

**DATA SUMMARY REPORT  
SITE INVESTIGATION  
WESTINGHOUSE ELECTRIC CORPORATION  
SPECIALTY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA  
PROJECT No. 93-132  
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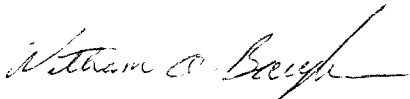
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**RE: TRANSMITTAL - DATA SUMMARY REPORT  
SITE INVESTIGATION - SPECIALTY METALS PLANT  
WESTINGHOUSE ELECTRIC CORPORATION - BLAIRSVILLE, PENNSYLVANIA**

Dear Mr. George:

Cummings/Riter Consultants, Inc. hereby transmits two copies of the above-referenced report. Cummings/Riter appreciates this opportunity to be of service to Westinghouse. If you have any questions or desire additional information, please call me at (412) 826-3366.

Respectfully submitted,  
*Cummings/Riter Consultants, Inc.*



William A. Baughman, P.G.  
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Enclosure

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**DATA SUMMARY REPORT  
SITE INVESTIGATION  
WESTINGHOUSE ELECTRIC CORPORATION  
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BLAIRSVILLE, PENNSYLVANIA**

**1.0 INTRODUCTION**

---

Cummings/Riter Consultants, Inc. (Cummings/Riter) was retained by Westinghouse Electric Corporation (Westinghouse) to perform a site investigation at the Westinghouse Specialty Metals Plant located in Derry Township, Westmoreland County, Pennsylvania near the community of Blairsville (Figure 1). Specifically, the investigation involved review of historical aerial photographs, field reconnaissance, review of published geologic literature, drilling soil/weathered bedrock borings, shallow monitoring well installation and a sampling and analysis program for soil, groundwater, surface water and sediment. The scope of work is outlined in the Field Sampling Plan (Cummings/Riter, 1994b).

Sampling, analysis, and reporting of the results contained in this report were performed as a cooperative effort between representatives of Cummings/Riter and the Westinghouse Energy System Business Unit.

**1.1 OBJECTIVES AND OVERALL APPROACH**

The objective of this program is to evaluate the nature and extent of compounds of interest (COI) in soils in the vicinity of potential source areas, shallow groundwater, surface water and sediment, and obtain an understanding of the shallow hydrogeologic regime at the Specialty Metals Plant. The investigative tasks performed or directed by Cummings/Riter to accomplish the aforementioned objectives included the following:

- Sump/basin reconnaissance;
- Historical aerial photograph review;
- Field reconnaissance;

- Preparation of a field sampling plan and a health and safety plan;
- Shallow monitor well installation;
- Shallow groundwater, soil, surface water and streambed sediment sampling and analysis; and
- Preparation of this Data Summary Report.

## **1.2 SITE DESCRIPTION**

The Westinghouse Specialty Metals Plant is located on approximately 485 acres along Township Road 966, which terminates at the plant. The facility is located south and west of the Conemaugh River, immediately upstream of the confluence between Blacklick Creek and the Conemaugh River, approximately two miles northwest of the town of Blairsville, Pennsylvania (Figure 1). The Westro Building, Zircaloy Building, Main Building Shop, Industrial Waste Treatment Plant, Maintenance Shop and Machine and Die Shop comprise the major buildings at the facility (Figure 2). Additional site features include the sludge drying beds, septic leach beds, sand filters, a 250,000-gallon water tank, an aeration pond, a man-made pond used for plant process water and paved parking/access areas. Eight former (inactive) groundwater supply wells and one active groundwater supply well are present at the facility, as shown on Figure 2.

## **1.3 PRODUCTION AT THE SITE**

The Specialty Metals Plant was founded in 1955 as a research and development manufacturing facility for Westinghouse. Westinghouse began manufacturing zircaloy tubing in 1967. The Specialty Metals Plant historically manufactured two lines of nuclear grade tubing, including steam generator tubing and fuel clad tubing. The plant currently manufactures only fuel clad tubing. Manufacture of the tubing includes the use of a variety of lubricants, solvents, acid pickle solutions and alkaline cleaners. Several spent solutions and/or materials used in the plant process are managed as hazardous wastes under the Resource Conservation and Recovery Act (RCRA). These materials are treated and disposed of off site.

During the period from approximately 1955 to 1961, fuel manufacturing operations were conducted at the Specialty Metals Plant using enriched uranium in both metal and oxide forms. This involved both highly enriched uranium for the naval fuel program (under

subcontract with the Bettis Atomic Power Laboratory for U.S. Atomic Energy Commission work) and low enriched uranium for atomic power plants (under License SNM-47 from the U.S. Atomic Energy Commission).

#### **1.4 PREVIOUS CHARACTERIZATION HISTORY**

This section summarizes events which occurred at the Specialty Metals Plant that are pertinent to the environmental characterization of the site.

Westinghouse contracted Acres American, Inc. (Acres) to perform the following in 1981:

- RCRA Waste Management Program Report,
- Preliminary RCRA Assessment Report, and
- Water Quality Evaluation Addendum to the RCRA Assessment.

The results for each of these studies, as described in their respective reports, are summarized below.

##### **1.4.1 RCRA Waste Management Program Report (Acres, 1981a)**

Westinghouse retained Acres to assist in the development of a waste management plan. Acres reviewed existing plant procedures and, where necessary, recommended alternative waste handling practices which were deemed to be environmentally sound and to the extent possible, compatible with Westinghouse's management and economic policies.

##### **1.4.2 Preliminary RCRA Assessment Report (Acres, 1981b)**

Westinghouse retained Acres to conduct a limited investigative program to evaluate the Specialty Metals Plant production activities. The investigative program for this study was designed to provide a preliminary overview of the geologic, hydrologic and water quality characteristics at the site.

Based on the literature review, the investigative boring program and the initial water quality analyses, Acres reached several conclusions. These included the following:

- The geology at the site typically consists of a sandstone bedrock which is overlain by a zone of weathered rock and thin surficial soils. In general, the unconsolidated soil and rock overlying bedrock were

reported to be less than 40 feet thick over most of the site. According to Acres, the thickness of these unconsolidated deposits (particularly the weathered rock zone) is variable from location to location.

- Borings drilled in the fill area northeast of the facility (Figure 2) did not encounter groundwater above bedrock.
- The depth to groundwater observed in three of the four shallow monitoring wells installed at the Specialty Metals Plant ranged from approximately five to ten feet below the ground surface during the Acres study. Groundwater flow direction within the shallow groundwater bearing unit was reported to be toward the Conemaugh River.
- In general, initial analysis of both groundwater and surface water indicated that for the majority of parameters, concentrations were below the drinking water standard or the range of values typical of water quality within the area. However, Acres indicated that several parameters at specific locations should be subject to additional monitoring in order to assess their significance with regard to background water quality. Specific parameters recommended by Acres for analysis in subsequent samples included pH, iron, manganese, fluorides, nitrate, gross beta, total organic carbon, chromium and specific conductance.

#### **1.4.3 Water Quality Evaluation Addendum to the RCRA Assessment (Acres, 1981c)**

The primary objective of this investigation was to collect additional water quality data for evaluating the impact of the Specialty Metals Plant operations on surface water and groundwater at the facility. The investigation involved sampling groundwater from four shallow monitoring wells and surface water from eight locations. The report stated that the analytical results indicated that groundwater and on-site surface water contained concentrations of both inorganic and organic compounds requiring additional study to define the extent of these compounds and to evaluate remedial measures to reduce or isolate these compounds.

#### **1.4.4 Surface Water and Groundwater Sampling and Analysis Report (Cummings/Riter, 1994a)**

In 1993, Westinghouse retained Cummings/Riter to perform sampling of surface water and groundwater from existing sample locations for analysis of volatile organic compounds (VOCs). The sampling and analysis program indicated that Target Compound List (TCL) VOCs were present in one of three surface water routes located east (downstream) of the Specialty Metals Plant. The compounds detected in surface water were trichloroethene (26 micrograms per liter [ $\mu\text{g/l}$ ]) and methylene chloride ( $3 \mu\text{g/l}$ ). TCL VOCs were not detected in surface water samples collected upstream of the Specialty Metals Plant or in two of the three surface water courses sampled downstream of the plant.

Groundwater samples were collected from two piped drainages, two monitoring wells and three groundwater supply wells (one active and two inactive). VOCs were not detected in the sample collected from the current groundwater supply well (DW-2). TCL VOCs were detected in other groundwater samples collected.

#### **1.5 PREVIOUS REMEDIATION HISTORY**

This section summarizes reported environmental remediation activities that have been completed at the site.

##### **1.5.1 Underground Waste Hydrofluoric Acid and Methylene Chloride Storage Tank Remediation**

In 1983, two 21,000-gallon underground waste hydrofluoric acid and methylene chloride/water mixture storage tanks located approximately 200 feet west of the Industrial Waste Treatment Plant (Figure 2) were closed in place in accordance with the Pennsylvania Department of Environmental Resources (PADER) approved Closure Plan (Westinghouse, 1982).

The buried polyvinyl chloride (PVC) lines leading from the Zircaloy Building to the two waste storage tanks (Figure 2) were excavated and removed during the underground storage tank closure.



### **1.5.2 Westro Underground Waste Oil Tank BV-2086**

The Westro Waste Oil Tank (BV-2086) and the drum unloading area/oil dumping pit located at the southeast corner of the Westro Building (Figure 2) were closed in 1986 in accordance with a Closure Plan prepared and implemented by SSS Company (SSS Company, 1986). The former underground waste oil tank was triple rinsed with high pressure water, and the unloading pit was steam cleaned and triple rinsed using high pressure steam. The former underground storage tank integrity was tested by Photoleak Detection Company and reportedly passed. Following removal of the tank, the underlying gravel was removed and the underlying residual soil inspected for stains, odors and oily texture. No physical evidence of any of these characteristics was reported. Verification samples were not collected. Both the former waste oil tank excavation and unloading pit areas were backfilled with clean fill and contoured to existing grade.

### **1.5.3 Above-Ground 15,000-Gallon Trichloroethene/1,1,1-Trichloroethane Storage Tank**

In 1986, the Specialty Metals Plant discontinued use of trichloroethene and 1,1,1-trichloroethane in the plant manufacturing process. The solvent contained in the 15,000-gallon above-ground trichloroethene/1,1,1-trichloroethane storage tank located at the south end of the Westro Building (Figure 2) was intentionally drained. The storage tank was cleaned and removed from operation in 1988.

### **1.5.4 Sludge Drying Beds**

In 1983, sludge contained in the waste water treatment plant sludge drying beds (Figure 2) was removed, and the bed liners were patched. In 1987, the sludge drying bed liners were replaced with 45 mil Hypalon as part of a waste water treatment plant upgrade.

### **1.5.5 "Triclene" Pits**

Two concrete lined pits located in the southern portion of the Westro Building (Figure 2) were drained and backfilled from 1985 to 1986.

### **1.5.6 Underground Gasoline Storage Tanks**

Two 3,000-gallon underground fiberglass gasoline storage tanks located at the northeast corner of the Main Building Shop Area (Figure 2) were removed in 1990 by CECOS International, Inc. of Niagara Falls, New York. One tank contained leaded gasoline and

the other contained unleaded gasoline. Soil associated with the tank excavation was sampled and analyzed for petroleum hydrocarbons, lead, benzene, toluene and xylenes. Sample analytical results from post-excavation sampling and soil borings advanced by Environmental Resources Management, Inc. to estimate the extent of the required soil excavation are included as Appendix A. The soil remediation was completed in 1991.

#### **1.5.7 Main Building Gage Laboratory Sump and Flooring**

A concrete lined sump, material contained in the sump and portions of the plant flooring, located in the Main Building Gage Laboratory (Figure 2) were removed in December 1994. The sump excavation measured 49 inches wide by 81 inches long by 82 inches deep. Five cast iron pipes were observed in the excavation sidewalls. The pipes were not removed during the sump excavation. Post-excavation samples were collected from two locations on the excavation sidewalls and one location on the excavation floor. The excavation was dry upon completion. The sump was backfilled with crushed stone and sand and the surface finished with concrete to floor grade.

#### **1.6 ENVIRONMENTAL PERMITS AND DISCHARGE LIMITATIONS**

The Westinghouse Specialty Metals Plant operates under U.S. Environmental Protection Agency (USEPA) Identification No. PAD005000625 as a large quantity generator. The facility maintains a National Pollutant Discharge Elimination System (NPDES) Permit (No. PA0000892). The current permit, which technically expired in 1992, places discharge limitations on flow and the following constituents: ammonia, chromium, cyanide, nickel, fluoride, oil/grease, suspended solids, pH and methylene chloride. Beryllium, mercury and pentachlorophenol are included within the permit as "monitor only" constituents. Appendix B contains the NPDES permit which includes the discharge limitations. An application for NPDES permit renewal has been submitted to PADER.

## 2.0 PLANT PROCESS DESCRIPTION

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The Specialty Metals Plant is a world-class manufacturer of nuclear-grade tubing. The Specialty Metals Plant historically manufactured two lines of tubing, including steam generator tubing and fuel clad tubing. Since 1983, the fuel clad tubing alone has been produced. The manufacturing process is described briefly as follows:

- **PILGERING**

Through the cold pilgering process, tube reduced extrusions (TREX) are reduced in size from 2.5 inches in diameter to final size tubes as small as .267 inches in outside diameter (O.D.). Pilger operators meet these exacting standards by sending the material through the automated cold pilger machine in a series of passes. The tubing quality is monitored throughout the process.

- **PICKLE/ANNEAL**

Between each pilger pass, tubes are cleaned, pickled and annealed. In the pickle house, the tubes are cleaned in an alkali solution then pickled in a mixture of hydrofluoric and nitric acids. Both hot-wall and cold-wall vacuum annealing furnaces are used for heat-treating.

- **FINISHING**

Once the tubes are cold pilgered to size and have completed the pickle/anneal cycle, they are moved to finishing. At this point in the process, they undergo a series of steps: straightening, grit blasting, precision cutting, end deburring, polishing and final cleaning. During the entire process, the material undergoes several in-process checks. When a tube has completed the finishing portion of the process, it is complete and ready for inspection.

- **INSPECTION**

Once the tubes are complete, they undergo ultrasonic testing and visual inspections. The ultrasonic test checks for flaws and diametrical wall dimensions. Other inspections include checks of the length of the tubes and squareness of the end-cuts, and visual inspection of the inside and outside surfaces of the tubes. Throughout the inspection process, inspectors are ensuring that the tubes meet the stringent criteria for nuclear-grade cladding.

- **LAB TESTING**

Concurrent to the inspection process, laboratory tests are conducted to certify that the product meets all customer requirements. Samples from each lot undergo physical and metallographical laboratory testing using tensile testers, autoclaves and gas analyzers.

### **3.0 FIELD INVESTIGATION**

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A field investigation was conducted by Cummings/Riter to obtain additional information at the Specialty Metals Plant. The investigation focused on site soils in the vicinity of potential source areas, shallow groundwater, surface water, and streambed sediment at the Specialty Metals Plant. The investigation tasks performed or coordinated by Cummings/Riter included the following:

- Sump/basin reconnaissance,
- Historical aerial photograph review/field survey,
- Soil borings,
- Shallow monitor well installation, and
- Shallow groundwater, soil, surface water, and sediment sampling and analysis.

This section outlines the procedures followed during the performance of each element of the field investigation.

#### **3.1 SUMP/BASIN RECONNAISSANCE**

In order to evaluate potential source areas at the Specialty Metals Plant, Cummings/Riter personnel reviewed existing Westinghouse site drawings to identify any sumps and basins. Cummings/Riter performed a field reconnaissance on October 11, 1994 to evaluate the sumps and basins, and found that the former "triclone" pit (Figure 3) in the Westro Building had been filled-in with several feet of concrete. No other active or former sumps or basins were identified during the field reconnaissance.

#### **3.2 HISTORICAL AERIAL PHOTOGRAPH REVIEW/FIELD SURVEY**

Cummings/Riter personnel reviewed copies of historical aerial photographs of the site dated 1957, 1967, 1974 and 1982 provided by the U.S. Department of Agriculture, Soil Conservation Service Office, Westmoreland County, Pennsylvania. Several former areas of usage on disturbed areas were identified from the photographs in the vicinity of the Specialty Metals Plant, including locations north of the railroad tracks, an area west of the plant, and two areas east of the plant (Figure 4).

On October 11, 1994, each identified area was evaluated by performing field monitoring using an organic vapor analyzer (HNU) at ground level operated by Cummings/Riter personnel, and radiological monitoring at ground level operated by Nuclear Support Services, Inc. (NSSI) personnel. Approximate locations of identified areas are shown on Figure 4.

Slightly elevated (20 percent above background) radiological readings were reported in two areas north of the railroad tracks; one in a shallow depression or impoundment, the other along a path leading to a natural gas well location. A small pile of debris consisting of gloves, cable, railroad ties, and grease containers was identified just north of the railroad tracks about 2,200 feet west of the plant. Radiological readings were recorded at background levels at this location.

Radiological readings of twice background were detected in a field to the west of the north end of the Westro Building, approximately 150 to 200 feet west of the building. Additionally, radiological readings were 10 to 15 times background on top of the "sand mound" adjacent to the main guard station, north of the visitors parking lot, within the grid area established by Cummings/Riter, as described in Section 4.3.9. No other areas investigated in this field reconnaissance exhibited radiological readings above background. None of the areas identified HNU readings above background.

### **3.3 SUBSURFACE DRILLING AND MONITORING WELL INSTALLATION**

As part of the field installation, 50 soil borings (B-1 through B-44, MW-5A through MW-10A) were advanced and five shallow monitoring wells (MW-6A through MW-10A) were installed at the Specialty Metals Plant. A series of soil and groundwater samples was collected for the purpose of characterizing site soils and shallow groundwater and to investigate for COI in product use and disposal areas at the facility.

#### **3.3.1 Drilling and Soil Sampling Methodology**

Forty-four soil borings (B-1 through B-44) were advanced for the collection of subsurface soil samples for laboratory analysis at the Specialty Metals Plant between October 17 and November 1, 1994. The soil boring locations are depicted on Figure 3.

Pennsylvania Drilling Company of Pittsburgh, Pennsylvania performed the drilling services under the technical direction of Cummings/Riter personnel. The soil borings outside known disposal areas were advanced using six-inch O.D. solid stem augers, with split-spoon samples collected continuously from ground surface using the Standard Penetration Test (SPT) apparatus. A standard two-inch O.D. split barrel (split spoon) soil sampler was driven 24 inches into the soil by dropping a 140-pound weight through a height of 30 inches. A three-inch O.D. split spoon sampler was also utilized in order to maximize sample recovery. The number of blows required to drive the sampler through each six-inch increment of soil was recorded by Cummings/Riter personnel.

The soil borings outside known disposal areas were terminated at the water table when elevated total organic vapor readings were detected in the borehole. If there were no elevated readings in the borehole, the boring was advanced to the top of weathered bedrock.

The soil borings located in the former disposal area northeast of the Specialty Metals Plant (B-39, B-40 and B-41) were advanced using six-inch O.D. solid stem augers, with split-spoon samplers collected at five-foot intervals using the SPT apparatus. Borings B-39, B-40 and B-41 were terminated at the base of the fill, upon encountering natural soil or bedrock.

Each soil sample was field screened for total organic vapors using the soil headspace technique. Radiation screening was also performed for each soil sample by an NSSI health physics technician. Each soil sample was visually inspected and logged by Cummings/Riter personnel. A portion of the soil was placed in the appropriate laboratory supplied sample bottles, labeled, and placed in coolers containing ice. A minimum of one soil sample from each boring was selected for laboratory analysis based on the field screening results. The soil sample analytical parameters are identified in Table 1. The remaining portion of the sample was placed in an appropriate bottle, catalogued, and submitted to Westinghouse for radioactive screening and storage. In a few instances, soil sample recovery was insufficient in size to provide Westinghouse a split sample for analysis.

Westinghouse performed the radiological characterization which consisted of an initial screening analysis of all samples received followed by more detailed analysis on selected samples at the Westinghouse Radiochemistry Laboratory located at the Waltz Mill Facility near Madison, Pennsylvania. In some cases, the samples selected for more detailed analysis by Westinghouse are splits of the samples selected for analysis by an independent laboratory.

The initial radiological screening of the samples consisted of counting the entire sample volume inside a shielded cave using a gamma spectrometer (Model GR-256) with a NaI detector. Two regions of interest (ROIs) were recorded, including the total spectrum and the Uranium Peak (185 Kev). The gross counts were normalized for the sample weight to provide a net counts per minute per gram of sample. These results are provided in Table 2. Although these results are qualitative, they do provide a rational basis for selection for further analysis and for comparative analysis.

Each soil boring was backfilled upon completion with cement-bentonite grout using the tremie method. The grout mixture consisted of one 94-pound bag of Portland Type I cement per approximately seven gallons of water and approximately five pounds of powdered bentonite.

The drill rigs, augers, split spoon samplers and sample rods, tools and related equipment were steam cleaned at a temporary site decontamination pad upon entering the site, between borings and prior to leaving the site. Decontamination activities were conducted on a 40-mil plastic-lined pad which was bermed to collect fluids generated during steam cleaning. The fluids generated during decontamination activities were contained in a 500-gallon poly tank for disposal by Westinghouse.

All drill cuttings and used personal protective equipment (PPE) accumulated during the field investigation were contained in 55-gallon open-top drums, labeled and transported to a designated storage area on site for disposal by Westinghouse. Boring logs are included as Appendix C to this report.



### **3.3.2 Monitoring Well Installation and Development**

Five shallow monitoring wells (MW-6A, MW-7A, MW-8A, MW-9A and MW-10A) were installed at the facility between October 27 and November 1, 1994. The monitoring wells were designed to monitor the uppermost groundwater unit associated with the unconsolidated deposits and the upper weathered bedrock. The locations of the monitoring wells are depicted on Figure 3. The monitoring wells were drilled and installed by Pennsylvania Drilling Company under the technical direction of Cummings/Riter. The monitoring wells were screened at the first water-bearing unit encountered and ranged in depths from 20 to 27 feet.

The borings for Monitoring Wells MW-6A, MW-7A, MW-8A, MW-9A and MW-10A were advanced using six-inch O.D. solid stem augers, with split-spoon soil samples collected on five-foot intervals using the SPT apparatus. Field screening consisted of real time monitoring for total organic vapors using the headspace technique, and radiation screening by an NSSI health physics technician. Each soil sample was logged by Cummings/Riter personnel. A portion of the sample was placed in an appropriately labeled bottle, catalogued, and submitted to Westinghouse for radioactive screening and storage.

All monitoring wells were constructed using Schedule 40 PVC, threaded flush joint, two-inch inside diameter (I.D.) screen (0.01-inch slots) and riser pipe. The annular space was backfilled with an appropriately sized sand adjacent to the screen to a depth approximately two feet above the top of the screen. A minimum three-foot sodium bentonite pellet seal was placed above the sand pack to inhibit vertical migration along the borehole. The remaining annular space was backfilled with cement-bentonite grout using the tremie method. A locking four-inch diameter steel protective casing set in a six-inch concrete pad was installed over the well to protect the well from damage and surface water infiltration.

In addition, existing Monitoring Wells MW-2 and MW-3 were rehabilitated by repairing the two-inch I.D. PVC riser pipe on Well No. 3 and installing a locking four-inch diameter steel protective casing set in a six-inch concrete pad for Wells MW-2 and MW-3 to protect the wells.

Proposed Monitoring Well MW-5A was not installed because the soil/weathered bedrock at this location was unsaturated. The boring for MW-5A was advanced to a total depth of 19 feet using six-inch O.D. solid stem augers and SPT apparatus. The boring was backfilled to ground surface upon completion with cement-bentonite grout using the tremie method.

The shallow monitoring wells (MW-6A, MW-7A, MW-8A, MW-9A and MW-10A) were developed using a clean PVC bailer attached to new dedicated polypropylene rope. A minimum of five well casing volumes of groundwater was removed during development from each monitoring well. Cummings/Riter personnel recorded the pH, specific conductance and temperature of the development water to evaluate the effectiveness of the development procedure. Well development equipment was steam cleaned prior to beginning development and between use at each well location. Development water was contained in the 500-gallon storage tank on site for disposal by Westinghouse. Monitoring well installation details are provided with the corresponding boring logs as Appendix C to this report.

### **3.4 SURFICIAL SOIL SAMPLING**

Between October 12 and 14, 1994, 139 surface soil locations were sampled. The sample locations were located in the field by establishing two 25-foot sample grids at the former zircaloy burn area and the "sand mound" area (Figure 3). Samples from each location on the grid were obtained from a depth of zero to six inches and six to twelve inches below ground surface. Each sample was uniquely identified, catalogued, and submitted to Westinghouse for radioactive screening and storage. Field screening consisted of real time monitoring for total organic vapors using the headspace technique and radiation screening by an NSSI health physics technician.

Westinghouse performed the radiological characterization which consisted of an initial screening analysis of all samples received followed by more detailed analysis on selected samples at the Westinghouse Radiochemistry Laboratory at the Waltz Mill Facility located near Madison, Pennsylvania.

The initial radiological screening of the samples consisted of counting the entire sample volume inside a shielded cave using a gamma spectrometer (Model GR-256) with a NaI detector. The gross counts were normalized for the sample weight to provide a net counts per minute per gram of sample. Two ROIs were recorded, including the total spectrum and the Uranium Peak (185 Kev). These results for soil samples collected from the former zircaloy burn area and the "sand mound" area are summarized in Tables 3 and 4, respectively. Although these results are qualitative, they do provide a rational basis for selection for further analysis and for comparative analysis.

A portion of each soil sample was maintained at the site in a locked secure building. Each sample was logged in and chain-of-custody procedures were followed. Surficial soil samples were collected using stainless steel hand augers and split-spoon samplers. Sample equipment was decontaminated using the following procedures:

- Alconox detergent wash,
- Potable water rinse,
- Distilled/deionized water rinse,
- Methanol rinse,
- Distilled/deionized water rinse, and
- Air dry.

### **3.5 GROUNDWATER SAMPLING AND ANALYSIS**

Following completion of well installation and development, groundwater was sampled from the seven shallow site monitoring wells (MW-2, MW-3, MW-6A, MW-7A, MW-8A, MW-9A, and MW-10A) and Groundwater Drain GW-1 (Figure 3). The groundwater samples were analyzed for the following compounds of interest:

- TCL VOCs,
- Target Analyte List (TAL) metals,
- Total petroleum hydrocarbons,
- Fluoride,
- Nitrate,
- Ammonia,
- Total organic carbon,
- Gross alpha,
- Gross beta,

- Total uranium,
- Uranium isotopes,
- Total radium, and
- pH.

Groundwater sampling for the seven shallow site monitoring wells was conducted approximately one week after the new monitoring wells were properly developed, allowing the wells to stabilize to static conditions before sampling. Prior to purging and sampling, the groundwater level and well depth for all wells were measured from a fixed point on the well casing. This point was used as the reference mark during the surveying of well head elevations and locations. The water table level and well depth were obtained using an electronic water level indicator. This instrument consists of a spool of dual conductor wire, a probe attached to the end, and an indicator. When the probe contacts the water surface, the circuit is closed and a meter light and/or buzzer attached to the spool will signal the contact. The bottom of the well was determined by resting the water level indicator on the well bottom. Measurements were made and recorded to the nearest 0.01 foot for the water level and the nearest 0.1 foot for the well depth. After water level and well depth measurements were completed, each well was purged of at least three well casing volumes using a clean dedicated Teflon bailer attached to new dedicated polypropylene rope prior to sampling. For two-inch diameter wells, the well casing volume is determined by the following formula:

$$= \frac{7.481}{144} \pi r^2 h = 0.163h$$

where: V = Volume (gallons)  
 r = Riser pipe radius (inches)  
 h = Standing water height as determined from water level measurements deducted from the well depth (feet)

A well stabilization test was performed during the purging of each well. Temperature, pH, and specific conductance were measured after fractional increments of the purge volume were removed. If the last three sets of readings were approximately constant, the

purging was considered complete. Constant levels were defined as  $\pm 10$  percent for temperature,  $\pm 0.1$  pH units, and  $\pm 10$  percent for specific conductance measurements. If the readings did not stabilize, additional water was purged until the desired results were obtained.

In addition to the eight groundwater samples, one replicate sample, one rinsate (equipment) sample and trip blank samples (one per sample shipment) were submitted to the laboratory. Sufficient volume of one sample was collected to allow the laboratory to prepare a matrix spike and a matrix spike duplicate for analysis.

If a well purged dry (i.e., all standing water is removed) prior to removal of three well volumes, a well-stabilization test was not required. Such wells were sampled when enough water recharged the well to obtain a sample. The water level was recorded at the time of sampling.

Groundwater samples were collected with clean Teflon dedicated bailers attached to new polypropylene rope. Groundwater was poured slowly and at an even rate from the bailer directly into the appropriate container to minimize sample disturbance. Samples were placed in a container with ice immediately upon collection.

Groundwater sampling equipment was dedicated to each monitoring well. Water level indicator probes were decontaminated before initial use and between wells.

Decontamination procedures for this equipment were as follows:

- Alconox detergent wash,
- Potable water rinse,
- Distilled/deionized water rinse,
- Methanol rinse,
- Distilled/deionized water rinse, and
- Air dry.

Following completion of sampling activities, dedicated rope and bailers were air dried, wrapped in a plastic bag, labeled, and stored in a secure building at the Specialty Metals Plant.

To identify and track each sample through shipping and laboratory analysis, the following documents were prepared:

- Sample labels,
- Chain-of-custody forms, and
- Sample log sheet.

The labels included the project number, project name, sampler's name, sample medium, sample preservative, type of sample (grab or composite), sample number, location, date and time.

Sample logs were used to make entries at each sampling station and included all information recorded on sample labels, field measurements and observations, including sample color and odor.

Possession of samples collected during the field investigations were traceable from the time the samples were collected until they or their derived data were used as evidentiary material. Custody procedures were followed to maintain sample possession.

The samplers were personally responsible for the care and custody of the samples collected until they were properly transferred or dispatched. Sample labels were completed using waterproof ink.

### **3.6 SURFACE WATER AND SEDIMENT SAMPLING AND ANALYSIS**

Surface water and sediment samples were collected to evaluate the relationship between shallow groundwater and surface water/sediment and further evaluate the presence of COI in each of these media. Surface water and sediment were sampled and analyzed at four locations (SW-1, SD-1; SW-2, SD-2; SW-3, SD-3; and SW-4, SD-4) for the COI identified in Section 3.5. Seven additional sediment samples (SD-A, SD-B, SD-C, SD-D, SD-E, SD-F, and SD-G) were obtained at the locations shown and/or described on Figure 3. These sediment samples were catalogued and submitted to Westinghouse for radioactivity screening and additional radiochemistry testing at the Westinghouse Radiochemistry Laboratory at the Waltz Mill Facility located near Madison,

Pennsylvania. Sample SD-1 was not reportedly received by Westinghouse, and therefore was not analyzed. Field screening at each surface water and sediment location was performed using an organic vapor analyzer and a radiation survey meter for health and safety purposes.

Surface water samples were collected by gently submerging a clean laboratory supplied container beneath the water surface and filling the appropriate sample bottles. Sediment samples were collected from the upper six inches of sediment using stainless steel sample trowels. The samples were collected from downstream locations first, followed by upstream locations to minimize sample disturbance.

The sample trowels were cleaned using procedures outlined for groundwater sampling equipment. Sample documentation and chain-of-custody for surface water and sediment were identical to procedures followed for groundwater sampling.

### **3.7 GROUNDWATER LEVEL MEASUREMENT**

The groundwater level for each monitoring well and surface water level for the on-site pond were measured and recorded November 10, 1994. The water levels and elevations are presented in Table 5. Groundwater and surface water levels were measured using an electronic water level indicator and recorded to the nearest 0.01 foot. All readings were measured from a surveyed reference point on the top of the well casing of each monitoring well and a stationary point located on an existing dock at the on-site pond.

### **3.8 SURVEYING**

Borings B-1 through B-44 and MW-5A, the five new monitoring wells (MW-6A, MW-7A, MW-8A, MW-9A, and MW-10A) and the two existing wells (MW-2 and MW-3) were surveyed for horizontal location and vertical elevation by Land Surveying Services of Bridgeport, West Virginia. The elevation of the ground surface, top of PVC riser pipe, and top of steel protective casing were surveyed for each monitoring well. The horizontal coordinates and elevation in feet above mean sea level (MSL) for each soil boring advanced and monitoring well installed as part of this investigation are provided on each respective boring log (Appendix C). In addition, a reference point on the dock extending into the on-site pond was surveyed to determine pond level elevations.

## **4.0 SPECIFIC AREAS INVESTIGATED**

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The review of existing information, site reconnaissance and discussions with Westinghouse enabled the development of a sampling and analysis program. The correlation between the sampling program (Section 3.0) and specific site features is described in the following sections. Figure 3 depicts the surveyed location for each sample collected.

### **4.1 WASTE WATER COLLECTION AND TREATMENT SYSTEMS**

The wash water from inside the buildings and laboratory waste water are channeled via floor drains and sinks to the industrial waste water treatment plant. However, the floor drains beneath the hazardous material drum storage area are plugged and do not contribute to flow to the industrial waste water treatment plant. The Specialty Metals Plant maintains an on-site septic system which handles waste water generated from the bathrooms, showers and drinking fountains only. Two soil borings (B-37 and B-38) were drilled and one monitoring well (MW-9A) was installed adjacent to the industrial waste water treatment plant and septic leach beds as part of this study.

### **4.2 STORM WATER COLLECTION AND DISCHARGE SYSTEM DESCRIPTION**

Storm water drainage from the majority of the site is collected and channeled through a series of storm sewers which discharge at Outfall 002 located between the waste water treatment sludge drying beds and the septic leach beds. Outfall 002 forms the headwaters of an unnamed tributary which flows east to the Conemaugh River. Surface water drainage from areas north of the Westro Building and Zircaloy Building in the vicinity of the aeration pond generally flows north to a shallow swampy area. The pond located at the southern limit of the Westinghouse property receives surface water drainage from the west and supplies the plant with process water, estimated at 70,000 to 90,000 gallons per day. Three shallow unnamed tributaries drain the eastern limits of the site and flow east toward the Conemaugh River (Figure 2), the southernmost of the three receiving overflow from the pond. A total of 11 sediment samples and 4 surface water samples were collected during this investigation from surface water drainage channels downstream from the Specialty Metals Plant (Figure 3).



### **4.3 STORAGE, CONVEYANCE LINES AND/OR DISPOSAL AREAS**

The Specialty Metals Plant maintained a series of above ground and underground storage facilities, conveyance lines and disposal areas. Many of these areas are no longer in use, and many have been remediated as described in Section 1.5. Each of these features is discussed below.

#### **4.3.1 Former Above Ground Trichloroethene/1,1,1-Trichloroethane Storage Tank Area**

A 15,000-gallon above ground tank located south of the Westro Building was used to store trichloroethene and 1,1,1-trichloroethane. The tank was removed in 1988. Existing Monitoring Well MW-3 (Figure 3) is located approximately 100 feet from the former storage tank area. Groundwater analytical results for Well MW-3 are provided in previously documented reports (Acres, 1981b, and Cummings/Riter, 1994a). Two soil borings (B-1 and B-2) were advanced adjacent to the former storage tank as part of this investigation.

#### **4.3.2 Former "Triclene" Pit**

The Specialty Metals Plant maintained a concrete-lined pit within the southern limits of the Westro Building. The pit was known as the "Triclene" pit and was utilized to contain both trichloroethene and 1,1,1-trichloroethane during the cleaning of manufactured tubing. In 1985, the "Triclene" pit was drained, backfilled with gravel, and the surface concreted to match the existing plant grade. Existing Monitoring Well MW-3 (Figure 3) is located approximately 250 feet from the former "Triclene" pit. Four soil borings (B-1 through B-4) were advanced adjacent to the Westro Building to evaluate the former "Triclene" pit.

#### **4.3.3 Former Underground Waste Hydrofluoric Acid and Methylene Chloride Storage Tank Area**

The former 21,000-gallon underground waste hydrofluoric acid and methylene chloride storage tanks were located approximately 200 feet west of the Industrial Waste Treatment Plant. This area was utilized to store the waste fluids prior to loading into tankers for off-site disposal at a licensed facility. Monitoring Well MW-1 was installed adjacent to the underground storage tanks in 1981. Groundwater analytical results for Well MW-1 are

provided in Acres, 1981b. However, this well was unable to be located during the 1993 sampling and analysis program conducted by Cummings/Riter. Two soil borings (B-32 and B-33) were advanced adjacent to the former underground storage tanks (Figure 3).

#### **4.3.4 Former Underground Lines to Waste Acid and Solvent Storage Tanks**

The former underground PVC conveyance lines were utilized to transfer waste hydrofluoric acid and methylene chloride from the Zircaloy Building and the Main Building Shop Area to the 21,000-gallon underground storage tanks. Twelve soil borings (B-8 through B-18 and B-34) were advanced along the former underground conveyance lines as part of this investigation (Figure 3).

#### **4.3.5 Sludge Drying Beds**

The industrial waste treatment plant sludge drying beds are located approximately 150 feet southwest of the Industrial Waste Treatment Plant. The beds are lined with 45 mil Hypalon. According to Westinghouse personnel, shallow groundwater is drained from the sludge drying beds using an active drain system which discharges at GW-1 (Figure 3). GW-2 was a former groundwater drain for the same area which appears to be plugged and exhibits limited groundwater flow. Existing Monitoring Well MW-2 is located adjacent to the sludge drying beds. Two soil borings (B-35 and B-36) were advanced at locations adjacent to the two sludge drying beds. In addition, groundwater from GW-1 was sampled.

#### **4.3.6 Former Zircaloy Burn Pit Area**

The former zircaloy burn pit consisted of a 50-foot by 20-foot concrete pad built in 1959, with a three-sided, five-foot block wall for open incineration of zirconium chips. This area formerly contained an equipment storage building and a hematite and celestite storage building. The buildings in this area initially housed the radioactive waste collection, processing, packaging, storage and shipment activities. A 25-foot sampling grid was established over the former zircaloy burn pit and surrounding area. Surficial soil samples were collected from depths of zero to six inches and six to twelve inches below ground surface at 117 locations established by the sample grid (Figure 3). Also, 12 soil borings (B-20 through B-31) were advanced to bedrock within the zircaloy burn pit area.

In addition to the soil sampling on a 25-foot grid spacing, a more detailed gamma spectrum survey was conducted in this area on a two-meter grid spacing. This survey was conducted by NSSI personnel using the Model GR-256 gamma spectrometer with a NaI detector. The area covered by this initial survey is smaller than that covered by the 25-foot grid soil sampling. Grid point B-1 is identical for both sampling/measurement tasks.

#### **4.3.7 Monitored Waste Line to Evaporator**

The monitored waste line conveyed waste fluids within the Main Building Shop Area to an evaporator located in the buildings near the zircaloy burn pit. Borings B-14, B-16, B-17, B-18, and B-19 were advanced near the monitored waste line to assess soil conditions in the vicinity of the former waste line (Figure 3).

#### **4.3.8 Fill Area Northeast of Facility**

A fill area was identified northeast of the Specialty Metals Plant and adjacent to Township Road 966. The fill area was created by disposal along a steep slope adjacent to the Conemaugh River. Borings B-39, B-40, and B-41 were advanced through the fill material and into the underlying soil. Monitoring Well MW-4 was reportedly located near the fill area but could not be located. According to a previous report (Acres, 1981b), Well MW-4 was previously dry. A boring was advanced for installation of Monitoring Well MW-5A (Figure 3). However, the soil and upper weathered bedrock in the vicinity of the fill area was dry, and the shallow monitoring well was not installed at Location MW-5A.

#### **4.3.9 Fill Area North of Visitors Parking Lot**

A linear fill area (sand mound) was identified northeast of the Main Building Shop Area and immediately north of an asphalt parking lot. This area consists of a slight mound with evidence of stressed vegetation. A 25-foot sampling grid was established over the fill area. Surficial soil samples were collected from depths of zero to six inches and six to twelve inches below ground surface at 22 locations established by the grid (Figure 3). In addition, two soil borings (B-42 and B-43) were performed in this area during the investigation.

In addition to the soil sampling on a 25-foot grid sampling, a more detailed gamma spectrum survey was conducted on a two-meter grid spacing. This survey was conducted using the Model GR-256 gamma spectrometer with a NaI detector. The results of the survey are shown on Figure 16. The area covered by this survey was larger than that covered by the 25-foot grid soil sampling. Figure 3 shows the outline of the area covered by the gamma spectrometer survey along with the soil sample locations.

#### **4.3.10 Former Underground Waste Acid Tank**

An underground concrete storage tank located at the southeast corner of the Westro Building was used to store waste acid. The tank was reportedly closed in-place and is no longer used in the plant process. Boring B-5 was advanced near the former waste acid tank (Figure 3).

#### **4.3.11 Former Underground Waste Oil Tank/Drum Unloading Area/Oil Dump Pit**

The former underground waste oil tank and the drum unloading area and oil dump pit were located southeast of the Westro Building. This area was used for waste oil storage/transfer prior to loading into tankers for off-site disposal at a licensed facility. Boring B-6 was advanced to bedrock adjacent to this area (Figure 3).

#### **4.3.12 Existing Underground Waste Oil Tank**

An 18,000-gallon underground waste oil tank located west of the Maintenance Storage Building is used to store waste oil prior to off-site disposal. Boring B-7 was advanced adjacent to the existing storage tank (Figure 3).

## 5.0 GEOLOGIC SETTING

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### 5.1 REGIONAL SETTING

Cummings/Riter reviewed published geologic reference material covering the study area to develop an understanding of the regional geologic setting for the Specialty Metals Plant area. The results of this review are provided in the following subsections.

#### 5.1.1 Physiography and Topography

The Specialty Metals Plant is in the Unglaciaded Allegheny Plateau section of the Appalachian Plateaus physiographic province (Fenneman, 1938). The Unglaciaded Allegheny Plateau is characterized by low, broad ridges, although there are many valleys with relief of several hundred feet. The major drainage feature for this area is the Conemaugh River located north and east of the Specialty Metals Plant. The Conemaugh River flows northwest and joins Loyalhanna Creek at Saltsburg to form the Kiskiminetas River.

#### 5.1.2 Unconsolidated Deposits

During the Illinoian stage of glaciation, the aggradation of the Allegheny Valley region by glacial gravels blocked the mouths of the tributary streams from the nonglaciaded terrain to the south and caused them to deposit much of their load. After the streams had completed their post-Illinoian downcutting, in part in wholly new courses, these sediments remained as a veneer over the rock terraces and abandoned reaches. These high stream-laid terrace deposits, free from ice-borne material of distant origin, and contemporaneous with the early glacial valley train, are known as the Carmichaels Formation (Piper, 1933).

According to Piper (1933), the most extensive deposits of the broad terraces within the Kiskiminetas basin occur at an altitude of about 1,040 feet above MSL along the Conemaugh River between Blairsville and Tunnelton. The Carmichaels Formation is composed largely of sand, silt and clay of local derivation, with some deeply weathered boulders.

In addition to the terrace deposits, residual soils formed from weathering of the underlying bedrock are present in the site vicinity. The residual soils are locally indistinguishable from the more prominent terrace deposits.

### **5.1.3 Bedrock**

Surficial bedrock in the vicinity of the Specialty Metals Plant belong chiefly to the Conemaugh Group of the Pennsylvanian subsystem (Figure 5). Typical bedrock consists of sandstones, shales, limestones, claystones, and coals (Figure 6).

The Pennsylvania Allegheny Group underlies the Conemaugh Group and consists of cyclic sequences of sandstone, shale, limestone clay, and coal. Based on the structure contours drawn on the Upper Freeport Coal Seam (Figure 7), the Upper Freeport Coal Seam is located approximately 300 feet below the Specialty Metals Plant. According to geological maps presented in Piper (1933), the geologic unit underlying the Specialty Metals Plant corresponds to the Saltsburg Sandstone member. The Saltsburg Sandstone generally lies from 170 to 285 feet above the Upper Freeport Coal. The rock is typically massive, fine-grained, and white, gray or yellow in color. Within short distances, it may grade into a very thin-bedded argillaceous sandstone or a bluish-gray sandy shale or, less frequently, into a coarse-grained or even pebbly irregularly bedded rock (Piper, 1933).

Eight natural gas wells have been drilled and placed into production at the Westinghouse property. Each of the natural gas wells was advanced to a depth of approximately 3,600 feet below ground surface. The approximate natural gas well locations are provided on Figure 1.

### **5.1.4 Structure**

The Specialty Metals Plant is located in an area where the bedrock units are folded into a series of anticlines and synclines which generally have a northeast-southwest trend. Specifically, the facility is located approximately 0.6 miles northwest of the axis of the Fayette Anticline and approximately 1.5 miles southeast of the Greensburg Syncline (Figure 5). Based on this location, in addition to structure contours drawn on the Pittsburgh Coal Seam (Wagner, 1975), the rocks underlying the Specialty Metals Plant would be expected to dip to the northwest at a rate of approximately 160 feet per mile.

However, as shown on Figure 7, the structure contours drawn on the Upper Freeport Coal (Figure 7) indicate a dip to the northeast at a rate of approximately 170 feet per mile, in response to the northeast plunging Fayette Anticline.

## **5.2 SITE GEOLOGY**

Information from previous site investigations and observations during this site investigation, along with the published geologic reference material for the site area, was utilized to provide an understanding of the site geologic setting, as discussed in the following subsections.

### **5.2.1 General**

The Specialty Metals Plant is located in the Unglaciaded Allegheny Plateau section of the Appalachian Plateau physiographic province on a broad, gently sloping ridge with steep slopes north and east of the facility adjacent to the Conemaugh River (Figure 1). Surface water drainage is generally west across the site via three shallow drainage channels which have been modified by the plant construction, the adjacent railroad bed and the formation of a large man-made pond at the southern limits of the site. Each of these drainage channels ultimately flows to the Conemaugh River. Surface elevations at the facility range from 980 to 1,000 feet above MSL, as compared to the approximate local Conemaugh River elevation of 905 feet MSL.

Review of existing site boring logs and published geologic reports covering the subject site area indicates the Specialty Metals Plant is underlain by fill material placed during plant construction, terrace deposits belonging to the Carmichaels Formation (Quaternary), residual soils formed from in-place weathering of bedrock, and sandstone belonging to the Glenshaw Formation of the Pennsylvania Age Conemaugh Group. Each of these units is discussed further in the following sections.

### **5.2.2 Unconsolidated Deposits**

Boring logs completed for collection of soil samples and monitoring well installation indicate that the unconsolidated deposits immediately underlying the Specialty Metals Plant are variable in nature and generally consist of brown, orange and gray, clayey silt, silty clay, and fine-to-medium grained, silty sand, with variable amounts of rock

fragments. The unconsolidated deposits ranged in thickness from 5 feet (B-37) to greater than 27 feet (B-39 and MW-10A). The average thickness of unconsolidated deposits for borings encountering bedrock was approximately ten feet.

Many of the borings encountered fill consisting of brown and gray, clayey to sandy silt, with cinders, slag, and rock, wood and glass fragments. The unconsolidated deposits were locally saturated. Hydrostratigraphic Cross Sections depicting the unconsolidated deposits are provided on Figures 8 and 9.

### **5.2.3 Bedrock**

The uppermost bedrock encountered at the Specialty Metals Plant consists of brown to gray fine-to-medium grained sandstone, with gray shale interbeds. This unit corresponds to the Saltsburg Sandstone unit (Figure 6), based on the reported elevation of the Upper Freeport Coal Seam beneath the Specialty Metals Plant.

The first mineable coal seam underlying the Specialty Metals Plant is the Upper Freeport Coal Seam, located approximately 300 feet below ground surface. According to the U.S. Department of the Interior, Office of Surface Mining Reclamation and Enforcement, no underground coal mining has occurred beneath the Specialty Metals Plant.

Nine deep (greater than 100 feet in depth) borings were advanced at the Specialty Metals Plant for installation of groundwater supply wells (DW-1 through DW-9). The locations of each groundwater supply well (eight former and one active) are provided on Figure 2. No boring logs or well installation records are available for the groundwater supply wells.

The bedrock surface underlying the Specialty Metals Plant is somewhat variable, as depicted in the hydrostratigraphic cross sections (Figures 8 and 9).



## **6.0 HYDROGEOLOGIC SETTING**

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### **6.1 REGIONAL GROUNDWATER SETTING**

Groundwater is known to occur in both unconsolidated deposits and bedrock in the surrounding area. Each of these water bearing units is discussed separately below.

#### **6.1.1 Unconsolidated Deposits**

The uppermost groundwater-bearing unit underlying the majority of the site area is associated with unconsolidated deposits comprised of terrace deposits of the Carmichaels Formation and residual soil formed from the in-place weathering of the underlying sandstone. The water-bearing properties of the Carmichaels Formation vary due to the variable texture, extent, and position of the deposits. Many of the thinner deposits of the Carmichaels, which lie on exposed terraces, are likely to be completely drained. On the broader terraces, however, groundwater may be encountered in the sandy and gravelly layers of the formation. The primary source of recharge to these deposits is through direct recharge via precipitation. According to Piper (1933), groundwater yields up to five to ten gallons per minute can be developed where the coarse layers are not subject to drainage.

#### **6.1.2 Bedrock**

According to Piper (1933), the Conemaugh Formation is a productive source of groundwater. Sandstone members--the Connellsville, Morgantown, Saltsburg, Buffalo, and Mahoning sandstones--are especially productive over extensive areas.

Groundwater occurs in coarse grained, highly permeable zones of the member, which yield up to 100 gallons per minute where the member lies below drainage level. Locally, the massive sandstone members have been extensively fractured, and the joint openings serve as conduits for groundwater circulation. The shale members of the formation, together with the shale facies of the sandstone members produce limited (generally less than five gallons per minute) groundwater from bedding plane partings and from joint openings.

Locally, the collapse and subsidence of the roof above abandoned underground mine entries along the Upper Freeport Coal has induced drainage of the overlying basal members of the Conemaugh Formation so that they are not a source of groundwater. According to the U.S. Department of the Interior, Office of Surface Mining Reclamation and Enforcement, no underground coal mining has occurred beneath the Specialty Metals Plant.

## **6.2 SITE GROUNDWATER**

This study focused on the shallow groundwater bearing unit immediately underlying the Specialty Metals Plant. Information obtained from the shallow soil borings and monitoring wells installed at the site indicates that the unconsolidated deposits are locally saturated and that the uppermost groundwater bearing unit is associated with the unconsolidated deposits and the underlying weathered bedrock. The borings also indicate that the shallow groundwater unit may not exist east of the Specialty Metals Plant along the steep hillside above the Conemaugh River, possibly due to increased stress relief fractures along the steep valley walls adjacent to the Conemaugh River which may allow drainage of the shallow groundwater into the more competent portion of the bedrock formation. According to Piper (1933), areas where unconsolidated terrace deposits (Carmichaels Formation) are located on exposed terraces, are likely to be completely drained.

Groundwater levels measured in the seven shallow site monitoring wells on November 10, 1994 were contoured as shown on Figure 10. The resulting piezometric surface map indicates that shallow groundwater flow tends to mimic surface topography, with flow generally from west to east across the site. The horizontal hydraulic gradient varies from upgradient (west) to downgradient (east) locations, with the gradient becoming much steeper east of the Specialty Metals Plant near Township Road 966. The average horizontal hydraulic gradient is approximately 0.02 foot per foot (ft/ft). The groundwater levels measured on November 10, 1994, ranged from 7 to 20 feet below ground surface, and are shown in cross section on Figures 8 and 9.

A staff gage was installed in the on-site pond to evaluate the relationship between surface water and shallow groundwater levels in site monitoring wells. Based on the one-time monitoring event conducted on November 10, 1994, the man-made pond appears to represent a groundwater recharge point for the local shallow groundwater unit, as evidenced by the pond surface water elevation (997.59 feet MSL), as compared to groundwater elevations in nearby monitoring Wells MW-3 (994.24 feet MSL) and Well MW-8A (990.38 feet MSL) (Figure 10).

The head relationship between the surface water drainage east of the facility adjacent to the sludge drying beds and the groundwater level in nearby Monitoring Well MW-2 indicates a potential for shallow groundwater discharge to the surface water drainage course in the vicinity of the sludge drying beds. However, further east, the groundwater level measured for Monitoring Well MW-9A on November 10, 1994 indicates a potential for surface water recharge to the shallow groundwater unit in the vicinity of Township Road 966, east of the Industrial Waste Treatment Plant. This relationship is depicted on Figure 8 (Cross Section A-A') and may be the result of increased fracturing of the shallow bedrock unit with depth in the vicinity of Township Road 966.

No natural springs or seeps were observed in the vicinity of the Specialty Metals Plant. However, Groundwater Drains GW-1 (active) and GW-2 (abandoned) were reportedly installed to intercept groundwater seepage in the vicinity of the existing sludge drying beds (Figure 3).

## 7.0 ANALYTICAL RESULTS

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The analytical results for samples collected during the site investigation are included as Appendices D and E and discussed in the following subsections.

### 7.1 SOIL

Fifty-eight subsurface soil samples were collected for laboratory analysis from 44 soil borings performed as part of this investigation. An additional 139 surficial soil samples were collected for radiological testing by Westinghouse representatives. The soil samples selected for laboratory analysis and the analytical parameters tested are provided in Table 1. Additional soil samples selected and analyzed by Westinghouse for radiological parameters are discussed later.

#### 7.1.1 Chemical Analysis

The results for soil headspace screening for each soil sample collected are provided on the appropriate boring log (Appendix C). Some soil samples exhibited total organic vapor results for headspace screening above background.

The laboratory analytical results for soil samples collected during the site investigation were compared to the *Interim Cleanup Standards for Contaminated Soils*, published by PADER (1993). This guidance document lists generic soil levels for a variety of substances and generally describes the methods and assumptions used to arrive at the levels. The use of these levels for a comparison is not intended to be a recommendation for their utilization as site-specific standards or criteria.

Two different groundwater protection levels are provided for each organic compound on the PADER list, depending on how recently the soil has become impacted. Level 1 is applicable to soils that have been impacted as a result of recent or continuing spills, leaks or discharges. Level 2 applies to soils that have been impacted by spills, leaks or discharges which occurred, in total, more than one year ago. The analytical results for soil samples

collected during this investigation were evaluated using the Level 2 criteria, as no known spills, leaks or discharges have occurred in the past year at the Specialty Metals Plant. In addition, many of the substances on the PADER list (i.e., trichloroethene) have not been used at the facility for more than five years.

The analytical results for soil samples and the PADER interim levels are provided in Table 6. Analytical results for pesticides, herbicides, and polychlorinated biphenyls (PCBs) were below method detection limits for all soil samples tested. Soil samples analyzed for semivolatile organic compounds were below method detection limits for all compounds, with the exception of di-n-butylphthalate in Sample B-24, S-2, with a reported concentration of 330 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ). This reported concentration was just above the method detection limit of 320  $\mu\text{g}/\text{kg}$ .

Soil samples exceeded the PADER reference levels for one VOC; trichloroethene (B-1, S-5), and one metal, nickel (B-39, S-5 and B-40, S-5). The soil sample analytical results were less than the PADER reference levels for all remaining samples tested. Sample B-1, S-5 was collected adjacent to the former 15,000-gallon above ground trichloroethene/1,1,1-trichloroethane storage tank located south of the Westro Building. Samples B-39, S-5 and B-40, S-5 were collected from fill material and soil underlying the fill material, respectively, northeast of the Specialty Metals Plant.

#### **7.1.2 Radiological Analysis of Soil Borings**

Table 2 presents the radiological screening results conducted by Westinghouse for samples collected from the soil borings, including the borings for monitor well installation. Figure 11 presents the normalized Uranium Peak data summarized in Table 2 in the form of a schematic fence diagram. These data are quantitative but do provide a basis for comparative review. Based on these results, 26 soil samples from Table 2 were selected for further radiochemistry analysis by the Westinghouse Laboratory at the Waltz Mill Facility located near Madison, Pennsylvania. These results are presented in Table 7. (The analytical laboratory data sheets are included in Appendix E). Using a ratio of 30 for total uranium to U-235, Table 7 indicates that several of the soil boring samples would exceed 30 pCi of uranium per gram of soil. The results presented in Table 6 for radiological parameters do not identify any samples which exceed the release criteria of 30 pCi/g for uranium in soil. However, in a few

cases, the results presented in Table 6 show isotopic ratios of U-234/U-238 that are indicative of enriched uranium rather than natural uranium (see the results for Samples B23, S1; B24, S2; B26, S1; B29, S1; and B30, S2). These samples are all located in the area of the zircaloy burn pit.

### **7.1.3 Radiological Analysis of Surface Soil**

At two locations shown on Figure 3 (former zircaloy burn area and sand mound area) 25-foot surface sample grids were established for the purpose of collecting soil samples at depths of zero to six inches and from 6 to 12 inches below ground surface. These soil samples also underwent a screening analysis. The radiological screening data are presented in Tables 3 and 4. Graphically, these same results are presented on Figures 12, 13 and 14 as surface contour plots of radioactivity versus "xy" dimension for each sample depth. Based on Figure 13, the grid pattern selected for the former zircaloy burn area did encompass the area of elevated activity in the north and south directions but not in the east and west directions.

A number of the surface soil samples were selected by Westinghouse for further radiochemistry analysis by the Westinghouse Radiochemistry Laboratory at the Waltz Mill Facility. These results are presented in Table 7A (the analytical laboratory data sheets are included in Appendix E). Some of the samples indicate that the release criteria of 30 pCi/g for uranium in soil is exceeded.

Figure 12 shows a specific peak sample result for the zero to six-inch sample at the G-8 location. The results presented in Table 7A indicate the presence of enriched uranium.

### **7.1.4 Gamma Surveys of Surface Areas**

In addition to the soil sampling programs described in Section 7.1.3, gamma spectrum measurements were made on a two-meter grid spacing for the former zircaloy burn area and the sand mound area. Figures 15 and 16 present the results for these two areas respectively.

## 7.2 SURFACE WATER/STREAMBED SEDIMENT

Surface water and sediment samples were collected from four downstream locations east of the Specialty Metals Plant. The samples were analyzed for the COI identified in Section 3.5 and identified as follows:

- SW-1/SD-1 - Surface water/sediment from drainage channel northeast of the Specialty Metals Plant, east of Township Road 966;
- SW-2/SD-2 - Surface water/sediment from drainage channel east of the Specialty Metals Plant, east of Township Road 966;
- SW-3/SD-3 - Surface water/sediment from drainage channel southeast of the Specialty Metals Plant, east of Township Road 966; and
- SW-7/SD-7 - Surface water/sediment from drainage channel east of the Specialty Metals Plant, at the confluence with the Conemaugh River.

The surface water and sediment sample locations are provided on Figure 3. The analytical results are summarized in Tables 8 and 9, respectively. Radiochemistry testing results performed by Westinghouse for sediment samples are summarized in Table 10.

Iron and manganese concentrations appear to be naturally elevated in site surface waters. VOCs were below method detection limits for all parameters with the exception of trichloroethene. Samples SW-1 (7.5 µg/l) and SW-2 (50 µg/l) reported the presence of trichloroethene. However, the concentration of trichloroethene decreased to less than detection limits (5 µg/l), approximately 1,200 feet downstream from location SW-2 at the confluence with the Conemaugh River (SW-7).

VOCs above method detection limits were reported for sediment Samples SD-1, SD-2, and SD-3. Sample SD-1 contained cis-1,2-dichloroethene (26 µg/kg), trichloroethene (15 µg/kg) and vinyl chloride (81 µg/kg). Sample SD-2 was reported to contain cis-1,2-dichloroethene (13 µg/kg) and trichloroethene (35 µg/kg). Sample SD-3 was reported to contain methylene chloride at a concentration of 6.8 µg/kg.

It should be noted that none of the surface waters in the vicinity of the Special Metals Plant are utilized as a drinking water supply.

### **7.3 GROUNDWATER**

As previously discussed, groundwater from seven shallow monitoring wells and one groundwater drain was sampled and analyzed as part of this investigation. The groundwater samples were analyzed for the COI identified in Section 4.5. The locations for Monitoring Wells MW-2, MW-3, MW-6A, MW-7A, MW-8A, MW-9A, MW-10A, and Groundwater Drain GW-1, which were sampled during this investigation, are provided on Figure 3.

The groundwater analytical results were evaluated by comparing the concentrations reported by the laboratory with the Pennsylvania Maximum Contaminant Levels (MCLs). Groundwater analytical results are presented along with the Pennsylvania MCLs in Table 11.

Two upgradient monitoring wells (MW-6A and MW-10A) were sampled during the site investigation. Groundwater sampled from Well MW-6A exceeded the MCL for total iron (17 milligrams per liter [mg/l]), total manganese (2 mg/l), and gross alpha ( $49 \pm 6$  pCi/l). Groundwater sampled from MW-10A exceeded the MCL for pH (5.36), total iron (4.8 mg/l), and total manganese (0.37 mg/l).

The active groundwater drain (GW-1) reportedly drains shallow groundwater beneath the sludge drying beds to the nearby drainage channel (Figure 3). Groundwater sampled at GW-1 exceeded the MCL for pH (6.37), total iron (0.75 mg/l), total manganese (0.3 mg/l), and trichloroethene (150  $\mu$ g/l).

Groundwater sampled from Monitoring Well MW-2, located downgradient of existing sludge drying beds, exceeded the MCLs for fluoride (2.7 mg/l), total iron (5.4 mg/l), total manganese (1.9 mg/l), trichloroethene (12  $\mu$ g/l), and gross alpha ( $38 \pm 6$  pCi/l).



Groundwater sampled from Monitoring Well MW-3, located south of the Westro Building, exceeded the MCLs for total iron (15 mg/l), total manganese (0.47 mg/l), 1,1-dichloroethene (21 µg/l), cis-1,2-dichloroethene (590 µg/l), trichloroethene (1500 µg/l), vinyl chloride (220 µg/l), and gross alpha ( $19 \pm 4$  pCi/l).

Groundwater sampled from Monitoring Well MW-7A, located north of the Main Building Shop Area, exceeded the MCLs for pH (6.34).

Monitoring Well MW-8A was installed southeast of the Westro Building and approximately 200 feet north of the on-site pond (Figure 3). Groundwater sampled at Well MW-8A exceeded the MCLs for pH (5.97), total cadmium (0.01 mg/l), total iron (41 mg/l), total manganese (5.2 mg/l), and gross alpha ( $25 \pm 5$  pCi/l).

Monitoring Well MW-9A was installed adjacent to Township Road 966, approximately 75 feet southeast (downgradient) from the Industrial Waste Treatment Plant Building (Figure 3). Groundwater sampled at Well MW-9A exceeded the MCLs for pH (6.44), total chromium (0.052 mg/l), total mercury (0.0027 mg/l), 1,1-dichloroethene (20 µg/l), cis-1,2-dichloroethene (3300 µg/l), tetrachloroethene (6 µg/l), trichloroethene (22,000 µg/l), vinyl chloride (49 µg/l), and gross alpha ( $20 \pm 4$  pCi/l).

It appears as though the reported elevated levels of iron, gross alpha, low pH and manganese represent background conditions because of their ubiquity and consistent levels.

## 8.0 SUMMARY OF FINDINGS

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The objective of this site investigation was to evaluate the nature and extent of COI in soils in the vicinity of potential source areas, shallow groundwater, surface water and sediment, and obtain an understanding of the shallow hydrogeologic regime at the Specialty Metals Plant.

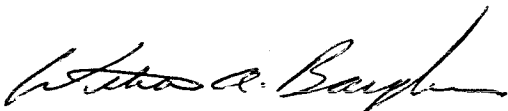
The findings are summarized as follows:

- Unconsolidated deposits consisting of fill material, terrace deposits, and residual soil are present immediately beneath the Specialty Metals Plant. The unconsolidated deposits range from 5 feet to greater than 27 feet in thickness.
- The uppermost bedrock beneath the Specialty Metals Plant consists of brown to gray, fine-to-medium grained sandstone with gray shale interbeds. This unit corresponds to the Saltsburg Sandstone unit.
- The uppermost groundwater-bearing unit beneath the Specialty Metals Plant was encountered at depths ranging from 7 to 20 feet below ground surface and was associated with the unconsolidated deposits and the upper weathered bedrock.
- Groundwater flow within the uppermost groundwater-bearing unit tends to mimic surface topography, with flow from west to east across the site. The average hydraulic gradient on November 10, 1994 was approximately 0.02 ft/ft.
- Based on the one-time monitoring event conducted on November 10, 1994, the pond located south of the Specialty Metals Plant appears to act as a recharge point for the local shallow groundwater unit. In addition, the groundwater levels indicate a potential for shallow groundwater discharge to surface water drainage features near the Industrial Waste Treatment Plant. This relationship may be reversed, with surface water drainage into the shallow groundwater unit, further east along the drainage course.

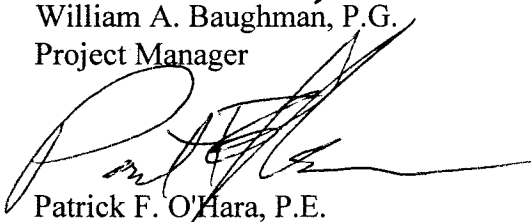
- Slightly elevated (20 percent above background) field radiological readings were reported in two areas north of the railroad tracks; one in a shallow depression or impoundment, the other along a path leading to a natural gas well location.
- Field radiological readings twice background were detected in a field to the west of the north end of the Westro Building, primarily 150 to 200 feet west of the building.
- Field radiological readings 10 to 15 times background were reported in a mound adjacent to the main guard station, north of the visitors parking lot.
- Soil analytical results for pesticides, herbicides, and PCBs were below method detection limits for all soil samples tested.
- Soil samples exceeded the PADER interim criteria for two parameters; trichloroethene in Sample B-1, S-5, adjacent to the former 15,000 gallon above ground trichloroethene/1,1,1-Trichloroethane storage tank, and nickel in Samples B-39, S-5 and B-40, S-5, located in the fill area identified northeast of the Specialty Metals Plant.
- Soil radiological results indicate areas of the site exceed background and require additional delineation.
- Soil radiochemistry results for the surface and near-surface samples collected in the former zircaloy burn area indicate that some soil exceeds the release criteria of 30 pCi/g for uranium in soil. This area will require additional delineation.
- Soil radiochemistry results for the soil boring samples collected in the fill area northeast of the facility indicate radiological results that exceed background. This area will require additional delineation.
- VOCs cis-1,2-dichloroethene, trichloroethene, vinyl chloride, and methylene chloride were detected in sediments at sample locations SD-1, SD-2 and SD-3.

- Surface water Samples SW-1 and SW-2 collected from drainage channels located downstream from the Specialty Metals Plant contained concentrations of trichloroethene (7.5 µg/l and 50 µg/l, respectively). These constituents were not present in previously obtained upstream samples.
- Groundwater sampled from shallow site monitoring wells exceeded the Pennsylvania MCLs for pH, total iron, total manganese and gross alpha for both the upgradient and downgradient monitoring wells, indicating these levels represent background groundwater quality.
- The active groundwater drain (GW-1) near the existing sludge drying beds contained concentrations of trichloroethene at 150 µg/l. Monitoring Well MW-2 located downgradient of the sludge drying beds also contained concentrations of fluoride (2.7 mg/l) and trichloroethene (12 µg/l) above the MCLs.
- Groundwater samples from Well MW-3, located south of the Westro Building, exceeded MCLs for 1,1-dichloroethene (1500 µg/l) and vinyl chloride (220 µg/l).
- Groundwater samples from Well MW-9A, located 75 feet southeast (downgradient) of the Industrial Waste Treatment Plant Building, exceeded MCLs for total chromium (0.052 mg/l), total mercury (0.0027 mg/l), 1,1-dichloroethene (20 µg/l), trichloroethene (22,000 µg/l) and vinyl chloride (49 µg/l).

Respectfully submitted,  
**Cummings/Riter Consultants, Inc.**



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 Project Manager



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 President

WAB/PFO/jmc

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# TABLES

**TABLE 1**

**ANALYTICAL PARAMETERS**  
**SPECIALTY METALS PLANT**  
**BLAIRSVILLE, PENNSYLVANIA**

<b>SOIL SAMPLE No.</b>	<b>PARAMETER LIST</b>	<b>DEPTH (FT) BELOW G.S.</b>	<b>COMMENTS</b>
B-1, S-2	A	3.0 - 5.0	
B-1, S-5	A	9.0 - 11.0	
B-2, S-2	B	3.0 - 5.0	
B-2, S-4	B	7.0 - 9.0	
B-3, S-3	A	4.0 - 6.0	
B-3, S-5	A	8.0 - 10.0	
B-4, S-3	A	4.0 - 6.0	
B-5, S-4	A	6.0 - 8.0	
B-6, S-2	A	2.0 - 4.0	
B-6, S-4	A	6.0 - 8.0	
B-7, S-2	A	2.0 - 4.0	
B-8, S-3	B	4.0 - 6.0	
B-9, S-2	A	2.0 - 4.0	
B-10, S-3	A	4.0 - 6.0	
B-11, S-3	B	4.0 - 6.0	Duplicate sample collected.
B-12, S-3	A	4.0 - 6.0	
B-13, S-2	A	2.0 - 4.0	
B-14, S-2	A	2.0 - 4.0	
B-15, S-2	B	2.0 - 4.0	
B-16, S-1	A	1.0 - 3.0	
B-16, S-3	A	5.0 - 7.0	
B-17, S-2	A	3.0 - 5.0	
B-18, S-1	A	1.0 - 3.0	
B-19, S-1	A	1.0 - 3.0	Duplicate sample collected.
B-19, S-3	A	5.0 - 7.0	
B-20, S-2	A	2.0 - 4.0	
B-21, S-2	A	2.0 - 4.0	
B-22, S-1	A	0.0 - 2.0	
B-22, S-2	A	2.0 - 4.0	
B-23, S-1	A	0.0 - 2.0	

**TABLE 1**  
**(CONTINUED)**

SOIL SAMPLE No.	PARAMETER LIST	DEPTH (FT) BELOW G.S.	COMMENTS
B-24, S-2	B	2.0 - 4.0	
B-25, S-1	A	0.0 - 2.0	
B-25, S-3	A	4.0 - 6.0	
B-26, S-1	A	0.0 - 2.0	
B-27, S-1	A	0.0 - 2.0	
B-28, S-2	A	2.0 - 4.0	
B-29, S-1	A	0.0 - 2.0	
B-30, S-2	A	2.0 - 4.0	
B-30, S-4	A	6.0 - 8.0	
B-31, S-1	A	0.0 - 2.0	Matrix spike/Matrix spike duplicate collected.
B-32, S-3	A	4.0 - 6.0	
B-33, S-3	B	4.0 - 6.0	
B-34, S-1	A	1.0 - 3.0	
B-35, S-1	B	0.0 - 2.0	
B-36, S-1	A	0.0 - 2.0	
B-37, S-2	B	2.0 - 4.0	
B-38, S-1	A	0.0 - 2.0	Matrix spike/Matrix spike duplicate collected.
B-39, S-4	*	15.0 - 17.0	* Insufficient sample - analyzed for VOCs and radiological parameters. Sample is fill.
B-39, S-5	A	20.0 - 22.0	Sample is fill.
B-39, S-6	*	25.0 - 27.0	* Insufficient sample - analyzed for VOCs and radiological parameters. Soil beneath fill.
B-40, S-4	*	15.0 - 17.0	* Insufficient sample - analyzed for VOCs and radiological parameters. Sample is fill.
B-40, S-5	B	20.0 - 21.8	Soil beneath fill.
B-41, S-2	A	5.0 - 7.0	Sample is fill.
B-41, S-4	A	15.0 - 17.0	Soil beneath fill.
B-42, S-1	A	0.0 - 2.0	Sample is fill.
B-43, S-1	B	0.0 - 2.0	Sample is fill.
B-44, S-2	A	3.5 - 5.5	
B-44, S-4	A	7.5 - 9.5	



**TABLE 1**  
**(CONTINUED)**

<b>SURFACE WATER No.</b>	<b>PARAMETER LIST</b>	<b>DEPTH (Ft) BELOW G.S.</b>	<b>COMMENTS</b>
SW-1	A	NA	
SW-2	A	NA	
SW-3	A	NA	Duplicate/Matrix spike/matrix spike duplicate collected.
SW-7	A	NA	
<b>SEDIMENT No.</b>	<b>PARAMETER LIST</b>	<b>DEPTH (Ft) BELOW G.S.</b>	<b>COMMENTS</b>
SD-1	A	0 - 0.5	
SD-2	A	0 - 0.5	
SD-3	A	0 - 0.5	
SD-7	A	0 - 0.5	
<b>GROUND WATER</b>	<b>PARAMETER LIST</b>	<b>DEPTH (Ft) BELOW G.S.</b>	<b>COMMENTS</b>
MW-2	A	NA	
MW-3	A	NA	Matrix spike/matrix spike duplicate collected.
MW-6A	A	NA	
MW-7A	A	NA	
MW-8A	A	NA	
MW-9A	A	NA	Duplicate sample collected.
MW-10A	A	NA	
GW-1	A	NA	

**TABLE 1**  
**(CONTINUED)**

<b>PARAMETER LIST A</b>	<b>METHOD</b>
• TCL VOCs	8240
• TAL metals	6010/7000
• Total petroleum hydrocarbons	8015/7000
• Fluoride	340.2
• Nitrate	353.3/9200
• Ammonia	350.3
• Total organic carbon	9060
• Gross alpha	
• Gross beta	900.0
• Total uranium	ASTM D2907
• Uranium isotopes	EPA 908
• Total radium	705/904
• pH	9045
 <b>PARAMETER LIST B</b>	
• TCL VOCs and SVOCs	8240/8270
• TAL metals plus cyanide	6010/7000, 9010
• Pesticides	8080
• Herbicides	8150
• PCBs	8080
• Gross alpha	
• Gross beta	900.0
• Total uranium	ASTM D2907
• Uranium isotopes	EPA 908
• Total radium	705/904

**TABLE 2**  
**RADIOLOGICAL DATA**  
**SOIL BORING SAMPLES**

Boring ID	Sample No.	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-1	S-1	96	0.5	346	87	7.21	1.81	
B-1	S-2	109	0.5	329	81	6.04	1.49	
B-1	S-3	142	0.5	334	75	4.70	1.06	
B-1	S-4	159	0.5	332	78	4.18	0.98	
B-1	S-5	125	0.5	302	67	4.83	1.07	
B-1	S-6	153	0.5	298	68	3.90	0.89	
B-2	S-1	82	0.5	332	69	8.10	1.68	
B-2	S-2	114	0.5	344	83	6.04	1.46	
B-2	S-3	112	0.5	306	69	5.46	1.23	
B-2	S-4	94	0.5	315	74	6.70	1.57	
B-2	S-5	127	0.5	330	90	5.20	1.42	
B-2	S-6	146	0.5	317	86	4.34	1.18	
B-3	S-1	81	0.5	330	61	8.15	1.51	
B-3	S-2	82	0.5	288	68	7.02	1.66	
B-3	S-3	118	0.5	357	77	6.05	1.31	
B-3	S-4	106	0.5	306	59	5.77	1.11	
B-3	S-5	132	0.5	303	76	4.59	1.15	
B-3	S-6	168	0.5	303	74	3.61	0.88	
B-3	S-7	153	0.5	303	75	3.96	0.98	
B-3	S-8	142	0.5	294	56	4.14	0.79	
B-3	S-9	149	0.5	271	64	3.64	0.86	
B-4	S-1	84	0.5	313	80	7.45	1.90	
B-4	S-2	75	0.5	328	82	8.75	2.19	
B-4	S-3	94	0.5	317	72	6.74	1.53	
B-4	S-4	109	0.5	288	68	5.28	1.25	
B-4	S-5	129	0.5	289	77	4.48	1.19	
B-5	S-1	100	0.5	289	63	5.78	1.26	
B-5	S-2	83	0.5	322	76	7.76	1.83	
B-5	S-3	82	0.5	328	67	8.00	1.63	
B-5	S-4	78	0.5	299	67	7.67	1.72	
B-5	S-5	143	0.5	298	72	4.17	1.01	

TA E 2  
RADIOLOGICAL DATA  
SOIL BORING SAMPLES

Boring ID	Sample No.	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-6	S-1	92	0.5	267	69	5.80	1.50	
B-6	S-2	118	0.5	336	78	5.69	1.32	
B-6	S-3	105	0.5	303	65	5.77	1.24	
B-6	S-4	118	0.5	300	85	5.08	1.44	
B-6	S-5	158	0.5	284	64	3.59	0.81	
B-6	S-6	140	0.5	304	74	4.34	1.06	
B-6	S-7	126	0.5	316	69	5.02	1.10	
B-7	S-1	59	0.5	292	65	9.90	2.20	
B-7	S-2	109	0.5	335	70	6.15	1.28	
B-7	S-3	127	0.5	287	74	4.52	1.17	
B-7	S-4	149	0.5	335	83	4.50	1.11	
B-7	S-5	139	0.5	301	71	4.33	1.02	
B-7	S-6	98	0.5	291	70	5.94	1.43	
B-8	S-1	75	0.5	292	64	7.79	1.71	
B-8	S-2	85	0.5	304	67	7.15	1.58	
B-8	S-3	94	0.5	326	70	6.94	1.49	
B-8	S-4	87	0.5	272	68	6.25	1.56	
B-8	S-5	101	0.5	287	69	5.68	1.37	
B-8	S-6	117	0.5	269	60	4.60	1.03	
B-8	S-6	116	0.5	325	78	5.60	1.34	
B-8	S-7	112	0.5	293	61	5.23	1.09	
B-8	S-8	143	0.5	325	79	4.55	1.10	
B-9	S-1	139	0.5	325	68	4.68	0.98	
B-9	S-2	96	0.5	298	73	6.21	1.52	
B-9	S-3	85	0.5	324	79	7.62	1.86	
B-9	S-4	132	0.5	325	89	4.92	1.35	
B-9	S-5	129	0.5	292	76	4.53	1.18	
B-9	S-6	127	0.5	301	68	4.74	1.07	
B-9	S-7	169	0.5	318	74	3.76	0.88	
B-9	S-8	129	0.5	304	65	4.71	1.01	

**TA E 2**  
**RADIOLOGICAL DATA**  
**SOIL BORING SAMPLES**

Boring ID	Sample No.	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-10	S-1	90	0.5	293	77	6.51	1.71	
B-10	S-2	108	0.5	315	84	5.83	1.56	
B-10	S-3	116	0.5	294	77	5.07	1.33	
B-10	S-4	80	0.5	308	77	7.70	1.93	
B-10	S-5	92	0.5	345	82	7.50	1.78	
B-10	S-6	116	0.5	281	57	4.84	0.98	
B-10	S-7	126	0.5	277	68	4.40	1.08	
B-11	S-1	94	0.5	287	67	6.11	1.43	
B-11	S-2	111	0.5	272	72	4.90	1.30	
B-11	S-3	116	0.5	281	65	4.84	1.12	
B-11	S-4	88	0.5	294	57	6.68	1.30	
B-11	S-5	143	0.5	304	70	4.25	0.98	
B-11	S-6	114	0.5	313	69	5.49	1.21	
B-11	S-7	137	0.5	338	79	4.93	1.15	
B-11	S-8	150	0.5	305	65	4.07	0.87	
B-12	S-1	104	0.5	292	70	5.62	1.35	
B-12	S-2	121	0.5	296	60	4.89	0.99	
B-12	S-3	102	0.5	296	81	5.80	1.59	
B-12	S-4	113	0.5	307	66	5.43	1.17	
B-12	S-5	151	0.5	309	86	4.09	1.14	
B-12	S-6	144	0.5	305	67	4.24	0.93	
B-12	S-7	164	0.5	300	74	3.66	0.90	
B-13	S-1	80	--	--	--	--	--	B029
B-13	S-2	128	0.5	329	77	5.14	1.20	
B-13	S-3	99	0.5	288	71	5.82	1.43	
B-13	S-4	108	0.5	325	88	6.02	1.63	
B-13	S-5	133	0.5	315	64	4.74	0.96	

**TABLE 2**  
**RADIOLOGICAL DATA**  
**SOIL BORING SAMPLES**

Boring ID	Sample No.	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-14	S-1	78	--	--	--	--	--	B030
B-14	S-2	108	0.5	316	82	5.85	1.52	
B-14	S-3	140	0.5	295	70	4.21	1.00	
B-14	S-4	140	0.5	317	69	4.53	0.99	
B-14	S-5	128	0.5	317	80	4.95	1.25	
B-15	S-1	103	--	--	--	--	--	B031 B032
B-15	S-2	102	--	--	--	--	--	
B-15	S-3	108	0.5	301	72	5.57	1.33	
B-15	S-4	151	0.5	348	86	4.61	1.14	
B-16	S-1	163	0.5	287	71	3.52	0.87	B033
B-16	S-2	116	0.5	291	77	5.02	1.33	
B-16	S-3	85	0.5	310	85	7.29	2.00	
B-16	S-4	139	0.5	297	72	4.27	1.04	
B-16	S-5	108	0.5	276	63	5.11	1.17	
B-17	S-1	154	0.5	308	84	4.00	1.09	B034
B-17	S-2	103	--	--	--	--	--	
B-17	S-3	116	0.5	305	71	5.26	1.22	
B-17	S-4	137	0.5	310	83	4.53	1.21	
B-17	S-5	144	0.5	307	73	4.26	1.01	
B-18	S-1	112	0.5	315	82	5.63	1.46	B035
B-18	S-2	70	--	--	--	--	--	
B-18	S-3	169	--	--	--	--	--	
B-18	S-4	120	0.5	311	70	5.18	1.17	
B-19	S-1	128	0.5	334	81	5.22	1.27	B036
B-19	S-2	91	--	--	--	--	--	
B-19	S-3	133	0.5	320	83	4.81	1.25	
B-19	S-4	127	0.5	331	105	5.21	1.65	
B-19	S-5	114	0.5	295	82	5.18	1.44	

TA. E 2  
RADIOLOGICAL DATA  
SOIL BORING SAMPLES

Boring ID	Sample No.	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-20	S-1	132	0.5	316	76	4.79	1.15	B037
B-20	S-2	114	--	--	--	--	--	
B-20	S-3	137	0.5	305	62	4.45	0.91	
B-20	S-4	137	0.5	319	78	4.66	1.14	
B-21	S-1	119	--	--	--	--	--	B038
B-21	S-2	129	0.5	288	79	4.47	1.22	
B-21	S-3	128	0.5	313	77	4.89	1.20	
B-21	S-4	162	0.5	327	85	4.04	1.05	
B-22	S-1	135	--	--	--	--	--	B039
B-22	S-2	110	0.5	271	69	4.93	1.25	
B-22	S-3	110	0.5	319	77	5.80	1.40	
B-22	S-4	156	0.5	305	95	3.91	1.22	
B-23	S-1	151	--	--	--	--	--	B040
B-23	S-2	124	0.5	341	82	5.50	1.32	
B-23	S-3	120	0.5	297	68	4.95	1.13	
B-24	S-1	135	0.5	309	72	4.58	1.07	
B-24	S-2	109	0.5	293	63	5.38	1.16	
B-24	S-3	136	0.5	329	67	4.84	0.99	
B-24	S-4	151	0.5	301	71	3.99	0.94	
B-25	S-1	115	--	--	--	--	--	B041
B-25	S-2	125	0.5	318	54	5.09	0.86	
B-25	S-3	128	0.5	280	61	4.38	0.95	
B-25	S-4	115	0.5	294	66	5.11	1.15	
B-26	S-1	102	--	--	--	--	--	B042
B-26	S-2	108	0.5	290	73	5.37	1.35	
B-26	S-3	110	0.5	287	64	5.22	1.16	
B-26	S-4	131	0.5	333	84	5.08	1.28	
B-27	S-1	139	0.5	327	73	4.71	1.05	B043
B-27	S-2	102	--	--	--	--	--	
B-27	S-3	133	0.5	308	74	4.63	1.11	
B-27	S-4	116	0.5	301	71	5.19	1.22	

**TA E 2**  
**RADIOLOGICAL DATA**  
**SOIL BORING SAMPLES**

Boring ID	Sample No.	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-28	S-1	103	0.5	371	99	7.20	1.92	
B-28	S-2	142	0.5	339	69	4.77	0.97	
B-28	S-3	104	0.5	302	57	5.81	1.10	
B-28	S-4	108	0.5	300	83	5.56	1.54	
B-29	S-1	106	0.5	306	77	5.77	1.45	
B-29	S-2	115	0.5	309	59	5.37	1.03	
B-29	S-3	73	0.5	304	85	8.33	2.33	
B-29	S-4	111	0.5	291	69	5.24	1.24	
B-29	S-5	129	0.5	280	62	4.34	0.96	
B-30	S-1	100	--	--	--	--	--	B044
B-30	S-2	122	0.5	315	83	5.16	1.36	
B-30	S-3	108	0.5	282	78	5.22	1.44	
B-30	S-4	133	0.5	297	65	4.47	0.98	
B-30	S-5	134	0.5	352	69	5.25	1.03	
B-31	S-1	115	0.5	327	77	5.69	1.34	
B-31	S-2	73	0.5	301	52	8.25	1.42	
B-31	S-3	122	0.5	278	55	4.56	0.90	
B-31	S-4	117	0.5	300	66	5.13	1.13	
B-31	S-5	85	0.5	304	69	7.15	1.62	
B-32	S-1	116	0.5	318	76	5.48	1.31	
B-32	S-2	164	0.5	285	79	3.48	0.96	
B-32	S-3	124	0.5	308	77	4.97	1.24	
B-33	S-1	169	0.5	329	89	3.89	1.05	B045
B-33	S-2	116	0.5	281	69	4.84	1.19	
B-33	S-3	129	0.5	332	78	5.15	1.21	
B-33	S-4	126	0.5	294	74	4.67	1.17	
B-34	S-1	124	--	--	--	--	--	
B-34	S-2	103	0.5	304	62	5.90	1.20	
B-34	S-3	133	0.5	315	68	4.74	1.02	



TA E 2  
RADIOLOGICAL DATA  
SOIL BORING SAMPLES

Boring ID	Sample No.	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-35	S-1	145	0.5	312	82	4.30	1.13	
B-35	S-2	94	0.5	327	83	6.96	1.77	
B-35	S-3	83	0.5	309	71	7.45	1.71	
B-36	S-1	147	0.5	306	66	4.16	0.90	
B-36	S-2	78	0.5	303	75	7.77	1.92	
B-36	S-3	124	0.5	309	72	4.98	1.16	
B-37	S-1	91	0.5	279	66	6.13	1.45	
B-37	S-2	88	0.5	298	83	6.77	1.89	
B-37	S-3	177	0.5	268	59	3.03	0.67	
B-38	S-1	124	0.5	281	61	4.53	0.98	
B-38	S-2	117	0.5	314	79	5.37	1.35	
B-38	S-3	114	0.5	302	80	5.30	1.40	
B-39	S-1	105	0.5	263	58	5.01	1.10	B046
B-39	S-2	85	0.5	343	87	8.07	2.05	
B-39	S-3	76	0.5	315	78	8.29	2.05	
B-39	S-4	110	0.5	358	96	6.51	1.75	
B-39	S-5	106	--	--	--	--	--	
B-40	S-1	162	0.5	300	74	3.70	0.91	B047
B-40	S-2	135	0.5	323	77	4.79	1.14	
B-40	S-3	127	0.5	340	74	5.35	1.17	
B-40	S-4	85	--	--	--	--	--	
B-41	S-1	144	0.5	295	75	4.10	1.04	
B-41	S-2	99	0.5	364	101	7.35	2.04	
B-41	S-3	137	0.5	327	90	4.77	1.31	
B-41	S-4	88	0.5	295	83	6.70	1.89	
B-42	S-1	147	0.5	321	75	4.37	1.02	
B-42	S-2	121	0.5	302	59	4.99	0.98	
B-42	S-3	167	0.5	305	76	3.65	0.91	
B-42	S-4	164	0.5	344	77	4.20	0.94	

TA E 2  
RADIOLOGICAL DATA  
SOIL BORING SAMPLES

Boring ID	Sample No.	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-43	S-1	157	0.5	336	80	4.28	1.02	B048
B-43	S-3	103	0.5	305	72	5.92	1.40	
B-43	S-5	144	0.5	300	69	4.17	0.96	
B-44	S-1	150	0.5	316	67	4.21	0.89	
B-44	S-2	102	0.5	332	75	6.51	1.47	
B-44	S-3	112	0.5	329	79	5.88	1.41	
B-44	S-4	136	0.5	285	80	4.19	1.18	
MW-5A	S-1	91	--	--	--	--	--	B060
MW-5A	S-2	172	0.5	299	66	3.48	0.77	
MW-5A	S-3	116	0.5	296	73	5.10	1.26	
MW-5A	S-4	121	--	--	--	--	--	B061
MW-6A	S-1	125	--	--	--	--	--	B062
MW-6A	S-2	158	0.5	330	68	4.18	0.86	
MW-6A	S-3	144	0.5	300	75	4.17	1.04	
MW-7A	S-1	113	0.5	295	74	5.22	1.31	
MW-7A	S-3	128	0.5	323	82	5.05	1.28	
MW-7A	S-4	152	0.5	315	81	4.14	1.07	
MW-8A	S-1	142	0.5	323	64	4.55	0.90	B063
MW-8A	S-2	127	--	--	--	--	--	
MW-8A	S-3	137	0.5	338	82	4.93	1.20	
MW-8A	S-4	155	0.5	317	76	4.09	0.98	
MW-9A	S-1	112	--	--	--	--	--	B064
MW-9A	S-2	98	0.5	311	73	6.35	1.49	
MW-9A	S-3	143	0.5	315	66	4.41	0.92	
MW-10A	S-1	152	--	--	--	--	--	B059
MW-10A	S-2	140	0.5	345	88	4.93	1.26	
MW-10A	S-3	143	0.5	329	93	4.60	1.30	
MW-10A	S-4	177	0.5	315	59	3.56	0.67	
MW-10A	S-6	162	0.5	289	67	3.57	0.83	

TA 3  
**RADIOLOGICAL DATA**  
**FORMER ZIRCALOY BURN AREA**  
**SURFACE/SHALLOW SUBSURFACE SOIL SAMPLES**

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
B-1	0-6	267	--	--	--	--	--	B065
B-1	6-12	239	0.5	322	69	2.69	0.58	
B-2	0-6	241	--	--	--	--	--	B066
B-2	6-12	192	0.5	335	92	3.49	0.96	
B-3	0-6	211	--	--	--	--	--	B067
B-3	6-12	225	0.5	333	74	2.96	0.66	
B-4	0-6	165	0.5	322	70	3.90	0.85	
B-4	6-12	185	0.5	302	75	3.26	0.81	
B-5	0-6	192	0.5	308	57	3.21	0.59	
B-5	6-12	174	0.5	328	78	3.77	0.90	
B-6	0-6	235	0.5	311	78	2.65	0.66	
B-6	6-12	199	0.5	312	84	3.14	0.84	
B-7	0-6	227	0.5	321	89	2.83	0.78	
B-7	6-12	225	0.5	357	71	3.17	0.63	
B-8	0-6	209	0.5	332	83	3.18	0.79	
B-8	6-12	248	0.5	338	74	2.73	0.60	
B-9	0-6	231	0.5	346	89	3.00	0.77	
B-9	6-12	237	0.5	319	81	2.69	0.68	
C-1	0-6	228	0.5	348	83	3.05	0.73	
C-1	6-12	270	0.5	354	78	2.62	0.58	
C-2	0-6	227	0.5	310	82	2.73	0.72	
C-2	6-12	211	0.5	307	74	2.91	0.70	
C-3	0-6	208	0.5	337	77	3.24	0.74	
C-3	6-12	281	0.5	297	77	2.11	0.55	
C-4	0-6	165	0.5	325	73	3.94	0.88	
C-4	6-12	226	0.5	350	79	3.10	0.70	
C-5	0-6	214	0.5	337	84	3.15	0.79	
C-5	6-12	165	0.5	327	89	3.96	1.08	
C-6	0-6	99	0.5	292	59	5.90	1.19	
C-6	6-12	241	0.5	361	81	3.00	0.67	
C-7	0-6	190	0.5	332	73	3.49	0.77	
C-7	6-12	231	0.5	331	81	2.87	0.70	
C-8	0-6	215	0.5	314	84	2.92	0.78	
C-8	6-12	210	0.5	320	76	3.05	0.72	
C-9	0-6	198	0.5	322	83	3.25	0.84	
C-9	6-12	192	0.5	330	80	3.44	0.83	

TA 3  
**RADIOLOGICAL DATA**  
**FORMER ZIRCALLOY BURN AREA**  
**SURFACE/SHALLOW SUBSURFACE SOIL SAMPLES**

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
D-1	0-6	112	0.5	312	76	5.57	1.36	B068
D-1	6-12	218	0.5	327	75	3.00	0.69	
D-2	0-6	185	0.5	321	77	3.47	0.83	
D-2	6-12	213	0.5	332	83	3.12	0.78	
D-3	0-6	203	--	--	--	--	--	
D-3	6-12	201	0.5	288	77	2.87	0.77	
D-4	0-6	181	0.5	319	62	3.52	0.69	
D-4	6-12	234	0.5	349	81	2.98	0.69	
D-5	0-6	214	0.5	368	77	3.44	0.72	
D-5	6-12	236	0.5	368	100	3.12	0.85	
D-6	0-6	167	0.5	328	76	3.93	0.91	
D-6	6-12	244	0.5	325	68	2.66	0.56	
D-7	0-6	180	0.5	336	75	3.73	0.83	
D-7	6-12	205	0.5	320	67	3.12	0.65	
D-8	0-6	132	--	--	--	--	--	B069
D-8	6-12	228	0.5	355	91	3.11	0.80	
D-9	0-6	173	0.5	329	96	3.80	1.11	
D-9	6-12	273	0.5	313	82	2.29	0.60	
E-1	0-6	141	--	--	--	--	--	B070
E-1	6-12	200	0.5	318	69	3.18	0.69	B071
E-2	0-6	120	--	--	--	--	--	
E-2	6-12	180	0.5	309	70	3.43	0.78	B072
E-3	0-6	163	--	--	--	--	--	
E-3	6-12	212	0.5	324	68	3.06	0.64	B073
E-4	0-6	171	0.5	322	79	3.77	0.92	
E-4	6-12	247	0.5	328	79	2.66	0.64	B074
E-5	0-6	170	--	--	--	--	--	
E-5	6-12	212	--	--	--	--	--	B073
E-6	0-6	206	0.5	354	92	3.44	0.89	
E-6	6-12	255	0.5	311	72	2.44	0.56	B074
E-7	0-6	205	0.5	339	93	3.31	0.91	
E-7	6-12	244	0.5	387	117	3.17	0.96	B073
E-8	0-6	210	0.5	311	86	2.96	0.82	
E-8	6-12	221	0.5	495	206	4.48	1.86	B074
E-9	0-6	201	0.5	349	117	3.47	1.16	
E-9	6-12	239	0.5	360	112	3.01	0.94	

TABLE 3  
RADIOLOGICAL DATA  
FORMER ZIRCALOY BURN AREA  
SURFACE/SHALLOW SUBSURFACE SOIL SAMPLES

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
F-1	0-6	151	--	--	--	--	--	B075
F-1	6-12	175	0.5	286	65	3.27	0.74	
F-2	0-6	193	0.5	313	77	3.24	0.80	
F-2	6-12	254	0.5	366	84	2.88	0.66	
F-3	0-6	97	0.5	296	76	6.10	1.57	B076
F-3	6-12	97	--	--	--	--	--	
F-4	0-6	219	0.5	326	71	2.98	0.65	
F-4	6-12	231	0.5	325	84	2.81	0.73	
F-5	0-6	180	0.5	327	89	3.63	0.99	
F-5	6-12	244	0.5	362	99	2.97	0.81	
F-6	0-6	237	0.5	368	99	3.11	0.84	
F-6	6-12	190	0.5	353	91	3.72	0.96	
F-7	0-6	210	0.5	364	90	3.47	0.86	B077
F-7	6-12	246	0.5	362	95	2.94	0.77	
F-8	0-6	138	--	--	--	--	--	
F-8	6-12	231	0.5	366	106	3.17	0.92	
F-9	0-6	166	0.5	369	99	4.45	1.19	
F-9	6-12	192	0.5	361	100	3.76	1.04	
G-1	0-6	111	--	--	--	--	--	B078
G-1	6-12	119	0.5	294	79	4.94	1.33	
G-2	0-6	269	0.5	355	71	2.64	0.53	
G-2	6-12	265	0.5	331	73	2.50	0.55	
G-3	0-6	150	0.5	317	81	4.23	1.08	
G-3	6-12	198	0.5	340	83	3.43	0.84	
G-4	0-6	191	0.5	316	80	3.31	0.84	
G-4	6-12	265	0.5	331	81	2.50	0.61	
G-5	0-6	201	0.5	339	77	3.37	0.77	
G-5	6-12	194	0.5	314	58	3.24	0.60	
G-6	0-6	98	0.5	334	83	6.82	1.69	
G-6	6-12	142	0.5	282	73	3.97	1.03	
G-7	0-6	232	0.5	322	91	2.78	0.78	
G-7	6-12	235	0.5	329	91	2.80	0.77	
G-8	0-6	253	0.5	6059	4798	47.90	37.93	
G-8	6-12	281	0.5	443	161	3.15	1.15	
G-9	0-6	202	0.5	401	123	3.97	1.22	
G-9	6-12	192	0.5	351	123	3.66	1.28	

TA E 3  
**RADIOLOGICAL DATA**  
**FORMER ZIRCALOY BURN AREA**  
**SURFACE/SHALLOW SUBSURFACE SOIL SAMPLES**

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
H-1	0-6	195	0.5	310	81	3.18	0.83	B079
H-1	6-12	246	0.5	313	81	2.54	0.66	
H-2	0-6	238	0.5	351	92	2.95	0.77	
H-2	6-12	274	0.5	328	81	2.39	0.59	
H-3	0-6	190	0.5	332	74	3.49	0.78	
H-3	6-12	257	0.5	342	75	2.66	0.58	
H-4	0-6	208	0.5	322	81	3.10	0.78	
H-4	6-12	272	0.5	352	70	2.59	0.51	
H-5	0-6	198	0.5	345	92	3.48	0.93	
H-5	6-12	178	0.5	301	85	3.38	0.96	
H-6	0-6	276	0.5	345	88	2.50	0.64	
H-6	6-12	254	0.5	319	76	2.51	0.60	
H-7	0-6	154	--	--	--	--	--	
H-7	6-12	237	0.5	311	94	2.62	0.79	
H-8	0-6	187	0.5	357	88	3.82	0.94	
H-8	6-12	256	0.5	340	109	2.66	0.85	
H-9	0-6	247	0.5	357	88	2.89	0.71	
H-9	6-12	184	0.5	288	80	3.13	0.87	
I-1	0-6	236	0.5	343	84	2.91	0.71	
I-1	6-12	288	0.5	319	84	2.22	0.58	
I-2	0-6	187	0.5	345	77	3.69	0.82	
I-2	6-12	242	0.5	299	73	2.47	0.60	
I-3	0-6	180	0.5	313	68	3.48	0.76	
I-3	6-12	189	0.5	328	80	3.47	0.85	
I-4	0-6	254	0.5	330	77	2.60	0.61	
I-4	6-12	287	0.5	318	77	2.22	0.54	
I-5	0-6	228	0.5	375	110	3.29	0.96	
I-5	6-12	283	0.5	345	93	2.44	0.66	
I-6	0-6	198	0.5	317	78	3.20	0.79	
I-6	6-12	240	0.5	319	79	2.66	0.66	
I-7	0-6	193	0.5	290	74	3.01	0.77	
I-7	6-12	243	0.5	334	105	2.75	0.86	
I-8	0-6	216	0.5	356	86	3.30	0.80	
I-8	6-12	247	0.5	313	77	2.53	0.62	
I-9	0-6	274	0.5	360	112	2.63	0.82	
I-9	6-12	236	0.5	304	81	2.58	0.69	

TA E 3  
RADIOLOGICAL DATA  
FORMER ZIRCALOY BURN AREA  
SURFACE/SHALLOW SUBSURFACE SOIL SAMPLES

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
J-1	0-6	227	0.5	356	85	3.14	0.75	
J-1	6-12	258	0.5	363	82	2.81	0.64	
J-2	0-6	229	0.5	369	98	3.22	0.86	
J-2	6-12	265	0.5	321	89	2.42	0.67	
J-3	0-6	175	0.5	305	66	3.49	0.75	
J-3	6-12	255	0.5	356	91	2.79	0.71	
J-4	0-6	235	0.5	313	79	2.66	0.67	
J-4	6-12	262	0.5	332	80	2.53	0.61	
J-5	0-6	158	0.5	305	93	3.86	1.18	
J-5	6-12	167	0.5	311	79	3.72	0.95	
J-6	0-6	238	0.5	363	95	3.05	0.80	
J-6	6-12	253	0.5	344	92	2.72	0.73	
J-7	0-6	226	0.5	342	80	3.03	0.71	
J-7	6-12	195	0.5	337	96	3.46	0.98	
J-8	0-6	375	0.5	389	111	2.07	0.59	
J-8	6-12	245	0.5	374	73	3.05	0.60	
J-9	0-6	194	0.5	340	95	3.51	0.98	
J-9	6-12	228	0.5	420	148	3.68	1.30	
K-1	0-6	235	0.5	322	85	2.74	0.72	
K-1	6-12	284	0.5	331	80	2.33	0.56	
K-2	0-6	200	0.5	333	80	3.33	0.80	
K-2	6-12	326	0.5	334	82	2.05	0.50	
K-3	0-6	284	0.5	328	82	2.31	0.58	
K-3	6-12	295	0.5	304	68	2.06	0.46	
K-4	0-6	251	0.5	356	88	2.84	0.70	
K-4	6-12	325	0.5	356	84	2.19	0.52	
K-5	0-6	209	0.5	328	79	3.14	0.76	
K-5	6-12	220	0.5	321	85	2.92	0.77	
K-6	0-6	226	0.5	312	71	2.76	0.63	
K-6	6-12	297	0.5	344	80	2.32	0.54	
K-7	0-6	163	0.5	323	85	3.96	1.04	
K-7	6-12	135	0.5	287	66	4.25	0.98	
K-8	0-6	278	0.5	378	81	2.72	0.58	
K-8	6-12	255	0.5	345	83	2.71	0.65	
K-9	0-6	165	0.5	345	94	4.18	1.14	
K-9	6-12	233	0.5	302	79	2.59	0.68	

TA E 3  
**RADIOLOGICAL DATA**  
**FORMER ZIRCALOY BURN AREA**  
**SURFACE/SHALLOW SUBSURFACE SOIL SAMPLES**

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
L-1	0-6	205	0.5	313	74	3.05	0.72	
L-1	6-12	262	0.5	348	103	2.66	0.79	
L-2	0-6	241	0.5	304	78	2.52	0.65	
L-2	6-12	250	0.5	309	76	2.47	0.61	
L-3	0-6	269	0.5	334	88	2.48	0.65	
L-3	6-12	328	0.5	372	88	2.27	0.54	
L-4	0-6	199	0.5	339	74	3.41	0.74	
L-4	6-12	289	0.5	366	85	2.53	0.59	
L-5	0-6	231	0.5	316	75	2.74	0.65	
L-5	6-12	236	0.5	324	80	2.75	0.68	
L-6	0-6	156	0.5	285	60	3.65	0.77	
L-6	6-12	221	0.5	340	75	3.08	0.68	
L-7	0-6	147	0.5	342	102	4.65	1.39	
L-7	6-12	270	0.5	387	94	2.87	0.70	
L-8	0-6	180	0.5	353	97	3.92	1.08	
L-8	6-12	186	0.5	317	81	3.41	0.87	
L-9	0-6	197	0.5	287	70	2.91	0.71	
L-9	6-12	168	0.5	321	74	3.82	0.88	
M-1	0-6	221	0.5	376	82	3.40	0.74	
M-1	6-12	226	0.5	329	78	2.91	0.69	
M-2	0-6	241	0.5	329	87	2.73	0.72	
M-2	6-12	277	0.5	324	83	2.34	0.60	
M-3	0-6	263	0.5	337	87	2.56	0.66	
M-3	6-12	268	0.5	343	79	2.56	0.59	
M-4	0-6	194	0.5	337	84	3.47	0.87	
M-4	6-12	245	0.5	297	77	2.42	0.63	
M-5	0-6	159	0.5	270	82	3.40	1.03	
M-5	6-12	183	0.5	328	83	3.58	0.91	
M-6	0-6	246	0.5	362	87	2.94	0.71	
M-6	6-12	309	0.5	359	108	2.32	0.70	
M-7	0-6	236	0.5	340	77	2.88	0.65	
M-7	6-12	226	0.5	329	84	2.91	0.74	
M-8	0-6	151	0.5	319	78	4.23	1.03	
M-8	6-12	140	0.5	341	89	4.87	1.27	
M-9	0-6	132	0.5	325	85	4.92	1.29	
M-9	6-12	176	0.5	289	60	3.28	0.68	



TA E 3  
**RADIOLOGICAL DATA**  
**FORMER ZIRCALOY BURN AREA**  
**SURFACE/SHALLOW SUBSURFACE SOIL SAMPLES**

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
N-1	0-6	95	0.5	322	81	6.78	1.71	
N-1	6-12	140	0.5	304	70	4.34	1.00	
N-2	0-6	115	0.5	310	76	5.39	1.32	
N-2	6-12	182	0.5	318	79	3.49	0.87	
N-3	0-6	129	0.5	297	64	4.60	0.99	
N-3	6-12	191	0.5	351	81	3.68	0.85	
N-4	0-6	100	0.5	294	53	5.88	1.06	
N-4	6-12	154	0.5	306	75	3.97	0.97	
N-5	0-6	87	0.5	278	71	6.39	1.63	
N-5	6-12	119	0.5	297	71	4.99	1.19	
N-6	0-6	95	0.5	299	61	6.29	1.28	
N-6	6-12	167	0.5	306	82	3.66	0.98	
N-7	0-6	106	0.5	311	70	5.87	1.32	
N-7	6-12	148	0.5	282	75	3.81	1.01	
N-8	0-6	158	0.5	348	91	4.41	1.15	
N-8	6-12	129	0.5	330	80	5.12	1.24	
N-9	0-6	187	0.5	319	76	3.41	0.81	
N-9	6-12	168	0.5	357	82	4.25	0.98	

**TA E 4**  
**RADIOLOGICAL DATA**  
**"SAND MOUND" SURFACE SOIL SAMPLES**

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
Y-1	0-6	190	--	--	--	--	--	B080
Y-1	6-12	116	--	--	--	--	--	B081
Y-2	0-6	159	0.5	364	87	4.58	1.09	
Y-2	6-12	106	0.5	300	65	5.66	1.23	
Y-3	0-6	131	0.5	371	96	5.66	1.47	
Y-3	6-12	134	0.5	297	72	4.43	1.07	
Y-4	0-6	154	0.5	293	71	3.81	0.92	
Y-4	6-12	90	0.5	304	79	6.76	1.76	
Y-5	0-6	142	0.5	312	66	4.39	0.93	
Y-5	6-12	117	0.5	348	97	5.95	1.66	
Y-6	0-6	159	0.5	306	69	3.85	0.87	
Y-6	6-12	156	0.5	306	80	3.92	1.03	
Y-7	0-6	141	0.5	327	76	4.64	1.08	
Y-7	6-12	95	0.5	298	71	6.27	1.49	
Y-8	0-6	145	0.5	364	89	5.02	1.23	
Y-8	6-12	149	0.5	310	82	4.16	1.10	
Y-9	0-6	95	0.5	311	65	6.55	1.37	
Y-9	6-12	129	0.5	302	75	4.68	1.16	
Y-10	0-6	65	0.5	308	68	9.48	2.09	
Y-10	6-12	116	0.5	317	72	5.47	1.24	
Y-11	0-6	139	0.5	277	69	3.99	0.99	
Y-11	6-12	108	0.5	320	54	5.93	1.00	
Z-1	0-6	103	0.5	430	100	8.35	1.94	
Z-1	6-12	95	0.5	317	83	6.67	1.75	
Z-2	0-6	111	0.5	393	91	7.08	1.64	
Z-2	6-12	101	0.5	299	76	5.92	1.50	
Z-3	0-6	144	--	--	--	--	--	B082
Z-3	6-12	99	0.5	356	78	7.19	1.58	
Z-4	0-6	165	0.5	360	96	4.36	1.16	
Z-4	6-12	106	0.5	332	75	6.26	1.42	

**TA E 4**  
**RADIOLOGICAL DATA**  
**"SAND MOUND" SURFACE SOIL SAMPLES**

Sample Grid ID	Sample Depth (in. BGS)	Weight (grams)	GR-256 Count Duration (Min.)	Raw Counts		Normalized CPM per Gram		Sample ID No.
				GR-256 Total Spectrum	GR-256 Uranium Peak	GR-256 Total Spectrum	GR-256 Uranium Peak	
Z-5	0-6	192	--	--	--	--	--	B083
Z-5	6-12	157	0.5	321	62	4.09	0.79	
Z-6	0-6	134	0.5	343	89	5.12	1.33	
Z-6	6-12	132	0.5	326	75	4.94	1.14	
Z-7	0-6	105	0.5	283	71	5.39	1.35	
Z-7	6-12	160	0.5	327	78	4.09	0.98	
Z-8	0-6	103	0.5	325	64	6.31	1.24	
Z-8	6-12	100	0.5	472	126	9.44	2.52	
Z-9	0-6	115	0.5	296	77	5.15	1.34	
Z-9	6-12	120	0.5	327	71	5.45	1.18	
Z-10	0-6	161	0.5	313	82	3.89	1.02	
Z-10	6-12	146	0.5	317	78	4.34	1.07	
Z-11	0-6	134	0.5	307	75	4.58	1.12	
Z-11	6-12	132	0.5	333	79	5.05	1.20	

**TABLE 5**

**GROUNDWATER/SURFACE WATER ELEVATIONS  
WESTINGHOUSE ELECTRIC CORPORATION  
BLAIRSVILLE, PENNSYLVANIA**

<b>MONITORING POINT</b>	<b>REFERENCE ELEVATION</b>	<b>GROUNDWATER LEVEL DEPTH (FT.)/ELEV. (FT. MSL.) NOVEMBER 10, 1994</b>
MW-2	988.42	7.27/981.15
MW-3	1003.08	8.84/994.24
MW-6A	1006.58	11.75/994.83
MW-7A	994.40	10.22/984.18
MW-8A	1003.89	13.51/990.38
MW-9A	980.82	19.24/961.58
MW-10A	1017.03	19.32/997.71
Pond	1000.49	2.90/997.59

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/17/94 B-1, S-2	10/17/94 B-1, S-5	10/17/94 B-2, S-2	10/17/94 B-2, S-4	10/17/94 B-3, S-3	10/17/94 B-3, S-5	10/18/94 B-4, S-3	10/18/94 B-5, S-4
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
<b>Miscellaneous Parameters:</b>										
Cyanide (ASTM)	mg/l	1000 mg/kg	NA	NA	0.005 U	0.005 U	NA	NA	NA	NA
Fluoride	mg/kg		110	89	NA	NA	160	110	130	120
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N		3.1	0.1 U	NA	NA	0.1 U	0.1 U	0.1 U	0.1 U
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N		0.1 U	0.1 U	NA	NA	0.1 U	0.1 U	0.1 U	0.1 U
pH	pH units		6.22	6.16	NA	NA	5.19	5.5	4.97	4.63
Total Petroleum Hydrocarbons	mg/kg	-- / 500	10 U	10 U	NA	NA	10 U	10 U	10 U	10 U
Total Organic Carbon (ASTM)	mg/l		7.5	2.3	NA	NA	1.2	1.8	3	2.3
<b>Inorganics:</b>										
Silver (Total)	mg/kg		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Aluminum (Total)	mg/kg		11000	13000	17000	7700	11000	7500	15000	6600
Arsenic (Total)	mg/kg	20	3.8	1	2.3	1.6	0.46	1.6	1.8	1.3
Barium (Total)	mg/kg	5000	86	110	77	91	110	95	85	37
Beryllium (Total)	mg/kg		0.84	1.1	0.78	0.44	0.95	0.63	1	0.49
Calcium (Total)	mg/kg		2900	1300	1200	580	520	500	600	300
Cadmium (Total)	mg/kg	20	2.7	5.2	2 U	2.8	2 U	2 U	6.1	2.8
Cobalt (Total)	mg/kg		16	15	14	5.3	10	9.5	8.7	3.2
Chromium (Total)	mg/kg	1000	19	20	20	21	17	14	22	13
Copper (Total)	mg/kg	700	9.5	14	13	10	14	14	17	10
Iron (Total)	mg/kg		17000	35000	11000	15000	10000	8300	65000	18000
Mercury (Total)	mg/kg	20	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.14	0.1 U
Potassium (Total)	mg/kg		950	1800	2200	1100	1200	800	1900	660
Magnesium (Total)	mg/kg		1700	1600	1800	980	1600	1200	1500	590
Manganese (Total)	mg/kg		2700	570	330	320	120	150	1500	54
Sodium (Total)	mg/kg		200	200	200 U	200 U	200 U	200 U	200 U	200 U
Nickel (Total)	mg/kg	200	24	23	17	15	20	14	17	10 U
Lead (Total)	mg/kg		20 U	21	20	20 U	20 U	20 U	25	20 U
Chromium (Total)	mg/kg		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Selenium (Total)	mg/kg	60	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2
Ithallium (Total)	mg/kg		0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium (Total)	mg/kg		26	33	31	18	24	20	37	20
Zinc (Total)	mg/kg	1000	46	75	44	36	59	42	57	29
<b>Pesticides/Herbicides/PCBs:</b>										
Aldrin	mg/kg	0.3 / 500	NA	NA	0.05 U	0.05 U	NA	NA	NA	NA
Aroclor-1016	mg/kg		NA	NA	1 U	1 U	NA	NA	NA	NA
Aroclor-1221	mg/kg		NA	NA	1 U	1 U	NA	NA	NA	NA
Aroclor-1232	mg/kg		NA	NA	1 U	1 U	NA	NA	NA	NA
Aroclor-1242	mg/kg		NA	NA	1 U	1 U	NA	NA	NA	NA
Aroclor-1248	mg/kg		NA	NA	1 U	1 U	NA	NA	NA	NA
Aroclor-1254	mg/kg		NA	NA	1 U	1 U	NA	NA	NA	NA
Aroclor-1260	mg/kg		NA	NA	1 U	1 U	NA	NA	NA	NA
alpha-BHC	mg/kg		NA	NA	0.05 U	0.05 U	NA	NA	NA	NA
beta-BHC	mg/kg		NA	NA	0.05 U	0.05 U	NA	NA	NA	NA
delta-BHC	mg/kg		NA	NA	0.05 U	0.05 U	NA	NA	NA	NA
gamma-BHC (Lindane)	mg/kg	3 / 10	NA	NA	0.05 U	0.05 U	NA	NA	NA	NA
alpha-Chlordane	mg/kg	3 / 500	NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
gamma-Chlordane	mg/kg	3 / 500	NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
2,4-D	mg/kg	700 / 2	NA	NA	0.2 U	0.2 U	NA	NA	NA	NA
4,4'-DDD	mg/kg	20 / 500	NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
4,4'-DDE	mg/kg	10 / 500	NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
4,4'-DDT	mg/kg	10 / 500	NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
Dieldrin	mg/kg	0.3 / 90	NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
Endrin Ketone	mg/kg		NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
Endosulfan I (Alpha)	mg/kg		NA	NA	0.05 U	0.05 U	NA	NA	NA	NA
Endosulfan II (Beta)	mg/kg		NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
Endrin	mg/kg	20 / 500	NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
Endrin Aldehyde	mg/kg		NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
Endosulfan Sulfate	mg/kg		NA	NA	0.1 U	0.1 U	NA	NA	NA	NA
Heptachlor	mg/kg	1 / 400	NA	NA	0.05 U	0.05 U	NA	NA	NA	NA
Heptachlor Epoxide	mg/kg		NA	NA	0.05 U	0.05 U	NA	NA	NA	NA
Methoxychlor	mg/kg	300 / 200	NA	NA	0.5 U	0.5 U	NA	NA	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/17/94 B-1, S-2	10/17/94 B-1, S-5	10/17/94 B-2, S-2	10/17/94 B-2, S-4	10/17/94 B-3, S-3	10/17/94 B-3, S-5	10/18/94 B-4, S-3	10/18/94 B-5, S-4
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Aroclor Source			NA	NA	---	---	NA	NA	NA	NA
Polychlorinated Biphenyls	mg/kg	5 / --	NA	NA	1 U	1 U	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	600 / 3	NA	NA	0.08 U	0.08 U	NA	NA	NA	NA
<b>Semivolatile Organics:</b>										
Acenaphthene	ug/kg	4x10 <sup>6</sup> / 30,000	NA	NA	330 U	330 U	NA	NA	NA	NA
Acenaphthylene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Anthracene	ug/kg	2x10 <sup>7</sup> / 70,000	NA	NA	330 U	330 U	NA	NA	NA	NA
Bis(2-chloro-1-methylethyl)eth	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Bis(2-chloroethyl)ether	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Benzo(a)pyrene	ug/kg	600 / 500,000	NA	NA	330 U	330 U	NA	NA	NA	NA
Benzo(a)anthracene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Benzo(b)fluoranthene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Benzo(ghi)perylene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Benzo(k)fluoranthene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
4-Bromophenyl phenyl ether	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Butyl benzyl phthalate	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Carbazole	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Chrysene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2-Chloronaphthalene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2-Chlorophenol	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
o-Cresol	ug/kg	3x10 <sup>6</sup> / 500	NA	NA	330 U	330 U	NA	NA	NA	NA
p-Cresol	ug/kg	300,000 / 400	NA	NA	330 U	330 U	NA	NA	NA	NA
Dibenz(a,h)anthracene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Dibenzofuran	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2-Chlorophenol	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
1,2-Dichlorobenzene	ug/kg	7x10 <sup>6</sup> / 7,000	NA	NA	330 U	330 U	NA	NA	NA	NA
1,3-Dichlorobenzene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
1,4-Dichlorobenzene	ug/kg	100,000 / 7,000	NA	NA	330 U	330 U	NA	NA	NA	NA
3,3'-Dichlorobenzidine	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Diethyl phthalate	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Dimethyl phthalate	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2,4-Dimethylphenol	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Di-n-butyl phthalate	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
4,6-Dinitro-o-cresol	ug/kg		NA	NA	830 U	830 U	NA	NA	NA	NA
2,4-Dinitrotoluene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2,6-Dinitrotoluene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Di-n-octyl phthalate	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2,4-Dinitrophenol	ug/kg		NA	NA	830 U	830 U	NA	NA	NA	NA
Fluoranthene	ug/kg	3x10 <sup>6</sup> / 400,000	NA	NA	330 U	330 U	NA	NA	NA	NA
Fluorene	ug/kg	3x10 <sup>6</sup> / 40,000	NA	NA	330 U	330 U	NA	NA	NA	NA
Hexachlorocyclopentadiene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Hexachlorobenzene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Hexachlorobutadiene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Hexachloroethane	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Isophorone	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2-Methylnaphthalene	ug/kg	1x10 <sup>6</sup> / 20,000	NA	NA	330 U	330 U	NA	NA	NA	NA
N-nitrosodiphenylamine	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
N-nitroso-di-n-propylamine	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
Naphthalene	ug/kg	600,000 / 8,000	NA	NA	330 U	330 U	NA	NA	NA	NA
2-Nitroaniline	ug/kg		NA	NA	830 U	830 U	NA	NA	NA	NA
3-Nitroaniline	ug/kg		NA	NA	830 U	830 U	NA	NA	NA	NA
4-Nitroaniline	ug/kg		NA	NA	830 U	830 U	NA	NA	NA	NA
Nitrobenzene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2-Nitrophenol	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
4-Nitrophenol	ug/kg		NA	NA	830 U	830 U	NA	NA	NA	NA
p-Chloroaniline	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
p-Chloro-m-cresol	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/17/94 B-1, S-2	10/17/94 B-1, S-5	10/17/94 B-2 S-2	10/17/94 B-2 S-4	10/17/94 B-3, S-3	10/17/94 B-3, S-5	10/18/94 B-4 S-3	10/18/94 B-5, S-4
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Pentachlorophenol	ug/kg	40 000/200,000	NA	NA	830 U	830 U	NA	NA	NA	NA
Phenanthrene	ug/kg	200 000/80,000	NA	NA	330 U	330 U	NA	NA	NA	NA
Phenol	ug/kg	4x10 <sup>7</sup> / 200	NA	NA	330 U	330 U	NA	NA	NA	NA
Pyrene	ug/kg	2x10 <sup>6</sup> / 300,000	NA	NA	330 U	330 U	NA	NA	NA	NA
1,2,4-Trichlorobenzene	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/kg		NA	NA	830 U	830 U	NA	NA	NA	NA
2,4,6-Trichlorophenol	ug/kg		NA	NA	330 U	330 U	NA	NA	NA	NA
<b>Volatile Organics:</b>										
Acetone	ug/kg		100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzene	ug/kg	100,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (MEK)	ug/kg	4x10 <sup>7</sup> / 50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/kg	1x10 <sup>6</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	ug/kg	700,000 / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/kg	7x10 <sup>6</sup> / 500	17	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/kg	50,000 / 300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/kg	700,000 / 1,000	13	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/kg		330	23	5 U	62	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	ug/kg	1x10 <sup>6</sup> / 600	21	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
3-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/kg	7x10 <sup>6</sup> / 5,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methylene chloride	ug/kg	600,000 / 200	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Styrene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/kg	700,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	ug/kg	1x10 <sup>7</sup> / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/kg	7x10 <sup>6</sup> / 1,000	18	8	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/kg	300,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/kg	400,000 / 2,000	480	2100	5 U	200	20	5 U	5 U	5 U
Vinyl chloride	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (Total)	ug/kg	1x10 <sup>8</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
<b>Radiological:</b>										
Gross Alpha	pCi/g		22 +/- 0.9	20 +/- 0.9	18 +/- 0.9	0.7 U	0.7 U	0.7 U	11 +/- 0.8	18 +/- 0.9
Gross Beta	pCi/g		1.5 +/- 0.5	0.5 U	0.8 +/- 0.5	0.5 U	0.5 U	0.5 U	0.5 U	1.0 +/- 0.5
Radium (Total)	pCi/g		0.5 U	1.3 +/- 0.6	1.5 +/- 0.4	1.2 +/- 0.5	1.3 +/- 0.6	1.3 +/- 0.5	1.3 +/- 0.4	0.4 +/- 0.2
Uranium-234	pCi/g		0.11 +/- 0.03	0.12 +/- 0.03	0.08 +/- 0.02	0.17 +/- 0.03	0.11 +/- 0.03	0.15 +/- 0.03	0.12 +/- 0.03	0.16 +/- 0.03
Uranium-235	pCi/g		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Uranium-238	pCi/g		0.11 +/- 0.03	0.09 +/- 0.03	0.09 +/- 0.02	0.14 +/- 0.03	0.10 +/- 0.02	0.13 +/- 0.03	0.13 +/- 0.03	0.17 +/- 0.03
Uranium (Total)	ug/g		0.2	0.2	0.3	0.4	0.1	0.4	0.8	0.3

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/19/94 B-6, S-2	10/19/94 B-6, S-4	10/19/94 B-7, S-2	10/19/94 B-8, S-3	10/18/94 B-9, S-2	10/18/94 B-10, S-3	10/19/94 B-11, S-3	10/19/94 B-11, S-3 Dup
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
<b>Miscellaneous Parameters:</b>										
Cyanide (ASTM)	mg/l	1000 mg/kg	NA	NA	NA	0.005 U	NA	NA	0.005 U	0.005 U
Fluoride	mg/kg		120	84	210	NA	150	110	NA	NA
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N		0.17	0.1 U	0.1 U	NA	0.1 U	0.1 U	NA	NA
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N		0.1 U	0.1 U	0.1 U	NA	0.26	0.1 U	NA	NA
pH	pH units		6.08	4.59	4.55	NA	5.19	4.77	NA	NA
Total Petroleum Hydrocarbons	mg/kg	-- / 500	10 U	10 U	10 U	NA	10 U	10 U	NA	NA
Total Organic Carbon (ASTM)	mg/l		2.3	1	1.6	NA	1.3	1.4	NA	NA
<b>Inorganics:</b>										
Silver (Total)	mg/kg		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Aluminum (Total)	mg/kg		15000	8000	5200	9100	17000	6000	6300	5700
Arsenic (Total)	mg/kg	20	2	2.3	1.5	0.83	8.5	1.9	2.9	1.2
Barium (Total)	mg/kg	5000	93	32	37	59	110	27	35	29
Beryllium (Total)	mg/kg		0.88	0.44	0.4 U	0.46	2	0.58	0.54	0.58
Calcium (Total)	mg/kg		990	370	420	480	1200	240	450	400
Cadmium (Total)	mg/kg	20	3.4	2.4	2 U	2 U	9.4	3.3	3.4	3.4
Cobalt (Total)	mg/kg		31	4.8	4.2	4.4	27	3.1	13	7.6
Chromium (Total)	mg/kg	1000	33	13	12	13	31	14	18	13
Copper (Total)	mg/kg	700	15	10	11	13	19	9.8	11	11
Iron (Total)	mg/kg		20000	15000	13000	9300	43000	20000	21000	22000
Mercury (Total)	mg/kg	20	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Potassium (Total)	mg/kg		1800	1200	690	970	1200	820	660	690
Magnesium (Total)	mg/kg		1600	590	490	1100	1300	460	550	460
Manganese (Total)	mg/kg		520	110	110	460	220	48	240	150
Sodium (Total)	mg/kg		330	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Nickel (Total)	mg/kg	200	78	10 U	10 U	12	25	10 U	30	17
Lead (Total)	mg/kg		24	20 U	20 U	20 U	43	20 U	20 U	20 U
Antimony (Total)	mg/kg		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Selenium (Total)	mg/kg	60	0.3	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.38	0.2 U
Thallium (Total)	mg/kg		0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium (Total)	mg/kg		35	19	16	18	74	17	20	19
Zinc (Total)	mg/kg	1000	51	31	24	37	62	31	39	37
<b>Pesticides/Herbicides/PCBs:</b>										
Aldrin	mg/kg	0.3 / 500	NA	NA	NA	0.05 U	NA	NA	0.05 U	0.05 U
Aroclor-1016	mg/kg		NA	NA	NA	1 U	NA	NA	1 U	1 U
Aroclor-1221	mg/kg		NA	NA	NA	1 U	NA	NA	1 U	1 U
Aroclor-1232	mg/kg		NA	NA	NA	1 U	NA	NA	1 U	1 U
Aroclor-1242	mg/kg		NA	NA	NA	1 U	NA	NA	1 U	1 U
Aroclor-1248	mg/kg		NA	NA	NA	1 U	NA	NA	1 U	1 U
Aroclor-1254	mg/kg		NA	NA	NA	1 U	NA	NA	1 U	1 U
Aroclor-1260	mg/kg		NA	NA	NA	1 U	NA	NA	1 U	1 U
alpha-BHC	mg/kg		NA	NA	NA	0.05 U	NA	NA	0.05 U	0.05 U
beta-BHC	mg/kg		NA	NA	NA	0.05 U	NA	NA	0.05 U	0.05 U
delta-BHC	mg/kg		NA	NA	NA	0.05 U	NA	NA	0.05 U	0.05 U
gamma-BHC (Lindane)	mg/kg	3 / 10	NA	NA	NA	0.05 U	NA	NA	0.05 U	0.05 U
alpha-Chlordane	mg/kg	3 / 500	NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
gamma-Chlordane	mg/kg	3 / 500	NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
2,4-D	mg/kg	700 / 2	NA	NA	NA	0.2 U	NA	NA	0.2 U	0.2 U
4,4'-DDD	mg/kg	20 / 500	NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
4,4'-DDE	mg/kg	10 / 500	NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
4,4'-DDT	mg/kg	10 / 500	NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
Dieldrin	mg/kg	0.3 / 90	NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
Endrin Ketone	mg/kg		NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
Endosulfan I (Alpha)	mg/kg		NA	NA	NA	0.05 U	NA	NA	0.05 U	0.05 U
Endosulfan II (Beta)	mg/kg		NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
Endrin	mg/kg	20 / 500	NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
Endrin Aldehyde	mg/kg		NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
Endosulfan Sulfate	mg/kg		NA	NA	NA	0.1 U	NA	NA	0.1 U	0.1 U
Heptachlor	mg/kg	1 / 400	NA	NA	NA	0.05 U	NA	NA	0.05 U	0.05 U
Heptachlor Epoxide	mg/kg		NA	NA	NA	0.05 U	NA	NA	0.05 U	0.05 U
Methoxychlor	mg/kg	300 / 200	NA	NA	NA	0.5 U	NA	NA	0.5 U	0.5 U



**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/19/94 B-6 S-2	10/19/94 B-6 S-4	10/19/94 B-7 S-2	10/19/94 B-8 S-3	10/18/94 B-9 S-2	10/18/94 B-10 S-3	10/19/94 B-11 S-3	10/19/94 B-11 S-3 Dup
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Aroclor Source			NA	NA	NA	---	NA	NA	---	---
Polychlorinated Biphenyls	mg/kg	5 / --	NA	NA	NA	1 U	NA	NA	1 U	1 U
2,4,5-TP (Silvex)	mg/kg	600 / 3	NA	NA	NA	0.08 U	NA	NA	0.08 U	0.08 U
<b>Semivolatile Organics:</b>										
Acenaphthene	ug/kg	4x10 <sup>6</sup> / 30,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
Acenaphthylene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Anthracene	ug/kg	2x10 <sup>6</sup> / 70,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
Bis(2-chloro-1-methylethyl)eth	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Bis(2-chloroethyl)ether	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Bis(2-chloroethoxy)methane	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Bis(2-ethylhexyl)phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Benzo(a)pyrene	ug/kg	600 / 500,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
Benzo(a)anthracene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Benzo(b)fluoranthene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Benzo(ghi)perylene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Benzo(k)fluoranthene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
4-Bromophenyl phenyl ether	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Butyl benzyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Carbazole	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Chrysene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2-Chloronaphthalene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2-Chlorophenol	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
4-Chlorophenyl phenyl ether	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
o-Cresol	ug/kg	3x10 <sup>6</sup> / 500	NA	NA	NA	330 U	NA	NA	330 U	330 U
p-Cresol	ug/kg	300,000 / 400	NA	NA	NA	330 U	NA	NA	330 U	330 U
Dibenz(a,h)anthracene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Dibenzofuran	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2-Chlorophenol	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
1,2-Dichlorobenzene	ug/kg	7x10 <sup>6</sup> / 7,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
1,3-Dichlorobenzene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
1,4-Dichlorobenzene	ug/kg	100,000 / 7,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
3,3'-Dichlorobenzidine	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Diethyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Dimethyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2,4-Dimethylphenol	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Di-n-butyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
4,6-Dinitro-o-cresol	ug/kg		NA	NA	NA	830 U	NA	NA	830 U	810 U
2,4-Dinitrotoluene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2,6-Dinitrotoluene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Di-n-octyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2,4-Dinitrophenol	ug/kg		NA	NA	NA	830 U	NA	NA	830 U	810 U
Fluoranthene	ug/kg	3x10 <sup>6</sup> / 400,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
Fluorene	ug/kg	3x10 <sup>6</sup> / 40,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
Hexachlorocyclopentadiene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Hexachlorobenzene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Hexachlorobutadiene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Hexachloroethane	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Indeno(1,2,3-cd)pyrene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Isophorone	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2-Methylnaphthalene	ug/kg	1x10 <sup>6</sup> / 20,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
N-nitrosodiphenylamine	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
N-nitroso-di-n-propylamine	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
Naphthalene	ug/kg	600,000 / 8,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
2-Nitroaniline	ug/kg		NA	NA	NA	830 U	NA	NA	830 U	810 U
3-Nitroaniline	ug/kg		NA	NA	NA	830 U	NA	NA	830 U	810 U
4-Nitroaniline	ug/kg		NA	NA	NA	830 U	NA	NA	830 U	810 U
Nitrobenzene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2-Nitrophenol	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
4-Nitrophenol	ug/kg		NA	NA	NA	830 U	NA	NA	830 U	810 U
p-Chloroaniline	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
p-Chloro-m-cresol	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/19/94 B-6, S-2	10/19/94 B-6, S-4	10/19/94 B-7 S-2	10/19/94 B-8, S-3	10/18/94 B-9 S-2	10/18/94 B-10, S-3	10/19/94 B-11, S-3	10/19/94 B-11, S-3 Dup
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Pentachlorophenol	ug/kg	40,000 / 200,000	NA	NA	NA	830 U	NA	NA	830 U	810 U
Phenanthrene	ug/kg	200,000 / 80,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
Phenol	ug/kg	4x10 <sup>5</sup> / 200	NA	NA	NA	330 U	NA	NA	330 U	330 U
Pyrene	ug/kg	2x10 <sup>6</sup> / 300,000	NA	NA	NA	330 U	NA	NA	330 U	330 U
1,2,4-Trichlorobenzene	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
2,4,5-Trichlorophenol	ug/kg		NA	NA	NA	830 U	NA	NA	830 U	810 U
2,4,6-Trichlorophenol	ug/kg		NA	NA	NA	330 U	NA	NA	330 U	330 U
<b><u>Volatile Organics:</u></b>										
Acetone	ug/kg		100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzene	ug/kg	100,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (MEK)	ug/kg	4x10 <sup>7</sup> / 50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/kg	1x10 <sup>6</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	ug/kg	700,000 / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/kg	7x10 <sup>6</sup> / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/kg	50,000 / 300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/kg	700,000 / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/kg		150	75	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	ug/kg	1x10 <sup>6</sup> / 600	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/kg	7x10 <sup>6</sup> / 5,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methylene chloride	ug/kg	600,000 / 200	9	76	11	73	5 U	5 U	6	14
4-Methyl-2-pentanone (MIBK)	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Styrene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/kg	700,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	ug/kg	1x10 <sup>7</sup> / 2,000	72	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/kg	7x10 <sup>6</sup> / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/kg	300,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/kg	400,000 / 2,000	98	100	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (Total)	ug/kg	1x10 <sup>8</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
<b><u>Radiological:</u></b>										
Gross Alpha	pCi/g		23 +/- 0.7	30 +/- 0.8	18 +/- 0.7	22 +/- 0.7	16 +/- 0.8	13 +/- 0.8	25 +/- 0.7	16 +/- 0.6
Gross Beta	pCi/g		0.9 +/- 0.3	0.9 +/- 0.3	0.9 +/- 0.4	1.4 +/- 0.4	0.5 U	0.8 +/- 0.5	0.6 +/- 0.3	2.3 +/- 0.4
Radium (Total)	pCi/g		1.3 +/- 0.1	0.3 U	0.3 U	1.1 +/- 0.4	0.3 U	0.4 +/- 0.1	0.8 +/- 0.4	1.3 +/- 0.4
Uranium-234	pCi/g		0.14 +/- 0.03	0.25 +/- 0.05	0.12 +/- 0.03	0.17 +/- 0.03	0.18 +/- 0.03	0.15 +/- 0.03	0.14 +/- 0.03	0.14 +/- 0.03
Uranium-235	pCi/g		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Uranium-238	pCi/g		0.10 +/- 0.02	0.21 +/- 0.05	0.09 +/- 0.02	0.17 +/- 0.03	0.20 +/- 0.03	0.12 +/- 0.03	0.11 +/- 0.03	0.12 +/- 0.03
Uranium (Total)	ug/g		0.4	0.7	0.2	1.1	0.4	0.3	0.3	0.4

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/19/94 B-12 S-3	10/20/94 B-13 S-2	10/20/94 B-14 S-2	10/20/94 B-15 S-2	10/24/94 B-16 S-1	10/24/94 B-16 S-3	10/24/94 B-17 S-2	10/24/94 B-18 S-1
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
<b>Miscellaneous Parameters:</b>										
Cyanide (ASTM)	mg/l	1000 mg/kg	NA	NA	NA	0.005 U	NA	NA	NA	NA
Fluoride	mg/kg		83	120	99	NA	120	130	200	180
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N		0.1 U	0.38	0.1 U	NA	0.84	0.68	1.4	0.99
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N		0.1 U	0.1	0.1 U	NA	0.1 U	0.1 U	0.1 U	0.1 U
pH	pH units		4.79	NA	NA	NA	6.1	5.2	6.07	7.51
Total Petroleum Hydrocarbons	mg/kg	-- / 500	10 U	10 U	10 U	NA	10 U	10 U	10 U	10 U
Total Organic Carbon (ASTM)	mg/l		1.3	1 U	1.6	NA	4.9	3	4.1	6.7
<b>Inorganics:</b>										
Silver (Total)	mg/kg		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Aluminum (Total)	mg/kg		3600	7900	8900	9700	6600	9000	6400	6900
Arsenic (Total)	mg/kg	20	3.7	5	4.7	5.3	5.5	6.3	5.7	5
Barium (Total)	mg/kg	5000	15	42	35	34	53	76	70	61
Beryllium (Total)	mg/kg		0.47	0.45	0.46	0.48	0.72	0.47	0.93	0.64
Calcium (Total)	mg/kg		260	410	390	730	1900	710	3500	4300
Cadmium (Total)	mg/kg	20	4.2	3.1	3.5	2.9	3.5	2.7	3.2	2.6
Cobalt (Total)	mg/kg		3.5	11	17	9.8	13	9.1	12	62
Chromium (Total)	mg/kg	1000	8.8	14	14	13	12	13	10	45
Copper (Total)	mg/kg	700	8.5	14	13	15	9	13	8.6	12
Iron (Total)	mg/kg		26000	19000	20000	18000	19000	14000	15000	15000
Mercury (Total)	mg/kg	20	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.43
Potassium (Total)	mg/kg		330	660	760	860	250	300	280	420
Magnesium (Total)	mg/kg		220	1100	1000	1400	820	1100	820	1200
Manganese (Total)	mg/kg		58	380	640	290	970	290	1200	540
Sodium (Total)	mg/kg		200 U	410	200 U	340	200 U	200 U	200 U	200 U
Nickel (Total)	mg/kg	200	10 U	14	14	13	12	10 U	16	150
Lead (Total)	mg/kg		20 U	20 U	20 U	20 U	23	20 U	24	20 U
Antimony (Total)	mg/kg		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Selenium (Total)	mg/kg	60	0.2 U	0.28	0.25	0.29	0.4	0.28	0.36	0.57
Thallium (Total)	mg/kg		0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium (Total)	mg/kg		16	21	23	23	25	22	20	19
Zinc (Total)	mg/kg	1000	27	38	38	40	31	35	33	34
<b>Pesticides/Herbicides/PCBs:</b>										
Aldrin	mg/kg	0.3 / 500	NA	NA	NA	0.05 U	NA	NA	NA	NA
Aroclor-1016	mg/kg		NA	NA	NA	1 U	NA	NA	NA	NA
Aroclor-1221	mg/kg		NA	NA	NA	1 U	NA	NA	NA	NA
Aroclor-1232	mg/kg		NA	NA	NA	1 U	NA	NA	NA	NA
Aroclor-1242	mg/kg		NA	NA	NA	1 U	NA	NA	NA	NA
Aroclor-1248	mg/kg		NA	NA	NA	1 U	NA	NA	NA	NA
Aroclor-1254	mg/kg		NA	NA	NA	1 U	NA	NA	NA	NA
Aroclor-1260	mg/kg		NA	NA	NA	1 U	NA	NA	NA	NA
alpha-BHC	mg/kg		NA	NA	NA	0.05 U	NA	NA	NA	NA
beta-BHC	mg/kg		NA	NA	NA	0.05 U	NA	NA	NA	NA
delta-BHC	mg/kg		NA	NA	NA	0.05 U	NA	NA	NA	NA
gamma-BHC (Lindane)	mg/kg	3 / 10	NA	NA	NA	0.05 U	NA	NA	NA	NA
alpha-Chlordane	mg/kg	3 / 500	NA	NA	NA	0.1 U	NA	NA	NA	NA
gamma-Chlordane	mg/kg	3 / 500	NA	NA	NA	0.1 U	NA	NA	NA	NA
2,4-D	mg/kg	700 / 2	NA	NA	NA	0.2 U	NA	NA	NA	NA
4,4'-DDD	mg/kg	20 / 500	NA	NA	NA	0.1 U	NA	NA	NA	NA
4,4'-DDE	mg/kg	10 / 500	NA	NA	NA	0.1 U	NA	NA	NA	NA
4,4'-DDT	mg/kg	10 / 500	NA	NA	NA	0.1 U	NA	NA	NA	NA
Dieldrin	mg/kg	0.3 / 90	NA	NA	NA	0.1 U	NA	NA	NA	NA
Endrin Ketone	mg/kg		NA	NA	NA	0.1 U	NA	NA	NA	NA
Endosulfan I (Alpha)	mg/kg		NA	NA	NA	0.05 U	NA	NA	NA	NA
Endosulfan II (Beta)	mg/kg		NA	NA	NA	0.1 U	NA	NA	NA	NA
Endrin	mg/kg	20 / 500	NA	NA	NA	0.1 U	NA	NA	NA	NA
Endrin Aldehyde	mg/kg		NA	NA	NA	0.1 U	NA	NA	NA	NA
Endosulfan Sulfate	mg/kg		NA	NA	NA	0.1 U	NA	NA	NA	NA
Heptachlor	mg/kg	1 / 400	NA	NA	NA	0.05 U	NA	NA	NA	NA
Heptachlor Epoxide	mg/kg		NA	NA	NA	0.05 U	NA	NA	NA	NA
Methoxychlor	mg/kg	300 / 200	NA	NA	NA	0.5 U	NA	NA	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/19/94	10/20/94	10/20/94	10/20/94	10/24/94	10/24/94	10/24/94	10/24/94
			B-12, S-3	B-13, S-2	B-14, S-2	B-15, S-2	B-16, S-1	B-16, S-3	B-17, S-2	B-18, S-1
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Aroclor Source			NA	NA	NA	---	NA	NA	NA	NA
Polychlorinated Biphenyls	mg/kg	5 / --	NA	NA	NA	1 U	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	600 / 3	NA	NA	NA	0.08 U	NA	NA	NA	NA
<b>Semivolatiles Organics:</b>										
Acenaphthene	ug/kg	4x10 <sup>6</sup> / 30,000	NA	NA	NA	330 U	NA	NA	NA	NA
Acenaphthylene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Anthracene	ug/kg	2x10 <sup>7</sup> / 70,000	NA	NA	NA	330 U	NA	NA	NA	NA
Bis(2-chloro-1-methylethyl)eth	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Bis(2-chloroethyl)ether	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Benzo(a)pyrene	ug/kg	600 / 500,000	NA	NA	NA	330 U	NA	NA	NA	NA
Benzo(a)anthracene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Benzo(b)fluoranthene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Benzo(ghi)perylene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Benzo(k)fluoranthene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
4-Bromophenyl phenyl ether	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Butyl benzyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Carbazole	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Chrysene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2-Chloronaphthalene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2-Chlorophenol	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
o-Cresol	ug/kg	3x10 <sup>6</sup> / 500	NA	NA	NA	330 U	NA	NA	NA	NA
p-Cresol	ug/kg	300,000 / 400	NA	NA	NA	330 U	NA	NA	NA	NA
Dibenz(a,h)anthracene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Dibenzofuran	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
1,2-Dichlorophenol	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
1,2-Dichlorobenzene	ug/kg	7x10 <sup>6</sup> / 7,000	NA	NA	NA	330 U	NA	NA	NA	NA
1,3-Dichlorobenzene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
1,4-Dichlorobenzene	ug/kg	100,000 / 7,000	NA	NA	NA	330 U	NA	NA	NA	NA
3,3'-Dichlorobenzidine	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Diethyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Dimethyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2,4-Dimethylphenol	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Di-n-butyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
4,6-Dinitro-o-cresol	ug/kg		NA	NA	NA	810 U	NA	NA	NA	NA
2,4-Dinitrotoluene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2,6-Dinitrotoluene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Di-n-octyl phthalate	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2,4-Dinitrophenol	ug/kg		NA	NA	NA	810 U	NA	NA	NA	NA
Fluoranthene	ug/kg	3x10 <sup>6</sup> / 400,000	NA	NA	NA	330 U	NA	NA	NA	NA
Fluorene	ug/kg	3x10 <sup>6</sup> / 40,000	NA	NA	NA	330 U	NA	NA	NA	NA
Hexachlorocyclopentadiene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Hexachlorobenzene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Hexachlorobutadiene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Hexachloroethane	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Isophorone	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2-Methylnaphthalene	ug/kg	1x10 <sup>6</sup> / 20,000	NA	NA	NA	330 U	NA	NA	NA	NA
N-nitrosodiphenylamine	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
N-nitroso-di-n-propylamine	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
Naphthalene	ug/kg	600,000 / 8,000	NA	NA	NA	330 U	NA	NA	NA	NA
2-Nitroaniline	ug/kg		NA	NA	NA	810 U	NA	NA	NA	NA
3-Nitroaniline	ug/kg		NA	NA	NA	810 U	NA	NA	NA	NA
4-Nitroaniline	ug/kg		NA	NA	NA	810 U	NA	NA	NA	NA
Nitrobenzene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2-Nitrophenol	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
4-Nitrophenol	ug/kg		NA	NA	NA	810 U	NA	NA	NA	NA
p-Chloroaniline	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
p-Chloro-m-cresol	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/19/94 B-12, S-3	10/20/94 B-13 S-2	10/20/94 B-14 S-2	10/20/94 B-15 S-2	10/24/94 B-16, S-1	10/24/94 B-16, S-3	10/24/94 B-17, S-2	10/24/94 B-18, S-1
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Pentachlorophenol	ug/kg	40,000/200,000	NA	NA	NA	810 U	NA	NA	NA	NA
Phenanthrene	ug/kg	200,000/80,000	NA	NA	NA	330 U	NA	NA	NA	NA
Phenol	ug/kg	4x10 <sup>7</sup> / 200	NA	NA	NA	330 U	NA	NA	NA	NA
Pyrene	ug/kg	2x10 <sup>6</sup> / 300,000	NA	NA	NA	330 U	NA	NA	NA	NA
1,2,4-Trichlorobenzene	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
2,4,6-Trichlorophenol	ug/kg		NA	NA	NA	330 U	NA	NA	NA	NA
<b>Volatile Organics:</b>										
Acetone	ug/kg		100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzene	ug/kg	100,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (MEK)	ug/kg	4x10 <sup>7</sup> / 50	10 U	10 U	10 U	10 U	10 U	10 U	15	10 U
Carbon disulfide	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.6
Carbon tetrachloride	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/kg	1x10 <sup>6</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	ug/kg	700,000 / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/kg	7x10 <sup>6</sup> / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/kg	50,000 / 300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/kg	700,000 / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	ug/kg	1x10 <sup>6</sup> / 600	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,3-Dichloropropane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/kg	7x10 <sup>6</sup> / 5,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methylene chloride	ug/kg	600,000 / 200	6.3	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Styrene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/kg	700,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	ug/kg	1x10 <sup>7</sup> / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/kg	7x10 <sup>6</sup> / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/kg	300,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/kg	400,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (Total)	ug/kg	1x10 <sup>8</sup> / 3,000	5 U	5.1	5 U	5 U	5 U	5 U	5 U	5 U
<b>Radiological:</b>										
Gross Alpha	pCi/g		12 +/- 0.6	13 +/- 0.6	3.5 +/- 0.9	1.1 +/- 0.6	1.1 +/- 0.6	1.2 +/- 0.6	1.6 +/- 0.7	1.2 +/- 0.6
Gross Beta	pCi/g		0.5 +/- 0.3	1.0 +/- 0.4	26.4 +/- 1.0	1.8 +/- 0.4	0.6 +/- 0.3	0.5 +/- 0.3	0.9 +/- 0.3	1.6 +/- 0.4
Radium (Total)	pCi/g		0.3 U	1.4 +/- 1.1	0.5 U	0.8 +/- 0.3	2.1 +/- 0.9	3.6 +/- 1.7	0.5 U	1.1 +/- 0.3
Uranium-234	pCi/g		0.13 +/- 0.03	0.11 +/- 0.03	0.08 +/- 0.02	0.07 +/- 0.02	0.06 +/- 0.02	0.14 +/- 0.03	0.26 +/- 0.03	0.08 +/- 0.02
Uranium-235	pCi/g		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Uranium-238	pCi/g		0.14 +/- 0.03	0.08 +/- 0.02	0.10 +/- 0.03	0.06 +/- 0.02	0.09 +/- 0.02	0.15 +/- 0.03	0.21 +/- 0.03	0.09 +/- 0.02
Uranium (Total)	ug/g		0.3	0.3	0.6	0.1	0.5	1.1	1.5	1.2

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/21/94 B-19, S-1	10/21/94 B-19, S-1 Dup	10/21/94 B-19, S-3	10/21/94 B-20, S-2	10/21/94 B-21, S-2	10/21/94 B-22, S-1	10/21/94 B-22, S-2	10/21/94 B-23, S-1
Parameter	Units	PADER Interim Level	Value	Qual	Value	Qual	Value	Qual	Value	Qual
<b>Miscellaneous Parameters:</b>										
Cyanide (ASTM)	mg/l	1000 mg/kg	NA		NA		NA		NA	
Fluoride	mg/kg		120		140		69		140	
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N		0.71		0.8		0.1 U		0.12	
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N		0.14		0.14		0.1		0.12	
pH	pH units		5.08		5.12		8.13		5.19	
Total Petroleum Hydrocarbons	mg/kg	--- 500	10 U		10 U		10 U		10 U	
Total Organic Carbon (ASTM)	mg/l		7.4		7.2		2.7		2.3	
<b>Inorganics:</b>										
Silver (Total)	mg/kg		2 U		2 U		2 U		2 U	
Aluminum (Total)	mg/kg		7900		7200		3300		5400	
Arsenic (Total)	mg/kg	20	3.2		4.5		3.3		7.7	
Barium (Total)	mg/kg	5000	80		71		55		29	
Beryllium (Total)	mg/kg		1.5		0.85		0.57		0.63	
Calcium (Total)	mg/kg		21000		7000		540		770	
Cadmium (Total)	mg/kg	20	2.8		2.9		2 U		4.6	
Cobalt (Total)	mg/kg		17		29		8.2		7.8	
Chromium (Total)	mg/kg	1000	15		31		8.5		9.6	
Copper (Total)	mg/kg	700	15		20		11		16	
Iron (Total)	mg/kg		15000		15000		5900		32000	
Mercury (Total)	mg/kg	20	0.1 U		0.1 U		0.1 U		0.1 U	
Potassium (Total)	mg/kg		540		370		290		230	
Magnesium (Total)	mg/kg		2600		1700		740		620	
Manganese (Total)	mg/kg		1500		670		88		300	
Sodium (Total)	mg/kg		200 U		200 U		200 U		200 U	
Nickel (Total)	mg/kg	200	40		76		11		11	
Lead (Total)	mg/kg		20 U		20 U		20 U		20 U	
Antimony (Total)	mg/kg		20 U		20 U		20 U		20 U	
Selenium (Total)	mg/kg	60	0.25		0.29		0.2 U		0.2 U	
Thallium (Total)	mg/kg		0.8 U		0.8 U		0.8 U		0.8 U	
Vanadium (Total)	mg/kg		16		20		18		17	
Zinc (Total)	mg/kg	1000	34		41		29		40	
<b>Pesticides/Herbicides/PCBs:</b>										
Aldrin	mg/kg	0.3 / 500	NA		NA		NA		NA	
Aroclor-1016	mg/kg		NA		NA		NA		NA	
Aroclor-1221	mg/kg		NA		NA		NA		NA	
Aroclor-1232	mg/kg		NA		NA		NA		NA	
Aroclor-1242	mg/kg		NA		NA		NA		NA	
Aroclor-1248	mg/kg		NA		NA		NA		NA	
Aroclor-1254	mg/kg		NA		NA		NA		NA	
Aroclor-1260	mg/kg		NA		NA		NA		NA	
alpha-BHC	mg/kg		NA		NA		NA		NA	
beta-BHC	mg/kg		NA		NA		NA		NA	
delta-BHC	mg/kg		NA		NA		NA		NA	
gamma-BHC (Lindane)	mg/kg	3 / 10	NA		NA		NA		NA	
alpha-Chlordane	mg/kg	3 / 500	NA		NA		NA		NA	
gamma-Chlordane	mg/kg	3 / 500	NA		NA		NA		NA	
2,4-D	mg/kg	700 / 2	NA		NA		NA		NA	
4,4'-DDD	mg/kg	20 / 500	NA		NA		NA		NA	
4,4'-DDE	mg/kg	10 / 500	NA		NA		NA		NA	
4,4'-DDT	mg/kg	10 / 500	NA		NA		NA		NA	
Dieldrin	mg/kg	0.3 / 90	NA		NA		NA		NA	
Endrin Ketone	mg/kg		NA		NA		NA		NA	
Endosulfan I (Alpha)	mg/kg		NA		NA		NA		NA	
Endosulfan II (Beta)	mg/kg		NA		NA		NA		NA	
Endrin	mg/kg	20 / 500	NA		NA		NA		NA	
Endrin Aldehyde	mg/kg		NA		NA		NA		NA	
Endosulfan Sulfate	mg/kg		NA		NA		NA		NA	
Heptachlor	mg/kg	1 / 400	NA		NA		NA		NA	
Heptachlor Epoxide	mg/kg		NA		NA		NA		NA	
Methoxychlor	mg/kg	300 / 200	NA		NA		NA		NA	

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/21/94 B-19 S-1	10/21/94 B-19 S-1 Dup	10/21/94 B-19 S-3	10/21/94 B-20, S-2	10/21/94 B-21, S-2	10/21/94 B-22 S-1	10/21/94 B-22 S-2	10/21/94 B-23, S-1
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Aroclor Source			NA	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls	mg/kg	5 / --	NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	600 / 3	NA	NA	NA	NA	NA	NA	NA	NA
<b>Semivolatile Organics:</b>										
Acenaphthene	ug/kg	4x10 <sup>6</sup> / 30,000	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	ug/kg	2x10 <sup>7</sup> / 70,000	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloro-1-methylethyl)eth	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	ug/kg	600 / 500,000	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Benzo(ghi)perylene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Carbazole	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
o-Cresol	ug/kg	3x10 <sup>6</sup> / 500	NA	NA	NA	NA	NA	NA	NA	NA
p-Cresol	ug/kg	300,000 / 400	NA	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
1-Chlorobenzene	ug/kg	7x10 <sup>6</sup> / 7,000	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	ug/kg	100,000 / 7,000	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	ug/kg	3x10 <sup>6</sup> / 400,000	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	ug/kg	3x10 <sup>6</sup> / 40,000	NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	ug/kg	1x10 <sup>6</sup> / 20,000	NA	NA	NA	NA	NA	NA	NA	NA
N-nitrosodiphenylamine	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
N-nitroso-di-n-propylamine	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	ug/kg	600,000 / 8,000	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
4-phenol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
p-tolroaniline	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
p-Chloro-m-cresol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/21/94 B-19, S-1	10/21/94 B-19, S-1 Dup	10/21/94 B-19, S-3	10/21/94 B-20, S-2	10/21/94 B-21, S-2	10/21/94 B-22, S-1	10/21/94 B-22, S-2	10/21/94 B-23, S-1
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Pentachlorophenol	ug/kg	40,000/200,000	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	ug/kg	200,000/80,000	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	ug/kg	4x10 <sup>7</sup> / 200	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	ug/kg	2x10 <sup>6</sup> / 300,000	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	ug/kg		NA	NA	NA	NA	NA	NA	NA	NA
<b>Volatile Organics:</b>										
Acetone	ug/kg		100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzene	ug/kg	100,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (MEK)	ug/kg	4x10 <sup>7</sup> / 50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/kg	1x10 <sup>6</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	ug/kg	700,000 / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/kg	7x10 <sup>6</sup> / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/kg	50,000 / 300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/kg	700,000 / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	ug/kg	1x10 <sup>6</sup> / 600	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/kg	7x10 <sup>6</sup> / 5,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methylene chloride	ug/kg	600,000 / 200	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Styrene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/kg	700,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	ug/kg	1x10 <sup>7</sup> / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/kg	7x10 <sup>6</sup> / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/kg	300,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/kg	400,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (Total)	ug/kg	1x10 <sup>8</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
<b>Radiological:</b>										
Gross Alpha	pCi/g		2.5 +/- 0.7	2.9 +/- 0.8	1.6 +/- 0.5	2.9 +/- 0.5	1.3 +/- 0.4	1.5 +/- 0.4	1.7 +/- 0.5	5.1 +/- 0.7
Gross Beta	pCi/g		1.1 +/- 0.4	1.1 +/- 0.4	1.0 +/- 0.4	2.2 +/- 0.8	1.4 +/- 0.4	0.8 +/- 0.3	0.5 U	1.3 +/- 0.4
Radium (Total)	pCi/g		0.5 +/- 0.3	0.8 +/- 0.2	0.5 U	1.9 +/- 0.6	1.2 +/- 0.6	0.7 +/- 0.3	0.5 U	5.0 +/- 3.3
Uranium-234	pCi/g		0.24 +/- 0.04	0.13 +/- 0.04	0.05 U	0.11 +/- 0.02	0.14 +/- 0.06	0.30 +/- 0.10	0.09 +/- 0.02	2.22 +/- 0.97
Uranium-235	pCi/g		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.10 +/- 0.08
Uranium-238	pCi/g		0.23 +/- 0.04	0.12 +/- 0.04	0.05 U	0.11 +/- 0.02	0.12 +/- 0.05	0.18 +/- 0.07	0.11 +/- 0.02	0.08 +/- 0.08
Uranium (Total)	ug/g		1.6	0.6	0.1 U	0.2	0.2	0.9	0.3	7.3



**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/21/94 B-24 S-2	10/21/94 B-25 S-1	10/21/94 B-25, S-3	10/21/94 B-26, S-1	10/21/94 B-27, S-1	10/20/94 B-28, S-2	10/20/94 B-29, S-1	10/20/94 B-30, S-2
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
<b>Miscellaneous Parameters:</b>										
Cyanide (ASTM)	mg/l	1000 mg/kg	0.006	NA	NA	NA	NA	NA	NA	NA
Fluoride	mg/kg		NA	100	160	110	120	130	120	130
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N		NA	0.1 U	0.17	0.76	0.4	0.21	0.26	0.1 U
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N		NA	0.16	0.1	0.72	0.12	0.15	0.18	0.12
pH	pH units		NA	5.28	5.29	7.43	7.7	NA	NA	NA
Total Petroleum Hydrocarbons	mg/kg	-- / 500	NA	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Total Organic Carbon (ASTM)	mg/l		NA	2.3	2.3	5	4.3	3.4	1.7	1.6
<b>Inorganics:</b>										
Silver (Total)	mg/kg		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Aluminum (Total)	mg/kg		2100	5800	2900	4300	4300	6100	13000	6600
Arsenic (Total)	mg/kg	20	1.6	5.6	3.6	4.6	3.4	2.2	2.1	3.6
Barium (Total)	mg/kg	5000	100	100	44	64	57	30	150	38
Beryllium (Total)	mg/kg		0.4 U	0.43	0.43	0.71	2.2	0.63	1.2	0.94
Calcium (Total)	mg/kg		2100	450	330	5500	64000	1000	3200	6100
Cadmium (Total)	mg/kg	20	2 U	3.5	4.3	4.5	2.9	3.8	2.5	4.3
Cobalt (Total)	mg/kg		11	13	7.3	35	13	12	9.2	18
Chromium (Total)	mg/kg	1000	5.3	9.9	12	39	12	15	16	18
Copper (Total)	mg/kg	700	6.5	9.9	9.4	27	29	16	11	33
Iron (Total)	mg/kg		13000	20000	27000	25000	17000	23000	16000	27000
Mercury (Total)	mg/kg	20	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U
Potassium (Total)	mg/kg		150	280	170	270	470	770	730	420
Magnesium (Total)	mg/kg		200	510	240	620	860	450	1000	1300
Manganese (Total)	mg/kg		670	1500	590	550	360	250	1600	280
Sodium (Total)	mg/kg		200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Nickel (Total)	mg/kg	200	10 U	16	11	63	15	14	23	28
Lead (Total)	mg/kg		20 U	20 U	20 U	540	20 U	20 U	20 U	20 U
Antimony (Total)	mg/kg		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Selenium (Total)	mg/kg	60	0.2 U	0.25	0.2 U	0.2 U	0.26	0.34	0.4	0.51
Thallium (Total)	mg/kg		0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium (Total)	mg/kg		10	19	16	17	15	19	23	17
Zinc (Total)	mg/kg	1000	24	31	37	74	47	48	59	60
<b>Pesticides/Herbicides/PCBs:</b>										
Aldrin	mg/kg	0.3 / 500	0.05 U	NA	NA	NA	NA	NA	NA	NA
Aroclor-1016	mg/kg		1 U	NA	NA	NA	NA	NA	NA	NA
Aroclor-1221	mg/kg		1 U	NA	NA	NA	NA	NA	NA	NA
Aroclor-1232	mg/kg		1 U	NA	NA	NA	NA	NA	NA	NA
Aroclor-1242	mg/kg		1 U	NA	NA	NA	NA	NA	NA	NA
Aroclor-1248	mg/kg		1 U	NA	NA	NA	NA	NA	NA	NA
Aroclor-1254	mg/kg		1 U	NA	NA	NA	NA	NA	NA	NA
Aroclor-1260	mg/kg		1 U	NA	NA	NA	NA	NA	NA	NA
alpha-BHC	mg/kg		0.05 U	NA	NA	NA	NA	NA	NA	NA
beta-BHC	mg/kg		0.05 U	NA	NA	NA	NA	NA	NA	NA
delta-BHC	mg/kg		0.05 U	NA	NA	NA	NA	NA	NA	NA
gamma-BHC (Lindane)	mg/kg	3 / 10	0.05 U	NA	NA	NA	NA	NA	NA	NA
alpha-Chlordane	mg/kg	3 / 500	0.1 U	NA	NA	NA	NA	NA	NA	NA
gamma-Chlordane	mg/kg	3 / 500	0.1 U	NA	NA	NA	NA	NA	NA	NA
2,4-D	mg/kg	700 / 2	0.2 U	NA	NA	NA	NA	NA	NA	NA
4,4'-DDD	mg/kg	20 / 500	0.1 U	NA	NA	NA	NA	NA	NA	NA
4,4'-DDE	mg/kg	10 / 500	0.1 U	NA	NA	NA	NA	NA	NA	NA
4,4'-DDT	mg/kg	10 / 500	0.1 U	NA	NA	NA	NA	NA	NA	NA
Dieldrin	mg/kg	0.3 / 90	0.1 U	NA	NA	NA	NA	NA	NA	NA
Endrin Ketone	mg/kg		0.1 U	NA	NA	NA	NA	NA	NA	NA
Endosulfan I (Alpha)	mg/kg		0.05 U	NA	NA	NA	NA	NA	NA	NA
Endosulfan II (Beta)	mg/kg		0.1 U	NA	NA	NA	NA	NA	NA	NA
Endrin	mg/kg	20 / 500	0.1 U	NA	NA	NA	NA	NA	NA	NA
Endrin Aldehyde	mg/kg		0.1 U	NA	NA	NA	NA	NA	NA	NA
Endosulfan Sulfate	mg/kg		0.1 U	NA	NA	NA	NA	NA	NA	NA
Heptachlor	mg/kg	1 / 400	0.05 U	NA	NA	NA	NA	NA	NA	NA
Heptachlor Epoxide	mg/kg		0.05 U	NA	NA	NA	NA	NA	NA	NA
Methoxychlor	mg/kg	300 / 200	0.5 U	NA	NA	NA	NA	NA	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/21/94 B-24, S-2	10/21/94 B-25, S-1	10/21/94 B-25, S-3	10/21/94 B-26, S-1	10/21/94 B-27, S-1	10/20/94 B-28, S-2	10/20/94 B-29, S-1	10/20/94 B-30, S-2
Parameter	Units	PADEP Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Aroclor Source			---	NA	NA	NA	NA	NA	NA	NA
Polychlorinated Biphenyls	mg/kg	5 / ---	1 U	NA	NA	NA	NA	NA	NA	NA
2,4,5-TP (Silvex)	mg/kg	600 / 3	0.08 U	NA	NA	NA	NA	NA	NA	NA
<b>Semivolatile Organics:</b>										
Acenaphthene	ug/kg	4x10 <sup>6</sup> / 30,000	320 U	NA	NA	NA	NA	NA	NA	NA
Acenaphthylene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Anthracene	ug/kg	2x10 <sup>7</sup> / 70,000	320 U	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloro-1-methylethyl)eth	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethyl)ether	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Bis(2-ethylhexyl)phthalate	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	ug/kg	600 / 500,000	320 U	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Benzo(ghi)perylene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Butyl benzyl phthalate	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Carbazole	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Chrysene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
2-Chloronaphthalene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
2-Chlorophenol	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
o-Cresol	ug/kg	3x10 <sup>6</sup> / 500	320 U	NA	NA	NA	NA	NA	NA	NA
p-Cresol	ug/kg	300,000 / 400	320 U	NA	NA	NA	NA	NA	NA	NA
Dibenz(a,h)anthracene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Dibenzofuran	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorophenol	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	ug/kg	7x10 <sup>6</sup> / 7,000	320 U	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	ug/kg	100,000 / 7,000	320 U	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Di-n-butyl phthalate	ug/kg		330	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-o-cresol	ug/kg		820 U	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
2,6-Dinitrotoluene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Di-n-octyl phthalate	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	ug/kg		820 U	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	ug/kg	3x10 <sup>6</sup> / 400,000	320 U	NA	NA	NA	NA	NA	NA	NA
Fluorene	ug/kg	3x10 <sup>6</sup> / 40,000	320 U	NA	NA	NA	NA	NA	NA	NA
Hexachlorocyclopentadiene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Hexachlorobenzene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Hexachlorobutadiene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Hexachloroethane	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Isophorone	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	ug/kg	1x10 <sup>6</sup> / 20,000	320 U	NA	NA	NA	NA	NA	NA	NA
N-nitrosodiphenylamine	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
N-nitroso-di-n-propylamine	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
Naphthalene	ug/kg	600,000 / 8,000	320 U	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	ug/kg		820 U	NA	NA	NA	NA	NA	NA	NA
3-Nitroaniline	ug/kg		820 U	NA	NA	NA	NA	NA	NA	NA
4-Nitroaniline	ug/kg		820 U	NA	NA	NA	NA	NA	NA	NA
Nitrobenzene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	ug/kg		820 U	NA	NA	NA	NA	NA	NA	NA
p-Toluenoaniline	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
p-Chloro-m-cresol	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/21/94 B-24, S-2	10/21/94 B-25, S-1	10/21/94 B-25, S-3	10/21/94 B-26, S-1	10/21/94 B-27, S-1	10/20/94 B-28, S-2	10/20/94 B-29, S-1	10/20/94 B-30, S-2
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Pentachlorophenol	ug/kg	40,000/200,000	820 U	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	ug/kg	200,000/80,000	320 U	NA	NA	NA	NA	NA	NA	NA
Phenol	ug/kg	4x10 <sup>7</sup> / 200	320 U	NA	NA	NA	NA	NA	NA	NA
Pyrene	ug/kg	2x10 <sup>6</sup> / 300,000	320 U	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
2,4,5-Trichlorophenol	ug/kg		820 U	NA	NA	NA	NA	NA	NA	NA
2,4,6-Trichlorophenol	ug/kg		320 U	NA	NA	NA	NA	NA	NA	NA
<b>Volatile Organics:</b>										
Acetone	ug/kg		100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzene	ug/kg	100,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (MEK)	ug/kg	4x10 <sup>7</sup> / 50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/kg	1x10 <sup>6</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	ug/kg	700,000 / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/kg	7x10 <sup>6</sup> / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/kg	50,000 / 300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/kg	700,000 / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	ug/kg	1x10 <sup>6</sup> / 600	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,3-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,3-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/kg	7x10 <sup>6</sup> / 5,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methylene chloride	ug/kg	600,000 / 200	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Styrene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/kg	700,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	ug/kg	1x10 <sup>7</sup> / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/kg	7x10 <sup>6</sup> / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/kg	300,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/kg	400,000 / 2,000	15	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (Total)	ug/kg	1x10 <sup>8</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
<b>Radiological:</b>										
Gross Alpha	pCi/g		3.9 +/- 0.7	0.7 +/- 0.4	0.5 U	3.9 +/- 0.8	1.2 U	0.5 +/- 0.4	8.8 +/- 1.0	18.2 +/- 1.8
Gross Beta	pCi/g		2.1 +/- 0.4	0.5 U	0.5 U	0.6 +/- 0.5	0.5 U	0.6 U	1.4 +/- 0.4	6.8 +/- 0.6
Radium (Total)	pCi/g		0.5 U	0.5 U	1.2 +/- 0.4	0.5 U	0.6 +/- 0.3	0.5 U	0.5 +/- 0.2	0.7 +/- 0.4
Uranium-234	pCi/g		1.61 +/- 0.28	0.07 +/- 0.02	0.14 +/- 0.03	0.80 +/- 0.20	0.06 +/- 0.03	2.62 +/- 0.80	8.47 +/- 1.91	6.95 +/- 2.31
Uranium-235	pCi/g		0.05 +/- 0.03	0.05 U	0.05 U	0.05 U	0.05 U	0.07 +/- 0.06	0.38 +/- 0.12	0.34 +/- 0.17
Uranium-238	pCi/g		0.09 +/- 0.03	0.06 +/- 0.02	0.14 +/- 0.03	0.13 +/- 0.05	0.05 U	1.91 +/- 0.10	0.86 +/- 0.23	1.36 +/- 0.50
Uranium (Total)	ug/g		1.4	0.2	0.1 U	1.8	0.1 U	1.1	10.2	2.2

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/20/94 B-30 S-4	10/20/94 B-31 S-1	10/24/94 B-32, S-3	10/25/94 B-33, S-3	10/24/94 B-34, S-1	10/25/94 B-35, S-1	10/25/94 B-36, S-1	11/01/94 B-37 S-2
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
<b>Miscellaneous Parameters:</b>										
Cyanide (ASTM)	mg/l	1000 mg/kg	NA	NA		0.005 U		0.005 U	NA	0.005 U
Fluoride	mg/kg		69	100	55	NA	140	NA	130	NA
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N		0.37	0.16	0.1 U	NA	0.7	NA	0.1 U	NA
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N		0.21	0.21	0.1 U	NA	0.1 U	NA	0.1 U	NA
pH	pH units		NA	NA	4.92	NA	8.24	NA	---	NA
Total Petroleum Hydrocarbons	mg/kg	-- / 500	10 U	10 U	10 U	NA	10 U	NA	10 U	
Total Organic Carbon (ASTM)	mg/l		1 U	4.3	3.6	NA	4.3	NA	3.3	
<b>Inorganics:</b>										
Silver (Total)	mg/kg		2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Aluminum (Total)	mg/kg		6900	7100	1500	3600	3500	11000	12000	6000
Arsenic (Total)	mg/kg	20	3.3	2.6	0.85	3.8	2.6	2.7	3.3	3.7
Barium (Total)	mg/kg	5000	28	81	7.2	43	42	58	85	79
Beryllium (Total)	mg/kg		1.1	0.75	0.4 U	0.4 U	0.67	0.72	0.63	0.41
Calcium (Total)	mg/kg		720	4300	280	480	1100	2800	960	1100
Cadmium (Total)	mg/kg	20	15	3.9	2 U	2 U	3.2	3.3	3	3.1
Cobalt (Total)	mg/kg		15	36	2 U	6.9	7.8	15	22	33
Chromium (Total)	mg/kg	1000	21	33	6	9.6	8.3	20	22	34
Copper (Total)	mg/kg	700	18	310	5	4.6	8.7	28	16	15
Iron (Total)	mg/kg		99000	21000	2400	8300	21000	18000	18000	12000
Mercury (Total)	mg/kg	20	0.1 U	0.1 U	0.14	0.1 U	0.33	0.33	0.1 U	0.1 U
Potassium (Total)	mg/kg		800	470	120	390	210	1400	1400	470
Magnesium (Total)	mg/kg		360	950	310	670	350	1100	1300	740
Manganese (Total)	mg/kg		590	590	15	210	360	500	860	150
Sodium (Total)	mg/kg		200 U	200 U	200 U	200 U	200 U	200 U	200 U	200 U
Nickel (Total)	mg/kg	200	24	68	10 U	10 U	10 U	30	35	80
Lead (Total)	mg/kg		31	250	20 U	20 U	20 U	20 U	20 U	56
Antimony (Total)	mg/kg		20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Selenium (Total)	mg/kg	60	0.33	0.2 U	0.2 U	0.2 U	0.2 U	0.26	0.2 U	0.21
Thallium (Total)	mg/kg		0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Vanadium (Total)	mg/kg		35	16	10 U	10	17	26	27	17
Zinc (Total)	mg/kg	1000	94	56	11	20	29	48	49	51
<b>Pesticides/Herbicides/PCBs:</b>										
Aldrin	mg/kg	0.3 / 500	NA	NA	NA	0.05 U	NA	0.05 U	NA	0.05 U
Aroclor-1016	mg/kg		NA	NA	NA	1 U	NA	1 U	NA	1 U
Aroclor-1221	mg/kg		NA	NA	NA	1 U	NA	1 U	NA	1 U
Aroclor-1232	mg/kg		NA	NA	NA	1 U	NA	1 U	NA	1 U
Aroclor-1242	mg/kg		NA	NA	NA	1 U	NA	1 U	NA	1 U
Aroclor-1248	mg/kg		NA	NA	NA	1 U	NA	1 U	NA	1 U
Aroclor-1254	mg/kg		NA	NA	NA	1 U	NA	1 U	NA	1 U
Aroclor-1260	mg/kg		NA	NA	NA	1 U	NA	1 U	NA	1 U
alpha-BHC	mg/kg		NA	NA	NA	0.05 U	NA	0.05 U	NA	0.05 U
beta-BHC	mg/kg		NA	NA	NA	0.05 U	NA	0.05 U	NA	0.05 U
delta-BHC	mg/kg		NA	NA	NA	0.05 U	NA	0.05 U	NA	0.05 U
gamma-BHC (Lindane)	mg/kg	3 / 10	NA	NA	NA	0.05 U	NA	0.05 U	NA	0.05 U
alpha-Chlordane	mg/kg	3 / 500	NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
gamma-Chlordane	mg/kg	3 / 500	NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
2,4-D	mg/kg	700 / 2	NA	NA	NA	0.2 U	NA	0.2 U	NA	0.2 U
4,4'-DDD	mg/kg	20 / 500	NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
4,4'-DDE	mg/kg	10 / 500	NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
4,4'-DDT	mg/kg	10 / 500	NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
Dieldrin	mg/kg	0.3 / 90	NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
Endrin Ketone	mg/kg		NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
Endosulfan I (Alpha)	mg/kg		NA	NA	NA	0.05 U	NA	0.05 U	NA	0.05 U
Endosulfan II (Beta)	mg/kg		NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
Endrin	mg/kg	20 / 500	NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
Endrin Aldehyde	mg/kg		NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
Endosulfan Sulfate	mg/kg		NA	NA	NA	0.1 U	NA	0.1 U	NA	0.1 U
Heptachlor	mg/kg	1 / 400	NA	NA	NA	0.05 U	NA	0.05 U	NA	0.05 U
Heptachlor Epoxide	mg/kg		NA	NA	NA	0.05 U	NA	0.05 U	NA	0.05 U
Methoxychlor	mg/kg	300 / 200	NA	NA	NA	0.5 U	NA	0.5 U	NA	0.5 U

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/20/94 B-30, S-4	10/20/94 B-31, S-1	10/24/94 B-32, S-3	10/25/94 B-33, S-3	10/24/94 B-34, S-1	10/25/94 B-35, S-1	10/25/94 B-36, S-1	11/01/94 B-37, S-2
Parameter	Units	PADER Interim Level	Value	Qual	Value	Qual	Value	Qual	Value	Qual
Aroclor Source			NA	NA	NA	---	NA	---	NA	---
Polychlorinated Biphenyls	mg/kg	5 / --	NA	NA	NA	1 U	NA	1 U	NA	1 U
2,4,5-TP (Silvex)	mg/kg	600 / 3	NA	NA	NA	0.08 U	NA	0.08 U	NA	0.08 U
<b>Semivolatile Organics:</b>										
Acenaphthene	ug/kg	4x10 <sup>6</sup> / 30,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
Acenaphthylene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Anthracene	ug/kg	2x10 <sup>7</sup> / 70,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
Bis(2-chloro-1-methylethyl)eth	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Bis(2-chloroethyl)ether	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Bis(2-chloroethoxy)methane	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Bis(2-ethylhexyl)phthalate	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Benzo(a)pyrene	ug/kg	600 / 500,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
Benzo(a)anthracene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Benzo(b)fluoranthene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Benzo(ghi)perylene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Benzo(k)fluoranthene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
4-Bromophenyl phenyl ether	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Butyl benzyl phthalate	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Carbazole	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Chrysene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2-Chloronaphthalene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2-Chlorophenol	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
4-Chlorophenyl phenyl ether	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
o-Cresol	ug/kg	3x10 <sup>6</sup> / 500	NA	NA	NA	330 U	NA	330 U	NA	330 U
p-Cresol	ug/kg	300,000 / 400	NA	NA	NA	330 U	NA	330 U	NA	330 U
Dibenz(a,h)anthracene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Dibenzofuran	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2,3-Dichlorophenol	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
1,2-Dichlorobenzene	ug/kg	7x10 <sup>6</sup> / 7,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
1,3-Dichlorobenzene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
1,4-Dichlorobenzene	ug/kg	100,000 / 7,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
3,3'-Dichlorobenzidine	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Diethyl phthalate	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Dimethyl phthalate	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2,4-Dimethylphenol	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Di-n-butyl phthalate	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
4,6-Dinitro-o-cresol	ug/kg		NA	NA	NA	830 U	NA	830 U	NA	800 U
2,4-Dinitrotoluene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2,6-Dinitrotoluene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Di-n-octyl phthalate	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2,4-Dinitrophenol	ug/kg		NA	NA	NA	830 U	NA	830 U	NA	800 U
Fluoranthene	ug/kg	3x10 <sup>6</sup> / 400,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
Fluorene	ug/kg	3x10 <sup>6</sup> / 40,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
Hexachlorocyclopentadiene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Hexachlorobenzene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Hexachlorobutadiene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Hexachloroethane	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Indeno(1,2,3-cd)pyrene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Isophorone	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2-Methylnaphthalene	ug/kg	1x10 <sup>6</sup> / 20,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
N-nitrosodiphenylamine	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
N-nitroso-di-n-propylamine	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
Naphthalene	ug/kg	600,000 / 8,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
2-Nitroaniline	ug/kg		NA	NA	NA	830 U	NA	830 U	NA	800 U
3-Nitroaniline	ug/kg		NA	NA	NA	830 U	NA	830 U	NA	800 U
4-Nitroaniline	ug/kg		NA	NA	NA	830 U	NA	830 U	NA	800 U
Nitrobenzene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2-Nitrophenol	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
4-Nitrophenol	ug/kg		NA	NA	NA	830 U	NA	830 U	NA	800 U
p-Toluenoaniline	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
p-Chloro-m-cresol	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/20/94 B-30 S-4	10/20/94 B-31 S-1	10/24/94 B-32 S-3	10/25/94 B-33 S-3	10/24/94 B-34 S-1	10/25/94 B-35 S-1	10/25/94 B-36 S-1	11/01/94 B-37 S-2
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Pentachlorophenol	ug/kg	40,000/200,000	NA	NA	NA	830 U	NA	830 U	NA	1700 U
Phenanthrene	ug/kg	200,000/80,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
Phenol	ug/kg	4x10 <sup>7</sup> / 200	NA	NA	NA	330 U	NA	330 U	NA	330 U
Pyrene	ug/kg	2x10 <sup>6</sup> / 300,000	NA	NA	NA	330 U	NA	330 U	NA	330 U
1,2,4-Trichlorobenzene	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
2,4,5-Trichlorophenol	ug/kg		NA	NA	NA	830 U	NA	830 U	NA	800 U
2,4,6-Trichlorophenol	ug/kg		NA	NA	NA	330 U	NA	330 U	NA	330 U
<b>Volatile Organics:</b>										
Acetone	ug/kg		100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
Benzene	ug/kg	100,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
2-Butanone (MEK)	ug/kg	4x10 <sup>7</sup> / 50	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Carbon disulfide	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	ug/kg	1x10 <sup>6</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorodibromomethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloromethane	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chloroform	ug/kg	700,000 / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	ug/kg	7x10 <sup>6</sup> / 500	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	ug/kg	50,000 / 300	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	ug/kg	700,000 / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	ug/kg	1x10 <sup>6</sup> / 600	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	ug/kg	7x10 <sup>6</sup> / 5,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Methylene chloride	ug/kg	600,000 / 200	5 U	5 U	5 U	5 U	5 U	5 U	5 U	23
4-Methyl-2-pentanone (MIBK)	ug/kg		50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
Styrene	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/kg		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	ug/kg	700,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	ug/kg	1x10 <sup>7</sup> / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,1-Trichloroethane	ug/kg	7x10 <sup>6</sup> / 1,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	ug/kg	300,000 / 800	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	ug/kg	400,000 / 2,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	ug/kg		10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Xylenes (Total)	ug/kg	1x10 <sup>8</sup> / 3,000	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
<b>Radiological:</b>										
Gross Alpha	pCi/g		12 +/- 0.6	19 +/- 0.5	17 +/- 0.6	0.5 U	44.3 +/- 2.3	0.5 U	0.5 U	1.0 +/- 0.7
Gross Beta	pCi/g		1.0 +/- 0.4	0.8 +/- 0.3	0.6 +/- 0.3	0.5 U	2.1 +/- 0.3	0.5 U	0.5 U	0.3 U
Radium (Total)	pCi/g		1.6 +/- 0.6	0.5 U	1.2 +/- 0.5	0.5 U	0.5 U	1.9 +/- 1.2	0.5 U	0.5 U
Uranium-234	pCi/g		0.22 +/- 0.05	0.46 +/- 0.04	0.15 +/- 0.03	1.16 +/- 0.13	0.76 +/- 0.09	0.43 +/- 0.05	0.18 +/- 0.03	0.05 U
Uranium-235	pCi/g		0.05 U	0.05 U	0.05 U	0.20 +/- 0.02	0.05 U	0.05 U	0.05 U	0.05 U
Uranium-238	pCi/g		0.10 +/- 0.03	0.23 +/- 0.03	0.14 +/- 0.03	0.59 +/- 0.03	0.18 +/- 0.03	0.19 +/- 0.03	0.09 +/- 0.02	0.05 U
Uranium (Total)	ug/g		0.5	0.6	0.6	1.6	2.2	0.8	0.4	0.7

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/25/94 B-38, S-1	10/26/94 B-39, S-4	10/26/94 B-39, S-5	10/26/94 B-39, S-6	10/26/94 B-40, S-4	10/26/94 B-40, S-5	10/25/94 B-41, S-2
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
<b>Miscellaneous Parameters:</b>									
Cyanide (ASTM)	mg/l	1000 mg/kg	NA	NA	NA	NA	NA	0.005 U	NA
Fluoride	mg/kg		240	NA	360	NA	NA	NA	87
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N		0.28	NA	0.1 U	NA	NA	NA	0.35
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N		0.1 U	NA	0.1 U	NA	NA	NA	0.1 U
pH	pH units		---	NA	9.95	NA	NA	NA	---
Total Petroleum Hydrocarbons	mg/kg	-- / 500	10 U	NA	10 U	NA	NA	NA	10 U
Total Organic Carbon (ASTM)	mg/l		3.1	NA	4.3	NA	NA	NA	3.9
<b>Inorganics:</b>									
Silver (Total)	mg/kg		2 U	NA	110	NA	NA	2 U	2 U
Aluminum (Total)	mg/kg		10000	NA	3600	NA	NA	4600	6700
Arsenic (Total)	mg/kg	20	4.8	NA	8.1	NA	NA	4.6	1.8
Barium (Total)	mg/kg	5000	87	NA	110	NA	NA	33	120
Beryllium (Total)	mg/kg		0.64	NA	0.86	NA	NA	0.41	2
Calcium (Total)	mg/kg		1300	NA	19000	NA	NA	3500	37000
Cadmium (Total)	mg/kg	20	2.4	NA	21	NA	NA	5.2	4.9
Cobalt (Total)	mg/kg		47	NA	1600	NA	NA	210	31
Chromium (Total)	mg/kg	1000	46	NA	640	NA	NA	93	32
Copper (Total)	mg/kg	700	11	NA	2 U	NA	NA	100	16
Iron (Total)	mg/kg		14000	NA	130000	NA	NA	25000	30000
Mercury (Total)	mg/kg	20	0.38	NA	0.8	NA	NA	0.13	0.1 U
Potassium (Total)	mg/kg		1000	NA	310	NA	NA	580	660
Magnesium (Total)	mg/kg		1100	NA	1400	NA	NA	2900	5400
Manganese (Total)	mg/kg		490	NA	1400	NA	NA	200	640
Sodium (Total)	mg/kg		200 U	NA	380	NA	NA	200 U	200
Nickel (Total)	mg/kg	200	120	NA	3800	NA	NA	640	140
Lead (Total)	mg/kg		24	NA	110	NA	NA	27	20 U
Antimony (Total)	mg/kg		20 U	NA	5000	NA	NA	20 U	20 U
Selenium (Total)	mg/kg	60	0.29	NA	0.23	NA	NA	0.2 U	0.2 U
Thallium (Total)	mg/kg		0.8 U	NA	0.8 U	NA	NA	0.8 U	0.8 U
Vanadium (Total)	mg/kg		22	NA	38	NA	NA	16	14
Zinc (Total)	mg/kg	1000	59	NA	97	NA	NA	56	26
<b>Pesticides/Herbicides/PCBs:</b>									
Aldrin	mg/kg	0.3 / 500	NA	NA	NA	NA	NA	0.05 U	NA
Aroclor-1016	mg/kg		NA	NA	NA	NA	NA	1 U	NA
Aroclor-1221	mg/kg		NA	NA	NA	NA	NA	1 U	NA
Aroclor-1232	mg/kg		NA	NA	NA	NA	NA	1 U	NA
Aroclor-1242	mg/kg		NA	NA	NA	NA	NA	1 U	NA
Aroclor-1248	mg/kg		NA	NA	NA	NA	NA	1 U	NA
Aroclor-1254	mg/kg		NA	NA	NA	NA	NA	1 U	NA
Aroclor-1260	mg/kg		NA	NA	NA	NA	NA	1 U	NA
alpha-BHC	mg/kg		NA	NA	NA	NA	NA	0.05 U	NA
beta-BHC	mg/kg		NA	NA	NA	NA	NA	0.05 U	NA
delta-BHC	mg/kg		NA	NA	NA	NA	NA	0.05 U	NA
gamma-BHC (Lindane)	mg/kg	3 / 10	NA	NA	NA	NA	NA	0.05 U	NA
alpha-Chlordane	mg/kg	3 / 500	NA	NA	NA	NA	NA	0.1 U	NA
gamma-Chlordane	mg/kg	3 / 500	NA	NA	NA	NA	NA	0.1 U	NA
2,4-D	mg/kg	700 / 2	NA	NA	NA	NA	NA	0.2 U	NA
4,4'-DDD	mg/kg	20 / 500	NA	NA	NA	NA	NA	0.1 U	NA
4,4'-DDE	mg/kg	10 / 500	NA	NA	NA	NA	NA	0.1 U	NA
4,4'-DDT	mg/kg	10 / 500	NA	NA	NA	NA	NA	0.1 U	NA
Dieldrin	mg/kg	0.3 / 90	NA	NA	NA	NA	NA	0.1 U	NA
Endrin Ketone	mg/kg		NA	NA	NA	NA	NA	0.1 U	NA
Endosulfan I (Alpha)	mg/kg		NA	NA	NA	NA	NA	0.05 U	NA
Endosulfan II (Beta)	mg/kg		NA	NA	NA	NA	NA	0.1 U	NA
Endrin	mg/kg	20 / 500	NA	NA	NA	NA	NA	0.1 U	NA
Endrin Aldehyde	mg/kg		NA	NA	NA	NA	NA	0.1 U	NA
Endosulfan Sulfate	mg/kg		NA	NA	NA	NA	NA	0.1 U	NA
heptachlor	mg/kg	1 / 400	NA	NA	NA	NA	NA	0.05 U	NA
Heptachlor Epoxide	mg/kg		NA	NA	NA	NA	NA	0.05 U	NA
Methoxychlor	mg/kg	300 / 200	NA	NA	NA	NA	NA	0.5 U	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/25/94 B-38 S-1	10/26/94 B-39 S-4	10/26/94 B-39 S-5	10/26/94 B-39 S-6	10/26/94 B-40 S-4	10/26/94 B-40 S-5	10/25/94 B-41 S-2
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Aroclor Source			NA	NA	NA	NA	NA	---	NA
Polychlorinated Biphenyls	mg/kg	5 / --	NA	NA	NA	NA	NA	1 U	NA
2,4,5-TP (Silvex)	mg/kg	600 / 3	NA	NA	NA	NA	NA	0.08 U	NA
<b>Semivolatile Organics:</b>									
Acenaphthene	ug/kg	4x10 <sup>6</sup> / 30,000	NA	NA	NA	NA	NA	330 U	NA
Acenaphthylene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Anthracene	ug/kg	2x10 <sup>6</sup> / 70,000	NA	NA	NA	NA	NA	330 U	NA
Bis(2-chloro-1-methylethyl)eth	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Bis(2-chloroethyl)ether	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Bis(2-chloroethoxy)methane	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Bis(2-ethylhexyl)phthalate	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Benzo(a)pyrene	ug/kg	600 / 500,000	NA	NA	NA	NA	NA	330 U	NA
Benzo(a)anthracene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Benzo(b)fluoranthene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Benzo(ghi)perylene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Benzo(k)fluoranthene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
4-Bromophenyl phenyl ether	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Butyl benzyl phthalate	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Carbazole	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Chrysene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2-Chloronaphthalene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2-Chlorophenol	ug/kg		NA	NA	NA	NA	NA	330 U	NA
4-Chlorophenyl phenyl ether	ug/kg		NA	NA	NA	NA	NA	330 U	NA
o-Cresol	ug/kg	3x10 <sup>6</sup> / 500	NA	NA	NA	NA	NA	330 U	NA
p-Cresol	ug/kg	300,000 / 400	NA	NA	NA	NA	NA	330 U	NA
Dibenz(a,h)anthracene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Dibenzofuran	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2,4-Dichlorophenol	ug/kg		NA	NA	NA	NA	NA	330 U	NA
1,2-Dichlorobenzene	ug/kg	7x10 <sup>6</sup> / 7,000	NA	NA	NA	NA	NA	330 U	NA
1,3-Dichlorobenzene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
1,4-Dichlorobenzene	ug/kg	100,000 / 7,000	NA	NA	NA	NA	NA	330 U	NA
3,3'-Dichlorobenzidine	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Diethyl phthalate	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Dimethyl phthalate	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2,4-Dimethylphenol	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Di-n-butyl phthalate	ug/kg		NA	NA	NA	NA	NA	330 U	NA
4,6-Dinitro-o-cresol	ug/kg		NA	NA	NA	NA	NA	810 U	NA
2,4-Dinitrotoluene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2,6-Dinitrotoluene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Di-n-octyl phthalate	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2,4-Dinitrophenol	ug/kg		NA	NA	NA	NA	NA	810 U	NA
Fluoranthene	ug/kg	3x10 <sup>6</sup> / 400,000	NA	NA	NA	NA	NA	330 U	NA
Fluorene	ug/kg	3x10 <sup>6</sup> / 40,000	NA	NA	NA	NA	NA	330 U	NA
Hexachlorocyclopentadiene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Hexachlorobenzene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Hexachlorobutadiene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Hexachloroethane	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Indeno(1,2,3-cd)pyrene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Isophorone	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2-Methylnaphthalene	ug/kg	1x10 <sup>6</sup> / 20,000	NA	NA	NA	NA	NA	330 U	NA
N-nitrosodiphenylamine	ug/kg		NA	NA	NA	NA	NA	330 U	NA
N-nitroso-di-n-propylamine	ug/kg		NA	NA	NA	NA	NA	330 U	NA
Naphthalene	ug/kg	600,000 / 8,000	NA	NA	NA	NA	NA	330 U	NA
2-Nitroaniline	ug/kg		NA	NA	NA	NA	NA	810 U	NA
3-Nitroaniline	ug/kg		NA	NA	NA	NA	NA	810 U	NA
4-Nitroaniline	ug/kg		NA	NA	NA	NA	NA	810 U	NA
Nitrobenzene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2-Nitrophenol	ug/kg		NA	NA	NA	NA	NA	330 U	NA
1-Nitrophenol	ug/kg		NA	NA	NA	NA	NA	810 U	NA
p-Chloroaniline	ug/kg		NA	NA	NA	NA	NA	330 U	NA
p-Chloro-m-cresol	ug/kg		NA	NA	NA	NA	NA	330 U	NA



**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/25/94 B-38, S-1	10/26/94 B-39 S-4	10/26/94 B-39, S-5	10/26/94 B-39, S-6	10/26/94 B-40 S-4	10/26/94 B-40 S-5	10/25/94 B-41, S-2
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Pentachlorophenol	ug/kg	40,000 / 200,000	NA	NA	NA	NA	NA	810 U	NA
Phenanthrene	ug/kg	200,000 / 80,000	NA	NA	NA	NA	NA	330 U	NA
Phenol	ug/kg	4x10 <sup>7</sup> / 200	NA	NA	NA	NA	NA	330 U	NA
Pyrene	ug/kg	2x10 <sup>6</sup> / 300,000	NA	NA	NA	NA	NA	330 U	NA
1,2,4-Trichlorobenzene	ug/kg		NA	NA	NA	NA	NA	330 U	NA
2,4,5-Trichlorophenol	ug/kg		NA	NA	NA	NA	NA	810 U	NA
2,4,6-Trichlorophenol	ug/kg		NA	NA	NA	NA	NA	330 U	NA
<b><u>Volatile Organics:</u></b>									
Acetone	ug/kg		100 U	NA	100 U	NA	NA	100 U	100 U
Benzene	ug/kg	100,000 / 800	5 U	NA	5 U	NA	NA	5 U	5 U
Bromodichloromethane	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
Bromoform	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
Bromomethane	ug/kg		10 U	NA	10 U	NA	NA	10 U	10 U
2-Butanone (MEK)	ug/kg	4x10 <sup>7</sup> / 50	10 U	NA	10 U	NA	NA	10 U	10 U
Carbon disulfide	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
Carbon tetrachloride	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
Chlorobenzene	ug/kg	1x10 <sup>6</sup> / 3,000	5 U	NA	5 U	NA	NA	5 U	5 U
Chlorodibromomethane	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
Chloroethane	ug/kg		10 U	NA	10 U	NA	NA	10 U	10 U
Chloromethane	ug/kg		10 U	NA	10 U	NA	NA	10 U	10 U
Chloroform	ug/kg	700,000 / 500	5 U	NA	5 U	NA	NA	5 U	5 U
1,1-Dichloroethane	ug/kg	7x10 <sup>6</sup> / 500	5 U	NA	5 U	NA	NA	5 U	5 U
1,2-Dichloroethane	ug/kg	50,000 / 300	5 U	NA	5 U	NA	NA	5 U	5 U
1,1-Dichloroethene	ug/kg	700,000 / 1,000	5 U	NA	5 U	NA	NA	5 U	5 U
cis-1,2-Dichloroethene	ug/kg		5 U	NA	6.3	NA	NA	5 U	5 U
trans-1,2-Dichloroethene	ug/kg	1x10 <sup>6</sup> / 600	5 U	NA	5 U	NA	NA	5 U	5 U
1,2-Dichloropropane	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
cis-1,3-Dichloropropene	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
trans-1,3-Dichloropropene	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
Ethylbenzene	ug/kg	7x10 <sup>6</sup> / 5,000	5 U	NA	5 U	NA	NA	5 U	5 U
2-Hexanone	ug/kg		50 U	NA	50 U	NA	NA	50 U	50 U
Methylene chloride	ug/kg	600,000 / 200	5 U	NA	30	NA	NA	5 U	5 U
4-Methyl-2-pentanone (MIBK)	ug/kg		50 U	NA	50 U	NA	NA	50 U	50 U
Styrene	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
1,1,2,2-Tetrachloroethane	ug/kg		5 U	NA	5 U	NA	NA	5 U	5 U
Tetrachloroethene	ug/kg	700,000 / 2,000	5 U	NA	5 U	NA	NA	5 U	5 U
Toluene	ug/kg	1x10 <sup>7</sup> / 2,000	5 U	NA	5 U	NA	NA	5 U	5 U
1,1,1-Trichloroethane	ug/kg	7x10 <sup>6</sup> / 1,000	5 U	NA	5 U	NA	NA	5 U	5 U
1,1,2-Trichloroethane	ug/kg	300,000 / 800	5 U	NA	5 U	NA	NA	5 U	5 U
Trichloroethene	ug/kg	400,000 / 2,000	5 U	NA	120	NA	NA	62	5 U
Vinyl chloride	ug/kg		10 U	NA	10 U	NA	NA	10 U	10 U
Xylenes (Total)	ug/kg	1x10 <sup>8</sup> / 3,000	5 U	NA	5 U	NA	NA	5 U	5 U
<b><u>Radiological:</u></b>									
Gross Alpha	pCi/g		0.5 U	8.7 +/- 1.2	16.8 +/- 1.5	2.5 +/- 1.0	80.3 +/- 3.5	8.5 +/- 1.2	2.3 +/- 0.5
Gross Beta	pCi/g		0.5 U	18.9 +/- 0.8	31.9 +/- 1.0	7.2 +/- 0.7	116 +/- 2.0	22.2 +/- 0.9	1.1 +/- 0.2
Radium (Total)	pCi/g		0.5 U	6.9 +/- 1.5	10.2 +/- 2.5	3.9 +/- 1.6	12.0 +/- 2.2	0.5 U	0.5 U
Uranium-234	pCi/g		0.06 +/- 0.01	1.04 +/- 0.11	0.86 +/- 0.11	0.14 +/- 0.02	0.98 +/- 0.14	0.21 +/- 0.03	1.04 +/- 0.12
Uranium-235	pCi/g		0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Uranium-238	pCi/g		0.06 +/- 0.01	0.35 +/- 0.04	0.28 +/- 0.05	0.05 +/- 0.01	1.01 +/- 0.14	0.20 +/- 0.03	0.83 +/- 0.10
Uranium (Total)	ug/g		0.4	3.1	2.3	0.3	4.4	1.2	1.9

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/25/94 B-41 S-4	10/25/94 B-42 S-1	10/25/94 B-43 S-1	10/24/94 B-44 S-2	10/24/94 B-44 S-4
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
<b>Miscellaneous Parameters:</b>							
Cyanide (ASTM)	mg/l	1000 mg/kg	NA	NA	0 005 U	NA	NA
Fluoride	mg/kg		140	160	NA	190	67
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N		0 16	0 1 U	NA	1 1	0 26
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N		0 1 U	0 16	NA	0 1 U	0 1 U
pH	pH units		---	---	NA	6 07	5 4
Total Petroleum Hydrocarbons	mg/kg	-- / 500	10 U	10 U	NA	10 U	10 U
Total Organic Carbon (ASTM)	mg/l		1 8	1 9	NA	4 7	3 1
<b>Inorganics:</b>							
Silver (Total)	mg/kg		2 U	2 U	2 U	2 U	2 U
Aluminum (Total)	mg/kg		18000	11000	10000	7200	2400
Arsenic (Total)	mg/kg	20	2 4	3 7	4 1	5 4	2 1
Barium (Total)	mg/kg	5000	120	55	59	62	21
Beryllium (Total)	mg/kg		0 89	0 68	0 64	0 63	0 4 U
Calcium (Total)	mg/kg		1100	610	1100	2000	320
Cadmium (Total)	mg/kg	20	5 4	2 9	2 9	3 5	2 U
Cobalt (Total)	mg/kg		38	59	9 3	8 1	2 U
Chromium (Total)	mg/kg	1000	23	18	14	11	7 1
Copper (Total)	mg/kg	700	25	17	10	11	6 7
Iron (Total)	mg/kg		29000	19000	18000	22000	7700
Mercury (Total)	mg/kg	20	0 1 U	0 1 U	0 1 U	0 2	0 16
Potassium (Total)	mg/kg		3800	1200	1000	290	180
Magnesium (Total)	mg/kg		1900	1000	970	1100	290
Manganese (Total)	mg/kg		2100	570	470	1500	28
Sodium (Total)	mg/kg		200 U	200 U	200 U	200 U	200 U
Nickel (Total)	mg/kg	200	33	57	15	14	10 U
Lead (Total)	mg/kg		20 U	20 U	20 U	20 U	20 U
Antimony (Total)	mg/kg		20 U	20 U	20 U	20 U	20 U
Selenium (Total)	mg/kg	60	0 2 U	0 23	0 2 U	0 2 U	0 25
Thallium (Total)	mg/kg		0 8 U	0 8 U	0 8 U	0 8 U	0 8 U
Vanadium (Total)	mg/kg		36	26	24	21	10 U
Zinc (Total)	mg/kg	1000	64	48	38	29	13
<b>Pesticides/Herbicides/PCBs:</b>							
Aldrin	mg/kg	0 3 / 500	NA	NA	0 05 U	NA	NA
Aroclor-1016	mg/kg		NA	NA	1 U	NA	NA
Aroclor-1221	mg/kg		NA	NA	1 U	NA	NA
Aroclor-1232	mg/kg		NA	NA	1 U	NA	NA
Aroclor-1242	mg/kg		NA	NA	1 U	NA	NA
Aroclor-1248	mg/kg		NA	NA	1 U	NA	NA
Aroclor-1254	mg/kg		NA	NA	1 U	NA	NA
Aroclor-1260	mg/kg		NA	NA	1 U	NA	NA
alpha-BHC	mg/kg		NA	NA	0 05 U	NA	NA
beta-BHC	mg/kg		NA	NA	0 05 U	NA	NA
delta-BHC	mg/kg		NA	NA	0 05 U	NA	NA
gamma-BHC (Lindane)	mg/kg	3 / 10	NA	NA	0 05 U	NA	NA
alpha-Chlordane	mg/kg	3 / 500	NA	NA	0 1 U	NA	NA
gamma-Chlordane	mg/kg	3 / 500	NA	NA	0 1 U	NA	NA
2,4-D	mg/kg	700 / 2	NA	NA	0 2 U	NA	NA
4,4'-DDD	mg/kg	20 / 500	NA	NA	0 1 U	NA	NA
4,4'-DDE	mg/kg	10 / 500	NA	NA	0 1 U	NA	NA
4,4'-DDT	mg/kg	10 / 500	NA	NA	0 1 U	NA	NA
Dieldrin	mg/kg	0 3 / 90	NA	NA	0 1 U	NA	NA
Endrin Ketone	mg/kg		NA	NA	0 1 U	NA	NA
Endosulfan I (Alpha)	mg/kg		NA	NA	0 05 U	NA	NA
Endosulfan II (Beta)	mg/kg		NA	NA	0 1 U	NA	NA
Endrin	mg/kg	20 / 500	NA	NA	0 1 U	NA	NA
Endrin Aldehyde	mg/kg		NA	NA	0 1 U	NA	NA
Endosulfan Sulfate	mg/kg		NA	NA	0 1 U	NA	NA
Heptachlor	mg/kg	1 / 400	NA	NA	0 05 U	NA	NA
Heptachlor Epoxide	mg/kg		NA	NA	0 05 U	NA	NA
Methoxychlor	mg/kg	300 / 200	NA	NA	0 5 U	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/25/94 B-41, S-4	10/25/94 B-42, S-1	10/25/94 B-43, S-1	10/24/94 B-44, S-2	10/24/94 B-44, S-4
Parameter	Units	PADER Interim Level	Value Qual	Value Qual	Value Qual	Value Qual	Value Qual
Aroclor Source			NA	NA	---	NA	NA
Polychlorinated Biphenyls	mg/kg	5 / --	NA	NA	1 U	NA	NA
2,4,5-TP (Silvex)	mg/kg	600 / 3	NA	NA	0.08 U	NA	NA
<b>Semivolatile Organics:</b>							
Acenaphthene	ug/kg	4x10 <sup>4</sup> / 30,000	NA	NA	330 U	NA	NA
Acenaphthylene	ug/kg		NA	NA	330 U	NA	NA
Anthracene	ug/kg	2x10 <sup>7</sup> / 70,000	NA	NA	330 U	NA	NA
Bis(2-chloro-1-methylethyl)eth	ug/kg		NA	NA	330 U	NA	NA
Bis(2-chloroethyl)ether	ug/kg		NA	NA	330 U	NA	NA
Bis(2-chloroethoxy)methane	ug/kg		NA	NA	330 U	NA	NA
Bis(2-ethylhexyl)phthalate	ug/kg		NA	NA	330 U	NA	NA
Benzo(a)pyrene	ug/kg	600 / 500,000	NA	NA	330 U	NA	NA
Benzo(a)anthracene	ug/kg		NA	NA	330 U	NA	NA
Benzo(b)fluoranthene	ug/kg		NA	NA	330 U	NA	NA
Benzo(ghi)perylene	ug/kg		NA	NA	330 U	NA	NA
Benzo(k)fluoranthene	ug/kg		NA	NA	330 U	NA	NA
4-Bromophenyl phenyl ether	ug/kg		NA	NA	330 U	NA	NA
Butyl benzyl phthalate	ug/kg		NA	NA	330 U	NA	NA
Carbazole	ug/kg		NA	NA	330 U	NA	NA
Chrysene	ug/kg		NA	NA	330 U	NA	NA
2-Chloronaphthalene	ug/kg		NA	NA	330 U	NA	NA
2-Chlorophenol	ug/kg		NA	NA	330 U	NA	NA
4-Chlorophenyl phenyl ether	ug/kg		NA	NA	330 U	NA	NA
o-Cresol	ug/kg	3x10 <sup>6</sup> / 500	NA	NA	330 U	NA	NA
p-Cresol	ug/kg	300,000 / 400	NA	NA	330 U	NA	NA
Dibenz(a,h)anthracene	ug/kg		NA	NA	330 U	NA	NA
Dibenzofuran	ug/kg		NA	NA	330 U	NA	NA
2,4-Dichlorophenol	ug/kg		NA	NA	330 U	NA	NA
1,2-Dichlorobenzene	ug/kg	7x10 <sup>6</sup> / 7,000	NA	NA	330 U	NA	NA
1,3-Dichlorobenzene	ug/kg		NA	NA	330 U	NA	NA
1,4-Dichlorobenzene	ug/kg	100,000 / 7,000	NA	NA	330 U	NA	NA
3,3'-Dichlorobenzidine	ug/kg		NA	NA	330 U	NA	NA
Diethyl phthalate	ug/kg		NA	NA	330 U	NA	NA
Dimethyl phthalate	ug/kg		NA	NA	330 U	NA	NA
2,4-Dimethylphenol	ug/kg		NA	NA	330 U	NA	NA
Di-n-butyl phthalate	ug/kg		NA	NA	330 U	NA	NA
4,6-Dinitro-o-cresol	ug/kg		NA	NA	820 U	NA	NA
2,4-Dinitrotoluene	ug/kg		NA	NA	330 U	NA	NA
2,6-Dinitrotoluene	ug/kg		NA	NA	330 U	NA	NA
Di-n-octyl phthalate	ug/kg		NA	NA	330 U	NA	NA
2,4-Dinitrophenol	ug/kg		NA	NA	820 U	NA	NA
Fluoranthene	ug/kg	3x10 <sup>6</sup> / 400,000	NA	NA	330 U	NA	NA
Fluorene	ug/kg	3x10 <sup>6</sup> / 40,000	NA	NA	330 U	NA	NA
Hexachlorocyclopentadiene	ug/kg		NA	NA	330 U	NA	NA
Hexachlorobenzene	ug/kg		NA	NA	330 U	NA	NA
Hexachlorobutadiene	ug/kg		NA	NA	330 U	NA	NA
Hexachloroethane	ug/kg		NA	NA	330 U	NA	NA
Indeno(1,2,3-cd)pyrene	ug/kg		NA	NA	330 U	NA	NA
Isophorone	ug/kg		NA	NA	330 U	NA	NA
2-Methylnaphthalene	ug/kg	1x10 <sup>6</sup> / 20,000	NA	NA	330 U	NA	NA
N-nitrosodiphenylamine	ug/kg		NA	NA	330 U	NA	NA
N-nitroso-di-n-propylamine	ug/kg		NA	NA	330 U	NA	NA
Naphthalene	ug/kg	600,000 / 8,000	NA	NA	330 U	NA	NA
2-Nitroaniline	ug/kg		NA	NA	820 U	NA	NA
3-Nitroaniline	ug/kg		NA	NA	820 U	NA	NA
4-Nitroaniline	ug/kg		NA	NA	820 U	NA	NA
Nitrobenzene	ug/kg		NA	NA	330 U	NA	NA
2-Nitrophenol	ug/kg		NA	NA	330 U	NA	NA
4-Nitrophenol	ug/kg		NA	NA	820 U	NA	NA
p-Chloroaniline	ug/kg		NA	NA	330 U	NA	NA
p-Chloro-m-cresol	ug/kg		NA	NA	330 U	NA	NA

**TABLE 6**  
**SOIL BORING ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Date Sampled: Sample ID:			10/25/94 B-41, S-4		10/25/94 B-42, S-1		10/25/94 B-43, S-1		10/24/94 B-44, S-2		10/24/94 B-44, S-4	
Parameter	Units	PADER Interim Level	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
Pentachlorophenol	ug/kg	40,000/200,000	NA		NA		820 U		NA		NA	
Phenanthrene	ug/kg	200,000/80,000	NA		NA		330 U		NA		NA	
Phenol	ug/kg	4x10 <sup>7</sup> / 200	NA		NA		330 U		NA		NA	
Pyrene	ug/kg	2x10 <sup>6</sup> / 300,000	NA		NA		330 U		NA		NA	
1,2,4-Trichlorobenzene	ug/kg		NA		NA		330 U		NA		NA	
2,4,5-Trichlorophenol	ug/kg		NA		NA		820 U		NA		NA	
2,4,6-Trichlorophenol	ug/kg		NA		NA		330 U		NA		NA	
<b><u>Volatile Organics:</u></b>												
Acetone	ug/kg		100 U		100 U		100 U		100 U		100 U	
Benzene	ug/kg	100,000 / 800	5 U		5 U		5 U		5 U		5 U	
Bromodichloromethane	ug/kg		5 U		5 U		5 U		5 U		5 U	
Bromoform	ug/kg		5 U		5 U		5 U		5 U		5 U	
Bromomethane	ug/kg		10 U		10 U		10 U		10 U		10 U	
2-Butanone (MEK)	ug/kg	4x10 <sup>7</sup> / 50	10 U		10 U		10 U		10 U		10 U	
Carbon disulfide	ug/kg		5 U		5 U		5 U		5 U		5 U	
Carbon tetrachloride	ug/kg		5 U		5 U		5 U		5 U		5 U	
Chlorobenzene	ug/kg	1x10 <sup>6</sup> / 3,000	5 U		5 U		5 U		5 U		5 U	
Chlorodibromomethane	ug/kg		5 U		5 U		5 U		5 U		5 U	
Chloroethane	ug/kg		10 U		10 U		10 U		10 U		10 U	
Chloromethane	ug/kg		10 U		10 U		10 U		10 U		10 U	
Chloroform	ug/kg	700,000 / 500	5 U		5 U		5 U		5 U		5 U	
1,1-Dichloroethane	ug/kg	7x10 <sup>6</sup> / 500	5 U		5 U		5 U		5 U		5 U	
1,2-Dichloroethane	ug/kg	50,000 / 300	5 U		5 U		5 U		5 U		5 U	
1,1-Dichloroethene	ug/kg	700,000 / 1,000	5 U		5 U		5 U		5 U		5 U	
cis-1,2-Dichloroethene	ug/kg		5 U		5 U		5 U		5 U		10	
trans-1,2-Dichloroethene	ug/kg	1x10 <sup>6</sup> / 600	5 U		5 U		5 U		5 U		5 U	
1,2-Dichloropropane	ug/kg		5 U		5 U		5 U		5 U		5 U	
cis-1,3-Dichloropropene	ug/kg		5 U		5 U		5 U		5 U		5 U	
trans-1,3-Dichloropropene	ug/kg		5 U		5 U		5 U		5 U		5 U	
Ethylbenzene	ug/kg	7x10 <sup>6</sup> / 5,000	5 U		5 U		5 U		5 U		5 U	
2-Hexanone	ug/kg		50 U		50 U		50 U		50 U		50 U	
Methylene chloride	ug/kg	600,000 / 200	5 U		89		5 U		5 U		5 U	
4-Methyl-2-pentanone (MIBK)	ug/kg		50 U		50 U		50 U		50 U		50 U	
Styrene	ug/kg		5 U		5 U		5 U		5 U		5 U	
1,1,2,2-Tetrachloroethane	ug/kg		5 U		5 U		5 U		5 U		5 U	
Tetrachloroethene	ug/kg	700,000 / 2,000	5 U		5 U		5 U		5 U		5 U	
Toluene	ug/kg	1x10 <sup>7</sup> / 2,000	5 U		5 U		5 U		5 U		5 U	
1,1,1-Trichloroethane	ug/kg	7x10 <sup>6</sup> / 1,000	5 U		5 U		5 U		5 U		5 U	
1,1,2-Trichloroethane	ug/kg	300,000 / 800	5 U		5 U		5 U		5 U		5 U	
Trichloroethene	ug/kg	400,000 / 2,000	5 U		5 U		5 U		5 U		26	
Vinyl chloride	ug/kg		10 U		10 U		10 U		10 U		10 U	
Xylenes (Total)	ug/kg	1x10 <sup>8</sup> / 3,000	5 U		5 U		5 U		5 U		5 U	
<b><u>Radiological:</u></b>												
Gross Alpha	pCi/g		0.5 U		0.5 U		0.5 U		2.1 +/- 0.7		0.6 +/- 0.5	
Gross Beta	pCi/g		0.6 +/- 0.4		0.5 U		0.5 U		0.9 +/- 0.3		0.6 +/- 0.3	
Radium (Total)	pCi/g		0.5 U		0.5 U		0.5 U		0.5 U		0.9 +/- 0.3	
Uranium-234	pCi/g		0.38 +/- 0.04		0.08 +/- 0.02		0.13 +/- 0.02		0.08 +/- 0.02		0.08 +/- 0.02	
Uranium-235	pCi/g		0.05 U		0.05 U		0.05 U		0.05 U		0.05 U	
Uranium-238	pCi/g		0.35 +/- 0.04		0.07 +/- 0.02		0.07 +/- 0.01		0.10 +/- 0.03		0.08 +/- 0.02	
Uranium (Total)	ug/g		0.6		0.6		0.4		2.9		0.3	

**Notes:**

- 1 NA - Sample not analyzed for this compound
- 2 U - Analyte not detected above quantitation limit
- 3 PADER Interim Standards listed for inorganics are the generic cleanup standards. For organics, the first standard listed is the lower of the direct contact and cancer risk levels, and the second is the groundwater 2 protection level
- 4 Results exceeding any interim standard are bold and shaded

**TABLE 7**  
**RADIOLOGICAL DATA**  
**SELECTED SOIL BORING SAMPLES**  
**(GAMMA SPECTROMETRY RESULTS)**

Sample ID No.	Boring ID	Sample ID	Cs-137	Tl-208	Bi-212	Bi-214	Pb-212	Pb-214	Ra-226	Ra-228/ Ac-228	Th-228	U-235	Other
B029	B-13	S-1	--	0.610 +/- 0.38	--	--	1.18 +/- 0.48	--	0.890 +/- 0.48	--	1.75 +/- 1.1	0.342 +/- 0.24	--
B030	B-14	S-1	--	0.525 +/- 0.27	--	--	0.755 +/- 0.42	0.667 +/- 0.50	--	--	1.51 +/- 0.77	0.491 +/- 0.34	--
B031	B-15	S-1	--	--	--	--	1.08 +/- 0.39	0.973 +/- 0.54	0.623 +/- 0.48	--	< 1.2	--	--
B032	B-15	S-2*	--	0.375 +/- 0.24	--	--	1.21 +/- 0.53	1.02 +/- 0.58	--	1.40 +/- 1.2	1.08 +/- 0.68	0.259 +/- 0.24	--
B033	B-16	S-3*	--	0.361 +/- 0.25	--	--	0.956 +/- 0.50	--	0.459 +/- 0.42	--	1.04 +/- 0.72	--	--
B034	B-17	S-2*	--	0.345 +/- 0.24	3.56 +/- 1.9	--	0.770 +/- 0.41	--	0.781 +/- 0.37	2.00 +/- 1.3	0.990 +/- 0.69	--	--
B035	B-18	S-2	--	--	--	--	0.949 +/- 0.71	--	--	--	< 0.71	--	--
B036	B-19	S-2	--	--	2.94 +/- 2.5	--	1.30 +/- 0.60	--	0.874 +/- 0.69	--	< 0.80	--	--
B037	B-20	S-2*	--	--	--	--	1.22 +/- 0.49	--	--	--	< 0.49	--	--
B038	B-21	S-1	--	0.645 +/- 0.26	--	--	0.569 +/- 0.45	--	--	--	1.85 +/- 0.76	1.18 +/- 0.42	--
B039	B-22	S-1*	--	0.424 +/- 0.27	--	--	--	--	--	--	1.22 +/- 0.78	0.459 +/- 0.31	--
B040	B-23	S-1*	--	--	--	--	--	--	--	--	< 0.51	1.25 +/- 0.58	--
B041	B-25	S-1*	--	--	--	--	0.975 +/- 0.47	--	--	--	< 0.47	--	--
B042	B-26	S-1*	--	--	--	--	0.777 +/- 0.62	--	--	--	< 0.62	0.993 +/- 0.57	--
B043	B-27	S-2	--	--	--	--	--	--	--	--	< 0.45	--	--
B044	B-30	S-1	--	--	--	--	--	--	--	--	< 1.3	0.759 +/- 0.43	--
B045	B-34	S-1*	--	--	--	--	0.789 +/- 0.52	--	--	--	< 0.52	--	--
B046	B-39	S-5*	--	0.531 +/- 0.40	--	--	--	6.35 +/- 1.6	5.48 +/- 1.5	--	1.53 +/- 1.2	0.668 +/- 0.60	--
B047	B-40	S-4*	--	0.872 +/- 0.69	--	23.1 +/- 2.6	4.21 +/- 1.3	23.7 +/- 2.8	23.1 +/- 2.6	--	2.50 +/- 2.0	4.87 +/- 1.3	--
B048	B-43	S-1*	--	1.09 +/- 0.52	--	12.6 +/- 1.8	0.971 +/- 0.84	16.5 +/- 2.0	12.6 +/- 1.8	--	3.14 +/- 1.5	1.99 +/- 0.76	--
B060	MW-5A	S-1	--	--	--	--	1.91 +/- 0.72	--	0.657 +/- 0.62	--	< 0.72	--	--
B061	MW-5A	S-4	--	0.209 +/- 0.10	--	1.16 +/- 0.34	0.830 +/- 0.15	1.05 +/- 0.28	1.16 +/- 0.34	1.13 +/- 0.74	0.600 +/- 0.29	--	--
B062	MW-6A	S-1	--	--	--	--	1.26 +/- 0.47	--	0.740 +/- 0.60	--	< 0.47	--	--
B063	MW-8A	S-2	--	0.342 +/- 0.29	--	--	1.23 +/- 0.57	--	--	--	0.982 +/- 0.84	--	--
B064	MW-9A	S-1	--	0.405 +/- 0.26	--	--	0.896 +/- 0.53	0.830 +/- 0.49	0.881 +/- 0.47	--	1.16 +/- 0.74	--	--
B059	MW-10A	S-1	--	0.398 +/- 0.28	--	--	1.17 +/- 0.45	--	1.06 +/- 0.66	--	1.14 +/- 0.81	--	--

Notes: All results in pCi/gram +/- 2 sigma at sample date of January 18, 1995.

\* These samples are split samples for some of the sample results presented in Table 6.

TAI 7A  
RADIOLOGICAL DATA  
SELECTED SURFACE SOIL BORING SAMPLES  
(GAMMA SPECTROMETRY RESULTS)

Sample ID No.	Hole ID	Sample Depth (in.)	Cs-137	Tl-208	Bi-212	Bi-214	Pb-212	Pb-214	Ra-226	Ra-228/ Ac-228	Th-228	U-235	Other
B065	B-1	0-6	--	0.526 +/- 0.35	--	--	1.35 +/- 0.43	--	0.957 +/- 0.63	--	1.51 +/- 1.0	--	--
B066	B-2	0-6	--	--	--	--	0.874 +/- 0.47	--	1.04 +/- 0.45	--	< 1.3	--	--
B067	B-3	0-6	--	0.395 +/- 0.30	--	--	1.25 +/- 0.45	1.27 +/- 0.50	--	--	1.13 +/- 0.87	--	--
B068	D-3	0-6	0.330 +/- 0.29	--	--	--	0.577 +/- 0.53	--	--	--	< 0.53	--	--
B069	D-8	0-6	0.555 +/- 0.34	--	--	--	0.995 +/- 0.31	0.977 +/- 0.51	1.02 +/- 0.68	--	< 0.65	4.04 +/- 0.61	--
B070	E-1	0-6	0.488 +/- 0.36	--	--	--	0.374 +/- 0.35	1.19 +/- 0.58	0.876 +/- 0.56	--	< 0.35	--	--
B071	E-2	0-6	--	--	--	--	0.607 +/- 0.47	--	--	--	< 0.47	--	--
B072	E-3	0-6	--	--	--	--	0.846 +/- 0.44	--	0.948 +/- 0.49	--	< 0.73	0.504 +/- 0.29	--
B073	E-5	0-6	--	0.305 +/- 0.20	4.75 +/- 2.9	--	1.41 +/- 0.45	0.839 +/- 0.64	1.10 +/- 0.44	--	0.876 +/- 0.57	--	--
B074	E-5	6-12	--	0.701 +/- 0.28	--	--	0.615 +/- 0.40	--	0.595 +/- 0.40	2.34 +/- 1.3	2.01 +/- 0.80	--	--
B075	F-1	0-6	--	0.661 +/- 0.27	--	--	--	--	0.484 +/- 0.34	--	0.951 +/- 0.77	--	--
B076	F-3	6-12	--	--	--	--	0.626 +/- 0.45	--	--	--	< 0.46	--	--
B077	F-8	0-6	--	--	--	--	0.921 +/- 0.45	--	--	--	< 0.80	0.800 +/- 0.33	--
B078	G-1	0-6	--	--	--	--	0.752 +/- 0.48	--	--	--	< 0.80	--	--
B446	G-8	0-6	0.577 +/- 0.21	0.335 +/- 0.16	--	--	0.960 +/- 0.31	0.636 +/- 0.27	0.656 +/- 0.26	--	0.961 +/- 0.47	187.5 +/- 1.5	33.5 +/- 25.7 (U-238)
B447	G-8	6-12	--	0.318 +/- 0.13	--	0.456 +/- 0.21	0.705 +/- 0.25	--	0.456 +/- 0.21	1.67 +/- 0.90	0.912 +/- 0.36	9.66 +/- 0.35	--
B079	H-7	0-6	0.206 +/- 0.12	0.33 +/- 0.18	--	--	0.695 +/- 0.25	0.542 +/- 0.33	0.477 +/- 0.32	1.26 +/- 0.81	0.948 +/- 0.51	0.515 +/- 0.20	0.190 +/- 0.15 (Co-60)
B080	Y-1	0-6	--	0.912 +/- 0.40	--	8.62 +/- 1.2	2.41 +/- 0.52	10.8 +/- 1.3	8.62 +/- 1.2	--	2.62 +/- 1.1	1.33 +/- 0.49	--
B081	Y-1	6-12	--	--	--	6.89 +/- 0.98	1.77 +/- 0.36	7.80 +/- 1.1	6.89 +/- 0.98	4.55 +/- 2.1	< 1.2	0.885 +/- 0.39	--
B082	Z-3	0-6	--	0.373 +/- 0.35	--	4.97 +/- 0.87	1.40 +/- 0.42	5.22 +/- 1.1	4.97 +/- 0.87	--	1.07 +/- 1.0	1.16 +/- 0.46	--
B083	Z-5	0-6	--	0.647 +/- 0.28	--	--	1.77 +/- 0.46	4.16 +/- 0.91	3.83 +/- 0.94	--	1.86 +/- 0.51	--	--

Note: All results in pCi/gram +/- 2 sigma at sample date of January 18, 1995.

**TABLE 8**  
**SURFACE WATER ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date:		10/25/94		10/24/94		10/25/94		10/25/94		10/24/94		10/27/94	
Sample ID:		SW-1		SW-2		SW-3		SW-3 Dup		SW-7		Decon-1	
Parameter	Units	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
<b><u>Miscellaneous Parameters:</u></b>													
Fluoride	mg/l	0.35		1		0.19		0.17		0.48		0.61	
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N	0.1	U	0.1	U	0.29		0.32		2.1		0.13	
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N	0.3		2.1		0.1	U	0.1	U	0.63		1.1	
pH	pH units	7.51		6.87		7.5		7.49		6.44		7.72	
Total Petroleum Hydrocarbons	mg/l	1	U	1	U	1	U	1	U	1	U	1	U
Total Organic Carbon (ASTM)	mg/l	7.9		6.4		6.2		3.5		5.1		17	
<b><u>Inorganics:</u></b>													
Silver (Total)	mg/l	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Aluminum (Total)	mg/l	1.1		1.5		1.8		1.8		0.26		0.23	
Arsenic (Total)	mg/l	0.003		0.002		0.006		0.006		0.001		0.001	U
Barium (Total)	mg/l	0.12		0.072		0.12		0.13		0.074		0.045	
Beryllium (Total)	mg/l	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
Calcium (Total)	mg/l	42		27		41		41		25		32	
Cadmium (Total)	mg/l	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U	0.01	U
Cobalt (Total)	mg/l	0.012		0.027		0.01	U	0.011		0.044		0.01	U
Chromium (Total)	mg/l	0.01		0.024		0.01	U	0.011		0.01	U	0.01	U
Copper (Total)	mg/l	0.01	U	0.01		0.016		0.01	U	0.01	U	0.032	
Iron (Total)	mg/l	3.6		1.4		9.3		9.7		54		35	
Mercury (Total)	mg/l	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U	0.0002	U
Potassium (Total)	mg/l	4.2		1.6		1.5		1.5		2.7		1.9	
Magnesium (Total)	mg/l	45		4.4		7.2		7.3		9		6.6	
Manganese (Total)	mg/l	0.85		0.45		1.6		1.7		1.6		0.21	
Sodium (Total)	mg/l	31		16		6.7		6.9		17		20	
Nickel (Total)	mg/l	0.04	U	0.059		0.04	U	0.04	U	0.1		0.04	U
Lead (Total)	mg/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Antimony (Total)	mg/l	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Selenium (Total)	mg/l	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Thallium (Total)	mg/l	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
Vanadium (Total)	mg/l	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U	0.05	U
Zinc (Total)	mg/l	0.032		0.072		0.046		0.046		0.048		0.36	
<b><u>Volatile Organics:</u></b>													
Acetone	ug/l	100	U	100	U	100	U	100	U	100	U	100	U
Benzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Bromodichloromethane	ug/l	5	U	5	U	5	U	5	U	5	U	9.8	
Bromoform	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Bromomethane	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
2-Butanone (MEK)	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
Carbon disulfide	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Chlorobenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Chlorodibromomethane	ug/l	5	U	5	U	5	U	5	U	5	U	7.9	
Chloroethane	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
Chloromethane	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
Chloroform	ug/l	5	U	5	U	5	U	5	U	5	U	17	
1,1-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U

**TABLE 8**  
**SURFACE WATER ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date: Sample ID:		10/25/94 SW-1		10/24/94 SW-2		10/25/94 SW-3		10/25/94 SW-3 Dup		10/24/94 SW-7		10/27/94 Decon-1	
Parameter	Units	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual	Value	Qual
trans-1,2-Dichloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Ethylbenzene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	ug/l	50	U	50	U	50	U	50	U	50	U	50	U
Methylene chloride	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	ug/l	50	U	50	U	50	U	50	U	50	U	50	U
Styrene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Tetrachloroethene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Toluene	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
Trichloroethene	ug/l	7.5		50		5	U	5	U	5	U	5	U
Vinyl chloride	ug/l	10	U	10	U	10	U	10	U	10	U	10	U
Xylenes (Total)	ug/l	5	U	5	U	5	U	5	U	5	U	5	U
<b><u>Radiological:</u></b>													
Gross Beta	pCi/l	33 +/- 5		12 +/- 5		24 +/- 5		12 +/- 5		4	U	3	U
Radium (Total)	pCi/l	2	U	2	U	2	U	2	U	2	U	1	U
Uranium-234	pCi/l	14.7 +/- 2.7		3.0 +/- 1.1		3.1 +/- 1.4		0.6	U	0.6	U	0.6	U
Uranium-235	pCi/l	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U	0.6	U
Uranium-238	pCi/l	12.2 +/- 2.4		1.6 +/- 0.8		4.6 +/- 1.6		0.6	U	0.6	U	0.6	U
Uranium (Total)	mg/l	0.008		0.001	U	0.001	U	0.001	U	0.001	U	0.001	U

**Notes:**

1. U - Analyte not detected above quantitation limit.



**TABLE 9**  
**SEDIMENT ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date:		10/25/94		10/24/94		10/25/94		10/24/94	
Sample ID:		SD-1		SD-2		SD-3		SD-7	
Parameter	Units	Value	Qual	Value	Qual	Value	Qual	Value	Qual
<b>Miscellaneous Parameters:</b>									
Fluoride	mg/kg	85		100		87		95	
Ammonia (ASTM)	mg/l NH <sub>3</sub> -N	0.1	U	0.1	U	0.33		2.4	
Nitrate (ASTM)	mg/l NO <sub>3</sub> -N	0.11		0.1	U	0.1	U	0.1	U
pH	pH units	---		7.02		---		6.95	
Total Petroleum Hydrocarbons	mg/kg	100	U	10	U	10	U	10	U
Total Organic Carbon (ASTM)	mg/l	5.5		55		4.1		8.2	
<b>Inorganics:</b>									
Silver (Total)	mg/kg	2	U	3.1		2	U	2	U
Aluminum (Total)	mg/kg	8000		3100		2400		5000	
Arsenic (Total)	mg/kg	5.6		3.2		4.5		3.1	
Barium (Total)	mg/kg	83		43		48		20	
Beryllium (Total)	mg/kg	0.74		0.42		0.48		1.1	
Calcium (Total)	mg/kg	1200		1600		2300		710	
Cadmium (Total)	mg/kg	3.3		2	U	2	U	3.9	
Cobalt (Total)	mg/kg	56		110		11		12	
Chromium (Total)	mg/kg	180		91		12		6.4	
Copper (Total)	mg/kg	17		21		6.7		16	
Iron (Total)	mg/kg	18000		9900		8200		20000	
Mercury (Total)	mg/kg	0.1	U	0.26		0.1	U	0.1	U
Potassium (Total)	mg/kg	1200		130		160		150	
Magnesium (Total)	mg/kg	980		490		390		340	
Manganese (Total)	mg/kg	670		420		490		150	
Sodium (Total)	mg/kg	200	U	200	U	200	U	200	U
Nickel (Total)	mg/kg	360		290		31		20	
Lead (Total)	mg/kg	43		28		20	U	20	U
Antimony (Total)	mg/kg	20	U	20	U	20	U	20	U
Selenium (Total)	mg/kg	0.53		0.69		0.2	U	0.54	
Thallium (Total)	mg/kg	0.8	U	0.8	U	0.8	U	0.8	U
Vanadium (Total)	mg/kg	18		10		10	U	10	U
Zinc (Total)	mg/kg	120		66		43		120	
<b>Volatile Organics:</b>									
Acetone	ug/kg	100	U	100	U	100	U	100	U
Benzene	ug/kg	5	U	5	U	5	U	5	U
Bromodichloromethane	ug/kg	5	U	5	U	5	U	5	U
Bromoform	ug/kg	5	U	5	U	5	U	5	U
Bromomethane	ug/kg	10	U	10	U	10	U	10	U
2-Butanone (MEK)	ug/kg	10	U	10	U	10	U	10	U
Carbon disulfide	ug/kg	5	U	5	U	5	U	5	U
Carbon tetrachloride	ug/kg	5	U	5	U	5	U	5	U
Chlorobenzene	ug/kg	5	U	5	U	5	U	5	U
Chlorodibromomethane	ug/kg	5	U	5	U	5	U	5	U
Chloroethane	ug/kg	10	U	10	U	10	U	10	U
Chloromethane	ug/kg	10	U	10	U	10	U	10	U

**TABLE 9**  
**SEDIMENT ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date:		10/25/94		10/24/94		10/25/94		10/24/94	
Sample ID:		SD-1		SD-2		SD-3		SD-7	
Parameter	Units	Value	Qual	Value	Qual	Value	Qual	Value	Qual
Chloroform	ug/kg	5	U	5	U	5	U	5	U
1,1-Dichloroethane	ug/kg	5	U	5	U	5	U	5	U
1,2-Dichloroethane	ug/kg	5	U	5	U	5	U	5	U
1,1-Dichloroethene	ug/kg	5	U	5	U	5	U	5	U
cis-1,2-Dichloroethene	ug/kg	26		13		5	U	5	U
trans-1,2-Dichloroethene	ug/kg	5	U	5	U	5	U	5	U
1,2-Dichloropropane	ug/kg	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/kg	5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/kg	5	U	5	U	5	U	5	U
Ethylbenzene	ug/kg	5	U	5	U	5	U	5	U
2-Hexanone	ug/kg	50	U	50	U	50	U	50	U
Methylene chloride	ug/kg	5	U	5	U	6.8		5	U
4-Methyl-2-pentanone (MIBK)	ug/kg	50	U	50	U	50	U	50	U
Styrene	ug/kg	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/kg	5	U	5	U	5	U	5	U
Tetrachloroethene	ug/kg	5	U	5	U	5	U	5	U
Toluene	ug/kg	5	U	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/kg	5	U	5	U	5	U	5	U
1,1,2-Trichloroethane	ug/kg	5	U	5	U	5	U	5	U
Trichloroethene	ug/kg	15		35		5	U	5	U
Vinyl chloride	ug/kg	81		10	U	10	U	10	U
Xylenes (Total)	ug/kg	5	U	5	U	5	U	5	U
<b>Radiological:</b>									
Gross Alpha	pCi/g	0.5	U	3.0 +/- 0.8		0.5	U	0.8 +/- 0.2	
Gross Beta	pCi/g	0.5	U	1.6 +/- 0.4		0.5	U	0.4 +/- 0.1	
Radium (Total)	pCi/g	0.5	U	0.9 +/- 0.4		4.3 +/- 1.6		0.5	U
Uranium-234	pCi/g	0.08 +/- 0.01		0.05	U	0.08 +/- 0.02		0.16 +/- 0.08	
Uranium-235	pCi/g	0.05	U	0.05	U	0.05	U	0.05	U
Uranium-238	pCi/g	0.06 +/- 0.01		0.05	U	0.08 +/- 0.02		0.13 +/- 0.07	
Uranium (Total)	ug/g	0.5		1.3		1.2		0.1	U

**Notes:**

1. U - Analyte not detected above quantitation limit.

**TABLE 10**  
**RADIOLOGICAL DATA**  
**SEDIMENT SAMPLES**

Sample ID No.	Sediment Sample Location	Cs-137	Tl-208	Bi-212	Bi-214	Pb-212	Pb-214	Ra-226	Ra-228/ Ac-228	Th-228	U-235	Other
B049	SD-2*	--	0.243 +/- 0.19	--	--	0.764 +/- 0.36	--	--	--	0.699 +/- 0.55	--	--
B050	SD-3*	--	--	--	--	--	--	--	--	< 2.0	--	--
B051	SD-7*	--	--	--	--	--	--	--	--	< 1.3	--	--
B052	SD-A	--	--	--	--	--	--	--	--	< 0.43	--	--
B053	SD-B	--	--	--	--	--	0.520 +/- 0.44	--	--	< 1.1	0.281 +/- 0.25	--
B054	SD-C	--	--	--	--	0.353 +/- 0.33	--	--	1.69 +/- 1.2	< 0.58	0.390 +/- 0.375	--
B055	SD-D	--	--	--	--	--	0.677 +/- 0.53	--	--	< 0.72	--	--
B056	SD-E	--	--	--	--	--	--	--	--	< 0.39	0.800 +/- 0.32	--
B057	SD-F	--	--	--	--	0.803 +/- 0.48	--	0.524 +/- 0.49	--	< 0.49	--	--
B058	SD-G	1.59 +/- 0.49	--	--	--	0.816 +/- 0.41	--	--	--	< 0.41	--	--

Notes: All results in pCi/gram +/- 2 sigma at sample date of January 18, 1995.  
\* These samples are split samples for some of the sample results presented in Table 9.

**TABLE 11**  
**GROUNDWATER ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date: Sample ID:			11/10/94 GW-1		11/10/94 MW-2		11/10/94 MW-3		11/10/94 MW-6A	
Parameter	Units	PA MCL	Value	Qual	Value	Qual	Value	Qual	Value	Qual
<b>Miscellaneous Parameters:</b>										
Fluoride	mg/l	2	0.79		2.7		0.1 U		0.1 U	
Ammonia	mg/l NH <sub>3</sub> -N		0.1 U		0.1 U		1.3		0.1 U	
Nitrate	mg/l NO <sub>3</sub> -N	10	1.4		7.6		0.1 U		0.1 U	
pH	pH units	6.5-8.5 (s)	6.37		7.2		6.88		6.86	
Total Petroleum Hydrocarbons	mg/l		1 U		1 U		1 U		1 U	
Total Organic Carbon	mg/l		2		3.3		2.2		4.7	
<b>Inorganics:</b>										
Silver (Total/Dissolved)	mg/l	0.05	0.01/0.01	U/U	0.01/0.01	U/U	0.01/0.01	U/U	0.01/0.01	U/U
Aluminum (Total/Dissolved)	mg/l		1.3/1.8		3.4/5.9		1.7/1.5		2.9/1.8	
Arsenic (Total/Dissolved)	mg/l	0.05	0.001/0.001	U/U	0.001/0.001	U/-	0.004/0.005		0.002/0.002	
Barium (Total/Dissolved)	mg/l	1	0.055/0.062		0.2/0.12		0.3/0.19		0.23/0.15	
Beryllium (Total/Dissolved)	mg/l		0.002/0.002	U/U	0.003/0.003		0.002/0.002	U/U	0.002/0.002	U/U
Calcium (Total/Dissolved)	mg/l		26/26		150/150		50/54		24/28	
Cadmium (Total/Dissolved)	mg/l	0.005	0.01/0.005	U/U	0.01/0.005	U/U	0.01/0.005	U/U	0.01/0.005	U/U
Cobalt (Total/Dissolved)	mg/l		0.01/0.01	U/U	0.01/0.01	U/U	0.01/0.01	U/U	0.01/0.01	U/U
Chromium (Total/Dissolved)	mg/l	0.05	0.01/0.01	U/U	0.016/0.019		0.023/0.01	-/U	0.016/0.011	
Copper (Total/Dissolved)	mg/l	1.3 / 1(s)	0.01/0.012	U/-	0.026/0.028		0.015/0.025		0.03/0.02	
Iron (Total/Dissolved)	mg/l	0.3 (s)	0.75/0.73		5.4/7.4		15/14		17/8.2	
Mercury (Total/Dissolved)	mg/l	0.002	0.0002/NA	U/-	0.0006/NA		0.0002/NA	U/-	0.0003/NA	
Potassium (Total/Dissolved)	mg/l		1/1.2		2.2/2.9		0.72/0.97		0.98/1.2	
Agnesium (Total/Dissolved)	mg/l		3.5/3.9		18/20		8.8/9.8		6.7/7.9	
Manganese (Total/Dissolved)	mg/l	0.05 (s)	0.3/0.3		1.9/2.1		0.47/0.50		2/2	
Sodium (Total/Dissolved)	mg/l		11/14		68/71		5.7/8.1		14/18	
Nickel (Total/Dissolved)	mg/l		0.04/0.04	U/U	0.14/0.13		0.04/0.04	U/U	0.04/0.04	U/U
Lead (Total/Dissolved)	mg/l	0.015	0.1/0.1	U/U	0.1/0.1	U/U	0.1/0.1	U/U	0.1/0.1	U/U
Antimony (Total/Dissolved)	mg/l		0.1/0.1	U/U	0.1/0.1	U/U	0.1/0.1	U/U	0.1/0.1	U/U
Selenium (Total/Dissolved)	mg/l	0.01	0.001/0.001	U/U	0.001/0.001	U/U	0.001/0.001	U/U	0.002/0.001	-/U
Thallium (Total/Dissolved)	mg/l		0.004/0.004	U/U	0.004/0.004	U/U	0.004/0.004	U/U	0.004/0.004	U/U
Vanadium (Total/Dissolved)	mg/l		0.05/0.05	U/U	0.05/0.05	U/U	0.05/0.05	U/U	0.05/0.05	U/U
Zinc (Total/Dissolved)	mg/l	5 (s)	0.014/0.028		0.42/0.41		0.039/0.059		0.12/0.06	
<b>Volatile Organics:</b>										
Acetone	ug/l		100 U		100 U		100 U		100 U	
Benzene	ug/l	5	5 U		5 U		5 U		5 U	
Bromodichloromethane	ug/l		5 U		5 U		5 U		5 U	
Bromoform	ug/l		5 U		5 U		5 U		5 U	
Bromomethane	ug/l		10 U		10 U		10 U		10 U	
2-Butanone (MEK)	ug/l		10 U		10 U		10 U		10 U	
Carbon disulfide	ug/l		5 U		5 U		5 U		5 U	
Carbon tetrachloride	ug/l	5	5 U		5 U		5 U		5 U	
Chlorobenzene	ug/l		5 U		5 U		5 U		5 U	
Chlorodibromomethane	ug/l		5 U		5 U		5 U		5 U	
Chloroethane	ug/l		10 U		10 U		10 U		10 U	
Chloromethane	ug/l		10 U		10 U		10 U		10 U	
Chloroform	ug/l		5 U		5 U		5 U		5 U	
1,1-Dichloroethane	ug/l		5 U		8.8		5 U		5 U	
2-Dichloroethane	ug/l	5	5 U		5 U		5 U		5 U	
1,1-Dichloroethene	ug/l	7	5 U		5 U		21		5 U	

**TABLE 11**  
**GROUNDWATER ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date: Sample ID:			11/10/94 GW-1		11/10/94 MW-2		11/10/94 MW-3		11/10/94 MW-6A	
Parameter	Units	PA MCL	Value	Qual	Value	Qual	Value	Qual	Value	Qual
cis-1,2-Dichloroethene	ug/l	70	5	U	5	U	590		5	U
trans-1,2-Dichloroethene	ug/l	100	5	U	5	U	5.7		5	U
1,2-Dichloropropane	ug/l	5	5	U	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l		5	U	5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l		5	U	5	U	5	U	5	U
Ethylbenzene	ug/l	700	5	U	5	U	5	U	5	U
2-Hexanone	ug/l		50	U	50	U	50	U	50	U
Methylene chloride	ug/l		5	U	5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	ug/l		50	U	50	U	50	U	50	U
Styrene	ug/l	100	5	U	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l		5	U	5	U	5	U	5	U
Tetrachloroethene	ug/l	5	5	U	5	U	5	U	5	U
Toluene	ug/l	1000	5	U	5	U	77		5	U
1,1,1-Trichloroethane	ug/l	200	5	U	25		5	U	5	U
1,1,2-Trichloroethane	ug/l		5	U	5	U	5	U	5	U
Trichloroethene	ug/l	5	150		12		1500		5	U
Vinyl chloride	ug/l	2	10	U	10	U	220		10	U
Xylenes (Total)	ug/l	10,000	5	U	5	U	5	U	5	U
<b>Radiological:</b>										
Gross Alpha	pCi/l	15	2	U	38 +/- 6		19 +/- 4		49 +/- 6	
Gross Beta	pCi/l		3	U	34 +/- 4		13 +/- 4		45 +/- 4	
Radium (Total)	pCi/l	5	1	U	1	U	1	U	1	U
Uranium-234	pCi/l		0.6	U	1.0 +/- 0.8		1.9 +/- 0.7		2.6 +/- 0.7	
Uranium-235	pCi/l		0.6	U	0.6	U	0.6	U	0.6	U
Uranium-238	pCi/l		0.6	U	0.8 +/- 0.6		1.0 +/- 0.6		2.8 +/- 0.7	
Uranium (Total)	mg/l		0.001	U	0.003		0.001	U	0.001	U

**TABLE 11**  
**GROUNDWATER ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date: Sample ID:			11/10/94 MW-7A		11/10/94 MW-8A		11/10/94 MW-9A	
Parameter	Units	PA MCL	Value	Qual	Value	Qual	Value	Qual
<b>Miscellaneous Parameters:</b>								
Fluoride	mg/l	2	0.1 U		0.1 U		0.1 U	
Ammonia	mg/l NH <sub>3</sub> -N		0.1 U		0.1 U		0.2	
Nitrate	mg/l NO <sub>3</sub> -N	10	0.1 U		0.1 U		0.1 U	
pH	pH units	6.5-8.5 (s)	<b>6.34</b>		<b>5.97</b>		<b>6.44</b>	
Total Petroleum Hydrocarbons	mg/l		1 U		1 U		1 U	
Total Organic Carbon	mg/l		3.3		2.8		2.7	
<b>Inorganics:</b>								
Silver (Total/Dissolved)	mg/l	0.05	0.01/NA	U/-	0.01/0.01	U/U	0.01/0.01	U/U
Aluminum (Total/Dissolved)	mg/l		0.85/NA		6.5/3.5		11/6.5	
Arsenic (Total/Dissolved)	mg/l	0.05	0.001/NA		0.001/0.001	U/-	0.003/0.001	
Barium (Total/Dissolved)	mg/l	1	0.1/NA		0.85/0.42		0.1/0.1	
Beryllium (Total/Dissolved)	mg/l		0.002/NA	U/-	0.002/0.002	-/U	0.002/0.002	U/U
Calcium (Total/Dissolved)	mg/l		21/NA		30/38		28/30	
Cadmium (Total/Dissolved)	mg/l	0.005	0.005/NA	U/-	<b>0.01/0.008</b>		0.01/0.005	U/U
Cobalt (Total/Dissolved)	mg/l		0.024/NA		0.11/0.089		0.029/0.018	
Chromium (Total/Dissolved)	mg/l	0.05	0.01/NA	U/-	0.01/0.016	U/-	<b>0.052/0.043</b>	
Copper (Total/Dissolved)	mg/l	1.3 / 1(s)	0.01/NA	U/-	0.038/0.028		0.026/0.027	
Iron (Total/Dissolved)	mg/l	0.3 (s)	<b>9.9/NA</b>		<b>41/21</b>		<b>29/14</b>	
Mercury (Total/Dissolved)	mg/l	0.002	0.0002/NA	U/-	0.0003/NA		<b>0.0027/NA</b>	
Potassium (Total/Dissolved)	mg/l		1.8/NA		1.3/1.3		1.9/1.6	
Magnesium (Total/Dissolved)	mg/l		11/NA		8.6/9.3		9.4/8.7	
Manganese (Total/Dissolved)	mg/l	0.05 (s)	<b>1.7/NA</b>		<b>5.2/4.4</b>		<b>6.4/6.6</b>	
Sodium (Total/Dissolved)	mg/l		10/NA		5.9/9		26/30	
Nickel (Total/Dissolved)	mg/l		0.04/NA	U/-	0.08/0.077		0.057/0.041	
Lead (Total/Dissolved)	mg/l	0.015	0.1/NA	U/-	0.1/0.1	U/U	0.1/0.1	U/U
Antimony (Total/Dissolved)	mg/l		0.1/NA	U/-	0.1/0.1	U/U	0.1/0.1	U/U
Selenium (Total/Dissolved)	mg/l	0.01	0.001/NA	U/-	0.001/0.001	U/U	0.001/0.001	U/U
Thallium (Total/Dissolved)	mg/l		0.004/NA	U/-	0.004/0.004	U/U	0.004/0.004	U/U
Vanadium (Total/Dissolved)	mg/l		0.05/NA	U/-	0.05/0.05	U/U	0.05/0.05	U/U
Zinc (Total/Dissolved)	mg/l	5 (s)	0.026		0.093/0.073		0.076/0.067	
<b>Volatile Organics:</b>								
Acetone	ug/l		100 U		100 U		100 U	
Benzene	ug/l	5	5 U		5 U		5 U	
Bromodichloromethane	ug/l		5 U		5 U		5 U	
Bromoform	ug/l		5 U		5 U		5 U	
Bromomethane	ug/l		10 U		10 U		10 U	
2-Butanone (MEK)	ug/l		10 U		10 U		10 U	
Carbon disulfide	ug/l		5 U		5 U		5 U	
Carbon tetrachloride	ug/l	5	5 U		5 U		5 U	
Chlorobenzene	ug/l		5 U		5 U		5 U	
Chlorodibromomethane	ug/l		5 U		5 U		5 U	
Chloroethane	ug/l		10 U		10 U		10 U	
Chloromethane	ug/l		10 U		10 U		10 U	
Chloroform	ug/l		5 U		5 U		5 U	
1,1-Dichloroethane	ug/l		5 U		5 U		6.6	
1,2-Dichloroethane	ug/l	5	5 U		5 U		5 U	
1,1-Dichloroethene	ug/l	7	5 U		5 U		<b>20</b>	

**TABLE 11**  
**GROUNDWATER ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date: Sample ID:			11/10/94 MW-7A		11/10/94 MW-8A		11/10/94 MW-9A	
Parameter	Units	PA MCL	Value	Qual	Value	Qual	Value	Qual
cis-1,2-Dichloroethene	ug/l	70	5	U	5	U	3300	
trans-1,2-Dichloroethene	ug/l	100	5	U	5	U	29	
1,2-Dichloropropane	ug/l	5	5	U	5	U	5	U
cis-1,3-Dichloropropene	ug/l		5	U	5	U	5	U
trans-1,3-Dichloropropene	ug/l		5	U	5	U	5	U
Ethylbenzene	ug/l	700	5	U	5	U	5	U
2-Hexanone	ug/l		50	U	50	U	50	U
Methylene chloride	ug/l		5	U	5	U	5	U
4-Methyl-2-pentanone (MIBK)	ug/l		50	U	50	U	50	U
Styrene	ug/l	100	5	U	5	U	5	U
1,1,2,2-Tetrachloroethane	ug/l		5	U	5	U	5	U
Tetrachloroethene	ug/l	5	5	U	5	U	6	
Toluene	ug/l	1000	5	U	5	U	5	U
1,1,1-Trichloroethane	ug/l	200	5	U	5	U	24	
1,1,2-Trichloroethane	ug/l		5	U	5	U	5	U
Trichloroethene	ug/l	5	5	U	5	U	22000	
Vinyl chloride	ug/l	2	10	U	10	U	49	
Xylenes (Total)	ug/l	10,000	5	U	5	U	5	U
<b><u>Radiological:</u></b>								
Gross Alpha	pCi/l	15	14 +/- 3		25 +/- 5		20 +/- 4	
Gross Beta	pCi/l		23 +/- 4		46 +/- 4		34 +/- 4	
Radium (Total)	pCi/l	5	3	U	2 +/- 1		1	U
Uranium-234	pCi/l		0.6	U	12.3 +/- 3.8		0.6	U
Uranium-235	pCi/l		0.6	U	0.8 +/- 0.6		0.6	U
Uranium-238	pCi/l		0.6	U	14.7 +/- 4.3		0.6	U
Uranium (Total)	mg/l		0.001		0.001	U	0.001	

**TABLE 11**  
**GROUNDWATER ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date: Sample ID:			11/10/94 MW-9AD		11/10/94 MW-10A		11/10/94 GW-EQB	
Parameter	Units	PA MCL	Value	Qual	Value	Qual	Value	Qual
<b>Miscellaneous Parameters:</b>								
Fluoride	mg/l	2	0.1	U	0.1	U	0.1	U
Ammonia	mg/l NH <sub>3</sub> -N		0.14		0.1	U	0.1	U
Nitrate	mg/l NO <sub>3</sub> -N	10	0.1	U	0.1	U	0.2	
pH	pH units	6.5-8.5 (s)	6.45		5.36		5.94	
Total Petroleum Hydrocarbons	mg/l		1	U	1	U	1	U
Total Organic Carbon	mg/l		2.6		2.8		1	U
<b>Inorganics:</b>								
Silver (Total/Dissolved)	mg/l	0.05	0.01/0.01	U/U	0.01/0.01	U/U	0.01/0.01	U/U
Aluminum (Total/Dissolved)	mg/l		4.8/5.6		1.5/5.7		0.1/0.1	U/U
Arsenic (Total/Dissolved)	mg/l	0.05	0.001/0.002		0.001/0.001	U/U	0.001/0.001	U/U
Barium (Total/Dissolved)	mg/l	1	0.088/0.097		0.095/0.28		0.02/0.02	U/U
Beryllium (Total/Dissolved)	mg/l		0.002/0.002	U/U	0.002/0.006	U/-	0.002/0.002	U/U
Calcium (Total/Dissolved)	mg/l		27/30		7.5/24		1/1	U/U
Cadmium (Total/Dissolved)	mg/l	0.005	0.01/0.005	U/U	0.01/0.013	U/-	0.01/0.005	U/U
Cobalt (Total/Dissolved)	mg/l		0.01/0.016	U/-	0.023/0.042		0.01/0.01	U/U
Chromium (Total/Dissolved)	mg/l	0.05	0.039/0.036		0.01/0.01	U/U	0.01/0.01	U/U
Copper (Total/Dissolved)	mg/l	1.3 / 1(s)	0.014/0.026		0.01/0.053		0.01/0.01	U/U
Iron (Total/Dissolved)	mg/l	0.3 (s)	11/12		4.8/10		0.032/0.03	-/U
Mercury (Total/Dissolved)	mg/l	0.002	0.0012/NA		0.001/NA		0.0002/NA	U/-
Potassium (Total/Dissolved)	mg/l		1.4/1.7		0.5/0.77	U/-	0.5/0.5	U/U
Magnesium (Total/Dissolved)	mg/l		7.8/8.6		4.3/6.5		0.5/0.54	U/-
Manganese (Total/Dissolved)	mg/l	0.05 (s)	6.5/6.6		0.37/0.55		0.01/0.01	U/U
Sodium (Total/Dissolved)	mg/l		28/31		4.5/6.8		1/2.4	U/-
Nickel (Total/Dissolved)	mg/l		0.04/0.056	U/-	0.04/0.04	U/U	0.04/0.04	U/U
Lead (Total/Dissolved)	mg/l	0.015	0.1/0.27	U/-	0.1/0.1	U/U	0.1/0.1	U/U
Antimony (Total/Dissolved)	mg/l		0.1/0.1	U/U	0.1/0.1	U/U	0.1/0.1	U/U
Selenium (Total/Dissolved)	mg/l	0.01	0.001/0.001	U/U	0.001/0.001	U/U	0.001/0.001	U/U
Thallium (Total/Dissolved)	mg/l		0.004/0.004	U/U	0.004/0.004	U/U	0.004/0.004	U/U
Vanadium (Total/Dissolved)	mg/l		0.05/0.05	U/U	0.05/0.05	U/U	0.05/0.05	U/U
Zinc (Total/Dissolved)	mg/l	5 (s)	0.031/0.055		0.035/0.1		0.005/0.019	U/-
<b>Volatile Organics:</b>								
Acetone	ug/l		100	U	100	U	100	U
Benzene	ug/l	5	5	U	5	U	5	U
Bromodichloromethane	ug/l		5	U	5	U	5	U
Bromoform	ug/l		5	U	5	U	5	U
Bromomethane	ug/l		10	U	10	U	10	U
2-Butanone (MEK)	ug/l		10	U	10	U	10	U
Carbon disulfide	ug/l		5	U	5	U	5	U
Carbon tetrachloride	ug/l	5	5	U	5	U	5	U
Chlorobenzene	ug/l		5	U	5	U	5	U
Chlorodibromomethane	ug/l		5	U	5	U	5	U
Chloroethane	ug/l		10	U	10	U	10	U
Chloromethane	ug/l		10	U	10	U	10	U
Chloroform	ug/l		5	U	5	U	5	U
1,1-Dichloroethane	ug/l		6.2		5	U	5	U
1,2-Dichloroethane	ug/l	5	5	U	5	U	5	U
1,1-Dichloroethene	ug/l	7	19		5	U	5	U



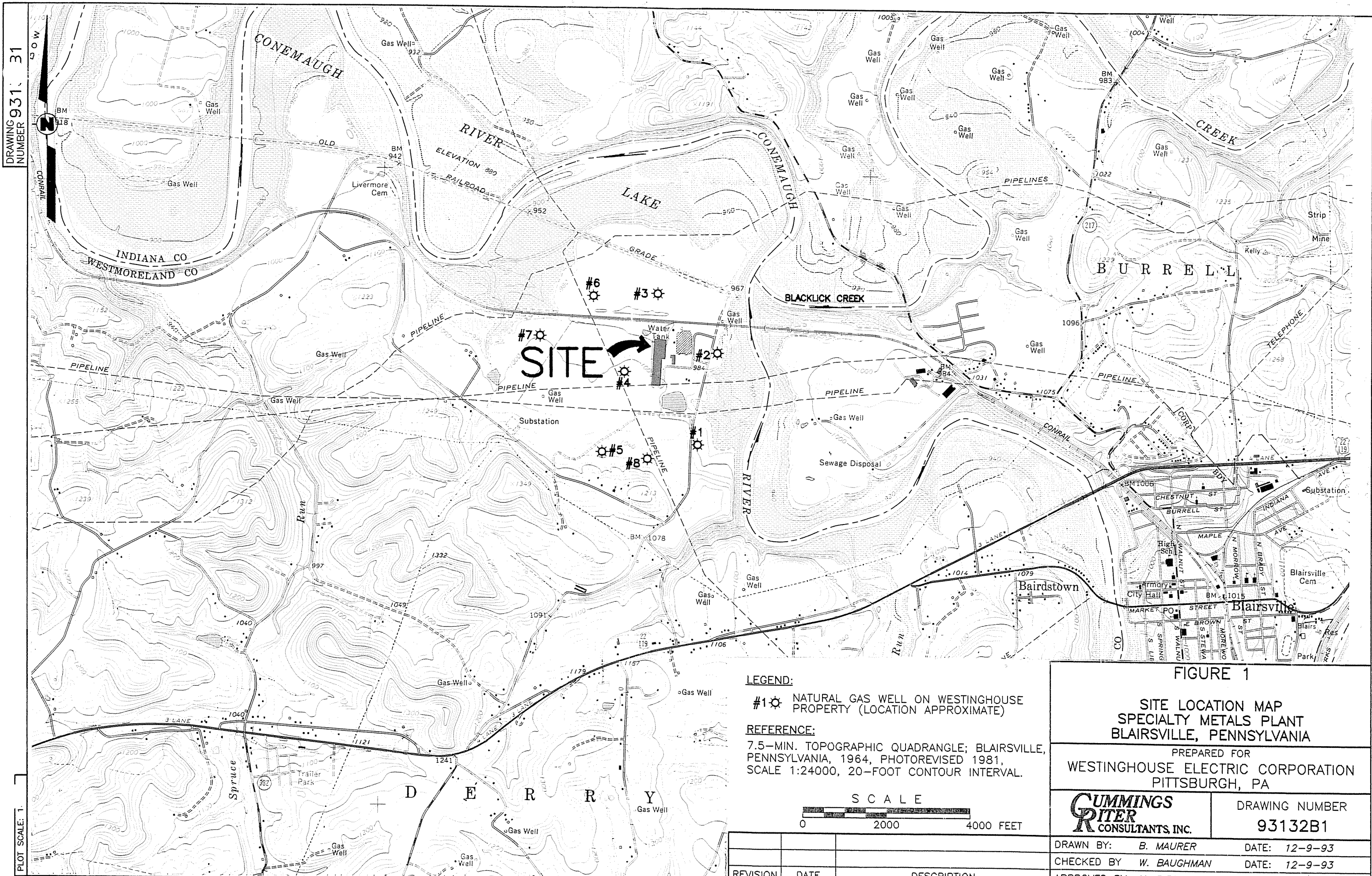
**TABLE 11**  
**GROUNDWATER ANALYTICAL RESULTS**  
**BLAIRSVILLE FACILITY**

Sample Date: Sample ID:			11/10/94 MW-9AD		11/10/94 MW-10A		11/10/94 GW-EQB	
Parameter	Units	PA MCL	Value	Qual	Value	Qual	Value	Qual
cis-1,2-Dichloroethene	ug/l	70	<b>2900</b>		5 U		5 U	
trans-1,2-Dichloroethene	ug/l	100	25		5 U		5 U	
1,2-Dichloropropane	ug/l	5	5 U		5 U		5 U	
cis-1,3-Dichloropropene	ug/l		5 U		5 U		5 U	
trans-1,3-Dichloropropene	ug/l		5 U		5 U		5 U	
Ethylbenzene	ug/l	700	5 U		5 U		5 U	
2-Hexanone	ug/l		50 U		50 U		50 U	
Methylene chloride	ug/l		5 U		5 U		5 U	
4-Methyl-2-pentanone (MIBK)	ug/l		50 U		50 U		50 U	
Styrene	ug/l	100	5 U		5 U		5 U	
1,1,2,2-Tetrachloroethane	ug/l		5 U		5 U		5 U	
Tetrachloroethene	ug/l	5	<b>5.6</b>		5 U		5 U	
Toluene	ug/l	1000	5 U		5 U		5 U	
1,1,1-Trichloroethane	ug/l	200	22		5 U		5 U	
1,1,2-Trichloroethane	ug/l		5 U		5 U		5 U	
Trichloroethene	ug/l	5	<b>21000</b>		5 U		5 U	
Vinyl chloride	ug/l	2	<b>47</b>		10 U		10 U	
Xylenes (Total)	ug/l	10,000	5 U		5 U		5 U	
<b><u>Radiological:</u></b>								
Gross Alpha	pCi/l	15	<b>20 +/- 4</b>		7 +/- 2		2 U	
Gross Beta	pCi/l		<b>21 +/- 4</b>		8 +/- 4		3 U	
Radium (Total)	pCi/l	5	1 U		1 U		1 U	
Uranium-234	pCi/l		1.8 +/- 0.5		0.7 +/- 0.6		0.7 +/- 0.5	
Uranium-235	pCi/l		0.6 U		0.6 U		0.6 U	
Uranium-238	pCi/l		1.6 +/- 0.5		0.6 U		1.7 +/- 0.7	
Uranium (Total)	mg/l		0.001 U		0.001 U		0.001 U	

**Notes:**

1. U - Analyte not detected above quantitation limit.
2. (s) - MCL listed is for secondary contaminant.
3. Results exceeding primary MCLs are bold and shaded.
4. Results exceeding secondary MCLs are bold.
5. NA - Sample not analyzed due to insufficient volume.

## FIGURES



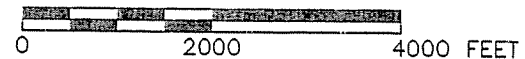
**LEGEND:**

#1 ⚡ NATURAL GAS WELL ON WESTINGHOUSE PROPERTY (LOCATION APPROXIMATE)

**REFERENCE:**

7.5-MIN. TOPOGRAPHIC QUADRANGLE; BLAIRSVILLE, PENNSYLVANIA, 1964, PHOTOREVISED 1981, SCALE 1:24000, 20-FOOT CONTOUR INTERVAL.

**SCALE**



**FIGURE 1**

**SITE LOCATION MAP  
SPECIALTY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA**

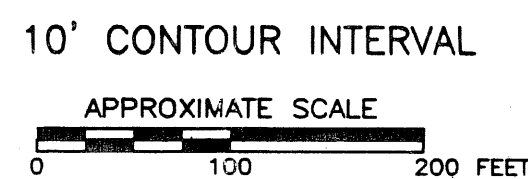
PREPARED FOR  
WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PA

**CUMMINGS  
PETER  
CONSULTANTS, INC.**

DRAWING NUMBER  
**93132B1**

DRAWN BY:	B. MAURER	DATE:	12-9-93
CHECKED BY:	W. BAUGHMAN	DATE:	12-9-93
APPROVED BY:	K. BIRD	DATE:	12-9-93

REVISION	DATE	DESCRIPTION




REFERENCE:

1. TOPOGRAPHIC CONTOURS AND PROPERTY FEATURES WERE PROVIDED BY OTHERS AND HAVE NOT BEEN VERIFIED BY CUMMINGS/RITER.

WESTINGHOUSE ELECTRIC CORPORATION, SPECIALTY METALS DIVISION,  
BLAIRSVILLE, PENNSYLVANIA; FIGURE 6; TITLED: "SURFACE AND  
GROUND WATER QUALITY MONITORING LOCATIONS NEAR PLANT  
FACILITIES," PROJECT P6043.

FIGURE 2  
SITE PLAN  
SPECIALTY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA

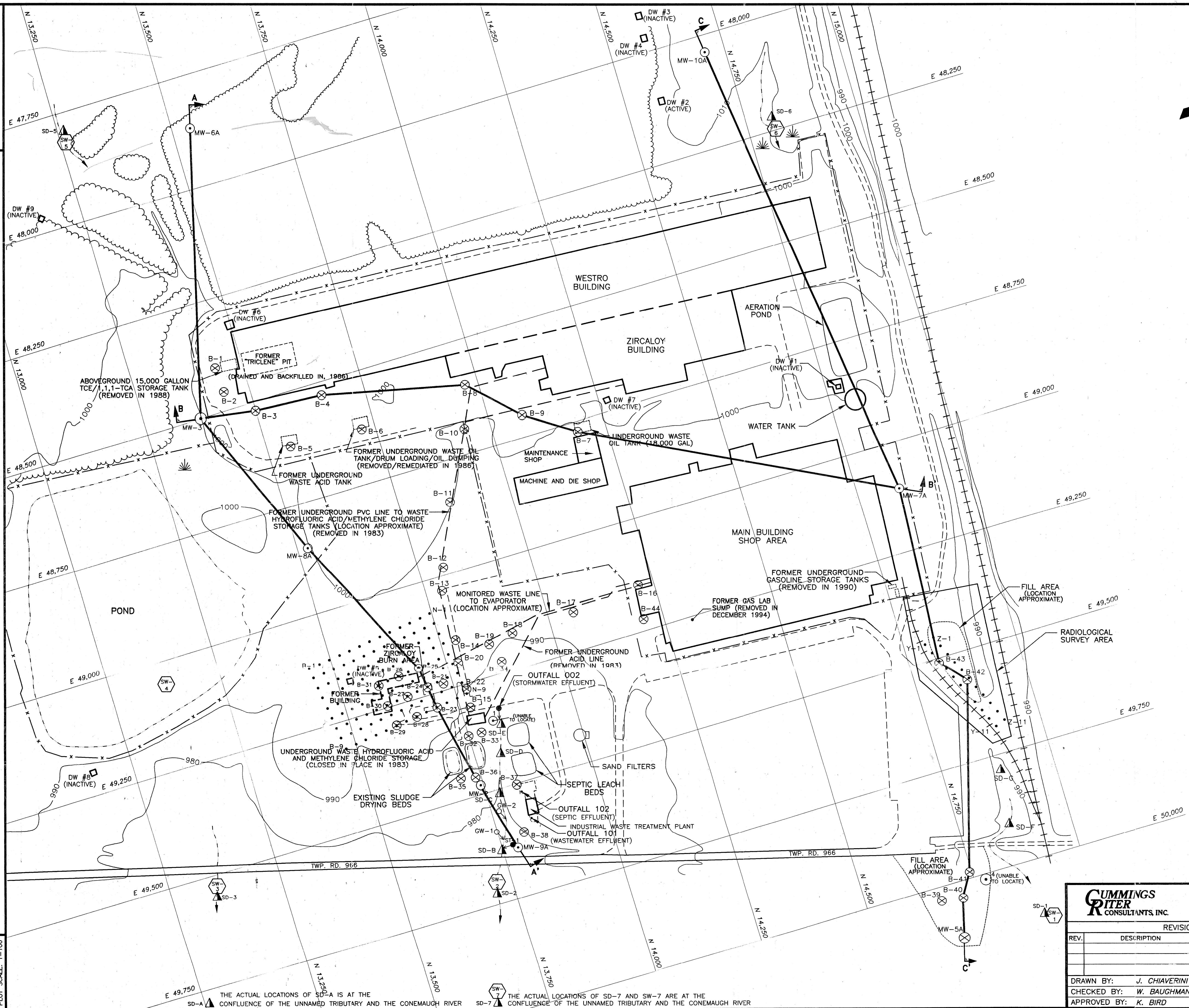
PREPARED FOR  
WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA

	3180 William Pitt Way Pittsburgh, PA 15238 (412) 826-3366 Fax: (412) 826-3367		FIGURE 2 SITE PLAN SPECIALTY METALS PLANT BLAIRSVILLE, PENNSYLVANIA	
	REVISIONS		PREPARED FOR WESTINGHOUSE ELECTRIC CORPORATION PITTSBURGH, PENNSYLVANIA	
	REV.	DESCRIPTION	DATE	APPROVED
DRAWN BY: J. CHIAVERINI		DATE: 1-13-95		SIZE
CHECKED BY: W. BAUGHMAN		DATE: 1-13-95		DRAWING NUMBER 93132E5
APPROVED BY: K. BIRD		DATE: 1-13-95		SCALE: 1"=100' SHEET 1 OF 1



DRAWING  
NUMBER 93132E3

PLOT SCALE: 1"=100'



LEGEND:

- PODS/STREAMS
- FENCE
- RAILROAD
- SURFACE WATER SAMPLE LOCATION
- ST-1 STORMWATER DISCHARGE
- GW-2 GROUNDWATER DISCHARGE
- DW #2 GROUNDWATER SUPPLY WELL
- CONTOURS (FEET ABOVE MEAN SEA LEVEL)
- TREE LINE
- VEGETATION
- MW-2 EXISTING MONITORING WELL
- B-1 SOIL BORINGS
- SURFACE SOIL SAMPLES (25-FOOT GRID)
- SEDIMENT SAMPLE LOCATIONS
- HYDROSTRATIGRAPHIC CROSS-SECTION (SEE FIGURES 8 AND 9)

NOTES:

- TOPOGRAPHIC CONTOURS AND PROPERTY FEATURES WERE PROVIDED BY OTHERS AND HAVE NOT BEEN VERIFIED BY CUMMINGS/RIEGER.
- ADDITIONAL SEDIMENT SAMPLES WILL ALSO BE COLLECTED AT THE OUTFALLS OF THE THREE DRAINAGE CHANNELS INTO THE RIVER.
- BORING AND WELL LOCATIONS SURVEYED BY LAND SURVEYING SERVICES, BRIDGEPORT, WEST VIRGINIA, NOVEMBER 1994.

REFERENCE:

WESTINGHOUSE ELECTRIC CORPORATION, SPECIALTY METALS DIVISION, BLAISVILLE, PENNSYLVANIA; FIGURE 6; TITLED: "SURFACE AND GROUND WATER QUALITY MONITORING LOCATIONS NEAR PLANT FACILITIES," PROJECT P6043.

10' CONTOUR INTERVAL  
APPROXIMATE SCALE  
0 100 200 FEET

**CUMMINGS  
RIEGER  
CONSULTANTS, INC.**

3180 William Pitt Way  
Pittsburgh, PA 15238  
(412) 826-3366  
Fax: (412) 826-3367

**FIGURE 3  
SAMPLE LOCATION PLAN  
SPECIALTY METALS PLANT  
BLAISVILLE, PENNSYLVANIA**

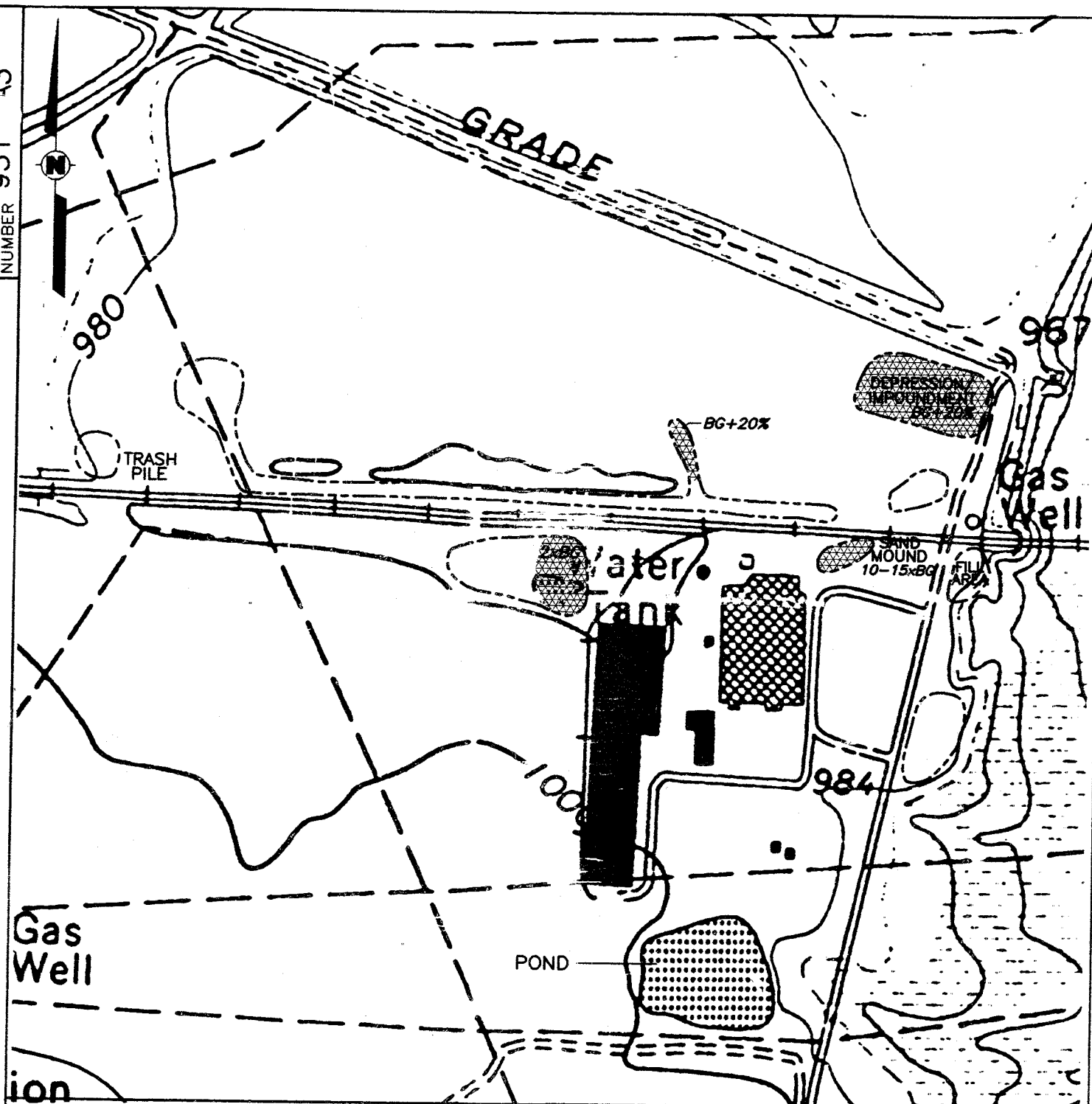
PREPARED FOR  
**WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA**

REV.	DESCRIPTION	DATE	APPROVED

DRAWN BY: J. CHIAVERINI DATE: 1/13/95  
CHECKED BY: W. BAUGHMAN DATE: 1/13/95  
APPROVED BY: K. BIRD DATE: 1/13/95

SIZE: E DRAWING NUMBER: 93132E3  
SCALE: 1"=100' SHEET 1 OF 1

THE ACTUAL LOCATIONS OF SD-1 IS AT THE CONFLUENCE OF THE UNNAMED TRIBUTARY AND THE CONEMAUGH RIVER  
SD-7 THE ACTUAL LOCATIONS OF SD-7 AND SW-7 ARE AT THE CONFLUENCE OF THE UNNAMED TRIBUTARY AND THE CONEMAUGH RIVER



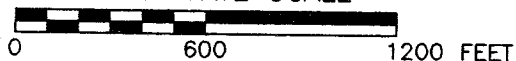
**LEGEND:**

- AREA INVESTIGATED DURING FIELD RECONNAISSANCE (LOCATION APPROXIMATE)
- SURFICIAL RADIOLOGICAL READING (REFERENCED TO BACKGROUND)

**REFERENCE:**

7.5-MIN. TOPOGRAPHIC QUADRANGLE, BLAIRSVILLE, PA, 1964, PHOTOREVISED 1981, ORIGINAL SCALE 1:24000, CONTOUR INTERVAL 20 FEET.

APPROXIMATE SCALE



**FIGURE 4**

AERIAL PHOTO REVIEW/  
FIELD SURVEY RESULTS  
SPECIALTY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA

PREPARED FOR

WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA

**CUMMINGS  
RITER  
CONSULTANTS, INC.**

DRAWING NUMBER

93132A3

DRAWN BY: B. MAURER DATE: 12-14-94

CHECKED BY W. BAUGHMAN DATE: 12-15-94

APPROVED BY: P. O'HARA DATE: 12-15-94

REVISION	DATE	DESCRIPTION

DRAWING  
NUMBER 931 44

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

64

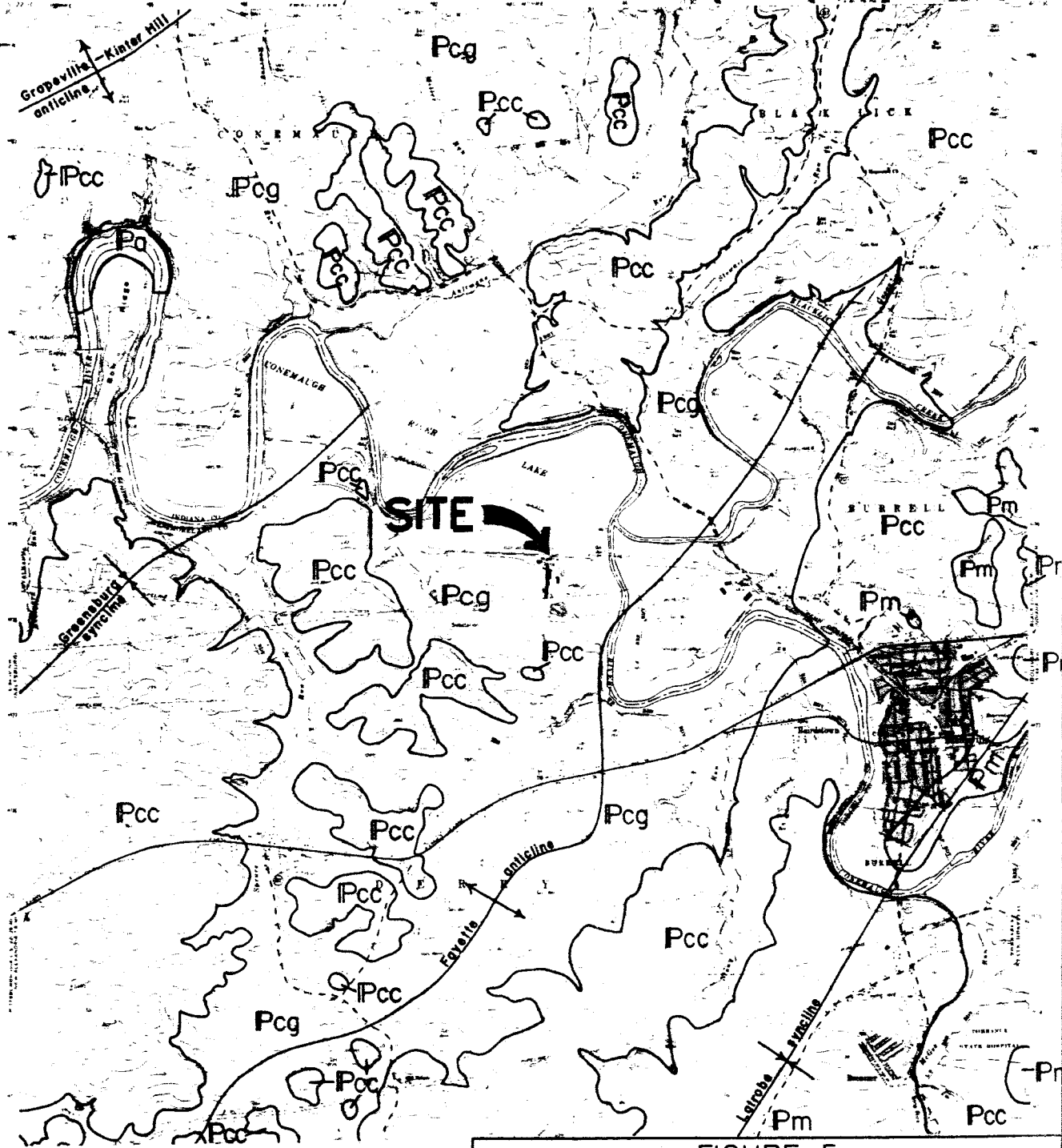
BLAIRSVILLE QUADRANGLE  
PENNSYLVANIA  
7.5 MINUTE SERIES (TOPOGRAPHIC)

SOURCE

USGS  
Folio  
110  
Maps 42  
and 43

EXPLANATION

Pm  
Monongahela Gp.  
Pcc  
Casselman Fm.  
Pcg  
Gleishaw Fm.  
Po  
Allegheny Gp.



REFERENCE:

PENNSYLVANIA GEOLOGICAL SURVEY, 1981, "ATLAS OF PRELIMINARY GEOLOGIC QUADRANGLE MAPS OF PENNSYLVANIA," EDITED BY T.M. BERG AND C.M. DODGE.

APPROXIMATE SCALE

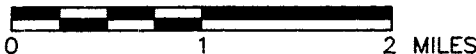


FIGURE 5  
REGIONAL GEOLOGIC MAP  
SPECIALTY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA

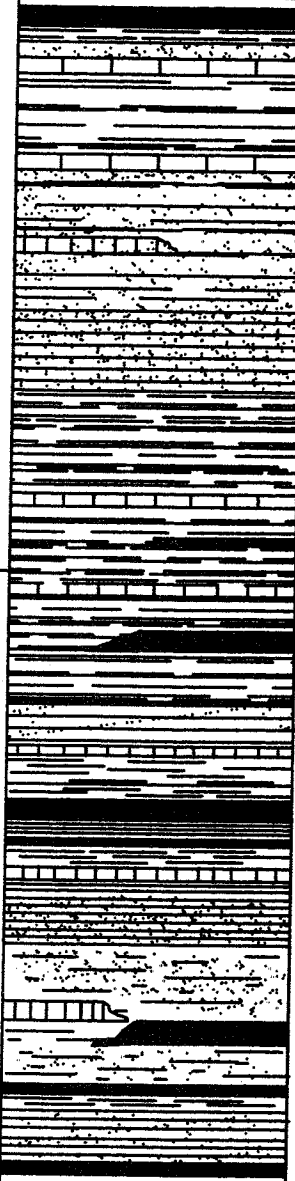
PREPARED FOR  
WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA

**CUMMINGS  
RITER**  
CONSULTANTS, INC.

DRAWING NUMBER  
**93132A4**

DRAWN BY: B. MAURER DATE: 12-14-94  
CHECKED BY W. BAUGHMAN DATE: 12-15-94  
APPROVED BY: P. O'HARA DATE: 12-15-94

REVISION	DATE	DESCRIPTION

PERIOD	GROUP (SYMBOL)	THICKNESS (IN FEET)	FORMATION (SYMBOL)	COLUMNAR SECTION	MEMBER, BEDS, AND OTHER MINOR UNITS
PENNSYLVANIAN	CONEMAUGH (Pc)	500-750	CASSELMAN (Pcc)		PITTSBURGH COAL UPPER PITTSBURGH LIMESTONE  CONNELLSVILLE SANDSTONE CLARKSBURG LIMESTONE  MORGANTOWN SANDSTONE WELLERSTOWN CLAY BIRMINGHAM SHALE  DUQUESNE COAL AMES LIMESTONE HARLEM COAL PITTSBURGH RED BEDS SALTSBURG SANDSTONE SECTION UNDERLYING STUDY AREA UPPER BAKERSTOWN COAL WOODS RUN LIMESTONE LOWER BAKERSTOWN COAL CAMBRIDGE (PINE CREEK) LIMESTONE BUFFALO SANDSTONE  BRUSH CREEK SHALE BRUSH CREEK LIMESTONE BRUSH CREEK COAL UPPER MAHONING SANDSTONE MANHONING COAL MANHONING (THORTON) COAL LOWER MANHONING CLAY UPPER FREEPORT COAL
			GLENSHAW (Pcg)		

**FIGURE 6**  
**GENERALIZED STRATIGRAPHIC COLUMN**  
**SPECIALITY METALS PLANT**  
**BLAIRSVILLE, PENNSYLVANIA**

PREPARED FOR  
WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA

**CUMMINGS**  
**RITER**  
CONSULTANTS, INC.

DRAWING NUMBER  
**93132A2**

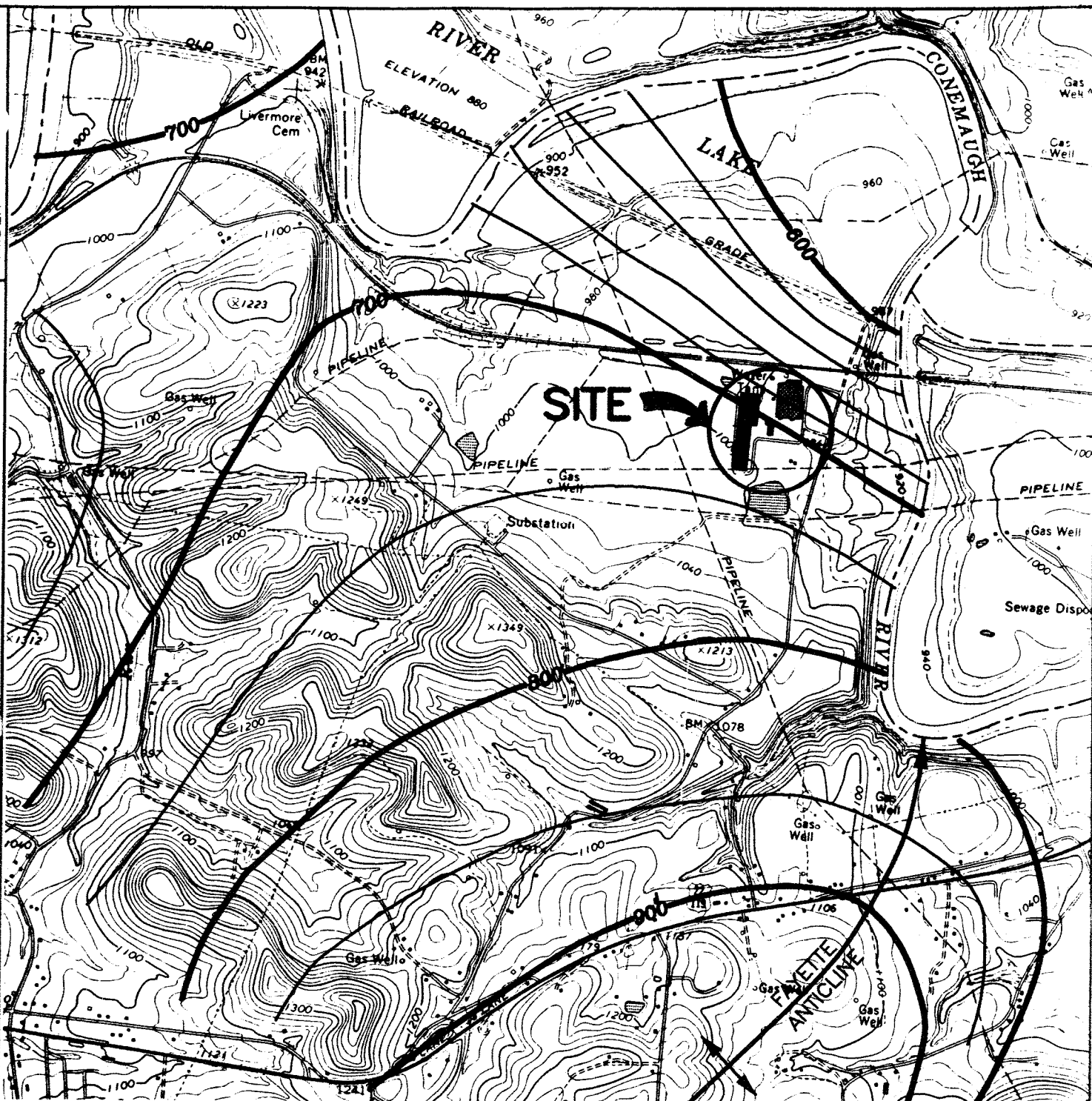
**REFERENCE:**

GREATER PITTSBURGH REGION PROPERTIES AND  
USES OF CLAYS AND SHALES, 1976, PENNSYLVANIA  
GEOLOGICAL SURVEY, M-71.

DRAWN BY: S. SWARTZBECK DATE: 11-7-94  
CHECKED BY B. MAURER DATE: 11-8-94  
APPROVED BY: W. BAUGHMAN DATE: 11-8-94

REVISION	DATE	DESCRIPTION
----------	------	-------------



**LEGEND:**

**700** BASE OF UPPER FREEPORT COAL (FEET ABOVE MEAN SEA LEVEL, 20 AND 50-FOOT CONTOUR INTERVALS)

**REFERENCE:**

US DEPARTMENT OF THE INTERIOR, OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT.

**APPROXIMATE SCALE**

0 2000 4000 FEET

**FIGURE 7**

**STRUCTURE CONTOUR MAP  
UPPER FREEPORT COAL SEAM  
SPECIALTY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA**

PREPARED FOR  
**WESTINGHOUSE ELECTRIC CORPORATION**  
PITTSBURGH, PENNSYLVANIA

**CUMMINGS  
RITER  
CONSULTANTS, INC.**

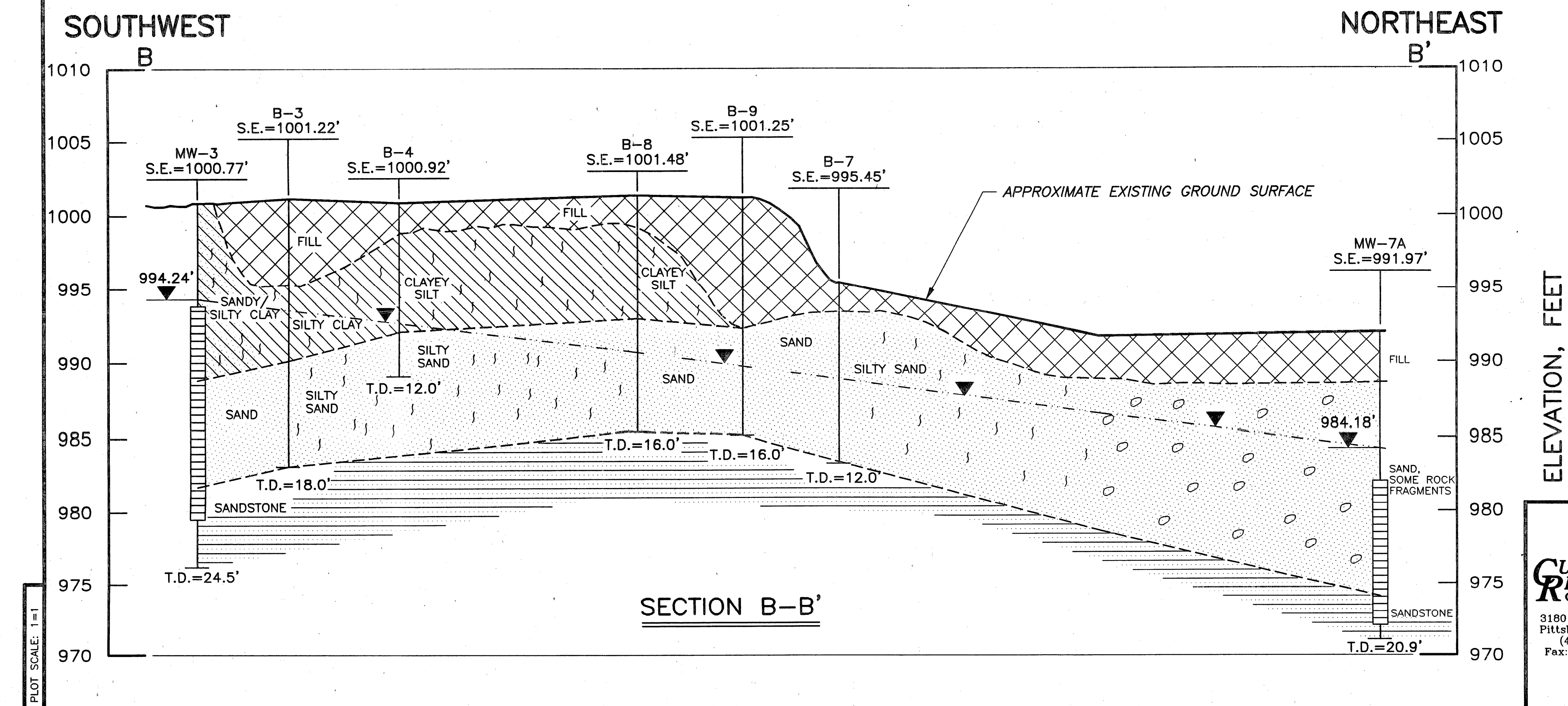
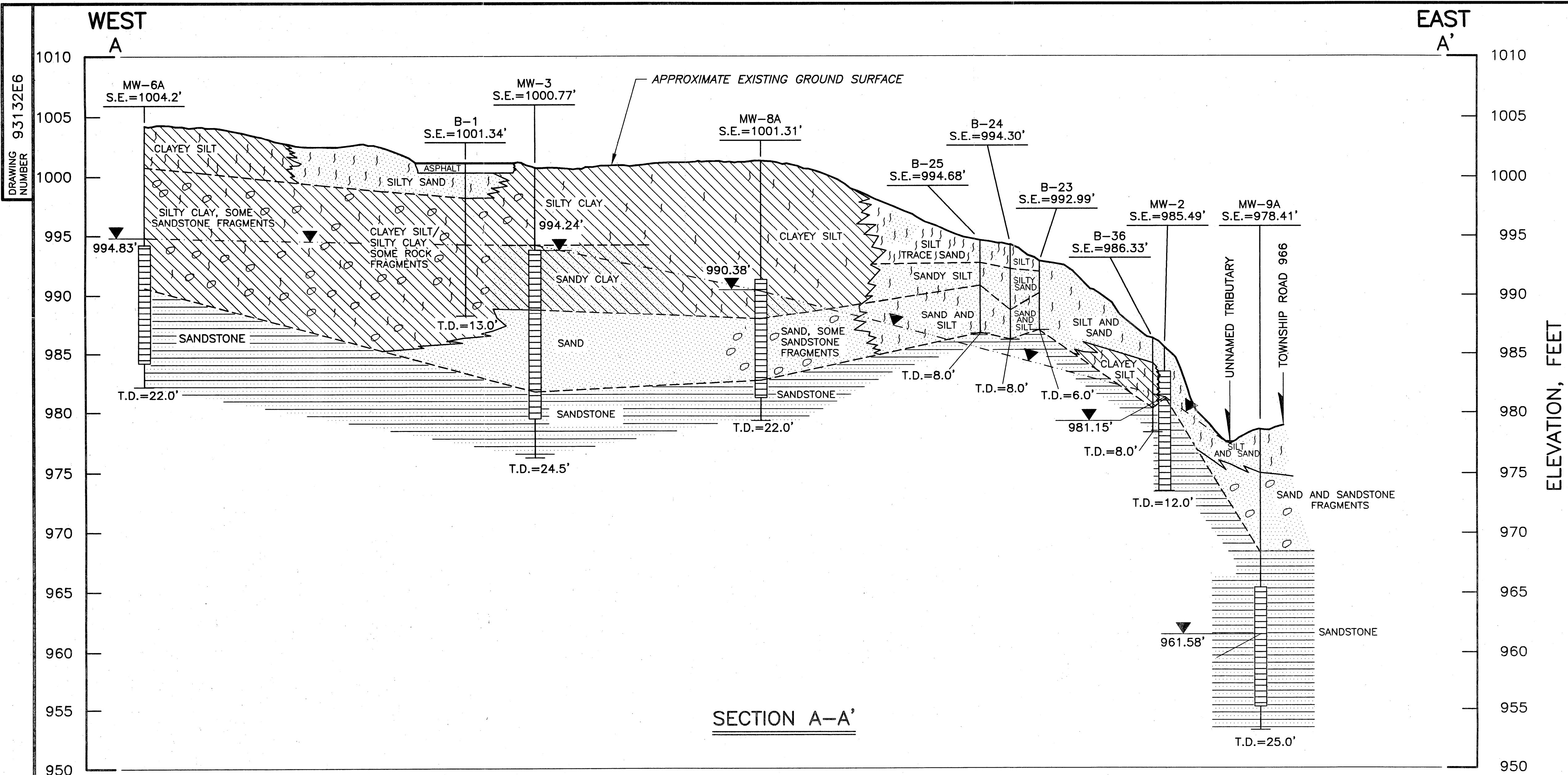
DRAWING NUMBER  
**93132A5**

DRAWN BY: **B. MAURER** DATE: **12-14-94**

CHECKED BY: **W. BAUGHMAN** DATE: **12-15-94**

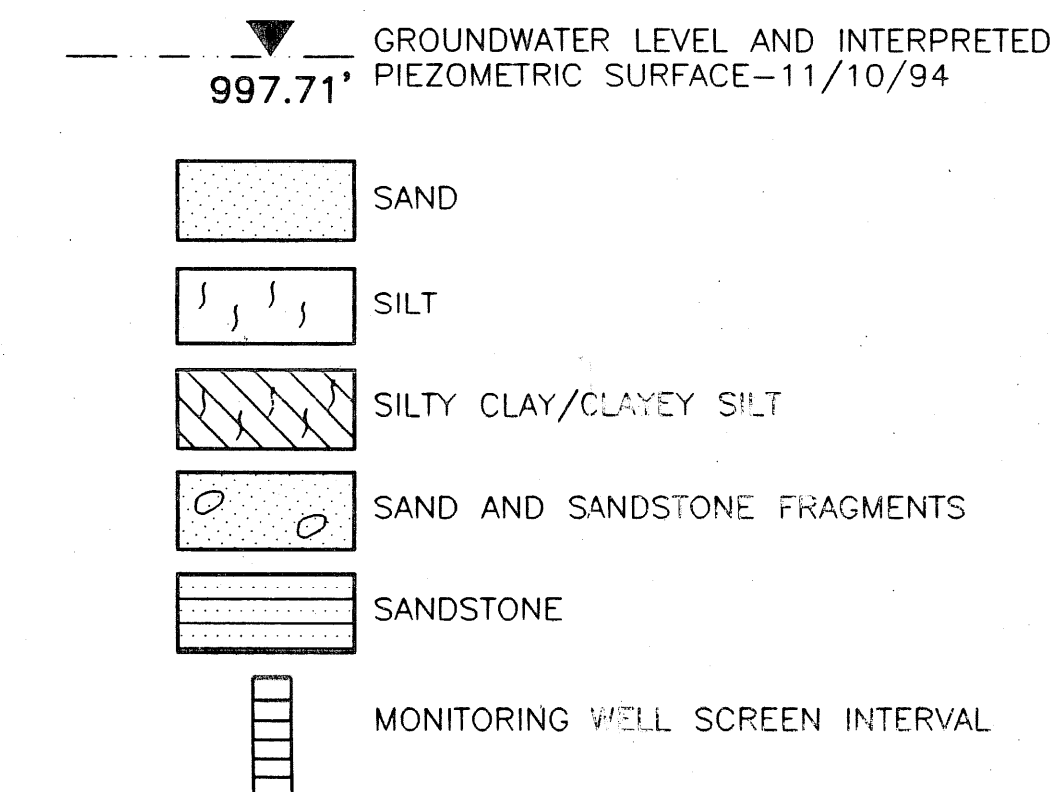
APPROVED BY: **P. O'HARA** DATE: **12-15-94**

REVISION	DATE	DESCRIPTION

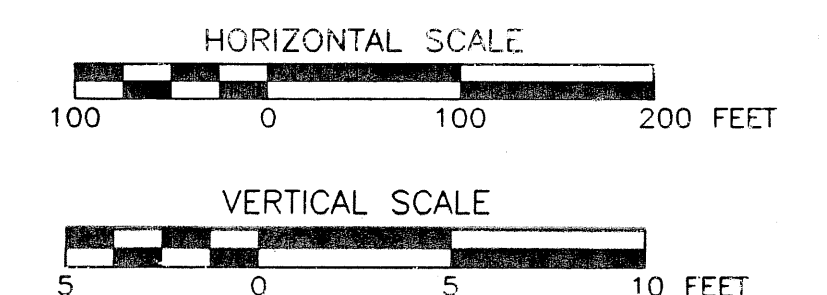


- NOTES:**
- ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL.
  - THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS. ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS.
  - THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTIONS WERE GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED.

**LEGEND:**



20X VERTICAL EXAGGERATION

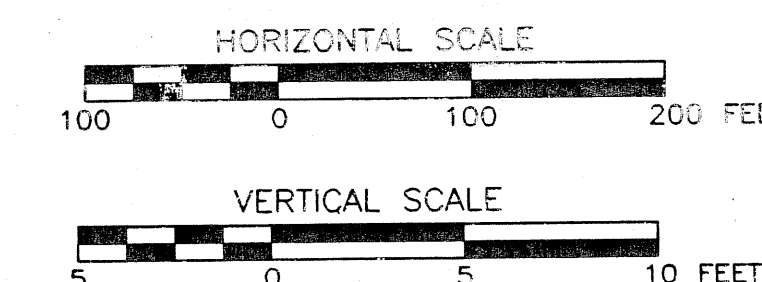


**CUMMINGS RITER CONSULTANTS, INC.**  
3180 William Pitt Way  
Pittsburgh, PA 15238  
(412) 828-3366  
Fax: (412) 828-3367

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

<b>FIGURE 8</b> <b>HYDROSTRATIGRAPHIC</b> <b>CROSS SECTIONS A-A' &amp; B-B'</b> <b>SPECIALTY METALS PLANT</b> <b>BLAIRSVILLE, PENNSYLVANIA</b>		PREPARED FOR <b>WESTINGHOUSE ELECTRIC CORPORATION</b> <b>PITTSBURGH, PENNSYLVANIA</b>	
		SIZE <b>E</b>	REV. <b>1</b>
DRAWN BY: <b>T. GROSSO</b> CHECKED BY: <b>W. BAUGHMAN</b> APPROVED BY: <b>P. O'HARA</b>		DATE: <b>12-15-94</b> DATE: <b>12-15-94</b> DATE: <b>12-15-94</b>	
SCALE: AS SHOWN		SHEET <b>1</b> OF <b>1</b>	





NOTES:

1. ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL.
2. THE BORING LOGS AND RELATED INFORMATION DEPICT SUBSURFACE CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AND DATES INDICATED. SOIL CONDITIONS AND WATER LEVELS AT OTHER LOCATIONS MAY DIFFER FROM CONDITIONS OCCURRING AT THESE BORING LOCATIONS. ALSO THE PASSAGE OF TIME MAY RESULT IN A CHANGE IN THE CONDITIONS AT THESE BORING LOCATIONS.
3. THE DEPTH AND THICKNESS OF THE SUBSURFACE STRATA INDICATED ON THE SECTION WAS GENERALIZED FROM AND INTERPOLATED BETWEEN THE TEST BORINGS. INFORMATION ON ACTUAL SUBSURFACE CONDITIONS EXISTS ONLY AT THE LOCATION OF THE TEST BORINGS AND IT IS POSSIBLE THAT SUBSURFACE CONDITIONS BETWEEN THE TEST BORINGS MAY VARY FROM THOSE INDICATED.

997.71'  GROUNDWATER LEVEL AND INTERPRETED  
PIEZOMETRIC SURFACE-11/10/94

- 
- SAND
- SILT
- SILTY CLAY/CLAYEY SILT
- SAND AND SANDSTONE FRAGMENTS
- SANDSTONE
- MONITORING WELL SCREEN INTERVAL

**CUMMINGS  
PRITER**  
CONSULTANTS, INC.

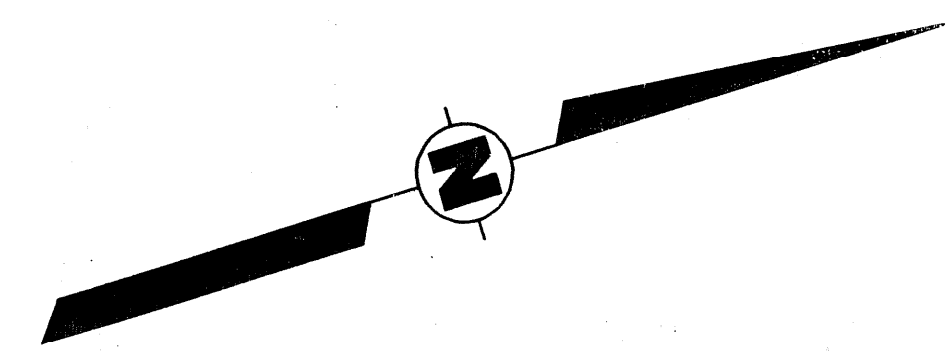
3180 William Pitt Way  
Pittsburgh, PA 15236  
(412) 826-3366  
Fax: (412) 826-3367

REVISIONS			
REV.	DESCRIPTION	DATE	APPROV
DRAWN BY:	T. GROSSO	DATE:	12-14-94
CHECKED BY:	W. BAUGHMAN	DATE:	12-15-94
APPROVED BY:	P. O'HARA	DATE:	12-15-94

FIGURE 9  
HYDROSTRATIGRAPHIC  
CROSS SECTION C-C'  
SPECIALTY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA

PREPARED FOR  
WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA


SIZE E	DRAWING NUMBER 93132E7	REV
SCALE: AS SHOWN		SHEET <u>1</u> OF <u>1</u>



REFERENCE:


WESTINGHOUSE ELECTRIC CORPORATION, SPECIALTY METALS DIVISION  
BLAIRSVILLE, PENNSYLVANIA; FIGURE 6; TITLED: "SURFACE AND  
GROUND WATER QUALITY MONITORING LOCATIONS NEAR PLANT  
FACILITIES," PROJECT P6043.

APPROXIMATE SCALE

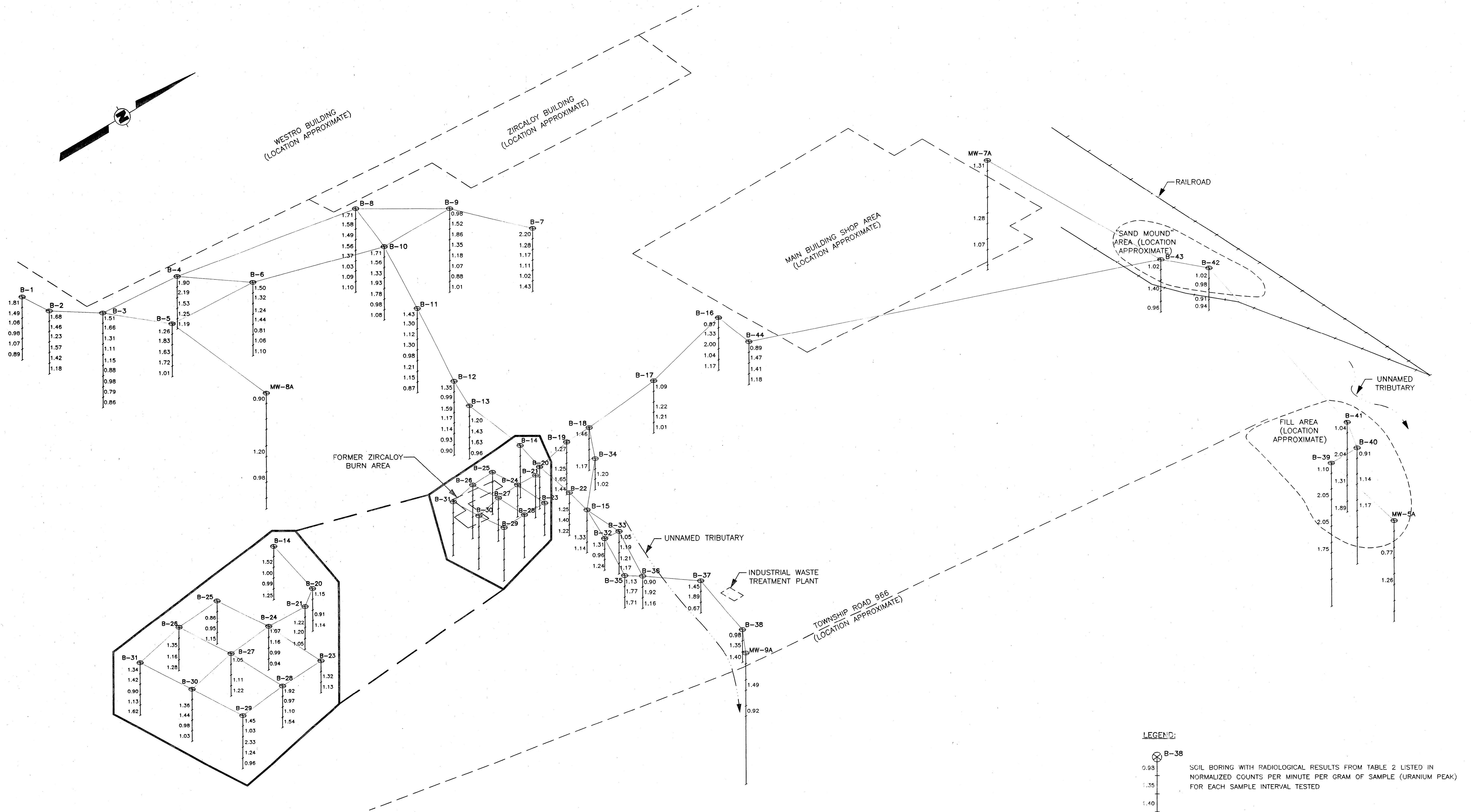


0 100 200 FEET

(10 LOCATE)
FIGURE 10

 <p>3180 William Pitt Way Pittsburgh, PA 15238 (412) 826-3366 Fax: (412) 826-3367</p>	REVISIONS				FIGURE 10 PIEZOMETRIC SURFACE MAP— NOVEMBER 10, 1994 SPECIALTY METALS PLANT BLAIRSVILLE, PENNSYLVANIA			
	REV.	DESCRIPTION	DATE	APPROVED	PREPARED FOR WESTINGHOUSE ELECTRIC CORPORATION PITTSBURGH, PENNSYLVANIA			
	DRAWN BY: <i>B. MAURER</i> DATE: <i>12-2-94</i>				SIZE	DRAWING NUMBER		REV.
CHECKED BY: <i>W. BAUGHMAN</i> DATE: <i>12-15-94</i>				E	93132E4			
APPROVED BY: <i>P. O'HARA</i> DATE: <i>12-15-94</i>				SCALE: 1"=100'		SHEET <u>1</u> OF <u>1</u>		

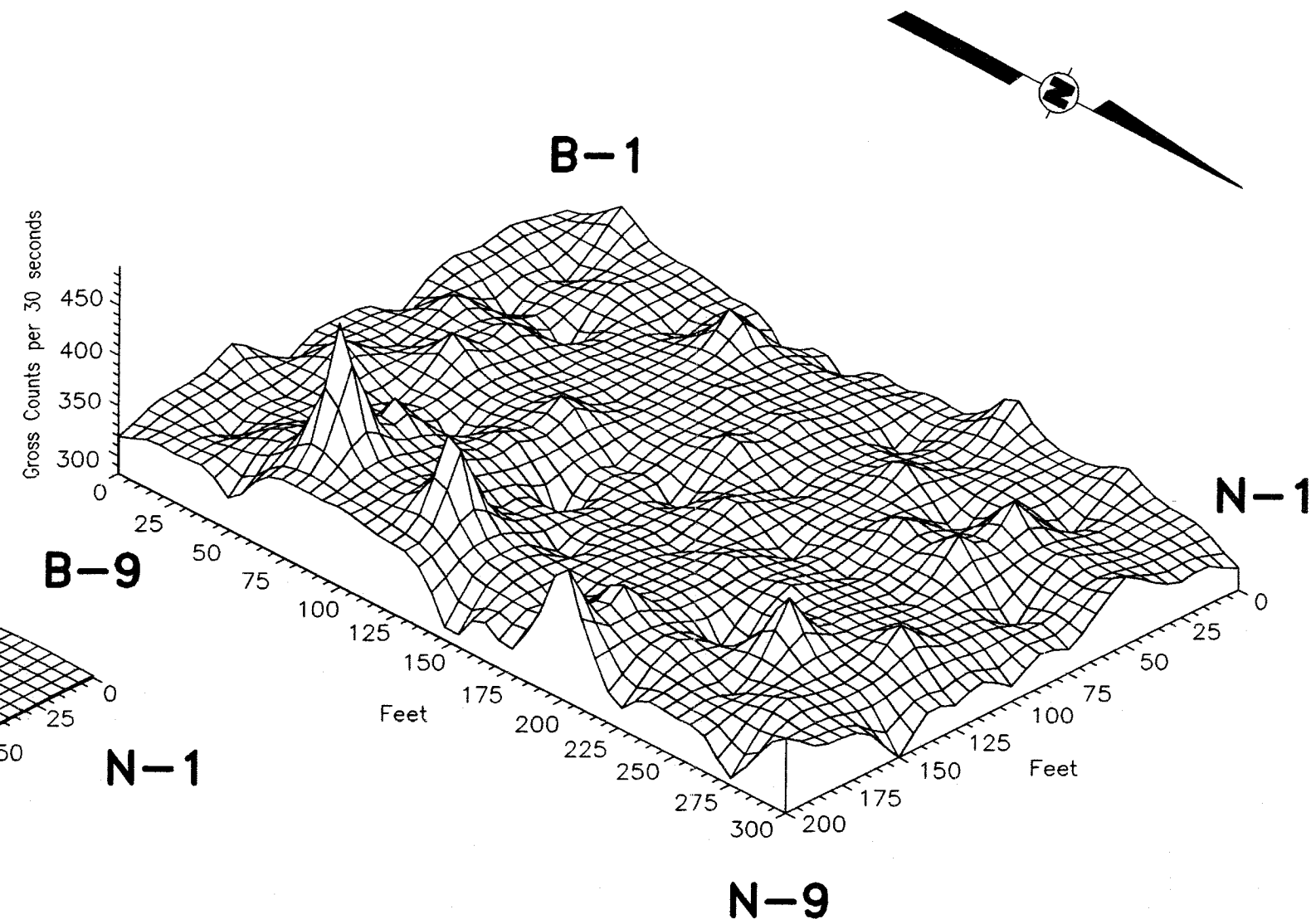
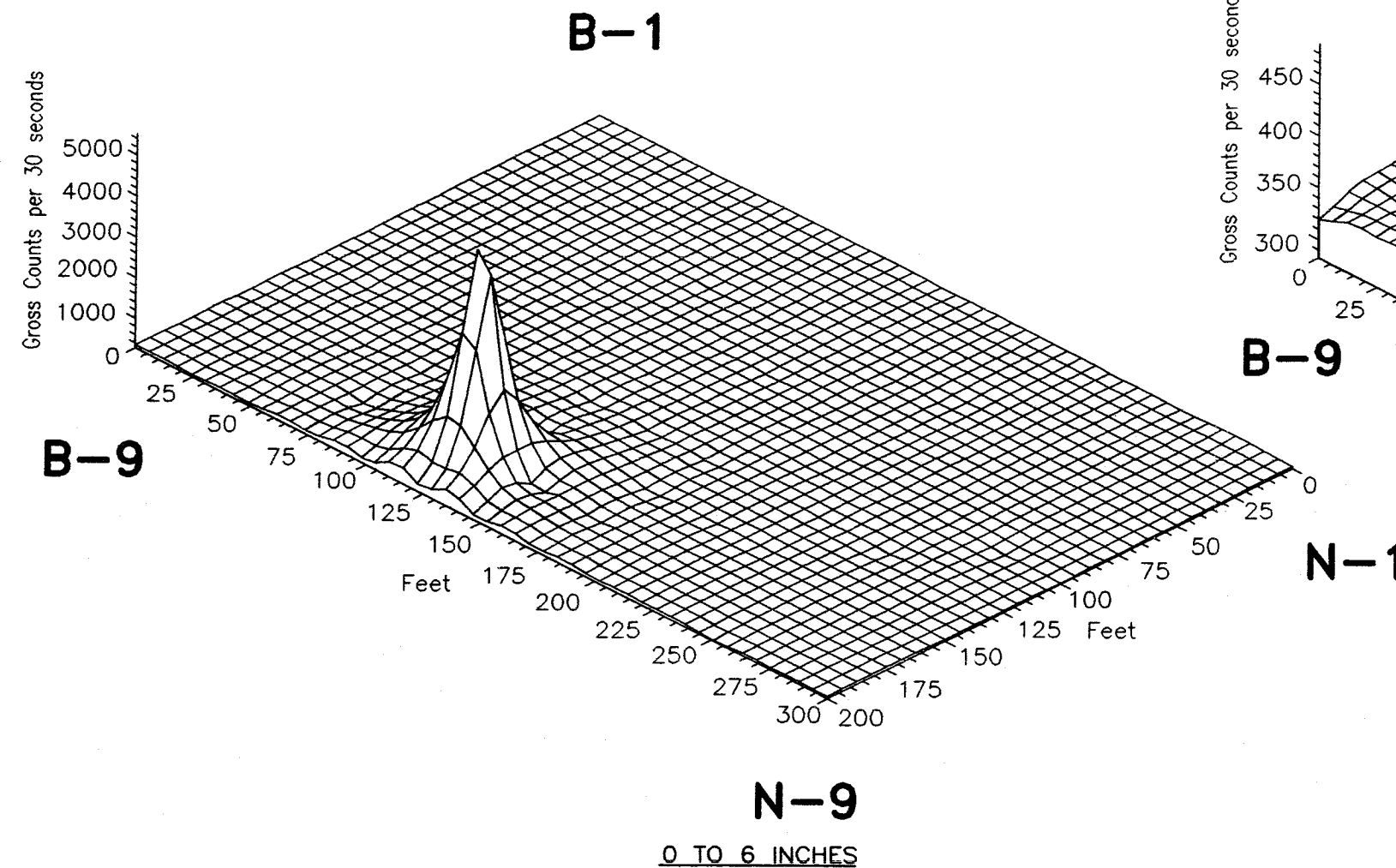




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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

FIGURE 11 SCHEMATIC FENCE DIAGRAM SOIL RADIOLOGICAL SURVEY RESULTS SPECIALTY METALS PLANT BLAIRSVILLE, PENNSYLVANIA		
PREPARED FOR WESTINGHOUSE ELECTRIC CORPORATION PITTSBURGH, PENNSYLVANIA		
SIZE E	DRAWING NUMBER 93132E12	REV. 
SCALE: NOT TO SCALE	SHEET 1 OF 1	



## NOTE:

SEE FIGURE 13 FOR A 3-DIMENSIONAL VIEW OF THE 0 TO 6 INCH RADIOLOGICAL TEST RESULTS WITH THE SPIKE IN THE VICINITY OF SAMPLE G-8 BLANKED OUT, AND THE GROSS COUNTS PER 30 SECONDS SCALE REDUCED.

**FIGURE 12**  
**RADIOLOGICAL TEST RESULTS - SOIL**  
**FORMER ZIRCALOY BURN AREA**  
**SPECIALTY METALS PLANT**  
**BLAIRSVILLE, PENNSYLVANIA**

PREPARED FOR  
**WESTINGHOUSE ELECTRIC CORPORATION**  
**PITTSBURGH, PENNSYLVANIA**

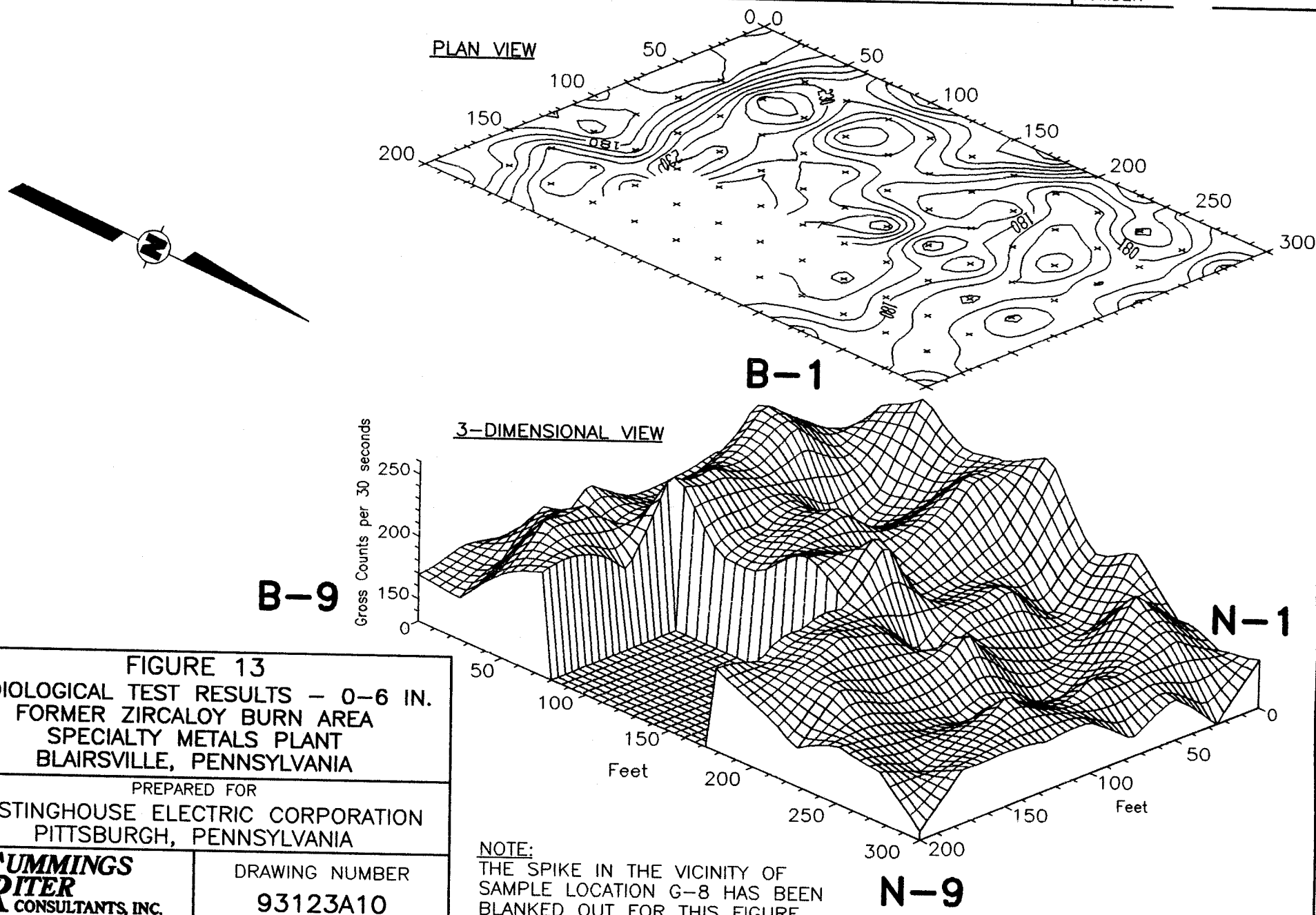
**CUMMINGS**  
**RITER**  
**CONSULTANTS, INC.**

DRAWING NUMBER  
**93132B3**

DRAWN BY: J. CHIAVERINI DATE: 3-1-95

CHECKED BY: B. MAURER DATE: 3-1-95

APPROVED BY: W. BAUGHMAN DATE: 3-1-95



DRAWN BY: J. CHIAVERINI	DATE: 3-1-95			
CHECKED BY B. MAURER	DATE: 3-1-95			
APPROVED BY: W. BAUGHMAN	DATE: 3-1-95	REVISION	DATE	DESCRIPTION

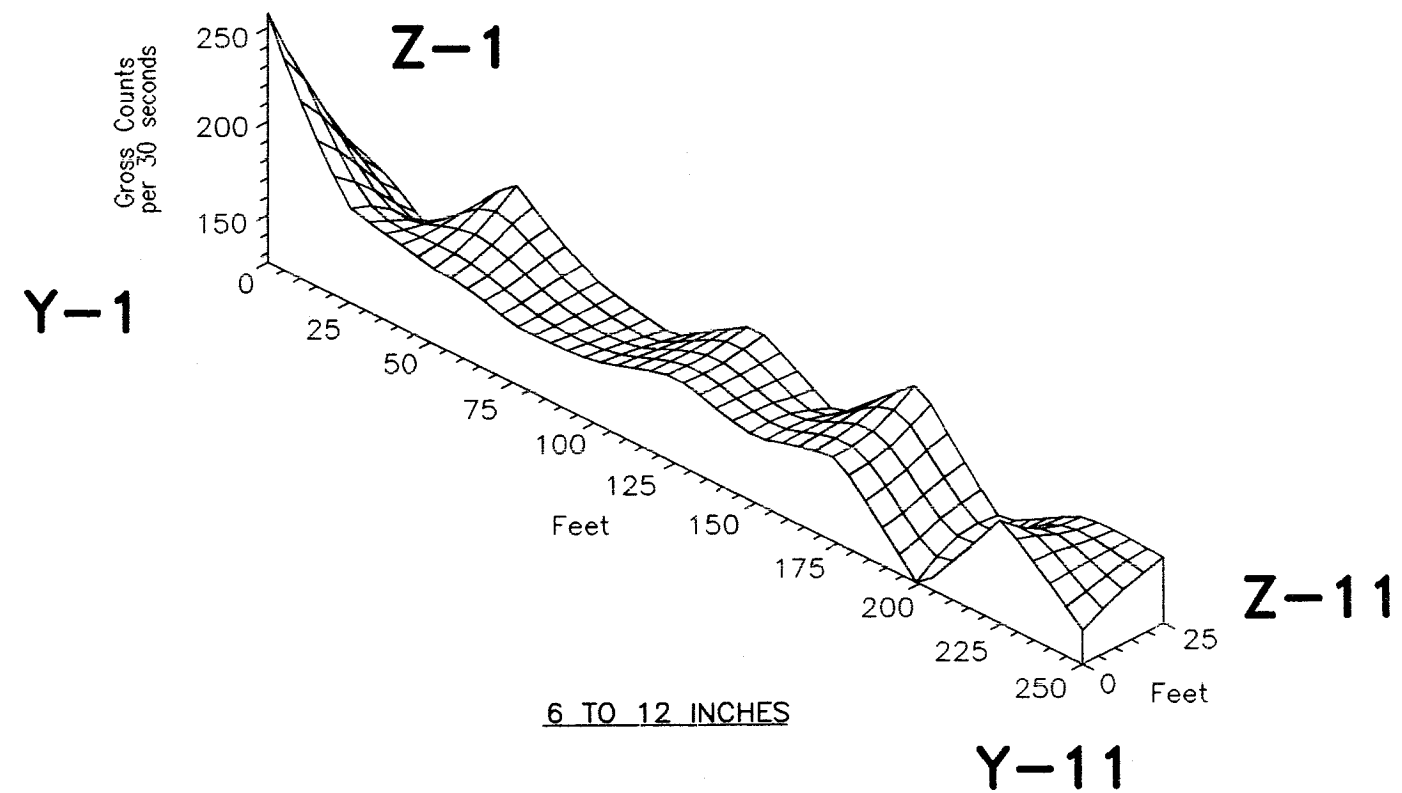
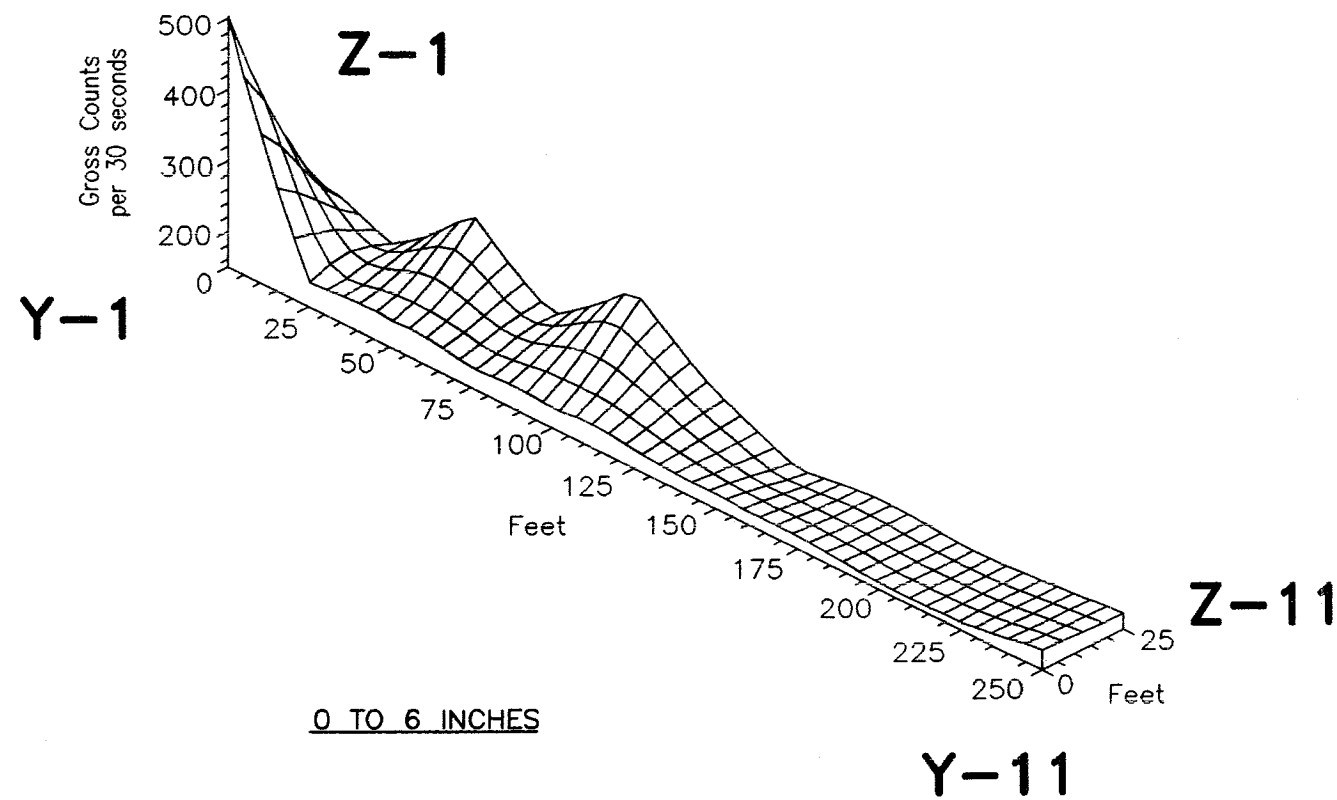


FIGURE 14  
RADIOLOGICAL TEST RESULTS - SOIL  
SAND MOUND AREA  
SPECIALITY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA

PREPARED FOR  
WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA

**CUMMINGS  
RITER**  
CONSULTANTS, INC.

DRAWING NUMBER  
**93132B4**

DRAWN BY: J. CHIAVERINI DATE: 3-1-95

CHECKED BY: B. MAURER DATE: 3-1-95

APPROVED BY: W. BAUGHMAN DATE: 3-1-95

REVISION	DATE	DESCRIPTION



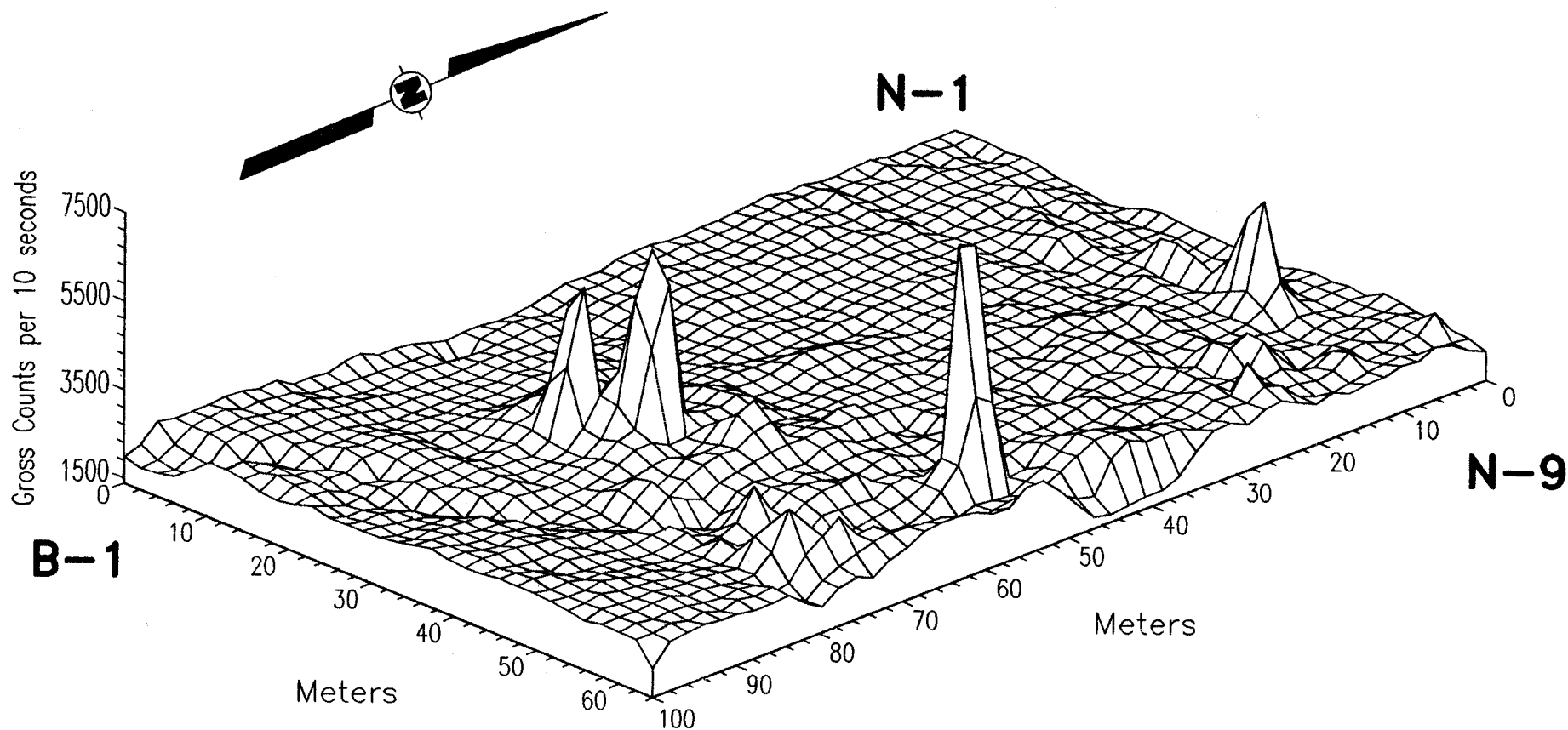


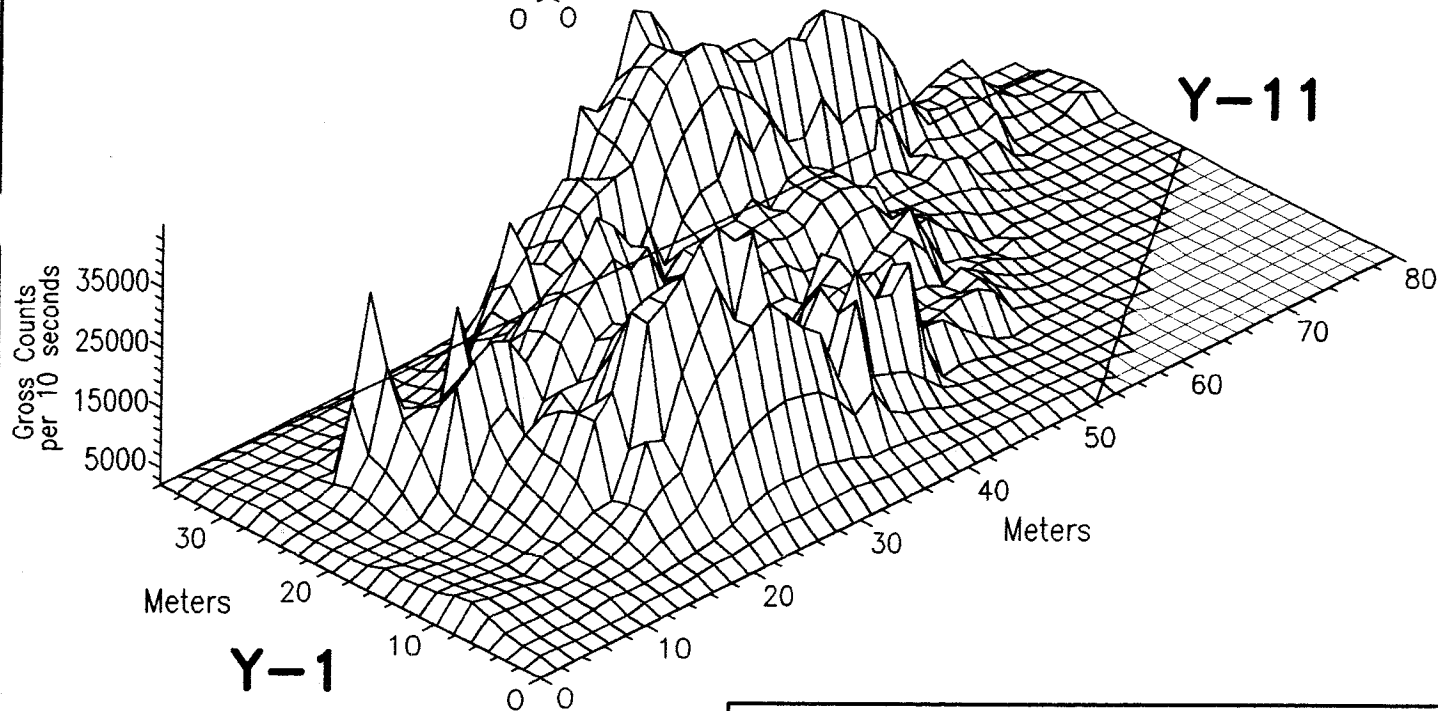
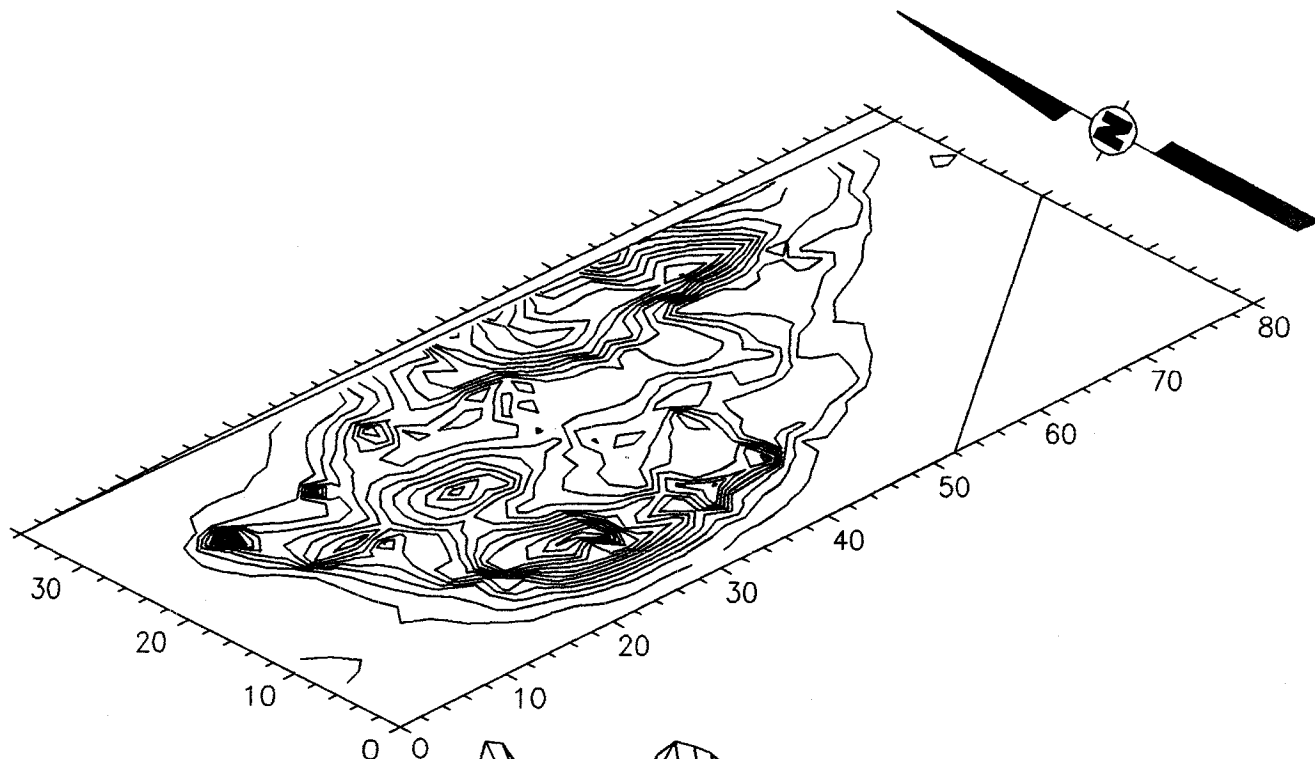
FIGURE 15  
RADIOLOGICAL FIELD SCREENING RESULTS  
FORMER ZIRCALOY BURN AREA  
SPECIALITY METALS PLANT  
BLAIRSVILLE, PENNSYLVANIA

PREPARED FOR  
WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA

**CUMMINGS**  
**WINTER**  
CONSULTANTS, INC.

DRAWING NUMBER  
93132A9

DRAWN BY: J. CHIAVERINI	DATE: 3-1-95			
CHECKED BY B. MAURER	DATE: 3-1-95			
APPROVED BY: W. BAUGHMAN	DATE: 3-1-95	REVISION	DATE	DESCRIPTION



**FIGURE 16**  
**RADIOLOGICAL FIELD SCREENING RESULTS**  
**SAND MOUND AREA**  
**SPECIALTY METALS PLANT**  
**BLAIRSVILLE, PENNSYLVANIA**

PREPARED FOR  
WESTINGHOUSE ELECTRIC CORPORATION  
PITTSBURGH, PENNSYLVANIA

**CUMMINGS**  
**RITER**  
CONSULTANTS, INC.

DRAWING NUMBER  
**93132A11**

DRAWN BY:	B. MAURER	DATE:	4-20-95
CHECKED BY:	D. CUSICK	DATE:	4-21-95
APPROVED BY:	W. BAUGHMAN	DATE:	4-21-95

REVISION	DATE	DESCRIPTION

**APPENDIX A**

**RESULTS FOR**

**GASOLINE UNDERGROUND STORAGE TANK**

OPERATIONAL REPORT

Closure of Underground Storage Tank Area  
for  
Westinghouse Electric at the Blairsville Facility  
Blairsville, Pennsylvania

CECOS Job Number: 2124

Prepared by:

CECOS International, Inc.  
56th Street & Niagara Falls Boulevard  
Niagara Falls, New York 14304

This site had two (2) underground storage tanks, one contained leaded gasoline and one contained unleaded gasoline.

SCOPE OF WORK

1. The tanks were uncovered on December 13, 1989, and all pumpable liquids from feed lines and inside tanks were pumped into 17-E drums for disposal when shipment approvals were obtained after initial analytical.
2. The concrete pad over tanks as removed and set off to the side of excavation for backfill material.
3. The soil from round and beneath tanks was excavated and checked with an OVA meter as well as visual inspection to determine general extent of possible contamination. Excavation continued until on-site methods of detection were exhausted. At that point, excavation was discontinued.
4. Tanks were lifted from excavation site, purged with nitrogen, then cut open using a cut off saw to facilitate cleaning operation. The intention of the tanks were utilizing orange solve degreaser, a Steam Jenny power wash and 3M absorbent pads for a final wipe down.
5. Tanks were cut into section for non-hazardous disposal on December 20, 1989 thorough Daniels and Miller, Greensberg, Pennsylvania.
6. Soil samples were taken from excavation area of December 20, 1989 and sent for analytical work to Lancy Environmental Services, 181 Thorn Hill Road, Warrendale, Pennsylvania, 15086-7527.
7. On January 6, 1990, a crew was sent out and proceeded to partially backfill and compact excavator.
8. Two of the original six soil samples were found to have higher than acceptable contamination levels.

9. On March 20, 1990, a crew rented to remove more soil from excavation site. During this time, all contaminated soil was removed from site using a transporter, Wills Trucking Company, 680 Progress Avenue, Zelienople, Pennsylvania, 16063. Disposal was at BFI/Willow Creek, 1043 State Route 25, Atwater, Ohio, 44201, PC #PA21990011754354.
10. A second round of soil samples were taken from affected area and sent to Lancy Environmental Services, 181 Thorn Hill Road, Warrendale, Pennsylvania, 15086-7527. This set of samples were found to be within parameters.
11. Excavation was backfilled with 135.10 tons of 2" crushed stone from Latrobe Construction. Material was compacted utilizing a "jumping jack" compactor and the Kato 900 SEL excavator.
12. The 13, 17-E drums filled with a gas-water mixture identified as Product Code #61744-XAA, was shipped on March 28, 1990 using Pennsylvania Manifest Number PAC 1281195, with CECOS Work Order #209674, using CECOS International transportation with disposal at:

CECOS International, Inc.  
4879 Spring Grove Avenue  
Cincinnati, OH 45232

EPA ID #OHD 000816629

The preceding work was completed in four (4) stages due, in part, to winter weather conditions.

12/18 - 12/20/89	Tank and soil excavated
01/06/90	Partial excavation backfilled
03/20 - 03/21/90	Additional soil excavation, stockpiled
soil	transportation and disposal.
03/28/90	Drums transported for disposal

Refer to attached pages for analytical results and manifest information.

CECOS ENVIRONMENTAL, INC.  
CHAIN OF CUSTODY RECORD

PROJECT #: 2124 PROJECT NAME Wastenhause - Blairsville, Pa  
STUDY AREA: UST SAMPLERS SIGNATURE: Richard C. Becker

STATION #	DATE	TIME	SUBSAMPLE CODES	TOTAL # OF SAMPLES	REMARKS
2673	12-20-89	9 <sup>30</sup>		1	ground water
2674	12-20-89	10 <sup>20</sup>		3	Leaded gas tank (gate)
2675	12-20-89	10 <sup>45</sup>		3	Leaded gas tank (middle)
2676	12-20-89	10 <sup>55</sup>		3	Leaded gas tank (end)
2677	12-20-89	2 <sup>00</sup>		3	unleaded gas tank (end)
2678	12-20-89	2 <sup>20</sup>		3	unleaded gas tank (middle)
2680	12-20-89	2 <sup>35</sup>		3	unleaded gas tank (drive way)
Relinquished By: <u>Richard C. Becker</u>		Date/Time: <u>12/20/89 6<sup>30</sup></u>	Received By: <u>[Signature]</u>	Comments	
Relinquished By: <u>Gary L. Larcher</u>		Date/Time: <u>12/21 2:00 PM</u>	Received By: <u>[Signature]</u>	Comments	
Method of Shipment:		Shipped By:	Received By:	Comments	

Received for Laboratory: Francis P. McCloskey Authorization for Disposal: \_\_\_\_\_  
Job #: \_\_\_\_\_ Type of Disposal: \_\_\_\_\_  
Date/Time: 12-22-89 Date of Disposal: \_\_\_\_\_

7 199  
9

JECT #: 2124 PROJECT NAME Wright House - Blairsville

STUDY AREA tank pit SAMPLERS SIGNATURE Stephen C. Becker

Relinquished By <i>Richard C. Baker</i>	Date/Time <i>3-90</i>	Received By <i>Phil Baker</i>	Comments <i>3-26 1:30</i>
Relinquished By	Date/Time	Received By	Comments
Method of Shipment	Shipped By	Received By	Comments

Job # \_\_\_\_\_

Authorization  
for Disposal \_\_\_\_\_

Type of Disposal \_\_\_\_\_

Date of Disposal \_\_\_\_\_



## ANALYSIS REPORT



LANCY ENVIRONMENTAL SERVICES  
DIVISION OF LANCY INTERNATIONAL, INC  
An Alcoa Separations Technology Company



181 Thorn Hill Road  
Warrendale, PA 15086 7527  
Phone (412) 772-1239 • FAX (412) 772-1360  
(412) 772-1390

CECOS Environmental, Inc.  
127 Clinton Economy Road  
Coraopolis, PA 15108

Attention: Bill Follett

Report Date 1/11/90  
Sample Date 12/20/89 by RB  
Received 12/22/89 by FM  
Analyzed 12/22/89 - 1/8/90 by Staff  
No. of Samples 7  
Purchase Order #                     

Analysis of Soil and Water Samples

Project #22307

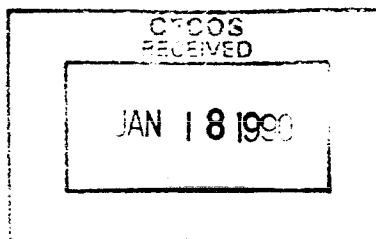
Sample #	2673	2674	2675	2676	2677	2678	2680
Lab Reference #	<u>9120726</u>	<u>9120727</u>	<u>9120728</u>	<u>9120729</u>	<u>9120730</u>	<u>9120731</u>	<u>9120732</u>
	(mg/L)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)

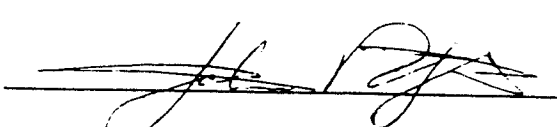
### Parameter

Petroleum	30	<40	<40	<40	<40	<40	1400
Hydrocarbons							
Lead, Total	0.3	16	8.5	17	19	17	21

<u>BTX</u>	(µg/L)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)	(µg/Kg)
Benzene	7400	<10	<10	<10	<10	<10	6100
Toluene	11000	<10	<10	<10	<10	<10	85000
Xylenes	13000	<25	<25	82	<25	<25	180000

<u>EPTOX Leachate</u>		(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)
Lead, Total	—	<0.1	<0.1	<0.1	0.1	0.1	<0.1



  
C. John Ritzert, Manager-Technical Operations  
Page 1 of 1

28 February 1990

Mr. Wayne George  
Manager of Environmental Affairs & Safety  
Westinghouse Electric Specialty Metals Facility  
Township Road 966  
Blairsville, Pennsylvania 15717

FILE: 434-41-00-01

RE: Results of Site Assessment to  
Determine Gasoline Contamination  
from Former Underground Storage Tanks

Dear Mr. George:

Environmental Resources Management, Inc. (ERM) submits this report as per our proposal of 11 January 1990 on the extent of gasoline contamination from the former underground storage tanks at the Westinghouse Electric Specialty Metals facility in Blairsville, Pennsylvania.

#### Field Investigation

As described in our 11 January 1990 proposal and subsequent discussions, the scope of our Site Assessment included the installation of soil borings and the collection of selected soil samples. Our goal was to obtain information relevant to the furthest extent and, therefore, the greatest degree of required remediation resulting from the gasoline which apparently leaked from one of the tanks.

ERM observed the installation of six soil borings to a depth of about 10 to 13 feet, or until ground water or some sign of contamination was encountered at the locations shown on Figure 1. Each of the borings was drilled using a truck-mounted drill rig with a hollow stem auger. Boring logs for each of the borings are included in Attachment 1. Soil samples taken with split spoon samplers driven ahead of the auger were used to visually inspect materials encountered for signs of gasoline and for obtaining samples for potential laboratory analysis. The soil samples from the split spoon samplers were analytically field screened for total volatile organic vapor using a Foxboro Century model 128 organic vapor analyzer (OVA) equipped with a flame ionization detector with the intention that any soil interval registering above background readings on the OVA might be submitted for laboratory analysis. As described in our proposal, ERM initially began drilling just north of the tanks, while progressively moving either laterally

(east or west) or further to the north (downgradient direction), depending upon the results of OVA readings.

As a result of our field measurements and observations, it was determined that samples from three of the six borings would be submitted for analysis of benzene, toluene, ethylbenzene, and xylene (BTEX). These samples were taken from appropriate split spoon intervals, sealed in pre-cleaned, appropriately labeled analytical glass bottles, and sent via overnight courier for 48-hour turnaround analysis by Lancaster Laboratories of Lancaster, Pennsylvania, a Pennsylvania-certified U.S. EPA CLP laboratory.

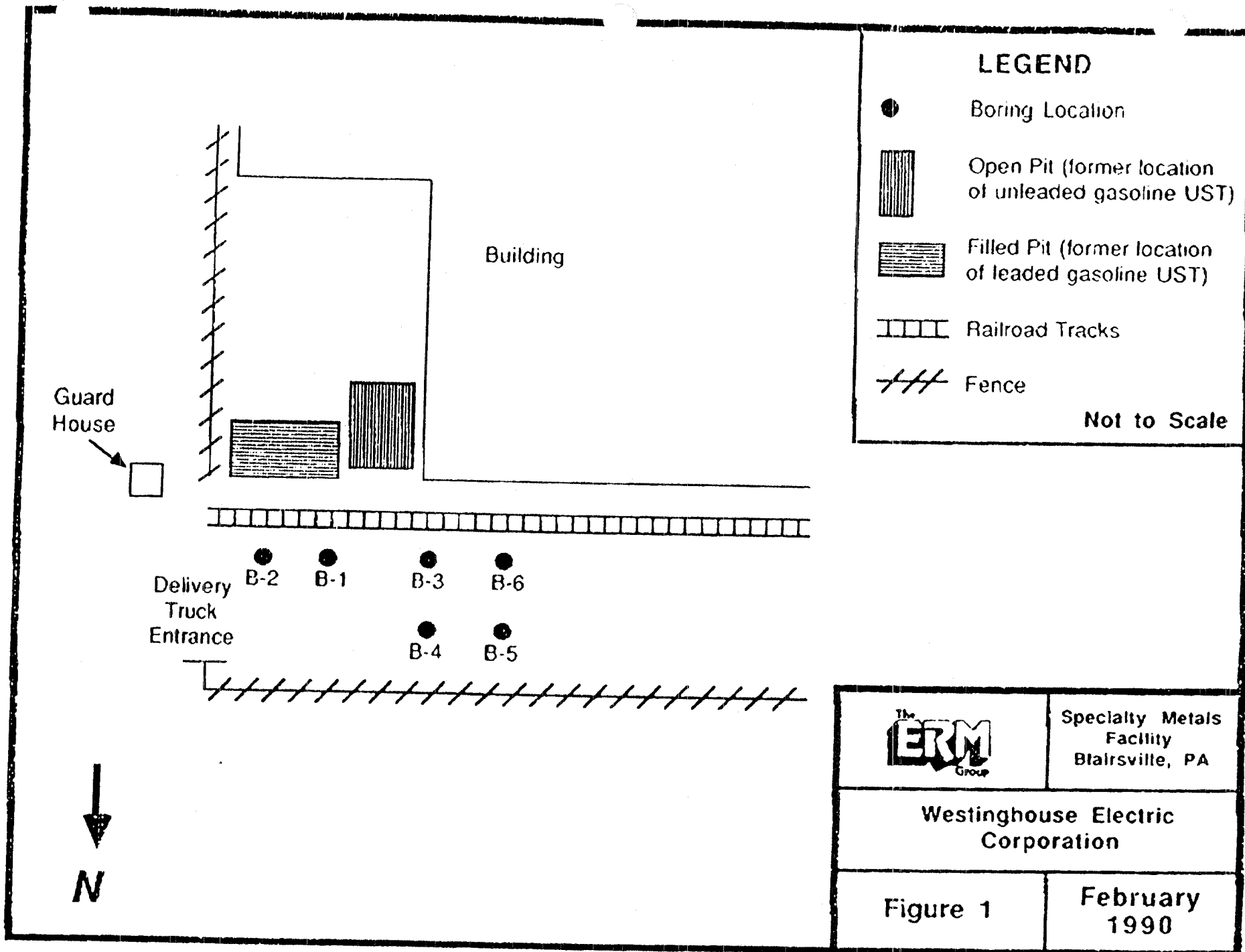
### Findings

The borings were installed sequentially as numbered and shown on Figure 1. During the installation of borings B-1 and B-2, there were no elevated OVA readings or visual signs of gasoline contamination. During the installation of B-3, gasoline was seen on the split spoon sampler retrieved from about 5 to 7 feet. Considering the apparent direction that the gasoline had migrated, borings B-4, B-5, and B-6 were all positioned to the northwest of B-3. There were no indications, either visually or on the OVA, of gasoline contamination in B-4, B-5, or B-6. To confirm that the gasoline contamination was limited to the vicinity of B-3, ERM submitted a sample from B-1 (7 to 9 feet), B-4 (7 to 9 feet), and B-6 (6 to 8 feet) for BTEX analysis.

The laboratory analytical data sheets, sample chain of custody forms, and traffic reports for the three samples submitted for BTEX analysis are provided in Attachment 2. None of the analyzed compounds were detected in any of the samples taken from the three borings above the analytical detection limit of 20 µg/kg.

### Conclusions

Based upon the findings provided above, ERM concludes that there is a need to conduct additional limited soil remediation. This conclusion is based upon our results which indicate that gasoline contamination has extended to as far as the vicinity of boring B-3, but no further north than B-4, or west than B-6, or laterally than B-1. Considering the apparent amount of contamination and current site conditions (an open pit where one of the underground storage tanks was located which will require closure and some additional excavation), we would recommend that the soils in the vicinity of B-3 be excavated to a depth of 7 to 10 feet. During this excavation, OVA measurements should be used to determine the amount of material to be excavated with one or two samples taken upon completion of the excavation to confirm cleanup. We suggest this excavation take place as soon as possi-



Mr. Wayne George  
Westinghouse Electric Specialty Metals Facility  
28 February 1990  
Page 3

ble. The presence of water in the existing open pit may only help to further push the contamination further away, thus resulting in the need for more excavation.

Thank you for the opportunity to assist you with this project. If you have any questions or require additional information, please feel free to call.

Sincerely,

Richard J. DeLuca, P.G.  
Project Geologist

Rudolph M. Schuller, P.G.  
Principal

RMS:cp

## ANALYSIS REPORT

CECOS Environmental, Inc.  
27 Clinton Economy Road  
Loraopolis, PA 15108

Attention: Bill Follett



CECOS ENVIRONMENTAL SERVICES  
DIVISION OF LANCY INTERNATIONAL, INC.  
An Alcoa Separations Technology Company  
181 Thorn Hill Road  
Warrendale, PA 15086-7527  
Phone (412) 772-1239 • FAX (412) 772-1360  
(412) 772-1390

Report Date 4/05/90  
Sample Date 3/20/90 by RB  
Received 3/26/90 by FM  
Analyzed 3/26 - 4/03/90 by Staff  
No. of Samples 1  
Purchase Order # 135-7503  
Project # 2124

Analysis of Solid Sample

Project #22546

Sample #  
Lab Reference #

Station #10  
30964  
(mg/Kg)

### Parameters

Petroleum Hydrocarbon  
Lead

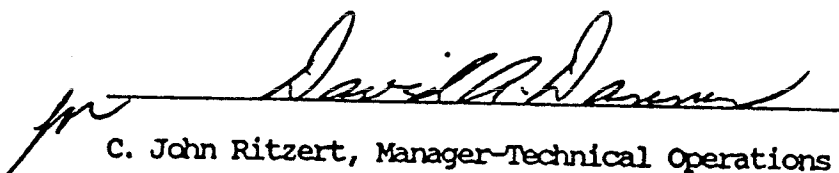
<40  
<10

### BTEX

( $\mu$ g/Kg)

Benzene  
Toluene  
Xylenes  
Ethylbenzene

<11  
<11  
<28  
<11

  
C. John Ritzert, Manager-Technical Operations

# **APPENDIX B**

## **NPDES PERMIT**



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF WATER QUALITY MANAGEMENT  
Highland Building  
121 South Highland Avenue  
Pittsburgh, Pennsylvania 15206-3988  
(412) 665-2900 (answers 24 hrs.)

SEP 24 1986

Westinghouse Electric Corporation  
Specialty Metals Plant  
R. D. #4, Box 333  
Blairsville, PA 15717

RE: NPDES Permit PA0000892  
Derry Township  
Westmoreland County

Gentlemen:

Your NPDES permit is enclosed. Please study it carefully, and if you have any questions, please contact me.

Because the NPDES permit authorizes a sewage discharge, it does not become operative until it is recorded in the office of the Recorder of Deeds in the county where the sewage discharge is located. Please take the enclosed NPDES permit, notary form, and certificate to the Recorder. After the Recorder fills out the certificate, please return the certificate only to the Bureau of Water Quality Management at the address indicated in Part C, Paragraph A of this permit.

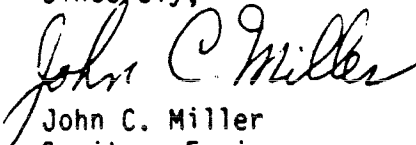
The discharge limitations and monitoring requirements in your NPDES permit are also typed on the original DMR that is attached to the permit. That original DMR is provided as a master, so do not write on it but rather: (1) make copies of it; (2) after doing the sample analyses and flow measurements required by the permit, fill out all the empty blocks on one of the copies by following the instructions on the back of the original DMR; and (3) make copies of the filled out copy and send one to each of the addresses listed in Part C of the permit.

EPA will be sending you computer generated, preprinted Discharge Monitoring Report (DMR) forms for your submittals. In the event that these forms are not received, use the attached DMR forms. Should you find significant discrepancies between the two versions, contact this office and use the attached



form until the preprinted forms are corrected. Do not allow a problem with the preprinted forms to cause your failure to submit these reports in a timely manner as this will result in violations of your permit. The DMR forms for Outfall 101 are predicated on the limitations from the Consent Agreement for this facility.

Sincerely,

  
John C. Miller  
Sanitary Engineer

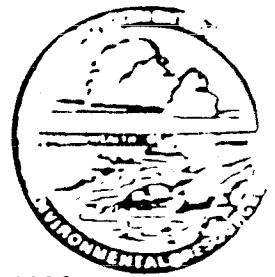
JCM/ld: c r

Enclosure

cc: EPA  
Operations Section



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WATER QUALITY MANAGEMENT  
Highland Building  
121 South Highland Avenue  
Pittsburgh, Pennsylvania 15206-3988 (412) 665-2900



10-27-86

Ms. S. L. Saunders, Senior Engineer  
Environmental Compliance  
Westinghouse Electric Corporation  
Specialty Metals Plant  
RD #14, Box 333  
Blairsville, PA 15717-8904

ATTACHED IS THE FOLLOWING MATERIAL YOU REQUESTED

- |  |                                       |                                       |                                       |
|--|---------------------------------------|---------------------------------------|---------------------------------------|
| A. <input type="checkbox"/> ER-BWQ-44    | <input type="checkbox"/> ER-BWQ-21    | <input type="checkbox"/> ER-BWQ-284   | <input type="checkbox"/> ER-BWQ-51    |
| B. <input type="checkbox"/> Stand Form C | <input type="checkbox"/> Form 1       | <input type="checkbox"/> Form 2C      | <input type="checkbox"/> Short Form C |
| C. <input type="checkbox"/> ER-BWQ-303   | <input type="checkbox"/> OSM Instruct | <input type="checkbox"/> ER-BWQ-303.1 |                                       |
| D. <input type="checkbox"/> MINE Table   | <input type="checkbox"/> ER-MR-10     | <input type="checkbox"/> PREP Table   |                                       |
| E. <input type="checkbox"/> IW Instruct  | <input type="checkbox"/> IW Module    | <input type="checkbox"/> PPC Plan     | <input type="checkbox"/> MUN Notice   |
| F. <input type="checkbox"/> MD Manual    | <input type="checkbox"/> SPRAY Manual | <input type="checkbox"/> IW Manual    | <input type="checkbox"/> PREP Manual  |
| <input type="checkbox"/> _____           | <input type="checkbox"/> _____        |                                       |                                       |

Returned, herewith, is the original notary form  
for NPDES Permit No. PA 0000892 complete  
with Dr. Archer's signature and the required  
notary seal.

Sincerely,

John C. Miller

FACT SHEET/STATEMENT OF BASIS

NPDES PA0000892

Prepared by John C. Miller

Date: September 22, 1986

Outfall 001 is submerged  
101, 102 and 002

Phone: 412-665-2900 (8-657-2900)

(ES) Westinghouse Electric Corporation (MUN) Derry Township

(AF) Specialty Metals Plant (CO) Westmoreland

\*\*\*\*\*

Addendum to July 16, 1986 Fact Sheet for NPDES Permit PA0000892 for the Specialty Metals Plant (SMP) of Westinghouse Electric Corporation (WEC).

1. The effluent limitations for Outfall 101 for the period from issued date to June 30, 1987 are based on BPT established by EPA. These BPT limitations, however, are superseded by an August 12, 1986 Consent Order and Agreement between DER and WEC.

EPA's BAT limits constitute the limitations for Outfall 101 from 7-1-87 through the expiration date of PA0000892.

2. In WEC's 9-5-86 letter to us, they notified us that their plans relative to the operation of the Westro Facility had finalized. Westro will never be returned to operation and they requested the deletion of any conditions persistent to Westro from Permit PA0000892. Therefore, all conditions in the Draft Permit which provided for the possible restarting of Westro have been eliminated.
3. Outfall 101 is, in reality, an internal monitoring point (IMP) which is regulated by Nonferrous Metals Forming and Metal Powders, Regulation 40 CFR 471. Both BPT and BAT do not allow any discharge of solvent cleaners at this location. Therefore, the Methylene Chloride limitation for Outfall 101 stated in the Draft Permit has been eliminated at this IMP. The 8-12-86 CO&A gives the Permittee a Methylene Chloride limit until 7-1-87.

FACT SHEET/STATEMENT OF BASIS

NPDES PA0000892

Prepared by: John C. Miller

Date: July 16, 1986

Outfalls: 001 is submerged,  
101, 102 and 002

Phone: 412-665-2900 (8-657-2900)

(ES) Westinghouse Electric Corporation

(MUN) Derry Township

(AF) Specialty Metals Plant

(CO) Westmoreland County

\*\*\*\*\*

A. Reason for Permit

The permit for this existing source is being reissued for a five year term. The permit, which was effective July 29, 1976, was to expire July 29, 1981, but an extension was granted to March 31, 1982 (Bureau of Water Quality Management (BWQM) March 3, 1981 letter from Manager S. F. Pedersen). Westinghouse Electric Corporation (WEC) filed a renewal application on January 13, 1982.

B. General Comments

On July 29, 1976, the Corps of Engineers issued NPDES Permit PA0000892 to Westinghouse Electric Corporation (WEC) for the Specialty Metals Division (SMD) facility in Derry Township, Westmoreland County. References to SIC codes (3356 and 3391) and three outfalls (001, 101 and 002) were noted in the initial application. Treated industrial wastewater (TIW) was discharged through 001, treated sanitary wastewater (TSW) from 101 and variable quantities of storm water runoff and ground drainage (SR & GD) from 002. The effluent from these three outfalls goes to the Conemaugh River. The original NPDES permit required (WEC-SMD) to monitor Outfall 002 for approximately five months until December 31, 1976 when all detected process parameters were to be diverted to the industrial waste treatment plant and subsequently Outfall 001.

Review of the renewal application disclosed: that the name of this facility had been changed from (SMD) to Specialty Metals Plant (SMP); that the (SMD) water flow schematic (Drawing No. 5311C47) showed a 1,000 gallon per day loss from the water tower to Outfall 002 and identified three liquid waste discharges (1,500 gallons per day from the Chemical Clean process in the Westro operation and two discharges - 2,500 gallons per day from the Chemical Clean process and 500 gallons per day from the Final Chemical Clean process - in the Zirc operation) without designating where these flows were going; that SIC code 3391 was deleted; that Outfalls 001 and 101 were not numbered in accordance with our established numbering procedure; and that different industrial waste parameters are now showing up in the discharge from Outfall 002 again.

A September 30, 1983 letter from Mr. W. J. Bloom of (WEC-SMP), formally notified DER of the plant's name change (SMD to SMP) and answered our queries (1,000 gallon per day water tower leak had been eliminated and the three liquid waste

streams go to holding tanks from which the liquid waste is pumped to trucks and hauled to an approved disposal site) about Drawing No. 5311C47. During the February 10, 1986 meeting in Litigation's Conference Room with the applicant, Howard J. Wein, representing DER Litigation, and representatives of the Bureau of Waste Management, it was learned that the Westro operation at the (SMP) was on hold since 1983 (February 13, 1986 phone conversation between Susan Saunders (WEC) and John Miller) but that WEC desired the effluent limitations for Outfall 001 (WEC-SMP) include the Westro operation. A February 13, 1986 letter from Susan R. Saunders (WEC-SMP) informed DER that: (SMP) eliminated the process operation described by SIC 3391; chlorine is added prior to the sewage treatment plant filter system; and furnished the production data for the various applicable BAT categories per their respective operation (Westro or Zirc). On March 25, 1986, Susan Saunders (WEC-SMP) hand delivered a February 24, 1986 letter which changed the production figure from 1,281,376 pounds per month to 887,099 pounds per month for Surface Treated Rinsewater. The production figures provided for various passes of the material through the process, thereby establishing the required off pounds.

During a telephone conversation with Susan R. Saunders (WEC-SMP), it was established that the effluent from the sewage treatment plant (STP) flowed to a conduit which also picked up the effluent from the industrial waste treatment plant before discharging either or both of these effluents to the Conemaugh River through a submerged outfall in the stream bed of the Conemaugh River. According to our established procedure, this submerged outfall constitutes Outfall 001 but it is inaccessible. Therefore, internal monitoring points have been established for sample locations. Outfalls formerly designated 001 (TIW) and 101 (TSW) in the original NPDES permit shall now be designated as Outfalls 101 (TIW) and 102 (TSW) respectively. Outfall 002 designation in this renewal permit (SR & GD) remains the same as in the original permit.

(WEC-SMP): Manufactures two lines of nuclear grade tubing consisting of steam generating tubing and fuel clad tubing; is considered a minor industry (SIC 3356) under EPA's Machinery and Mechanical Products Classification but is covered by Nonferrous Metals Forming and Metal Powders, Regulation 40 CFR 471. Federal Register/Volume 50, Number 164/ Friday, 8-23-85 established final effluent limitation guidelines (ELG) based on the "best practicable technology" (BPT) and "best available technology" (BAT) (Page 34242 of referenced FR). Page 34271 - Federal Register/Volume 50, Number 164/ Friday, 8-23-85 indicates that BCT is reserved for both operations (Westro-Subpart C, Nickel-Cobalt Forming Subcategory 471.36 and Zirc-Subpart I, Zirconium-Hafnium Forming Subcategory 471.96) at this facility.

(WEC)'s application refers to many parameters as ND. Queries about the values associated with this ND designation have not been answered. WEC (S. Saunders) informed me that their records had been discarded but that they would try and locate the engineer who worked on the analysis and ascertain if he recalls the detection levels. However, Subsection B of Section XVI - Appendices, Federal Register/Volume 50, Number 164/ Friday, 8-23-85 lists "Toxic Pollutants Not Detected in Nonferrous Metals Forming Wastewaters" by EPA. Subpart C Nickel-Cobalt Forming page 34265 relates to (WEC)'s Westro operation and Subpart I Zirconium-Hafnium page 34268 relates to (WEC)'s Zirc operation. Currently the Westro operation is on hold but (WEC) requested that limitations be established including both operations (Zirc and Westro). Therefore, two sets of limitations for Outfall 101 (TIW) are included in this permit (one for only the

Zirc operation and the other to cover the Zirc and Westro operations when both processes are working simultaneously). Where the application lists parameters with an ND and these parameters are also covered by EPA's listing as not present in the wastewater from this operation, these EPA noted parameters are deleted from water quality (WQ) consideration in the Zirc operation but for the combined Zirc-Westro operations the parameter has to be excluded by EPA in both operations. Otherwise this parameter is included in Part C of the permit and (WEC) shall resample for the particular parameters.

It has been mentioned previously that the Westro process is on hold since 1983. Therefore, it will not be possible to take the samples and run the required analyses associated with the Westro process until it is returned to operation.

A file review disclosed numerous problems meeting the fecal coliform and BOD limitations at Outfall 102, formerly 101. The addition of chlorine prior to the sewage treatment plant filter system is thought to be the cause of these problems. Therefore, the applicant should change the point for the addition of chlorine from before the filter to after the filter system and add a chlorine contact tank or holding tank to the current sewage treatment plant operation. This shall be done by July 1, 1987.

#### C. Draft Permit Effluent Limitations and Conditions

1. General - In the original application, there were three outfalls (001 treated industrial wastewater (TIW); 101 treated sanitary wastewater (TSW); and 002 storm water runoff and ground drainage (SR & GD)) and each discharged to the Conemaugh River. Outfall 001 (TIW) and 101 (TSW) are not numbered in accordance with our established numbering procedure. Outfall 001 and 101 discharge to a common conduit which discharges to the Conemaugh River through a submerged outfall in the river's stream bed. Outfalls formerly designated 001 (TIW) and 101 (TSW) in the original NPDES permit shall now be designated as 101 (TIW) and 102 (TSW) respectively. Outfall 001 is submerged and has no accessible monitoring point. Monitoring Point 101 and 102 are internal monitoring points. The receiving stream for all discharges is the Conemaugh River.

Since WEC advised us that their Westro operation has not been operational since 1983 and that it will not be put back on line until after July 1, 1987, but that they desired the effluent limitations for Outfall 101 to include provision for the Westro process, it necessitated providing a set of limits, (BAT) for the period after July 1, 1987.

2. Determining parameters to be controlled at outfalls.

##### a. Form 1 - Explanation of Work Sheets Attached to This Fact Sheet

Form 1 consists of nine Roman numeral pages which contain all the parameters including their respective discharge concentrations shown on application form 2C by the applicant for that outfall. To the extreme right of each parameter the following notations have been placed to indicate the reasoning behind the action taken:

(\*) - Toxic Pollutants Not Detected in Nonferrous Metal Forming Wastewaters by EPA for Zirconium-Hafnium forming subcategory (Federal Register/Volume 50, Number 164/ Friday, 8-23-85). Zirc parameters bearing (\*) and (\*both) are excluded from further consideration when the Zirc operation is working.

(\*both). Toxic Pollutants Not Detected in the Nonferrous Metal Forming Wastewaters for both Nickel-Cobalt Forming Subcategory (Subpart C) and also the Zirconium-Hafnium Forming Subcategory (Subpart 1), are excluded from further consideration when both Zirc and Westro operations are working simultaneously.

(\*\*)- indicates parameters whose discharge concentration is lower than the nominal detection level (NDL) or screening level. Parameters bearing this designation and which are also below the governing stream criteria figure are excluded from further consideration.

☐ - indicates parameters which are mass balanced. The mass balance figure is shown under the column heading "Mass Balance (MB) Concentration". A number in a rhombus is shown immediately to the right of this mass balance figure. The number in the rhombus indicates the number of tens associated with that parameter to have it in compliance with the water quality limit. Where the DC exceeds the 10% allotted to that parameter, the parameter is limited.

b. Water Quality -

b.1. Outfall 001

Outfall 001 is submerged in the stream bed of the Conemaugh River. Monitoring at this point is not feasible. The low stream flow at this discharge point is 105 cfs (see page 1 and 2 of the supporting data of the pollution report).

b.2. Outfall 101 (TIW)(Application labeled this outfall as 001)

The discharge concentration for each parameter on the application for this outfall was recorded on Form 1 for Outfall 101 under the appropriate column. Federal Register/Volume 50, Number 164/ Friday, 8-23-85, pages 34265 and 34268 (attached) were reviewed to ascertain which parameters were not detected by EPA in the wastewaters from the Zirc process and also from the Westro process. Since the Westro process is not being utilized at this time but since the applicant desires two sets of limitations (one for only the Zirc process and the other for simultaneous operation of both the Zirc and Westro process), Outfall 101 has BPT limits for the Zirc process and a set of BAT limits for each process.

BCT is reserved for both these processes (see attached page 34271, Sections 471.36 and 471.96, Federal Register/ Volume 50, Number 164/ Friday, 8-23-85) so BPT was used. For the Zirc process, all parameters which the applicant did not detect in the effluent and which also were not detected by EPA in wastewaters for the Zirc process, or were below the MB allowance such as P-Chloro-M-Cresol and Panachlorophenol, were eliminated from water quality considerations. Wherein certain parameters were not detected by EPA in wastewaters from both (the Zirc and Westro) processes and where these parameters also were not detected by the applicant, these parameters were eliminated from (WQ) consideration. Where the applicant indicated (ND) parameters present but these parameters were not excluded from both (Zirc and Westro) processes, the applicant was requested to monitor these parameters since the detection level to which the parameters were tested was not known. The discharge concentration (DC) was then compared to the nominal detection level (NDL) and where it is less than the (NDL) this (PNCf) as shown by the (\*\*) on Form 1. The (DC) was compared to the stream criteria (SC) and where it is less than the (SC) this (PNCf) as shown by the (\*\*\*) on Form 1. The Water Quality Network Station 0811 for April 17, 1985 was checked to ascertain if there was any background data available for the parameters of concern. Where there was background data available, it was added to Form 1 under the column "Background Concentration" and on the horizontal line for that parameter. If the background data exceeded the stream criteria, variability of that parameter was computed and the resulting figure determined the action taken. In those instances where the mass balance (MB) figure (say 400 micrograms per liter) is not clearly above the DC (which indicates less than 1,000) the applicant was required to sample the parameter further to ascertain whether it was below the mass balance figure or not. The remaining parameters had their discharge concentration (DC) compared to the nominal detection level (NDL) for that specific parameter and where the (DC) was less than the (NDL) it was deleted from further consideration. Where the (DC) was equal to or greater than the nominal detection level the (DC) was compared to the governing stream criteria (SC) and if less than the (SC), it was deleted from further consideration.

A mass balance was performed for each remaining parameter to establish the permissible total concentration of that parameter which can be discharged to the specific stream. A certain percentage of each parameter's total concentration was allotted to this specific industry and the balance was held as a reserve for other industries discharging to this stream. Although the flow associated with the Zirc process is 0.05 million gallons per day (0.0775 cu. ft/sec.) and with the Zirc and Westro process is 0.076 million gallons per day (0.1176 cu. ft/sec.): which respectively amounts to roughly 7 hundredths of a percent or 1/10 of a



percent of the total stream flow, this industry was allotted 10% of the total permissible (DC). Where the (DC) is less than the 10% figure for that parameter a limit was not imposed. Where the (DC) is greater than this 10% figure, a limit is imposed on that parameter based on this 10% allowance.

**b.3. Internal Monitoring Point (IMP) 102(TSW) (application labelled this outfall as 101)**

Enlosed is Form 1 which provides the (DC) for the parameters present at this monitoring point. The treated effluent from the septic system serving WEC-SMP is monitored at this point before discharging to the submerged outfall in the Conemaugh River. A review of Form 1 for IMP 102 indicates the parameters of concern for this treated sewage outfall to be BOD-5, SS, pH and Fecal Coliform.

**b.4 Outfall 002 (application labelled this Outfall 002)**

Since this outfall also contained process wastewaters in the original permit, the applicant shall sample this outfall twice a year for all limited parameters contained in this permit. This bi-yearly sampling program shall begin immediately upon issuance of this permit and continue until the expiration of the permit.

**c. Technology - The 2/13/86 letter from Ms. S. Saunders (WEC-MMP) advises us that their:**

C-1 Zirc operation falls under Subcategories: (i), (j), (k), (o), (q), (r), and (t) of Subpart I, Section 471.91 for BPT and 471.92 for BAT. BPT establishes limitations for Chromium, Cyanide, Nickel, Ammonia, Fluoride, Oil and Grease, Total Suspended Solids and pH. BAT further limits the first five parameters mentioned initially in the preceding sentence. Determination of the BPT and BAT limits are shown on calculation sheet (CS) No. 1 (BPT) and (CS) No. 3 (BAT).

C-2 Westro operation falls under Subcategories: (t), (v), (z), and (bb) of Subpart C, Section 471.31 for BPT and 471.32 for BAT. BPT establishes limitations for Chromium, Nickel, Fluoride, Oil and Grease and Total Suspended Solids and pH. BAT further limits the first three parameters in the preceding sentence above. The 2/24/85 letter from Ms. S. Saunders (WEC-SMP) revised the production figures for Subcategory t. Determinations of BPT and BAT limits are shown on (CS)

No. 2 for BPT and (CS) No. 4 for BAT for the Westro operation. Since the Zirc and Westro operation will be taking place simultaneously, the total limitations for both processes, Westro and Zirc, are given on the calculation summary sheet included herewith.

During the preparation of this draft permit (WEC-SMP) agreed to convert the solvent cleaning process to alkaline cleaning by July 1, 1987. The BPT limits on pg. 2a of 14 include solvent cleaning. The BAT limits on pg. 2c of 14 include alkaline cleaning. The BAT limits for both the Westro and Zirc operations on pg. 2d of 14 are based on alkaline cleaning.

Notes:

1. Outfall 101 contains Nonscope waters per Paragraph E page 7 of the telefax communique. Federal Regulations Preamble Language to 40 CFR Part 467 provide an allowance for Nonscope Waters. This Nonscope Water consists of wastewater from the D.I. Backwash, Filter Backwash and Laboratories. An allowance is made for TSS and Fluorides from the aforementioned Backwashes and Laboratory wastewater. An allowance is also made for nickel in the wastewater from the laboratories. Page 8 of the telefax communique cites the authorized allowance for this discharge.
2. 5-14-86 - Talked to EPA (Terry Oda) about providing capability in Permit for an Operating Process which had been idle since 1983. Mr. Oda indicated that the option is ours but applicant has to satisfy limits as soon as the process is made operational. After attempting to phone Mr. Steve Green and Miss Sue Saunder, spoke with the General Manager (WEC-SMP - Mr. Koga) and he informed me that the Westro Operation would not be made operational before 7-1-87. Therefore, it was decided to eliminate any provision for the Westro Operation before 7-1-87. This permit does not consider BPT limitations other than for the Conventional Parameters.
3. Calculations revised based on new information in July 3, 1986 letter from Westinghouse.

JM:bc

No. 010159

DATE 11 30 1987

RECEIVED FROM Westinghouse Elec Corp  
to be recorded in the Recorder's Office of  
Westmoreland County.

FROM Penna Commonwealth

TO Westinghouse Elec Corp

(1) Deed Permit \$ 24-

(2) State Stamp \$ \_\_\_\_\_

(3) Local Stamp \$ \_\_\_\_\_

(4) Mortgage \$ \_\_\_\_\_

(5) Satisfaction \$ \_\_\_\_\_

(6) Other \$ \_\_\_\_\_

TOTAL ► \$ 24-

JEANNE C. GRIFFITH  
Recorder of Deeds

☒ CHECK \_\_\_\_\_ BY Jc  
☐ CASH \_\_\_\_\_

No. 010159

DATE 11 30 1987

RECEIVED FROM Westinghouse Elec Corp  
to be recorded in the Recorder's Office of  
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(1) Deed Permit \$ 24-

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(4) Mortgage \$ \_\_\_\_\_

(5) Satisfaction \$ \_\_\_\_\_

(6) Other \$ \_\_\_\_\_

TOTAL ► \$ 24-

JEANNE C. GRIFFITH  
Recorder of Deeds

☒ CHECK \_\_\_\_\_ BY JG  
☐ CASH \_\_\_\_\_

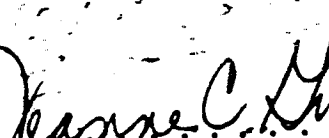
ER-342-63

Re: NPDES Permit No. PA0000692  
Westinghouse Electric Corporation  
Specialty Metals Plant  
R. D. #4, Box 333  
Blairsville, PA 15717  
Derry Township  
Westmoreland County

Commonwealth of Pennsylvania  
Department of Environmental Resources

RECORDER OF DEEDS CERTIFICATE

I hereby certify that on January 20, 1987...  
(Date)  
there was recorded in Book 2719...  
page 577... the sewerage permit issued  
to Westinghouse Electric Corp....  
bearing date of September 24, 1986...

  
Jeanne C. Dwyer  
Recorder of Deeds  
Westmoreland County

ER-340-63

Re: NPDES Permit No. PA0000892  
Westinghouse Electric Corporation  
Specialty Metals Plant  
R. D. #4, Box 333  
Blairsville, PA 15717  
Derry Township  
Westmoreland County

Commonwealth of Pennsylvania  
Department of Environmental Resources

RECORDER OF DEEDS CERTIFICATE

I hereby certify that on *January 20, 1987*...  
(Date)  
there was recorded in Book *2719*...  
page *577*... the sewerage permit issued  
to *Westinghouse Electric Corp.*...  
bearing date of *September 24, 1986*...

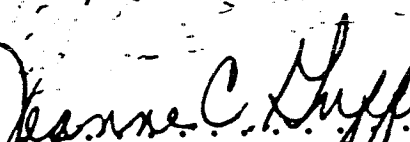
*Jeanne C. Dufford*  
Recorder of Deeds  
*Westmoreland* County

Re: NPDES Permit No. PA0000892  
Westinghouse Electric Corporation  
Specialty Metals Plant  
R. D. #4, Box 333  
Blairsville, PA 15717  
Derry Township  
Westmoreland County

Commonwealth of Pennsylvania  
Department of Environmental Resources

RECORDER OF DEEDS CERTIFICATE

I hereby certify that on January 20, 1987...  
(Date)  
there was recorded in Book 2719...  
page 577... the sewerage permit issued  
to Westinghouse Electric Corp....  
bearing date of September 24, 1986...

  
Jeanne C. Dufford  
Recorder of Deeds  
Westmoreland County

ER-34Q-63

Re: NPDES Permit No. PA0000892  
Westinghouse Electric Corporation  
Specialty Metals Plant  
R. D. #4, Box 333  
Blairsville, PA 15717  
Derry Township  
Westmoreland County

Commonwealth of Pennsylvania  
Department of Environmental Resources

RECORDER OF DEEDS CERTIFICATE

I hereby certify that on *January 20, 1987*...  
(Date)  
there was recorded in Book *2719*.....  
page *577*..... the sewerage permit issued  
to *Westinghouse Electric Corp.*....  
bearing date of *September 24, 1986*.....

*Janice C. Dufford*  
Recorder of Deeds  
*Westmoreland* County



00936

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WATER QUALITY MANAGEMENT

08V2719 PAGE 577

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT PA0000892

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. (the "Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq.,

Westinghouse Electric Corporation  
Specialty Metals Plant  
R. D. #4, Box 333  
Blairsville, PA 15717

is authorized to discharge from a facility located at

Derry Township  
Westmoreland County

to receiving waters named

Conemaugh River

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B, and C of this permit.

SEP 24 1991

This permit and the authorization to discharge shall expire at midnight \_\_\_\_\_

The authority granted by this permit is subject to the following further qualifications:

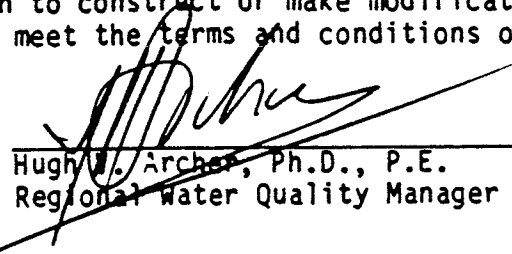
1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.
2. Failure to comply with any of the terms or conditions of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of permit renewal.
3. If this permit authorizes a sewage discharge, the permit will not become operative until it is recorded in the office of the Recorder of Deeds in the county where the sewage discharge is located.
4. Application for renewal of this permit, or notification of intent to cease discharging by the expiration date, must be submitted to the Department at least 180 days prior to the expiration date (unless permission has been granted by the Department for submission at a later date), using the appropriate NPDES permit application form. In the event that a timely and complete application for renewal has been submitted and the Department is unable, through no fault of the permittee, to reissue the permit before the expiration date, the terms and conditions of this permit will be automatically continued and will remain fully effective and enforceable pending the grant or denial of permit renewal.
5. This permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

PERMIT ISSUED

DATE \_\_\_\_\_

SEP 24 1986

BY

  
Hugh W. Archer, Ph.D., P.E.  
Regional Water Quality Manager

RECORDED  
WESTMORELAND COUNTY, PA.  
1987 JAN 30 AM 11:11  
RECORDER OF DEEDS

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 101 WHICH RECEIVES WASTE FROM:  
the industrial wastewater treatment plant.

- a. The permittee is authorized to discharge during the period from issued date through June 30, 1987.
- b. Based on the production data and/or anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)							MONITORING REQUIREMENTS		
	Mass Units			Concentrations				Measurement Frequency	Sample Type	24-Hour Report Under A.3.c.
	(lb/day except flow)			(mg/l unless otherwise indicated)						
	Average Monthly	Average Weekly	Max. Daily	Average Monthly	Average Weekly	Max. Daily	Instant. Max.			
Flow (mgd)								2/month	measured	
Ammonia	27.0		43.0					2/month	16 hr. comp.	
Chromium	0.08		0.20					2/month	16 hr. comp.	
Cyanide	0.06		0.14					2/month	16 hr. comp.	
Nickel	0.61		0.93					2/month	16 hr. comp.	
Fluoride	15.2		34.3					2/month	16 hr. comp.	
O & G	6.3		12.5					2/month	3 grabs/16 hrs	
Suspended Solids	11.4		23.6					2/month	16 hr comp.	

DBV 2719 PAGE 5

There shall be no discharge of solvent cleaning rinse wastewater.

pH	not less than 7.5 nor greater than 9.0 standard units	2/month	3 grabs/16 hrs
----	---	---------	----------------

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:  
the effluent from the industrial wastewater treatment plant prior to mixing with any other liquid.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 101 WHICH RECEIVES WASTE FROM:  
the industrial wastewater treatment plant.

- a. The permittee is authorized to discharge during the period from July 1, 1987 through expiration date.
- b. Based on the production data and/or anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)							MONITORING REQUIREMENTS		
	Mass Units			Concentrations				Measurement Frequency	Sample Type	24-Hour Report Under A.3.c.
	(lb/day except flow)			(mg/l unless otherwise indicated)						
	Average Monthly	Average Weekly	Max. Daily	Average Monthly	Average Weekly	Max. Daily	Instant. Max.			
Flow (mgd)								2/month	measured	
Ammonia	12.0		28.0					2/month	16 hr. comp.	
Chromium	0.04		0.09					2/month	16 hr. comp.	
Cyanide	0.03		0.06					2/month	16 hr. comp.	
Nickel	0.28		0.43					2/month	16 hr. comp.	
Fluoride	8.4		18.9					2/month	16 hr. comp.	
O & G	6.3		12.5					2/month	3 grabs/16 hrs	
Suspended Solids	31.0		66.0					2/month	16 hr comp.	
Beryllium				Monitor Only*				2/month	16 hr. comp.	
Mercury				Monitor Only*				2/month	16 hr. comp.	
Pentachlorophenol				Monitor Only*				2/month	16 hr. comp.	
pH	not less than 7.5 nor greater than 9.0 standard units							2/month	3 grabs/16 hrs	

\* See Special Condition F.

There shall be no discharge of solvent cleaning rinse wastewater.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:  
the effluent from the industrial wastewater treatment plant prior to mixing with any other liquid.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 102 WHICH RECEIVES WASTE FROM:  
the sewage treatment plant.

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)							MONITORING REQUIREMENTS		
	Mass Units			Concentrations				Measurement Frequency	Sample Type	24-Hour Report Under A.3.c.
	(lb/day except flow)			(mg/l unless otherwise indicated)						
	Average Monthly	Average Weekly	Max. Daily	Average Monthly	Average Weekly	Max. Daily	Instant. Max.			
Flow (mgd)	0.008							2/month	measured	
BOD-5 Day	30							2/month	grab	
Suspended Solids	30							2/month	grab	
Fecal Coliform	refer to Part C for effective disinfection							2/month	grab	
% Removal (BOD-5 Day & SS)	refer to Part C									
pH	not less than 6.0 nor greater than 9.0 standard units							2/month	grab	

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:  
effluent from the final sewage treatment unit prior to mixing with any other liquid.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 002\* WHICH RECEIVES WASTE FROM:  
the plant area - stormwater runoff and ground drainage

- a. The permittee is authorized to discharge during the period from issued date through expiration date.
- b. Based on the production data and/or anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

<u>Discharge Parameter</u>	<u>DISCHARGE LIMITATIONS (gross unless otherwise indicated)</u>							<u>MONITORING REQUIREMENTS</u>		
	<u>Mass Units</u>			<u>Concentrations</u>				<u>Measurement Frequency</u>	<u>Sample Type</u>	<u>24-Hour Report Under A.3.c.</u>
	<u>(lb/day except flow)</u>			<u>(mg/l unless otherwise indicated)</u>						
	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Max. Daily</u>	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Max. Daily</u>	<u>Instant. Max.</u>			
Flow (mgd)								N/A	N/A	

This outfall shall contain only uncontaminated storm runoff and ground discharge

\* See Special Condition D

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:  
discharge end of the storm sewer serving the plant area.

## OTHER REQUIREMENTS

- A. In accordance with Part A.3.b of this permit, the permittee shall submit a copy of the reports to each of the following:

Department of Environmental Resources  
Bureau of Water Quality Management  
600 Highland Building  
121 South Highland Avenue  
Pittsburgh, Pennsylvania 15206-3988

U.S. Environmental Protection Agency  
Region III, Pennsylvania Section (3WM52)  
Water Permits Branch  
Water Management Division  
841 Chestnut Street  
Philadelphia, Pennsylvania 19107

- B. Effective disinfection to control disease producing organisms shall be the production of an effluent which will contain a concentration of fecal coliform organisms not greater than

a. 200/100 ml as a monthly geometric mean, nor greater than 1000/100 ml in more than ten percent of the samples examined during any month from May through September inclusive.

b. 100,000/100 ml as a monthly geometric mean based on five consecutive samples collected on different days during any month from October through April inclusive.

- C. In no case shall the arithmetic means of the effluent values of the biochemical oxygen demand (BOD-5 Day) and suspended solids discharged during a period of 30 consecutive days exceed 15 percent of respective arithmetic means of the influent values for those parameters during the same time period except as specifically authorized by the Department.

D. Outfall 002:

Since this outfall also contained process wastewaters in the original application, the applicant shall sample this outfall twice a year for all limited parameters contained in this permit. This bi-yearly sampling program shall begin immediately upon issuance of this permit and continue until the expiration of the permit.

The Department will review the analyses to determine which, if any, of the parameters need to be limited. Based on this review, the permit will be amended as appropriate.

- E. The current point of chlorine application in the sewage treatment process is to be relocated after the filter system. A chlorine contact tank is also to be added to insure proper mixing of the chlorine with the effluent before discharge. This work is to be completed and operational by July 1, 1987.

F. Water Quality-Based Effluent Limitations and Other Requirements for Management of Toxic Pollutants

1. Water Quality-Based Effluent Limitations

In addition to the effluent limitations shown in Part A of this permit, the Permittee is expected to achieve the water quality-based effluent limitations shown below.

No final date for compliance with these limitations is shown. The Department will modify this permit to establish a final compliance date, if necessary, upon the submittal by the Permittee and review by the Department of an acceptable Toxics Reduction Evaluation (TRE), or the failure of the Permittee to submit an acceptable TRE under the schedule established under Subsection b. below. The Permittee must submit the following requests, along with supporting documentation, to the Department at the time of submission of the TRE:

(1) A request for modification of water quality-based effluent limitations shown below; and/or,

(2) A request for an extension of time to achieve the water quality-based effluent limitations shown below; and/or,

(3) A request for alternative bioassay-based effluent limitations.

For purposes of compliance, effluent limitations listed in Part A of this permit apply unless changed by order, permit modification, or other Department action.

Submittal by the Permittee of a TRE shall not be deemed to affect the appeal rights of the Permittee of final water quality-based effluent limitations upon action of the Department to make the limitations effective.

Monitoring Point 101, Outfall 001 (Zirc Operation)

<u>Parameter</u>	<u>Units</u>	<u>Average Monthly</u>	<u>Maximum Daily</u>	<u>Instantaneous Maximum</u>
Beryllium	mg/l	0.01	0.02	0.025
Mercury	mg/l	0.002	0.004	0.005
Pentachlorophenol	mg/l		0.84	

2. Toxics Reduction Evaluation (TRE)

In order to (1) verify the actual extent of the toxic pollutants associated with the wastewater, (2) determine sources of these toxic pollutants, and (3) recommend control and/or treatment technologies to reduce or eliminate these toxic pollutants, the Permittee is directed to carry out a Toxics Reduction Evaluation (TRE) in accordance with guidelines developed by the Department.

The Permittee shall submit three (3) copies of the completed TRE to the Department for review in accordance with the following schedule:

<u>Step</u>	<u>Completion Date</u>
Initiate TRE Study	July 1, 1987
Submit Complete TRE Report	July 1, 1988

3. Modification of Permit to Incorporate Water Quality-Based Effluent Limitations For Toxic Pollutants

Upon approval of the TRE and any additional submittals for the above toxic pollutants of concern, the Department will modify Part A of this permit to reflect the effluent limitations, monitoring requirements, and other conditions necessary for compliance with water quality standards.

A permit modification may include a schedule of compliance. Any such permit modification will be conducted in accordance with applicable permit modification procedures, which include development of draft and final permits and associated public notification requirements.

4. Procedures for Granting Extensions of Time to Achieve Water Quality-Based Effluent Limitations

At the request of the Permittee, in conjunction with modifying the permit to incorporate water quality-based effluent limitations under Subsection c. above, the Department may grant an extension of time to achieve the water quality-based effluent limitations shown in Subsection a. above, provided the Permittee meets all of the eligibility requirements contained in Section 95.4 of the Department's Rules and Regulations.

Requests for Section 95.4 time extensions, including all documentation required to support such a request, must be submitted to the Department along with the Permittee's TRE as required under Subsection b. above.

5. Procedures for Demonstration of Alternative Site-Specific Bioassay-Based Effluent Limitations

Where the water quality-based effluent limitations listed in Subsection a. above have been developed by the Department for protection of fish and aquatic life, the Permittee may request an opportunity to demonstrate alternative, site-specific, bioassay-based "safe concentration values" for the pollutants in question.

The final water quality based effluent limitations in Subsection a. are based on protection of fish and aquatic life for the following pollutants:

Outfall 101 (Zirc Operation) - Pentachlorophenol; Mercury

The procedures for carrying out such demonstrations shall be approved in writing by the Department, and shall be conducted in accordance with the requirements of Sections 93.8(d)-(e) of the Department's Rules and Regulations.



Requests for alternative, site-specific, bioassay-based effluent limitations, including all documentation required to support such a request, must be submitted to the Department along with the Permittee's TRE as required under Subsection b. above.

Where the demonstration results in more stringent limitations than those established by the Department in Subsection a. above, the more stringent limitations will apply. Any less stringent limitations which are approved by the Department shall not violate applicable criteria for the protection of human health. This procedure does not apply to those parameters for which specific numeric criteria are listed in Section 93.7, Table 3 of the Department's Rules and Regulations.

6. Procedures for Demonstrating Alternative Method Detection Limits

Where necessary, the Permittee may request an opportunity to demonstrate alternative facility specific MDL's to account for interfering factors associated with the wastewater in question.

The procedures for determining MDL's, published as Appendix B in 49 FR43430, October 26, 1984, must be followed and complete documentation provided.

Requests for alternative, facility-specific, MDL's including all documentation required to support such a request, must be submitted to the Department. The Department, upon evaluation of the documentation submitted, may grant a facility-specific MDL to define not detectable for permitting limit and compliance monitoring purposes.

- G. For all the parameters listed in Part C, Paragraph F, the applicant is required to take 4 samples total, during the period over which the preparation of the TRE extends. These samples must be representative of the working schedule of the plant. Until the Department evaluates the permittee's TRE, these parameters shall be samples 1/year thereafter.
- H. By June 1, 1987, the discharge of M-11 rinsewater from the Zirconium Etch facility shall be discontinued.
- I. The permittee is required to submit a Part II application at least six months prior to initiating any construction work necessitated by this permit.

ER-BWQ-69


Re: NPDES Permit No. PA0000892  
Westinghouse Electric Corporation  
Specialty Metals Plant  
R. D. #4, Box 333  
Blairsville, PA 15717  
Derry Township  
Westmoreland County

STATE OF PENNSYLVANIA



>SS

COUNTY OF ALLEGHENY

On the 24th day of September in the year one  
thousand nine hundred and eighty-six before me, the  
Subscriber, a Notary Public, came Hugh V. Archer, Ph.D., P.E.  
and duly acknowledged the foregoing permit to be his act  
and deed and desired that the same might be recorded as such.

  
\_\_\_\_\_  
Hugh V. Archer, Ph.D., P.E.

Witness my hand and notarial seal the day and year  
aforesaid.

   
NOTARY PUBLIC  
MELISSA L. NELSON, Notary Public  
PITTSBURGH, ALLEGHENY COUNTY, PA  
MY COMMISSION EXPIRES  
MARCH 19, 1990



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES

BUREAU OF WATER QUALITY MANAGEMENT  
600 Highland Building  
121 South Highland Avenue  
Pittsburgh, Pennsylvania 15206-3988  
(412) 665-2900 (answers 24 hrs.)

FEB 19 1987

Westinghouse Electric Corporation  
Specialty Metals Plant  
R.D. #4, Box 333  
Blairsville, PA 15717

RE: Amendment No. 1  
NPDES Permit PA0000892  
Derry Township  
Westmoreland County

Gentlemen:

We have amended your NPDES Permit due to the presence of non-processed methylene chloride at your plant.

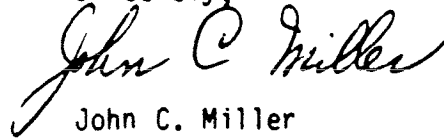
As part of the Amendment we have also decided to revise Part C, Paragraph E, Page 14 of 14 and to delete Paragraph I on Page 14c of 14.

Law and regulation prohibits construction of wastewater treatment facilities until a Part II Permit is issued. Since the chlorine contact tank constitutes a part of your sewage wastewater treatment facility, a Part II Permit must be issued before construction can be initiated. Production process changes, however, do not require a Part II Permit.

Transmitted herewith is Amendment No. 1, Pages 2a of 14 and also 2b of 14 which reflect the addition of the methylene chloride parameter, Page 14 of 14, Paragraph E, which is revised due to additional clarification concerning the need for a Part II Permit for the chlorine contact tank, Page 14c of 14 which reflects the deletion of Paragraph I and the Fact Sheet/Statement of Basis for this Amendment.

Westinghouse Electric Corporation can appeal this Amendment up to thirty (30) days after its issuance date.

Sincerely,

A handwritten signature in cursive script that reads "John C. Miller". The signature is written in dark ink and is positioned above the printed name and title.

John C. Miller  
Sanitary Engineer

JCM/kld: c r t

Enclosure

cc: EPA  
Operations Section  
Litigation

FACT SHEET/STATEMENT OF BASIS

NPDES PA0000892

Prepared by John C. Miller

Date: February 9, 1987

Outfall 001 is submerged  
101, 102 and 002

Phone: 412-665-2900 (8-657-2900)

(ES) Westinghouse Electric Corporation (MUN) Derry Township

(AF) Specialty Metals Plant (CO) Westmoreland

\*\*\*\*\*

Addendum to July 16, 1986 Fact Sheet for NPDES Permit PA0000892 for the Specialty Metals Plant (SMP) of Westinghouse Electric Corporation (WEC).

1. The effluent limitations for Outfall 101 for the period from issued date to June 30, 1987 are based on BPT established by EPA. These BPT limitations, however, are superseded by an August 12, 1986 Consent Order and Agreement between DER and WEC.

EPA's BAT limits constitute the limitations for Outfall 101 from 7-1-87 through the expiration date of PA0000892.

2. In WEC's 9-5-86 letter to us, they notified us that their plans relative to the operation of the Westro Facility had finalized. Westro will never be returned to operation and they requested the deletion of any conditions pertinent to Westro be eliminated from Permit PA0000892. Therefore, all conditions in the Draft Permit which provided for the possible restarting of Westro have been eliminated.
3. NPDES Permit PA0000892, issued on September 24, 1986 to Westinghouse Electric Corporation (WEC) for its Specialty Metals Plant (Blairsville Facility), does not allow any discharge of solvent rinse wastewaters. The zero discharge requirement of these rinse wastewaters is mandated by the Effluent Limitation Guideline (ELG) for Nonferrous Metals Forming and Metal Powders Production (40 CFR 471) for both BPT and BAT. The ELG does not pertain to non-process related wastewaters. Methylene Chloride is used as the solvent degreaser, and (WEC) is currently converting the production process from solvent degreasing to alkaline cleaning at their Blairsville Facility. This will place (WEC) in compliance with the BPT/BAT zero discharge for process-related methylene chloride. However, Methylene Chloride is present in the non-process related wastewaters which are also treated at the industrial waste treatment plant. Since appropriate data is not presently available on the Methylene Chloride actually present in these non-process related wastewaters, and the removal efficiency of Methylene Chloride by the existing treatment system cannot adequately be established at this time, a maximum daily concentration limit of 0.5 mg/l, based on water quality considerations has been established for Methylene Chloride at this monitoring point. This monitoring data will aid the Department in evaluating appropriate technology limits for Methylene Chloride in the next permit renewal.

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WATER QUALITY MANAGEMENT

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT PA0000892 AS ISSUED ON September 24, 1986

AMENDMENT NO. 1

In compliance with the provisions of the Clean Water Act, 33 U.S.C. 1251 et seq. (the "Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the above referenced permit issued to

Westinghouse Electric Corporation  
Specialty Metals Plant  
R. D. #4, Box 333  
Blairsville, PA 15717

for a facility located at

Derry Township  
Westmoreland County

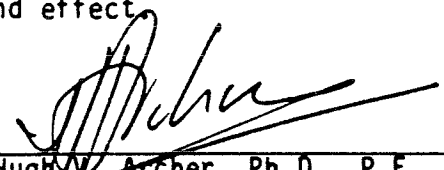
is amended as follows: Pages 2a of 14 and also 2b of 14 are revised due to the addition of a Methylene Chloride limit for non process operations utilizing this parameter. Page 14 of 14, Paragraph E, is revised due to additional clarification concerning the need for a Part II Application and correspondingly Page 14c of 14 is revised due to the deletion of Paragraph I.

The remainder of the permit is in full force and effect.

AMENDMENT ISSUED

DATE FEB 19 1987

BY

  
\_\_\_\_\_  
Hugh V. Archer, Ph.D., P.E.  
Regional Water Quality Manager

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 101 WHICH RECEIVES WASTE FROM:  
the industrial wastewater treatment plant.

- a. The permittee is authorized to discharge during the period from issued date through June 30, 1987.
- b. Based on the production data and/or anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)							MONITORING REQUIREMENTS		
	Mass Units			Concentrations				Measurement Frequency	Sample Type	24-Hour Report Under A.3.c.
	(lb/day except flow)			(mg/l unless otherwise indicated)						
	Average Monthly	Average Weekly	Max. Daily	Average Monthly	Average Weekly	Max. Daily	Instant. Max.			
Flow (mgd)								2/month	measured	
Ammonia	27.0		43.0					2/month	16 hr. comp.	
Chromium	0.08		0.20					2/month	16 hr. comp.	
Cyanide	0.06		0.14					2/month	16 hr. comp.	
Nickel	0.61		0.93					2/month	16 hr. comp.	
Fluoride	15.2		34.3					2/month	16 hr. comp.	
O & G	6.3		12.5					2/month	3 grabs/16 hrs	
Suspended Solids	11.4		23.6					2/month	16 hr comp.	
Methylene Chloride						0.5		2/month	3 grabs/16 hrs	

There shall be no discharge of solvent cleaning rinse wastewater.

pH	not less than 7.5 nor greater than 9.0 standard units	2/month	3 grabs/16 hrs
----	---	---------	----------------

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:  
the effluent from the industrial wastewater treatment plant prior to mixing with any other liquid.

1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR OUTFALL 101 WHICH RECEIVES WASTE FROM:  
the industrial wastewater treatment plant.

- a. The permittee is authorized to discharge during the period from July 1, 1987 through expiration date.
- b. Based on the production data and/or anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply. Total (dissolved plus suspended fraction) is implied for each parameter unless otherwise indicated.

Discharge Parameter	DISCHARGE LIMITATIONS (gross unless otherwise indicated)							MONITORING REQUIREMENTS		
	Mass Units			Concentrations				Measurement Frequency	Sample Type	24-Hour Report Under A.3.c.
	(lb/day except flow)			(mg/l unless otherwise indicated)						
	Average Monthly	Average Weekly	Max. Daily	Average Monthly	Average Weekly	Max. Daily	Instant. Max.			
Flow (mgd)								2/month	measured	
Ammonia	12.0		28.0					2/month	16 hr. comp.	
Chromium	0.04		0.09					2/month	16 hr. comp.	
Cyanide	0.03		0.06					2/month	16 hr. comp.	
Nickel	0.28		0.43					2/month	16 hr. comp.	
Fluoride	8.4		18.9					2/month	16 hr. comp.	
O & G	6.3		12.5					2/month	3 grabs/16 hrs	
Suspended Solids	31.0		66.0					2/month	16 hr comp.	
Methylene Chloride						0.5		2/month	3 grabs/16 hrs	
Beryllium				Monitor Only*				2/month	16 hr. comp.	
Mercury				Monitor Only*				2/month	16 hr. comp.	
Pentachlorophenol				Monitor Only*				2/month	16 hr. comp.	
pH	not less than 7.5 nor greater than 9.0 standard units							2/month	3 grabs/16 hrs	

\* See Special Condition F.

There shall be no discharge of solvent cleaning rinse wastewater.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:



## OTHER REQUIREMENTS

- A. In accordance with Part A.3.b of this permit, the permittee shall submit a copy of the reports to each of the following:

Department of Environmental Resources  
Bureau of Water Quality Management  
600 Highland Building  
121 South Highland Avenue  
Pittsburgh, Pennsylvania 15206-3988

U.S. Environmental Protection Agency  
Region III, Pennsylvania Section (3WM52)  
Water Permits Branch  
Water Management Division  
841 Chestnut Street  
Philadelphia, Pennsylvania 19107

- B. Effective disinfection to control disease producing organisms shall be the production of an effluent which will contain a concentration of fecal coliform organisms not greater than
- a. 200/100 ml as a monthly geometric mean, nor greater than 1000/100 ml in more than ten percent of the samples examined during any month from May through September inclusive.
  - b. 100,000/100 ml as a monthly geometric mean based on five consecutive samples collected on different days during any month from October through April inclusive.
- C. In no case shall the arithmetic means of the effluent values of the biochemical oxygen demand (BOD-5 Day) and suspended solids discharged during a period of 30 consecutive days exceed 15 percent of respective arithmetic means of the influent values for those parameters during the same time period except as specifically authorized by the Department.
- D. Outfall 002:

Since this outfall also contained process wastewaters in the original application, the applicant shall sample this outfall twice a year for all limited parameters contained in this permit. This bi-yearly sampling program shall begin immediately upon issuance of this permit and continue until the expiration of the permit.

The Department will review the analyses to determine which, if any, of the parameters need to be limited. Based on this review, the permit will be amended as appropriate.

- E. The current point of chlorine application in the sewage treatment process is to be relocated after the filter system. A chlorine contact tank is also to be added to insure proper mixing of the chlorine with the effluent before discharge. This work to be completed and operational by July 1, 1987. A Part II application is required for this revision to the sewage treatment plant.

Requests for alternative, site-specific, bioassay-based effluent limitations, including all documentation required to support such a request, must be submitted to the Department along with the Permittee's TRE as required under Subsection b. above.

Where the demonstration results in more stringent limitations than those established by the Department in Subsection a. above, the more stringent limitations will apply. Any less stringent limitations which are approved by the Department shall not violate applicable criteria for the protection of human health. This procedure does not apply to those parameters for which specific numeric criteria are listed in Section 93.7, Table 3 of the Department's Rules and Regulations.

6. Procedures for Demonstrating Alternative Method Detection Limits

Where necessary, the Permittee may request an opportunity to demonstrate alternative facility specific MDL's to account for interfering factors associated with the wastewater in question.

The procedures for determining MDL's, published as Appendix B in 49 FR43430, October 26, 1984, must be followed and complete documentation provided.

Requests for alternative, facility-specific, MDL's including all documentation required to support such a request, must be submitted to the Department. The Department, upon evaluation of the documentation submitted, may grant a facility-specific MDL to define not detectable for permitting limit and compliance monitoring purposes.

- G. For all the parameters listed in Part C, Paragraph F, the applicant is required to take 4 samples total, during the period over which the preparation of the TRE extends. These samples must be representative of the working schedule of the plant. Until the Department evaluates the permittee's TRE, these parameters shall be samples 1/year thereafter.
- H. By June 1, 1987, the discharge of M-11 rinsewater from the Zirconium Etch facility shall be discontinued.

NAME Westinghouse Electric Corporation  
ADDRESS R. #4, Box 333  
Blairsville, Pennsylvania 15717  
AGILITY Specialty Metals Plant  
LOCATION Derry Township, Westmoreland County

AL P ANT HARC MIN BYB NED  
DISCHARGE MONITORING REPORT (DMR)  
(2 16) (17 19)  
PA0000  
PERMIT NUMBER  
101  
DISCHARGE NUMBER  
MONITORING PERIOD  
FROM YEAR MO DAY TO YEAR MO DAY  
(20 21) (22 23) (24 25) (26 27) (28 29) (30 31)

Limitations Imposed From  
July 1, 1987 Through  
Expiration Date

NOTE: Read instructions before completing this form.

PARAMETER (12-17)		(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (54-61)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-65)	SAMPLE TYPE (66-70)	
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS				
Suspended Solids	SAMPLE MEASUREMENT				*	*	*					
	PERMIT REQUIREMENT	31.0	66.0	LB/DY	*	*	*	*		2/MO	16HC	
Methylene Chloride	SAMPLE MEASUREMENT	*	*		*	*						
	PERMIT REQUIREMENT	*				*	0.5	mg/l		2/MO	3/24HR	
pH	SAMPLE MEASUREMENT	*	*			*						
	PERMIT REQUIREMENT	*	*	*	7.5	*	9.0	S.U.		2/MO	3/24HR	
Beryllium	SAMPLE MEASUREMENT	*	*									
	PERMIT REQUIREMENT	*	*	MONITOR ONLY		*	*	mg/l		2/MO	16HC	
Mercury	SAMPLE MEASUREMENT	*	*									
	PERMIT REQUIREMENT	*	*	MONITOR ONLY		*	*	mg/l		2/MO	16HC	
Pentachlorophenol	SAMPLE MEASUREMENT	*	*									
	PERMIT REQUIREMENT	*	*	MONITOR ONLY		*	*	mg/l		2/MO	16HC	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER		I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years)					SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT		TELEPHONE		DATE	
TYPED OR PRINTED							AREA CODE		NUMBER		YEAR MO DAY	
IMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)												

NAME Westinghouse Electric Corporation  
ADDRESS D. #4, Box 333  
Clearville, Pennsylvania 15717  
FACILITY Specialty Metals Plant  
LOCATION Derry Township, Westmoreland County

DISCHARGE MONITORING REPORT (DMR)  
(2-15) (17-19)

PA00C 02  
PERMIT NUMBER

101  
DISCHARGE NUMBER

MONITORING PERIOD  
FROM YEAR MO DAY TO YEAR MO DAY  
(20 21) (22 23) (24 25) (26 27) (28 29) (30 31)

Limitations Imposed From  
July 1, 1987 Through  
Expiration Date

NOTE: Read instructions before completing this form.

PARAMETER (32-37)	X	(3 Card Only) QUANTITY OR LOADING (46-53)			(4 Card Only) QUALITY OR CONCENTRATION (46-53)				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-67)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
Flow					*	*	*				
				MGD	*	*	*	*		2/MO	MEAS
Ammonia					*	*	*	*			
				LB/DY	*	*	*	*		2/MO	16HC
Chromium					*	*	*	*			
				LB/DY	*	*	*	*		2/MO	16HC
Cyanide					*	*	*	*			
				LB/DY	*	*	*	*		2/MO	16HC
Nickel					*	*	*	*			
				LB/DY	*	*	*	*		2/MO	16HC
Fluoride					*	*	*	*			
				LB/DY	*	*	*	*		2/MO	16HC
Oil & Grease					*	*	*	*			
				LB/DY	*	*	*	*		2/MO	16HC
					*	*	*	*		2/MO	3/16HR

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER

TYPED OR PRINTED

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319. (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE

DATE

AREA CODE NUMBER YEAR MO DAY

Facility Name/Location if different)  
NAME Westinghouse Electric Corporation  
ADDRESS R. #4, Box 333  
Blairsville, Pennsylvania 15717

Facility Specialty Metals Plant  
Location Derry Township, Westmoreland County

DISCHARGE MONITORING REPORT (DMR)

PA00000E  
PERMIT NUMBER

102  
DISCHARGE NUMBER

MONITORING PERIOD

FROM			TO		
YEAR	MO	DAY	YEAR	MO	DAY
(20 21)	(22 23)	(24 25)	(26 27)	(28 29)	(30 31)

NOTE: Read instructions before completing this form.

PARAMETER (32-37)		(3 Card Only) (46-53) QUANTITY OR LOADING (54-61)			(4 Card Only) (38-45) QUALITY OR CONCENTRATION (46-53) (54-61)			NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
Flow	SAMPLE MEASUREMENT		*	MGD	*	*	*			
	PERMIT REQUIREMENT	0.008	*		*	*	*			
300-5 Day	SAMPLE MEASUREMENT	*	*	*	*				2/MO	MEAS
	PERMIT REQUIREMENT	*	*		*	30	60	MG/L		
Suspended Solids	SAMPLE MEASUREMENT	*	*	*	*				2/MO	GRAB
	PERMIT REQUIREMENT	*	*		*	30	60	MG/L		
Fecal Coliform May 1 to Sept 30 Oct 1 to Apr 30	SAMPLE MEASUREMENT	*	*	*	*				2/MO	GRAB
	PERMIT REQUIREMENT	*	*		*	200 100,000	1,000 -----	#/100ML		
pH	SAMPLE MEASUREMENT	*	*	*		*			2/MO	GRAB
	PERMIT REQUIREMENT	*	*		6.0	*	9.0	S.U.		
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	I CERTIFY UNDER PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED HEREIN AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION I BELIEVE THE SUBMITTED INFORMATION IS TRUE ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT SEE 18 USC § 1001 AND 33 USC § 1319 (Penalties under these statutes may include fines up to \$10,000 and/or maximum imprisonment of between 6 months and 5 years.)	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
			AREA CODE	NUMBER	YEAR	MO	DAY

Typed or Printed

Comment and Explanation of any violations (Reference all attachments here)

# **APPENDIX C**

## **BORING LOGS/WELL INSTALLATION DETAILS**

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-1

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-17-94

Date Completed 10-17-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-17-94/11:00

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N <u>408585.02</u> E <u>1534377.67</u> Surface Elev. <u>1001.34</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
					ASPHALT 1.0'		HNU-
	S-1	10	4-5 9-8	S	MEDIUM DENSE, BLACK, BROWN AND ORANGE SILTY SAND, TRACE ROCK FRAGMENTS, DRY TO MOIST. 3.0'	120	2ppm IN BOREHOLE
5	S-2	22	6-5 9-11	S	MEDIUM STIFF TO STIFF MOTTLED GRAY AND BROWN CLAYEY SILT, TRACE ROCK FRAGMENTS, MOIST.	150	HNU- 5ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
	S-3	24	11-20 25-7	S		200	
	S-4	24	13-12 12-13	S	MEDIUM STIFF TO STIFF MOTTLED BROWN AND ORANGE SILTY CLAY, SOME ROCK FRAGMENTS, TRACE SANDSTONE FRAGMENTS AND BLACK CARBONACEOUS FLECKS, DRY TO MOIST	320	HNU- 50ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
10	S-5	24	17-21 18-25	S		360	HNU- 60ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
	S-6	24	22-25 22-21	S		320	NO BEDROCK ENCOUNTERED
					13.0'		
15					BOTTOM OF BORING = 13.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-2 AND S-5 WERE SENT TO LAB FOR ANALYSIS
20							
25							
30							
5							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-2

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-17-94

Date Completed 10-17-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-17-94/12:15

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N 408587.72 E 1534434.33</u> Surface Elev. <u>1001.39</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
					ASPHALT 0.8'		HNU-
	S-1	11	4-4 10-6	S o S	MEDIUM DENSE, GRAY TO BROWN SILT AND SAND, SOME ROCK FRAGMENTS, DRY 3.0'	3.5	BACKGROUND IN BOREHOLE
5	S-2	22	8-8 18-20	S o //	MEDIUM STIFF, MOTTLED BROWN AND GRAY, CLAYEY SILT, SOME ROCK FRAGMENTS, TRACE SAND AND SANDSTONE FRAGMENTS, DRY TO MOIST	0.6	HNU-
	S-3	17	10-15 17-25	// o S		0.2	BACKGROUND IN BOREHOLE
	S-4	12	23-29 18-16	// o S		1.2	HNU- 1ppm IN BOREHOLE
10	S-5	24	7-9 13-15	S o S	MEDIUM STIFF MOTTLED BROWN AND GRAY SILTY CLAY, TRACE BLACK CARBONACEOUS FLECKS, TRACE SANDSTONE FRAGMENTS MOIST	0.1	HNU-
	S-6	16	15-15 25-18	S o S		0.1	BACKGROUND IN BOREHOLE
					13.0'		NO BEDROCK ENCOUNTERED
15					BOTTOM OF BORING = 13.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT-BENTONITE GROUT		SAMPLES S-2 AND S-4 WERE SENT TO LAB FOR ANALYSIS
20							
25							
30							



# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-3

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-17-94

Date Completed 10-17-94

Field Geologist DPC Checked By WAB GWL: Depth 8.0' Date/Time 10-17-94/14:00

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408643.95 E1534495.51 Surface Elev. 1001.22	PID READING (PPM)	REMARKS
					DESCRIPTION		
5	S-1	13	5-5 5-7		MEDIUM STIFF, MOTTLED BROWN AND GRAY CLAYEY SILT, TRACE ROCK FRAGMENTS AND WOOD FRAGMENTS, DRY (FILL)	0	HNU- 1.8 PPM IN BOREHOLE BACKGROUND IN BREATHING ZONE
	S-2	17	5-7 9-15			0	
	S-3	24	9-13 15-18			0.1	
	S-4	24	22-19 20-21			0	
10	S-5	18	3-5 7-8		MEDIUM STIFF, GRAY SILTY CLAY, TRACE ROCK FRAGMENTS, MOIST	0	HNU- BACKGROUND IN BOREHOLE
	S-6	18	2-2 6-5			100	
	S-7	24	3-3 3-6			50	
	S-8	24	5-5 4-3			15	
15	S-9	22	10-19 25-50		DENSE, GRAY SILTY SAND, SOME SANDSTONE FRAGMENTS, MOIST	30	TOP OF WEATHERED BEDROCK 18.0'
20					BOTTOM OF BORING = 18.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT-BENTONITE GROUT.		SAMPLES S-2 AND S-5 WERE SENT TO LAB FOR ANALYSIS
25							
30							
5							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-4

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-18-94

Date Completed 10-18-94

Field Geologist DPC Checked By WAB GWL: Depth 9.0' Date/Time 10-18-94/09:00

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDRAD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408797.21 E 1534505.48 Surface Elev. 1000.92	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	11	9-9 9-7		SOFT TO MEDIUM STIFF, BROWN TO GRAY CLAYEY SILT, TRACE BLACK CARBONACEOUS FLECKS, TRACE ROCK FRAGMENTS, DRY 2.0'	1.0	HNU NOT FUNCTIONING PROPERLY DUE TO MOISTURE
	S-2	20	11-7 12-15		MEDIUM STIFF, MOTTLED ORANGE AND GRAY CLAYEY SILT, TRACE BLACK CARBONACEOUS, AND ROCK FRAGMENTS, DRY TO MOIST.	0.1	
5	S-3	22	4-8 13-18			0.4	
	S-4	24	15-16 16-14			0	
	S-5	24	4-4 6-7		9.0'	0.2	
10	S-6	18	1-1 4-5		LOOSE TO MEDIUM DENSE, BROWN TO GRAY SILTY FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, MOIST TO WET.		WATER AT 9.0'
					11.0'		NO BEDROCK ENCOUNTERED
					BOTTOM OF BORING = 12.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-3 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							

**CUMMINGS  
RITER  
CONSULTANTS, INC.**

## LOG OF BORING NO. B-5

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA






Date Started 10-18-94

Date Completed 10-18-94

Field Geologist DPC Checked By WAB GWL: Depth 8.0' Date/Time 10-18-94/10:40

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N408697.76 E1354593.40</u> Surface Elev. <u>1001.27</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
5	S-1	14	10-9 9-4		MEDIUM DENSE, BROWN, FINE SANDY SILT SOME CINDERS AND WOOD FRAGMENTS, DRY (FILL) 2.0'	0.1	HARD DRILLING INITIAL 6"-SECTION OF CONCRETE ENCOUNTERED, MOVED HOLE 2'  Hnu- 1.4 ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE WATER AT 8.0'  Hnu- 6ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE NO BEDROCK ENCOUNTERED
	S-2	12	2-2 2-2		SOFT, GRAY AND BROWN CLAYEY SILT, TRACE WOOD FRAGMENTS, TRACE GRAVEL, MOIST (FILL)	0.1	
	S-3	12	3-4 6-8		MEDIUM STIFF, MOTTLED BROWN AND GRAY CLAYEY SILT, TRACE SAND AND BLACK CARBONACEOUS FLECKS, DRY TO MOIST 5.0'	0.1	
	S-4	24	7-9 8-12		LOOSE TO MEDIUM DENSE BROWN AND GRAY SILTY FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE GRAVEL AND COBBLES, MOIST TO WET 7.5'	0.1	
	S-5	12	2-4 3-4			0.5	
10					BOTTOM OF BORING = 10.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-4 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							
35							
40							
45							
50							
55							
60							
65							
70							
75							
80							
85							
90							
95							
100							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-6

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-19-94








Date Completed 10-19-94

Field Geologist DPC Checked By WAB GWL: Depth 9.0' Date/Time 10-19-94/11:10

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N 408864.22 E 1534603.56 Surface Elev. 1001.32	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	11	11-22 10-7		DENSE, BROWN AND BLACK SILT, SOME GRAY FINE SAND, SOME CINDERS AND ROCK FRAGMENTS, DRY (FILL) 2.2'	10	HNU NOT FUNCTIONING PROPERLY DUE TO RAIN. ODOR FROM BOREHOLE
	S-2	18	4-6 13-12		MEDIUM STIFF, MOTTLED BROWN AND GRAY CLAYEY SILT, TRACE BLACK CARBONACEOUS FLECKS AND WOOD FRAGMENTS, DRY (FILL)	48	
5	S-3	24	10-21 19-16		MEDIUM DENSE TO DENSE, BROWN FINE SAND AND SILT, TRACE BLACK CARBONACEOUS FLECKS, DRY TO MOIST. 5.0'	14	
	S-4	24	11-14 14-11		MEDIUM DENSE, BROWN FINE TO MEDIUM SAND, SOME SANDSTONE FRAGMENTS, TRACE BLACK CARBONACEOUS FLECKS, MOIST TO WET. 7.0'	27	
10	S-5	19	11-10 11-8		MEDIUM DENSE BROWN FINE TO MEDIUM SAND TRACE SANDSTONE FRAGMENTS, DRY TO MOIST 13.0'	10	
	S-6	22	5-6 11-13			4.0	WATER AT 9.0'
	S-7	21	6-11 16-30			1.0	TOP OF WEATHERED BEDROCK AT 14.0'
15					BOTTOM OF BORING = 14.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-2 AND S-4 WERE SENT TO LAB FOR ANALYSIS.
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## Project No. 93-132

Date Completed 10-19-94

Date/Time \_\_\_\_\_

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N409330.12 E1534749.12</u> Surface Elev. <u>995.45</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	11	5-6 6-10	SS	MEDIUM DENSE, BROWN AND GRAY SILT, TRACE ROCK FRAGMENTS, DRY 2.0'	0.2	WATER AT 5.0' HNU-BACKGROUND IN BOREHOLE
	S-2	15	6-6 7-8		SS	MEDIUM DENSE, BROWN SILTY SAND, DRY 4.5'	
5	S-3	22	4-4 4-3	S	LOOSE, BROWN FINE TO MEDIUM SAND, TRACE BLACK SILT, WET 9.0'	0.2	
	S-4	24	2-4 4-3			0.2	
	S-5	24	4-3 3-9			0.3	
10	S-6	20	19-24 20-24	OS	LOOSE TO DENSE, DARK BROWN, FINE TO MEDIUM SAND, TRACE BLACK SILT, TRACE SANDSTONE FRAGMENTS, MOIST 12.0'	0.4	
					BOTTOM OF BORING = 12.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT-BENTONITE GROUT		SAMPLE S-2 SENT TO LAB FOR ANALYSIS.

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-8

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA


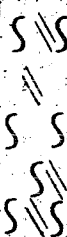
Date Started 10-19-94

Date Completed 10-19-94

Field Geologist DPC Checked By WAB GWL: Depth 9.0' Date/Time 10-19-94/09:25

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N 409115.80 E 1534577.42</u> Surface Elev. <u>1001.48</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
5	S-1	16	2-4 8-12		MEDIUM DENSE, BROWN SILT, TRACE FINE SAND TRACE GRAVEL AND ROCK FRAGMENTS, TRACE CINDERS, DRY (FILL) 2.0'	0.2	HNU NOT FUNCTIONING PROPERLY DUE TO PRECIPITATION  WATER ENCOUNTERED AT 9.0'
	S-2	15	5-9 9-13		MEDIUM STIFF TO STIFF, MOTTLED ORANGE, BROWN AND GRAY CLAYEY SILT, TRACE BROWN FINE SAND, TRACE BLACK CARBONACEOUS FLECKS AND ROCK FRAGMENTS, DRY TO MOIST	0.2	
	S-3	18	9-15 19-21		0.4		
	S-4	24	18-15 16-10		0.6		
10	S-5	2	8-6 5-4		LOOSE TO MEDIUM DENSE, BROWN TO GRAY, FINE TO MEDIUM SAND, TRACE BLACK FINE SAND, MOIST TO WET	8.5'	
	S-6	17	1-1 3-2	0.8			
	S-7	18	2-4 4-2	0.2			
	15	S-8	24	3-2 3-50		16.0'	
					BOTTOM OF BORING = 16.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT.		SAMPLE S-3 WAS SENT TO LAB FOR ANALYSIS
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-9

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-18-94


Date Completed 10-18-94

Field Geologist DPC Checked By WAB GWL: Depth 11.0' Date/Time 10-18-94/14:10

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N409220.06 E1534678.24 Surface Elev. 1001.25	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	3	5-10 11-9		MEDIUM DENSE, BROWN SILT, SOME CINDERS AND ROCK FRAGMENTS, DRY TO MOIST (FILL)	0.1	HNU-BACKGROUND IN BOREHOLE
	S-2	21	5-6 9-9		MEDIUM STIFF, MOTTLED BROWN-ORANGE AND GRAY CLAYEY SILT, TRACE BLACK CARBONACEOUS FLECKS, TRACE FINE SAND, TRACE ROCK AND WOOD FRAGMENTS DRY TO MOIST (FILL)	0.2	
5	S-3	19	2-6 11-13			0.2	
	S-4	17	15-20 21-16			0.2	
	S-5	24	15-13 13-9			0.2	
10	S-6	24	5-3 2-3	S	LOOSE TO MEDIUM DENSE, BROWN TO GRAY, FINE TO MEDIUM SAND, TRACE BLACK SILT AND FINE SAND, MOIST TO WET	0	WATER ENCOUNTERED AT 11.0'
	S-7	24	2-2 3-4			0.2	
15	S-8	24	3-2 2-9			0.2	
							TOP OF WEATHERED BEDROCK AT 16.0'
					BOTTOM OF BORING = 16.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT.		SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-10

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-18-94







Date Completed 10-18-94

Field Geologist DPC Checked By WAB GWL: Depth 9.0' Date/Time 10-18-94/13.00

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N409086.29 E1534669.41</u> Surface Elev. <u>1000.24</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	14	4-6 7-9		MEDIUM DENSE, BROWN SILT, TRACE FINE SAND TRACE CLAY, TRACE CINDERS AND ROCK FRAGMENTS, DRY TO MOIST (FILL) 2.0'	0	Hnu-BACKGROUND READING IN BORHOLE
	S-2	17	6-9 11-15		MEDIUM STIFF, MOTTLED ORANGE AND GRAY CLAYEY SILT, TRACE FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE SANDSTONE FRAGMENTS, DRY TO MOIST 5.0'	0.1	
5	S-3	18	9-15 11-13		MEDIUM DENSE, BROWN AND BLACK, FINE TO MEDIUM SAND, MOIST TO WET.	0.2	
	S-4	15	9-9 8-6			0.2	Hnu-BACKGROUND READING IN BORHOLE
	S-5	16	4-6 8-6			0.1	WATER ENCOUNTERED AT 9.0'
10	S-6	24	8-7 12-10			0.5	Hnu-BACKGROUND READING IN BORHOLE
	S-7	24	10-15 17-30		MEDIUM DENSE TO VERY DENSE, BROWN AND BLACK FINE TO MEDIUM SAND, TRACE SANDSTONE FRAGMENTS, MOIST.	0.4	
15	S-8	17	30-31 50			—	TOP OF WEATHERED BEDROCK AT 16.0'
					BOTTOM OF BORING = 16.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-11

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-19-94

Date Completed 10-19-94

Field Geologist DPC Checked By WAB GWL: Depth 10.0' Date/Time 10-19-94/13:10

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N409007.13 E1534820.05 Surface Elev. 999.97	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	17	2-3 5-5	SS	LOOSE, DARK BROWN AND ORANGE, FINE SAND AND SILT, TRACE ROCK FRAGMENTS, DRY 2.0'	0	3" SPLIT SPOON DRIVEN FOR DUPLICATE SAMPLE  Hnu-BACKGROUND IN BOREHOLE  6-8' WHITE MATERIAL ENCOUNTERED (2")  WATER ENCOUNTERED AT 10.0'  Hnu-BACKGROUND IN BOREHOLE  TOP OF WEATHERED BEDROCK AT 16.0'
	S-2	12	2-3 3-4	SS	MEDIUM STIFF, BROWN-ORANGE CLAYEY SILT AND FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, DRY 4.0'	0.6	
5	S-3	16	2-3 4-4	o	LOOSE, BROWN-ORANGE FINE SAND, TRACE CLAY, TRACE SANDSTONE FRAGMENTS, DRY 6.0'	0.8	
	S-4	13	1-0 1-3	o	VERY LOOSE TO MEDIUM DENSE, BROWN-ORANGE FINE SAND, TRACE CLAY, TRACE BLACK SILT, TRACE ROCK FRAGMENTS, MOIST TO WET.	0.6	
	S-5	22	10-10 8-9	o		0.2	
10	S-6	24	5-6 8-6	o		0.4	
	S-7	24	4-3 5-6	o		0.4	
15	S-8	24	2-2 1-2	o		0.2	
					BOTTOM OF BORING = 16.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT.		SAMPLE S-3 AND DUPLICATE WERE SENT TO LAB FOR ANALYSIS
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-12

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-19-94

Date Completed 10-19-94

Field Geologist DPC Checked By WAB GWL: Depth 18.0' Date/Time 10-19-94/19:10

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408949.28 E1534957.59 Surface Elev. 995.86	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	12	5-9 10-7	S	MEDIUM DENSE, BROWN-ORANGE, FINE SAND AND SILT, TRACE ROCK FRAGMENTS TRACE ROOTS, DRY	0.8	HNU-NOT FUNCTIONING PROPERLY    ENCOUNTERED WATER AT 8.0'   TOP OF WEATHERED BEDROCK AT 13.3'
	S-2	12	3-3 3-3	S	MEDIUM STIFF, BROWN CLAYEY SILT, TRACE FINE SAND, TRACE SANDSTONE FRAGMENTS, DRY	0.2	
5	S-3	22	3-3 5-8	S		0.6	
	S-4	18	8-10 9-11	S	MEDIUM DENSE TO VERY DENSE, BROWN-ORANGE, FINE TO MEDIUM SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE CLAY, TRACE ROCK FRAGMENTS, MOIST TO WET.	0.2	
	S-5	24	8-6 7-6	S		2.4	
10	S-6	24	3-3 9-22	S		0.2	
	S-7	14	22-30 50/3"	S		0.2	
15					BOTTOM OF BORING = 13.3' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-3 WAS SENT TO LAB FOR ANALYSIS
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-13

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-20-94

Date Completed 10-20-94

Field Geologist DPC Checked By WAB GWL: Depth 7.76' Date/Time 10-20-94/07:55

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408930.91 E1535009.15 Surface Elev. 994.69	PID READING (PPM)	REMARKS
					DESCRIPTION		
5	S-1	13	5-13 13-14		MEDIUM DENSE, BROWN TO LIGHT BROWN SILT, TRACE ROOTS, DRY 2.0'	0.8	HNU-BACKGROUND IN BOREHOLE  WATER ENCOUNTERED AT 8.0'  TOP OF WEATHERED BEDROCK AT 10.0'  SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
	S-2	17	7-11 11-22		MEDIUM STIFF, BROWN-ORANGE TO GRAY CLAYEY SILT, TRACE FINE SAND, TRACE ROCK FRAGMENTS, TRACE ROOTS, DRY 5.0'	0.6	
	S-3	20	5-11 11-12		MEDIUM DENSE TO DENSE, BROWN-ORANGE TO LIGHT GRAY, FINE TO MEDIUM SAND, TRACE BLACK SILT, TRACE SANDSTONE FRAGMENTS, DRY TO WET 10.0'	1.5	
	S-4	24	13-12 10-14			4.5	
	S-5	22	10-16 28-40			.05	
10					BOTTOM OF BORING = 10.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-14

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-20-94

Date Completed 10-20-94

Field Geologist DPC Checked By WAB GWL: Depth 8.0' Date/Time 10-20-94/09:00

Driller PENNSYLVANIA DRILLING COMPANY Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408928.83 E1535121.94 Surface Elev. 992.96	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	18	2-2 6-4	S	MEDIUM DENSE, DARK BROWN TO BLACK SILT, TRACE ROOTS, DRY 2.0'	0.5	Hnu-BACKGROUND IN BOREHOLE
	S-2	19	2-4 6-10		MEDIUM STIFF, BROWN-ORANGE CLAYEY SILT TRACE FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE SANDSTONE, FRAGMENTS, MOIST 4.0'	5.0	
5	S-3	20	4-12 11-7	S	MEDIUM DENSE TO VERY DENSE ORANGE- BROWN, FINE TO MEDIUM SAND, TRACE BLACK SILT AND FINE SAND, TRACE GRAVEL, TRACE SANDSTONE FRAGMENTES DRY TO WET 10.0'	0.2	Hnu-BACKGROUND IN BOREHOLE BOREHOLE
	S-4	21	7-8 12-7			0.1	
	S-5	24	13-28 31-20	S		0.3	WATER ENCOUNTERED AT 8.0' TOP OF WEATHERED BEDROCK AT 10.0'
10					BOTTOM OF BORING = 10.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT.		SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-15

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-20-94

Date Completed 10-20-94

Field Geologist DPC

Checked By WAB

GWL: Depth

DRY Date/Time 10-20-94/09:40

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N408916.30 E 1535280.09</u> Surface Elev. <u>989.23</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
5	S-1	15	10-24 12-10	SS SS	DENSE DARK BROWN TO BLACK, ORANGE AND GRAY SILT AND FINE SAND, SOME GRAVEL AND COBBLES, DRY 2.0'	3.0	Hnu-BACKGROUND IN BOREHOLE  WATER ENCOUNTERED AT 5.0'  Hnu-BACKGROUND IN BOREHOLE  TOP OF WEATHERED BEDROCK AT 7.5'  SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
	S-2	24	5-6 9-10	SS SS	MEDIUM STIFF, BROWN-ORANGE CLAYEY SILT, TRACE FINE SAND, TRACE BLACK MEDIUM GRAIN SAND, TRACE BLACK CARBONACEOUS FLECKS, DRY 4.0'	0	
	S-3	19	7-8 8-7	SS OO	MEDIUM DENSE BROWN-ORANGE, FINE TO MEDIUM SAND, TRACE SILT, TRACE BLACK SAND, MOIST TO WET 5.0'	0.1	
	S-4	15	12-31 50/3"	OO OO	MEDIUM DENSE TO VERY DENSE, MOTTLED BROWN AND GRAY, FINE SAND, TRACE SANDSTONE FRAGMENTS, MOIST TO WET 7.5'	0.1	
10					BOTTOM OF BORING = 7.5' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT.		
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-16

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-24-94

Date Completed 10-24-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-24-94/10:50

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST


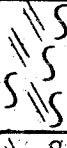

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N409359.25 E1535124.59</u> Surface Elev. <u>995.64</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
					CONCRETE 0.6'		
	S-1	16	15-14		MEDIUM DENSE GRAY SILT, SOME SLAG, AND GRAVEL, (FILL) DRY 1.5'	1.0	3" SPLIT SPOON DRIVEN
	S-2	17	3-5		MEDIUM STIFF TO STIFF, DARK GRAY TO BROWN CLAYEY SILT, TRACE COBBLES, TRACE WOOD FRAGMENTS, DRY (FILL)	4.0	
5	S-3	24	1-3		SOFT TO MEDIUM STIFF, MOTTLED ORANGE CLAYEY SILT, TRACE FINE SAND, TRACE ROCK FRAGMENTS, DRY 6.0'	5.0	HNU-7ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
	S-4	24	10-13		MEDIUM DENSE, MOTTLED ORANGE-BROWN TO GRAY, FINE TOP MEDIUM CLAYEY SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE ROCK FRAGMENTS, MOIST TO WET 7.5'	5.2	HNU-9ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
10	S-5	24	18-13			1.6	
			10-9				NO BEDROCK ENCOUNTERED
					BOTTOM OF BORING = 11.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-1 AND S-3 WAS SENT TO LAB FOR ANALYSIS

**CUMMINGS  
RITER  
CONSULTANTS, INC.**
**LOG OF BORING NO. B-17**

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIADate Started 10-24-94Date Completed 10-24-94Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-24-94/09:30Driller PENNSYLVANIA DRILLING COMPANYDate/Time -Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N409202.27 E1535139.92</u> Surface Elev. <u>992.36</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
					ASPHALT AND SLAG 1.0'		
	S-1	16	3-6		MEDIUM DENSE, MOTTLED BROWN AND GRAY FINE CLAYEY SAND, TRACE GRAVEL, MOIST (FILL) 3.0'	0.3	3" SPLIT SPOON DRIVEN
	S-2	17	1-2		MEDIUM STIFF, GRAY CLAYEY SILT, TRACE ROOTS AND WOOD FRAGMENTS, MOIST (FILL) 5.5'	0.2	
5	S-3	24	2-4			0.2	
			5-6				
	S-4	24	7-7			0.1	
			8-9		9.0'		
10	S-5	24	14-20		DENSE, BROWN TO TAN, FINE TO MEDIUM GRAIN, CLAYEY SAND, SOME SANDSTONE FRAGMENTS DRY TO MOIST 11.0'	0.1	TOP OF WEATHERED BEDROCK AT 11.0'
			20-19				
15					BOTTOM OF BORING = 11.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
20							
25							
30							
35							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING B-18

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-24-94


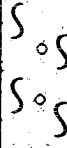
Date Completed 10-24-94

Field Geologist DPC Checked By WAB GWL: Depth 4.41' Date/Time 10-24-94/08:20

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N 409056.81 E 1535144.44 Surface Elev. 990.91	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	4	8-8		ASPHALT 1.0'		DROVE 3" SPLIT SPOON AFTER POOR RECOVERY  SEWER ODOR HNU-BACKGROUND IN BOREHOLE
			10-9		MEDIUM STIFF, GRAY TO BROWN CLAYEY SILT SOME GRAVEL, TRACE CINDERS, TRACE WOOD FRAGMENTS, MOIST TO WET (FILL)	0.1	
	S-2	2	3-5			0.1	
5			11-13				
	S-3	8	6-13			0.1	
			12-18		MEDIUM DENSE TO DENSE, BROWN AND GRAY FINE TO MEDIUM SAND, TRACE SILT, TRACE SANDSTONE FRAGMENTS, MOIST TO WET		TOP OF WEATHERED BEDROCK AT 9.9'
	S-4	21	7-12			0	
			15-17				
10	S-5	24	23		9.9'		SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS
			50/5"				
					BOTTOM OF BORING = 9.9' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		
15							
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35							



# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-19

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA






Date Started 10-21-94

Date Completed 10-21-94

Field Geologist DPC Checked By WAB GWL: Depth 8.19' Date/Time 10-21-94/14:10

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N408998.84 E 1535153.31</u> Surface Elev. <u>991.64</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
					ASPHALT 1.0'		
	S-1	20	12-15 19-17		VERY STIFF, DARK BROWN AND GRAY, CLAYEY SILT, TRACE COBBLES, WOOD FRAGMENTS, CINDERS, GLASS, DRY TO MOIST (FILL) 3.6'	0.3	Hnu-11ppm IN BOREHOLE
	S-2	23	3-4 5-6		MEDIUM STIFF TO STIFF, BROWN TO MOTTLED ORANGE-BROWN AND GRAY SILT, SOME FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, DRY TO MOIST	0.3	HNU-30ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
5	S-3	24	11-16 14-16			0.3	HNU-6ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
	S-4	20	17-21 23-22			0.5	
10	S-5	14	20-30 50/2"		VERY DENSE, LIGHT GRAY TO ORANGE CLAYEY SAND, TRACE SILT, MOIST 10.2'	0.6	TOP OF WEATHERED BEDROCK AT 9.9'
					BOTTOM OF BORING = 10.2' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-1 AND S-3 WERE SENT TO LAB FOR ANALYSIS
15							
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50							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-20

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-21-94

Date Completed 10-21-94

Field Geologist DPC Checked By WAB GWL: Depth 6.91' Date/Time 10-21-94/13:15

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408919.70 E 1535173.24 Surface Elev. 991.91	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	19	7-14 13-12	SSS	MEDIUM DENSE DARK BROWN TO ORANGE BROWN SILT, TRACE ROOTS, TRACE FINE SAND, TRACE BLACK SILT, DRY 2.0'	2.0	3" SPLIT SPOON DRIVEN
	S-2	16	2-3 8-8	SSS	MEDIUM STIFF, ORANGE-BROWN CLAYEY SILT MOIST 3.0'	0.6	HNU-19ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
5	S-3	12	10-8 13-21	SSS	MEDIUM DENSE, ORANGE-BROWN, FINE TO MEDIUM CLAYEY SAND, TRACE BLACK SILT, DRY TO MOIST 7.0'	0.8	HNU-15.2ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
	S-4	12	18-22 20-12	SSS	DENSE, ORANGE-BROWN TO TAN FINE SAND, SOME SANDSTONE FRAGMENTS, DRY 8.0'	1.0	TOP OF WEATHERED BEDROCK AT 8.0'
10	BOTTOM OF BORING = 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT						SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
15							
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25							
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-21

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-21-94

Date Completed 10-21-94

Field Geologist DPC

Checked By WAB

GWL:

Depth DRY

Date/Time 10-21-94/11:15

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N 408873.84 E 1535210.29 Surface Elev. 994.41	PID READING (PPM)	REMARKS
					DESCRIPTION		
5	S-1	19	3-10 10-9	XXXX	MEDIUM DENSE, DARK BROWN AND ORANGE SILT, TRACE FINE SAND, TRACE ROCK FRAGMENTS AND ROOTS SHAVED METAL SCRAP, DRY (FILL) 2.0'	0.2	3" SPLIT SPOON DRIVEN  Hnu- BACKGROUND IN BOREHOLE  TOP OF WEATHERED BEDROCK AT 8.0'  SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
	S-2	20	3-5 6-7	SS	MEDIUM STIFF, ORANGE-BROWN CLAYEY SILT TRACE SAND, TRACE BLACK CARBONACEOUS FLECKS, DRY TO MOIST 6.0'	1.0	
	S-3	12	7-11 14-24	SS		2.0	
	S-4	14	16-23 19-17	SS	MEDIUM DENSE, BROWN-ORANGE TO LIGHT TAN FINE SAND AND SILT, TRACE BLACK CARBONACEOUS FLECKS, DRY 8.0'	0.2	
10					BOTTOM OF BORING = 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT.		
15							
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**CUMMINGS  
RITER  
CONSULTANTS, INC.**

## LOG OF BORING NO. B-22

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-21-94





Date Completed 10-21-94

Field Geologist DPC Checked By WAB GWL: Depth 7.16' Date/Time 10-21-94/12:36

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408920.26 E1535237.48 Surface Elev. 990.14	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	19	3-8 10-9		MEDIUM DENSE, DARK TO LIGHT BROWN SILT, TRACE CLAY, TRACE WOOD FRAGMENTS, TRACE BLACK SLAG, DRY (FILL) 2.0'	0.1	3" SPLIT SPOON DRIVEN
	S-2	22	4-4 5-5		MEDIUM STIFF, ORANGE-BROWN CLAYEY SILT, TRACE BLACK CARBONACEOUS FLECKS, MOIST 3.7'	0.6	HNU- 1ppm IN BOREHOLE
5	S-3	16	4-6 7-7		MEDIUM DENSE TO DENSE, ORANGE-BROWN TO GRAY, CLAYEY FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE SANDSTONE FRAGMENTS, DRY TO WET	0.7	
	S-4	17	8-16 28-33		8.0'	0.4	TOP OF WEATHERED BEDROCK AT 8.0'
10					BOTTOM OF BORING = 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT.		SAMPLE S-1 AND S-2 WERE SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							
35							

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-21-94

Date Completed 10-21-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-21-94/10:45

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time \_\_\_\_\_

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TESTS

B-23

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-24

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-21-94





Date Completed 10-21-94

Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-21-94/10:00

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N 408836 91 E 1535207 89 Surface Elev. 994.30	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	16	11-14 8-5		MEDIUM DENSE, BROWN SILT, SOME SANDSTONE FRAGMENTS, SOME SLAG, DRY (FILL) 2.0'	0.6	3" SPLIT SPOON DRIVEN
	S-2	14	1-1 2-7		LOOSE TO MEDIUM DENSE, BROWN FINE TO MEDIUM SAND, TRACE BLACK SILT, TRACE ROCK FRAGMENTS, MOIST	0.3	HNU- BACKGROUND IN BOREHOLE
5	S-3	18	13-12 15-23		5.5'	0.5	
	S-4	19	25-25 20-25		MEDIUM DENSE TO DENSE, BROWN-ORANGE SILT AND FINE TO MEDIUM SAND, TRACE CLAY TRACE ROCK AND SANDSTONE FRAGMENTS DRY 8.0'	0.6	TOP OF WEATHERED BEDROCK AT 8.0'
10					BOTTOM OF BORING = 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							
35							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING B-25

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-21-94

Date Completed 10-21-94

d Geologist DPC

Checked By WAB

GWL: Depth

DRY Date/Time 10-21-94/09:30

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O D SOLID STEM AUGERS WITH STANDARD PENETRATION TEST


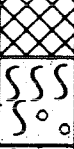
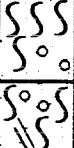

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N408830.38 E1535159.69</u> Surface Elev. <u>944.68</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	18	5-7 7-7	SSS	MEDIUM DENSE, DARK BROWN TO BROWN SILT, TRACE FIRM SAND, TRACE ROCK FRAGMENTS, TRACE ROOTS, DRY 2.0'	0.1	3" SPLIT-SPOON DRIVEN  Hnu-BACKGROUND IN BOREHOLE
	S-2	19	2-1 3-7	SSS	LOOSE, BROWN-ORANGE SANDY SILT, TRACE OF ROCK FRAGMENTS, DRY 4.0'	0.6	
5	S-3	22	9-10 16-27	S //	MEDIUM DENSE TO DENSE, ORANGE-BROWN FINE SAND AND SILT, TRACE CLAY TRACE ROCK FRAGMENTS AND SANDSTONE FRAGMENTS, DRY TO MOIST	0.1	
	S-4	14	25-21 20-26	S		0.5	
					8.0		TOP OF WEATHERED BEDROCK AT 8.0'
10					BOTTOM OF BORING = 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-1 AND S-3 WERE SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							

**CUMMINGS  
RITER  
CONSULTANTS, INC.**
**LOG OF BORING NO. B-26**

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIADate Started 10-21-94Date Completed 10-21-94Old Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-21-94/08:00Driller PENNSYLVANIA DRILLING COMPANYDrilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N408781.73 E1535165.19</u> Surface Elev <u>994.92</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	12	7-16 11-9		MEDIUM DENSE, BROWN SILT, TRACE FINE SAND TRACE GRAVEL, TRACE ROOTS, TRACE ROCK FRAGMENTS, DRY (FILL)	0.1	3" SPLIT SPOON DRIVEN  Hnu- BACKGROUND IN BOREHOLE  TOP OF WEATHERED BEDROCK AT 8.0'
	S-2	6	3-5 7-6		3.8'	0.7	
5	S-3	17	9-11 20-26		DENSE, BROWN FINE SANDY SILT, TRACE GRAVEL TRACE SANDSTONE BOULDERS, DRY	0.4	
	S-4	17	14-17 16-15		DENSE, BROWN FINE SAND AND SILT, TRACE BLACK SILT, TRACE CLAY, SOME SANDSTONE FRAGMENTS, DRY TO MOIST	0.5	
10					BOTTOM OF BORING = 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS
15							
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25							
30							



# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-27

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132


Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-21-94

Date Completed 10-21-94

 d Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-21-94/08:40  
 Driller PENNSYLVANIA DRILLING COMPANY Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N408787.78 E1535215.24</u> Surface Elev. <u>994.65</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
5	S-1	18	10-10 12-14		MEDIUM DENSE, BROWN TO BLACK, SANDY SILT, TRACE GRAVEL, AND ROCK FRAGMENTS, DRY (FILL)	0.2	3"-SPLIT SPOON DRIVEN
	S-2	14	5-5 6-7			0.5	
	S-3	19	19-30 31-31		VERY DENSE BROWN TO BLACK, FINE TO MEDIUM SAND AND SILT, SOME SANDSTONE FRAGMENTS, DRY	0.4	
	S-4	14	18-26 25-15			0.3	
					8.0'		TOP OF WEATHERED BEDROCK AT 8.0'
10					BOTTOM OF BORING = 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS
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25							
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-28

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-20-94

Date Completed 10-20-94

Field Geologist DPC

Checked By WAB

GWL: Depth

DRY

Date/Time 10-20-94/14:25

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408794.97 E1535264.87 Surface Elev. 993.65	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	10	3-43 21-17	SSS	VERY DENSE, DARK BROWN SILT, SOME SANDSTONE FRAGMENTS, TRACE ROOTS DRY 2.0'	0.2	3" SPILT SPOON DRIVEN
	S-2	22	7-5 10-12	SSS	MEDIUM DENSE TO VERY DENSE, ORANGE BROWN FINE CLAYEY SAND AND SILT, TRACE BLACK FINE SAND, TRACE SANDSTONE FRAGMENTS, DRY TO MOIST	0.2	Hnu-BACKGROUND IN BOREHOLE
5	S-3	14	4-16 22-27	SSS		0.2	
	S-4	13	16-22 30-24	SSS	VERY DENSE, LIGHT BROWN FINE TO MEDIUM SAND, SOME SANDSTONE FRAGMENTS, DRY 8.0'	0.4	TOP OF WEATHERED BEDROCK AT 8.0
10					BOTTOM OF BORING AT 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-2 WAS SENT TO LAB FOR ANALYSIS
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# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-29

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA






Date Started 10-20-94

Date Completed 10-20-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-20-94/13:35

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N408745.80 E 1535269.66</u> Surface Elev. <u>993.97</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	24	18-32 23-10		VERY DENSE, BLACK TO GRAY SAND, SOME SILT AND GRAVEL, TRACE SLAG, DRY (FILL) 2.0'	0.6	3" SPLIT-SPOON DRIVEN
	S-2	12	2-2 4-3		SOFT TO MEDIUM STIFF, BROWN TO BROWN-ORANGE CLAYEY SILT AND FINE SAND, TRACE SANDSTONE BOULDERS, TRACE BLACK CARBONACEOUS FLECKS, DRY TO MOIST.	1.5	Hnu-BACKGROUND IN BORHOLE
5	S-3	24	7-10 11-12			3.0	
	S-4	17	12-17 17-18			1.0	
	S-5	7	17 50/1"			3.0	
10					8.7' BOTTOM OF BORING AT 8.7' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		TOP OF WEATHERED BEDROCK AT 8.7'
							SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							
35							

**CUMMINGS  
RITER  
CONSULTANTS, INC.**
**LOG OF BORING NO. B-30**

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-20-94

Date Completed 10-20-94

Field Geologist DPC

Checked By WAB

GWL: Depth

DRY Date/Time 10-20-94/12:40

Driller PENNSYLVANIA DRILLING COMPANY

-

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408738.43 E 1535221.96 Surface Elev. 994.14	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	9	4-7 7-7	So	MEDIUM DENSE TO DENSE, BROWN TO BLACK FINE SAND AND SILT, SOME GRAVEL AND SANDSTONE FRAGMENTS, DRY 2.5'	0.6	DROVE 2" SPLIT-SPOON TWICE Hnu-.8ppm IN BOREHOLE
	S-2	6	11-12 21-21	So	MEDIUM STIFF TO STIFF, MOTTLED ORANGE BROWN AND DARK BROWN CLAYEY SILT AND FINE SAND, SOME ROCK FRAGMENTS DRY 4.0'	3.0	POOR RECOVERY-DROVE 3" SPLIT SPOON SECOND TIME
5	S-3	24	7-15 16-22	So		1.5	
	S-4	24	12-17 13-15	So	MEDIUM DENSE TO DENSE, BROWN AND ORANGE, FINE CLAYEY SAND AND SILT, SOME ROCK FRAGMENTS, DRY TO MOIST	3.0	Hnu-BACKGROUND IN BOREHOLE
	S-5	18	24-18 19-15	So		3.5	
10					10.0'		TOP OF WEATHERED BEDROCK AT 10.0
					BOTTOM OF BORING AT 10.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-2 AND S-4 WERE SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-31

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA






Date Started 10-20-94

Date Completed 10-20-94

Field Geologist DPC Checked By WAB GWL: Depth 8.45' Date/Time 10-20-94/10:55

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408732.19 E 1535172.34 Surface Elev. 994.56	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	12	5-9 5-5		MEDIUM DENSE, BROWN FINE SAND AND SILT, SOME GRAVEL, SOME CINDERS, TRACE SANDSTONE FRAGMENTS, DRY (FILL) 2.0'	0.2	3" SPLIT-SPOON DRIVEN FOR MS/MSD SAMPLE
	S-2	18	4-4 9-13		MEDIUM STIFF, BROWN-ORANGE CLAYEY SILT AND SAND, TRACE BLACK CARBONACEOUS FLECKS, MOIST 3.0'	1.8	Hnu-BACKGROUND IN BOREHOLE
5	S-3	22	3-8 9-14		MEDIUM DENSE, LIGHT GRAY MEDIUM SAND AND GRAVEL, SOME SANDSTONE FRAGMENTS, WET. 5.0'	1.6	
	S-4	15	5-15 30-29		MEDIUM DENSE TO DENSE, BROWN-ORANGE FINE TO MEDIUM SAND, TRACE CLAY, TRACE BLACK CARBONACEOUS FLECKS, TRACE SANDSTONE FRAGMENTS DRY TO MOIST 9.0'	1.6	
10	S-5	15	30-28 50/5"		DENSE, BROWN FINE SAND AND SILT, TRACE BLACK CARBONACEOUS FLECKS, SOME SANDSTONE FRAGMENTS, WET 9.5'	0.8	WATER ENCOUNTERED AT ~9.0' TOP OF WEATHERED BEDROCK AT 9.5'
15	BOTTOM OF BORING=9.5' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT-BENTONITE GROUT						SAMPLES S-1 AND MS/MSD WERE SENT TO LAB FOR ANALYSIS.
20							
25							
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35							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-32

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-24-94

Date Completed 10-24-94

 d Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-24-94/15:00  
 Driller PENNSYLVANIA DRILLING COMPANY Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N 408894.12 E 1535340.67</u> Surface Elev. <u>988.05</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
5	S-1	12	10-21 37-26		VERY DENSE, BROWN SILT AND FINE SAND, TRACE ROCK FRAGMENTS, TRACE COBBLES, TRACE ROOTS, DRY 2.0'	0	3" SPLIT SPOON DRIVEN  Hnu-BACKGROUND IN BOREHOLE  TOP OF WEATHERED BEDROCK AT 7.5'
	S-2	17	4-3 5-7		MEDIUM STIFF, ORANGE-BROWN CLAYEY SILT, TRACE BLACK CARBONACEOUS FLECKS, TRACE FINE SAND MOIST 3.7'	0	
	S-3	19	4-4 10-14		MEDIUM DENSE TO VERY DENSE, LIGHT GRAY TO BROWN FINE CLAYEY SAND TRACE SILT, TRACE SANDSTONE FRAGMENTS, DRY TO MOIST	0.2	
	S-4	22	14-25 30-50/4"		7.8'	-	
10					BOTTOM OF BORING = 7.8' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-3 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-33

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-25-94

Date Completed 10-25-94

Lead Geologist DPC

Checked By WAB

GWL: Depth

DRY Date/Time 10-25-94/07:55

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408924.75 E1535341.29 Surface Elev. 987.85	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	16	12-26 21-12	So	DENSE, DARK BROWN FINE SAND AND SILT, SOME ROCK FRAGMENTS, TRACE COBBLES, TRACE ROOTS, DRY	0	3" SPILT-SPOON DRIVEN
	S-2	3	4-6 13-12	So	4.0'	0	Hnu- 1.2ppm IN BOREHOLE POOR RECOVERY-BOULDER IN SPOON
5	S-3	14	7-10 10-6	So	MEDIUM STIFF, MOTTED GRAY AND BROWN CLAYEY SILT, SOME FINE SAND, SOME SANDSTONE FRAGMENTS, DRY TO MOIST	0.4	
	S-4	11	9-50/2	So	6.0' VERY DENSE, ORANGE-BROWN FINE CLAYEY SAND, SOME SILT, SOME SANDSTONE FRAGMENTS, MOIST 6.8'	0.4	TOP OF WEATHERED BEDROCK AT 6.6'
10					BOTTOM OF BORING = 6.8' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-3 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-34

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-24-94

Date Completed 10-24-94

Field Geologist DPC

Checked By WAB

GWL: Depth 6.32' Date/Time 10-21-94/14:10

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N409015.31 E 1535198.91</u> Surface Elev. <u>989.98</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
					ASPHALT 0.5'		
	S-1	10	5-10 9-6	S S S	MEDIUM STIFF BROWN TO GRAY, CLAYEY SILT, TRACE FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE SANDSTONE FRAGMENTS, DRY TO MOIST	0.2	3" SPLIT-SPOON DRIVEN
5	S-2	7	2-2 3-4		5.4'	0.2	Hnu-BACKGROUND IN BOREHOLE
	S-3	22	1-2 6-8	° // °	LOOSE TO DENSE, BROWN TO GRAY FINE CLAYEY SAND, TRACE SANDSTONE FRAGMENTS, MOIST TO WET	0.3	
	S-4	22	9-13 33-50/2		8.6'	-	TOP OF WEATHERED BEDROCK AT 8.5'
10					BOTTOM OF BORING = 8.6' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							



# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-35

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-25-94

Date Completed 10-25-94

Geologist DPC

Checked By WAB

GWL:

Depth

Date/Time 10-25-94/08:30

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408849.17 E1535429.33 Surface Elev. 987.72	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	23	14-32 23-19	SoS	VERY DENSE, BROWN-BLACK TO ORANGE-BROWN SILT AND SAND, SOME SANDSTONE COBBLES, TRACE ROOTS, DRY	0	Hnu-BACKGROUND IN BOREHOLE
	S-2	13	6-8 9-6	SoS	3.8'	0	
5	S-3	12	1-4 13-3	SoS	MEDIUM DENSE TO VERY DENSE, BROWN-BLACK FINE TO MEDIUM CLAYEY SAND, TRACE SILT, SANDSTONE FRAGMENTS, MOIST	0	
	S-4	4	4-1 50/4"	SoS	7.4'	-	
					BOTTOM OF BORING=7.4' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-36

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-25-94





Date Completed 10-25-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-25-94/09:35

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408881.59 E1535436.18 Surface Elev. 986.33	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	18	9-15 20-11		DENSE BROWN-BLACK SILT AND FINE SAND, SOME ROCK FRAGMENTS, TRACE WOOD FRAGMENTS, DRY (FILL) 2.0'	0	Hnu-BACKGROUND IN BOREHOLE  HIT BOULDER-AUGERED THROUGH TO 8.0' BUT UNABLE TO DRIVE SPOON  TOP OF WEATHERED BEDROCK AT 6.0'
	S-2	10	2-5 5-4		MEDIUM STIFF, BROWN TO GRAY SILT, SOME FINE SAND, TRACE GRAVEL, TRACE SANDSTONE FRAGMENTS, DRY TO MOIST	0	
5	S-3	10	2-3 50/3"		6.0'	0.1	
	S-4	4	50/2"		8.0'	-	
10					BOTTOM OF BORING=8.0' UPON COMPLETION BOREHOLE WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							



## LOG OF BORING NO. B-37

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 11-1-94

Date Completed 11-1-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 11-1-94/08:30

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N408966.18 E1535478.08</u> Surface Elev. <u>983.26</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	12	3-7 2-15	SSS	MEDIUM DENSE, BROWN SILT, TRACE FINE SAND, SOME SANDSTONE FRAGMENTS, DRY 2.0'	0.2	Hnu-BACKGROUND IN BOREHOLE  TOP OF WEATHERED BEDROCK AT 5.0' SAMPLE S-2 WAS SENT TO THE LAB FOR ANALYSIS
	S-2	11	3-5 3-12	SSS	MEDIUM DENSE, BROWN SILT AND FINE SAND, TRACE SANDSTONE FRAGMENTS, DRY TO MOIST 4.8'	0.2	
5	S-3	11	5-29 50/3"	ooo	VERY DENSE, FINE BROWN SAND AND SANDSTONE FRAGMENTS, DRY TO WET 5.3'	0.2	
					BOTTOM OF BORING=5.3' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		
10							
15							
20							
25							
30							
35							

**CUMMINGS  
RITER  
CONSULTANTS, INC.**

## LOG OF BORING NO. B-38

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA



Date Started 10-25-94

Date Completed 10-25-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-25-94/10:45

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N408966.18 E1535478.08 Surface Elev. 983.26	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	21	7-18 24-31		MEDIUM DENSE TO DENSE, BROWN, BLACK AND ORANGE SILT AND SAND, TRACE CLAY, TRACE WOOD FRAGMENTS, TRACE SANDSTONE FRAGMENTS, DRY (FILL)	0	MS/MSD SAMPLE COLLECTED
	S-2	17	11-10 7-10		4.0'	0.2	Hnu-BACKGROUND IN BOREHOLE
5	S-3	11	3-20 3-10		MEDIUM DENSE, BROWN CLAYEY FINE SAND, SOME SILT AND GRAVEL, MOIST	0	Hnu- 0.8ppn IN BOREHOLE TOP OF WEATHERED BEDROCK AT 6.2'
	S-4	2	50/2"		BOTTOM OF BORING = 6.2' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT	-	SAMPLES S-1 AND MS/MSD WERE SENT TO LAB FOR ANALYSIS
10							
15							
20							
25							
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-39

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-26-94



Date Completed 10-26-94

Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-26-94/13:30

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N409809.84 E1536006.75 Surface Elev. 989.53	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	18	5-7 5-10		MEDIUM STIFF, MOTTLED BROWN AND GRAY SILTY CLAY, SOME ORANGE-BROWN FINE SAND, TRACE ROCK FRAGMENTS, DRY (FILL) ~3.5'	0	3" SPLIT-SPOON DRIVEN Hnu-BACKGROUND IN BOREHOLE
5	S-2	11	1-3 9-10		MEDIUM DENSE, BLACK BROWN AND GRAY SILT, TRACE FINE SAND, SOME GRAVEL AND ROCK FRAGMENTS, DRY (FILL) ~8.5'	0.1	Hnu-BACKGROUND IN BOREHOLE
10	S-3	14	18-11 10-6		MEDIUM DENSE, BROWN, RED AND GRAY SILT AND FINE SAND, SOME GRAVEL AND ROCK FRAGMENTS, SCRAP METAL, DRY (FILL) ~13.5'	1.8	Hnu - 1ppm IN BOREHOLE
15	S-4	12	3-2 2-3		LOOSE, BLACK SILT, SOME GRAVEL, SOME SAND, TRACE PURPLE FRAGMENTS, SCRAP METAL, WHITE SILTY SAND FRAGMENTS, DRY TO MOIST (FILL) ~18.5'	1.4	Hnu - 2.2ppm IN BOREHOLE
20	S-5	13	3-4 5-34		MEDIUM DENSE, BLACK TO ORANGE SILT, SOME FINE SAND, TRACE FINE CINDERS, GRAVEL, AND WOOD FRAGMENTS, DRY (FILL) ~23.5'	1.0	Hnu-BACKGROUND IN BOREHOLE
25	S-6	17	4-7 8-11		MEDIUM DENSE, BROWN-ORANGE TO WHITE, FINE SAND, TRACE SANDSTONE FRAGMENTS, DRY 27.0'	-	NO BEDROCK ENCOUNTERED
30					BOTTOM OF BORING = 27.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-4, S-5 AND S-6 WERE SENT TO LAB FOR ANALYSIS


# CUMMINGS RITER CONSULTANTS, INC.

LOG OF BORING NO. **B-40**

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIADate Started 10-26-94Date Completed 10-26-94Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-26-94/10:00Driller PENNSYLVANIA DRILLING COMPANY Date/Time -Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N409858.15 E 1536014.54</u> Surface Elev. <u>990.40</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	18	9-10 16-19		MEDIUM DENSE, BROWN TO MOTTLED BROWN-ORANGE AND GRAY CLAYEY SILT AND FINE SAND, SOME CINDERS AND SLAG, SOME ROCK FRAGMENTS, DRY (FILL) ~3.5'	0.6	3" SPLIT-SPOON DRIVEN Hnu-BACKGROUND IN BOREHOLE
5	S-2	6	7-11		MEDIUM DENSE, DARK BROWN SILT AND FINE SAND, SOME SLAG AND GRAVEL DRY (FILL) ~8.5'	0.2	CONCRETE ENCOUNTERED
10	S-3	3	50/1"		SOFT, BLACK-BROWN CLAYEY SILT AND SLAG, SOME GRAVEL, TRACE METAL WIRE DRY (FILL) ~13.5'	0.8	Hnu-BACKGROUND IN BOREHOLE
15	S-4	12	2-3 6-6		LOOSE, BROWN-BLACK TO DARK RED SILT AND CLAY, SOME GRAVEL, ROCK FRAGMENTS AND COBBLES, DRY (FILL) ~18.5'	3.6	RADIOLOGICAL READINGS ABOVE BACKGROUND
20	S-5	8	5-15 5-50/4"		MEDIUM DENSE, ORANGE-BROWN CLAYEY FINE SAND SOME SANDSTONE FRAGMENTS, DRY 21.8'	-	TOP OF WEATHERED BEDROCK AT 21.8'
25					BOTTOM OF BORING = 21.8' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-4 AND S-5 WERE SENT TO LAB FOR ANALYSIS
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-41

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132




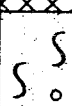
Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-25-94

Date Completed 10-25-94

 Field Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 10-25-94/15:00  
 Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N 409888.28 E 1535963.05 Surface Elev. 991.05	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	15	12-14 25-1		DENSE, BROWN SILT, SOME CINDERS, SOME GRAVEL, SOME SLAG, DRY (FILL)	3.0	Hnu- 0.8 ppm IN BOREHOLE
5					~3.5'		
	S-2	12	3-23 18-15		DENSE, BROWN TO PURPLE SILT, TRACE CINDERS AND GRAVEL, MOIST (FILL)	7.5	STRONG ODOR, Hnu-BACKGROUND IN BOREHOLE
					~8.5'		
10	S-3	15	11-15 10-12		MEDIUM DENSE, ORANGE-BROWN FINE TO MEDIUM SAND AND SILT, TRACE SANDSTONE FRAGMENTS, DRY TO MOIST	4.0	Hnu- 6.2 ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
					~13.5'		
15	S-4	18	4-7 10-12		MEDIUM STIFF, MOTTLED ORANGE AND GRAY SILTY CLAY, SOME BLACK CARBONACEOUS FLECKS, DRY	2.0	Hnu- 6.2 ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE NO BEDROCK ENCOUNTERED
					17.0'		
20					BOTTOM OF BORING = 17.0' UPON COMPLETION BOREHOLE WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-2 AND S-4 WERE SENT TO THE LAB FOR ANALYSIS
25							
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-42

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-25-94

Date Completed 10-25-94

d Geologist DPC

Checked By WAB

GWL: Depth

DRY

Date/Time 10-25-94/13:35

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N410009.42 E 1535542.59</u> Surface Elev <u>993.36</u>	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	20	5-7 9-11		MEDIUM STIFF, BROWN TO ORANGE-BROWN CLAYEY SILT, TRACE BLACK CARBONACEOUS FLECKS, DRY	0.6	3" SPLIT-SPOON DRIVEN  Hnu-BACKGROUND IN BOREHOLE  TOP OF WEATHERED BEDROCK AT 8.0' SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS
	S-2	22	4-8 9-11		3.0' MEDIUM DENSE TO VERY DENSE, ORANGE- BROWN, FINE SAND, TRACE CLAY, TRACE BLACK FINE SAND, TRACE SANDSTONE FRAGMENTS, DRY	1.4	
5	S-3	18	5-10 20-32			3.5	
	S-4	24	30-34 40-33		8.0'	3.0	
10					BOTTOM OF BORING = 8.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		
15							
20							
25							
30							



**CUMMINGS  
RITER  
CONSULTANTS, INC.**
**LOG OF BORING NO. B-43**Client WESTINGHOUSE ELECTRIC CORPORATIONProject No. 93-132Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIADate Started 10-25-94Date Completed 10-25-94Field Geologist DPCChecked By WABGWL: Depth8.17'Date/Time 10-25-94/11:40Driller PENNSYLVANIA DRILLING COMPANYDate/Time -Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates <u>N 409960.33 E 1535487.09</u> Surface Elev. <u>994.71</u>	PID READING (PPM)	REMARKS
DESCRIPTION							
	S-1	24	23-24 15-10	5° S	DENSE, ORANGE-BROWN FINE SAND AND SILT, SOME ROCK FRAGMENTS, TRACE ROOTS, DRY 2.0'	0.2	RAIDOLOGICAL READINGS ABOVE BACKGROUND
	S-2	18	2-4 5-8	5° S	SOFT TO MEDIUM STIFF, ORANGE-BROWN CLAYEY SILT, TRACE FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, DRY TO MOIST 4.3'	0	Hnu- 0.8 ppm IN BOREHOLE
5	S-3	19	6-10 5-12	0°	MEDIUM DENSE TO DENSE, ORANGE-BROWN FINE CLAYEY SAND, TRACE BLACK FINE SAND, TRACE SANDSTONE FRAGMENTS, DRY TO WET	0	
	S-4	21	12-18 26-22	11°		2.0	WATER ENCOUNTERED AT ~ 8.0' Hnu-BACKGROUND IN BOREHOLE
	S-5	18	22-16 19-28	0°		1.2	TOP OF WEATHERED BEDROCK AT 10.0'
10					BOTTOM OF BORING = 10.0' UPON COMPLETION BOREHOLE WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLE S-1 WAS SENT TO LAB FOR ANALYSIS
15							
20							
25							
30							
35							
40							
45							
50							
55							
60							
65							
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75							
80							
85							
90							
95							
100							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. B-44

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-24-94

Date Completed 10-24-94

Field Geologist DPC

Checked By WAB

GWL: Depth

Date/Time 10-24-94/13:50

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N409349.84 E1535200.64 Surface Elev. 995.25	PID READING (PPM)	REMARKS
					DESCRIPTION		
					ASPHALT AND SLAG 1.5'		
5	S-1	12	4-12 12-50/0		MEDIUM STIFF TO STIFF, BROWNISH GRAY CLAYEY SILT, TRACE GRAVEL, TRACE WOOD FRAGMENTS, DRY (FILL)	1.6	HIT RAILROAD TIE--AUGERED THROUGH
	S-2	16	1-3 4-5			0.8	Hnu- 9ppm IN BOREHOLE ODOR TO SAMPLE
	S-3	24	3-2 3-7		MEDIUM STIFF, MOTTLED ORANGE-BROWN AND GRAY CLAYEY SILT, TRACE FINE SAND TRACE GRAVEL, MOIST 6.0'	3.6	
10	S-4	24	8-13 5-12		MEDIUM DENSE, ORANGE-BROWN TO GRAY FINE CLAYEY SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE SAND-STONE FRAGMENTS, DRY TO MOIST 8.0'	9.5	Hnu- 6.2ppm IN BOREHOLE BACKGROUND IN BREATHING ZONE
	S-5	24	10-10 15-18			-	
					11.5'		NO BEDROCK ENCOUNTERED
15					BOTTOM OF BORING = 11.5' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		SAMPLES S-2 AND S-4 WERE SENT TO LAB FOR ANALYSIS
20							
25							
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. MW-5A

Client WESTINGHOUSE ELECTRIC CORPORATION

Project No. 93-132

Location BLAIRSVILLE FACILITY, BLAIRSVILLE, PENNSYLVANIA





Date Started 11-1-94

Date Completed 11-1-94

d Geologist DPC Checked By WAB GWL: Depth DRY Date/Time 11-1-94/13:00

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOLID STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6")	PROFILE	Coordinates N409849.26 E 1536103.23 Surface Elev. 981.43	PID READING (PPM)	REMARKS
					DESCRIPTION		
	S-1	12	3-3 15-10		MEDIUM DENSE, BLACK SILT AND GRAVEL, DRY 0.5'	0.2	Hnu-NOT FUNCTIONING PROPERLY DUE TO WEATHER COKE BOULDER IN CUTTINGS METAL SCRAP
					MEDIUM STIFF, MOTTLED BROWN AND GRAY CLAYEY SILT, TRACE ROOTS, TRACE WOOD FRAGMENTS, MOIST (FILL) ~3.5'		
5	S-2	5	4-5 13-7		MEDIUM DENSE, AND BLACK BROWN SILT, SOME CINDERS AND GRAVEL, DRY (FILL) ~8.5'	16	
					LOOSE, BLACK SILT, TRACE FINE SAND, SOME GRAVEL AND SLAG, DRY (FILL) ~13.5'		
10	S-3	12	1-2 1-2		VERY DENSE, BROWN-BLACK SANDY SILT, TRACE COBBLES AND SANDSTONE FRAGMENTS, DRY TO MOIST ~16.0'	1.6	
15	S-4	6	2-50/3		VERY HARD, LIGHT GRAY SANDSTONE 19.0'	0.6	TOP OF WEATHERED BEDROCK AT 16.0'
20					BOTTOM OF BORING = 19.0' UPON COMPLETION BORING WAS BACKFILLED WITH CEMENT/BENTONITE GROUT		
25							VERY HARD AUGERING DRY AT 19.0'
30							

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. MW-6A

Client WESTINGHOUSE ELECTRIC CORPORATION Project No. 93-132

Location BLAIRSVILLE, FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-27-94 Date Completed 10-28-94

Lead Geologist DPC Checked By WAB GWL: Depth 11.4'(TOR) Date/Time 11-2-94/09:40

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOILD STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6" OR ROD (%))	HEADSPACE (PPM)	PROFILE	Coordinates <u>N408687.04 E1533842.62</u> Surface Elev. <u>1004.22</u>	DESCRIPTION	WELL/PIEZOMETER CONSTRUCTION DETAIL	ELEVATION (FEET, MSL)
								LOCKING 4-IN. PROTECTIVE STEEL CASING	1006.80'
								CONCRETE PAD	1006.58'
								CEMENT-BENTONITE GROUT	1004.22'
	S-1	14	1-3 4-5	0			MEDIUM STIFF, MOTTLED GRAY AND BROWN CLAYEY SILT, TRACE WOOD FRAGMENTS, DRY		
							~3.5'		
5	S-2	15	1-2 7-5	0			SOFT, MOTTLED GRAY AND BROWN SILTY CLAY, TRACE SANDSTONE FRAGMENTS, MOIST	BENTONITE	1000.00'
							~8.5'		
10	S-3	20	25-48 39-50	0.4			VERY DENSE, BROWN AND GRAY SANDY-SILTY CLAY, SOME SANDSTONE FRAGMENTS	2" I.D. SCH 40 PVC RISER PIPE 6" DIA. BORING	
							~13.5'		
15							SOFT, TAN, FINE GRAINED SANDSTONE	SAND	990.00'
							22.0'	2" I.D. SCH 40 PVC SCREEN (0.01")	
20									982.22'
25							BOTTOM OF BOREHOLE = 22.0' UPON COMPLETION MONITORING WELL MW-6A WAS INSTALLED WITH SCREEN FROM 9.7' TO 19.7'		

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. MW-7A






Client WESTINGHOUSE ELECTRIC CORPORATION Project No. 93-132

Location BLAIRSVILLE, FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-31-94 Date Completed 10-31-94

 d Geologist DPC Checked By WAB GWL: Depth 10.09'(TOR) Date/Time 11-2-94/11:40  
 Driller PENNSYLVANIA DRILLING COMPANY Date/Time -

Drilling Method 6" O.D. SOILD STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6") OR ROD (%)	HEADSPACE (PPM)	PROFILE	Coordinates N409988.04 E1535082.25 Surface Elev. 991.97	WELL/PIEZOMETER CONSTRUCTION DETAIL	ELEVATION (FEET, MSL)
						DESCRIPTION		
							LOCKING 4-IN. PROTECTIVE STEEL CASING	994.40'
							CONCRETE PAD	993.92'
								991.97'
	S-1	7	18-14 7-8	0		MEDIUM DENSE, BROWN FINE SAND AND GRAVEL, SOME ROCK FRAGMENTS, AND BLACK SLAG, DRY TO WET (FILL) ~3.5'	CEMENT-BENTONITE GROUT	990.00'
5	S-2	0	7-7 8-6	-		MEDIUM DENSE, GRAY TO BROWN FINE SAND, TRACE ROCK FRAGMENTS, MOIST TO WET	BENTONITE	
10	S-3	12	1-6 4-3	0			2" I.D. SCH 40 PVC RISER PIPE	
							6" DIA. BORING	980.00'
15	S-4	14	6-14 12-16	0.2		MEDIUM DENSE, GRAY FINE SAND, SOME SANDSTONE FRAGMENTS, MOIST TO WET ~13.5'	SAND	
20	S-5	1	50/1"	-		VERY DENSE, GRAY FINE SAND, SOME SANDSTONE FRAGMENTS, LENS OF BLACK SHALE, MOIST TO WET 20.9'	2" I.D. SCH 40 PVC SCREEN (0.01")	971.07'
25						BOTTOM OF BOREHOLE = 20.9' UPON COMPLETION MONITORING WELL MW-6A WAS INSTALLED WITH SCREEN FROM 10.9' TO 20.9'		
30								

Client	WESTINGHOUSE ELECTRIC CORPORATION	Project No.	93-132
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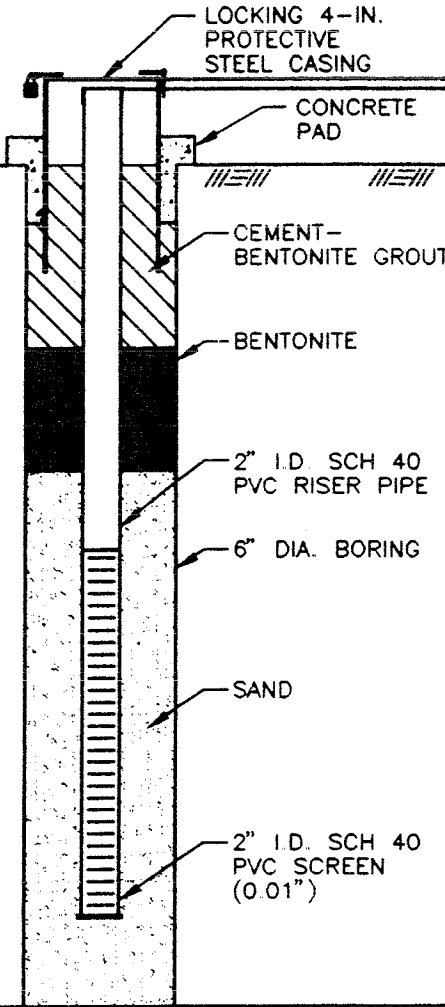

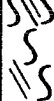
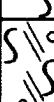
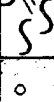

Location BLAIRSVILLE, FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-28-94 Date Completed 10-28-94

Field Geologist DPC Checked By WAB GWL: Depth 13.03'(TOR) Date/Time 11-2-94/14:00

Driller PENNSYLVANIA DRILLING COMPANY

Drilling Method 6" O.D. SOILD STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6") OR ROD (%)	HEADSPACE (PPM)	PROFILE	Coordinates <u>N 408668.36 E 1534827.81</u>	WELL/PIEZOMETER CONSTRUCTION DETAIL	ELEVATION (FEET, MSL)
						Surface Elev <u>1001.31</u>		
								1003.89
								1003.57
								1001.31
								1000.00
5	S-1	14	5-7 6-7	0		STIFF, MOTTLED BROWN AND GRAY CLAYEY SILT, TRACE FINE SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE SANDSTONE FRAGMENTS, DRY ~3.5'		
	S-2	24	1-2 4-8	0		MEDIUM STIFF, MOTTLED ORANGE- BROWN AND GRAY CLAYEY SILT, DRY TO MOIST ~8.5'		
10	S-3	14	4-10 10-14	0.2		MEDIUM STIFF, MOTTLED ORANGE- BROWN AND GRAY CLAYEY SILT, TRACE BLACK CARBONACEOUS FLECKS, TRACE GRAY SANDSTONE FRAGMENTS, DRY ~13.5'		990.00
15	S-4	20	2-3 7-10	1.2		MEDIUM DENSE, BROWN AND GRAY FINE TO MEDIUM SAND, SOME GRAY AND BROWN SANDSTONE FRAGMENTS, WET ~18.5'		
20	S-5	10	50/2"	-		VERY DENSE, BROWN FINE SAND, SOME GRAY SANDSTONE FRAGMENTS, MOIST TO WET 22.0'		980.00
								979.31
25						BOTTOM OF BOREHOLE = 22.0' UPON COMPLETION MONITORING WELL MW-6A WAS INSTALLED WITH SCREEN FROM 10.0' TO 20.0'		

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. MW-9A

Client WESTINGHOUSE ELECTRIC CORPORATION Project No. 93-132

Location BLAIRSVILLE, FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-31-94 Date Completed 10-31-94

Field Geologist DPC Checked By WAB GWL: Depth 19.15'(TOR) Date/Time 11-2-94/12:05

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOILD STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6") OR ROD (%)	HEADSPACE (PPM)	PROFILE	Coordinates N408928.62 E 1535614.01 Surface Elev 978.41	WELL/PIEZOMETER CONSTRUCTION DETAIL	ELEVATION (FEET, MSL)
						DESCRIPTION		
							LOCKING 4-IN. PROTECTIVE STEEL CASING	980.89'
							CONCRETE PAD	980.82'
								978.41'
	S-1	14	3-4 3-8	0	S	MEDIUM DENSE, BROWN TO ORANGE SILT AND FINE SAND, TRACE SANDSTONE AND WOOD FRAGMENTS, DRY	CEMENT- BENTONITE GROUT	
						~3.5'	2" I.D. SCH 40 PVC RISER PIPE	
5	S-2	12	2-4 9-30	0.2	o	MEDIUM DENSE, ORANGE BROWN FINE SAND AND SANDSTONE FRAGMENTS, DRY	BENTONITE	970.00'
						~8.5'		
10	S-3	6	50/1"	0.4	o	VERY DENSE BROWN FINE SAND AND SANDSTONE FRAGMENTS, WET,	6" DIA. BORING	
						10.1'	SAND	
15						SOFT, LIGHT GRAY AND TAN, FINE GRAINED SANDSTONE, DRY TO WET	2" I.D. SCH 40 PVC SCREEN (0.01")	960.00'
20								
25								953.41'
						25.0'		
						BOTTOM OF BOREHOLE = 25.0" UPON COMPLETION MONITORING WELL MW-6A WAS INSTALLED WITH SCREEN FROM 13.2' TO 23.2'		

# CUMMINGS RITER CONSULTANTS, INC.

## LOG OF BORING NO. MW-10A

Client WESTINGHOUSE ELECTRIC CORPORATION Project No. 93-132

Location BLAIRSVILLE, FACILITY, BLAIRSVILLE, PENNSYLVANIA

Date Started 10-27-94 Date Completed 10-27-94

Geologist DPC Checked By WAB GWL: Depth 19.22'(TOR) Date/Time 11-2-94/08:10

Driller PENNSYLVANIA DRILLING COMPANY

Date/Time -

Drilling Method 6" O.D. SOILD STEM AUGERS WITH STANDARD PENETRATION TEST

DEPTH (FEET)	SAMPLE NO. AND TYPE	SAMPLE RECOVERY (IN.)	SPT BLOWS (6") OR RQD (%)	HEADSPACE (PPM)	PROFILE	Coordinates N409850.66 E1534014.82 Surface Elev. 1016.90	DESCRIPTION	WELL/PIEZOMETER CONSTRUCTION DETAIL	ELEVATION (FEET, MSL)
								LOCKING 4-IN. PROTECTIVE STEEL CASING	1017.30
								CONCRETE PAD	1017.03
									1016.90
	S-1	15	4-9 11-13	0	SS		STIFF, MOTTLED BROWN AND GRAY SILT, TRACE BLACK CARBONACEOUS FLECKS, DRY		
						~3.5'			
5	S-2	19	3-3 7-8	0	SS		MEDIUM STIFF, MOTTLED BROWN- ORANGE AND GRAY SILTY CLAY, TRACE FIRM SAND, TRACE BLACK CARBONACEOUS FLECKS, TRACE BLACK WOOD FRAGMENTS, DRY TO MOIST	CEMENT- BENTONITE GROUT	1010.00
						~8.5'			
10	S-3	20	11-13 16-22	0	SS		STIFF, MOTTLED ORANGE-BROWN AND GRAY CLAYEY SILT, TRACE FINE SAND DRY	2" I.D. SCH 40 PVC RISER PIPE	
								6" DIA. BORING	
								BENTONITE	
15	S-4	22	9-13 10-12	0	SS	15.5'	MEDIUM DENSE, ORANGE-BROWN TO GRAY FINE SAND, DRY TO MOIST	SAND	1000.00
							BECOMING WET AT APPROXIMATELY 18.5'	2" I.D. SCH 40 PVC SCREEN (0.01")	
20	S-5	24	4-6 9-14	0	SS	20.4'	STIFF, MOTTLED BROWN-GRAY SANDY- SILTY CLAY, MOIST		
						23.5'			
25	S-6	24	3-2 3-4	0.4	SS	27.0'	LOOSE, BROWN TO GRAY FINE TO MEDIUM SAND, TRACE ROCK FRAGMENTS		989.90'
							BOTTOM OF BOREHOLE = 27.0' UPON COMPLETION MONITORING WELL MW-6A WAS INSTALLED WITH SCREEN FROM 17.0' TO 27.0'		



## **APPENDIX D**

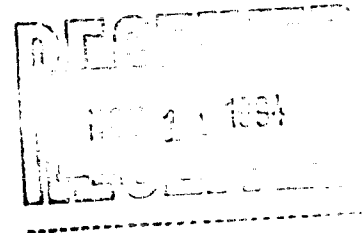
### **LABORATORY ANALYTICAL DATA - ANTECH AND CEP LABORATORIES**



## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 8, 1994



Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

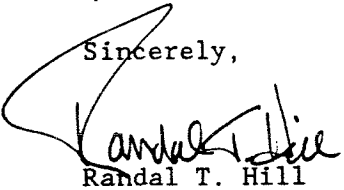
Soil/Water Characterization; Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4094

Dear Mr. Baughman

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on October 17, 1994 and logged in for analysis on October 18, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

  
Randal T. Hill  
Organic Chemistry Manager

RTH:aeb

Enclosures

ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4094

CLIENT: Purchase Order No. BL-26163-H

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-1756 through 9410-1760

CLIENT: B-1, S-2; B-1, S-5; B-3 S-3; B-2, S-4; and Trip  
Blank

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

Radiological work is in progress and will be reported as soon as it  
is received from the subcontracting lab.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. SEMIVOLATILES:

None

3. PESTICIDES/HERBICIDES/PCB'S/8015:

None

4. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not  
be interpreted as precision of the analytical procedure, but rather  
as a result of reporting format.

Table 1  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4094  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification			
			9410-1756	9410-1757	9410-1758	9410-1761
			B-1, S-2 (10/17/94)	B-1, S-5 (10/17/94)	B-3, S-3 (10/17/94)	Method Blank (10/17/94)
Fluoride	340.2 <sup>(1)</sup>	mg/kg	110	89	160	<1.0
pH	9045 <sup>(2)</sup>	pH units	6.22	6.16	5.19	NAP <sup>(3)</sup>
Total Petroleum Hydrocarbons	8015 <sup>(2)</sup>	mg/kg	<10	<10	<10	<10
ASTM:						
Ammonia (ASTM)	350.1 <sup>(1)</sup>	mg/l NH <sub>3</sub> -N	3.1	<0.10	<0.10	<0.10
Nitrate (ASTM)	352.1 <sup>(1)</sup>	mg/l NO <sub>3</sub> -N	<0.10	<0.10	<0.10	<0.10
Total Organic Carbon (ASTM)	9060 <sup>(2)</sup>	mg/l	7.5	2.3	1.2	<1.0
Metals:						
Silver (Total)	6010 <sup>(2)</sup>	mg/kg	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010 <sup>(2)</sup>	mg/kg	11000	13000	11000	<20
Arsenic (Total)	7060 <sup>(2)</sup>	mg/kg	3.8	1.0	0.46	<0.20
Barium (Total)	6010 <sup>(2)</sup>	mg/kg	86	110	110	<4.0
Beryllium (Total)	6010 <sup>(2)</sup>	mg/kg	0.84	1.1	0.95	<0.40
Calcium (Total)	6010 <sup>(2)</sup>	mg/kg	2900	1300	520	<200
Cadmium (Total)	6010 <sup>(2)</sup>	mg/kg	2.7	5.2	<2.0	<2.0
Cobalt (Total)	6010 <sup>(2)</sup>	mg/kg	16	15	10	<2.0
Chromium (Total)	6010 <sup>(2)</sup>	mg/kg	18	20	17	<2.0
Copper (Total)	6010 <sup>(2)</sup>	mg/kg	9.5	14	14	<2.0
Iron (Total)	6010 <sup>(2)</sup>	mg/kg	17000	35000	10000	<10
Mercury (Total)	7471 <sup>(2)</sup>	mg/kg	<0.10	<0.10	<0.10	<0.10
Potassium (Total)	6010 <sup>(2)</sup>	mg/kg	950	1800	1200	<100
Magnesium (Total)	6010 <sup>(2)</sup>	mg/kg	1700	1600	1600	<100
Manganese (Total)	6010 <sup>(2)</sup>	mg/kg	2700	570	120	<2.0
Sodium (Total)	6010 <sup>(2)</sup>	mg/kg	200	200	<200	<200
Nickel (Total)	6010 <sup>(2)</sup>	mg/kg	24	23	20	<10
Lead (Total)	6010 <sup>(2)</sup>	mg/kg	<20	21	<20	<20
Antimony (Total)	6010 <sup>(2)</sup>	mg/kg	<20	<20	<20	<20
Selenium (Total)	7740 <sup>(2)</sup>	mg/kg	<0.20	<0.20	<0.20	<0.20
Thallium (Total)	7841 <sup>(2)</sup>	mg/kg	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010 <sup>(2)</sup>	mg/kg	26	33	24	<10
Zinc (Total)	6010 <sup>(2)</sup>	mg/kg	46	75	59	<2.0

<sup>(1)</sup>U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

<sup>(2)</sup>U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

<sup>(3)</sup>NAP = Not applicable.

Table 2  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4094  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification	
			9410-1759 B-2, S-4 (10/17/94)	9410-1761 Method Blank (10/17/94)
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0	<1.0
ASTM:				
Cyanide (ASTM)	9012(1)	mg/l	<0.0050	<0.0050
Metals:				
Silver (Total)	6010(1)	mg/kg	<2.0	<2.0
Aluminum (Total)	6010(1)	mg/kg	7700	<20
Arsenic (Total)	7060(1)	mg/kg	1.6	<0.20
Barium (Total)	6010(1)	mg/kg	91	<4.0
Beryllium (Total)	6010(1)	mg/kg	0.44	<0.40
Calcium (Total)	6010(1)	mg/kg	580	<200
Cadmium (Total)	6010(1)	mg/kg	2.8	<2.0
Cobalt (Total)	6010(1)	mg/kg	5.3	<2.0
Chromium (Total)	6010(1)	mg/kg	21	<2.0
Copper (Total)	6010(1)	mg/kg	10	<2.0
Iron (Total)	6010(1)	mg/kg	15000	<10
Mercury (Total)	7471(1)	mg/kg	<0.10	<0.10
Potassium (Total)	6010(1)	mg/kg	1100	<100
Magnesium (Total)	6010(1)	mg/kg	980	<100
Manganese (Total)	6010(1)	mg/kg	320	<2.0
Sodium (Total)	6010(1)	mg/kg	<200	<200
Nickel (Total)	6010(1)	mg/kg	15	<10
Lead (Total)	6010(1)	mg/kg	<20	<20
Antimony (Total)	6010(1)	mg/kg	<20	<20
Selenium (Total)	7740(1)	mg/kg	<0.20	<0.20
Thallium (Total)	7841(1)	mg/kg	<0.80	<0.80
Vanadium (Total)	6010(1)	mg/kg	18	<10
Zinc (Total)	6010(1)	mg/kg	36	<2.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Table 3  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4094  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-B; Blairsville, PA

Page 1 of 2

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-1756 B-1, S-2 (10/17/94)	9410-1757 B-1, S-5 (10/17/94)	9410-1758 B-3, S-3 (10/17/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
-Dichloroethane	75-34-3	µg/kg	17	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	13	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	330	23	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	21	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	18	8.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	480	2100	20
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

footnotes at end of table.

Table 3  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-1759 B-2, S-4 (10/17/94)	9410-1761 Method Blank (10/17/94)
Acetone	67-64-1	µg/kg	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	6.2	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	200	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 4  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4094  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-1760 Trip Blank (10/17/94)	9410-1762 Method Blank (10/17/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.  
(2) CAS - Chemical Abstracts Services.



Table 5  
Semivolatile Organic Analyses  
Target Compound List/EPA Method 8270(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4094  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-1759 B-2, S-4 (10/17/94)	9410-1761 Method Blank (10/17/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
Dibenzofuran	132-64-9	µg/kg	<330	<330
2,4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
1,3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
1,4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
2,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
2,4-Dimethylphenol	105-67-9	µg/kg	<330	<330
Di-n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<830	<830
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<830	<830
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<830	<830
3-Nitroaniline	99-09-2	µg/kg	<830	<830
4-Nitroaniline	100-01-6	µg/kg	<830	<830
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<830	<830
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<830	<830
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<830	<830
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 6  
Pesticides/Herbicides Organic Analyses  
Target Compound List/EPA Method 8080/8150(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4094  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-1759 B-2, S-4 (10/17/94)	9410-1761 Method Blank (10/17/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050
Aroclor-1016	12674-11-2	mg/kg	<1.0	<1.0
Aroclor-1221	11104-28-2	mg/kg	<1.0	<1.0
Aroclor-1232	11141-16-5	mg/kg	<1.0	<1.0
Aroclor-1242	53469-21-9	mg/kg	<1.0	<1.0
Aroclor-1248	12672-29-6	mg/kg	<1.0	<1.0
Aroclor-1254	11097-69-1	mg/kg	<1.0	<1.0
Aroclor-1260	11096-82-5	mg/kg	<1.0	<1.0
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050
beta-BHC	319-85-7	mg/kg	<0.050	<0.050
delta-BHC	319-86-8	mg/kg	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10
2,4-D	94-75-7	mg/kg	<0.20	<0.20
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10
4,4'-DDT	50-29-3	mg/kg	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS - Chemical Abstracts Services.



3. P. W.

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FAX (412) 327-7793      Shipment ID:

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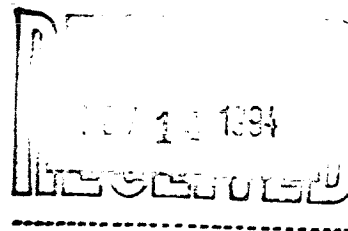




## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 8, 1994



Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

Soil Characterization: Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4124

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on October 18, 1994 and logged in for analysis on October 20, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,



Randal T. Hill

Organic Chemistry Manager

RTH:aeb

Enclosures

ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4124

CLIENT: Purchase Order No. BL-26163-H

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-1929 through 9410-1935

CLIENT: B-3; S-5, B-4; S-3, B-5; S-4, B-9; S-2, B-10; S-3, B-2;  
S-2, and Trip-2

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

Radiological work is in progress and will be reported as soon as it  
is received from the subcontracting lab.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. SEMIVOLATILES:

None

3. HERBICIDES/PESTICIDES/PCBS/8015:

None

4. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not  
be interpreted as precision of the analytical procedure, but rather  
as a result of reporting format.

Table 1  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4124  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification				
			9410-1929	9410-1930	9410-1931	9410-1932	9410-1933
			B-3, S-5 (10/17/94)	B-4, S-3 (10/18/94)	B-5, S-4 (10/18/94)	B-9, S-2 (10/18/94)	B-10, S-3 (10/18/94)
Fluoride	340.2 <sup>(1)</sup>	mg/kg	110	130	120	150	110
pH	9045 <sup>(2)</sup>	pH units	5.50	4.97	4.63	5.19	4.77
Total Petroleum Hydrocarbons	8015 <sup>(2)</sup>	mg/kg	<10	<10	<10	<10	<10
ASTM:							
Ammonia (ASTM)	350.1 <sup>(1)</sup>	mg/l NH <sub>3</sub> -N	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrate (ASTM)	352.1 <sup>(1)</sup>	mg/l NO <sub>3</sub> -N	<0.10	<0.10	<0.10	0.26	<0.10
Total Organic Carbon (ASTM)	9060 <sup>(2)</sup>	mg/l	1.8	3.0	2.3	1.3	1.4
Metals:							
Silver (Total)	6010 <sup>(2)</sup>	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010 <sup>(2)</sup>	mg/kg	7500	15000	6600	17000	6000
Arsenic (Total)	7060 <sup>(2)</sup>	mg/kg	1.6	1.8	1.3	8.5	1.9
Barium (Total)	6010 <sup>(2)</sup>	mg/kg	95	85	37	110	27
Beryllium (Total)	6010 <sup>(2)</sup>	mg/kg	0.63	1.0	0.49	2.0	0.58
Calcium (Total)	6010 <sup>(2)</sup>	mg/kg	500	600	300	1200	240
Cadmium (Total)	6010 <sup>(2)</sup>	mg/kg	<2.0	6.1	2.8	9.4	3.3
Cobalt (Total)	6010 <sup>(2)</sup>	mg/kg	9.5	8.7	3.2	27	3.1
Chromium (Total)	6010 <sup>(2)</sup>	mg/kg	14	22	13	31	14
Copper (Total)	6010 <sup>(2)</sup>	mg/kg	14	17	10	19	9.8
Iron (Total)	6010 <sup>(2)</sup>	mg/kg	8300	65000	18000	43000	20000
Mercury (Total)	7471 <sup>(2)</sup>	mg/kg	<0.10	0.14	<0.10	<0.10	<0.10
Potassium (Total)	6010 <sup>(2)</sup>	mg/kg	800	1900	660	1200	820
Magnesium (Total)	6010 <sup>(2)</sup>	mg/kg	1200	1500	590	1300	460
Manganese (Total)	6010 <sup>(2)</sup>	mg/kg	150	1500	54	220	48
Sodium (Total)	6010 <sup>(2)</sup>	mg/kg	<200	<200	<200	<200	<200
Nickel (Total)	6010 <sup>(2)</sup>	mg/kg	14	17	<10	25	<10
Lead (Total)	6010 <sup>(2)</sup>	mg/kg	<20	25	<20	43	<20
Antimony (Total)	6010 <sup>(2)</sup>	mg/kg	<20	<20	<20	<20	<20
Selenium (Total)	7740 <sup>(2)</sup>	mg/kg	<0.20	<0.20	0.20	<0.20	<0.20
Thallium (Total)	7841 <sup>(2)</sup>	mg/kg	<0.80	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010 <sup>(2)</sup>	mg/kg	20	37	20	74	17
Zinc (Total)	6010 <sup>(2)</sup>	mg/kg	42	57	29	62	31

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington.

Table 2  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4124  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification
			9410-1934 B-2, S-2 (10/17/94)
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0
ASTM:			
Cyanide (ASTM)	9012(1)	mg/l	<0.0050
Metals:			
Silver (Total)	6010(1)	mg/kg	<2.0
Aluminum (Total)	6010(1)	mg/kg	17000
Arsenic (Total)	7060(1)	mg/kg	2.3
Barium (Total)	6010(1)	mg/kg	77
Beryllium (Total)	6010(1)	mg/kg	0.78
Calcium (Total)	6010(1)	mg/kg	1200
Cadmium (Total)	6010(1)	mg/kg	<2.0
Cobalt (Total)	6010(1)	mg/kg	14
Chromium (Total)	6010(1)	mg/kg	20
Copper (Total)	6010(1)	mg/kg	13
Iron (Total)	6010(1)	mg/kg	11000
Mercury (Total)	7471(1)	mg/kg	<0.10
Potassium (Total)	6010(1)	mg/kg	2200
Magnesium (Total)	6010(1)	mg/kg	1800
Manganese (Total)	6010(1)	mg/kg	330
Sodium (Total)	6010(1)	mg/kg	<200
Nickel (Total)	6010(1)	mg/kg	17
Lead (Total)	6010(1)	mg/kg	20
Antimony (Total)	6010(1)	mg/kg	<20
Selenium (Total)	7740(1)	mg/kg	<0.20
Thallium (Total)	7841(1)	mg/kg	<0.80
Vanadium (Total)	6010(1)	mg/kg	31
Zinc (Total)	6010(1)	mg/kg	44

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.



Table 3  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4124  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification
			9410-1936 Method Blank (10/18/94)
Fluoride	340.2(1)	mg/kg	<1.0
pH	9045(2)	pH units	NAP(3)
Polychlorinated Biphenyls	8080(2)	mg/kg	<1.0
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10
ASTM:			
Cyanide (ASTM)	9012(2)	mg/l	<0.0050
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	<1.0
Metals:			
Silver (Total)	6010(2)	mg/kg	<2.0
Aluminum (Total)	6010(2)	mg/kg	<20
Arsenic (Total)	7060(2)	mg/kg	<0.20
Barium (Total)	6010(2)	mg/kg	<4.0
Beryllium (Total)	6010(2)	mg/kg	<0.40
Calcium (Total)	6010(2)	mg/kg	<200
Cadmium (Total)	6010(2)	mg/kg	<2.0
Cobalt (Total)	6010(2)	mg/kg	<2.0
Chromium (Total)	6010(2)	mg/kg	<2.0
Copper (Total)	6010(2)	mg/kg	<2.0
Iron (Total)	6010(2)	mg/kg	<10
Mercury (Total)	7471(2)	mg/kg	<0.10
Potassium (Total)	6010(2)	mg/kg	<100
Magnesium (Total)	6010(2)	mg/kg	<100
Manganese (Total)	6010(2)	mg/kg	<2.0
Sodium (Total)	6010(2)	mg/kg	<200
Nickel (Total)	6010(2)	mg/kg	<10
Lead (Total)	6010(2)	mg/kg	<20
Antimony (Total)	6010(2)	mg/kg	<20
Selenium (Total)	7740(2)	mg/kg	<0.20
Thallium (Total)	7841(2)	mg/kg	<0.80
Vanadium (Total)	6010(2)	mg/kg	<10
Zinc (Total)	6010(2)	mg/kg	<2.0

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NAP = Not applicable.

Table 4  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4124  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-B; Blairsville, PA

Page 1 of 2

Parameter	CAS(2) Number	Units	Sample Identification			
			9410-1929	9410-1930	9410-1931	9410-1932
			B-3, S-5 (10/17/94)	B-4, S-3 (10/18/94)	B-5, S-4 (10/18/94)	B-9, S-2 (10/18/94)
Acetone	67-64-1	µg/kg	<100	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 4  
(Continued)

Page 2 of 2

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-1933	9410-1934	9410-1936
			B-10, S-3 (10/18/94)	B-2, S-2 (10/17/94)	Method Blank (10/18/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
s-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 5  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4124  
Water Characterization; Westinghouse  
Purchase Order No BL-26163-B; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-1935 Trip-2 (10/18/94)	9410-1937 Method Blank (10/18/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 6  
Semivolatile Organic Analyses  
Target Compound List/EPA Method 8270<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4124  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-1934	9410-1936
			B-2, S-2 (10/17/94)	Method Blank (10/18/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
Dibenzofuran	132-64-9	µg/kg	<330	<330
4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
1,3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
1,4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
3,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
2,4-Dimethylphenol	105-67-9	µg/kg	<330	<330
Di-n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<830	<830
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<830	<830
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<830	<830
3-Nitroaniline	99-09-2	µg/kg	<830	<830
4-Nitroaniline	100-01-6	µg/kg	<830	<830
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<830	<830
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<830	<830
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<830	<830
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 7  
Pesticides Organic Analyses  
EPA Method 8080(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4124  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-1934 B-2, S-2 (10/17/94)	9410-1936 Method Blank (10/18/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050
beta-BHC	319-85-7	mg/kg	<0.050	<0.050
delta-BHC	319-86-8	mg/kg	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10
,4'-DDT	50-29-3	mg/kg	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50

(1)U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2)CAS - Chemical Abstracts Services.

Table 8  
 Herbicides Organic Analyses  
 EPA Method 8150(1)  
 Cummings/Riter Consultants, Inc.  
 Antech Ltd. Project No. 94-4124  
 Soil Characterization; Westinghouse  
 Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-1934 B-2, S-2 (10/17/94)	9410-1936 Method Blank (10/18/94)
2,4-D	94-75-7	mg/kg	<0.20	<0.20
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080

- (1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.  
 (2) CAS = Chemical Abstracts Services.



# Antech Ltd. Chain of Custody Record

*For Laboratory Use Only*  
 Laboratory Project No. 94-4121  
 Signature: Bryan Mauser  
 (Signature)

Project Name: WESTINGHOUSE - BLAIRSVILLE

Project No.: 93-132

Sampler: BRYAN MAUSER  
 (Printed Name)

Relinquished By: (Signature and Printed Name)  
Bryan Mauser  
 Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)  
Debra Grunier  
 Received By: (Signature and Printed Name)

Date: 10/15/94

Time: 5:00 pm

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Antech Proposal No.:

Ship To:  
 Antech Ltd.  
 One Triangle Drive  
 Export, PA 15632  
 (412) 733-1161  
 FAX (412) 327-7793

Method of Shipment:

Shipment ID:

Grab	Composite	Cups, Bottles, Bags														Other (Please Specify)										Please Check when VOA Vials are Collected:  <input type="checkbox"/> Free of Bubbles <input type="checkbox"/> Bubbles Present  (Specify in Special Instructions/Comments)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
		Chemistry (500 ml, 1000 ml)	Nutrient (250 ml, 500 ml)	Total Metals (250 ml, 500 ml)	Dissolved Metals (250 ml, 500 ml)	Cyanide (1000 ml)	Phenols (1000 ml)	TOC (125 ml)	TOX (250 ml)	Salinity (500 ml)	Radio logical (1000 ml)	Oil & Grease (1000 ml)	THC (1000 ml)	VOC (400 ml)	Organics (1000 ml, 2.5 liter)	Acetone/propant (125 ml)	Wetdown/In. Sol. (250 ml, 500 ml, 1000 ml)	VOA Septo Jar, Soil (125 ml)	Parameter List A	Parameter List B																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Please Check when VOA Vials are Collected:  
☐ Free of Bubbles  
☐ Bubbles Present  
 (Specify in Special Instructions/Comments)

Special Instructions/Comments: PARAMETER LIST A: TCL VOCs, TAL Metals, TPH, Fluoride, Nitrate, Ammonia, TOC, Gross Beta, Total Uranium, Uranium Isotopes, Total Radium, pH  
PARAMETER LIST B: TCL VOCs/SVOCs, TAL Metals, CN, As, Pb, Hg, PCBs, Gross Beta, Total Uranium, Uranium Isotopes, Total Radium

Sample Return/Disposition:  
☐ Return to Client  
☒ Disposed by Antech

Results To:  
☐ Client Name: BILL BAUGHMAN  
 Company: CUMMINGS/RIEGER CONSULTANTS  
 Address:

*For Laboratory Use Only*  
 Sample Condition Upon Receipt:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Invoice To:  
☐ Client Name: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Address: \_\_\_\_\_



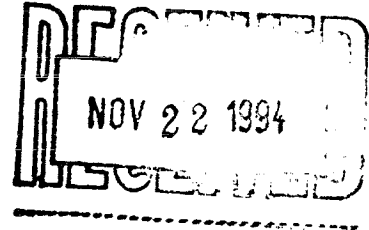




## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 16, 1994



Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

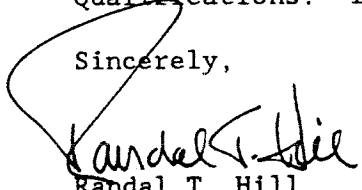
Soil/Water Characterization; Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4143

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on October 19, 1994 and logged in for analysis on October 20, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

  
Randal T. Hill  
Organic Chemistry Manager

RTH:sja

Enclosures

ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4143

CLIENT: 93-132

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-2103 through 9410-2110

CLIENT: B-6, S-2; B-6, S-4; B-7 S-2; B-12, S-3; B-8, S-3; B-11, S-3; B-11, S-3 Duplicate, and Trip Blank

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

Radiological work is in progress and will be reported as soon as it is received from the subcontracting laboratory.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. SEMIVOLATILES:

None

3. PESTICIDES/HERBICIDES/PCB'S/8015:

None

4. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not be interpreted as precision of the analytical procedure, but rather as a result of reporting format.

1  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4143  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification				
			9410-2103 B-6, S-2 (10/19/94)	9410-2104 B-6, S-4 (10/19/94)	9410-2105 B-7, S-2 (10/19/94)	9410-2106 B-12, S-3 (10/19/94)	9410-2111 Method Blank (10/19/94)
Fluoride	340.2(1)	mg/kg	120	84	210	83	<1.0
pH	9045(2)	pH units	6.08	4.59	4.55	4.79	NAP(3)
ASTM:							
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	0.17	<0.10	<0.10	<0.10	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	<0.10	<0.10	<0.10	<0.10	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	2.3	1.0	1.6	1.3	<1.0
Metals:							
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	15000	8000	5200	3600	<20
Arsenic (Total)	7060(2)	mg/kg	2.0	2.3	1.5	3.7	<0.20
Barium (Total)	6010(2)	mg/kg	93	32	37	15	<4.0
Beryllium (Total)	6010(2)	mg/kg	0.88	0.44	<0.40	0.47	<0.40
Calcium (Total)	6010(2)	mg/kg	990	370	420	260	<200
Cadmium (Total)	6010(2)	mg/kg	3.4	2.4	<2.0	4.2	<2.0
Cobalt (Total)	6010(2)	mg/kg	31	4.8	4.2	3.5	<2.0
Chromium (Total)	6010(2)	mg/kg	33	13	12	8.8	<2.0
Copper (Total)	6010(2)	mg/kg	15	10	11	8.5	<2.0
Iron (Total)	6010(2)	mg/kg	20000	15000	13000	26000	<10
Mercury (Total)	7471(2)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	1800	1200	890	330	<100
Magnesium (Total)	6010(2)	mg/kg	1600	590	490	220	<100
Manganese (Total)	6010(2)	mg/kg	520	110	110	58	<2.0
Sodium (Total)	6010(2)	mg/kg	330	<200	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	78	<10	<10	<10	<10
Lead (Total)	6010(2)	mg/kg	24	<20	<20	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	0.30	<0.20	<0.20	<0.20	<0.20
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	35	19	16	16	<10
Zinc (Total)	6010(2)	mg/kg	51	31	24	27	<2.0

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NAP = Not applicable.

Table 2  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4143  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Page 1 of 2

Parameter	Analytical Method	Units	Sample Identification	
			9410-2107 B-8, S-3 (10/19/94)	9410-2108 B-11, S-3 (10/19/94)
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0	<1.0
ASTM:				
Cyanide (ASTM)	9012(1)	mg/l	<0.0050	<0.0050
Metals:				
Silver (Total)	6010(1)	mg/kg	<2.0	<2.0
Aluminum (Total)	6010(1)	mg/kg	9100	6300
Arsenic (Total)	7060(1)	mg/kg	0.83	2.9
Barium (Total)	6010(1)	mg/kg	59	35
Beryllium (Total)	6010(1)	mg/kg	0.46	0.54
Calcium (Total)	6010(1)	mg/kg	480	450
Cadmium (Total)	6010(1)	mg/kg	<2.0	3.4
Cobalt (Total)	6010(1)	mg/kg	4.4	13
Chromium (Total)	6010(1)	mg/kg	13	18
Copper (Total)	6010(1)	mg/kg	13	11
Iron (Total)	6010(1)	mg/kg	9300	21000
Mercury (Total)	7471(1)	mg/kg	<0.10	<0.10
Potassium (Total)	6010(1)	mg/kg	970	660
Magnesium (Total)	6010(1)	mg/kg	1100	550
Manganese (Total)	6010(1)	mg/kg	460	240
Sodium (Total)	6010(1)	mg/kg	<200	<200
Nickel (Total)	6010(1)	mg/kg	12	30
Lead (Total)	6010(1)	mg/kg	<20	<20
Antimony (Total)	6010(1)	mg/kg	<20	<20
Selenium (Total)	7740(1)	mg/kg	<0.20	0.38
Thallium (Total)	7841(1)	mg/kg	<0.80	<0.80
Vanadium (Total)	6010(1)	mg/kg	18	20
Zinc (Total)	6010(1)	mg/kg	37	39

See footnotes at end of table.

Table 2  
(Continued)

Page 2 of 2

Parameter	Analytical Method	Units	Sample Identification	
			9410-2109 B-11, S-3 Duplicate (10/19/94)	9410-2111 Method Blank (10/19/94)
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0	<1.0
ASTM:				
Cyanide (ASTM)	9012(1)	mg/l	<0.0050	<0.0050
Metals:				
Silver (Total)	6010(1)	mg/kg	<2.0	<2.0
Aluminum (Total)	6010(1)	mg/kg	5700	<20
Arsenic (Total)	7060(1)	mg/kg	1.2	<0.20
Barium (Total)	6010(1)	mg/kg	29	<4.0
Beryllium (Total)	6010(1)	mg/kg	0.58	<0.40
Calcium (Total)	6010(1)	mg/kg	400	<200
Cadmium (Total)	6010(1)	mg/kg	3.4	<2.0
Cobalt (Total)	6010(1)	mg/kg	7.6	<2.0
Chromium (Total)	6010(1)	mg/kg	13	<2.0
Copper (Total)	6010(1)	mg/kg	11	<2.0
Iron (Total)	6010(1)	mg/kg	22000	<10
Mercury (Total)	7471(1)	mg/kg	<0.10	<0.10
Potassium (Total)	6010(1)	mg/kg	690	<100
Magnesium (Total)	6010(1)	mg/kg	460	<100
Manganese (Total)	6010(1)	mg/kg	150	<2.0
Sodium (Total)	6010(1)	mg/kg	<200	<200
Nickel (Total)	6010(1)	mg/kg	17	<10
Lead (Total)	6010(1)	mg/kg	<20	<20
Antimony (Total)	6010(1)	mg/kg	<20	<20
Selenium (Total)	7740(1)	mg/kg	<0.20	<0.20
Thallium (Total)	7841(1)	mg/kg	<0.80	<0.80
Vanadium (Total)	6010(1)	mg/kg	19	<10
Zinc (Total)	6010(1)	mg/kg	37	<2.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

TABLE 3

Page 1 of 3

Missing

Table 3  
(Continued)

Page 2 of 3

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2106 B-12, S-3 (10/19/94)	9410-2107 B-8, S-3 (10/19/94)	9410-2108 B-11, S-3 (10/19/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	6.3	7.3	6.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,1,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

- See footnotes at end of table.



Table 3  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2109 B-11, S-3 Duplicate (10/19/94)	9410-2111 Method Blank (10/19/94)
Acetone	67-64-1	µg/kg	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0
-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50
Methylene chloride	75-09-2	µg/kg	14	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 4  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4143  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2110 Trip Blank (10/19/94)	9410-2112 Method Blank (10/19/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

(-) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.  
(2) CAS = Chemical Abstracts Services.

Table 5  
Semivolatile Organic Analyses  
Target Compound List/EPA Method 8270(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd Project No. 94-4143  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-B; Blairsville, PA

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2107 B-8, S-3 (10/19/94)	9410-2108 B-11, S-3 (10/19/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
Dibenzofuran	132-64-9	µg/kg	<330	<330
2,4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
1,3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
1,4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
2,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
2,4-Dimethylphenol	105-67-9	µg/kg	<330	<330
Di-n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<830	<830
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<830	<830
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<830	<830
3-Nitroaniline	99-09-2	µg/kg	<830	<830
4-Nitroaniline	100-01-6	µg/kg	<830	<830
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<830	<830
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<830	<830
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<830	<830
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

See footnotes at end of table.

Table 5  
(Continued)

Parameter	CAS (2) Number	Units	Sample Identification	
			9410-2109 B-11, S-3 Duplicate (10/19/94)	9410-2111 Method Blank (10/19/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
Dibenzofuran	132-64-9	µg/kg	<330	<330
2,4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
1,3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
1,4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
3,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
4-Dimethylphenol	105-67-9	µg/kg	<330	<330
n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<810	<830
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<810	<830
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<810	<830
3-Nitroaniline	99-09-2	µg/kg	<810	<830
4-Nitroaniline	100-01-6	µg/kg	<810	<830
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<810	<830
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<810	<830
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<810	<830
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 6  
Pesticides/Herbicides Organic Analyses  
Target Compound List/EPA Method 8080/8015<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 84-4143  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification			
			9410-2107	9410-2108	9410-2109	9410-2111
			B-8, S-3 (10/19/94)	B-11, S-3 (10/19/94)	B-11, S-3 Duplicate (10/19/94)	Method Blank (10/19/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050	<0.050	<0.050
Aroclor-1016	12674-11-2	mg/kg	<1.0	<1.0	<1.0	<1.0
Aroclor-1221	11104-28-2	mg/kg	<1.0	<1.0	<1.0	<1.0
Aroclor-1232	11141-16-5	mg/kg	<1.0	<1.0	<1.0	<1.0
Aroclor-1242	53469-21-9	mg/kg	<1.0	<1.0	<1.0	<1.0
Aroclor-1248	12672-29-6	mg/kg	<1.0	<1.0	<1.0	<1.0
Aroclor-1254	11097-69-1	mg/kg	<1.0	<1.0	<1.0	<1.0
Aroclor-1260	11096-82-5	mg/kg	<1.0	<1.0	<1.0	<1.0
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050	<0.050	<0.050
beta-BHC	319-85-7	mg/kg	<0.050	<0.050	<0.050	<0.050
delta-BHC	319-86-8	mg/kg	<0.050	<0.050	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10	<0.10	<0.10
2,4-D	94-75-7	mg/kg	<0.20	<0.20	<0.20	<0.20
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10	<0.10	<0.10
4,4'-DDT	50-29-3	mg/kg	<0.10	<0.10	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50	<0.50	<0.50
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080	<0.080	<0.080

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.



# Antech Ltd. Chain of Custody Record

For Laboratory Use Only

Laboratory Project No.: 94-4193

Project Name: WESTINGHOUSE - BLAIRSVILLE

Project No.: 93-132

Sampler: BRIAN R. MAUREE  
(Printed Name)

*B.R. Mauree*  
(Signature)

Relinquished By: (Signature and Printed Name)

*B.R. Mauree* BRIAN MAUREE

Received By: (Signature and Printed Name)

*Shirley Helms*

Date: 10/19/94

Time: 3:56 pm

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Antech Proposal No.: \_\_\_\_\_

Ship To:

Antech Ltd.

One Triangle Drive

Export, PA 15632

(412) 733-1161

FAX (412) 327-7793

Method of Shipment: \_\_\_\_\_

Shipment ID: \_\_\_\_\_

Sample ID Number	Sample Description			Grab	Composite	Chemistry	Nutrient	Total Metals	Dissolved Metals (250 ml)	Cyanide	Phenolics	TOC (1)	TOX (2)	Sulfide	Radiological	Oil & Grease	TPHC	VOA (4)	Organics	Bacteriological	Widemouth Jar (250 ml)	VOA Septa Jar	PARAM LIST A	PARAM LIST B								No. of Containers	Use Only Laboratory ID
	Date	Time	Description																														
TRIP-3	10/19/94	—	TRIP BLANK																X												2	10-2110	
B-6, S-2	10/19/94	1020																				X		X								3	10-2103
B-6, S-4	10/19/94	1020																				X		X								3	2104
B-7, S-2	10/19/94	715																				X		X								3	2105
B-8, S-3	10/19/94	835																				X			X							3	2107
B-11, S-3	10/19/94	1230																				X			X							3	2108
B-11, S-3 Dup	10/19/94	1230																				X			X							3	2109
B-12, S-3	10/19/94	1335																				X		X								3	2106

Special Instructions/Comments:

LIST A - VOCs, Metals, TPH, Fluoride,  
Nitrate, Ammonia, TOC, Gross Beta, Total Uranium, Uranium Isotopes,  
Total Radium, pH  
LIST B - VOCs, SVOCs, Metals, CN, Pest/Herb/PCBs,  
Gross Beta, total Uranium, Uranium Isotopes, Total Radium

Sample Return/Disposal:

☐ Return to Client

☒ Disposal by Antech

Results To:

☐ Client Name:

Company:

Address:

Invoice To:

☐ Client Name:

Company:

Address:

For Laboratory Use Only

Sample Condition Upon Receipt

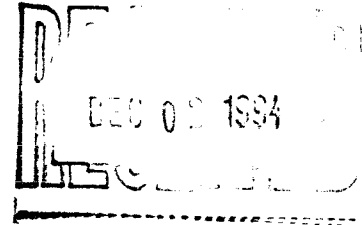




## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 29, 1994



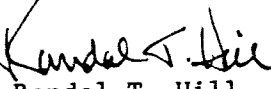
Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

Subcontracted Results  
Antech Ltd. Projects Nos. 94-4094,  
94-4124, and 94-4143

Dear Mr. Baughman:

Enclosed are copies of the results for gross beta, total radium, total uranium, and uranium isotopes for the above-referenced projects. Results for samples in the other Antech projects will be forwarded as soon as they are received. If you have any questions regarding these results, please call me or CEP directly.

Sincerely,



Randal T. Hill  
Organic Chemistry Manager

RTH:sja

Enclosure





# Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87502

OUT OF STATE 800/545-2188 • FAX • 505-982-9289

Controls for Environmental  
Pollution, Inc.  
P.O. Box 5351  
Santa Fe, NM 87502

Phone: (505) 982-9289 • (800) 545-2188

Earth Science Consultants  
One Triangle Drive  
Export, PA 15622

Attn: Randy Hill

Order #: 94-10-391  
Date: 11/21/94 11:00  
Work ID: Soil (NR)  
Date Received: 10/24/94  
Date Completed: 11/21/94

Purchase Order: 05-0620  
Invoice Number:

Client Code: ANTECH

## SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	94-1091 9410-1756
02	94-1091 9410-1757
03	94-1091 9410-1758
04	94-1091 9410-1759
05	94-4121 9410-1929
06	94-4121 9410-1930
07	94-4121 9410-1931
08	94-4121 9410-1932
09	94-4121 9410-1933

Sample Number	Sample Description
10	94-4124 9410-1934
11	94-4143 9410-2103
12	94-4143 9410-2104
13	94-4143 9410-2105
14	94-4143 9410-2106
15	94-4143 9410-2107
16	94-4143 9410-2108
17	94-4143 9410-2109



**Controls for Environmental Pollution, Inc.**

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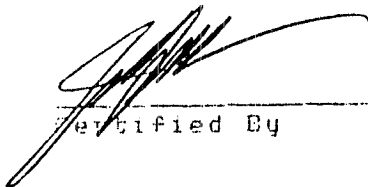
IN STATE 505-982-9289 OUT OF STATE 800/545-2188 • FAX - 505-982-9289

Order # 94-10-071  
11/21/94 11:00

Controls for Environmental

Page 2

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

  
Certified By

Order # 94-10 391  
11/21/94 11:00Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample 01A 94-1094 9410-1756 (B1, S2) Collected: 10/17/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	1.5+/-0.2		pCi/gram	11/04/94	PM
Total Radium	10.8		pCi/gram	10/27/94	LJ

Sample 02A 94-1094 9410-1757 (B1, S5) Collected: 10/17/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	10.8		pCi/gram	11/04/94	PM
Total Radium	1.3+/-0.2		pCi/gram	10/27/94	LJ

Sample 03A 94-1094 9410-1758 (B3, S3) Collected: 10/17/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	10.8		pCi/gram	11/04/94	PM
Total Radium	1.3+/-0.2		pCi/gram	10/27/94	LJ

Sample 04A 94-1094 9410-1759 (B2, S4) Collected: 10/17/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	10.8		pCi/gram	11/04/94	PM
Total Radium	1.2+/-0.2		pCi/gram	10/27/94	LJ

Sample 05A 94-1094 9410-1829 (B3, S5) Collected: 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	10.8		pCi/gram	11/04/94	PM
Total Radium	1.3+/-0.2		pCi/gram	10/27/94	LJ

Sample 06A 94-1094 9410-1930 (B4, S3) Collected: 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	10.8		pCi/gram	11/04/94	PM
Total Radium	1.3+/-0.2		pCi/gram	10/27/94	LJ



Order # 94-10-291  
11/21/94 11:00

Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample 07A 94-10-24 9410-1931 (85, 54) Collected: 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	1.0 +/- 0.3		pCi/gram	11/04/94	PM
Total Radium	0.4 +/- 0.2		pCi/gram	10/28/94	LJ

Sample 08A 94-10-24 9410-1932 (89, 52) Collected: 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	1.0 +/- 0.3		pCi/gram	11/04/94	PM
Total Radium	0.4 +/- 0.2		pCi/gram	10/28/94	LJ

Sample 09A 94-10-24 9410-1933 (810, 53) Collected: 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.8 +/- 0.3		pCi/gram	11/04/94	PM
Total Radium	0.4 +/- 0.2		pCi/gram	10/28/94	LJ

Sample 10A 94-10-24 9410-1934 (82, 52) Collected: 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.8 +/- 0.3		pCi/gram	11/04/94	PM
Total Radium	1.5 +/- 0.4		pCi/gram	10/28/94	LJ

Sample 11A 94-10-24 9410-2103 (86, 52) Collected: 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.9 +/- 0.3		pCi/gram	11/04/94	PM
Total Radium	1.3 +/- 0.4		pCi/gram	10/28/94	LJ

Sample 12A 94-10-24 9410-2104 (86, 54) Collected: 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.9 +/- 0.3		pCi/gram	11/04/94	PM
Total Radium	1.0 +/- 0.3		pCi/gram	10/29/94	LJ

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TEST RESULTS BY SAMPLE

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Sample 13A 94-0143 9410-2105 (87, 52) collected 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.9+/-0.4		pCi/gram	11/04/94	PM
Total Radium	10.3		pCi/gram	10/29/94	LJ

Sample 14A 94-0143 9410-2106 (812, 53) collected 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.5+/-0.2		pCi/gram	11/04/94	PM
Total Radium	10.1		pCi/gram	10/31/94	LJ

Sample 15A 94-0143 9410-2107 (68, 53) collected 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	1.4+/-0.4		pCi/gram	11/04/94	PM
Total Radium	1.1+/-0.3		pCi/gram	10/31/94	LJ

Sample 16A 94-0143 9410-2108 (811, 53) collected 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.6+/-0.2		pCi/gram	11/04/94	PM
Total Radium	0.8+/-0.2		pCi/gram	10/31/94	LJ

Sample 17A 94-0143 9410-2109 (811, 53 Dup) collected 10/19/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	2.3+/-0.4		pCi/gram	11/04/94	PM
Total Radium	1.3+/-0.4		pCi/gram	10/31/94	LJ



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Controls For Environmental

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11/21/94 11:00

TEST RESULTS BY SAMPLE

Sample Description 94-4094 9410-1756 (B1, S2) Lab No: 01A  
Test Description Isotopic Uranium Method:  
Collected 10/17/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.11+/-0.03
Uranium-235	_____	<0.05
Uranium-238	_____	0.11+/-0.03

All results reported in:

UNITS \_\_\_\_\_ pCi/gm  
Analyzed 11/09/94  
By HD

Sample Description 94-4094 9410-1756 (B1, S2) Lab No: 01A  
Test Description Total Uranium Method:  
Collected 10/17/94 Category: SOIL

Test Code FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.11+/-0.04

All results reported in:

UNITS \_\_\_\_\_ pCi/gm  
Analyzed 11/09/94  
By HD

Order # 94-10 391  
11/21/94 11 0Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4094 9410-1757 (B1,SS) Lab No: 02A  
Test Description: Isotopic Uranium Method:  
Collection: 10/17/94 Category: SOIL

Test Code: ISOU\_5

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.12+/-0.03
Uranium-235	_____	0.05
Uranium-238	_____	0.09+/-0.03

All results reported in:

UNITS: \_\_\_\_\_ pCi/gram  
Analyzed: 11/09/94  
By: HQ

Sample Description: 94-4094 9410-1757 (B1,SS) Lab No: 02A  
Test Description: Total Uranium Method:  
Collection: 10/17/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.14+/-0.04

All results reported in:

UNITS: \_\_\_\_\_ pCi/gram  
Analyzed: 11/09/94  
By: HQ

Order # 94-10-94  
11/21/94 11:00Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 8

Sample Description: 94-4094 9410-1758 (B3,S3) Lab No: 03A  
Test Description: Isotopic Uranium Method:  
Collected: 10/17/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.11+/-0.03
Uranium-235	_____	<0.05
Uranium-238	_____	0.10+/-0.02

All results reported in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed: 11/09/94  
By: HD

Sample Description: 94-4094 9410-1758 (B3,S3) Lab No: 03A  
Test Description: Total Uranium Method:  
Collected: 10/17/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.07+/-0.04

All results reported in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed: 11/09/94  
By: HD



Order # 94-10-121  
11/21/94 11 00Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4094 9410-1759 (B2,54) Lab No: 04A  
Test Description: Isotopic Uranium Method:  
Collected: 10/17/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.17+/-0.03
Uranium-235	_____	<0.05
Uranium-238	_____	0.14+/-0.03

All results reported in:

UNITS: \_\_\_\_\_ pCi/gram  
Analyzed: 11/09/94  
By: HD

Sample Description: 94-4094 9410-1759 (B2,54) Lab No: 04A  
Test Description: Total Uranium Method:  
Collected: 10/17/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.24+/-0.05

All results reported in:

UNITS: \_\_\_\_\_ pCi/gram  
Analyzed: 11/09/94  
By: HD

**Controls for Environmental Pollution, Inc.**

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Order # 94-10 371  
11/21/94 11 00**Controls for Environmental  
TEST RESULTS BY SAMPLE**

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Sample Description: 94-4124 9410-1929 (B3,SS) Lab No: 05A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of analysis	Detection Limit	RESULT
Uranium-234	_____	0.15+/-0.03
Uranium-235	_____	<0.05
Uranium-238	_____	0.13+/-0.03

All results report in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HQ

Sample Description: 94-4124 9410-1929 (B3,SS) Lab No: 05A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of analysis	Detection Limit	RESULT
Total Uranium	_____	0.25+/-0.05

All results reported in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HQ



Order # 94-10-291

Controls for Environmental

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11/21/94 11:00

TEST RESULTS BY SAMPLE

Sample Description: 94-4124 9410-1930 (B4,S3) Lab No: 06A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.12+/-0.03
Uranium-235	_____	<0.05
Uranium-238	_____	0.13+/-0.03

All results reported in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 11/09/94  
By HD

Sample Description: 94-4124 9410-1930 (B4,S3) Lab No: 06A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.53+/-0.06

All results reported in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 11/09/94  
By HD



Order # 94-10-1931

Controls for Environmental

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11/21/94 11:00

TEST RESULTS BY SAMPLE

Sample Description: 94-4124 9410-1931 (B5, S4) Lab No: 07A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.16+/-0.03
Uranium-235	_____	0.05
Uranium-238	_____	0.17+/-0.03

All results reported in:

UNITS: pCi/gram  
Analyzed: 11/09/94  
By: HD

Sample Description: 94-4124 9410-1931 (B5, S4) Lab No: 07A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.17+/-0.04

All results reported in:

UNITS: pCi/gram  
Analyzed: 11/09/94  
By: HD



Order # 94-10-391

Controls for Environmental

Page 13

11/21/94 11:00

TEST RESULTS BY SAMPLE

Sample Description: 94-4124 9410-1932 (B9,S2) Lab No: 08A

Test Description: Isotopic Uranium

Method:

Test Code: ISOU\_S

Collected: 10/19/94

Category: SOIL

Type of Analysis

Detection

RESULT

Limit

Uranium-234

0.18+/-0.03

Uranium-235

&lt;0.05

Uranium-238

0.20+/-0.03

All results reported in:

UNITS pCi/gm

Analyzed 11/09/94

By HD

Sample Description: 94-4124 9410-1932 (B9,S2) Lab No: 08A

Test Description: Total Uranium

Method:

Test Code: FU\_5

Collected: 10/19/94

Category: SOIL

Type of Analysis

Detection

RESULT

Limit

Total Uranium

0.25+/-0.05

All results reported in:

UNITS pCi/gm

Analyzed 11/09/94

By HD

Order # 94-10-391  
11/21/94 11:00Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4124 9410-1933 (B10,53) Lab No: 09A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.15+/-0.03
Uranium-235	_____	0.05
Uranium-238	_____	0.12+/-0.03

All results reported in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HDSample Description: 94-4124 9410-1933 (B10,53) Lab No: 09A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.21+/-0.05

All results reported in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HD

Order # 94-10 391  
11/21/94 11:00Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 15

Sample Description: 94-4124 9410-1934 (B2,S2) Lab No: 10A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.08+/-0.02
Uranium-235	_____	0.05
Uranium-238	_____	0.09+/-0.02

All results reported in:

UNITS: pCi/gram  
Analyzed: 11/09/94  
By: HD

Sample Description: 94-4124 9410-1934 (B2,S2) Lab No: 10A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.22+/-0.05

All results reported in:

UNITS: pCi/gram  
Analyzed: 11/09/94  
By: HD

Order # 94-10-391  
11/21/94 11:00**Controls for Environmental  
TEST RESULTS BY SAMPLE**

Page 16

Sample Description: 94-4143 9410-2103 (B6, S2) Lab No: 11A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.14+/-0.03
Uranium-235	_____	0.05
Uranium-238	_____	0.10+/-0.02

All results report in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 11/09/94  
By HD

Sample Description: 94-4143 9410-2103 (B6, S2) Lab No: 11A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.26+/-0.06

All results reported in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 11/09/94  
By HD



Order # 94-10 391  
11/21/94 11:00Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4143 9410-2104 (B6,S4) Lab No: 12A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.25+/-0.05
Uranium-235	_____	0.05
Uranium-238	_____	0.21+/-0.05

All results report in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HD

Sample Description: 94-4143 9410-2104 (B6,S4) Lab No: 12A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.44+/-0.07

All results reported in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HD



Order # 94-10-391

Controls for Environmental

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11/21/94 11:00

TEST RESULTS BY SAMPLE

Sample Description: 94-4143 9410-2105 (B7, S2) Lab No: 13A

Test Description: Isotopic Uranium

Method:

Test Code: ISOU\_S

Collected: 10/19/94

Category: SOIL

Type of Analysis

Detection  
Limit

RESULT

Uranium-234

0.12+/-0.03

Uranium-235

<0.05

Uranium-238

0.09+/-0.02

All results report in:

UNITS pCi/gram

Analyzed: 11/09/94

By HD

Sample Description: 94-4143 9410-2105 (B7, S2) Lab No: 13A

Test Description: Total Uranium

Method:

Test Code: FU\_5

Collected: 10/19/94

Category: SOIL

Type of Analysis

Detection  
Limit

RESULT

Total Uranium

0.16+/-0.06

All results reported in:

UNITS pCi/gram

Analyzed: 11/09/94

By HD

Order # 94-10-391  
11/21/94 11:00Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4143 9410-2106 (B12,S3) Lab No: 14A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.13+/-0.03
Uranium-235	_____	<0.05
Uranium-238	_____	0.14+/-0.03

All results reported in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HD

Sample Description: 94-4143 9410-2106 (B12,S3) Lab No: 14A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.23+/-0.06

All results reported in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HD



Order # 94-10-391

Controls for Environmental

Page 20

11/21/94 11.00

TEST RESULTS BY SAMPLE

Sample Description: 94-4143 9410-2107 (B8,S3) Lab No: 15A

Test Description: Isotopic Uranium

Method:

Test Code: ISOU\_S

Collected: 10/19/94

Category: SOIL

Type of Analysis

Detection  
Limit

RESULT

Uranium-234

\_\_\_\_\_

0.17+/-0.03

Uranium-235

\_\_\_\_\_

0.05

Uranium-238

\_\_\_\_\_

0.17+/-0.03

All results report in

UNITS \_\_\_\_\_ pCi/gram

Analyzed 11/09/94

By HD

Sample Description: 94-4143 9410-2107 (B8,S3) Lab No: 15A

Test Description: Total Uranium

Method:

Test Code: FU\_5

Collected: 10/19/94

Category: SOIL

Type of Analysis

Detection  
Limit

RESULT

Total Uranium

\_\_\_\_\_

0.72+/-0.08

All results reported in:

UNITS \_\_\_\_\_ pCi/gram

Analyzed 11/09/94

By HD



Order # 94-10-391

Controls for Environmental

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11/21/94 11:00

TEST RESULTS BY SAMPLE

Sample Description: 94-4143 9410-2108 (BU, 53) Lab No: 16A  
Test Description: Isotopic Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.14+/-0.03
Uranium-235	_____	0.05
Uranium-238	_____	0.11+/-0.03

All results report in

UNITS pCi/gram  
Analyzed 11/09/94  
By HD

Sample Description: 94-4143 9410-2108 (BU, 53) Lab No: 16A  
Test Description: Total Uranium Method:  
Collected: 10/19/94 Category: SOIL

Test Code: FU\_5

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.21+/-0.06

All results reported in:

UNITS pCi/gram  
Analyzed 11/09/94  
By HD



Order # 94-10-391

Controls for Environmental

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11/21/94 11:00

TEST RESULTS BY SAMPLE

Sample Description: 94-4143 9410-2109(B11, S3 Dup) Lab No: 17A

Test Description: Isotopic Uranium

Method:

Test Code: ISOU\_S

Collected: 10/19/94

Category: SOIL

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	0.14+/-0.03
Uranium-235	_____	<0.05
Uranium-238	_____	0.12+/-0.03

All results reported in:

UNITS pCi/gram

Analyzed 11/09/94

By HD

Sample Description: 94-4143 9410-2109(B11, S3 Dup) Lab No: 17A

Test Description: Total Uranium

Method:

Test Code: FU\_S

Collected: 10/19/94

Category: SOIL

Type of Analysis	Detection Limit	RESULT
Total Uranium	_____	0.24+/-0.06

All results reported in:

UNITS pCi/gram

Analyzed 11/09/94

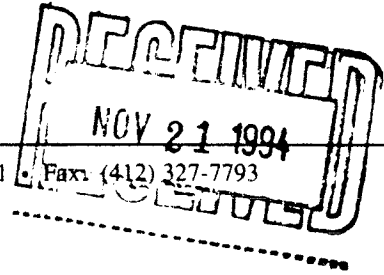
By HD





## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793



November 17, 1994

Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

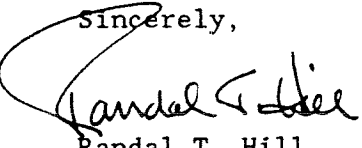
Soil/Water Characterization: Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4162

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received and logged in for analysis on October 21, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

  
Randal T. Hill  
Organic Chemistry Manager

RTH:mav

Enclosures



ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4162

CLIENT: 93-132

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-2190 through 9410-2198 and 9410-2198A, and 9410-2199

CLIENT: B-13.S-2, B-14.S-2, B-15.S-2, B-28.S-2, B-29.S-1, B-30.S-2, B-30.S-4, B-31.S-1, B-31.S-1 MS, B-31.S-1 MSD, and Trip-4

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

Radiological work is in progress and will be reported as soon as it is received from the subcontracting lab.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

The spiked samples were analyzed twice with similar results.

2. SEMIVOLATILES:

None

3. PESTICIDES/HERBICIDES/PCBS/8015:

None

4. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not be interpreted as precision of the analytical procedure, but rather as a result of reporting format.

T 1  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4162  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Page 1 of 2

Parameter	Analytical Method	Units	Sample Identification				
			9410-2190	9410-2191	9410-2193	9410-2194	9410-2195
			B-13,S-2 (10/20/94)	B-14,S-2 (10/20/94)	B-28,S-2 (10/20/94)	B-29,S-1 (10/20/94)	B-30,S-2 (10/20/94)
Fluoride	340.2(1)	mg/kg	120	99	130	120	130
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10	<10	<10	<10
ASTM:							
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	0.38	<0.10	0.21	0.26	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	0.10	<0.10	0.14	0.18	0.12
Total Organic Carbon (ASTM)	9060(2)	mg/l	<1.0	1.6	3.4	1.7	1.6
Metals:							
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	7900	8900	6100	13000	6600
Arsenic (Total)	7060(2)	mg/kg	5.0	4.7	2.2	2.1	3.6
Barium (Total)	6010(2)	mg/kg	42	35	30	150	38
Beryllium (Total)	6010(2)	mg/kg	0.45	0.46	0.63	1.2	0.94
Calcium (Total)	6010(2)	mg/kg	410	390	1000	3200	6100
Cadmium (Total)	6010(2)	mg/kg	3.1	3.5	3.8	2.5	4.3
Cobalt (Total)	6010(2)	mg/kg	11	17	12	9.2	18
Chromium (Total)	6010(2)	mg/kg	14	14	15	16	18
Copper (Total)	6010(2)	mg/kg	14	13	16	11	33
Iron (Total)	6010(2)	mg/kg	19000	20000	23000	16000	27000
Mercury (Total)	7471(2)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	660	760	770	730	420
Magnesium (Total)	6010(2)	mg/kg	1100	1000	450	1000	1300
Manganese (Total)	6010(2)	mg/kg	380	640	250	1600	280
Sodium (Total)	6010(2)	mg/kg	410	<200	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	14	14	14	23	28
Lead (Total)	6010(2)	mg/kg	<20	<20	<20	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	0.28	0.25	0.34	0.40	0.51
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	21	23	19	23	17
Zinc (Total)	6010(2)	mg/kg	38	38	48	59	60

See footnotes at end of table.

Parameter	Analytical Method	Units	Sample Identification				
			9410-2196 B-30,S-4 (10/20/94)	9410-2197 B-31,S-1 (10/20/94)	9410-2198 B-31,S-1 MS (10/20/94)	9410-2198A B-31,S-1 MSD (10/20/94)	9410-2200A Method Blank (10/21/94)
Fluoride	340.2 <sup>(1)</sup>	mg/kg	69	100	52X	43X	<1.0
Total Petroleum Hydrocarbons	8015 <sup>(2)</sup>	mg/kg	<10	<10	141X	118X	<10
ASTM:							
Ammonia (ASTM)	350.1 <sup>(1)</sup>	mg/l NH <sub>3</sub> -N	0.37	0.16	98X	82X	<0.10
Nitrate (ASTM)	352.1 <sup>(1)</sup>	mg/l NO <sub>3</sub> -N	0.21	0.21	98X	78X	<0.10
Total Organic Carbon (ASTM)	8060 <sup>(2)</sup>	mg/l	<1.0	4.3	90X	90X	<1.0
Metals:							
Silver (Total)	6010 <sup>(2)</sup>	mg/kg	<2.0	<2.0	82.8X	99.0X	<2.0
Aluminum (Total)	6010 <sup>(2)</sup>	mg/kg	6900	7100	NC <sup>(3)</sup>	NC	<20
Arsenic (Total)	7060 <sup>(2)</sup>	mg/kg	3.3	2.6	80.8X	100.5X	<0.20
Barium (Total)	6010 <sup>(2)</sup>	mg/kg	28	81	88.0X	91.0X	<4.0
Beryllium (Total)	6010 <sup>(2)</sup>	mg/kg	1.1	0.75	83.0X	87.5X	<0.40
Calcium (Total)	6010 <sup>(2)</sup>	mg/kg	720	4300	NAP <sup>(4)</sup>	NAP	<200
Cadmium (Total)	6010 <sup>(2)</sup>	mg/kg	15	3.9	87.2X	96.6X	<2.0
Cobalt (Total)	6010 <sup>(2)</sup>	mg/kg	15	36	80.1X	96.2X	<2.0
Chromium (Total)	6010 <sup>(2)</sup>	mg/kg	21	33	89.4X	102.2X	<2.0
Copper (Total)	6010 <sup>(2)</sup>	mg/kg	18	310	NC	NC	<2.0
Iron (Total)	6010 <sup>(2)</sup>	mg/kg	99000	21000	NC	NC	<10
Mercury (Total)	7471 <sup>(2)</sup>	mg/kg	<0.10	<0.10	114.4X	114.4X	<0.10
Potassium (Total)	6010 <sup>(2)</sup>	mg/kg	800	470	NAP	NAP	<100
Magnesium (Total)	6010 <sup>(2)</sup>	mg/kg	360	950	NAP	NAP	<100
Manganese (Total)	6010 <sup>(2)</sup>	mg/kg	590	590	NC	NC	<2.0
Sodium (Total)	6010 <sup>(2)</sup>	mg/kg	<200	<200	NAP	NAP	<200
Nickel (Total)	6010 <sup>(2)</sup>	mg/kg	24	68	75.2X	107.7X	<10
Lead (Total)	6010 <sup>(2)</sup>	mg/kg	31	250	NC	NC	<20
Antimony (Total)	6010 <sup>(2)</sup>	mg/kg	<20	<20	86.5X	92.4X	<20
Selenium (Total)	7740 <sup>(2)</sup>	mg/kg	0.33	<0.20	91.0X	86.8X	<0.20
Thallium (Total)	7841 <sup>(2)</sup>	mg/kg	<0.80	<0.80	83.2X	85.4X	<0.80
Vanadium (Total)	6010 <sup>(2)</sup>	mg/kg	35	16	100.3X	105.6X	<10
Zinc (Total)	6010 <sup>(2)</sup>	mg/kg	94	56	97.3X	92.6X	<2.0

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NC = Not calculable.

(4) NAP = Not applicable.

Table 2  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4162  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification	
			9410-2192 B-15, S-2 (10/20/94)	9410-2200A Method Blank (10/21/94)
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0	<1.0
ASTM:				
Cyanide (ASTM)	9012(1)	mg/l	<0.0050	<0.0050
Metals:				
Silver (Total)	6010(1)	mg/kg	<2.0	<2.0
Aluminum (Total)	6010(1)	mg/kg	9700	<20
Arsenic (Total)	7060(1)	mg/kg	5.3	<0.20
Barium (Total)	6010(1)	mg/kg	34	<4.0
Beryllium (Total)	6010(1)	mg/kg	0.48	<0.40
Calcium (Total)	6010(1)	mg/kg	730	<200
Cadmium (Total)	6010(1)	mg/kg	2.9	<2.0
Cobalt (Total)	6010(1)	mg/kg	9.8	<2.0
Chromium (Total)	6010(1)	mg/kg	13	<2.0
Copper (Total)	6010(1)	mg/kg	15	<2.0
Iron (Total)	6010(1)	mg/kg	18000	<10
Mercury (Total)	7471(1)	mg/kg	<0.10	<0.10
Potassium (Total)	6010(1)	mg/kg	860	<100
Magnesium (Total)	6010(1)	mg/kg	1400	<100
Manganese (Total)	6010(1)	mg/kg	290	<2.0
Sodium (Total)	6010(1)	mg/kg	340	<200
Nickel (Total)	6010(1)	mg/kg	13	<10
Lead (Total)	6010(1)	mg/kg	<20	<20
Antimony (Total)	6010(1)	mg/kg	<20	<20
Selenium (Total)	7740(1)	mg/kg	0.29	<0.20
Thallium (Total)	7841(1)	mg/kg	<0.80	<0.80
Vanadium (Total)	6010(1)	mg/kg	23	<10
Zinc (Total)	6010(1)	mg/kg	40	<2.0

<sup>(1)</sup> U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Table 3  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4162  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Sample Identification	
		9410-2198	9410-2198A
		B-31,S-1	B-31,S-1
		MS (10/20/94)	MSD (10/20/94)
Metals:			
Silver (Total)	6010(1)	82.9%	99.0%
Aluminum (Total)	6010(1)	NC(2)	NC
Arsenic (Total)	7060(1)	80.9%	100.5%
Barium (Total)	6010(1)	88.0%	91.0%
Beryllium (Total)	6010(1)	83.0%	87.5%
Calcium (Total)	6010(1)	NAP(3)	NAP
Cadmium (Total)	6010(1)	87.2%	96.6%
Cobalt (Total)	6010(1)	80.1%	96.2%
Chromium (Total)	6010(1)	89.4%	102.2%
Copper (Total)	6010(1)	NC	NC
Iron (Total)	6010(1)	NC	NC
Mercury (Total)	7471(1)	114.4%	114.4%
Potassium (Total)	6010(1)	NAP	NAP
Magnesium (Total)	6010(1)	NAP	NAP
Manganese (Total)	6010(1)	NC	NC
Sodium (Total)	6010(1)	NAP	NAP
Nickel (Total)	6010(1)	75.2%	107.7%
Lead (Total)	6010(1)	NC	NC
Antimony (Total)	6010(1)	86.5%	92.4%
Selenium (Total)	7740(1)	91.0%	86.8%
Thallium (Total)	7841(1)	83.2%	85.4%
Vanadium (Total)	6010(1)	100.3%	105.6%
Zinc (Total)	6010(1)	97.3%	92.6%

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) NC = Not calculable.

(3) NAP = Not applicable.

Table 4  
Volatile Organic Analyses  
EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4162  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Page 1 of 2

Parameter	CAS(2) Number	Units	Sample Identification				
			9410-2190 B-13,S-2 (10/20/94)	9410-2191 B-14,S-2 (10/20/94)	9410-2192 B-15,S-2 (10/20/94)	9410-2193 B-28,S-2 (10/20/94)	9410-2194 B-29,S-1 (10/20/94)
Acetone	67-64-1	µg/kg	<100	<100	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	5.1	<5.0	<5.0	<5.0	<5.0

• footnotes at end of table.

Table 4  
(Continued)

Page 2 of 2

Parameter	CAS(2) Number	Units	Sample Identification			
			9410-2195 B-30,S-2 (10/20/94)	9410-2196 B-30,S-4 (10/20/94)	9410-2197 B-31,S-1 (10/20/94)	9410-2200A Method Blank (10/21/94)
Acetone	67-64-1	µg/kg	<100	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 5  
Matrix Spike/Matrix Spike Duplicate Volatile Organic Analyses  
EPA Method 8260(1)  
Cummings/Riter Consultants, Inc  
Antech Ltd. Project No. 94-4162  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-B; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2188 B-31,S-1 MS (10/20/94)	9410-2188A B-31,S-1 MSD (10/20/94)
Acetone	67-64-1	µg/kg	NAP(3)	NAP
Benzene	71-43-2	µg/kg	134X	130X
Bromodichloromethane	75-27-4	µg/kg	NAP	NAP
Bromoform	75-25-2	µg/kg	NAP	NAP
Bromomethane	74-83-9	µg/kg	NAP	NAP
2-Butanone (MEK)	78-93-3	µg/kg	NAP	NAP
Carbon disulfide	75-15-0	µg/kg	NAP	NAP
Carbon tetrachloride	56-23-5	µg/kg	NAP	NAP
Chlorobenzene	108-90-7	µg/kg	134X	124X
Chlorodibromomethane	124-48-1	µg/kg	NAP	NAP
Chloroethane	75-00-3	µg/kg	NAP	NAP
Chloromethane	74-87-3	µg/kg	NAP	NAP
Chloroform	67-66-3	µg/kg	NAP	NAP
1,1-Dichloroethane	75-34-3	µg/kg	NAP	NAP
1,2-Dichloroethane	107-06-2	µg/kg	NAP	NAP
1,1-Dichloroethene	75-35-4	µg/kg	150X	148X
cis-1,2-Dichloroethene	156-59-2	µg/kg	NAP	NAP
trans-1,2-Dichloroethene	156-60-5	µg/kg	NAP	NAP
1,2-Dichloropropane	78-87-5	µg/kg	NAP	NAP
cis-1,3-Dichloropropene	10061-01-5	µg/kg	NAP	NAP
trans-1,3-Dichloropropene	10061-02-6	µg/kg	NAP	NAP
Ethylbenzene	100-41-4	µg/kg	NAP	NAP
2-Hexanone	591-78-6	µg/kg	NAP	NAP
Methylene chloride	75-09-2	µg/kg	NAP	NAP
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	NAP	NAP
Styrene	100-42-5	µg/kg	NAP	NAP
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	NAP	NAP
Tetrachloroethene	127-18-4	µg/kg	NAP	NAP
Toluene	108-88-3	µg/kg	146X	144X
1,1,1-Trichloroethane	71-55-6	µg/kg	NAP	NAP
1,1,2-Trichloroethane	79-00-5	µg/kg	NAP	NAP
Trichloroethene	79-01-6	µg/kg	134X	128X
Vinyl chloride	75-01-4	µg/kg	NAP	NAP
Xylenes (Total)	1330-20-7	µg/kg	NAP	NAP

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

NAP = Not applicable.



Table 6  
Volatile Organic Analyses  
EPA Method 8260<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4162  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-B; Blairsville, PA

Parameter	CAS <sup>(2)</sup> Number	Units	Sample Identification	
			9410-2199 Trip-4 (10/20/94)	9410-2201A Method Blank (10/21/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

<sup>(1)</sup> U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

<sup>(2)</sup> CAS = Chemical Abstracts Services.

Table 7  
Semivolatile Organic Analyses  
Target Compound List/EPA Method 8270<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4162  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-B; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2192 B-15,S-2 (10/20/94)	9410-2200A Method Blank (10/21/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
2-Benzofuran	132-64-9	µg/kg	<330	<330
4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
1,3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
1,4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
3,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
2,4-Dimethylphenol	105-67-9	µg/kg	<330	<330
Di-n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<810	<820
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<810	<820
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<810	<820
3-Nitroaniline	99-09-2	µg/kg	<810	<820
4-Nitroaniline	100-01-6	µg/kg	<810	<820
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<810	<820
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<810	<820
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<330	<330
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 8  
Herbicides/Pesticides Organic Analyses  
EPA Method 8150(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4162  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2192 B-15,S-2 (10/20/94)	9410-2200A Method Blank (10/21/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050
beta-BHC	319-85-7	mg/kg	<0.050	<0.050
delta-BHC	319-86-8	mg/kg	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10
2,4-D	94-75-7	mg/kg	<0.20	<0.20
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10
4,4'-DDT	50-29-3	mg/kg	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080

- (1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.  
(2) CAS - Chemical Abstracts Services.

Controls for Environmental  
Pollution, Inc.P.O. Box 5351  
Santa Fe, NM 87502

Phone: (505) 982-9841/(800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: R. Hill

Purchase Order: 0621  
Invoice Number:Order #: 94-10-495  
Date: 12/07/94 16:06  
Work ID: Soil (NR)  
Date Received: 10/28/94  
Date Completed: 12/07/94

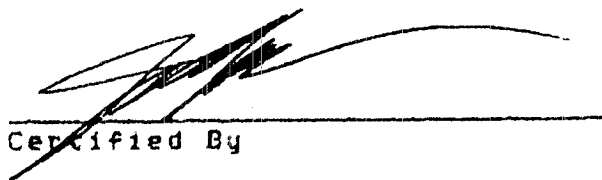
Client Code: ANTECH

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	94-4162 9410-2190 B 135-2
02	94-4162 9410-2191 B 145-2
03	94-4162 9410-2192 B 155-2
04	94-4162 9410-2193 B 285-2

Sample Number	Sample Description
05	94-4162 9410-2194 B 295-1
06	94-4162 9410-2195 B 305-2
07	94-4162 9410-2196 B 305-1
08	94-4162 9410-2197 B 315-1

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only, will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

  
Certified By

Order # 94-10-495  
12/07/94 16:06Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 2

Sample: 01A 94-4162 9410-2190 Collected: 10/20/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	1.4+/-1.1		pCi/gram	11/01/94	LJ
Total Uranium	0.3		ug/gram	10/28/94	HD

Sample: 02A 94-4162 9410-2191 Collected: 10/20/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	<0.5		pCi/gram	11/02/94	LJ
Total Uranium	0.6		ug/gram	10/28/94	HD

Sample: 03A 94-4162 9410-2192 Collected: 10/20/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	0.8+/-0.3		pCi/gram	11/02/94	LJ
Total Uranium	0.1		ug/gram	10/28/94	HD

Sample: 04A 94-4162 9410-2193 Collected: 10/20/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	<0.5		pCi/gram	11/02/94	LJ
Total Uranium	1.1		ug/gram	10/28/94	HD

Sample: 05A 94-4162 9410-2194 Collected: 10/20/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	0.5+/-0.2		pCi/gram	11/02/94	LJ
Total Uranium	10.2		ug/gram	10/28/94	HD

Sample: 06A 94-4162 9410-2195 Collected: 10/20/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	0.7+/-0.4		pCi/gram	11/02/94	LJ
Total Uranium	2.2		ug/gram	10/28/94	HD



Order # 94-10-495  
12/07/94 16:06

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 3

Sample: 07A 94-4162 9410-2196 304 Collected: 10/20/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	1.6+/-0.6		pCi/gram	11/02/94	LJ
Total Uranium	0.5		ug/gram	10/28/94	HD

Sample: 08A 94-4162 9410-2197 Collected: 10/20/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	<0.5		pCi/gram	11/02/94	LJ
Total Uranium	0.6		ug/gram	10/28/94	HD

SENT BY: CEP, Inc.

12-7-94 : 17:15 :

CEP, Inc. -

14123277793: 9



Order # 94-10-495  
12/07/94 16:06

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 4

Sample Description: 94-4162 9410-2190  
Test Description: Gross Beta  
Collected: 10/20/94

Lab No: 01A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>1.0 +/- 0.4</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/29/94  
By PM

Sample Description: 94-4162 9410-2190  
Test Description: Isotopic Uranium  
Collected: 10/20/94

Lab No: 01A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.11 +/- 0.03</u>
Uranium-235	<u>0.05</u>	<u>&lt; 0.05</u>
Uranium-238	<u>0.05</u>	<u>0.08 +/- 0.02</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD

SENT BY: CEP, Inc.

12-7-94 : 17:15

CEP, Inc.

14123277793:10



Order # 94-10-495  
12/07/94 16:06

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 5

Sample Description: 94-4162 9410-2191  
Test Description: Gross Beta  
Collected: 10/20/94

Lab No: 02A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta		26.4 +/- 1.0

All results reported in:

UNITS pCi/gram  
Analyzed 10/29/94  
By PM

Sample Description: 94-4162 9410-2191  
Test Description: Isotopic Uranium  
Collected: 10/20/94

Lab No: 02A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	0.08 +/- 0.02
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.10 +/- 0.03

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD

SENT BY: CEP, Inc.

12-7-94 : 17:16 :

CEP, Inc.

141232777931:11



Order # 94-10-495  
12/07/94 16:56Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 6

Sample Description: 94-4162 9410-2192  
Test Description: Gross Beta  
Collected: 10/20/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta		1.8+/-0.4

All results reported in

UNITS pCi/gram  
Analyzed 10/29/94  
By PMSample Description: 94-4162 9410-2192  
Test Description: Isotopic Uranium  
Collected: 10/20/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: ISDU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	0.07+/-0.02
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.06+/-0.02

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD



Order # 94-10-495  
12/07/94 16.06

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 7

Sample Description: 94-4162 9410-2193  
Test Description: Gross Beta  
Collected: 10/20/94

Lab No: 04A  
Method:  
Category: SDIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	_____ <u>CO 6</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/29/94  
By PM

Sample Description: 94-4162 9410-2193  
Test Description: Isotopic Uranium  
Collected: 10/20/94

Lab No: 04A  
Method:  
Category: SDIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>2.62+/-0.80</u>
Uranium-235	<u>0.05</u>	<u>0.07+/-0.06</u>
Uranium-238	<u>0.05</u>	<u>1.91+/-0.10</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD

SENT BY: CEP, INC.

12-7-94 17:17

CEP, INC.

14123277783-13

Order # 94-10-495  
12/07/94 16:06Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 8

Sample Description: 94-4162 9410-2194  
Test Description: Gross Beta  
Collected: 10/20/94Lab No: 05A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta		1.4+/-0.4

All results reported in:

UNITS pCi/gram  
Analyzed 10/29/94  
By PMSample Description: 94-4162 9410-2194  
Test Description: Isotopic Uranium  
Collected: 10/20/94Lab No: 05A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	8.47+/-1.91
Uranium-235	0.05	0.38+/-0.12
Uranium-238	0.05	0.86+/-0.23

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD



Order # 94-10-495  
12/07/94 16:06

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 9

Sample Description: 94-4162 9410-2195  
Test Description: Gross Beta  
Collected: 10/20/94

Lab No: 06A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>6.8+/-0.6</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/29/94  
By PM

Sample Description: 94-4162 9410-2195  
Test Description: Isotopic Uranium  
Collected: 10/20/94

Lab No: 06A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>6.95+/-2.31</u>
Uranium-235	<u>0.05</u>	<u>0.34+/-0.17</u>
Uranium-238	<u>0.05</u>	<u>1.36+/-0.50</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD



Order # 94-10-495  
12/07/94 16:06

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 10

Sample Description: 94-4162 9410-2196  
Test Description: Gross Beta  
Collected: 10/20/94

Lab No: 07A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	1.0+/-0.4

All results reported in

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 10/29/94  
By PM

Sample Description: 94-4162 9410-2196  
Test Description: Isotopic Uranium  
Collected: 10/20/94

Lab No: 07A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	0.22+/-0.05
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.10+/-0.03

All results report in

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 10/28/94  
By HD

Order # 94-10-495  
12/07/94 16:06Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 11

Sample Description: 94-4162 9410-2197  
Test Description: Gross Beta  
Collected: 10/20/94Lab No: 08A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>0.8+/-0.3</u>

All results reported in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 10/29/94  
By PMSample Description: 94-4162 9410-2197  
Test Description: Isotopic Uranium  
Collected: 10/20/94Lab No: 08A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.46+/-0.04</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.23+/-0.03</u>

All results report in

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 11/16/94  
By MM



# Antech Ltd. Chain of Custody Record

For Laboratory Use Only

Laboratory Project No.:

94-4162

Project Name: WESTINGHOUSE - BLAKESVILLE

Project No.: 93-132

Sampler: BRYAN R. MAURER  
(Printed Name)

Byrl Man  
(Signature)

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date: 10/20/94

Time: 16:05

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Antech Proposal No.:

Ship To:  
Antech Ltd.  
One Triangle Drive  
Export, PA 15632  
(412) 733-1161  
FAX (412) 327-7793

Method of Shipment:

Shipment ID:

Circle Bottle Size

Other (Please Specify)

Please Check when VOA Vials are Collected:

☐ Free of Bubbles

☐ Bubbles Present

(Specify in Special Instructions/Comments)

Sample ID Number	Sample Description			Grab	Compo	Chemistry	Nutrient	Total Metals	Dissolved (250 ml)	Cyanide (	Phenolics	TOC (125	TOX (250	Sulfide (50	Radiologic	Oil & Gre	TPHC (100	VOA (40 m	Organics (	Bacteriolog	Widemouth (250 ml, 50	VOA Septa	PARAMETER	PARAMETER																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
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Special Instructions/Comments:

LIST A - VOCs, Metals, TPH, Fluoride, Nitrate, Ammonia, TOC, PH, Gross Beta, total uranium, uranium isotopes, total radium  
LIST B - VOCs, SVOCs, Metals, CN, Pest/Herb/PCBs, Gross Beta, total uranium, uranium isotopes, total radium

Sample Return/Disposal:

☐ Return to Client

☒ Disposal by Antech

Results To:

☐ Client Name: BILL BAUGHMAN

Company: CUMMINGS/ITER CONSULTANTS

Address:

Invoice To:

☐ Client Name:

Company:

Address:

For Laboratory Use Only

Sample Condition Upon Receipt



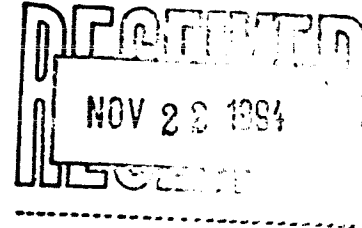




## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 17, 1994



Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

Soil/Water Characterization: Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4185

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on October 21, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

Randal T. Hill  
Organic Chemistry Manager

RTH:sja

Enclosures

ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4185

CLIENT: 93-132

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-2308 through 9410-2321

CLIENT: B-19, S-1; B-19, S-3; B-19, S-1 Duplicate; B-20, S-2;  
B-21, S-2; B-22, S-1; B-22, S-2; B-23, S-1; B-24, S-2;  
B-25, S-1; B-25, S-3; B-26, S-1; B-27, S-1; and Trip  
Blank

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

Radiological work is in progress and will be reported as soon as it  
is received from the subcontracting laboratory.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. SEMIVOLATILES:

None

3. PESTICIDES/HERBICIDES/PCB'S/8015:

None

4. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not  
be interpreted as precision of the analytical procedure, but rather  
as a result of reporting format.

Tai  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4185  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-4; Blairsville, PA

Page 1 of 3

Parameter	Analytical Method	Units	Sample Identification				
			9410-2308	9410-2309	9410-2310	9410-2311	9410-2312
			B-19, S-1 (10/21/94)	B-19, S-3 (10/21/94)	B-19, S-1 Duplicate (10/21/94)	B-20, S-2 (10/21/94)	B-21, S-2 (10/21/94)
Fluoride	340.2(1)	mg/kg	120	69	140	140	70
pH	9045(2)	pH units	5.08	8.13	5.12	5.19	7.56
ASTM:							
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	0.71	<0.10	0.80	0.12	0.14
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	0.14	0.10	0.14	0.12	0.12
Total Organic Carbon (ASTM)	9060(2)	mg/l	7.4	2.7	7.2	2.3	2.6
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10	<10	<10	<10
Metals:							
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	7900	3300	7200	5400	5400
Arsenic (Total)	7060(2)	mg/kg	3.2	3.3	4.5	7.7	4.9
Barium (Total)	6010(2)	mg/kg	80	55	71	29	24
Beryllium (Total)	6010(2)	mg/kg	1.5	0.57	0.85	0.63	<0.40
Calcium (Total)	6010(2)	mg/kg	21000	540	7000	770	660
Cadmium (Total)	6010(2)	mg/kg	2.8	<2.0	2.9	4.6	3.0
Cobalt (Total)	6010(2)	mg/kg	17	8.2	29	7.8	7.5
Chromium (Total)	6010(2)	mg/kg	15	8.5	31	9.6	9.5
Copper (Total)	6010(2)	mg/kg	15	11	20	16	11
Iron (Total)	6010(2)	mg/kg	15000	5900	15000	32000	19000
Mercury (Total)	7471(2)	mg/kg	<0.10	<0.10	<0.10	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	540	290	370	230	190
Magnesium (Total)	6010(2)	mg/kg	2600	740	1700	620	660
Manganese (Total)	6010(2)	mg/kg	1500	88	670	300	290
Sodium (Total)	6010(2)	mg/kg	<200	<200	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	40	11	76	11	11
Lead (Total)	6010(2)	mg/kg	<20	<20	<20	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	0.25	<0.20	0.29	<0.20	0.21
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	16	18	20	17	17
Zinc (Total)	6010(2)	mg/kg	34	29	41	40	34

See footnotes at end of table.

Parameter	Analytical Method	Units	Sample Identification			
			9410-2313	9410-2314	9410-2315	9410-2317
			B-22, S-1 (10/21/94)	B-22, S-2 (10/21/94)	B-23, S-1 (10/21/94)	B-25, S-1 (10/21/94)
Fluoride	340.2(1)	mg/kg	160	55	170	100
pH	9045(2)	pH units	5.36	6.45	7.64	5.28
ASTM:						
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10	0.41	<0.10	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	0.14	0.14	0.15	0.16
Total Organic Carbon (ASTM)	9060(2)	mg/l	4.3	2.2	3.4	2.3
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10	<10	<10
Metals:						
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	6800	6800	4200	5800
Arsenic (Total)	7060(2)	mg/kg	4.4	4.3	2.6	5.6
Barium (Total)	6010(2)	mg/kg	62	24	22	100
Beryllium (Total)	6010(2)	mg/kg	0.51	<0.40	0.49	0.43
Calcium (Total)	6010(2)	mg/kg	1400	670	770	450
Cadmium (Total)	6010(2)	mg/kg	2.8	2.7	3.3	3.5
Cobalt (Total)	6010(2)	mg/kg	32	8.2	8.3	13
Chromium (Total)	6010(2)	mg/kg	26	11	9.3	9.9
Copper (Total)	6010(2)	mg/kg	12	12	11	9.9
Iron (Total)	6010(2)	mg/kg	16000	18000	18000	20000
Mercury (Total)	7471(2)	mg/kg	<0.10	<0.10	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	310	260	230	280
Magnesium (Total)	6010(2)	mg/kg	870	920	310	510
Manganese (Total)	6010(2)	mg/kg	520	250	140	1500
Sodium (Total)	6010(2)	mg/kg	<200	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	77	12	15	16
Lead (Total)	6010(2)	mg/kg	21	<20	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	0.31	<0.20	<0.20	0.25
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	18	19	16	19
Zinc (Total)	6010(2)	mg/kg	40	33	29	31

See footnotes at end of table.

Parameter	Analytical Method	Units	Sample Identification			
			9410-2318 B-25, S-3 (10/21/94)	9410-2319 B-26, S-1 (10/21/94)	9410-2320 B-27, S-1 (10/21/94)	9410-2322 Method Blank (10/21/94)
Fluoride	340.2(1)	mg/kg	160	110	120	<1.0
pH	9045(2)	pH units	5.29	7.43	7.70	NAP(3)
ASTM:						
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	0.17	0.76	0.40	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	0.10	0.72	0.12	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	2.3	5.0	4.3	<1.0
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10	<10	<10
Metals:						
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	2900	4300	4300	<20
Arsenic (Total)	7060(2)	mg/kg	3.6	4.6	3.4	<0.20
Barium (Total)	6010(2)	mg/kg	44	64	57	<4.0
Beryllium (Total)	6010(2)	mg/kg	0.43	0.71	2.2	<0.40
Calcium (Total)	6010(2)	mg/kg	330	5500	64000	<200
Cadmium (Total)	6010(2)	mg/kg	4.3	4.5	2.9	<2.0
Cobalt (Total)	6010(2)	mg/kg	7.3	35	13	<2.0
Chromium (Total)	6010(2)	mg/kg	12	39	12	<2.0
Copper (Total)	6010(2)	mg/kg	9.4	27	29	<2.0
Iron (Total)	6010(2)	mg/kg	27000	25000	17000	<10
Mercury (Total)	7471(2)	mg/kg	<0.10	<0.10	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	170	270	470	<100
Magnesium (Total)	6010(2)	mg/kg	240	620	860	<100
Manganese (Total)	6010(2)	mg/kg	590	550	360	<2.0
Sodium (Total)	6010(2)	mg/kg	<200	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	11	63	15	<10
Lead (Total)	6010(2)	mg/kg	<20	540	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	<0.20	<0.20	0.26	<0.20
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	16	17	15	<10
Zinc (Total)	6010(2)	mg/kg	37	74	47	<2.0

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NAP = Not applicable.

Table 2  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4185  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-4; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification	
			9410-2316 B-24, S-2 10/21/94	9410-2322 Method Blank 10/21/94
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0	<1.0
ASTM:				
Cyanide (ASTM)	9012(1)	mg/l	0.0060	<0.0050
Metals:				
Silver (Total)	6010(1)	mg/kg	<2.0	<2.0
Aluminum (Total)	6010(1)	mg/kg	2100	<20
Arsenic (Total)	7060(1)	mg/kg	1.6	<0.20
Barium (Total)	6010(1)	mg/kg	100	<4.0
Beryllium (Total)	6010(1)	mg/kg	<0.40	<0.40
Calcium (Total)	6010(1)	mg/kg	2100	<200
Cadmium (Total)	6010(1)	mg/kg	<2.0	<2.0
Cobalt (Total)	6010(1)	mg/kg	11	<2.0
Chromium (Total)	6010(1)	mg/kg	5.3	<2.0
Copper (Total)	6010(1)	mg/kg	6.5	<2.0
Iron (Total)	6010(1)	mg/kg	13000	<10
Mercury (Total)	7471(1)	mg/kg	<0.10	<0.10
Potassium (Total)	6010(1)	mg/kg	150	<100
Magnesium (Total)	6010(1)	mg/kg	200	<100
Manganese (Total)	6010(1)	mg/kg	670	<2.0
Sodium (Total)	6010(1)	mg/kg	<200	<200
Nickel (Total)	6010(1)	mg/kg	<10	<10
Lead (Total)	6010(1)	mg/kg	<20	<20
Antimony (Total)	6010(1)	mg/kg	<20	<20
Selenium (Total)	7740(1)	mg/kg	<0.20	<0.20
Thallium (Total)	7841(1)	mg/kg	<0.80	<0.80
Vanadium (Total)	6010(1)	mg/kg	10	<10
Zinc (Total)	6010(1)	mg/kg	24	<2.0

1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Table 3  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4185  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-4; Blairsville, PA

Page 1 of 5

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2308 B-19, S-1 (10/21/94)	9410-2309 B-19, S-3 (10/21/94)	9410-2310 B-19, S-1 Duplicate (10/21/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 3  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2311 B-20, S-2 (10/21/94)	9410-2312 B-21, S-2 (10/21/94)	9410-2313 B-22, S-1 (10/21/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,1,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

See footnotes at end of table.



Table 3  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2314 B-22, S-2 (10/21/94)	9410-2315 B-23, S-1 (10/21/94)	9410-2316 B-24, S-2 (10/21/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	15
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 3  
(Continued)

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2317 B-25, S-1 (10/21/94)	9410-2318 B-25, S-3 (10/21/94)	9410-2319 B-26, S-1 (10/21/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 3  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2320 B-27, S-1 (10/21/94)	9410-2322 Method Blank (10/21/94)
Acetone	67-64-1	µg/kg	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 4  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4185  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-4; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2321 Trip Blank (10/21/94)	9410-2323 Method Blank (10/21/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS - Chemical Abstracts Services.

Table 5  
Semivolatile Organic Analyses  
Target Compound List/EPA Method 8270(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4185  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-4; Blairsville, PA

Parameter	Units	Sample Identification	
		9410-2316	9410-2322
		B-24, S-2 (10/21/94)	Method Blank (10/21/94)
Acenaphthene	µg/kg	<320	<330
Acenaphthylene	µg/kg	<320	<330
Anthracene	µg/kg	<320	<330
Bis(2-chloro-1-methylethyl)ether	µg/kg	<320	<330
Bis(2-chloroethyl)ether	µg/kg	<320	<330
Bis(2-chloroethoxy)methane	µg/kg	<320	<330
Bis(2-ethylhexyl)phthalate	µg/kg	<320	<330
Benzo(a)pyrene	µg/kg	<320	<330
Benzo(a)anthracene	µg/kg	<320	<330
Benzo(b)fluoranthene	µg/kg	<320	<330
Benzo(ghi)perylene	µg/kg	<320	<330
Benzo(k)fluoranthene	µg/kg	<320	<330
4-Bromophenyl phenyl ether	µg/kg	<320	<330
Butyl benzyl phthalate	µg/kg	<320	<330
Carbazole	µg/kg	<320	<330
Chrysene	µg/kg	<320	<330
2-Chloronaphthalene	µg/kg	<320	<330
2-Chlorophenol	µg/kg	<320	<330
4-Chlorophenyl phenyl ether	µg/kg	<320	<330
o-Cresol	µg/kg	<320	<330
p-Cresol	µg/kg	<320	<330
Dibenz(a,h)anthracene	µg/kg	<320	<330
Dibenzofuran	µg/kg	<320	<330
2,4-Dichlorophenol	µg/kg	<320	<330
1,2-Dichlorobenzene	µg/kg	<320	<330
1,3-Dichlorobenzene	µg/kg	<320	<330
1,4-Dichlorobenzene	µg/kg	<320	<330
2,3-Dichlorobenzidine	µg/kg	<320	<330
Diethyl phthalate	µg/kg	<320	<330
Dimethyl phthalate	µg/kg	<320	<330
2,4-Dimethylphenol	µg/kg	<320	<330
Di-n-butyl phthalate	µg/kg	330	<330
4,6-Dinitro-o-cresol	µg/kg	<820	<850
2,4-Dinitrotoluene	µg/kg	<320	<330
2,6-Dinitrotoluene	µg/kg	<320	<330
Di-n-octyl phthalate	µg/kg	<320	<330
2,4-Dinitrophenol	µg/kg	<820	<850
Fluoranthene	µg/kg	<320	<330
Fluorene	µg/kg	<320	<330
Hexachlorocyclopentadiene	µg/kg	<320	<330
Hexachlorobenzene	µg/kg	<320	<330
Hexachlorobutadiene	µg/kg	<320	<330
Hexachloroethane	µg/kg	<320	<330
Indeno(1,2,3-cd)pyrene	µg/kg	<320	<330
Isophorone	µg/kg	<320	<330
2-Methylnaphthalene	µg/kg	<320	<330
N-nitrosodiphenylamine	µg/kg	<320	<330
N-nitroso-di-n-propylamine	µg/kg	<320	<330
Naphthalene	µg/kg	<320	<330
2-Nitroaniline	µg/kg	<820	<850
3-Nitroaniline	µg/kg	<820	<850
4-Nitroaniline	µg/kg	<820	<850
Nitrobenzene	µg/kg	<320	<330
2-Nitrophenol	µg/kg	<320	<330
4-Nitrophenol	µg/kg	<820	<850
p-Chloroaniline	µg/kg	<320	<330
p-Chloro-m-cresol	µg/kg	<320	<330
Pentachlorophenol	µg/kg	<820	<850
Phenanthrene	µg/kg	<320	<330
Phenol	µg/kg	<320	<330
Pyrene	µg/kg	<320	<330
1,2,4-Trichlorobenzene	µg/kg	<320	<330
2,4,5-Trichlorophenol	µg/kg	<820	<800
2,4,6-Trichlorophenol	µg/kg	<320	<330

Table 6  
Pesticides/Herbicides Organic Analyses  
Target Compound List/EPA Method 8080/8150(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4185  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-4; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2316 B-24, S-2 (10/21/94)	9410-2322 Method Blank (10/21/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050
Aroclor-1016	12674-11-2	mg/kg	<1.0	<1.0
Aroclor-1221	11104-28-2	mg/kg	<1.0	<1.0
Aroclor-1232	11141-16-5	mg/kg	<1.0	<1.0
Aroclor-1242	53469-21-9	mg/kg	<1.0	<1.0
Aroclor-1248	12672-29-6	mg/kg	<1.0	<1.0
Aroclor-1254	11097-69-1	mg/kg	<1.0	<1.0
Aroclor-1260	11096-82-5	mg/kg	<1.0	<1.0
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050
Beta-BHC	319-85-7	mg/kg	<0.050	<0.050
Delta-BHC	319-86-8	mg/kg	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10
2,4-D	94-75-7	mg/kg	<0.20	<0.20
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10
4,4'-DDT	50-29-3	mg/kg	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.



Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87502

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Controls for Environmental  
Pollution, Inc.  
P.O. Box 5351  
Santa Fe, NM 87502

Phone: (505) 982-9841/(800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: R. Hill

Purchase Order: 0622  
Invoice Number:

Order #: 94-10-494  
Date: 12/07/94 16:24  
Work ID: Soil (NR)  
Date Received: 10/28/94  
Date Completed: 12/07/94

Client Code: ANTECH

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	94-4185 9410-2308 B-19 S-1
02	94-4185 9410-2309 B-19 S-3
03	94-4185 9410-2310 B-19 S-1 DOP
04	94-4185 9410-2311 B-20 S-2
05	94-4185 9410-2312 B-21 S-2
06	94-4185 9410-2313 B-22 S-1
07	94-4185 9410-2314 B-22 S-2

Sample Number	Sample Description
08	94-4185 9410-2315 B-23 S-1
09	94-4185 9410-2316 B-24 S-2
10	94-4185 9410-2317 B-25 S-1
11	94-4185 9410-2318 B-25 S-3
12	94-4185 9410-2319 B-26 S-1
13	94-4185 9410-2320 B-27 S-1

SENT BY: CEP, Inc.

12-7-94 17:20

CEP, Inc.

14123277783: #16



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental

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Page 2

Remainder of sample(s) for routine analysis will be disposed of three weeks from final report date. Sample(s) for bacteria analysis only, will be disposed of immediately after analysis. This is not applicable if other arrangements have been made.

  
\_\_\_\_\_  
Certified By

SENT BY: CEP, Inc.

: 12-7-94 : 17:21 :

CEP, Inc. -

14123277783:19



Order # 94-10-494  
12/07/94 16:24Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 3

Sample: 01A 94-4185 9410-2308 *m1* Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	0.5+/-0.3		pCi/gram	10/31/94	LJ
Total Uranium	1.6		ug/gram	10/28/94	HD

Sample: 02A 94-4185 9410-2309 *13* Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	<0.5		pCi/gram	10/31/94	LJ
Total Uranium	<0.1		ug/gram	10/28/94	HD

Sample: 03A 94-4185 9410-2310 *11* Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	0.8+/-0.2		pCi/gram	10/31/94	LJ
Total Uranium	0.6		ug/gram	10/28/94	HD

Sample: 04A 94-4185 9410-2311 *20-2* Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	1.9+/-0.6		pCi/gram	10/31/94	LJ
Total Uranium	0.2		ug/gram	10/28/94	HD

Sample: 05A 94-4185 9410-2312 *20-2* Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	1.2+/-0.6		pCi/gram	11/01/94	LJ
Total Uranium	0.2		ug/gram	10/28/94	HD

Sample: 06A 94-4185 9410-2313 *20-2* Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	0.7+/-0.3		pCi/gram	11/01/94	LJ
Total Uranium	0.9		ug/gram	10/28/94	HD

Order # 94-10-494  
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TEST RESULTS BY SAMPLE

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Sample: 07A 94-4185 9410-2314 <sup>2</sup> Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	<0.5		pCi/gram	11/01/94	LJ
Total Uranium	0.3		ug/gram	10/28/94	HD

Sample: 08A 94-4185 9410-2315 <sup>1</sup> Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	5.0+/-3.3		pCi/gram	11/01/94	LJ
Total Uranium	7.3		ug/gram	10/28/94	HD

Sample: 09A 94-4185 9410-2316 <sup>2</sup> Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	<0.5		pCi/gram	11/01/94	LJ
Total Uranium	1.4		ug/gram	10/28/94	HD

Sample: 10A 94-4185 9410-2317 <sup>1</sup> Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	<0.5		pCi/gram	11/01/94	LJ
Total Uranium	0.2		ug/gram	10/28/94	HD

Sample: 11A 94-4185 9410-2318 <sup>3</sup> Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	1.2+/-0.4		pCi/gram	11/01/94	LJ
Total Uranium	<0.1		ug/gram	10/28/94	HD

Sample: 12A 94-4185 9410-2319 <sup>1</sup> Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	<0.5		pCi/gram	11/01/94	LJ
Total Uranium	1.8		ug/gram	10/28/94	HD

SENT BY: CEP, Inc.

12-7-94 17:22

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1412327793-21

Order # 94-10-494  
12/07/94 16:24Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 5

Sample: 13A 94-4185 9410-2320 Collected: 10/21/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Radium	0.6+/-0.3		pCi/gram	11/01/94	LJ
Total Uranium	<0.1		ug/gram	10/28/94	HD

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:12-7-94 : 17:23 :

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14123277793:22



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4185 9410-2308  
Test Description: Gross Beta  
Collected: 10/21/94

Lab No: 01A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>1.1+/-0.4</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PM

Sample Description: 94-4185 9410-2308  
Test Description: Isotopic Uranium  
Collected: 10/21/94

Lab No: 01A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.24+/-0.04</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.23+/-0.04</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

Order # 94-10-494  
12/07/94 16:24Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4185 9410-2309  
Test Description: Gross Beta  
Collected: 10/21/94Lab No: 02A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>1.0 +/- 0.4</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PMSample Description: 94-4185 9410-2309  
Test Description: Isotopic Uranium  
Collected: 10/21/94Lab No: 02A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>&lt;0.05</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD

SENT BY: CEP, Inc.

12-7-94 : 17:24 :

CEP, Inc.

14123277793:24

Order # 94-10-494  
12/07/94 16:24Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4185 9410-2310  
Test Description: Gross Beta  
Collected: 10/21/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>1.1+/-0.4</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PMSample Description: 94-4185 9410-2310  
Test Description: Isotopic Uranium  
Collected: 10/21/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: ISOU\_5

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.13+/-0.04</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.12+/-0.04</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD

Order # 94-10-494  
12/07/94 16:24Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4185 9410-2311  
Test Description: Gross Beta  
Collected: 10/21/94Lab No: 04A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>22.7+/-0.8</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PMSample Description: 94-4185 9410-2311  
Test Description: Isotopic Uranium  
Collected: 10/21/94Lab No: 04A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.11+/-0.02</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.11+/-0.02</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 10

Sample Description: 94-4185 9410-2312  
Test Description: Gross Beta  
Collected: 10/21/94

Lab No: 05A  
Method:  
Category: SOIL

Test Code: BETA\_S

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>1.4 +/- 0.4</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PM

Sample Description: 94-4185 9410-2312  
Test Description: Isotopic Uranium  
Collected: 10/21/94

Lab No: 05A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.14 +/- 0.06</u>
Uranium-235	<u>0.05</u>	<u>&lt; 0.05</u>
Uranium-238	<u>0.05</u>	<u>0.12 +/- 0.05</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD





Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 11

Sample Description: 94-4185 9410-2313  
Test Description: Gross Beta  
Collected: 10/21/94

Lab No: 06A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>0.8+/-0.3</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PM

Sample Description: 94-4185 9410-2313  
Test Description: Isotopic Uranium  
Collected: 10/21/94

Lab No: 06A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.30+/-0.10</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.18+/-0.07</u>

All results report in

UNITS pCi/gram  
Analyzed 10/28/94  
By HD



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 12

Sample Description: 94-4185 9410-2314  
Test Description: Gross Beta  
Collected: 10/21/94

Lab No: 07A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>&lt;0.5</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PM

Sample Description: 94-4185 9410-2314  
Test Description: Isotopic Uranium  
Collected: 10/21/94

Lab No: 07A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.09+/-0.02</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.11+/-0.02</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 13

Sample Description: 94-4185 9410-2315

Lab No: OBA

Test Description: Gross Beta

Method:

Test Code: BETA\_5

Collected: 10/21/94

Category: SOIL

Type of Analysis:

Detection Limit  
pCi/gram

RESULT

Gross Beta

1.3+/-0.4

All results reported in:

UNITS pCi/gram

Analyzed 10/28/94

By PM

Sample Description: 94-4185 9410-2315

Lab No: OBA

Test Description: Isotopic Uranium

Method:

Test Code: ISOU\_S

Collected: 10/21/94

Category: SOIL

Type of Analysis:

Detection  
Limit

RESULT

Uranium-234

0.05

2.22+/-0.97

Uranium-235

0.05

0.10+/-0.08

Uranium-238

0.05

0.08+/-0.08

All results report in:

UNITS pCi/gram

Analyzed 10/28/94

By HD



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample Description: 94-4185 9410-2316  
Test Description: Gross Beta  
Collected: 10/21/94

Lab No: 09A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>2.1+/-0.4</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PM

Sample Description: 94-4185 9410-2316  
Test Description: Isotopic Uranium  
Collected: 10/21/94

Lab No: 09A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>1.61+/-0.28</u>
Uranium-235	<u>0.05</u>	<u>0.05+/-0.03</u>
Uranium-238	<u>0.05</u>	<u>0.09+/-0.03</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 15

Sample Description: 94-4185 9410-2317  
Test Description: Gross Beta  
Collected: 10/21/94

Lab No: 10A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>&lt;0.5</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PM

Sample Description: 94-4185 9410-2317  
Test Description: Isotopic Uranium  
Collected: 10/21/94

Lab No: 10A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.07+/-0.02</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.06+/-0.02</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD

Order # 94-10-494  
12/07/94 16:24Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 16

Sample Description: 94-4185 9410-2318  
Test Description: Gross Beta  
Collected: 10/21/94Lab No: 11A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	_____ <0.5

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PMSample Description: 94-4185 9410-2318  
Test Description: Isotopic Uranium  
Collected: 10/21/94Lab No: 11A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.14+/-0.03</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.14+/-0.03</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 17

Sample Description: 94-4185 9410-2319  
Test Description: Gross Beta  
Collected: 10/21/94

Lab No: 12A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>0.6+/-0.5</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PM

Sample Description: 94-4185 9410-2319  
Test Description: Isotopic Uranium  
Collected: 10/21/94

Lab No: 12A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.80+/-0.20</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.13+/-0.05</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD



Order # 94-10-494  
12/07/94 16:24

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 18

Sample Description: 94-41B5 9410-2320  
Test Description: Gross Beta  
Collected: 10/21/94

Lab No: 13A  
Method:  
Category: SOIL

Test Code: BETA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Gross Beta	_____	<u>&lt;0.5</u>

All results reported in:

UNITS pCi/gram  
Analyzed 10/28/94  
By PM

Sample Description: 94-41B5 9410-2320  
Test Description: Isotopic Uranium  
Collected: 10/21/94

Lab No: 13A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.06+/-0.03</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>&lt;0.05</u>

All results report in:

UNITS pCi/gram  
Analyzed 10/28/94  
By HD





# Antech Ltd. Chain of Custody Record

For Laboratory Use Only

Laboratory Project No.: 94-4185

Project Name: Blairsville

Project No.: 93-132

Sampler: Bryan R. Maurer  
(Printed Name)

B. J. Maurer  
(Signature)

Relinquished By: (Signature and Printed Name)

Bryan R. Maurer Bryan Maurer

Received By: (Signature and Printed Name)

Nelini Crumeli

Date: 10/21/94

Time: 4:45

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Antech Proposal No.: \_\_\_\_\_

Ship To:  
Antech Ltd.  
One Triangle Drive  
Export, PA 15632  
(412) 733-1161  
FAX (412) 327-7793

Method of Shipment: \_\_\_\_\_

Shipment ID: \_\_\_\_\_

Sample ID Number	Sample Description			Grab	Comp	Chemist	Nutrient	Total M	Dissolv (250 ml)	Cyanide	Phenol	TOC (1	TOX (2	Sulfide	Radiololo	Oil & G	TPHC	VOA (4	Organic	Bacteri	Widem	VOA S	Para	Para																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											</
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Please Check when VOA Vials are Collected:

☐ Free of Bubbles

☐ Bubbles Present

(Specify in Special Instructions/Comments)

Special Instructions/Comments: Parameter List A: VOCs, TAL Metals, TPH, Fluoride, Nitrate, Ammonia, Total organic carbon, Gross beta, Total Uranium, Uranium isotopes, total radium, pH

Parameter List B: VOCs, SVOCs, TAL Metals + cyanide, Pesticides, Herbicides, PCBs, Gross beta, Total uranium, Uranium isotopes, total radium

Sample Return/Disposal:

☐ Return to Client

☒ Disposal by Antech

Results To:

☐ Client Name: William A. Baughman

Company: Cummings / Riter Consultants

Address: 3180 William Pitt Way

Invoice To:

☐ Client Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

For Laboratory Use Only

Sample Condition Upon Receipt: \_\_\_\_\_



Laboratory Project No.:

94-4185

Sampler: Bryan R. Maurer  
(Printed Name)

(Signature)

Date: 10/21/94

Time: 4:45

Date \_\_\_\_\_

Time

Date \_\_\_\_\_

Time

[illegible]

Special Instructions/Comments: Parameter List A: VOCs, TAL metals, TPH, Fluoride, Nitrate, Ammonia, Total organic carbon, Gross beta, Total Uranium, Uranium isotopes, total radium, pH

**Sample Return/Disposal:**

☐ Return to Client

☒ Disposal by Antech

Results To:

☐ Client Name: William A. Baughman  
Company: Cummings / Ritter Consultants  
Address: 3180 William Pitt Way

**For Laboratory Use Only**

**Sample Condition Upon Receipt**

**Invoice To:**

☐ **Client Name:** \_\_\_\_\_

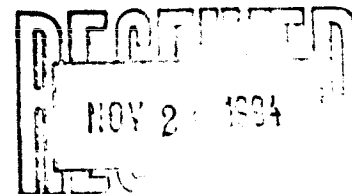
**Company:** \_\_\_\_\_

**Address:** \_\_\_\_\_





## Antech Ltd.



One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 22, 1994

Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

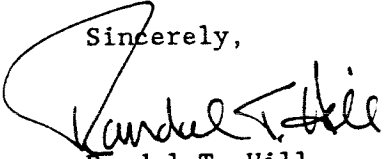
Soil/Water Characterization; Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4246

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on October 24, 1994 and logged in for analysis on October 27, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

  
Randal T. Hill  
Organic Chemistry Manager

RTH:aeb

Enclosures

ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4246  
CLIENT: 93-132

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-2802 through 9410-2814  
CLIENT: B-16, S-1; B-16, S-3; B-17, S-2, B-18, S-1; B-32, S-3;  
B-34, S-1; B-44, S-2; B-44, S-4; SD-2, SD-7, SW-2, SW-  
7, and Trip Blank

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

The radiological work is in progress and will be submitted as soon  
as it is received from the subcontracting laboratory.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. 8015:

None

3. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not  
be interpreted as precision of the analytical procedure, but rather  
as a result of reporting format.

Table 1  
General Data Table  
Cummings/Ritter Consultants, Inc  
Antech Ltd. Project No. 94-4246  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Page 1 of 4

Parameter	Analytical Method	Units	Sample Identification		
			9410-2802 B-16, S-1 (10/24/94)	9410-2803 B-16, S-3 (10/24/94)	9410-2804 B-17, S-2 (10/24/94)
Fluoride	340.2(1)	mg/kg	120	130	200
pH	9045(2)	pH units	6.10	5.20	6.07
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10	<10
ASTM:					
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	0.84	0.68	1.4
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	<0.10	<0.10	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	4.9	3.0	4.1
Metals:					
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	6600	9000	6400
Arsenic (Total)	7060(2)	mg/kg	5.5	6.3	5.7
Barium (Total)	6010(2)	mg/kg	53	76	70
Beryllium (Total)	6010(2)	mg/kg	0.72	0.47	0.93
Calcium (Total)	6010(2)	mg/kg	1900	710	3500
Cadmium (Total)	6010(2)	mg/kg	3.5	2.7	3.2
Cobalt (Total)	6010(2)	mg/kg	13	9.1	12
Chromium (Total)	6010(2)	mg/kg	12	13	10
Copper (Total)	6010(2)	mg/kg	9.0	13	8.6
Iron (Total)	6010(2)	mg/kg	19000	14000	15000
Mercury (Total)	7471(2)	mg/kg	<0.10	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	250	300	280
Magnesium (Total)	6010(2)	mg/kg	820	1100	820
Manganese (Total)	6010(2)	mg/kg	970	290	1200
Sodium (Total)	6010(2)	mg/kg	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	12	<10	16
Lead (Total)	6010(2)	mg/kg	23	<20	24
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	0.40	0.28	0.36
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	25	22	20
Zinc (Total)	6010(2)	mg/kg	31	35	33

See footnotes at end of table.

Table 1  
(Continued)

Page 2 of 4

Parameter	Analytical Method	Units	Sample Identification		
			9410-2805 B-18, S-1 (10/24/94)	9410-2806 B-32, S-3 (10/24/94)	9410-2807 B-34, S-1 (10/24/94)
Fluoride	340.2(1)	mg/kg	180	55	140
pH	9045(2)	pH units	7.51	4.92	8.24
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10	<10
ASTM:					
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	0.99	<0.10	0.70
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	<0.10	<0.10	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	6.7	3.6	4.3
Metals:					
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	6900	1500	3500
Arsenic (Total)	7060(2)	mg/kg	5.0	0.85	2.6
Barium (Total)	6010(2)	mg/kg	61	7.2	42
Beryllium (Total)	6010(2)	mg/kg	0.64	<0.40	0.67
Calcium (Total)	6010(2)	mg/kg	4300	280	1100
Cadmium (Total)	6010(2)	mg/kg	2.6	<2.0	3.2
Cobalt (Total)	6010(2)	mg/kg	62	<2.0	7.8
Chromium (Total)	6010(2)	mg/kg	45	6.0	8.3
Copper (Total)	6010(2)	mg/kg	12	5.0	8.7
Iron (Total)	6010(2)	mg/kg	15000	2400	21000
Mercury (Total)	7471(2)	mg/kg	0.43	0.14	0.33
Potassium (Total)	6010(2)	mg/kg	420	120	210
Magnesium (Total)	6010(2)	mg/kg	1200	310	350
Manganese (Total)	6010(2)	mg/kg	540	15	360
Sodium (Total)	6010(2)	mg/kg	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	150	<10	<10
Lead (Total)	6010(2)	mg/kg	<20	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	0.57	<0.20	<0.20
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	19	<10	17
Zinc (Total)	6010(2)	mg/kg	34	11	29

See footnotes at end of table.

Table 1  
(Continued)

Page 3 of 4

Parameter	Analytical Method	Units	Sample Identification		
			9410-2808 B-44, S-2 (10/24/94)	9410-2809 B-44, S-4 (10/24/94)	9410-2810 SD-2 (10/24/94)
Fluoride	340.2(1)	mg/kg	190	67	100
pH	9045(2)	pH units	6.07	5.40	7.02
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10	<10
ASTM:					
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	1.1	0.26	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	<0.10	<0.10	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	4.7	3.1	55
Metals:					
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	3.1
Aluminum (Total)	6010(2)	mg/kg	7200	2400	3100
Arsenic (Total)	7060(2)	mg/kg	5.4	2.1	3.2
Barium (Total)	6010(2)	mg/kg	62	21	43
Beryllium (Total)	6010(2)	mg/kg	0.63	<0.40	0.42
Calcium (Total)	6010(2)	mg/kg	2000	320	1600
Cadmium (Total)	6010(2)	mg/kg	3.5	<2.0	<2.0
Cobalt (Total)	6010(2)	mg/kg	8.1	<2.0	110
Chromium (Total)	6010(2)	mg/kg	11	7.1	91
Copper (Total)	6010(2)	mg/kg	11	6.7	21
Iron (Total)	6010(2)	mg/kg	22000	7700	9900
Mercury (Total)	7471(2)	mg/kg	0.20	0.16	0.26
Potassium (Total)	6010(2)	mg/kg	290	180	130
Magnesium (Total)	6010(2)	mg/kg	1100	290	490
Manganese (Total)	6010(2)	mg/kg	1500	28	420
Sodium (Total)	6010(2)	mg/kg	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	14	<10	290
Lead (Total)	6010(2)	mg/kg	<20	<20	28
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	<0.20	0.25	0.69
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	21	<10	10
Zinc (Total)	6010(2)	mg/kg	29	13	66

See footnotes at end of table.



Table 1  
(Continued)

Page 4 of 4

Parameter	Analytical Method	Units	Sample Identification	
			9410-2811 SD-7 (10/24/94)	9410-2815 Method Blank (10/24/94)
Fluoride	340.2(1)	mg/kg	95	<1.0
pH	9045(2)	pH units	6.95	NAP(3)
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10
ASTM:				
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	2.4	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	<0.10	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	8.2	<1.0
Metals:				
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	5000	<20
Arsenic (Total)	7060(2)	mg/kg	3.1	<0.20
Barium (Total)	6010(2)	mg/kg	20	<4.0
Beryllium (Total)	6010(2)	mg/kg	1.1	<0.40
Calcium (Total)	6010(2)	mg/kg	710	<200
Cadmium (Total)	6010(2)	mg/kg	3.9	<2.0
Cobalt (Total)	6010(2)	mg/kg	12	<2.0
Chromium (Total)	6010(2)	mg/kg	6.4	<2.0
Copper (Total)	6010(2)	mg/kg	16	<2.0
Iron (Total)	6010(2)	mg/kg	20000	<10
Mercury (Total)	7471(2)	mg/kg	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	150	<100
Magnesium (Total)	6010(2)	mg/kg	340	<100
Manganese (Total)	6010(2)	mg/kg	150	<2.0
Sodium (Total)	6010(2)	mg/kg	<200	<200
Nickel (Total)	6010(2)	mg/kg	20	<10
Lead (Total)	6010(2)	mg/kg	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20
Selenium (Total)	7740(2)	mg/kg	0.54	<0.20
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	<10	<10
Zinc (Total)	6010(2)	mg/kg	120	<2.0

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NAP = Not applicable.

Table 2  
General Data Table  
Cummings/Riter Consultants, Inc  
Antech Ltd Project No. 84-4246  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification		
			9410-2812 SW-2 (10/24/94)	9410-2813 SW-7 (10/24/94)	9410-2816 Method Blank (10/24/94)
Fluoride	340.2(1)	mg/l	1.0	0.48	<0.010
Ammonia	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10	2.1	<0.10
Nitrate	353.2(1)	mg/l NO <sub>3</sub> -N	2.1	0.63	<0.10
pH	9040(2)	pH units	6.87	6.44	NAP(3)
Total Organic Carbon	415.1(1)	mg/l	6.4	5.1	<1.0
Total Petroleum Hydrocarbons	8015(2)	mg/l	<1.0	<1.0	<1.0
Metals:					
Silver (Total)	6010(2)	mg/l	<0.010	<0.010	<0.010
Aluminum (Total)	6010(2)	mg/l	1.5	0.26	<0.10
Arsenic (Total)	7060(2)	mg/l	0.0020	0.0010	<0.0010
Barium (Total)	6010(2)	mg/l	0.072	0.074	<0.020
Beryllium (Total)	6010(2)	mg/l	<0.0020	<0.0020	<0.0020
Calcium (Total)	6010(2)	mg/l	27	25	<1.0
Cadmium (Total)	6010(2)	mg/l	<0.010	<0.010	<0.010
Cobalt (Total)	6010(2)	mg/l	0.027	0.044	<0.010
Chromium (Total)	6010(2)	mg/l	0.024	<0.010	<0.010
Copper (Total)	6010(2)	mg/l	0.010	<0.010	<0.010
Iron (Total)	6010(2)	mg/l	1.4	54	<0.030
Mercury (Total)	7470(2)	mg/l	<0.00020	<0.00020	<0.00020
Potassium (Total)	6010(2)	mg/l	1.6	2.7	<0.50
Magnesium (Total)	6010(2)	mg/l	4.4	9.0	<0.50
Manganese (Total)	6010(2)	mg/l	0.45	1.6	<0.010
Sodium (Total)	6010(2)	mg/l	16	17	<1.0
Nickel (Total)	6010(2)	mg/l	0.059	0.10	<0.040
Lead (Total)	6010(2)	mg/l	<0.10	<0.10	<0.10
Antimony (Total)	6010(2)	mg/l	<0.10	<0.10	<0.10
Selenium (Total)	7740(2)	mg/l	<0.0010	<0.0010	<0.0010
Thallium (Total)	7841(2)	mg/l	<0.0040	<0.0040	<0.0040
Vanadium (Total)	6010(2)	mg/l	<0.050	<0.050	<0.050
Zinc (Total)	6010(2)	mg/l	0.072	0.048	<0.0050

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NAP = Not applicable.

Table 3  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4246  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

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Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2802 B-16, S-1 (10/24/94)	9410-2803 B-16, S-3 (10/24/94)	9410-2804 B-17, S-2 (10/24/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	15
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

a footnotes at end of table.

Table 3  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2805 B-18, S-1 (10/24/94)	9410-2806 B-32, S-3 (10/24/94)	9410-2807 B-34, S-1 (10/24/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	7.6	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 3  
(Continued)

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Parameter	CAS (2) Number	Units	Sample Identification		
			9410-2808 B-44, S-2 (10/24/94)	9410-2809 B-44, S-4 (10/24/94)	9410-2810 SD-2 (10/24/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	10	13
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	26	35
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 3  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2811 SD-7 (10/24/94)	9410-2815 Method Blank (10/24/94)
Acetone	67-64-1	µg/kg	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0
trans-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0
trans-1,2-Dichloroethane	156-60-5	µg/kg	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 4  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4246  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2812	9410-2813
			SW-2 (10/24/94)	SW-7 (10/24/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	50	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

See footnotes at end of table.

Table 4  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2814 Trip Blank (10/24/94)	9410-2816 Method Blank (10/24/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.





Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87502

STATE 505 982-9841  
OUT OF STATE 800/545-2188 • FAX 505-91 9289

Controls for Environmental  
Pollution, Inc.

P.O. Box 5351

Santa Fe, NM 87502

Phone (505) 982-9841 / (800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: Randal T. Hill

Purchase Order: 0630

Invoice Number:

Order #: 94-11-060

Date: 12/12/94 15.39

Work ID: Soil (NR)

Date Received: 11/02/94

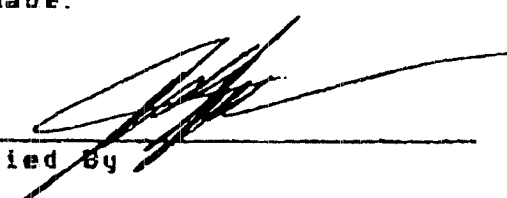
Date Completed: 12/12/94

Client Code: ANTECH

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	94-4246 9410-2802 64, 91	06	94-4246 9410-2807 64, 91
02	94-4246 9410-2803 616, 59	07	94-4246 9410-2808 64, 92
03	94-4246 9410-2804 612, 92	08	94-4246 9410-2809 64, 94
04	94-4246 9410-2805 614, 51	09	94-4246 9410-2810 50-2
05	94-4246 9410-2806 632, 93	10	94-4246 9410-2811 50-2

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only, will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

Certified By 

DEC 13 '94 08:54

P.2/15

**Controls for Environmental Pollution, Inc.**

P.O. BOX 5351 • Santa Fe New Mexico 87502

TEL: 505 932 9341  
OUT OF STATE 800/545-2188 • FAX: 505-967 9289Order # 94-11-060  
12/12/94 15:35**Controls for Environmental  
TEST RESULTS BY SAMPLE**

Page 2

Sample: 01A 94-4246 9410-2802 Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.6+/-0.3		pCi/gram	11/11/94	PM
Total Radium	2.1+/-0.9		pCi/gram	11/04/94	LJ
Total Uranium	0.5		ug/gram	11/16/94	MM

Sample: 02A 94-4246 9410-2803 Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.5+/-0.3		pCi/gram	11/11/94	PM
Total Radium	3.6+/-1.7		pCi/gram	11/04/94	LJ
Total Uranium	1.1		ug/gram	11/16/94	MM

Sample: 03A 94-4246 9410-2804 Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.9+/-0.3		pCi/gram	11/11/94	PM
Total Radium	0.5		pCi/gram	11/04/94	LJ
Total Uranium	1.5		ug/gram	11/16/94	MM

Sample: 04A 94-4246 9410-2805 Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	1.6+/-0.4		pCi/gram	11/11/94	PM
Total Radium	1.1+/-0.3		pCi/gram	11/06/94	LJ
Total Uranium	1.2		ug/gram	11/16/94	MM

Sample: 05A 94-4246 9410-2806 Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.6+/-0.3		pCi/gram	11/11/94	PM
Total Radium	1.2+/-0.5		pCi/gram	11/06/94	LJ
Total Uranium	0.6		ug/gram	11/16/94	MM

DEC 13 '94 08:54

P.3/15

Order # 94-11-050  
12/12/94 15:39Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 3

Sample: 06A 94-4246 9410-2807

Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	2.1 +/- 0.3		pCi/gram	11/11/94	PM
Total Radium	0.5		pCi/gram	11/06/94	LJ
Total Uranium	2.2		ug/gram	11/16/94	MM

Sample: 07A 94-4246 9410-2808

Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.9 +/- 0.3		pCi/gram	11/11/94	PM
Total Radium	0.5		pCi/gram	11/06/94	LJ
Total Uranium	2.9		ug/gram	11/16/94	MM

Sample: 08A 94-4246 9410-2809

Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.6 +/- 0.3		pCi/gram	11/11/94	PM
Total Radium	0.9 +/- 0.3		pCi/gram	11/06/94	LJ
Total Uranium	0.3		ug/gram	11/16/94	MM

Sample: 09A 94-4246 9410-2810

Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	1.6 +/- 0.4		pCi/gram	11/11/94	PM
Total Radium	0.9 +/- 0.4		pCi/gram	11/06/94	LJ
Total Uranium	1.3		ug/gram	11/16/94	MM

Sample: 10A 94-4246 9410-2811

Collected: 10/24/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	0.4 +/- 0.1		pCi/gram	11/11/94	PM
Total Radium	0.5		pCi/gram	11/06/94	LJ
Total Uranium	0.1		ug/gram	11/16/94	MM

DEC 13 '94 08:55

P.4/15



# Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87502

STATE 505/982-9811  
OUT OF STATE 800/545-2188 • FAX 505-981-9289

Order # 94-11-060  
12/12/94 15:39

## Controls for Environmental TEST RESULTS BY SAMPLE

Page 4

Sample Description: 94-4246 9410-2802  
Test Description: Gross Alpha  
Collected: 10/24/94

Lab No: OIA  
Method:  
Category: SOIL

Test Code: ALPH\_5

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>1.1+/-0.6</u>

All results reported in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 11/11/94  
By PM

Sample Description: 94-4246 9410-2802  
Test Description: Isotopic Uranium  
Collected: 10/24/94

Lab No: OIA  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.06+/-0.02</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.09+/-0.02</u>

All results report in:

UNITS \_\_\_\_\_ pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 08:56

P.5/15

Order # 94-11-060  
12/12/94 15:39Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 5

Sample Description: 94-4246 9410-2803

Lab No: 02A

Test Description: Gross Alpha

Method:

Test Code: ALPH\_5

Collected: 10/24/94

Category: SOIL

Type of Analysis

Detection  
Limit

RESULT

Gross Alpha

1.2+/-0.6

All results reported in:

UNITS pCi/gram

Analyzed 11/11/94

By PM

Sample Description: 94-4246 9410-2803

Lab No: 02A

Test Description: Isotopic Uranium

Method:

Test Code: ISOU\_S

Collected: 10/24/94

Category: SOIL

Type of Analysis

Detection  
Limit

RESULT

Uranium-234

0.050.14+/-0.03

Uranium-235

0.05<0.05

Uranium-238

0.050.15+/-0.03

All results report in:

UNITS pCi/gram

Analyzed 11/16/94

By MM

DEC 13 '94 08:56

P.6/15

Order # 94-11-060  
12/12/94 15:39Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 6

Sample Description: 94-4246 9410-2804  
Test Description: Gross Alpha  
Collected: 10/24/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: ALPH\_5

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>1.6+/-0.7</u>

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By PMSample Description: 94-4246 9410-2804  
Test Description: Isotopic Uranium  
Collected: 10/24/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.26+/-0.03</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.21+/-0.03</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 08:56

P.7/15

Order # 94-11-060  
12/12/94 15:39Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 7

Sample Description: 94-4246 9410-2805

Lab No: 04A

Test Description: Gross Alpha

Method:

Test Code: ALPH\_5

Collected: 10/24/94

Category: SOIL

Type of Analysis

Detection  
Limit

RESULT

Gross Alpha

1.2+/-0.6

All results reported in:

UNITS pCi/gram

Analyzed 11/11/94

By PM

Sample Description: 94-4246 9410-2805

Lab No: 04A

Test Description: Isotopic Uranium

Method:

Test Code: ISOU\_S

Collected: 10/24/94

Category: SOIL

Type of Analysis

Detection  
Limit

RESULT

Uranium-234

0.050.08+/-0.02

Uranium-235

0.05<0.05

Uranium-238

0.050.09+/-0.02

All results report in:

UNITS pCi/gram

Analyzed 11/16/94

By MM

DEC 13 '94 08:57

P.8/15

Order # 94-11-060  
12/12/94 15.39Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 8

Sample Description: 94-4246 9410-2806  
Test Description: Gross Alpha  
Collected: 10/24/94Lab No: 05A  
Method:  
Category: SOIL

Test Code: ALPH\_5

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>1.7+/-0.6</u>

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By PMSample Description: 94-4246 9410-2806  
Test Description: Isotopic Uranium  
Collected: 10/24/94Lab No: 05A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.15+/-0.03</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.14+/-0.03</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 08:57

P.9/15



Order # 94-11-060  
12/12/94 15:39Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 9

Sample Description: 94-4246 9410-2807  
Test Description: Gross Alpha  
Collected: 10/24/94Lab No: 06A  
Method:  
Category: SOIL

Test Code: ALPH\_5

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>44.3 +/- 2.3</u>

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By PMSample Description: 94-4246 9410-2807  
Test Description: Isotopic Uranium  
Collected: 10/24/94Lab No: 06A  
Method:  
Category: SOIL

Test Code: ISOU\_5

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.76 +/- 0.09</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.18 +/- 0.03</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 08:58

P.10/15



# Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87502

IN STATE 805/982-9841  
OUT OF STATE 800/545-2188 • FAX • 505/982-9289

Order # 94-11-060  
12/12/94 15:39

## Controls for Environmental TEST RESULTS BY SAMPLE

Page 10

Sample Description: 94-4246 9410-2808  
Test Description: Gross Alpha  
Collected: 10/24/94

Lab No: 07A  
Method:  
Category: SOIL

Test Code: ALPH\_5

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>2.1+/-0.7</u>

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By PM

Sample Description: 94-4246 9410-2808  
Test Description: Isotopic Uranium  
Collected: 10/24/94

Lab No: 07A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.08+/-0.02</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.10+/-0.03</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 08:58

P.11/15

Order # 94-11-060  
12/12/94 15:39Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 11

Sample Description: 94-4246 9410-2809

Test Description: Gross Alpha

Collected: 10/24/94

Lab No: OBA

Method:

Category: SOIL

Test Code: ALPH\_5

Type of Analysis

Detection  
Limit

RESULT

Gross Alpha

0.6+/-0.5

All results reported in:

UNITS pCi/gram

Analyzed 11/11/94

By PM

Sample Description: 94-4246 9410-2809

Test Description: Isotopic Uranium

Collected: 10/24/94

Lab No: OBA

Method:

Category: SOIL

Test Code: ISOU\_S

Type of Analysis

Detection  
Limit

RESULT

Uranium-234

0.050.08+/-0.02

Uranium-235

0.05<0.05

Uranium-238

0.050.08+/-0.02

All results report in:

UNITS pCi/gram

Analyzed 11/16/94

By MM

DEC 13 '94 08:58

P.12/15

Order # 94-11-060  
12/12/94 15:39Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 12

Sample Description: 94-4246 9410-2610  
Test Description: Gross Alpha  
Collected: 10/24/94Lab No: 09A  
Method:  
Category: SOIL

Test Code: ALPH\_5

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>3.0+/-0.8</u>

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By PMSample Description: 94-4246 9410-2810  
Test Description: Isotopic Uranium  
Collected: 10/24/94Lab No: 09A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>&lt;0.05</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By NM

DEC 13 '94 08:59

P.13/15



Order # 94-11-060  
12/12/94 15:39

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 13

Sample Description: 94-4246 9410-2811  
Test Description: Gross Alpha  
Collected: 10/24/94

Lab No: 10A  
Method:  
Category: SOIL

Test Code: ALPH\_5

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>0.8+/-0.2</u>

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By PM

Sample Description: 94-4246 9410-2811  
Test Description: Isotopic Uranium  
Collected: 10/24/94

Lab No: 10A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.16+/-0.08</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.13+/-0.07</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 08:59

P.14/15



Controls for Environmental  
Pollution, Inc.  
P.O. Box 5351  
Santa Fe, NM 87502

Phone: (505) 982-9841 / (800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: Randal T. Hill

Purchase Order: 0630  
Invoice Number:

Order #: 94-11-061  
Date: 12/12/94 14:16  
Work ID: Water (NR)  
Date Received: 11/02/94  
Date Completed: 12/12/94

Client Code: ANTECH

\* High detection limit due to high solids.

#### SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>
01	9410-2812 (Sw-2)

<u>Sample Number</u>	<u>Sample Description</u>
02	9410-2813 (Sw-7)

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only, will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

Certified By 

DEC 13 '94 09:09

P.2/12

94-92

Order # 94-11-061  
12/12/94 14:16Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 2

Sample: 01A 9410-2812 (SW-2)

Collected: 10/24/94

Test Description	Result	D. L.	Units	Analyzed	By
Gross Beta	12+/-5	3	pCi/liter	11/04/94	CM
Total Radium	<2	2	pCi/liter	11/11/94	JB
Total Uranium	<0.001	0.001	mg/liter	11/07/94	LH
Uranium-234	3.0+/-1.1	0.6	pCi/liter	11/04/94	HD
Uranium-235	<0.6	0.6	pCi/liter	11/04/94	HD
Uranium-238	1.6+/-0.8	0.6	pCi/liter	11/04/94	HD

Sample: 02A 9410-2813 (SW-7)

Collected: 10/24/94

Test Description	Result	D. L.	Units	Analyzed	By
Gross Beta	<4*	3	pCi/liter	11/04/94	CM
Total Radium	<2	2	pCi/liter	11/11/94	JB
Total Uranium	<0.001	0.001	mg/liter	11/07/94	LH
Uranium-234	<0.6	0.6	pCi/liter	11/23/94	HD
Uranium-235	<0.6	0.6	pCi/liter	11/23/94	HD
Uranium-238	<0.6	0.6	pCi/liter	11/23/94	HD

DEC 13 '94 09:09

P.3/12



# Antech Ltd. Chain of Custody Record

accept 1  
10/26/94  
1 of 2

For Laboratory Use Only

Laboratory Project No.

94-4246

Project Name: WESTINGHOUSE - BLAIRSVILLE

Project No.: 93-132

Sampler: BRYAN MAJER  
(Printed Name)

[Signature]  
(Signature)

Relinquished By: (Signature and Printed Name)

[Signature] BRYAN MAJER

Received By: (Signature and Printed Name)

[Signature] Heidi Helsel

Date: 10/21/94

Time: 1905

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Antech Proposal No.:

Ship To:  
Antech Ltd.  
One Triangle Drive  
Export, PA 15632  
(412) 733-1161  
FAX (412) 327-7793

Method of Shipment:

Shipment ID:

Sample ID Number	Sample Description		Grab	Composite	Circle Bottle Size														Other (Please Specify)		No. of Containers	For Laboratory Use Only Laboratory ID					
	Date	Time			Description	Chemistry (500 ml, 1000 ml)	Nutrients (250 ml, 500 ml)	Total Metals (250 ml, 500 ml)	Dissolved Metals (250 ml, 500 ml)	Cyanide (1000 ml)	Phenolics (1000 ml)	TOC (125 ml)	TOX (250 ml)	Sulfide (500 ml)	Radiochemical (1000 ml)	Oil & Grease (500 ml)	SPIC (1000 ml)	VOA (500 ml)	Organics (1000 ml, 2.5 liter)	Bacteriological (125 ml)			Wet/Dry Ash (250 ml, 500 ml, 1000 ml)	VOA Septa Jar, Soil (125 ml)	PARAM LIST A	PARAM LIST B	
TRIP-6	10/21/94	---	TRIP BLANK																							2	10-2819
SW-7	10/21/94	1600			X		X		X		X	X	X	X	X	X	X									8	2813
SW-2	10/21/94	1715			X		X		X		X	X	X	X	X	X	X									8	2812
SD-7	10/21/94	1615																	X							3	2811
SD-2	10/21/94	1730																	X							3	2807
B-32.5-3	10/21/94	1440																	X							3	2809
B-34.5-1	10/21/94	1350																	X							3	2804
B-44.5-2	10/21/94	1250																	X							3	2806
B-44.5-4	10/21/94	1250																	X							3	2810

Special Instructions/Comments:

PARAM LIST A - VOA Metals, TPH, Fluoride, Nitrate, Ammonia, TOC, Radiochemical, pH

Sample Return/Disposition:

☐ Return to Client  
☒ Disposed by Antech

Results To:

☐ Bill Pughman  
Company: COMMUNICATOR CONSULTANTS

For Laboratory Use Only

Sample Condition Upon Receipt:

Results To:

☐ Client Name  
Company:  
Address:





Laboratory Project No.:

94-4246

Sampler: BRYAN M. MURTER  
(Printed Name)

By R. Man  
(Signature)

Received By: (Signature and Printed Name)

Date: 10/24/94

Time: 1905

Received By: (Signature and Printed Name)

## Discussion

Types

Received By: (Signature and Printed Name)

**Discussion**

**Times**

**Ship To:**  
**Antech Ltd.**  
**One Triangle Drive**  
**Export, PA 15632**  
**(412) 733-1161**  
**FAX (412) 327-7775**

### Method of Silencing

Shipment ID:

**Circle Bottle Size**

Other (Please Specify)

Please Check when VOA Visit are Called

 **Free of Bubbles**

**Bubbles Program**

**(Specify in Special Instructions/Comments)**

[illegible]

**For Laboratory  
Use Only**

Sample ID Number	Date	Time	Description
B-16, S-1	10/24/94	1020	
B-16, S-3	10/24/94	1020	
B-17, S-2	10/24/94	900	
B-18, S-1	10/24/94	740	

Special Instructions/Comments: See Det 182 A

**Sample Return/Disposal:**

## Results To:

**Return to Client**

☐ Client Name

### Disposal by Antech

**Company:**

## Address

**For Laboratory Use Only**

### Sample Conditions Upon Receipt

**Invoice To:**

Client Name

### Contemporary:

**Address:**





## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 25, 1994

PLEASE  
RECEIVE

Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

Soil/Water Characterization; Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4249

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on October 25, 1994 and logged in for analysis on October 27, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

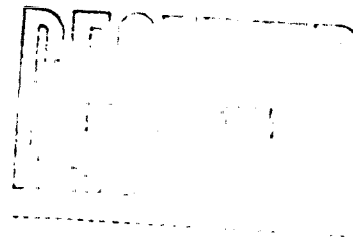
Sincerely,

Randal T. Hill  
Organic Chemistry Manager

RTH:mav

Enclosures

ANTECH LTD.  
CASE NARRATIVE



I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4249  
CLIENT: 93-132

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-2823 through 9410-2839  
CLIENT: B-33, S-3; B-35, S-1; B-43, S-1; B-36, S-1; B-38, S-1;  
B-38, S-1 MS; B-38, S-1 MSD; B-41, S-2; B-41, S-4; B-  
42, S-1; SD-1; SD-3; SW-1; SW-3; SW-3 Duplicate; SW-3  
MS; SW-3 MSD; and Trip Blank

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

The radiological analysis are in progress and will be submitted  
when results are received from the subcontracting lab.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. SEMIVOLATILES:

None

3. PESTICIDES/HERBICIDES/PCB'S:

None

4. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not  
be interpreted as precision of the analytical procedure, but rather  
as a result of reporting format.

T<sub>1</sub> 1  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4249  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Page 1 of 2

Parameter	Analytical Method	Units	Sample Identification			
			9410-2826 B-36, S-1 (10/25/94)	9410-2827 B-38, S-1 (10/25/94)	9410-2829 B-41, S-2 (10/25/94)	9410-2830 B-41, S-4 (10/25/94)
Fluoride	340.2(1)	mg/kg	130	240	87	140
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<10	<10	<10
ASTM:						
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10	0.28	0.35	0.16
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	<0.10	<0.10	<0.10	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	3.3	3.1	3.9	1.8
Metals:						
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	12000	10000	6700	18000
Arsenic (Total)	7060(2)	mg/kg	3.3	4.8	1.8	2.4
Barium (Total)	6010(2)	mg/kg	85	87	120	120
Beryllium (Total)	6010(2)	mg/kg	0.63	0.64	2.0	0.89
Calcium (Total)	6010(2)	mg/kg	960	1300	37000	1100
Cadmium (Total)	6010(2)	mg/kg	3.0	2.4	4.9	5.4
Cobalt (Total)	6010(2)	mg/kg	22	47	31	38
Chromium (Total)	6010(2)	mg/kg	22	46	32	23
Copper (Total)	6010(2)	mg/kg	16	11	16	25
Iron (Total)	6010(2)	mg/kg	18000	14000	30000	29000
Mercury (Total)	7471(2)	mg/kg	<0.10	0.38	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	1400	1000	660	3800
Magnesium (Total)	6010(2)	mg/kg	1300	1100	5400	1900
Manganese (Total)	6010(2)	mg/kg	860	490	640	2100
Sodium (Total)	6010(2)	mg/kg	<200	<200	200	<200
Nickel (Total)	6010(2)	mg/kg	35	120	140	33
Lead (Total)	6010(2)	mg/kg	<20	24	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	<0.20	0.29	<0.20	<0.20
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	27	22	14	36
Zinc (Total)	6010(2)	mg/kg	49	59	26	64

See footnotes at end of table.

Parameter	Analytical Method	Units	Sample Identification			
			9410-2831 B-42, S-1 (10/25/94)	9410-2832 SD-1 (10/25/94)	9410-2833 SD-3 (10/25/94)	9410-2840 Method Blank (10/25/94)
Fluoride	340.2(1)	mg/kg	160	85	87	<1.0
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10	<100	<10	<10
ASTM:						
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10	<0.10	0.33	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	0.16	0.11	<0.10	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	1.9	5.5	4.1	<1.0
Metals:						
Silver (Total)	6010(2)	mg/kg	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010(2)	mg/kg	11000	8000	2400	<20
Arsenic (Total)	7060(2)	mg/kg	3.7	5.6	4.5	<0.20
Barium (Total)	6010(2)	mg/kg	55	83	48	<4.0
Beryllium (Total)	6010(2)	mg/kg	0.68	0.74	0.48	<0.40
Calcium (Total)	6010(2)	mg/kg	610	1200	2300	<200
Cadmium (Total)	6010(2)	mg/kg	2.9	3.3	<2.0	<2.0
Cobalt (Total)	6010(2)	mg/kg	59	56	11	<2.0
Chromium (Total)	6010(2)	mg/kg	18	180	12	<2.0
Copper (Total)	6010(2)	mg/kg	17	17	6.7	<2.0
Iron (Total)	6010(2)	mg/kg	19000	18000	8200	<10
Mercury (Total)	7471(2)	mg/kg	<0.10	<0.10	<0.10	<0.10
Potassium (Total)	6010(2)	mg/kg	1200	1200	160	<100
Magnesium (Total)	6010(2)	mg/kg	1000	980	390	<100
Manganese (Total)	6010(2)	mg/kg	570	670	490	<2.0
Sodium (Total)	6010(2)	mg/kg	<200	<200	<200	<200
Nickel (Total)	6010(2)	mg/kg	57	360	31	<10
Lead (Total)	6010(2)	mg/kg	<20	43	<20	<20
Antimony (Total)	6010(2)	mg/kg	<20	<20	<20	<20
Selenium (Total)	7740(2)	mg/kg	0.23	0.53	<0.20	<0.20
Thallium (Total)	7841(2)	mg/kg	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010(2)	mg/kg	26	18	<10	<10
Zinc (Total)	6010(2)	mg/kg	48	120	43	<2.0

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Ta 2  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4249  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification	
			9410-2828 B-38, S-1 MS (10/25/94)	9410-2828A B-38, S-1 MSD (10/25/94)
Fluoride	340.2(1)	mg/kg	49%	63%
Total Petroleum Hydrocarbons	8015(2)	mg/kg	73%	79%
ASTM:				
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	76%	73%
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	137%	139%
Total Organic Carbon (ASTM)	9060(2)	mg/l	92%	92%
Metals:				
Silver (Total)	6010(2)	mg/kg	78.7%	81.4%
Aluminum (Total)	6010(2)	mg/kg	NC(3)	NC
Arsenic (Total)	7060(2)	mg/kg	117.1%	87.2%
Barium (Total)	6010(2)	mg/kg	84.8%	90.0%
Beryllium (Total)	6010(2)	mg/kg	88.2%	89.0%
Calcium (Total)	6010(2)	mg/kg	NAP(4)	NAP
Cadmium (Total)	6010(2)	mg/kg	98.3%	95.3%
Cobalt (Total)	6010(2)	mg/kg	73.2%	90.8%
Chromium (Total)	6010(2)	mg/kg	35.0%	89.8%
Copper (Total)	6010(2)	mg/kg	83.6%	93.2%
Iron (Total)	6010(2)	mg/kg	NC	NC
Mercury (Total)	7471(2)	mg/kg	98.3%	85.5%
Potassium (Total)	6010(2)	mg/kg	NAP	NAP
Magnesium (Total)	6010(2)	mg/kg	NAP	NAP
Manganese (Total)	6010(2)	mg/kg	NC	NC
Sodium (Total)	6010(2)	mg/kg	NAP	NAP
Nickel (Total)	6010(2)	mg/kg	NC	NC
Lead (Total)	6010(2)	mg/kg	89.5%	92.0%
Antimony (Total)	6010(2)	mg/kg	85.9%	89.6%
Selenium (Total)	7740(2)	mg/kg	109.2%	74.2%
Thallium (Total)	7841(2)	mg/kg	152.9%	144.4%
Vanadium (Total)	6010(2)	mg/kg	89.2%	93.4%
Zinc (Total)	6010(2)	mg/kg	81.2%	90.5%

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NC = Not calculable.

(4) NAP = Not applicable.

Tat 3  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4249  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification			
			9410-2823 B-33, S-3 (10/25/94)	9410-2824 B-35, S-1 (10/25/94)	9410-2825 B-43, S-1 (10/25/94)	9410-2840 Method Blank (10/25/94)
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0	<1.0	<1.0	<1.0
ASTM:						
Cyanide (ASTM)	9012(1)	mg/l	<0.0050	<0.0050	<0.0050	<0.0050
Metals:						
Silver (Total)	6010(1)	mg/kg	<2.0	<2.0	<2.0	<2.0
Aluminum (Total)	6010(1)	mg/kg	3600	11000	10000	<20
Arsenic (Total)	7060(1)	mg/kg	3.8	2.7	4.1	<0.20
Barium (Total)	6010(1)	mg/kg	43	58	59	<4.0
Beryllium (Total)	6010(1)	mg/kg	<0.40	0.72	0.64	<0.40
Calcium (Total)	6010(1)	mg/kg	480	2800	1100	<200
Cadmium (Total)	6010(1)	mg/kg	<2.0	3.3	2.9	<2.0
Cobalt (Total)	6010(1)	mg/kg	6.9	15	9.3	<2.0
Chromium (Total)	6010(1)	mg/kg	9.6	20	14	<2.0
Copper (Total)	6010(1)	mg/kg	4.6	28	10	<2.0
Iron (Total)	6010(1)	mg/kg	8300	18000	18000	<10
Mercury (Total)	7471(1)	mg/kg	<0.10	0.33	<0.10	<0.10
Potassium (Total)	6010(1)	mg/kg	390	1400	1000	<100
Magnesium (Total)	6010(1)	mg/kg	670	1100	970	<100
Manganese (Total)	6010(1)	mg/kg	210	500	470	<2.0
Sodium (Total)	6010(1)	mg/kg	<200	<200	<200	<200
Nickel (Total)	6010(1)	mg/kg	<10	30	15	<10
Lead (Total)	6010(1)	mg/kg	<20	<20	<20	<20
Antimony (Total)	6010(1)	mg/kg	<20	<20	<20	<20
Selenium (Total)	7740(1)	mg/kg	<0.20	0.26	<0.20	<0.20
Thallium (Total)	7841(1)	mg/kg	<0.80	<0.80	<0.80	<0.80
Vanadium (Total)	6010(1)	mg/kg	10	26	24	<10
Zinc (Total)	6010(1)	mg/kg	20	48	38	<2.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.



Table 4  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4249  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-B; Blairsville, PA

Page 1 of 5

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2823 B-33, S-3 (10/25/94)	9410-2824 B-35, S-1 (10/25/94)	9410-2825 B-43, S-1 (10/25/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	5.6	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 4  
(Continued)

Page 2 of 5

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2826 B-36, S-1 (10/25/94)	9410-2827 B-38, S-1 (10/25/94)	9410-2828 B-38, S-1 MS (10/25/94)
Acetone	67-64-1	µg/kg	<100	<100	NAP(3)
Benzene	71-43-2	µg/kg	<5.0	<5.0	143%
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	NAP
Bromoform	75-25-2	µg/kg	<5.0	<5.0	NAP
Bromomethane	74-83-9	µg/kg	<10	<10	NAP
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	NAP
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	NAP
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	NAP
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	129%
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	NAP
Chloroethane	75-00-3	µg/kg	<10	<10	NAP
Chloromethane	74-87-3	µg/kg	<10	<10	NAP
Chloroform	67-66-3	µg/kg	<5.0	<5.0	NAP
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	NAP
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	NAP
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	157%
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0	NAP
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	NAP
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	NAP
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	NAP
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	NAP
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	NAP
2-Hexanone	591-78-6	µg/kg	<50	<50	NAP
Methylene chloride	75-09-2	µg/kg	<5.0	<5.0	NAP
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	NAP
Styrene	100-42-5	µg/kg	<5.0	<5.0	NAP
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	NAP
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	NAP
Toluene	108-88-3	µg/kg	<5.0	<5.0	147%
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	NAP
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	NAP
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0	129%
Vinyl chloride	75-01-4	µg/kg	<10	<10	NAP
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	NAP

See footnotes at end of table.

Table 4  
(Continued)

Parameter	CAS <sup>(2)</sup> Number	Units	Sample Identification		
			9410-2828A B-38, S-1 MSD (10/25/94)	9410-2829 B-41, S-2 (10/25/94)	9410-2830 B-41, S-4 (10/25/94)
Acetone	67-64-1	µg/kg	NAP	<100	<100
Benzene	71-43-2	µg/kg	131%	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	NAP	<5.0	<5.0
Bromoform	75-25-2	µg/kg	NAP	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	NAP	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	NAP	<10	<10
Carbon disulfide	75-15-0	µg/kg	NAP	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	NAP	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	108%	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	NAP	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	NAP	<10	<10
Chloromethane	74-87-3	µg/kg	NAP	<10	<10
Chloroform	67-66-3	µg/kg	NAP	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	NAP	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	NAP	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	144%	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	NAP	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	NAP	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	NAP	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	NAP	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	NAP	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	NAP	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	NAP	<50	<50
Methylene chloride	75-09-2	µg/kg	NAP	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	NAP	<50	<50
Styrene	100-42-5	µg/kg	NAP	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	NAP	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	NAP	<5.0	<5.0
Toluene	108-88-3	µg/kg	131%	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	NAP	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	NAP	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	119%	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	NAP	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	NAP	<5.0	<5.0

See footnotes at end of table.

Table 4  
(Continued)

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2831 B-42, S-1 (10/25/94)	9410-2832 SD-1 (10/25/94)
Acetone	67-64-1	µg/kg	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	26
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50
Methylene chloride	75-09-2	µg/kg	8.9	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	15
Vinyl chloride	75-01-4	µg/kg	<10	81
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0

See footnotes at end of table.

Table 4  
(Continued)

Page 5 of 5

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2833 SD-3 (10/25/94)	9410-2840 Method Blank (10/25/94)
Acetone	67-64-1	µg/kg	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50
Methylene chloride	75-09-2	µg/kg	6.8	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

(3) NAP = Not applicable.

Table 5  
Semivolatile Organic Analyses  
Target Compound List/EPA Method 8270<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd Project No. 94-4249  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Page 1 of 2

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2823 B-33, S-3 (10/25/94)	9410-2824 B-35, S-1 (10/25/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
Dibenzofuran	132-64-9	µg/kg	<330	<330
2,4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
1,3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
1,4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
2,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
2,4-Dimethylphenol	105-67-9	µg/kg	<330	<330
Di-n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<830	<830
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<830	<830
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<830	<830
3-Nitroaniline	99-09-2	µg/kg	<830	<830
4-Nitroaniline	100-01-6	µg/kg	<830	<830
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<830	<830
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<830	<830
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<830	<830
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

see footnotes at end of table.

Table 5  
(Continued)

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2825 B-43, S-1 (10/25/94)	9410-2840 Method Blank (10/25/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
Dibenzofuran	132-64-9	µg/kg	<330	<330
2,4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
1,3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
1,4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
3,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
1,4-Dimethylphenol	105-67-9	µg/kg	<330	<330
Di-n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<820	<830
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<820	<330
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<820	<830
3-Nitroaniline	99-09-2	µg/kg	<820	<830
4-Nitroaniline	100-01-6	µg/kg	<820	<830
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<820	<830
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<820	<830
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<820	<830
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

<sup>(1)</sup>U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

<sup>(2)</sup>CAS = Chemical Abstracts Services.

Table 6  
Pesticide/Herbicide Organic Analyses  
Target Compound List/EPA Method 8080/8150(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4249  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2823 B-33, S-3 (10/25/94)	9410-2824 B-35, S-1 (10/25/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050
Aroclor-1016	12674-11-2	mg/kg	<1.0	<1.0
Aroclor-1221	11104-28-2	mg/kg	<1.0	<1.0
Aroclor-1232	11141-16-5	mg/kg	<1.0	<1.0
Aroclor-1242	53469-21-9	mg/kg	<1.0	<1.0
Aroclor-1248	12672-29-6	mg/kg	<1.0	<1.0
Aroclor-1254	11097-69-1	mg/kg	<1.0	<1.0
Aroclor-1260	11096-82-5	mg/kg	<1.0	<1.0
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050
beta-BHC	319-85-7	mg/kg	<0.050	<0.050
delta-BHC	319-86-8	mg/kg	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10
2,4-D	94-75-7	mg/kg	<0.20	<0.20
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10
4,4'-DDT	50-29-3	mg/kg	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080

See footnotes at end of table.



Table 6  
(Continued)

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Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2825 B-43, S-1 (10/25/94)	9410-2840 Method Blank (10/25/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050
Aroclor-1016	12674-11-2	mg/kg	<1.0	<1.0
Aroclor-1221	11104-28-2	mg/kg	<1.0	<1.0
Aroclor-1232	11141-16-5	mg/kg	<1.0	<1.0
Aroclor-1242	53469-21-9	mg/kg	<1.0	<1.0
Aroclor-1248	12672-29-6	mg/kg	<1.0	<1.0
Aroclor-1254	11097-69-1	mg/kg	<1.0	<1.0
Aroclor-1260	11096-82-5	mg/kg	<1.0	<1.0
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050
beta-BHC	319-85-7	mg/kg	<0.050	<0.050
delta-BHC	319-86-8	mg/kg	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10
2,4-D	94-75-7	mg/kg	<0.20	<0.20
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10
4,4'-DDT	50-29-3	mg/kg	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080

(1)U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2)CAS - Chemical Abstracts Services.

General Data Table  
 Cummings/Riter Consultants, Inc.  
 Antech Ltd. Project No. 94-4249  
 Water Characterization; Westinghouse  
 Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification		
			9410-2834 SW-1 (10/25/94)	9410-2835 SW-3 (10/25/94)	9410-2836 SW-3 Duplicate (10/25/94)
Fluoride	340.2(1)	mg/l	0.35	0.19	0.17
Ammonia	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10	0.29	0.32
Nitrate	353.2(1)	mg/l NO <sub>3</sub> -N	0.30	<0.10	<0.10
pH	9040(2)	pH units	7.51	7.50	7.49
Total Petroleum Hydrocarbons	8015(2)	mg/l	<1.0	<1.0	<1.0
Total Organic Carbon	415.1(1)	mg/l	7.9	6.2	3.5
Metals:					
Silver (Total)	6010(2)	mg/l	<0.010	<0.010	<0.010
Aluminum (Total)	6010(2)	mg/l	1.1	1.8	1.8
Arsenic (Total)	7060(2)	mg/l	0.0030	0.0060	0.0060
Barium (Total)	6010(2)	mg/l	0.12	0.12	0.13
Beryllium (Total)	6010(2)	mg/l	<0.0020	<0.0020	<0.0020
Calcium (Total)	6010(2)	mg/l	42	41	41
Cadmium (Total)	6010(2)	mg/l	<0.010	<0.010	<0.010
Cobalt (Total)	6010(2)	mg/l	0.012	<0.010	0.011
Chromium (Total)	6010(2)	mg/l	0.010	<0.010	0.011
Copper (Total)	6010(2)	mg/l	<0.010	0.016	<0.010
Iron (Total)	6010(2)	mg/l	3.6	9.3	9.7
Mercury (Total)	7470(2)	mg/l	<0.00020	<0.00020	<0.00020
Potassium (Total)	6010(2)	mg/l	4.2	1.5	1.5
Magnesium (Total)	6010(2)	mg/l	45	7.2	7.3
Manganese (Total)	6010(2)	mg/l	0.85	1.6	1.7
Sodium (Total)	6010(2)	mg/l	31	6.7	6.9
Nickel (Total)	6010(2)	mg/l	<0.040	<0.040	<0.040
Lead (Total)	6010(2)	mg/l	<0.10	<0.10	<0.10
Antimony (Total)	6010(2)	mg/l	<0.10	<0.10	<0.10
Selenium (Total)	7740(2)	mg/l	<0.0010	<0.0010	<0.0010
Thallium (Total)	7841(2)	mg/l	<0.0040	<0.0040	<0.0040
Vanadium (Total)	6010(2)	mg/l	<0.050	<0.050	<0.050
Zinc (Total)	6010(2)	mg/l	0.032	0.046	0.046

See footnotes at end of table.

Parameter	Analytical Method	Units	Sample Identification		
			9410-2837	9410-2838	9410-2841
			SW-3 MS (10/25/94)	SW-3 MSD (10/25/94)	Method Blank (10/25/94)
Fluoride	340.2 <sup>(1)</sup>	mg/l	104%	105%	<0.010
Ammonia	350.1 <sup>(1)</sup>	mg/l NH <sub>3</sub> -N	98%	88%	<0.10
Nitrate	353.2 <sup>(1)</sup>	mg/l NO <sub>3</sub> -N	125%	130%	<0.10
pH	9040 <sup>(2)</sup>	pH units	NAP <sup>(3)</sup>	NAP	NAP
Total Petroleum Hydrocarbons	8015 <sup>(2)</sup>	mg/l	116%	143%	<1.0
Total Organic Carbon	415.1 <sup>(1)</sup>	mg/l	62%	68%	<1.0
Metals:					
Silver (Total)	6010 <sup>(2)</sup>	mg/l	93.8%	95.1%	<0.010
Aluminum (Total)	6010 <sup>(2)</sup>	mg/l	91.0%	104.4%	<0.10
Arsenic (Total)	7060 <sup>(2)</sup>	mg/l	81.9%	76.6%	<0.0010
Barium (Total)	6010 <sup>(2)</sup>	mg/l	89.0%	93.4%	<0.020
Beryllium (Total)	6010 <sup>(2)</sup>	mg/l	96.4%	100.8%	<0.0020
Calcium (Total)	6010 <sup>(2)</sup>	mg/l	NAP	NAP	<1.0
Cadmium (Total)	6010 <sup>(2)</sup>	mg/l	106.7%	110.4%	<0.010
Cobalt (Total)	6010 <sup>(2)</sup>	mg/l	90.8%	98.5%	<0.010
Chromium (Total)	6010 <sup>(2)</sup>	mg/l	96.6%	103.1%	<0.010
Copper (Total)	6010 <sup>(2)</sup>	mg/l	100.1%	99.4%	<0.010
Iron (Total)	6010 <sup>(2)</sup>	mg/l	NC <sup>(4)</sup>	NC	<0.030
Mercury (Total)	7470 <sup>(2)</sup>	mg/l	97.8%	96.3%	<0.00020
Potassium (Total)	6010 <sup>(2)</sup>	mg/l	NAP	NAP	<0.50
Magnesium (Total)	6010 <sup>(2)</sup>	mg/l	NAP	NAP	<0.50
Manganese (Total)	6010 <sup>(2)</sup>	mg/l	116.6%	112.2%	<0.010
Sodium (Total)	6010 <sup>(2)</sup>	mg/l	NAP	NAP	<1.0
Nickel (Total)	6010 <sup>(2)</sup>	mg/l	98.0%	101.9%	<0.040
Lead (Total)	6010 <sup>(2)</sup>	mg/l	101.4%	100.1%	<0.10
Antimony (Total)	6010 <sup>(2)</sup>	mg/l	103.4%	104.5%	<0.10
Selenium (Total)	7740 <sup>(2)</sup>	mg/l	94.9%	99.2%	<0.0010
Thallium (Total)	7841 <sup>(2)</sup>	mg/l	110.4%	106.1%	<0.0040
Vanadium (Total)	6010 <sup>(2)</sup>	mg/l	92.0%	95.6%	<0.050
Zinc (Total)	6010 <sup>(2)</sup>	mg/l	92.7%	95.3%	<0.0050

- (1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
- (2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.
- (3) NAP = Not applicable.

Table 8  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4249  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

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Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2834	9410-2835	9410-2836
			SW-1 (10/25/94)	SW-3 (10/25/94)	SW-3 Duplicate (10/25/94)
Acetone	67-64-1	µg/l	<100	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	7.5	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 8  
(Continued)

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2837 SW-3 MS (10/25/94)	9410-2838 SW-3 MSD (10/25/94)
Acetone	67-64-1	µg/l	NAP <sup>(3)</sup>	NAP
Benzene	71-43-2	µg/l	91%	99%
Bromodichloromethane	75-27-4	µg/l	NAP	NAP
Bromoform	75-25-2	µg/l	NAP	NAP
Bromomethane	74-83-9	µg/l	NAP	NAP
2-Butanone (MEK)	78-93-3	µg/l	NAP	NAP
Carbon disulfide	75-15-0	µg/l	NAP	NAP
Carbon tetrachloride	56-23-5	µg/l	NAP	NAP
Chlorobenzene	108-90-7	µg/l	86%	97%
Chlorodibromomethane	124-48-1	µg/l	NAP	NAP
Chloroethane	75-00-3	µg/l	NAP	NAP
Chloromethane	74-87-3	µg/l	NAP	NAP
Chloroform	67-66-3	µg/l	NAP	NAP
1,1-Dichloroethane	75-34-3	µg/l	NAP	NAP
1,2-Dichloroethane	107-06-2	µg/l	NAP	NAP
1,1-Dichloroethene	75-35-4	µg/l	101%	100%
cis-1,2-Dichloroethene	156-59-2	µg/l	NAP	NAP
trans-1,2-Dichloroethene	156-60-5	µg/l	NAP	NAP
1,2-Dichloropropane	78-87-5	µg/l	NAP	NAP
cis-1,3-Dichloropropene	10061-01-5	µg/l	NAP	NAP
trans-1,3-Dichloropropene	10061-02-6	µg/l	NAP	NAP
Ethylbenzene	100-41-4	µg/l	NAP	NAP
2-Hexanone	591-78-6	µg/l	NAP	NAP
Methylene chloride	75-09-2	µg/l	NAP	NAP
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	NAP	NAP
Styrene	100-42-5	µg/l	NAP	NAP
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	NAP	NAP
Tetrachloroethene	127-18-4	µg/l	NAP	NAP
Toluene	108-88-3	µg/l	89%	98%
1,1,1-Trichloroethane	71-55-6	µg/l	NAP	NAP
1,1,2-Trichloroethane	79-00-5	µg/l	NAP	NAP
Trichloroethene	79-01-6	µg/l	83%	89%
Vinyl chloride	75-01-4	µg/l	NAP	NAP
Xylenes (Total)	1330-20-7	µg/l	NAP	NAP

See footnotes at end of table.

Table 8  
(Continued)

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2839 Trip Blank (10/25/94)	9410-2841 Method Blank (10/25/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

(3) NAP = Not applicable.



Controls for Environmental Pollution, Inc.

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Controls for Environmental  
Pollution, Inc.

P.O. Box 5351

Santa Fe, NM 87502

Phone: (505) 982-9841 / (800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: Randal T. Hill

Purchase Order: 0631  
Invoice Number:

Order #: 94-11-062

Date: 12/12/94 15:45

Work ID: Soil (NR)

Date Received: 11/02/94

Date Completed: 12/12/94

Client Code: ANTECH

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	94-4249 9410-2823 893, 93
02	94-4249 9410-2824 895, 91
03	94-4249 9410-2825 893, 91
04	94-4249 9410-2826 892, 91
05	94-4249 9410-2827 893, 91

Sample Number	Sample Description
06	94-4249 9410-2829 891, 92
07	94-4249 9410-2830 891, 94
08	94-4249 9410-2831 892, 91
09	94-4249 9410-2832 90-1
10	94-4249 9410-2833 90-3

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only, will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

  
Certified By

DEC 13 '94 09:10

P.4/12

Order # 94-11-062  
12/12/94 15:45Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 2

Sample: 01A 94-4249 9410-2823

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	<0.5	0.5	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/06/94	LJ
Total Uranium	1.6		ug/gram	11/16/94	MM

Sample: 02A 94-4249 9410-2824

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	<0.5	0.5	pCi/gram	11/11/94	PM
Total Radium	1.9+/-1.2	0.5	pCi/gram	11/07/94	LJ
Total Uranium	0.8		ug/gram	11/16/94	MM

Sample: 03A 94-4249 9410-2825

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	<0.5	0.5	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/07/94	LJ
Total Uranium	0.4		ug/gram	11/16/94	MM

Sample: 04A 94-4249 9410-2826

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	<0.5	0.5	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/08/94	LJ
Total Uranium	0.4		ug/gram	11/16/94	MM

Sample: 05A 94-4249 9410-2827

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	<0.5	0.5	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/08/94	LJ

DEC 13 '94 09:10

P.5/12



Order # 94-11-062  
12/12/94 15:45Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 3

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Uranium	0.4		ug/gram	11/16/94	MM

Sample: 06A 94-4249 9410-2829 Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	2.3+/-0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	1.1+/-0.2	0.5	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/08/94	LJ
Total Uranium	1.9		ug/gram	11/16/94	MM

Sample: 07A 94-4249 9410-2830 Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	0.6+/-0.4	0.5	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/09/94	LJ
Total Uranium	0.6		ug/gram	11/16/94	MM

Sample: 08A 94-4249 9410-2831 Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	<0.5	0.5	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/10/94	LJ
Total Uranium	0.6		ug/gram	11/16/94	MM

Sample: 09A 94-4249 9410-2832 Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	<0.5	0.5	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/10/94	LJ
Total Uranium	0.5		ug/gram	11/16/94	MM

DEC 13 '94 09:11

P.6/12



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Order # 94-11-062  
12/12/94 15:45

Controls for Environmental  
TEST RESULTS BY SAMPLE

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Sample: 10A 94-4249 9410-2833

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<0.5	0.5	pCi/gram	11/11/94	PM
Gross Beta	<0.5	0.5	pCi/gram	11/11/94	PM
Total Radium	4.3+/-1.6	0.5	pCi/gram	11/10/94	LJ
Total Uranium	1.2		ug/gram	11/16/94	MM

DEC 13 '94 09:12

P.7/12

Order # 94-11-042  
12/12/94 17:18Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 5

Sample Description: 94-4249 9410-2823  
Test Description: Isotopic Uranium  
Collected: 10/25/94Lab No: 01A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	1.16+/-0.13
Uranium-235	0.05	0.20+/-0.02
Uranium-238	0.05	0.59+/-0.03

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MMSample Description: 94-4249 9410-2824  
Test Description: Isotopic Uranium  
Collected: 10/25/94Lab No: 02A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	0.43+/-0.05
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.19+/-0.03

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 09:12

P.8/12

Order # 94-11-062  
12/12/94 15:45Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 6

Sample Description: 94-4249 9410-2825  
Test Description: Isotopic Uranium  
Collected: 10/25/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: ISOU\_S

## Type of Analysis

Detection  
Limit

## RESULT

Uranium-234

0.050.13+/-0.02

Uranium-235

0.050.05

Uranium-238

0.050.07+/-0.01

All results report in:

UNITS pCi/gram

Analyzed 11/16/94

By MMSample Description: 94-4249 9410-2826  
Test Description: Isotopic Uranium  
Collected: 10/25/94Lab No: 04A  
Method:  
Category: SOIL

Test Code: ISOU\_S

## Type of Analysis

Detection  
Limit

## RESULT

Uranium-234

0.050.18+/-0.03

Uranium-235

0.050.05

Uranium-238

0.050.09+/-0.02

All results report in:

UNITS pCi/gram

Analyzed 11/16/94

By MM

DEC 13 '94 09:12

P.9/12



Order # 94-11-062

12/12/94 15.45

## Controls for Environmental

## TEST RESULTS BY SAMPLE

Page 7

Sample Description: 94-4249 9410-2827

Test Description: Isotopic Uranium

Collected: 10/25/94

Lab No: 05A

Method:

Category: SOIL

Test Code: ISOU\_S

## Type of Analysis

Detection  
Limit

## RESULT

Uranium-234

0.050.06+/-0.01

Uranium-235

0.05<0.05

Uranium-238

0.050.06+/-0.01

All results report in:

UNITS pCi/gram

Analyzed 11/16/94

By MM

Sample Description: 94-4249 9410-2829

Test Description: Isotopic Uranium

Collected: 10/25/94

Lab No: 05A

Method:

Category: SOIL

Test Code: ISOU\_S

## Type of Analysis

Detection  
Limit

## RESULT

Uranium-234

0.051.04+/-0.12

Uranium-235

0.05<0.05

Uranium-238

0.050.83+/-0.10

All results report in:

UNITS pCi/gram

Analyzed 11/16/94

By MM

DEC 13 '94 09:13

P.10/12

Order # 94-11-062  
12/12/94 15:45Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 8

Sample Description: 94-4249 9410-2830  
Test Description: Isotopic Uranium  
Collected: 10/25/94Lab No: 07A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	0.36+/-0.04
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.35+/-0.04

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MMSample Description: 94-4249 9410-2831  
Test Description: Isotopic Uranium  
Collected: 10/25/94Lab No: 08A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	0.08+/-0.02
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.07+/-0.02

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 09:13

P.11/12

Order # 94-11-062  
12/12/94 15:45Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 9

Sample Description: 94-4249 9410-2832  
Test Description: Isotopic Uranium  
Collected: 10/25/94Lab No: 09A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis:	Detection Limit	RESULT
Uranium-234	0.05	0.08+/-0.01
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.06+/-0.01

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MMSample Description: 94-4249 9410-2833  
Test Description: Isotopic Uranium  
Collected: 10/25/94Lab No: 10A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	0.08+/-0.02
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.08+/-0.02

All results report in:

UNITS pCi/gram  
Analyzed 11/16/94  
By MM

DEC 13 '94 09:14

P.12/12



Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87507

NEWARK 505/982-9841

OUT OF STATE 800/545-2188 • FAX - 505-982-9289

Controls for Environmental  
Pollution, Inc.

P.O. Box 5351

Santa Fe, NM 87502

Phone: (505) 982-9841/(800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: Randal T. Hill

Purchase Order: 0631

Invoice Number:

Order #: 94-11-063

Date: 12/02/94 10:52

Work ID: Water (NR)

Date Received: 11/02/94

Date Completed: 12/02/94

Client Code: ANTECH

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	9410-2834 (SW-1)
02	9410-2835 (SW-3)

Sample Number	Sample Description
03	9410-2836 (SW-3 DCP)

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only, will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

  
\_\_\_\_\_  
Certified By

94-1249

DEC 12 '94 12:41

P.4/9



Order # 94-11-063  
12/02/94 10:52Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 2

Sample: 01A 9410-2834 (Sw-1)

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	33+/-5	3	pCi/liter	11/04/94	CM
Total Radium	<2	2	pCi/liter	11/11/94	JB
Total Uranium	0.008	0.001	mg/liter	11/07/94	LH

Sample: 02A 9410-2835 (Sw-3)

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	24+/-5	3	pCi/liter	11/04/94	CM
Total Radium	<2	2	pCi/liter	11/11/94	JB
Total Uranium	<0.001	0.001	mg/liter	11/07/94	LH

Sample: 03A 9410-2836 (Sw-3 Dup)

Collected: 10/25/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	12+/-5	3	pCi/liter	11/04/94	CM
Total Radium	<2	2	pCi/liter	11/11/94	JB
Total Uranium	<0.001	0.001	mg/liter	11/07/94	LH

DEC 12 '94 12:42

P.5/9



Order # 94-11-063

12/02/94 10:52

Controls for Environmental

TEST RESULTS BY SAMPLE

Page 3

Sample Description: 9410-2834 (Sw-1)

Test Description: Isotopic Uranium

Collected: 10/25/94

Lab No: 01A

Method:

Category: WATER

Test Code: ISOU

Type of Analysis

Detection  
Limit

RESULT

Uranium-234

0.614.7+/-2.7

Uranium-235

0.6<0.6

Uranium-238

0.612.2+/-2.4

All results report in:

UNITS pCi/liter

Analyzed 11/04/94

By HD

Sample Description: 9410-2835 (Sw-3)

Test Description: Isotopic Uranium

Collected: 10/25/94

Lab No: 02A

Method:

Category: WATER

Test Code: ISOU

Type of Analysis

Detection  
Limit

RESULT

Uranium-234

0.63.1+/-1.4

Uranium-235

0.6<0.6

Uranium-238

0.64.6+/-1.6

All results report in:

UNITS pCi/liter

Analyzed 11/04/94

By HD

DEC 12 '94 12:42

P.6/9



# Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87502

N. STATE 505/982 9841

OUT OF STATE 800/545-2188 • FAX • 505-982-9799

Order # 94-11-063

12/02/94 10:52

Controls for Environmental

TEST RESULTS BY SAMPLE

Page 4

Sample Description: 9410-2836 (SW-3 DOP)

Test Description: Isotopic Uranium

Collected: 10/25/94

Lab No: 03A

Method:

Category: WATER

Test Code: ISOU

Type of Analysis

Detection  
Limit

RESULT

Uranium-234

0.6

<0.6

Uranium-235

0.6

<0.6

Uranium-238

0.6

<0.6

All results report in:

UNITS pCi/liter

Analyzed 11/23/94

By HD

DEC 12 '94 12:43

P.7/9



# Antech Ltd. Chain of Custody Record

1 of 2

For Laboratory Use Only

Laboratory Project No.:

14-4249

Project Name: WESTINGHOUSE - BLAIRSVILLE

Project No.: 93-132

Sampler: BRYAN MAURER  
(Printed Name)

*Bryan Maurer*  
(Signature)

Relinquished By: (Signature and Printed Name)

*Bryan Maurer* BRYAN MAURER

Received By: (Signature and Printed Name)

*Javan E. Snodden*

Date: 10/25/94

Time: 10:30

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date:

Time:

Antech Proposal No.:

Ship To:  
Antech Ltd.

One Triangle Drive  
Export, PA 15632  
(412) 733-1161

FAX (412) 327-7793

Method of Shipment:

Shipment ID:

Circle Bottle Size

Other (Please Specify)

Please Check when VOA Vials are Collected:

☒ Free of Bubbles

☐ Bubbles Present

(Specify in Special Instructions/Comments)

Sample ID Number	Sample Description			Grab	Composite	Chemistry	Nutrient	Total Metals	Dissolved Metals (250 ml)	Cyanide	Phenolics	TOC (125)	TOX (250)	Sulfide (5)	Radiology	Oil & Grease	TPHC (100)	VOA (40)	Organics	Bacteriology	Widomax (250 ml)	VOA Septa	VACUUM	PACUUM																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Special Instructions/Comments: LIST A - VOCs, Metals, TPH, Fluoride, Nitrate, Ammonia, TOC, pH, radiological

LIST B - VOCs, SVOCs, metals, CN, Herb/Pest/PCBs, Radiological

Sample Return/Disposal:

☐ Return to Client

☒ Disposal by Antech

Results To:

☐ Client Name: BILL BAUGHMAN

Company: CUMMINGS/RIFF CONSULTANTS

Address:

Invoice To:

☐ Client Name:

Company:

Address:

For Laboratory Use Only

Sample Condition Upon Receipt



# Antech Ltd. Chain of Custody Record

2 of 2

For Laboratory Use Only

Laboratory Project No.:

94-4249

Project Name: WESTINGHOUSE - BLAIRSVILLE

Project No.: 93-132

Sampler: BRYAN MAYER  
(Printed Name)

Bryan Mayer  
(Signature)

Relinquished By: (Signature and Printed Name)

Bryan Mayer  
Relinquished By: (Signature and Printed Name)

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Patricia E. Shaffer  
Received By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date: 10/25/94

Date:

Date:

Time: 6:50

Time:

Time:

Antech Proposal No.:

Ship To:  
Antech Ltd.  
One Triangle Drive  
Export, PA 15632  
(412) 733-1161  
FAX (412) 327-7793

Method of Shipment:

Shipment ID:

Circle Bottle Size

Other (Please Specify)

Please Check when VOA Vials are Collected:

☐ Free of Bubbles

☐ Bubbles Present

(Specify in Special Instructions/Comments)

Sample ID Number	Sample Description			Grab	Compo	Chemistr	Nutrient	Total Met	Dissolved (250 ml)	Cyanide	Phenolics	TOC (125)	TOX (250)	Sulfide (5	Radiologi	Oil & Gre	TPHC (10	VOA (40	Organics	Bacteriologi	Widermouth (250 ml)	VOA Sep	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	1798	17
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Special Instructions/Comments: see 1 of 2 for param lists

Sample Return/Disposal:

☐ Return to Client

☐ Disposal by Antech

Results To:

☐ Client Name:

Company:

Address:

Invoice To:

☐ Client Name:

Company:

Address:

For Laboratory Use Only

Sample Condition Upon Receipt

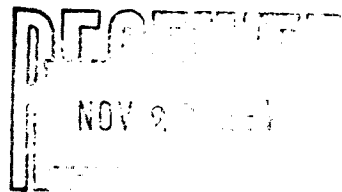




## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 21, 1994



Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

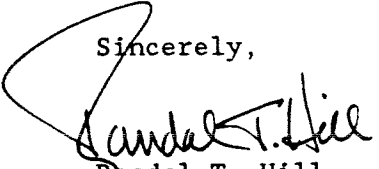
Soil/Water Characterization; Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4257

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on October 26, 1994 and logged in for analysis on October 28, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

  
Randal T. Hill  
Organic Chemistry Manager

RTH:mav

Enclosures

ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4257

CLIENT: 93-132

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-2885 through 9410-2890

CLIENT: B-39, S-5, B-40, S-5, B-39, S-4, B-39, S-6, B-40, S-4,  
and Trip Blank

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

The radiological work is in progress and will be reported as soon  
as it is received from the subcontracting lab.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. SEMIVOLATILES:

None

3. PESTICIDES/HERBICIDES/PCB'S/8015:

None

4. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not  
be interpreted as precision of the analytical procedure, but rather  
as a result of reporting format.



Table 1  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4257  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification
			9410-2885 B-39, S-5 (10/26/94)
Fluoride	340.2(1)	mg/kg	360
pH	9045(2)	pH units	9.95
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10
ASTM:			
Ammonia (ASTM)	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10
Nitrate (ASTM)	352.1(1)	mg/l NO <sub>3</sub> -N	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	4.3
Metals:			
Silver (Total)	6010(2)	mg/kg	110
Aluminum (Total)	6010(2)	mg/kg	3600
Arsenic (Total)	7060(2)	mg/kg	8.1
Barium (Total)	6010(2)	mg/kg	110
Beryllium (Total)	6010(2)	mg/kg	0.86
Calcium (Total)	6010(2)	mg/kg	19000
Cadmium (Total)	6010(2)	mg/kg	21
Cobalt (Total)	6010(2)	mg/kg	1600
Chromium (Total)	6010(2)	mg/kg	640
Copper (Total)	6010(2)	mg/kg	<2.0
Iron (Total)	6010(2)	mg/kg	130000
Mercury (Total)	7471(2)	mg/kg	0.80
Potassium (Total)	6010(2)	mg/kg	310
Magnesium (Total)	6010(2)	mg/kg	1400
Manganese (Total)	6010(2)	mg/kg	1400
Sodium (Total)	6010(2)	mg/kg	380
Nickel (Total)	6010(2)	mg/kg	3800
Lead (Total)	6010(2)	mg/kg	110
Antimony (Total)	6010(2)	mg/kg	5000
Selenium (Total)	7740(2)	mg/kg	0.23
Thallium (Total)	7841(2)	mg/kg	<0.80
Vanadium (Total)	6010(2)	mg/kg	38
Zinc (Total)	6010(2)	mg/kg	97

- (1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
- (2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Table 2  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4257  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification
			9410-2886 B-40, S-5 (10/26/94)
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0
ASTM:			
Cyanide (ASTM)	9012(1)	mg/l	<0.0050
Metals:			
Silver (Total)	6010(1)	mg/kg	<2.0
Aluminum (Total)	6010(1)	mg/kg	4600
Arsenic (Total)	7060(1)	mg/kg	4.6
Barium (Total)	6010(1)	mg/kg	33
Beryllium (Total)	6010(1)	mg/kg	0.41
Calcium (Total)	6010(1)	mg/kg	3500
Cadmium (Total)	6010(1)	mg/kg	5.2
Cobalt (Total)	6010(1)	mg/kg	210
Chromium (Total)	6010(1)	mg/kg	93
Copper (Total)	6010(1)	mg/kg	100
Iron (Total)	6010(1)	mg/kg	25000
Mercury (Total)	7471(1)	mg/kg	0.13
Potassium (Total)	6010(1)	mg/kg	580
Magnesium (Total)	6010(1)	mg/kg	2900
Manganese (Total)	6010(1)	mg/kg	200
Sodium (Total)	6010(1)	mg/kg	<200
Nickel (Total)	6010(1)	mg/kg	640
Lead (Total)	6010(1)	mg/kg	27
Antimony (Total)	6010(1)	mg/kg	<20
Selenium (Total)	7740(1)	mg/kg	<0.20
Thallium (Total)	7841(1)	mg/kg	<0.80
Vanadium (Total)	6010(1)	mg/kg	16
Zinc (Total)	6010(1)	mg/kg	56

1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Table 3  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4257  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification
			9410-2891 Method Blank (10/26/94)
Fluoride	340 2(1)	mg/kg	<1.0
pH	9045(2)	pH units	NAP(3)
Polychlorinated Biphenyls	8080(2)	mg/kg	<1.0
Total Petroleum Hydrocarbons	8015(2)	mg/kg	<10
ASTM:			
Ammonia (ASTM)	350 1(1)	mg/l NH <sub>3</sub> -N	<0.10
Cyanide (ASTM)	9012(2)	mg/l	<0.0050
Nitrate (ASTM)	352 1(1)	mg/l NO <sub>3</sub> -N	<0.10
Total Organic Carbon (ASTM)	9060(2)	mg/l	<1.0
Metals:			
Silver (Total)	6010(2)	mg/kg	<2.0
Aluminum (Total)	6010(2)	mg/kg	<20
Arsenic (Total)	7060(2)	mg/kg	<0.20
Barium (Total)	6010(2)	mg/kg	<4.0
Beryllium (Total)	6010(2)	mg/kg	<0.40
Calcium (Total)	6010(2)	mg/kg	<200
Cadmium (Total)	6010(2)	mg/kg	<2.0
Cobalt (Total)	6010(2)	mg/kg	<2.0
Chromium (Total)	6010(2)	mg/kg	<2.0
Copper (Total)	6010(2)	mg/kg	<2.0
Iron (Total)	6010(2)	mg/kg	<10
Mercury (Total)	7471(2)	mg/kg	<0.10
Potassium (Total)	6010(2)	mg/kg	<100
Magnesium (Total)	6010(2)	mg/kg	<100
Manganese (Total)	6010(2)	mg/kg	<2.0
Sodium (Total)	6010(2)	mg/kg	<200
Nickel (Total)	6010(2)	mg/kg	<10
Lead (Total)	6010(2)	mg/kg	<20
Antimony (Total)	6010(2)	mg/kg	<20
Selenium (Total)	7740(2)	mg/kg	<0.20
Thallium (Total)	7841(2)	mg/kg	<0.80
Vanadium (Total)	6010(2)	mg/kg	<10
Zinc (Total)	6010(2)	mg/kg	<2.0

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NAP = Not applicable.

Table 4  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc  
Antech Ltd Project No. 94-4257  
Soil Characterization; Westinghouse  
Purchase Order No BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-2885 B-39, S-5 (10/26/94)	9410-2886 B-40, S-5 (10/26/94)	9410-2891 Method Blank (10/26/94)
Acetone	67-64-1	µg/kg	<100	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	6.3	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50	<50
Methylene chloride	75-09-2	µg/kg	30	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	120	62	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 5  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd Project No. 94-4257  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS <sup>(2)</sup> Number	Units	Sample Identification	
			9410-2890 Trip-8 (10/26/94)	9410-2892 Method Blank (10/26/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

<sup>(1)</sup>U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

<sup>(2)</sup>CAS = Chemical Abstracts Services.

Table 6  
Semivolatile Organic Analyses  
Target Compound List/EPA Method 8270<sup>(1)</sup>  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4257  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2886	9410-2891
			B-40, S-5 (10/26/94)	Method Blank (10/26/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
Dibenzofuran	132-64-9	µg/kg	<330	<330
1,4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
1,3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
1,4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
3,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
2,4-Dimethylphenol	105-67-9	µg/kg	<330	<330
Di-n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<810	<830
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<810	<830
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<810	<830
3-Nitroaniline	99-09-2	µg/kg	<810	<830
4-Nitroaniline	100-01-6	µg/kg	<810	<830
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<810	<830
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<810	<830
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<810	<830
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 7  
Pesticides Organic Analyses  
Target Compound List/EPA Method 8080/8100(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4257  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9410-2886 B-40, S-5 (10/26/94)	9410-2891 Method Blank (10/26/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050
Aroclor-1016	12674-11-2	mg/kg	<1.0	<1.0
Aroclor-1221	11104-28-2	mg/kg	<1.0	<1.0
Aroclor-1232	11141-16-5	mg/kg	<1.0	<1.0
Aroclor-1242	53469-21-9	mg/kg	<1.0	<1.0
Aroclor-1248	12672-29-6	mg/kg	<1.0	<1.0
Aroclor-1254	11097-69-1	mg/kg	<1.0	<1.0
Aroclor-1260	11096-82-5	mg/kg	<1.0	<1.0
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050
beta-BHC	319-85-7	mg/kg	<0.050	<0.050
delta-BHC	319-86-8	mg/kg	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10
2,4-D	94-75-7	mg/kg	<0.20	<0.20
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10
4,4'-DDT	50-29-3	mg/kg	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.



Controls for Environmental Pollution, Inc.

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502

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TEL 505/982-9841

Controls for Environmental  
Pollution, Inc  
P O Box 5351  
Santa Fe, NM 87502

Phone: (505) 982-9841 / (800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: Randal T. Hill

Purchase Order: 0632  
Invoice Number:

Order #: 94-11-064  
Date: 12/12/94 14:26  
Work ID: Soil (NR)  
Date Received: 11/02/94  
Date Completed: 12/12/94

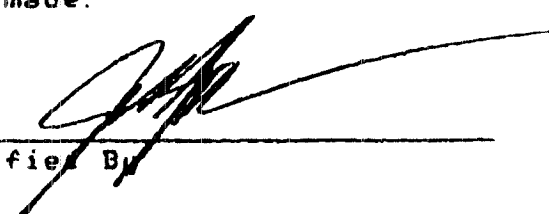
Client Code: ANTECH

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	94-4257 9410-2885 <i>BA, 25</i>
02	94-4257 9410-2886 <i>BA, 65</i>
03	94-4257 9410-2887 <i>BA, 24</i>

Sample Number	Sample Description
04	94-4257 9410-2888 <i>BA, 56</i>
05	94-4257 9410-2889 <i>BA, 24</i>

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only, will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

Certified By 

DEC 13 '94 09:02

P.2/11



Order # 94-11-064  
12/12/94 14:26Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 2

Sample: 01A 94-4257 9410-2885

Collected: 10/26/94

Test Description  
Total UraniumResult  
2.3D.L.Units  
ug/gramAnalyzed  
11/22/94By  
HD

Sample: 02A 94-4257 9410-2886

Collected: 10/26/94

Test Description  
Total UraniumResult  
1.2D.L.Units  
ug/gramAnalyzed  
11/22/94By  
HD

Sample: 03A 94-4257 9410-2887

Collected: 10/26/94

Test Description  
Total UraniumResult  
3.1D.L.Units  
ug/gramAnalyzed  
11/22/94By  
HD

Sample: 04A 94-4257 9410-2888

Collected: 10/26/94

Test Description  
Total UraniumResult  
0.3D.L.Units  
ug/gramAnalyzed  
11/22/94By  
HD

Sample: 05A 94-4257 9410-2889

Collected: 10/26/94

Test Description  
Total UraniumResult  
4.4D.L.Units  
ug/gramAnalyzed  
11/22/94By  
HD

DEC 13 '94 09:02

P.3/11

Order # 94-11-064  
12/12/94 14:26Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 3

Sample Description: 94-4257 9410-2885  
Test Description: Gross Alpha/Beta  
Collected: 10/26/94Lab No: 01A  
Method:  
Category: SOIL

Test Code: AB\_S

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	16.8+/-1.5
Gross Beta	_____	31.9+/-1.0

All results reported in:

UNITS pCi/gram  
Analyzed 12/08/94  
By PMSample Description: 94-4257 9410-2885  
Test Description: Isotopic Uranium  
Collected: 10/26/94Lab No: 01A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.66+/-0.11</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.28+/-0.05</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/14/94  
By HD

DEC 13 '94 09:03

P.4/11/

Order # 94-11-064  
12/12/94 14:26Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 4

Sample Description: 94-4257 9410-2885  
Test Description: Total Radium  
Collected: 10/26/94Lab No: 01A  
Method:  
Category: SOIL

Test Code: T\_RA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Total Radium	_____	<u>10.2+/-2.5</u>

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By LJSample Description: 94-4257 9410-2886  
Test Description: Gross Alpha/Beta  
Collected: 10/26/94Lab No: 02A  
Method:  
Category: SOIL

Test Code: AB\_S

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>8.5+/-1.2</u>
Gross Beta	_____	<u>22.2+/-0.9</u>

All results reported in:

UNITS pCi/gram  
Analyzed 12/08/94  
By PM

DEC 13 '94 09:03

P.5/11

**Controls for Environmental Pollution, Inc.**

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502

IN STATE 505/382-9341  
OUT OF STATE 800/545-2188 • FAX 505-96 9289Order # 94-11-064  
12/12/94 14:26**Controls for Environmental  
TEST RESULTS BY SAMPLE**

Page 5

Sample Description: 94-4257 9410-2886  
Test Description: Isotopic Uranium  
Collected: 10/26/94Lab No: 02A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.21+/-0.03</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>0.20+/-0.03</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/14/94  
By HDSample Description: 94-4257 9410-2886  
Test Description: Total Radium  
Collected: 10/26/94Lab No: 02A  
Method:  
Category: SOIL

Test Code: T\_RA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Total Radium	<u>          </u>	<u>&lt;0.5</u>

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By LJ

DEC 13 '94 09:03

P.6/11

Order # 94-11-064  
12/12/94 14:26Controls For Environmental  
TEST RESULTS BY SAMPLE

Page 6

Sample Description: 94-4257 9410-2887  
Test Description: Gross Alpha/Beta  
Collected: 10/26/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: AB\_S

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	8.7+/-1.2
Gross Beta	_____	18.9+/-0.8

All results reported in:

UNITS pCi/gram  
Analyzed 12/06/94  
By PMSample Description: 94-4257 9410-2887  
Test Description: Isotopic Uranium  
Collected: 10/26/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	1.04+/-0.11
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.35+/-0.04

All results report in:

UNITS pCi/gram  
Analyzed 11/14/94  
By MD

DEC 13 '94 09:04

P.7/11

Order # 94-11-064  
12/12/94 14:26Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 7

Sample Description: 94-4257 9410-2887  
Test Description: Total Radium  
Collected: 10/26/94Lab No: 03A  
Method:  
Category: SOIL

Test Code: T\_RA\_5

Type of Analysis:

Detection  
Limit pCi/gram

RESULT

Total Radium

6.9+/-1.5

All results reported in

UNITS pCi/gram  
Analyzed 11/11/94  
By LJSample Description: 94-4257 9410-2886  
Test Description: Gross Alpha/Beta  
Collected: 10/26/94Lab No: 04A  
Method:  
Category: SOIL

Test Code: AB\_S

Type of Analysis

Detection  
Limit

RESULT

Gross Alpha

2.5+/-1.0

Gross Beta

7.2+/-0.7

All results reported in

UNITS pCi/gram  
Analyzed 12/08/94  
By PM

DEC 13 '94 09:04

P.8/11



Order # 94-11-064  
12/12/94 14:26

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 6

Sample Description: 94-4257 9410-2988  
Test Description: Isotopic Uranium  
Collected: 10/26/94

Lab No: 04A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.05	0.14+/-0.02
Uranium-235	0.05	<0.05
Uranium-238	0.05	0.05+/-0.01

All results report in:

UNITS pCi/gram  
Analyzed 11/14/94  
By HD

Sample Description: 94-4257 9410-2888  
Test Description: Total Radium  
Collected: 10/26/94

Lab No: 04A  
Method:  
Category: SOIL

Test Code: T\_RA\_5

Type of Analysis	Detection Limit pCi/gram	RESULT
Total Radium		3.9+/-1.6

All results reported in:

UNITS pCi/gram  
Analyzed 11/11/94  
By LJ

DEC 13 '94 09:05

P.9/11

Order # 94-11-064  
12/12/94 14:26Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 9

Sample Description: 94-4257 9410-2889  
Test Description: Gross Alpha/Beta  
Collected: 10/26/94Lab No: 05A  
Method:  
Category: SOIL

Test Code: AB\_S

Type of Analysis	Detection Limit	RESULT
Gross Alpha	_____	<u>80.3 +/- 3.5</u>
Gross Beta	_____	<u>116.0 +/- 2.0</u>

All results reported in:

UNITS pCi/gram  
Analyzed 12/08/94  
By PMSample Description: 94-4257 9410-2889  
Test Description: Isotopic Uranium  
Collected: 10/26/94Lab No: 05A  
Method:  
Category: SOIL

Test Code: ISOU\_S

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.05</u>	<u>0.98 +/- 0.14</u>
Uranium-235	<u>0.05</u>	<u>&lt;0.05</u>
Uranium-238	<u>0.05</u>	<u>1.01 +/- 0.14</u>

All results report in:

UNITS pCi/gram  
Analyzed 11/14/94  
By HQ

DEC 13 '94 09:05

P.10/11





Controls for Environmental Pollution, Inc.

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Order # 94-11-064  
12/12/94 14:26

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 10

Sample Description: 94-4257 9410-2889  
Test Description: Total Radium  
Collected: 10/26/94

Lab No: 05A  
Method:  
Category: SOIL

Test Code: T\_RA\_5

Type of Analysis

Detection  
Limit pCi/gram

RESULT

Total Radium

12.0 +/- 2.2

All results reported in:

UNITS pCi/gram

Analyzed 11/11/94

By LJ

DEC 13 '94 09:06

P.11/11



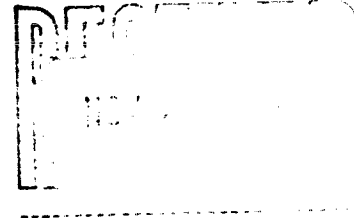




## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 21, 1994



Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

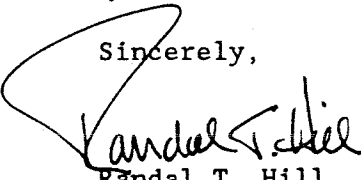
Water Characterization; Purchase Order #BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4295

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received and logged in for analysis on October 28, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

  
Randal T. Hill  
Organic Chemistry Manager

RTH:mav

Enclosures

ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4295

CLIENT: None

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9410-3149 and 9410-3150

CLIENT: Decon-1 and Trip-9

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

The radiological analysis are in progress and will be reported as soon as it is received from the subcontracting lab.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. 8015:

None

3. TOC:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not be interpreted as precision of the analytical procedure, but rather as a result of reporting format.

Table 1  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4295  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification	
			9410-3149 Decon-1 (10/27/94)	9410-3151 Method Blank (10/28/94)
Fluoride	340.2(1)	mg/l	0.61	<0.10
Ammonia	350.1(1)	mg/l NH <sub>3</sub> -N	0.13	<0.10
Nitrate	353.2(1)	mg/l NO <sub>3</sub> -N	1.1	<0.10
pH	9040(2)	pH units	7.72	NAP(3)
Total Organic Carbon	415.1(1)	mg/l	17	<1.0
Total Petroleum Hydrocarbons	8015(2)	mg/l	<1.0	<1.0
Metals:				
Silver (Total)	6010(2)	mg/l	<0.010	<0.010
Aluminum (Total)	6010(2)	mg/l	0.23	<0.10
Arsenic (Total)	7060(2)	mg/l	<0.0010	<0.0010
Barium (Total)	6010(2)	mg/l	0.045	<0.020
Beryllium (Total)	6010(2)	mg/l	<0.0020	<0.0020
Calcium (Total)	6010(2)	mg/l	32	<1.0
Cadmium (Total)	6010(2)	mg/l	<0.010	<0.010
Cobalt (Total)	6010(2)	mg/l	<0.010	<0.010
Chromium (Total)	6010(2)	mg/l	<0.010	<0.010
Copper (Total)	6010(2)	mg/l	0.032	<0.010
Iron (Total)	6010(2)	mg/l	35	<0.030
Mercury (Total)	7470(2)	mg/l	<0.00020	<0.00020
Potassium (Total)	6010(2)	mg/l	1.9	<0.50
Magnesium (Total)	6010(2)	mg/l	6.6	<0.50
Manganese (Total)	6010(2)	mg/l	0.21	<0.010
Sodium (Total)	6010(2)	mg/l	20	<1.0
Nickel (Total)	6010(2)	mg/l	<0.040	<0.040
Lead (Total)	6010(2)	mg/l	<0.10	<0.10
Antimony (Total)	6010(2)	mg/l	<0.10	<0.10
Selenium (Total)	7740(2)	mg/l	<0.0010	<0.0010
Thallium (Total)	7841(2)	mg/l	<0.0040	<0.0040
Vanadium (Total)	6010(2)	mg/l	<0.050	<0.050
Zinc (Total)	6010(2)	mg/l	0.36	<0.0050

- (1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
- (2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.
- (3) NAP = Not applicable.

Table 2  
Volatile Organic Analyses  
EPA Method 8260(1)  
Cummings/Riter Consultants, Inc  
Antech Ltd. Project No. 94-4295  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification		
			9410-3149	9410-3150	9410-3151
			Decon-1 (10/27/94)	Trip-9 (10/27/94)	Method Blank (10/28/94)
Acetone	67-64-1	µg/l	<100	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	9.8	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	7.9	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10	<10
Chloroform	67-66-3	µg/l	17	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.



Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87503

STATE 505 982 054  
OUT OF STATE 800/545-2188 • FAX 505-982 7289

Controls for Environmental  
Pollution, Inc.

P.O. Box 5351

Santa Fe, NM 87502

Phone: (505) 982-9841/(800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: Randal T. Hill

Purchase Order: 0633  
Invoice Number:

Order #: 94-11-065

Date: 12/01/94 11:51

Work ID: Water (NR)

Date Received: 11/02/94

Date Completed: 12/01/94

Client Code: ANTECH

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>
01	94-4295 9410-3149 <i>Decon-1</i>

<u>Sample Number</u>	<u>Sample Description</u>
--------------------------	-------------------------------

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only, will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

Certified By 





Order # 94-11-065  
12/01/94 11:51

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 2

Sample: 01A 94-4295 9410-3149

Collected: 10/27/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	<3	3	pCi/liter	11/24/94	GF
Total Radium	<1	1	pCi/liter	11/11/94	JB
Total Uranium	<0.001	0.001	mg/liter	11/07/94	LH
Uranium-234	<0.6	0.6	pCi/liter	11/23/94	HD
Uranium-235	<0.6	0.6	pCi/liter	11/23/94	HD
Uranium-238	<0.6	0.6	pCi/liter	11/23/94	HD



Laboratory Project No.: 94-4295

Sampler: Daniel P. Cusick  
(Printed Name)

Daniel P. Cusack  
(Signature)

Time: 4:30 PM

Time

Time

**Shipment ID:**

(Specify in Special Instructions/Comments)

**For Laboratory  
Use Only**  
Laboratory ID

☐ Return to Client

☒ Disposal by Antech

☐ Client Name: William A. Baughman  
Company: Commerce/Rite Consultant  
Address: 3100 William Pitt Way

**Sample Condition Upon Receipt**

☐ Client Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_

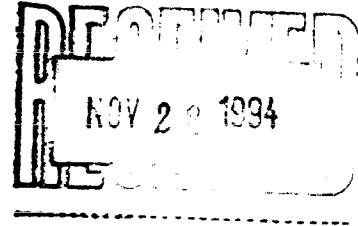




## Antech Ltd.

One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 23, 1994



Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

Soil/Water Characterization; Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4362

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on November 1, 1994 and logged in for analysis on November 3, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

Randal T. Hill  
Organic Chemistry Manager

RTH:aeb

Enclosures

ANTECH LTD.  
CASE NARRATIVE

I. GENERAL:

A: PROJECT NUMBERS:

ANTECH LTD.: 94-4362

CLIENT: 93-132

B: SAMPLE IDENTIFICATIONS:

ANTECH LTD.: 9411-0192 and 9411-0193

CLIENT: B-37, S-2 and Trip 10

C: SHIPPING/RECEIVING COMMENTS:

None

II. PREPARATION/ANALYSIS COMMENTS:

A: PREPARATION:

None

B: GENERAL CHEMISTRY:

The radiological analysis is in progress and will be submitted as soon as it is received from the subcontracting lab.

C: METALS:

None

D: ORGANICS:

1. VOLATILES:

None

2. SEMIVOLATILES:

None

3. PESTICIDES/HERBICIDES/PCB'S:

None

III. GENERAL COMMENTS:

Trailing zeroes and decimal places appearing on the data should not be interpreted as precision of the analytical procedure, but rather as a result of reporting format.

Table 1  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4362  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification	
			9411-0192 B-37, S-2 (11/1/94)	9411-0194 Method Blank (11/1/94)
Cyanide (ASTM)	9012(1)	mg/l	<0.0050	<0.0050
Polychlorinated Biphenyls	8080(1)	mg/kg	<1.0	<1.0
Metals:				
Silver (Total)	6010(1)	mg/kg	<2.0	<2.0
Aluminum (Total)	6010(1)	mg/kg	6000	<20
Arsenic (Total)	7060(1)	mg/kg	3.7	<0.20
Barium (Total)	6010(1)	mg/kg	79	<4.0
Beryllium (Total)	6010(1)	mg/kg	0.41	<0.40
Calcium (Total)	6010(1)	mg/kg	1100	<200
Cadmium (Total)	6010(1)	mg/kg	3.1	<2.0
Cobalt (Total)	6010(1)	mg/kg	33	<2.0
Chromium (Total)	6010(1)	mg/kg	34	<2.0
Copper (Total)	6010(1)	mg/kg	15	<2.0
Iron (Total)	6010(1)	mg/kg	12000	<10
Mercury (Total)	7471(1)	mg/kg	<0.10	<0.10
Potassium (Total)	6010(1)	mg/kg	470	<100
Magnesium (Total)	6010(1)	mg/kg	740	<100
Manganese (Total)	6010(1)	mg/kg	150	<2.0
Sodium (Total)	6010(1)	mg/kg	<200	<200
Nickel (Total)	6010(1)	mg/kg	80	<10
Lead (Total)	6010(1)	mg/kg	56	<20
Antimony (Total)	6010(1)	mg/kg	<20	<20
Selenium (Total)	7740(1)	mg/kg	0.21	<0.20
Thallium (Total)	7841(1)	mg/kg	<0.80	<0.80
Vanadium (Total)	6010(1)	mg/kg	17	<10
Zinc (Total)	6010(1)	mg/kg	51	<2.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Table 2  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4362  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9411-0192 B-37, S-2 (11/1/94)	9411-0194 Method Blank (11/1/94)
Acetone	67-64-1	µg/kg	<100	<100
Benzene	71-43-2	µg/kg	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/kg	<5.0	<5.0
Bromoform	75-25-2	µg/kg	<5.0	<5.0
Bromomethane	74-83-9	µg/kg	<10	<10
2-Butanone (MEK)	78-93-3	µg/kg	<10	<10
Carbon disulfide	75-15-0	µg/kg	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/kg	<5.0	<5.0
Chlorobenzene	108-90-7	µg/kg	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/kg	<5.0	<5.0
Chloroethane	75-00-3	µg/kg	<10	<10
Chloromethane	74-87-3	µg/kg	<10	<10
Chloroform	67-66-3	µg/kg	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/kg	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/kg	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/kg	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/kg	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/kg	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/kg	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/kg	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/kg	<5.0	<5.0
Ethylbenzene	100-41-4	µg/kg	<5.0	<5.0
2-Hexanone	591-78-6	µg/kg	<50	<50
Methylene chloride	75-09-2	µg/kg	23	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/kg	<50	<50
Styrene	100-42-5	µg/kg	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/kg	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/kg	<5.0	<5.0
Toluene	108-88-3	µg/kg	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/kg	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/kg	<5.0	<5.0
Trichloroethene	79-01-6	µg/kg	<5.0	<5.0
Vinyl chloride	75-01-4	µg/kg	<10	<10
Xylenes (Total)	1330-20-7	µg/kg	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 3  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4362  
Water Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9411-0193 Trip 10 (11/1/94)	9411-0195 Method Blank (11/1/94)
Acetone	67-64-1	µg/l	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS - Chemical Abstracts Services.



Table 4  
Semivolatile Organic Analyses  
Target Compound List/EPA Method 8270(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4362  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9411-0192 B-37, S-2 (11/1/94)	9411-0194 Method Blank (11/1/94)
Acenaphthene	83-32-9	µg/kg	<330	<330
Acenaphthylene	208-96-8	µg/kg	<330	<330
Anthracene	120-12-7	µg/kg	<330	<330
Bis(2-chloro-1-methylethyl)ether	108-60-1	µg/kg	<330	<330
Bis(2-chloroethyl)ether	111-44-4	µg/kg	<330	<330
Bis(2-chloroethoxy)methane	111-91-1	µg/kg	<330	<330
Bis(2-ethylhexyl)phthalate	117-81-7	µg/kg	<330	<330
Benzo(a)pyrene	50-32-8	µg/kg	<330	<330
Benzo(a)anthracene	56-55-3	µg/kg	<330	<330
Benzo(b)fluoranthene	205-99-2	µg/kg	<330	<330
Benzo(ghi)perylene	191-24-2	µg/kg	<330	<330
Benzo(k)fluoranthene	207-08-9	µg/kg	<330	<330
4-Bromophenyl phenyl ether	101-55-3	µg/kg	<330	<330
Butyl benzyl phthalate	85-68-7	µg/kg	<330	<330
Carbazole	86-74-8	µg/kg	<330	<330
Chrysene	218-01-9	µg/kg	<330	<330
2-Chloronaphthalene	91-58-7	µg/kg	<330	<330
2-Chlorophenol	95-57-8	µg/kg	<330	<330
4-Chlorophenyl phenyl ether	7005-72-3	µg/kg	<330	<330
o-Cresol	95-48-7	µg/kg	<330	<330
p-Cresol	106-44-5	µg/kg	<330	<330
Dibenz(a,h)anthracene	53-70-3	µg/kg	<330	<330
Dibenzofuran	132-64-9	µg/kg	<330	<330
2,4-Dichlorophenol	120-83-2	µg/kg	<330	<330
1,2-Dichlorobenzene	95-50-1	µg/kg	<330	<330
3-Dichlorobenzene	541-73-1	µg/kg	<330	<330
4-Dichlorobenzene	106-46-7	µg/kg	<330	<330
3,3'-Dichlorobenzidine	91-94-1	µg/kg	<330	<330
Diethyl phthalate	84-66-2	µg/kg	<330	<330
Dimethyl phthalate	131-11-3	µg/kg	<330	<330
2,4-Dimethylphenol	105-67-9	µg/kg	<330	<330
Di-n-butyl phthalate	84-74-2	µg/kg	<330	<330
4,6-Dinitro-o-cresol	534-52-1	µg/kg	<800	<800
2,4-Dinitrotoluene	121-14-2	µg/kg	<330	<330
2,6-Dinitrotoluene	606-20-2	µg/kg	<330	<330
Di-n-octyl phthalate	117-84-0	µg/kg	<330	<330
2,4-Dinitrophenol	51-28-5	µg/kg	<800	<800
Fluoranthene	206-44-0	µg/kg	<330	<330
Fluorene	86-73-7	µg/kg	<330	<330
Hexachlorocyclopentadiene	77-47-4	µg/kg	<330	<330
Hexachlorobenzene	118-74-1	µg/kg	<330	<330
Hexachlorobutadiene	87-68-3	µg/kg	<330	<330
Hexachloroethane	67-72-1	µg/kg	<330	<330
Indeno(1,2,3-cd)pyrene	193-39-5	µg/kg	<330	<330
Isophorone	78-59-1	µg/kg	<330	<330
2-Methylnaphthalene	91-57-6	µg/kg	<330	<330
N-nitrosodiphenylamine	86-30-6	µg/kg	<330	<330
N-nitroso-di-n-propylamine	621-64-7	µg/kg	<330	<330
Naphthalene	91-20-3	µg/kg	<330	<330
2-Nitroaniline	88-74-4	µg/kg	<800	<800
3-Nitroaniline	99-09-2	µg/kg	<800	<800
4-Nitroaniline	100-01-6	µg/kg	<800	<800
Nitrobenzene	98-95-3	µg/kg	<330	<330
2-Nitrophenol	88-75-5	µg/kg	<330	<330
4-Nitrophenol	100-02-7	µg/kg	<800	<800
p-Chloroaniline	106-47-8	µg/kg	<330	<330
p-Chloro-m-cresol	59-50-7	µg/kg	<330	<330
Pentachlorophenol	87-86-5	µg/kg	<1700	<1700
Phenanthrene	85-01-8	µg/kg	<330	<330
Phenol	108-95-2	µg/kg	<330	<330
Pyrene	129-00-0	µg/kg	<330	<330
1,2,4-Trichlorobenzene	120-82-1	µg/kg	<330	<330
2,4,5-Trichlorophenol	95-95-4	µg/kg	<800	<800
2,4,6-Trichlorophenol	88-06-2	µg/kg	<330	<330

U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

Table 5  
Pesticide/Herbicides Organic Analyses  
Target Compound List/EPA Method 8080/8150(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4362  
Soil Characterization; Westinghouse  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	CAS(2) Number	Units	Sample Identification	
			9411-0192 B-37, S-2 (11/1/94)	9411-0194 Method Blank (11/1/94)
Aldrin	309-00-2	mg/kg	<0.050	<0.050
Aroclor-1016	12674-11-2	mg/kg	<1.0	<1.0
Aroclor-1221	11104-28-2	mg/kg	<1.0	<1.0
Aroclor-1232	11141-16-5	mg/kg	<1.0	<1.0
Aroclor-1242	53469-21-9	mg/kg	<1.0	<1.0
Aroclor-1248	12672-29-6	mg/kg	<1.0	<1.0
Aroclor-1254	11097-69-1	mg/kg	<1.0	<1.0
Aroclor-1260	11096-82-5	mg/kg	<1.0	<1.0
alpha-BHC	319-84-6	mg/kg	<0.050	<0.050
Beta-BHC	319-85-7	mg/kg	<0.050	<0.050
delta-BHC	319-86-8	mg/kg	<0.050	<0.050
gamma-BHC (Lindane)	58-89-9	mg/kg	<0.050	<0.050
alpha-Chlordane	5103-71-9	mg/kg	<0.10	<0.10
gamma-Chlordane	5103-74-2	mg/kg	<0.10	<0.10
2,4-D	94-75-7	mg/kg	<0.20	<0.20
4,4'-DDD	72-54-8	mg/kg	<0.10	<0.10
4,4'-DDE	72-55-9	mg/kg	<0.10	<0.10
4,4'-DDT	50-29-3	mg/kg	<0.10	<0.10
Dieldrin	60-57-1	mg/kg	<0.10	<0.10
Endrin Ketone	53494-70-5	mg/kg	<0.10	<0.10
Endosulfan I (Alpha)	959-98-8	mg/kg	<0.050	<0.050
Endosulfan II (Beta)	33213-65-9	mg/kg	<0.10	<0.10
Endrin	72-20-8	mg/kg	<0.10	<0.10
Endrin Aldehyde	7421-93-4	mg/kg	<0.10	<0.10
Endosulfan Sulfate	1031-07-8	mg/kg	<0.10	<0.10
Heptachlor	76-44-8	mg/kg	<0.050	<0.050
Heptachlor Epoxide	1024-57-3	mg/kg	<0.050	<0.050
Methoxychlor	72-43-5	mg/kg	<0.50	<0.50
2,4,5-TP (Silvex)	93-72-1	mg/kg	<0.080	<0.080

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.



Controls for Environmental Pollution, Inc.

P.O. BOX 5351 • Santa Fe, New Mexico 87505

STATE 505/982-9841

OUT OF STATE 800/545-2188 • FAX 505-982-9779

Controls for Environmental  
Pollution, Inc.

P.O. Box 5351

Santa Fe, NM 87502

Phone: (505) 982-9841 / (800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: Randal T. Hill

Purchase Order: 0634  
Invoice Number:

Order #: 94-11-124

Date: 12/09/94 09:18

Work ID: Soil (NR)

Date Received: 11/07/94

Date Completed: 12/09/94

Client Code: ANTECH

SAMPLE IDENTIFICATION

<u>Sample Number</u>	<u>Sample Description</u>
01	94-4362 9411-0192 B-37 S-2

<u>Sample Number</u>	<u>Sample Description</u>
--------------------------	-------------------------------

Remainder of sample(s) for routine analysis will be disposed  
of three weeks from final report date. Sample(s) for bacteria  
analysis only, will be disposed of immediately after analysis.  
This is not applicable if other arrangements have been made.

Certified By

DEC 12 '94 12:43

P.8/9



Order # 94-11-124  
12/09/94 09:18

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 2

Sample: G1A 94-4362 9411-0192

Collected: 11/01/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Beta	<0.3	0.3	pCi/gram	11/11/94	PM
Total Radium	<0.5	0.5	pCi/gram	11/09/94	LJ
Total Uranium	0.7		ug/gram	11/16/94	MM
Uranium-234	<0.05	0.05	pCi/gram	11/16/94	MM
Uranium-235	<0.05	0.05	pCi/gram	11/16/94	MM
Uranium-238	<0.05	0.05	pCi/gram	11/16/94	MM

DEC 12 '94 12:43

P.9/9







## Antech Ltd.

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One Triangle Drive • Export, Pennsylvania 15632 • Phone: (412) 733-1161 • Fax: (412) 327-7793

November 29, 1994

Mr. Bill Baughman  
Cummings/Riter Consultants, Inc.  
3180 William Pitt Way  
Pittsburgh, PA 15238

Water Characterization; Purchase Order No. BL-26163-H  
Westinghouse; Blairsville, PA  
Antech Ltd. Project No. 94-4563

Dear Mr. Baughman:

Enclosed are analytical results for the samples submitted by Cummings/Riter Consultants, Inc. The samples were received on November 10, 1994.

Appropriate U.S. Environmental Protection Agency methods were used and are indicated accordingly on the data tables. Appropriate quality assurance/quality control analyses were performed in accordance with Antech Ltd.'s Statement of Qualifications. If you have any questions, please call me.

Sincerely,

  
Randal T. Hill  
Organic Chemistry Manager

RTH:sja

Enclosures

**ANTECH LTD.  
CASE NARRATIVE**

**I. GENERAL:**

**A: PROJECT NUMBERS:**

ANTECH LTD.: 94-4563

CLIENT: Purchase Order No. BL-26163-H

**B: SAMPLE IDENTIFICATIONS:**

ANTECH LTD.: 9411-1660 through 9411-1672

CLIENT: GW-1, MW-2, MW-3, MW-3 MS, MW-3 MSD, MW-6A, MW-7A, MW-8A, MW-9A, MW-9AD, MW-10A, GW-EOB, and Trip Blank

**C: SHIPPING/RECEIVING COMMENTS:**

None

**II. PREPARATION/ANALYSIS COMMENTS:**

**A: PREPARATION:**

None

**B: GENERAL CHEMISTRY:**

The radiological analysis is in progress and will be reported as soon as it is received from the subcontracting laboratory.

**C: METALS:**

None

**D: ORGANICS:**

**1. VOLATILES:**

Due to the high concentration of trichloroethene in the sample, percent recoveries for this analyte in the MS/MSD samples could not be calculated.

**2. 8015:**

None

**III. GENERAL COMMENTS:**

Trailing zeroes and decimal places appearing on the data should not be interpreted as precision of the analytical procedure, but rather as a result of reporting format.



Tak  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4563  
Water Characterization  
Purchase Order No. BL-26163-H; Blairsville, PA

Page 1 of 2

Parameter	Analytical Method	Units	Sample Identification				
			9411-1660 GW-1 (11/10/94)	9411-1661 MW-2 (11/10/94)	9411-1662 MW-3 (11/10/94)	9411-1665 MW-6A (11/10/94)	9411-1667 MW-8A (11/10/94)
Fluoride	340.2(1)	mg/l	0.79	2.7	<0.10	<0.10	<0.10
Ammonia	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10	<0.10	1.3	<0.10	<0.10
Nitrate	353.2(1)	mg/l NO <sub>3</sub> -N	1.4	7.6	<0.10	<0.10	<0.10
pH	9040(2)	pH units	6.37	7.20	6.88	6.86	5.97
Total Organic Carbon	415.1(1)	mg/l	2.0	3.3	2.2	4.7	2.8
Total Petroleum Hydrocarbons	8015(2)	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0
Metals:							
Silver (Total)	8010(2)	mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminum (Total)	6010(2)	mg/l	1.3	3.4	1.7	2.9	6.5
Arsenic (Total)	7060(2)	mg/l	<0.0010	<0.0010	0.0040	0.0020	<0.0010
Barium (Total)	6010(2)	mg/l	0.055	0.20	0.30	0.23	0.85
Beryllium (Total)	6010(2)	mg/l	<0.0020	0.0030	<0.0020	<0.0020	0.0020
Calcium (Total)	6010(2)	mg/l	26	150	50	24	30
Cadmium (Total)	6010(2)	mg/l	<0.010	<0.010	<0.010	<0.010	0.010
Cobalt (Total)	6010(2)	mg/l	<0.010	<0.010	<0.010	<0.010	0.11
Chromium (Total)	6010(2)	mg/l	<0.010	0.016	0.023	0.016	<0.010
Copper (Total)	6010(2)	mg/l	<0.010	0.026	0.015	0.030	0.038
Iron (Total)	6010(2)	mg/l	0.75	5.4	15	17	41
Mercury (Total)	7470(2)	mg/l	<0.00020	0.00060	<0.00020	0.00030	0.00030
Potassium (Total)	6010(2)	mg/l	1.0	2.2	0.72	0.98	1.3
Magnesium (Total)	6010(2)	mg/l	3.5	18	8.8	6.7	8.6
Manganese (Total)	6010(2)	mg/l	0.30	1.9	0.47	2.0	5.2
Sodium (Total)	6010(2)	mg/l	11	68	5.7	14	5.9
Nickel (Total)	6010(2)	mg/l	<0.040	0.14	<0.040	<0.040	0.080
Lead (Total)	6010(2)	mg/l	<0.10	<0.10	<0.10	<0.10	<0.10
Antimony (Total)	6010(2)	mg/l	<0.10	<0.10	<0.10	<0.10	<0.10
Selenium (Total)	7740(2)	mg/l	<0.0010	<0.0010	<0.0010	0.0020	<0.0010
Thallium (Total)	7841(2)	mg/l	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Vanadium (Total)	6010(2)	mg/l	<0.050	<0.050	<0.050	<0.050	<0.050
Zinc (Total)	6010(2)	mg/l	0.014	0.42	0.039	0.12	0.093

See footnotes at end of table.

Parameter	Analytical Method	Units	Sample Identification				
			9411-1668 MW-8A (11/10/94)	9411-1669 MW-8AD (11/10/94)	9411-1670 MW-10A (11/10/94)	9411-1671 GW-EQB (11/10/94)	9411-1673 Method Blank (11/10/94)
Fluoride	340.2(1)	mg/l	<0.10	<0.10	<0.10	<0.10	<0.10
Ammonia	350.1(1)	mg/l NH <sub>3</sub> -N	0.20	0.14	<0.10	<0.10	<0.10
Nitrate	353.2(1)	mg/l NO <sub>3</sub> -N	<0.10	<0.10	<0.10	0.20	<0.10
pH	9040(2)	pH units	6.44	6.45	5.36	5.94	NAP(3)
Total Organic Carbon	415.1(1)	mg/l	2.7	2.6	2.8	<1.0	<1.0
Total Petroleum Hydrocarbons	8015(2)	mg/l	<1.0	<1.0	<1.0	<1.0	<1.0
Metals:							
Silver (Total)	6010(2)	mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Aluminum (Total)	6010(2)	mg/l	11	4.8	1.5	<0.10	<0.10
Arsenic (Total)	7060(2)	mg/l	0.0030	0.0010	<0.0010	<0.0010	<0.0010
Barium (Total)	6010(2)	mg/l	0.10	0.088	0.095	<0.020	<0.020
Beryllium (Total)	6010(2)	mg/l	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Calcium (Total)	6010(2)	mg/l	28	27	7.5	<1.0	<1.0
Cadmium (Total)	6010(2)	mg/l	<0.010	<0.010	<0.010	<0.010	<0.010
Cobalt (Total)	6010(2)	mg/l	0.029	<0.010	0.023	<0.010	<0.010
Chromium (Total)	6010(2)	mg/l	0.052	0.039	<0.010	<0.010	<0.010
Copper (Total)	6010(2)	mg/l	0.026	0.014	0.010	<0.010	<0.010
Iron (Total)	6010(2)	mg/l	29	11	4.8	0.032	<0.030
Mercury (Total)	7470(2)	mg/l	0.0027	0.0012	0.0010	<0.00020	<0.00020
Potassium (Total)	6010(2)	mg/l	1.9	1.4	<0.50	<0.50	<0.50
Magnesium (Total)	6010(2)	mg/l	9.4	7.8	4.3	<0.50	<0.50
Manganese (Total)	6010(2)	mg/l	6.4	6.5	0.37	<0.010	<0.010
Sodium (Total)	6010(2)	mg/l	26	28	4.5	<1.0	<1.0
Nickel (Total)	6010(2)	mg/l	0.057	<0.040	<0.040	<0.040	<0.040
Lead (Total)	6010(2)	mg/l	<0.10	<0.10	<0.10	<0.10	<0.10
Antimony (Total)	6010(2)	mg/l	<0.10	<0.10	<0.10	<0.10	<0.10
Selenium (Total)	7740(2)	mg/l	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Thallium (Total)	7841(2)	mg/l	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Vanadium (Total)	6010(2)	mg/l	<0.050	<0.050	<0.050	<0.050	<0.050
Zinc (Total)	6010(2)	mg/l	0.076	0.031	0.035	<0.0050	<0.0050

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NAP - Not applicable.

Table 2  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4563  
Water Characterization  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Units	Sample Identification
			9411-1666 MW-7A (11/10/94)
Fluoride	340.2(1)	mg/l	<0.10
Ammonia	350.1(1)	mg/l NH <sub>3</sub> -N	<0.10
Nitrate	353.2(1)	mg/l NO <sub>3</sub> -N	<0.10
pH	9040(2)	pH units	6.34
Total Organic Carbon	415.1(1)	mg/l	3.3
Total Petroleum Hydrocarbons	8015(2)	mg/l	<1.0

- (1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.
- (2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

Table 3  
General Data Table  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4563  
Water Characterization  
Purchase Order No. BL-26163-H; Blairsville, PA

Parameter	Analytical Method	Sample Identification	
		9411-1663 MW-3 MS (11/10/94)	9411-1664 MW-3 MSD (11/10/94)
Fluoride	340.2(1)	100%	98%
Ammonia	350.1(1)	91%	105%
Nitrate	353.2(1)	89%	107%
pH	9040(2)	NAP(3)	NAP
Total Organic Carbon	415.1(1)	2.7	2.8
Total Petroleum Hydrocarbons	8015(2)	118%	155%
Metals:			
Silver (Total)	6010(2)	90.2%	113.6%
Aluminum (Total)	6010(2)	101.7%	102.2%
Arsenic (Total)	7060(2)	100.3%	90.5%
Barium (Total)	6010(2)	94.9%	95.7%
Beryllium (Total)	6010(2)	94.2%	94.2%
Calcium (Total)	6010(2)	NAP	NAP
Cadmium (Total)	6010(2)	107.6%	107.6%
Cobalt (Total)	6010(2)	89.2%	89.2%
Chromium (Total)	6010(2)	79.5%	81.0%
Copper (Total)	6010(2)	94.5%	93.0%
Iron (Total)	6010(2)	NC(4)	NC
Mercury (Total)	7470(2)	97.4%	110.0%
Potassium (Total)	6010(2)	NAP	NAP
Magnesium (Total)	6010(2)	NAP	NAP
Manganese (Total)	6010(2)	95.0%	95.1%
Sodium (Total)	6010(2)	NAP	NAP
Nickel (Total)	6010(2)	94.5%	92.9%
Lead (Total)	6010(2)	93.7%	93.8%
Antimony (Total)	6010(2)	90.8%	90.4%
Selenium (Total)	7740(2)	61.1%	61.7%
Thallium (Total)	7841(2)	95.7%	89.0%
Vanadium (Total)	6010(2)	94.8%	94.4%
Zinc (Total)	6010(2)	95.2%	93.4%

(1) U.S. Environmental Protection Agency, 1983, Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.

(2) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(3) NAP - Not applicable.

(4) NC - Not calculable.

Table 4  
Volatile Organic Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4563  
Water Characterization  
Purchase Order No. BL-26163-B; Blairsville, PA

Page 1 of 4

Parameter	CAS(2) Number	Units	Sample Identification		
			9411-1660	9411-1661	9411-1662
			GW-1 (11/10/94)	MW-2 (11/10/94)	MW-3 (11/10/94)
Acetone	67-64-1	µg/l	<100	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	8.8	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0	21
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0	590
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0	5.7
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0	77
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	25	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	150	12	1500
Vinyl chloride	75-01-4	µg/l	<10	<10	220
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 4  
(Continued)

Page 2 of 4

Parameter	CAS(2) Number	Units	Sample Identification		
			9411-1665	9411-1666	9411-1667
			MW-6A (11/10/94)	MW-7A (11/10/94)	MW-8A (11/10/94)
Acetone	67-64-1	µg/l	<100	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 4  
(Continued)

Page 3 of 4

Parameter	CAS(2) Number	Units	Sample Identification		
			9411-1668 MW-9A (11/10/94)	9411-1669 MW-9AD (11/10/94)	9411-1670 MW-10A (11/10/94)
Acetone	67-64-1	µg/l	<100	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	6.6	6.2	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	20	19	<5.0
s-1,2-Dichloroethene	156-59-2	µg/l	3300	2900	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	29	25	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	6.0	5.6	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	24	22	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	22000	21000	<5.0
Vinyl chloride	75-01-4	µg/l	49	47	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0	<5.0

See footnotes at end of table.

Table 4  
(Continued)

Page 4 of 4

Parameter	CAS(2) Number	Units	Sample Identification		
			9411-1671 GW-EQB (11/10/94)	9411-1672 Trip Blank (11/10/94)	9411-1673 Method Blank (11/10/94)
Acetone	67-64-1	µg/l	<100	<100	<100
Benzene	71-43-2	µg/l	<5.0	<5.0	<5.0
Bromodichloromethane	75-27-4	µg/l	<5.0	<5.0	<5.0
Bromoform	75-25-2	µg/l	<5.0	<5.0	<5.0
Bromomethane	74-83-9	µg/l	<10	<10	<10
2-Butanone (MEK)	78-93-3	µg/l	<10	<10	<10
Carbon disulfide	75-15-0	µg/l	<5.0	<5.0	<5.0
Carbon tetrachloride	56-23-5	µg/l	<5.0	<5.0	<5.0
Chlorobenzene	108-90-7	µg/l	<5.0	<5.0	<5.0
Chlorodibromomethane	124-48-1	µg/l	<5.0	<5.0	<5.0
Chloroethane	75-00-3	µg/l	<10	<10	<10
Chloromethane	74-87-3	µg/l	<10	<10	<10
Chloroform	67-66-3	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethane	75-34-3	µg/l	<5.0	<5.0	<5.0
1,2-Dichloroethane	107-06-2	µg/l	<5.0	<5.0	<5.0
1,1-Dichloroethene	75-35-4	µg/l	<5.0	<5.0	<5.0
cis-1,2-Dichloroethene	156-59-2	µg/l	<5.0	<5.0	<5.0
trans-1,2-Dichloroethene	156-60-5	µg/l	<5.0	<5.0	<5.0
1,2-Dichloropropane	78-87-5	µg/l	<5.0	<5.0	<5.0
cis-1,3-Dichloropropene	10061-01-5	µg/l	<5.0	<5.0	<5.0
trans-1,3-Dichloropropene	10061-02-6	µg/l	<5.0	<5.0	<5.0
Ethylbenzene	100-41-4	µg/l	<5.0	<5.0	<5.0
2-Hexanone	591-78-6	µg/l	<50	<50	<50
Methylene chloride	75-09-2	µg/l	<5.0	<5.0	<5.0
4-Methyl-2-pentanone (MIBK)	108-10-1	µg/l	<50	<50	<50
Styrene	100-42-5	µg/l	<5.0	<5.0	<5.0
1,1,2,2-Tetrachloroethane	79-34-5	µg/l	<5.0	<5.0	<5.0
Tetrachloroethene	127-18-4	µg/l	<5.0	<5.0	<5.0
Toluene	108-88-3	µg/l	<5.0	<5.0	<5.0
1,1,1-Trichloroethane	71-55-6	µg/l	<5.0	<5.0	<5.0
1,1,2-Trichloroethane	79-00-5	µg/l	<5.0	<5.0	<5.0
Trichloroethene	79-01-6	µg/l	<5.0	<5.0	<5.0
Vinyl chloride	75-01-4	µg/l	<10	<10	<10
Xylenes (Total)	1330-20-7	µg/l	<5.0	<5.0	<5.0

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.



Table 5  
Matrix Spike/Matrix Spike Duplicate Analyses  
Target Compound List/EPA Method 8260(1)  
Cummings/Riter Consultants, Inc.  
Antech Ltd. Project No. 94-4583  
Water Characterization  
Purchase Order No. BL-26163-E; Blairsville, PA

Parameter	CAS(2) Number	Sample Identification	
		9411-1663	9411-1664
		MW-3 MS (11/10/94)	MW-3 MSD (11/10/94)
Acetone	67-64-1	NAP(3)	NAP
Benzene	71-43-2	73X	96X
Bromodichloromethane	75-27-4	NAP	NAP
Bromoform	75-25-2	NAP	NAP
Bromomethane	74-83-9	NAP	NAP
2-Butanone (MEK)	78-93-3	NAP	NAP
Carbon disulfide	75-15-0	NAP	NAP
Carbon tetrachloride	56-23-5	NAP	NAP
Chlorobenzene	108-90-7	85X	111X
Chlorodibromomethane	124-48-1	NAP	NAP
Chloroethane	75-00-3	NAP	NAP
Chloromethane	74-87-3	NAP	NAP
Chloroform	67-66-3	NAP	NAP
1,1-Dichloroethane	75-34-3	NAP	NAP
1,2-Dichloroethane	107-06-2	NAP	NAP
1,1-Dichloroethene	75-35-4	111X	132X
cis-1,2-Dichloroethene	156-59-2	NAP	NAP
trans-1,2-Dichloroethene	156-60-5	NAP	NAP
1,2-Dichloropropane	78-87-5	NAP	NAP
cis-1,3-Dichloropropene	10061-01-5	NAP	NAP
trans-1,3-Dichloropropene	10061-02-6	NAP	NAP
Ethylbenzene	100-41-4	NAP	NAP
2-Hexanone	591-78-6	NAP	NAP
Methylene chloride	75-09-2	NAP	NAP
4-Methyl-2-pentanone (MIBK)	108-10-1	NAP	NAP
Styrene	100-42-5	NAP	NAP
1,1,2,2-Tetrachloroethane	79-34-5	NAP	NAP
Tetrachloroethene	127-18-4	NAP	NAP
Toluene	108-88-3	72X	94X
1,1,1-Trichloroethane	71-55-6	NAP	NAP
1,1,2-Trichloroethane	79-00-5	NAP	NAP
Trichloroethene	79-01-6	NAP	NAP
Vinyl chloride	75-01-4	NAP	NAP
Xylenes (Total)	1330-20-7	NAP	NAP

(1) U.S. Environmental Protection Agency, 1987, Test Methods for Evaluating Solid Waste, SW-846, 3rd ed., Office of Solid Waste and Emergency Response, Washington, DC.

(2) CAS = Chemical Abstracts Services.

(3) NAP = Not applicable.



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Controls for Environmental  
Pollution, Inc.

P.O. Box 5351

Santa Fe, NM 87502

Phone: (505) 982-9841/(800) 545-2188

Earth Sciences Consultants  
One Triangle Drive  
Export, PA 15632

Attn: R. Hill

Purchase Order: 0641

Invoice Number:

Order #: 94-11-278

Date: 12/13/94 11:14

Work ID: Water (NR)

Date Received: 11/17/94

Date Completed: 12/13/94

Client Code: ANTECH

\* Low recovery, samples being rerun.

SAMPLE IDENTIFICATION

Sample Number	Sample Description
01	94-4563 9411-1660 1
02	94-4563 9411-1661 2
03	94-4563 9411-1662 3
04	94-4563 9411-1665 4
05	94-4563 9411-1666 7

Sample Number	Sample Description
06	94-4563 9411-1667 8
07	94-4563 9411-1668 9
08	94-4563 9411-1669 9D
09	94-4563 9411-1670 10
10	94-4563 9411-1671 8RB



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Order # 94-11-278  
12/13/94 11:14

Controls for Environmental

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Page 2

Remainder of sample(s) for routine analysis will be disposed of three weeks from final report date. Sample(s) for bacteria analysis only, will be disposed of immediately after analysis. This is not applicable if other arrangements have been made.

  
\_\_\_\_\_  
Certified By

Order # 94-11-276  
12/13/94 13:42

**Controls for Environmental  
TEST RESULTS BY SAMPLE**

Page 3

Sample: 01A 94-4563 9411-1660

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Gross Alpha	<2	2	pCi/liter	11/17/94	GF
Gross Beta	<3	3	pCi/liter	11/17/94	GF
Total Radium	<1	1	pCi/liter	11/23/94	TG
Total Uranium	<0.001	0.001	mg/liter	12/08/94	LH

Sample: 02A 94-4563 9411-1661

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Gross Alpha	38+/-6	2	pCi/liter	11/17/94	GF
Gross Beta	34+/-4	3	pCi/liter	11/17/94	GF
Total Radium	<1	1	pCi/liter	11/23/94	TG
Total Uranium	0.003	0.001	mg/liter	12/08/94	LH

Sample: 03A 94-4563 9411-1662

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Gross Alpha	19+/-4	2	pCi/liter	11/17/94	GF
Gross Beta	13+/-4	3	pCi/liter	11/17/94	GF
Total Radium	<1	1	pCi/liter	11/23/94	TG
Total Uranium	<0.001	0.001	mg/liter	12/08/94	LH

Sample: 04A 94-4563 9411-1665

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Gross Alpha	49+/-6	2	pCi/liter	11/17/94	GF
Gross Beta	45+/-4	3	pCi/liter	11/17/94	GF
Total Radium	<1	1	pCi/liter	11/23/94	TG
Total Uranium	<0.001	0.001	mg/liter	12/08/94	LH

Sample: 05A 94-4563 9411-1666

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D. L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>Bu</u>
Gross Alpha	14+/-3	2	pCi/liter	11/17/94	GF
Gross Beta	23+/-4	3	pCi/liter	11/17/94	GF
Total Radium	<3	3	pCi/liter	11/23/94	TG

Order # 94-11-278  
12/13/94 11:14Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 4

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Total Uranium	0.001	0.001	mg/liter	12/08/94	LH

Sample: 06A 94-4563 9411-1667

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	25+/-5	2	pCi/liter	11/17/94	GF
Gross Beta	46+/-4	3	pCi/liter	11/17/94	GF
Total Radium	2+/-1	1	pCi/liter	11/23/94	TG
Total Uranium	<0.001	0.001	mg/liter	12/08/94	LH

Sample: 07A 94-4563 9411-1668

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	20+/-4	2	pCi/liter	11/17/94	GF
Gross Beta	34+/-4	3	pCi/liter	11/17/94	GF
Total Radium	<1	1	pCi/liter	11/23/94	TG
Total Uranium	0.001	0.001	mg/liter	12/08/94	LH

Sample: 08A 94-4563 9411-1669

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	20+/-4	2	pCi/liter	11/17/94	GF
Gross Beta	21+/-4	3	pCi/liter	11/17/94	GF
Total Radium	<1	1	pCi/liter	11/23/94	TG
Total Uranium	<0.001	0.001	mg/liter	12/08/94	LH

Sample: 09A 94-4563 9411-1670

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	7+/-2	2	pCi/liter	11/20/94	GF
Gross Beta	8+/-4	3	pCi/liter	11/17/94	GF
Total Radium	<1	1	pCi/liter	11/23/94	TG
Total Uranium	<0.001	0.001	mg/liter	12/08/94	LH



Order # 94-11-278  
12/13/94 11:14

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 5

Sample: 10A 94-4563 9411-1671

Collected: 11/10/94

<u>Test Description</u>	<u>Result</u>	<u>D.L.</u>	<u>Units</u>	<u>Analyzed</u>	<u>By</u>
Gross Alpha	<2	2	pCi/liter	11/17/94	GF
Gross Beta	<3	3	pCi/liter	11/17/94	GF
Total Radium	<1	1	pCi/liter	11/23/94	TG
Total Uranium	<0.001	0.001	mg/liter	12/08/94	LH

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Order # 94-11-276  
12/13/94 11:14**Controls for Environmental  
TEST RESULTS BY SAMPLE**

Page 6

Sample Description: 94-4563 9411-1660  
Test Description: Isotopic Uranium  
Collected: 11/10/94Lab No: 01A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.6</u>	<u>&lt;0.6</u>
Uranium-235	<u>0.6</u>	<u>&lt;0.6</u>
Uranium-238	<u>0.6</u>	<u>&lt;0.6</u>

All results report in:  
UNITS pCi/liter  
Analyzed 11/28/94  
By MMSample Description: 94-4563 9411-1661  
Test Description: Isotopic Uranium  
Collected: 11/10/94Lab No: 02A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.6</u>	<u>1.0 +/- 0.8</u>
Uranium-235	<u>0.6</u>	<u>&lt;0.6</u>
Uranium-238	<u>0.6</u>	<u>0.8 +/- 0.6</u>

All results report in:  
UNITS pCi/liter  
Analyzed 11/28/94  
By MM



Order # 94-11-278  
12/13/94 11:14

Controls for Environmental  
TEST RESULTS BY SAMPLE

Page 7

Sample Description: 94-4563 9411-1662  
Test Description: Isotopic Uranium  
Collected: 11/10/94

Lab No: 03A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.6</u>	<u>1.9+/-0.7</u>
Uranium-235	<u>0.6</u>	<u>&lt;0.6</u>
Uranium-238	<u>0.6</u>	<u>1.0+/-0.6</u>

All results report in:  
UNITS pCi/liter  
Analyzed 11/28/94  
By MM

Sample Description: 94-4563 9411-1665  
Test Description: Isotopic Uranium  
Collected: 11/10/94

Lab No: 04A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>          </u>	<u>          </u> *
Uranium-235	<u>          </u>	<u>          </u> *
Uranium-238	<u>          </u>	<u>          </u> *

All results report in:  
UNITS             
Analyzed             
By



Order # 94-11-278  
12/13/94 13:42**Controls for Environmental  
TEST RESULTS BY SAMPLE**

Page 8

Sample Description: 94-4563 9411-1666  
Test Description: Isotopic Uranium  
Collected: 11/10/94Lab No: 05A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.6</u>	<u>&lt;0.6</u>
Uranium-235	<u>0.6</u>	<u>&lt;0.6</u>
Uranium-238	<u>0.6</u>	<u>&lt;0.6</u>

All results report in:  
UNITS pCi/liter  
Analyzed 11/28/94  
By MMSample Description: 94-4563 9411-1667  
Test Description: Isotopic Uranium  
Collected: 11/10/94Lab No: 06A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.6</u>	<u>12.3+/-3.8</u>
Uranium-235	<u>0.6</u>	<u>0.8+/-0.6</u>
Uranium-238	<u>0.6</u>	<u>14.7+/-4.3</u>

All results report in:  
UNITS pCi/liter  
Analyzed 11/28/94  
By MM

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12/13/94 11:14**Controls for Environmental  
TEST RESULTS BY SAMPLE**

Page 9

Sample Description: 94-4563 9411-1668  
Test Description: Isotopic Uranium  
Collected: 11/10/94Lab No: 07A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	0.6	<0.6
Uranium-235	0.6	<0.6
Uranium-238	0.6	<0.6

All results report in:  
UNITS pCi/liter  
Analyzed 11/28/94  
By MMSample Description: 94-4563 9411-1669  
Test Description: Isotopic Uranium  
Collected: 11/10/94Lab No: 08A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	_____	_____*
Uranium-235	_____	_____*
Uranium-238	_____	_____*

All results report in:  
UNITS \_\_\_\_\_  
Analyzed \_\_\_\_\_  
By \_\_\_\_\_

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12/13/94 11:14**Controls for Environmental  
TEST RESULTS BY SAMPLE**

Page 10

Sample Description: 94-4563 9411-1670  
Test Description: Isotopic Uranium  
Collected: 11/10/94Lab No: 09A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.6</u>	<u>0.7+/-0.6</u>
Uranium-235	<u>0.6</u>	<u>&lt;0.6</u>
Uranium-238	<u>0.6</u>	<u>&lt;0.6</u>

All results report in:  
UNITS pCi/liter  
Analyzed 11/28/94  
By MMSample Description: 94-4563 9411-1671  
Test Description: Isotopic Uranium  
Collected: 11/10/94Lab No: 10A  
Method:  
Category: WATER

Test Code: ISOU

Type of Analysis	Detection Limit	RESULT
Uranium-234	<u>0.6</u>	<u>0.7+/-0.5</u>
Uranium-235	<u>0.6</u>	<u>&lt;0.6</u>
Uranium-238	<u>0.6</u>	<u>1.7+/-0.7</u>

All results report in:  
UNITS pCi/liter  
Analyzed 11/28/94  
By MM



# Antech Ltd. Chain of Custody Record

For Laboratory Use Only

Laboratory Project No.: 744563

Project Name: Westlake - Blainville

Project No.: 93-132.04

Sampler: Bryan Maurer  
(Printed Name)

*Bryan Maurer*  
(Signature)

Relinquished By: (Signature and Printed Name)

*Bryan Maurer*  
Bryan Maurer

Relinquished By: (Signature and Printed Name)

Relinquished By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

*Michelle D. Allen*  
Michelle D. Allen

Received By: (Signature and Printed Name)

Received By: (Signature and Printed Name)

Date: 11/10/94

Date:

Date:

Time: 755

Time:

Time:

Antech Proposal No.: \_\_\_\_\_

Ship To:  
Antech Ltd.  
One Triangle Drive  
Export, PA 15632  
(412) 733-1161  
FAX (412) 327-7793

Method of Shipment: \_\_\_\_\_

Shipment ID: \_\_\_\_\_

Sample ID Number	Sample Description			Grab	Comp	Chemical	Nutrient	Total Metals	Dissolved Metals (250 ml)	Cyanide	Phenolic	TOC (125 ml)	TOX (250 ml)	Sulfide	Radiological	Oil & Grease	TPHC (1000 ml)	VOA (40 ml)	Organics (1000 ml)	Bacteriological (125 ml)	Widermouth Jar (250 ml)	VOA Septa Jar (125 ml)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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Special Instructions/Comments: PARAM LIST A - VOCs, Metals, PH, TPH, TOC, Fluoride, Nitrate, Ammonia, Radiological  
FOR ALL SAMPLES

NO DISSOLVED METALS FOR MW-7A

Sample Return/Disposal:

- ☐ Return to Client  
☒ Disposal by Antech

Results To:

☐ Client Name: BILL BAUGHMAN  
Company: CUMMINGS RITER CONSULTANTS  
Address: \_\_\_\_\_

Invoice To:

☐ Client Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_

For Laboratory Use Only

Sample Condition Upon Receipt: \_\_\_\_\_



Laboratory Project No.: 94-4563

Relinquished By: (Signature and Printed Name) <u>Bryan Maurer Bryan R Maurer</u>	Received By: (Signature and Printed Name) <u>Michael S. Allen</u>	Date: <u>11/10/94</u>	Time: <u>755</u>
Relinquished By: (Signature and Printed Name) _____	Received By: (Signature and Printed Name) _____	Date: _____	Time: _____
Relinquished By: (Signature and Printed Name) _____	Received By: (Signature and Printed Name) _____	Date: _____	Time: _____

[illegible]

Invoice To:

☐ Client Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

**Sample Condition Upon Receipt**

**APPENDIX E**

**LABORATORY ANALYTICAL DATA - WESTINGHOUSE  
LABORATORY**

Sample #	Date	Comments	Sample #	Date	Comments
001		BASELINE	B-026	12-31-94	Gage Rm Sump Pit at 0,0
002	11-29-94	REF. LOCATION # 93	B-027	12-31-94	Gage Rm Sump Pit at 0.7, -2
003	11-29-94	" # 94	B-028	12-31-94	Sump Pit Sludge 1-6-1 East Side
004	11-29-94	" # 95	B029	1-16-95	B-13 S1
005	11-29-94	" # 96	B030	1-16-95	B 14 S1
006	11-30-94	" # 97	B031	1-16-95	B 15 S1
007	11-30-94	" # 98	B032	1-16-95	B 15 S2
008	12-1-94	" # 105	B033		B16 S3
009	12-1-94	" # 106	B034		B17 S2
010	12-1-94	" # 107	B035		B18 S2
011	12-1-94	" # 108	B036		B 19 S2
012	12-1-94	" # 109	B037		B 20 S2
013	12-1-94	" # 110	B038		B21 S1
014	12-1-94	" # 111	B039		B22 S1
015	12-1-94	" # 112	B040		B23 S1
016	12-2-94	" # 113	B041		B25 S1
017	12-2-94	" # 114	B042		B26 S1
018	12-2-94	" # 115	B043		B27 S2
019	12-2-94	" # 116	B044		B30 S1
020	12-1-94	" # 117	B045		B34 S1
021	12-1-94	" # 118	B046		B39 S5
022	12-1-94	" # 119	B047		B40 S4
023	12-1-94	" # 120	B048		B43 S1
B-024	12-31-94	Gage Rm. Sump Pit at 0, -2	B049		SD 2
B-025	12-31-94	Gage Rm. Sump Pit at 1.3, 0	B050	↓	SD 3

Sample #	Date	Comments
B051	1-16-95	SD7
B052		SDA
B053		SOB
B054		SOC
B055		SOD
B056		SDE
B057		SDF
B058		SDG
B059		MW 10A S1
B060		MW 5A S1
B061		MW 5A S4
B062		MW 6A S1
B063		MW 8A S2
B064		MW 9A S1
B065		B1 0-6
B066		B2 0-6
B067		B3 0-6
B068		D3 0-6
B069		D8 0-6
B070		E1 0-6
B071		E2 0-6
B072		E3 0-6
B073		E5 0-6
B074		E5 6-12
B075	V	F1 0-6

Sample #	Date	Comments
B076	1-16-95	F3 6-12
B077		F8 0-6
B078		G1 0-6
B079		H7 0-6
B080		Y1 0-6
B081		Y1 6-12
B082		Z3 0-6
B083		Z5 0-6
B084	1-16-95	5564L DRUM CRW-001
B-085	1-18-95	BASLINE SAND USED TO FILL SUMP 12-31-9
446 *	2-16-95	BLAIRSVILLE Surface G8 0-6 inches
447 *	2-16-95	BLAIRSVILLE Surface G8 6-12 inches
* These sample were originally given sample numbers and logged in on The Forest Hills records. The information has been rewritten here to complete these Log sheets.		
		A. Joseph Ford
		4/21/95





**Nuclear Services Division**  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

ANALYSIS REPORT

155 4

Originator A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

**RESULTS OF ANALYSIS**

pCi/gram +/- 2 sigma @ sample date: JAN. 18, 1995

Analytical Service #	Sample Identification	Cs137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other	
95-96	B-024		0.384 ±0.27			0.835 ±0.42	0.854 ±0.64	0.483 ±0.48	2.78 ±1.6	1.10 ±0.77			
95-97	B-025		0.198 ±0.17			1.22 ±0.32	0.729 ±0.55		1.69 ±1.3	0.568 ±0.48			
95-98	B-026		0.305 ±0.16			1.09 ±0.31	0.793 ±0.45			0.876 ±0.47			
95-99	B-027		0.365 ±0.20			0.893 ±0.41		0.700 ±0.41		1.05 ±0.56			
95-100	B-028									<0.66 ±1.1	26.1 ±1.1		
95-101	B-029		0.610 ±0.38			1.18 ±0.48		0.890 ±0.48		1.75 ±1.1	0.342 ±0.24		

Remarks: **BLAIRSVILLE**

Procedures: A-524  
Analyst: WTF, MRK, FRC  
Page 1

Approved: \_\_\_\_\_

*M. R. Kawchak*  
M. R. Kawchak  
Senior Scientist



Nuclear Services Division  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

ANALYSIS REPORT

155 +

Originator A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

### RESULTS OF ANALYSIS

pCi/gram  $\pm$  2 sigma @ sample date: JAN. 18, 1995

Analytical Service #	Sample Identification	Cs137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other	
95-102	B-030		0.525 $\pm 0.27$			0.755 $\pm 0.42$	0.667 $\pm 0.50$			1.51 $\pm 0.77$	0.491 $\pm 0.34$		
95-103	B-031					1.08 $\pm 0.39$	0.973 $\pm 0.54$	0.623 $\pm 0.48$		<1.2			
95-104	B-032		0.375 $\pm 0.24$			1.21 $\pm 0.53$	1.02 $\pm 0.58$		1.40 $\pm 1.2$	1.08 $\pm 0.68$	0.259 $\pm 0.24$		
95-105	B-033		0.361 $\pm 0.25$			0.956 $\pm 0.50$		0.459 $\pm 0.42$		1.04 $\pm 0.72$			
95-106	B-034		0.345 $\pm 0.24$	3.56 $\pm 1.9$		0.770 $\pm 0.41$		0.781 $\pm 0.37$	2.00 $\pm 1.3$	0.990 $\pm 0.69$			
95-107	B-035					0.949 $\pm 0.71$				<0.71			

Remarks: BLAIRSVILLE

Procedures: A-524  
Analyst: WTF, MRK, FRC  
Page 1

Approved: \_\_\_\_\_

M. R. Kawchak  
Senior Scientist



Nuclear Services Division  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

ANALYSIS REPORT

15504

Originator A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

RESULTS OF ANALYSIS  
pCi/gram +/- 2 sigma @ sample date:

Analytical Service #	Sample Identification	Cs137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other	
95-108	B-036			2.94 ±2.5		1.30 ±0.60		0.874 ±0.69		<0.80			
95-109	B-037					1.22 ±0.49				<0.49			
95-110	B-038		0.645 ±0.26			0.569 ±0.45				1.85 ±0.76	1.18 ±0.42		
95-111	B-039		0.424 ±0.27							1.22 ±0.78	0.459 ±0.31		
95-112	B-040									<0.51	1.25 ±0.58		
95-113	B-041					0.975 ±0.47				<0.47			


Remarks: **BLAIRSVILLE**

Procedures: A-524

Analyst: WTF, MRK, FRC

Page 3

Approved:

  
M. R. Kawchak  
Senior Scientist



Nuclear Services Division  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

ANALYSIS REPORT

155 4

Originator

A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

### RESULTS OF ANALYSIS

pCi/gram  $\pm$  2 sigma @ sample date:


JAN. 18, 1995

Analytical Service #	Sample Identification	Cs137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other	
95-114	B-042					0.777 $\pm 0.62$				<0.62	0.993 $\pm 0.57$		
95-115	B-043									<0.45			
95-116	B-044									<1.3	0.759 $\pm 0.43$		
95-117	B-045					0.789 $\pm 0.52$				<0.52			
95-118	B-046		0.531 $\pm 0.40$				6.35 $\pm 1.6$	5.48 $\pm 1.5$		1.53 $\pm 1.2$	0.668 $\pm 0.60$		
95-119	B-047		0.872 $\pm 0.69$		23.1 $\pm 2.6$	4.21 $\pm 1.3$	23.7 $\pm 2.8$	23.1 $\pm 2.6$		2.50 $\pm 2.0$	4.87 $\pm 1.3$		

Remarks: BLAIRSVILLE

Procedures: A-524  
Analyst: WTF, MRK, FRC  
Page 14

Approved:

  
M. R. Kawchak  
Senior Scientist



Nuclear Services Division  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

ANALYSIS REPORT

155

Originator

A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

### RESULTS OF ANALYSIS

pCi/gram  $\pm$  2 sigma @ sample date: JAN. 18, 1995

Analytical Service #	Sample Identification	Cs137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other	
95-120	B-048		1.09 $\pm$ 0.52		12.6 $\pm$ 1.8	0.971 $\pm$ 0.84	16.5 $\pm$ 2.0	12.6 $\pm$ 1.8		3.14 $\pm$ 1.5	1.99 $\pm$ 0.76		
95-121	B-049		0.243 $\pm$ 0.19			0.764 $\pm$ 0.36				0.699 $\pm$ 0.55			
95-122	B-050									<2.0			
95-123	B-051									<1.3			
95-124	B-052									<0.43			
95-125	B-053						0.520 $\pm$ 0.44			<1.1	0.281 $\pm$ 0.25		

Remarks: BLAIRSVILLE

Procedures: A-524  
Analyst: WTF, MRK, FRC  
Page 5

Approved:

  
M. R. Kawchak  
Senior Scientist



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Waltz Mill Site  
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ANALYSIS REPORT

1514

Originator

A J Nardi

Company/Div. W E S B U Environmental & Regulatory Services

### RESULTS OF ANALYSIS


pCi/gram  $\pm$  2 sigma @ sample date: JAN. 18, 1995

Analytical Service #	Sample Identification	Cs137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other CS-137
95-126	B-054					0.353 $\pm$ 0.33			1.69 $\pm$ 1.2	<0.58	0.390 $\pm$ 0.375	
95-127	B-055						0.677 $\pm$ 0.53			<0.72		
95-128	B-056									<0.39	0.800 $\pm$ 0.32	
95-129	B-057					0.803 $\pm$ 0.48		0.524 $\pm$ 0.49		<0.49		
95-130	B-058					0.816 $\pm$ 0.41				<0.41		1.59 $\pm$ 0.49
95-131	B-059		0.398 $\pm$ 0.28			1.17 $\pm$ 0.45		1.06 $\pm$ 0.66		1.14 $\pm$ 0.81		

Remarks: BLAIRSVILLE

Procedures: A-524  
Analyst: WTF, MRK, FRC  
Page 6

Approved:

  
M. R. Kawchak  
Senior Scientist



Originator A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

RESULTS OF ANALYSIS

pCi/gram +/- 2 sigma @ sample date: JAN. 18, 1995

Analytical Service #	Sample Identification	Cs137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other	
95-132	B-060					1.91 ±0.72		0.657 ±0.62		<0.72			
95-133	B-061		0.209 ±0.10		1.16 ±0.34	0.830 ±0.15	1.05 ±0.28	1.16 ±0.34	1.13 ±0.74	0.600 ±0.29			
95-134	B-062					1.26 ±0.47		0.740 ±0.60		<0.47			
95-135	B-063		0.342 ±0.29			1.23 ±0.57				0.982 ±0.84			
95-136	B-064		0.405 ±0.26			0.896 ±0.53	0.830 ±0.49	0.881 ±0.47		1.16 ±0.74			
95-137	B-065		0.526 ±0.35			1.35 ±0.43		0.957 ±0.63		1.51 ±1.0			

Remarks: **BLAIRSVILLE**

Procedures: A-524  
Analyst: WTF, MRK, FRC  
Page 7

Approved:

  
M. R. Kawchak  
Senior Scientist



**Nuclear Services Division**  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

ANALYSIS REPORT

15534

Originator

A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

**RESULTS OF ANALYSIS**

pCi/gram +/- 2 sigma @ sample date:

JAN. 18, 1995

Analytical Service #	Sample Identification	Ce137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra228/ Ac228	Th228	U235	Other	
95-138	B-066					0.874 ±0.47		1.04 ±0.45		<1.3			
95-139	B-067		0.395 ±0.30			1.25 ±0.45	1.27 ±0.50			1.13 ±0.87			
95-140	B-068	0.330 ±0.29				0.577 ±0.53				<0.53			
95-141	B-069	0.555 ±0.34				0.495 ±0.31	0.977 ±0.51	1.02 ±0.68		<0.65	4.04 ±0.61		
95-142	B-070	0.488 ±0.36				0.374 ±0.35	1.19 ±0.58	0.876 ±0.56		<0.35			
95-143	B-071					0.607 ±0.47				<0.47			

Remarks:

Procedures: A-524

Analyst: WTF, MRK, FRC

Page 8

Approved:

M. R. Kawchak  
Senior Scientist





**Nuclear Services Division**  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

ANALYSIS REPORT

15-84

Originator

A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

**RESULTS OF ANALYSIS**

pCi/gram +/- 2 sigma @ sample date:


JAN. 18, 1995

Analytical Service #	Sample Identification	Ce137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other	
95-144	B-072					0.846 ± 0.44		0.948 ± 0.49		<0.73	0.504 ± 0.29		
95-145	B-073		0.305 ± 0.20	4.75 ± 2.9		1.41 ± 0.45	0.839 ± 0.64	1.10 ± 0.44		0.876 ± 0.57			
95-146	B-074		0.701 ± 0.28			0.615 ± 0.40		0.595 ± 0.40	2.34 ± 1.3	2.01 ± 0.80			
95-147	B-075		0.661 ± 0.27					0.484 ± 0.34		0.931 ± 0.77			
95-148	B-076					0.626 ± 0.45				<0.46			
95-149	B-077					0.921 ± 0.45				<0.80	0.800 ± 0.33		

Remarks:

Procedures: A-524  
Analyst: WTF, MRK, FRC  
Page 4

Approved:

  
M. R. Kawchak  
Senior Scientist



**Nuclear Services Division**  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

ANALYSIS REPORT

1554

Originator

A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

**RESULTS OF ANALYSIS**

pCi/gram +/- 2 sigma @ sample date:

JAN. 18. 1995

Analytical Service #	Sample Identification	Cs137	Tl208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra228/ Ac228	Th228	U235	Other	Co-60
95-150	B-078					0.752 ±0.48				<0.80			
95-151	B-079	0.206 ±0.12	0.33 ±0.18			0.695 ±0.25	0.542 ±0.33	0.477 ±0.32	1.26 ±0.81	0.948 ±0.51	0.515 ±0.20		0.190 ±0.15
95-152	B-080		0.912 ±0.40		8.62 ±1.2	2.41 ±0.52	10.8 ±1.3	8.62 ±1.2		2.62 ±1.1	1.33 ±0.49		
95-153	B-081				6.89 ±0.98	1.77 ±0.36	7.80 ±1.1	6.89 ±0.98	4.85 ±2.1	<1.2	0.885 ±0.39		
95-154	B-082		0.373 ±0.35		4.97 ±0.87	1.40 ±0.42	5.22 ±1.1	4.97 ±0.87		1.07 ±1.0	1.16 ±0.46		
95-155	B-083		0.647 ±0.28			1.77 ±0.46	4.16 ±0.91	3.83 ±0.94		1.86 ±0.51			

Remarks:

Procedures: A-524  
Analyst: WTF, MRK, FRC  
Page 10

Approved:

  
M. R. Kawchak  
Senior Scientist



**Nuclear Services Division**  
COTA - Analytical Laboratory  
Waltz Mill Site  
(412) 722-5217, 5219

**ANALYSIS REPORT**

**15620**

Originator

A J Nardi

Company/Div. W ESBU Environmental & Regulatory Services

**RESULTS OF ANALYSIS**

pCi/gram +/- 2 sigma @ sample date: 3-3-95

Analytical Service #	Sample Identification	Cs137	Ti208	Bi212	Bi214	Pb212	Pb214	Ra226	Ra226/ Ac228	Th228	U235	Other	U-238
95-392	# 446	0.577 ±0.21	0.335 ±0.16			0.960 ±0.31	0.636 ±0.27	0.656 ±0.26		0.961 ±0.47	187.5 ±1.5		33.5 ±25.7
95-393	# 447		0.318 ±0.13		0.456 ±0.21	0.705 ±0.25		0.456 ±0.21	1.67 ±0.90	0.912 ±0.36	9.66 ±0.35		

Remarks:

Procedures: A-524  
Analyst: WTF, MRK, FRC  
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