophenol | 1.6 UJ | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR |
| 2,4-Dinitrotoluene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2,6-Dinitrotoluene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Fluoranthene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Fluorene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Hexachlorobenzene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Hexachlorobutadiene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Hexachlorocyclopentadiene | 0.33 U | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR | 1.6 UR |
| Hexachloroethane | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Indeno(1,2,3-c,d)pyrene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Isophorone | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2-Methylnaphthalene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2-Methylphenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 4-Methylphenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Naphthalene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2-Nitroaniline | 1.6 U | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ |
| 3-Nitroaniline | 1.6 U | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ |
| 4-Nitroaniline | 1.6 U | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ |
| Nitrobenzene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2-Nitrophenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 4-Nitrophenol | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ |
| N-Nitrosodi-n-propylamine | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| N-Nitrosodiphenylamine | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Pentachlorophenol | 1.6 U | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ | 1.6 UJ |
| Phenanthrene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Phenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| Pyrene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 1,2,4-Trichlorobenzene | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2,4,5-Trichlorophenol | 1.6 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |
| 2,4,6-Trichlorophenol | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ | 0.33 UJ |

## Soil

| Location | USB20 | USB20 | USB21 | USB21 | USB21 | USW02 | USW02 | USW13 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.7 | 12.2 | 2.0 | 13.7 | 13.7 | 5.5 | 30.5 | 1.7 |
| End Depth (feet) | 6.2 | 13.7 | 3.7 | 17.7 | 17.7 | 7.0 | 33.0 | 3.4 |
| Date | 12/06/96 | 12/06/96 | 12/07/96 | 12/07/96 | 12/07/96 | 11/16/96 | 11/17/96 | 11/24/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REP | REG | REG | REG |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Acenaphthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Acenapthylene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(a)anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(a)pyrene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(b)fluoranthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzo(g,h,i)perylene | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 U | 0.33 U | 0.33 U |
| Benzo(k)fluoranthene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Benzoic acid | -- | -- | -- | -- | -- | 1.6 U | 1.6 U | 1.6 UR |
| Benzyl alcohol | -- | -- | -- | -- | -- | 0.33 U | 0.33 U | 0.33 U |
| Bis(2-chloroethoxy) methane | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Bis(2-chloroethyl) ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Bis(2-chloroisopropyl) ether | 0.33 UR | 0.33 UR | 0.33 UR | 0.33 UR | 0.33 UR | 0.33 U | 0.33 U | 0.33 U |
| Bis(2-ethylhexyl) phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Bromophenyl phenyl ether | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Butyl benzyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Carbazole | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | -- | -- | -- |
| 4-Chloro-3-methylphenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Chloroaniline | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Chloronaphthalene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 2-Chlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 4-Chlorophenyl phenyl ether | 0.029 U | 0.029 U | 0.029 U | 0.029 U | 0.029 U | 0.33 U | 0.33 U | 0.33 U |
| Chrysene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Cresols, m & p | -- | -- | -- | -- | -- | -- | -- | -- |
| Di-n-butyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Di-n-octyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Dibenz(a,h)anthracene | 0.33 U | 0.33 U | 0.33 U | 0.33 UJ | 0.33 UJ | 0.33 U | 0.33 U | 0.33 U |
| Dibenzofuran | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 1,2-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 1,3-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 1,4-Dichlorobenzene | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| 3,3'-Dichlorobenzidine | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 1.6 U | 0.66 U | 0.66 U | 0.66 U |
| 2,4-Dichlorophenol | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |
| Diethyl phthalate | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U | 0.33 U |

## Soil

| Location | USB20 | | USB20 | | USB21 | | USB21 | | USB21 | | USW02 | | USW02 | | USW13 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.7 | | 12.2 | | 2.0 | | 13.7 | | 13.7 | | 5.5 | | 30.5 | | 1.7 | |
| End Depth (feet) | 6.2 | | 13.7 | | 3.7 | | 17.7 | | 17.7 | | 7.0 | | 33.0 | | 3.4 | |
| Date | 12/06/96 | | 12/06/96 | | 12/07/96 | | 12/07/96 | | 12/07/96 | | 11/16/96 | | 11/17/96 | | 11/24/96 | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Sample Type | REG | | REG | | REG | | REG | | REP | | REG | | REG | | REG | |
| SEMIVOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| Dimethyl phthalate | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 2,4-Dimethylphenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 4,6-Dinitro-2-methylphenol | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | U | 1.6 | U | 1.6 | U |
| 2,4-Dinitrophenol | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ |
| 2,4-Dinitrotoluene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | U | 0.33 | U | 0.33 | U |
| 2,6-Dinitrotoluene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Fluoranthene | 0.33 | U | 0.33 | U | 0.61 | | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Fluorene | 0.042 | U | 0.042 | U | 0.042 | U | 0.042 | U | 0.042 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Hexachlorobenzene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Hexachlorobutadiene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Hexachlorocyclopentadiene | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR | 0.33 | U | 0.33 | U | 0.33 | U |
| Hexachloroethane | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Indeno(1,2,3-c,d)pyrene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Isophorone | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 2-Methylnaphthalene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 2-Methylphenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 4-Methylphenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Naphthalene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 2-Nitroaniline | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U |
| 3-Nitroaniline | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U |
| 4-Nitroaniline | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U |
| Nitrobenzene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 2-Nitrophenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 4-Nitrophenol | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | U | 1.6 | U | 1.6 | UJ |
| N-Nitrosodi-n-propylamine | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| N-Nitrosodiphenylamine | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Pentachlorophenol | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U | 1.6 | U |
| Phenanthrene | 0.33 | U | 0.33 | U | 0.46 | | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Phenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| Pyrene | 0.33 | U | 0.33 | U | 0.57 | | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 1,2,4-Trichlorobenzene | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |
| 2,4,5-Trichlorophenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 1.6 | U | 1.6 | U | 1.6 | U |
| 2,4,6-Trichlorophenol | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U | 0.33 | U |

## Soil

| Location | USW16 | | USW16 | | USW19 | | USW19 | |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 8.5 | | 21.0 | | 1.0 | | 26.0 | |
| End Depth (feet) | 11.0 | | 23.5 | | 3.5 | | 28.0 | |
| Date | 12/04/96 | | 12/04/96 | | 12/05/96 | | 12/05/96 | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Sample Type | REG | | REG | | REG | | REG | |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Acenaphthene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Acenapthylene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Anthracene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Benzo(a)anthracene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Benzo(a)pyrene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Benzo(b)fluoranthene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Benzo(g,h,i)perylene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Benzo(k)fluoranthene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Benzoic acid | -- | | -- | | -- | | -- | |
| Benzyl alcohol | -- | | -- | | -- | | -- | |
| Bis(2-chloroethoxy) methane | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Bis(2-chloroethyl) ether | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Bis(2-chloroisopropyl) ether | 0.33 | UR | 0.33 | UR | 0.33 | UR | 0.33 | UR |
| Bis(2-ethylhexyl) phthalate | 0.33 | UJ | 0.33 | UJ | 0.35 | J | 0.33 | UJ |
| 4-Bromophenyl phenyl ether | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Butyl benzyl phthalate | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Carbazole | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 4-Chloro-3-methylphenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 4-Chloroaniline | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2-Chloronaphthalene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2-Chlorophenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 4-Chlorophenyl phenyl ether | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Chrysene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Cresols, m & p | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Di-n-butyl phthalate | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Di-n-octyl phthalate | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Dibenz(a,h)anthracene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Dibenzofuran | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 1,2-Dichlorobenzene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 1,3-Dichlorobenzene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 1,4-Dichlorobenzene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 3,3'-Dichlorobenzidine | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ |
| 2,4-Dichlorophenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Diethyl phthalate | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |

## Soil

| **Location** | **USW16** | | **USW16** | | **USW19** | | **USW19** | |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 8.5 | | 21.0 | | 1.0 | | 26.0 | |
| End Depth (feet) | 11.0 | | 23.5 | | 3.5 | | 28.0 | |
| Date | 12/04/96 | | 12/04/96 | | 12/05/96 | | 12/05/96 | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Sample Type | REG | | REG | | REG | | REG | |
| SEMIVOLATILE ORGANICS | | | | | | | | |
| Dimethyl phthalate | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2,4-Dimethylphenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 4,6-Dinitro-2-methylphenol | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR |
| 2,4-Dinitrophenol | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR |
| 2,4-Dinitrotoluene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2,6-Dinitrotoluene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Fluoranthene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Fluorene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Hexachlorobenzene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Hexachlorobutadiene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Hexachlorocyclopentadiene | 1.6 | UR | 1.6 | UR | 1.6 | UR | 1.6 | UR |
| Hexachloroethane | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Indeno(1,2,3-c,d)pyrene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Isophorone | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2-Methylnaphthalene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2-Methylphenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 4-Methylphenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Naphthalene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2-Nitroaniline | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ |
| 3-Nitroaniline | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ |
| 4-Nitroaniline | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ |
| Nitrobenzene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2-Nitrophenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 4-Nitrophenol | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ |
| N-Nitrosodi-n-propylamine | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| N-Nitrosodiphenylamine | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Pentachlorophenol | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ | 1.6 | UJ |
| Phenanthrene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Phenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| Pyrene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 1,2,4-Trichlorobenzene | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2,4,5-Trichlorophenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |
| 2,4,6-Trichlorophenol | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ | 0.33 | UJ |

## Soil

| Location | USB01 | USB01 | USB03 | USB03 | USB04 | USB04 | USB05 | USB05 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 5.0 | 10.0 | 3.2 | 15.7 | 8.5 | 33.5 | 11.5 | 11.5 |
| End Depth (feet) | 7.5 | 12.5 | 5.7 | 18.2 | 11.0 | 36.0 | 13.8 | 13.8 |
| Date | 11/16/96 | 11/16/96 | 11/17/96 | 11/17/96 | 11/19/96 | 11/19/96 | 11/21/96 | 11/21/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | | | | | |
| Aldrin | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| Arochlor 1016 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 U |
| Arochlor 1221 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 U |
| Arochlor 1232 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 U |
| Arochlor 1242 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 U |
| Arochlor 1248 | 0.040 | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 U |
| Arochlor 1254 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 U |
| Arochlor 1260 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 U |
| alpha BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 U |
| beta BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 U |
| delta BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| gamma BHC (Lindane) | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 U |
| alpha-Chlordane | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 U |
| gamma-Chlordane | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 U |
| 4,4'-DDD | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 U |
| 4,4'-DDE | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 U |
| 4,4'-DDT | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 U |
| Dieldrin | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 U |
| Endosulfan I | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 U |
| Endosulfan II | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 U |
| Endosulfan sulfate | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 U |
| Endrin | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 U |
| Endrin ketone | 0.0056 | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 U |
| Heptachlor | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 U |
| Heptachlor epoxide | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| Methoxychlor | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 U | 0.017 UJ | 0.017 U |
| Toxaphene | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 UJ | 0.17 U | 0.17 UJ | 0.17 U |

## Soil

| Location | USB06 | USB06 | USB07 | USB07 | USB08 | USB08 | USB09 | USB09 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.2 | 8.2 | 3.1 | 5.0 | 3.0 | 9.0 | 1.0 | 11.0 |
| End Depth (feet) | 5.7 | 10.7 | 5.0 | 8.0 | 5.5 | 9.5 | 3.5 | 13.5 |
| Date | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/21/96 | 11/22/96 | 11/22/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | | | | | |
| Aldrin | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| Arochlor 1016 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1221 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1232 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1242 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1248 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1254 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1260 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U |
| alpha BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| beta BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| delta BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| gamma BHC (Lindane) | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| alpha-Chlordane | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| gamma-Chlordane | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| 4,4'-DDD | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| 4,4'-DDE | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| 4,4'-DDT | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Dieldrin | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Endosulfan I | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| Endosulfan II | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Endosulfan sulfate | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Endrin | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Endrin ketone | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U |
| Heptachlor | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| Heptachlor epoxide | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| Methoxychlor | 0.017 U | 0.017 U | 0.017 U | 0.017 U | 0.017 U | 0.017 U | 0.017 U | 0.017 U |
| Toxaphene | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U |

## Soil

| Location | USB10 | USB10 | USB11 | USB12 | USB12 | USB1302 | USB1302 | USB14 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 1.0 | 13.2 | 0.01 | 3.4 | 8.4 | 13.4 | 1.9 | 7.5 |
| End Depth (feet) | 3.2 | 14.5 | 2.5 | 5.9 | 13.4 | 15.9 | 2.2 | 10.0 |
| Date | 11/23/96 | 11/23/96 | 11/23/96 | 11/24/96 | 11/24/96 | 11/24/96 | 12/05/96 | 11/25/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | | | | | |
| Aldrin | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Arochlor 1016 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1221 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1232 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1242 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1248 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1254 | 0.033 U | 0.033 U | 0.056 | 0.033 U | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1260 | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| alpha BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| beta BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| delta BHC | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| gamma BHC (Lindane) | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| alpha-Chlordane | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| gamma-Chlordane | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| 4,4'-DDD | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| 4,4'-DDE | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| 4,4'-DDT | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Dieldrin | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endosulfan I | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Endosulfan II | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endosulfan sulfate | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endrin | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endrin ketone | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Heptachlor | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Heptachlor epoxide | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Methoxychlor | 0.017 U | 0.017 U | 0.017 U | 0.017 U | 0.017 U | 0.017 UJ | 0.017 UJ | 0.017 UJ |
| Toxaphene | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 U | 0.17 UJ | 0.17 UJ | 0.17 UJ |

## Soil

| Location | USB14 | USB15 | USB15 | USB17 | USB17 | USB180A | USB180B | USB180C |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 20.0 | 8.4 | 18.4 | 1.0 | 8.7 | 2.2 | 1.9 | 1.9 |
| End Depth (feet) | 22.5 | 10.9 | 20.9 | 3.7 | 11.2 | 3.1 | 2.3 | 2.5 |
| Date | 11/25/96 | 12/03/96 | 12/03/96 | 12/05/96 | 12/05/96 | 12/04/96 | 12/04/96 | 12/04/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | | | | | |
| Aldrin | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Arochlor 1016 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1221 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1232 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1242 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1248 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1254 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1260 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| alpha BHC | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| beta BHC | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| delta BHC | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| gamma BHC (Lindane) | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| alpha-Chlordane | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| gamma-Chlordane | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| 4,4'-DDD | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| 4,4'-DDE | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| 4,4'-DDT | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Dieldrin | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endosulfan I | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Endosulfan II | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endosulfan sulfate | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endrin | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endrin ketone | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Heptachlor | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Heptachlor epoxide | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Methoxychlor | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ |
| Toxaphene | 0.17 UJ | 0.17 UJ | 0.17 UJ | 0.17 UJ | 0.17 UJ | 0.17 UJ | 0.17 UJ | 0.17 UJ |

## *Soil*

| **Location** | **USB20** | **USB20** | **USB21** | **USB21** | **USB21** | **USW02** | **USW02** | **USW13** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.7 | 12.2 | 2.0 | 13.7 | 13.7 | 5.5 | 30.5 | 1.7 |
| End Depth (feet) | 6.2 | 13.7 | 3.7 | 17.7 | 17.7 | 7.0 | 33.0 | 3.4 |
| Date | 12/06/96 | 12/06/96 | 12/07/96 | 12/07/96 | 12/07/96 | 11/16/96 | 11/17/96 | 11/24/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REP | REG | REG | REG |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | | | | | |
| Aldrin | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| Arochlor 1016 | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1221 | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1232 | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1242 | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1248 | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1254 | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 U | 0.033 U | 0.033 U |
| Arochlor 1260 | 0.033 U | 0.033 UJ | 0.033 U | 0.033 UJ | 0.033 UJ | 0.033 U | 0.033 U | 0.033 U |
| alpha BHC | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| beta BHC | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| delta BHC | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| gamma BHC (Lindane) | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| alpha-Chlordane | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| gamma-Chlordane | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| 4,4'-DDD | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 U | 0.0033 U | 0.0033 U |
| 4,4'-DDE | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 U | 0.0033 U | 0.0033 U |
| 4,4'-DDT | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 U |
| Dieldrin | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 U | 0.0033 U | 0.0033 U |
| Endosulfan I | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| Endosulfan II | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 U | 0.0033 U | 0.0033 U |
| Endosulfan sulfate | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 U |
| Endrin | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 U | 0.0033 U | 0.0033 U |
| Endrin ketone | 0.0033 U | 0.0033 UJ | 0.0033 U | 0.0033 UJ | 0.0033 UJ | 0.0033 U | 0.0033 U | 0.0033 U |
| Heptachlor | 0.0017 U | 0.0017 UJ | 0.0017 U | 0.0017 UJ | 0.0017 UJ | 0.0017 U | 0.0017 U | 0.0017 U |
| Heptachlor epoxide | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U | 0.0017 U |
| Methoxychlor | 0.017 U | 0.017 UJ | 0.017 U | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 U |
| Toxaphene | 0.17 U | 0.17 UJ | 0.17 U | 0.17 UJ | 0.17 UJ | 0.17 U | 0.17 U | 0.17 U |

## Soil

| Location | USW16 | USW16 | USW19 | USW19 |
|---|---|---|---|---|
| Begin Depth (feet) | 8.5 | 21.0 | 1.0 | 26.0 |
| End Depth (feet) | 11.0 | 23.5 | 3.5 | 28.0 |
| Date | 12/04/96 | 12/04/96 | 12/05/96 | 12/05/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | |
| Aldrin | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Arochlor 1016 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1221 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1232 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1242 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1248 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1254 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| Arochlor 1260 | 0.033 UJ | 0.033 UJ | 0.033 UJ | 0.033 UJ |
| alpha BHC | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| beta BHC | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| delta BHC | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| gamma BHC (Lindane) | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| alpha-Chlordane | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| gamma-Chlordane | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| 4,4'-DDD | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| 4,4'-DDE | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| 4,4'-DDT | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Dieldrin | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endosulfan I | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Endosulfan II | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endosulfan sulfate | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endrin | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Endrin ketone | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ | 0.0033 UJ |
| Heptachlor | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Heptachlor epoxide | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ | 0.0017 UJ |
| Methoxychlor | 0.017 UJ | 0.017 UJ | 0.017 UJ | 0.017 UJ |
| Toxaphene | 0.17 UJ | 0.17 UJ | 0.17 UJ | 0.17 UJ |

## *Soil*

| **Location** | **USB01** | **USB01** | **USB03** | **USB03** | **USB04** | **USB04** | **USB05** | **USB05** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 5.0 | 10.0 | 3.2 | 15.7 | 8.5 | 33.5 | 11.5 | 11.5 |
| End Depth (feet) | 7.5 | 12.5 | 5.7 | 18.2 | 11.0 | 36.0 | 13.8 | 13.8 |
| Date | 11/16/96 | 11/16/96 | 11/17/96 | 11/17/96 | 11/19/96 | 11/19/96 | 11/21/96 | 11/21/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| METALS | | | | | | | | |
| Aluminum | 5870 | 4100 | 10900 | 6760 | 5230 | 4540 | 6060 | 6500 |
| Antimony | 6.0 UJ | 12.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UR | 6.0 UR | 6.0 UR | 6.0 UR |
| Arsenic | 19.6 | 20.0 U | 14.7 | 13.5 | 13.3 J | 10.0 UJ | 10.7 J | 24.1 J |
| Barium | 74.9 | 67.1 | 152 | 92.7 | 78.3 J | 48.3 J | 154 J | 643 J |
| Beryllium | 0.34 | 0.40 U | 0.76 | 0.38 | 0.29 J | 0.27 J | 0.44 J | 0.34 J |
| Cadmium | 0.56 | 1.0 U | 0.50 U | 0.50 U | 0.50 UJ | 0.50 UJ | 0.50 UJ | 0.50 UJ |
| Calcium | 68600 | 108000 | 2720 | 68400 | 42200 | 55700 | 6980 | 7720 |
| Chromium | 11.4 | 6.1 | 13.6 | 9.7 | 7.4 J | 9.3 J | 9.8 J | 10.2 J |
| Cobalt | 7.7 | 4.6 | 8.6 | 8.4 | 8.0 J | 6.1 J | 11.1 J | 11.7 J |
| Copper | 21.3 | 12.0 | 14.1 | 16.8 | 21.8 J | 15.0 J | 31.6 J | 34.4 J |
| Iron | 17400 | 12600 | 19800 | 16500 | 17400 | 13500 | 22400 | 24400 |
| Lead | 21.7 | 1210 | 17.5 | 10.2 | 6.9 J | 5.0 UJ | 10.4 J | 17.7 J |
| Magnesium | 26800 | 32600 | 2280 | 27700 | 18900 | 16000 | 3850 | 4540 |
| Manganese | 334 J | 221 J | 258 J | 397 J | 179 | 241 | 165 | 129 |
| Molybdenum | 8.8 | 6.0 | 3.4 | 6.0 | 12.4 J | 5.8 J | 54.4 J | 33.6 J |
| Nickel | 21.8 | 15.4 | 18.8 | 24.6 | 26.8 J | 17.3 J | 71.9 J | 73.7 J |
| Potassium | 1120 | 1000 U | 1040 | 1430 | 1310 | 1050 | 1950 | 2260 |
| Selenium | 20.0 U | 40.0 U | 20.0 U | 20.0 U | 20.0 UJ | 20.0 UJ | 20.0 UJ | 20.0 UJ |
| Silver | 1.0 U | 2.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Sodium | 500 U | 1000 U | 500 U | 500 U | 500 U | 500 U | 500 U | 500 U |
| Thallium | 200 U | 400 U | 200 U | 200 U | 200 UR | 200 UR | 200 UR | 200 UR |
| Vanadium | 17.7 | 11.3 | 26.4 | 13.3 | 15.0 J | 10.2 J | 23.2 J | 26.1 J |
| Zinc | 79.0 | 47.5 | 69.1 | 50.4 | 70.9 J | 38.8 J | 33.2 J | 76.3 J |

## Soil

| Location | USB06 | | USB06 | | USB07 | | USB07 | | USB08 | | USB08 | | USB09 | | USB09 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.2 | | 8.2 | | 3.1 | | 5.0 | | 3.0 | | 9.0 | | 1.0 | | 11.0 | |
| End Depth (feet) | 5.7 | | 10.7 | | 5.0 | | 8.0 | | 5.5 | | 9.5 | | 3.5 | | 13.5 | |
| Date | 11/21/96 | | 11/21/96 | | 11/21/96 | | 11/21/96 | | 11/21/96 | | 11/21/96 | | 11/22/96 | | 11/22/96 | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Sample Type | REG | | REG | | REG | | REG | | REG | | REG | | REG | | REG | |
| METALS | | | | | | | | | | | | | | | | |
| Aluminum | 4740 | | 6300 | | 1640 | | 5320 | | 7110 | | 7450 | | 10500 | | 3550 | |
| Antimony | 12.0 | UR | 6.0 | UR | 12.0 | UR | 6.0 | UR | 6.0 | UR | 6.0 | UR | 6.0 | UJ | 6.0 | UJ |
| Arsenic | 20.0 | UJ | 20.0 | J | 20.0 | UJ | 10.0 | UJ | 10.0 | UJ | 39.6 | J | 10.0 | U | 11.2 | |
| Barium | 73.3 | J | 140 | J | 32.7 | J | 74.2 | J | 118 | J | 134 | J | 173 | | 28.7 | |
| Beryllium | 0.40 | UJ | 0.43 | J | 0.40 | UJ | 0.21 | J | 0.52 | J | 0.45 | J | 0.78 | | 0.25 | |
| Cadmium | 1.0 | UJ | 0.50 | UJ | 1.0 | UJ | 0.78 | J | 0.50 | UJ | 1.2 | J | 0.50 | U | 0.50 | U |
| Calcium | 184000 | | 4540 | | 139000 | | 82700 | | 33800 | | 3630 | | 3360 | | 74400 | |
| Chromium | 5.0 | J | 9.5 | J | 4.6 | J | 7.8 | J | 8.1 | J | 11.8 | J | 12.3 | | 4.3 | |
| Cobalt | 3.2 | J | 13.7 | J | 2.9 | J | 5.4 | J | 7.3 | J | 15.5 | J | 9.2 | | 4.2 | |
| Copper | 9.7 | J | 35.0 | J | 8.0 | J | 17.8 | J | 17.5 | J | 40.3 | J | 19.6 | | 14.9 | |
| Iron | 11500 | | 26500 | | 8240 | | 15300 | | 16300 | | 35100 | | 23200 | | 12500 | |
| Lead | 10.0 | UJ | 16.5 | J | 10.0 | UJ | 30.9 | J | 19.9 | J | 25.8 | J | 12.7 | | 5.0 | U |
| Magnesium | 51700 | | 3260 | | 52100 | | 17600 | | 14700 | | 4160 | | 2250 | J | 17900 | J |
| Manganese | 286 | | 161 | | 254 | | 429 | | 269 | | 187 | | 481 | | 220 | |
| Molybdenum | 4.7 | J | 34.3 | J | 4.5 | J | 8.7 | J | 7.9 | J | 14.8 | J | 5.8 | | 5.2 | |
| Nickel | 9.3 | J | 86.3 | J | 9.1 | J | 15.5 | J | 24.2 | J | 83.5 | J | 26.3 | | 15.8 | |
| Potassium | 1000 | U | 2270 | | 1000 | U | 783 | | 966 | | 2480 | | 769 | | 786 | |
| Selenium | 40.0 | UJ | 20.0 | UJ | 40.0 | UJ | 20.0 | UJ | 20.0 | UJ | 20.0 | UJ | 20.0 | U | 20.0 | U |
| Silver | 2.0 | U | 1.0 | U | 2.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Sodium | 1000 | U | 500 | U | 1000 | U | 500 | U | 500 | U | 500 | U | 500 | U | 500 | U |
| Thallium | 400 | UR | 200 | UR | 400 | UR | 200 | UR | 200 | UR | 200 | UR | 200 | U | 200 | U |
| Vanadium | 9.2 | J | 24.4 | J | 7.0 | J | 14.2 | J | 15.7 | J | 31.6 | J | 24.1 | | 10.8 | |
| Zinc | 18.7 | J | 52.1 | J | 27.9 | J | 68.0 | J | 42.4 | J | 79.3 | J | 78.7 | J | 51.5 | J |

## *Soil*

| **Location** | **USB10** | **USB10** | **USB11** | **USB12** | **USB12** | **USB1302** | **USB1302** | **USB14** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 1.0 | 13.2 | 0.0 | 3.4 | 8.4 | 13.4 | 1.9 | 7.5 |
| End Depth (feet) | 3.2 | 14.5 | 2.5 | 5.9 | 13.4 | 15.9 | 2.2 | 10.0 |
| Date | 11/23/96 | 11/23/96 | 11/23/96 | 11/24/96 | 11/24/96 | 11/24/96 | 12/05/96 | 11/25/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| METALS | | | | | | | | |
| Aluminum | 4000 | 3260 | 5160 | 1500 | 1450 | 5650 | 9470 J | 6290 |
| Antimony | 12.0 UJ | 6.0 UJ | 6.0 UJ | 12.0 UJ | 12.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ |
| Arsenic | 24.0 | 23.1 | 17.0 | 20.0 U | 20.0 U | 17.6 | 15.1 J | 15.9 |
| Barium | 60.2 | 17.9 | 54.0 | 50.7 | 18.9 | 61.8 | 129 J | 174 |
| Beryllium | 0.40 U | 0.20 U | 0.40 | 0.40 U | 0.40 U | 0.20 U | 0.48 J | 0.26 |
| Cadmium | 1.0 U | 0.50 U | 0.50 U | 1.0 U | 1.0 U | 0.50 U | 0.96 J | 0.50 U |
| Calcium | 122000 | 77400 | 48100 | 148000 | 128000 | 36100 | 7390 J | 61200 |
| Chromium | 24.2 | 4.1 | 6.7 | 2.0 U | 2.0 U | 7.9 | 12.5 J | 9.0 |
| Cobalt | 5.6 | 5.8 | 10.0 | 3.1 | 2.7 | 8.5 | 11.0 J | 9.2 |
| Copper | 18.8 | 15.1 | 19.1 | 7.4 | 7.1 | 20.4 | 26.4 J | 20.5 |
| Iron | 15700 | 14200 | 18800 | 7140 | 7950 | 19700 | 25800 J | 18000 |
| Lead | 10.0 U | 7.8 | 10.5 | 10.0 U | 10.0 U | 7.1 | 10.9 J | 13.5 |
| Magnesium | 32500 J | 24400 J | 16500 J | 40600 J | 38600 J | 12900 J | 4200 J | 25800 J |
| Manganese | 322 | 227 | 314 | 200 | 181 | 252 | 266 J | 228 |
| Molybdenum | 10.5 | 11.7 | 7.9 | 4.0 U | 4.6 | 9.0 | 9.8 J | 11.3 |
| Nickel | 18.3 | 24.3 | 27.7 | 14.1 | 9.2 | 28.3 | 34.1 J | 29.0 |
| Potassium | 1000 U | 812 | 678 | 1000 U | 1000 U | 1200 | 1130 J | 1610 |
| Selenium | 40.0 U | 20.0 U | 20.0 U | 40.0 U | 40.0 U | 20.0 U | 20.0 UJ | 20.0 U |
| Silver | 2.0 U | 1.0 U | 1.0 U | 2.0 U | 2.0 U | 1.0 U | 1.0 UJ | 1.0 U |
| Sodium | 1000 U | 500 U | 500 U | 1000 U | 1000 U | 500 U | 500 UJ | 500 U |
| Thallium | 400 U | 200 U | 200 U | 400 U | 400 U | 200 U | 200 UJ | 200 U |
| Vanadium | 15.7 | 12.2 | 13.9 | 4.3 | 4.0 | 13.8 | 24.3 J | 17.9 |
| Zinc | 107 J | 41.1 J | 76.3 J | 24.5 J | 28.5 J | 74.3 J | 95.3 J | 74.0 J |

## Soil

| Location | USB14 | USB15 | USB15 | USB17 | USB17 | USB180A | USB180B | USB180C |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 20.0 | 8.4 | 18.4 | 1.0 | 8.7 | 2.2 | 1.9 | 1.9 |
| End Depth (feet) | 22.5 | 10.9 | 20.9 | 3.7 | 11.2 | 3.1 | 2.3 | 2.5 |
| Date | 11/25/96 | 12/03/96 | 12/03/96 | 12/05/96 | 12/05/96 | 12/04/96 | 12/04/96 | 12/04/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REG |
| METALS | | | | | | | | |
| Aluminum | 3510 | 7590 J | 2490 J | 1160 J | 6270 J | 10900 J | 9940 J | 9360 J |
| Antimony | 6.0 UJ | 6.0 UJ | 12.0 UJ | 12.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ |
| Arsenic | 19.0 | 11.9 J | 20.0 UJ | 20.0 UJ | 10.9 J | 10.0 UJ | 10.0 UJ | 10.0 UJ |
| Barium | 35.5 | 45.7 J | 14.4 J | 9.7 J | 40.0 J | 116 J | 126 J | 76.8 J |
| Beryllium | 0.20 U | 0.48 J | 0.40 UJ | 0.40 UJ | 0.33 J | 0.83 J | 0.78 J | 0.58 J |
| Cadmium | 0.50 | 0.87 J | 1.0 UJ | 1.1 J | 0.50 UJ | 0.50 UJ | 0.73 J | 0.70 J |
| Calcium | 44400 | 2200 J | 120000J | 159000J | 39300 J | 4050 J | 4230 J | 3020 J |
| Chromium | 5.1 | 11.9 J | 3.5 J | 4.2 J | 8.9 J | 12.9 J | 11.9 J | 11.3 J |
| Cobalt | 6.0 | 10.1 J | 3.5 J | 2.3 J | 9.1 J | 6.9 J | 5.0 J | 5.9 J |
| Copper | 17.1 | 30.6 J | 13.8 J | 5.2 J | 22.3 J | 24.4 J | 23.6 J | 16.2 J |
| Iron | 15700 | 26600 J | 9820 J | 4850 J | 20700 J | 16100 J | 14300 J | 14800 J |
| Lead | 8.3 | 11.9 J | 10.0 UJ | 10.0 UJ | 7.2 J | 16.1 J | 18.7 J | 17.1 J |
| Magnesium | 13500 J | 2630 J | 45700 J | 60600 J | 13100 J | 2260 J | 2050 J | 1780 J |
| Manganese | 244 | 210 J | 185 J | 147 J | 249 J | 240 J | 194 J | 198 J |
| Molybdenum | 8.8 | 13.9 J | 6.9 J | 4.0 UJ | 10.4 J | 3.0 J | 2.8 J | 2.9 J |
| Nickel | 22.2 | 41.7 J | 11.8 J | 8.0 UJ | 28.5 J | 20.5 J | 17.4 J | 14.3 J |
| Potassium | 931 | 1520 J | 1000 UJ | 1000 UJ | 1410 J | 1380 J | 1090 J | 1100 J |
| Selenium | 20.0 U | 20.0 UJ | 40.0 UJ | 40.0 UJ | 20.0 UJ | 20.0 UJ | 20.0 UJ | 20.0 UJ |
| Silver | 1.0 U | 1.0 UJ | 2.0 UJ | 2.0 UJ | 1.0 UJ | 1.0 UJ | 1.0 UJ | 1.0 UJ |
| Sodium | 500 U | 500 UJ | 1000 UJ | 1000 UJ | 500 UJ | 500 UJ | 500 UJ | 500 UJ |
| Thallium | 200 U | 200 UJ | 400 UJ | 400 UJ | 200 UJ | 200 UJ | 200 UJ | 200 UJ |
| Vanadium | 11.1 | 24.7 J | 12.2 J | 4.2 J | 13.0 J | 23.7 J | 23.1 J | 23.9 J |
| Zinc | 77.8 J | 197 J | 50.3 J | 13.7 J | 60.4 J | 82.2 J | 77.1 J | 69.9 J |

## *Soil*

| **Location** | **USB20** | **USB20** | **USB21** | **USB21** | **USB21** | **USW02** | **USW02** | **USW13** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 3.7 | 12.2 | 2.0 | 13.7 | 13.7 | 5.5 | 30.5 | 1.7 |
| End Depth (feet) | 6.2 | 13.7 | 3.7 | 17.7 | 17.7 | 7.0 | 33.0 | 3.4 |
| Date | 12/06/96 | 12/06/96 | 12/07/96 | 12/07/96 | 12/07/96 | 11/16/96 | 11/17/96 | 11/24/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REP | REG | REG | REG |
| METALS | | | | | | | | |
| Aluminum | 6650 | 3940 | 3590 | 3730 | 3950 | 4530 | 3180 | 609 |
| Antimony | 6.0 UJ | 6.0 UJ | 12.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ | 12.0 UJ |
| Arsenic | 12.1 | 11.4 | 20.0 U | 13.1 | 15.6 | 13.4 | 14.6 | 20.0 U |
| Barium | 62.6 | 43.3 | 204 | 25.1 | 23.8 | 166 | 105 | 48.2 |
| Beryllium | 0.50 | 0.27 | 0.40 U | 0.28 | 0.28 | 0.29 | 0.29 | 0.40 U |
| Cadmium | 0.50 UJ | 0.50 UJ | 1.0 UJ | 0.50 UJ | 0.50 UJ | 0.50 U | 0.50 U | 1.0 U |
| Calcium | 1760 | 46200 | 167000 | 93000 | 70100 | 52600 | 49900 | 171000 |
| Chromium | 10.2 J | 5.6 J | 7.0 J | 7.8 J | 8.7 J | 6.5 | 5.4 | 2.0 U |
| Cobalt | 6.9 | 6.9 | 3.4 | 4.9 | 5.0 | 5.9 | 5.9 | 2.0 U |
| Copper | 17.9 | 21.6 | 13.4 | 17.0 | 17.2 | 18.5 | 14.6 | 4.0 U |
| Iron | 20400 | 16200 | 9580 | 14600 | 14900 | 16000 | 13500 | 4320 |
| Lead | 9.7 J | 7.3 J | 10.0 UJ | 7.7 J | 5.6 J | 11.0 | 8.7 | 10.0 U |
| Magnesium | 1930 J | 16300 J | 11300 J | 17000 J | 16500 J | 19500 | 15300 | 49700 J |
| Manganese | 128 | 238 | 191 | 181 | 171 | 225 J | 187 J | 269 |
| Molybdenum | 7.4 | 9.0 | 4.0 U | 8.0 | 8.5 | 6.7 | 8.1 | 4.0 U |
| Nickel | 24.0 | 24.6 | 13.3 | 18.4 | 18.5 | 20.3 | 21.9 | 8.0 U |
| Potassium | 1040 | 949 | 1000 U | 743 | 767 | 1230 | 937 | 1000 U |
| Selenium | 20.0 U | 20.0 U | 40.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 40.0 U |
| Silver | 1.0 U | 1.0 U | 2.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 2.0 U |
| Sodium | 500 U | 500 U | 1000 U | 500 U | 500 U | 500 U | 500 U | 1000 U |
| Thallium | 200 U | 200 U | 400 U | 200 U | 200 U | 200 U | 200 U | 400 U |
| Vanadium | 17.4 | 10.1 | 10.3 | 8.9 | 8.9 | 12.4 | 11.4 | 2.7 |
| Zinc | 78.1 | 62.1 | 59.9 | 52.2 | 55.3 | 64.1 | 67.8 | 6.2 J |

## Soil

| Location | USW16 | | USW16 | | USW19 | | USW19 | |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 8.5 | | 21.0 | | 1.0 | | 26.0 | |
| End Depth (feet) | 11.0 | | 23.5 | | 3.5 | | 28.0 | |
| Date | 12/04/96 | | 12/04/96 | | 12/05/96 | | 12/05/96 | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Sample Type | REG | | REG | | REG | | REG | |
| METALS | | | | | | | | |
| Aluminum | 6600 | J | 4060 | J | 10300 | J | 6100 | J |
| Antimony | 6.0 | UJ | 6.0 | UJ | 6.0 | UJ | 6.0 | UJ |
| Arsenic | 16.8 | J | 34.0 | J | 10.9 | J | 10.0 | UJ |
| Barium | 48.5 | J | 14.5 | J | 86.9 | J | 54.3 | J |
| Beryllium | 0.30 | J | 0.23 | J | 0.67 | J | 0.23 | J |
| Cadmium | 0.50 | UJ | 0.88 | J | 0.50 | UJ | 0.50 | UJ |
| Calcium | 32200 | J | 63100 | J | 2100 | J | 47900 | J |
| Chromium | 24.8 | J | 30.9 | J | 12.6 | J | 9.3 | J |
| Cobalt | 10.2 | J | 7.8 | J | 10.0 | J | 6.8 | J |
| Copper | 24.9 | J | 31.8 | J | 14.7 | J | 17.7 | J |
| Iron | 20500 | J | 28500 | J | 20800 | J | 16300 | J |
| Lead | 8.5 | J | 9.4 | J | 13.7 | J | 5.0 | UJ |
| Magnesium | 17200 | J | 16600 | J | 1920 | J | 15400 | J |
| Manganese | 310 | J | 185 | J | 569 | J | 255 | J |
| Molybdenum | 11.2 | J | 14.0 | J | 8.5 | J | 6.1 | J |
| Nickel | 33.2 | J | 31.0 | J | 13.3 | J | 19.1 | J |
| Potassium | 1350 | J | 837 | J | 826 | J | 1430 | J |
| Selenium | 20.0 | UJ | 20.0 | UJ | 21.0 | UJ | 20.0 | UJ |
| Silver | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ |
| Sodium | 500 | UJ | 500 | UJ | 500 | UJ | 500 | UJ |
| Thallium | 200 | UJ | 200 | UJ | 200 | UJ | 200 | UJ |
| Vanadium | 19.7 | J | 14.5 | J | 24.6 | J | 14.4 | J |
| Zinc | 83.2 | J | 69.4 | J | 47.4 | J | 49.2 | J |

## *Surface Water*

| **Location** | **9MW1** | | **9MW3** | | **9MW7** | | **BLD3** | | **BLD3** | | **PG-201** | | **PG-501** | | **USW02** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 12/17/96 | | 12/18/96 | | 12/18/96 | | 12/18/96 | | 12/18/96 | | 12/17/96 | | 12/18/96 | | 12/17/96 | |
| Sample Type | REG | | REG | | REG | | REG | | DUP | | REG | | REG | | REG | |
| Units | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | |
| VOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| Acetone | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ |
| Benzene | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.9 | |
| Bromodichloromethane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Bromoform | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Bromomethane | 2.0 | U | 2.0 | UJ | 2.0 | UJ | 2.0 | UJ | 2.0 | UJ | 2.0 | U | 2.0 | UJ | 2.0 | U |
| 2-Butanone | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ |
| Carbon disulfide | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Carbon tetrachloride | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Chlorobenzene | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Chloroethane | 2.0 | U | 2.0 | UJ | 2.0 | UJ | 2.0 | UJ | 2.0 | UJ | 2.0 | U | 2.0 | UJ | 2.0 | U |
| Chloroform | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Chloromethane | 2.0 | U | 2.0 | UJ | 2.0 | UJ | 2.0 | UJ | 2.0 | UJ | 2.0 | U | 2.0 | UJ | 2.0 | U |
| Dibromochloromethane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 1,1-Dichloroethane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 1,2-Dichloroethane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 1,1-Dichloroethene | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 1,2-Dichloroethene (total) | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 1,2-Dichloropropane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| cis-1,3-Dichloropropene | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| trans-1,3-Dichloropropene | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Ethylbenzene | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 2-Hexanone | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ |
| 4-Methyl-2-pentanone | 5.0 | U | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | U | 5.0 | UJ | 5.0 | U |
| Methylene chloride | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Styrene | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 1,1,2,2-Tetrachloroethane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Tetrachloroethene (Tetrachloroethylene) | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Toluene | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 1,1,1-Trichloroethane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| 1,1,2-Trichloroethane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Trichloroethene (Trichloroethylene) | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |
| Vinyl chloride | 2.0 | U | 2.0 | UJ | 2.0 | UJ | 2.0 | UJ | 2.0 | UJ | 2.0 | U | 2.0 | UJ | 2.0 | U |
| Xylenes (total) | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | U | 1.0 | UJ | 1.0 | U |

| **Location** | **USW13** | | **USW16** | | **USW19** | |
|---|---|---|---|---|---|---|
| Date | 12/17/96 | | 12/17/96 | | 12/17/96 | |
| Sample Type | REG | | REG | | REG | |
| Units | µg/L | | µg/L | | µg/L | |
| VOLATILE ORGANICS | | | | | | |
| Acetone | 10 | UJ | 10 | UJ | 10 | UJ |
| Benzene | 1.0 | U | 1.0 | U | 1.0 | U |
| Bromodichloromethane | 1.0 | U | 1.0 | U | 1.0 | U |
| Bromoform | 1.0 | U | 1.0 | U | 1.0 | U |
| Bromomethane | 2.0 | U | 2.0 | U | 2.0 | U |
| 2-Butanone | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ |
| Carbon disulfide | 1.0 | U | 1.0 | U | 1.0 | U |
| Carbon tetrachloride | 1.0 | U | 1.0 | U | 1.0 | U |
| Chlorobenzene | 1.0 | U | 1.0 | U | 1.0 | U |
| Chloroethane | 2.0 | U | 2.0 | U | 2.0 | U |
| Chloroform | 1.0 | U | 1.0 | U | 1.0 | U |
| Chloromethane | 2.0 | U | 2.0 | U | 2.0 | U |
| Dibromochloromethane | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1-Dichloroethane | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,2-Dichloroethane | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1-Dichloroethene | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,2-Dichloroethene (total) | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,2-Dichloropropane | 1.0 | U | 1.0 | U | 1.0 | U |
| cis-1,3-Dichloropropene | 1.0 | U | 1.0 | U | 1.0 | U |
| trans-1,3-Dichloropropene | 1.0 | U | 1.0 | U | 1.0 | U |
| Ethylbenzene | 1.0 | U | 1.0 | U | 1.0 | U |
| 2-Hexanone | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ |
| 4-Methyl-2-pentanone | 5.0 | U | 5.0 | U | 5.0 | U |
| Methylene chloride | 1.0 | U | 1.0 | U | 1.0 | U |
| Styrene | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1,2,2-Tetrachloroethane | 1.0 | U | 1.0 | U | 1.0 | U |
| Tetrachloroethene (Tetrachloroethylene) | 1.0 | U | 1.0 | U | 1.0 | U |
| Toluene | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1,1-Trichloroethane | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1,2-Trichloroethane | 1.0 | U | 1.0 | U | 1.0 | U |
| Trichloroethene (Trichloroethylene) | 1.0 | U | 1.0 | U | 1.0 | U |
| Vinyl chloride | 2.0 | U | 2.0 | U | 2.0 | U |
| Xylenes (total) | 1.0 | U | 1.0 | U | 1.0 | U |

## Surface Water

| Location | 9MW1 | | 9MW3 | | 9MW7 | | BLD3 | | BLD3 | | PG-201 | | PG-501 | | USW02 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 12/17/96 | | 12/18/96 | | 12/18/96 | | 12/18/96 | | 12/18/96 | | 12/17/96 | | 12/18/96 | | 12/17/96 | |
| Sample Type | REG | | REG | | REG | | REG | | DUP | | REG | | REG | | REG | |
| Units | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | |
| SEMIVOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| Acenaphthene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Acenapthylene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Anthracene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Benzo(a)anthracene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Benzo(a)pyrene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Benzo(b)fluoranthene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Benzo(g,h,i)perylene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Benzo(k)fluoranthene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Bis(2-chloroethoxy) methane | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Bis(2-chloroethyl) ether | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Bis(2-chloroisopropyl) ether | 11 | UJ | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | UJ | 9.8 | UJ | 11 | UJ |
| Bis(2-ethylhexyl) phthalate | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 31 | | 9.8 | UJ | 11 | U |
| 4-Bromophenyl phenyl ether | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Butyl benzyl phthalate | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Carbazole | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 4-Chloro-3-methylphenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 4-Chloroaniline | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2-Chloronaphthalene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2-Chlorophenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 4-Chlorophenyl phenyl ether | 11 | UJ | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | UJ | 9.8 | UJ | 11 | UJ |
| Chrysene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Cresols, m & p | 11 | U | 10 | UJ | 10 | UJ | -- | | 11 | UJ | -- | | 9.8 | UJ | -- | |
| Di-n-butyl phthalate | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Di-n-octyl phthalate | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Dibenz(a,h)anthracene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Dibenzofuran | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 1,2-Dichlorobenzene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 1,3-Dichlorobenzene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 1,4-Dichlorobenzene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 3,3'-Dichlorobenzidine | 53 | UJ | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | UJ | 49 | UJ | 56 | UJ |
| 2,4-Dichlorophenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Diethyl phthalate | 11 | UR | 10 | UR | 10 | UR | 11 | UR | 11 | UR | 11 | UR | 9.8 | UR | 11 | UR |
| Dimethyl phthalate | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2,4-Dimethylphenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 4,6-Dinitro-2-methylphenol | 53 | U | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | U | 49 | UJ | 56 | U |
| 2,4-Dinitrophenol | 53 | U | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | U | 49 | UJ | 56 | U |

## Ground Water

| **Location** | **9MW1** | | **9MW3** | | **9MW7** | | **BLD3** | | **BLD3** | | **PG-201** | | **PG-501** | | **USW02** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 12/17/96 | | 12/18/96 | | 12/18/96 | | 12/18/96 | | 12/18/96 | | 12/17/96 | | 12/18/96 | | 12/17/96 | |
| Sample Type | REG | | REG | | REG | | REG | | DUP | | REG | | REG | | REG | |
| Units | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | |
| SEMIVOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| 2,4-Dinitrotoluene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2,6-Dinitrotoluene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Fluoranthene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Fluorene | 11 | UR | 10 | UR | 10 | UR | 11 | UR | 11 | UR | 11 | UR | 9.8 | UR | 11 | UR |
| Hexachlorobenzene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Hexachlorobutadiene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Hexachlorocyclopentadiene | 53 | UJ | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | UJ | 49 | UJ | 56 | UJ |
| Hexachloroethane | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Indeno(1,2,3-c,d)pyrene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Isophorone | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2-Methylnaphthalene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2-Methylphenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 4-Methylphenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Naphthalene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2-Nitroaniline | 53 | UJ | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | UJ | 49 | UJ | 56 | UJ |
| 3-Nitroaniline | 53 | U | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | U | 49 | UJ | 56 | U |
| 4-Nitroaniline | 53 | U | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | U | 49 | UJ | 56 | U |
| Nitrobenzene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2-Nitrophenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 4-Nitrophenol | 53 | U | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | U | 49 | UJ | 56 | U |
| N-Nitrosodi-n-propylamine | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| N-Nitrosodiphenylamine | 11 | UR | 10 | UR | 10 | UR | 11 | UR | 11 | UR | 11 | UR | 9.8 | UR | 11 | UR |
| Pentachlorophenol | 53 | U | 50 | UJ | 52 | UJ | 53 | UJ | 53 | UJ | 55 | U | 49 | UJ | 56 | U |
| Phenanthrene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Phenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| Pyrene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 1,2,4-Trichlorobenzene | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2,4,5-Trichlorophenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |
| 2,4,6-Trichlorophenol | 11 | U | 10 | UJ | 10 | UJ | 11 | UJ | 11 | UJ | 11 | U | 9.8 | UJ | 11 | U |

## *Surface Water*

| **Location** | **USW13** | | **USW16** | | **USW19** | |
|---|---|---|---|---|---|---|
| Date | 12/17/96 | | 12/17/96 | | 12/17/96 | |
| Sample Type | REG | | REG | | REG | |
| Units | µg/L | | µg/L | | µg/L | |
| SEMIVOLATILE ORGANICS | | | | | | |
| Acenaphthene | 11 | U | 11 | U | 9.9 | U |
| Acenapthylene | 11 | U | 11 | U | 9.9 | U |
| Anthracene | 11 | U | 11 | U | 9.9 | U |
| Benzo(a)anthracene | 11 | U | 11 | U | 9.9 | U |
| Benzo(a)pyrene | 11 | U | 11 | U | 9.9 | U |
| Benzo(b)fluoranthene | 11 | U | 11 | U | 9.9 | U |
| Benzo(g,h,i)perylene | 11 | U | 11 | U | 9.9 | UJ |
| Benzo(k)fluoranthene | 11 | U | 11 | U | 9.9 | U |
| Bis(2-chloroethoxy) methane | 11 | U | 11 | U | 9.9 | U |
| Bis(2-chloroethyl) ether | 11 | U | 11 | U | 9.9 | U |
| Bis(2-chloroisopropyl) ether | 11 | UJ | 11 | UJ | 9.9 | UJ |
| Bis(2-ethylhexyl) phthalate | 11 | U | 11 | U | 9.9 | U |
| 4-Bromophenyl phenyl ether | 11 | U | 11 | U | 9.9 | U |
| Butyl benzyl phthalate | 11 | U | 11 | U | 9.9 | U |
| Carbazole | 11 | U | 11 | U | 9.9 | U |
| 4-Chloro-3-methylphenol | 11 | U | 11 | U | 9.9 | U |
| 4-Chloroaniline | 11 | U | 11 | U | 9.9 | U |
| 2-Chloronaphthalene | 11 | U | 11 | U | 9.9 | U |
| 2-Chlorophenol | 11 | U | 11 | U | 9.9 | U |
| 4-Chlorophenyl phenyl ether | 11 | UJ | 11 | UJ | 9.9 | UJ |
| Chrysene | 11 | U | 11 | U | 9.9 | U |
| Cresols, m & p | 11 | U | | | -- | |
| Di-n-butyl phthalate | 11 | U | 11 | U | 9.9 | U |
| Di-n-octyl phthalate | 11 | U | 11 | U | 9.9 | U |
| Dibenz(a,h)anthracene | 11 | U | 11 | U | 9.9 | U |
| Dibenzofuran | 11 | U | 11 | U | 9.9 | U |
| 1,2-Dichlorobenzene | 11 | U | 11 | U | 9.9 | U |
| 1,3-Dichlorobenzene | 11 | U | 11 | U | 9.9 | U |
| 1,4-Dichlorobenzene | 11 | U | 11 | U | 9.9 | U |
| 3,3'-Dichlorobenzidine | 56 | UJ | 54 | UJ | 50 | U |
| 2,4-Dichlorophenol | 11 | U | 11 | U | 9.9 | U |
| Diethyl phthalate | 11 | UR | 11 | UR | 9.9 | UR |
| Dimethyl phthalate | 11 | U | 11 | U | 9.9 | U |
| 2,4-Dimethylphenol | 11 | U | 11 | U | 9.9 | U |
| 4,6-Dinitro-2-methylphenol | 56 | U | 54 | U | 50 | U |
| 2,4-Dinitrophenol | 56 | U | 54 | U | 50 | U |

| **Location** | **USW13** | | **USW16** | | **USW19** | |
|---|---|---|---|---|---|---|
| Date | 12/17/96 | | 12/17/96 | | 12/17/96 | |
| Sample Type | REG | | REG | | REG | |
| Units | µg/L | | µg/L | | µg/L | |
| SEMIVOLATILE ORGANICS | | | | | | |
| 2,4-Dinitrotoluene | 11 | U | 11 | U | 9.9 | U |
| 2,6-Dinitrotoluene | 11 | U | 11 | U | 9.9 | U |
| Fluoranthene | 11 | U | 11 | U | 9.9 | U |
| Fluorene | 11 | UR | 11 | UR | 9.9 | UR |
| Hexachlorobenzene | 11 | U | 11 | U | 9.9 | U |
| Hexachlorobutadiene | 11 | U | 11 | U | 9.9 | U |
| Hexachlorocyclopentadiene | 56 | UJ | 54 | UJ | 50 | UJ |
| Hexachloroethane | 11 | U | 11 | U | 9.9 | U |
| Indeno(1,2,3-c,d)pyrene | 11 | U | 11 | U | 9.9 | U |
| Isophorone | 11 | U | 11 | U | 9.9 | U |
| 2-Methylnaphthalene | 11 | U | 11 | U | 9.9 | U |
| 2-Methylphenol | 11 | U | 11 | U | 9.9 | U |
| 4-Methylphenol | 11 | U | 11 | U | 9.9 | U |
| Naphthalene | 11 | U | 11 | U | 9.9 | U |
| 2-Nitroaniline | 56 | UJ | 54 | UJ | 50 | U |
| 3-Nitroaniline | 56 | U | 54 | U | 50 | U |
| 4-Nitroaniline | 56 | U | 54 | U | 50 | U |
| Nitrobenzene | 11 | U | 11 | U | 9.9 | U |
| 2-Nitrophenol | 11 | U | 11 | U | 9.9 | U |
| 4-Nitrophenol | 56 | U | 54 | UR | 50 | U |
| N-Nitrosodi-n-propylamine | 11 | U | 11 | U | 9.9 | U |
| N-Nitrosodiphenylamine | 11 | UR | 11 | U | 9.9 | UR |
| Pentachlorophenol | 56 | U | 54 | U | 50 | U |
| Phenanthrene | 11 | U | 11 | U | 9.9 | U |
| Phenol | 11 | U | 11 | U | 9.9 | U |
| Pyrene | 11 | U | 11 | U | 9.9 | U |
| 1,2,4-Trichlorobenzene | 11 | U | 11 | U | 9.9 | U |
| 2,4,5-Trichlorophenol | 11 | U | 11 | U | 9.9 | U |
| 2,4,6-Trichlorophenol | 11 | U | 11 | U | 9.9 | U |

## *Surface Water*

| **Location** | **9MW1** | **9MW3** | **9MW7** | **BLD3** | **BLD3** | **PG-201** | **PG-501** | **USW02** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 10.2 | 17.8 | 23.0 | 6.0 | 6.0 | 28.0 | 20.0 | 26.65 |
| End Depth (feet) | 20.7 | 28.3 | 44.5 | 11.0 | 11.0 | 29.0 | 45.0 | 31.65 |
| Date | 12/17/96 | 12/18/96 | 12/18/96 | 12/18/96 | 12/18/96 | 12/17/96 | 12/18/96 | 12/17/96 |
| Units | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| Sample Type | REG | REG | REG | REG | DUP | REG | REG | REG |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | | | | | |
| Aldrin | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| Arochlor 1016 | 1.1 U | 1.0 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 UJ | 1.2 U |
| Arochlor 1221 | 1.1 U | 1.0 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 UJ | 1.2 U |
| Arochlor 1232 | 1.1 U | 1.0 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 UJ | 1.2 U |
| Arochlor 1242 | 1.1 U | 1.0 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 UJ | 1.2 U |
| Arochlor 1248 | 1.1 U | 1.0 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 UJ | 1.2 U |
| Arochlor 1254 | 1.1 U | 1.0 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 UJ | 1.2 U |
| Arochlor 1260 | 1.1 U | 1.0 UJ | 1.1 UJ | 1.1 UJ | 1.1 UJ | 1.1 U | 1.1 UJ | 1.2 U |
| alpha BHC | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| beta BHC | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| delta BHC | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| gamma BHC (Lindane) | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| alpha-Chlordane | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| gamma-Chlordane | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| 4,4'-DDD | 0.11 U | 0.10 UJ | 0.11 UJ | 0.11 UJ | 0.11 UJ | 0.11 U | 0.11 UJ | 0.12 U |
| 4,4'-DDE | 0.11 U | 0.10 UJ | 0.11 UJ | 0.11 UJ | 0.11 UJ | 0.11 U | 0.11 UJ | 0.12 U |
| 4,4'-DDT | 0.11 U | 0.10 UJ | 0.11 UJ | 0.11 UJ | 0.11 UJ | 0.11 U | 0.11 UJ | 0.12 U |
| Dieldrin | 0.11 U | 0.10 UJ | 0.11 UJ | 0.11 UJ | 0.11 UJ | 0.11 U | 0.11 UJ | 0.12 U |
| Endosulfan I | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| Endosulfan II | 0.11 U | 0.10 UJ | 0.11 UJ | 0.11 UJ | 0.11 UJ | 0.11 U | 0.11 UJ | 0.12 U |
| Endosulfan sulfate | 0.11 U | 0.10 UJ | 0.11 UJ | 0.11 UJ | 0.11 UJ | 0.11 U | 0.11 UJ | 0.12 U |
| Endrin | 0.11 U | 0.10 UJ | 0.11 UJ | 0.11 UJ | 0.11 UJ | 0.11 U | 0.11 UJ | 0.12 U |
| Endrin ketone | 0.11 U | 0.10 UJ | 0.11 UJ | 0.11 UJ | 0.11 UJ | 0.11 U | 0.11 UJ | 0.12 U |
| Heptachlor | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| Heptachlor epoxide | 0.054 U | 0.052 UJ | 0.056 UJ | 0.055 UJ | 0.056 UJ | 0.056 U | 0.054 UJ | 0.058 U |
| Methoxychlor | 0.54 U | 0.52 UJ | 0.56 UJ | 0.55 UJ | 0.56 UJ | 0.56 U | 0.54 UJ | 0.58 U |
| Toxaphene | 5.4 U | 5.2 UJ | 5.6 UJ | 5.5 UJ | 5.6 UJ | 5.6 U | 5.4 UJ | 5.8 U |

| Location | USW13 | USW16 | USW19 |
|---|---|---|---|
| Begin Depth (feet) | 11.65 | 17.0 | 20.4 |
| End Depth (feet) | 16.65 | 20.0 | 30.4 |
| Date | 12/17/96 | 12/17/96 | 12/17/96 |
| Units | ug/L | ug/L | ug/L |
| Sample Type | REG | REG | REG |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | |
| Aldrin | 0.049 U | 0.060 U | 0.058 U |
| Arochlor 1016 | 0.98 U | 1.2 U | 1.2 U |
| Arochlor 1221 | 0.98 U | 1.2 U | 1.2 U |
| Arochlor 1232 | 0.98 U | 1.2 U | 1.2 U |
| Arochlor 1242 | 0.98 U | 1.2 U | 1.2 U |
| Arochlor 1248 | 0.98 U | 1.2 U | 1.2 U |
| Arochlor 1254 | 0.98 U | 1.2 U | 1.2 U |
| Arochlor 1260 | 0.98 U | 1.2 U | 1.2 U |
| alpha BHC | 0.049 U | 0.060 U | 0.058 U |
| beta BHC | 0.049 U | 0.060 U | 0.058 U |
| delta BHC | 0.049 U | 0.060 U | 0.058 U |
| gamma BHC (Lindane) | 0.049 U | 0.060 U | 0.058 U |
| alpha-Chlordane | 0.049 U | 0.060 U | 0.058 U |
| gamma-Chlordane | 0.049 U | 0.060 U | 0.058 U |
| 4,4'-DDD | 0.098 U | 0.12 U | 0.12 U |
| 4,4'-DDE | 0.098 U | 0.12 U | 0.12 U |
| 4,4'-DDT | 0.098 U | 0.12 U | 0.12 U |
| Dieldrin | 0.098 U | 0.12 U | 0.12 U |
| Endosulfan I | 0.049 U | 0.060 U | 0.058 U |
| Endosulfan II | 0.098 U | 0.12 U | 0.12 U |
| Endosulfan sulfate | 0.098 U | 0.12 U | 0.12 U |
| Endrin | 0.098 U | 0.12 U | 0.12 U |
| Endrin ketone | 0.098 U | 0.12 U | 0.12 U |
| Heptachlor | 0.049 U | 0.060 U | 0.058 U |
| Heptachlor epoxide | 0.050 U | 0.060 U | 0.058 U |
| Methoxychlor | 0.49 U | 0.60 U | 0.58 U |
| Toxaphene | 4.9 U | 6.0 U | 5.8 U |

## *Surface Water*

| **Location** | **9MW1** | **9MW3** | **9MW7** | **BLD3** | **BLD3** | **PG-201** | **PG-501** | **USW02** |
|---|---|---|---|---|---|---|---|---|
| Date | 12/17/96 | 12/18/96 | 12/18/96 | 12/18/96 | 12/18/96 | 12/17/96 | 12/18/96 | 12/17/96 |
| Sample Type | REG | REG | REG | REG | DUP | REG | REG | REG |
| Units | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| METALS (unfiltered) | | | | | | | | |
| Aluminum | 0.24 | 0.10 UJ | 0.10 UJ | 0.10 UJ | 0.21 J | 0.24 | 0.10 UJ | 0.67 |
| Antimony | 0.060 U | 0.060 UJ | 0.060 UJ | 0.060 UJ | 0.060 UJ | 0.060 U | 0.060 UJ | 0.060 U |
| Arsenic | 0.10 U | 0.10 UJ | 0.10 UJ | 0.10 UJ | 0.10 UJ | 0.10 U | 0.10 UJ | 0.10 U |
| Barium | 0.098 | 0.72 J | 0.17 J | 0.071 J | 0.068 U | 0.13 | 0.23 J | 0.30 |
| Beryllium | 0.0020 U | 0.0020 UJ | 0.0020 UJ | 0.0020 UJ | 0.0020 UJ | 0.0020 U | 0.0020 UJ | 0.0020 U |
| Cadmium | 0.0050 U | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0050 UJ | 0.0083 | 0.0050 UJ | 0.0050 U |
| Calcium | 54.7 | 113 J | 134 J | 110 J | 110 J | 121 | 129 J | 114 |
| Chromium | 0.010 U | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Cobalt | 0.010 U | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Copper | 0.020 U | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 U | 0.020 UJ | 0.020 U |
| Iron | 0.90 | 3.4 J | 4.6 J | 0.25 J | 0.28 J | 2.6 | 3.2 J | 2.3 |
| Lead | 0.050 U | 0.050 UJ | 0.050 UJ | 0.050 UJ | 0.050 UJ | 0.050 U | 0.050 UJ | 0.050 U |
| Magnesium | 16.5 | 44.0 J | 46.2 J | 45.7 J | 44.8 J | 40.9 | 44.1 J | 44.8 |
| Manganese | 0.22 | 0.073 J | 0.17 J | 1.8 J | 1.7 J | 0.070 | 0.057 J | 0.048 |
| Molybdenum | 0.020 U | 0.020 UJ | 0.022 J | 0.020 UJ | 0.020 UJ | 0.020 | 0.020 UJ | 0.020 U |
| Nickel | 0.040 U | 0.040 UJ | 0.040 UJ | 0.040 UJ | 0.040 UJ | 0.040 U | 0.040 UJ | 0.040 U |
| Potassium | 5.0 U | 5.0 UJ | 5.0 UJ | 5.0 UJ | 5.0 UJ | 5.0 U | 5.0 UJ | 18.1 |
| Selenium | 0.20 U | 0.20 UJ | 0.20 UJ | 0.20 UJ | 0.20 UJ | 0.20 U | 0.20 UJ | 0.20 U |
| Silver | 0.010 U | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Sodium | 5.0 U | 23.8 J | 17.3 J | 45.9 J | 45.0 J | 11.7 | 5.1 J | 20.1 |
| Thallium | 2.0 U | 2.0 UJ | 2.0 UJ | 2.0 UJ | 2.0 UJ | 2.0 U | 2.0 UJ | 2.0 U |
| Vanadium | 0.010 U | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 UJ | 0.010 U | 0.010 UJ | 0.010 U |
| Zinc | 0.020 U | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.059 | 0.020 UJ | 0.027 |

| **Location** | **USW13** | **USW16** | **USW19** |
|---|---|---|---|
| Date | 12/17/96 | 12/17/96 | 12/17/96 |
| Sample Type | REG | REG | REG |
| Units | mg/L | mg/L | mg/L |
| METALS (unfiltered) | | | |
| Aluminum | 0.10 U | 0.10 U | 0.10 U |
| Antimony | 0.060 U | 0.060 U | 0.060 U |
| Arsenic | 0.10 U | 0.10 U | 0.10 U |
| Barium | 0.049 U | 0.095 | 0.079 |
| Beryllium | 0.0020 U | 0.0020 U | 0.0020 U |
| Cadmium | 0.0050 U | 0.0050 U | 0.0050 U |
| Calcium | 267 | 101 | 93.8 |
| Chromium | 0.010 U | 1.4 | 0.010 U |
| Cobalt | 0.010 U | 0.010 U | 0.010 U |
| Copper | 0.020 U | 0.020 U | 0.020 U |
| Iron | 0.31 | 0.10 U | 1.6 |
| Lead | 0.050 U | 0.050 U | 0.050 U |
| Magnesium | 107 | 38.0 | 33.4 |
| Manganese | 5.0 | 0.020 | 0.059 |
| Molybdenum | 0.020 U | 0.020 U | 0.046 |
| Nickel | 0.040 U | 0.040 U | 0.040 U |
| Potassium | 5.0 U | 5.0 U | 5.0 U |
| Selenium | 0.20 U | 0.20 U | 0.20 U |
| Silver | 0.010 U | 0.010 U | 0.010 U |
| Sodium | 26.5 | 8.8 | 5.0 U |
| Thallium | 2.0 U | 2.0 U | 2.0 U |
| Vanadium | 0.010 U | 0.010 U | 0.010 U |
| Zinc | 0.020 U | 0.020 U | 0.020 U |

## *Surface Water*

| **Location** | **9MW1** | **9MW3** | **9MW7** | **BLD3** | **BLD3** | **PG-201** | **PG-501** | **USW02** |
|---|---|---|---|---|---|---|---|---|
| Date | 12/17/96 | 12/18/96 | 12/18/96 | 12/18/96 | 12/18/96 | 12/17/96 | 12/18/96 | 12/17/96 |
| Sample Type | REG | REG | REG | REG | DUP | REG | REG | REG |
| Units | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| ANIONS | | | | | | | | |
| Chloride | 1.6 | 23.8 J | 55.8 J | 64.9 J | 63.7 J | 12.5 | 10.8 J | 17.5 |
| Fluoride | 0.50 U | 0.84 J | 0.50 UJ | 0.50 UJ | 0.50 UJ | 1.0 | 1.0 UJ | 0.58 |
| Nitrogen, nitrate (as N) | 0.50 U | 0.50 UJ | 0.50 UJ | 0.50 UJ | 0.50 UJ | 0.50 U | 0.50 UJ | 0.50 U |
| Phosphorus, total orthophosphate (as P) | 0.50 U | 0.50 UJ | 0.50 UJ | 0.50 UJ | 0.50 UJ | 0.50 U | 0.50 UJ | 0.50 U |
| Sulfate | 27.3 J | 2.9 J | 104 J | 128 J | 127 J | 154 J | 103 J | 49.1 J |

| **Location** | **USW13** | **USW16** | **USW19** |
|---|---|---|---|
| Date | 12/17/96 | 12/17/96 | 12/17/96 |
| Sample Type | REG | REG | REG |
| Units | mg/L | mg/L | mg/L |
| ANIONS | | | |
| Chloride | 14.1 | 2.0 | 3.1 |
| Fluoride | 2.5 U | 0.50 U | 0.71 |
| Nitrogen, nitrate (as N) | 0.50 U | 5.8 | 0.50 U |
| Phosphorus, total orthophosphate (as P) | 1.0 U | 0.50 U | 0.50 U |
| Sulfate | 819 J | 144 J | 76.9 J |

| **Location** | **BLD3** | **PG-201** | **USW02** | **USW16** | **USW19** |
|---|---|---|---|---|---|
| Date | 12/18/96 | 12/17/96 | 12/17/96 | 12/17/96 | 12/17/96 |
| Sample Type | REG | REG | REG | REG | REG |
| Units | mg/L | mg/L | mg/L | mg/L | mg/L |
| CYANIDE | | | | | |
| Cyanide | 0.010 UJ | 0.010 U | 0.010 U | 0.010 U | 0.010 U |

## Surface Water

| **Location** | **MR01** | | **MR02** | | **MR03** | | **MR04** | | **MR05** | | **TR01** | | **TR02** | | **TR02** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | |
| Sample Type | REG | | REG | | REG | | REG | | REG | | REG | | REG | | REP | |
| Units | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | |
| VOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| Acetone | 10 | U | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ | 10 | UJ |
| Benzene | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Bromodichloromethane | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Bromoform | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Bromomethane | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U |
| 2-Butanone | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ |
| Carbon disulfide | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Carbon tetrachloride | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Chlorobenzene | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Chloroethane | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U |
| Chloroform | 1.0 | U | 1.0 | U | 1.0 | U | 1.5 | | 1.6 | | 1.0 | U | 1.0 | U | 1.0 | U |
| Chloromethane | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U |
| Dibromochloromethane | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1-Dichloroethane | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,2-Dichloroethane | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1-Dichloroethene | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,2-Dichloroethene (total) | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.4 | | 1.6 | |
| trans-1,2-Dichloroethene | -- | | 0.50 | U | 0.50 | U | 0.50 | U | -- | | 0.50 | U | -- | | -- | |
| cis-1,2-Dichloroethene | -- | | 0.50 | U | 0.50 | U | 0.50 | U | -- | | 0.50 | U | -- | | -- | |
| 1,2-Dichloropropane | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| cis-1,3-Dichloropropene | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| trans-1,3-Dichloropropene | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Ethylbenzene | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| 2-Hexanone | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ |
| 4-Methyl-2-pentanone | 5.0 | U | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ | 5.0 | UJ |
| Methylene chloride | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Styrene | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1,2,2-Tetrachloroethane | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Tetrachloroethene (Tetrachloroethylene) | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| Toluene | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1,1-Trichloroethane | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |
| 1,1,2-Trichloroethane | 1.0 | U | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ | 1.0 | UJ |
| Trichloroethene (Trichloroethylene) | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.2 | | 1.2 | |
| Vinyl chloride | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U | 2.0 | U |
| Xylenes (total) | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U | 1.0 | U |

## *Surface Water*

| **Location** | **MR01** | | **MR02** | | **MR03** | | **MR04** | | **MR05** | | **TR01** | | **TR02** | | **TR02** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | |
| Sample Type | REG | | REG | | REG | | REG | | REG | | REG | | REG | | REP | |
| Units | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | |
| SEMIVOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| Acenaphthene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Acenapthylene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Anthracene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Benzo(a)anthracene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Benzo(a)pyrene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Benzo(b)fluoranthene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Benzo(g,h,i)perylene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Benzo(k)fluoranthene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Bis(2-chloroethoxy) methane | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Bis(2-chloroethyl) ether | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Bis(2-chloroisopropyl) ether | 11 | UR | 9.7 | UR | 9.6 | UR | 9.8 | UR | 11 | UR | 11 | UR | 9.8 | UR | 9.8 | UR |
| Bis(2-ethylhexyl) phthalate | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 4-Bromophenyl phenyl ether | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Butyl benzyl phthalate | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Carbazole | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 4-Chloro-3-methylphenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 4-Chloroaniline | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2-Chloronaphthalene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2-Chlorophenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 4-Chlorophenyl phenyl ether | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Chrysene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Cresols, m & p | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Di-n-butyl phthalate | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Di-n-octyl phthalate | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Dibenz(a,h)anthracene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Dibenzofuran | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 1,2-Dichlorobenzene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 1,3-Dichlorobenzene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 1,4-Dichlorobenzene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 3,3'-Dichlorobenzidine | 54 | U | 48 | U | 48 | U | 49 | U | 54 | U | 55 | U | 49 | UJ | 49 | UJ |
| 2,4-Dichlorophenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Diethyl phthalate | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Dimethyl phthalate | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2,4-Dimethylphenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 4,6-Dinitro-2-methylphenol | 54 | UR | 48 | UR | 48 | UR | 49 | UR | 54 | UR | 55 | UR | 49 | UR | 49 | UR |
| 2,4-Dinitrophenol | 54 | UR | 48 | UR | 48 | UR | 49 | UR | 54 | UR | 55 | UR | 49 | UR | 49 | UR |

## Surface Water

| Location | MR01 | | MR02 | | MR03 | | MR04 | | MR05 | | TR01 | | TR02 | | TR02 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | |
| Sample Type | REG | | REG | | REG | | REG | | REG | | REG | | REG | | REP | |
| Units | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | | µg/L | |
| SEMIVOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| 2,4-Dinitrotoluene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2,6-Dinitrotoluene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Fluoranthene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Fluorene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Hexachlorobenzene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Hexachlorobutadiene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Hexachlorocyclopentadiene | 54 | U | 48 | U | 48 | U | 49 | U | 54 | U | 55 | U | 49 | UJ | 49 | UJ |
| Hexachloroethane | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Indeno(1,2,3-c,d)pyrene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Isophorone | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2-Methylnaphthalene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2-Methylphenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 4-Methylphenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Naphthalene | 11 | UR | 9.7 | UR | 9.6 | UR | 9.8 | UR | 11 | UR | 11 | UR | 9.8 | UR | 9.8 | UR |
| 2-Nitroaniline | 54 | U | 48 | U | 48 | U | 49 | U | 54 | U | 55 | U | 49 | UJ | 49 | UJ |
| 3-Nitroaniline | 54 | U | 48 | U | 48 | U | 49 | U | 54 | U | 55 | U | 49 | UJ | 49 | UJ |
| 4-Nitroaniline | 54 | U | 48 | U | 48 | U | 49 | U | 54 | U | 55 | U | 49 | UJ | 49 | UJ |
| Nitrobenzene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2-Nitrophenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 4-Nitrophenol | 54 | U | 48 | U | 48 | U | 49 | U | 54 | U | 55 | U | 49 | UJ | 49 | UJ |
| N-Nitrosodi-n-propylamine | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| N-Nitrosodiphenylamine | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Pentachlorophenol | 54 | U | 48 | U | 48 | U | 49 | U | 54 | U | 55 | U | 49 | UJ | 49 | UJ |
| Phenanthrene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Phenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| Pyrene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 1,2,4-Trichlorobenzene | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2,4,5-Trichlorophenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |
| 2,4,6-Trichlorophenol | 11 | U | 9.7 | U | 9.6 | U | 9.8 | U | 11 | U | 11 | U | 9.8 | UJ | 9.8 | UJ |

## *Surface Water*

| **Location** | **MR01** | **MR02** | **MR03** | **MR04** | **MR05** | **TR01** | **TR02** | **TR02** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End Depth (feet) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Date | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 |
| Units | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L | ug/L |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | | | | | |
| Aldrin | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| Arochlor 1016 | 1.1 U | 0.98 U | 0.98 U | 0.98 U | 0.98 U | 1.0 U | 0.99 U | 0.98 U |
| Arochlor 1221 | 1.1 U | 0.98 U | 0.98 U | 0.98 U | 0.98 U | 1.0 U | 0.99 U | 0.98 U |
| Arochlor 1232 | 1.1 U | 0.98 U | 0.98 U | 0.98 U | 0.98 U | 1.0 U | 0.99 U | 0.98 U |
| Arochlor 1242 | 1.1 U | 0.98 U | 0.98 U | 0.98 U | 0.98 U | 1.0 U | 0.99 U | 0.98 U |
| Arochlor 1248 | 1.1 U | 0.98 U | 0.98 U | 0.98 U | 0.98 U | 1.0 U | 0.99 U | 0.98 U |
| Arochlor 1254 | 1.1 U | 0.98 U | 0.98 U | 0.98 U | 0.98 U | 1.0 U | 0.99 U | 0.98 U |
| Arochlor 1260 | 1.1 U | 0.98 U | 0.98 U | 0.98 U | 0.98 U | 1.0 U | 0.99 U | 0.98 U |
| alpha BHC | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| beta BHC | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| delta BHC | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| gamma BHC (Lindane) | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| alpha-Chlordane | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| gamma-Chlordane | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| 4,4'-DDD | 0.11 U | 0.098 U | 0.098 U | 0.098 U | 0.098 U | 0.10 U | 0.099 U | 0.098 U |
| 4,4'-DDE | 0.11 U | 0.098 U | 0.098 U | 0.098 U | 0.098 U | 0.10 U | 0.099 U | 0.098 U |
| 4,4'-DDT | 0.11 U | 0.098 U | 0.098 U | 0.098 U | 0.098 U | 0.10 U | 0.099 U | 0.098 U |
| Dieldrin | 0.11 U | 0.098 U | 0.098 U | 0.098 U | 0.098 U | 0.10 U | 0.099 U | 0.098 U |
| Endosulfan I | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| Endosulfan II | 0.11 U | 0.098 U | 0.098 U | 0.098 U | 0.098 U | 0.10 U | 0.099 U | 0.098 U |
| Endosulfan sulfate | 0.11 U | 0.098 U | 0.098 U | 0.098 U | 0.098 U | 0.10 U | 0.099 U | 0.098 U |
| Endrin | 0.11 U | 0.098 U | 0.098 U | 0.098 U | 0.098 U | 0.10 U | 0.099 U | 0.098 U |
| Endrin ketone | 0.11 U | 0.098 U | 0.098 U | 0.098 U | 0.098 U | 0.10 U | 0.099 U | 0.098 U |
| Heptachlor | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| Heptachlor epoxide | 0.054 U | 0.049 U | 0.049 U | 0.049 U | 0.049 U | 0.050 U | 0.050 U | 0.049 U |
| Methoxychlor | 0.54 U | 0.49 U | 0.49 U | 0.49 U | 0.49 U | 0.50 U | 0.50 U | 0.49 U |
| Toxaphene | 5.4 U | 4.9 U | 4.9 U | 4.9 U | 4.9 U | 5.0 U | 5.0 U | 4.9 U |

## Surface Water

| Location | MR01 | MR02 | MR03 | MR04 | MR05 | TR01 | TR02 | TR02 |
|---|---|---|---|---|---|---|---|---|
| Date | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| Units | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| METALS (unfiltered) | | | | | | | | |
| Aluminum | 0.10 | 0.17 | 0.10 U | 0.12 | 0.11 | 0.10 U | 0.10 U | 0.10 U |
| Antimony | 0.060 U | 0.060 U | 0.060 U | 0.060 U | 0.060 U | 0.060 U | 0.060 U | 0.060 U |
| Arsenic | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U | 0.10 U |
| Barium | 0.11 | 0.11 | 0.072 | 0.094 | 0.087 | 0.083 | 0.078 | 0.079 |
| Beryllium | 0.0020 U | 0.0020 U | 0.0020 U | 0.0020 U | 0.0020 U | 0.0020 U | 0.0020 U | 0.0020 U |
| Cadmium | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U | 0.0050 U |
| Calcium | 131 | 125 | 82.0 | 98.9 | 96.3 | 105 | 101 | 101 |
| Chromium | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| Cobalt | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| Copper | 0.020 U | 0.020 U | 0.020 U | 0.020 U | 0.020 U | 0.020 U | 0.020 U | 0.020 U |
| Iron | 0.21 | 0.41 | 0.25 | 0.43 | 0.31 | 0.30 | 0.20 | 0.23 |
| Lead | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U | 0.050 U |
| Magnesium | 33.8 | 31.3 | 23.5 | 27.3 | 27.0 | 29.2 | 28.2 | 28.4 |
| Manganese | 0.045 | 0.079 | 0.20 | 0.14 | 0.13 | 0.080 | 0.046 | 0.044 |
| Molybdenum | 0.020 U | 0.020 U | 0.020 U | 0.020 U | 0.020 U | 0.020 U | 0.020 U | 0.020 U |
| Nickel | 0.040 U | 0.040 U | 0.040 U | 0.040 U | 0.040 U | 0.040 U | 0.040 U | 0.040 U |
| Potassium | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U | 5.0 U |
| Selenium | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U |
| Silver | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| Sodium | 44.9 | 39.9 | 34.3 | 35.7 | 37.6 | 73.7 | 34.6 | 34.1 |
| Thallium | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U | 2.0 U |
| Vanadium | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U |
| Zinc | 0.025 | 0.030 | 0.051 | 0.047 | 0.041 | 0.020 U | 0.020 U | 0.020 U |

## *Surface Water*

| **Location** | **MR01** | **MR02** | **MR03** | **MR04** | **MR05** | **TR01** | **TR02** | **TR02** |
|---|---|---|---|---|---|---|---|---|
| Date | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| Units | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L | mg/L |
| ANIONS | | | | | | | | |
| Chloride | 80.3 | 73.5 | 73.2 | 73.7 | 78.0 | 121 | 53.6 | 41.9 |
| Fluoride | 1.0 U | 1.0 U | 0.50 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Nitrogen, nitrate (as N) | 24.3 | 20.9 | 6.2 | 9.1 | 8.5 | 4.5 | 2.0 | 1.5 |
| Phosphorus, total orthophosphate (as P) | 0.50 UJ | -- | 0.50 UJ | -- | -- | 0.50 UJ | -- | -- |
| Sulfate | 89.9 | 84.1 | 72.2 | 76.5 | 78.8 | 65.3 | 56.9 | 56.1 |
| Phosphorus, total orthophosphate (as P) | -- | 0.13 J | -- | 0.12 J | 0.16 J | -- | 0.12 J | 0.11 J |

| **Location** | **MR01** | **MR05** | **TR02** | **TR02** |
|---|---|---|---|---|
| Date | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 |
| Sample Type | REG | REG | REG | REP |
| Units | mg/L | mg/L | mg/L | mg/L |
| CYANIDE | | | | |
| Cyanide | 0.010 U | 0.010 U | 0.010 U | 0.010 U |

## Streambed sediment

| Location | MR01 | MR02 | MR03 | MR04 | MR05 | TR01 | TR02 | TR02 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End Depth (feet) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Date | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| VOLATILE ORGANICS | | | | | | | | |
| Acetone | 0.020 UJ | 0.020 UR | 0.037 J | 0.050 UR | 0.020 UR | 0.071 J | 0.057 J | 0.052 J |
| Benzene | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Bromodichloromethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Bromoform | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Bromomethane | 0.010 U | 0.010 U | 0.010 U | 0.025 U | 0.010 U | 0.020 U | 0.010 U | 0.010 U |
| 2-Butanone | 0.020 UR | 0.020 UR | 0.020 UR | 0.050 UR | 0.020 UR | 0.040 UR | 0.020 UR | 0.020 UR |
| Carbon disulfide | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Carbon tetrachloride | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Chlorobenzene | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Chloroethane | 0.010 U | 0.010 U | 0.010 U | 0.025 U | 0.010 UJ | 0.020 U | 0.010 U | 0.010 U |
| Chloroform | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Chloromethane | 0.010 U | 0.010 U | 0.010 U | 0.025 U | 0.010 UJ | 0.020 U | 0.010 U | 0.010 U |
| Dibromochloromethane | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 1,1-Dichloroethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 1,2-Dichloroethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 1,1-Dichloroethene | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 1,2-Dichloroethene (total) | 0.0050 U | 0.0050 U | 0.0056 J | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 1,2-Dichloropropane | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| cis-1,3-Dichloropropene | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| trans-1,3-Dichloropropene | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Ethylbenzene | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 2-Hexanone | 0.020 UR | 0.020 UR | 0.020 UR | 0.050 UR | 0.020 UR | 0.040 UR | 0.020 UR | 0.020 UR |
| 4-Methyl-2-pentanone | 0.020 UJ | 0.020 UJ | 0.020 UJ | 0.050 UJ | 0.020 UJ | 0.040 UJ | 0.020 UJ | 0.020 UJ |
| Methylene chloride | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Styrene | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 1,1,2,2-Tetrachloroethane | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Tetrachloroethene (Tetrachloroethylene) | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Toluene | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.15 J | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 1,1,1-Trichloroethane | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| 1,1,2-Trichloroethane | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Trichloroethene (Trichloroethylene) | 0.0050 U | 0.0050 U | 0.0050 U | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |
| Vinyl chloride | 0.010 U | 0.010 U | 0.010 U | 0.025 U | 0.010 U | 0.020 U | 0.010 U | 0.010 U |
| Xylenes (total) | 0.0050 U | 0.0050 U | 0.0050 UJ | 0.012 U | 0.0050 U | 0.010 U | 0.0050 U | 0.0050 U |

## *Streambed sediment*

| **Location** | **MR01** | | **MR02** | | **MR03** | | **MR04** | | **MR05** | | **TR01** | | **TR02** | | **TR02** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| End Depth (feet) | 0.5 | | 0.5 | | 0.5 | | 0.5 | | 0.5 | | 0.5 | | 0.5 | | 0.5 | |
| Date | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Sample Type | REG | | REG | | REG | | REG | | REG | | REG | | REG | | REP | |
| SEMIVOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| Acenaphthene | 1.6 | U | 1.6 | U | 57 | | 88 | | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Acenapthylene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Anthracene | 1.6 | U | 1.6 | U | 84 | | 150 | | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Benzo(a)anthracene | 4.7 | | 2.4 | | 200 | | 290 | | 32 | | 1.7 | U | 1.6 | U | 1.6 | U |
| Benzo(a)pyrene | 5.8 | | 3.7 | | 150 | | 210 | | 27 | | 1.7 | U | 1.6 | U | 1.6 | U |
| Benzo(b)fluoranthene | 7.4 | | 4.4 | | 140 | | 190 | | 24 | | 1.7 | U | 1.6 | U | 1.6 | U |
| Benzo(g,h,i)perylene | 5.2 | | 3.2 | | 72 | | 88 | | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Benzo(k)fluoranthene | 7.4 | | 5.2 | | 130 | | 210 | | 27 | | 1.7 | U | 1.6 | U | 1.6 | U |
| Bis(2-chloroethoxy) methane | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Bis(2-chloroethyl) ether | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Bis(2-chloroisopropyl) ether | 1.6 | UR | 1.6 | UR | 33 | UR | 82 | UR | 16 | UR | 1.7 | UR | 1.6 | UR | 1.6 | UR |
| Bis(2-ethylhexyl) phthalate | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 4-Bromophenyl phenyl ether | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Butyl benzyl phthalate | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Carbazole | 1.6 | U | 1.6 | U | 85 | | 140 | | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 4-Chloro-3-methylphenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 4-Chloroaniline | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2-Chloronaphthalene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2-Chlorophenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 4-Chlorophenyl phenyl ether | 1.6 | U | 0.14 | U | 2.9 | U | 7.2 | U | 1.4 | U | 0.14 | U | 0.14 | U | 1.6 | U |
| Chrysene | 10 | | 5.8 | | 230 | | 350 | | 42 | | 1.7 | U | 1.6 | U | 1.6 | U |
| Di-n-butyl phthalate | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Di-n-octyl phthalate | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Dibenz(a,h)anthracene | 2.0 | | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Dibenzofuran | 1.6 | U | 1.6 | U | 53 | | 86 | | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 1,2-Dichlorobenzene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 1,3-Dichlorobenzene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 1,4-Dichlorobenzene | 1.6 | UJ | 1.6 | UJ | 33 | UJ | 82 | UJ | 16 | UJ | 1.7 | UJ | 1.6 | UJ | 1.6 | UJ |
| 3,3'-Dichlorobenzidine | 8.0 | U | 8.0 | U | 160 | U | 400 | U | 80 | U | 8.0 | U | 8.0 | U | 8.0 | U |
| 2,4-Dichlorophenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Diethyl phthalate | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Dimethyl phthalate | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2,4-Dimethylphenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 4,6-Dinitro-2-methylphenol | 8.0 | UR | 8.0 | UR | 160 | UR | 400 | UR | 80 | UR | 8.0 | UR | 8.0 | UR | 8.0 | UR |

## Streambed sediment

| Location | MR01 | | MR02 | | MR03 | | MR04 | | MR05 | | TR01 | | TR02 | | TR02 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| End Depth (feet) | 0.5 | | 0.5 | | 0.5 | | 0.5 | | 0.5 | | 0.5 | | 0.5 | | 0.5 | |
| Date | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | | 12/10/96 | |
| Units | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | | mg/kg | |
| Sample Type | REG | | REG | | REG | | REG | | REG | | REG | | REG | | REP | |
| SEMIVOLATILE ORGANICS | | | | | | | | | | | | | | | | |
| 2,4-Dinitrophenol | 8.0 | UR | 8.0 | UR | 160 | UR | 400 | UR | 80 | UR | 8.0 | UR | 8.0 | UR | 8.0 | UR |
| 2,4-Dinitrotoluene | 1.6 | UJ | 1.6 | UJ | 33 | UJ | 82 | UJ | 16 | UJ | 1.7 | UJ | 1.6 | UJ | 1.6 | UJ |
| 2,6-Dinitrotoluene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Fluoranthene | 13 | | 7.0 | | 530 | | 860 | | 98 | | 2.8 | | 2.1 | | 1.6 | U |
| Fluorene | 1.6 | U | 0.21 | U | 61 | | 95 | | 2.1 | U | 0.21 | U | 0.21 | U | 1.6 | U |
| Hexachlorobenzene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Hexachlorobutadiene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Hexachlorocyclopentadiene | 8.0 | UR | 8.0 | UR | 160 | UR | 400 | UR | 80 | UR | 8.0 | UR | 8.0 | UR | 8.0 | UR |
| Hexachloroethane | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Indeno(1,2,3-c,d)pyrene | 5.0 | | 3.1 | | 78 | | 99 | | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Isophorone | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2-Methylnaphthalene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2-Methylphenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 4-Methylphenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Naphthalene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2-Nitroaniline | 8.0 | U | 8.0 | U | 160 | U | 400 | U | 80 | U | 8.0 | U | 8.0 | U | 8.0 | U |
| 3-Nitroaniline | 8.0 | U | 8.0 | U | 160 | U | 400 | U | 80 | U | 8.0 | U | 8.0 | U | 8.0 | U |
| 4-Nitroaniline | 8.0 | U | 8.0 | U | 160 | U | 400 | U | 80 | U | 8.0 | U | 8.0 | U | 8.0 | U |
| Nitrobenzene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2-Nitrophenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 4-Nitrophenol | 8.0 | UJ | 8.0 | UJ | 160 | UJ | 400 | UJ | 80 | UJ | 8.0 | UJ | 8.0 | UJ | 8.0 | UJ |
| N-Nitrosodi-n-propylamine | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| N-Nitrosodiphenylamine | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Pentachlorophenol | 8.0 | U | 8.0 | U | 160 | U | 400 | U | 80 | U | 8.0 | U | 8.0 | U | 8.0 | U |
| Phenanthrene | 3.6 | | 1.9 | | 510 | | 900 | | 94 | | 1.7 | U | 1.6 | U | 1.6 | U |
| Phenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| Pyrene | 11 | | 6.2 | | 410 | | 640 | | 76 | | 2.5 | | 2.1 | | 1.6 | U |
| 1,2,4-Trichlorobenzene | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2,4,5-Trichlorophenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |
| 2,4,6-Trichlorophenol | 1.6 | U | 1.6 | U | 33 | U | 82 | U | 16 | U | 1.7 | U | 1.6 | U | 1.6 | U |

## *Streambed sediment*

| **Location** | **MR01** | **MR02** | **MR03** | **MR04** | **MR05** | **TR01** | **TR02** | **TR02** |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End Depth (feet) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Date | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| PESTICIDES AND POLYCHLORINATED BIPHENYLS | | | | | | | | |
| Aldrin | 0.0085 U | 0.0068 U | 0.34 U | 0.17 U | 0.068 U | 0.0043 J | 0.0057 | 0.0068 UR |
| Arochlor 1016 | 0.16 U | 0.13 UJ | 6.6 U | 3.3 U | 1.3 U | 0.033 UJ | 0.033 U | 0.13 UR |
| Arochlor 1221 | 0.16 U | 0.13 UJ | 6.6 U | 3.3 U | 1.3 U | 0.033 UJ | 0.033 U | 0.13 UR |
| Arochlor 1232 | 0.16 U | 0.13 UJ | 6.6 U | 3.3 U | 1.3 U | 0.033 UJ | 0.033 U | 0.13 UR |
| Arochlor 1242 | 0.16 U | 0.13 UJ | 6.6 U | 3.3 U | 1.3 U | 0.033 UJ | 0.033 U | 0.13 UR |
| Arochlor 1248 | 0.16 U | 0.13 UJ | 6.6 U | 3.3 U | 1.3 U | 0.033 UJ | 0.033 U | 0.13 UR |
| Arochlor 1254 | 0.16 U | 0.13 UJ | 6.6 U | 3.3 U | 1.3 U | 0.033 UJ | 0.033 U | 0.13 UR |
| Arochlor 1260 | 0.16 U | 0.13 UJ | 6.6 U | 3.3 U | 1.3 U | 0.033 UJ | 0.033 U | 0.13 UR |
| alpha BHC | 0.0085 U | 0.0068 UJ | 0.34 U | 0.17 U | 0.068 U | 0.0017 UJ | 0.0017 U | 0.0068 UR |
| beta BHC | 0.0085 U | 0.0068 UJ | 0.34 U | 0.17 U | 0.068 U | 0.0017 UJ | 0.0017 U | 0.0068 UR |
| delta BHC | 0.0085 U | 0.0068 U | 0.34 U | 0.17 U | 0.068 U | 0.0017 UJ | 0.0017 U | 0.0068 UR |
| gamma BHC (Lindane) | 0.0085 U | 0.0068 UJ | 0.34 U | 0.17 U | 0.068 U | 0.0017 UJ | 0.0017 U | 0.0068 UR |
| alpha-Chlordane | 0.0085 U | 0.0068 UJ | 0.34 U | 0.17 U | 0.068 U | 0.0017 UJ | 0.0017 U | 0.0068 UR |
| gamma-Chlordane | 0.0085 U | 0.0068 UJ | 0.34 U | 0.17 U | 0.068 U | 0.0030 J | 0.0017 U | 0.0068 UR |
| 4,4'-DDD | 0.016 U | 0.013 UJ | 0.66 U | 0.33 U | 0.13 U | 0.0033 UJ | 0.0033 U | 0.013 UR |
| 4,4'-DDE | 0.016 U | 0.013 UJ | 0.66 U | 0.33 U | 0.13 U | 0.0033 UJ | 0.0033 U | 0.013 UR |
| 4,4'-DDT | 0.016 U | 0.013 U | 0.66 U | 0.33 U | 0.13 U | 0.0033 UJ | 0.0033 U | 0.013 UR |
| Dieldrin | 0.016 U | 0.013 UJ | 0.66 U | 0.33 U | 0.13 U | 0.0033 UJ | 0.0033 U | 0.013 UR |
| Endosulfan I | 0.0085 U | 0.0068 UJ | 0.34 U | 0.17 U | 0.068 U | 0.0017 UJ | 0.0017 U | 0.0068 UR |
| Endosulfan II | 0.016 U | 0.013 UJ | 0.66 U | 0.33 U | 0.13 U | 0.0033 UJ | 0.0033 U | 0.013 UR |
| Endosulfan sulfate | 0.016 U | 0.013 UJ | 0.66 U | 0.33 U | 0.13 U | 0.014 J | 0.017 | 0.013 UR |
| Endrin | 0.016 U | 0.013 UJ | 0.66 U | 0.33 U | 0.13 U | 0.0033 UJ | 0.0033 U | 0.013 UR |
| Endrin ketone | 0.016 U | 0.013 UJ | 0.66 U | 1.0 | 0.13 U | 0.0033 UJ | 0.0039 | 0.013 UR |
| Heptachlor | 0.0085 U | 0.0068 UJ | 0.34 U | 0.17 U | 0.068 U | 0.0017 UJ | 0.0017 U | 0.0068 UR |
| Heptachlor epoxide | 0.0085 U | 0.0068 U | 0.34 U | 0.17 U | 0.068 U | 0.0017 UJ | 0.0017 U | 0.0068 UR |
| Methoxychlor | 0.085 U | 0.068 U | 3.4 U | 1.7 U | 0.68 U | 0.017 UJ | 0.017 U | 0.068 UR |
| Toxaphene | 0.85 U | 0.68 UJ | 34 U | 17 U | 6.8 U | 0.17 UJ | 0.17 U | 0.68 UR |

## Streambed sediment

| Location | MR01 | MR02 | MR03 | MR04 | MR05 | TR01 | TR02 | TR02 |
|---|---|---|---|---|---|---|---|---|
| Begin Depth (feet) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| End Depth (feet) | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Date | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 | 12/10/96 |
| Units | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| Sample Type | REG | REG | REG | REG | REG | REG | REG | REP |
| METALS | | | | | | | | |
| Aluminum | 3570 | 3260 | 3340 | 2480 | 2350 | 4190 | 4330 | 4070 |
| Antimony | 6.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ | 6.0 UJ |
| Arsenic | 10.0 U | 10.7 | 14.2 | 11.0 | 11.6 | 10.0 U | 10.0 U | 10.0 U |
| Barium | 77.0 | 53.0 | 70.7 | 37.5 | 51.7 | 64.8 | 73.3 | 66.4 |
| Beryllium | 0.27 | 0.27 | 0.31 | 0.22 | 0.27 | 0.33 | 0.38 | 0.38 |
| Cadmium | 1.4 J | 0.92 J | 2.2 J | 1.3 J | 0.81 J | 0.74 J | 0.84 J | 0.97 J |
| Calcium | 45900 | 22200 | 75000 | 71000 | 91500 | 29600 | 38600 | 32200 |
| Chromium | 8.2 J | 7.9 J | 58.0 J | 111 J | 13.5 J | 9.5 J | 9.6 J | 8.8 J |
| Cobalt | 6.0 | 4.5 | 5.5 | 4.3 | 4.8 | 4.4 | 4.4 | 3.9 |
| Copper | 28.8 | 29.5 | 67.6 | 41.3 | 22.4 | 20.2 | 24.4 | 20.4 |
| Iron | 11400 | 9640 | 16900 | 12800 | 11400 | 10700 | 10900 | 9560 |
| Lead | 27.0 J | 24.9 J | 116 J | 439 J | 57.1 J | 24.6 J | 30.7 J | 26.1 J |
| Magnesium | 12100 J | 6350 J | 15000 J | 17400 J | 20600 J | 5200 J | 5680 J | 5020 J |
| Manganese | 359 | 189 | 282 | 242 | 238 | 195 | 172 | 152 |
| Molybdenum | 4.5 | 3.6 | 6.7 | 4.2 | 4.4 | 3.4 | 3.2 | 2.7 |
| Nickel | 17.0 | 14.9 | 19.6 | 12.2 | 12.1 | 14.7 | 14.8 | 12.8 |
| Potassium | 500 U | 500 U | 500 U | 500 U | 500 U | 537 | 531 | 516 |
| Selenium | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U |
| Silver | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U | 1.0 U |
| Sodium | 500 U | 500 U | 500 U | 500 U | 500 U | 500 U | 500 U | 500 U |
| Thallium | 200 U | 200 U | 200 U | 200 U | 200 U | 200 U | 200 U | 200 U |
| Vanadium | 11.0 | 9.5 | 12.7 | 9.7 | 10.9 | 10.0 | 9.7 | 8.9 |
| Zinc | 173 | 170 | 801 | 442 | 183 | 154 | 157 | 141 |

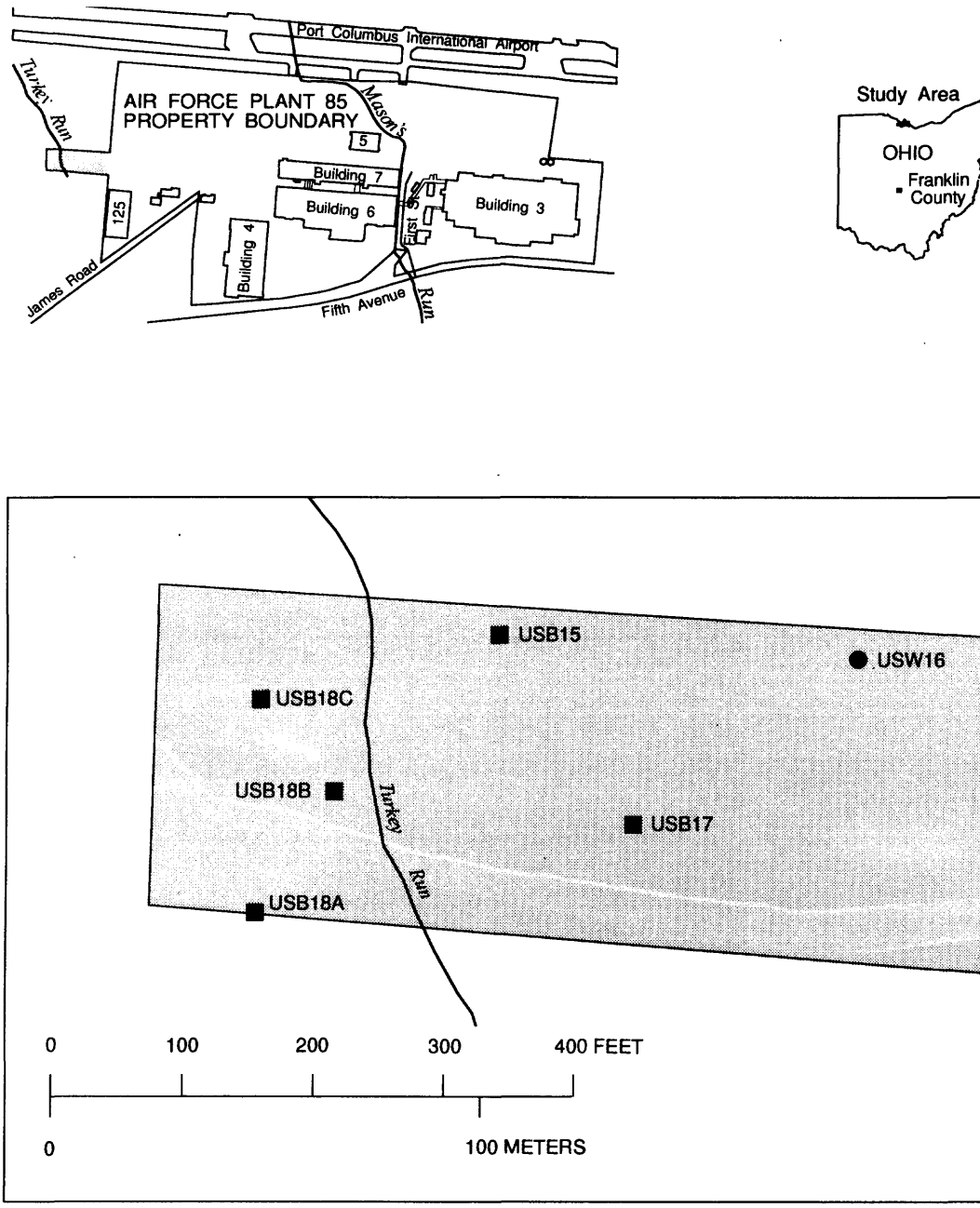



**Figure 3**. Soil boring/sampling locations at the magnesium-chip burning and rubble-disposal area, Air Force Plant 85, Columbus, Ohio.

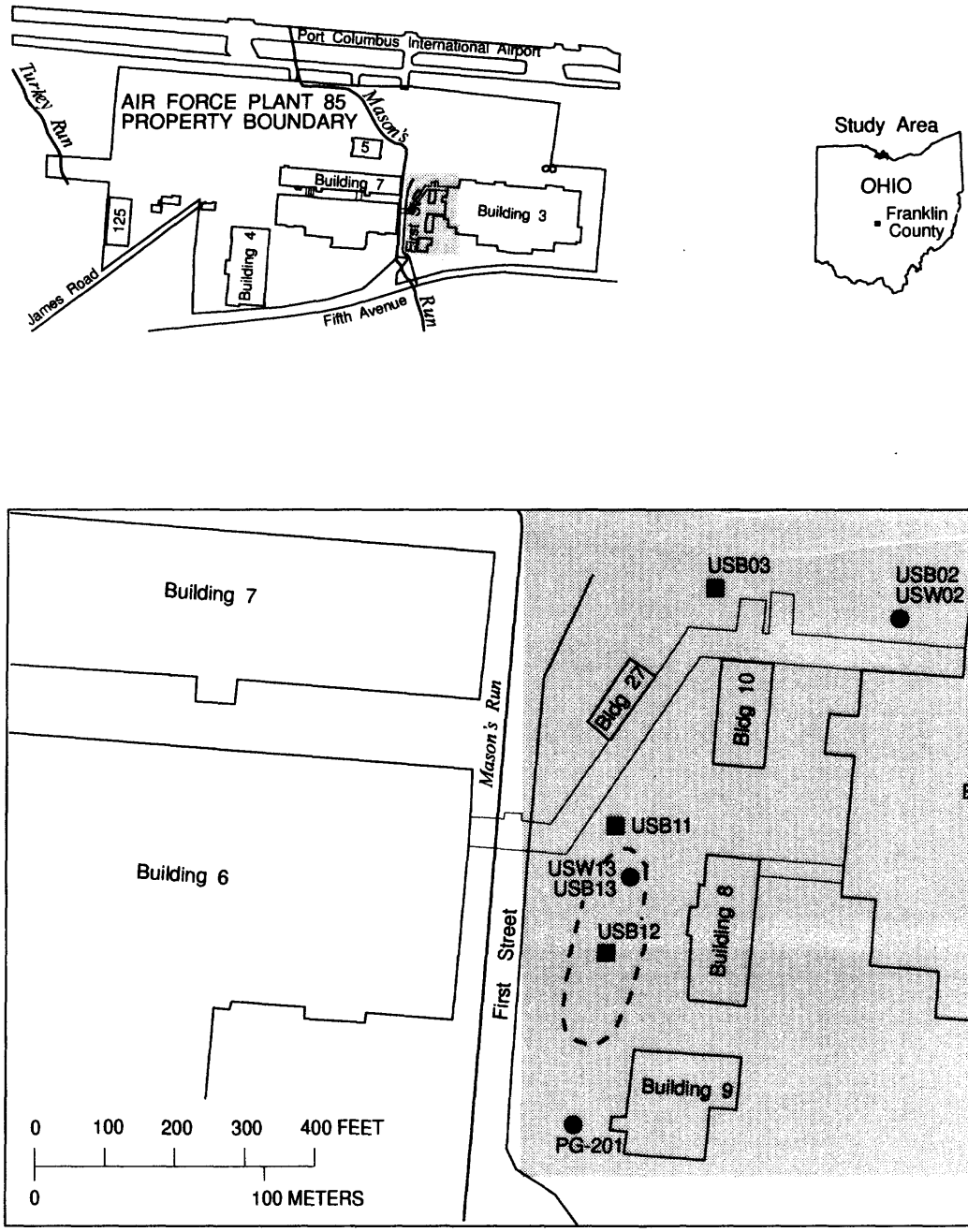



**Figure 4.** Soil boring/sampling locations near the coal pile, Air Force Plant 85, Columbus, Ohio.

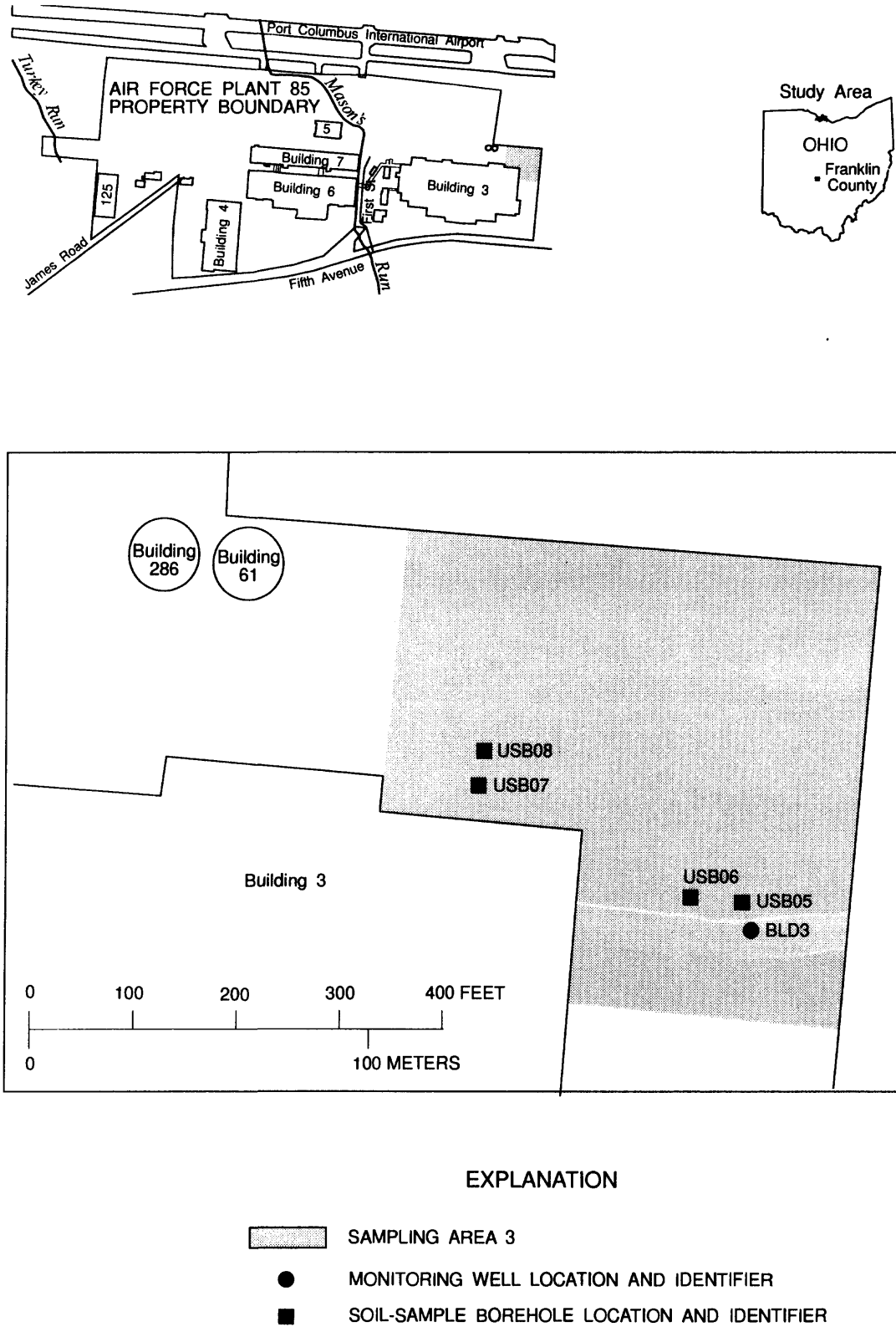



**Figure 5**. Soil boring/sampling locations north of Building 3 and at fuel tank area east of Building 3, Air Force Plant 85, Columbus, Ohio.

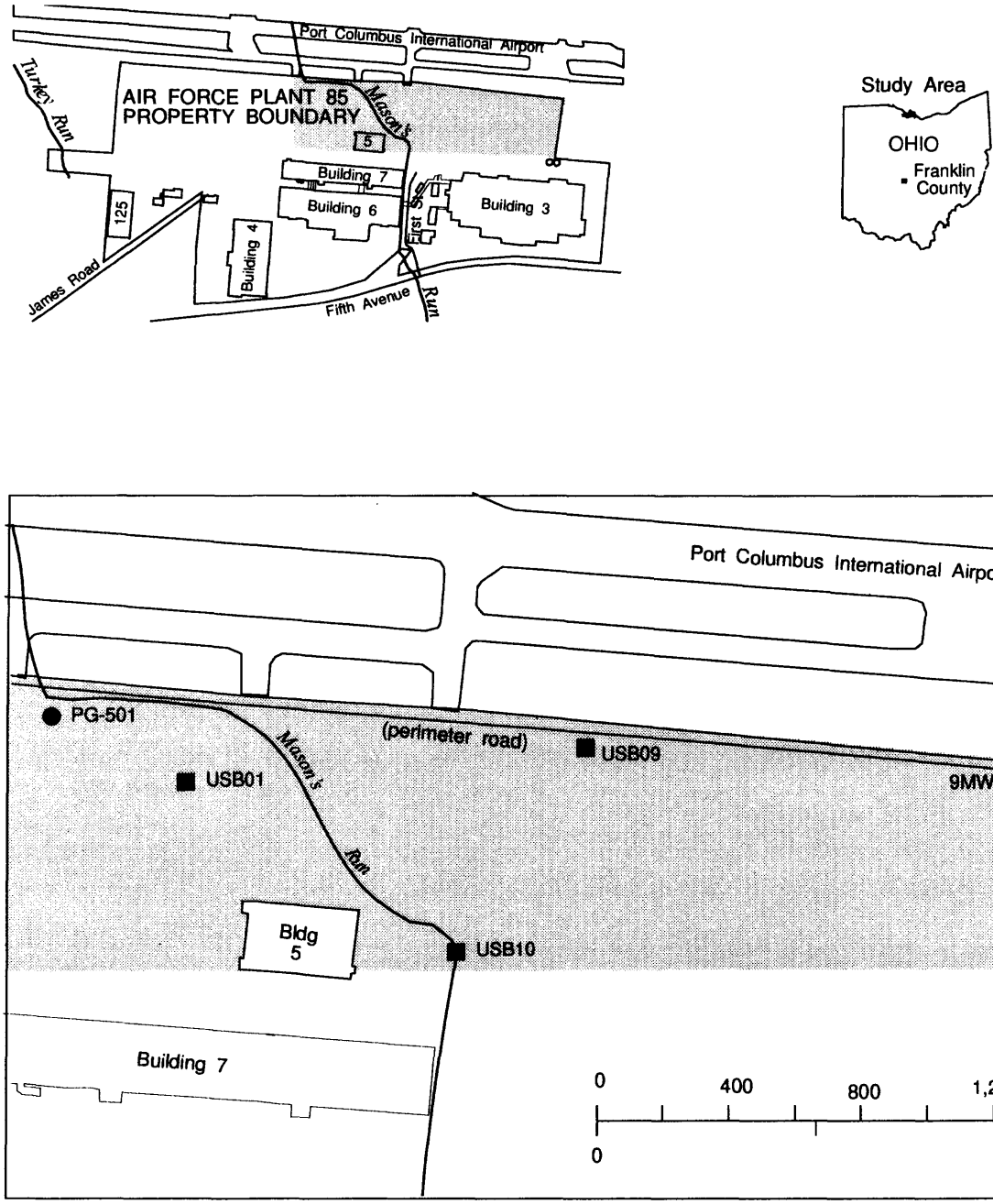



**Figure 6**. Soil boring/sampling locations on the north side of Air Force Plant 85 (north-central boundary, wash rack area, and near Mason's Run), Columbus, Ohio.

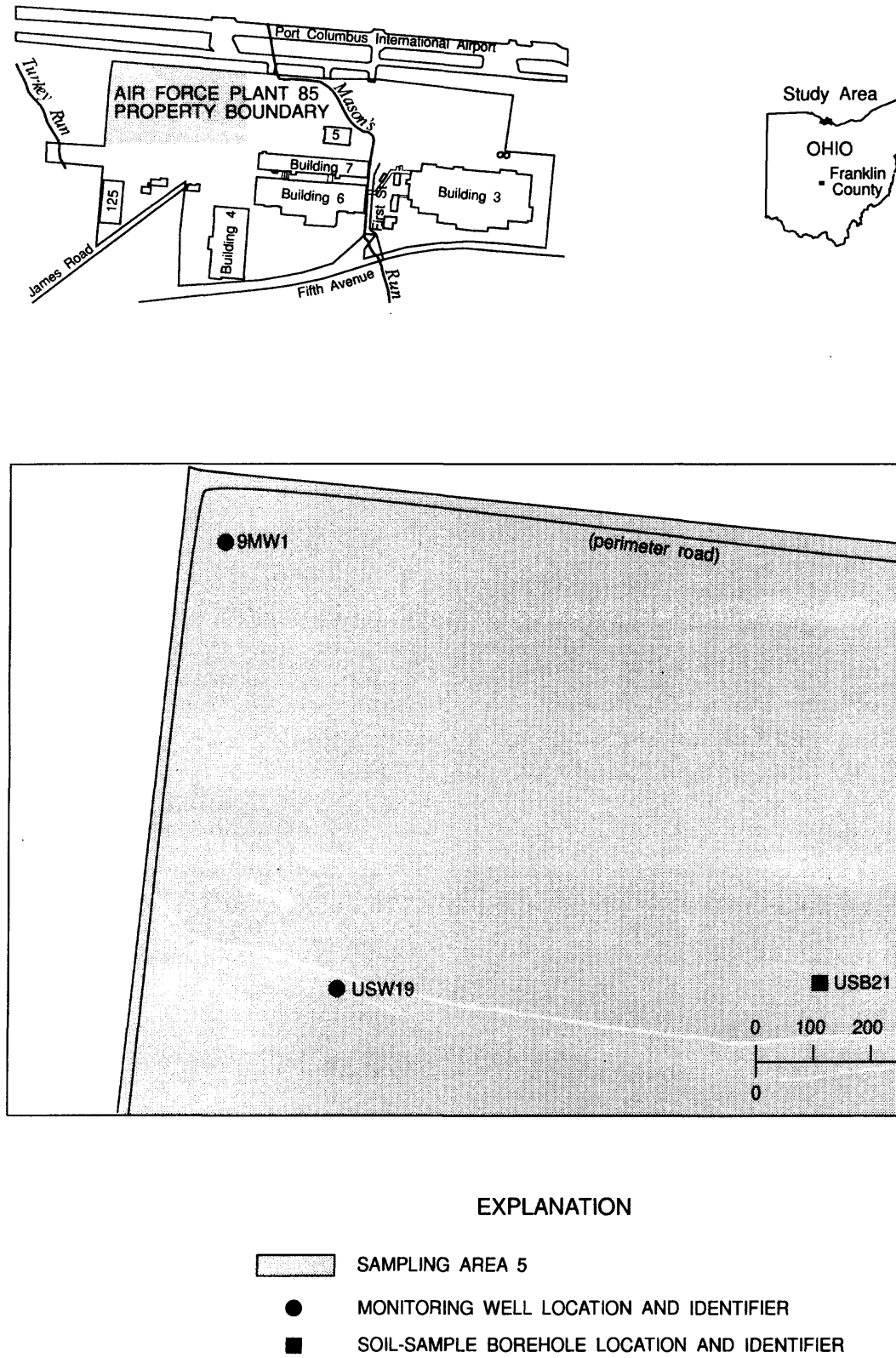



**Figure 7**. Soil boring/sampling locations at leach-field area, stationary radar site, and northwest perimeter road, Air Force Plant 85, Columbus, Ohio.

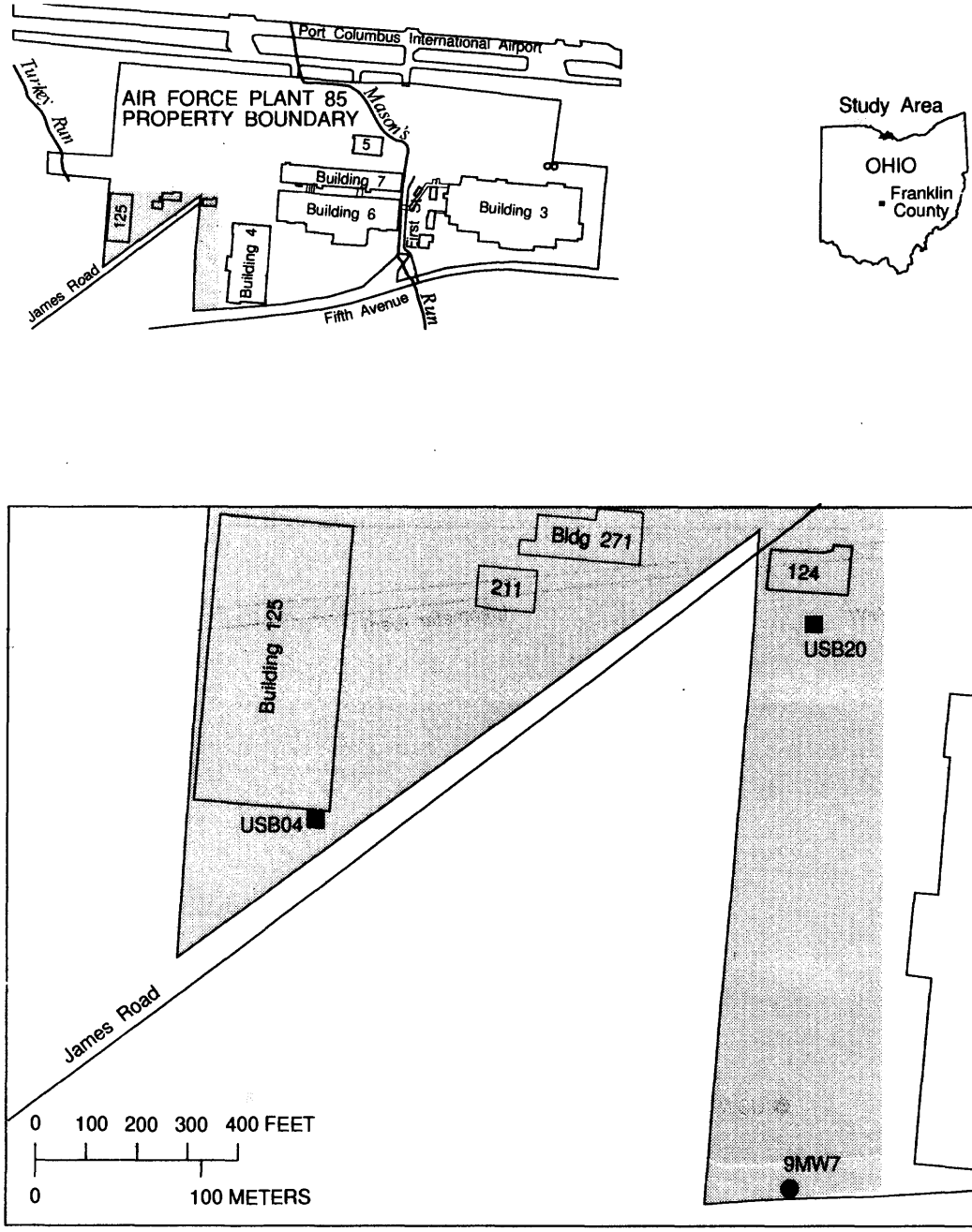
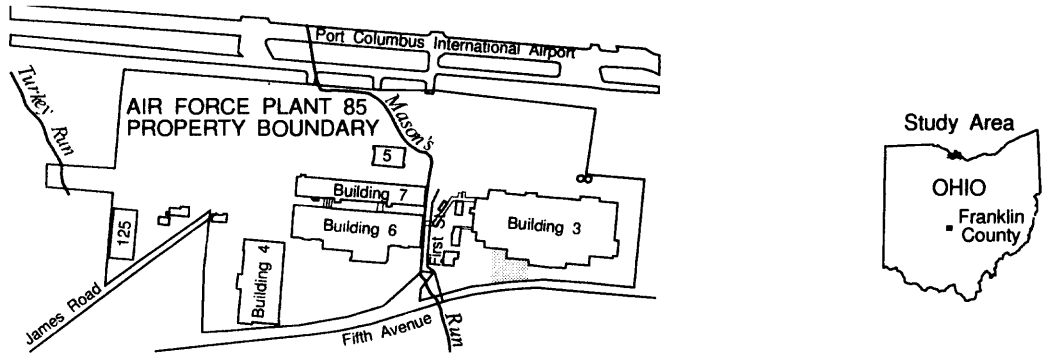
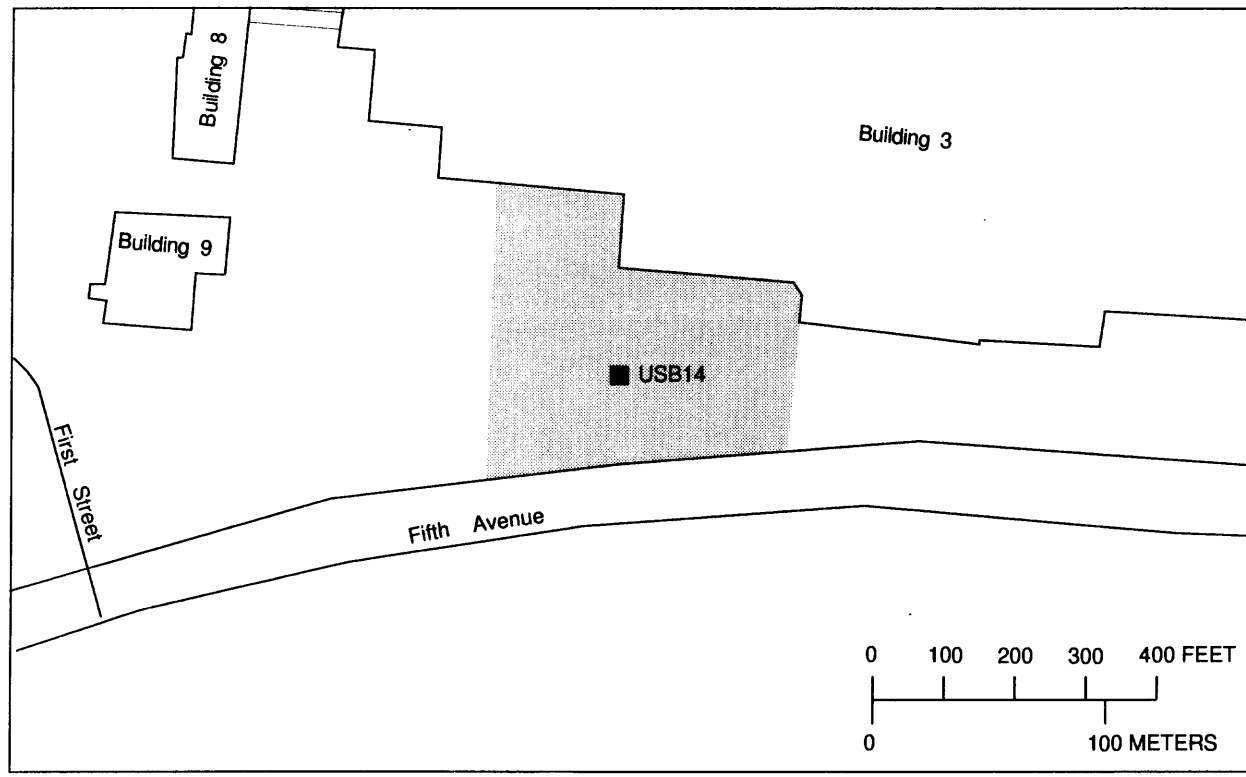



**Figure 8**. Soil boring/sampling locations on the southwestern part of Air Force Plant 85 (south of Buildings 124 and 125 and in southwest Building 4 parking lot), Columbus, Ohio.



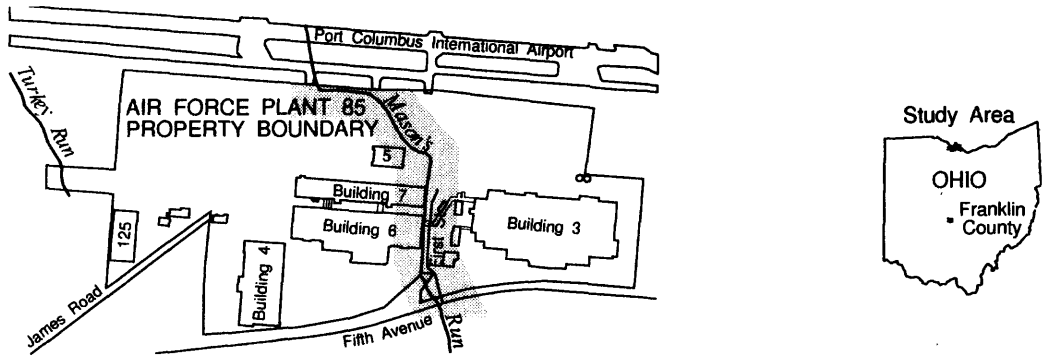



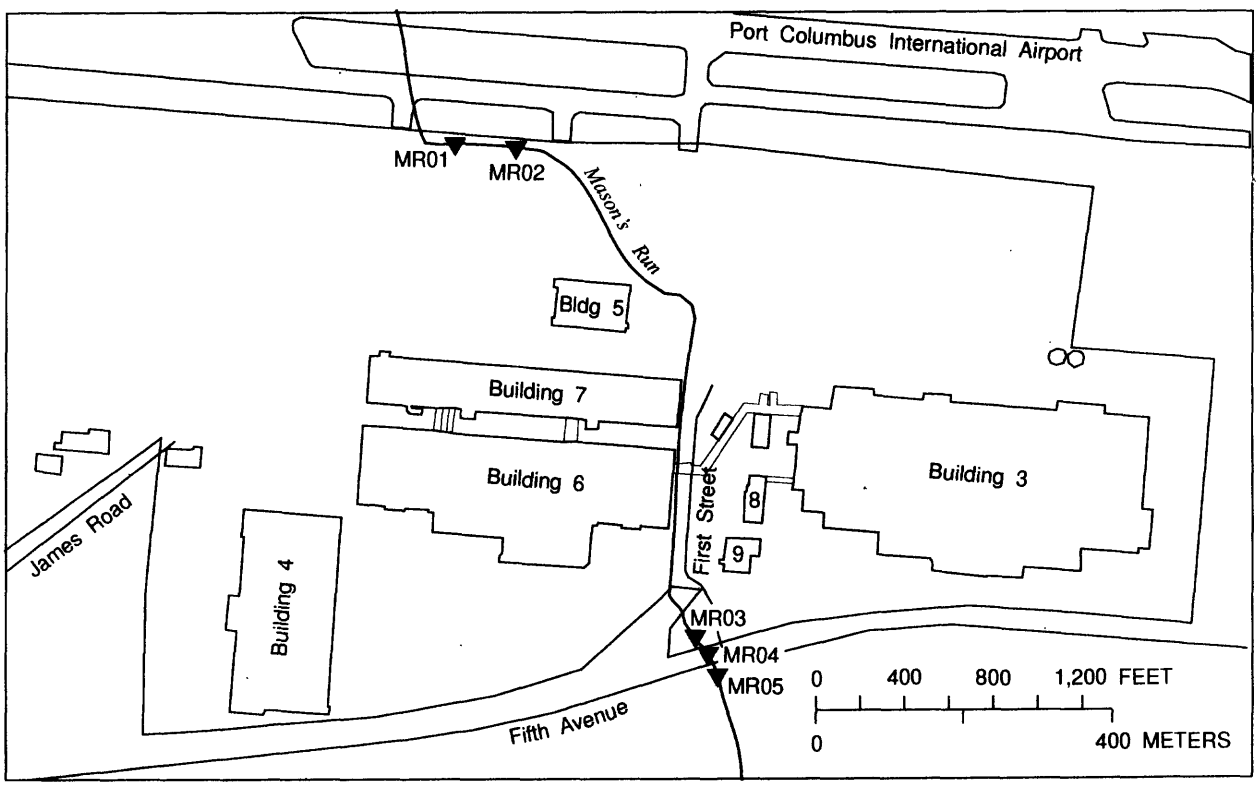

EXPLANATION

SAMPLING AREA 7

SOIL-SAMPLE BOREHOLE LOCATION AND IDENTIFIER

**Figure 9**. Soil boring/sampling locations southwest part of Building 3 (in parking lot), Air Force Plant 85, Columbus, Ohio.

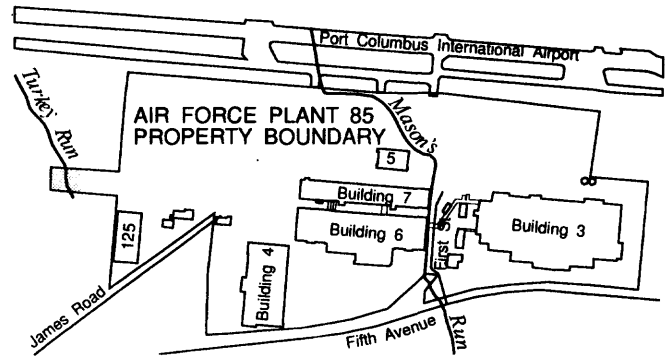


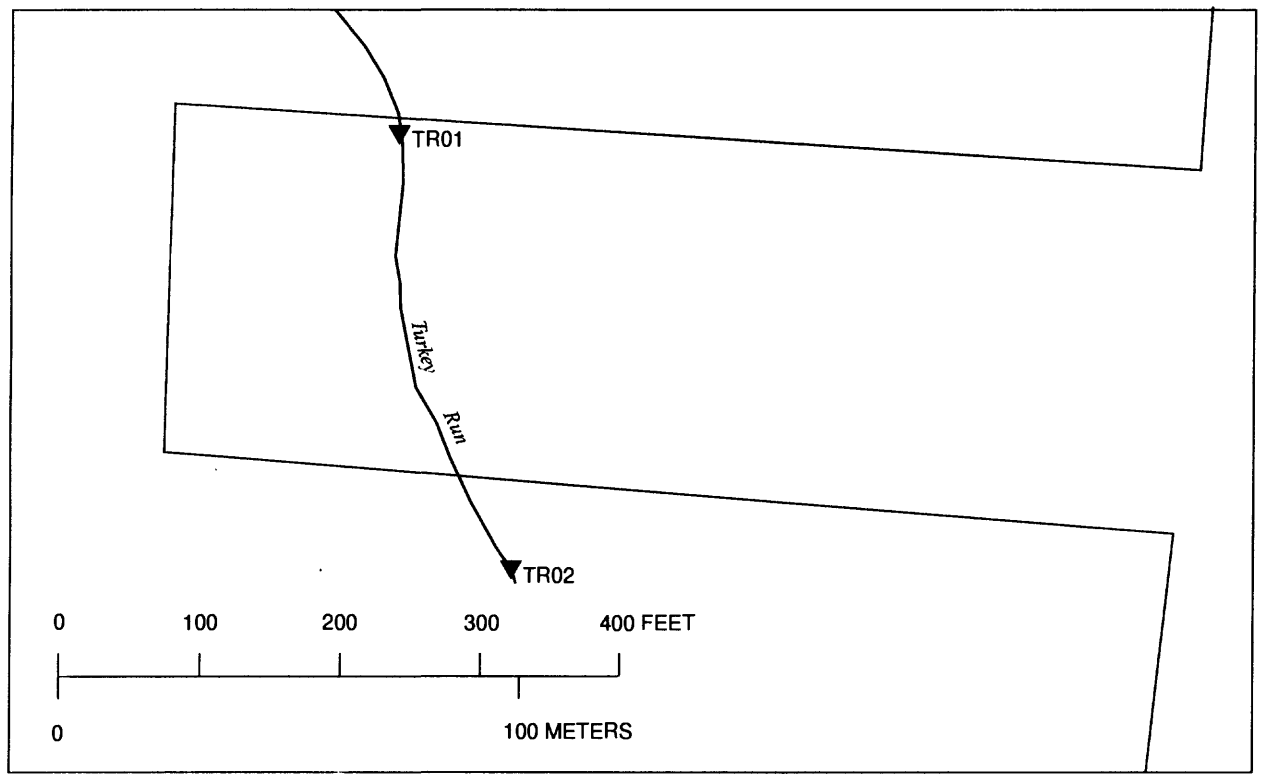

EXPLANATION

▼ SURFACE-WATER AND STREAMBED-SAMPLING SITE WITH IDENTIFIER

**Figure 10**. Surface-water and streambed-sediment sampling locations on Mason's Run, Air Force Plant 85, Columbus, Ohio.








EXPLANATION

▼ SURFACE-WATER AND STREAMBED-SEDIMENT SAMPLING SITE

**Figure 11**. Surface-water and streambed-sediment sampling locations on Turkey Run, Air Force Plant 85, Columbus, Ohio.

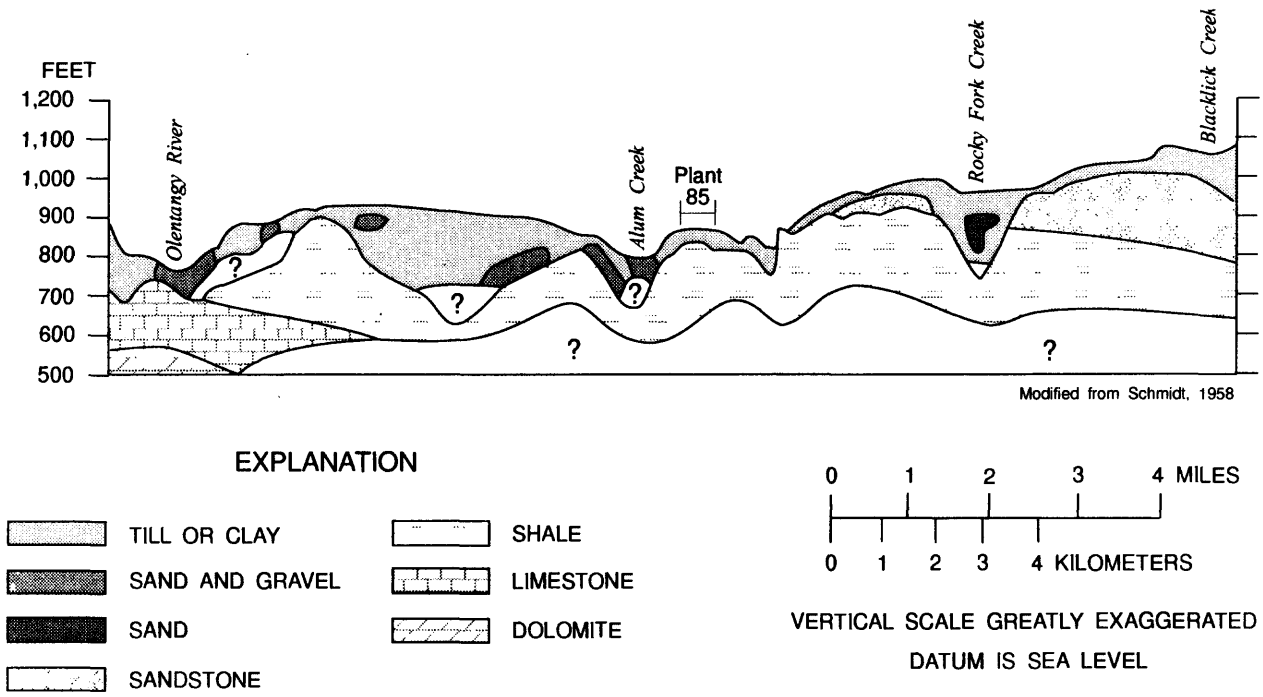
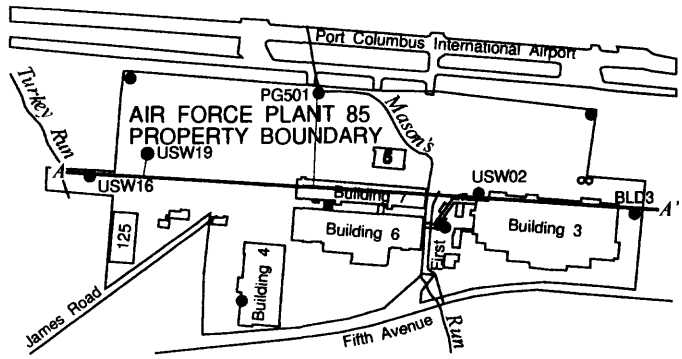
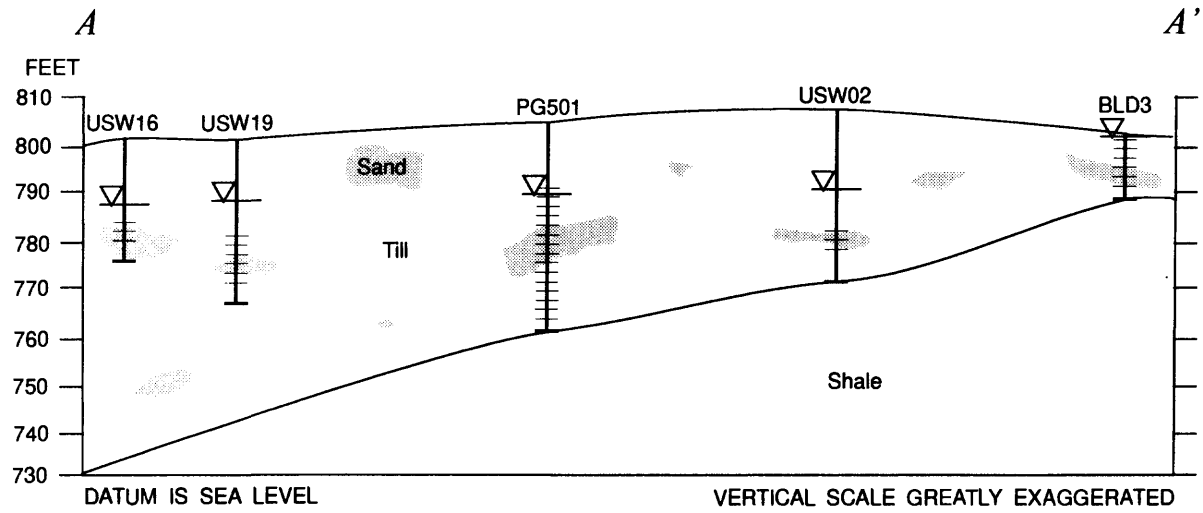
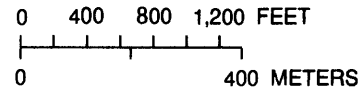



**Figure 12.** Generalized cross section showing geology of Air Force Plant 85, Columbus, Ohio.







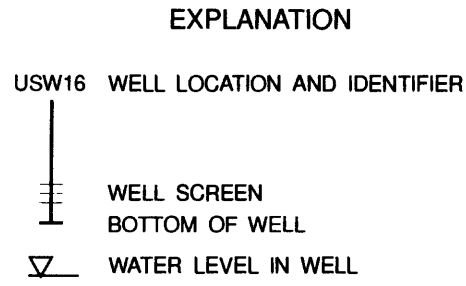




**Figure 13.** Cross-section of *A-A'* showing monitoring wells at Air Force Plant 85, Columbus, Ohio.



☆U.S. GOVERNMENT PRINTING OFFICE: 1998 -651-381